



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1070986

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Verna Herl 2-12
Doc ID	1070986

All Electric Logs Run

Micro
Sonic
Dual Indcution
Compensated Density / Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Verna Herl 2-12
Doc ID	1070986

Tops

Name	Top	Datum
Top Anhydrite	1405'	+747
Base Anhydrite	1446'	+706
Topeka	3151'	-999
Heebner	3400'	-1248
Toronto	3420'	-1268
LKC	3450'	-1298
BKC	3675'	-1523
Arbuckle	3774'	-1622



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Verna Herl #2-12

12-14s-19w Ellis,KS

Start Date: 2011.12.12 @ 07:05:36

End Date: 2011.12.12 @ 14:10:21

Job Ticket #: 44703 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2011.12.19 @ 11:07:56



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44703

DST#: 1

ATTN: Marc Downing

Test Start: 2011.12.12 @ 07:05:36

GENERAL INFORMATION:

Formation: **Plattsmouth**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:25:36

Time Test Ended: 14:10:21

Test Type: Conventional Bottom Hole (Initial)

Tester: Jason McLemore

Unit No: 54

Interval: 3360.00 ft (KB) To 3394.00 ft (KB) (TVD)

Reference Elevations: 2164.00 ft (KB)

Total Depth: 3394.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8673 Inside

Press @ Run Depth: 30.78 psig @ 3363.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.12 End Date: 2011.12.12

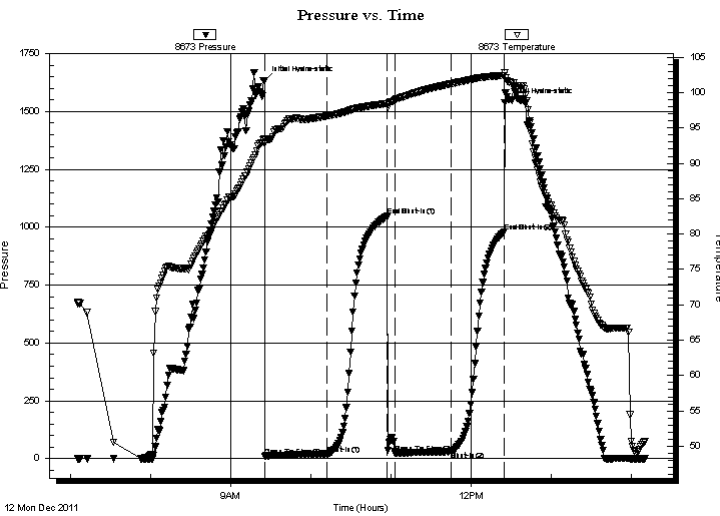
Last Calib.: 2011.12.12

Start Time: 07:05:38 End Time: 14:10:21

Time On Btm: 2011.12.12 @ 09:25:21

Time Off Btm: 2011.12.12 @ 12:25:06

TEST COMMENT: IFP-Weak Blow, Built to 4"
ISI-Dead
FFP-Weak Blow, Built to 3"
FSI-Dead



PRESSURE SUMMARY

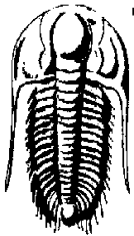
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1633.54	93.49	Initial Hydro-static
1	11.66	92.78	Open To Flow (1)
47	20.85	96.68	Shut-In(1)
92	1047.95	98.46	End Shut-In(1)
98	22.10	99.05	Open To Flow (2)
140	30.78	101.23	Shut-In(2)
180	981.09	102.43	End Shut-In(2)
180	1539.23	102.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	OCMW-10%O-50%W-40%M	0.56
0.00	60' Gas In Pipe	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44703

DST#: 1

ATTN: Marc Downing

Test Start: 2011.12.12 @ 07:05:36

GENERAL INFORMATION:

Formation: **Plattsmouth**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:25:36

Time Test Ended: 14:10:21

Test Type: Conventional Bottom Hole (Initial)

Tester: Jason McLemore

Unit No: 54

Interval: **3360.00 ft (KB) To 3394.00 ft (KB) (TVD)**

Reference Elevations: 2164.00 ft (KB)

Total Depth: 3394.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: **8736** Outside

Press@RunDepth: psig @ 3363.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.12 End Date: 2011.12.12

Last Calib.: 2011.12.12

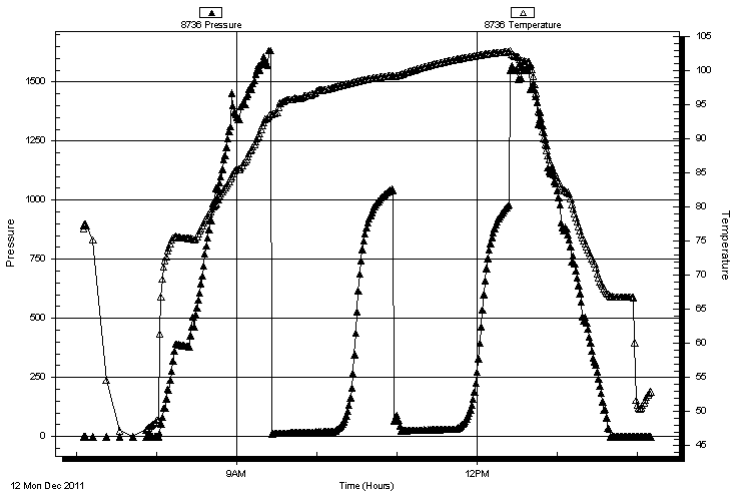
Start Time: 07:05:11 End Time: 14:10:05

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP-Weak Blow , Built to 4"
ISI-Dead
FFP-Weak Blow , Built to 3"
FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	OCMW-10%O-50%W-40%M	0.56
0.00	60' Gas In Pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44703

DST#: 1

ATTN: Marc Downing

Test Start: 2011.12.12 @ 07:05:36

Tool Information

Drill Pipe:	Length: 3359.00 ft	Diameter: 3.80 inches	Volume: 47.12 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 55000.00 lb
			<u>Total Volume: 47.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3360.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	55.00 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			3340.00	
Shut In Tool	5.00			3345.00	
Hydraulic tool	5.00			3350.00	
Packer	5.00			3355.00	21.00 Bottom Of Top Packer
Packer	5.00			3360.00	
Stubb	1.00			3361.00	
Perforations	2.00			3363.00	
Recorder	0.00	8673	Inside	3363.00	
Recorder	0.00	8736	Outside	3363.00	
Perforations	28.00			3391.00	
Bullnose	3.00			3394.00	34.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44703

DST#: 1

ATTN: Marc Downing

Test Start: 2011.12.12 @ 07:05:36

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

48000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
40.00	OCCMW-10%O-50%W-40%M	0.561
0.00	60' Gas In Pipe	0.000

