



1067188

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
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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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Tombaugh-Vand 1-6
Doc ID	1067188

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Density / Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Tombaugh-Vand 1-6
Doc ID	1067188

Tops

Name	Top	Datum
Top Anhydrite	1383	+837
Base Anhydrite	1405	+815
Heebner	3735	-1515
LKC	3784	-1564
BKC	4103	-1883
Fort Scott	4287	-2067
Cherokee Shale	4308	-2088
Mississippi	4353	-2133

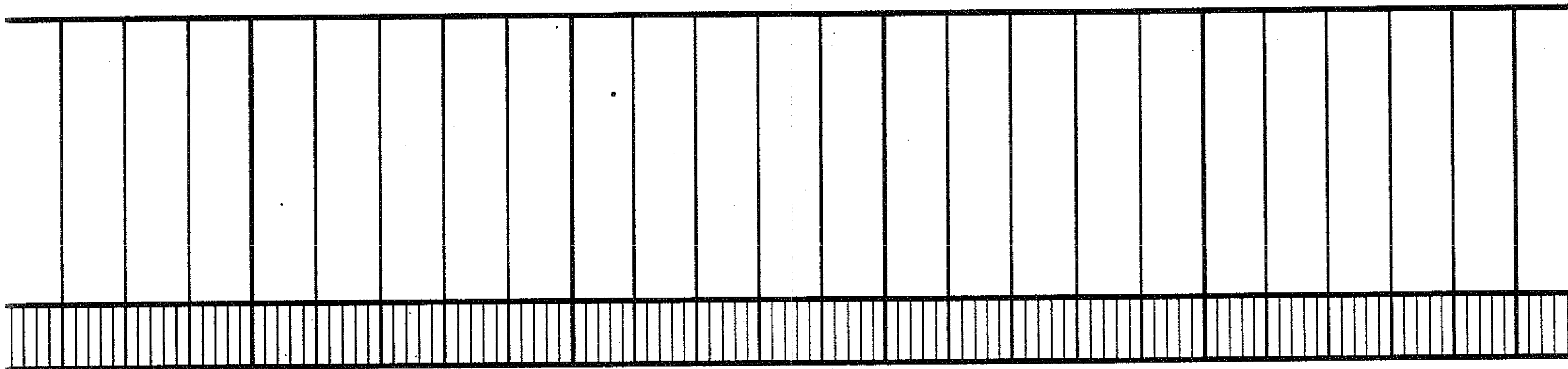
JOB LOG

SWIFT Services, Inc.

DATE 9 NOV 11 PAGE NO. 1

CUSTOMER Draming & Nelson WELL NO. 1-6 LEASE TOMBROUGH - VAND JOB TYPE Cement long string TICKET NO. 22438

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								150 sacks SA-2 - 1753 lbs SMD w/ #1 floccul
								TD: 4379' 5 1/2" 19.5# casing 105 joints - 4470'
								Centralizers 1, 3, 5, 7, 9, 11, 13, 72 Basket #73
								DV tool #73 1348' short 42.13'
	1230							on loc TRK 114
	1410							start 5 1/2" casing in well
	1615							circulate
	1640						1320	Drop ball - set packer shoe
								circulate
	1642	4 3/4	12				200	Pump 500 gal mud flush
		4 3/4	20				200	Pump 20 bbl KCL flush
	1655	4 3/4	47				200	Mix 150 sacks SA-2 @ 15.3 PPG
								Drop 1st stage latch down plug
								wash out pump & line
	1710	6 3/4					200	Displace plug
		6 3/4	88				850	
	1725	6 3/4	103				1500	Land plug
								Release pressure to truck - dried up
								Drop bomb
	1735		7					Plug RH - MH 30 sacks - 20 sacks
	1740	2	4				900	Open DV tool
	1745	4 3/4	90				200	Mix 125 sacks SMD @ 11.2 PPG
	1808							Drop 2nd stage plug
	1810	6 3/4					200	Displace plug
	1815	6 3/4	32				1800	Land plug - close DV tool
								Release pressure to truck - dried up
	1820							wash truck
								Rack up
	1900							job complete
								Thanks!
								DAVE, Joe, & Blaine



