Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1215604

Form ACO-1
August 2013
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: Marc Downing
Purchaser:

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

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

07/02/2014	07/08/2014	07/09/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-195-22952-00-00
Spot Description:
SW SW NE NE Sec. 34 Twp. 12 S. R. 21 ☐ East ☑ West
1235 Feet from ☑ North / ☐ South Line of Section
1070 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Trego
Lease Name: Seitz-Barnhardt Well #: C-5
Field Name: Ridgeway
Producing Formation: None
Elevation: Ground: 2193 Kelly Bushing: 2201
Total Vertical Depth: 3959 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 221 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 38000 ppm Fluid volume: 400 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
☐ **Confidentiality Requested**
Date:
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 08/14/2014

[redacted] 1215604

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Seitz-Barnhardt Well #: C-5

Sec. 34 Twp. 12 S. R. 21 ☐ East ☑ West County: Trego

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

List All E. Logs Run:

Micro
Dual Induction
Compensated Density/Neutron

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

Name: Attached Top: Attached Datum: 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	220.97	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	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

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	Seitz-Barnhardt C-5
Doc ID	1215604

Tops

Name	Top	Datum
Top Anhydrite	1570'	+632
Base Anhydrite	1611'	+591
Topeka	3221'	-1019
Heebner	3445'	-1243
Toronto	3467'	-1265
LKC	3479'	-1277
BKC	3719'	-1517
Marmaton	3782'	-1580
Arbuckle	3853'	-1651

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 507

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-2-14	34	12	21	Trego	KS		6:15 PM

Location Rush 1/2 N to L Rd 3/4 E S into

Lease Seitz-Barnhardt Well No. C-5

Contractor Discovery #3

Type Job Surface

Hole Size 12 1/4 T.D. 221'

Csg. 8 5/8 Depth 221'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 20' Shoe Joint

Meas Line Displace 12 3/4 bbl

EQUIPMENT

Pumptrk 5 No. Cementer Helper David

Bulktrk 13 No. Driver Driver Chad Tylor

Bulktrk PU No. Driver Driver Brett

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Cement Circulated!!

Quality Oilwell Cementing

x Signature John Gaeddert

Owner

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Downing - Nelson

Street

City State

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

Cement Amount Ordered 150 com 3% cc 2% gel

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 23

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. 261

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-9-14	34	12	21	Trego	KS		10:15AM

Location Riga and I-70, ½N to L Rd, ¾E, Sn 2

Lease Seitz-Barhardt Well No. C-5

Contractor Discovery #3

Type Job Plug

Hole Size 7⅞ T.D. 3959

Csg. Depth

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

EQUIPMENT

Pumptrk 17 No. Cementer Helper Lonnie W.

Bulktrk 13 No. Driver Driver Cluton

Bulktrk 24 No. Driver Driver Travis

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 sx

Mouse Hole 15 sx

Centralizers

Baskets

D/V or Port Collar

50sx at 3833

50sx at 1590

100sx at 850

50sx at 280

10sx at 40 with plug

Owner

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Downing - Nelson

Street

City State

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

Cement Amount Ordered 305 sx 60/40, 4% gel, ¼# Flow

Common 183

Poz. Mix 122

Gel. 11

Calcium

Hulls

Salt

Flowseal 76#

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 316

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

1 wood plug

Pumptrk Charge plug

Mileage 23

Tax

Discount

Total Charge

X Signature John Luther

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Seitz-Bamhardt #C-5

34-12s-21w Trego KS

Start Date: 2014.07.07 @ 03:48:00
End Date: 2014.07.07 @ 10:32:30
Job Ticket #: 54064 DST #: 1

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

Printed: 2014.07.10 @ 10:35:07

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54064 **DST#: 1**

Test Start: 2014.07.07 @ 03:48:00

GENERAL INFORMATION:

Formation: **Cong. Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:45:15
Time Test Ended: 10:32:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3807.00 ft (KB) To 3853.00 ft (KB) (TVD)
Total Depth: 3853.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

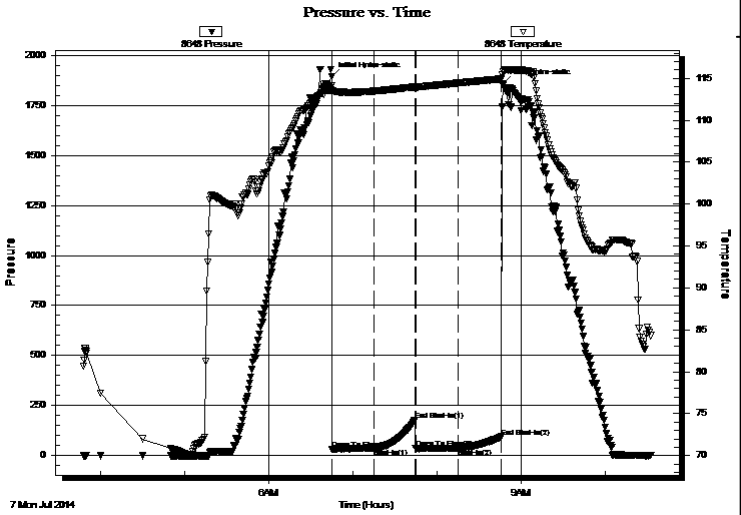
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8648 **Inside**

Press@RunDepth: 36.79 psig @ 3845.00 ft (KB)
Start Date: 2014.07.07 End Date: 2014.07.07
Start Time: 03:48:05 End Time: 10:32:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.07
Time On Btm: 2014.07.07 @ 06:45:00
Time Off Btm: 2014.07.07 @ 08:47:00

TEST COMMENT: 30 - IF- 1/4" blow , died back to surface blow
30 - ISI- No return
30 - FF- No blow
30 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.96	114.15	Initial Hydro-static
1	31.87	113.48	Open To Flow (1)
30	35.82	113.47	Shut-In(1)
59	175.78	113.97	End Shut-In(1)
60	34.90	113.94	Open To Flow (2)
90	36.79	114.44	Shut-In(2)
121	93.87	114.93	End Shut-In(2)
122	1856.33	115.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	VSOCM, 2%O,98%M	0.01
0.00	1" of free oil on top	0.00

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: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

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Hole Diameter: 7.88 inches Hole Condition: Fair

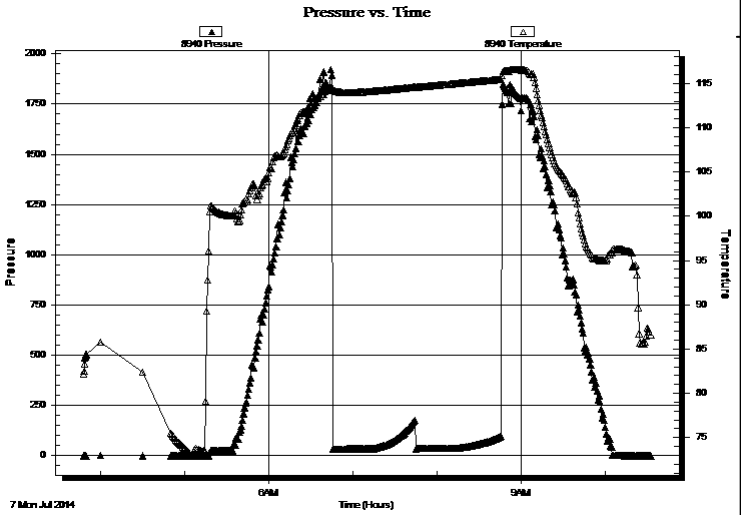
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8940 **Outside**

Press@RunDepth: psig @ 3845.00 ft (KB)
Start Date: 2014.07.07 End Date: 2014.07.07
Start Time: 03:48:05 End Time: 10:32:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.07
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 1/4" blow , died back to surface blow
30 - ISI- No return
30 - FF- No blow
30 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	VSOCM, 2%O,98%M	0.01
0.00	1" of free oil on top	0.00

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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54064 **DST#: 1**

Test Start: 2014.07.07 @ 03:48:00

Tool Information

Drill Pipe:	Length:	3772.00 ft	Diameter:	3.80	inches	Volume:	52.91	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:	53.06	bbl	

Drill Pipe Above KB:	16.00 ft
Depth to Top Packer:	3807.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	46.00 ft
Tool Length:	67.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		30000.00 lb
Weight to Pull Loose:		67000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	55000.00 lb
	Final	55000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3787.00		
Shut In Tool	5.00			3792.00		
Hydraulic tool	5.00			3797.00		
Packer	5.00			3802.00	21.00	Bottom Of Top Packer
Packer	5.00			3807.00		
Perforations	4.00			3811.00		
Stubb	1.00			3812.00		
Change Over Sub	1.00			3813.00		
Drill Pipe	31.00			3844.00		
Change Over Sub	1.00			3845.00		
Recorder	0.00	8648	Inside	3845.00		
Recorder	0.00	8940	Outside	3845.00		
Perforations	5.00			3850.00		
Bullnose	3.00			3853.00	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: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54064 **DST#: 1**

Test Start: 2014.07.07 @ 03:48:00

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	20000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	VSOCM, 2%O,98%M	0.015
0.00	1" of free oil on top	0.000

