



1067188

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Tombaugh-Vand Well #: 1-6
 Sec. 6 Twp. 21 S. R. 20 East West County: Pawnee

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 <i>(Attach Additional Sheets)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name Attached	Top Attached	Datum Attached
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Submitted Electronically <i>(If no, Submit Copy)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

List All E. Logs Run:
Attached

CASING RECORD <input checked="" 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
Surface Pipe	12.25	8.625	23	520	Common	265	2% Gel & 3% CC
Production String	7.875	5.5	15.5	4373	EA/2	150	

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: <u>2.8750</u> Set At: <u>4358.08</u> Packer At:		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR: <u>01/20/2012</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____	
Estimated Production Per 24 Hours	Oil Bbls. <u>81</u> Gas Mcf <u>0</u> Water Bbls. <u>0</u>	Gas-Oil Ratio _____ Gravity _____

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 checked="" 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> _____	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

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

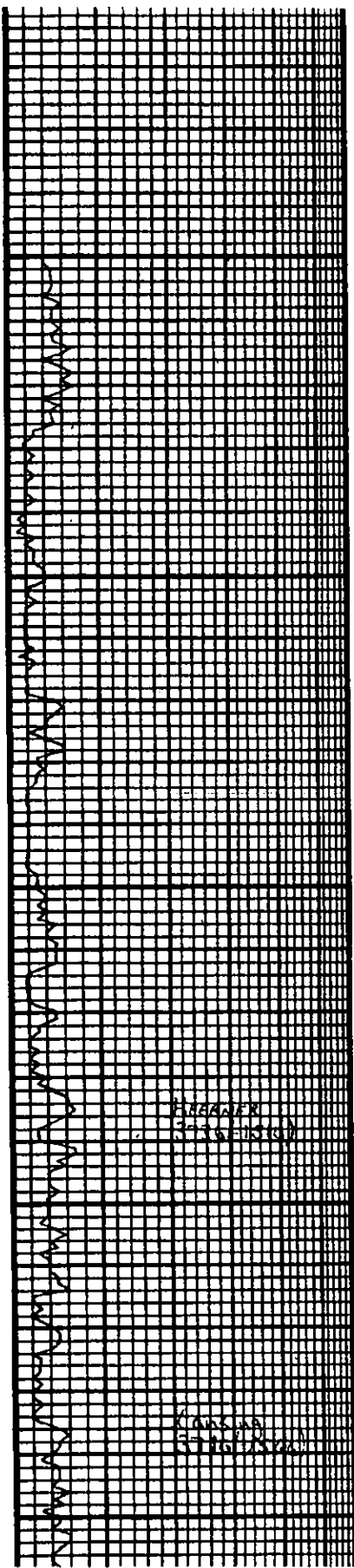
JOB LOG

SWIFT Services, Inc.

DATE NOV 11 PAGE NO. 1

CUSTOMER Phanix & Nelson WELL NO. 1-6 LEASE TOMBROUGH - VAND JOB TYPE Conduit 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 - 175 lbs SMD w/ 1/2 floater ATD = 4379' 5 1/2" 19.5# casing 105 joints - 4470' Circulate 1, 3, 5, 7, 9, 11, 13, 72 Bskt #73 DV tool #73 1348' shaft 42.13'
	1230							on loc TRK 114
	1410							start 5 1/2" casing in well
	1615							circulate
	1640						1300	Drop ball - set packer shoe
								circulate
	1642	4 3/4	12				200	Pump 500 gal mix 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				800	
	1725	6 3/4	103				1500	Land plug Release pressure to truck - dried up Drop bomb
	1735		7					Plug RH - MH 300 lbs - 200 lbs
	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
	1900							Rack up job complete Thanks! DAVE, Joe, & Blaine