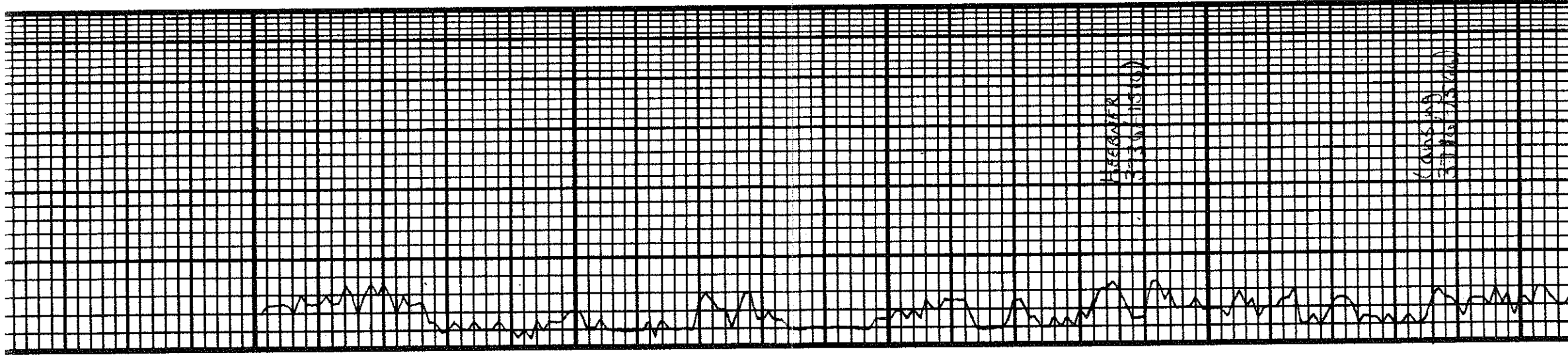
3600

50

3700

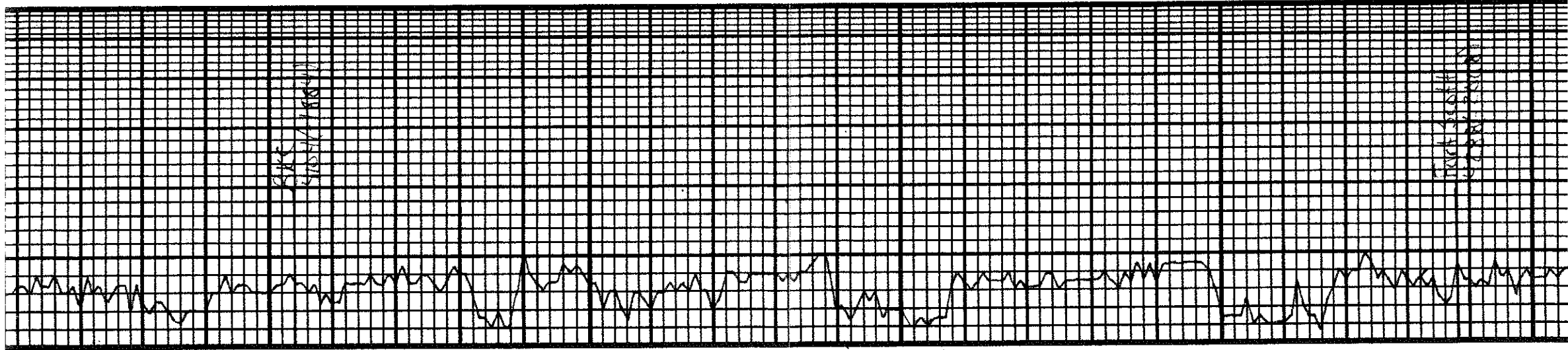
50

3800



RESERVED
FOR
FUTURE USE

RESERVED
FOR
FUTURE USE



4100

DATE
4/10/77 (1987)

50

4200

50

4300

DATE
4/10/77 (1987)

LS: Unit, tom, sat w/ flux ex. phase, ALL NS	LS: Unit, flux, sat xln, seat out ex. unit - gg	Sh: Black Carb. Sh: gg	LS: tom, vfm xln, vchms Sh: ALL	LS: tom, vfm - mic xln, No visg, NS	Sh: lt gg	LS: Unit, flux, seat out, PRF, few facs.	Sh: gg w/ some red in base	Sh: 50	LS: Unit - lt tom, vfm xln w/ no visg, v. diff.	Sh: Black Carb	Sh: dark gg	LS: tom - ben, vfm xln, vchms	Sh: gg	LS: tom, flux, sat - vfm xln, ALL vchms w/ no visg, ABS	Sh: dark gg w/ blk Carb	LS: tom - seat, vfm xln, vchms.	Sh: Black Carb	LS: tom - ex xln chms Sh: 50	LS: tom - unit, fu - unit xln mostly all chms selected few facs & sub xln ex. NS.
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Vis: 63 wt: 8.9