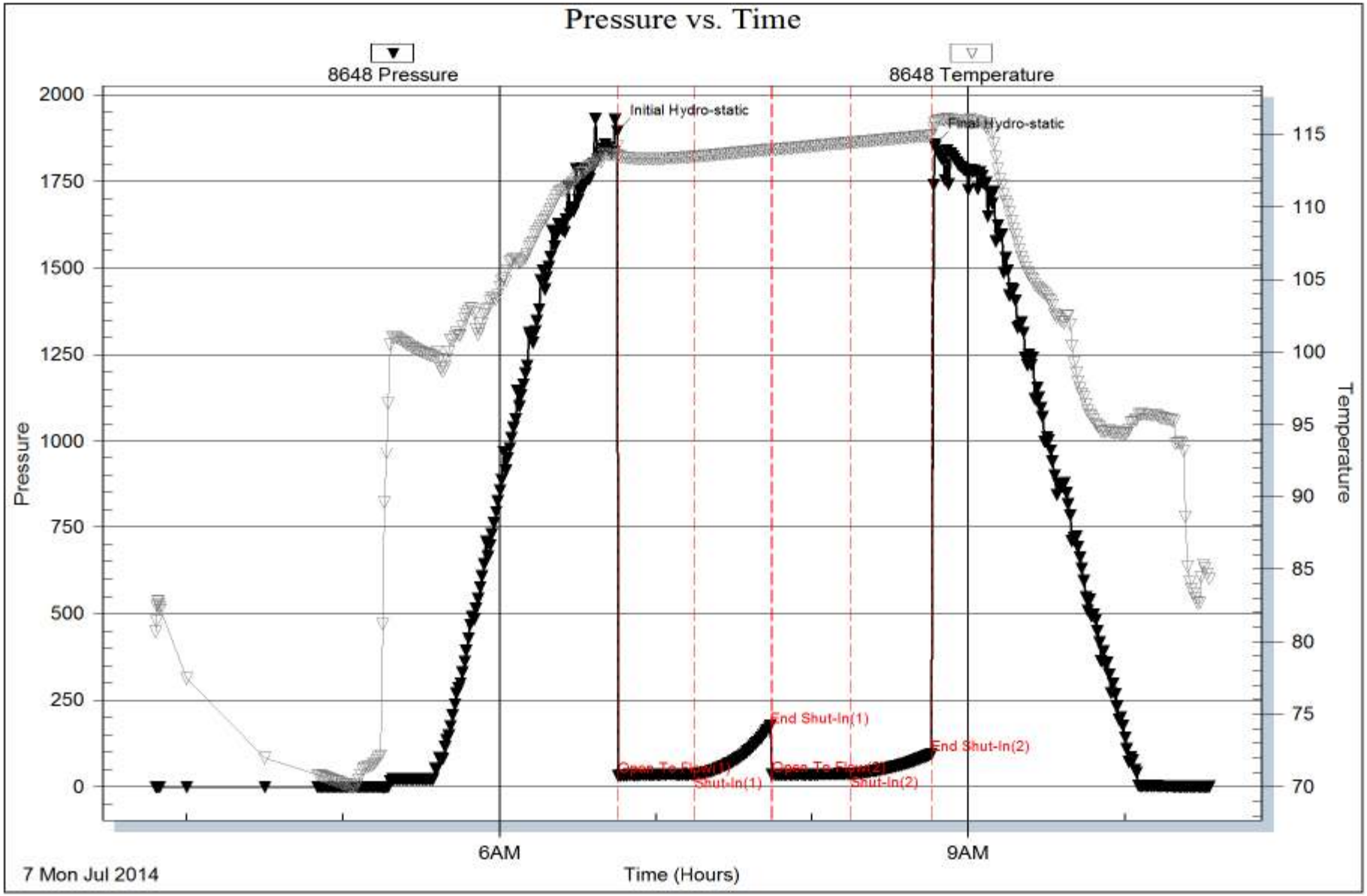
Total Length: 3.00 ft Total Volume: 0.015 bbl

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

Laboratory Name: Laboratory Location:

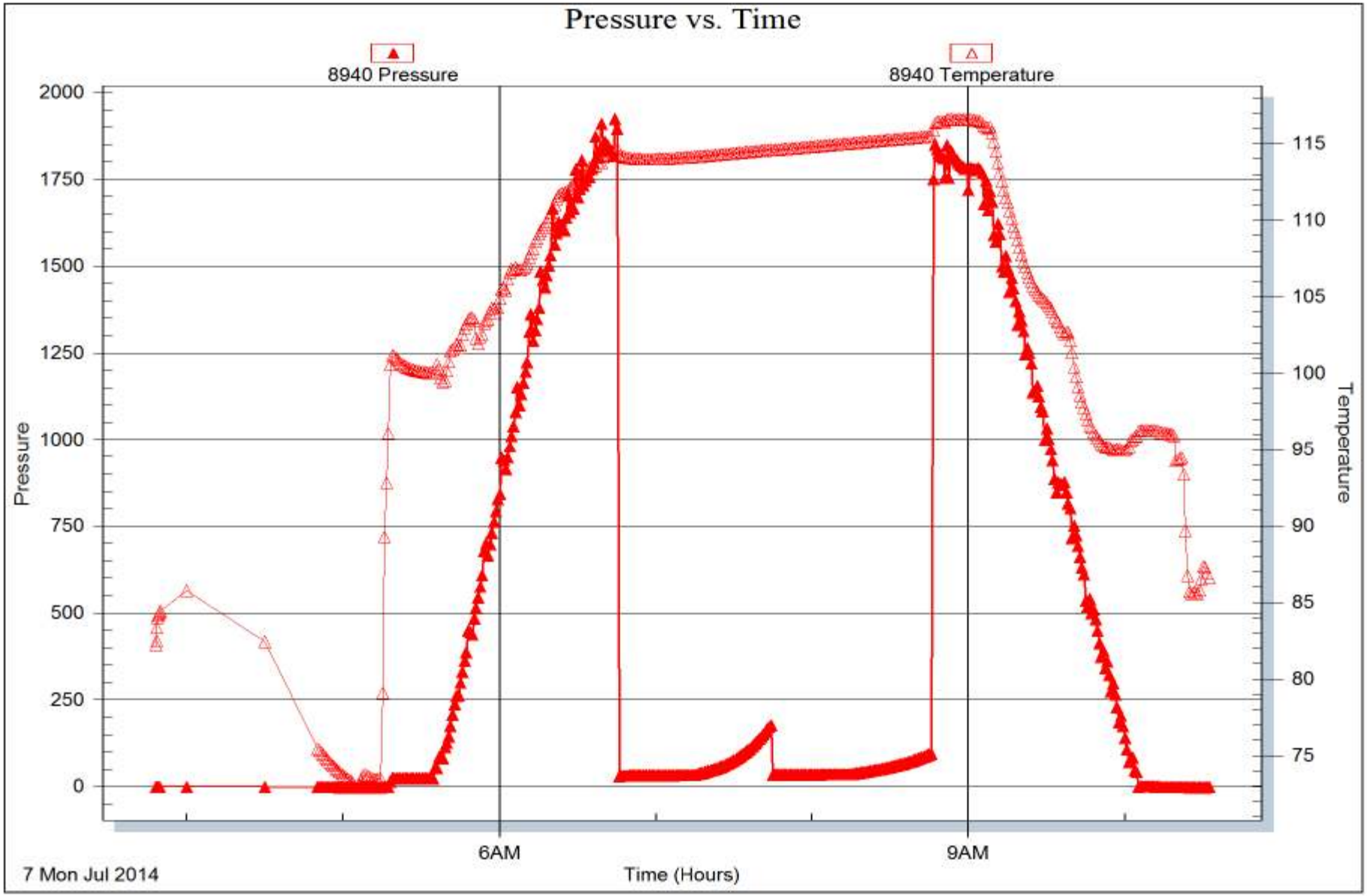
Recovery Comments:

Serial #: 8648 **Inside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 54064 Printed: 2014.07.10 @ 10:35:09

Serial #: 8940 **Outside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 54064 Printed: 2014.07.10 @ 10:35:09

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Seitz-Bamhardt #C-5

34-12s-21w Trego KS

Start Date: 2014.07.07 @ 16:23:00
End Date: 2014.07.07 @ 23:46:00
Job Ticket #: 54065 DST #: 2

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

Printed: 2014.07.10 @ 10:34:44

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54065 **DST#: 2**

Test Start: 2014.07.07 @ 16:23:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:47:00
Time Test Ended: 23:46:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

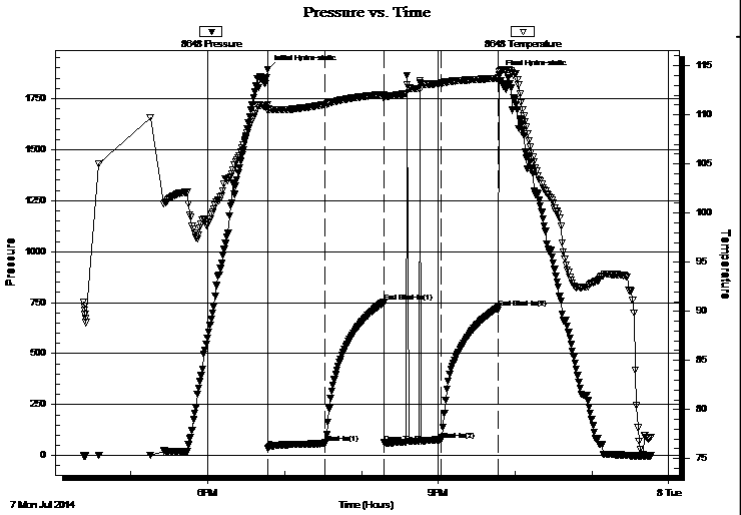
Interval: 3806.00 ft (KB) To 3869.00 ft (KB) (TVD)
Total Depth: 3869.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8648 **Inside**
Press@RunDepth: 74.46 psig @ 3844.00 ft (KB)
Start Date: 2014.07.07 End Date: 2014.07.07
Start Time: 16:23:05 End Time: 23:45:59

Capacity: 8000.00 psig
Last Calib.: 2014.07.07
Time On Btm: 2014.07.07 @ 18:46:45
Time Off Btm: 2014.07.07 @ 21:47:45

TEST COMMENT: 45 - IF- 2 1/4" blow @ 20 minutes, died off to 1 3/4" blow
45 - ISI- No return
45 - FF- No blow , flushed tool @ 15 minutes, surged and died, flushed tool again, w eak surface blow
45 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1893.33	111.05	Initial Hydro-static
1	36.71	110.38	Open To Flow (1)
45	59.72	111.07	Shut-In(1)
91	751.33	112.09	End Shut-In(1)
91	62.17	111.68	Open To Flow (2)
136	74.46	113.22	Shut-In(2)
180	725.35	113.73	End Shut-In(2)
181	1866.60	114.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	VSOCM, 2%O, 98%M	0.60
30.00	VSOCM, 5%O, 95%M	0.42

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54065 **DST#: 2**

Test Start: 2014.07.07 @ 16:23:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:47:00
Time Test Ended: 23:46:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3806.00 ft (KB) To 3869.00 ft (KB) (TVD)
Total Depth: 3869.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