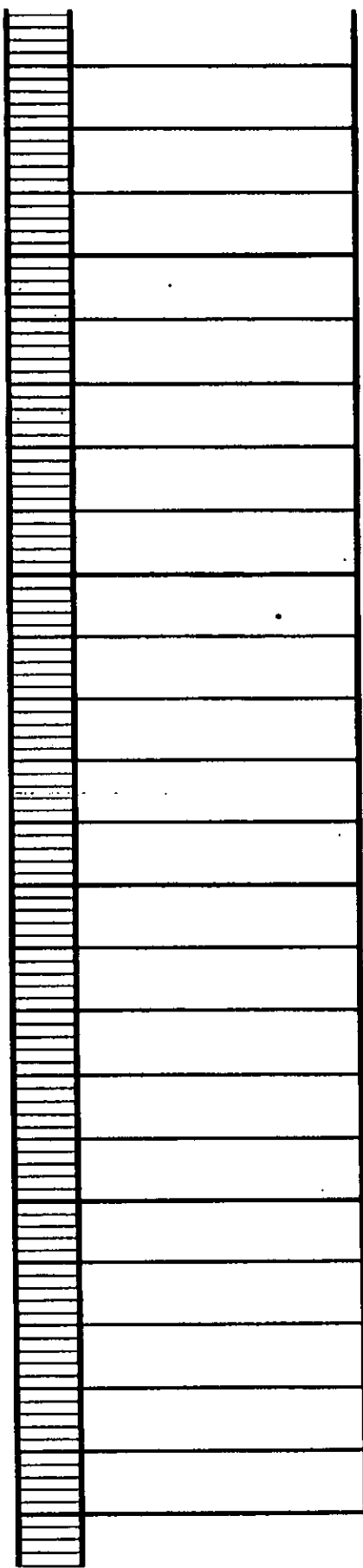
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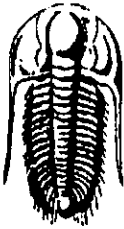
50

3700

50

3800





**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

Job Ticket: 44769

DST#: 1

ATTN: Ron Nelson

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)**

Total Depth: **4369.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2220.00 ft (KB)**

2212.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 6625 **Inside**

Press@RunDepth: **49.85 psig @ 4334.00 ft (KB)**

Start Date: **2011.11.07**

End Date:

2011.11.07

Start Time: **05:11:04**

End Time:

12:36:58

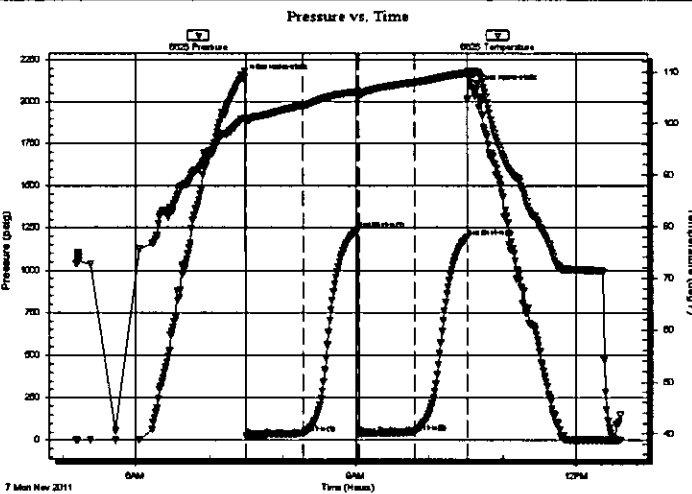
Capacity: **8000.00 psig**

Last Calib.: **2011.11.07**

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

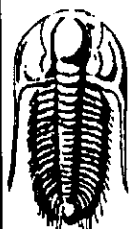
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2142.67	100.97	Initial Hydro-static
3	24.08	100.83	Open To Flow (1)
49	40.72	103.51	Shut-In(1)
94	1241.91	106.21	End Shut-In(1)
95	37.15	105.60	Open To Flow (2)
140	49.85	108.03	Shut-In(2)
183	1197.20	109.87	End Shut-In(2)
188	2076.04	109.63	Final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



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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-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