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8673

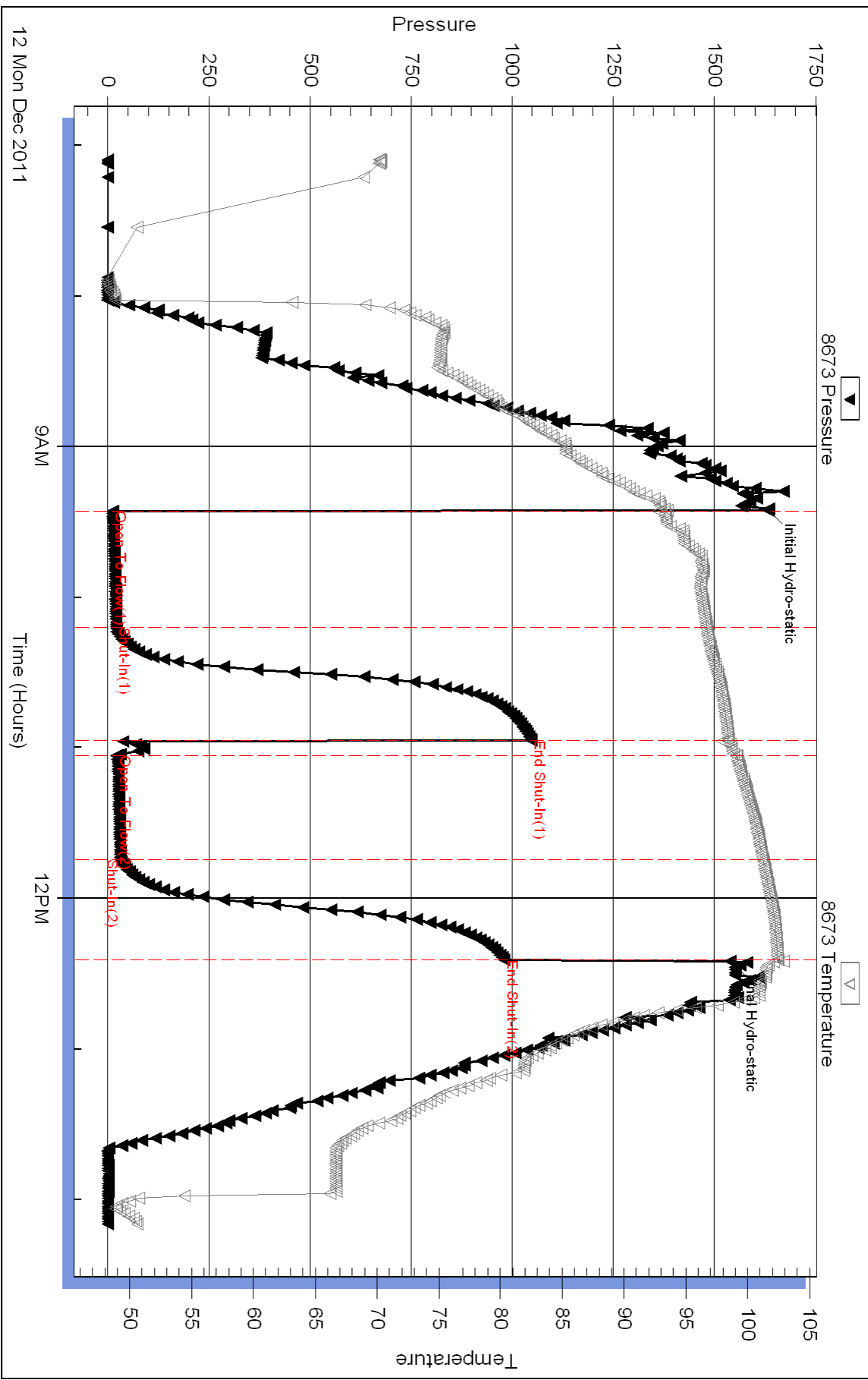
Inside

Downing Nelson Oil Company

Verna Heri #2-12

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 44703

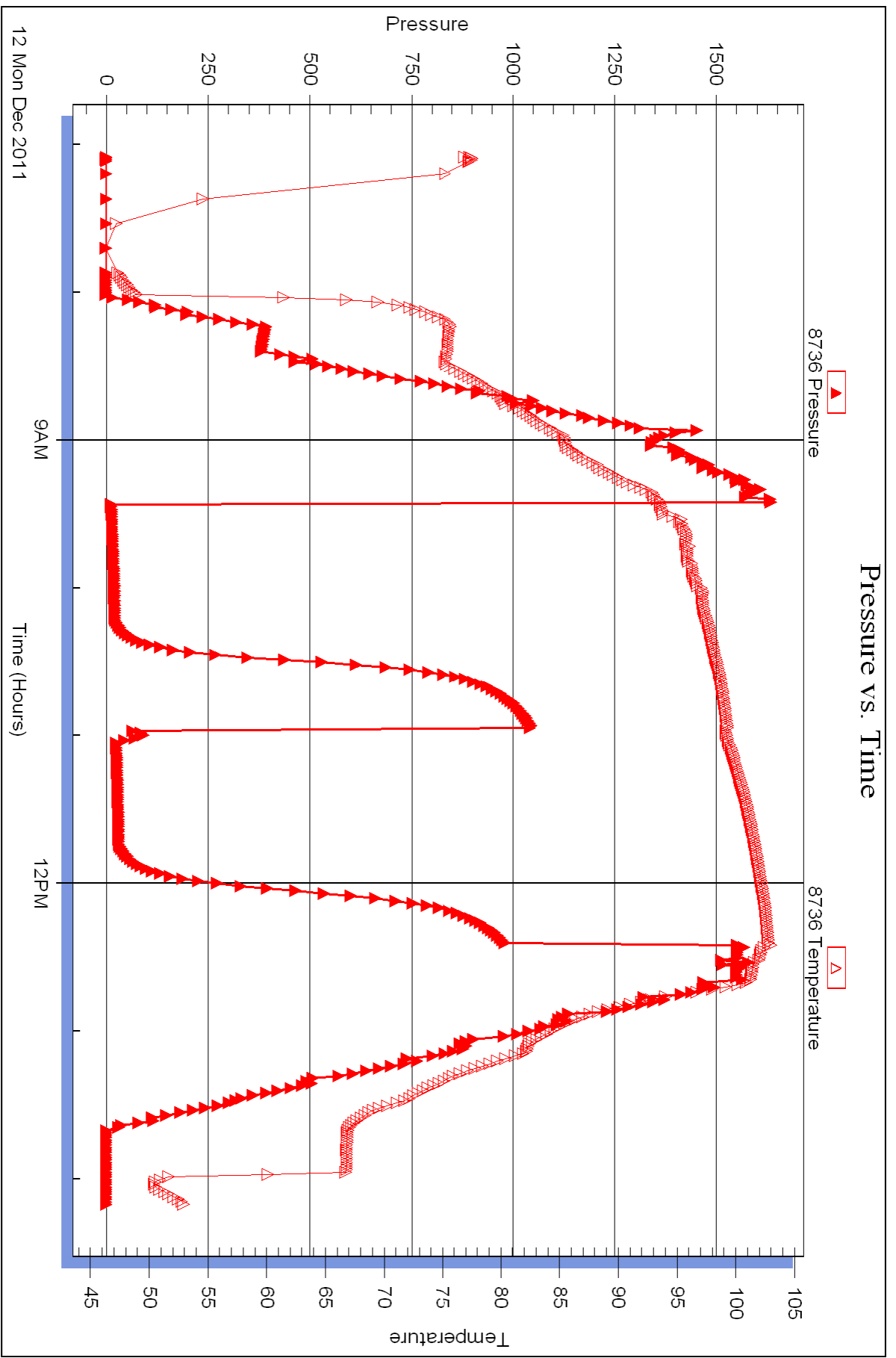
Printed: 2011.12.19 @ 11:07:58

Serial #: 8736

Outside Dow nling Nelson Oil Company

Verna Herl #2-12

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 44703

Printed: 2011.12.19 @ 11:07:59



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Verna Herl #2-12

12-14s-19w Ellis,KS

Start Date: 2011.12.13 @ 02:44:17

End Date: 2011.12.13 @ 10:01:02

Job Ticket #: 44704 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2011.12.19 @ 11:07:17



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44704

DST#: 2

ATTN: Marc Downing

Test Start: 2011.12.13 @ 02:44:17

GENERAL INFORMATION:

Formation: **D-E**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:00:02
 Tester: Jason McLemore
 Time Test Ended: 10:01:02
 Unit No: 54
 Interval: **3483.00 ft (KB) To 3521.00 ft (KB) (TVD)**
 Reference Elevations: 2164.00 ft (KB)
 Total Depth: 3521.00 ft (KB) (TVD)
 2156.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 8.00 ft

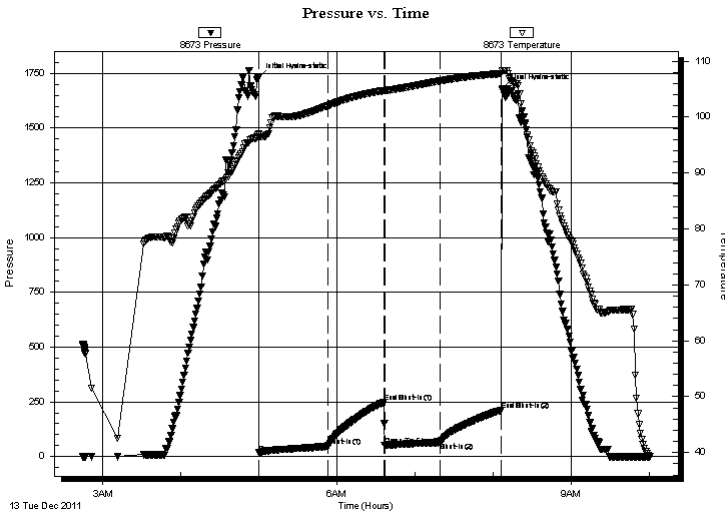
Serial #: 8673

Inside

Press @ Run Depth: 63.97 psig @ 3488.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.12.13 End Date: 2011.12.13 Last Calib.: 2011.12.13
 Start Time: 02:44:19 End Time: 10:01:02 Time On Btm: 2011.12.13 @ 04:59:47
 Time Off Btm: 2011.12.13 @ 08:07:02

TEST COMMENT: IFP-Good Blow, BOB in 19 Min.
 ISI-Dead
 FFP-Fair Blow, Built to 6"
 FSI Dead for 30 min surface blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1732.43	96.95	Initial Hydro-static
1	17.08	96.36	Open To Flow (1)
53	46.32	102.01	Shut-In(1)
97	248.46	104.75	End Shut-In(1)
97	51.92	104.70	Open To Flow (2)
140	63.97	106.46	Shut-In(2)
187	211.61	107.78	End Shut-In(2)
188	1681.02	108.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
115.00	SOCMW-5%O-65%W-30%M	1.61
0.00	130' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Company
 PO Box 1019
 Hays, KS 67601
 ATTN: Marc Downing

12-14s-19w Ellis, KS
Verna Herl #2-12
 Job Ticket: 44704 **DST#: 2**
 Test Start: 2011.12.13 @ 02:44:17

GENERAL INFORMATION:

Formation: **D-E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:00:02
 Time Test Ended: 10:01:02

Test Type: Conventional Bottom Hole (Reset)
 Tester: Jason McLemore
 Unit No: 54

Interval: **3483.00 ft (KB) To 3521.00 ft (KB) (TVD)**
 Total Depth: 3521.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

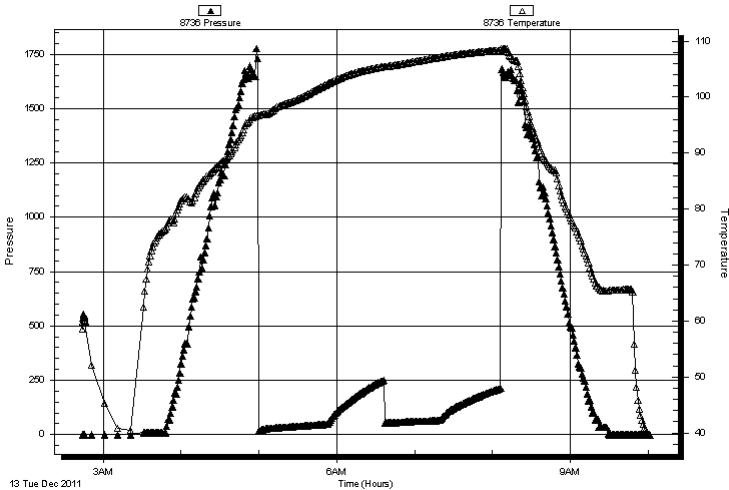
Reference Elevations: 2164.00 ft (KB)
 2156.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8736 Outside

Press @ Run Depth: psig @ 3488.00 ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2011.12.13 End Date: 2011.12.13 Last Calib.: 2011.12.13
 Start Time: 02:44:07 End Time: 10:01:01 Time On Btm:
 Time Off Btm:

TEST COMMENT: IFP-Good Blow , BOB in 19 Min.
 IS-Dead
 FFP-Fair Blow , Built to 6"
 FSI Dead for 30 min surface blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
115.00	SOCMW-5%O-65%W-30%M	1.61
0.00	130' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company

12-14s-19w Ellis,KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44704

DST#: 2

ATTN: Marc Downing

Test Start: 2011.12.13 @ 02:44:17

Tool Information

Drill Pipe:	Length: 3484.00 ft	Diameter: 3.80 inches	Volume: 48.87 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 55000.00 lb
			<u>Total Volume: 48.87 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3483.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	59.00 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			3463.00	
Shut In Tool	5.00			3468.00	
Hydraulic tool	5.00			3473.00	
Packer	5.00			3478.00	21.00 Bottom Of Top Packer
Packer	5.00			3483.00	
Stubb	1.00			3484.00	
Perforations	4.00			3488.00	
Recorder	0.00	8673	Inside	3488.00	
Recorder	0.00	8736	Outside	3488.00	
Perforations	30.00			3518.00	
Bullnose	3.00			3521.00	38.00 Bottom Packers & Anchor

Total Tool Length: 59.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44704

DST#: 2

ATTN: Marc Downing

Test Start: 2011.12.13 @ 02:44:17

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:

46000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
115.00	SOCMW-5%O-65%W-30%M	1.613
0.00	130' Gas In Pipe	0.000