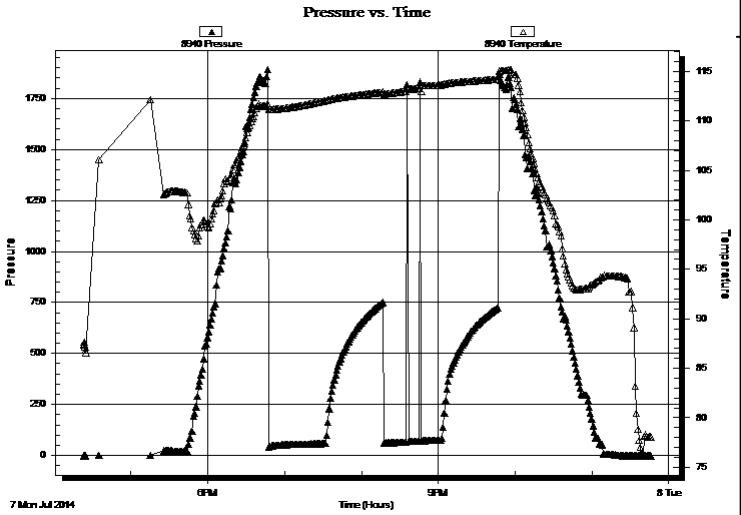
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8940 **Outside**

Press@RunDepth: psig @ 3844.00 ft (KB)
Start Date: 2014.07.07 End Date: 2014.07.07
Start Time: 16:23:05 End Time: 23:45:59

Capacity: 8000.00 psig
Last Calib.: 2014.07.07
Time On Btm:
Time Off Btm:

TEST COMMENT: 45 - IF- 2 1/4" blow @ 20 minutes, died off to 1 3/4" blow
45 - ISI- No return
45 - FF- No blow , flushed tool @ 15 minutes, surged and died, flushed tool again, w eak surface blow
45 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
62.00	VSOCM, 2%O, 98%M	0.60
30.00	VSOCM, 5%O, 95%M	0.42

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54065 **DST#: 2**

Test Start: 2014.07.07 @ 16:23:00

Tool Information

Drill Pipe:	Length:	3772.00 ft	Diameter:	3.80 inches	Volume:	52.91 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		30000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		59000.00 lb
					Total Volume:	53.06 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		17.00 ft					String Weight:	Initial	55000.00 lb
Depth to Top Packer:		3806.00 ft						Final	55000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		63.00 ft							
Tool Length:		84.00 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			3786.00		
Shut In Tool	5.00			3791.00		
Hydraulic tool	5.00			3796.00		
Packer	5.00			3801.00	21.00	Bottom Of Top Packer
Packer	5.00			3806.00		
Perforations	4.00			3810.00		
Stubb	1.00			3811.00		
Change Over Sub	1.00			3812.00		
Drill Pipe	31.00			3843.00		
Change Over Sub	1.00			3844.00		
Recorder	0.00	8648	Inside	3844.00		
Recorder	0.00	8940	Outside	3844.00		
Perforations	22.00			3866.00		
Bullnose	3.00			3869.00	63.00	Bottom Packers & Anchor
Total Tool Length:	**84.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54065 **DST#: 2**

Test Start: 2014.07.07 @ 16:23:00

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:	59.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	VSOCM, 2%O, 98%M	0.596
30.00	VSOCM, 5%O, 95%M	0.421

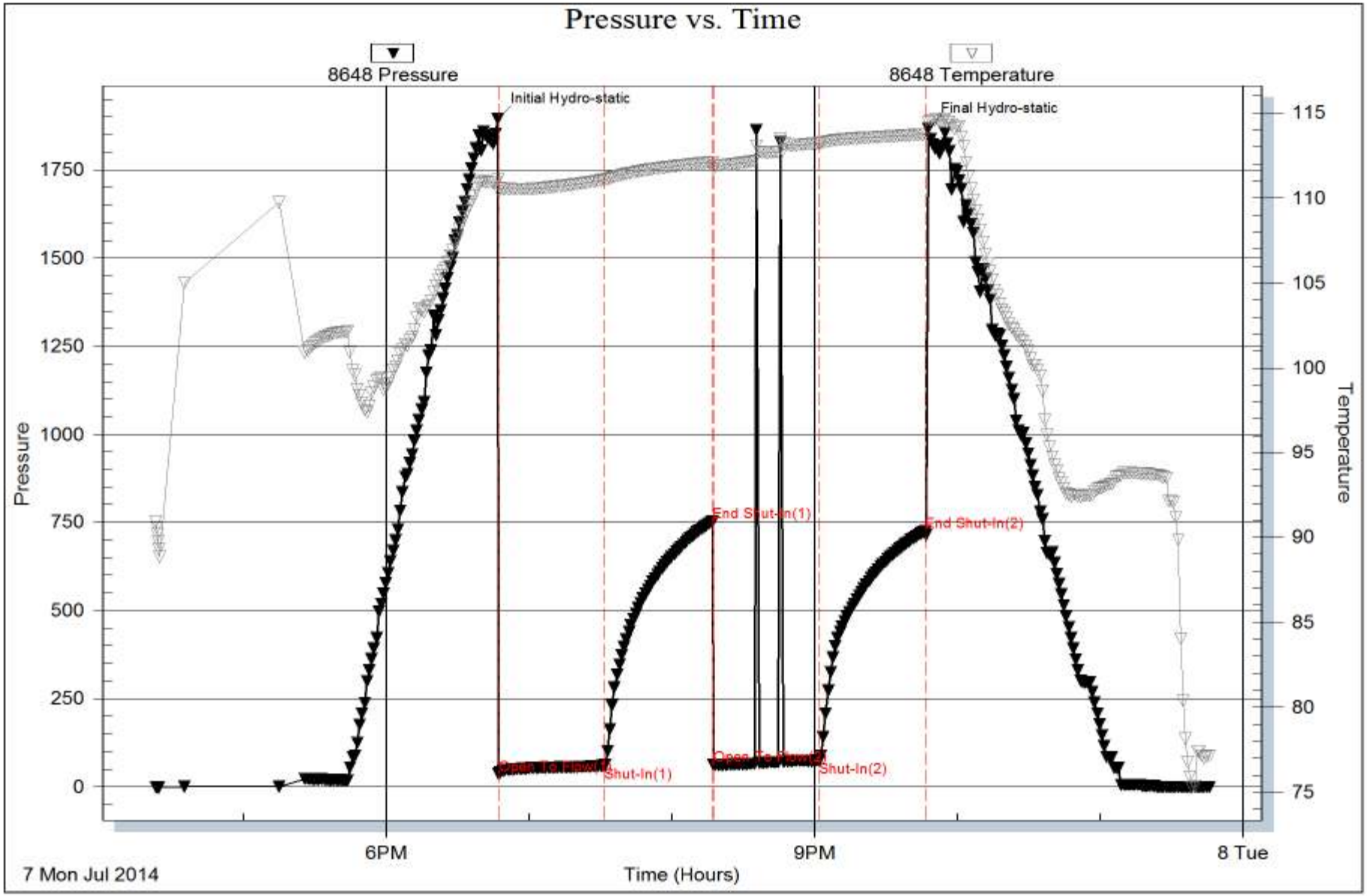
Total Length: 92.00 ft Total Volume: 1.017 bbl

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

Laboratory Name: Laboratory Location:

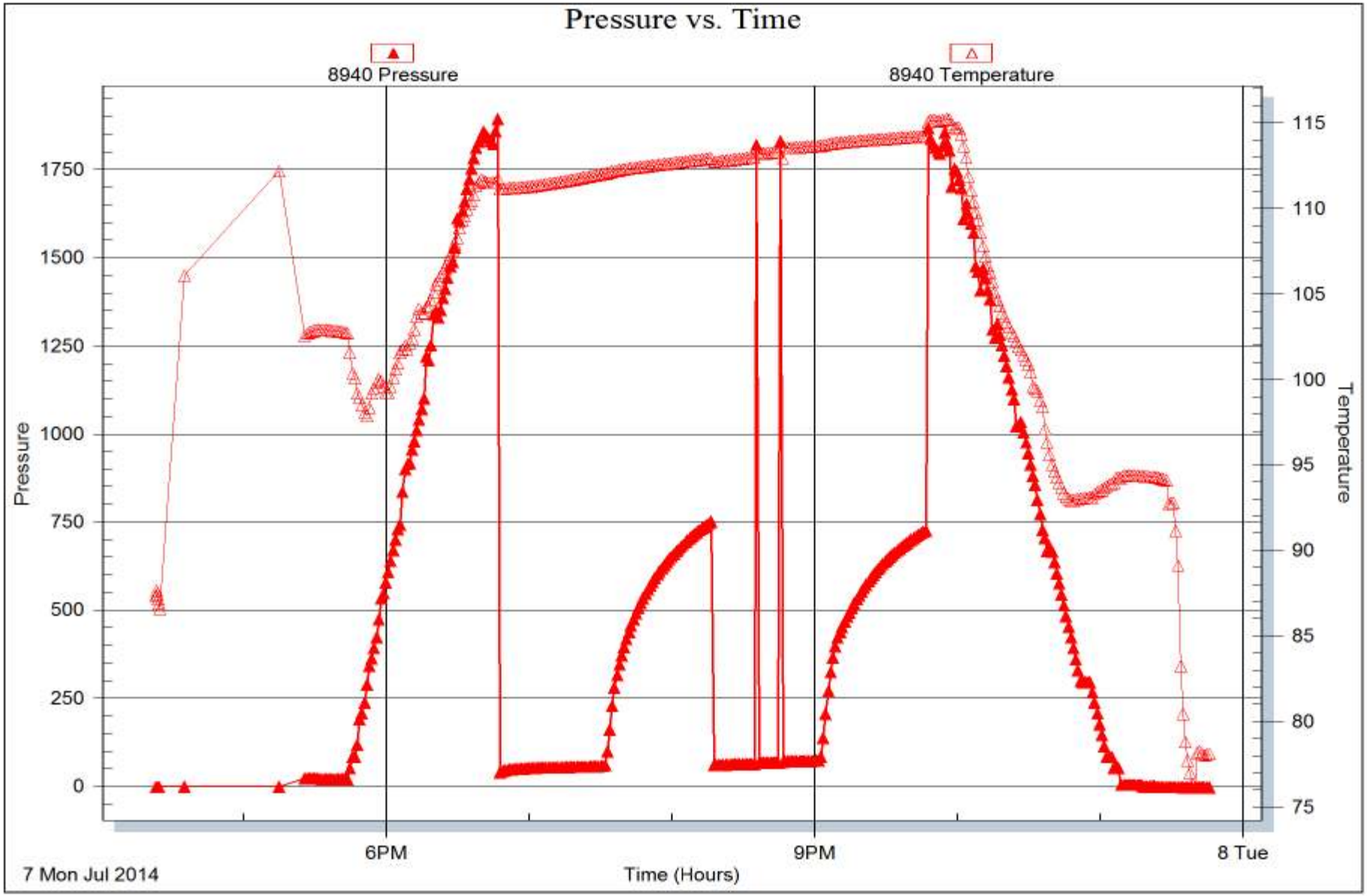
Recovery Comments:

Serial #: 8648 **Inside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 54065 Printed: 2014.07.10 @ 10:34:45

Serial #: 8940 **Outside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 54065 Printed: 2014.07.10 @ 10:34:45

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Seitz-Bamhardt #C-5

34-12s-21w Trego KS

Start Date: 2014.07.08 @ 12:52:00
End Date: 2014.07.08 @ 20:18:15
Job Ticket #: 54066 DST #: 3

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

Printed: 2014.07.10 @ 10:28:37

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54066 **DST#: 3**

Test Start: 2014.07.08 @ 12:52:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:41:30
Time Test Ended: 20:18:15

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3860.00 ft (KB) To 3878.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

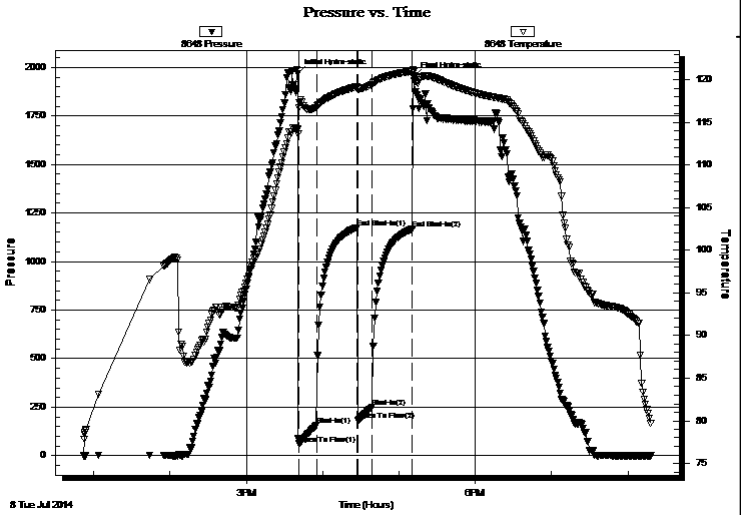
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8648 **Inside**

Press@RunDepth: 250.29 psig @ 3861.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.08
Start Time: 12:52:05 End Time: 20:18:14

Capacity: 8000.00 psig
Last Calib.: 2014.07.08
Time On Btm: 2014.07.08 @ 15:40:30
Time Off Btm: 2014.07.08 @ 17:11:30

TEST COMMENT: 15 - IF- B.OB. in 3 minutes
30 - ISI- Surface return, died in 9 minutes
15 - FF- B.O.B. in 3 minutes
30 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1968.33	114.20	Initial Hydro-static
1	60.77	116.72	Open To Flow (1)
15	155.42	116.78	Shut-In(1)
47	1173.82	119.17	End Shut-In(1)
48	180.09	118.91	Open To Flow (2)
59	250.29	119.45	Shut-In(2)
90	1166.43	120.97	End Shut-In(2)
91	1950.87	121.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW - Oil spots, 20%M, 80%W	5.81
77.00	VSOCWM, 5%O, 15%W, 80%M	1.08
1.00	Free Oil, 100%O	0.01

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54066 **DST#: 3**

Test Start: 2014.07.08 @ 12:52:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:41:30
Time Test Ended: 20:18:15

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3860.00 ft (KB) To 3878.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

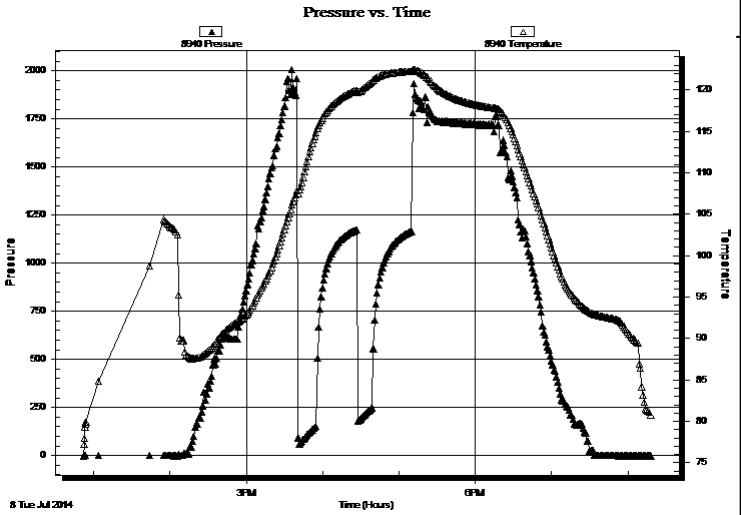
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8940 **Outside**

Press@RunDepth: psig @ 3861.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.08
Start Time: 12:52:05 End Time: 20:18:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.08
Time On Btm:
Time Off Btm:

TEST COMMENT: 15 - IF- B.OB. in 3 minutes
30 - ISI- Surface return, died in 9 minutes
15 - FF- B.O.B. in 3 minutes
30 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW - Oil spots, 20%M, 80%W	5.81
77.00	VSOCWM, 5%O, 15%W, 80%M	1.08
1.00	Free Oil, 100%O	0.01

* 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: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54066 **DST#: 3**

Test Start: 2014.07.08 @ 12:52:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:41:30
Time Test Ended: 20:18:15

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

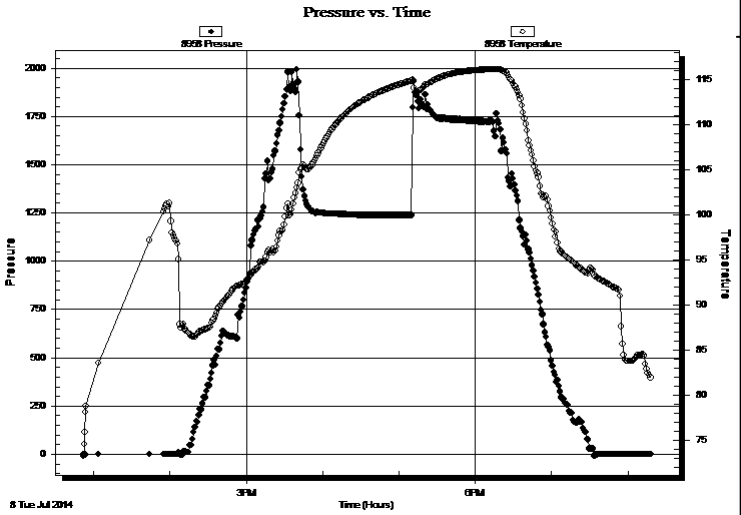
Interval: 3860.00 ft (KB) To 3878.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8958 **Below (Straddle)**
Press@RunDepth: psig @ 3884.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.08
Start Time: 12:52:05 End Time: 20:18:14

Capacity: 8000.00 psig
Last Calib.: 2014.07.08
Time On Btm:
Time Off Btm:

TEST COMMENT: 15 - IF- B.OB. in 3 minutes
30 - ISI- Surface return, died in 9 minutes
15 - FF- B.O.B. in 3 minutes
30 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW - Oil spots, 20%M, 80%W	5.81
77.00	VSOCWM, 5%O, 15%W, 80%M	1.08
1.00	Free Oil, 100%O	0.01

* 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: Marc Downing

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54066 **DST#: 3**

Test Start: 2014.07.08 @ 12:52:00

Tool Information

Drill Pipe:	Length:	3836.00 ft	Diameter:	3.80	inches	Volume:	53.81	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:	53.96	bbl	

Drill Pipe Above KB:	27.00 ft
Depth to Top Packer:	3860.00 ft
Depth to Bottom Packer:	3878.00 ft
Interval between Packers:	18.00 ft
Tool Length:	126.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		30000.00 lb
Weight to Pull Loose:		67000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	60000.00 lb
	Final	61000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3840.00		
Shut In Tool	5.00			3845.00		
Hydraulic tool	5.00			3850.00		
Packer	5.00			3855.00	21.00	Bottom Of Top Packer
Packer	5.00			3860.00		
Stubb	1.00			3861.00		
Recorder	0.00	8648	Inside	3861.00		
Recorder	0.00	8940	Outside	3861.00		
Perforations	16.00			3877.00		
Blank Off Sub	1.00			3878.00	18.00	Tool Interval
Packer	5.00			3883.00		
Change Over Sub	1.00			3884.00		
Recorder	0.00	8958	Below	3884.00		
Drill Pipe	62.00			3946.00		
Perforations	16.00			3962.00		
Bullnose	3.00			3965.00	87.00	Bottom Packers & Anchor
Total Tool Length:	**126.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54066 **DST#: 3**

