



DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co. Inc.**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Ostmeyer #1-28

28-9s-31w Thomas,KS

Start Date: 2012.08.21 @ 05:40:00

End Date: 2012.08.21 @ 12:50:30

Job Ticket #: 48877 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.28 @ 11:07:43



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48877

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 05:40:00

GENERAL INFORMATION:

Formation: **Kansas City "I-J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:00:00
 Time Test Ended: 12:50:30
 Interval: **4244.00 ft (KB) To 4295.00 ft (KB) (TVD)**
 Total Depth: 4295.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jace McKinney
 Unit No: 46
 Reference Elevations: 3045.00 ft (KB)
 3037.00 ft (CF)
 KB to GR/CF: 8.00 ft

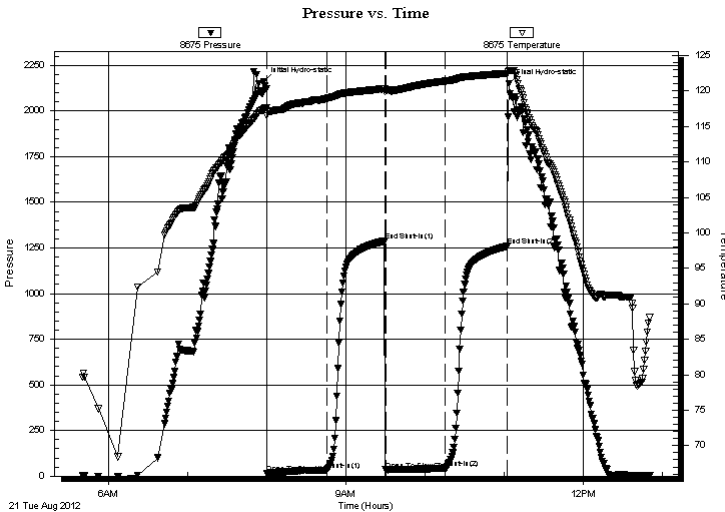
Serial #: 8675

Inside

Press @ Run Depth: 42.09 psig @ 4245.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.08.21 End Date: 2012.08.21 Last Calib.: 2012.08.21
 Start Time: 05:40:15 End Time: 12:50:30 Time On Btm: 2012.08.21 @ 07:57:30
 Time Off Btm: 2012.08.21 @ 11:03:30

TEST COMMENT: Built to 2" blow
 No return blow
 Weak surface blow
 No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.68	117.48	Initial Hydro-static
3	16.16	116.54	Open To Flow (1)
48	32.67	118.91	Shut-In(1)
92	1287.79	120.31	End Shut-In(1)
93	34.62	119.92	Open To Flow (2)
138	42.09	121.37	Shut-In(2)
185	1259.28	122.48	End Shut-In(2)
186	2150.58	122.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	100% Mud w ith oil spots in tool	0.50

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48877

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 05:40:00

Tool Information

Drill Pipe:	Length: 4206.21 ft	Diameter: 3.80 inches	Volume: 59.00 bbl	Tool Weight: 1500.00 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: 30.04 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 59.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.25 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4244.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	51.00 ft			
Tool Length:	71.00 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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Change Over Sub	1.00			4225.00	
Shut In Tool	5.00			4230.00	
Hydraulic tool	5.00			4235.00	
Packer	5.00			4240.00	20.00 Bottom Of Top Packer
Packer	4.00			4244.00	
Stubb	1.00			4245.00	
Recorder	0.00	8675	Inside	4245.00	
Recorder	0.00	8650	Outside	4245.00	
Perforations	14.00			4259.00	
Change Over Sub	1.00			4260.00	
Drill Pipe	31.00			4291.00	
Change Over Sub	1.00			4292.00	
Bullnose	3.00			4295.00	51.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48877

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 05:40:00

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: 7.57 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	100% Mud w ith oil spots in tool	0.498

Total Length: 55.00 ft Total Volume: 0.498 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

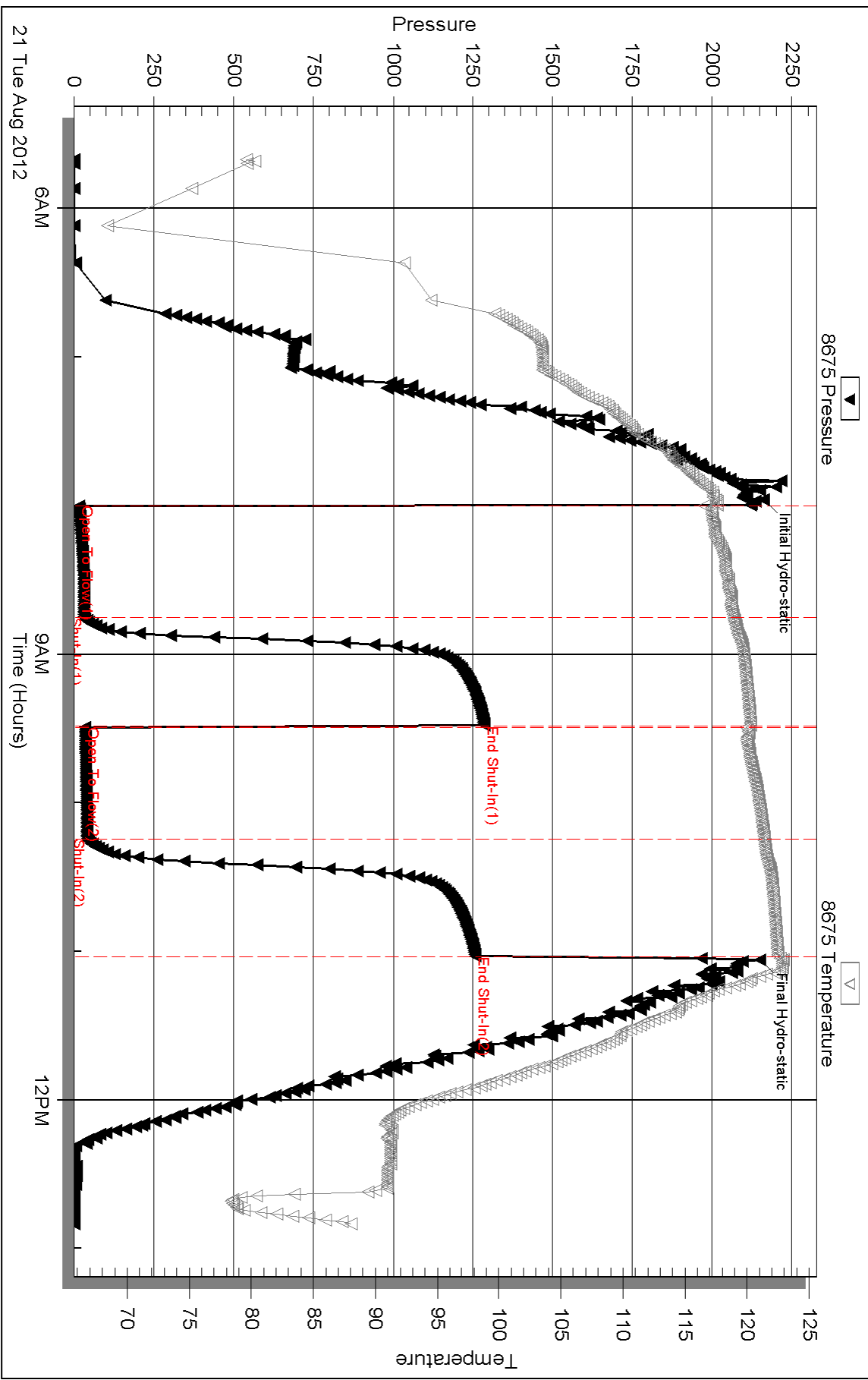
Inside

Dow nting-Nelson Oil Co. Inc.