Total Length: 115.00 ft

Total Volume: 1.613 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8673

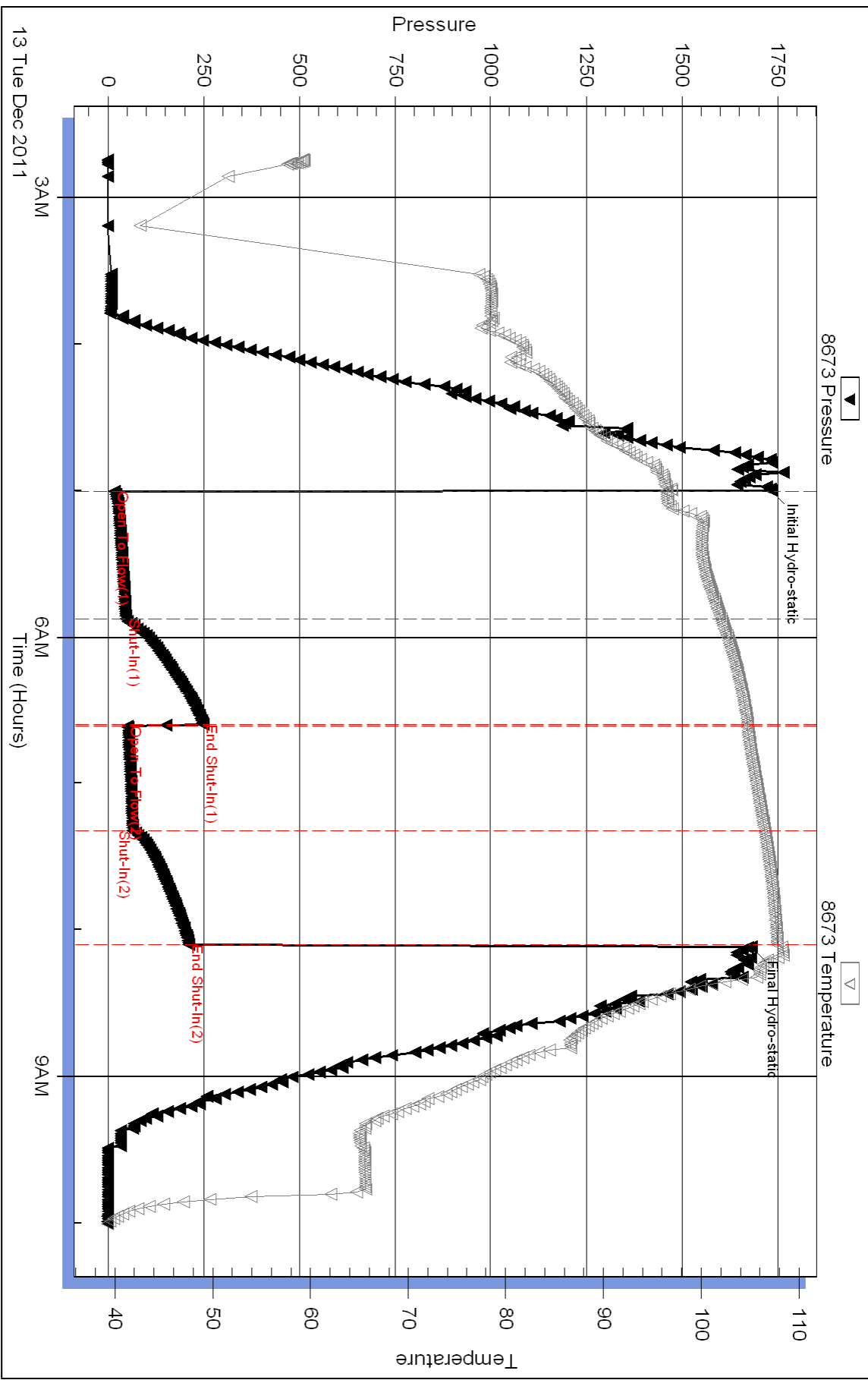
Inside

Downing Nelson Oil Company

Verna Herl #2-12

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 44704

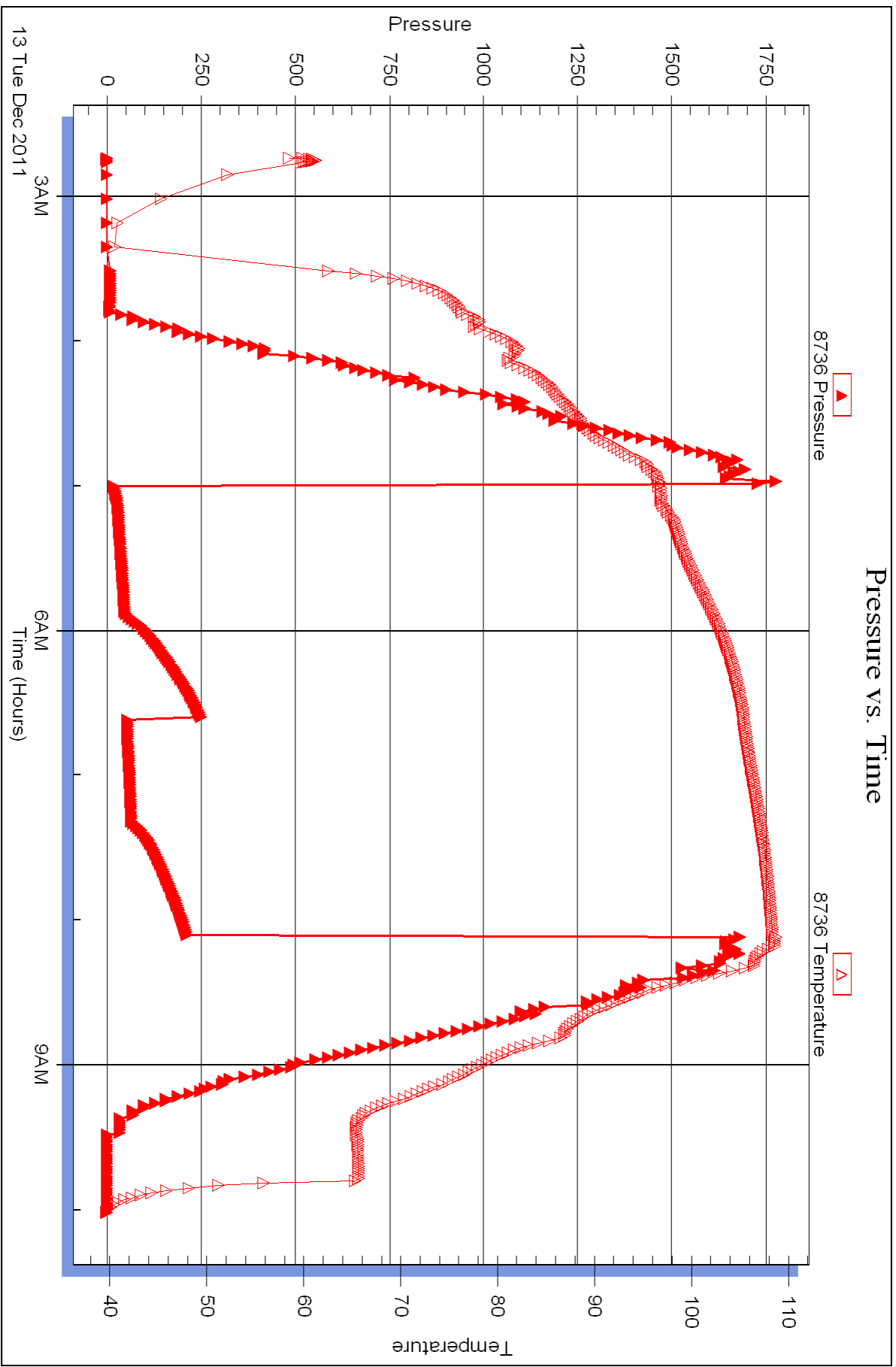
Printed: 2011.12.19 @ 11:07:19

Serial #: 8736

Outside Dow nung Nelson Oil Company

Verna Herl #2-12

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Verna Herl #2-12

12-14s-19w Ellis,KS

Start Date: 2011.12.13 @ 21:58:46

End Date: 2011.12.14 @ 05:24:31

Job Ticket #: 44705 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.19 @ 11:06:37



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44705

DST#: 3

ATTN: Marc Downing

Test Start: 2011.12.13 @ 21:58:46

GENERAL INFORMATION:

Formation: **H-I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:53:31

Time Test Ended: 05:24:31

Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3557.00 ft (KB) To 3633.00 ft (KB) (TVD)

Reference Elevations: 2164.00 ft (KB)

Total Depth: 3633.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8673 Inside

Press @ Run Depth: 95.13 psig @ 3600.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.13

End Date:

2011.12.14

Last Calib.:

2011.12.14

Start Time: 21:58:48

End Time:

05:24:31

Time On Btm:

2011.12.13 @ 23:53:16

Time Off Btm:

2011.12.14 @ 02:54:31

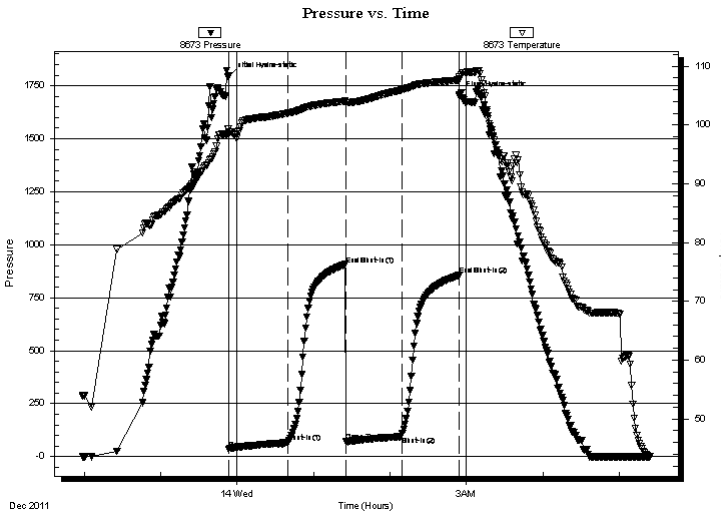
TEST COMMENT: IFP-Good Blow, BOB in 8Min.

ISI-Blow back Built to 1/2"

FFP-Strong, BOB in 2 Min.

