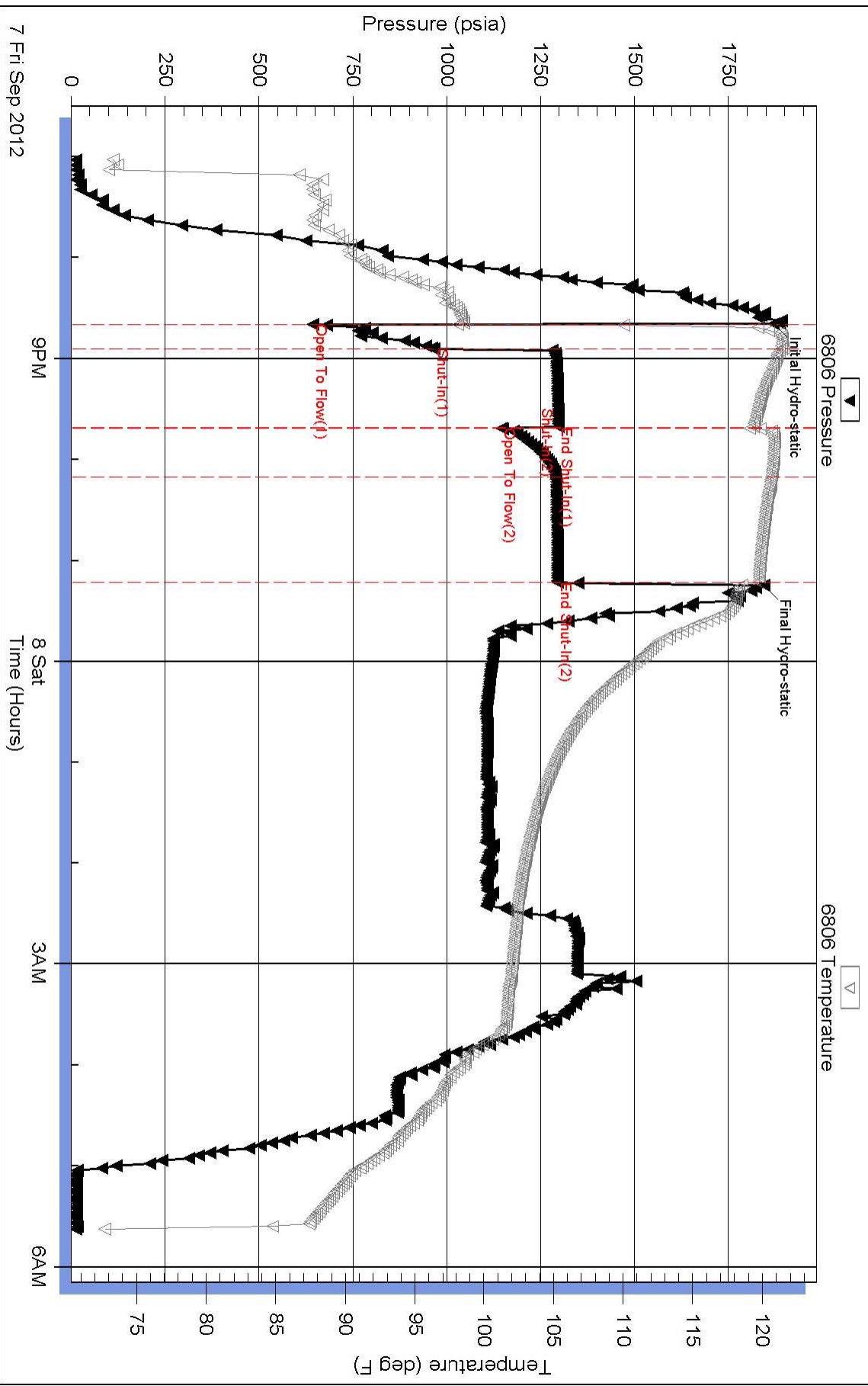
