



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

Hiebsch #7-1

S7-34s-32w Seward,KS

Start Date: 2015.05.11 @ 20:15:00

End Date: 2015.05.12 @ 05:57:30

Job Ticket #: 58814 DST #: 1

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

Printed: 2015.05.22 @ 08:26:56



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 58814

DST#: 1

ATTN: Luke Thompson

Test Start: 2015.05.11 @ 20:15:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:58:15

Time Test Ended: 05:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Cornelio Landa III

Unit No: 67

Interval: 4448.00 ft (KB) To 4514.00 ft (KB) (TVD)

Reference Elevations: 2823.00 ft (KB)

Total Depth: 4514.00 ft (KB) (TVD)

2812.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8968 Outside

Press@RunDepth: 162.03 psig @ 4451.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.11

End Date: 2015.05.12

Last Calib.: 2015.05.12

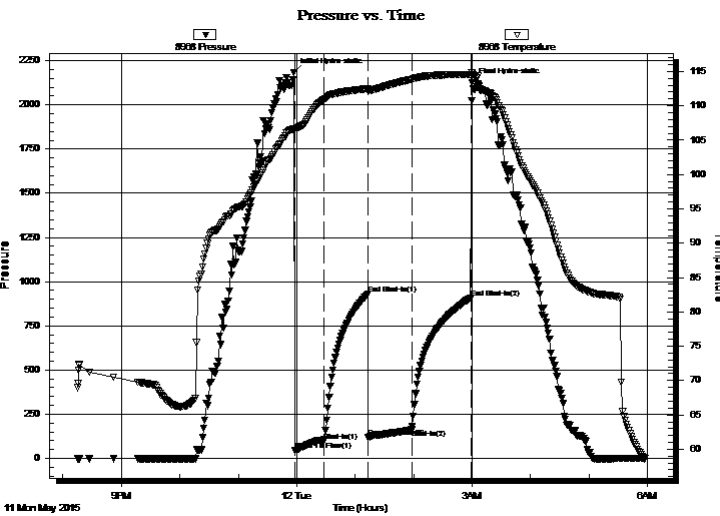
Start Time: 20:15:05

End Time: 05:57:30

Time On Btm: 2015.05.11 @ 23:57:15

Time Off Btm: 2015.05.12 @ 03:00:00

TEST COMMENT: IF: BOB in 1 min. 15 sec.- GTS in 10 min.- Too small to gauge
IS: Bled off in 2 min.- Weak surface blow back- Built to 2" return
FF: 2" Immediately- BOB and GTS in 3 min.- Too small to gauge
FS: Bled off in 3 min.- Weak surface blow back- Built to 1 1/2". of return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2184.04	106.74	Initial Hydro-static
1	43.31	106.54	Open To Flow (1)
31	96.75	110.86	Shut-In(1)
76	929.97	112.49	End Shut-In(1)
76	118.18	112.20	Open To Flow (2)
121	162.03	113.85	Shut-In(2)
182	909.65	114.58	End Shut-In(2)
183	2125.36	114.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	G & Mcw 5g 20m 75w	0.59
214.00	O & Gcm 5o 15g 80m	1.91

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palmer Oil, Inc
PO Box 399
Garden City, KS 67846
ATTN: Luke Thompson

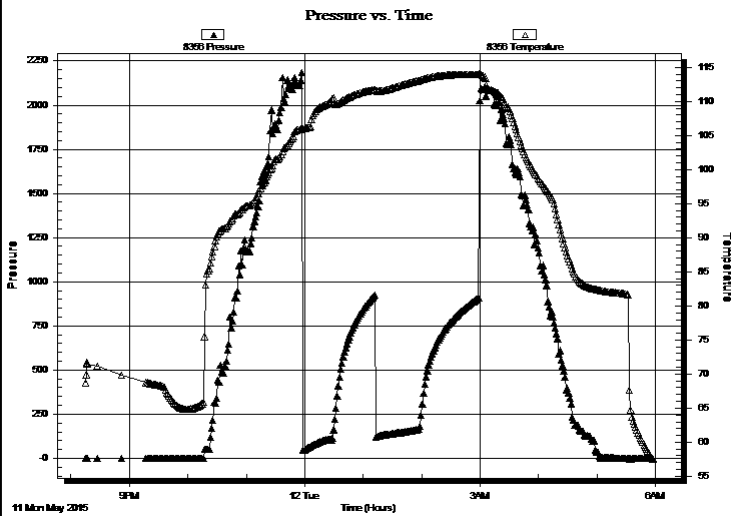
S7-34s-32w Seward,KS
Hiebsch #7-1
Job Ticket: 58814 **DST#: 1**
Test Start: 2015.05.11 @ 20:15:00

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:58:15
Time Test Ended: 05:57:30
Test Type: Conventional Bottom Hole (Initial)
Tester: Cornelio Landa III
Unit No: 67
Interval: **4448.00 ft (KB) To 4514.00 ft (KB) (TVD)**
Reference Elevations: 2823.00 ft (KB)
Total Depth: 4514.00 ft (KB) (TVD) 2812.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 11.00 ft

Serial #: 8356 Inside
Press@RunDepth: psig @ 4451.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2015.05.11 End Date: 2015.05.12 Last Calib.: 2015.05.12
Start Time: 20:15:05 End Time: 05:57:30 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: BOB in 1 min. 15 sec.- GTS in 10 min.- Too small to gauge
IS: Bled off in 2 min.- Weak surface blow back- Built to 2" return
FF: 2" Immediately- BOB and GTS in 3 min.- Too small to gauge
FS: Bled off in 3 min.- Weak surface blow back- Built to 1 1/2". of return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	G & Mcw 5g 20m 75w	0.59
214.00	O & Gcm 5o 15g 80m	1.91

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 58814

DST#: 1

ATTN: Luke Thompson

Test Start: 2015.05.11 @ 20:15:00

Tool Information

Drill Pipe:	Length: 4203.00 ft	Diameter: 3.80 inches	Volume: 58.96 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: 28000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 60.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4448.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	93.00 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			4422.00	
Shut In Tool	5.00			4427.00	
Hydraulic tool	5.00			4432.00	
Jars	5.00			4437.00	
Safety Joint	2.00			4439.00	
Packer	5.00			4444.00	27.00 Bottom Of Top Packer
Packer	4.00			4448.00	
Stubb	1.00			4449.00	
Perforations	1.00			4450.00	
Change Over Sub	1.00			4451.00	
Recorder	0.00	8356	Inside	4451.00	
Recorder	0.00	8968	Outside	4451.00	
Drill Pipe	31.00			4482.00	
Change Over Sub	1.00			4483.00	
Perforations	28.00			4511.00	
Bullnose	3.00			4514.00	66.00 Bottom Packers & Anchor
Total Tool Length:	93.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 58814

DST#: 1

ATTN: Luke Thompson

Test Start: 2015.05.11 @ 20:15:00

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: 225000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume: bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	G & Mcw 5g 20m 75w	0.590
214.00	O & Gcm 5o 15g 80m	1.909

Total Length: 334.00 ft Total Volume: 2.499 bbl

Num Fluid Samples: 0

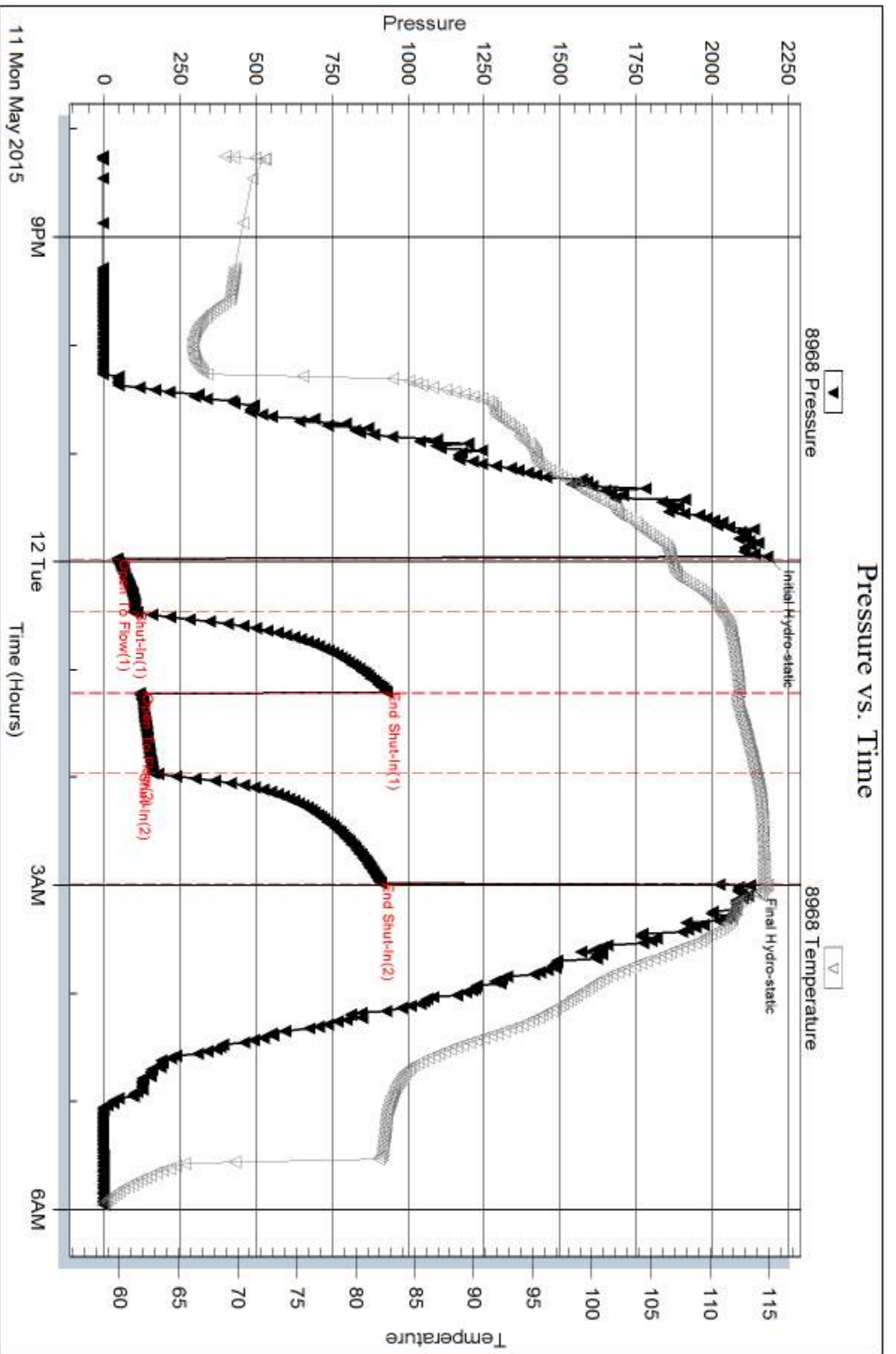
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



