



DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum**

88 Inerness Cir E. unit F104
Englewood, CO 80112

ATTN: Bob Elder

T- Schertz #2-32

32-10s-34w Thomas,KS

Start Date: 2012.03.04 @ 12:20:27

End Date: 2012.03.04 @ 18:49:36

Job Ticket #: 45021 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.08 @ 15:18:19

Norstar Petroleum
32-10s-34w Thomas,KS
T- Schertz #2-32
DST # 1
LKC H-L-J
2012.03.04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Norstar Petroleum
88 Inerness Cir E. unit F104
Englewood, CO 80112
ATTN: Bob Elder

32-10s-34w Thomas,KS

T- Schertz #2-32

Job Ticket: 45021 **DST#: 1**

Test Start: 2012.03.04 @ 12:20:27

GENERAL INFORMATION:

Formation: **LKC H-I-J**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 14:34:52 Tester: Brandon Turley
 Time Test Ended: 18:49:36 Unit No: 60
 Interval: **4343.00 ft (KB) To 4420.00 ft (KB) (TVD)** Reference Elevations: 3287.00 ft (KB)
 Total Depth: 4420.00 ft (KB) (TVD) 3280.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

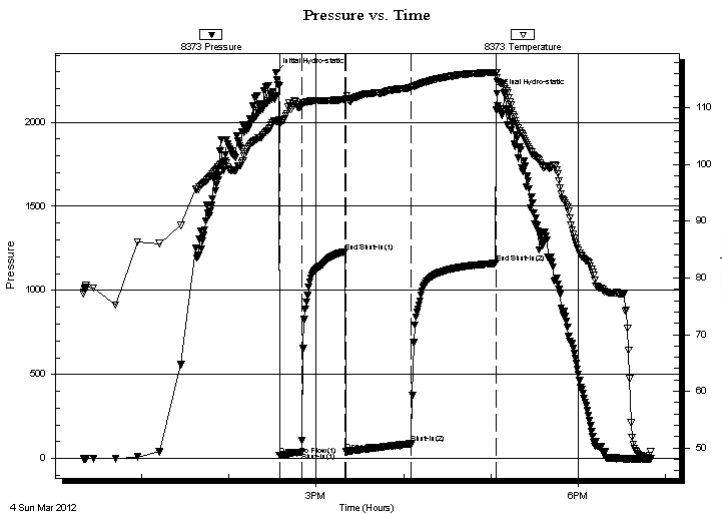
Serial #: 8373

Inside

Press @ Run Depth: 88.72 psig @ 4344.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.04 End Date: 2012.03.04 Last Calib.: 2012.03.04
 Start Time: 12:20:27 End Time: 18:49:36 Time On Btm: 2012.03.04 @ 14:32:37
 Time Off Btm: 2012.03.04 @ 17:04:06

TEST COMMENT: IF: 1/2" blow built to 3" in 15 min.
 IS: No return.
 FF: Surface blow built to 8" in 45 min.
 FS: No return.

PRESSURE SUMMARY



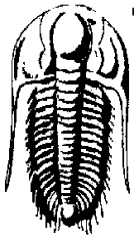
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.65	107.65	Initial Hydro-static
3	20.11	107.01	Open To Flow (1)
18	38.77	110.34	Shut-In(1)
48	1229.81	111.42	End Shut-In(1)
48	41.73	111.55	Open To Flow (2)
93	88.72	113.56	Shut-In(2)
151	1161.40	116.24	End Shut-In(2)
152	2170.36	115.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	w cm 40%w 60%m	0.87
62.00	w cm 10%w 90%m	0.87
31.00	mud 100%m	0.43

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Norstar Petroleum
88 Inerness Cir E. unit F104
Englewood, CO 80112
ATTN: Bob Elder

32-10s-34w Thomas,KS

T- Schertz #2-32

Job Ticket: 45021 **DST#: 1**
Test Start: 2012.03.04 @ 12:20:27

GENERAL INFORMATION:

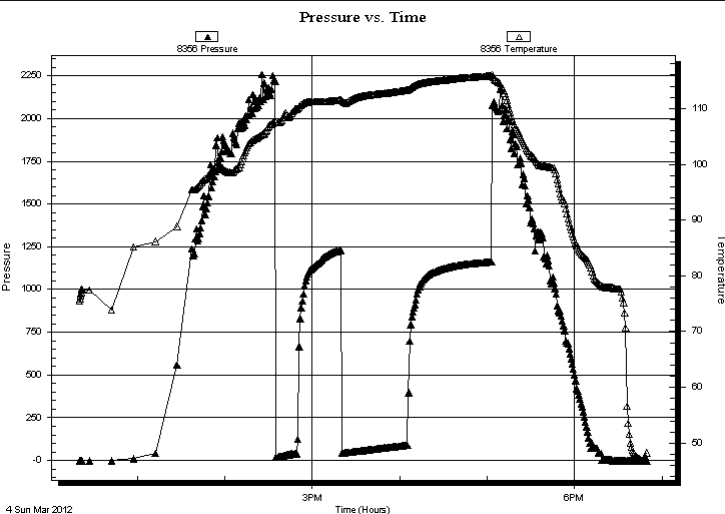
Formation: LKC H-I-J	
Deviated: No Whipstock:	ft (KB)
Time Tool Opened: 14:34:52	Test Type: Conventional Bottom Hole (Initial)
Time Test Ended: 18:49:36	Tester: Brandon Turley
	Unit No: 60
Interval: 4343.00 ft (KB) To 4420.00 ft (KB) (TVD)	Reference Elevations: 3287.00 ft (KB)
Total Depth: 4420.00 ft (KB) (TVD)	3280.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Good
	KB to GR/CF: 7.00 ft

Serial #: 8356

Outside

Press @RunDepth: psig @ 4344.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2012.03.04	End Date: 2012.03.04
Start Time: 12:20:17	End Time: 18:49:26
	Last Calib.: 2012.03.04
	Time On Btm:
	Time Off Btm:

TEST COMMENT: IF: 1/2" blow built to 3" in 15 min.
IS: No return.
FF: Surface blow built to 8" in 45 min.
FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
62.00	w cm 40%w 60%m	0.87
62.00	w cm 10%w 90%m	0.87
31.00	mud 100%m	0.43

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum
88 Inerness Cir E. unit F104
Englewood, CO 80112
ATTN: Bob Elder

32-10s-34w Thomas,KS
T- Schertz #2-32
Job Ticket: 45021 **DST#: 1**
Test Start: 2012.03.04 @ 12:20:27

Tool Information

Drill Pipe:	Length: 4330.00 ft	Diameter: 3.80 inches	Volume: 60.74 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:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 60.74 bbl</u>	Tool Chased	4.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	4343.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	77.00 ft				
Tool Length:	105.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4316.00	
Shut In Tool	5.00			4321.00	
Hydraulic tool	5.00			4326.00	
Jars	5.00			4331.00	
Safety Joint	3.00			4334.00	
Packer	5.00			4339.00	28.00 Bottom Of Top Packer
Packer	4.00			4343.00	
Stubb	1.00			4344.00	
Recorder	0.00	8373	Inside	4344.00	
Recorder	0.00	8356	Outside	4344.00	
Perforations	7.00			4351.00	
Change Over Sub	1.00			4352.00	
Drill Pipe	62.00			4414.00	
Change Over Sub	1.00			4415.00	
Bullnose	5.00			4420.00	77.00 Bottom Packers & Anchor

Total Tool Length: 105.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum

32-10s-34w Thomas,KS

88 Inerness Cir E. unit F104
Englewood, CO 80112

T- Schertz #2-32

Job Ticket: 45021

DST#: 1

ATTN: Bob Elder

Test Start: 2012.03.04 @ 12:20:27

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

42000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	w cm 40%w 60%m	0.870
62.00	w cm 10%w 90%m	0.870
31.00	mud 100%m	0.435

Total Length: 155.00 ft Total Volume: 2.175 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .20@61=42000

