



## DRILL STEM TEST REPORT

Prepared For: **Anchor Bay Petroleum, LLC**

1952 Victoria Rd.  
Hays, KS 67601

ATTN: Ed Glassman

### **Hazen #1**

### **19-8S-18W Rooks,KS**

Start Date: 2018.09.02 @ 03:41:34

End Date: 2018.09.02 @ 12:53:04

Job Ticket #: 63143                      DST #: 1

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

Printed: 2018.09.05 @ 13:49:55



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63143

**DST#: 1**

ATTN: Ed Glassman

Test Start: 2018.09.02 @ 03:41:34

## GENERAL INFORMATION:

Formation: **Toronto- LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:52:34

Time Test Ended: 12:53:04

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

**Interval: 3211.00 ft (KB) To 3285.00 ft (KB) (TVD)**

Reference Elevations: 2045.00 ft (KB)

Total Depth: 3285.00 ft (KB) (TVD)

2038.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 7.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 166.51 psig @ 3212.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.02

End Date:

2018.09.02

Last Calib.: 2018.09.02

Start Time: 03:41:39

End Time:

12:53:04

Time On Btm: 2018.09.02 @ 07:50:34

Time Off Btm: 2018.09.02 @ 10:55:34

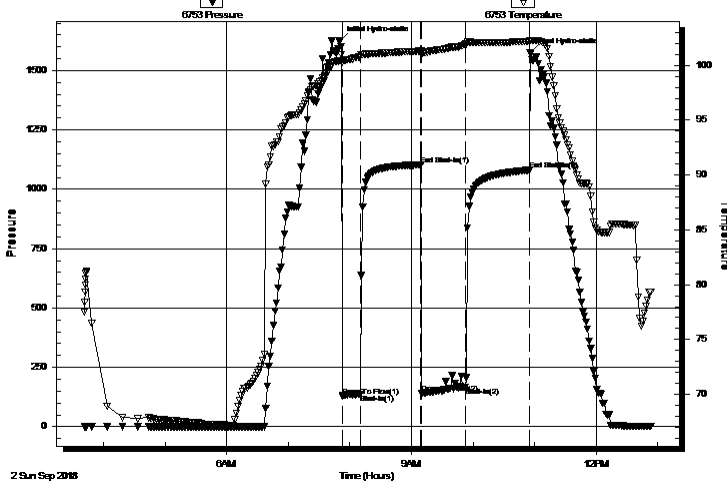
TEST COMMENT: 15- IF- Weak surface blow

60- IS- No blow

45- FF- Built slow ly to 1"

60- FSI- No blow

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.18	100.47	Initial Hydro-static
2	127.47	100.24	Open To Flow (1)
20	137.15	100.78	Shut-In(1)
79	1103.02	101.31	End Shut-In(1)
79	141.81	101.07	Open To Flow (2)
122	166.51	101.90	Shut-In(2)
184	1080.31	102.19	End Shut-In(2)
185	1577.08	102.27	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
288.00	M	4.08

## Gas Rates

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



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**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
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**Hazen #1**

Job Ticket: 63143

**DST#: 1**

ATTN: Ed Glassman

Test Start: 2018.09.02 @ 03:41:34

**GENERAL INFORMATION:**

Formation: **Toronto- LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:52:34

Time Test Ended: 12:53:04

**Interval: 3211.00 ft (KB) To 3285.00 ft (KB) (TVD)**

Total Depth: 3285.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Reference Elevations: 2045.00 ft (KB)

2038.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 6771 Outside**

Press@RunDepth: psig @ 3212.00 ft (KB)

Start Date: 2018.09.02 End Date: 2018.09.02

Start Time: 03:41:26 End Time: 12:52:00

Capacity: 8000.00 psig

Last Calib.: 2018.09.02

Time On Btm:

Time Off Btm:

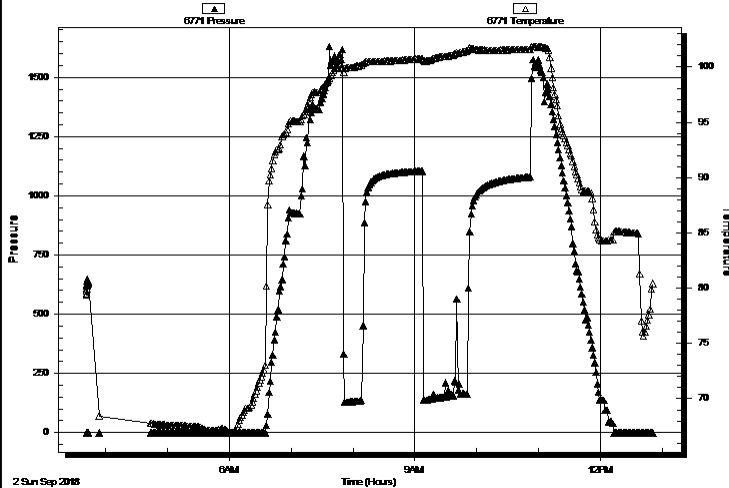
TEST COMMENT: 15- IF- Weak surface blow

60- IS- No blow

45- FF- Built slow ly to 1"

60- FSI- No blow

Pressure vs. Time



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
288.00	M	4.08

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63143

**DST#: 1**

ATTN: Ed Glassman

Test Start: 2018.09.02 @ 03:41:34

## Tool Information

Drill Pipe:	Length: 3208.00 ft	Diameter: 3.82 inches	Volume: 45.47 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3211.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	94.00 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			3192.00	
Shut In Tool	5.00			3197.00	
Hydraulic tool	5.00			3202.00	
Packer	5.00			3207.00	20.00 Bottom Of Top Packer
Packer	4.00			3211.00	
Stubb	1.00			3212.00	
Recorder	0.00	6753	Inside	3212.00	
Recorder	0.00	6771	Outside	3212.00	
Perforations	5.00			3217.00	
Change Over Sub	1.00			3218.00	
Drill Pipe	63.00			3281.00	
Change Over Sub	1.00			3282.00	
Bullnose	3.00			3285.00	74.00 Bottom Packers & Anchor

**Total Tool Length: 94.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks, KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63143

