



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1306338
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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 #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

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: _____ Date: _____

1306338

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Penka 1-30
Doc ID	1306338

All Electric Logs Run

Mirco
Sonic
Dual Induction
Compensated Density Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Penka 1-30
Doc ID	1306338

Tops

Name	Top	Datum
Top Anhydrite	1286'	+832
Base Anhydrite	1320'	+798
Topeka	3149'	-1031
Heebner	3434'	-1316
Toronto	3451'	-1333
LKC	3482'	-1364
BKC	3754'	-1636
Marmaton	3798'	-1680
Conglomerate Sand	3839'	-1721
Arbuckle	3918'	-1800

QUALITY OILWELL CEMENTING, INC.

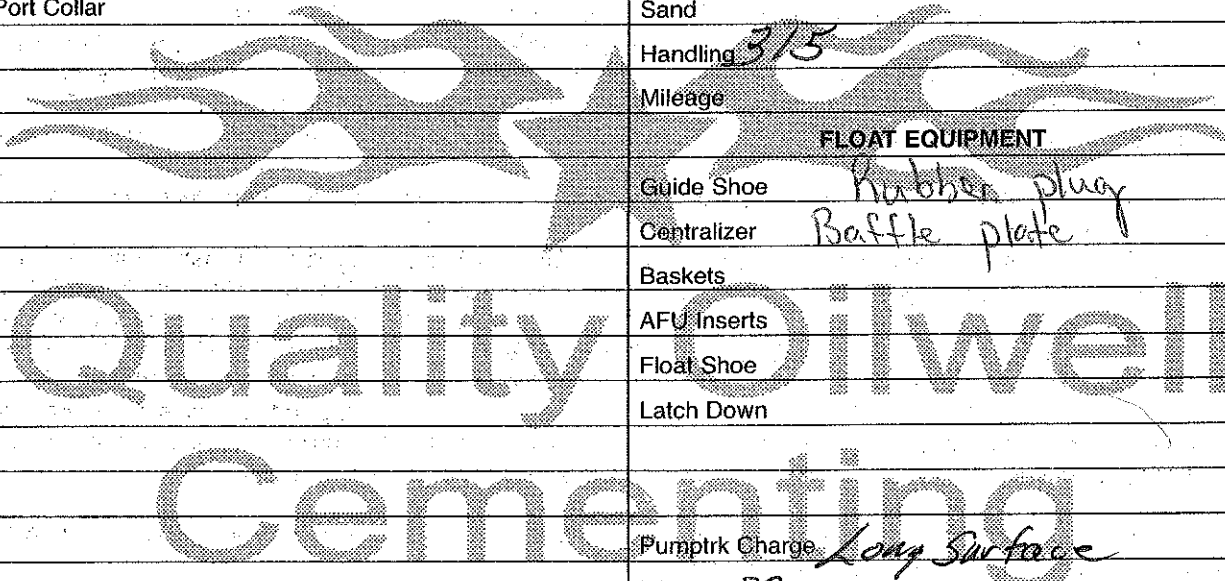
Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1343

Date	4-28-16	Sec.	30	Twp.	17	Range	18	County	Rush	State	Ks	On Location		Finish	7:30 AM
Lease								Location		Lacross, Ks - 260 on Hwy 4					
Penka		Well No.		1-30		Owner		3/4 N w/s							
Contractor		Integrity #7		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.		685'		Charge To		Downing - Nelson					
Csg.		8 5/8"		Depth		685'		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.		42'		Shoe Joint		42'		Cement Amount Ordered		300 60/40 3% CC 2% Gel					
Meas Line		Displace		41 BLS											
EQUIPMENT												Common			
Pumptrk		18		No.		Cementer		Helper		Brett		Common		180	
Bulktrk		21		No.		Driver		Downey		Gel.		11 6			
Bulktrk				No.		Driver		Rick		Calcium		0 11			
JOB SERVICES & REMARKS												Hulls			
Remarks:		Cement did Circulate										Salt			
Rat Hole												Flowseal			
Mouse Hole												Kol-Seal			
Centralizers												Mud CLR 48			
Baskets												CFL-117 or CD110 CAF 38			
D/V or Port Collar												Sand			
												Handling			
												315			
												Mileage			
FLOAT EQUIPMENT															
												Guide Shoe			
												Centralizer			
												Baffle plate			
												Baskets			
												AFU Inserts			
												Float Shoe			
												Latch Down			
												Pumptrk Charge			
												Long Surface			
												Mileage			
												32			
X Signature												Tax			
												Discount			
												Total Charge			



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. 1860

Date <u>5-5-16</u>	Sec. <u>30</u>	Twp. <u>17</u>	Range <u>18</u>	County <u>Rush</u>	State <u>KS</u>	On Location	Finish <u>1:00 AM</u>
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Location Lacross 2W 1N Wino

Lease <u>Penka</u>	Well No. <u>1</u>	Owner
Contractor <u>Integrity</u>		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 <u>Plug</u>		
Hole Size <u>7 7/8</u>	T.D. <u>3940'</u>	Charge To <u>Downing - Nelson</u>
Csg. <u>Drill Pipe</u>	Depth	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.	Shoe Joint	Cement Amount Ordered <u>205 60/40 4% Gel 1/4 Flo</u>

Meas Line	Displace	
EQUIPMENT		
Pumptrk <u>5</u>	No. <u>Cementer</u> <u>Helper</u> <u>Brett</u>	Common <u>123</u>
Bulktrk <u>19</u>	No. <u>Driver</u> <u>Driver</u> <u>Craig</u>	Poz. Mix <u>82</u>
Bulktrk	No. <u>Driver</u> <u>Driver</u> <u>Doug</u>	Gel. <u>7</u>
		Calcium