Ostmeyer #1-28

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48877

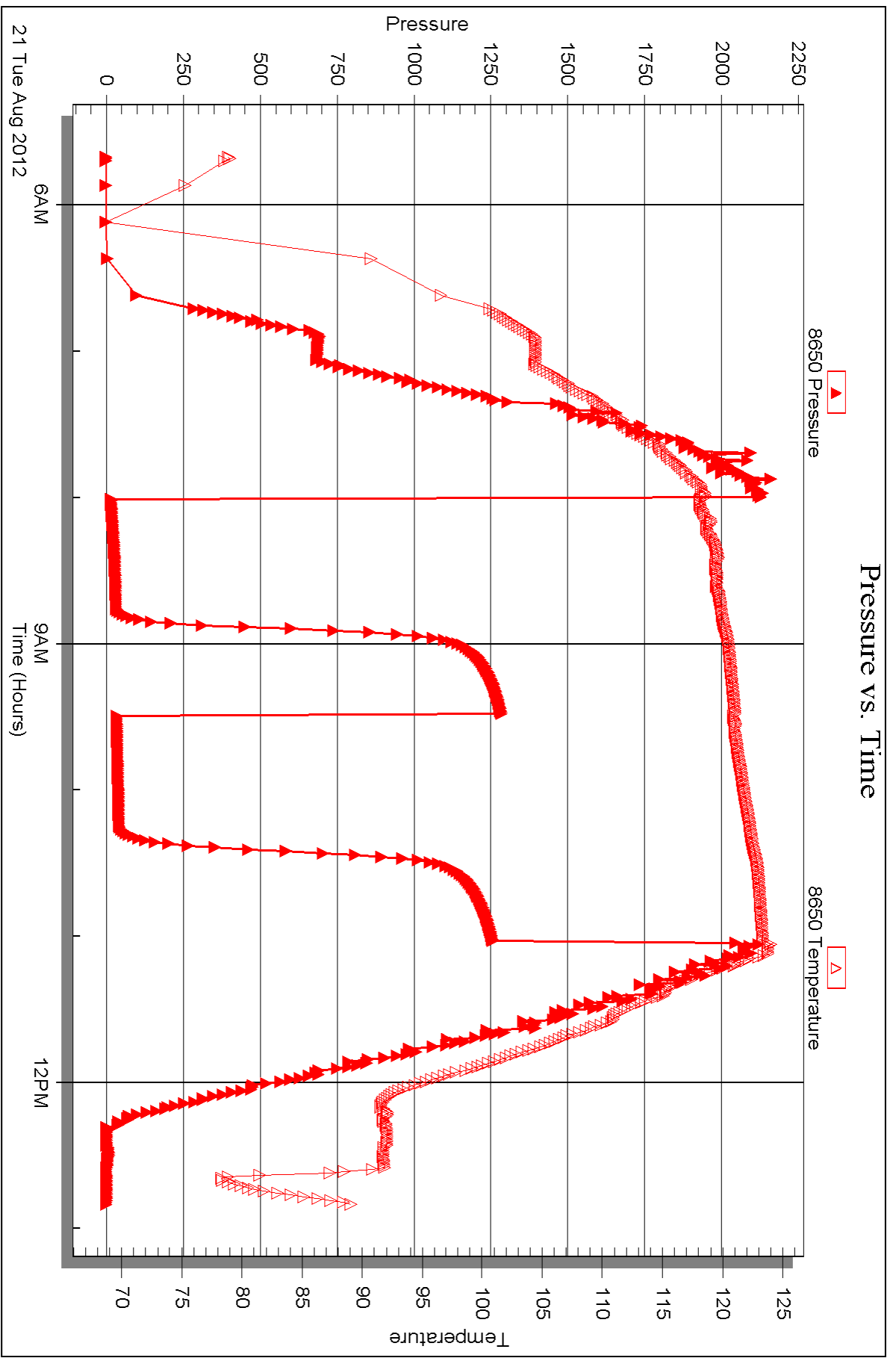
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Serial #: 8650

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Ostmeyer #1-28

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 48877

Printed: 2012.08.28 @ 11:07:48



DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co. Inc.**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Ostmeyer #1-28

28-9s-31w Thomas,KS

Start Date: 2012.08.21 @ 21:45:00

End Date: 2012.08.22 @ 03:19:00

Job Ticket #: 48878 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.28 @ 11:06:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48878

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 21:45:00

GENERAL INFORMATION:

Formation: **Kansas City "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:35:30

Time Test Ended: 03:19:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4296.00 ft (KB) To 4330.00 ft (KB) (TVD)

Reference Elevations: 3045.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8675

Inside

Press @RunDepth: 36.69 psig @ 4297.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.21

End Date:

2012.08.22

Last Calib.:

2012.08.22

Start Time: 21:45:15

End Time:

03:19:00

Time On Btm:

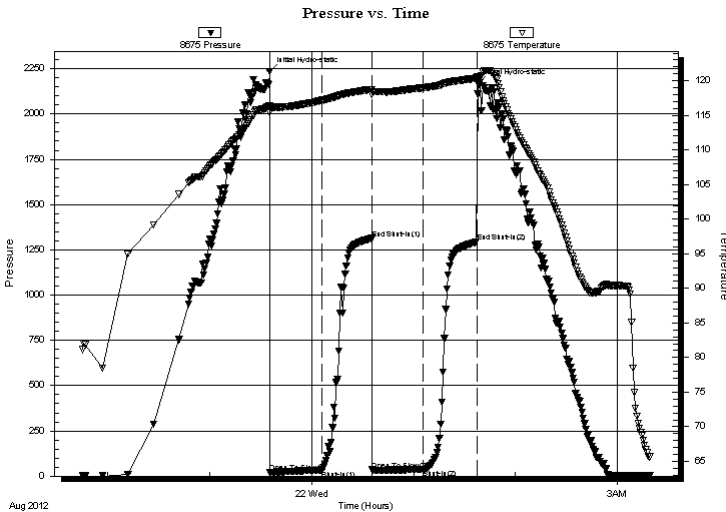
2012.08.21 @ 23:35:15

Time Off Btm:

2012.08.22 @ 01:38:00

TEST COMMENT: Built to 1 1/4" blow
No return blow
Weak surface blow
No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2236.14	116.42	Initial Hydro-static
1	20.80	115.35	Open To Flow (1)
31	32.43	117.15	Shut-In(1)
60	1313.40	118.76	End Shut-In(1)
61	34.41	118.02	Open To Flow (2)
91	36.69	118.97	Shut-In(2)
122	1293.37	120.38	End Shut-In(2)
123	2167.46	120.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	100%Mud with oil spots in tool	0.29

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48878

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 21:45:00

Tool Information

Drill Pipe:	Length: 4269.35 ft	Diameter: 3.80 inches	Volume: 59.89 bbl	Tool Weight: 1500.00 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: 30.04 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 60.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.39 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4296.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	34.00 ft			
Tool Length:	54.00 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			4277.00	
Shut In Tool	5.00			4282.00	
Hydraulic tool	5.00			4287.00	
Packer	5.00			4292.00	20.00 Bottom Of Top Packer
Packer	4.00			4296.00	
Stubb	1.00			4297.00	
Recorder	0.00	8675	Inside	4297.00	
Recorder	0.00	8650	Outside	4297.00	
Perforations	30.00			4327.00	
Change Over Sub	0.00			4327.00	
Drill Pipe	0.00			4327.00	
Change Over Sub	0.00			4327.00	
Bullnose	3.00			4330.00	34.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48878

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.08.21 @ 21:45:00

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:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	100%Mud w ith oil spots in tool	0.287

Total Length: 40.00 ft Total Volume: 0.287 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

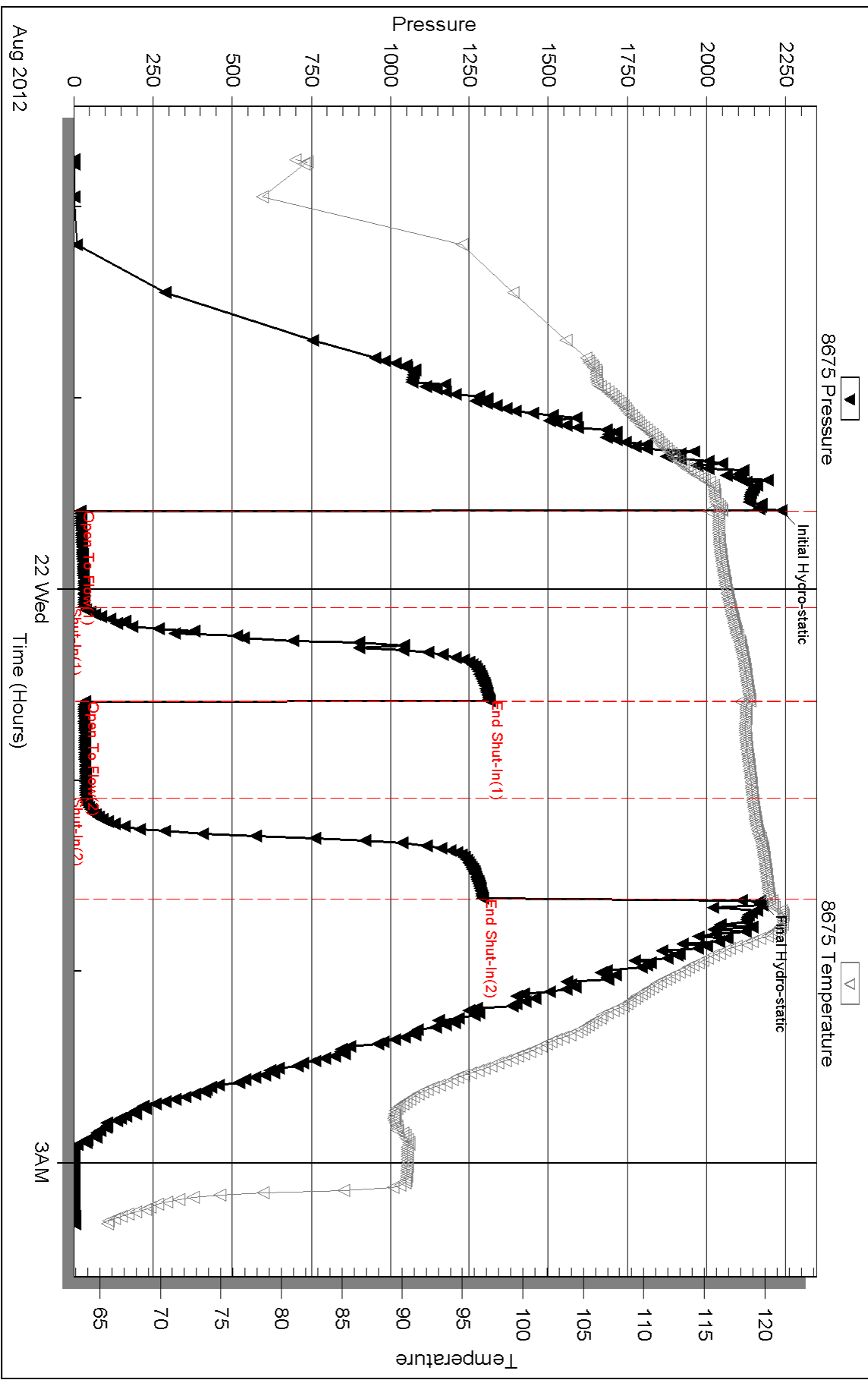
Inside

Downing-Nelson Oil Co. Inc.

Ostmeier #1-28

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48878

Printed: 2012.08.28 @ 11:06:59



DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co. Inc.**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Ostmeyer #1-28

28-9s-31w Thomas,KS

Start Date: 2012.08.23 @ 00:40:00

End Date: 2012.08.23 @ 07:50:00

Job Ticket #: 48879 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.28 @ 11:06:03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48879

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.08.23 @ 00:40:00

GENERAL INFORMATION:

Formation: **Pawnee & Myric Stati**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:54:30

Time Test Ended: 07:50:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4438.00 ft (KB) To 4537.00 ft (KB) (TVD)

Reference Elevations: 3045.00 ft (KB)

Total Depth: 4537.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 144.06 psig @ 4439.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.23

End Date:

2012.08.23

Last Calib.:

2012.08.23

Start Time: 00:40:15

End Time:

07:50:00

Time On Btm:

2012.08.23 @ 02:52:00

Time Off Btm:

2012.08.23 @ 05:55:00

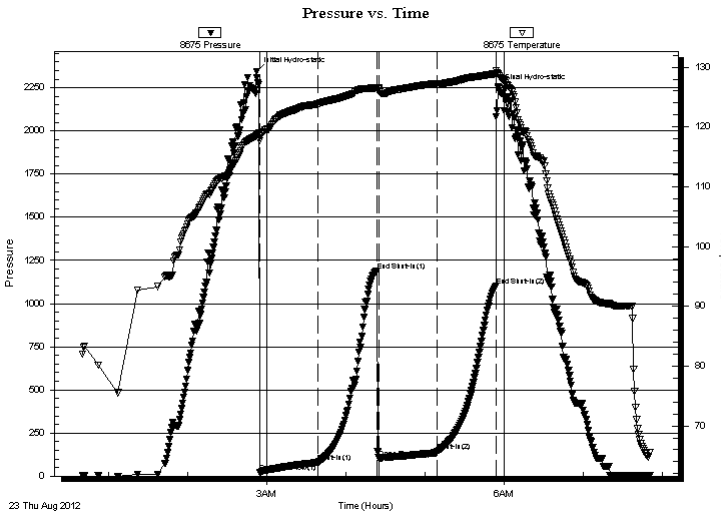
TEST COMMENT: B.O.B. in 35 min.