DST # 1

4330-4349

45-45-45-45

I.F. - 1/4" blow

F.F. - 1" blow

IFP: 24-40

FFP: 37-49

SIP: 1241-1197

HP: 2142-2070

Rec:

30' GIP



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

ATTN: Ron Nelson

Job Ticket: 44769

DST#: 1

Test Start: 2011.11.07 @ 05:11:04

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:30:29

Time Test Ended: 12:36:58

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 42

Interval: 4330.00 ft (KB) To 4369.00 ft (KB) (TVD)

Reference Elevations: 2220.00 ft (KB)

Total Depth: 4369.00 ft (KB) (TVD)

2212.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6625 Inside

Press @ Run Depth: 49.85 psig @ 4334.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.11.07

End Date:

2011.11.07

Last Calib.: 2011.11.07

Start Time: 05:11:04

End Time:

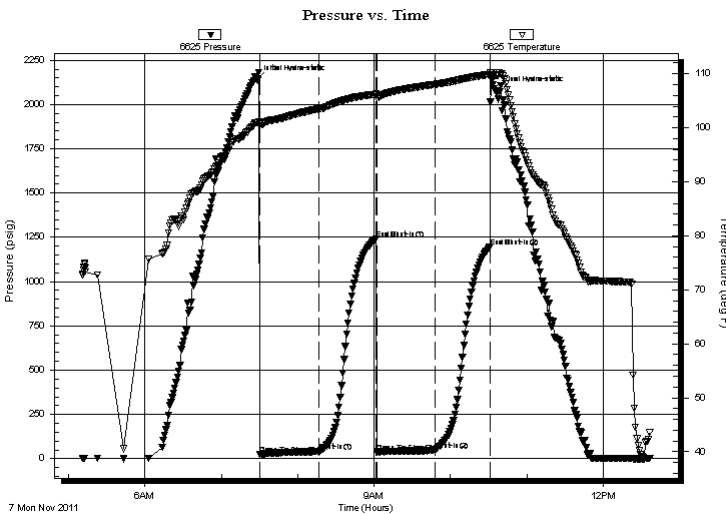
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Time On Btm: 2011.11.07 @ 07:27:59

Time Off Btm: 2011.11.07 @ 10:35:58

TEST COMMENT: 45-IFP-w k bl 1/4"to 1 1/4"bl
45-ISIP-no bl
45-FFP-w k bl 1/2"to 1"bl
45-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2142.67	100.97	Initial Hydro-static
3	24.08	100.83	Open To Flow (1)
49	40.72	103.51	Shut-In(1)
94	1241.91	106.21	End Shut-In(1)
95	37.15	105.60	Open To Flow (2)
140	49.85	108.03	Shut-In(2)
183	1197.20	109.87	End Shut-In(2)
188	2076.04	109.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	30'GIP	0.00
60.00	HO&GCM 10%G40%O50%M	0.57

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

Job Ticket: 44769

DST#: 1

ATTN: Ron Nelson

Test Start: 2011.11.07 @ 05:11:04

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: 63.00 sec/qt

Cushion Volume: bbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 6800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	30'GIP	0.000
60.00	HO&GCM 10%G40%O50%M	0.568

Total Length: 60.00 ft Total Volume: 0.568 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6625