JOB SERVICES & REMARKS		
Remarks:		Hulls
Rat Hole - <u>30sx</u>		Salt
Mouse Hole		Flowseal <u>50#</u>
Centralizers		Kol-Seal
Baskets		Mud CLR 48
DV or Port Collar		CFL-117 or CD110 CAF 38
		Sand
		Handling <u>12</u>
<u>1st Plug @ 3915 w/ 50 sx</u>		Mileage

	FLOAT EQUIPMENT
<u>2nd Plug @ 1350 w/ 50 sx</u>	Guide Shoe
	Centralizer
<u>3rd Plug @ 720 w/ 50 sx</u>	Baskets
	AFU Inserts
<u>4th Plug @ 60 w/ 20 sx</u>	Float Shoe
	Latch Down

	Pumptrk Charge <u>plug</u>	Tax
	Mileage <u>32</u>	Discount
		Total Charge
X Signature <u>[Signature]</u>		



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company Inc**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Penka #1-30

30-17S-18W/ Rush,KS

Start Date: 2016.04.13 @ 09:19:12

End Date: 2016.04.13 @ 17:28:42

Job Ticket #: 65089 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.05.06 @ 08:43:21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65089

DST#: 1

ATTN: Marc Dow ning

Test Start: 2016.04.13 @ 09:19:12

GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:53:42

Time Test Ended: 17:28:42

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Sw inney

Unit No: 72

Interval: 3825.00 ft (KB) To 3848.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3848.00 ft (KB) (TVD)

2113.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741 Inside

Press@RunDepth: 147.68 psig @ 3844.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.05.16

End Date:

2016.05.16

Last Calib.: 2016.05.04

Start Time: 02:37:05

End Time:

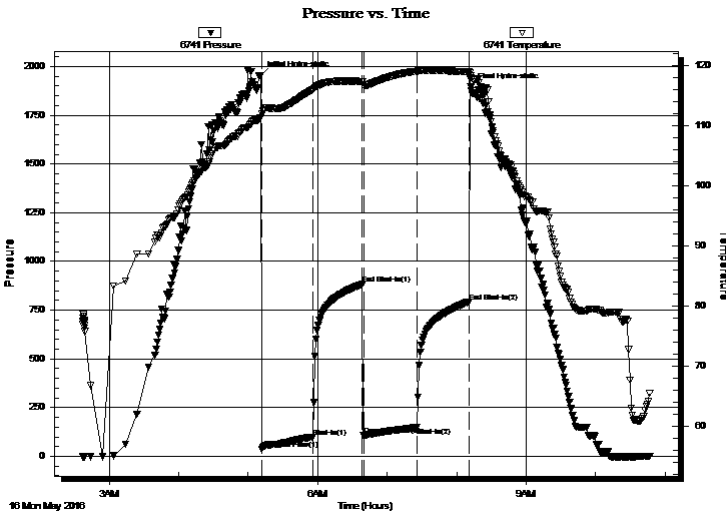
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Time On Btm: 2016.05.16 @ 05:10:30

Time Off Btm: 2016.05.16 @ 08:12:00

TEST COMMENT: IFP BOB in 36 minutes
ISI No blow back
FFP -Blow built to 8 1/2"
FSI No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1954.58	111.25	Initial Hydro-static
1	35.21	111.89	Open To Flow (1)
45	99.09	115.92	Shut-In(1)
88	883.26	117.29	End Shut-In(1)
89	105.76	116.81	Open To Flow (2)
135	147.68	118.98	Shut-In(2)
180	793.18	118.84	End Shut-In(2)
182	1894.25	118.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	OCMW Oil 5% Mud 30% Water 65%	3.33
30.00	Clean oil	0.42

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65089

DST#: 1

ATTN: Marc Dow ning

Test Start: 2016.04.13 @ 09:19:12

GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:53:42

Time Test Ended: 17:28:42

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Sw inney

Unit No: 72

Interval: 3825.00 ft (KB) To 3848.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3848.00 ft (KB) (TVD)

2113.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8960 Outside

Press@RunDepth: 796.05 psig @ 3845.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.05.16

End Date:

2016.05.16

Last Calib.:

2016.05.04

Start Time: 02:37:05

End Time:

10:46:29

Time On Btm:

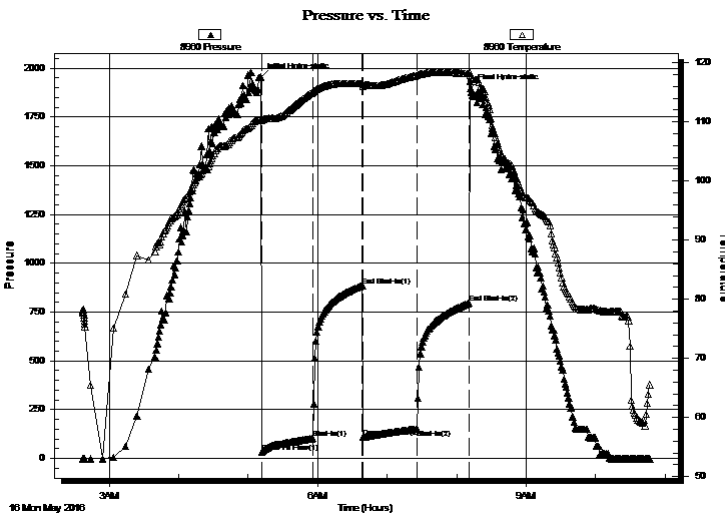
2016.05.16 @ 05:10:30

Time Off Btm:

2016.05.16 @ 08:12:00

TEST COMMENT: IFP BOB in 36 minutes
ISI No blow back
FFP -Blow built to 8 1/2"
FSI No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1954.14	110.42	Initial Hydro-static
1	31.62	110.17	Open To Flow (1)
45	102.34	114.98	Shut-In(1)
88	886.09	116.46	End Shut-In(1)
89	108.40	115.99	Open To Flow (2)
135	151.40	117.85	Shut-In(2)
180	796.05	118.16	End Shut-In(2)
182	1895.26	117.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	OCMW Oil 5% Mud 30% Water 65%	3.33
30.00	Clean oil	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65089