Test Start: 2014.07.08 @ 12:52:00

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

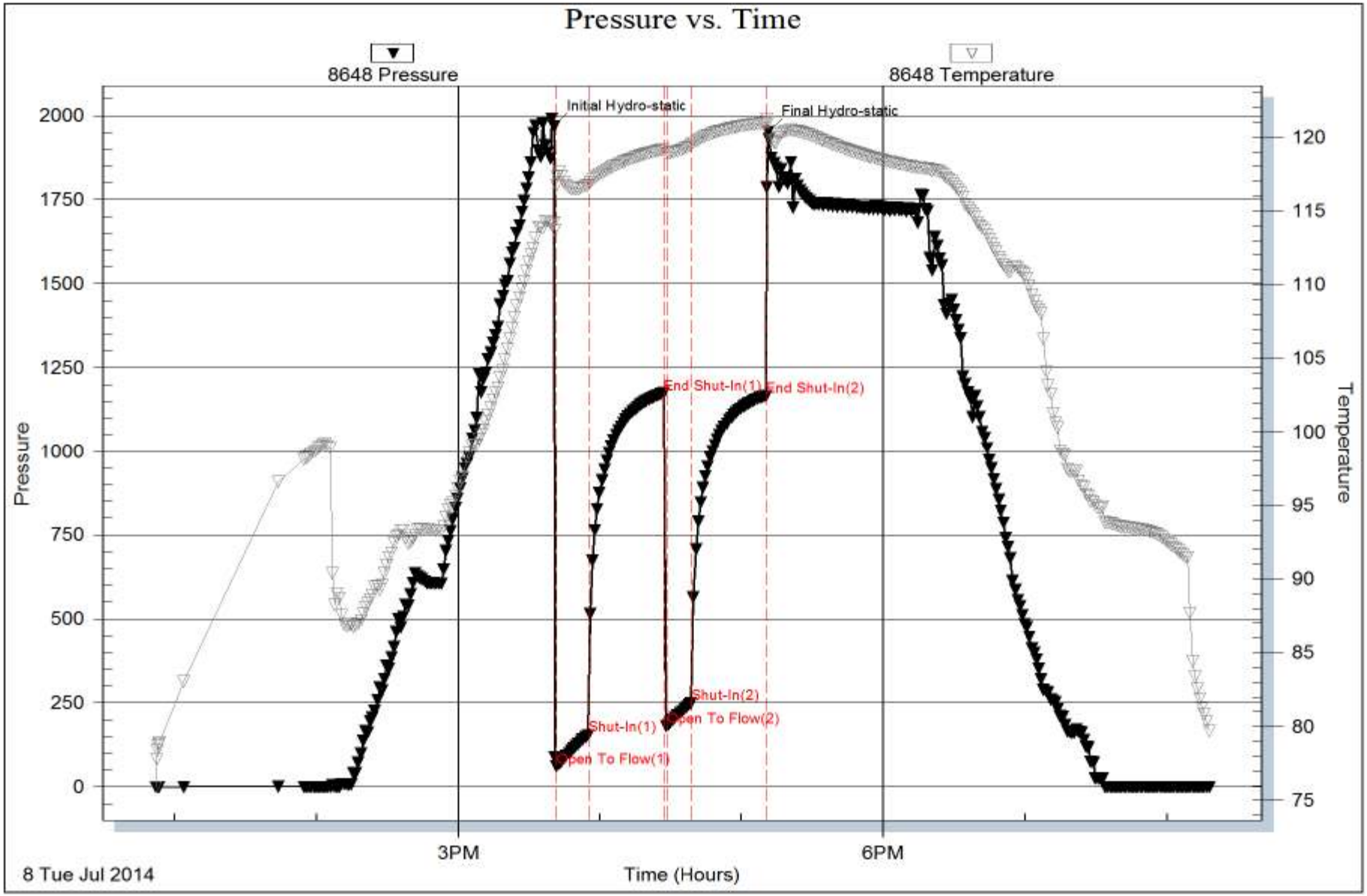
Recovery Table

Length ft	Description	Volume bbl
434.00	MW - Oil spots, 20%M, 80%W	5.815
77.00	VSOCWM, 5%O, 15%W, 80%M	1.080
1.00	Free Oil, 100%O	0.014

Total Length: 512.00 ft Total Volume: 6.909 bbl

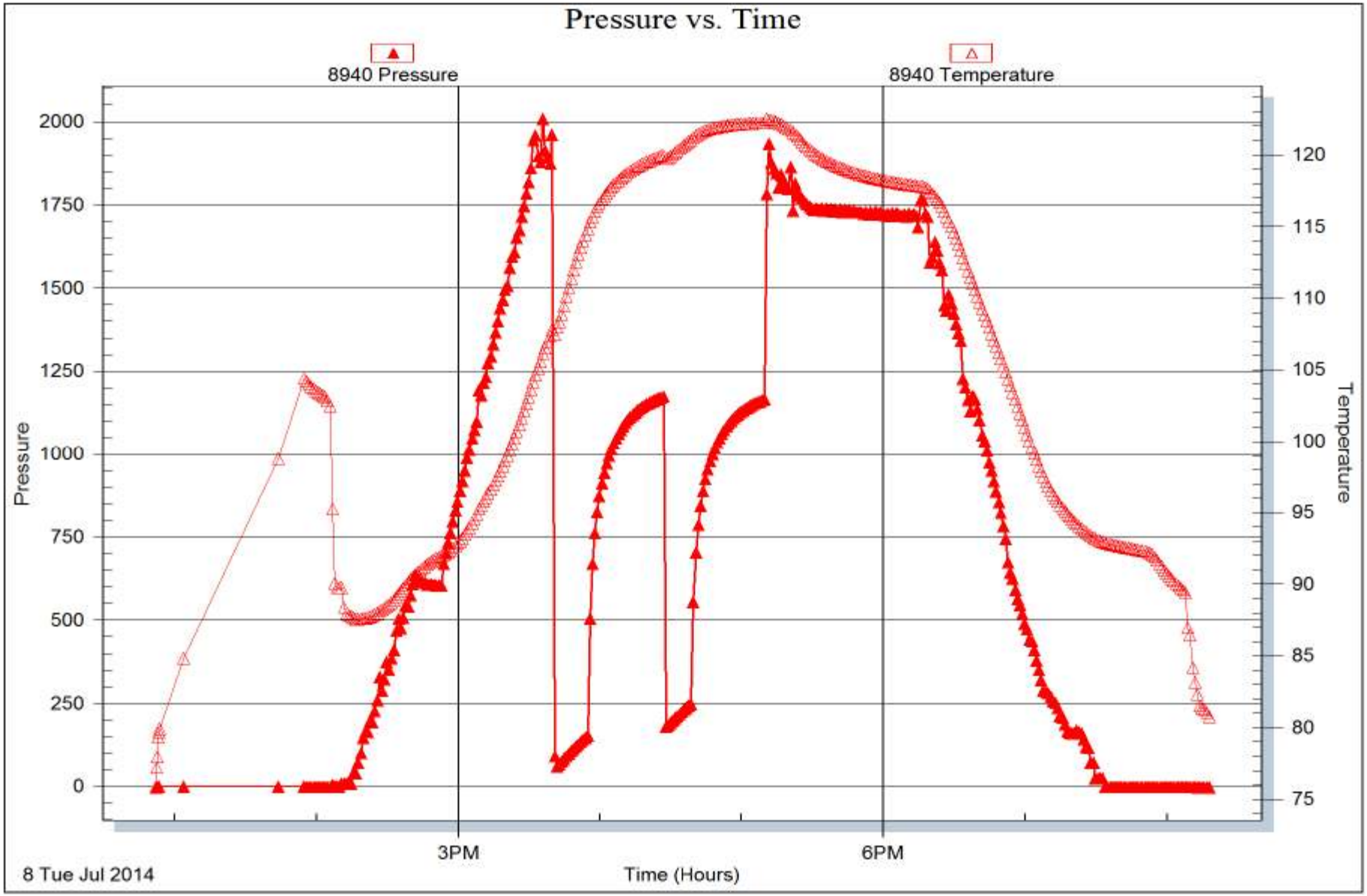
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8648 **Inside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 3



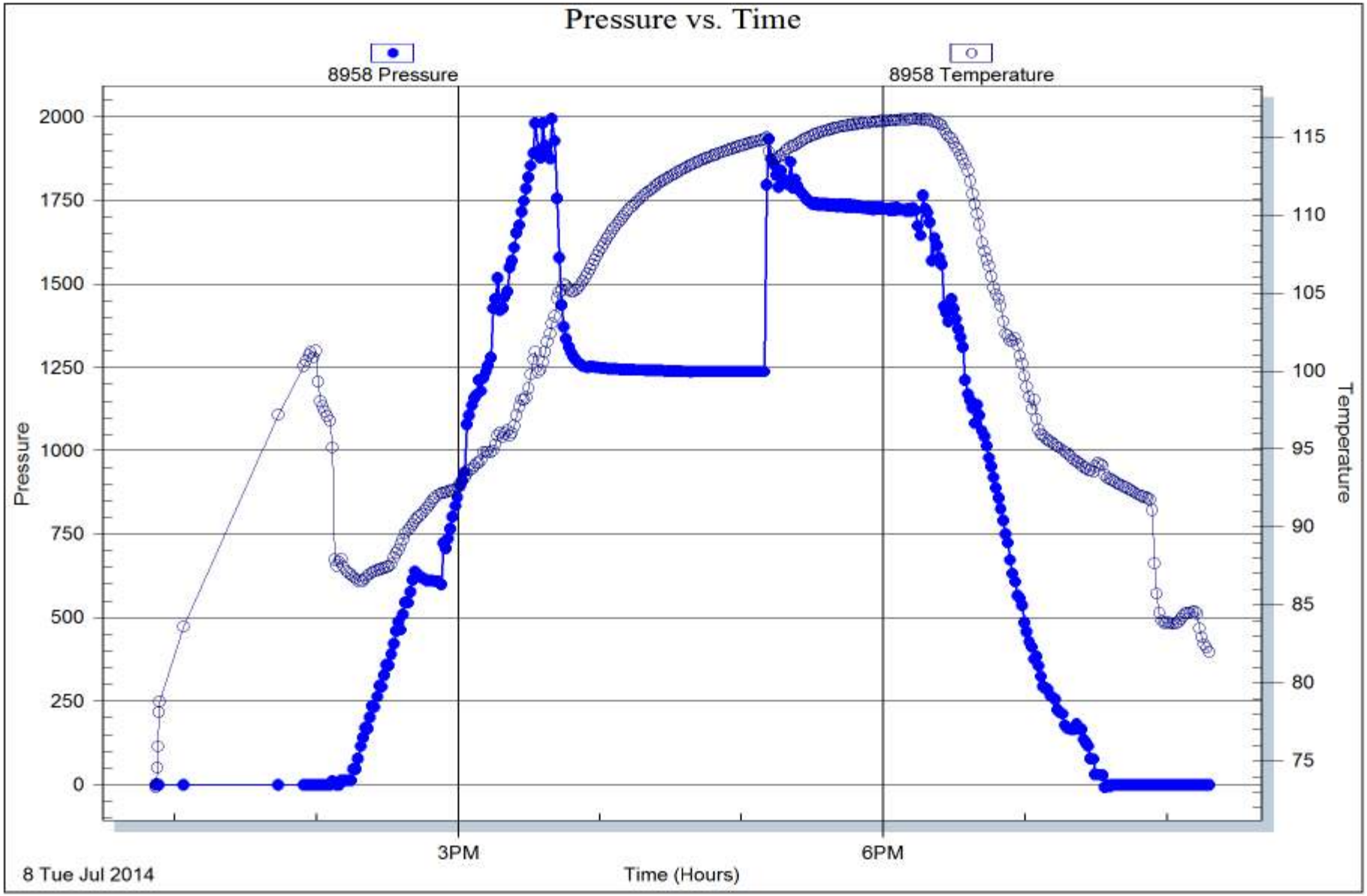
Trilobite Testing, Inc Ref. No: 54066 Printed: 2014.07.10 @ 10:28:39