**DST#: 1**

ATTN: Ed Glassman

Test Start: 2018.09.02 @ 03:41:34

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
288.00	M	4.083

Total Length: 288.00 ft

Total Volume: 4.083 bbl

Num Fluid Samples: 0

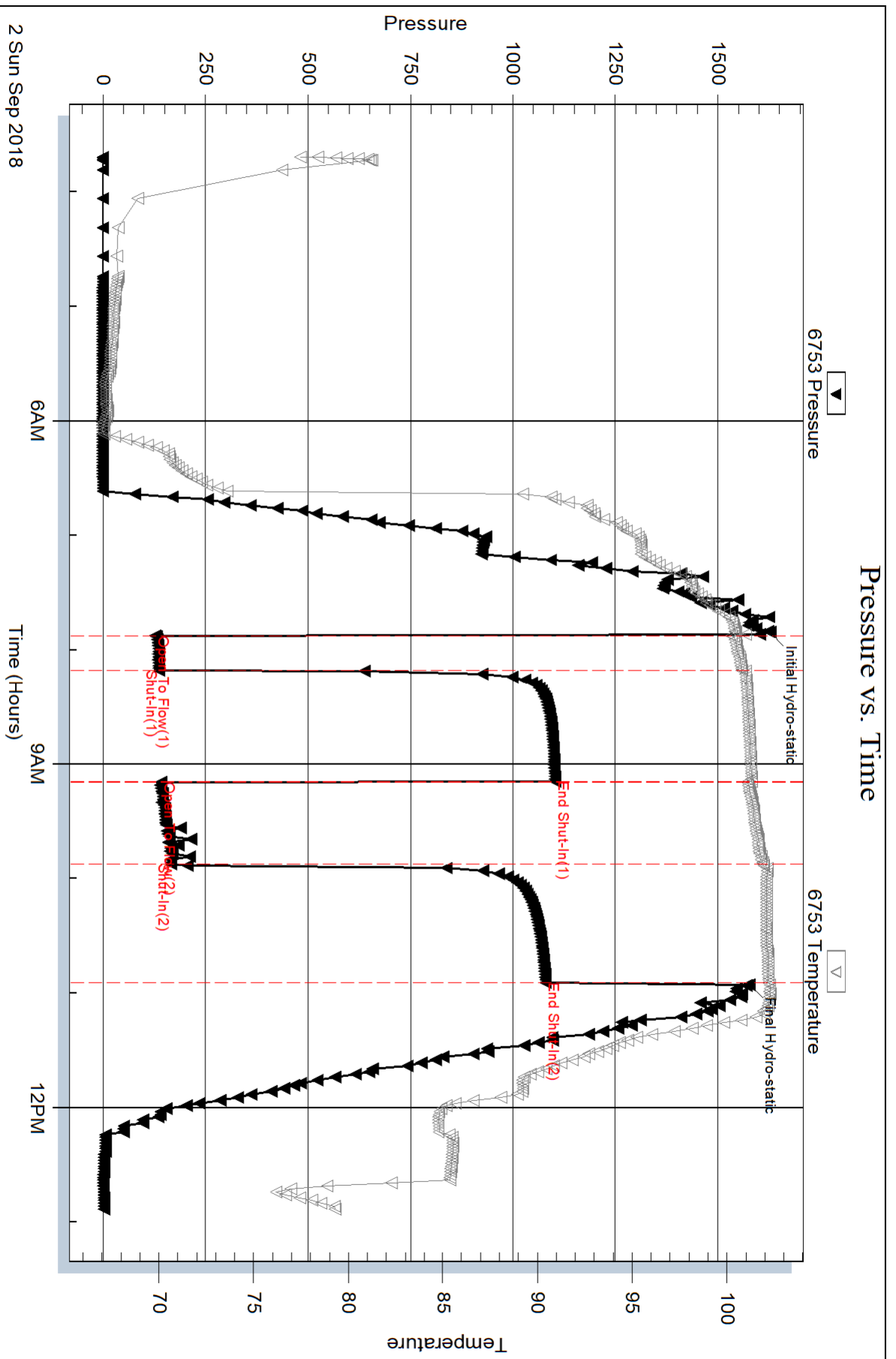
Num Gas Bombs: 0

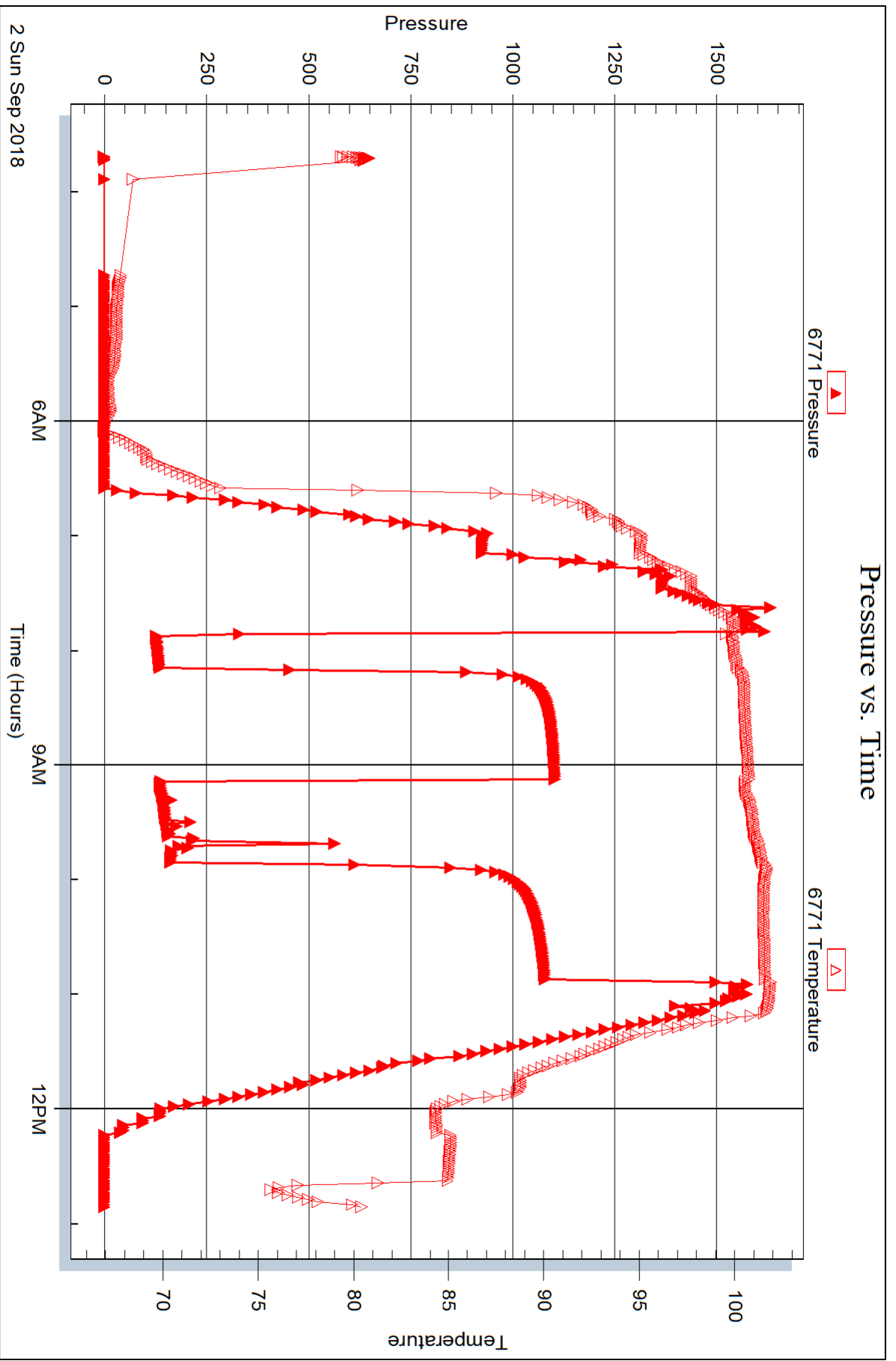
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Anchor Bay Petroleum, LLC**