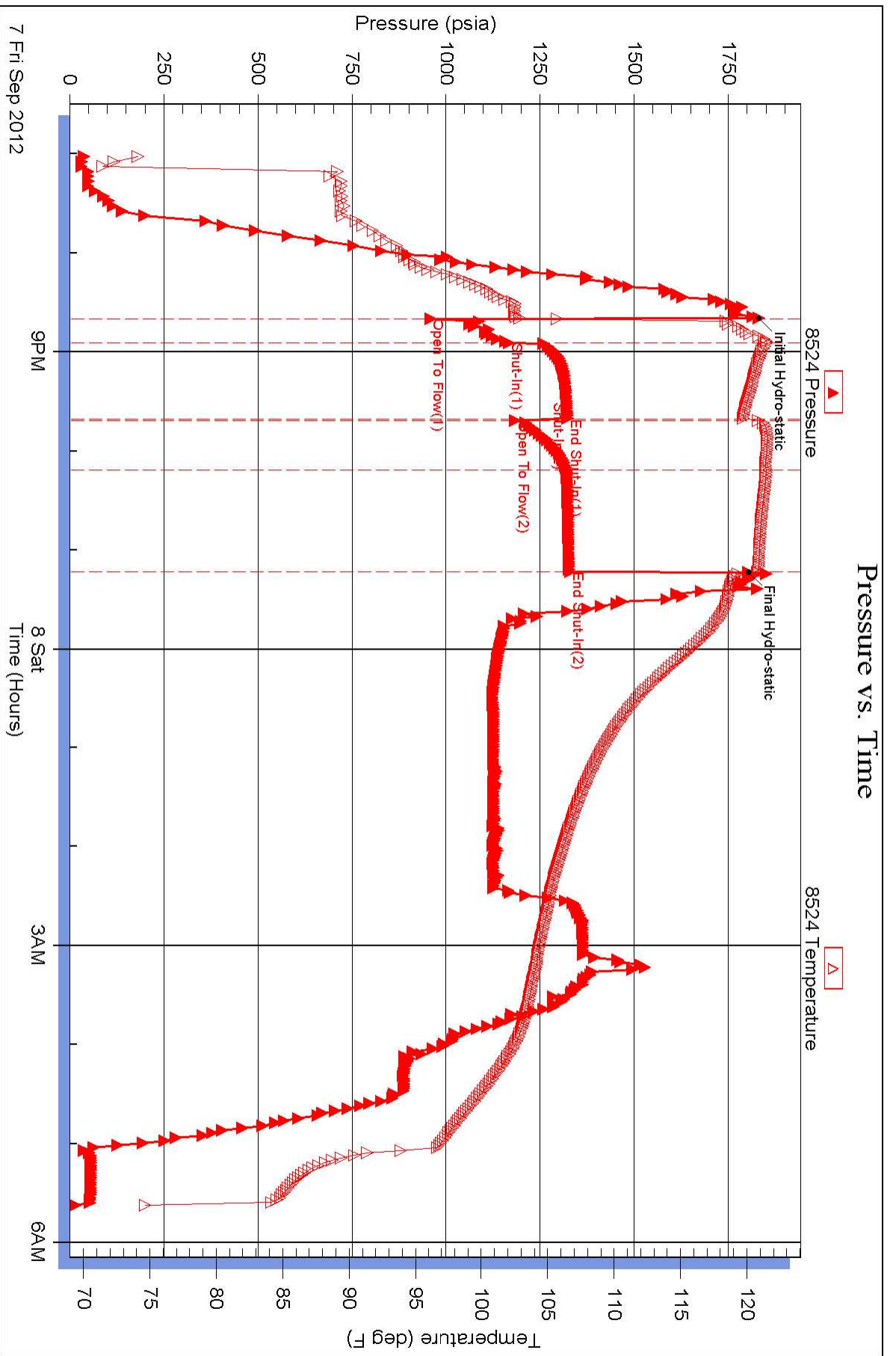