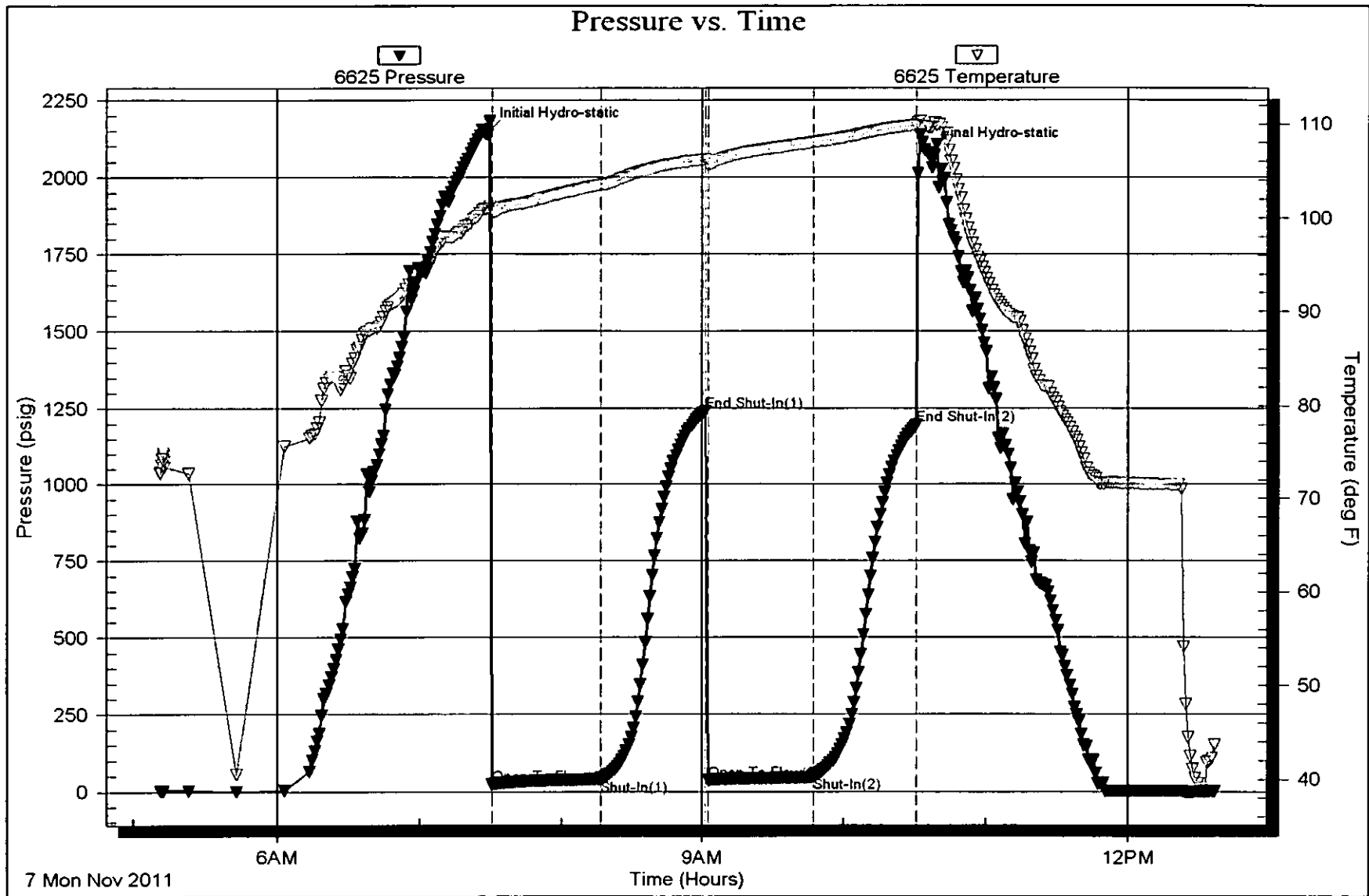
Num Gas Bombs: 0

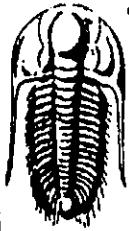
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing-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

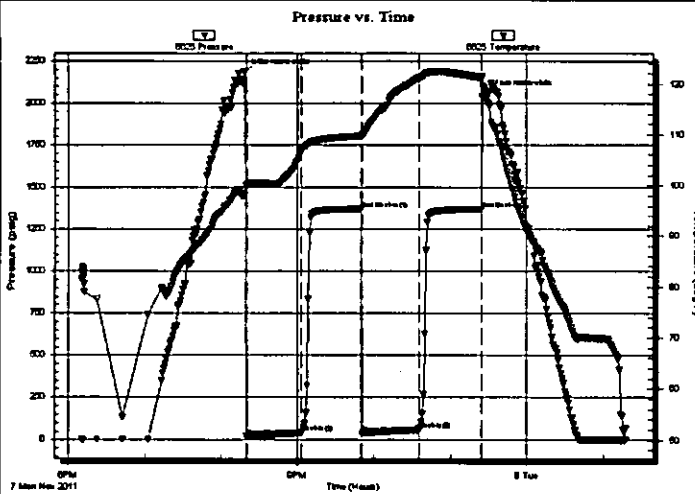
Test Start: 2011.11.07 @ 18:10:31

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 20:19:56
 Time Test Ended: 01:17:55
 Interval: **4362.00 ft (KB) To 4374.00 ft (KB) (TVD)**
 Total Depth: **4374.00 ft (KB) (TVD)**
 Hole Diameter: **7.85 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole (Reset)**
 Tester: **Ray Schwager**
 Unit No: **42**
 Reference Elevations: **2220.00 ft (KB)**
2212.00 ft (CF)
 KB to GRV/CF: **8.00 ft**