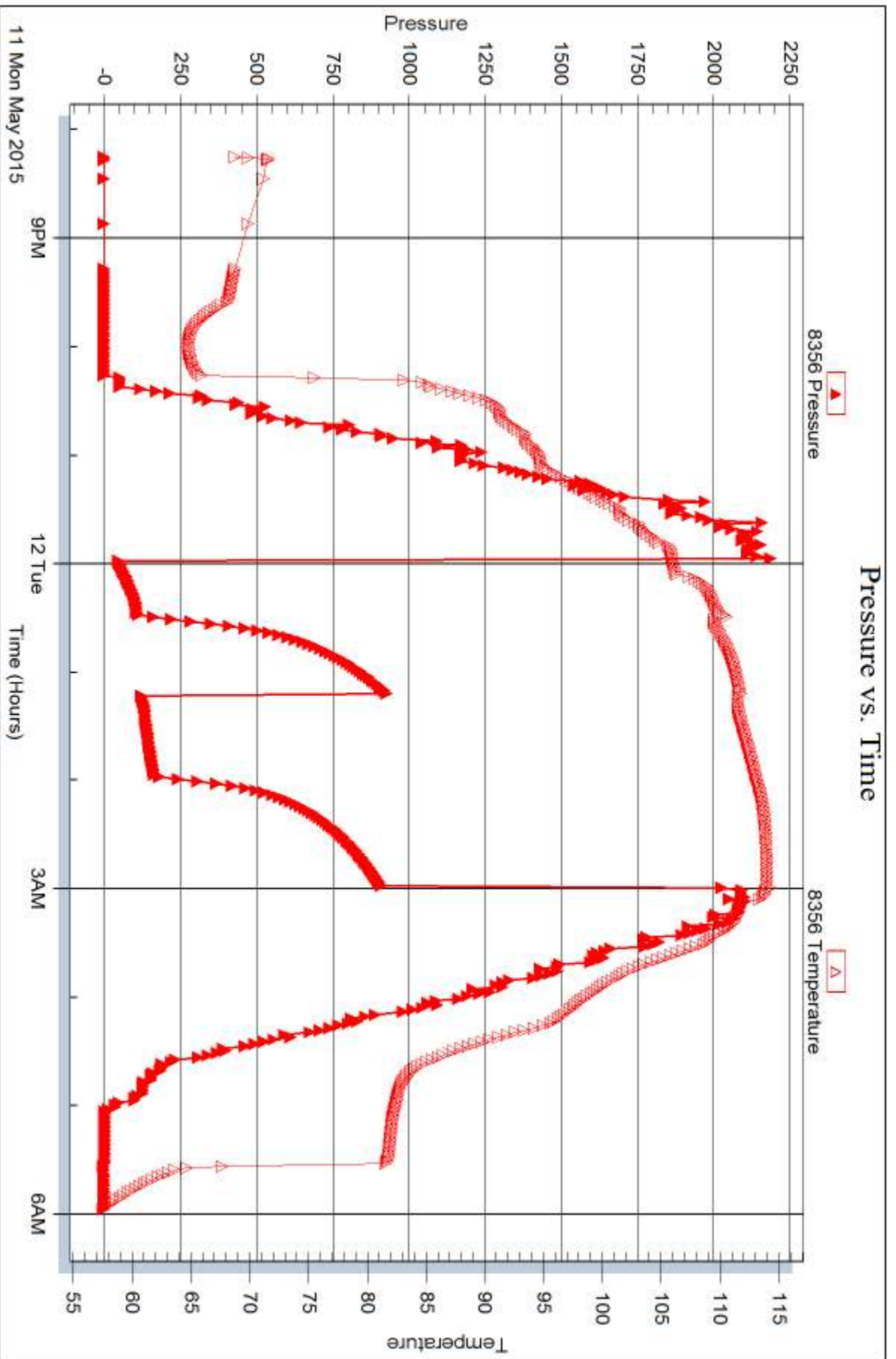
Serial #: 8356

Inside

Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 58814

Printed: 2015.05.22 @ 08:26:58



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

Hiebsch #7-1

S7-34s-32w Seward,KS

Start Date: 2015.05.16 @ 10:09:00

End Date: 2015.05.16 @ 18:06:50

Job Ticket #: 61682 DST #: 2

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

Printed: 2015.05.22 @ 08:26:13



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Palmer Oil, Inc
PO Box 399
Garden City, KS 67846
ATTN: Luke Thompson

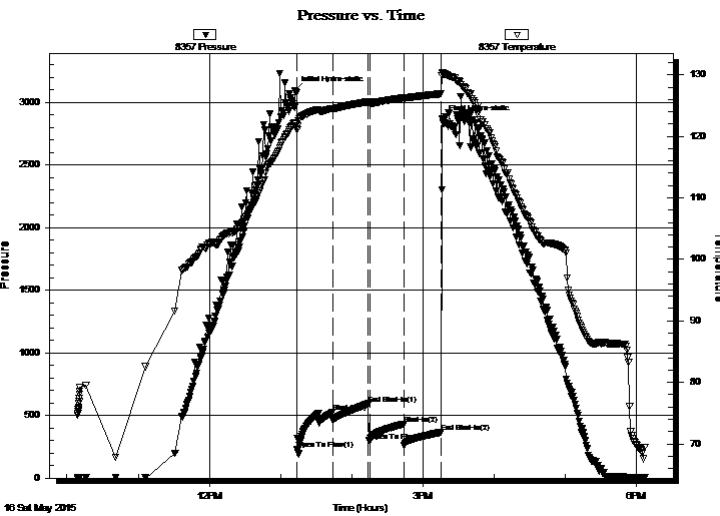
S7-34s-32w Seward,KS
Hiebsch #7-1
Job Ticket: 61682 **DST#: 2**
Test Start: 2015.05.16 @ 10:09:00

GENERAL INFORMATION:

Formation: **Morrow**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:14:00
Time Test Ended: 18:06:50
Interval: **5771.00 ft (KB) To 6000.00 ft (KB) (TVD)**
Total Depth: 6000.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2823.00 ft (KB)
2812.00 ft (CF)
KB to GR/CF: 11.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 61

Serial #: 8357 Inside
Press@RunDepth: 431.90 psig @ 5774.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2015.05.16 End Date: 2015.05.16 Last Calib.: 2015.05.16
Start Time: 10:09:02 End Time: 18:06:49 Time On Btm: 2015.05.16 @ 13:12:10
Time Off Btm: 2015.05.16 @ 15:16:20

TEST COMMENT: 30- 2" Blow .
30- No return.
30- Weak surface blow died @ 5 min.
30- No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3089.92	122.25	Initial Hydro-static
2	227.46	121.09	Open To Flow (1)
32	523.17	124.57	Shut-In(1)
62	593.62	125.63	End Shut-In(1)
63	293.94	125.54	Open To Flow (2)
92	431.90	126.26	Shut-In(2)
124	366.43	126.93	End Shut-In(2)
125	2864.50	130.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	M 100m with a couple of oil spots.	0.34

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Luke Thompson

S7-34s-32w Seward,KS
Hiebsch #7-1
 Job Ticket: 61682 **DST#: 2**
 Test Start: 2015.05.16 @ 10:09:00

GENERAL INFORMATION:

Formation: **Morrow**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:14:00
 Time Test Ended: 18:06:50
 Interval: **5771.00 ft (KB) To 6000.00 ft (KB) (TVD)**
 Total Depth: 6000.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Smith
 Unit No: 61
 Reference Elevations: 2823.00 ft (KB)
 2812.00 ft (CF)
 KB to GR/CF: 11.00 ft

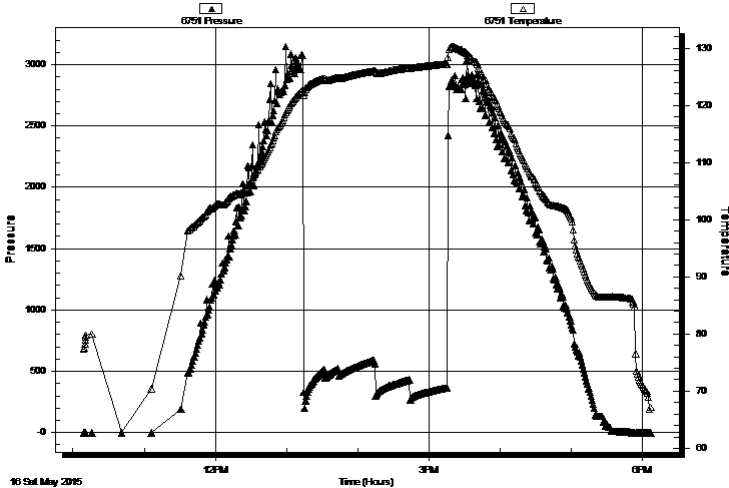
Serial #: 6751

Outside

Press@RunDepth: psig @ 5774.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.16 End Date: 2015.05.16 Last Calib.: 2015.05.16
 Start Time: 10:09:02 End Time: 18:06:40 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30- 2" Blow .
 30- No return.
 30- Weak surface blow died @ 5 min.
 30- No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	M 100m with a couple of oil spots.	0.34

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61682

DST#: 2

ATTN: Luke Thompson

Test Start: 2015.05.16 @ 10:09:00

Tool Information

Drill Pipe:	Length: 5520.00 ft	Diameter: 3.80 inches	Volume: 77.43 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 125000.0 lb
			<u>Total Volume: 78.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.50 ft			String Weight: Initial 86000.00 lb
Depth to Top Packer:	5771.00 ft			Final 87000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	229.00 ft			
Tool Length:	256.50 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			5744.50	
Shut In Tool	5.00			5749.50	
Hydraulic tool	5.00			5754.50	
Jars	5.00			5759.50	
Safety Joint	2.50			5762.00	
Packer	5.00			5767.00	27.50 Bottom Of Top Packer
Packer	4.00			5771.00	
Stubb	1.00			5772.00	
Perforations	2.00			5774.00	
Recorder	0.00	8357	Inside	5774.00	
Recorder	0.00	6751	Outside	5774.00	
Perforations	33.00			5807.00	
Change Over Sub	1.00			5808.00	
Drill Pipe	188.00			5996.00	
Change Over Sub	1.00			5997.00	
Bullnose	3.00			6000.00	229.00 Bottom Packers & Anchor
Total Tool Length:	256.50				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61682

DST#: 2

ATTN: Luke Thompson

Test Start: 2015.05.16 @ 10:09:00

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: 70.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	M 100m w with a couple of oil spots.	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