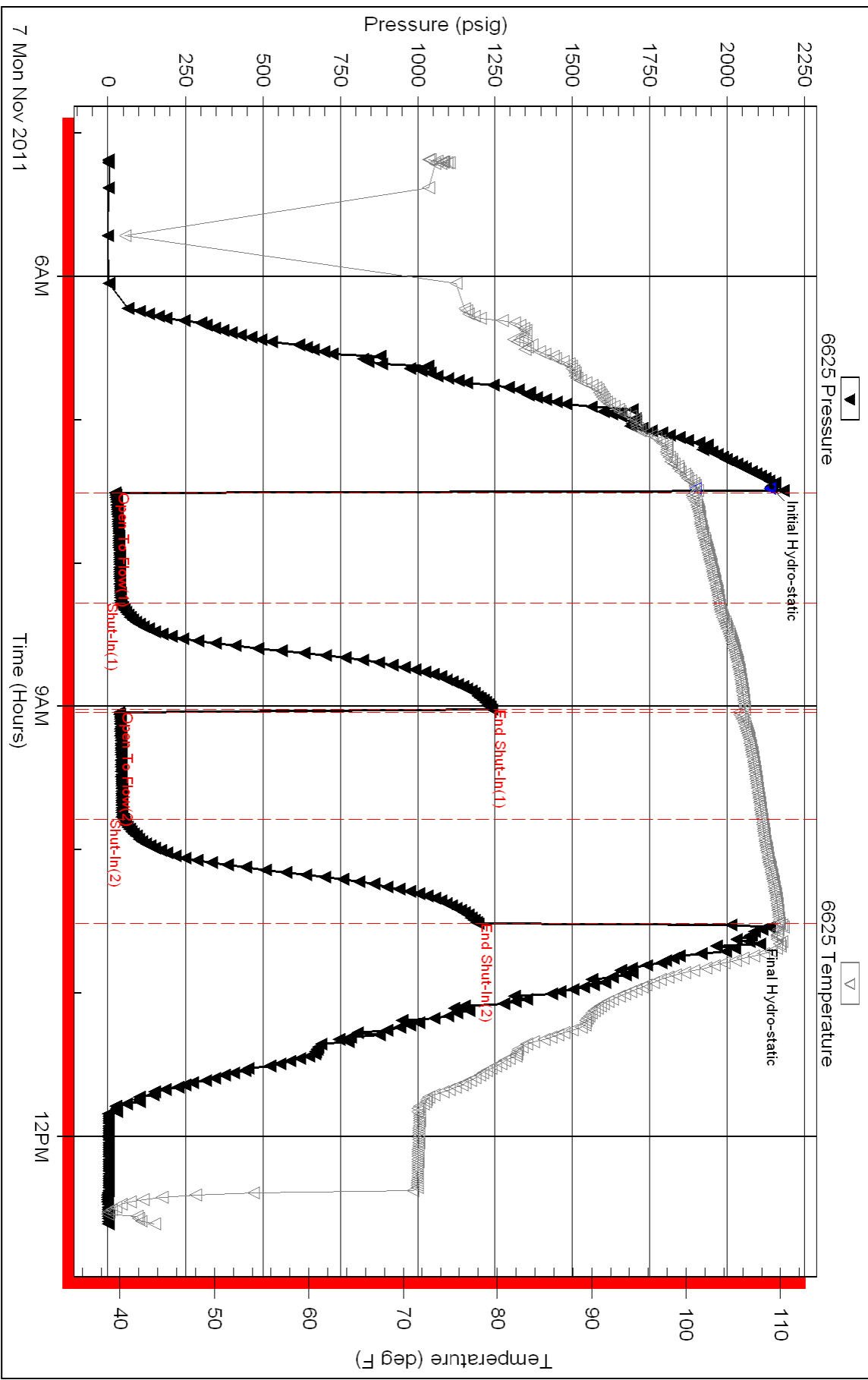
Inside

Dow nung-Nelson Oil Co Inc

Tombaugh-Vand #1-6

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

ATTN: Ron Nelson

Job Ticket: 44770

DST#: 2

Test Start: 2011.11.07 @ 18:10:31

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:19:56

Time Test Ended: 01:17:55

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 4362.00 ft (KB) To 4374.00 ft (KB) (TVD)

Reference Elevations: 2220.00 ft (KB)

Total Depth: 4374.00 ft (KB) (TVD)

2212.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6625 Inside

Press @ Run Depth: 61.36 psig @ 4366.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.11.07

End Date:

2011.11.08

Last Calib.: 2011.11.08

Start Time: 18:10:31

End Time:

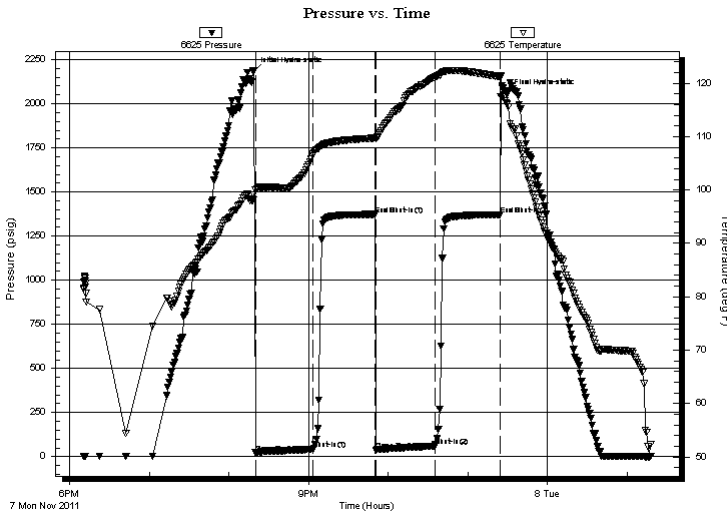
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Time Off Btm: 2011.11.07 @ 23:29:25

TEST COMMENT: 45-IFP-w k to a fr bl 1/2"to 4"bl
45-ISIP-no bl
45-FFP-w k to a fr bl 1"to 6"bl
45-FSIP-no bl 1st 20min, then surface bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.39	98.22	Initial Hydro-static
2	22.21	99.95	Open To Flow (1)
45	41.38	106.69	Shut-In(1)
92	1372.89	109.75	End Shut-In(1)
93	37.86	109.72	Open To Flow (2)
137	61.36	121.17	Shut-In(2)
186	1371.30	121.22	End Shut-In(2)
191	2057.25	116.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MGO 10%G10%M80%O	0.57
55.00	CO	0.77
0.00	250'GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

Job Ticket: 44770 **DST#: 2**

ATTN: Ron Nelson

Test Start: 2011.11.07 @ 18:10:31

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.93 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 6800.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MGO 10%G10%M80%O	0.568
55.00	CO	0.772
0.00	250'GIP	0.000

Total Length: 115.00 ft Total Volume: 1.340 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