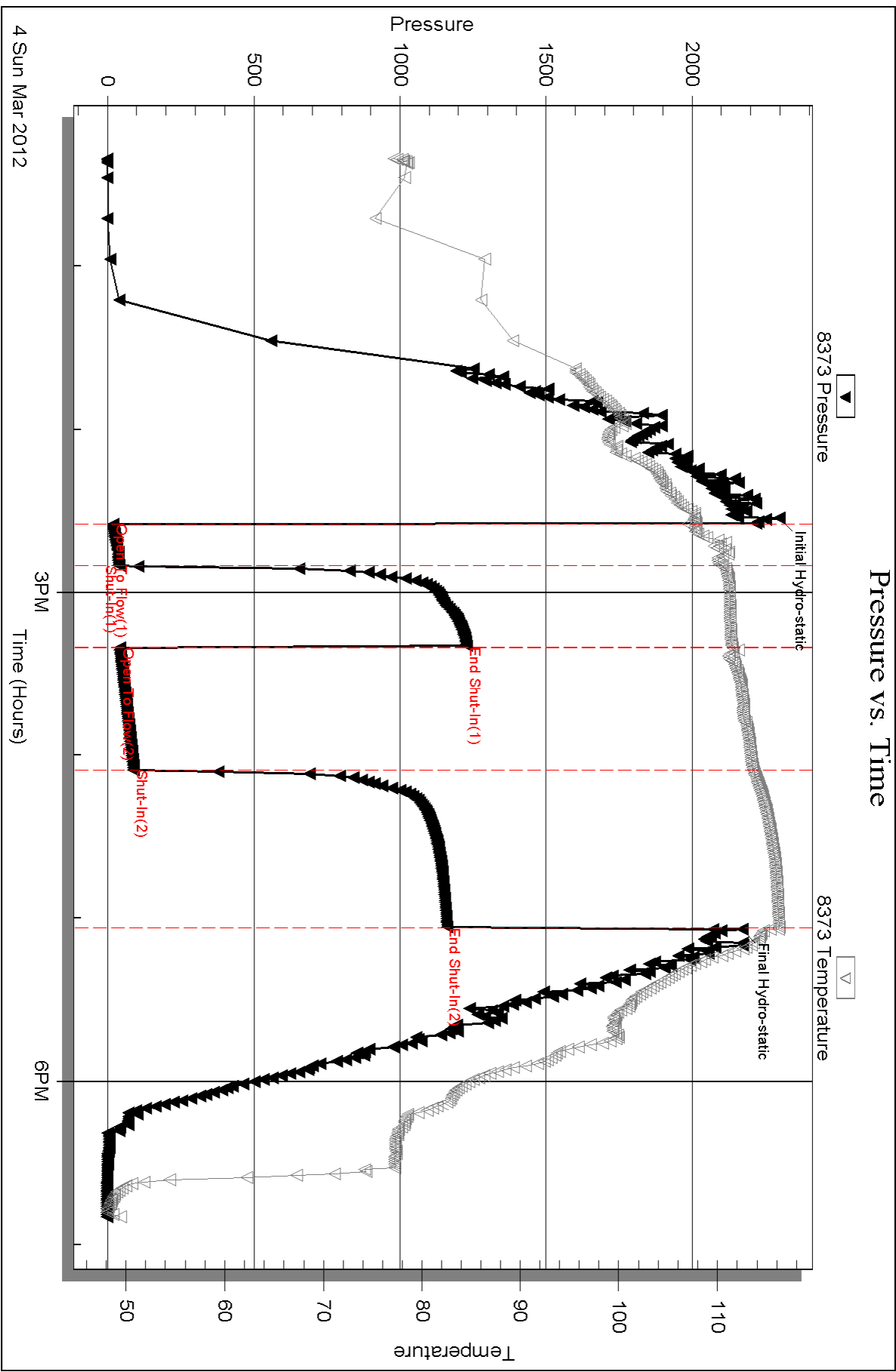
Serial #: 8373

Inside

Norstar Petroleum

T-Schertz #2-32

DST Test Number: 1

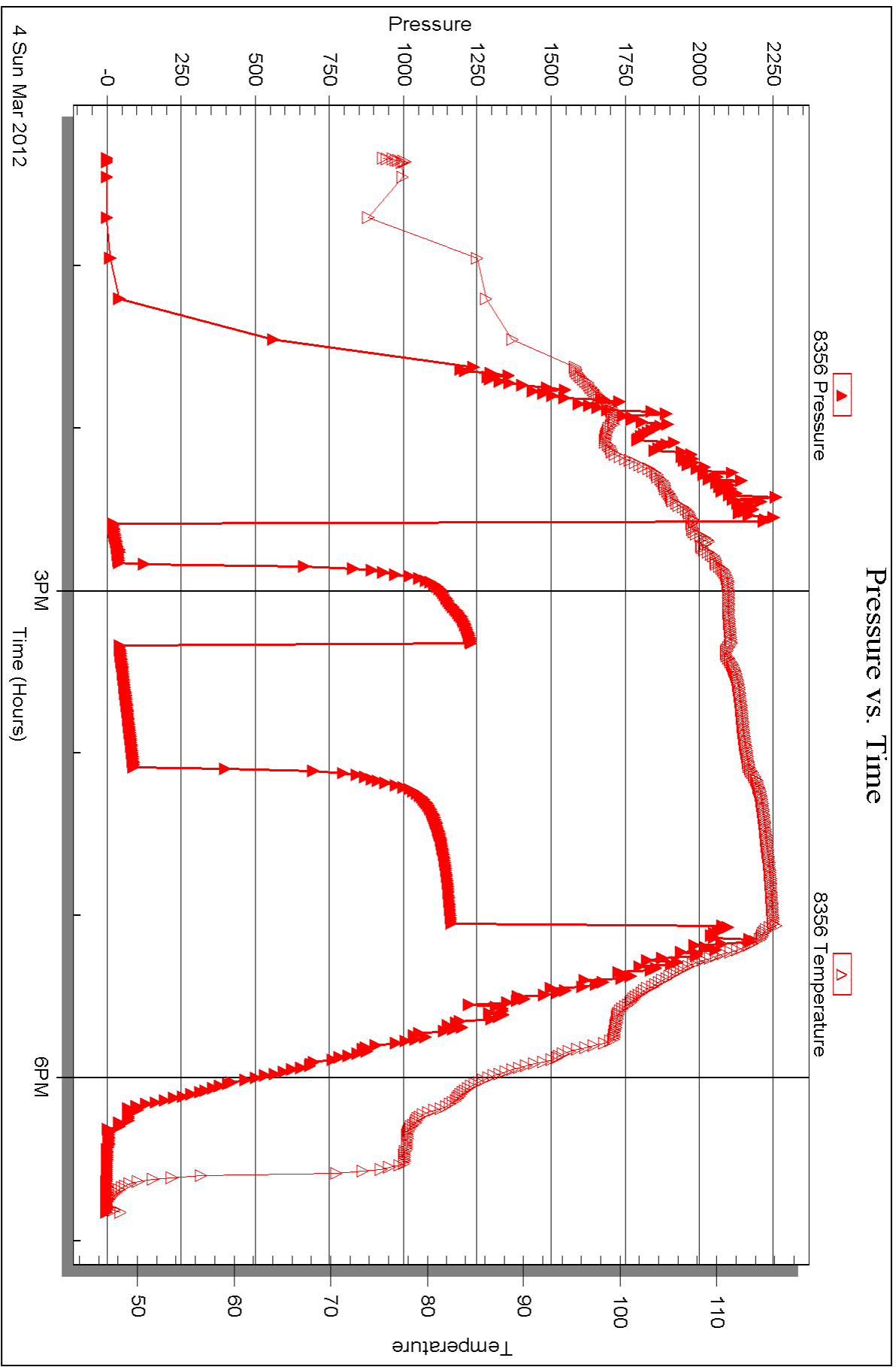


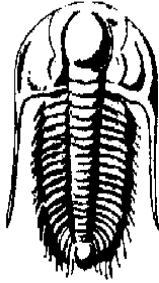
Serial #: 8356

Outside Norstar Petroleum

T-Schertz #2-32

DST Test Number: 1





TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum**

88 Inerness Cir E. unit F104
Englewood, CO 80112

ATTN: Bob Elder

T- Schertz #2-32

32-10s-34w Thomas,KS

Start Date: 2012.03.06 @ 04:00:27