Bled off for 5 min. No return blow

B.O.B. in 32 min.

Bled off for 5 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2345.88	118.53	Initial Hydro-static
3	19.71	117.71	Open To Flow (1)
47	79.46	123.84	Shut-In(1)
92	1191.13	126.55	End Shut-In(1)
93	106.03	126.30	Open To Flow (2)
138	144.06	127.19	Shut-In(2)
182	1103.42	128.91	End Shut-In(2)
183	2247.60	128.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	135 feet gas in pipe	0.00
125.00	ocgm 5%O 30%G 65%M	1.48
115.00	ocm 20%O 80%M	1.61

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48879

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.08.23 @ 00:40:00

Tool Information

Drill Pipe:	Length: 4393.96 ft	Diameter: 3.80 inches	Volume: 61.64 bbl	Tool Weight: 1500.00 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: 30.04 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 61.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4438.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	99.00 ft			
Tool Length:	119.00 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			4419.00	
Shut In Tool	5.00			4424.00	
Hydraulic tool	5.00			4429.00	
Packer	5.00			4434.00	20.00 Bottom Of Top Packer
Packer	4.00			4438.00	
Stubb	1.00			4439.00	
Recorder	0.00	8675	Inside	4439.00	
Recorder	0.00	8650	Outside	4439.00	
Perforations	30.00			4469.00	
Change Over Sub	1.00			4470.00	
Drill Pipe	63.00			4533.00	
Change Over Sub	1.00			4534.00	
Bullnose	3.00			4537.00	99.00 Bottom Packers & Anchor

Total Tool Length: 119.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48879

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.08.23 @ 00:40:00

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: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	135 feet gas in pipe	0.000
125.00	ocgm 5%O 30%G 65%M	1.480
115.00	ocm 20%O 80%M	1.613

Total Length: 240.00 ft Total Volume: 3.093 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

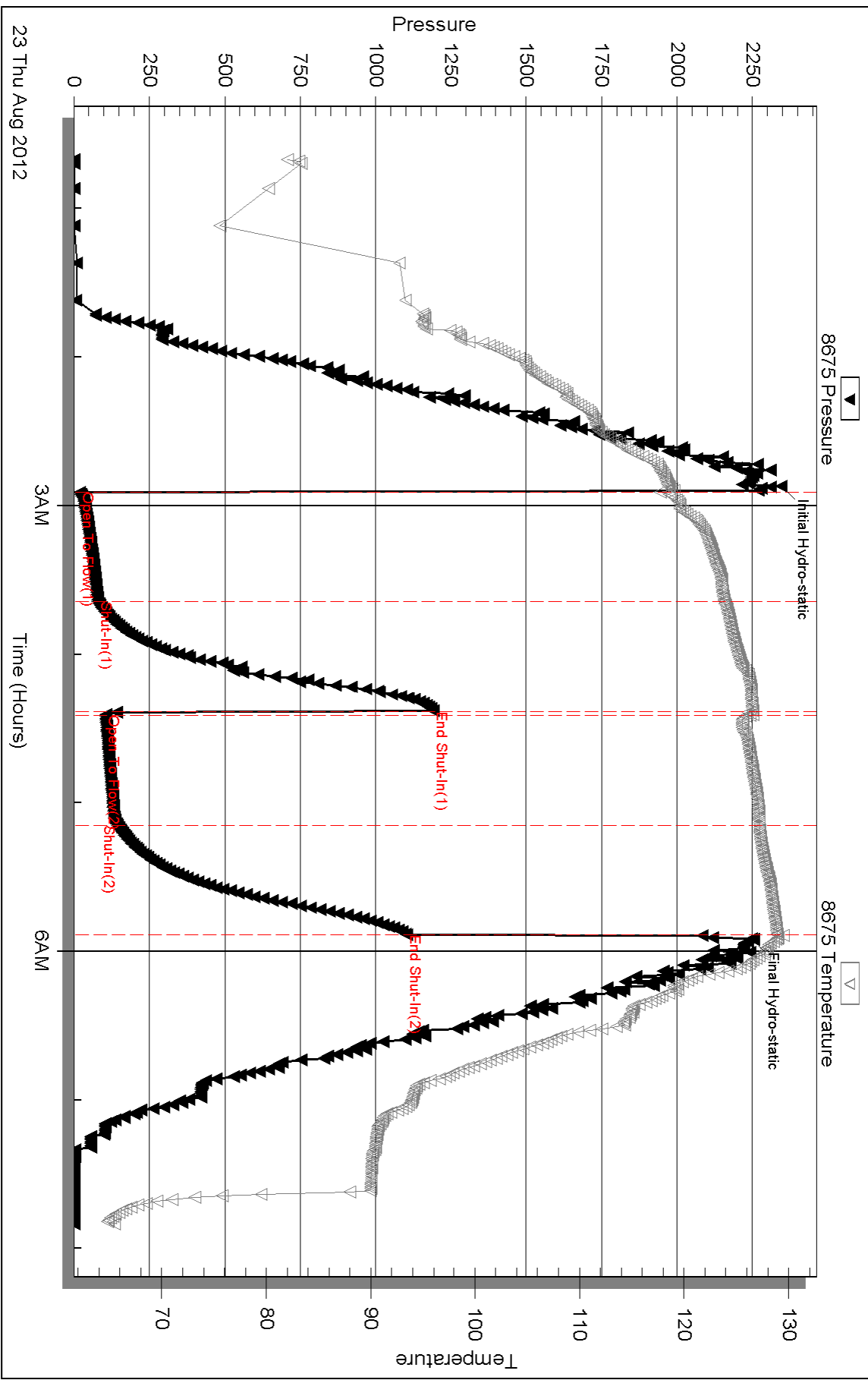
Inside

Dow nung-Nelson Oil Co. Inc.

