



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1179019  
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: \_\_\_\_\_

1179019

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KoBoDo 1-34
Doc ID	1179019

All Electric Logs Run

Sonic
Micro
Dual Indcution
Compensated Density/Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KoBoDo 1-34
Doc ID	1179019

Tops

Name	Top	Datum
Top Anhydrite	1240'	+807
Base Anhydrite	1282'	+765
Topeka	3015'	-968
Heebner	3288'	-1241
Toronto	3308'	-1261
LKC	3330'	-1283
BKC	3580'	-1533
Marmaton	3598'	-1551
Regan Sand	NA	-1599

# 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. 7215

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-22-13	34	15	19	Ellis	KS		7:45 PM

Location *Schoenchen, 9W, 1/2 S, Wn2*

Lease	Well No.	Owner	
<i>KOBODO</i>	<i>1-34</i>	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.	
Contractor		Charge To	
<i>Discovery #3</i>		<i>Downing - Nelson</i>	
Type Job	T.D.	Street	
<i>Surface</i>	<i>1243</i>		
Hole Size	Depth	City	
<i>12 1/4</i>	<i>1242.68</i>	State	
Csg.	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	
<i>8 5/8</i>			
Tbg. Size	Depth	Cement Amount Ordered	
		<i>450 com 3% cc 2% gel</i>	
Tool	Shoe Joint	Cement Line	
	<i>42.75</i>	Displace	
		<i>76 1/4 bbl</i>	

**EQUIPMENT**

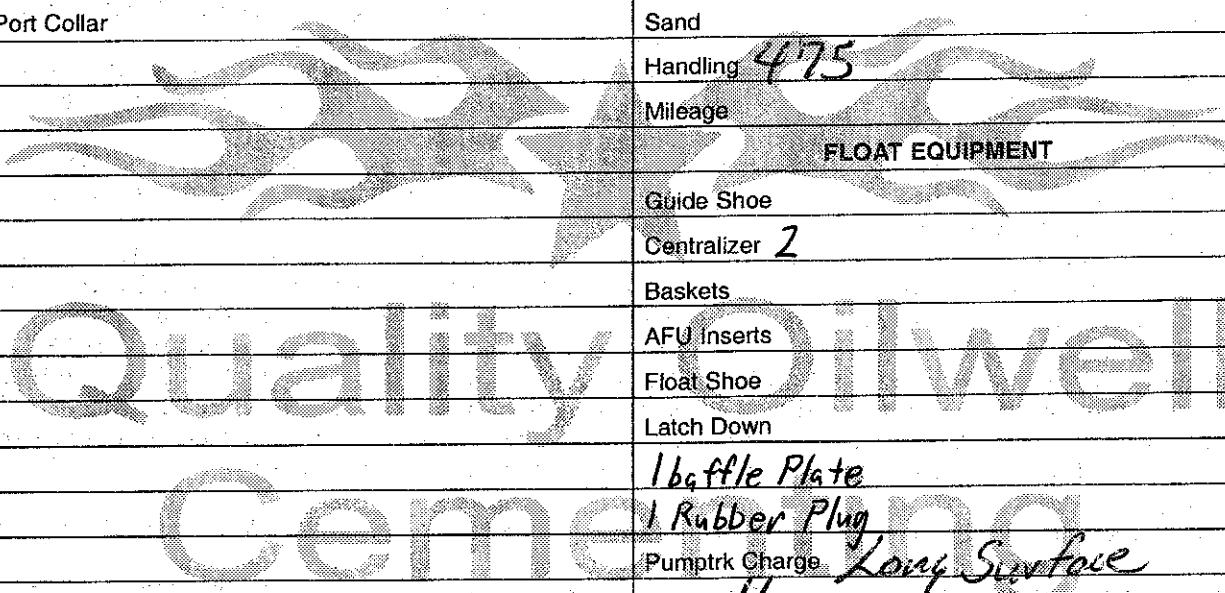
Pumptrk	No.	Cementer	Helper	Common
<i>15</i>			<i>Nick</i>	<i>450</i>
Bulktrk	No.	Driver		Poz. Mix
<i>12</i>		<i>Clation</i>		Gel. <i>9</i>
Bulktrk	No.	Driver		Calcium
<i>PU</i>		<i>Travis</i>		<i>16</i>

**JOB SERVICES & REMARKS**

Remarks:	Hulls
<i>Cement did circulate</i>	Salt
Rat Hole	Flowseal
Mouse Hole	Kol-Seal
Centralizers	Mud CLR 48
<i>1,6</i>	CFL-117 or CD110 CAF 38
Baskets	Sand
D/V or Port Collar	Handling
	<i>475</i>
	Mileage