### Pressure vs. Time







# DRILL STEM TEST REPORT

## FLUID SUMMARY

CAPTIVA

3-22S-16W

445 UNION BLVD SUITE 208 LAKEWOOD CO  
80228

1-3WFYOG

Job Ticket: 17735

DST#: 3

ATTN: CHARLIE STURDAVANT

Test Start: 2012.09.07 @ 19:00:31

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 7.60 in<sup>3</sup>

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
540.00	CLEAN OIL 100%OIL	5.662
2420.00	WATER 100%WATER	33.946

Total Length: 2960.00 ft      Total Volume: 39.608 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: GRAVITY OF OIL/30

RECOVERY CHLORIDES/35000



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

CAPTIVA

**3-22S-16W**

445 UNION BLVD SUITE 208 LAKEWOOD CO  
80228

**1-3WFYOG**

Job Ticket: 17735

**DST#: 3**

ATTN: CHARLIE STURDAVANT

Test Start: 2012.09.07 @ 19:00:31

## Tool Information

Drill Pipe:	Length: 3631.00 ft	Diameter: 3.80 inches	Volume: 50.93 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 92000.00 lb
			<u>Total Volume: 51.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3867.00 ft			Final 79000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3844.00	
Hydraulic Tool	5.00			3849.00	
Jars	6.00			3855.00	
Safety Joint	2.00			3857.00	
Packer	5.00			3862.00	28.00 Bottom Of Top Packer
Packer	5.00			3867.00	
Perforations	4.00			3871.00	
Recorder	1.00	8524	Inside	3872.00	
Recorder	1.00	6806	Outside	3873.00	
Bullnose	3.00			3876.00	9.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>37.00</b>				



# DRILL STEM TEST REPORT

CAPTIVA

3-22S-16W

445 UNION BLVD SUITE 208 LAKEWOOD CO  
80228

1-3WFYOG

Job Ticket: 17735

DST#: 3

ATTN: CHARLIE STURDAVANT

Test Start: 2012.09.07 @ 19:00:31

## GENERAL INFORMATION:

Formation: **ARBUCKLE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:40:01

Time Test Ended: 05:37:31

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVE

Unit No: 3345

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

Reference Elevations: 1997.00 ft (KB)

Total Depth: 3876.00 ft (KB) (TVD)

1986.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: **6806** Outside

Press @ RunDepth: 1295.99 psia @ 3873.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.09.07

End Date:

2012.09.08

Last Calib.:

2012.09.07

Start Time: 19:00:49

End Time:

05:38:19

Time On Btm:

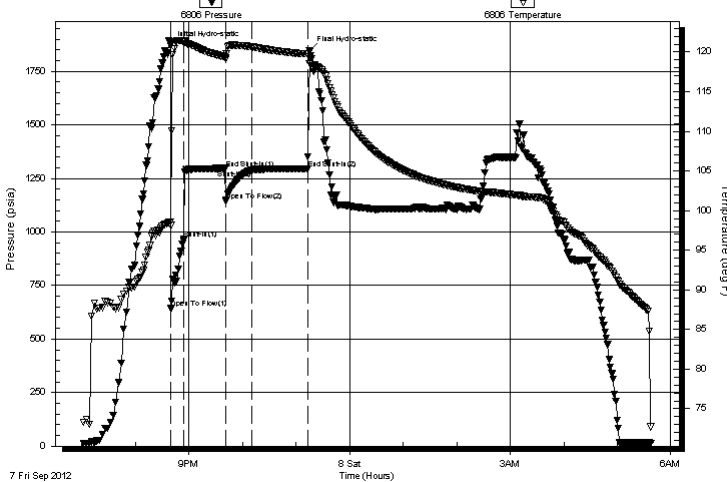
2012.09.07 @ 20:39:19

Time Off Btm:

2012.09.07 @ 23:14:49

TEST COMMENT: 15 MIN INITIAL OPENING/GOOD BLOW/BOTTOM BUCKET IN 30 SEC  
45 MIN INITIAL SHUT IN/WEAK BLOW/IN 40 MINS  
30 MIN FINIAL OPENING/GOOD BLOW /BOTTOM BUCKET IN 20 SEC/BLOW WEAKENED/2/6IN BY 30MINS  
60 MIN FINIAL SHUT IN/WEAK BLOW

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1869.49	98.61	Initial Hydro-static
1	643.26	98.14	Open To Flow (1)
15	965.68	121.37	Shut-In(1)
62	1297.15	119.32	End Shut-In(1)
62	1146.30	119.09	Open To Flow (2)
92	1289.96	120.63	Shut-In(2)
154	1295.99	119.75	End Shut-In(2)
156	1844.78	118.52	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
540.00	CLEAN OIL 100%OIL	5.66
2420.00	WATER 100%WATER	33.95