Ostmeier #1-28

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48879

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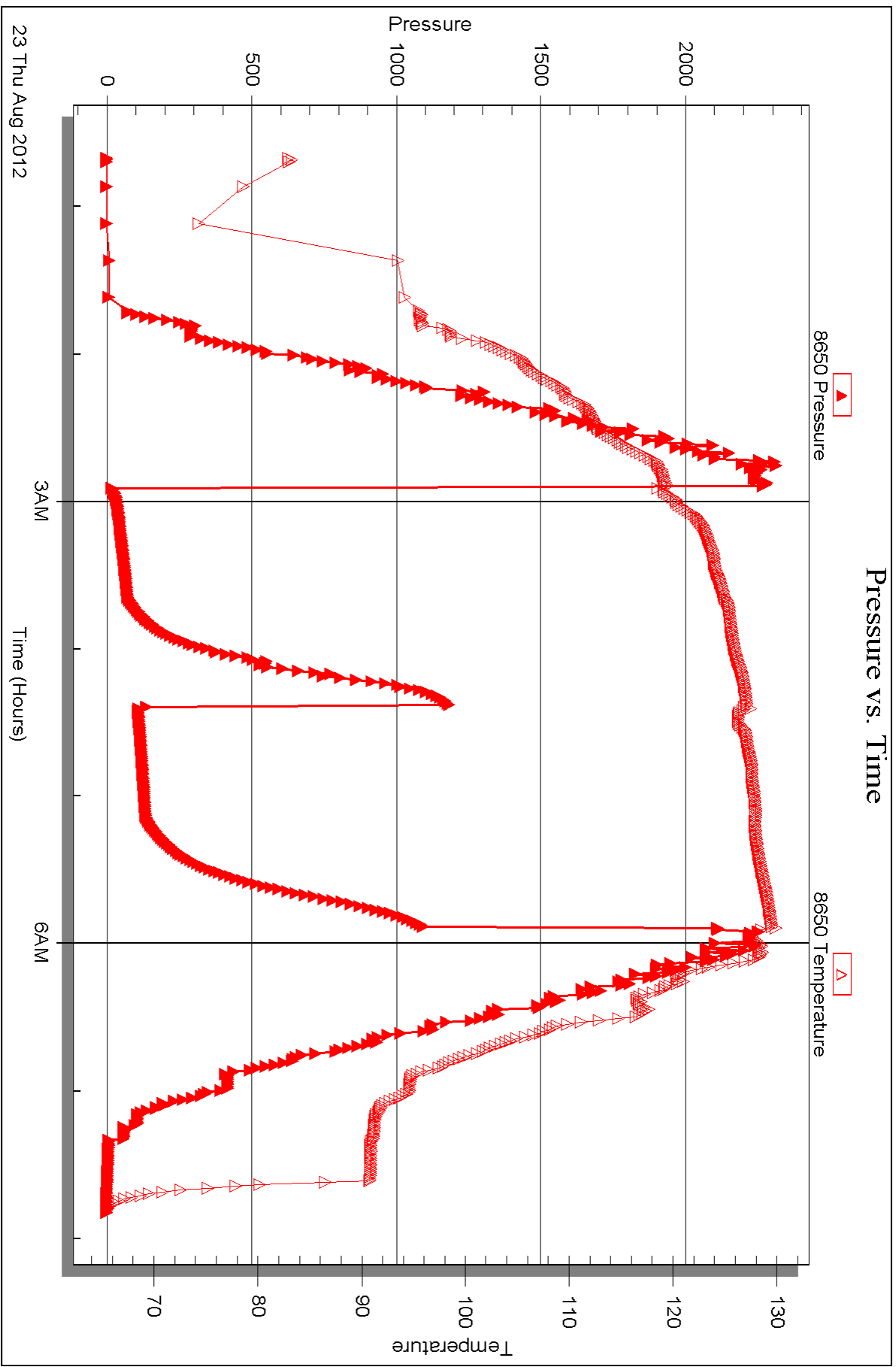
Serial #: 8650

Outside

Dow nung-Nelson Oil Co. Inc.

Ostmeier #1-28

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co. Inc.**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Ostmeyer #1-28

28-9s-31w Thomas,KS

Start Date: 2012.08.24 @ 10:15:00

End Date: 2012.08.24 @ 16:59:30

Job Ticket #: 48880 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.28 @ 11:05:07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48880

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.08.24 @ 10:15:00

GENERAL INFORMATION:

Formation: **Kansas City L - Marm**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:00:45

Time Test Ended: 16:59:30

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4326.00 ft (KB) To 4485.00 ft (KB) (TVD)

Reference Elevations: 3045.00 ft (KB)

Total Depth: 4713.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8675

Inside

Press @RunDepth: 46.68 psig @ 4327.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.24

End Date:

2012.08.24

Last Calib.:

2012.08.24

Start Time: 10:15:15

End Time:

16:59:30

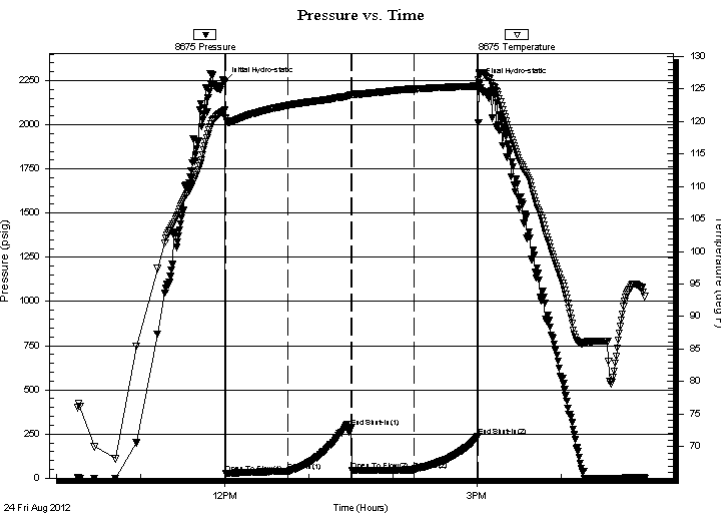
Time On Btm:

2012.08.24 @ 12:00:15

Time Off Btm:

2012.08.24 @ 15:01:30

TEST COMMENT: Built to 2" blow
No return blow
Built to 2" blow
No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2241.96	121.77	Initial Hydro-static
1	24.34	120.64	Open To Flow (1)
45	39.04	122.48	Shut-In(1)
90	285.37	124.12	End Shut-In(1)
91	44.11	124.09	Open To Flow (2)
135	46.68	124.99	Shut-In(2)
181	237.64	125.46	End Shut-In(2)
182	2240.19	127.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	100% Mud w ith oil spots	0.64