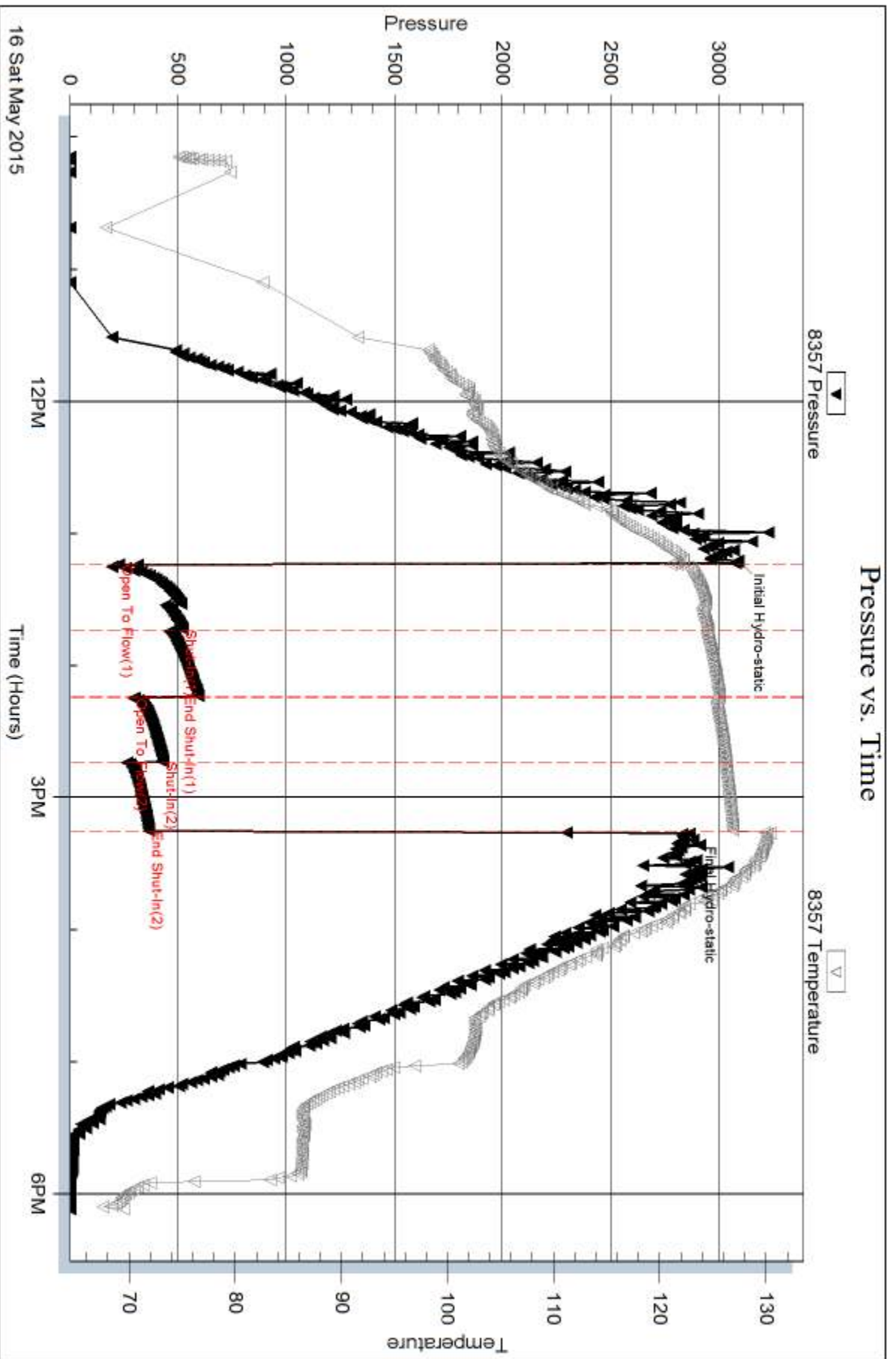
Serial #: 8357

Inside

Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 2

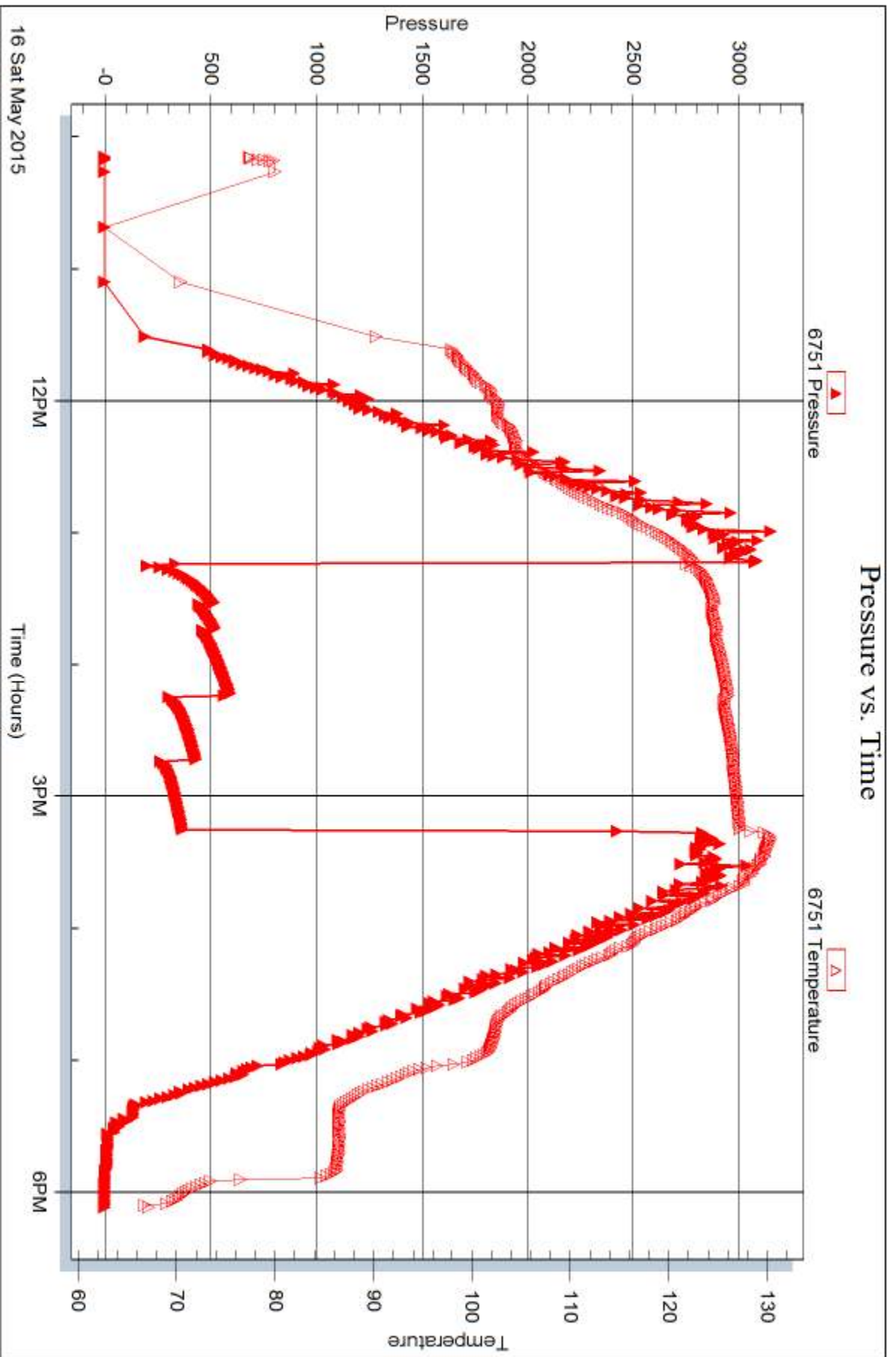


Serial #: 6751

Outside Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

Hiebsch #7-1

S7-34s-32w Seward,KS

Start Date: 2015.05.18 @ 08:02:00

End Date: 2015.05.18 @ 14:38:00

Job Ticket #: 61684 DST #: 3

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

Printed: 2015.05.22 @ 08:25:50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61684

DST#: 3

ATTN: Luke Thompson

Test Start: 2015.05.18 @ 08:02:00

GENERAL INFORMATION:

Formation: **Chester**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:12:50

Time Test Ended: 14:38:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 61

Interval: 6183.00 ft (KB) To 6334.00 ft (KB) (TVD)

Reference Elevations: 2823.00 ft (KB)

Total Depth: 6334.00 ft (KB) (TVD)

2812.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8357 Inside

Press@RunDepth: psig @ 6184.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.18

End Date: 2015.05.18

Last Calib.: 2015.05.18

Start Time: 08:02:02

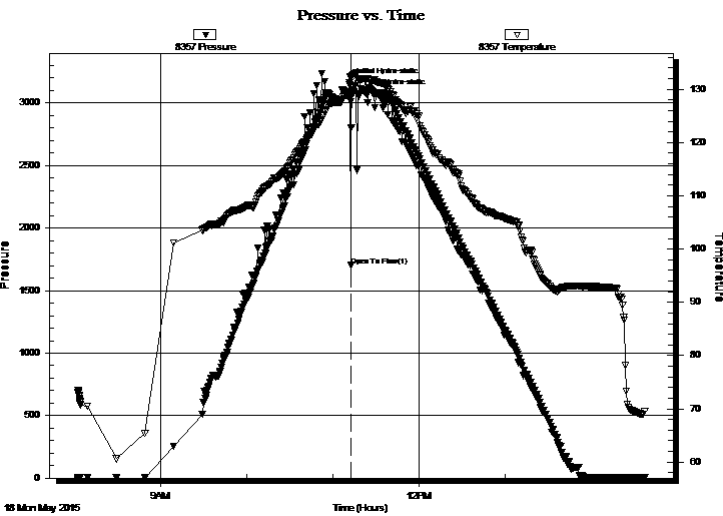
End Time: 14:38:00

Time On Btm: 2015.05.18 @ 11:11:50

Time Off Btm: 2015.05.18 @ 11:17:30

TEST COMMENT: Packer seat failed, reset packer again, packer seat failed, pulled tool.