**FLOAT EQUIPMENT**

Guide Shoe
Centralizer
<i>2</i>
Baskets
AFU Inserts
Float Shoe
Latch Down
<i>1 baffle Plate</i>
<i>1 Rubber Plug</i>
Pumptrk Charge
<i>Long Surface</i>
Mileage
<i>16</i>



X Signature <i>Alan Lischer</i>	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. 7460

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-28-13	34	15	19	BLS	KS		10:00pm
Location Schoenchen SW 1/2 Winto							

Lease	Well No.	Owner	
KO BODO	1-34	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.	
Contractor	Type Job	Charge To	
D. Seavey #3	Production String	Downing/Nelson	
Hole Size	T.D.	Street	
7 7/8	3649		
Csg.	Depth	City	
5 1/2	3646.86	State	
Tbg. Size	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	
		Cement Amount Ordered 180 com 10% Salt 5/Gel Kenite	
Tool	Depth	Cement Left in Csg. 18.77 Shoe Joint 18.77	
		Meas Line Displace 88/2RL 500 gal mud clear	

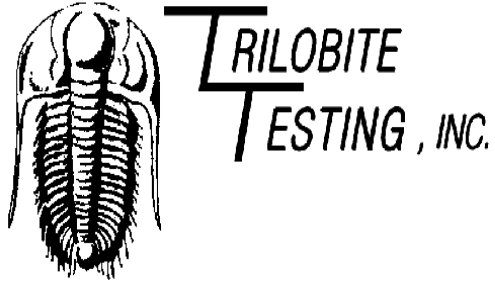
EQUIPMENT			Common
Pumptrk	No.	Cementer	180
17		Helper	Poz. Mix
Bulktrk	No.	Driver	Gel.
		Driver	Calcium
Bulktrk	No.	Driver	Hulls
8		Driver	Salt 17

JOB SERVICES & REMARKS		Hulls
Remarks:		Salt 17
Rat Hole		Flowseal
375K		Kol-Seal 900#
Mouse Hole		Mud CLR 48 500 gal
155K		CFL-117 or CD110 CAF 38
Centralizers		Sand
		Handling 206
Baskets		Mileage
		FLOAT EQUIPMENT
D/V or Port Collar		Guide Shoe 5 1/2
		Centralizer 6
		Baskets Rotator
		AFU Inserts
		Float Shoe 1
		Latch Down 1

5 1/2 size 36 gal Bull @ 3627. Est.  
Circulation Pump 500 gal mud flush +  
10 BL Sprink Cement Ratchet mustok  
Mix 135-324 Displace Plug  
Pneumatically @ 1500# - Release Pressure  
Dry.

Pumptrk Charge	prod long string
Mileage	14

Signature <i>John D. Seavey</i> Thank's!	Tax
	Discount
	Total Charge



## DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019  
Hays KS 67601

ATTN: Marc Downing

### **KoBoDo #1-34**

### **34-15s-19w Ellis KS**

Start Date: 2013.10.25 @ 13:27:00

End Date: 2013.10.25 @ 20:21:00

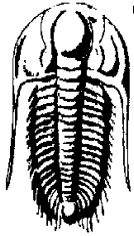
Job Ticket #: 54485                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.29 @ 13:32:50



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54485

**DST#: 1**

ATTN: Marc Downing

Test Start: 2013.10.25 @ 13:27:00

## GENERAL INFORMATION:

Formation: **Plattsmouth**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:32:45

Time Test Ended: 20:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 53

**Interval: 3229.00 ft (KB) To 3280.00 ft (KB) (TVD)**

Reference Elevations: 2048.00 ft (KB)

Total Depth: 3280.00 ft (KB) (TVD)

2040.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

## Serial #: 6799

Inside

Press @ Run Depth: 111.54 psig @ 3265.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.25

End Date:

2013.10.25

Last Calib.:

2013.10.25

Start Time: 13:27:05

End Time:

20:20:59

Time On Btm:

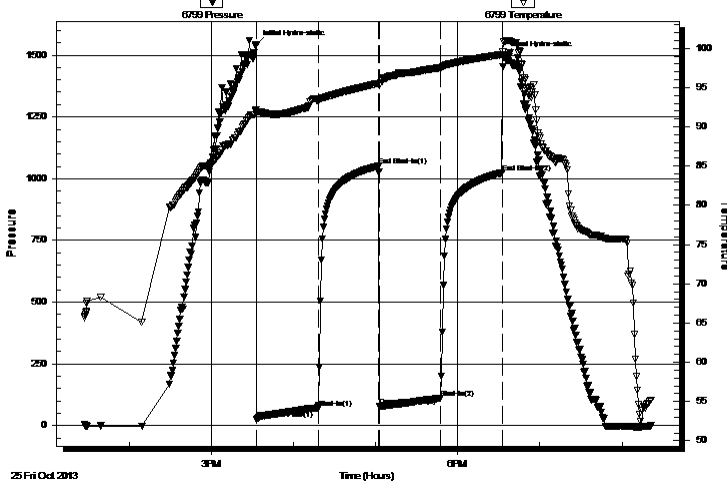
2013.10.25 @ 15:32:30

Time Off Btm:

2013.10.25 @ 18:33:45

TEST COMMENT: 45 - IF- 8" blow  
45 - IS- No return  
45 - FF- 4" blow  
45 - FS- No return

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1542.41	92.15	Initial Hydro-static
1	26.58	91.89	Open To Flow (1)
46	72.80	93.39	Shut-In(1)
90	1050.71	95.54	End Shut-In(1)
90	76.61	95.26	Open To Flow (2)
135	111.54	97.53	Shut-In(2)
180	1024.08	99.21	End Shut-In(2)
182	1500.08	100.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	WM, 40%W, 60%M	0.15
161.00	MW, 10%M, 90%W	2.26

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54485

**DST#: 1**

ATTN: Marc Downing

Test Start: 2013.10.25 @ 13:27:00

## Tool Information

Drill Pipe:	Length: 3201.00 ft	Diameter: 3.80 inches	Volume: 44.90 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: 54000.00 lb
			<u>Total Volume: 45.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3229.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	72.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3209.00	
Shut In Tool	5.00			3214.00	
Hydraulic tool	5.00			3219.00	
Packer	5.00			3224.00	21.00 Bottom Of Top Packer
Packer	5.00			3229.00	
Stubb	1.00			3230.00	
Perforations	3.00			3233.00	
Drill Pipe	31.00			3264.00	
Change Over Sub	1.00			3265.00	
Recorder	0.00	6799	Inside	3265.00	
Recorder	0.00	8648	Outside	3265.00	
Perforations	12.00			3277.00	
Bullnose	3.00			3280.00	51.00 Bottom Packers & Anchor

**Total Tool Length: 72.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54485

**DST#: 1**

ATTN: Marc Downing

Test Start: 2013.10.25 @ 13:27:00

## 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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	WM, 40%W, 60%M	0.148
161.00	MW, 10%M, 90%W	2.258

Total Length: 191.00 ft      Total Volume: 2.406 bbl

Num Fluid Samples: 0

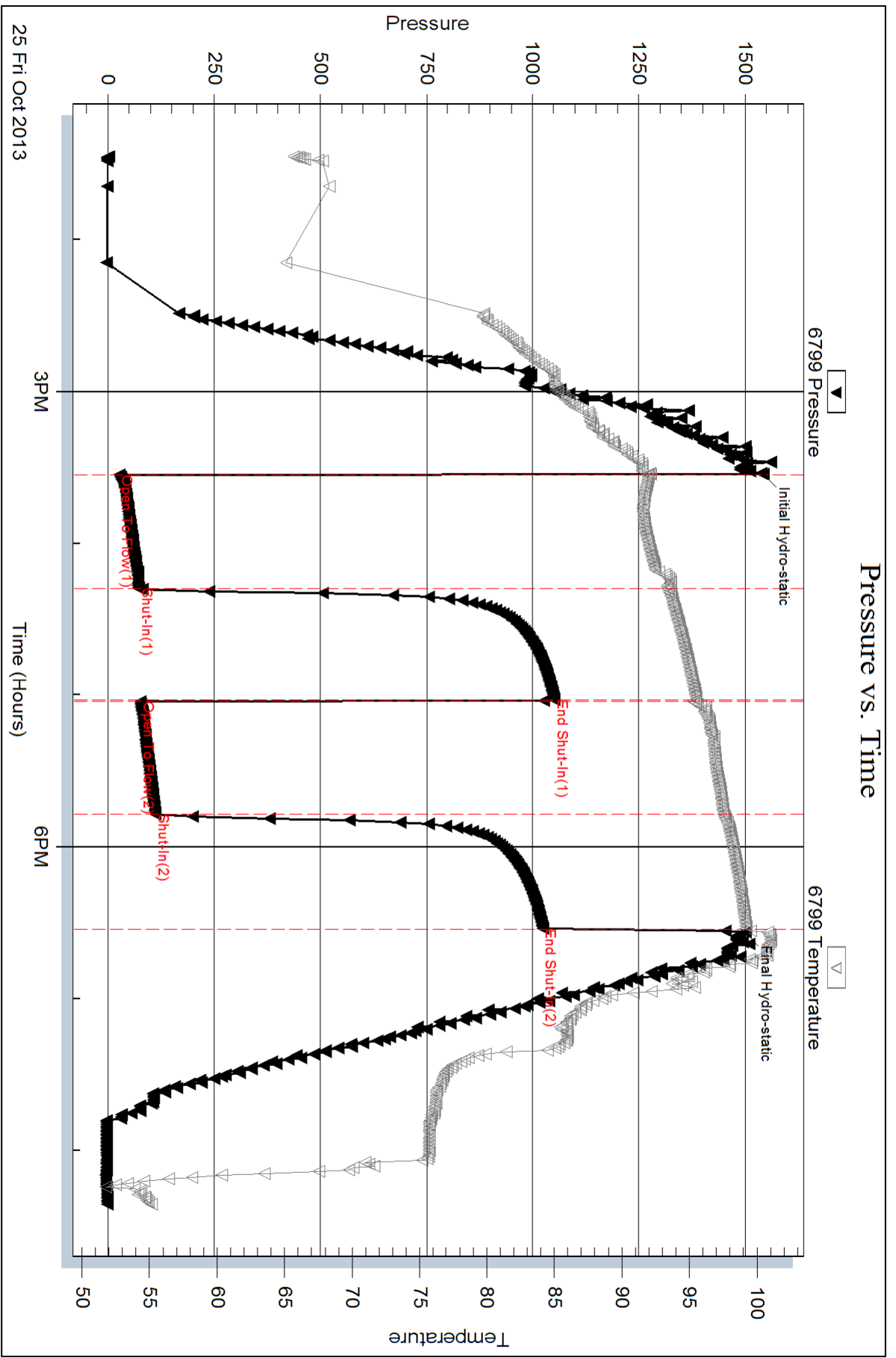
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .25 @ 60 Degrees = 38000