End Date: 2012.03.06 @ 09:53:06

Job Ticket #: 45022 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.08 @ 15:17:12

Norstar Petroleum
32-10s-34w Thomas,KS
T- Schertz #2-32
DST # 2
Johnson
2012.03.06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Norstar Petroleum
 88 Inerness Cir E. unit F104
 Englewood, CO 80112
 ATTN: Bob Elder

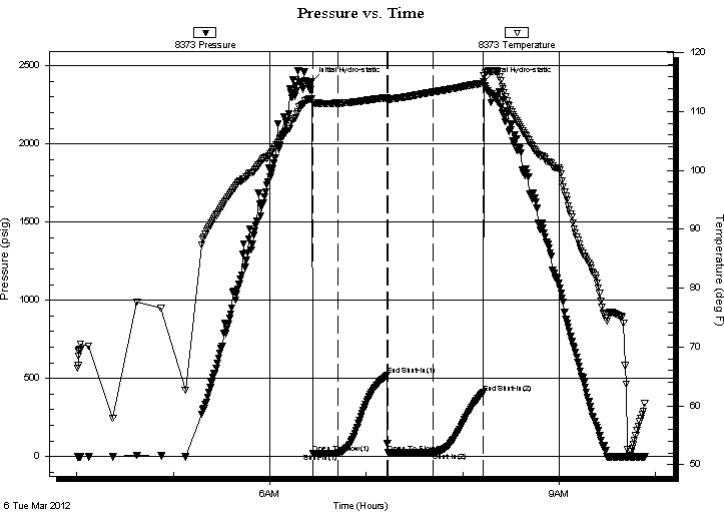
32-10s-34w Thomas, KS
T- Schertz #2-32
 Job Ticket: 45022 **DST#: 2**
 Test Start: 2012.03.06 @ 04:00:27