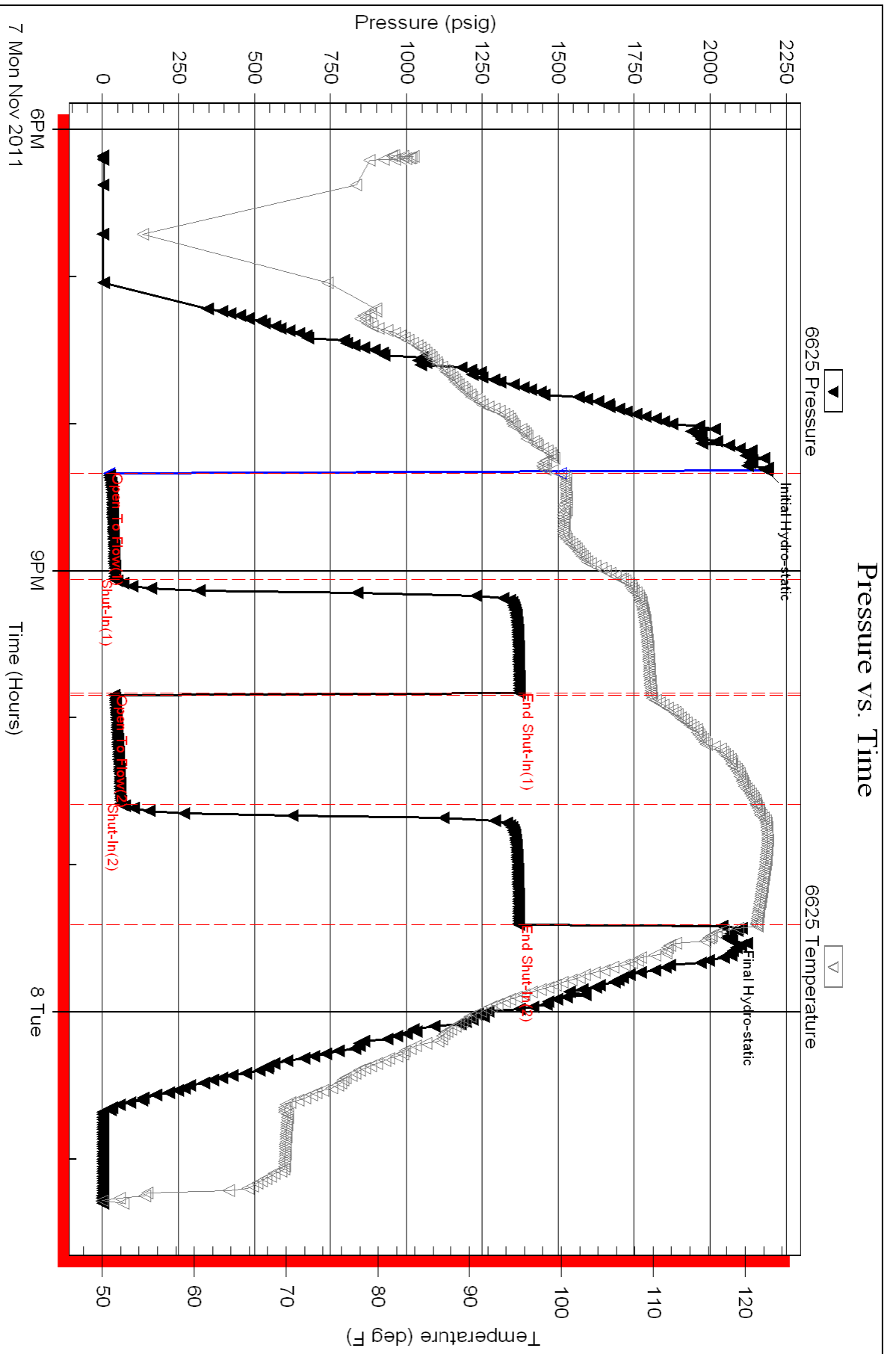
Serial #: 6625

Inside

Dow nings-Nelson Oil Co Inc

Tombaugh-Vand #1-6

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 44770

Printed: 2011.11.08 @ 08:13:28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

ATTN: Ron Nelson

Job Ticket: 44771

DST#: 3

Test Start: 2011.11.08 @ 09:15:49

GENERAL INFORMATION:

Formation: **MISS-Osage**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:11:44

Time Test Ended: 20:15:14

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 4363.00 ft (KB) To 4377.00 ft (KB) (TVD)

Reference Elevations: 2220.00 ft (KB)

Total Depth: 4377.00 ft (KB) (TVD)

2212.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6625

Inside

Press @ Run Depth: 1150.69 psig @ 4369.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.11.08

End Date:

2011.11.08

Last Calib.:

2011.11.08

Start Time: 09:15:49

End Time:

20:15:14

Time On Btm:

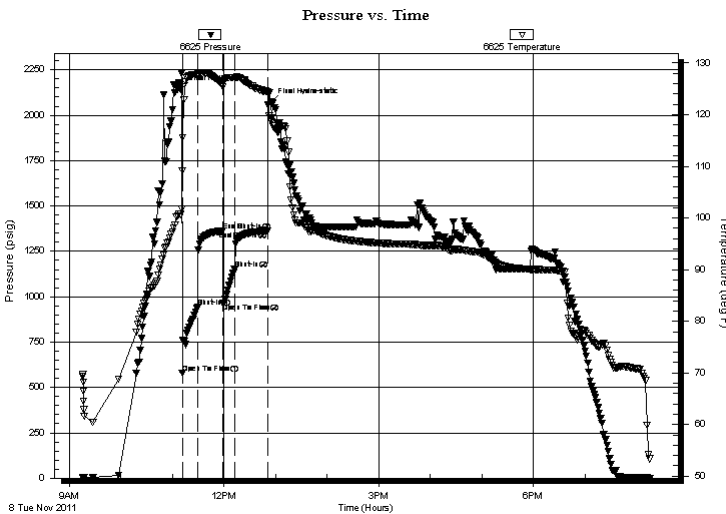
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Time Off Btm:

2011.11.08 @ 12:54:44

TEST COMMENT: 15-IFP-strg bl in 30sec
30-ISIP-4 1/2"bl bk
15-FFP-strg bl thru-out
30-FSIP-

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2141.02	100.74	Initial Hydro-static
2	577.80	109.12	Open To Flow (1)
20	941.54	127.81	Shut-In(1)
49	1362.09	125.83	End Shut-In(1)
49	962.56	125.33	Open To Flow (2)
63	1150.69	127.13	Shut-In(2)
101	1360.97	124.41	End Shut-In(2)
105	2069.92	118.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	124'GIP	0.00
2976.00	CO	41.47
124.00	MGO 25%G10%M65%O	1.74