FSI-Surface Bow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1795.38	99.41	Initial Hydro-static
1	33.51	98.34	Open To Flow (1)
47	66.35	101.99	Shut-In(1)
92	907.01	104.05	End Shut-In(1)
93	71.99	103.81	Open To Flow (2)
136	95.13	105.94	Shut-In(2)
181	855.29	107.67	End Shut-In(2)
182	1702.42	108.14	Final Hydro-static

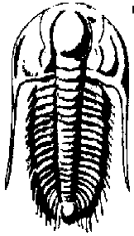
Recovery

Length (ft)	Description	Volume (bbl)
145.00	Gassy Muddy Oil-55%G-30%O-15%M	2.03
0.00	840' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

ATTN: Marc Downing

Job Ticket: 44705

DST#: 3

Test Start: 2011.12.13 @ 21:58:46

GENERAL INFORMATION:

Formation: **HI-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:53:31

Time Test Ended: 05:24:31

Interval: **3557.00 ft (KB) To 3633.00 ft (KB) (TVD)**

Total Depth: 3633.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Reference Elevations: 2164.00 ft (KB)

2156.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8736 Outside

Press @ Run Depth: psig @ 3600.00 ft (KB)

Start Date: 2011.12.13 End Date: 2011.12.14

Start Time: 21:58:40 End Time: 05:24:34

Capacity: 8000.00 psig

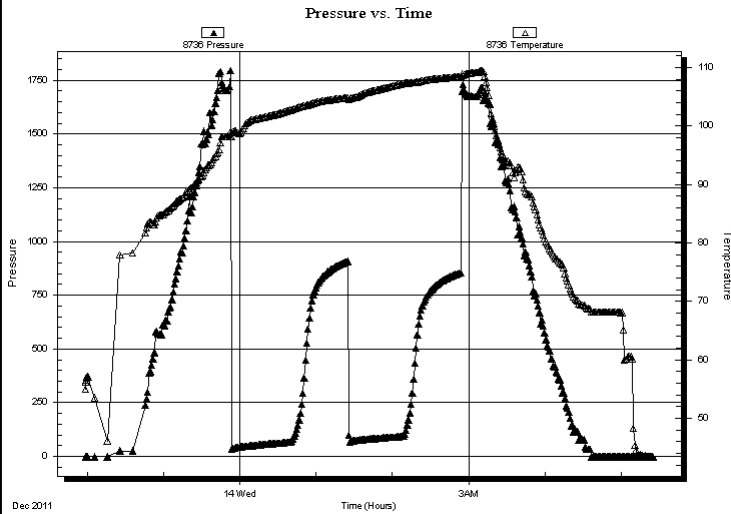
Last Calib.: 2011.12.14

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP-Good Blow, BOB in 8Min.
ISI-Blow back Built to 1/2"
FFP-Strong, BOB in 2 Min.
FSI-Surface Bow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
145.00	Gassy Muddy Oil-55%G-30%O-15%M	2.03
0.00	840' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44705

DST#: 3

ATTN: Marc Downing

Test Start: 2011.12.13 @ 21:58:46

Tool Information

Drill Pipe:	Length: 3548.00 ft	Diameter: 3.80 inches	Volume: 49.77 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 60000.00 lb
			<u>Total Volume: 49.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3557.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.00 ft			
Tool Length:	97.00 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			3537.00	
Shut In Tool	5.00			3542.00	
Hydraulic tool	5.00			3547.00	
Packer	5.00			3552.00	21.00 Bottom Of Top Packer
Packer	5.00			3557.00	
Stubb	1.00			3558.00	
Perforations	8.00			3566.00	
Change Over Sub	1.00			3567.00	
Blank Spacing	32.00			3599.00	
Change Over Sub	1.00			3600.00	
Recorder	0.00	8673	Inside	3600.00	
Recorder	0.00	8736	Outside	3600.00	
Perforations	30.00			3630.00	
Bullnose	3.00			3633.00	76.00 Bottom Packers & Anchor

Total Tool Length: 97.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44705

DST#: 3

ATTN: Marc Downing

Test Start: 2011.12.13 @ 21:58:46

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
145.00	Gassy Muddy Oil-55%G-30%O-15%M	2.034
0.00	840' Gas In Pipe	0.000

Total Length: 145.00 ft

Total Volume: 2.034 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

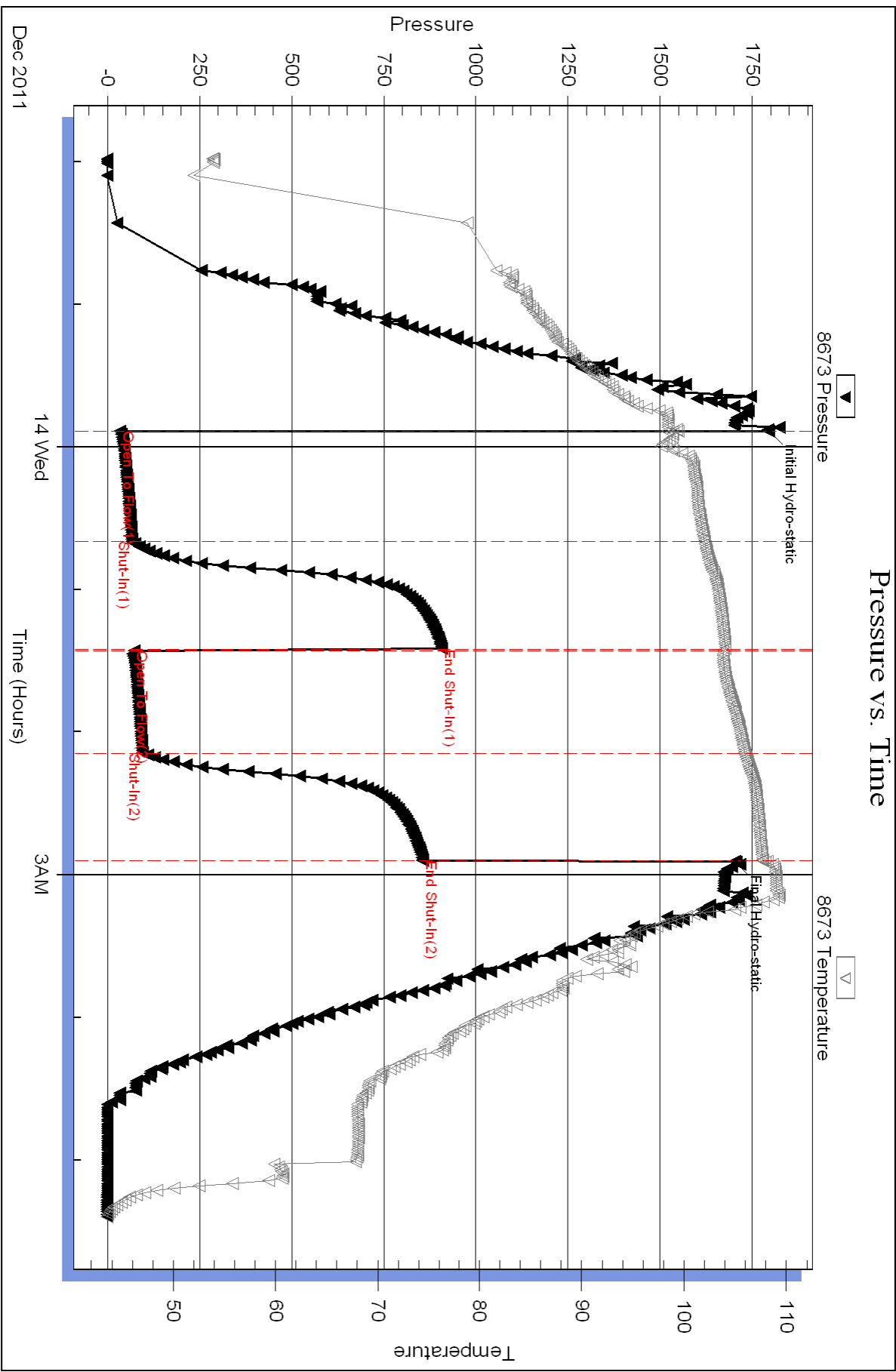
Serial #: 8673

Inside

Downing Nelson Oil Company

Verna Heri #2-12

DST Test Number: 3

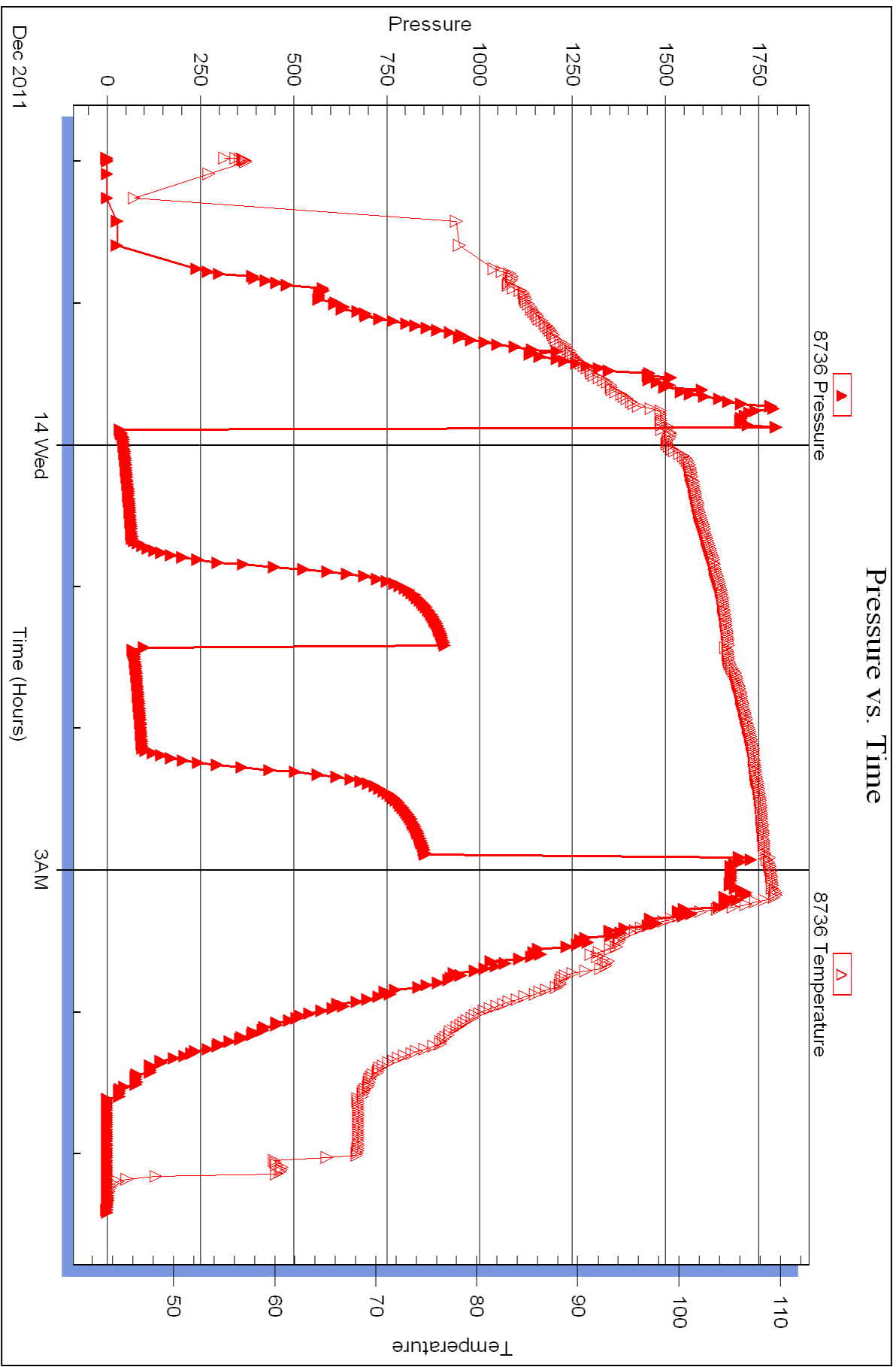


Serial #: 8736

Outside Dow nung Nelson Oil Company

Verna Herl #2-12

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company**

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Verna Herl #2-12

12-14s-19w Ellis,KS

Start Date: 2011.12.15 @ 02:55:23

End Date: 2011.12.15 @ 10:47:38

Job Ticket #: 44706 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2011.12.19 @ 11:05:59