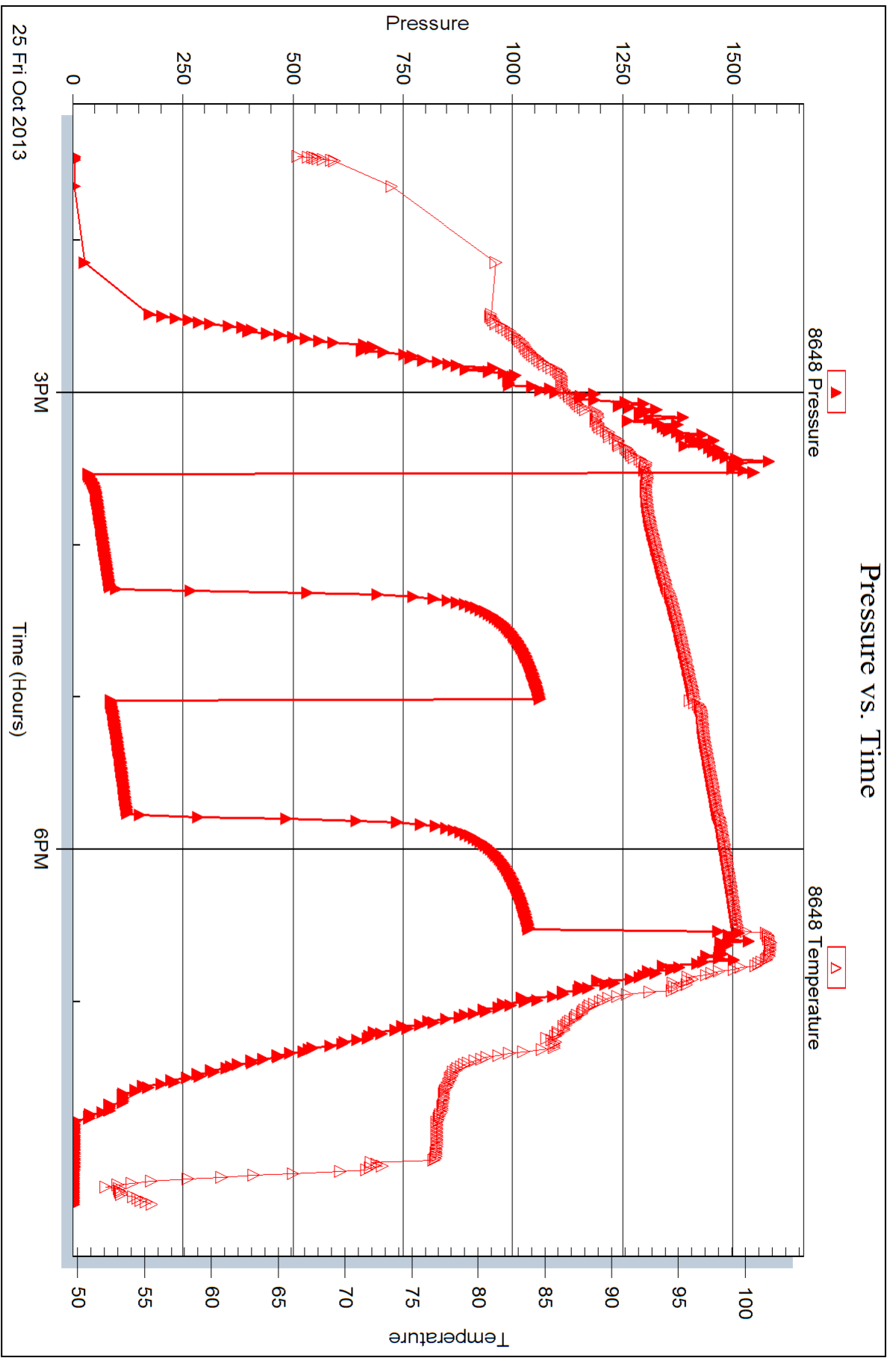


Serial #: 8648

Outside Dow n ing Nelson Oil Co

KoBoDo #1-34

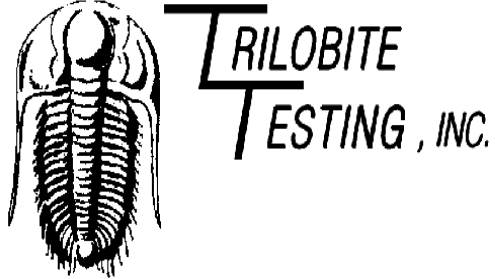
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 54485

Printed: 2013.10.29 @ 13:32:52



## DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019  
Hays KS 67601

ATTN: Marc Downing

**KoBoDo #1-34**

**34-15s-19w Ellis KS**

Start Date: 2013.10.26 @ 05:21:00

End Date: 2013.10.26 @ 11:50:30

Job Ticket #: 54486                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.29 @ 13:32:05



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54486

**DST#: 2**

ATTN: Marc Downing

Test Start: 2013.10.26 @ 05:21:00

## GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:22:45

Time Test Ended: 11:50:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 53

**Interval: 3336.00 ft (KB) To 3370.00 ft (KB) (TVD)**

Reference Elevations: 2048.00 ft (KB)

Total Depth: 3370.00 ft (KB) (TVD)