1952 Victoria Rd.  
Hays, KS 67601

ATTN: Ed Glassman

### **Hazen #1**

### **19-8S-18W Rooks,KS**

Start Date: 2018.09.03 @ 13:56:51

End Date: 2018.09.03 @ 19:02:21

Job Ticket #: 63144                      DST #: 2

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

Printed: 2018.09.05 @ 13:49:31

Anchor Bay Petroleum, LLC  
19-8S-18W Rooks,KS  
Hazen #1  
DST # 2  
LKC-"I-K"  
2018.09.03





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63144

**DST#: 2**

ATTN: Ed Glassman

Test Start: 2018.09.03 @ 13:56:51

## GENERAL INFORMATION:

Formation: **LKC "I-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:03:51

Time Test Ended: 19:02:21

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

**Interval: 3386.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Reference Elevations: 2045.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

2038.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6753**

**Inside**

Press@RunDepth: 19.46 psig @ 3387.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.03

End Date: 2018.09.03

Last Calib.: 2018.09.03

Start Time: 13:56:56

End Time: 19:02:20

Time On Btm: 2018.09.03 @ 16:03:21

Time Off Btm: 2018.09.03 @ 17:36:51

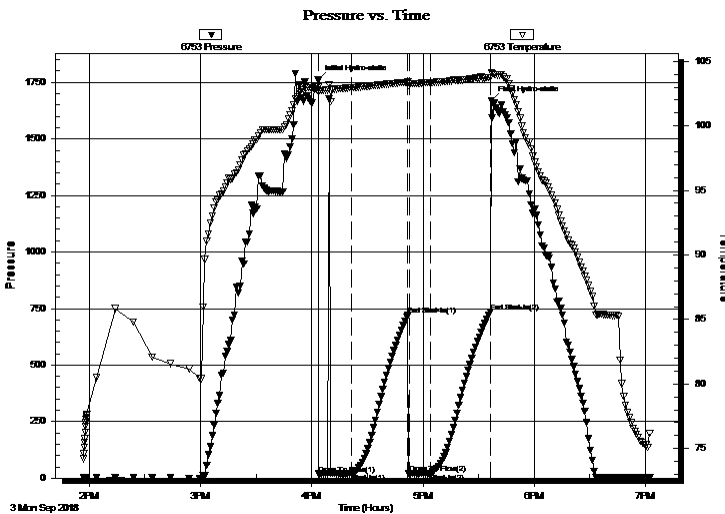
**TEST COMMENT:** 15- IF- Weak surface blow died in 1 min. Flushed tool. No blow

30- IS- No blow

15- FF- No blow

30- FSI- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.97	103.01	Initial Hydro-static
1	18.46	102.68	Open To Flow (1)
18	19.79	102.96	Shut-In(1)
49	720.68	103.38	End Shut-In(1)
50	19.58	103.26	Open To Flow (2)
61	19.46	103.35	Shut-In(2)
93	735.36	103.74	End Shut-In(2)
94	1668.91	104.14	Final Hydro-static

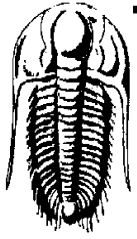
## Recovery

Length (ft)	Description	Volume (bbl)
10.00	M	0.14
2.00	CO	0.03

\* Recovery from multiple tests

## Gas Rates

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



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**DRILL STEM TEST REPORT**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63144

**DST#: 2**

ATTN: Ed Glassman

Test Start: 2018.09.03 @ 13:56:51

**GENERAL INFORMATION:**

Formation: **LKC "I-K"**

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 16:03:51

Tester: Brannan Lonsdale

Time Test Ended: 19:02:21

Unit No: 73

**Interval: 3386.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Reference Elevations: 2045.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

2038.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6771      Outside**

Press@RunDepth:      psig @ 3387.00 ft (KB)

Capacity:      8000.00 psig

Start Date: 2018.09.03      End Date: 2018.09.03

Last Calib.: 2018.09.03

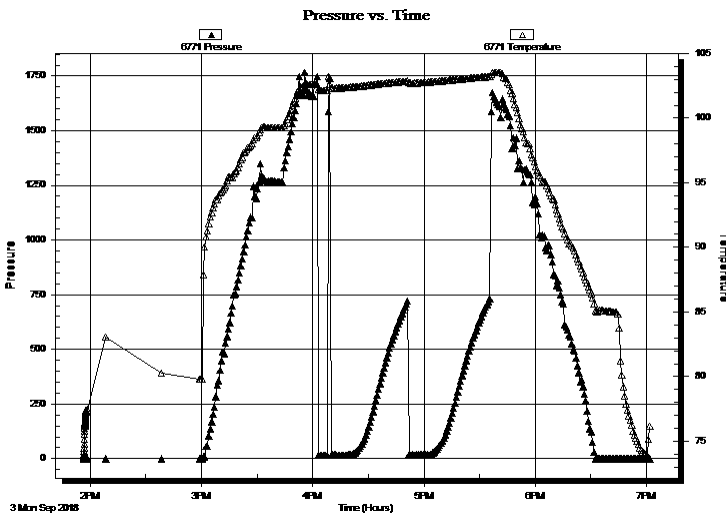
Start Time: 13:56:26      End Time: 19:02:01

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 15- IF- Weak surface blow died in 1 min. Flushed tool. No blow  
 30- IS- No blow  
 15- FF- No blow  
 30- FSI- No blow

**PRESSURE SUMMARY**



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

**Recovery**

Length (ft)	Description	Volume (bbl)
10.00	M	0.14
2.00	CO	0.03

\* Recovery from multiple tests

**Gas Rates**

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



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TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63144

**DST#: 2**

ATTN: Ed Glassman

Test Start: 2018.09.03 @ 13:56:51

## Tool Information

Drill Pipe:	Length: 3400.00 ft	Diameter: 3.82 inches	Volume: 48.20 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	3386.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	64.00 ft				
Tool Length:	84.00 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			3367.00	
Shut In Tool	5.00			3372.00	
Hydraulic tool	5.00			3377.00	
Packer	5.00			3382.00	20.00 Bottom Of Top Packer
Packer	4.00			3386.00	
Stubb	1.00			3387.00	
Recorder	0.00	6753	Inside	3387.00	
Recorder	0.00	6771	Outside	3387.00	
Perforations	26.00			3413.00	
Change Over Sub	1.00			3414.00	
Drill Pipe	32.00			3446.00	
Change Over Sub	1.00			3447.00	
Bullnose	3.00			3450.00	64.00 Bottom Packers & Anchor

**Total Tool Length: 84.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63144

**DST#: 2**

ATTN: Ed Glassman

Test Start: 2018.09.03 @ 13:56:51

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M	0.142
2.00	CO	0.028

Total Length: 12.00 ft      Total Volume: 0.170 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

