KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1106590

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30717
Name: Downing-Nelson Oil Co Inc
Address 1: PO BOX 1019
Address 2:
City: HAYS State: KS Zip: 67601 +
Contact Person: Ron Nelson
Phone: (785) 621-2610
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Ron Nelson
Purchaser:

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] 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 #:

12/11/2012	12/15/2012	12/16/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26428-00-00
Spot Description:
NW NW NW Sec. 26 Twp. 14 S. R. 16 [ ] East [x] West
330 Feet from [x] North / [ ] South Line of Section
330 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [x] NW [ ] SE [ ] SW
County: Ellis
Lease Name: MWG Well #: 3-26
Field Name:
Producing Formation: None
Elevation: Ground: 1885 Kelly Bushing: 1893
Total Depth: 3534 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 220 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 23000 ppm Fluid volume: 3232 bbls
Dewatering method used: Evaporated
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:
- [x] Wireline Log Received
- [ ] Geologist Report Received
- [ ] UIC Distribution

ALT [ ] I [x] II [ ] III Approved by: Deanna Garrison Date: 01/14/2013

Side Two

[redacted]

1106590

Operator Name: Downing-Nelson Oil Co Inc Lease Name: MWG Well #: 3-26

Sec. 26 Twp. 14 S. R. 16 ☐ East ☑ West County: Ellis

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 (Attach Additional Sheets)	✓ Yes	☐ No	✓ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes	☑ No	Name: Attached	Top: Attached	Datum: Attached
Cores Taken	☐ Yes	✓ No			
Electric Log Run	✓ Yes	☐ No			
Electric Log Submitted Electronically (If no, Submit Copy)	☑ Yes	☐ No			

List All E. Logs Run:

Micro
Dual Induction
Compensated Neutron / Density

CASING RECORD ✓ New ☐ 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	220.10	Common	150	2% Gel 7 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives

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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. (Submit ACO-5) ☐ Commingled (Submit ACO-4) ☐ Other (Specify)

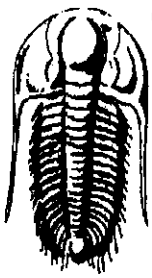
PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	MWG 3-26
Doc ID	1106590

Tops

Top Anhydrite	975'	+918
Base Anhydrite	1012'	+881
Topeka	2876'	-971
Heebner	3088'	-1194
Toronto	3138'	-1225
LKC	3138'	-1244
BKC	3370'	-1476
Reworked Arbuckle	3396'	-1503
Arbuckle	3434'	-1541



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: AL Downing

MWG #3-26

26-14s-16w Ellis,KS

Start Date: 2012.12.15 @ 12:40:06
End Date: 2012.12.15 @ 17:54:30
Job Ticket #: 51511 DST #: 1

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

Printed: 2012.12.18 @ 13:36:47

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Downing

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51511 **DST#: 1**

Test Start: 2012.12.15 @ 12:40:06

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:24:31
Time Test Ended: 17:54:30

Test Type: Conventional Straddle (Initial)
Tester: Ray Schwager
Unit No: 42

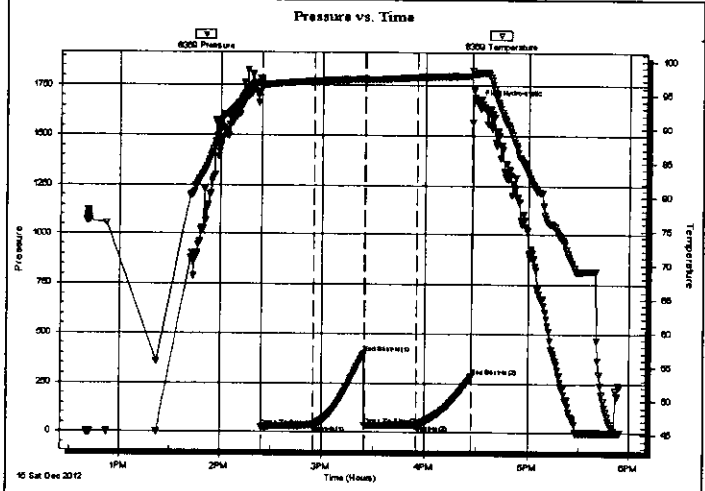
Interval: 3365.00 ft (KB) To 3422.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**
Press@RunDepth: 37.65 psig @ 3376.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 12:40:06 End Time: 17:54:30

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm: 2012.12.15 @ 14:22:01
Time Off Btm: 2012.12.15 @ 16:30:31

TEST COMMENT: 30-IFP-wk bl thru-out 1/2" to 1 " bl
30-ISIP-no bl
30-FFP-no bl
30-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1705.50	96.67	Initial Hydro-static
3	25.12	95.96	Open To Flow (1)
33	33.74	96.87	Shut-In(1)
63	400.43	97.29	End Shut-In(1)
63	35.42	97.15	Open To Flow (2)
93	37.65	97.50	Shut-In(2)
125	285.05	97.78	End Shut-In(2)
129	1660.70	98.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	SOCM 1%O99%M	0.22

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51511 **DST#: 1**

Test Start: 2012.12.15 @ 12:40:06

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:24:31
Time Test Ended: 17:54:30

Test Type: Conventional Straddle (Initial)
Tester: Ray Schw ager
Unit No: 42

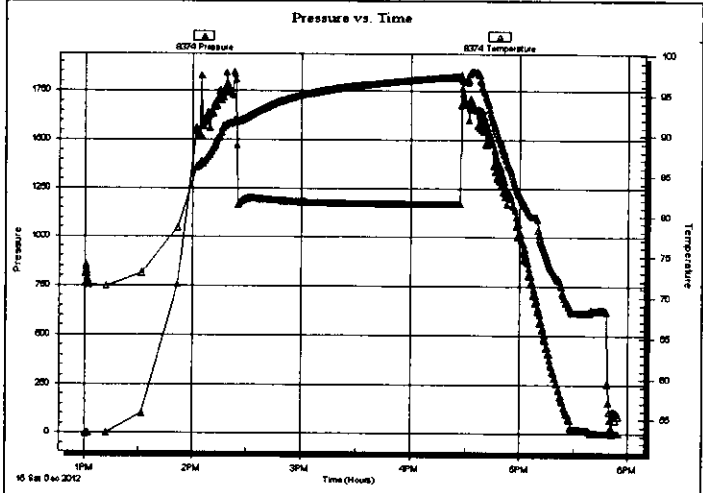
Interval: 3365.00 ft (KB) To 3422.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8374 **Below (Straddle)**
Press@RunDepth: psig @ 3438.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 12:59:50 End Time: 17:54:29