11" Of bottom rubber are in the hole. Top packer rubber was split circumferentially.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3165.18	128.77	Initial Hydro-static
1	1701.81	127.64	Open To Flow (1)
6	3073.06	131.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	M 100m	2.86

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

S7-34s-32w Seward,KS

Hiebsch #7-1

Job Ticket: 61684 **DST#: 3**

Test Start: 2015.05.18 @ 08:02:00

GENERAL INFORMATION:

Formation: **Chester**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:12:50

Time Test Ended: 14:38:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 61

Interval: 6183.00 ft (KB) To 6334.00 ft (KB) (TVD)

Total Depth: 6334.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2823.00 ft (KB)

2812.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6751

Outside

Press@RunDepth: psig @ 6184.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.18

End Date: 2015.05.18

Last Calib.: 2015.05.18

Start Time: 08:02:12

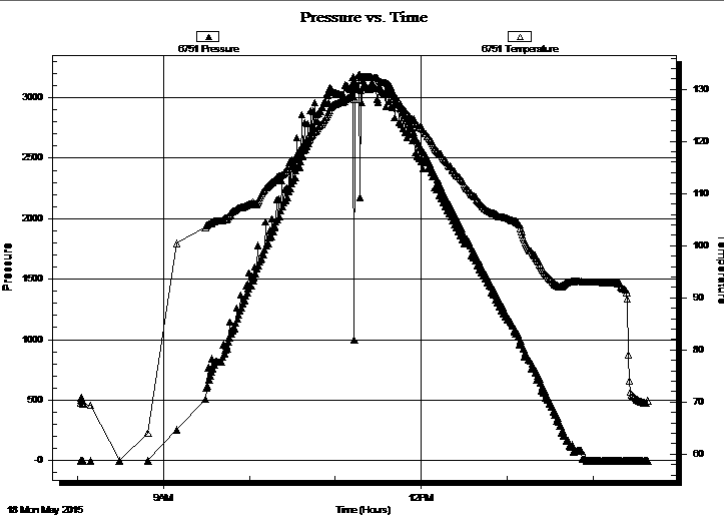
End Time: 14:37:59

Time On Btm:

Time Off Btm:

TEST COMMENT: Packer seat failed, reset packer again, packer seat failed, pulled tool.

11" Of bottom rubber are in the hole. Top packer rubber was split circumferentially.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
360.00	M 100m	2.86

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61684

DST#: 3

ATTN: Luke Thompson

Test Start: 2015.05.18 @ 08:02:00

Tool Information

Drill Pipe:	Length: 5932.00 ft	Diameter: 3.80 inches	Volume: 83.21 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 125000.0 lb
			<u>Total Volume: 84.39 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.50 ft			String Weight: Initial 87000.00 lb
Depth to Top Packer:	6183.00 ft			Final 89000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	151.00 ft			
Tool Length:	178.50 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			6156.50	
Shut In Tool	5.00			6161.50	
Hydraulic tool	5.00			6166.50	
Jars	5.00			6171.50	
Safety Joint	2.50			6174.00	
Packer	5.00			6179.00	27.50 Bottom Of Top Packer
Packer	4.00			6183.00	
Stubb	1.00			6184.00	
Recorder	0.00	8357	Inside	6184.00	
Recorder	0.00	6751	Outside	6184.00	
Perforations	20.00			6204.00	
Change Over Sub	1.00			6205.00	
Drill Pipe	125.00			6330.00	
Change Over Sub	1.00			6331.00	
Bullnose	3.00			6334.00	151.00 Bottom Packers & Anchor

Total Tool Length: 178.50



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61684

DST#: 3

ATTN: Luke Thompson

Test Start: 2015.05.18 @ 08:02:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	M 100m	2.864

Total Length: 360.00 ft Total Volume: 2.864 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

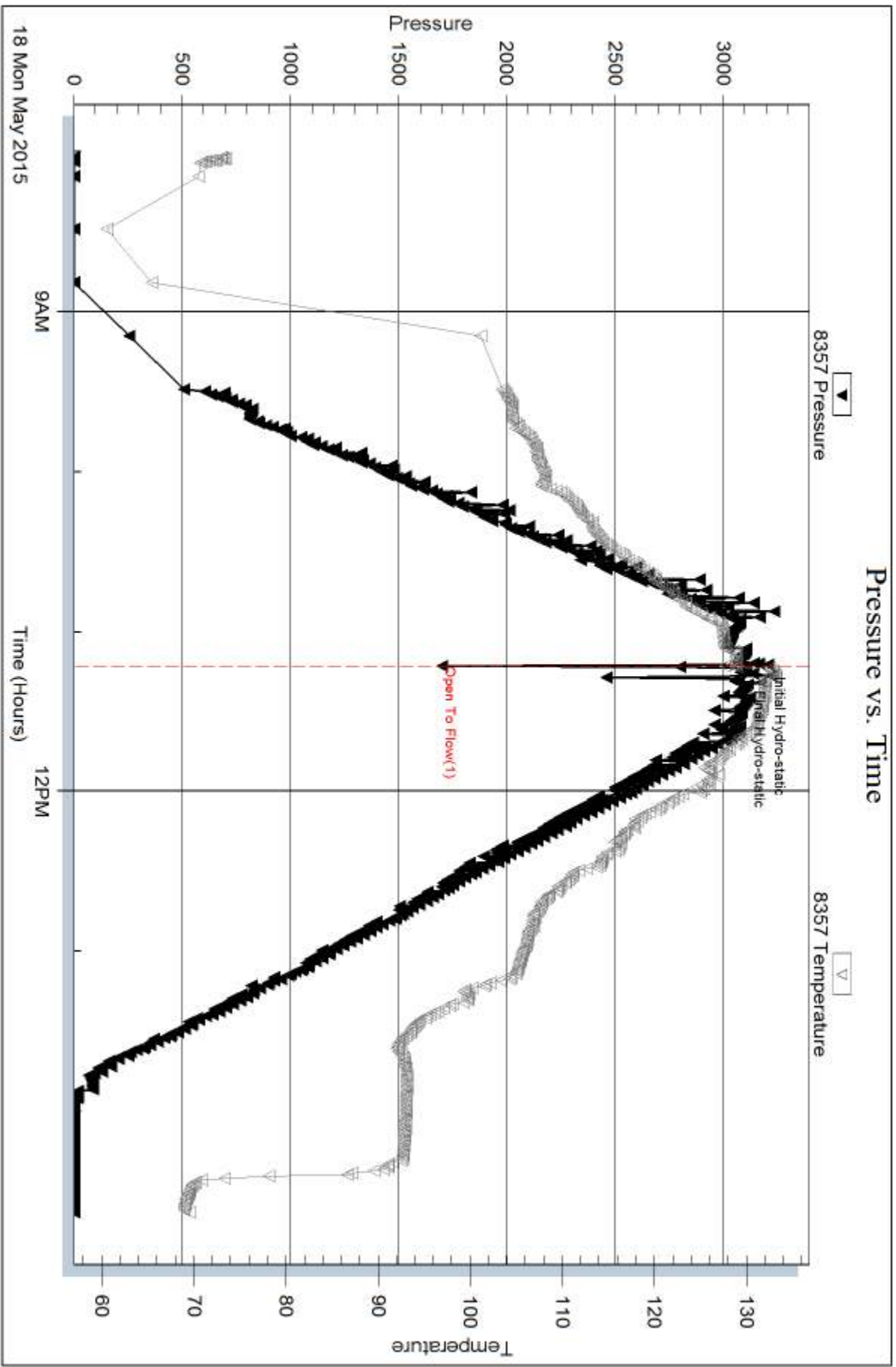
Serial #: 8357

Inside

Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 61684

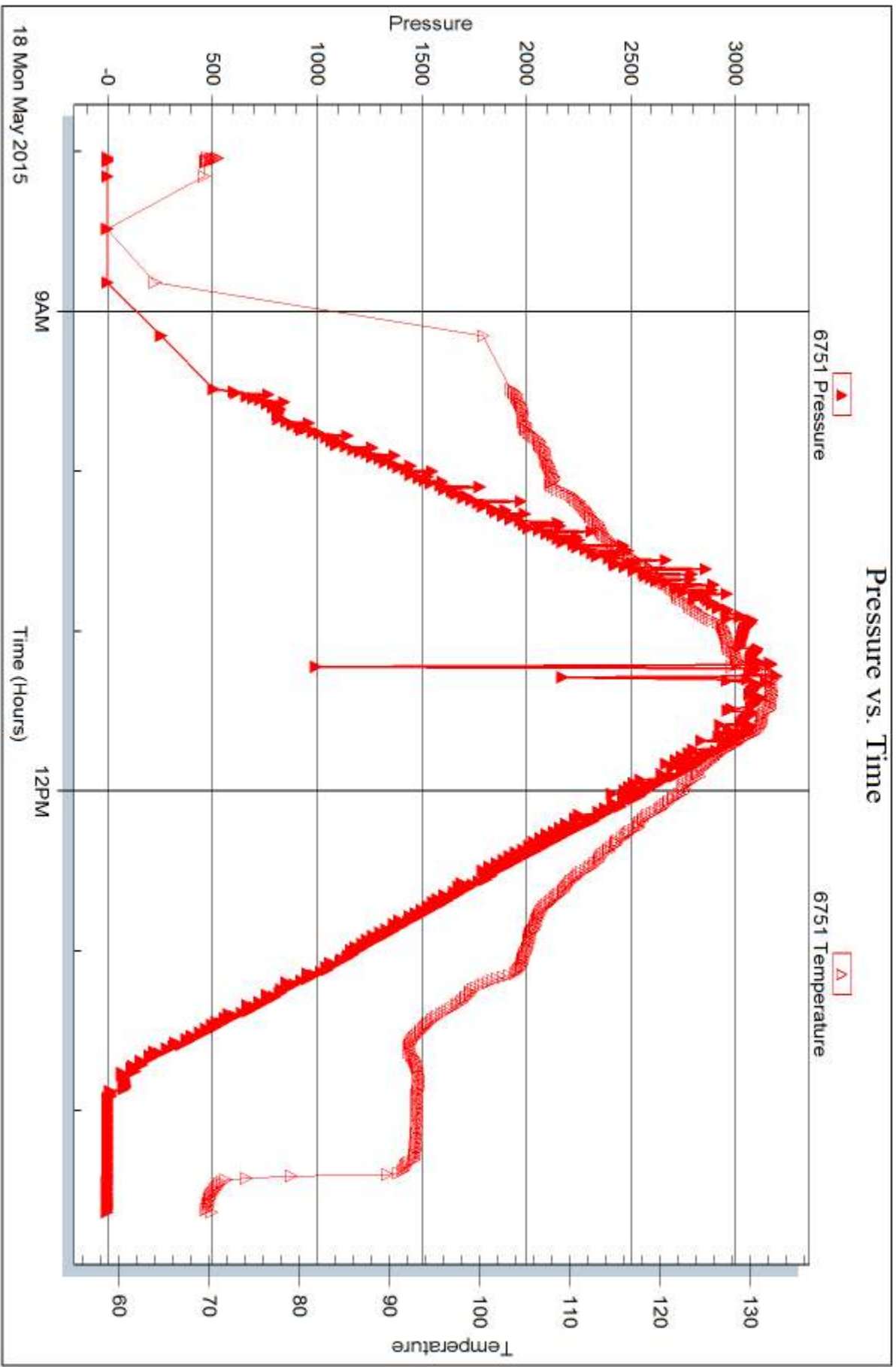
Printed: 2015.05.22 @ 08:25:51

Serial #: 6751

Outside Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

Hiebsch #7-1

S7-34s-32w Seward,KS

Start Date: 2015.05.18 @ 15:09:00

End Date: 2015.05.18 @ 22:28:30

Job Ticket #: 61685 DST #: 4

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

Printed: 2015.05.22 @ 08:25:19



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Luke Thompson

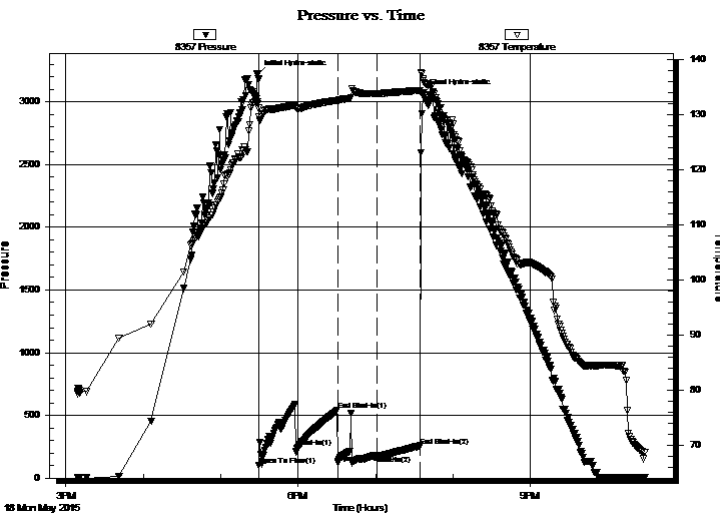
S7-34s-32w Seward,KS
Hiebsch #7-1
 Job Ticket: 61685 **DST#: 4**
 Test Start: 2015.05.18 @ 15:09:00