2040.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6799**

**Inside**

Press @ Run Depth: 48.16 psig @ 3340.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.26

End Date:

2013.10.26

Last Calib.:

2013.10.26

Start Time: 05:21:05

End Time:

11:50:29

Time On Btm:

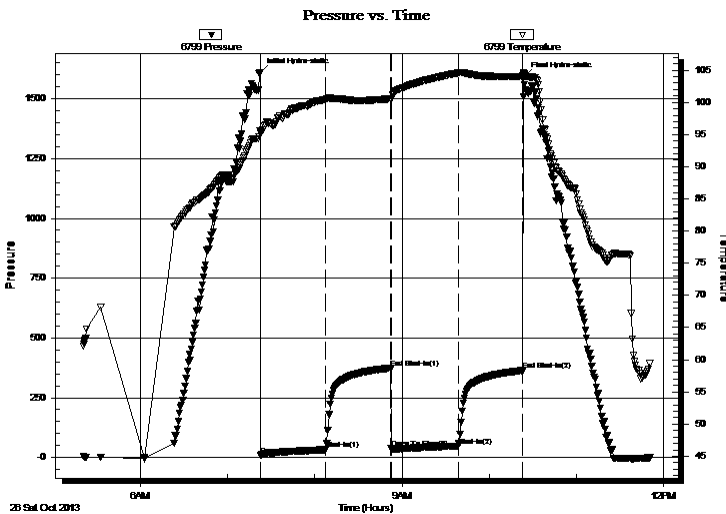
2013.10.26 @ 07:22:30

Time Off Btm:

2013.10.26 @ 10:23:45

**TEST COMMENT:** 45 - IF- 2" blow  
45 - IS- No return  
45 - FF- 1/4" blow  
45 - FS- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1610.69	95.58	Initial Hydro-static
1	10.10	95.31	Open To Flow (1)
45	32.57	100.46	Shut-In(1)
90	372.11	100.54	End Shut-In(1)
90	36.57	100.40	Open To Flow (2)
136	48.16	104.55	Shut-In(2)
181	363.71	104.04	End Shut-In(2)
182	1593.37	104.49	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	MW, 20%M, 80%W	0.60
20.00	WM, 40%W, 60%M	0.28

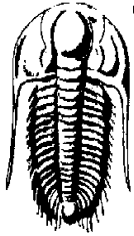
\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54486