GENERAL INFORMATION:

Formation: Johnson			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Reset)	
Time Tool Opened: 06:26:37		Tester: Brandon Turley	
Time Test Ended: 09:53:06		Unit No: 60	
Interval: 4733.00 ft (KB) To 4785.00 ft (KB) (TVD)		Reference Elevations: 3287.00 ft (KB)	
Total Depth: 4785.00 ft (KB) (TVD)		3280.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 7.00 ft	

Serial #: 8373	Inside		
Press @ Run Depth: 24.37 psig @ 4734.00 ft (KB)		Capacity: 8000.00 psig	
Start Date: 2012.03.06	End Date: 2012.03.06	Last Calib.: 2012.03.06	
Start Time: 04:00:27	End Time: 09:53:06	Time On Btm: 2012.03.06 @ 06:25:52	
		Time Off Btm: 2012.03.06 @ 08:13:07	

TEST COMMENT: IF: Surface blow died in 6 min.
 IS: No return.
 FF: No blow.
 FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2401.72	112.20	Initial Hydro-static
1	22.12	111.49	Open To Flow (1)
17	22.39	111.43	Shut-In(1)
47	519.01	112.38	End Shut-In(1)
48	23.58	112.12	Open To Flow (2)
76	24.37	113.34	Shut-In(2)
107	408.20	114.83	End Shut-In(2)
108	2398.12	116.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100% m	0.14

* Recovery from multiple tests

Gas Rates

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



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Norstar Petroleum
88 Inerness Cir E. unit F104
Englewood, CO 80112
ATTN: Bob Elder

32-10s-34w Thomas,KS

T- Schertz #2-32

Job Ticket: 45022

DST#: 2

Test Start: 2012.03.06 @ 04:00:27

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:26:37

Time Test Ended: 09:53:06

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4733.00 ft (KB) To 4785.00 ft (KB) (TVD)

Reference Elevations: 3287.00 ft (KB)

Total Depth: 4785.00 ft (KB) (TVD)

3280.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8356 Outside

Press @ Run Depth: psig @ 4734.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.06

End Date:

2012.03.06

Last Calib.:

2012.03.06

Start Time: 04:00:33

End Time:

09:52:57

Time On Btm:

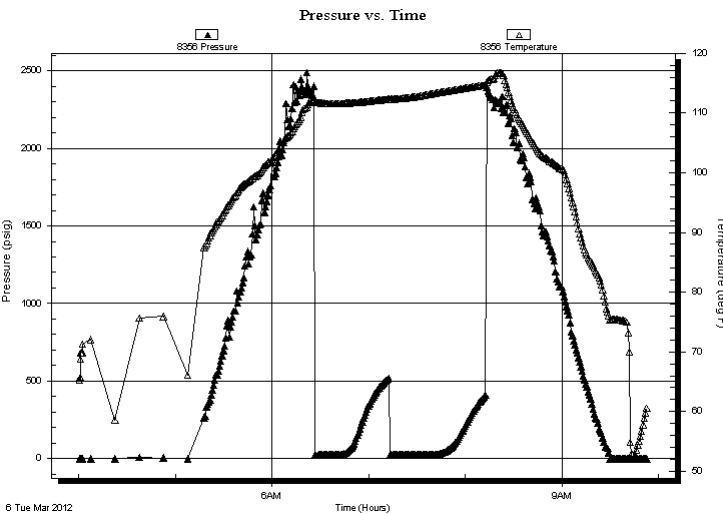
Time Off Btm:

TEST COMMENT: IF: Surface blow died in 6 min.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%m	0.14

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum
88 Inerness Cir E. unit F104
Englewood, CO 80112
ATTN: Bob Elder

32-10s-34w Thomas,KS
T- Schertz #2-32
Job Ticket: 45022 **DST#: 2**
Test Start: 2012.03.06 @ 04:00:27