Serial #: 8940 **Outside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 54066 Printed: 2014.07.10 @ 10:28:39

Serial #: 8958 Below (Straddle) Ding-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 54066 Printed: 2014.07.10 @ 10:28:39

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Seitz-Bamhardt #C-5

34-12s-21w Trego KS

Start Date: 2014.07.08 @ 20:44:00
End Date: 2014.07.09 @ 03:47:30
Job Ticket #: 54067 DST #: 4

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

Printed: 2014.07.10 @ 10:27:52

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54067 **DST#: 4**

Test Start: 2014.07.08 @ 20:44:00

GENERAL INFORMATION:

Formation: **LKC "C-E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:03:00
Time Test Ended: 03:47:30

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3502.00 ft (KB) To 3558.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

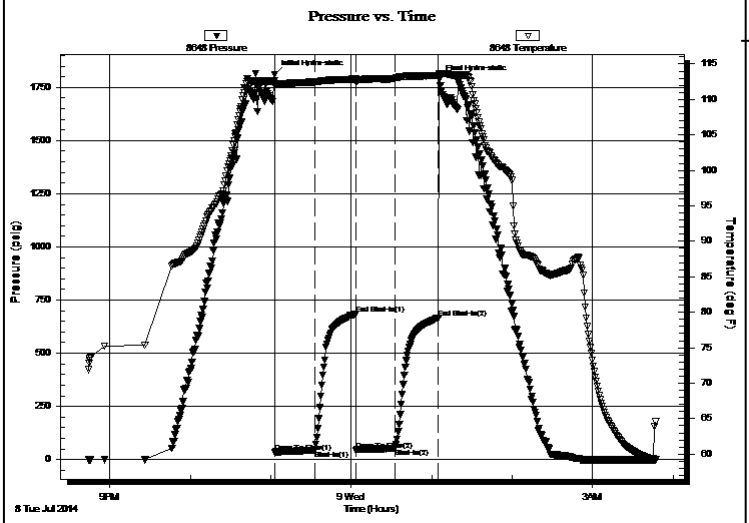
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8648 **Inside**

Press@RunDepth: 51.94 psig @ 3540.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.09
Start Time: 20:44:05 End Time: 03:47:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.09
Time On Btm: 2014.07.08 @ 23:02:45
Time Off Btm: 2014.07.09 @ 01:05:45

TEST COMMENT: 30 - IF- 3/4" Blow
30 - ISI- No return
30 - FF- 1/4" blow
30 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1808.63	112.63	Initial Hydro-static
1	35.60	111.92	Open To Flow (1)
30	44.61	112.46	Shut-In(1)
61	682.65	112.87	End Shut-In(1)
61	43.01	112.43	Open To Flow (2)
90	51.94	112.97	Shut-In(2)
123	665.32	113.34	End Shut-In(2)
123	1788.43	113.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud, 100%M	0.22

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54067 **DST#: 4**

Test Start: 2014.07.08 @ 20:44:00

GENERAL INFORMATION:

Formation: **LKC "C-E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:03:00
Time Test Ended: 03:47:30

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3502.00 ft (KB) To 3558.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

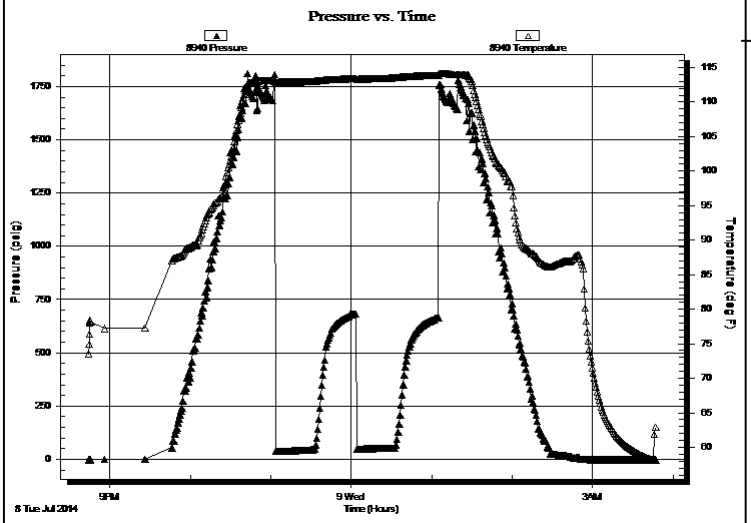
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8940 **Outside**

Press@RunDepth: psig @ 3540.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.09
Start Time: 20:44:05 End Time: 03:47:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.09
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 3/4" Blow
30 - ISI- No return
30 - FF- 1/4" blow
30 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud, 100%M	0.22

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54067 **DST#: 4**

Test Start: 2014.07.08 @ 20:44:00

GENERAL INFORMATION:

Formation: **LKC "C-E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:03:00
Time Test Ended: 03:47:30

Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3502.00 ft (KB) To 3558.00 ft (KB) (TVD)
Total Depth: 3961.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

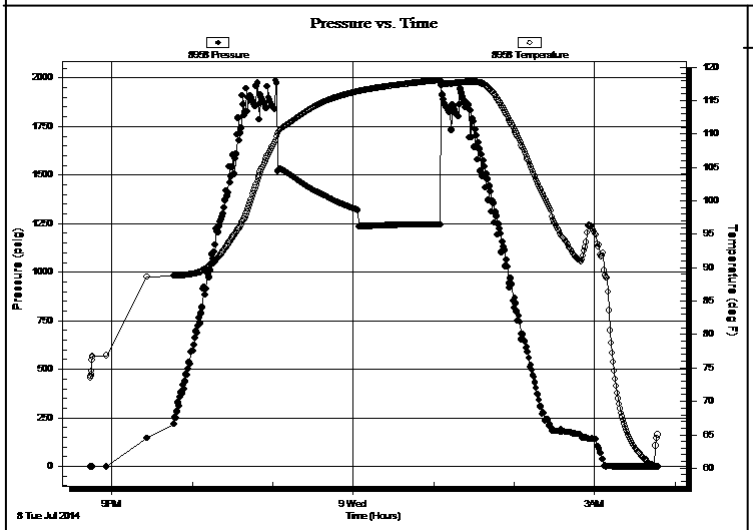
Reference Elevations: 2201.00 ft (KB)
2193.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8958 **Below (Straddle)**

Press@RunDepth: psig @ 3945.00 ft (KB)
Start Date: 2014.07.08 End Date: 2014.07.09
Start Time: 20:44:05 End Time: 03:47:29

Capacity: 8000.00 psig
Last Calib.: 2014.07.09
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 3/4" Blow
30 - ISI- No return
30 - FF- 1/4" blow
30 - FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud, 100%M	0.22

* 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: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54067 **DST#: 4**

Test Start: 2014.07.08 @ 20:44:00

Tool Information

Drill Pipe:	Length:	3457.00 ft	Diameter:	3.80 inches	Volume:	48.49 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:	48.64 bbl	

Drill Pipe Above KB:	6.00 ft
Depth to Top Packer:	3502.00 ft
Depth to Bottom Packer:	3558.00 ft
Interval betw een Packers:	56.00 ft
Tool Length:	484.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		30000.00 lb
Weight to Pull Loose:		66000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	60000.00 lb
	Final	60000.00 lb

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	4.00			3507.00		
Change Over Sub	1.00			3508.00		
Drill Pipe	31.00			3539.00		
Change Over Sub	1.00			3540.00		
Recorder	0.00	8648	Inside	3540.00		
Recorder	0.00	8940	Outside	3540.00		
Perforations	17.00			3557.00		
Blank Off Sub	1.00			3558.00	56.00	Tool Interval
Packer	5.00			3563.00		
Change Over Sub	1.00			3564.00		
Drill Pipe	381.00			3945.00		
Recorder	0.00	8958	Below	3945.00		
Perforations	17.00			3962.00		
Bullnose	3.00			3965.00	407.00	Bottom Packers & Anchor
Total Tool Length:	**484.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Marc Dow ning