## Gas Rates

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



# DRILL STEM TEST REPORT

CAPTIVA

3-22S-16W

445 UNION BLVD SUITE 208 LAKEWOOD CO  
80228

1-3WFYOG

Job Ticket: 17735

DST#: 3

ATTN: CHARLIE STURDAVANT

Test Start: 2012.09.07 @ 19:00:31

## GENERAL INFORMATION:

Formation: **ARBUCKLE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:40:01

Time Test Ended: 05:37:31

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVE

Unit No: 3345

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

Reference Elevations: 1997.00 ft (KB)

Total Depth: 3876.00 ft (KB) (TVD)

1986.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8524

Inside

Press @ RunDepth: 1320.96 psia @ 3872.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.09.07

End Date:

2012.09.08

Last Calib.:

2012.09.07

Start Time: 19:00:31

End Time:

05:37:31

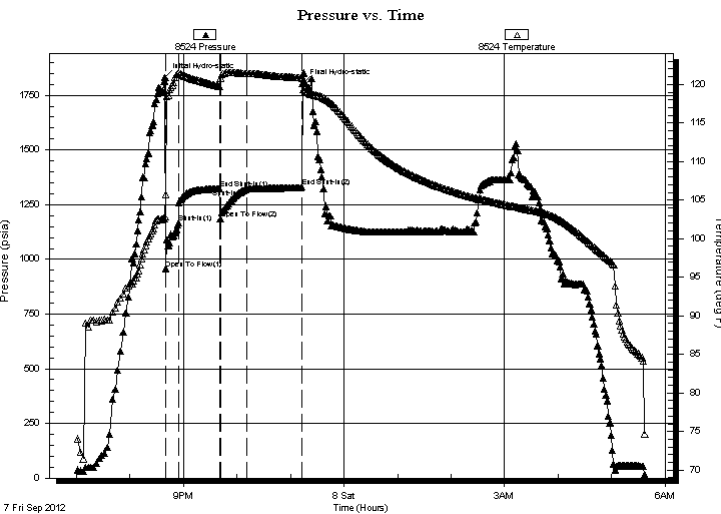
Time On Btm:

2012.09.07 @ 20:39:31

Time Off Btm:

2012.09.07 @ 23:13:31

TEST COMMENT: 15 MIN INITIAL OPENING/GOOD BLOW/BOTTOM BUCKET IN 30 SEC  
45 MIN INITIAL SHUT IN/WEAK BLOW/IN 40 MINS  
30 MIN FINIAL OPENING/GOOD BLOW /BOTTOM BUCKET IN 20 SEC/BLOW WEAKENED/2/6IN BY 30MINS  
60 MIN FINIAL SHUT IN/WEAK BLOW



## PRESSURE SUMMARY

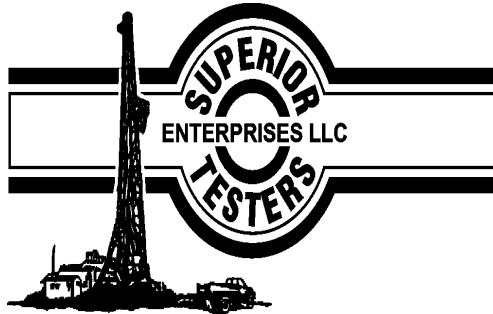
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1830.43	102.88	Initial Hydro-static
1	958.07	105.73	Open To Flow (1)
15	1167.51	121.53	Shut-In(1)
61	1323.37	119.72	End Shut-In(1)
62	1185.02	120.83	Open To Flow (2)
92	1320.96	121.44	Shut-In(2)
154	1330.35	120.86	End Shut-In(2)
154	1803.83	120.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
540.00	CLEAN OIL 100%OIL	5.66
2420.00	WATER 100%WATER	33.95

## Gas Rates

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



## DRILL STEM TEST REPORT

Prepared For: **CAPTIVA**

445 UNION BLVD SUITE 208 LAKEWOOD  
CO 80228

ATTN: CHARLIE STURDAVANT

**1-3WFYOG**

**3-22S-16W**

Start Date: 2012.09.07 @ 19:00:31

End Date: 2012.09.08 @ 05:37:31

Job Ticket #: 17735                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2012.09.07 @ 19:46:02

CAPTIVA  
3-22S-16W  
1-3WFYOG  
DST # 3  
ARBUCKLE  
2012.09.07