GENERAL INFORMATION:

Formation: **Chester**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:29:30
 Time Test Ended: 22:28:30
 Interval: **6082.00 ft (KB) To 6334.00 ft (KB) (TVD)**
 Total Depth: 6334.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Smith
 Unit No: 61
 Reference Elevations: 2823.00 ft (KB)
 2812.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8357 **Inside**
 Press@RunDepth: 184.39 psig @ 6083.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.18 End Date: 2015.05.18 Last Calib.: 2015.05.18
 Start Time: 15:09:02 End Time: 22:28:30 Time On Btm: 2015.05.18 @ 17:28:10
 Time Off Btm: 2015.05.18 @ 19:36:30

TEST COMMENT: 30- 1 1/2" Blow receded to 1".
 30- No return.
 30- No blow , flushed tool, surge died.
 33- No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3216.14	132.29	Initial Hydro-static
2	100.46	129.55	Open To Flow (1)
32	243.04	131.03	Shut-In(1)
63	542.42	132.59	End Shut-In(1)
63	121.85	132.45	Open To Flow (2)
93	184.39	133.84	Shut-In(2)
127	257.61	134.36	End Shut-In(2)
129	3069.24	136.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	M 100m	0.59

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palmer Oil, Inc

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

S7-34s-32w Seward,KS

Hiebsch #7-1

Job Ticket: 61685

DST#: 4

Test Start: 2015.05.18 @ 15:09:00

GENERAL INFORMATION:

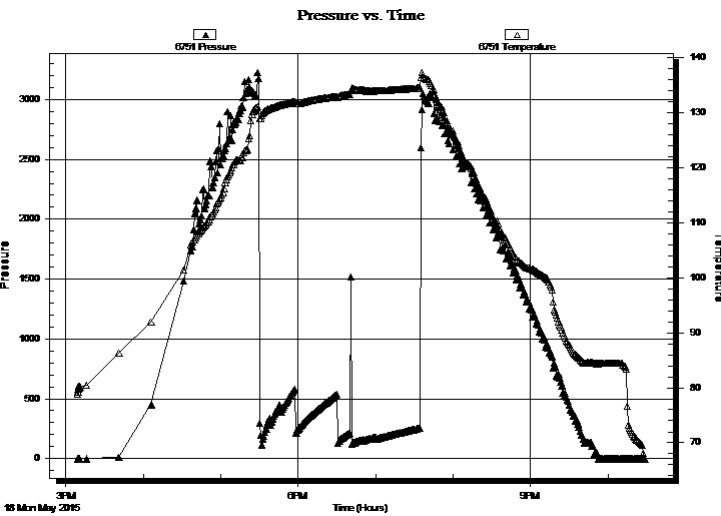
Formation: **Chester**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:29:30
 Time Test Ended: 22:28:30
 Interval: **6082.00 ft (KB) To 6334.00 ft (KB) (TVD)**
 Total Depth: 6334.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Smith
 Unit No: 61
 Reference Elevations: 2823.00 ft (KB)
 2812.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6751

Outside

Press@RunDepth: psig @ 6083.00 ft (KB)
 Start Date: 2015.05.18 End Date: 2015.05.18
 Start Time: 15:09:02 End Time: 22:28:19
 Capacity: 8000.00 psig
 Last Calib.: 2015.05.18
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30- 1 1/2" Blow receded to 1".
 30- No return.
 30- No blow , flushed tool, surge died.
 33- No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	M 100m	0.59

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61685

DST#: 4

ATTN: Luke Thompson

Test Start: 2015.05.18 @ 15:09:00

Tool Information

Drill Pipe:	Length: 5838.00 ft	Diameter: 3.80 inches	Volume: 81.89 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 92000.00 lb
			<u>Total Volume: 83.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.50 ft			String Weight: Initial 87000.00 lb
Depth to Top Packer:	6082.00 ft			Final 87000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	252.00 ft			
Tool Length:	279.50 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			6055.50	
Shut In Tool	5.00			6060.50	
Hydraulic tool	5.00			6065.50	
Jars	5.00			6070.50	
Safety Joint	2.50			6073.00	
Packer	5.00			6078.00	27.50 Bottom Of Top Packer
Packer	4.00			6082.00	
Stubb	1.00			6083.00	
Recorder	0.00	8357	Inside	6083.00	
Recorder	0.00	6751	Outside	6083.00	
Perforations	27.00			6110.00	
Change Over Sub	1.00			6111.00	
Drill Pipe	219.00			6330.00	
Change Over Sub	1.00			6331.00	
Bullnose	3.00			6334.00	252.00 Bottom Packers & Anchor

Total Tool Length: 279.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61685

DST#: 4

ATTN: Luke Thompson

Test Start: 2015.05.18 @ 15:09:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	M 100m	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