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 " bl
30-ISIP-no bl
30-FFP-no bl
30-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	SOCM 1%O99%M	0.22

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51511 **DST#: 1**

Test Start: 2012.12.15 @ 12:40:06

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:24:31
Time Test Ended: 17:54:30

Test Type: Conventional Straddle (Initial)
Tester: Ray Schw ager
Unit No: 42

Interval: 3365.00 ft (KB) To 3422.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

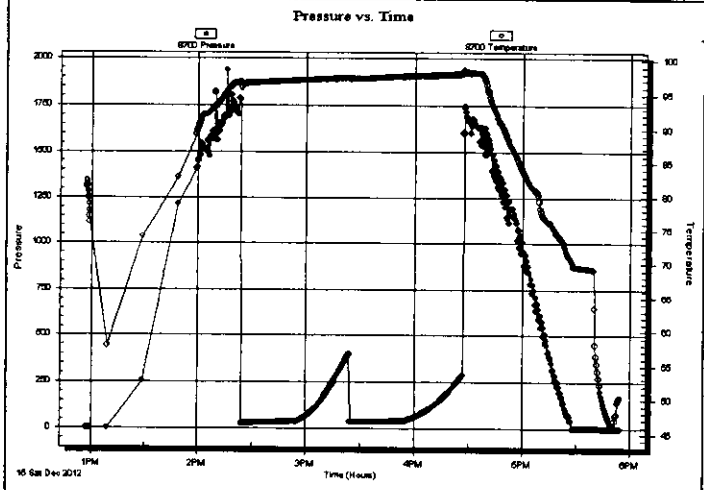
Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3376.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 12:56:51 End Time: 17:54:00

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 " bl
30-ISIP-no bl
30-FFP-no bl
30-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	SOCM 1%O99%M	0.22

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Downing

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51511 **DST#: 1**

Test Start: 2012.12.15 @ 12:40:06

Tool Information

Drill Pipe:	Length:	3342.00 ft	Diameter:	3.80 inches	Volume:	46.88 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	
					Total Volume:	47.03 bbl	

Drill Pipe Above KB:	28.00 ft
Depth to Top Packer:	3365.00 ft
Depth to Bottom Packer:	3422.00 ft
Interval between Packers:	57.00 ft
Tool Length:	192.00 ft
Number of Packers:	3 Diameter: 6.75 inches

Tool Weight:	2200.00 lb
Weight set on Packer:	25000.00 lb
Weight to Pull Loose:	65000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	52000.00 lb
Final	52000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3345.00		
Shut In Tool	5.00			3350.00		
Hydraulic tool	5.00			3355.00		
Packer	5.00			3360.00	21.00	Bottom Of Top Packer
Packer	5.00			3365.00		
Stubb	1.00			3366.00		
Perforations	10.00			3376.00		
Recorder	0.00	8369	Inside	3376.00		
Recorder	0.00	8700	Outside	3376.00		
Blank Spacing	33.00			3409.00		
Perforations	9.00			3418.00		
Blank Off Sub	1.00			3419.00		
Blank Spacing	3.00			3422.00	57.00	Tool Interval
Packer	5.00			3427.00		
Stubb	1.00			3428.00		
Perforations	10.00			3438.00		
Recorder	0.00	8374	Below	3438.00		
Blank Spacing	95.00			3533.00		
Bullnose	3.00			3536.00	114.00	Bottom Packers & Anchor
Total Tool Length:	**192.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51511 **DST#: 1**

Test Start: 2012.12.15 @ 12:40:06

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.56 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

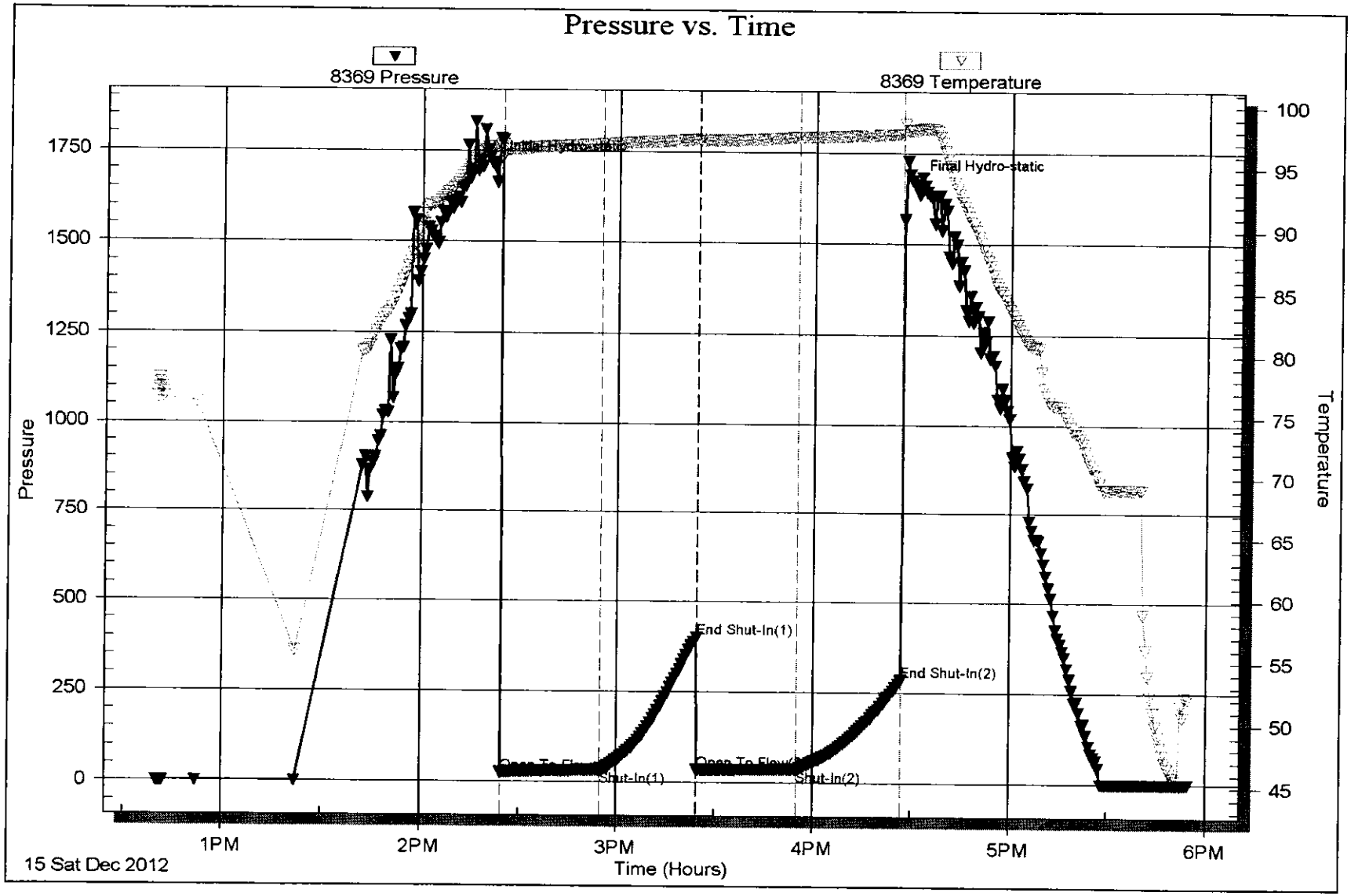
Recovery Table

Length ft	Description	Volume bbl
35.00	SOCM 1%O99%M	0.218

Total Length: 35.00 ft Total Volume: 0.218 bbl

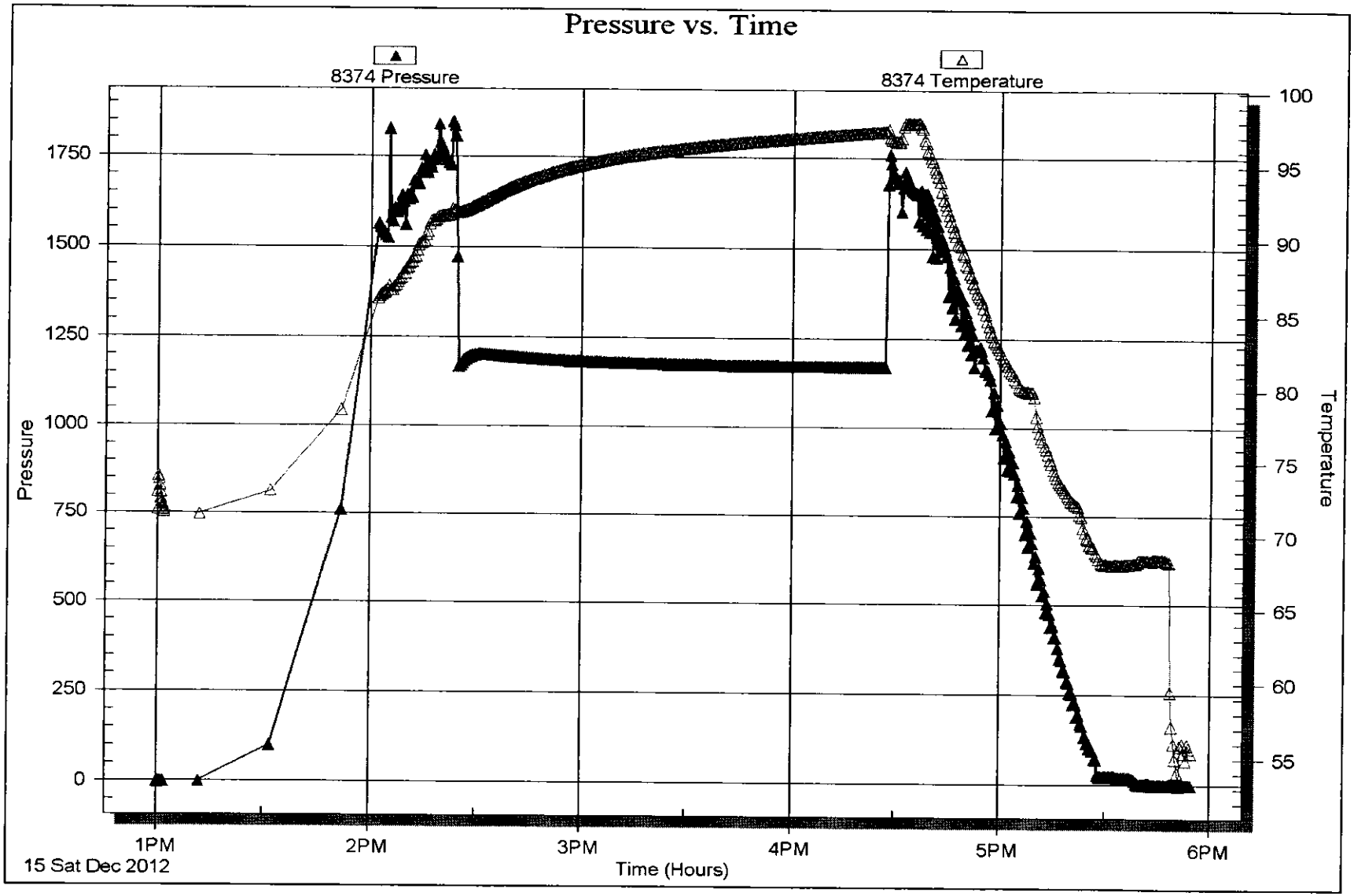
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 Inside Downing-Nelson Oil Co Inc MWG #3-26 DST Test Number: 1



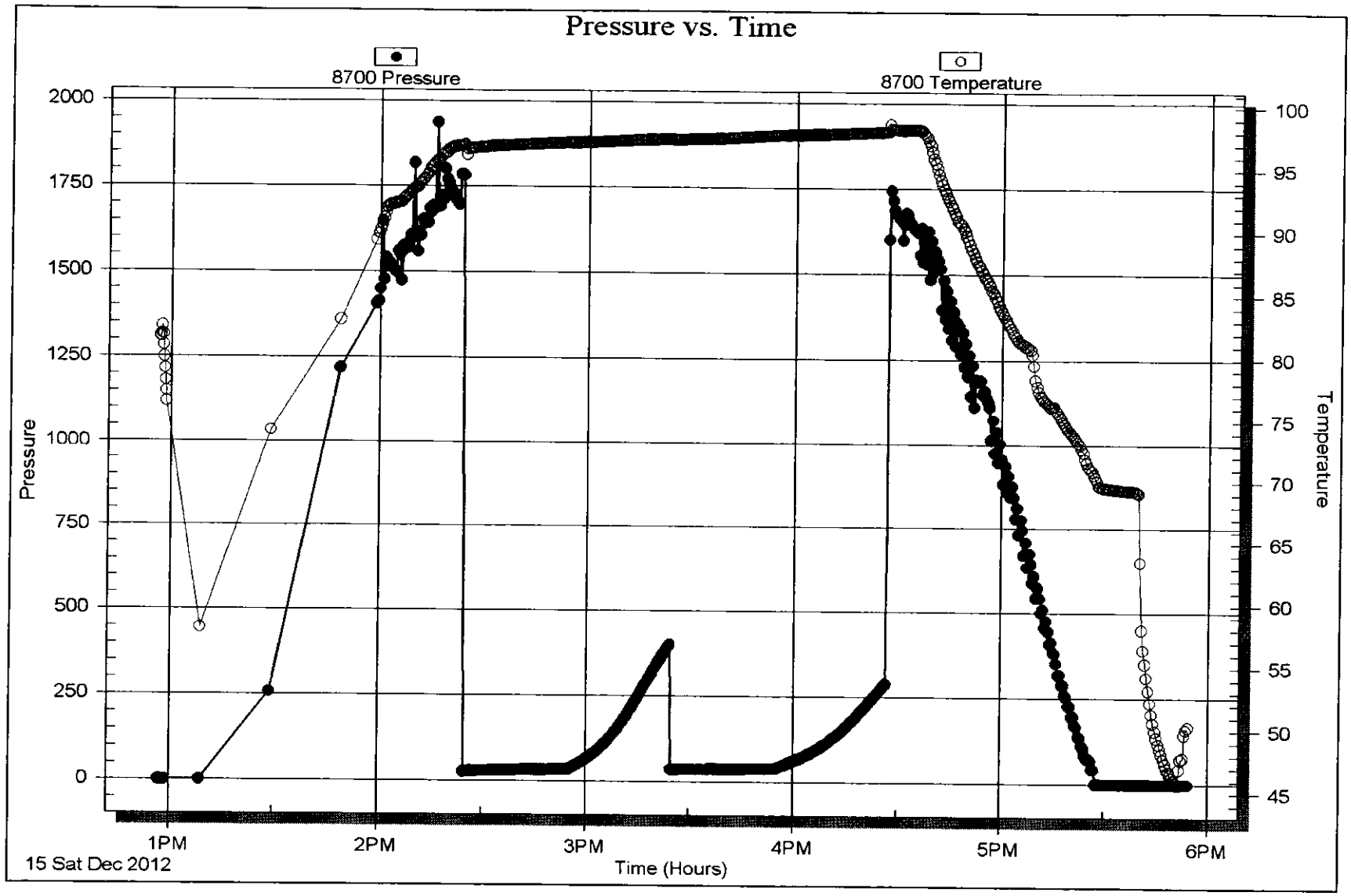
Trilobite Testing, Inc Ref. No: 51511 Printed: 2012.12.18 @ 13:36:52

Serial #: 8374 Below (Straddle) Trilobite Testing-Nelson Oil Co Inc MWG #3-26 DST Test Number: 1

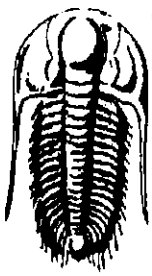


Trilobite Testing, Inc Ref. No: 51511 Printed: 2012.12.18 @ 13:36:53

Serial #: 8700 Outside Downing-Nelson Oil Co Inc MWG #3-26 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 51511 Printed: 2012.12.18 @ 13:36:54



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: AL Downing

MWG #3-26

26-14s-16w Ellis,KS

Start Date: 2012.12.15 @ 18:20:20
End Date: 2012.12.15 @ 22:42:59
Job Ticket #: 51512 DST #: 2

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

Printed: 2012.12.18 @ 13:35:52

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51512 **DST#: 2**

Test Start: 2012.12.15 @ 18:20:20

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:54:00
Time Test Ended: 22:42:59

Test Type: Conventional Straddle (Reset)
Tester: Ray Schw ager
Unit No: 42

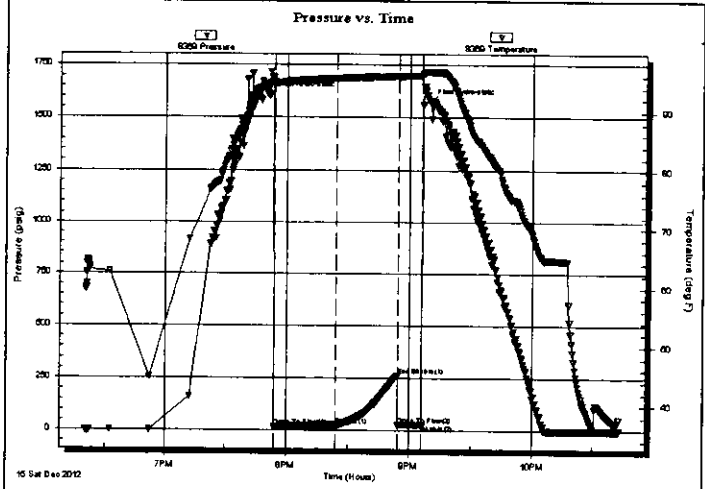
Interval: 3190.00 ft (KB) To 3236.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**
Press@RunDepth: 24.91 psig @ 3194.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 18:20:20 End Time: 22:42:59

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm: 2012.12.15 @ 19:51:15
Time Off Btm: 2012.12.15 @ 21:09:45

TEST COMMENT: 30-IFP-w k bl thru-out 1/8" bl
30-ISIP-no bl
10-FFP-no bl, pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1603.00	94.70	Initial Hydro-static
3	17.62	94.73	Open To Flow (1)
33	24.91	95.66	Shut-In(1)
63	265.61	96.11	End Shut-In(1)
64	26.46	96.03	Open To Flow (2)
75	27.93	96.16	Shut-In(2)
79	1575.25	96.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51512 **DST#: 2**

Test Start: 2012.12.15 @ 18:20:20

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:54:00
Time Test Ended: 22:42:59

Test Type: Conventional Straddle (Reset)
Tester: Ray Schw ager
Unit No: 42

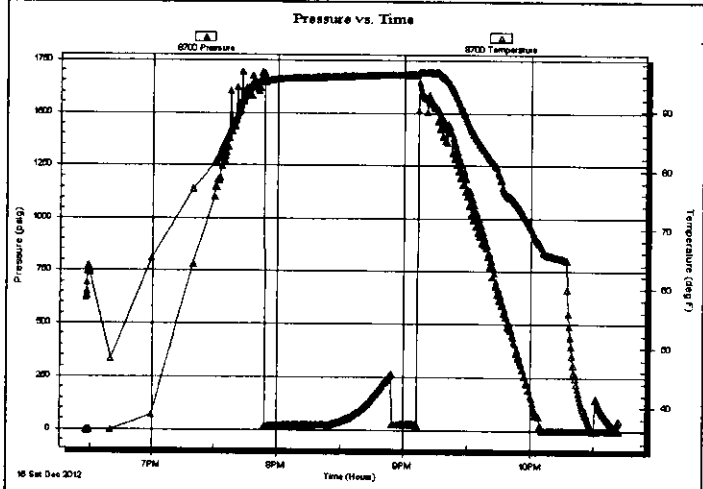
Interval: 3190.00 ft (KB) To 3236.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**
Press@RunDepth: psig @ 3194.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 18:27:47 End Time: 22:42:27

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/8" bl
30-ISIP-no bl
10-FFP-no bl, pulled tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51512 **DST#: 2**

Test Start: 2012.12.15 @ 18:20:20

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:54:00
Time Test Ended: 22:42:59

Test Type: Conventional Straddle (Reset)
Tester: Ray Schw ager
Unit No: 42

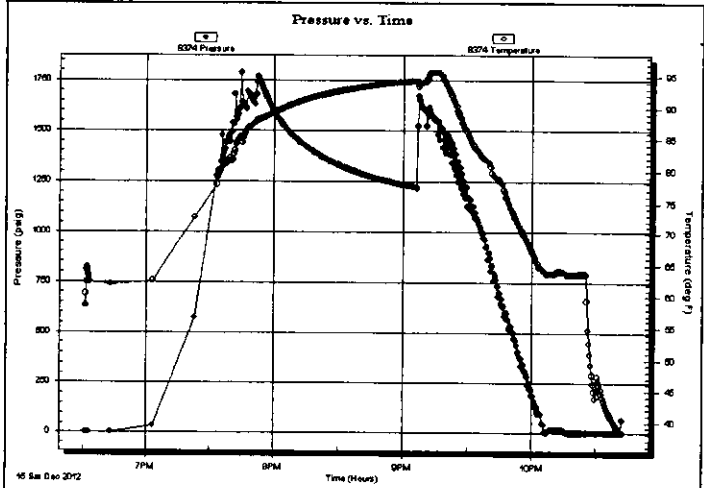
Interval: 3190.00 ft (KB) To 3236.00 ft (KB) (TVD)
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1893.00 ft (KB)
1885.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8374 **Below (Straddle)**
Press@RunDepth: psig @ 3252.00 ft (KB)
Start Date: 2012.12.15 End Date: 2012.12.15
Start Time: 18:31:00 End Time: 22:42:55

Capacity: 8000.00 psig
Last Calib.: 2012.12.15
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/8" bl
30-ISIP-no bl
10-FFP-no bl, pulled tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

* 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 Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Downing

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51512 **DST#: 2**

Test Start: 2012.12.15 @ 18:20:20

Tool Information

Drill Pipe:	Length:	3155.00 ft	Diameter:	3.80 inches	Volume:	44.26 bbl	Tool Weight:		2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		65000.00 lb
					Total Volume:	44.41 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight:	Initial	53000.00 lb
Depth to Top Packer:		3190.00 ft						Final	53000.00 lb
Depth to Bottom Packer:		3236.00 ft							
Interval betw een Packers:		46.00 ft							
Tool Length:		369.00 ft							
Number of Packers:		3	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3170.00		
Shut In Tool	5.00			3175.00		
Hydraulic tool	5.00			3180.00		
Packer	5.00			3185.00	21.00	Bottom Of Top Packer
Packer	5.00			3190.00		
Stubb	1.00			3191.00		
Perforations	3.00			3194.00		
Recorder	0.00	8369	Inside	3194.00		
Recorder	0.00	8700	Outside	3194.00		
Blank Spacing	33.00			3227.00		
Perforations	5.00			3232.00		
Blank Off Sub	1.00			3233.00		
Blank Spacing	3.00			3236.00	46.00	Tool Interval
Packer	5.00			3241.00		
Stubb	1.00			3242.00		
Perforations	10.00			3252.00		
Recorder	0.00	8374	Below	3252.00		
Blank Spacing	283.00			3535.00		
Bullnose	3.00			3538.00	302.00	Bottom Packers & Anchor
Total Tool Length:	**369.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: AL Dow ning

26-14s-16w Ellis,KS

MWG #3-26

Job Ticket: 51512 **DST#: 2**

Test Start: 2012.12.15 @ 18:20:20

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.56 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

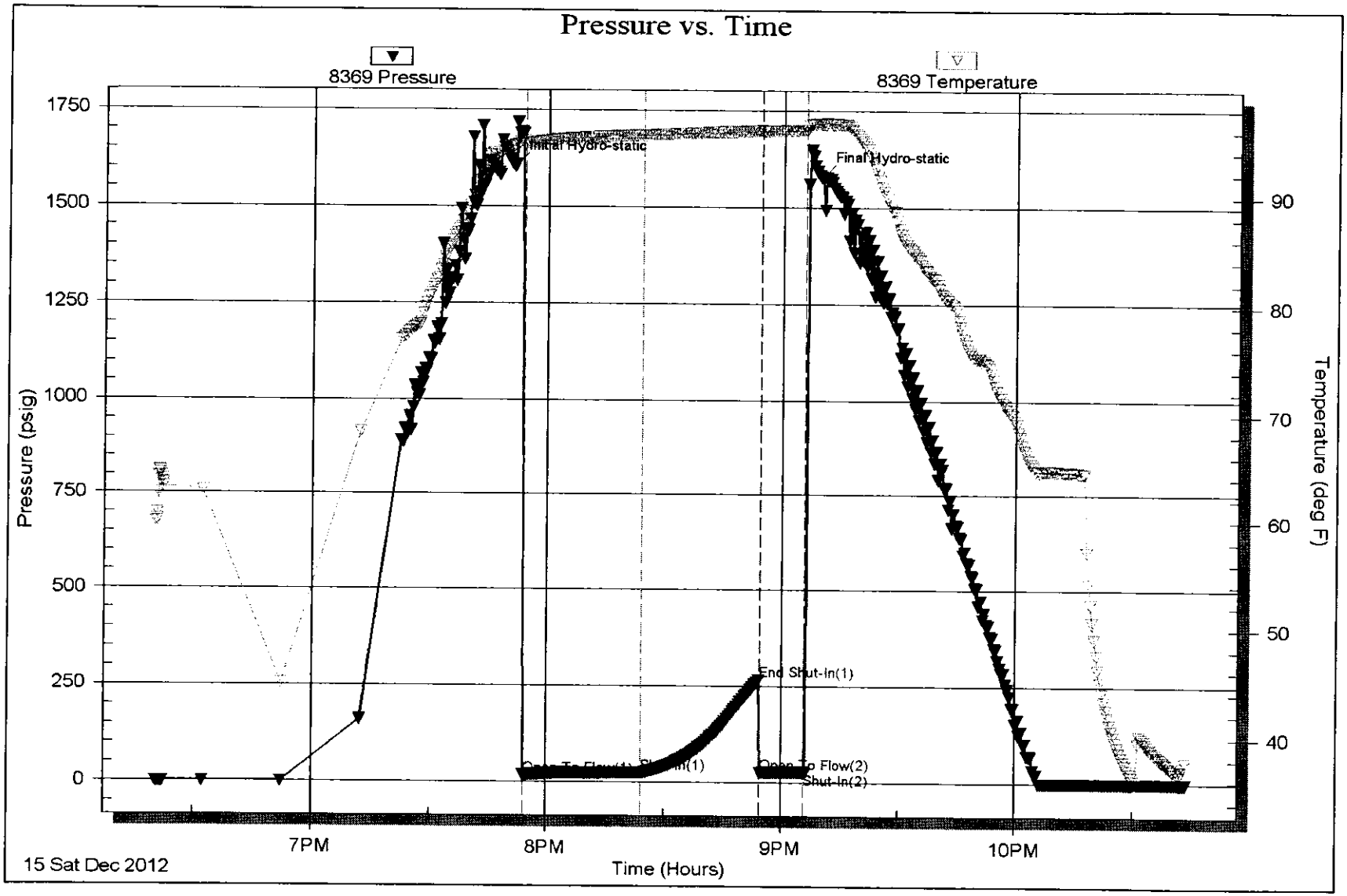
Total Length: 10.00 ft Total Volume: 0.049 bbl

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

Laboratory Name: Laboratory Location:

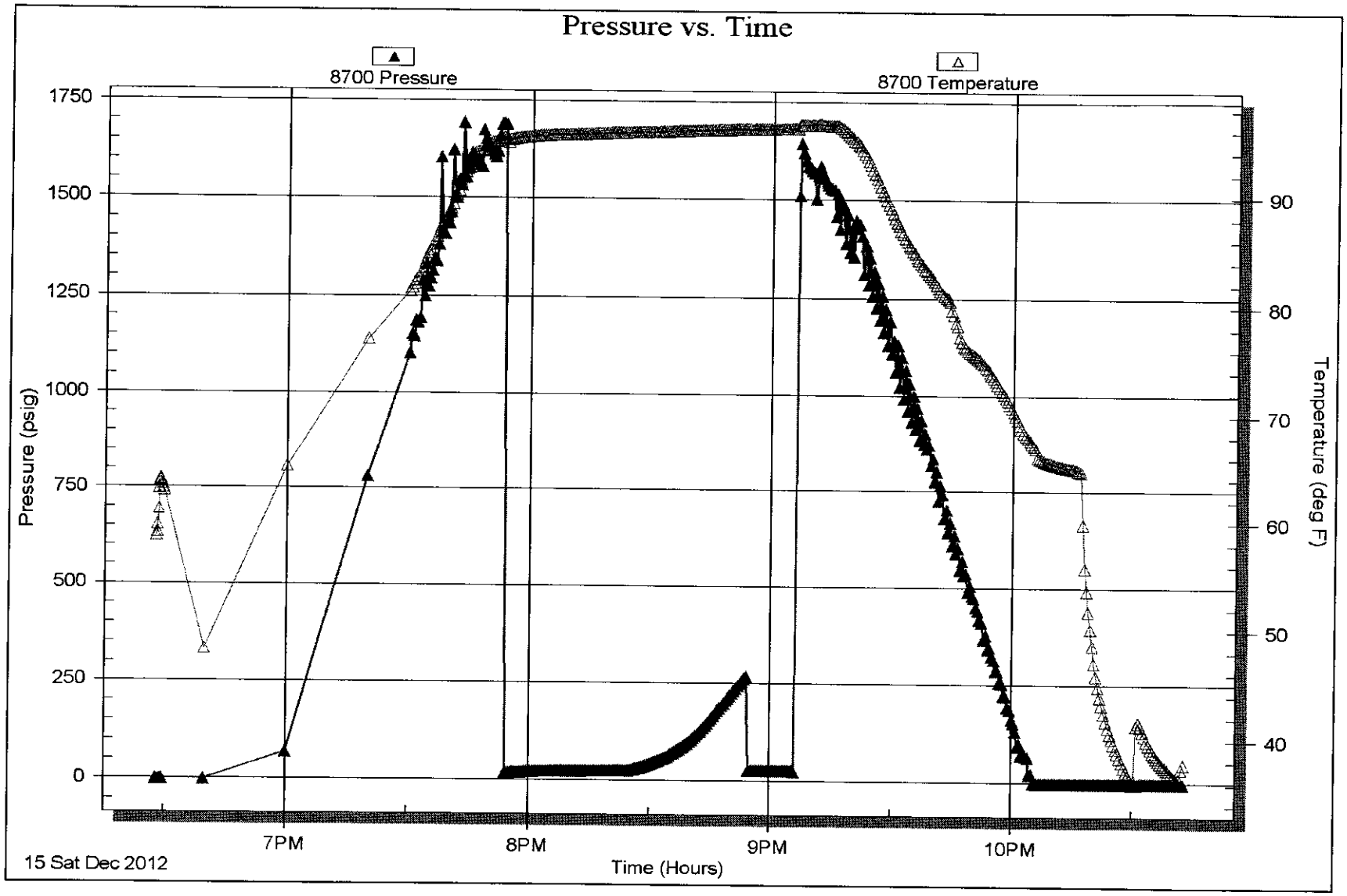
Recovery Comments:

Serial #: 8369 **Inside** Downing-Nelson Oil Co Inc MWG #3-26 DST Test Number: 2



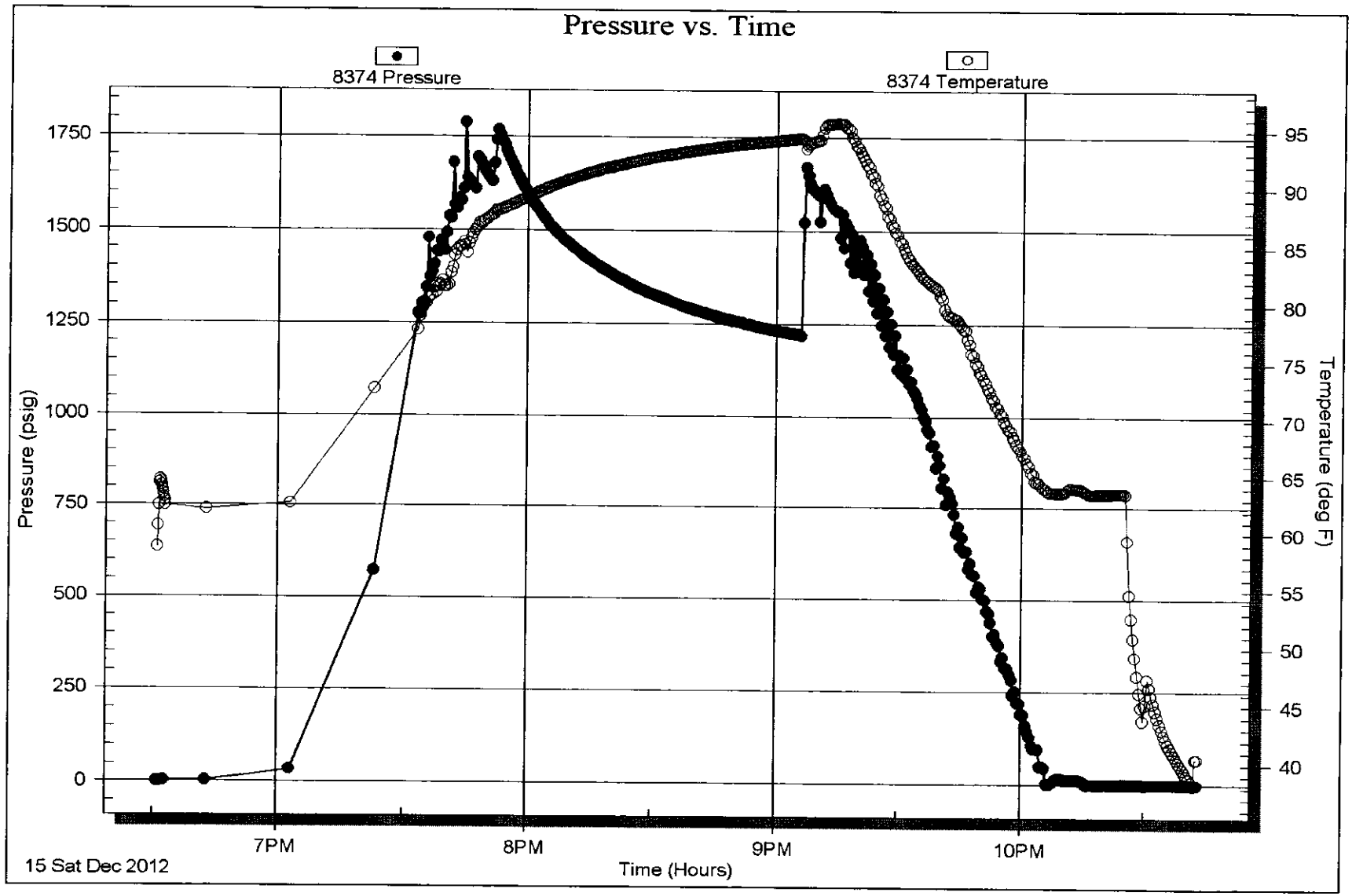
Trilobite Testing, Inc Ref. No: 51512 Printed: 2012.12.18 @ 13:35:57

Serial #: 8700 **Outside** Downing-Nelson Oil Co Inc MWG #3-26 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 51512 Printed: 2012.12.18 @ 13:35:57

Serial #: 8374 Below (Straddle) Ring-Nelson Oil Co Inc MWG #3-26 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 51512 Printed: 2012.12.18 @ 13:35:58