DST#: 1

ATTN: Marc Dow ning

Test Start: 2016.04.13 @ 09:19:12

Tool Information

Drill Pipe:	Length: 3714.00 ft	Diameter: 3.80 inches	Volume: 52.10 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:	20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 52.69 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3825.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	23.00 ft				
Tool Length:	43.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3810.00	
Hydraulic tool	5.00			3815.00	
Top Packer	5.00			3820.00	
Packer	5.00			3825.00	20.00 Bottom Of Top Packer
Anchor	18.00			3843.00	
Recorder	1.00	6741	Inside	3844.00	
Recorder	1.00	8960	Outside	3845.00	
Bullnose	3.00			3848.00	23.00 Anchor Tool

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65089

DST#: 1

ATTN: Marc Downing

Test Start: 2016.04.13 @ 09:19:12

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

32000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	OCMW Oil 5% Mud 30% Water 65%	3.325
30.00	Clean oil	0.421

Total Length: 345.00 ft Total Volume: 3.746 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

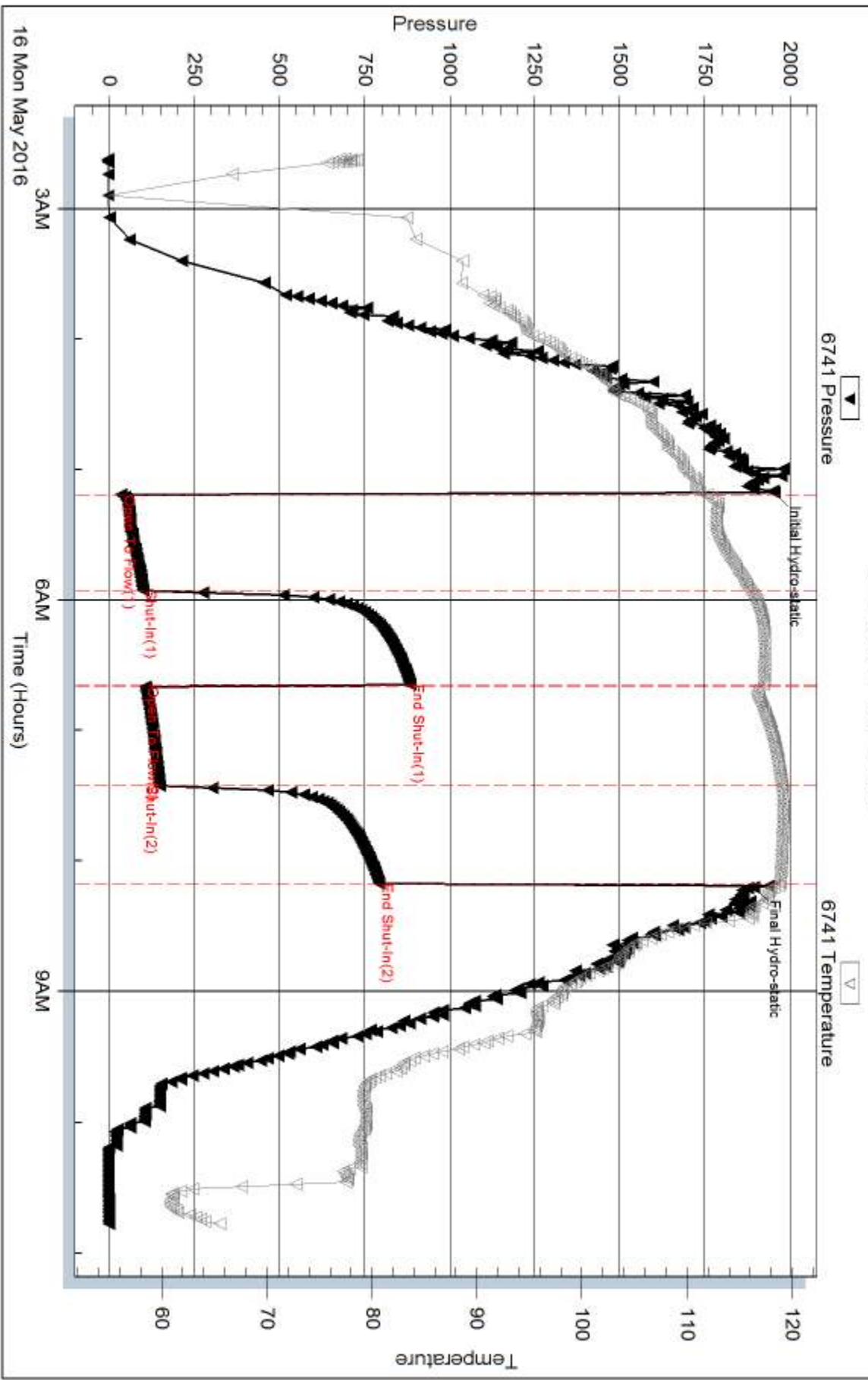
Inside

Downing Nelson Oil Company Inc

Penka #1-30

DST Test Number: 1

Pressure vs. Time

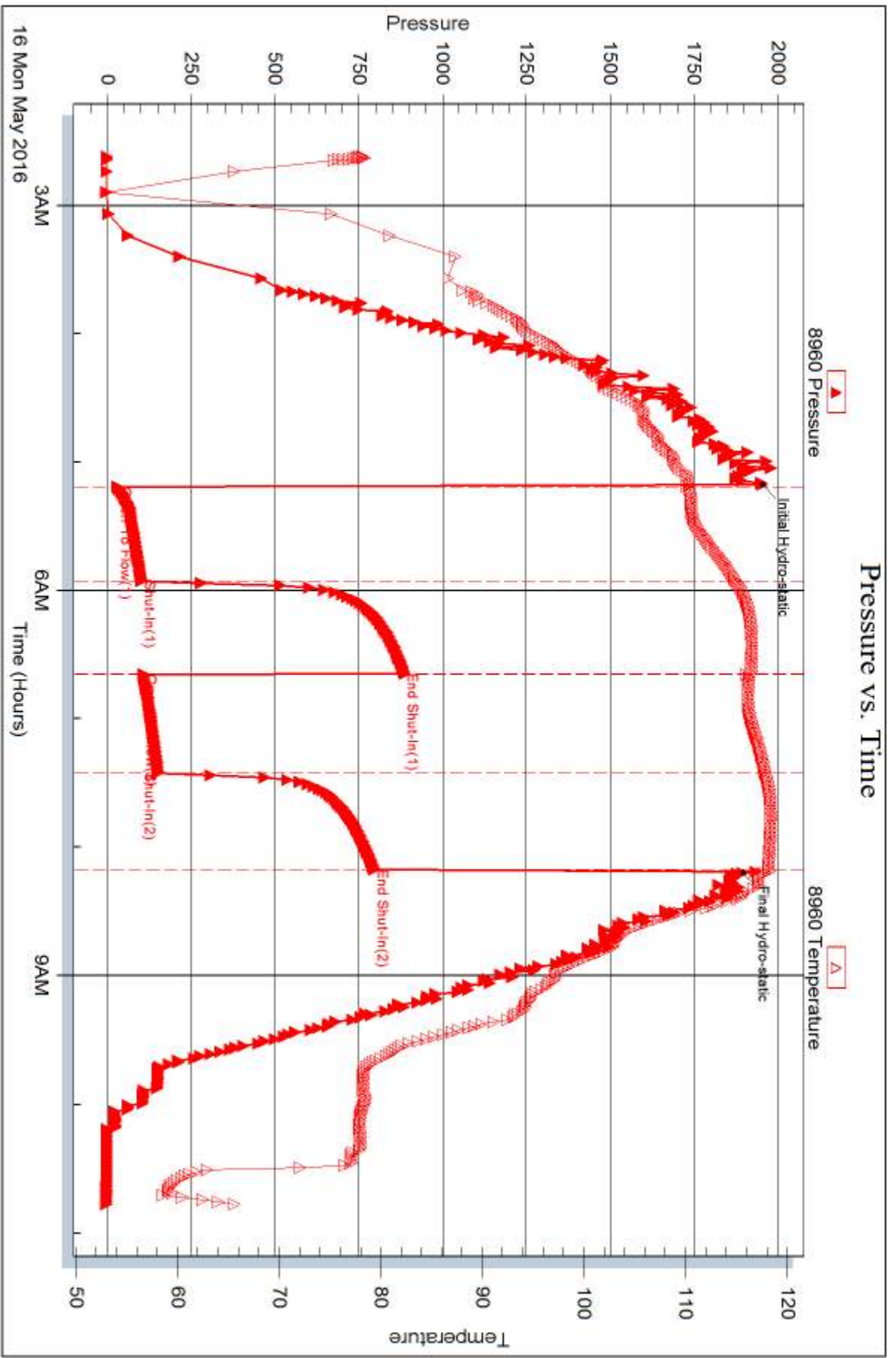


Serial #: 8960

Outside Dow n ing Nelson Oil Company Inc

Penka #1-30

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company Inc**

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Penka #1-30

30-17S-18W/ Rush,KS

Start Date: 2016.05.05 @ 10:00:00