Num Fluid Samples: 0

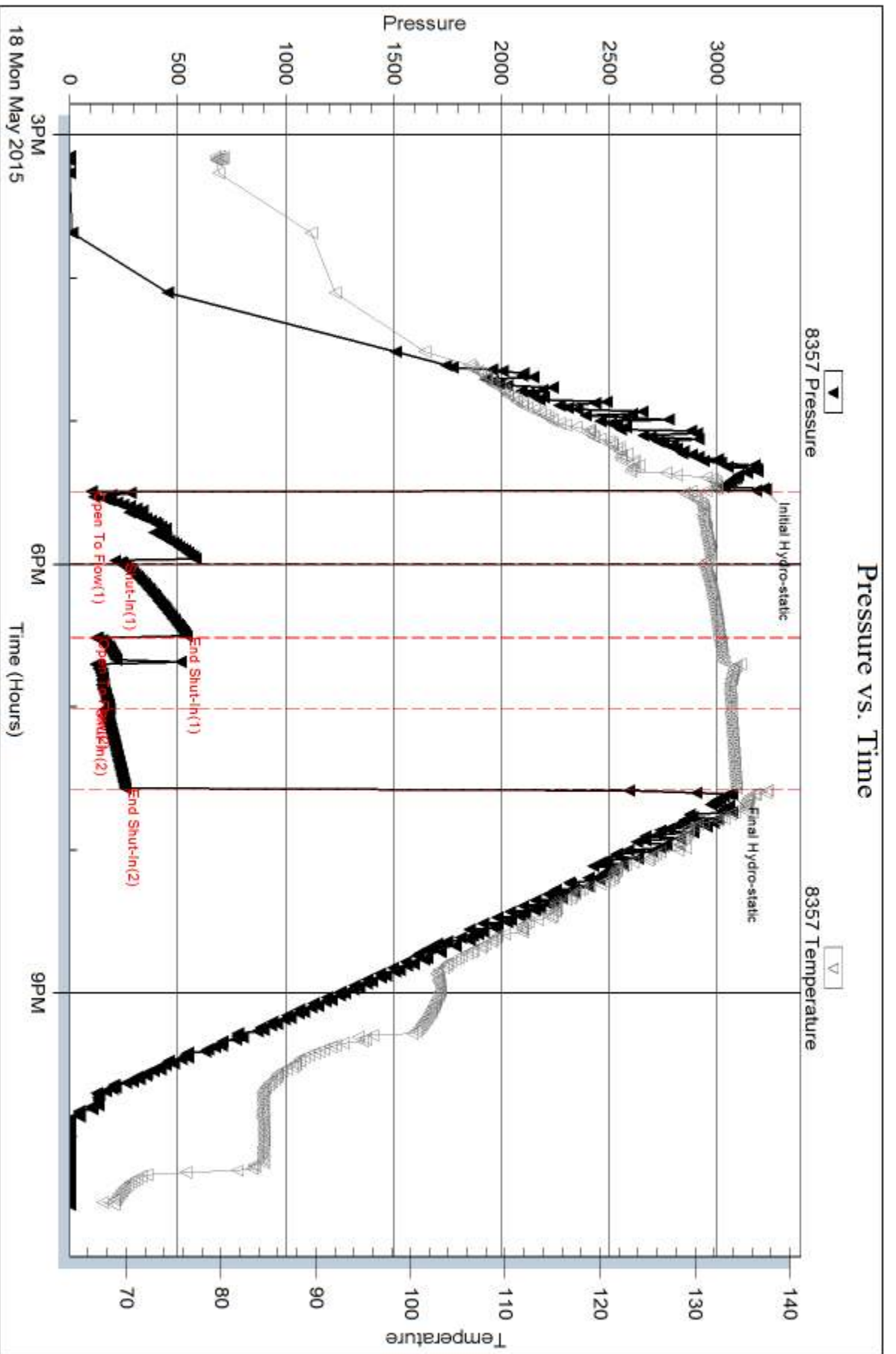
Num Gas Bombs: 0

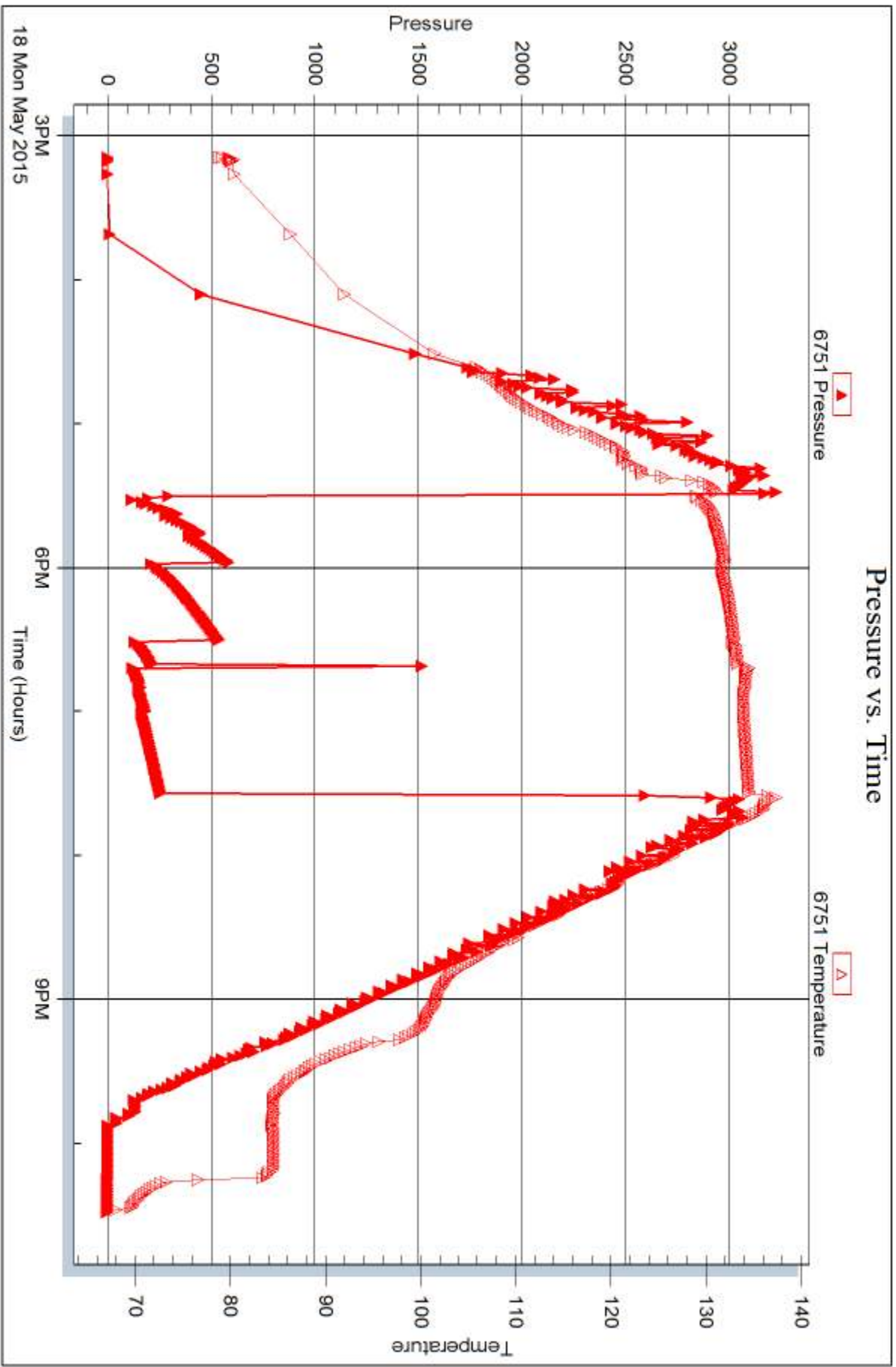
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





18 Mon May 2015



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City, KS 67846

ATTN: Luke Thompson

Hiebsch #7-1

S7-34s-32w Seward,KS

Start Date: 2015.05.20 @ 17:00:00

End Date: 2015.05.21 @ 01:20:30

Job Ticket #: 61686 DST #: 5

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

Printed: 2015.05.22 @ 08:24:21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61686

DST#: 5

ATTN: Luke Thompson

Test Start: 2015.05.20 @ 17:00:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:45:20

Time Test Ended: 01:20:30

Test Type: Conventional Straddle (Reset)

Tester: Chuck Smith

Unit No: 61

Interval: 6564.00 ft (KB) To 6600.00 ft (KB) (TVD)

Reference Elevations: 2823.00 ft (KB)

Total Depth: 6645.00 ft (KB) (TVD)

2812.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8357

Inside

Press@RunDepth: 89.00 psig @ 6569.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.20

End Date: 2015.05.21

Last Calib.: 2015.05.21

Start Time: 17:00:02

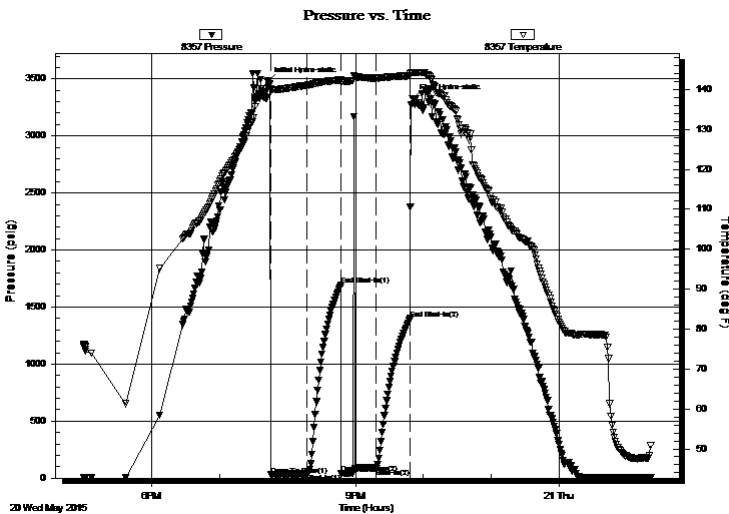
End Time: 01:20:30

Time On Btm: 2015.05.20 @ 19:42:40

Time Off Btm: 2015.05.20 @ 21:50:20

TEST COMMENT: 30- 1/2" Blow receded to a weak surface blow .
30- No return.
30- No blow , flushed tool, lost 10' of mud, surge died @ 20 min.
30- No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3474.00	140.43	Initial Hydro-static
3	28.82	140.09	Open To Flow (1)
35	37.87	141.03	Shut-In(1)
65	1692.20	142.36	End Shut-In(1)
65	41.23	141.80	Open To Flow (2)
96	89.00	142.82	Shut-In(2)
126	1398.59	143.42	End Shut-In(2)
128	3327.91	144.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	M 100m No oil spots	0.59

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Palmer Oil, Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Luke Thompson

S7-34s-32w Seward,KS

Hiebsch #7-1

Job Ticket: 61686

DST#: 5

Test Start: 2015.05.20 @ 17:00:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:45:20

Time Test Ended: 01:20:30

Test Type: Conventional Straddle (Reset)

Tester: Chuck Smith

Unit No: 61

Interval: 6564.00 ft (KB) To 6600.00 ft (KB) (TVD)

Total Depth: 6645.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2823.00 ft (KB)

2812.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 6569.00 ft (KB)

Start Date: 2015.05.20

End Date: 2015.05.21

Start Time: 16:59:52

End Time: 01:20:20

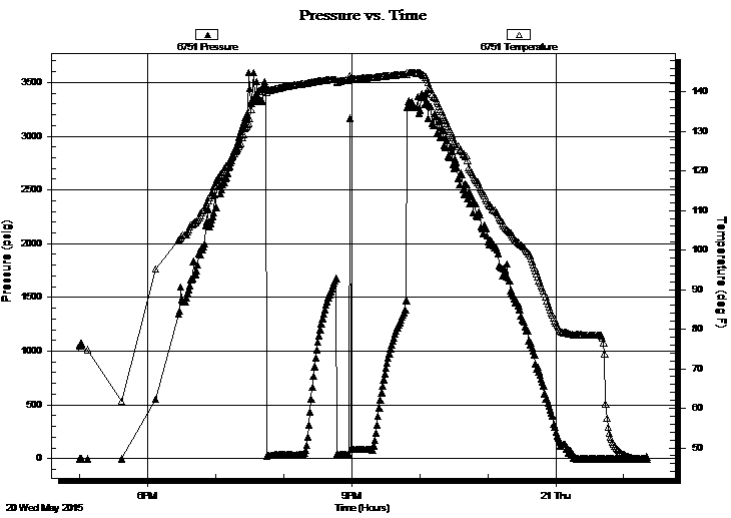
Capacity: 8000.00 psig

Last Calib.: 2015.05.21

Time On Btm:

Time Off Btm:

TEST COMMENT: 30- 1/2" Blow receded to a weak surface blow.
 30- No return.
 30- No blow, flushed tool, lost 10' of mud, surge died @ 20 min.
 30- No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	M 100m No oil spots	0.59

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61686

DST#: 5

ATTN: Luke Thompson

Test Start: 2015.05.20 @ 17:00:00

Tool Information

Drill Pipe:	Length: 6304.00 ft	Diameter: 3.80 inches	Volume: 88.43 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: 30000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 125000.0 lb
			<u>Total Volume: 89.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.50 ft			String Weight: Initial 88000.00 lb
Depth to Top Packer:	6564.00 ft			Final 88000.00 lb
Depth to Bottom Packer:	6600.00 ft			
Interval between Packers:	36.00 ft			
Tool Length:	107.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Change Over Sub	1.00			6537.50	
Shut In Tool	5.00			6542.50	
Hydraulic tool	5.00			6547.50	
Jars	5.00			6552.50	
Safety Joint	2.50			6555.00	
Packer	5.00			6560.00	27.50 Bottom Of Top Packer
Packer	4.00			6564.00	
Stubb	1.00			6565.00	
Perforations	4.00			6569.00	
Recorder	0.00	8357	Inside	6569.00	
Recorder	0.00	6751	Outside	6569.00	
Perforations	27.00			6596.00	
Blank Off Sub	1.00			6597.00	
topof s pack	3.00			6600.00	36.00 Tool Interval
Packer	0.00			6600.00	
Stubb	1.00			6601.00	
Perforations	7.00			6608.00	
Change Over Sub	1.00			6609.00	
Recorder	0.00	8645	Below	6609.00	
Drill Pipe	31.00			6640.00	
Change Over Sub	1.00			6641.00	
Bullnose	3.00			6644.00	44.00 Bottom Packers & Anchor

Total Tool Length: 107.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc

S7-34s-32w Seward,KS

PO Box 399
Garden City, KS 67846

Hiebsch #7-1

Job Ticket: 61686

DST#: 5

ATTN: Luke Thompson

Test Start: 2015.05.20 @ 17:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	M 100m No oil spots	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