Downing Nelson Oil Company

12-14s-19w Ellis,KS

Verna Herl #2-12

DST # 4

Arbuckle

2011.12.15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44706

DST#: 4

ATTN: Marc Downing

Test Start: 2011.12.15 @ 02:55:23

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:54:23

Time Test Ended: 10:47:38

Test Type: Conventional Straddle (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3780.00 ft (KB) To 3796.00 ft (KB) (TVD)

Reference Elevations: 2164.00 ft (KB)

Total Depth: 3851.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8673 Inside

Press @ Run Depth: 15.98 psig @ 3782.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.15

End Date:

2011.12.15

Last Calib.:

2011.12.19

Start Time: 02:55:25

End Time:

10:47:38

Time On Btm:

2011.12.15 @ 05:53:53

Time Off Btm:

2011.12.15 @ 08:26:53

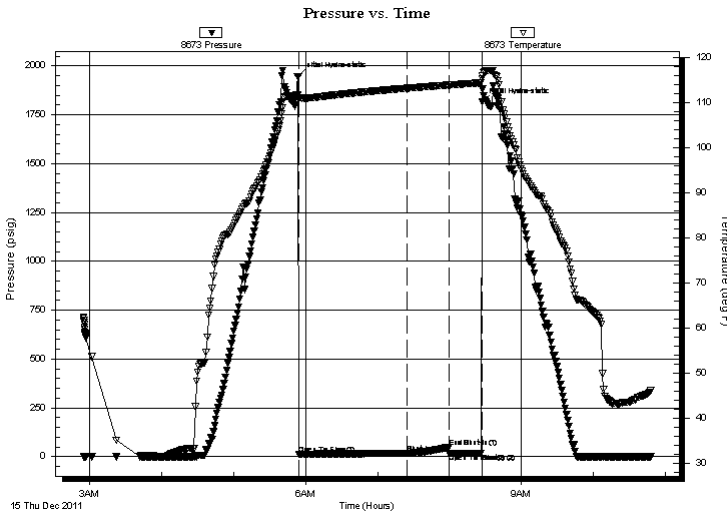
TEST COMMENT: IFP-Weak Blow, Built to 1-1/4"

ISI-Dead

FFP-Dead

FSI-Dead

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1945.66	111.67	Initial Hydro-static
1	12.89	110.84	Open To Flow (1)
91	15.98	113.15	Shut-In(1)
126	48.82	113.86	End Shut-In(1)
126	16.85	113.85	Open To Flow (2)
153	16.56	114.33	Shut-In(2)
153	1814.76	115.26	Final Hydro-static

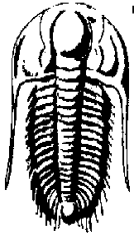
Recovery

Length (ft)	Description	Volume (bbl)
5.00	Free Oil	0.07
5.00	HOCM-40%O-60%M	0.07
0.00	60' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44706

DST#: 4

ATTN: Marc Downing

Test Start: 2011.12.15 @ 02:55:23

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:54:23

Time Test Ended: 10:47:38

Test Type: Conventional Straddle (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3780.00 ft (KB) To 3796.00 ft (KB) (TVD)

Reference Elevations: 2164.00 ft (KB)

Total Depth: 3851.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 6755 Outside

Press@RunDepth: psig @ 3782.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.15

End Date: 2011.12.15

Last Calib.: 2011.12.15

Start Time: 02:54:55

End Time: 10:47:53

Time On Btm

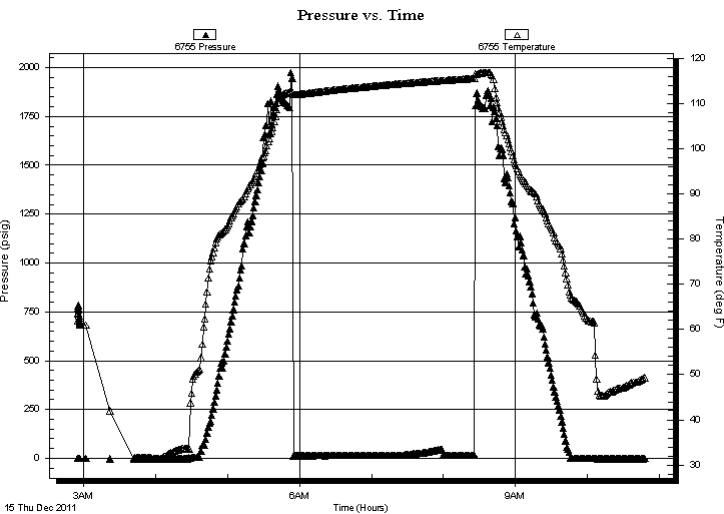
Time Off Btm

TEST COMMENT: IFP-Weak Blow, Built to 1-1/4"

ISI-Dead

FFP-Dead

FSI-Dead



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Free Oil	0.07
5.00	HOCM-40%O-60%M	0.07
0.00	60' Gas In Pipe	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Company
 PO Box 1019
 Hays, KS 67601
 ATTN: Marc Downing

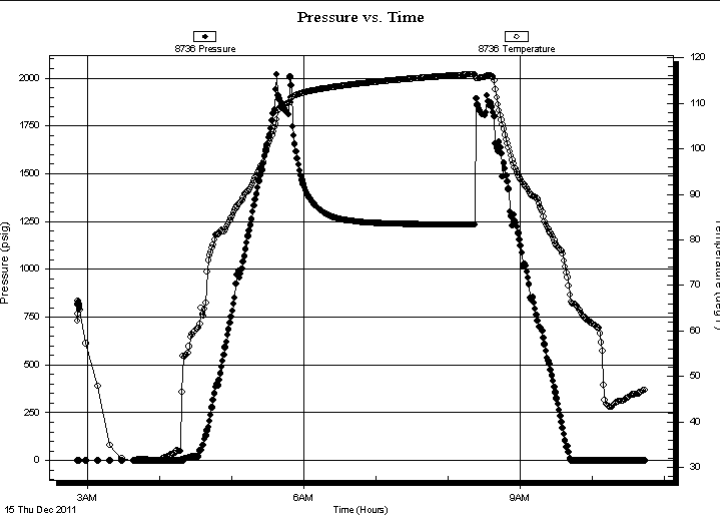
12-14s-19w Ellis, KS
Verna Herl #2-12
 Job Ticket: 44706 **DST#: 4**
 Test Start: 2011.12.15 @ 02:55:23

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:54:23
 Time Test Ended: 10:47:38
 Interval: **3780.00 ft (KB) To 3796.00 ft (KB) (TVD)**
 Total Depth: 3851.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Straddle (Reset)
 Tester: Jason McLemore
 Unit No: 54
 Reference Elevations: 2164.00 ft (KB)
 2156.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8736 Below (Straddle)
 Press@RunDepth: psig @ 3812.00 ft (KB)
 Start Date: 2011.12.15 End Date: 2011.12.15
 Start Time: 02:51:45 End Time: 10:43:39
 Capacity: 8000.00 psig
 Last Calib.: 2011.12.15
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IFP-Weak Blow , Built to 1-1/4"
 IS-Dead
 FFP-Dead
 FSI-Dead



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

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	Free Oil	0.07
5.00	HOCM-40%O-60%M	0.07
0.00	60' Gas In Pipe	0.00

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44706

DST#: 4

ATTN: Marc Downing

Test Start: 2011.12.15 @ 02:55:23

Tool Information

Drill Pipe:	Length: 3770.00 ft	Diameter: 3.80 inches	Volume: 52.88 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 62000.00 lb
			<u>Total Volume: 52.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3780.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	3796.00 ft			
Interval between Packers:	16.00 ft			
Tool Length:	90.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3760.00	
Shut In Tool	5.00			3765.00	
Hydraulic tool	5.00			3770.00	
Packer	5.00			3775.00	21.00 Bottom Of Top Packer
Packer	5.00			3780.00	
Stubb	1.00			3781.00	
Perforations	1.00			3782.00	
Recorder	0.00	8673	Inside	3782.00	
Recorder	0.00	6755	Outside	3782.00	
Perforations	10.00			3792.00	
Blank Off Sub	1.00			3793.00	
Blank Spacing	3.00			3796.00	16.00 Tool Interval
Packer	0.00			3796.00	
Perforations	15.00			3811.00	
Change Over Sub	1.00			3812.00	
Recorder	0.00	8736	Below	3812.00	
Blank Spacing	31.00			3843.00	
Change Over Sub	1.00			3844.00	
Perforations	2.00			3846.00	
Bullnose	3.00			3849.00	53.00 Bottom Packers & Anchor

Total Tool Length: 90.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company

12-14s-19w Ellis, KS

PO Box 1019
Hays, KS 67601

Verna Herl #2-12

Job Ticket: 44706

DST#: 4

ATTN: Marc Downing

Test Start: 2011.12.15 @ 02:55:23

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Free Oil	0.070
5.00	HOCM-40%O-60%M	0.070
0.00	60' Gas In Pipe	0.000