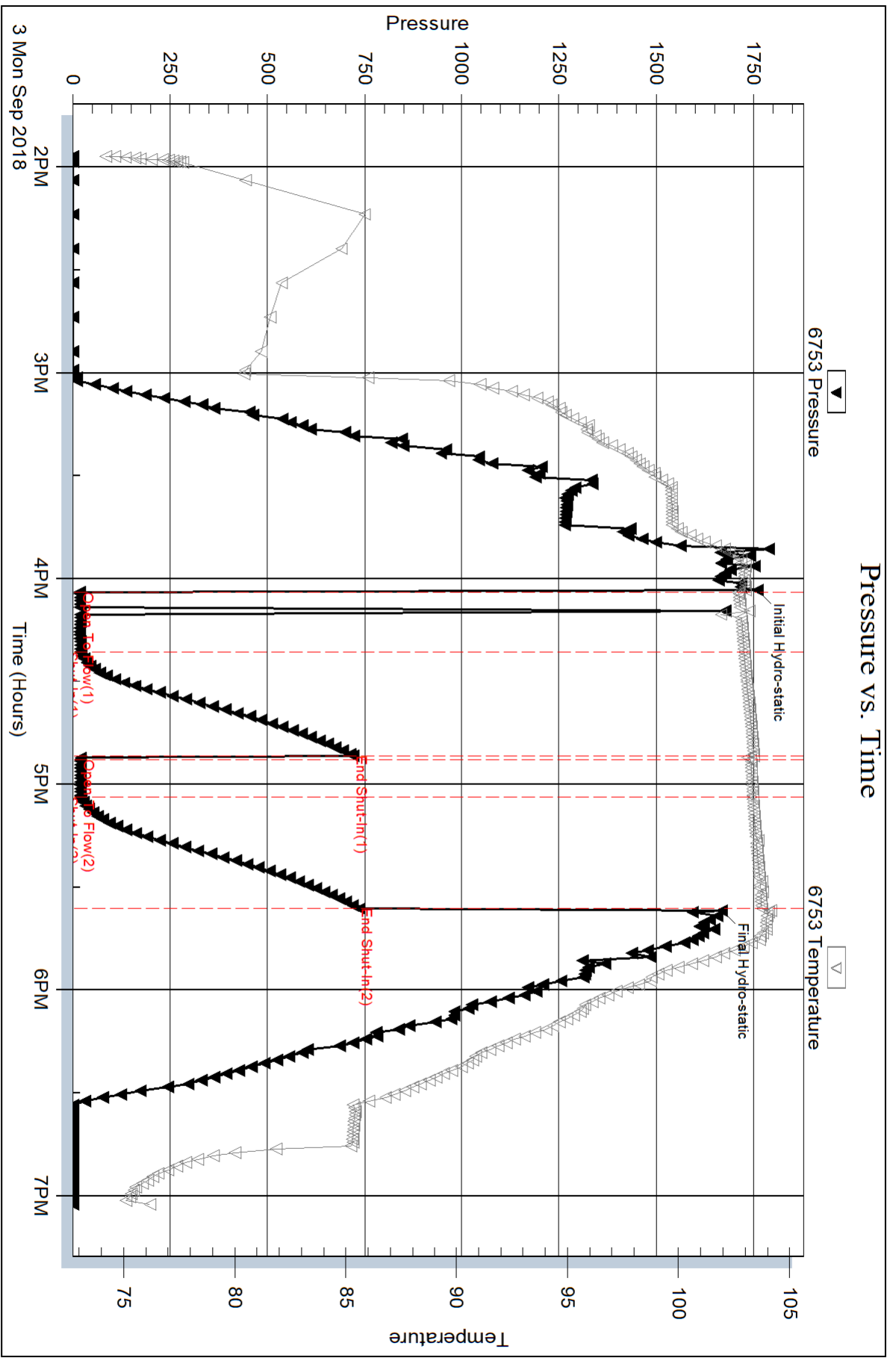
Serial #: 6753

Inside

Anchor Bay Petroleum, LLC

Hazen #1

DST Test Number: 2

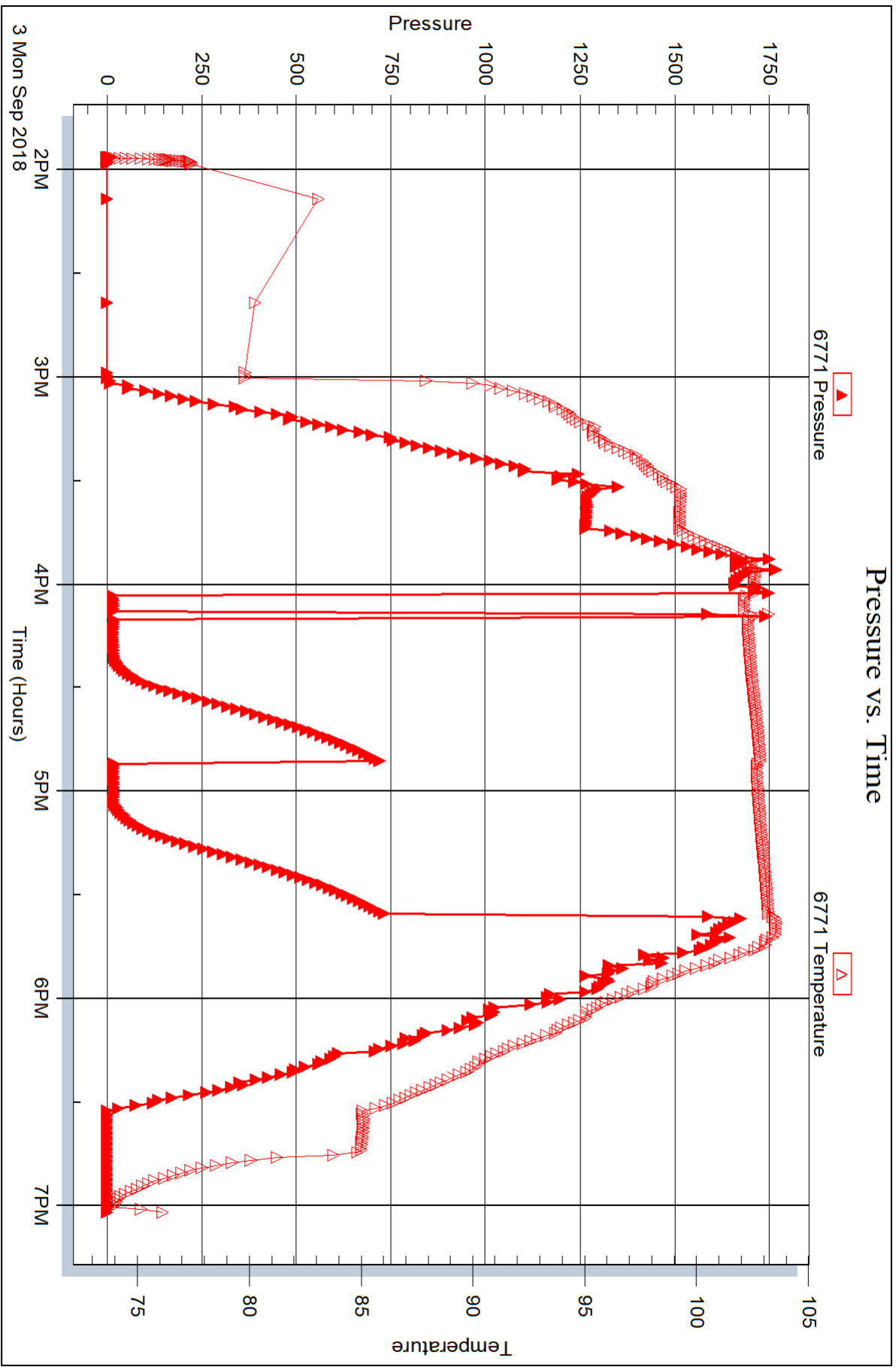


Serial #: 6771

Outside Anchor Bay Petroleum, LLC

Hazen #1

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Anchor Bay Petroleum, LLC**

1952 Victoria Rd.  
Hays, KS 67601

ATTN: Ed Glassman

### **Hazen #1**

### **19-8S-18W Rooks,KS**

Start Date: 2018.09.04 @ 12:34:09

End Date: 2018.09.04 @ 19:41:30

Job Ticket #: 63145                      DST #: 3

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

Printed: 2018.09.05 @ 13:48:13



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63145

**DST#: 3**

ATTN: Ed Glassman

Test Start: 2018.09.04 @ 12:34:09

## GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:57:30

Time Test Ended: 19:41:30

Test Type: Conventional Straddle (Reset)