Num Fluid Samples: 0

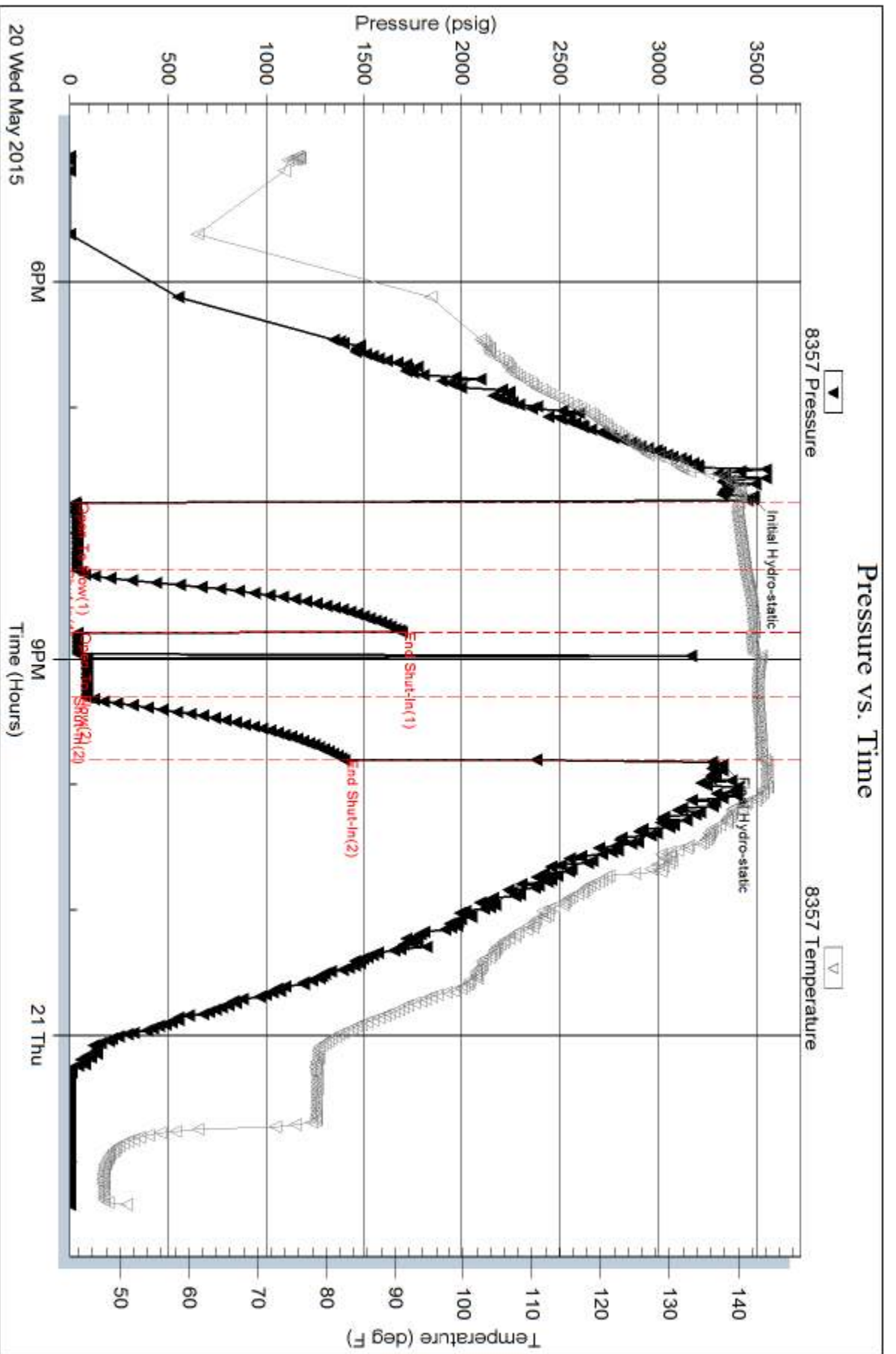
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

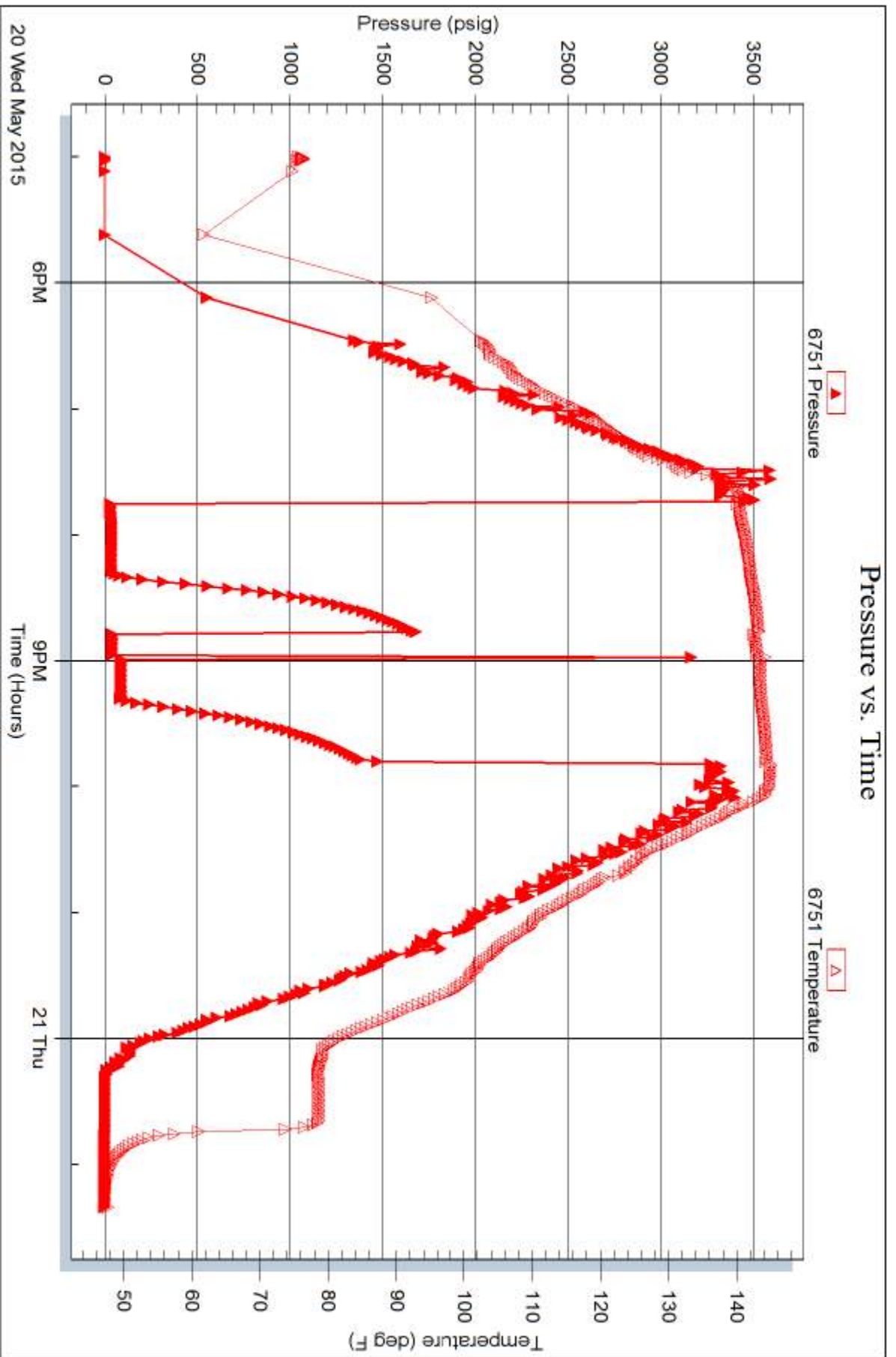


Serial #: 6751

Outside Palmer Oil, Inc

Hiebsch #7-1

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 61686

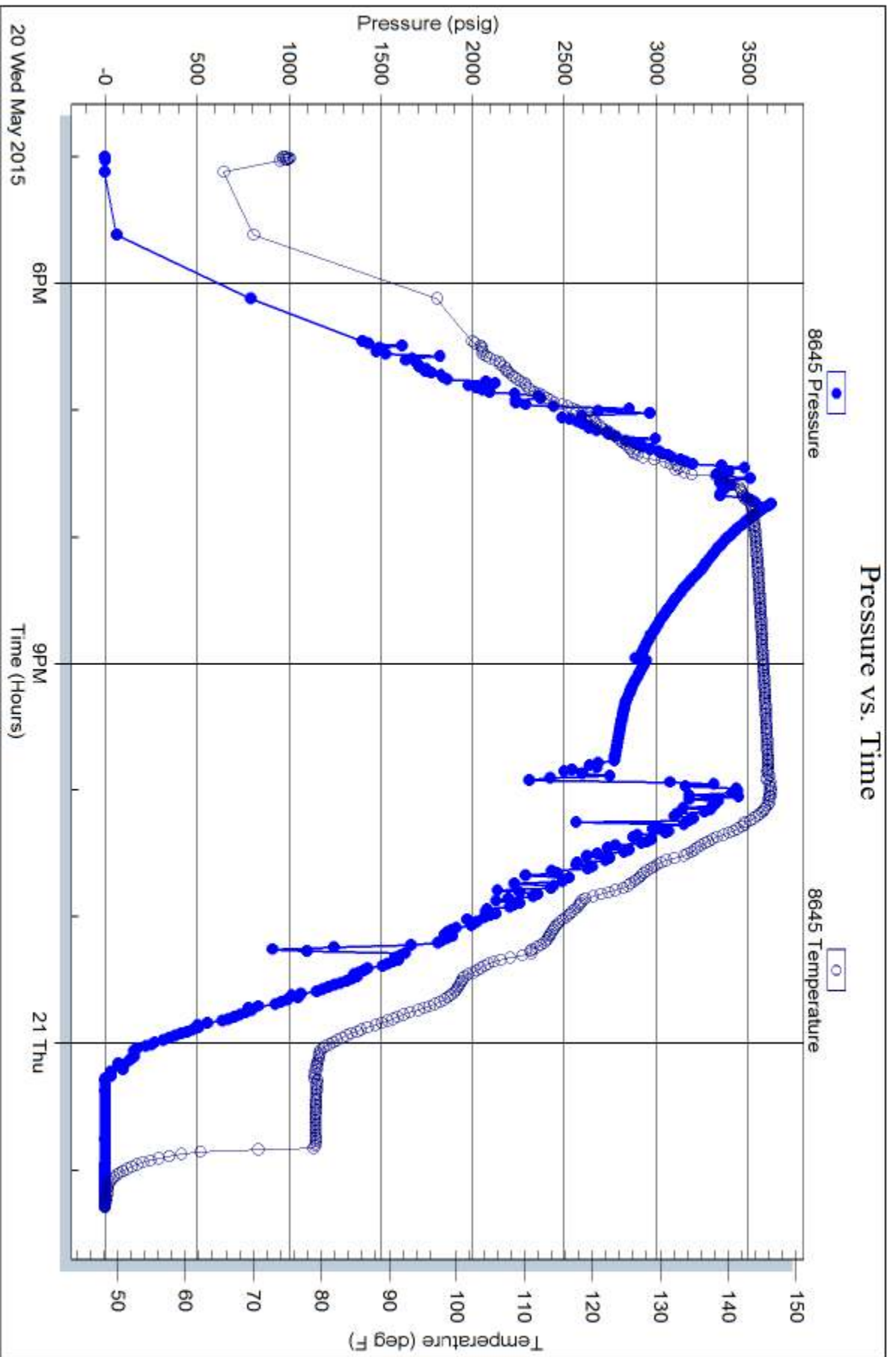
Printed: 2015.05.22 @ 08:24:22

Serial #: 8645

Below (Stratton) Oil, Inc

Hiebsch #7-1

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 61686

Printed: 2015.05.22 @ 08:24:22



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61681

Well Name & No. Hiebsch #7-1 Test No. 1 Date 5-11-15
 Company Palmer Oil, Inc. Elevation 2823 KB 2812 GL
 Address POB 399 Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 34s Rge. 32w Co. Seward State KS