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

6-21s-20w Pawnee

P O Box 372
Hays Ks 67601-0372

Tombaugh-Vand #1-6

Job Ticket: 44771 **DST#: 3**

ATTN: Ron Nelson

Test Start: 2011.11.08 @ 09:15:49

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.76 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5000.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	124'GIP	0.000
2976.00	CO	41.472
124.00	MGO 25%G10%M65%O	1.739

Total Length: 3100.00 ft Total Volume: 43.211 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6625

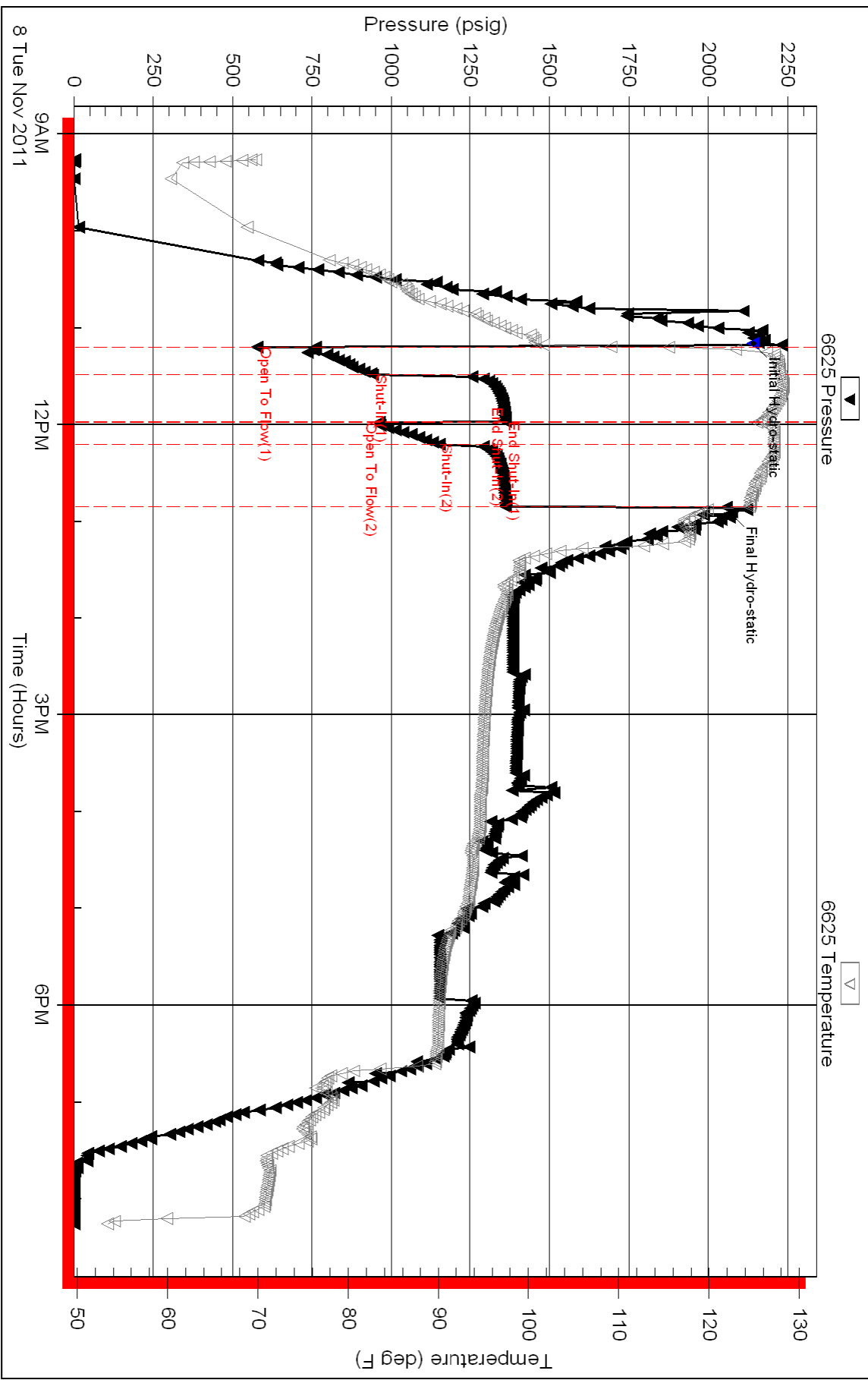
Inside

Dow nings-Nelson Oil Co Inc

Tombaugh-Vand #1-6

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 44771

Printed: 2011.11.09 @ 08:17:20