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 #: 8673

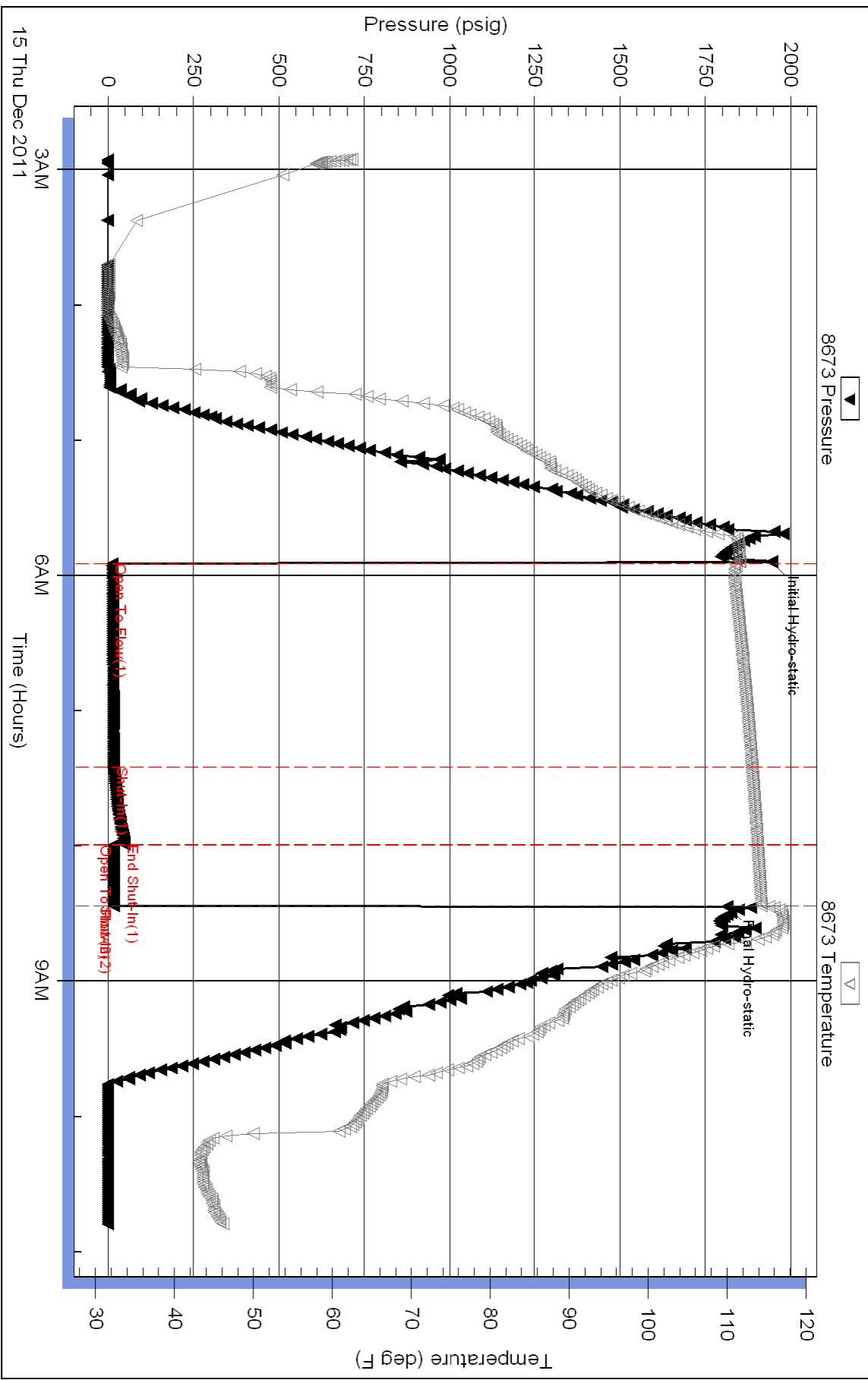
Inside

Downing Nelson Oil Company

Verna Herl #2-12

DST Test Number: 4

Pressure vs. Time



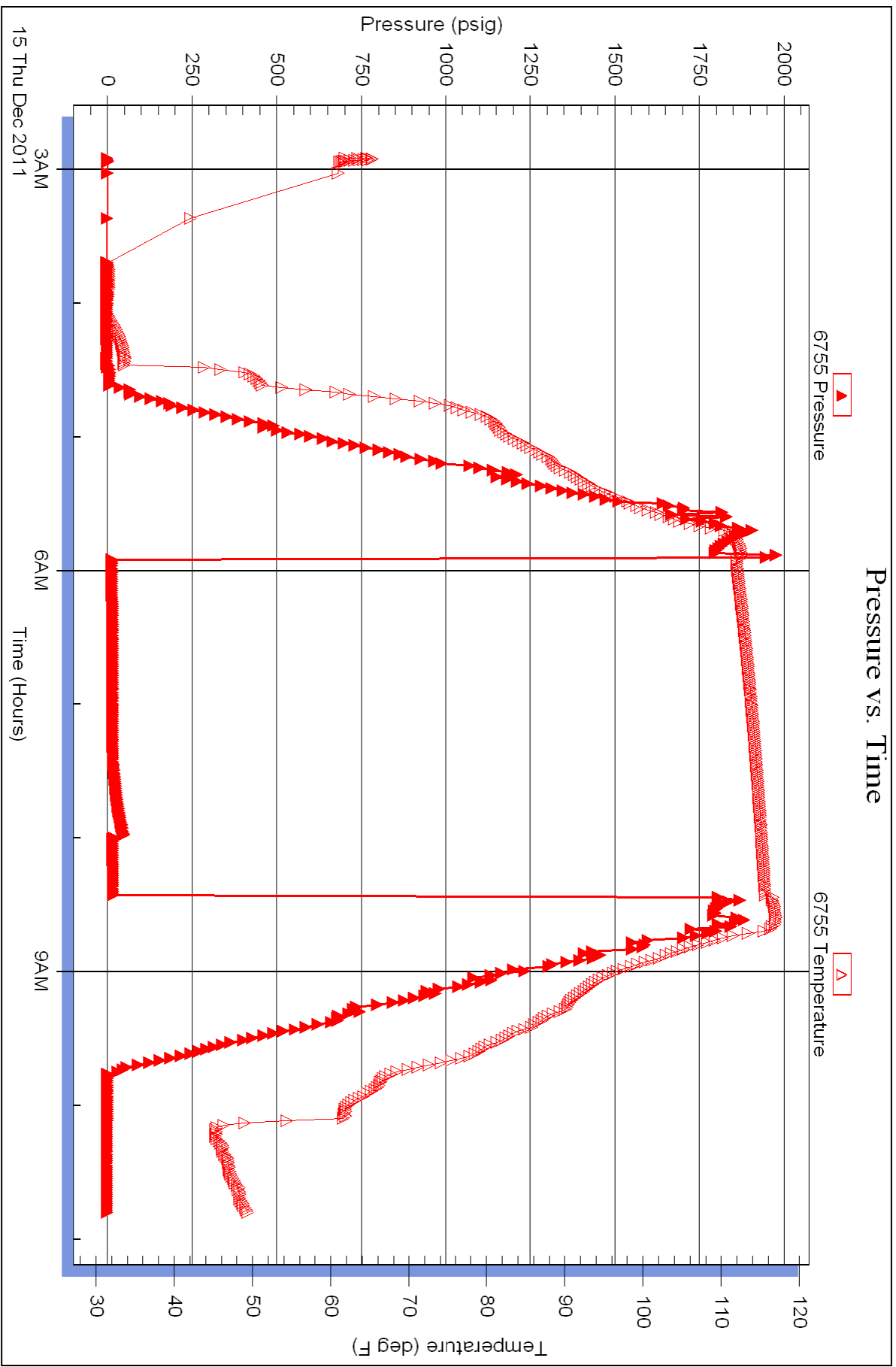
Serial #: 6755

Outside

Dow nling Nelson Oil Company

Verna Herl #2-12

DST Test Number: 4

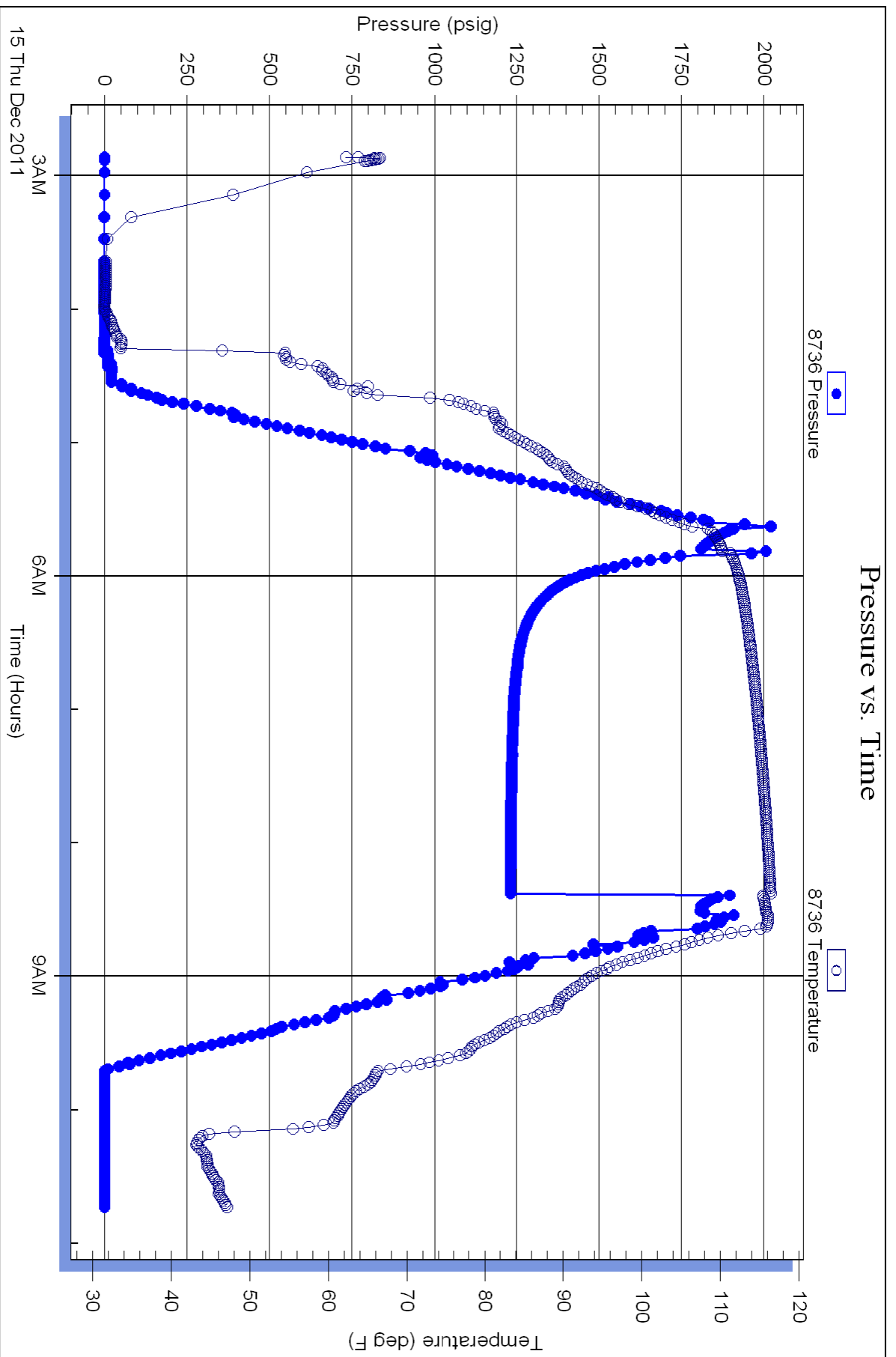


Serial #: 8736

Below (Stratton) Nelson Oil Company

Verna Herl #2-12

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 44706

Printed: 2011.12.19 @ 11:06:03



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
DEC 16 2011
BY: _____

Test Ticket

NO. 44703

Well Name & No. Verna Herl #2-12 Test No. 1 Date 12-12-11
 Company Downing Nelson Oil Company Elevation 2164 KB 2154 GL
 Address PO Box 1019, Hays, KS. 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #3
 Location: Sec. 12 Twp. 14s Rge. 19w Co. Ellis State KS