Interval Tested 4448-4514 Zone Tested Toronto
 Anchor Length 66 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth _____ Drill Collars Run _____ Vis _____
 Bottom Packer Depth _____ Wt. Pipe Run _____ WL _____
 Total Depth _____ Chlorides _____ ppm System LCM _____
 Blow Description Rig was stuck during the short trip about 12 stands off bottom.
Oil was on order when I left location

Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic N/A Test _____ T-On Location 5:00
 (B) First Initial Flow _____ Jars _____ T-Started X
 (C) First Final Flow _____ Safety Joint _____ T-Open _____
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled _____
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out _____
 (F) Second Final Flow _____ Mileage 214RT 68 Comments Left location @ 9:00
 (G) Final Shut-In _____ Sampler rig got stuck Corndog ended up running
 (H) Final Hydrostatic _____ Straddle _____ dst #1
 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 68
 Accessibility _____ MP/DST Disc't _____
 Sub Total 68

Approved By _____ Our Representative Chuck Smith

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. 58814

Well Name & No. Hlebsch #7-1 Test No. 1 Date 5-11-15
 Company Palmer Oil, Inc Elevation 2823 KB 2812 GL
 Address 3118 Cummings Rd - Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 34S Rge. 32-W Co. Seward State Ks

Interval Tested 4448-4514 Zone Tested toronto
 Anchor Length 66' Drill Pipe Run 4703 Mud Wt. 9.30
 Top Packer Depth 4444 Drill Collars Run 240 Vis 57
 Bottom Packer Depth 4448 Wt. Pipe Run 8 WL 7-70
 Total Depth 4514 Chlorides 2700 ppm System LCM ⊗ ⊗ #3

Blow Description IFE Bob. in 1 min 15 sec. G.T.S. 10 min - Too small to gauge
IFE: Bled off in 2 min - weak surface blowback - Built to 2 in. Return
FF 2 in immediately - Bob & G.T.S. in 3 min. - Too small to gauge
FSI: Bled off in 3 min. - weak surface blowback - Built to 1/2 in. Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>6' m cw</u>	<u>5</u>		<u>75</u>	<u>20</u>
<u>214</u>	<u>0' GCM</u>	<u>15</u>	<u>50</u>		<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>G.T.S.</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 334 BHT 115 Gravity — API RW .60 @ 53 °F Chlorides 225,000 ppm

(A) Initial Hydrostatic <u>2184</u>	<input checked="" type="checkbox"/> Test <u>950</u>	T-On Location <u>20:15</u>
(B) First Initial Flow <u>43</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>20:15</u>
(C) First Final Flow <u>97</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>23:58</u>
(D) Initial Shut-In <u>930</u>	<input checked="" type="checkbox"/> Circ Sub	T-Pulled <u>02:58</u>
(E) Second Initial Flow <u>118</u>	<input checked="" type="checkbox"/> Hourly Standby <u>NIC</u>	T-Out <u>05:57</u>
(F) Second Final Flow <u>162</u>	<input checked="" type="checkbox"/> Mileage <u>78 RIT x 2</u>	Comments <u>10 added on 5/13/15</u>
(G) Final Shut-In <u>910</u>	<input type="checkbox"/> Sampler <u>68</u>	<u>@ 11:30</u>
(H) Final Hydrostatic <u>2125</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 30 Ruined Packer 320
 Initial Shut-In 45 Extra Copies
 Final Flow 45 Sub Total 320
 Final Shut-In 60 Total 1863
 Sub Total 1543 MP/DST Disc't

Approved By _____ Our Representative _____

Trilobite Testing Inc. shall not be liable for damaged or 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. 61682

Well Name & No. Hiebsch #7-1 Test No. 2 Date 5-16-15
 Company Palmer Oil, Inc. Elevation 2823 KB 2812 GL
 Address POB 399 Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 34s Rge. 32w Co. Seward State KS

Interval Tested 5771 - 6000 Zone Tested Morrow
 Anchor Length 229 Drill Pipe Run 5520 Mud Wt. 9.3
 Top Packer Depth 5767 Drill Collars Run 240 Vis 70
 Bottom Packer Depth 6000-5771 Wt. Pipe Run 0 WL 9.6
 Total Depth 6000 Chlorides 1900 ppm System LCM 6"
 Blow Description 2" Blow.
No return.
Weak surface blow died @ 5 min.
No return

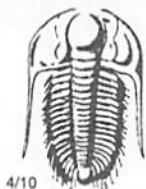
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>70</u>	Feet of <u>M with a couple spots of oil</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 127 Gravity - API RW @ - °F Chlorides - ppm

(A) Initial Hydrostatic <u>3090</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>6:43</u>
(B) First Initial Flow <u>227</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:09</u>
(C) First Final Flow <u>523</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>13:14</u>
(D) Initial Shut-In <u>594</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>15:15</u>
(E) Second Initial Flow <u>294</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>18:07</u>
(F) Second Final Flow <u>432</u>	<input checked="" type="checkbox"/> Mileage <u>68</u>	Comments
(G) Final Shut-In <u>366</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2865</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Open <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1443</u>
Final Flow <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
Final Shut-In <u>30</u>	Sub Total <u>1443</u>	

Approved By _____ Our Representative Chuck Smith

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. 61684

Well Name & No. Hiebsch #7-1 Test No. 3 Date 5-18-15
 Company Palmer Oil, Inc Elevation 2823 KB 2812 GL
 Address POB 399 Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 34s Rge. 32w Co. Seward State KS

Interval Tested 6183-6334 Zone Tested Chester
 Anchor Length 151 Drill Pipe Run 5932 Mud Wt. 9.5
 Top Packer Depth 6179 Drill Collars Run 240 Vis 57
 Bottom Packer Depth 6183 Wt. Pipe Run 0 WL 11.2
 Total Depth 6334 Chlorides 2300 ppm System LCM 4*

Blow Description Packer seat failed, re-set packer again, packer seat failed, pulled tool.
11" of bottom rubber are in the hole. Top packer rubber was split circumferentially.

Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic _____ Test Mis-run 1150 T-On Location 7:50
 (B) First Initial Flow _____ Jars 250 T-Started 8:02
 (C) First Final Flow N/A Safety Joint 75 T-Open 11:13
 (D) Initial Shut-In _____ Circ Sub NIC T-Pulled 11:17
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 14:38
 (F) Second Final Flow _____ Mileage 68 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____ Ruined Shale Packer _____
 _____ Shale Packer _____ Ruined Packer x2 640
 Initial Open N/A Extra Packer _____ Extra Copies _____
 Initial Shut-In _____ Extra Recorder _____ Sub Total 640+58.33
 Final Flow _____ Day Standby 1.5d 1.75h Total 2241.33
 Final Shut-In _____ Accessibility _____ MP/DST Disc't _____
 Sub Total 1543

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61685

Well Name & No. Hiebsch #7-1 Test No. 4 Date 5-18-15
 Company Palmer Oil, Inc. Elevation 2823 KB 2812 GL
 Address POB 399 Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 34s Rge. 32w Co. Seward State KS

Interval Tested 6082-6334 Zone Tested Chester
 Anchor Length 252 Drill Pipe Run 5838 Mud Wt. 9.6
 Top Packer Depth 6078 Drill Collars Run 240 Vis 53
 Bottom Packer Depth 6082 Wt. Pipe Run 0 WL 9.2
 Total Depth 6334 Chlorides 3200 ppm System LCM 4-5"
 Blow Description 1 1/2" Blow receded to 1"
No return.
No blow, Flushed tool, surge died
No return

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>120</u>	Feet of <u>M</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 Total 120 BHT 134 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>3216</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>14:45</u>
(B) First Initial Flow <u>100</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>15:09</u>
(C) First Final Flow <u>243</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>17:30</u>
(D) Initial Shut-In <u>542</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>19:34</u>
(E) Second Initial Flow <u>122</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>22:29</u>
(F) Second Final Flow <u>184</u>	<input checked="" type="checkbox"/> Mileage <u>NIC stayed</u>	Comments
(G) Final Shut-In <u>258</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>3069</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1475</u>
Final Shut-In <u>33</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1475</u>	

Approved By

Our Representative

Chuck Smith

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61686

Well Name & No. Hiebsch #7-1 Test No. 5 Date 5-20-15
 Company Palmer Oil, Inc. Elevation 2823 KB 2812 GL
 Address POB 399 Garden City, KS 67846
 Co. Rep / Geo. Luke Thompson Rig Duke #5
 Location: Sec. 7 Twp. 3 1/2 Rge. 32W Co. Seward State KS

Interval Tested 6564-6600 Zone Tested Mississippian
 Anchor Length 36 Drill Pipe Run 6304 Mud Wt. 9.55
 Top Packer Depth 6560 Drill Collars Run 240 Vis 50
 Bottom Packer Depth 6600 Wt. Pipe Run 0 WL 9.4
 Total Depth 6645 LTD Chlorides 1900 ppm System LCM 4"
 Blow Description 1/2" Blow receded to weak surface blow.
No return.
No blow, flushed tool, lost 10' of mud, surge died @ 20 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>120</u>	Feet of <u>M</u>			%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 120 BHT 143 Gravity — API RW @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>3474</u>	<input checked="" type="checkbox"/> Test <u>1350</u>	T-On Location <u>16:00</u>
(B) First Initial Flow <u>29</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>19:00</u>
(C) First Final Flow <u>38</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>19:45</u>
(D) Initial Shut-In <u>1692</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>21:48</u>
(E) Second Initial Flow <u>41</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1:21</u>
(F) Second Final Flow <u>89</u>	<input checked="" type="checkbox"/> Mileage <u>68</u>	Comments <u>Wait on loggers .7</u>
(G) Final Shut-In <u>1399</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>3328</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input checked="" type="checkbox"/> Ruined Shale Packer <u>350</u>
	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>350+183.33</u>
Final Flow <u>30</u>	<input checked="" type="checkbox"/> Day Standby <u>1.5d 5.5h</u>	Total <u>3126.33</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>2593</u>	

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