End Date: 2016.05.05 @ 16:05:30

Job Ticket #: 65090 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.05.06 @ 08:43:00



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65090

DST#: 2

ATTN: Marc Downing

Test Start: 2016.05.05 @ 10:00:00

GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:15:30

Time Test Ended: 16:05:30

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3823.00 ft (KB) To 3894.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3977.00 ft (KB) (TVD)

2113.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741 Inside

Press@RunDepth: psig @ 3823.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.05.05 End Date: 2016.05.05

Last Calib.: 2016.05.05

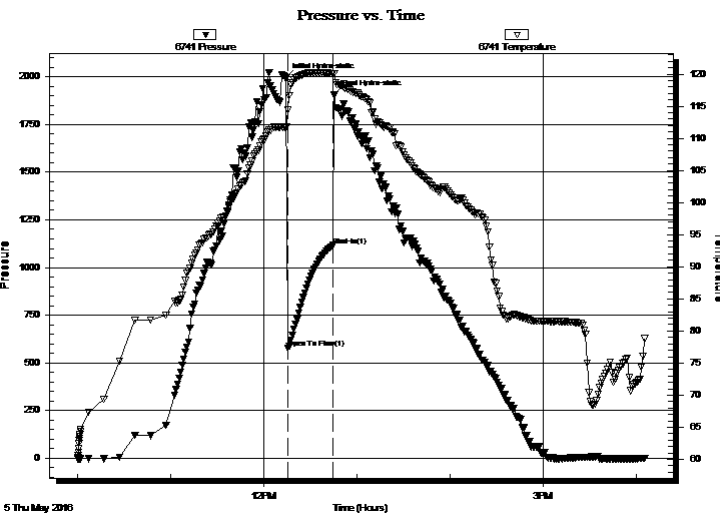
Start Time: 10:00:05 End Time: 16:05:29

Time On Btm: 2016.05.05 @ 12:14:00

Time Off Btm: 2016.05.05 @ 12:45:30

TEST COMMENT: IFP 30 minutes BOB in 30 seconds

Pull test after initial flow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1993.31	111.72	Initial Hydro-static
2	577.86	114.36	Open To Flow (1)
31	1115.57	120.06	Shut-In(1)
32	1904.70	120.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2360.00	MW Mud 15% Water 85%	32.01

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65090

DST#: 2

ATTN: Marc Downing

Test Start: 2016.05.05 @ 10:00:00

GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:15:30

Time Test Ended: 16:05:30

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3823.00 ft (KB) To 3894.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3977.00 ft (KB) (TVD)