**DST#: 2**

ATTN: Marc Downing

Test Start: 2013.10.26 @ 05:21:00

## Tool Information

Drill Pipe:	Length: 3296.00 ft	Diameter: 3.80 inches	Volume: 46.23 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:	54000.00 lb
			<u>Total Volume: 46.38 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3336.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	55.00 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			3316.00	
Shut In Tool	5.00			3321.00	
Hydraulic tool	5.00			3326.00	
Packer	5.00			3331.00	21.00 Bottom Of Top Packer
Packer	5.00			3336.00	
Stubb	1.00			3337.00	
Perforations	3.00			3340.00	
Recorder	0.00	6799	Inside	3340.00	
Recorder	0.00	8648	Outside	3340.00	
Perforations	27.00			3367.00	
Bullnose	3.00			3370.00	34.00 Bottom Packers & Anchor

**Total Tool Length: 55.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54486

**DST#: 2**

ATTN: Marc Downing

Test Start: 2013.10.26 @ 05:21:00

## 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:

31000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	MW, 20%M, 80%W	0.596
20.00	WM, 40%W, 60%M	0.281

Total Length: 82.00 ft      Total Volume: 0.877 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

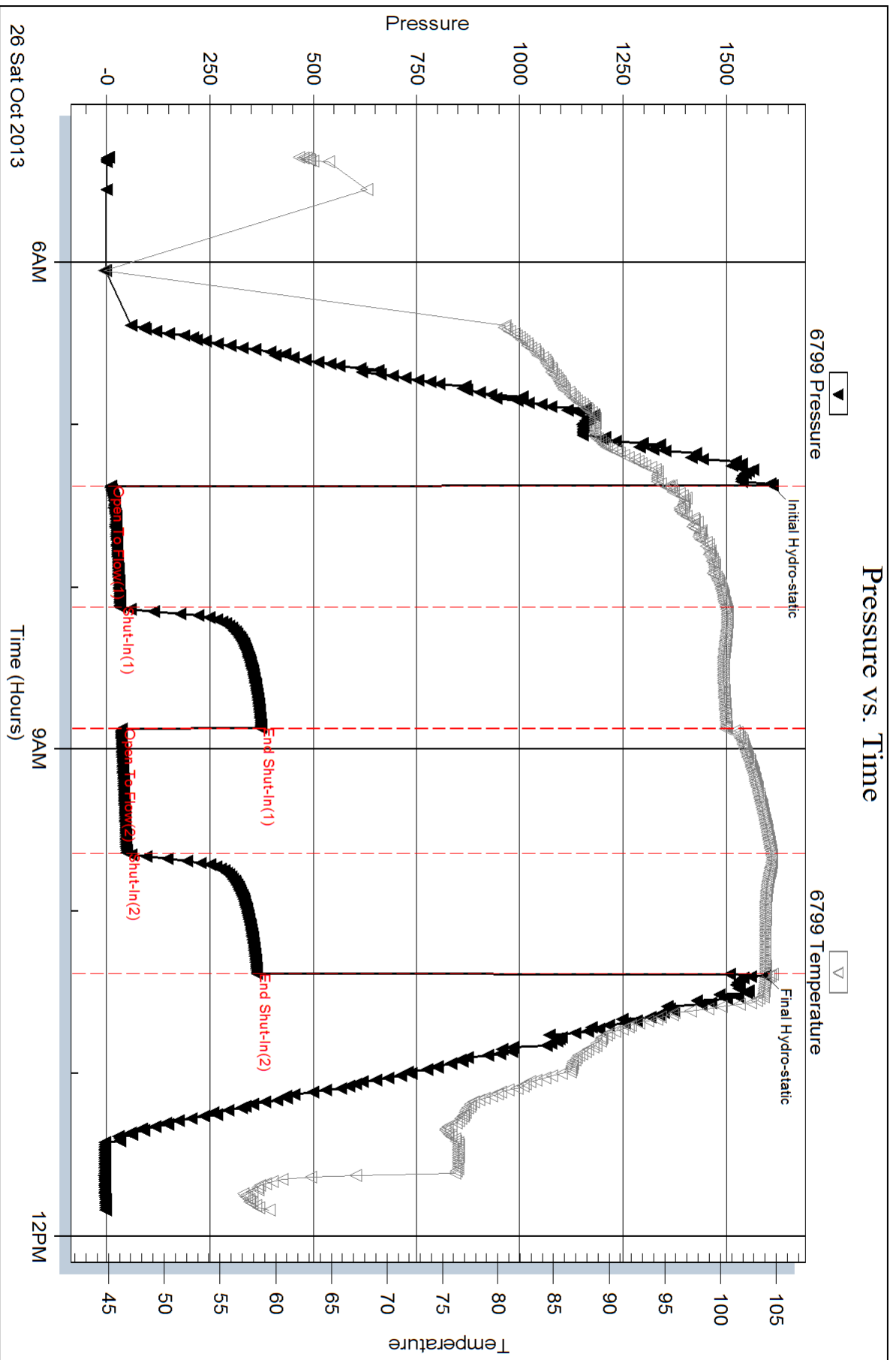
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .31 @ 50 Degrees = 31000