Tester: Brannan Lonsdale

Unit No: 73

**Interval: 3270.00 ft (KB) To 3304.00 ft (KB) (TVD)**

Reference Elevations: 2045.00 ft (KB)

Total Depth: 3550.00 ft (KB) (TVD)

2038.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6771 Outside**

Press@RunDepth: 59.10 psig @ 3271.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.04 End Date: 2018.09.04

Last Calib.: 2018.09.04

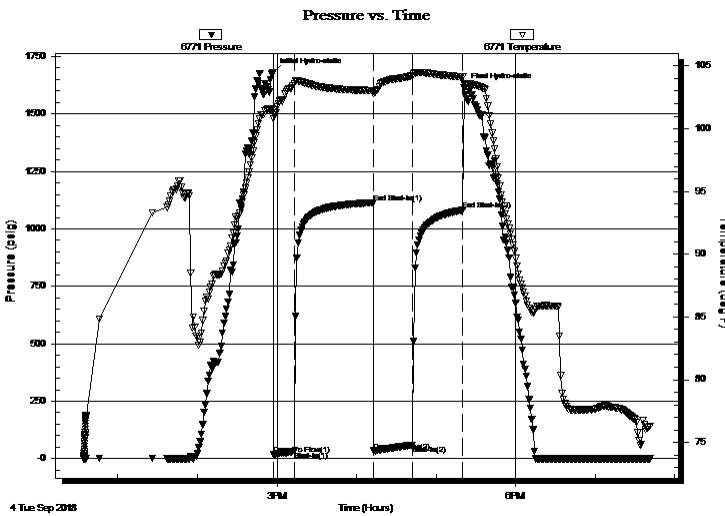
Start Time: 12:34:10 End Time: 19:41:30

Time On Btm: 2018.09.04 @ 14:57:15

Time Off Btm: 2018.09.04 @ 17:21:15

**TEST COMMENT:** 15- IF- Slow ly built to 2 1/4"  
60- IS- No blow  
30- FF- Slow ly built to 5 1/2"  
40- FSI- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1680.77	101.48	Initial Hydro-static
1	17.91	100.81	Open To Flow (1)
16	32.08	103.60	Shut-In(1)
76	1114.65	103.04	End Shut-In(1)
76	33.97	102.81	Open To Flow (2)
105	59.10	104.20	Shut-In(2)
143	1081.94	104.14	End Shut-In(2)
144	1612.39	103.58	Final Hydro-static

## Recovery

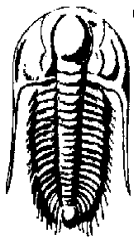
Length (ft)	Description	Volume (bbl)
96.00	MW, 40%M 60%W	1.36

\* Recovery from multiple tests

## Gas Rates

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





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# DRILL STEM TEST REPORT

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63145

**DST#: 3**

ATTN: Ed Glassman

Test Start: 2018.09.04 @ 12:34:09

### GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:57:30

Time Test Ended: 19:41:30

Test Type: Conventional Straddle (Reset)

Tester: Brannan Lonsdale

Unit No: 73

**Interval: 3270.00 ft (KB) To 3304.00 ft (KB) (TVD)**

Reference Elevations: 2045.00 ft (KB)

Total Depth: 3550.00 ft (KB) (TVD)

2038.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6753**

Inside

Press@RunDepth: psig @ 3271.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.04 End Date: 2018.09.04

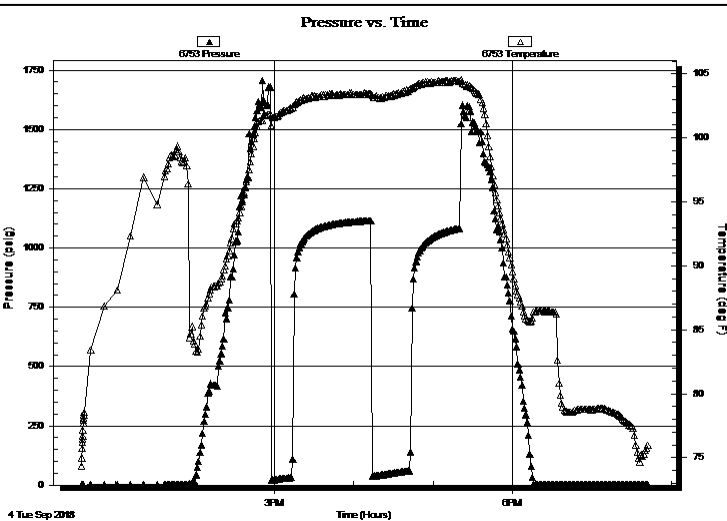
Last Calib.: 2018.09.04

Start Time: 12:34:41 End Time: 19:42:05

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 15- IF- Slow ly built to 2 1/4"  
60- IS- No blow  
30- FF- Slow ly built to 5 1/2"  
40- FS- No blow



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
96.00	MW, 40%M 60%W	1.36

### Gas Rates

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

\* Recovery from multiple tests



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## DRILL STEM TEST REPORT

Anchor Bay Petroleum, LLC

19-8S-18W Rooks,KS

1952 Victoria Rd.  
Hays, KS 67601

Hazen #1

Job Ticket: 63145

DST#: 3

ATTN: Ed Glassman

Test Start: 2018.09.04 @ 12:34:09

### GENERAL INFORMATION:

Formation: LKC "C"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:57:30

Time Test Ended: 19:41:30

Test Type: Conventional Straddle (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 3270.00 ft (KB) To 3304.00 ft (KB) (TVD)

Total Depth: 3550.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2045.00 ft (KB)

2038.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8367 Below (Straddle)

Press@RunDepth: psig @ 3321.00 ft (KB)

Start Date: 2018.09.04 End Date: 2018.09.04

Start Time: 12:34:13 End Time: 19:41:33

Capacity: 8000.00 psig

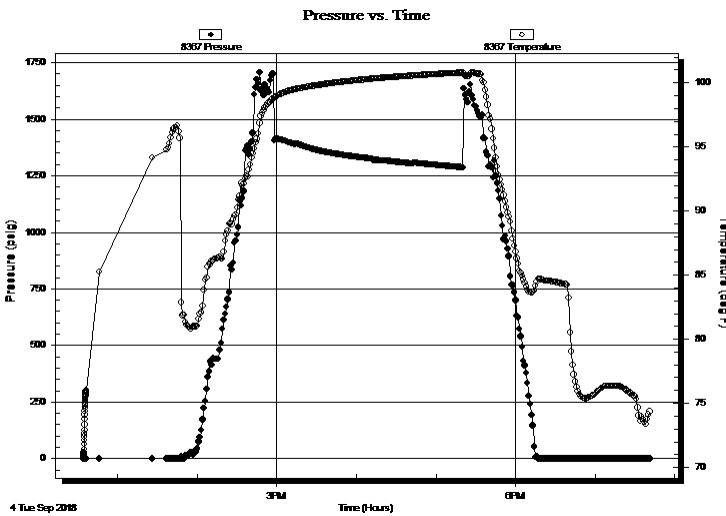
Last Calib.: 2018.09.04

Time On Btm:

Time Off Btm:

TEST COMMENT: 15- IF- Slow ly built to 2 1/4"  
60- IS- No blow  
30- FF- Slow ly built to 5 1/2"  
40- FS- No blow

### PRESSURE SUMMARY



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

### Recovery

Length (ft)	Description	Volume (bbl)
96.00	MW, 40%M 60%W	1.36

### Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63145

**DST#: 3**

ATTN: Ed Glassman

Test Start: 2018.09.04 @ 12:34:09

## Tool Information

Drill Pipe:	Length: 3272.00 ft	Diameter: 3.82 inches	Volume: 46.38 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	62000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3270.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	3304.00 ft				
Interval between Packers:	34.00 ft				
Tool Length:	300.00 ft				
Number of Packers:	3	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3251.00	
Shut In Tool	5.00			3256.00	
Hydraulic tool	5.00			3261.00	
Packer	5.00			3266.00	20.00 Bottom Of Top Packer
Packer	4.00			3270.00	
Stubb	1.00			3271.00	
Recorder	0.00	6753	Inside	3271.00	
Recorder	0.00	6771	Outside	3271.00	
Perforations	29.00			3300.00	
Blank Off Sub	1.00			3301.00	
Blank Spacing	3.00			3304.00	34.00 Tool Interval
Packer	1.00			3305.00	
Stubb	1.00			3306.00	
Perforations	14.00			3320.00	
Change Over Sub	1.00			3321.00	
Recorder	0.00	8367	Below	3321.00	
Drill Pipe	225.00			3546.00	
Change Over Sub	1.00			3547.00	
Bullnose	3.00			3550.00	246.00 Bottom Packers & Anchor

**Total Tool Length: 300.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Anchor Bay Petroleum, LLC

**19-8S-18W Rooks,KS**

1952 Victoria Rd.  
Hays, KS 67601

**Hazen #1**

Job Ticket: 63145

**DST#: 3**

ATTN: Ed Glassman

Test Start: 2018.09.04 @ 12:34:09

## 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:

85000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
96.00	MW, 40%M 60%W	1.361

Total Length: 96.00 ft      Total Volume: 1.361 bbl

Num Fluid Samples: 0

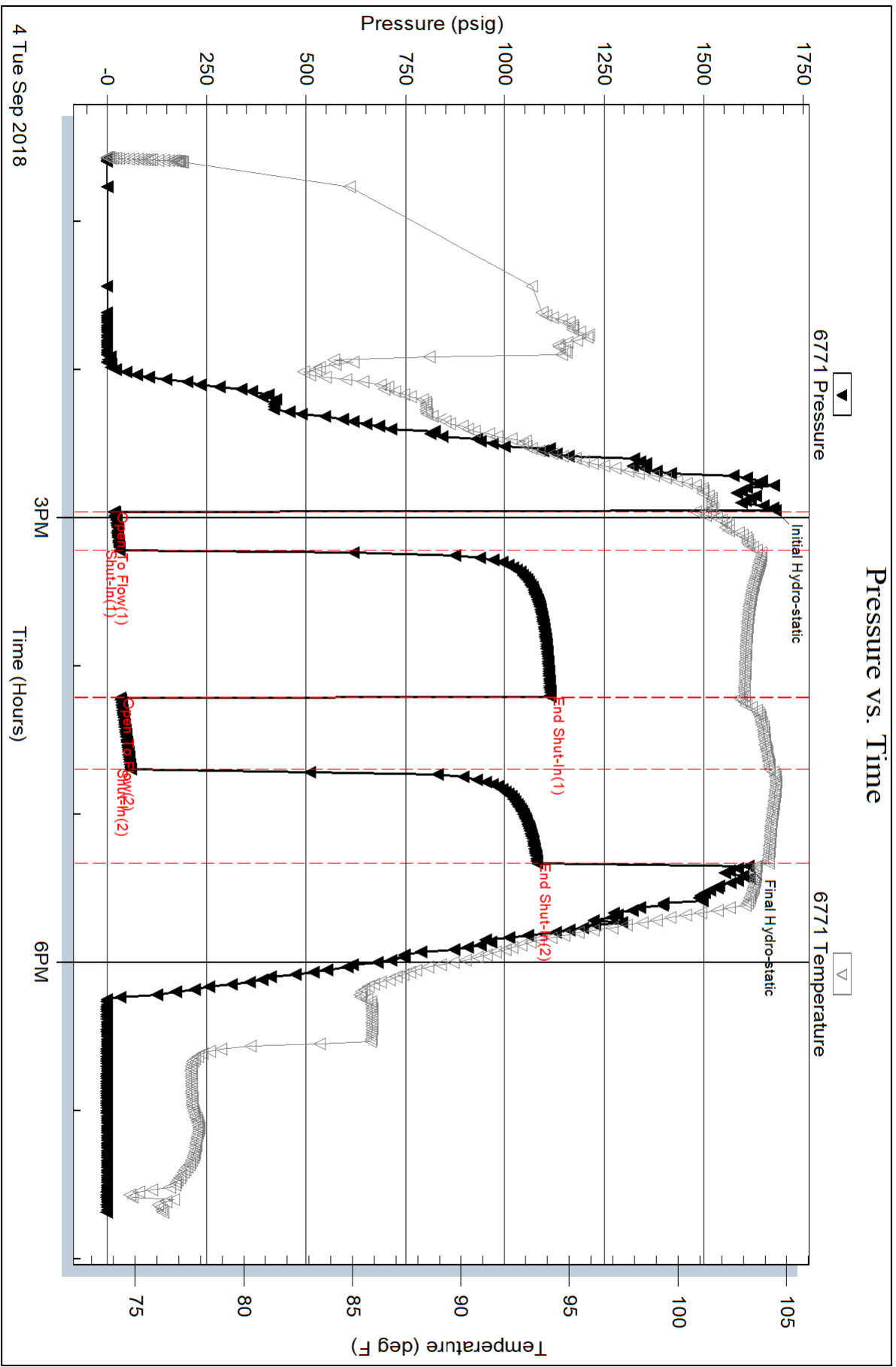
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .07@77deg