2113.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8960 Outside

Press@RunDepth: psig @ 3823.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.05.05 End Date: 2016.05.05

Last Calib.: 2016.05.05

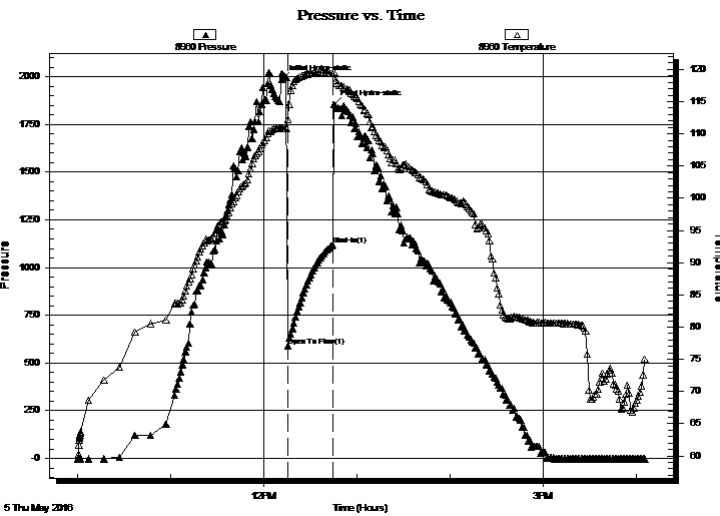
Start Time: 10:00:05 End Time: 16:05:29

Time On Btm: 2016.05.05 @ 12:12:00

Time Off Btm: 2016.05.05 @ 12:45:30

TEST COMMENT: IFP 30 minutes BOB in 30 seconds

Pull test after initial flow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1983.33	110.84	Initial Hydro-static
4	590.63	112.28	Open To Flow (1)
33	1118.63	119.37	Shut-In(1)
34	1852.76	119.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2360.00	MW Mud 15% Water 85%	32.01

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65090

DST#: 2

ATTN: Marc Downing

Test Start: 2016.05.05 @ 10:00:00

GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:15:30

Time Test Ended: 16:05:30

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3823.00 ft (KB) To 3894.00 ft (KB) (TVD)

Reference Elevations: 2124.00 ft (KB)

Total Depth: 3977.00 ft (KB) (TVD)

2113.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8521 Below (Straddle)

Press@RunDepth: psig @ 3908.82 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.05.05 End Date: 2016.05.05

Last Calib.: 2016.05.05

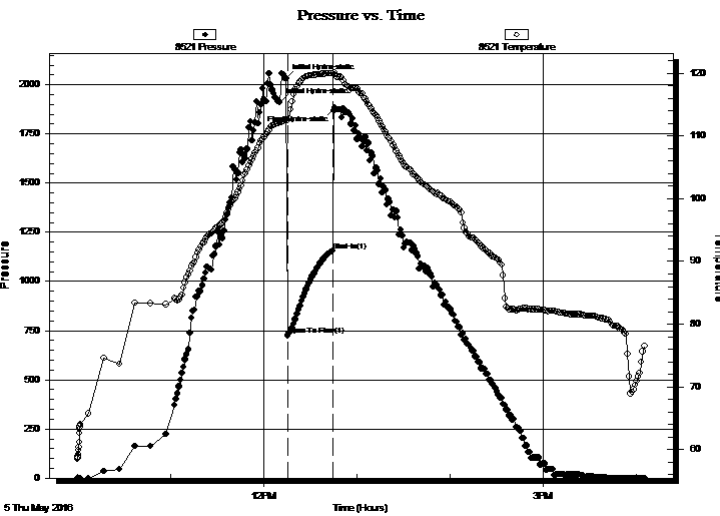
Start Time: 10:00:05 End Time: 16:05:29

Time On Btm: 2016.05.05 @ 12:10:30

Time Off Btm: 2016.05.05 @ 12:46:00

TEST COMMENT: IFP 30 minutes BOB in 30 seconds

Pull test after initial flow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1909.19	112.12	Initial Hydro-static
4	2031.45	112.49	Initial Hydro-static
5	725.26	112.43	Open To Flow (1)
34	1156.89	119.93	Shut-In(1)
36	1883.56	119.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2360.00	MW Mud 15% Water 85%	32.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65090

DST#: 2

ATTN: Marc Dow ning

Test Start: 2016.05.05 @ 10:00:00

Tool Information

Drill Pipe:	Length: 3717.00 ft	Diameter: 3.80 inches	Volume: 52.14 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: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 52.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.85 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3823.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	3892.37 ft			
Interval betw een Packers:	69.37 ft			
Tool Length:	170.06 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3811.15	
Hydraulic tool	5.00			3816.15	
Top Packer	5.00			3821.15	
Packer	1.85			3823.00	16.85 Bottom Of Top Packer
Recorder	0.00	8960	Outside	3823.00	
Recorder	0.00	6741	Inside	3823.00	
Anchor	32.00			3855.00	
Change Over Sub	1.02			3856.02	
Drill Pipe	31.55			3887.57	
Change Over Sub	0.85			3888.42	
Blank Off Sub	1.00			3889.42	
Packer (anchor side)	2.95			3892.37	69.37 Tool Interval
Packer	1.00			3893.37	
Stubb	1.60			3894.97	
Anchor	13.00			3907.97	
Change Over Sub	0.85			3908.82	
Recorder	0.00	8521	Below	3908.82	
Drill Pipe	63.47			3972.29	
Change Over Sub	0.92			3973.21	
Bullnose	3.00			3976.21	83.84 Bottom Packers & Anchor

Total Tool Length: 170.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company Inc

30-17S-18W/ Rush,KS

PO Box 1019
Hays KS 67601

Penka #1-30

Job Ticket: 65090

DST#: 2

ATTN: Marc Downing

Test Start: 2016.05.05 @ 10:00:00

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:

26000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2360.00	MW Mud 15% Water 85%	32.011

Total Length: 2360.00 ft Total Volume: 32.011 bbl

Num Fluid Samples: 0

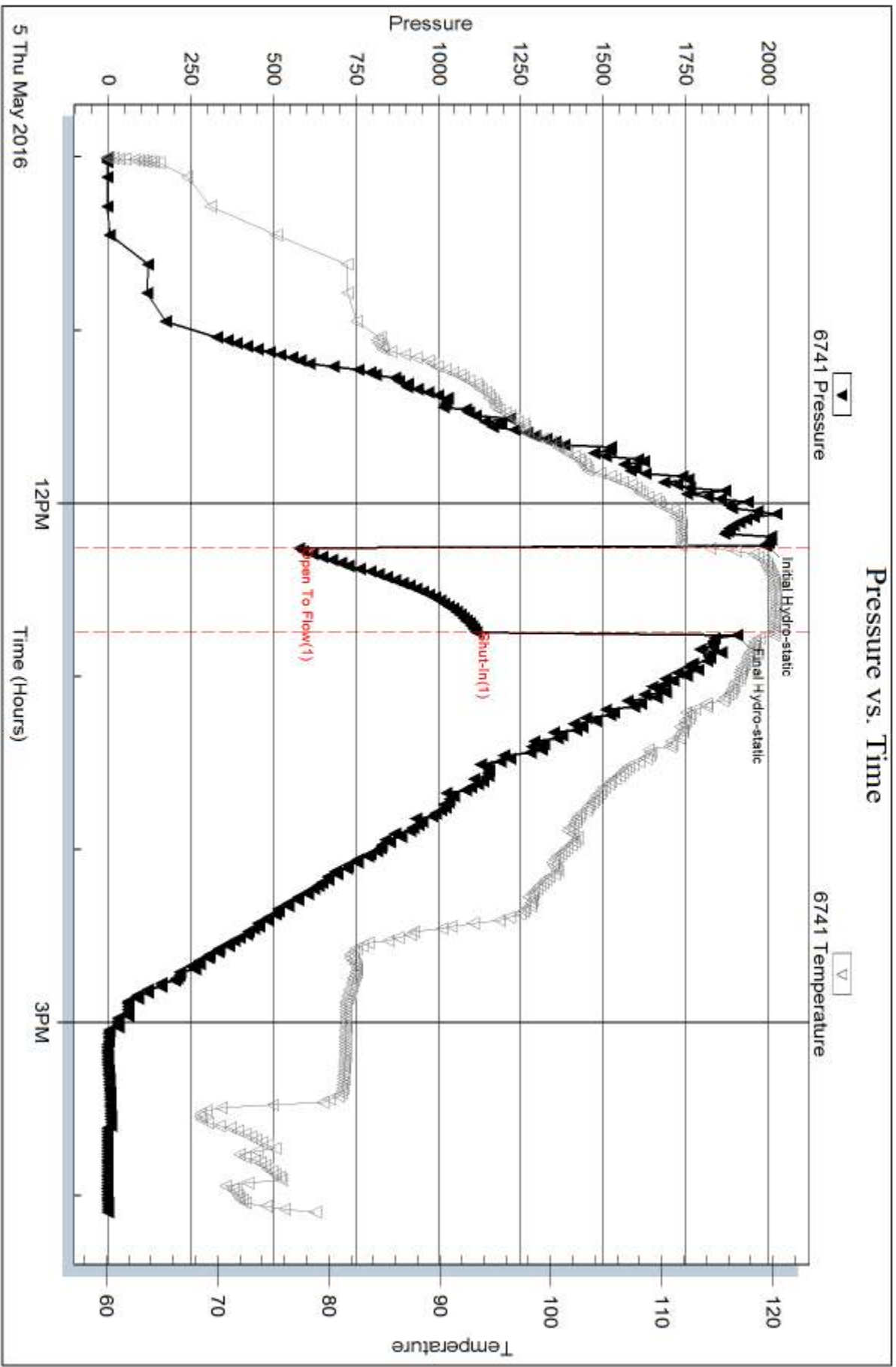
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