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48880

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.08.24 @ 10:15:00

Tool Information

Drill Pipe:	Length: 4300.60 ft	Diameter: 3.80 inches	Volume: 60.33 bbl	Tool Weight: 1500.00 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: 30.04 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 74000.00 lb
			Total Volume: 60.48 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.64 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4326.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	4482.00 ft			
Interval between Packers:	156.00 ft			
Tool Length:	410.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments: Anchor 159 Tail Pipe 228				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4311.00	
Hydraulic tool	5.00			4316.00	
Jars	0.00			4316.00	
Safety Joint	0.00		Fluid	4316.00	
Packer	5.00			4321.00	20.00 Bottom Of Top Packer
Packer	5.00			4326.00	
Stubb	1.00			4327.00	
Recorder	0.00	8675	Inside	4327.00	
Recorder	0.00	8650	Outside	4327.00	
Perforations	26.00			4353.00	
Change Over Sub	1.00			4354.00	
drill Pipe	126.00			4480.00	
change Over Sub	1.00			4481.00	
Perforations	0.00			4481.00	
Blank Off Sub	1.00			4482.00	156.00 Tool Interval
Packer	5.00			4487.00	
Stubb	1.00			4488.00	
Change Over Sub	1.00			4489.00	
Recorder	0.00	6672	Below	4489.00	
Drill Pipe	220.00			4709.00	
Change Over Sub	1.00			4710.00	
Bullnose	6.00			4716.00	234.00 Bottom Packers & Anchor

Total Tool Length: 410.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

28-9s-31w Thomas,KS

PO Box 1019
Hays KS 67601

Ostmeyer #1-28

Job Ticket: 48880

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.08.24 @ 10:15:00

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:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
65.00	100% Mud w ith oil spots	0.638

Total Length: 65.00 ft Total Volume: 0.638 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

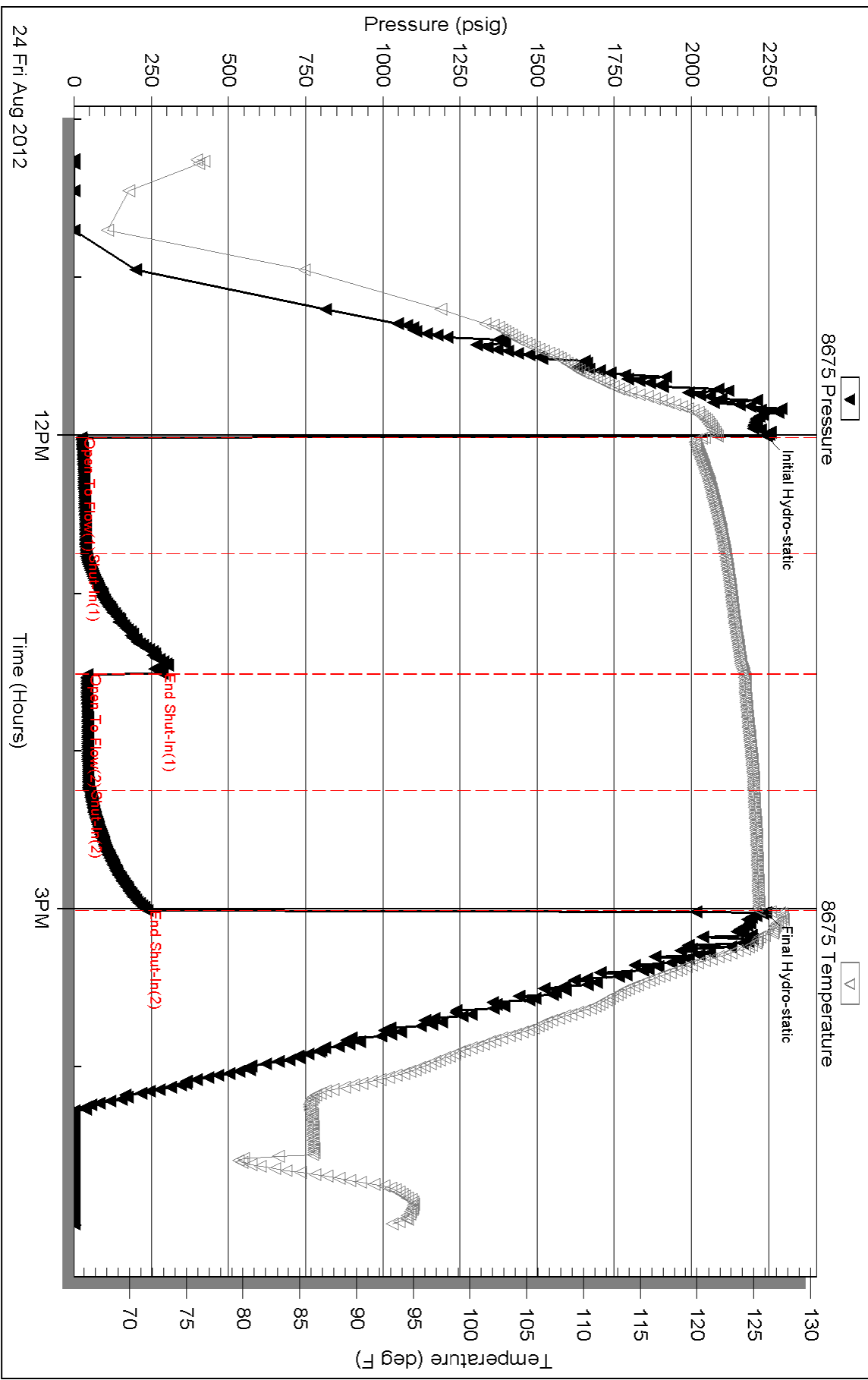
Inside

Downing-Nelson Oil Co. Inc.