34-12s-21w Trego KS

Seitz-Bamhardt #C-5

Job Ticket: 54067 **DST#: 4**

Test Start: 2014.07.08 @ 20:44:00

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	inches				

Recovery Information

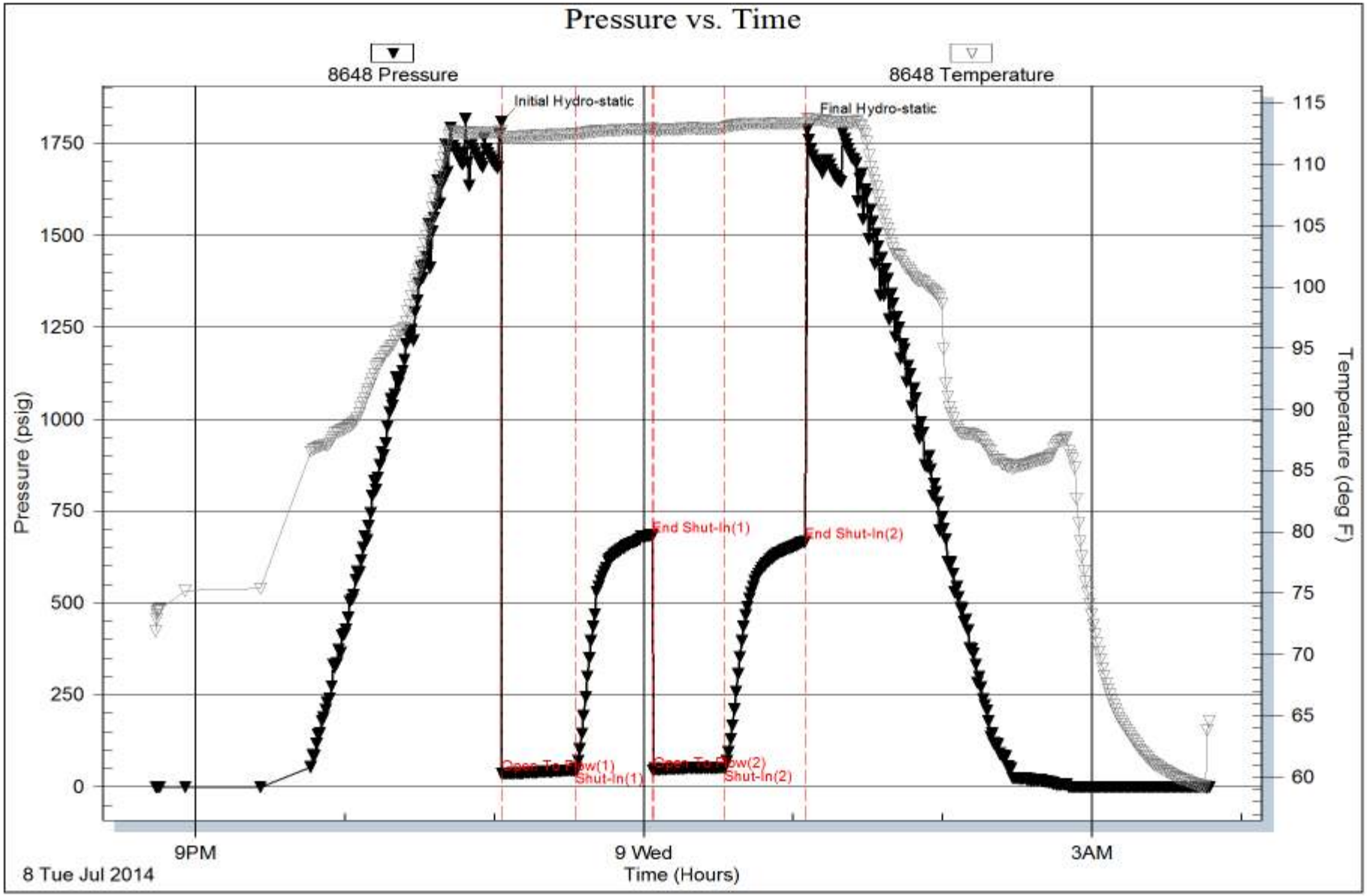
Recovery Table

Length ft	Description	Volume bbl
35.00	Mud, 100%M	0.218

Total Length: 35.00 ft Total Volume: 0.218 bbl

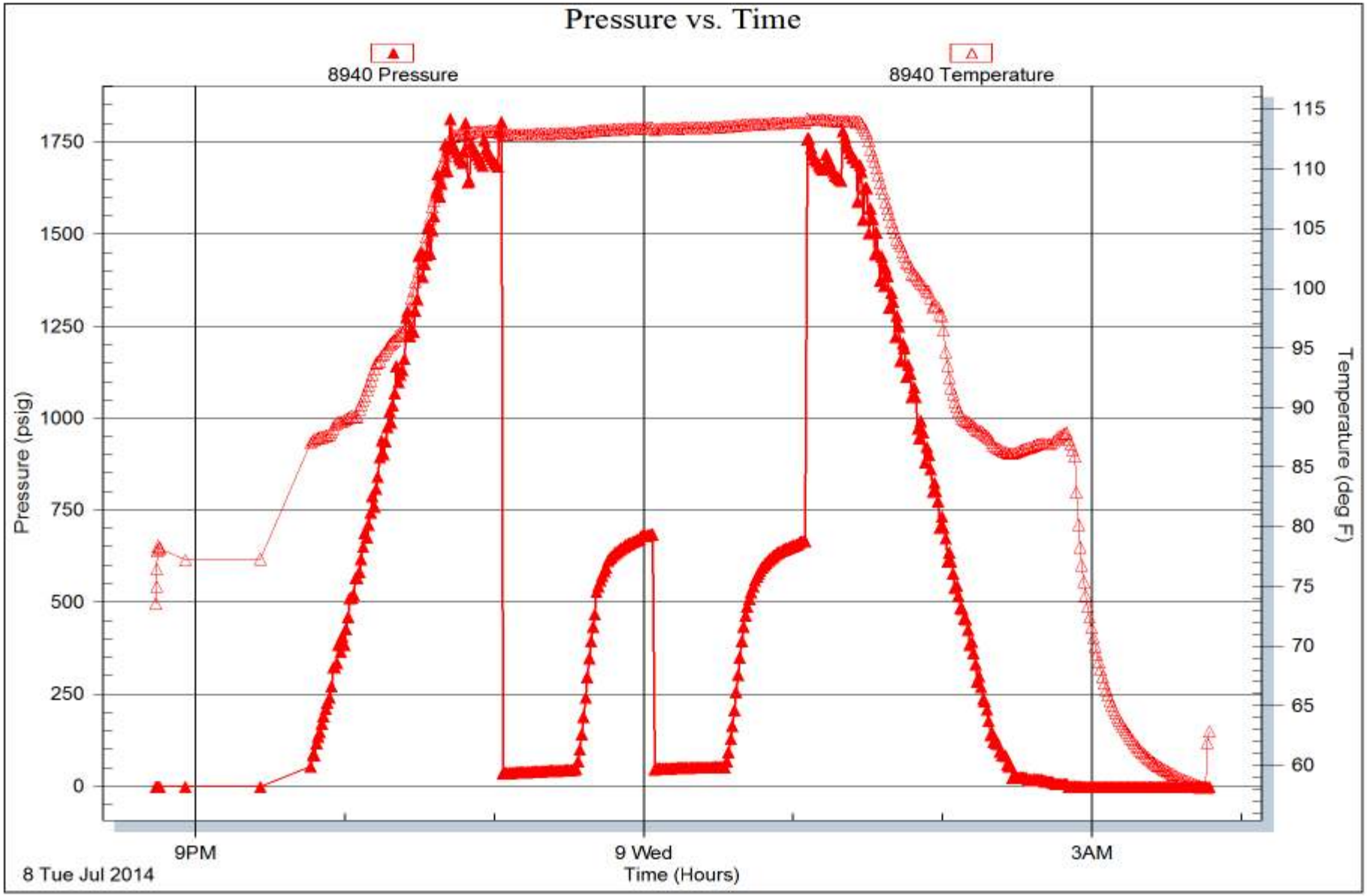
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8648 **Inside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 4



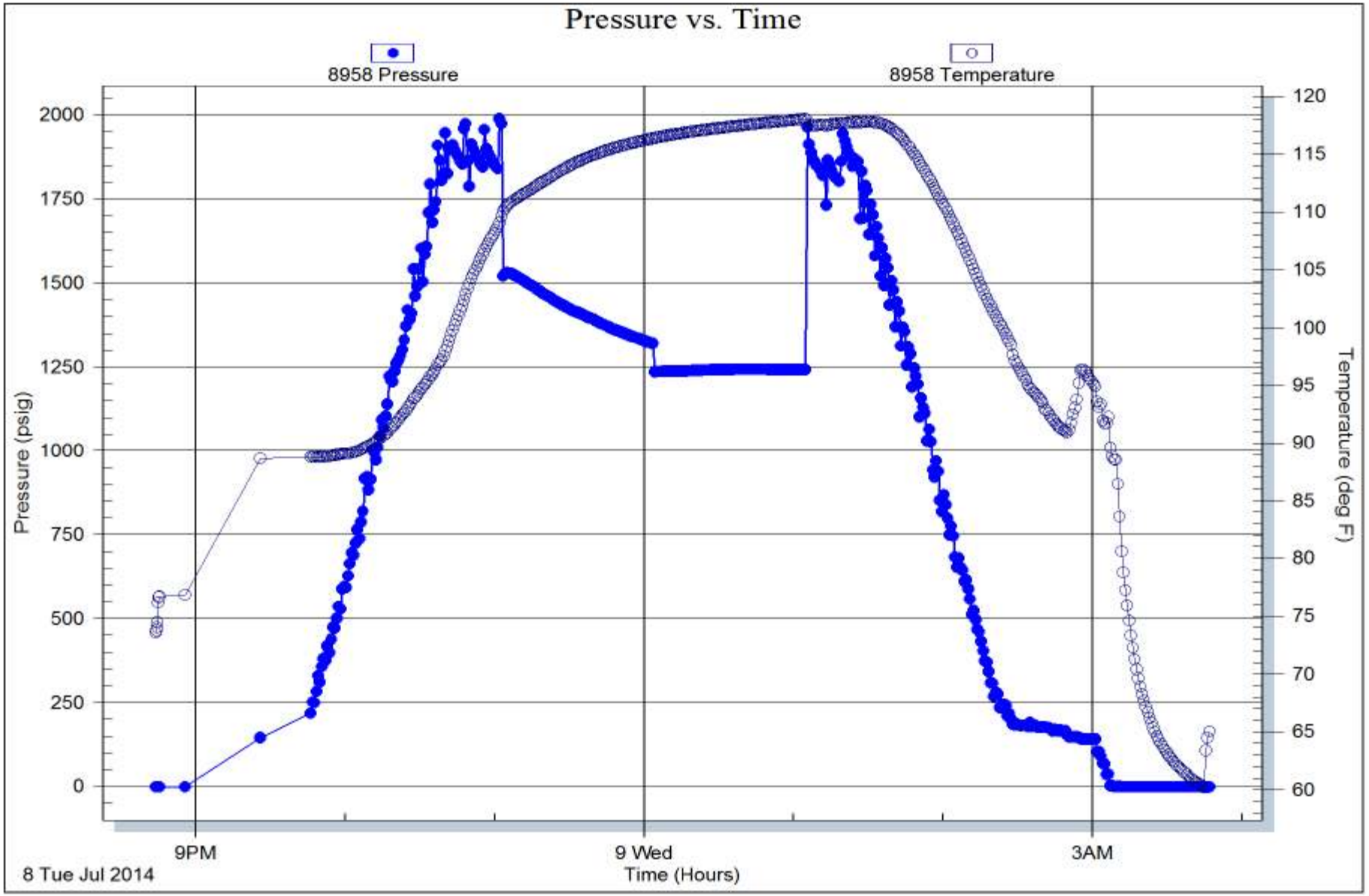
Trilobite Testing, Inc Ref. No: 54067 Printed: 2014.07.10 @ 10:27:53