# Pressure vs. Time

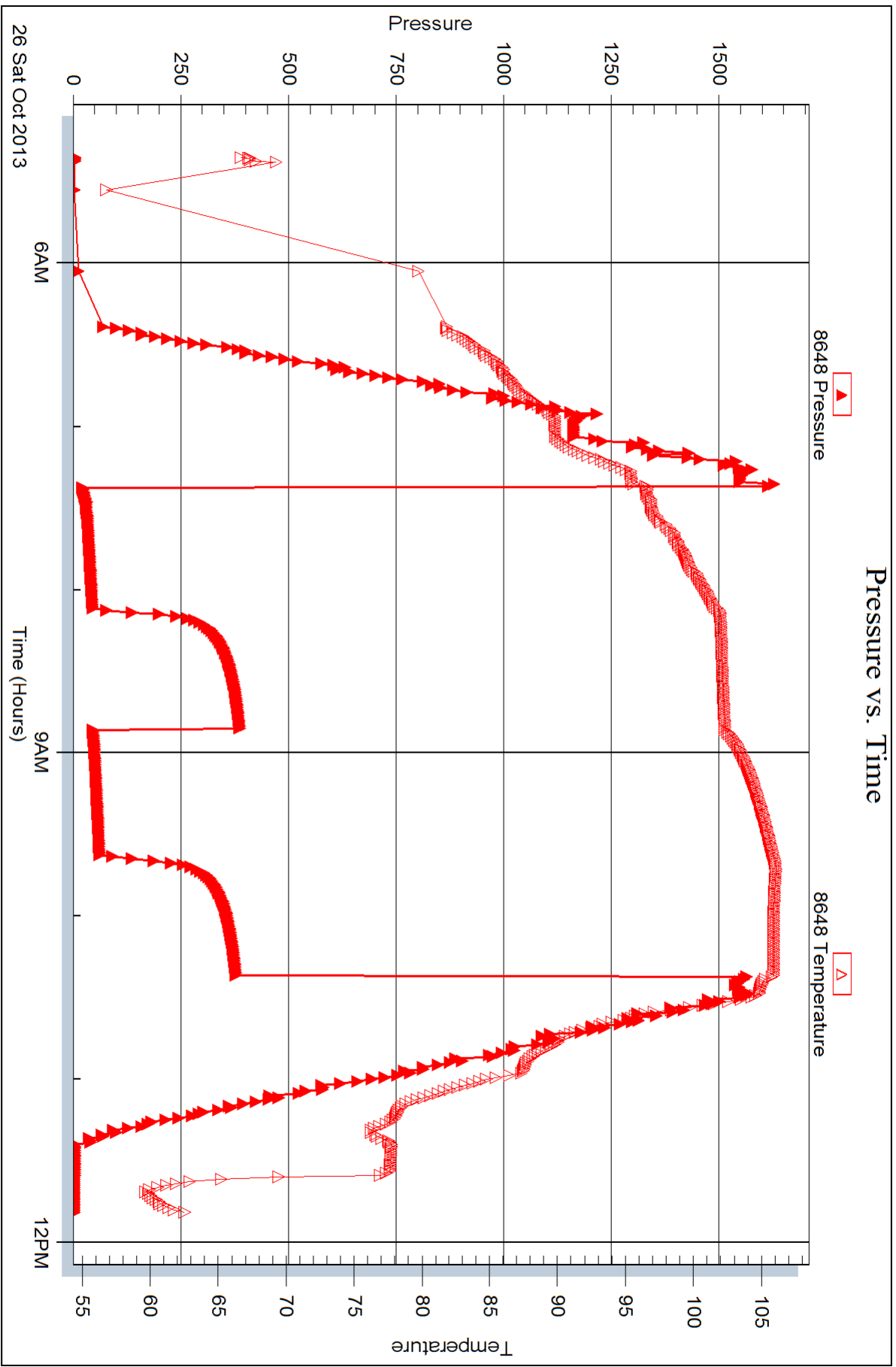


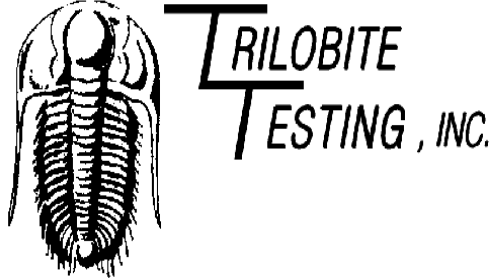
Serial #: 8648

Outside Dow ning Nelson Oil Co

KoBoDo #1-34

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019  
Hays KS 67601

ATTN: Marc Downing

**KoBoDo #1-34**

**34-15s-19w Ellis KS**

Start Date: 2013.10.27 @ 03:22:00

End Date: 2013.10.27 @ 10:21:45

Job Ticket #: 54487                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.29 @ 13:31:31