Ostmeier #1-28

DST Test Number: 4

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48880

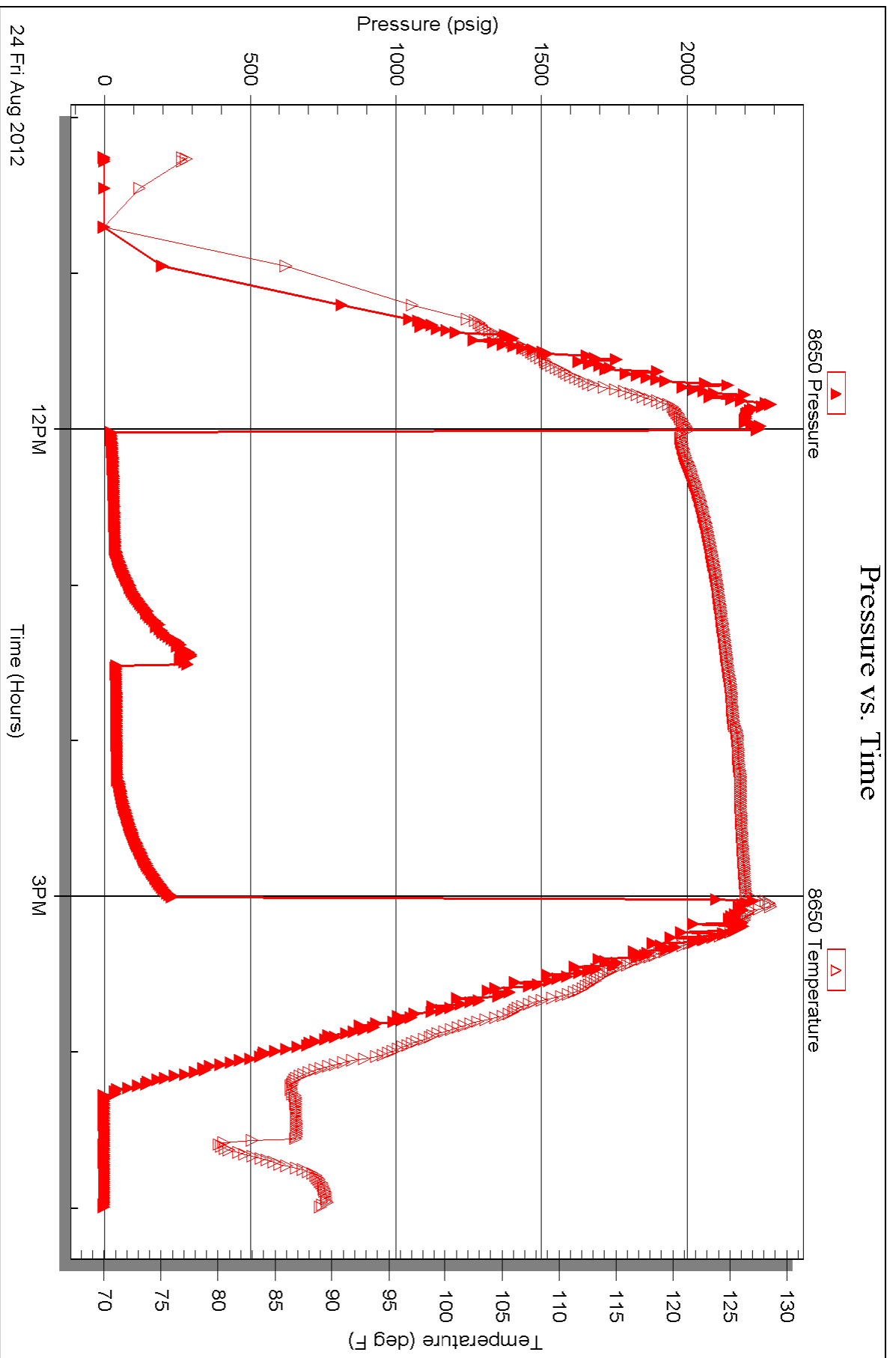
Printed: 2012.08.28 @ 11:05:12

Serial #: 8650

Outside Dow nting-Nelson Oil Co. Inc.

Ostmeyer #1-28

DST Test Number: 4

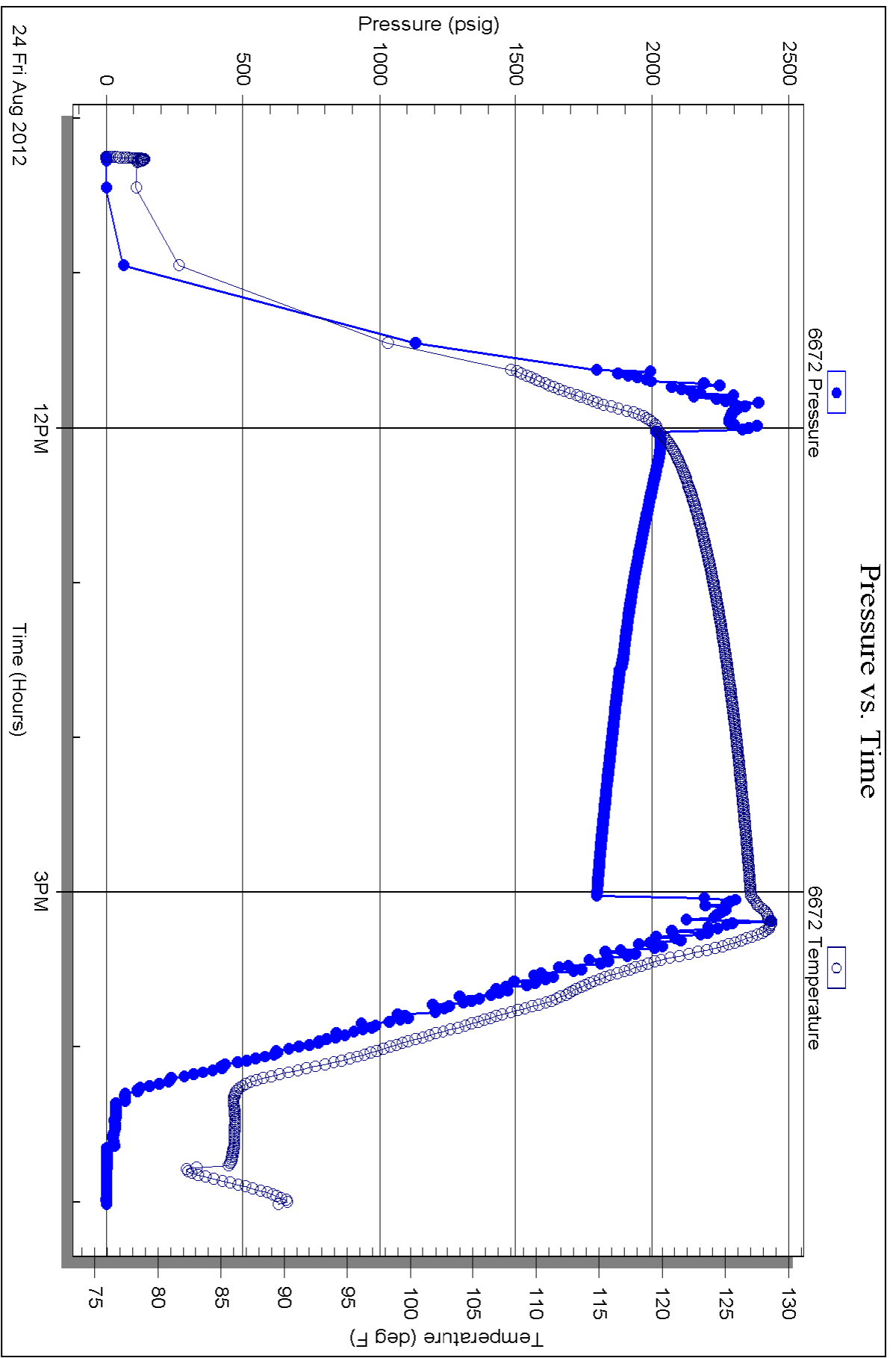


Serial #: 6672

Below (Stratton)ng-Nelson Oil Co. Inc.