Serial #: 8940 **Outside** Dow ning-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 54067 Printed: 2014.07.10 @ 10:27:53

Serial #: 8958 Below (Straddle) Trilobite Testing-Nelson Oil Co Inc Seitz-Bamhardt #C-5 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 54067 Printed: 2014.07.10 @ 10:27:54

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 54064

Well Name & No. Seitz - Bamhardt C-5 Test No. 1 Date 7-7-14

Company Downing-Nelson Oil Co Inc Elevation 2201 KB 2193 GL

Address Po Box 1019, Hays KS, 67601

Co. Rep / Geo. Marc Downing Rig Discovery #3

Location: Sec. 34 Twp. 12S Rge. 21W Co. Trego State KS

Interval Tested 3807 - 3853 Zone Tested Cong. Sand

Anchor Length 46' Drill Pipe Run 3772' Mud Wt. 9

Top Packer Depth 3802 Drill Collars Run 30 Vis 58

Bottom Packer Depth 3807 Wt. Pipe Run — WL 7.2

Total Depth 3853 Chlorides 2,000 ppm System LCM 1#

Blow Description IF- 1/4" blow, died back to surface blow

ISI- No return

FF- No blow

FSI- No return

Rec 3	Feet of VSOCM	%gas	2 %oil	%water	98 %mud	
Rec	Feet of 1" of Free oil on top	%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 3' BHT 114° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	1894	☑ Test	1150	T-On Location	0320
(B) First Initial Flow	31	☐ Jars		T-Started	0348
(C) First Final Flow	35	☐ Safety Joint		T-Open	0645
(D) Initial Shut-In	175	☐ Circ Sub		T-Pulled	0845
(E) Second Initial Flow	34	☐ Hourly Standby		T-Out	1033
(F) Second Final Flow	36	☑ Mileage 54RT	83.70	Comments	
(G) Final Shut-In	93	☐ Sampler			
(H) Final Hydrostatic	1856	☐ 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	1233.70
Final Shut-In	30	☐ Accessibility		MP/DST Disc't	
		Sub Total	1233.70		

Approved By _____ Our Representative Cody B

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 54065

Well Name & No. Seitz - Bamhardt C-5 Test No. 2 Date 7-7-14

Company Downing Nelson Oil Co Inc Elevation 2201 KB 2193 GL

Address Po Box 1019, Hays KS, 67601

Co. Rep / Geo. Marc Downing Rig Discovery # 3

Location: Sec. 34 Twp. 12S Rge. 21W Co. Trego State KS

Interval Tested 3806 - 3869 Zone Tested Arbuckle

Anchor Length 63' Drill Pipe Run 3772' Mud Wt. 9.2

Top Packer Depth 3801 Drill Collars Run 30' Vis 59

Bottom Packer Depth 3806 Wt. Pipe Run — WL 7.6

Total Depth 3869 Chlorides 3,000 ppm System LCM 2#

Blow Description IF - 2.25" blow in 20 minutes, died back to 1.75" blow

ISI - No return

FF - No blow, Flushed tool @ 15 minutes, Surged & died, flushed tool again, Surface blow

FSI - No return

Rec 62	Feet of VSOCM	%gas 2	%oil	%water 98	%mud
Rec 30	Feet of VSOCM	%gas 5	%oil	%water 95	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 92' BHT 1130 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1893	☑ Test 1150	T-On Location 1609
(B) First Initial Flow 36	☐ Jars	T-Started 1623
(C) First Final Flow 59	☐ Safety Joint	T-Open 1847
(D) Initial Shut-In 751	☐ Circ Sub	T-Pulled 2147
(E) Second Initial Flow 62	☐ Hourly Standby	T-Out 2346
(F) Second Final Flow 74	☑ Mileage 54RT 83.70	Comments
(G) Final Shut-In 725	☐ Sampler	
(H) Final Hydrostatic 1866	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 45	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 45	☐ Extra Recorder	Sub Total 0
Final Flow 45	☐ Day Standby	Total 1233.70
Final Shut-In 45	☐ Accessibility	MP/DST Disc't
	Sub Total 1233.70	

Approved By Our Representative Cody Bloedorn

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 54066

Well Name & No. Seitz-Bambardt C-5 Test No. 3 Date 7-8-14

Company Downing-Nelson Oil Co Inc Elevation 2201 KB 2193 GL

Address Po Box 1019, Hays KS, 67601

Co. Rep / Geo. Marc Downing Rig Discovery #3

Location: Sec. 34 Twp. 12s Rge. 21w Co. Trego State KS

Interval Tested 3860-3878 TD 3961 Zone Tested Arbuckle

Anchor Length 18' anchor, 83' tail Drill Pipe Run 3836' Mud Wt. 9.3

Top Packer Depth 3855 Drill Collars Run 30' Vis 58

Bottom Packer Depth 3860 Wt. Pipe Run — WL 8.0

Total Depth 3878 Chlorides 3,500 ppm System LCM —

Blow Description IF - B.O.B. in 3 minutes

ISI - surface return, died in 9 minutes

FF - B.O.B. in 3 minutes

FSI - No return

Rec 434	Feet of MW - oil spots	%gas	%oil	80	%water	20	%mud	
Rec 77	Feet of VSOCWM	%gas	5	%oil	15	%water	80	%mud
Rec 1'	Feet of Free oil on top	%gas	100	%oil		%water		%mud
Rec	Feet of	%gas		%oil		%water		%mud
Rec	Feet of	%gas		%oil		%water		%mud

Rec Total 512 BHT 120° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	1968	☑ Test	1150	T-On Location	1237
(B) First Initial Flow	60	☐ Jars		T-Started	1254
(C) First Final Flow	155	☐ Safety Joint		T-Open	1543
(D) Initial Shut-In	1173	☐ Circ Sub		T-Pulled	1713
(E) Second Initial Flow	180	☐ Hourly Standby		T-Out	2021
(F) Second Final Flow	250	☑ Mileage 54RT	83.70	Comments	
(G) Final Shut-In	1166	☐ Sampler			
(H) Final Hydrostatic	1950	☑ Straddle	600	☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	15	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	30	☐ Extra Recorder		Sub Total	0
Final Flow	15	☐ Day Standby		Total	1833.70
Final Shut-In	30	☐ Accessibility		MP/DST Disc't	
		Sub Total	1833.70		

Approved By _____ Our Representative Cody Bloedorn

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 54067

Well Name & No. Seitz - Bamhardt C-5 Test No. 4 Date 7-8-14

Company Downing - Nelson Oil Co Inc Elevation 2201 KB 2193 GL

Address Po Box 1019, Hays KS, 67601

Co. Rep / Geo. Marc Downing Rig Discovery #3

Location: Sec. 34 Twp. 12s Rge. 21w Co. Trego State KS

Interval Tested 3502 - 3558 Zone Tested C, D, E

Anchor Length 56' anchor, 403' tail Drill Pipe Run 3457' Mud Wt. 9.3

Top Packer Depth 3497 Drill Collars Run 30' Vis 58

Bottom Packer Depth 3502 Wt. Pipe Run — WL 8.0

Total Depth 3558 Chlorides 3,500 ppm System LCM —

Blow Description IF - 3/4" blow

ISI - No return

FF - 1/4" blow

FSI - No return

Rec 35	Feet of Mud	%gas	%oil	%water 100	%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 35 BHT 113° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1808	☑ Test 1150	T-On Location 2030	
(B) First Initial Flow 35	☐ Jars	T-Started 2044	
(C) First Final Flow 44	☐ Safety Joint	T-Open 2303	
(D) Initial Shut-In 682	☐ Circ Sub	T-Pulled 0103	
(E) Second Initial Flow 43	☐ Hourly Standby	T-Out 0347	
(F) Second Final Flow 51	[redacted]	Comments	
(G) Final Shut-In 665	☐ Sampler		
(H) Final Hydrostatic 1788	☑ 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 1750	
Final Shut-In 30	☐ Accessibility	MP/DST Disc't	
	Sub Total 1750		

Approved By _____ Our Representative Cody Bl

Marc A. Downing Consulting Petroleum Geologist	Geologic Report Drilling Time and Sample Log

Operator **Downing-Nelson Oil Co., Inc.**

Lease **Seitz-Barnhardt** No. **C-5**

API # **15-195-22952-0000**

Field **Ridgeway**

Location **1235' FNL & 1070' FEL**

Sec. **34** Twp. **12s** Rge. **21w**

County **Trego** State **Kansas**

Elevation	
KB	2202
DF	2200
GL	2194

Casing Record
Surface **8 5/8" @ 221'**
Production **None**

Electrical Surveys
CNDL, DIL, MEL

Formation	Sample tops	Log Tops	Datum	Struct Comp
Top Anhydrite	1573	1576	+623	-7
Base Anhydrite	1612	1611	+591	FL
Topeka	3221	3221	-1019	-7
Heebner	3444	3445	-1243	-9
Toronto	3468	3467	-1265	-11
LKC	3479	3479	-1277	-8
BKC	3718	3719	-1517	-11
Marmaton	3781	3782	-1580	-8
Arbuckle	3853	3853	-1651	-7
Total Depth	3959	3961	-1759	

Reference Well For Structural Comparison **DNOCI**
Seitz-Barnhardt C #3 **560' FNL & 1090' FEL** **Sec. 34-12s-21w**

Drilling Contractor	Discovery Drilling, Rig #3		
Commenced	7-2-14	Completed	7-9-14
Samples Saved From	3200	To	RTD
Drilling Time Kept From	3100	To	RTD
Samples Examined From	3200	To	RTD
Geological Supervision From	3100	To	RTD

Summary and Recommendations

Due to structural position, DST recovery, and log evaluation, it was decided to plug and abandon the well.

Respectfully Submitted,

Marc A. Downing