Interval Tested 3360-3394 Zone Tested Plattsmouth
 Anchor Length 34' Drill Pipe Run 3359 Mud Wt. 8.5
 Top Packer Depth 3355 Drill Collars Run 0 Vis 55
 Bottom Packer Depth 3360 Wt. Pipe Run 0 WL 8.0
 Total Depth 3394 Chlorides 2,000 ppm System LCM 2 1/2 #
 Blow Description IFP - Weak Blow, Built to 4"
ISI - Dead
FFP - Weak Blow, Built to 3"
FSI - Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>OCMW</u>	<u>10</u>	<u>50</u>	<u>40</u>	<u></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 <u>60' GIP</u>	%gas	%oil	%water	%mud

Rec Total 40 BHT Gravity API RW 272 @ 45 °F Chlorides 48,000 ppm
 (A) Initial Hydrostatic 1634 Test 1125' T-On Location 4:55
 (B) First Initial Flow 12 Jars T-Started 7:03
 (C) First Final Flow 21 Safety Joint T-Open 9:20
 (D) Initial Shut-In 1048 Circ Sub T-Pulled 12:20
 (E) Second Initial Flow 22 Hourly Standby 1/2 hr 50' T-Out 14:10
 (F) Second Final Flow 31 Mileage 12 rt 116.80 Comments _____
 (G) Final Shut-In 981 Sampler _____
 (H) Final Hydrostatic 1539 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 45 Shale Packer _____
 Initial Shut-In 45 Extra Packer _____
 Final Flow 45 Extra Recorder _____
 Final Shut-In 45 Day Standby _____
 Accessibility _____
 Sub Total 1191.80 MP/DST Disc't _____
 Sub Total 1191.80

Approved By _____

Our Representative Jaron Mc Lomax *Thank you!*

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
DEC 16 2011
BY: _____

Test Ticket

NO. 44704

Well Name & No. Vesna Herl #2-12 Test No. 2 Date 12-13-11
 Company Downing Nelson Oil Company Elevation 2164 KB 2156 GL
 Address PO Box 1019, Hays, KS. 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #3
 Location: Sec. 12 Twp. 14s Rge. 19W Co. Ellis State KS

Interval Tested 3483-3521 Zone Tested D-E
 Anchor Length 38 Drill Pipe Run 3484 Mud Wt. 9.0
 Top Packer Depth 3478 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3483 Wt. Pipe Run 0 WL 8.0
 Total Depth 3521 Chlorides 3,000 ppm System LCM 2th

Blow Description I/F - Good Blow, BOB in 19 min.
ISI - Dead
F/F - Fair Blow, Built to 6"
F/SI - Dead For 30 min, Surface Blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>115</u>	<u>SOCMW</u>	<u>5</u>	<u>65</u>	<u>30</u>	<u></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 115 BHT Gravity API RW 290 @ 40 ° F Chlorides 46,000 ppm
 (A) Initial Hydrostatic 1732 Test 1125 T-On Location 2:30
 (B) First Initial Flow 17 Jars T-Started 2:42
 (C) First Final Flow 46 Safety Joint T-Open 5:00
 (D) Initial Shut-In 248 Circ Sub T-Pulled 8:00
 (E) Second Initial Flow 52 Hourly Standby T-Out 10:05
 (F) Second Final Flow 64 Mileage 12 RT 16.80 Comments _____
 (G) Final Shut-In 212 Sampler _____
 (H) Final Hydrostatic 1681 Straddle _____
 Shale Packer _____
 Ruined 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 1141.80
 Total 1141.80
 MP/DST Disc't _____
 Sub Total 1141.80

Approved By _____ Our Representative Jason Mc Lamore

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.

Handwritten signature/initials



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
DEC 16 2011
BY: _____

Test Ticket

NO. 44705

Well Name & No. Verna Herl #2-12 Test No. 3 Date 12-14-11
 Company Downing Nelson Oil Company Elevation 2164 KB 2156 GL
 Address PO Box 1019, Hays, KS. 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #3
 Location: Sec. 12 Twp. 14s Rge. 19w Co. Ellis State KS

Interval Tested 3557-3633 Zone Tested H-I-J
 Anchor Length 76 Drill Pipe Run 3548 Mud Wt. 9.1
 Top Packer Depth 3552 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3557 Wt. Pipe Run 0 WL 8.0
 Total Depth 3633 Chlorides 5500 ppm System LCM 2 #
 Blow Description IFP- Good Blow, BOB in 8 min.
ISI- Blowback Built to 1/2"
FFP- Good Blow, BOB in 2 min.
FSI- Surface Blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>145</u>	<u>GMO</u>	<u>55</u>	<u>30</u>	<u>15</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	Feet of	%gas	%oil	%water	%mud

Rec Total 145 BHT 107° Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1795 Test 1125' T-On Location 21:32
 (B) First Initial Flow 34 Jars _____ T-Started 21:56
 (C) First Final Flow 66 Safety Joint _____ T-Open 23:48
 (D) Initial Shut-In 907 Circ Sub _____ T-Pulled 2:48
 (E) Second Initial Flow 72 Hourly Standby _____ T-Out 5:25
 (F) Second Final Flow 95 Mileage 12.25 116.80 Comments _____
 (G) Final Shut-In 855 Sampler _____
 (H) Final Hydrostatic 1702 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1141.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1141.80

Approved By _____

Our Representative Jason McLenon

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.

Thank You!



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
DEC 16 2011
BY: _____

Test Ticket

NO. 44706

Well Name & No. Verna Herl #2-12 Test No. 4 Date 12-15-11
 Company Downing Nelson Oil Company Elevation 2164 KB 2156 GL
 Address PO Box 1019, Hays, KS. 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #3
 Location: Sec. 12 Twp. 14s Rge. 19w Co. Ellis State KS

Interval Tested 3780-3796 Zone Tested Arbuckle
 Anchor Length 16' Drill Pipe Run 3770 Mud Wt. 9.0
 Top Packer Depth 3775 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3780 straddle @ 3796 Wt. Pipe Run 0 WL 8.8
 Total Depth 3851 Chlorides 8500 ppm System LCM 1 1/2 #
 Blow Description IFP - Weak Blow, Built to 1 1/4
ISI - Dead
FFP - Dead
FSI - Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Free Oil</u>				
<u>5</u>	<u>HOCM</u>		<u>40</u>		<u>60</u>

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

(A) Initial Hydrostatic 1946 Test 1125 T-On Location 2:30
 (B) First Initial Flow 13 Jars _____ T-Started 2:51
 (C) First Final Flow 16 Safety Joint _____ T-Open 5:48
 (D) Initial Shut-In 49 Circ Sub _____ T-Pulled 8:18
 (E) Second Initial Flow 17 Hourly Standby _____ T-Out 10:45
 (F) Second Final Flow 17 Mileage 12 RT 16.80 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1815 Straddle LOOS Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1741.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1741.80

Approved By _____

Our Representative Jason McDemmon

Thank You

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.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 092

Date 12-2-11	Sec. 12	Twp. 14	Range 19	County Ellis	State KS	On Location	Finish 10:45 P.m.
Lease Ueng Herl		Well No.		Location Nays 2 1/2 W N.110			

Contractor D. Scovery #3	Owner To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Type Job Surface	Charge To Downing/Wilson
Hole Size 12 1/4	
Csg. 8 5/8	Depth 222
Tbg. Size	Depth
Tool	Depth
Cement Left in Csg. 15'	Shoe Joint
Meas Line	Displace 133C
Cement Amount Ordered 150 com 3 @ 50 2 @ 50	

EQUIPMENT

Pumptrk 9	No.	Cement Helper Conry	Common 150
Bulktrk	No.	Driver Paul	Poz. Mix
Bulktrk 8	No.	Driver Conry	Gel. 3
			Calcium 5

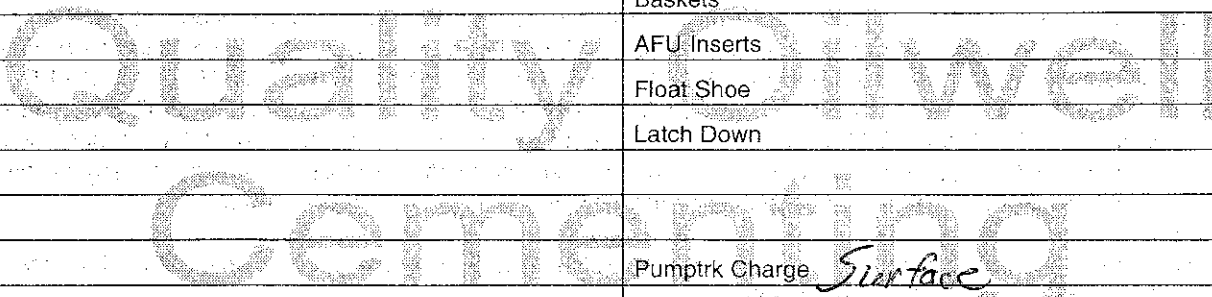
JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
8 5/8 on bottom. Egt Circulation	Sand
Mix 150 sack + Displace	Handling 158
	Mileage

Cement Circulated

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	



Pumptrk Charge Surface	
Mileage 5	

	Tax	
	Discount	
X Signature John Dasher		Total Charge

JOB LOG

SWIFT Services, Inc.