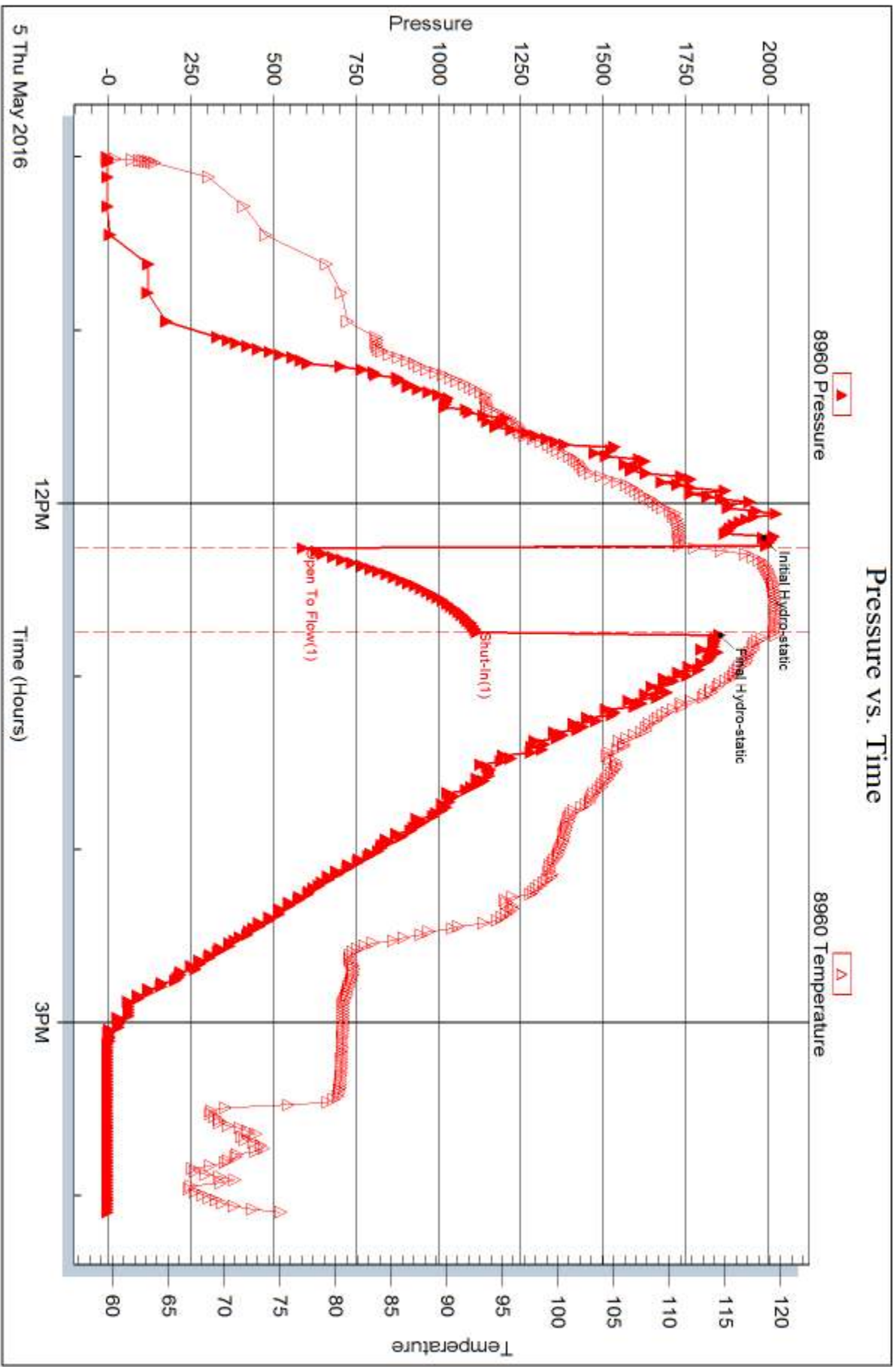


Serial #: 8960

Outside Dow ning Nelson Oil Company Inc

Penka #1-30

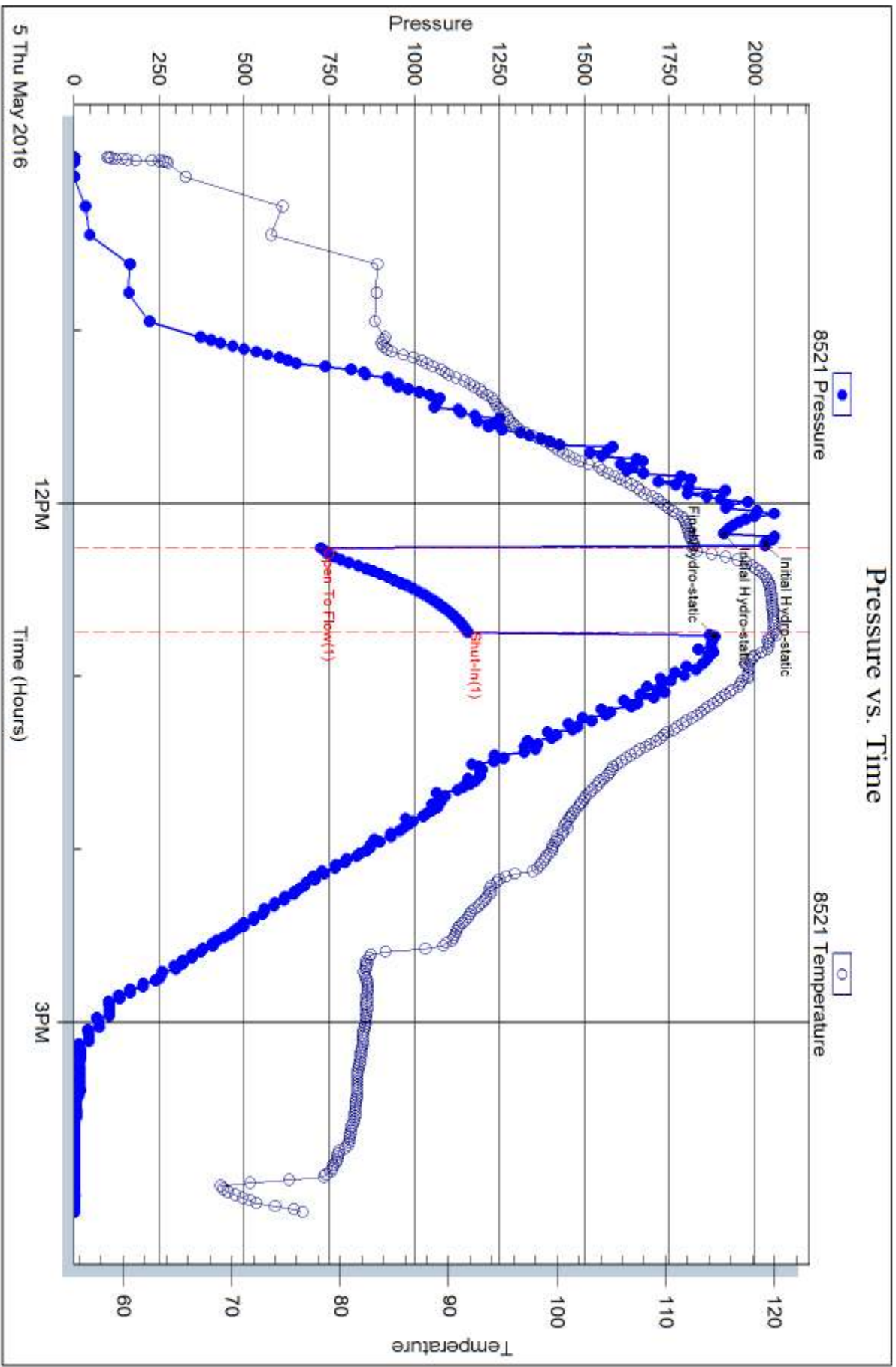
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 65090

Printed: 2016.05.06 @ 08:43:02





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65089**

Well Name & No. Penka #1-30 Test No. 1 Date 4 MAY 16
 Company Downing-Nelson Oil Company Inc. Elevation 2124 KB 2113 GL
 Address PO Box 1019 Hays Kansas 67601
 Co. Rep/Geo. Marc Downing Rig Integrity Rig 7
 Location: Sec. 30 Twp. 17S Rge. 18W Co. Rush State KS

Interval Tested 3825-3848 Zone Tested Conglomerate Sand
 Anchor Length 23 Drill Pipe Run 3714 Mud Wt. 9.6
 Top Packer Depth 3820 Drill Collars Run 120 Vis 6.0
 Bottom Packer Depth 3825 Wt. Pipe Run 420 WL 8.0
 Total Depth 3848 Chlorides 2500 ppm System LCM 1#
 Blow Description Initial flow-blow built to bottom of bucket in 36 minutes
Initial shut in-no blow back
Final flow-blow built to 8 1/2 inches
Final shut in-no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>315</u>	<u>0.1 out Muddy Water</u>	<u>5</u>	<u>65</u>	<u>30</u>	<u></u>
<u>30</u>	<u>Clean 0.1</u>	<u>100</u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Rec Total 3415 BHT 119 Gravity 34 API RW .2 @ 70 °F Chlorides 32,000 ppm

(A) Initial Hydrostatic <u>1954</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>1:18 am</u>
(B) First Initial Flow <u>35</u>	<input type="checkbox"/> Jars	T-Started <u>2:30 am</u>
(C) First Final Flow <u>99</u>	<input type="checkbox"/> Safety Joint	T-Open <u>5:10 am</u>
(D) Initial Shut-In <u>883</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>8:10 am</u>
(E) Second Initial Flow <u>105</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>10:45 am</u>
(F) Second Final Flow <u>147</u>	<input checked="" type="checkbox"/> Mileage <u>66</u> <u>49.50</u>	Comments
(G) Final Shut-In <u>793</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1894</u>	<input type="checkbox"/> Straddle	
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1099.50</u>
	Sub Total <u>1099.50</u>	MP/DST Disc't

Approved By _____ Our Representative [Signature]
 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

Test Ticket

NO. **65090**

Well Name & No. Penka #1-30 Test No. 2 Date 5 MAY 16
 Company Downing Nelson O.I Company Inc Elevation 2124 KB 2113 GL
 Address PO Box 1019 Hays Kansas 67601
 Co. Rep / Geo. Marc Downing Rig Integrity Rig 7
 Location: Sec. 30 Twp. 17S Rge. 18W Co. Rush State KS

Interval Tested 3823-3894 Zone Tested Conglomerate Sand
 Anchor Length 71 Drill Pipe Run 3897 Mud Wt. 9.3
 Top Packer Depth 3818 Drill Collars Run 120 Vis 52
 Bottom Packer Depth 3823 Wt. Pipe Run — WL 7.6
 Total Depth 3977 Chlorides 4000 ppm System LCM 2#
 Blow Description Initial Flow - blow built to bottom of bucket in 30 seconds
Pull test after initial flow

Rec	Feet of	%gas	%oil	%water	%mud
<u>2360</u>	<u>Muddy Water</u>			<u>85%</u>	<u>15%</u>
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 2360 BHT 119 Gravity _____ API RW .24 @ 84 °F Chlorides 26000 ppm

(A) Initial Hydrostatic 1993 Test 850 T-On Location 8:19 am
 (B) First Initial Flow 577 Jars _____ T-Started 9:59 am
 (C) First Final Flow 1115 Safety Joint _____ T-Open 12:14 pm
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 12:44 pm
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 4:05 pm
 (F) Second Final Flow _____ Mileage 66 49.50 Comments _____
 (G) Final Shut-In 1904 Sampler _____
 (H) Final Hydrostatic 1904 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1499.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1499.50

Approved By _____ Our Representative [Signature]
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Marc A. Downing Geologic Report		Drilling Time and Sample Log	
Consulting Petroleum Geologist		Operator Downing-Nelson Oil Co., Inc.	
Lease Penka No. 1-30		Elevation KB 2118 DF 2116 GL 2109	
API # 15-165-22127-0000		Casing Record Surface 8 5/8" @ 683' Production None	
Field Wildcat		Electrical Surveys CNDL, DIL, MEL, Sonic	
Location 1755' FNL & 1305' FEL		County Rush State Kansas	
Sec. 30 Twp. 17s Rge. 18w		Datum	
Top Anhydrite 1288		Log Tops 1286	
Base Anhydrite NA		Struct Comp +6	
Topoka 3151		3149 -1031 +4	
Heebner 3436		3434 -1316 +10	
Toronto 3456		3451 -1333 +10	
LKC 3488		3482 -1364 +11	
BKC 3756		3754 -1636 +11	
Marmaton 3801		3798 -1680 +13	
Conglomerate Sand 3841		3839 -1721 +10	
Arbuckle 3920		3918 -1800 -11	
Total Depth 3978		3977 -1859	
Reference Well For Structural Comparison Pickrell Drilling Co. Greenway "A" #1 C SW NE Sec. 30-17s-18w			

Drilling Contractor	Integrity Drilling, Rig #7	
Commenced	4-27-16	Completed 5-5-16
Samples Saved From	3400	To RTD
Drilling Time Kept From	3050	To RTD
Samples Examined From	3400	To RTD
Geological Supervision From	3050	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

