



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil, Inc**

PO Box 399
Garden City KS 67846

ATTN: Wyatt Urban

Loretta #36-1

36-31s-39w Stevens,KS

Start Date: 2013.10.20 @ 23:20:00

End Date: 2013.10.21 @ 08:27:45

Job Ticket #: 52985 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.10.24 @ 13:17:21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palmer Oil, Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Wyatt Urban

36-31s-39w Stevens,KS

Loretta #36-1

Job Ticket: 52985

DST#: 1

Test Start: 2013.10.20 @ 23:20:00

GENERAL INFORMATION:

Formation: **St. Louis**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:44:15
 Time Test Ended: 08:27:45
 Interval: **6018.00 ft (KB) To 6097.00 ft (KB) (TVD)**
 Total Depth: 6097.00 ft (KB) (TVD)
 Hole Diameter: inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jace Mckinney
 Unit No: 46
 Reference Elevations: ft (KB)
 ft (CF)
 KB to GR/CF: ft

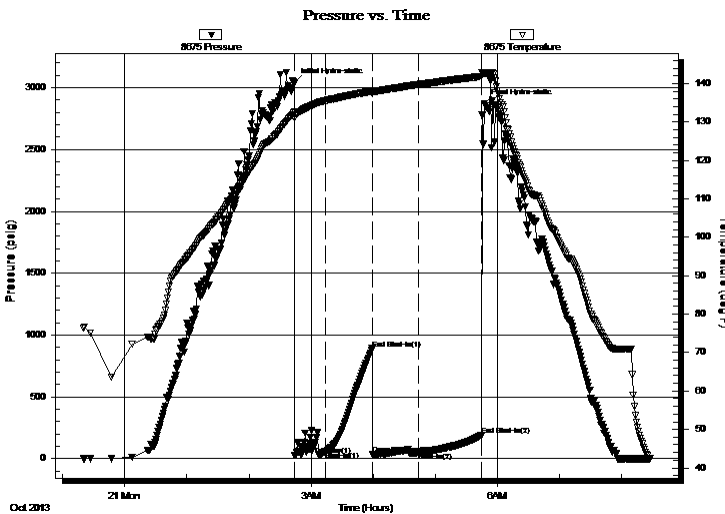
Serial #: 8675

Inside

Press@RunDepth: 52.34 psig @ 6019.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.20 End Date: 2013.10.21 Last Calib.: 2013.10.21
 Start Time: 23:20:15 End Time: 08:27:45 Time On Btm: 2013.10.21 @ 02:44:00
 Time Off Btm: 2013.10.21 @ 05:47:15

TEST COMMENT: Weak surface, died in 2 min
 No return blow
 No blow
 No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3038.35	132.54	Initial Hydro-static
1	27.78	131.14	Open To Flow (1)
30	58.82	135.49	Shut-In(1)
75	89.72	137.98	End Shut-In(1)
76	36.92	137.43	Open To Flow (2)
120	52.34	139.73	Shut-In(2)
181	189.47	141.86	End Shut-In(2)
184	2868.68	142.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

Gas Rates

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



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Loretta #36-1

Job Ticket: 52985 DST#: 1

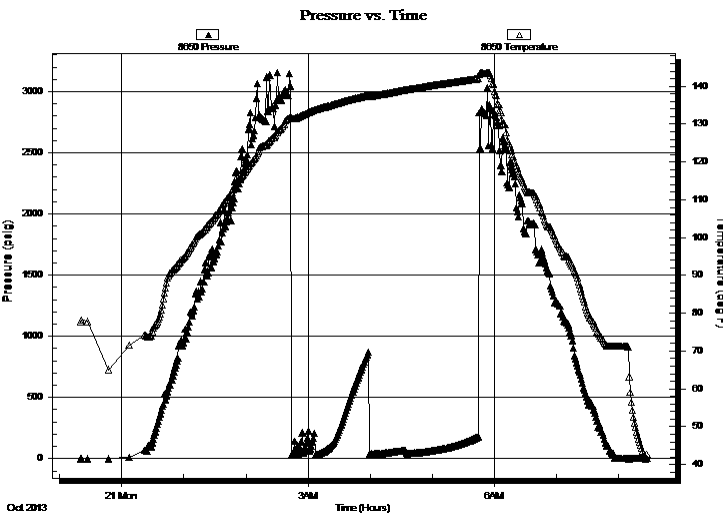
Test Start: 2013.10.20 @ 23:20:00

GENERAL INFORMATION:

Formation:	St. Louis			
Deviated:	No Whipstock:	ft (KB)	Test Type:	Conventional Bottom Hole (Initial)
Time Tool Opened:	02:44:15		Tester:	Jace Mckinney
Time Test Ended:	08:27:45		Unit No:	46
Interval:	6018.00 ft (KB) To 6097.00 ft (KB) (TVD)		Reference Elevations:	ft (KB)
Total Depth:	6097.00 ft (KB) (TVD)			ft (CF)
Hole Diameter:	inches	Hole Condition: Poor	KB to GR/CF:	ft

Serial #: 8650	Outside		
Press@RunDepth:	psig @ 6019.00 ft (KB)	Capacity:	8000.00 psig
Start Date:	2013.10.20	End Date:	2013.10.21
Start Time:	23:20:15	End Time:	08:27:45
		Last Calib.:	2013.10.21
		Time On Btm:	
		Time Off Btm:	

TEST COMMENT: Weak surface, died in 2 min
No return blow
No blow
No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil, Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Wyatt Urban

36-31s-39w Stevens,KS
Loretta #36-1
 Job Ticket: 52985 **DST#: 1**
 Test Start: 2013.10.20 @ 23:20:00

Tool Information

Drill Pipe:	Length: 5812.80 ft	Diameter: 3.80 inches	Volume: 81.54 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: 186.15 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 82.46 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.45 ft			String Weight: Initial 84000.00 lb
Depth to Top Packer:	6018.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	82.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			5991.50	
Shut In Tool	5.00			5996.50	
Hydraulic tool	5.00			6001.50	
Jars	5.00			6006.50	
Safety Joint	2.50			6009.00	
Packer	5.00			6014.00	27.50 Bottom Of Top Packer
Packer	4.00			6018.00	
Stubb	1.00			6019.00	
Recorder	0.00	8675	Inside	6019.00	
Recorder	0.00	8650	Outside	6019.00	
Perforations	18.00			6037.00	
Change Over Sub	1.00			6038.00	
Drill Pipe	31.00			6069.00	
Change Over Sub	1.00			6070.00	
Bullnose	3.00			6073.00	55.00 Bottom Packers & Anchor

Total Tool Length: 82.50



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DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil, Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Wyatt Urban

36-31s-39w Stevens,KS
Loretta #36-1
 Job Ticket: 52985 **DST#: 1**
 Test Start: 2013.10.20 @ 23:20:00

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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100% Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