Ostmeier #1-28

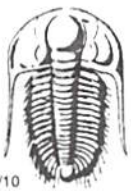
DST Test Number: 4



Triobite Testing, Inc

Ref. No: 48880

Printed: 2012.08.28 @ 11:05:13



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48877

Company Downing-Nelson Oil Company Inc Test No. 1 Date 8/21/12
 Well Name & No. Ostmeyer 1-28 Elevation 3045 KB 3037 GL
 Company Ostmeyer 1-28
 Address PO Box 1019 Hayses KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery Run 1
 Location: Sec. 28 Twp. 9S Rge. 31W Co. Thomas State KS

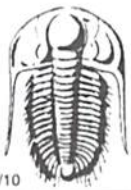
Interval Tested 4244-4295 Zone Tested Kansas City "IIS"
 Anchor Length 51 Drill Pipe Run 4206.21 Mud Wt 8.6
 Top Packer Depth 4240 Drill Collars Run 30.04 Vis 70
 Bottom Packer Depth 4244 Wt. Pipe Run _____ WL 7.6
 Total Depth 4295 Chlorides 300 ppm System LCM 2#
 Blow Description Built to 2" below
No return below
Weak surface below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>55</u>	<u>Mud with oil spots in tool</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 55 BHT 120 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2,161 Test 1250 T-On Location 4:25
 (B) First Initial Flow 16 Jars N/C wrong thing T-Started 5:40
 (C) First Final Flow 33 Safety Joint T-Open 8:00
 (D) Initial Shut-In 1,288 Circ Sub N/C T-Pulled 11:02
 (E) Second Initial Flow 35 Hourly Standby T-Out 12:51
 (F) Second Final Flow 42 Mileage 132 204.60 Comments _____
 (G) Final Shut-In 1,260 Sampler _____
 (H) Final Hydrostatic 2,151 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1454
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1454

Approved By Not on location 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

Test Ticket

NO. 48878

Well Name & No. Ostmeier 1-28 Test No. 2 Date 8/21/12 8/22/12
 Company Downing-Nelson Oil Company Inc. Elevation 3045 KB 3037 GL
 Address PO Box 104 Hays KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery Rig 1
 Location: Sec. 28 Twp. 9S Rge. 3W Co. Thomas State KS

Interval Tested 4296 - 4330 Zone Tested Kansas City "K"
 Anchor Length 34 Drill Pipe Run 4269.35 Mud Wt. 8.9
 Top Packer Depth 4292 Drill Collars Run 3004 Vis 53
 Bottom Packer Depth 4296 Wt. Pipe Run _____ WL 8.0
 Total Depth 4330 Chlorides 500 ppm System LCM 1.5#

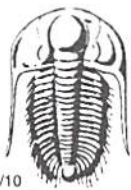
Blow Description Built to 1/4" below
No return below
Weak surface below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>Mud with oil spots in tool</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 40 BHT 120 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2,236 Test 1250 T-On Location 20:40
 (B) First Initial Flow 21 Jars _____ T-Started 21:45
 (C) First Final Flow 32 Safety Joint _____ T-Open 23:35
 (D) Initial Shut-In 1,313 Circ Sub N/C T-Pulled 1:37
 (E) Second Initial Flow 34 Hourly Standby _____ T-Out 3:19
 (F) Second Final Flow 37 Mileage 132 RT 204.60 Comments _____
 (G) Final Shut-In 1,293 Sampler _____
 (H) Final Hydrostatic 2,167 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer 320
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 320
 Initial Shut-In 30 Day Standby _____ Total 1774.60
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 30 Sub Total 1454.60

Approved By Not on location Our Representative [Signature]
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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48879

Well Name & No. Ostmeyer 1-28 Test No. 3 Date 8/22/12 8/23/12
 Company Downing-Nelson Oil Company Inc. Elevation 3045 KB 3037 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery Rig 1
 Location: Sec. 28 Twp. 9s Rge. 31w Co. Thomas State KS

Interval Tested 4438-4537 Zone Tested Pawnee; ~~Johnson~~ Myric Station
 Anchor Length 99 Drill Pipe Run 4396.96 Mud Wt. 9.2
 Top Packer Depth 4434 Drill Collars Run 30.04 Vis LeLo
 Bottom Packer Depth 4438 Wt. Pipe Run _____ WL 8.0
 Total Depth 4537 Chlorides 800 ppm System LCM 1.5

Blow Description B.O.B. in 35 min.
Bled off for 5 min. No return below
B.O.B. in 32 min.

Bled off for 5 min. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>0.00cm</u>	<u>30</u>	<u>5</u>	<u>65</u>	
<u>115</u>	<u>0.00cm</u>		<u>20</u>	<u>80</u>	
<u>0</u>	<u>135' Gas In Pipe</u>				

Rec Total 240 BHT 128 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

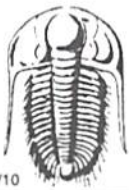
(A) Initial Hydrostatic 2,346 Test 1250 T-On Location 23:45
 (B) First Initial Flow 20 Jars T-Started 00:40
 (C) First Final Flow 79 Safety Joint T-Open 2:55
 (D) Initial Shut-In 1,191 Circ Sub NK T-Pulled 5:55
 (E) Second Initial Flow 106 Hourly Standby T-Out 7:50
 (F) Second Final Flow 144 Mileage 132 RT 204.60 Comments _____
 (G) Final Shut-In 1,103 Sampler _____
 (H) Final Hydrostatic 2,248 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

Sub Total 0
 Total 1454.60
 MP/DST Disc't _____

Approved By Not on Location Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48880

Well Name & No. Ostmeyer 1-28 Test No. 4 Date 8/24/12
 Company Downing - Nelson Oil Company Inc. Elevation 3045 KB 3037 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. Marl Downing Rig Discovery Rig 4
 Location: Sec. 28 Twp. 9S Rge. 3W Co. Thomas State KS

Interval Tested 4326-4485 Zone Tested Kansas City L - Marmaton
 Anchor Length 159 Tailpipe 228 Drill Pipe Run 4300.60 Mud Wt. 9.2
 Top Packer Depth 4321 Drill Collars Run 30.04 Vis 60
 Bottom Packer Depth 4326 Wt. Pipe Run ————— WL 8.8
 Total Depth 4485 4713 Chlorides 1,000 ppm System LCM 1.5
 Blow Description Built to 2" below
No return below
Built to 2" below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>Mud with oil spots</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 65 BHT 125 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2,242 Test 1250 T-On Location 9:50
 (B) First Initial Flow 24 Jars T-Started 10:15
 (C) First Final Flow 39 Safety Joint T-Open 12:00
 (D) Initial Shut-In 285 Circ Sub n/c T-Pulled 15:00
 (E) Second Initial Flow 44 Hourly Standby 2hrs T-Out 17:00
 (F) Second Final Flow 47 Mileage 132 RT 204.60 Comments _____
 (G) Final Shut-In 238 Sampler _____
 (H) Final Hydrostatic 2,240 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 66.67
 Initial Shut-In 45 Day Standby 1d 2hrs Total 2121.27
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 2054.60

Approved By _____ Our Representative [Signature]
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