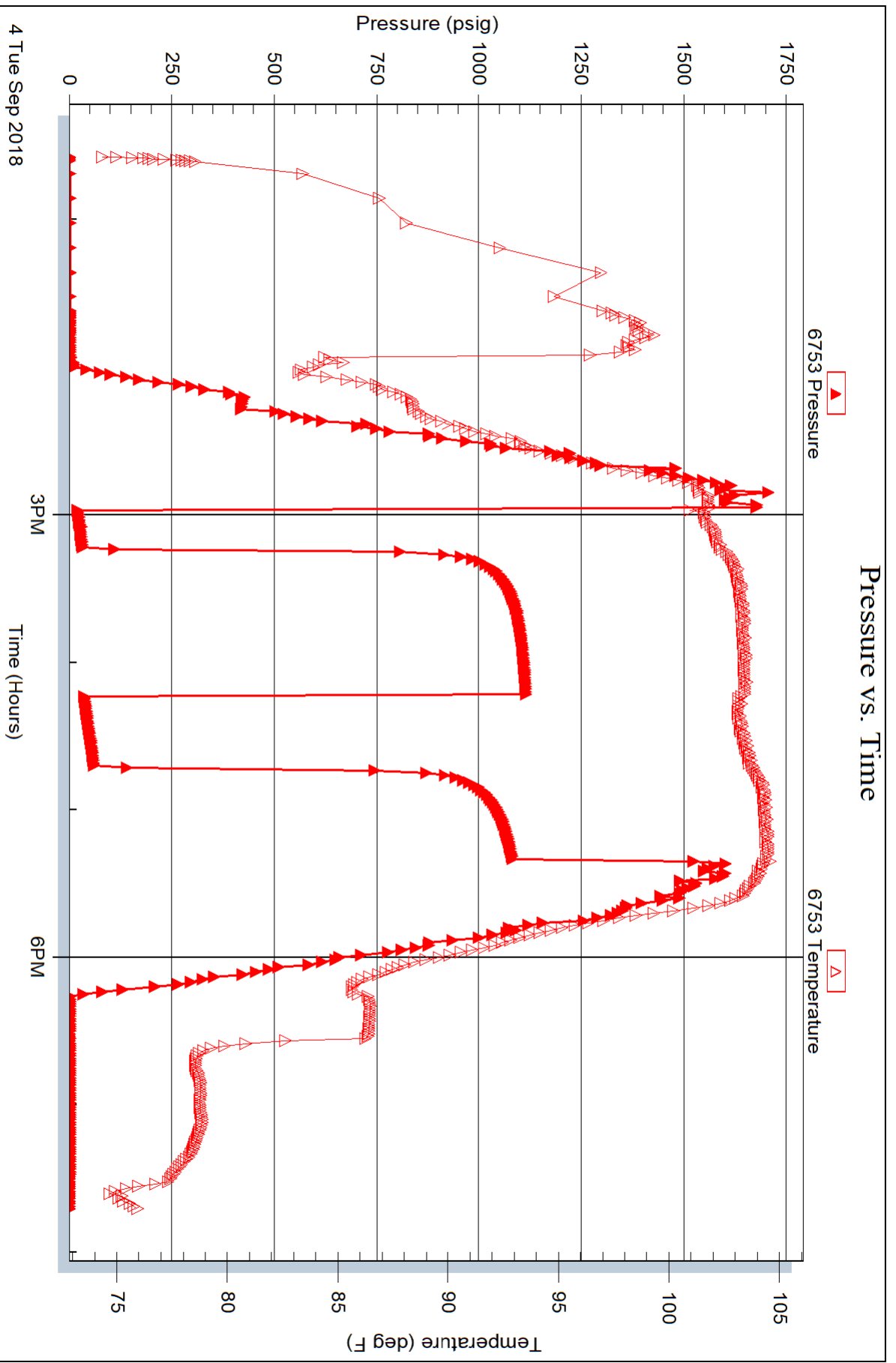
Serial #: 6753

Inside

Anchor Bay Petroleum, LLC

Hazen #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 63145

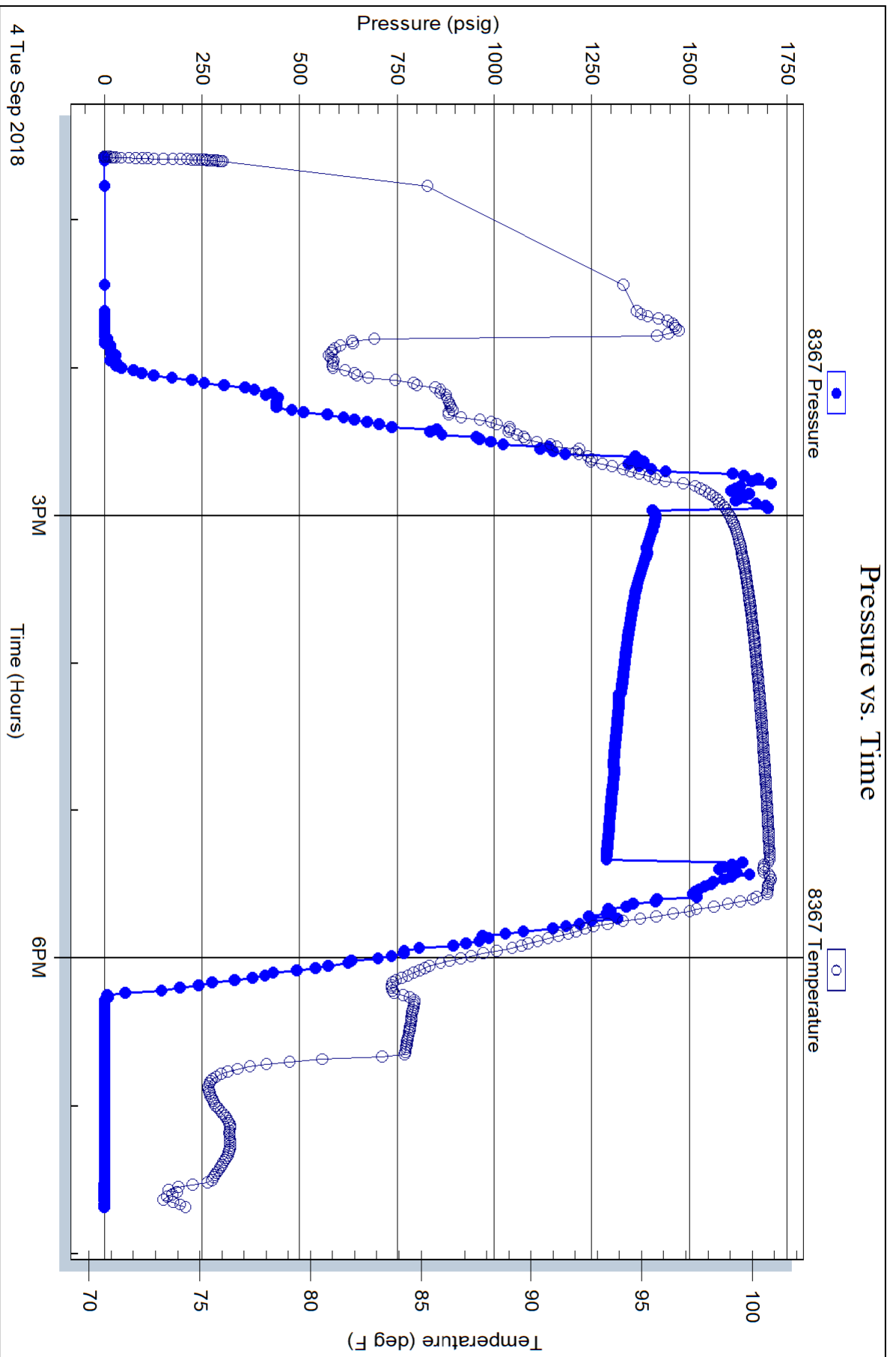
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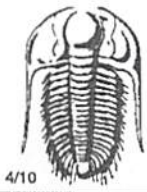
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Below (Stratfield) Bay Petroleum, LLC