Tool Information

Drill Pipe:	Length: 4734.00 ft	Diameter: 3.80 inches	Volume: 66.41 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 66.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4733.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4706.00	
Shut In Tool	5.00			4711.00	
Hydraulic tool	5.00			4716.00	
Jars	5.00			4721.00	
Safety Joint	3.00			4724.00	
Packer	5.00			4729.00	28.00 Bottom Of Top Packer
Packer	4.00			4733.00	
Stubb	1.00			4734.00	
Recorder	0.00	8373	Inside	4734.00	
Recorder	0.00	8356	Outside	4734.00	
Perforations	13.00			4747.00	
Change Over Sub	1.00			4748.00	
Drill Pipe	31.00			4779.00	
Change Over Sub	1.00			4780.00	
Bullnose	5.00			4785.00	52.00 Bottom Packers & Anchor

Total Tool Length: 80.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum

32-10s-34w Thomas,KS

88 Inerness Cir E. unit F104
Englewood, CO 80112

T- Schertz #2-32

Job Ticket: 45022

DST#: 2

ATTN: Bob Elder

Test Start: 2012.03.06 @ 04:00:27

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%m	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

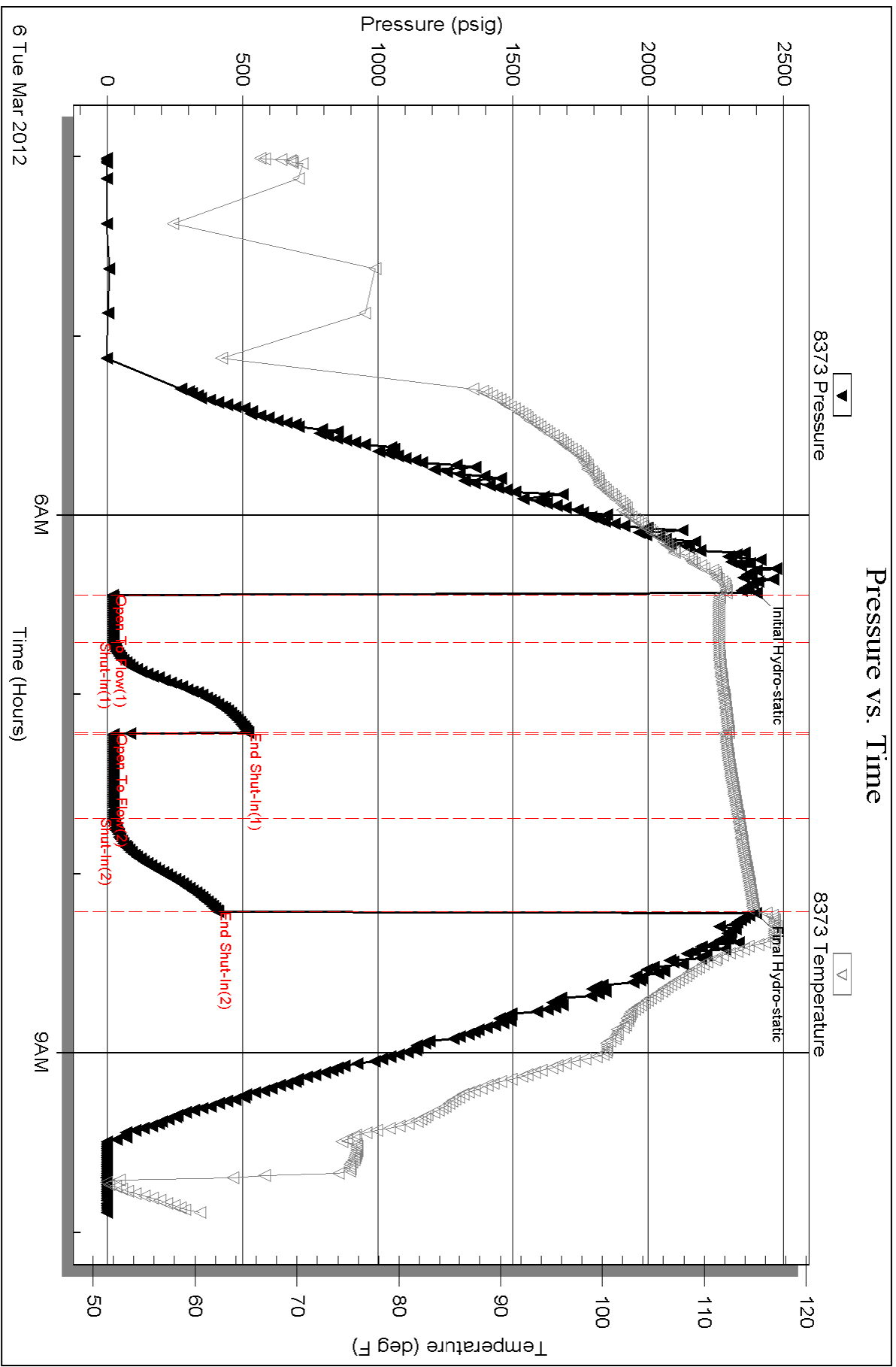
Serial #: 8373

Inside

Norstar Petroleum

T-Schertz #2-32

DST Test Number: 2

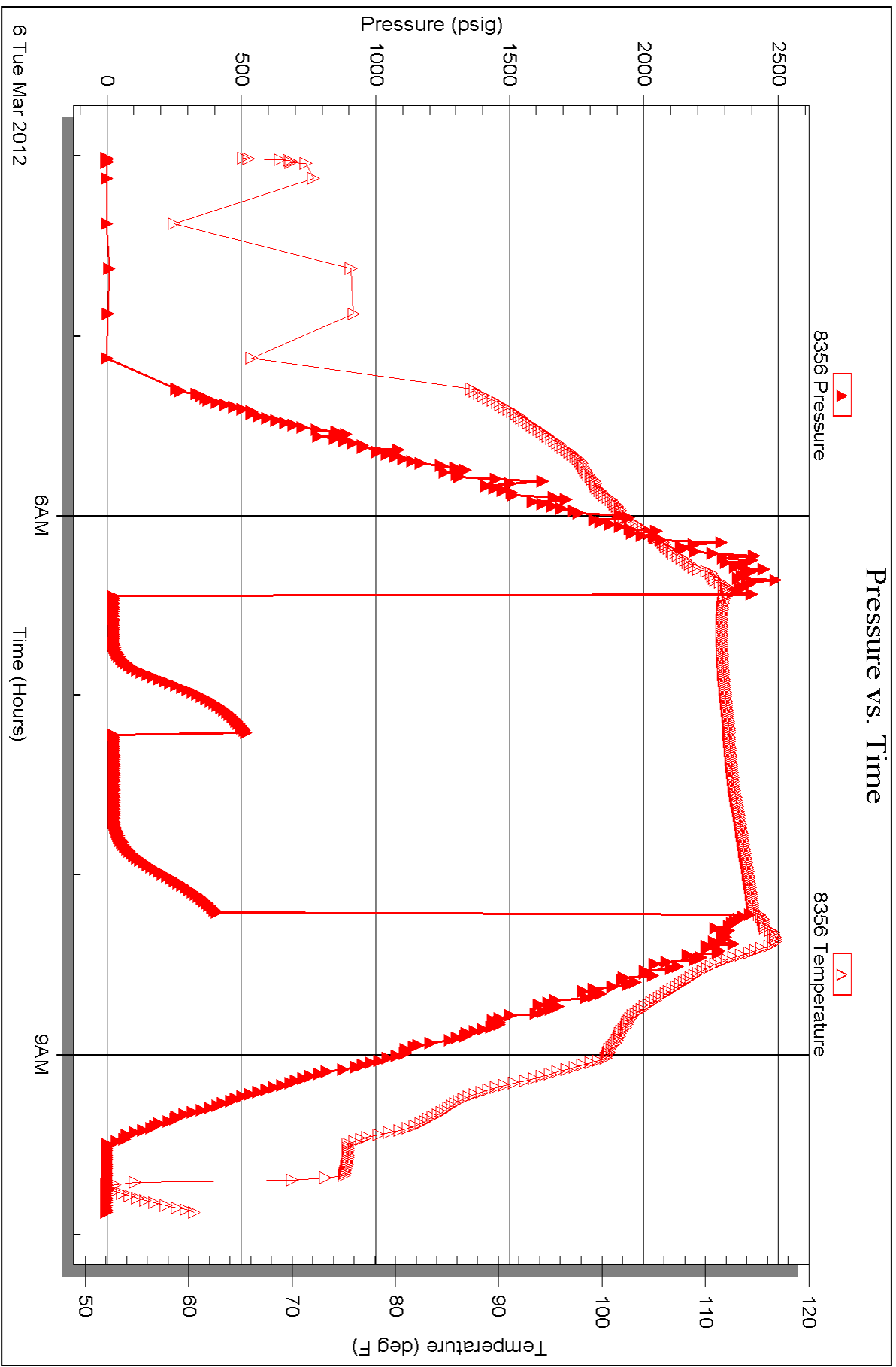


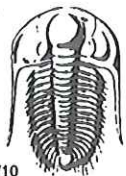
Serial #: 8356

Outside Norstar Petroleum

T-Schertz #2-32

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
MAR 07 2012

Test Ticket

NO. 45021

Well Name & No. Norstar Petroleum ^{T-Schertz 2 BY 32} Test No. 1 Date 3-4-12
 Company Norstar Petroleum Elevation 3287 KB 3280 GL
 Address 88 Inerness Cir E. unit F104 Englewood, CO 80112
 Co. Rep / Geo. Bob Elder Rig Maverick 108