Serial #: 6625 **Inside**
 Press@RunDepth: **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: **01:17:55** Time On Btm: **2011.11.07 @ 20:18:26**
 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

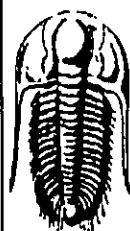
Recovery

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)



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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:

bbbl

Water Loss: 7.93 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 bbbl
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

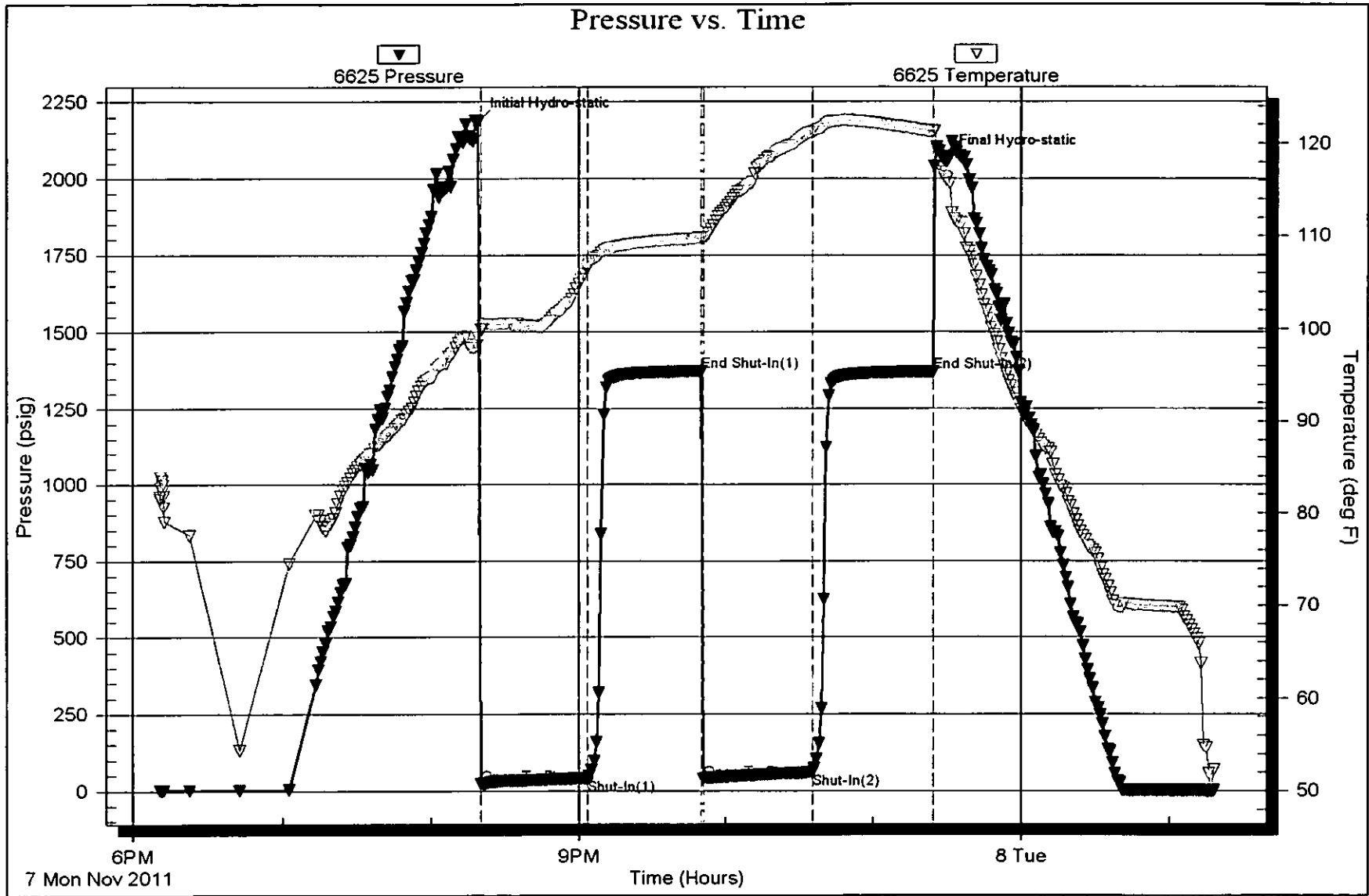
Num Gas Bombs: 0

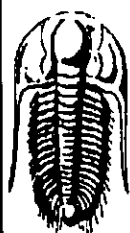
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-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:

bbbl

Water Loss: 8.76 in³

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:

