KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1135558

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: Alan Downing
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 #:

04/02/2013	04/07/2013	04/08/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26465-00-00
Spot Description:
E2 - NW - NE - NE Sec. 14 Twp. 13 S. R. 19 [ ] East [x] West
330 Feet from [x] North / [ ] South Line of Section
700 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[x] NE [ ] NW [ ] SE [ ] SW
County: Ellis
Lease Name: Diana Pfeifer Well #: 1-14
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2077 Kelly Bushing: 2085
Total Depth: 3793 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 221 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: 22000 ppm Fluid volume: 160 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Blackhawk Production Company
Lease Name: Brull #2 (SWD) License #: 32504
Quarter NW Sec. 30 Twp. 14 S. R. 18 [ ] East [x] West
County: Ellis Permit #: D26232

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**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** Deanna Garrison **Date:** 04/26/2013

Side Two

[redacted] 1135558

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Diana Pfeifer Well #: 1-14

Sec. 14 Twp. 13 S. R. 19 ☐ 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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No
Electric Log Run ☑ Yes ☐ No
Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

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	220.66	Common	150	2% Gel & 3% CC

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 *(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	Diana Pfeifer 1-14
Doc ID	1135558

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Density/Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Diana Pfeifer 1-14
Doc ID	1135558

Tops

Name	Top	Datum
Top Anhydrite	1386'	+701
Base Anhydrite	1426'	+657
Topeka	3106'	-1021
Heebner	3344'	-1259
Toronto	3364'	-1279
LKC	3389'	-1304
BKC	3632'	-1547
Arbuckle	3703'	-1618

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 6498

Cell 785-324-1041

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 4-2-13	14	13	19	ELLIS	KANSAS		7:45pm

Location HAYS TO FEEDLOT RD - 5W - 1S - W/INTO

Lease DIANA PFEIFER Well No. #1-14 Owner DOWNING & NELSON

Contractor DISCOVERY #3

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 12 1/4" T.D. 221'

Charge To DOWNING & NELSON

Csg. 8 5/8" Depth 221'

Street P.O. Box 1019

Tbg. Size Depth

City Hays State KS, 67601

Tool Depth

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

Cement Left in Csg. Shoe Joint 15'

Cement Amount Ordered 150 com 3% cc - 2% gel

Meas Line Displace 13 BBLS

EQUIPMENT

Pumptrk #16 No. Cementer / Helper TRAVIS

Bulktrk #13 No. Driver / Driver CLAYTON

Bulktrk P/U No. Driver / Driver CISCO

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

CEMENT ___ CIRCULATE!

THANK YOU!

X Signature

Common	150
Poz. Mix	
Gel.	3
Calcium	5
Hulls	
Salt	
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	11
Tax	
Discount	
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. 6755

Cell 785-324-1041

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 4-8-13	14	13	19	ELLIS	KANSAS		4:30 pm

Location HAYS TO FEEDLOT - W TO 210 - S 1½ - W/INTO

Lease DIANA PFEIFER Well No. #1-14 Owner DOWNING & NELSON

Contractor D.D #3

Type Job P.T.A

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.

Hole Size 7⅞" T.D. 3,793

Csg. 4½" Depth

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

Charge To DOWNING & NELSON

Street P.O. BOX 1019

City HAYS State KS, 67601

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

Cement Amount Ordered 270 60/40 2% GEL ¼ LB FLOSEAL

EQUIPMENT

Pumptrk #116 No. Cementer Helper TRAVIS H.

Bulktrk #10 No. Driver Driver LONNIE S.

Bulktrk P/U No. Driver Driver CISCO A.

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 SKS

Mouse Hole 15 SKS

Centralizers

Baskets

D/V or Port Collar

1ST @ 3,680	50 SKS
2ND @ 1,410	25 SKS
3RD @ 680	100 SKS
4TH @ 270	40 SKS
5TH @ 40	10 SKS
RAT HOLE	30 SKS
MOUSE HOLE	15 SKS
TOTAL -	270 SKS

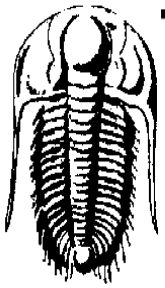
THANK YOU!

X Signature

Common	162
Poz. Mix	108
Gel.	10
Calcium	
Hulls	
Salt	
Flowseal	67 #
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	280
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	plug
Mileage	12
Tax	
Discount	
Total Charge	



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Al Downing

Diana Pfeifer #1-14

14-13s-19w Ellis,KS

Start Date: 2013.04.06 @ 07:30:20
End Date: 2013.04.06 @ 13:05:14
Job Ticket #: 52557 DST #: 1

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

Printed: 2013.04.12 @ 09:28:17

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52557 **DST#: 1**

Test Start: 2013.04.06 @ 07:30:20

GENERAL INFORMATION:

Formation: **LKC C-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:34:00
Time Test Ended: 13:05:14

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

Interval: 3404.00 ft (KB) To 3450.00 ft (KB) (TVD)
Total Depth: 3450.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

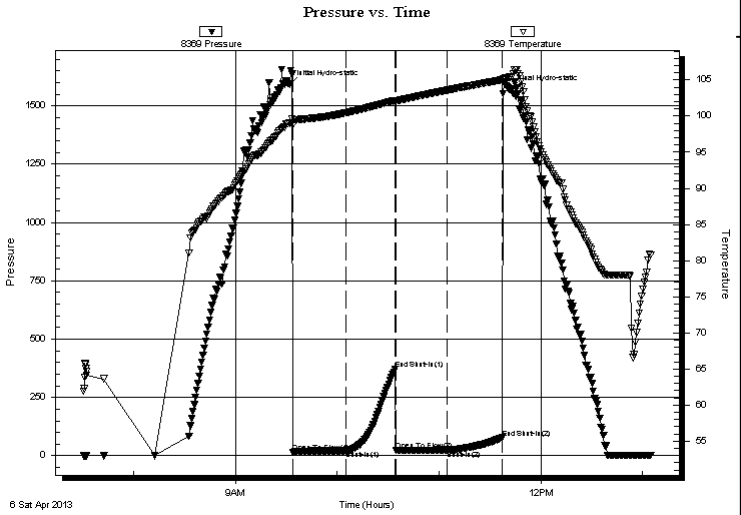
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**

Press@RunDepth: 24.99 psig @ 3414.00 ft (KB)
Start Date: 2013.04.06 End Date: 2013.04.06
Start Time: 07:30:20 End Time: 13:05:14

Capacity: 8000.00 psig
Last Calib.: 2013.04.06
Time On Btm: 2013.04.06 @ 09:31:45
Time Off Btm: 2013.04.06 @ 11:42:00

TEST COMMENT: 30-IFP-wk surface bl thru-out
30-ISIP-no bl
30-FFP-wk surface bl thru-out
30-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1591.30	99.02	Initial Hydro-static
3	15.60	98.83	Open To Flow (1)
33	22.12	100.45	Shut-In(1)
63	371.24	102.19	End Shut-In(1)
63	23.05	102.11	Open To Flow (2)
93	24.99	103.59	Shut-In(2)
126	76.74	105.02	End Shut-In(2)
131	1570.68	105.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w/show of oil	0.10

Gas Rates

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

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52557 **DST#: 1**

Test Start: 2013.04.06 @ 07:30:20

GENERAL INFORMATION:

Formation: **LKC C-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:34:00
Time Test Ended: 13:05:14

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

Interval: 3404.00 ft (KB) To 3450.00 ft (KB) (TVD)
Total Depth: 3450.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

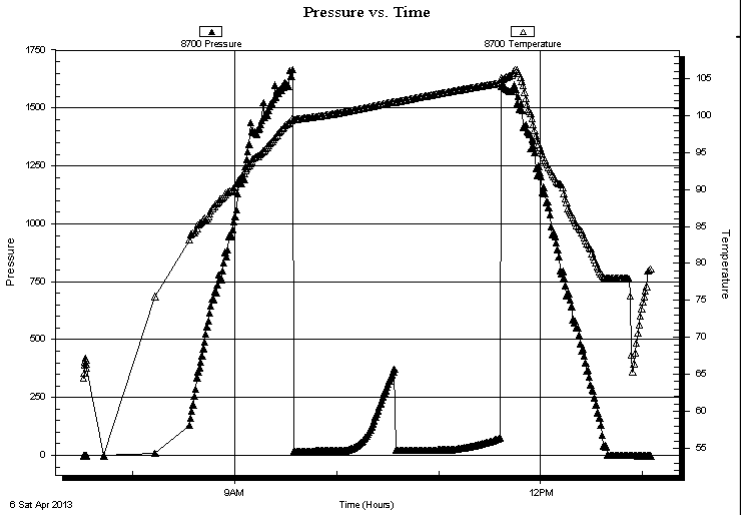
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3414.00 ft (KB)
Start Date: 2013.04.06 End Date: 2013.04.06
Start Time: 07:31:04 End Time: 13:04:43

Capacity: 8000.00 psig
Last Calib.: 2013.04.06
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-wk surface bl thru-out
30-ISIP-no bl
30-FFP-wk surface bl thru-out
30-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w/show of oil	0.10

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52557 **DST#: 1**

Test Start: 2013.04.06 @ 07:30:20

Tool Information

Drill Pipe:	Length:	3360.00 ft	Diameter:	3.80 inches	Volume:	47.13 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:		60000.00 lb
					Total Volume:	47.28 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		7.00 ft					String Weight:	Initial	52000.00 lb
Depth to Top Packer:		3404.00 ft						Final	52000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		46.00 ft							
Tool Length:		67.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3384.00		
Shut In Tool	5.00			3389.00		
Hydraulic tool	5.00			3394.00		
Packer	5.00			3399.00	21.00	Bottom Of Top Packer
Packer	5.00			3404.00		
Stubb	1.00			3405.00		
Perforations	9.00			3414.00		
Recorder	0.00	8369	Inside	3414.00		
Recorder	0.00	8700	Outside	3414.00		
Blank Spacing	33.00			3447.00		
Bullnose	3.00			3450.00	46.00	Bottom Packers & Anchor
Total Tool Length:	**67.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52557 **DST#: 1**

Test Start: 2013.04.06 @ 07:30:20

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:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.93 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

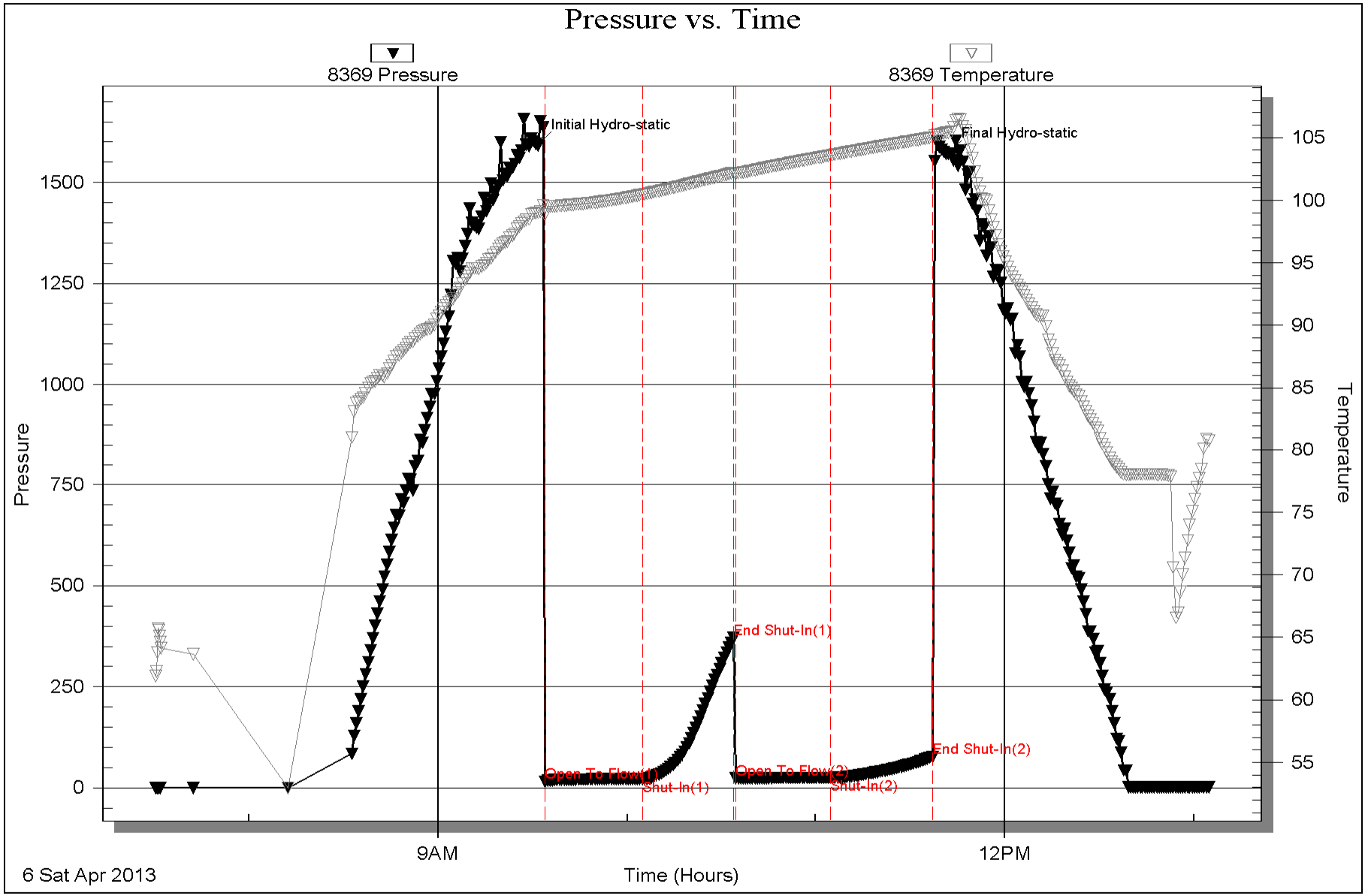
Recovery Table

Length ft	Description	Volume bbl
20.00	Mud w/show of oil	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

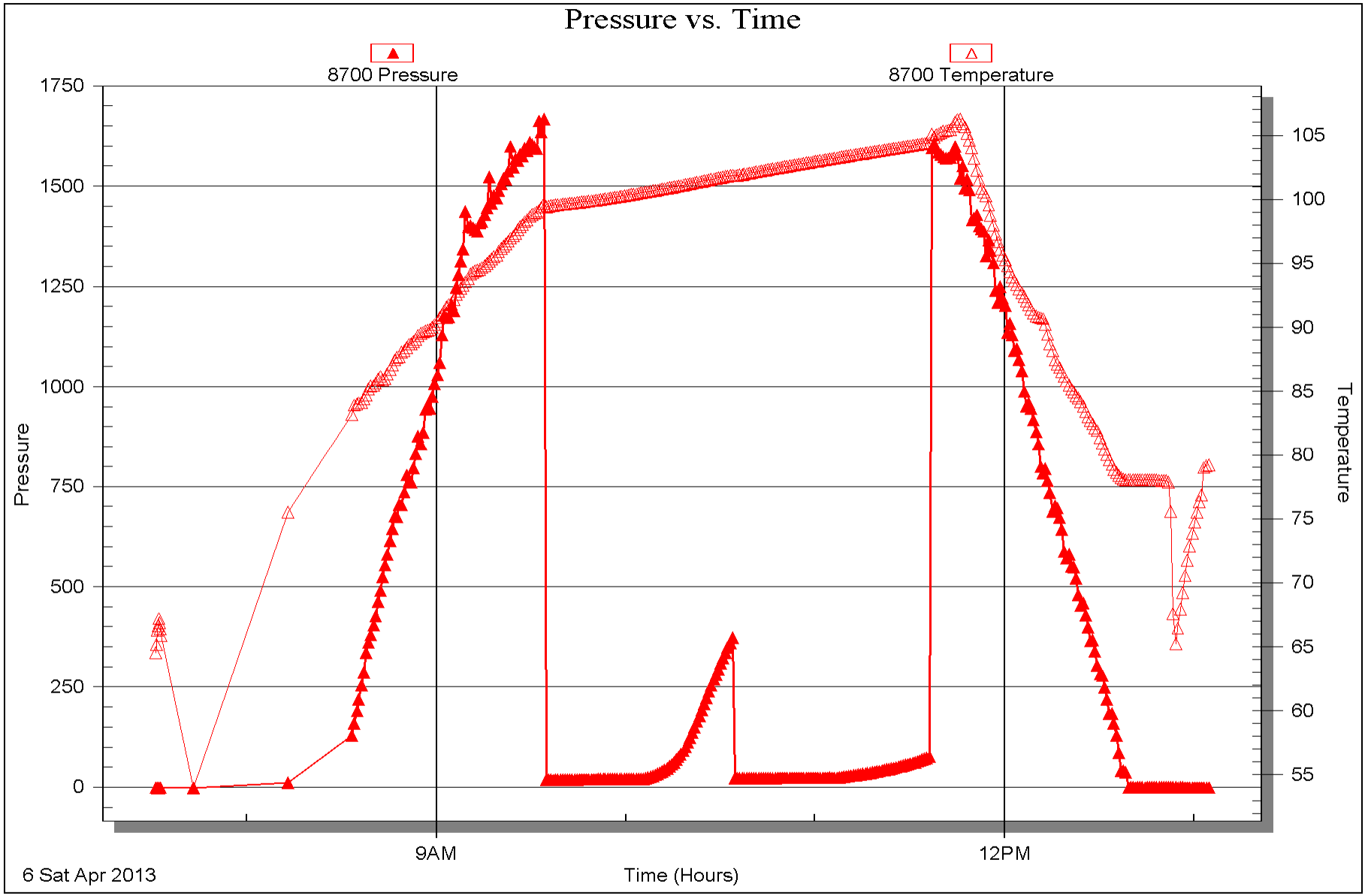
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 **Inside** Dow ning-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 1

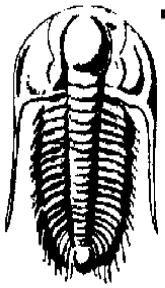


Trilobite Testing, Inc Ref. No: 52557 Printed: 2013.04.12 @ 09:28:19

Serial #: 8700 **Outside** Downing-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 52557 Printed: 2013.04.12 @ 09:28:20



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Al Downing

Diana Pfeifer #1-14

14-13s-19w Ellis,KS

Start Date: 2013.04.07 @ 01:45:05
End Date: 2013.04.07 @ 06:33:14
Job Ticket #: 52558 DST #: 2

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

Printed: 2013.04.12 @ 09:26:28

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Dow ning

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52558 **DST#: 2**

Test Start: 2013.04.07 @ 01:45:05

GENERAL INFORMATION:

Formation: **LKC H-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:42:45
Time Test Ended: 06:33:14

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

Interval: 3502.00 ft (KB) To 3582.00 ft (KB) (TVD)
Total Depth: 3482.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

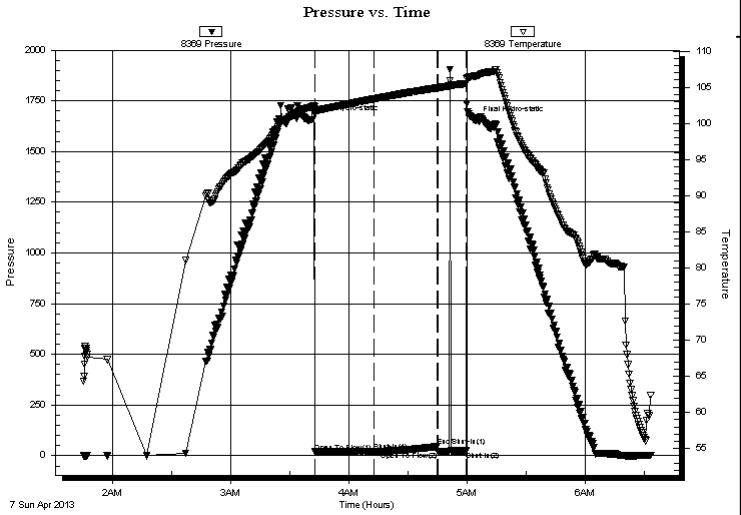
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**

Press@RunDepth: 21.45 psig @ 3514.00 ft (KB)
Start Date: 2013.04.07 End Date: 2013.04.07
Start Time: 01:45:05 End Time: 06:33:14

Capacity: 8000.00 psig
Last Calib.: 2013.04.07
Time On Btm: 2013.04.07 @ 03:40:00
Time Off Btm: 2013.04.07 @ 05:04:30

TEST COMMENT: 30-IFP-w k surface bl thru-out
30-ISIP-no bl
15-FFP-no bl flushed tool
pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1655.96	102.19	Initial Hydro-static
3	18.69	101.39	Open To Flow (1)
33	21.45	103.39	Shut-In(1)
65	45.16	104.92	End Shut-In(1)
65	21.42	104.92	Open To Flow (2)
80	23.94	105.53	Shut-In(2)
85	1652.17	106.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w /show of oil	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

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52558 **DST#: 2**

Test Start: 2013.04.07 @ 01:45:05

GENERAL INFORMATION:

Formation: **LKC H-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:42:45
Time Test Ended: 06:33:14

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

Interval: 3502.00 ft (KB) To 3582.00 ft (KB) (TVD)
Total Depth: 3482.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

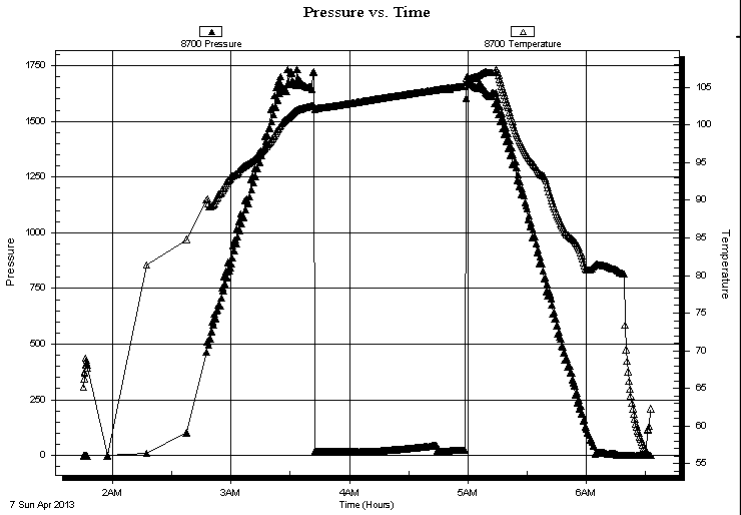
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3514.00 ft (KB)
Start Date: 2013.04.07 End Date: 2013.04.07
Start Time: 01:45:25 End Time: 06:32:34

Capacity: 8000.00 psig
Last Calib.: 2013.04.07
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k surface bl thru-out
30-ISIP-no bl
15-FFP-no bl flushed tool
pulled tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w /show of oil	0.05

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Dow ning

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52558 **DST#: 2**

Test Start: 2013.04.07 @ 01:45:05

Tool Information

Drill Pipe:	Length:	3482.00 ft	Diameter:	3.80 inches	Volume:	48.84 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:	48.99 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		31.00 ft					String Weight:	Initial	52000.00 lb
Depth to Top Packer:		3502.00 ft						Final	52000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		80.00 ft							
Tool Length:		101.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3482.00		
Shut In Tool	5.00			3487.00		
Hydraulic tool	5.00			3492.00		
Packer	5.00			3497.00	21.00	Bottom Of Top Packer
Packer	5.00			3502.00		
Stubb	1.00			3503.00		
Perforations	11.00			3514.00		
Recorder	0.00	8369	Inside	3514.00		
Recorder	0.00	8700	Outside	3514.00		
Blank Spacing	65.00			3579.00		
Bullnose	3.00			3582.00	80.00	Bottom Packers & Anchor
Total Tool Length:	**101.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52558 **DST#: 2**

Test Start: 2013.04.07 @ 01:45:05

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:	7.94 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

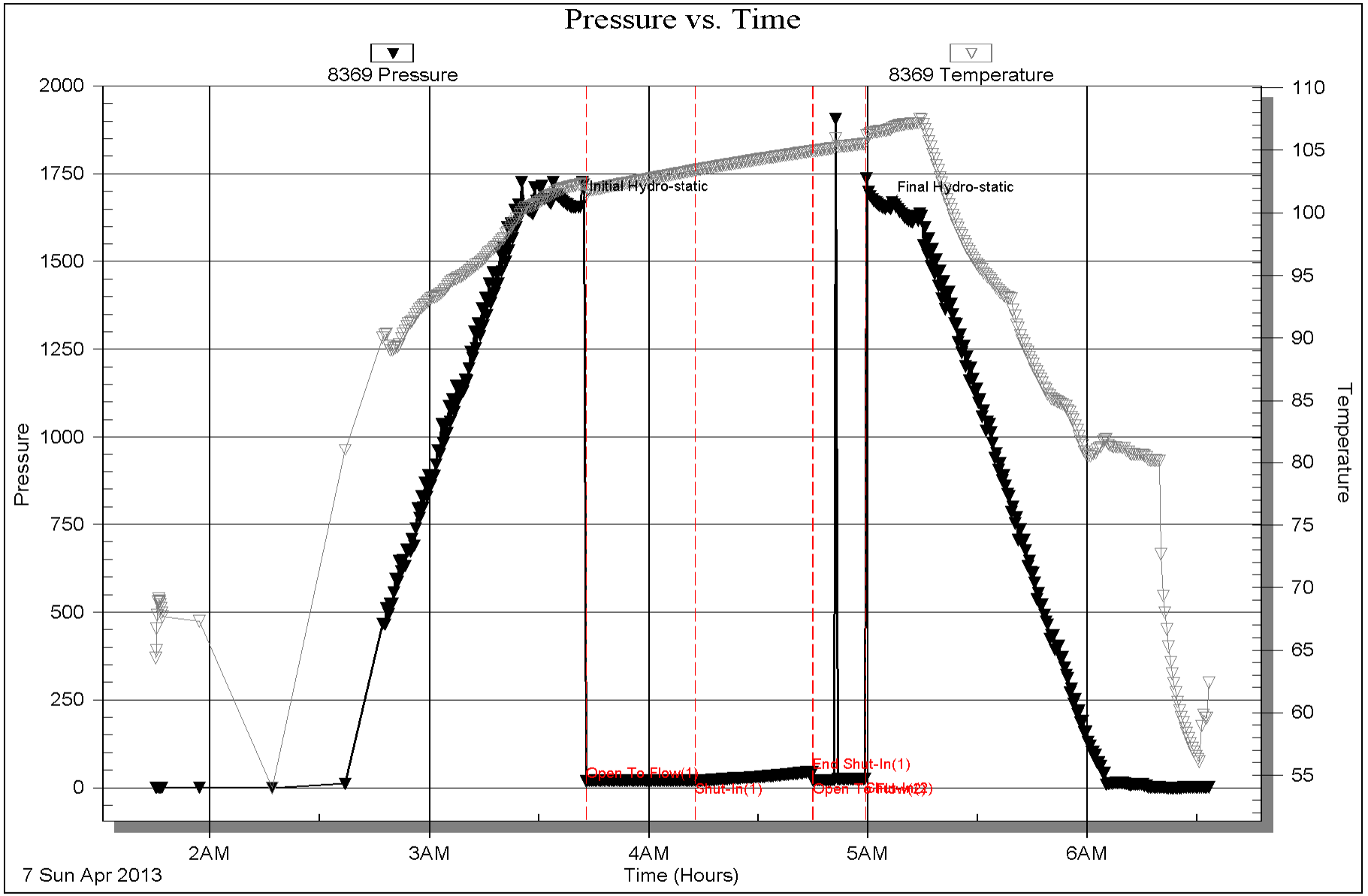
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w/show of oil	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

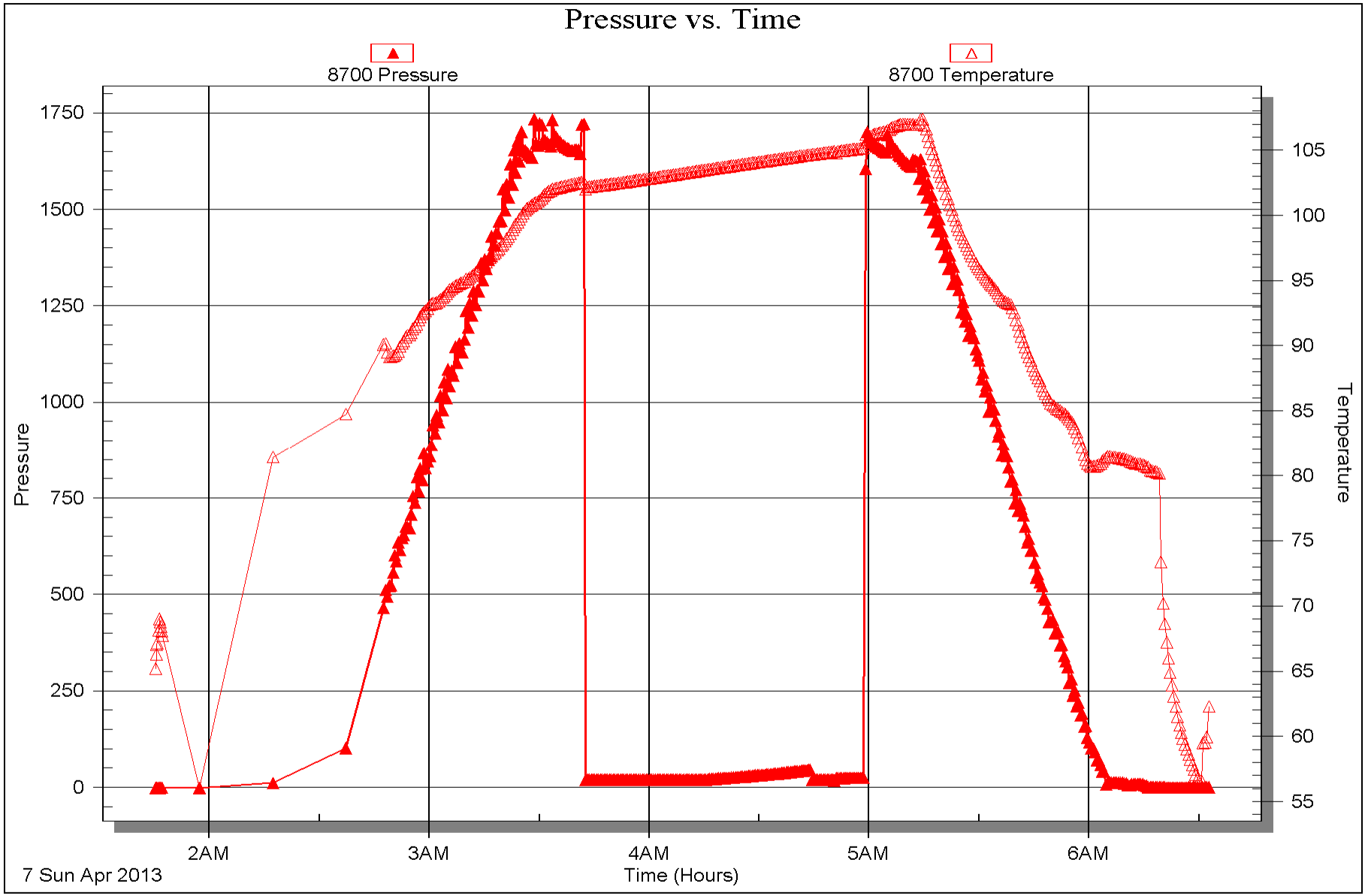
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 **Inside** Dow ning-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 2

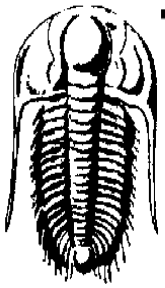


Trilobite Testing, Inc Ref. No: 52558 Printed: 2013.04.12 @ 09:26:31

Serial #: 8700 **Outside** Dow ning-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 52558 Printed: 2013.04.12 @ 09:26:31



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Al Downing

Diana Pfeifer #1-14

14-13s-19w Ellis,KS

Start Date: 2013.04.08 @ 04:55:39
End Date: 2013.04.08 @ 09:13:03
Job Ticket #: 52559 DST #: 3

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

Printed: 2013.04.12 @ 09:27:16

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52559 **DST#: 3**

Test Start: 2013.04.08 @ 04:55:39

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:14:19
Time Test Ended: 09:13:03

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

Interval: 3707.00 ft (KB) To 3727.00 ft (KB) (TVD)
Total Depth: 3793.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

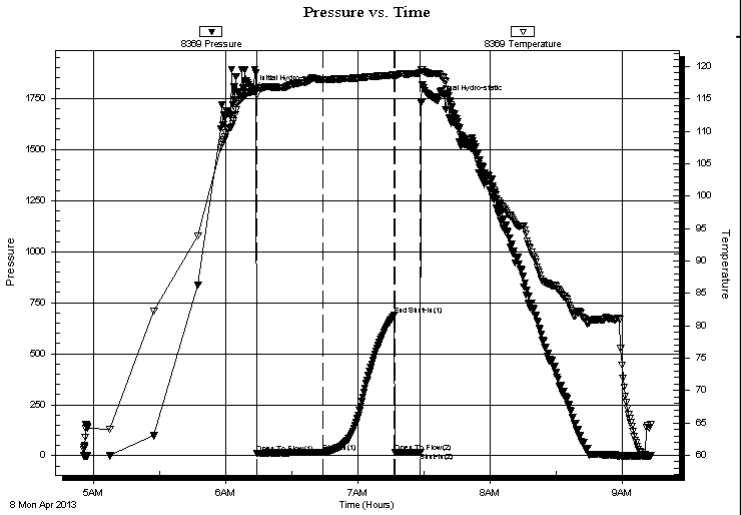
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**

Press@RunDepth: 16.53 psig @ 3708.00 ft (KB)
Start Date: 2013.04.08 End Date: 2013.04.08
Start Time: 04:55:39 End Time: 09:13:03

Capacity: 8000.00 psig
Last Calib.: 2013.04.08
Time On Btm: 2013.04.08 @ 06:12:19
Time Off Btm: 2013.04.08 @ 07:35:04

TEST COMMENT: 30-IFP-wk bl 1/4" bl
30-ISIP-no bl
15-FFP-no bl
pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1791.98	116.07	Initial Hydro-static
2	11.16	115.69	Open To Flow (1)
32	16.53	117.93	Shut-In(1)
64	687.34	118.66	End Shut-In(1)
65	17.96	118.47	Open To Flow (2)
76	18.46	119.02	Shut-In(2)
83	1746.54	118.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 1%O99%M	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52559 **DST#: 3**

Test Start: 2013.04.08 @ 04:55:39

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:14:19
Time Test Ended: 09:13:03

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

Interval: 3707.00 ft (KB) To 3727.00 ft (KB) (TVD)
Total Depth: 3793.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

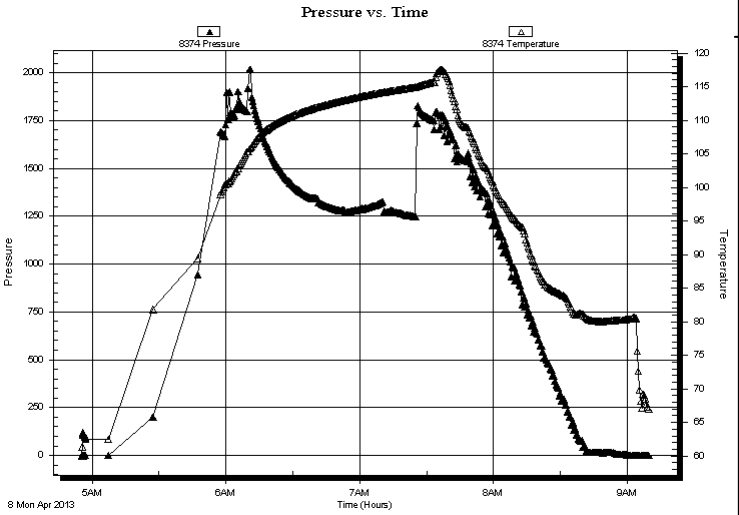
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8374 **Below (Straddle)**

Press@RunDepth: psig @ 3734.00 ft (KB)
Start Date: 2013.04.08 End Date: 2013.04.08
Start Time: 04:55:20 End Time: 09:09:45

Capacity: 8000.00 psig
Last Calib.: 2013.04.08
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-wk bl 1/4" bl
30-ISIP-no bl
15-FFP-no bl
pulled tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 1%O99%M	0.02

* 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

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52559 **DST#: 3**

Test Start: 2013.04.08 @ 04:55:39

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:14:19
Time Test Ended: 09:13:03

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

Interval: 3707.00 ft (KB) To 3727.00 ft (KB) (TVD)
Total Depth: 3793.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

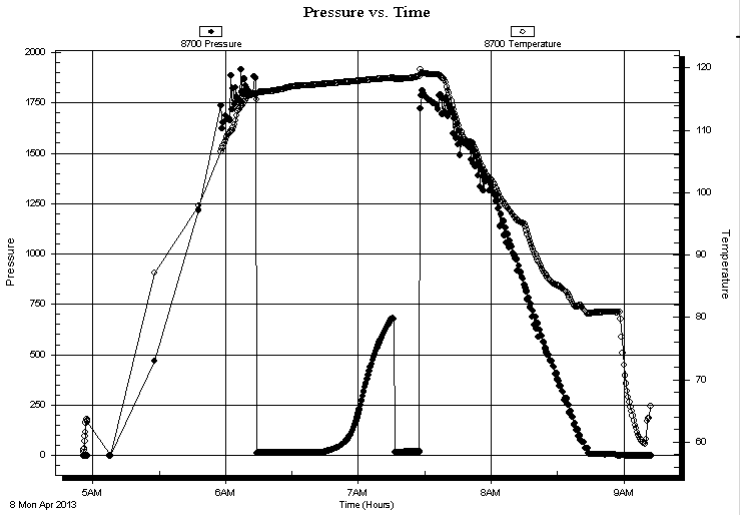
Reference Elevations: 2085.00 ft (KB)
2077.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3708.00 ft (KB)
Start Date: 2013.04.08 End Date: 2013.04.08
Start Time: 04:55:52 End Time: 09:12:16

Capacity: 8000.00 psig
Last Calib.: 2013.04.08
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k bl 1/4" bl
30-ISIP-no bl
15-FFP-no bl
pulled tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 1%O99%M	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52559 **DST#: 3**

Test Start: 2013.04.08 @ 04:55:39

Tool Information

Drill Pipe:	Length:	3675.00 ft	Diameter:	3.80 inches	Volume:	51.55 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:	51.70 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		19.00 ft					String Weight:	Initial	57000.00 lb
Depth to Top Packer:		3707.00 ft						Final	57000.00 lb
Depth to Bottom Packer:		3727.00 ft							
Interval between Packers:		20.00 ft							
Tool Length:		111.00 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			3687.00		
Shut In Tool	5.00			3692.00		
Hydraulic tool	5.00			3697.00		
Packer	5.00			3702.00	21.00	Bottom Of Top Packer
Packer	5.00			3707.00		
Stubb	1.00			3708.00		
Recorder	0.00	8369	Inside	3708.00		
Recorder	0.00	8700	Outside	3708.00		
Perforations	15.00			3723.00		
Blank Off Sub	1.00			3724.00		
Blank Spacing	3.00			3727.00	20.00	Tool Interval
Packer	5.00			3732.00		
Stubb	1.00			3733.00		
Perforations	1.00			3734.00		
Recorder	0.00	8374	Below	3734.00		
Blank Spacing	63.00			3797.00	70.00	Bottom Packers & Anchor
Total Tool Length:	**111.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Al Downing

14-13s-19w Ellis,KS

Diana Pfeifer #1-14

Job Ticket: 52559 **DST#: 3**

Test Start: 2013.04.08 @ 04:55:39

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:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.97 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

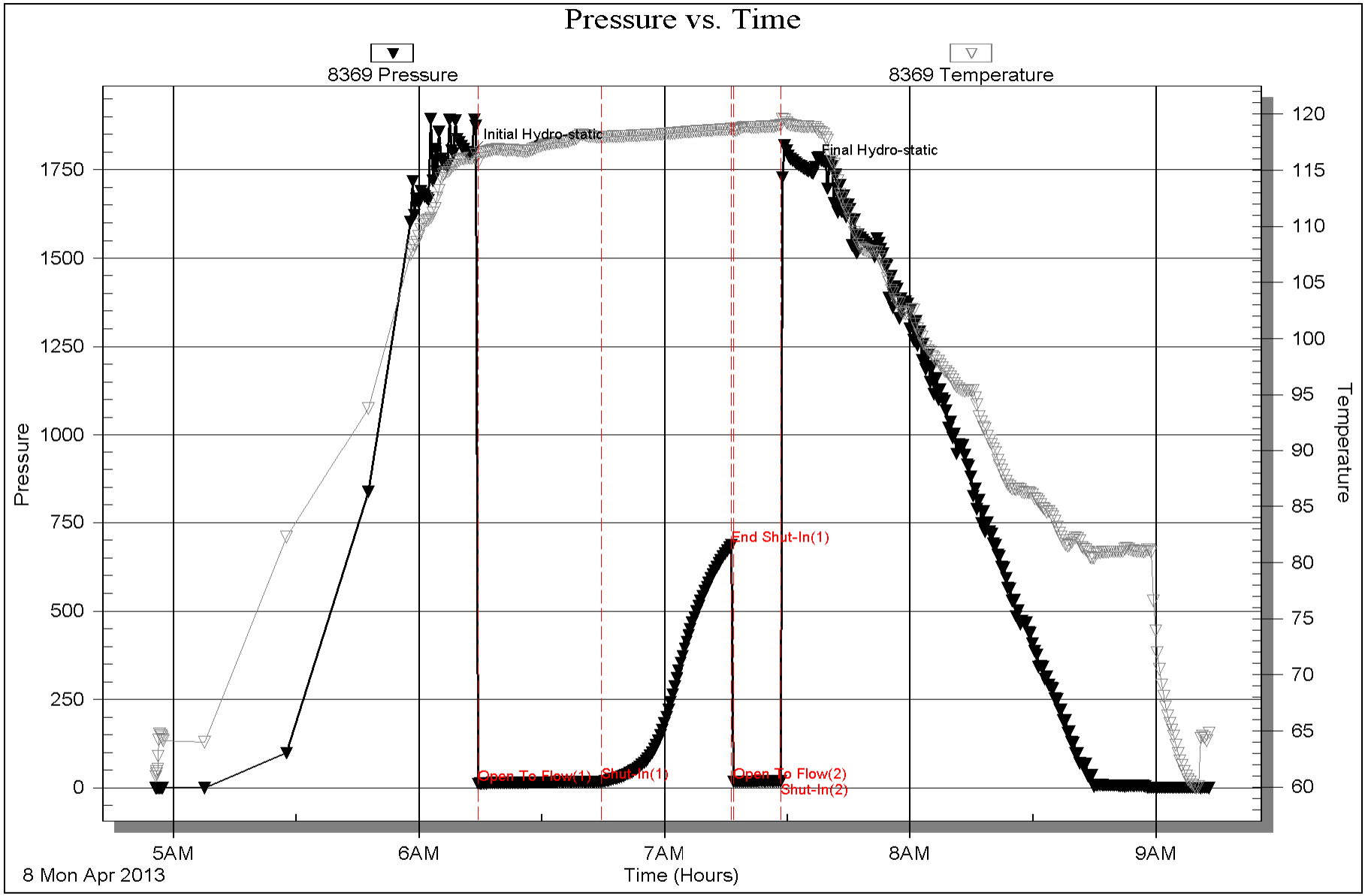
Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 1%O99%M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

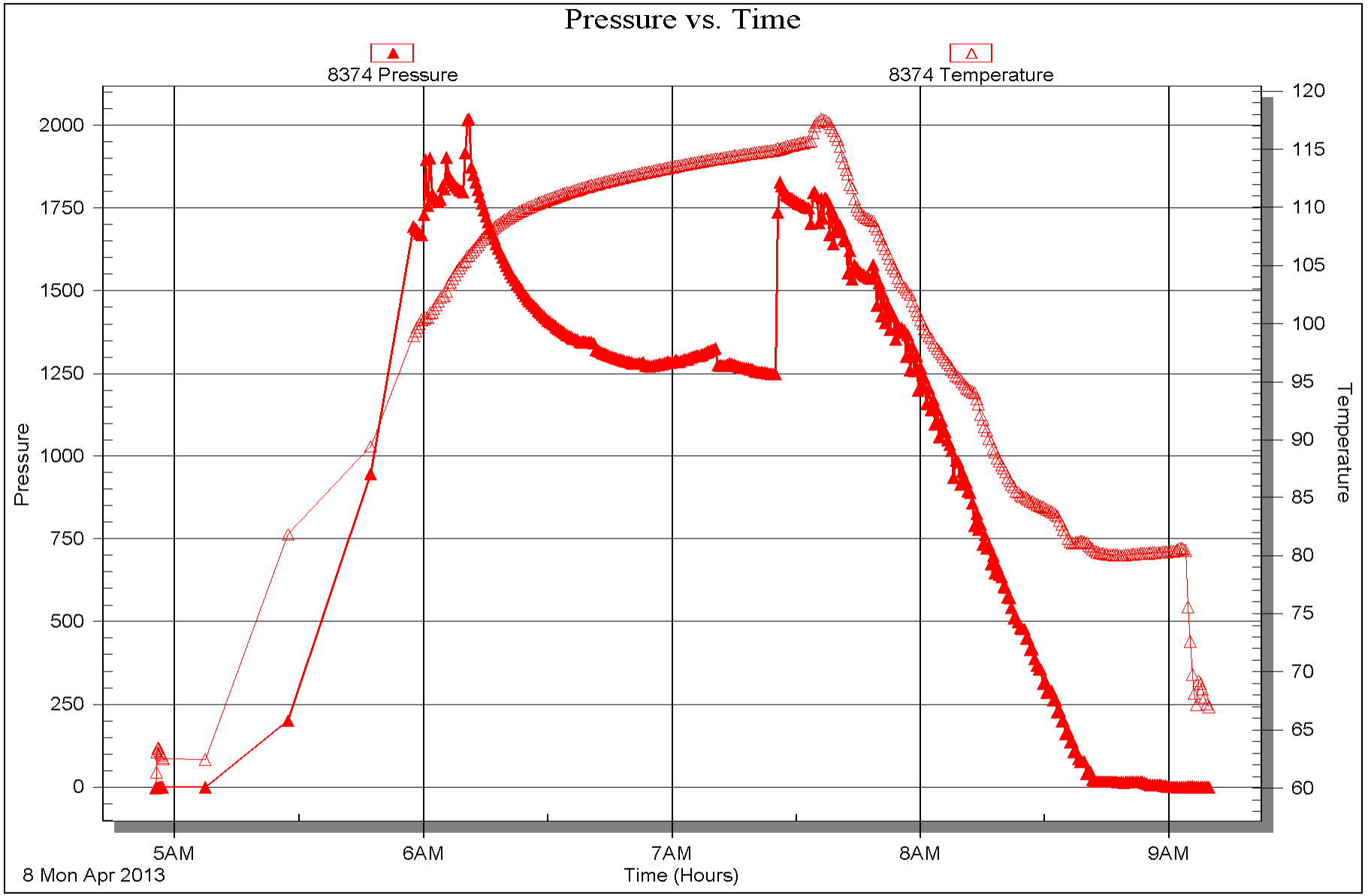
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 **Inside** Dow ning-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 3



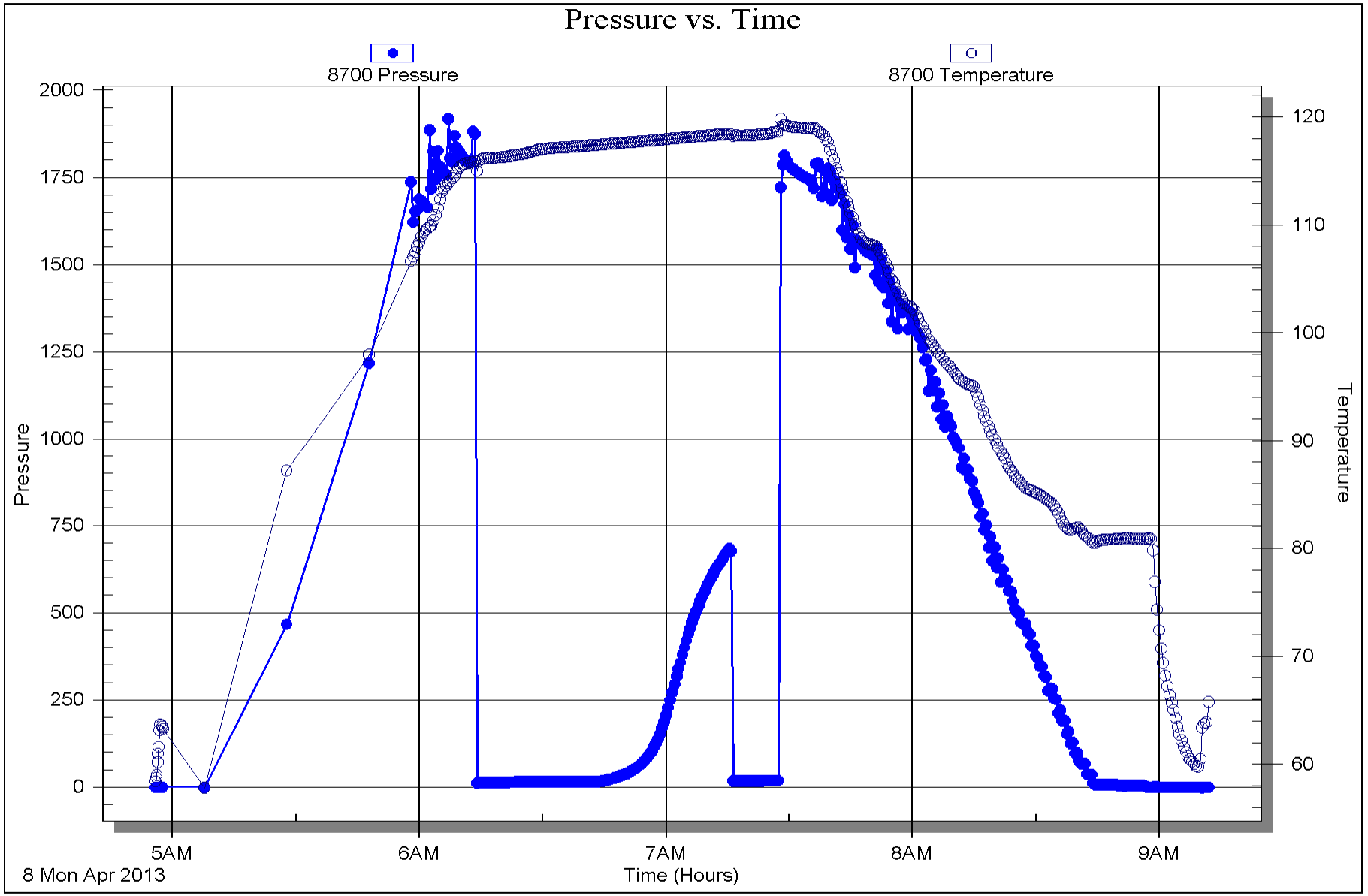
Trilobite Testing, Inc Ref. No: 52559 Printed: 2013.04.12 @ 09:27:19

Serial #: 8374 Below (Straddle) Dowling-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 52559 Printed: 2013.04.12 @ 09:27:20

Serial #: 8700 **Outside** Dow ning-Nelson Oil Co Inc Diana Pfeifer #1-14 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 52559 Printed: 2013.04.12 @ 09:27:21

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52557

Well Name & No. Diana Pfeifer #1-14 Test No. 1 Date 4-6-13

Company Downing-Nelson Oil Co Inc Elevation 2085 KB 2077 GL

Address PO Box 1019 Hays, Ks 67601

Co. Rep / Geo. AL Downing Rig Discovery rig 3

Location: Sec. 14 Twp. 13s Rge. 19w Co. Ellis State Ks

Interval Tested 3404-3450 Zone Tested LKC C-D

Anchor Length 46 Drill Pipe Run 3360 Mud Wt. 8.8

Top Packer Depth 3399 Drill Collars Run 30 Vis 54

Bottom Packer Depth 3404 Wt. Pipe Run — WL 8

Total Depth 3450 Chlorides 2000 ppm System LCM 1½#

Blow Description IFP- Weak surface Blow thru-out
ISIP - NO Blow
FFP - Weak surface Blow thru-out
FSIP - NO Blow

Rec 20	Feet of Mud w/show of oil	%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 20 BHT 105 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1591	☑ Test 1150	T-On Location 0620	
(B) First Initial Flow 15	☐ Jars	T-Started 0730	
(C) First Final Flow 22	☐ Safety Joint	T-Open 0935	
(D) Initial Shut-In 371	☐ Circ Sub	T-Pulled 1135	
(E) Second Initial Flow 23	☐ Hourly Standby	T-Out 1305	
(F) Second Final Flow 24	☑ Mileage 20RT 31	Comments	
(G) Final Shut-In 76	☐ Sampler		
(H) Final Hydrostatic 1570	☐ Straddle	☐ 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 1181	
Final Shut-In 30	☐ Accessibility	MP/DST Disc't	
	Sub Total 1181		

Approved By Our Representative Ray Schwager 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.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52558

Well Name & No. Diana Pfeifer #1-14 Test No. 2 Date 4-7-13

Company Downing-Nelson Oil Co Inc Elevation 2085 KB 2077 GL

Address PO Box 1019 Hays, Ks 67601

Co. Rep / Geo. AL Downing Rig Discovery rig 3

Location: Sec. 14 Twp. 13S Rge. 19W Co. Ellis State Ks

Interval Tested 3502-3582 Zone Tested LKC H-J

Anchor Length 80 Drill Pipe Run 3482 Mud Wt. 8.8

Top Packer Depth 3497 Drill Collars Run 30 Vis 63

Bottom Packer Depth 3502 Wt. Pipe Run — WL 8

Total Depth 3582 Chlorides 2000 ppm System LCM 1½#

Blow Description IFP - Weak surface Blow then-out
ISIP - NO Blow
FFP - NO Blow, flushed Tool, surged
Pulled Tool

Rec 10	Feet of Mud w/show of oil	%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 105 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1655	☑ Test 1150	T-On Location 0115
(B) First Initial Flow 18	☐ Jars	T-Started 0145
(C) First Final Flow 21	☐ Safety Joint	T-Open 0345
(D) Initial Shut-In 45	☐ Circ Sub	T-Pulled 0500
(E) Second Initial Flow 21	☐ Hourly Standby	T-Out 0633
(F) Second Final Flow 23	☑ Mileage 20RT 31	Comments
(G) Final Shut-In —	☐ Sampler	
(H) Final Hydrostatic 1652	☐ Straddle	☐ 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 15	☐ Day Standby	Total 1181
Final Shut-In —	☐ Accessibility	MP/DST Disc't
	Sub Total 1181	

Approved By Our Representative Ray Schwager 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.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52559

Well Name & No. Diana Pfeifer #1-14 Test No. 3 Date 4-8-13

Company Downing-Nelson Oil Co Inc Elevation 2085 KB 2077 GL

Address PO Box 1019 Hays, Ks 67601

Co. Rep / Geo. AL Downing Rig Discovery rig 3

Location: Sec. 14 Twp. 13S Rge. 19W Co. Ellis State Ks

Interval Tested 3707-3727 Zone Tested Arbuckle

Anchor Length 20 Drill Pipe Run 3675 Mud Wt. 9

Top Packer Depth 3707-3702 Drill Collars Run 30 Vis 62

Bottom Packer Depth 3727 Wt. Pipe Run — WL 8

Total Depth 3793 Chlorides 6000 ppm System LCM 1½#

Blow Description IFP - Weak Blow ¼" Blow
ISIP - No Blow
FFP - No Blow

Rec 5	Feet of 50CM	%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 — BHT 1 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1791	☑ Test 1150	T-On Location 0430	
(B) First Initial Flow 11	☐ Jars	T-Started 0455	
(C) First Final Flow 16	☐ Safety Joint	T-Open 0615	
(D) Initial Shut-In 687	☐ Circ Sub	T-Pulled 0730	
(E) Second Initial Flow 17	☐ Hourly Standby	T-Out 0913	
(F) Second Final Flow 18	☑ Mileage 20RT 31	Comments	
(G) Final Shut-In —	☐ Sampler		
(H) Final Hydrostatic 1746	☑ 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 15	☐ Day Standby	Total 1781	
Final Shut-In	☐ Accessibility	MP/DST Disc't	
	Sub Total 1781		

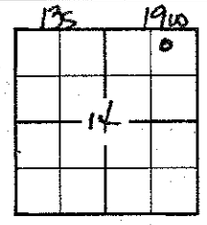
Approved By Our Representative Ray Schwager Thank you

Marc Downing

Consulting Petroleum Geologist
1411 Washington Circle
Hays, Ks 67601
Phone: 620-428-1356 (cell) 785-621-2286

GEOLOGIC REPORT LOG

COMPANY Downing-Nelson Oil Co., Inc.
WELL Diana Pfeifer # 1-14
FIELD
LOCATION 335' FNL - 700' FEL
SEC. 14 TWP. 13S RGE. 19W
COUNTY Ellis
STATE Kansas



PRODUCTION Dry
ELEVATION KB 2085
DF
GL 2077
Drilling Measured From: 2085 KB

Samples Saved From 3200 To: TD
Drilling Time From 2900 To: TD
Samples Examined From 3200 To: TD
Geological Supervision From 2900 To Total Depth
Wellsite Geologist Alan Downing
Electrical Surveys Nabor
CDNL / GR - Microlog
Sonic - Dual Induction

OPERATOR DNOCI
CONTRACTOR Discovery Drilling Rig #3
COMM: 9-02-13 COMP: 9-08-13

CASING RECORD

SURF: 8 5/8" - 220' PROD: -
TOTAL DEPTH DRILLERS: 3793
TOTAL DEPTH LOG: 3794

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
Anhydrite	1385	1386	+701	
Base	1427	1426	+659	
Topeka	3106	3106	-1021	
Heebner	3344	3344	-1259	
Toronto	3364	3364	-1279	
Lansing	3390	3389	-1304	
BKC	3633	3632	-1547	
Arbuckle	3702	3703	-1618	

REFERENCE WELL FOR STRUCTURE

DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHP-FHP	RECOVERY

REMARKS AND RECOMMENDATIONS

LEGEND

DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases 5″ 10″ 15″	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
	2900				
	50				
	3000				

50

3100

Top Ck9

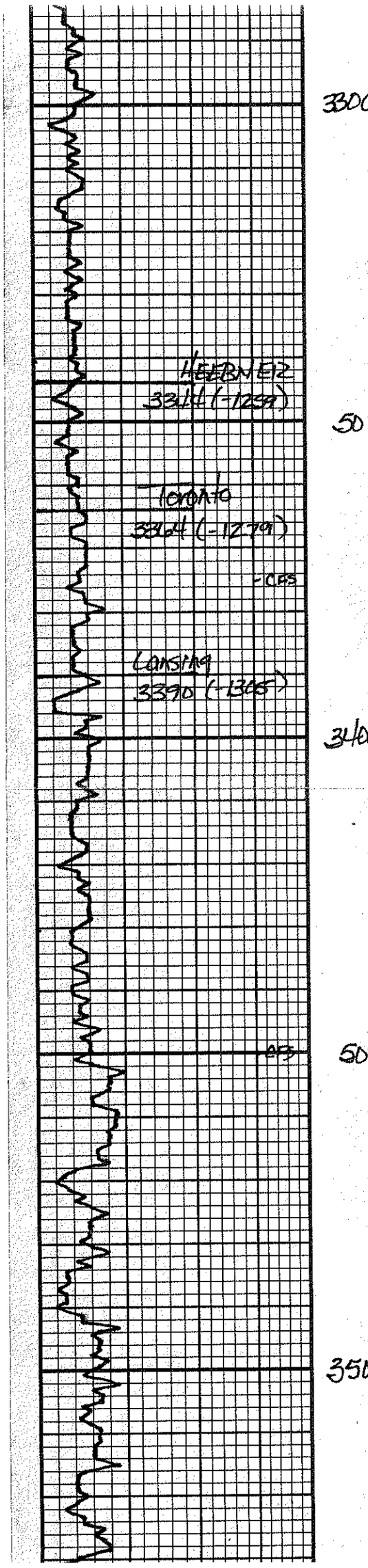
3106 (1021)

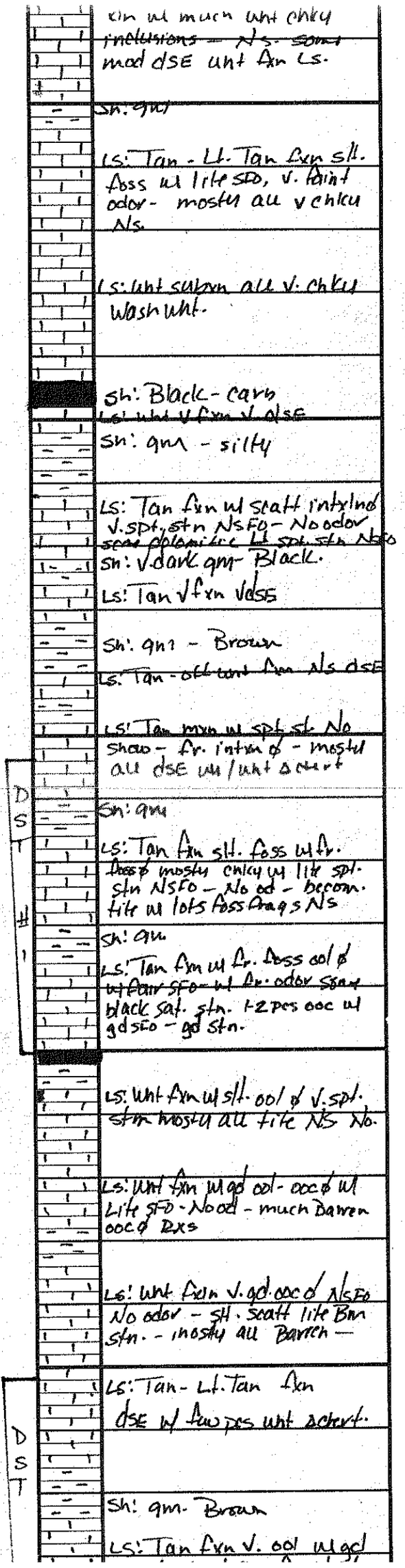
50

3200

50

Sh: Black carb





VIS 54
wt 8.8
wl 8.0
wcm 1½#

DST #1
3304 - 3450
30-30-30-30
Rec:
20' mud w/ show oil
IHP: 1591#
IFP: 15-22#
FFP: 23-24#
SIP: 371-76#
FHP: 1576#

VIS 63
wl 8.0
wt 8.8
wcm 1½#

DST #2
3502 - 3584
30-30-15
Rec:
10' mcl w/ oil spts
IHP: 1655#

50

CFS

3000

BKC
3633(-1518)

50

Arbuckle
3702(-1687)

3700

#2

Sone total Brn sat stn occas dse unt f-vfxln Ls.

Sh: gm

LS: unt - Lt. Tan f-vfxln dse Ls. - Ns- -

Sh: gm - Brown

Ls: unt - Lt. Tan fxln wl gd ooc ϕ wl pd sfo - gd od - Sone total sat stn.

Sh: gm - Brown

Ls: Tan fxln wl fr. ool - ooc ϕ v. spt. stn NSFO - No odor.

Ls: wht Lt. Tan fxln dse wl fair pcs unt scvrn

Sh: Black - carb

Ls: Tan ool - ooc ϕ wl lite - Rare sfo No odor - wl good ϕ 95% totally Barren oo stn becom. v. dse

Sh: Red-Brown - Purtic

Ls: Tan - unt fxln wl lots cmn Lt. Tan scvrn all No show

Sh: Red - v. argillaceous

Ls: Tan cmn - wl lots varicolored scvrn all No show -

~~Sandy Ls as scvrn wl alt f~~ vfgr. No show - lite clusters wlmuch varicolored scvrn ~~wash Red~~

Sh: Brown - Red

#3

Dolo: Tan fx/a sucrosic wl lite sfo - Faint odor fr. - lite inbound wl fair Brn sat stn - sand dse

Dolo: Tan Brn m - crs xln Rhom wlgd sfo - good odor wl some total ~~Black sat~~ ~~Ras Rks Hvy tarry~~

Dolo: Tan m - crs xln wl fr. intxnl sucrosic to Rhom - some total sat wl fair od. - Becoming, lite

Dolo: Cm - Lt. Tan f - mxn wl lite sfo - mostly stn wlmuch Red/Feld Dolomite all lite.

Dolo: Cm f - mxn Rhom wl poor sfo - mostly all Barren - trace odor

Dolo: Tan - unt m - crs xln wl lots gilsonite NSFO - No -

Dolo: unt fxln wl fair amt ool scvrn all NS -

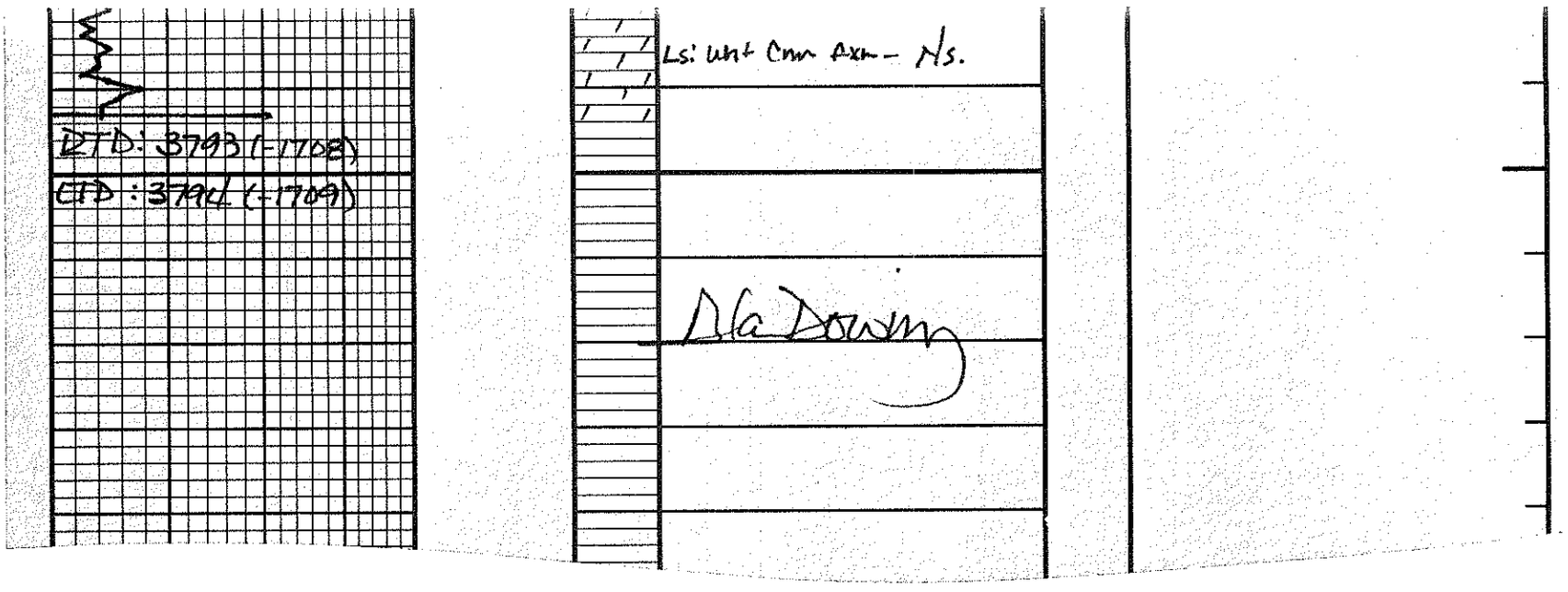
FFP: 21-23#
SIP: 45#
FHP: 1652

Vis 60
wt 8.9
wl 9.0
cm 2½#

Straddle Test
DST #3
3707 - 3727
30 - 30 - 10

Rec:
5' socm 1%oil

IHP: 1791#
IFP: 11-16#
FFP: 17-18
SIP: 687#
FHP: 1746#


LS: Unt Cmn Axm – Ns.
DTD: 3793 (-1708)
CTD: 3794 (-1709)
Dia Downs