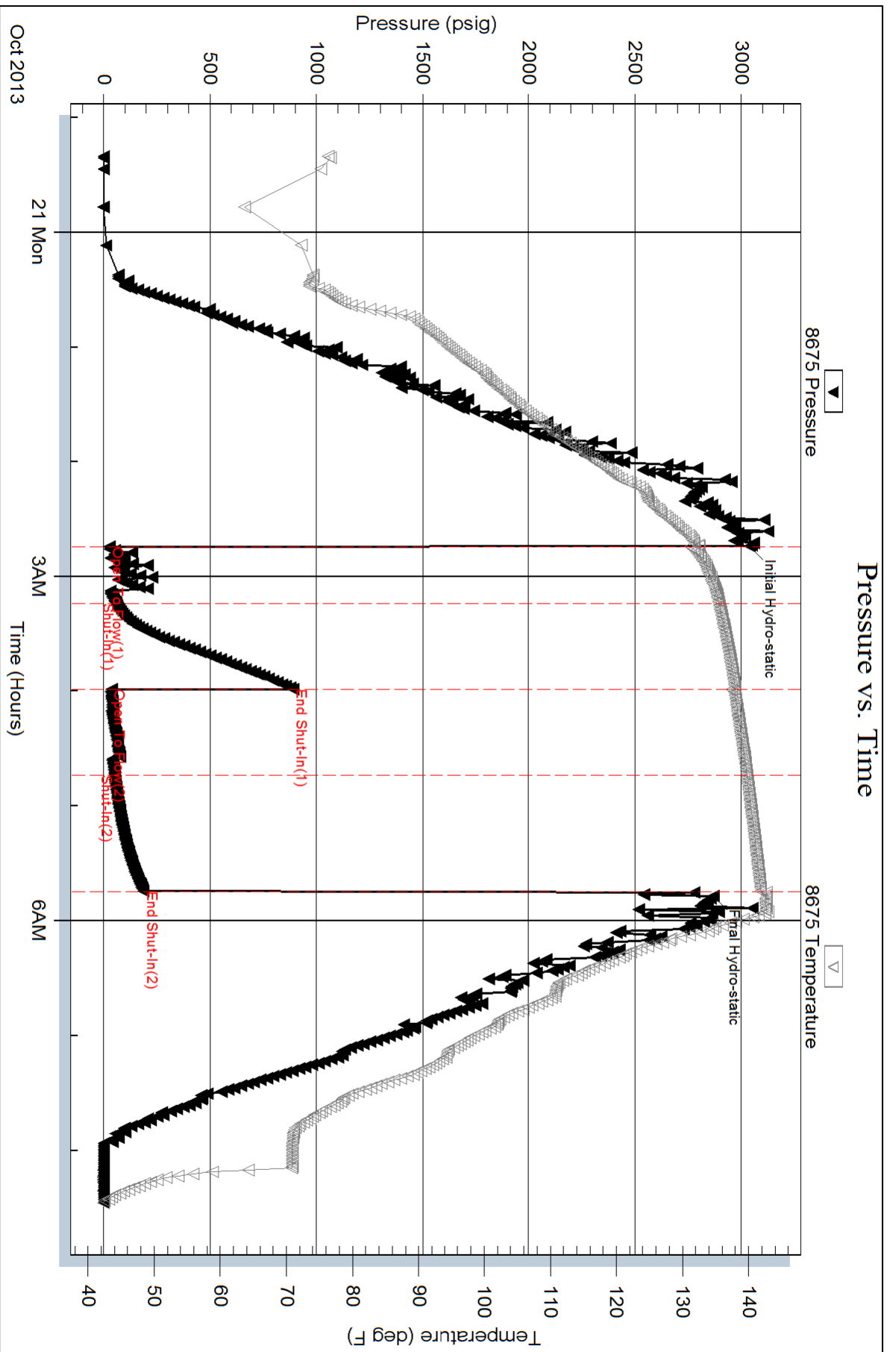
Serial #: 8675

Inside

Palmer Oil, Inc

Loreta #36-1

DST Test Number: 1

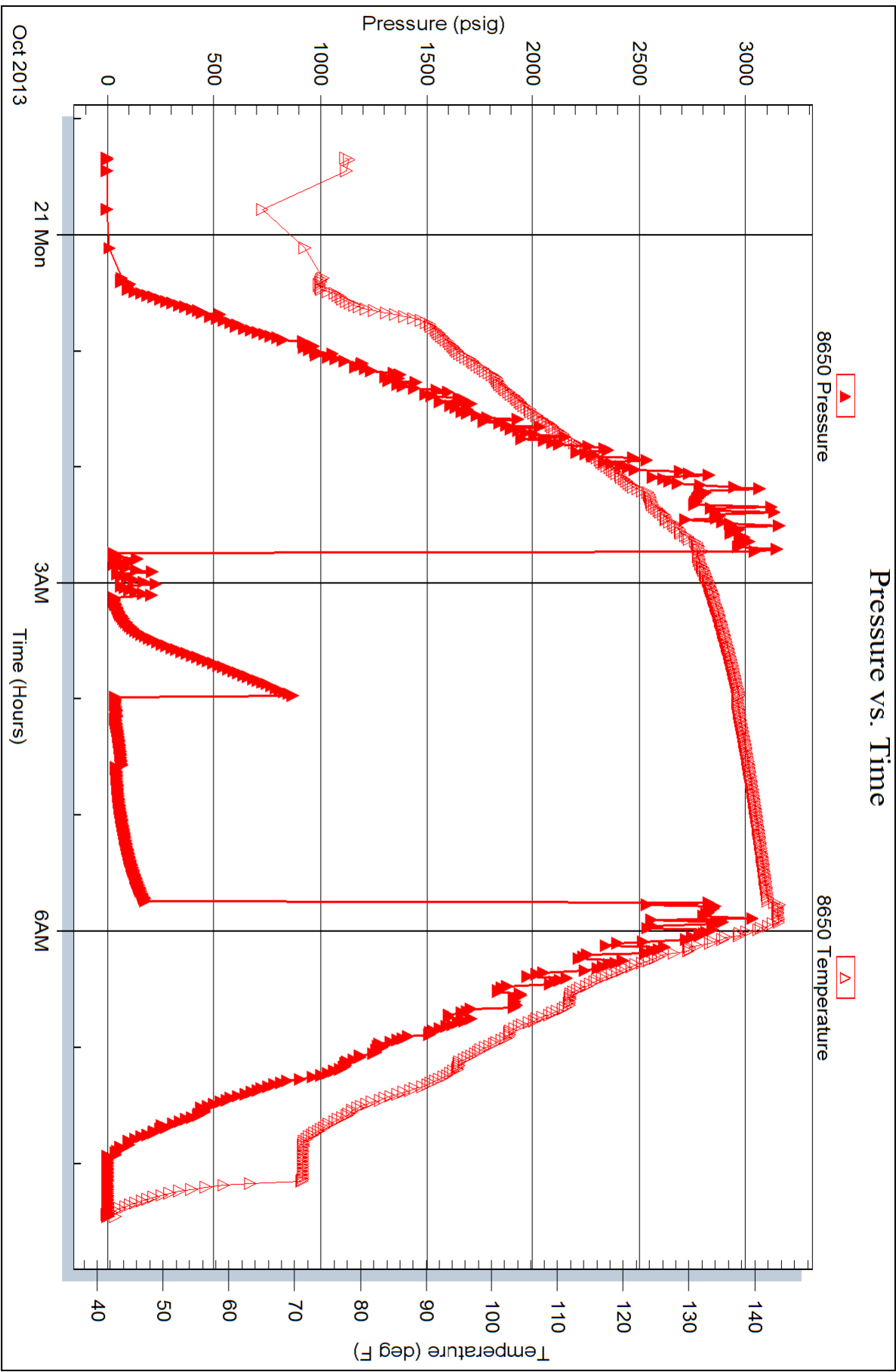


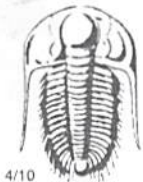
Serial #: 8650

Outside Palmer Oil, Inc

Loretta #36-1

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52985

Well Name & No. Loretta 36-1 Test No. 1 Date 10/20/13 10/21/13
 Company Palmet Oil, Inc Elevation 3181 KB 3166 GL
 Address 3118 N Cummings Rd, PO Box 399, Carden City KS, 67846
 Co. Rep / Geo. W. J. ... Rig Duke Rig 9
 Location: Sec. 36 Twp. 31s Rge. 39w Co. Stevens County State KS

Interval Tested 6018-6097 Zone Tested St. Louis
 Anchor Length 79 Drill Pipe Run 582.80 Mud Wt. 8.9
 Top Packer Depth 6014 Drill Collars Run 186.15 Vis 53
 Bottom Packer Depth 6018 Wt. Pipe Run _____ WL 8.8
 Total Depth 6097 Chlorides 500 ppm System LCM 24# spotted pill on bottom
 Blow Description Weak surface died in 2 mins

No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</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 5 BHT 140 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm
 (A) Initial Hydrostatic 3,038 Test 1450 T-On Location 22:30
 (B) First Initial Flow 28 Jars 250 T-Started 23:20
 (C) First Final Flow 59 Safety Joint 75 T-Open 02:44
 (D) Initial Shut-In 891 Circ Sub N/C T-Pulled 05:44
 (E) Second Initial Flow 37 Hourly Standby _____ T-Out 08:27
 (F) Second Final Flow 52 Mileage 236 RT X 2 731.60 Comments Loaded tools on 10/22 @ 08:30
 (G) Final Shut-In 189 Sampler _____
 (H) Final Hydrostatic 2,869 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 2506.60
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
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