 Location: Sec. 32 Twp. 10 Rge. 34 Co. Thomas State KS

Interval Tested 4343 4420 Zone Tested LKB H-I-J
 Anchor Length 77 Drill Pipe Run 4330 Mud Wt. 9.2
 Top Packer Depth 4338 Drill Collars Run — Vis 55
 Bottom Packer Depth 4343 Wt. Pipe Run — WL 8.8
 Total Depth 4420 Chlorides 4500 ppm System LCM 2

Blow Description IF: 1/2 blow built to 3 in 15 min.
IS: No return.
FF: surface blow built to 8 in 45 min.
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>31</u>	<u>mud</u>			<u>100</u>	
<u>62</u>	<u>wcm</u>		<u>10</u>	<u>90</u>	
<u>62</u>	<u>wcm</u>		<u>40</u>	<u>60</u>	

Rec Total 155 BHT 116 Gravity — API RW 120 @ 61 °F Chlorides 42,000 ppm

(A) Initial Hydrostatic <u>2296</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>6:45</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>12:20</u>
(C) First Final Flow <u>38</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>14:34</u>
(D) Initial Shut-In <u>1229</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>17:04</u>
(E) Second Initial Flow <u>41</u>	<input checked="" type="checkbox"/> Hourly Standby <u>400 2hrs 200</u>	T-Out <u>18:50</u>
(F) Second Final Flow <u>88</u>	<input checked="" type="checkbox"/> Mileage <u>130-182'</u>	Comments _____
(G) Final Shut-In <u>1161</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2170</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Open <u>15</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1932'</u>
Final Flow <u>45</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1932'</u>	

Approved By [Signature] Our Representative [Signature]

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
MAR 07 2012

Test Ticket

NO. 45022

4/10