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51511

Well Name & No. MWG #3-26 Test No. 1 Date 12-15-12

Company Downing-Nelson Oil Co Inc Elevation 1893 KB 1885 GL

Address Po Box 1019 Hays, Ks 67601

Co. Rep / Geo. AL Downing Rig Discovery rig 2

Location: Sec. 26 Twp. 14S Rge. 16W Co. Ellis State Ks

Interval Tested 3365-3422 Zone Tested Arbuckle

Anchor Length 57 Drill Pipe Run 3342 Mud Wt. 9.2

Top Packer Depth 3365-3360 Drill Collars Run 30 Vis 48

Bottom Packer Depth 3422 Wt. Pipe Run — WL 9.6

Total Depth 3532 Chlorides 3000 ppm System LCM 2#

Blow Description IFP - Weak Blow thru-out ½" To 1" Blow
ISIP - NO Blow
FFP - NO Blow
FSIP - NO Blow

Rec 35	Feet of SOCM	%gas	1 %oil	%water 99	%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 30 BHT 97 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	1705	☑ Test 1150	T-On Location 1215
(B) First Initial Flow	25	☐ Jars	T-Started 1240
(C) First Final Flow	33	☐ Safety Joint	T-Open 1425
(D) Initial Shut-In	400	☐ Circ Sub	T-Pulled 1625
(E) Second Initial Flow	35	☐ Hourly Standby	T-Out 1754
(F) Second Final Flow	37	☑ Mileage 32 RT 49.60	Comments
(G) Final Shut-In	285	☐ Sampler	
(H) Final Hydrostatic	1660	☑ Straddle 600	☐ Ruined Shale Packer
		☐ Shale Packer	☐ Ruined Packer
Initial Open	30	☐ Extra Packer	☐ Extra Copies
Initial Shut-In	30	☐ Extra Recorder	Sub Total 0
Final Flow	30	☐ Day Standby	Total 1799.60
Final Shut-In	30	☐ Accessibility	MP/DST Disc't
		Sub Total 1799.60	

Approved By Our Representative RAY Schwager Thank you

Trilobite Testing Inc. shall not be liable for damages 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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51512

Well Name & No. MWG #3-26 Test No. 2 Date 12-15-12

Company Downing-Nelson Oil Co Inc Elevation 1893 KB 1885 GL

Address PO Box 1019 Hays KS 67601

Co. Rep / Geo. AL Downing Rig Discovery rig 2

Location: Sec. 26 Twp. 14S Rge. 16W Co. Ellis State KS

Interval Tested 3190-3236 Zone Tested LKC

Anchor Length 46 Drill Pipe Run 3155 Mud Wt. 9.2

Top Packer Depth 3190-3185 Drill Collars Run 30 Vis 48

Bottom Packer Depth 3236 Wt. Pipe Run — WL 9.6

Total Depth 3532 Chlorides 3000 ppm System LCM 2#

Blow Description IFP- Weak Blow 7 1/2 in-out 1/8" Blow

ISIP- No Blow

FFP- No Blow, pulled Tool

Rec 10	Feet of Mud	%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 10 BHT 96 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic 1603	☑ Test 1150	T-On Location 1755
(B) First Initial Flow 17	☐ Jars	T-Started 1820
(C) First Final Flow 24	☐ Safety Joint	T-Open 1955
(D) Initial Shut-In 264	☐ Circ Sub	T-Pulled 2105
(E) Second Initial Flow 26	☐ Hourly Standby	T-Out 2242
(F) Second Final Flow 27	☑ Mileage	Comments
(G) Final Shut-In —	☐ Sampler	
(H) Final Hydrostatic 1575	☑ Straddle 600	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 30	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0
Final Flow 10	☐ Day Standby	Total 1750
Final Shut-In	☐ Accessibility	MP/DST Disc't
	Sub Total 1750	

Approved By Our Representative Ray Schwager

Trilobite Testing Inc. shall not be liable for damages 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. 6224

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-11-12	26	14	16	Ellis	KS		6:15 P.m.

Location Walkers to Vorhis/K-18 E. 5 into

Lease MWG	Well No. 3-26	Owner 35	
Contractor Discovery #2		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			
Hole Size 12¼	T.D. 221	Charge To Downing/Nelson	
Csg. 8 5/8	Depth 220	Street	
Tbg. Size	Depth	City State	
Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg. 15'	Shoe Joint	Cement Amount Ordered 150 com 3% cc 2% gel	
Meas Line	Displace 13 BC		

EQUIPMENT

Pumptrk 16	No.	Cementer Cody	
		Helper	
Bulktrk	No.	Driver Travis	
		Driver	
Bulktrk 1	No.	Driver	
		Driver Billy	

JOB SERVICES & REMARKS

Remarks:		Common 150	
Rat Hole		Poz. Mix	
Mouse Hole		Gel. 3	
Centralizers		Calcium 5	
Baskets		Hulls	
D/V or Port Collar		Salt	
8 5/8 on bottom. Est. Circulation. Mix 150 sk & Displace. Cement Circulated!		Flowseal	
		Kol-Seal	
		Mud CLR 48	
		CFL-117 or CD110 CAF 38	
		Sand	
		Handling 158	
		Mileage	
		FLOAT EQUIPMENT	
		Guide Shoe	
		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	
		Pumptrk Charge Surface	
		Mileage 16	
		Tax	
		Discount	
X Signature		Total Charge	

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 6250

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-16-12	26	14	16	Ellis	KS	2:00 PM	6:30 PM

Location Walker 3 South Into

Lease ~~KS~~ MW9 Well No. 3-26

Owner

Contractor Discovery 2

Type Job plug

Hole Size 7 7/8 T.D. 3534

Csg. Depth 3430

Tbg. Size Drill pipe Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

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.

Charge To Downing - Nelson

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 225 60/40 4% gel 1/4 Flow

EQUIPMENT

Pumptrk 5	No.	Cementer	
		Helper	Matt
Bulktrk 8	No.	Driver	
		Driver	Brett
Bulktrk PU	No.	Driver	
		Driver	Doug

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 SX

Mouse Hole 15 SX

Centralizers

Baskets

D/V or Port Collar

1st 3430 ft 295X

2nd 980 ft 255X

3rd 410 ft 140 SX

4th 40 ft 10 SX

Common	135
Poz. Mix	90
Gel.	8
Calcium	
Hulls	
Salt	
Flowseal	50#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	233
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	plug
Mileage 16	
Tax	
Discount	
Total Charge	

X Signature Jerrel Wilson