Hazen #1

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63143

Well Name & No. Hazen #1 Test No. 1 Date 9/2/18  
 Company Anchor Bay Petroleum, LLC Elevation 2045 KB 2038 GL  
 Address 1952 Victoria Rd. Hays, KS 67601  
 Co. Rep / Geo. Ed Classman Rig Royal #2  
 Location: Sec. 19 Twp. 8 S Rge. 18 W Co. Rooks State KS

Interval Tested 3211-3285 Zone Tested Toronto-LKC "C"  
 Anchor Length 74' Drill Pipe Run 3208 Mud Wt. 8.9  
 Top Packer Depth 3206 Drill Collars Run --- Vis 56  
 Bottom Packer Depth 3211 Wt. Pipe Run --- WL 6.0  
 Total Depth 3285 Chlorides 1,900 ppm System LCM 2#

Blow Description IF - Weak surface blow  
ISF - No blow  
PF - Built slowly to 1"  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>288</u>	<u>M</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

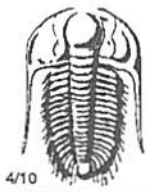
Rec Total 288 BHT 102° Gravity --- API RW --- @ --- ° F Chlorides --- ppm

(A) Initial Hydrostatic <u>1627</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>0305</u>
(B) First Initial Flow <u>127</u>	<input type="checkbox"/> Jars <u>---</u>	T-Started <u>0341</u>
(C) First Final Flow <u>137</u>	<input type="checkbox"/> Safety Joint <u>---</u>	T-Open <u>0751</u>
(D) Initial Shut-In <u>1103</u>	<input type="checkbox"/> Circ Sub <u>---</u>	T-Pulled <u>1051</u>
(E) Second Initial Flow <u>142</u>	<input type="checkbox"/> Hourly Standby <u>---</u>	T-Out <u>1251</u>
(F) Second Final Flow <u>167</u>	<input checked="" type="checkbox"/> Mileage <u>74 BT</u> 74	Comments <u>---</u>
(G) Final Shut-In <u>1080</u>	<input type="checkbox"/> Sampler <u>---</u>	<input type="checkbox"/> Ruined Shale Packer <u>---</u>
(H) Final Hydrostatic <u>1577</u>	<input type="checkbox"/> Straddle <u>---</u>	<input type="checkbox"/> Ruined Packer <u>---</u>
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer <u>---</u>	<input type="checkbox"/> Extra Copies <u>---</u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer <u>---</u>	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder <u>---</u>	Total <u>1124</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby <u>---</u>	MP/DST Disc't <u>---</u>
	<input type="checkbox"/> Accessibility <u>---</u>	
	Sub Total <u>1124</u>	

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

Our Representative  
Braunman Lonsdak





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63144

Well Name & No. Hazen #1 Test No. 2 Date 9/3/18  
 Company Anchor Bay Petroleum, LLC Elevation 2045 KB 2038 GL  
 Address 1952 Victoria Rd. Hays, KS 67601  
 Co. Rep / Geo. Ed Classman Rig Royal #2  
 Location: Sec. 19 Twp. 8 S Rge. 18 W Co. Rooks State KS

Interval Tested 3386-3450 Zone Tested LISC "I-K"  
 Anchor Length 64' Drill Pipe Run 3400 Mud Wt. 9.3  
 Top Packer Depth 3381 Drill Collars Run --- Vis 52  
 Bottom Packer Depth 3386 Wt. Pipe Run --- WL 7.4  
 Total Depth 3450 Chlorides 3,200 ppm System LCM 2#

Blow Description IF - Weak surface blow died 1 min. Flushed to bottom. No blow  
ISF - No blow  
FF - No blow  
FISF - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>M</u>				
<u>2</u>	<u>CO</u>				

Rec Total 12' BHT 104° Gravity 34 API RW --- @ --- ° F Chlorides --- ppm

(A) Initial Hydrostatic 1761  Test 1050 T-On Location 1345  
 (B) First Initial Flow 18  Jars --- T-Started 1356  
 (C) First Final Flow 20  Safety Joint --- T-Open 1603  
 (D) Initial Shut-In 221  Circ Sub --- T-Pulled 1733  
 (E) Second Initial Flow 20  Hourly Standby --- T-Out 1902  
 (F) Second Final Flow 20  Mileage 74 RT 74 Comments ---  
 (G) Final Shut-In 235  Sampler ---  
 (H) Final Hydrostatic 1669  Straddle ---  
 Shale Packer ---  
 Shale Packer ---  
 Extra Packer ---  
 Extra Recorder ---  
 Day Standby ---  
 Accessibility ---  
 Sub Total 1124

Ruined Shale Packer ---  
 Ruined Packer ---  
 Extra Copies ---  
 Sub Total 0  
 Total 1124  
 MP/DST Disc't ---

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

Our Representative  
Brennan Lonsdale



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63145

Well Name & No. Hazen #1 Test No. 3 Date 9/4/18  
 Company Anchor Bay Petroleum, LLC Elevation 2045 KB 2038 GL  
 Address 1952 Victoria Bld. Hays, KS 67601  
 Co. Rep / Geo. Ed Classman Rig Royal #2  
 Location: Sec. 19 Twp. 8 S Rge. 18 W Co. Rooks State KS

Interval Tested 3270-3304 Zone Tested LKC "C"  
 Anchor Length 34' - Tail-246' Drill Pipe Run 3272 Mud Wt. 9.4  
 Top Packer Depth 3265-3270 Drill Collars Run \_\_\_\_\_ Vis 59  
 Bottom Packer Depth 3270 3304 Wt. Pipe Run \_\_\_\_\_ WL 7.8  
 Total Depth 3550 Chlorides 3,300 ppm System LCM 2H

Blow Description IF - slowly built to 2 1/4"  
FST - No blow  
PF - slowly built to 5 1/2"  
FST - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>96</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 Total 96' BHT 104° Gravity \_\_\_\_\_ API RW .07 @ 77 °F Chlorides 85,000 ppm  
 (A) Initial Hydrostatic 1681  Test 1050 T-On Location 1205  
 (B) First Initial Flow 18  Jars \_\_\_\_\_ T-Started 1234  
 (C) First Final Flow 32  Safety Joint \_\_\_\_\_ T-Open 1457  
 (D) Initial Shut-In 1115  Circ Sub \_\_\_\_\_ T-Pulled 1722  
 (E) Second Initial Flow 34  Hourly Standby \_\_\_\_\_ T-Out 1942  
 (F) Second Final Flow 59  Mileage 74 RT 74 Comments \_\_\_\_\_  
 (G) Final Shut-In 1082  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1612  Straddle 600  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Initial Open 15  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 30  Day Standby \_\_\_\_\_ Total 1974  
 Final Shut-In 40  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1974

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

Our Representative  
Brauman Lonsdale