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Dinning + Nelson		2-12		Verna Herl		Cement 2-stage L.S.		20421	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		TD-3850'	DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING		
	1645								On location w/ Float Equip - Recharge over to run casing L.D.-RH/MT
	1750								Start 5 1/2" casing to 3850' Insert Float Shoe w/ Auto-fill D.V. L.D. Baffle - SS-21' @ 3825' = 93 1/2" Cement - 1-3-5-7-9-11-58 Cement Basket #58 D.V. #59 collar @ 1378' = 33 1/2" BBI
	1915								Drop Ball up Ball 5 STs out Fin run casing
	1930								Start Circ / Rotate Casing
	2000								Fin circ - Hook up for 1st stage
		5	12				350		Plug Pump - 500 gal Mud/Flush
		5 1/2	20				350		Pump 20 BBI KCL Flush
		4					300		Start 150 sks EA-2 cement
			36				Vac		Fin out - Wash out Pump Lines
	2020	9							Drop D.V. L.D. Plug - Start Displ H ₂ O
		8	60				300		Start 15 BBI Mud
		7	75				400		Start KCL Flush For Top stage
	2035	0	93 1/2				850 1500		Plug Down - Hold - Release - Hold.
	2040								Drop D.V. opening tool
	2055	0	2				1200 950		Plug RH - 30 SKS ^{SHUD} MT 15 SKS ^{SHUD} Open D.V. - KCL flush 2 BBI - 2nd stage
		5 1/2					250		Start 130 SKS SHUD out.
	2115		75				1000		Fin out - Drop D.V. Closing Plug
		6					250		Start Displ (33 1/2 BBI)
		5 1/2	15				350		
		5 1/2	20				400		cut circ to Pit
	2130		33 1/2				150 1500		Plug Down - D.V. closed - Release OK 25 SKS can't circulate to Pit
	2130								Job Complete Wishup & Break up

Woods, Don, Brian & David

DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	INH-FNH	RECOVERY

REMARKS AND RECOMMENDATIONS

LEGEND

	Anhydrite
	Salt
	Sandstone
	Shale
	Carb sh
	Limestone
	Ool.Lime
	Chert
	Dolomite

	REMARKS																				
	OIL SHOWS																				
	SAMPLE DESCRIPTIONS	<table border="1" style="width: 100%; height: 100px;"> <tr><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td></tr> </table>																			
	LITHOLOGY	<table border="1" style="width: 100%; height: 40px;"> <tr> <td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td> </tr> </table>																			
	DEPTH																				
DRILLING TIME IN MINUTES PER FOOT <i>Rate of Penetration Decreases</i>	5" 10" 15" 20" 25" 	<table border="1" style="width: 100%; height: 100px;"> <tr><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 10%;"></td></tr> </table>																			

3000

50

3100

50

3200

Flacke
51057001

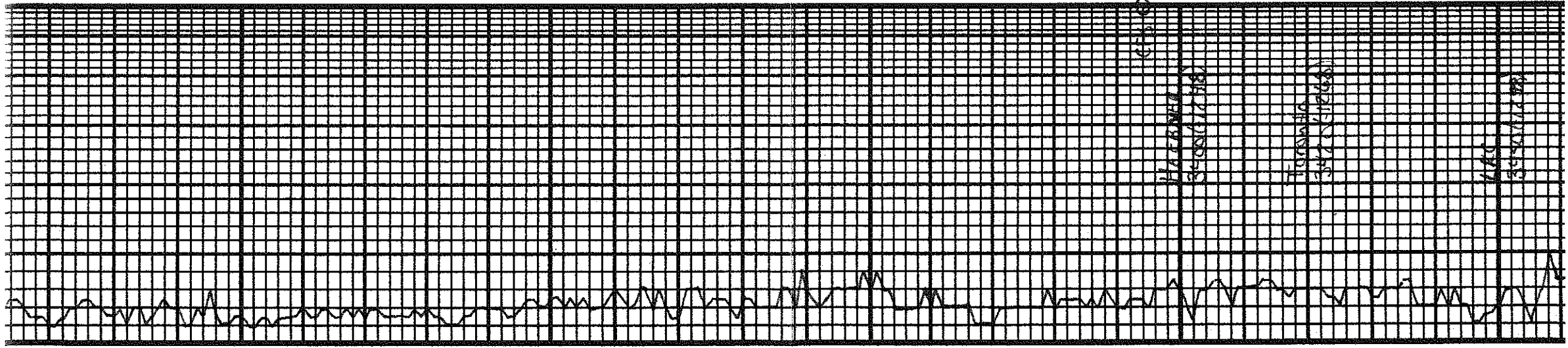
L: tam- wht, fm xln, sub
xln-chalky seat face

F: amt ggy sh. Tong
chms w/ per. ALL AS

Sh: ggy
L: s: wht, fm- v fm xln, seat
gd imbricate, possibly v chky
All No, No Od. Tong chms
w/ per, fbs.

sh: ggy
L: s: tam- wht, fm- v fm xln





50

3300

50

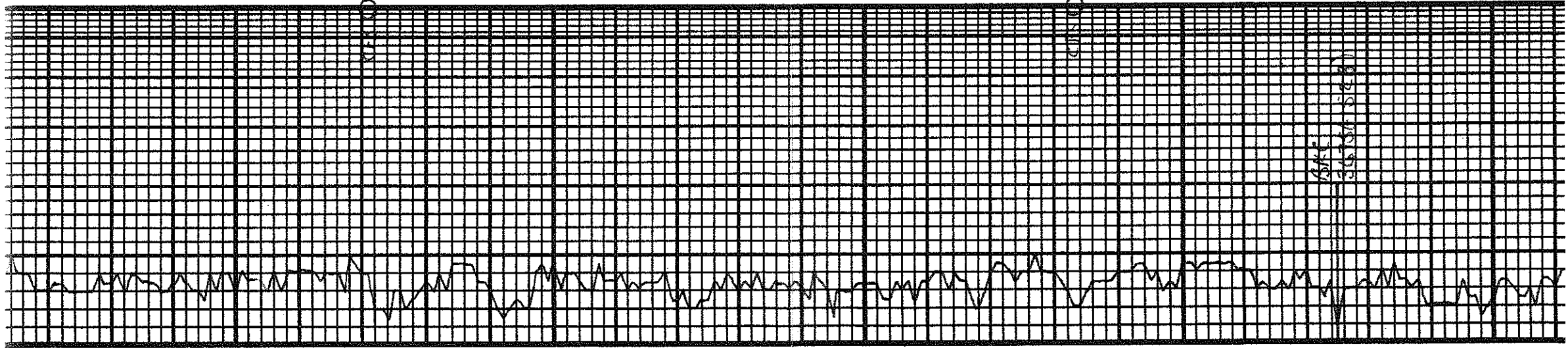
3400

50

Rx: Tong fr int subd, mild subch, NS.
 LS: 4wt, med xln, fess, prop.
 Tong much AIA, 6Hly mtld, fr int xln, subch - chky }
 Totally barren.
 LS: 4wt - tom, fanned xln, scat fess, mild, gel in subd, chky, NS.
 Sh: Black Carb
 Sh: brn-red w/gy }
 LS: 4wt, f, med xln, fess, fr int xln - }
 Sh: gy }
 LS: 4wt, f, med xln, fess, gel int xln, 1-2 pss ul fr sfo, no cell vchky & barren. Tong v chns & tile w/gy shp chtd. }
 Sh: gy }
 LS: tom, 4wt, scat chky cr, mostly fess & dms. Sh: Black Carb
 Sh: gy }
 LS: tom, brn, f, xln - mt x ul }
 1-2 pss ul fr sfo, no cell }
 Tong wtd, f, med xln, few subch cr, tom-gy chky ns. Sh: gy }
 LS: 4wt, f, med xln, scat fess }
 1-2 cr w/ settd sfo in fr int xln }
 1-2 mostly s-wd - chky. H od. }
 LS: tom - lt tom, imp. - crs xln, dms w/ scat fess, gel w/gy w/ scat int xln & pss. gel lt brn - mt dtn w/ f-gd sfo, gy in pot. gel od. }
 LS: tom - wtd, f, v fr xln, v chns ul AIA wtd, NS }
 Sh: Black Carb
 Sh: 11 gy, gummy }
 LS: 4wt, f, xln, few smt fess, fr int subch - chky }
 pss ul 1-2 pss ul fr sfo }
 NSFA MOD. }
 Sh: gy - lt gy, gummy }
 in pot. Tong brn - red w/ depth }
 LS: tom, fanned xln, pss, dms. Sh: AIA.

DST #1

Vis: 55 Wt: 9.5
 DST #1
 3360 - 3394
 45 - 45 - 45 - 45
 I.F.: 4" blow
 F.F.: 3" blow
 I.F.P.: 12-21
 F.F.P.: 22-31
 S.I.P.: 1048-981
 H.P.: 1634-1839
 Rec:
 60' GIP
 46' OC MUL 10' 10, 50' m
 BHT: 102' Chlar: 48K



DST # 2

3500

DST # 3

3600

50

3700

Sh: lt grj	LS: wht, fu-mid xln, mostly dms, scat sub xln, 1-2 r
Sh: grj	w/ pr-fc str, NSFO, No Od.
Sh: grj	LS: wht, med xln, fass, dclom in prt. pr-fc intubing w/ spm vngs. Fr-gd H-ben str. soiled SFO.
Sh: Black Carb	H-fc Od.
Sh: grj	LS: wht, fu-mid xln, dclom w/ fass, pr-fc intubing appx. H-ben str, rase SFO, fat H Od. Kc tite, sub xln in prt.
Sh: grj	LS: wht, med xln, sltly dclom. fr intubing w/ long SFO. Mostly chlkz
Sh: grj	LS: wht - tom, v fu - mid xln, v dms. No vngs
Sh: dk grj	LS: wht, fu-mid xln, few fass, sltly intub, sub xln - chlkz. Few pr-fc intub. All NS
Sh: dk grj	LS: wht - tom, fu-mid xln, All tite w/ prgs.
Sh: grj	Sh: dk grj
Sh: grj	LS: wht, fu-mid xln, scat fass, pr intubing, scat prgs, w/ H-ben str, rare SFO, fat H Od. fr own intubing - chlkz
Sh: grj	LS: fu - mid xln, dclom, Tom Tat fass, leg fass, fr intubing, scat vngs. fr - gd brn scat str, fr SFO, H-fc Od. slt fass oil on sub.
Sh: grj	LS: wht v-fu-xln - fu vngs w/ fass, fr appx. fr 6 in str w/ fr SFO, fr sltly tite. Much free oil on cup, H Odor.
Sh: grj	LS: wht, oal, tite + pr oacx, barren w/ No Od.
Sh: grj	LS: wht, fu xln, few oal w/ prgs, tite, NS, fr long sub xln - chlkz w/ dclom
Sh: grj	LS: wht, fu-mid xln, scat oal + fass. Sub xln in prt, All NS
Sh: grj	LS: wht, fu-mid xln, sub xln, prgs, NS.
Sh: grj	LS: tom-wht, fu-mid xln, dms
Sh: grj - H grj	oal brn
LS: tom, med xln, dms	

Vis: 50 wt: 9.0
DST # 2
3483 - 3521
45 - 46 - 45.45
I.F. - BOB 19 min
F.F. - 6" below
I.F.P. - 17-44
F.F.P. - 52-64
S.I.P. - 248-212
H.P. - 1732 - 1691
Rec:
130' GIP
115' SACM 5% O, 65% W
BHT: 108' Chlor 46 K

Vis: 51 wt: 9.1
DST # 3
3557 - 3633
45 - 46 - 45.45
I.F. - BOB 8 min / 1/2" SIA
F.F. - BOB 2 min / Sur P SIA
I.F.P. - 34-46
F.F.P. - 72-95
S.I.P. - 967-865
H.P. - 1796 - 1762
Rec:
840' GIP
146' GAO 55% G, 30% O
BHT: 107'