BY: _____

Well Name & No. T-Schertz 2-32 Test No. 2 Date 3-6-12
 Company Norstar Petroleum Elevation 3287 KB 3280 GL
 Address _____
 Co. Rep / Geo. Bob Elder Rig McVerick 108
 Location: Sec. 32 Twp. 10 Rge. 34 Co. Thomps State KS

Interval Tested 4733 4785 Zone Tested Johnson
 Anchor Length _____ Drill Pipe Run 4734 Mud Wt. 9.3
 Top Packer Depth 4728 Drill Collars Run _____ Vis 54
 Bottom Packer Depth 4733 Wt. Pipe Run _____ WL 7.6
 Total Depth 4785 Chlorides 5500 ppm System LCM 3

Blow Description IF: surface blow died in 6 min.
#5: No return.
FF: No blow.
FS: No return.

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

Rec Total 10 BHT 114 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2401</u>	<input checked="" type="checkbox"/> Test <u>1225</u>	T-On Location <u>3:15</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>4:00</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>6:26</u>
(D) Initial Shut-In <u>519</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/L</u>	T-Pulled <u>8:11</u>
(E) Second Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Hourly Standby <u>1</u>	T-Out <u>10:00</u>
(F) Second Final Flow <u>24</u>	<input checked="" type="checkbox"/> Mileage <u>130-182</u>	Comments <u>Hand took 1 hour</u>
(G) Final Shut-In <u>408</u>	<input type="checkbox"/> Sampler _____	<u>break after making</u>
(H) Final Hydrostatic <u>2398</u>	<input type="checkbox"/> Straddle _____	<u>up the tool</u>

Initial Open 15
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1732
 MP/DST Disc't _____

Sub Total 1732

Approved By Randy Sloan Our Representative [Signature]

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