Downing Nelson Oil Co  
34-15s-19w Ellis KS  
KoBoDo #1-34  
DST # 3  
LKC "H-J"  
2013.10.27



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54487

**DST#: 3**

ATTN: Marc Dow ning

Test Start: 2013.10.27 @ 03:22:00

## GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:21:45

Time Test Ended: 10:21:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 53

**Interval: 3448.00 ft (KB) To 3525.00 ft (KB) (TVD)**

Reference Elevations: 2048.00 ft (KB)

Total Depth: 3525.00 ft (KB) (TVD)

2040.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

## Serial #: 6799

Inside

Press @RunDepth: 92.01 psig @ 3516.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.27

End Date:

2013.10.27

Last Calib.:

2013.10.27

Start Time:

03:22:05

End Time:

10:21:44

Time On Btm:

2013.10.27 @ 05:21:15

Time Off Btm:

2013.10.27 @ 08:24:15

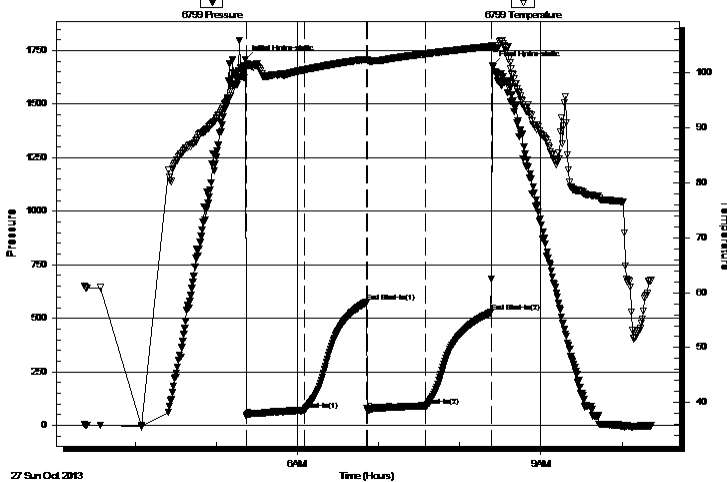
TEST COMMENT: 45 - IF- B.O.B. in 14 minutes

45 - IS- Surface return

45 - FF- B.O.B. in 6 minutes

45 - FS- Surface return

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1707.09	100.75	Initial Hydro-static
1	44.57	101.00	Open To Flow (1)
44	72.64	100.53	Shut-In(1)
90	574.18	102.46	End Shut-In(1)
91	69.10	102.39	Open To Flow (2)
134	92.01	103.45	Shut-In(2)
182	527.55	104.80	End Shut-In(2)
183	1679.30	104.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
134.00	GHOCM, 20%G, 40%O, 40%M	1.61
20.00	GO, 85%O, 15%G	0.28
0.00	961' of G.I.P.	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54487

**DST#: 3**

ATTN: Marc Downing

Test Start: 2013.10.27 @ 03:22:00

## Tool Information

Drill Pipe:	Length: 3422.00 ft	Diameter: 3.80 inches	Volume: 48.00 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: 58000.00 lb
			<u>Total Volume: 48.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3448.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	98.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3428.00	
Shut In Tool	5.00			3433.00	
Hydraulic tool	5.00			3438.00	
Packer	5.00			3443.00	21.00 Bottom Of Top Packer
Packer	5.00			3448.00	
Stubb	1.00			3449.00	
Perforations	3.00			3452.00	
Change Over Sub	1.00			3453.00	
Drill Pipe	62.00			3515.00	
Change Over Sub	1.00			3516.00	
Recorder	0.00	6799	Inside	3516.00	
Recorder	0.00	8648	Outside	3516.00	
Perforations	6.00			3522.00	
Bullnose	3.00			3525.00	77.00 Bottom Packers & Anchor

**Total Tool Length: 98.00**





**TRILOBITE**  
**TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54487

**DST#: 3**

ATTN: Marc Downing

Test Start: 2013.10.27 @ 03:22:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
134.00	GHOCM, 20%G, 40%O, 40%M	1.606
20.00	GO, 85%O, 15%G	0.281
0.00	961' of G.I.P.	0.000

Total Length: 154.00 ft      Total Volume: 1.887 bbl

Num Fluid Samples: 0

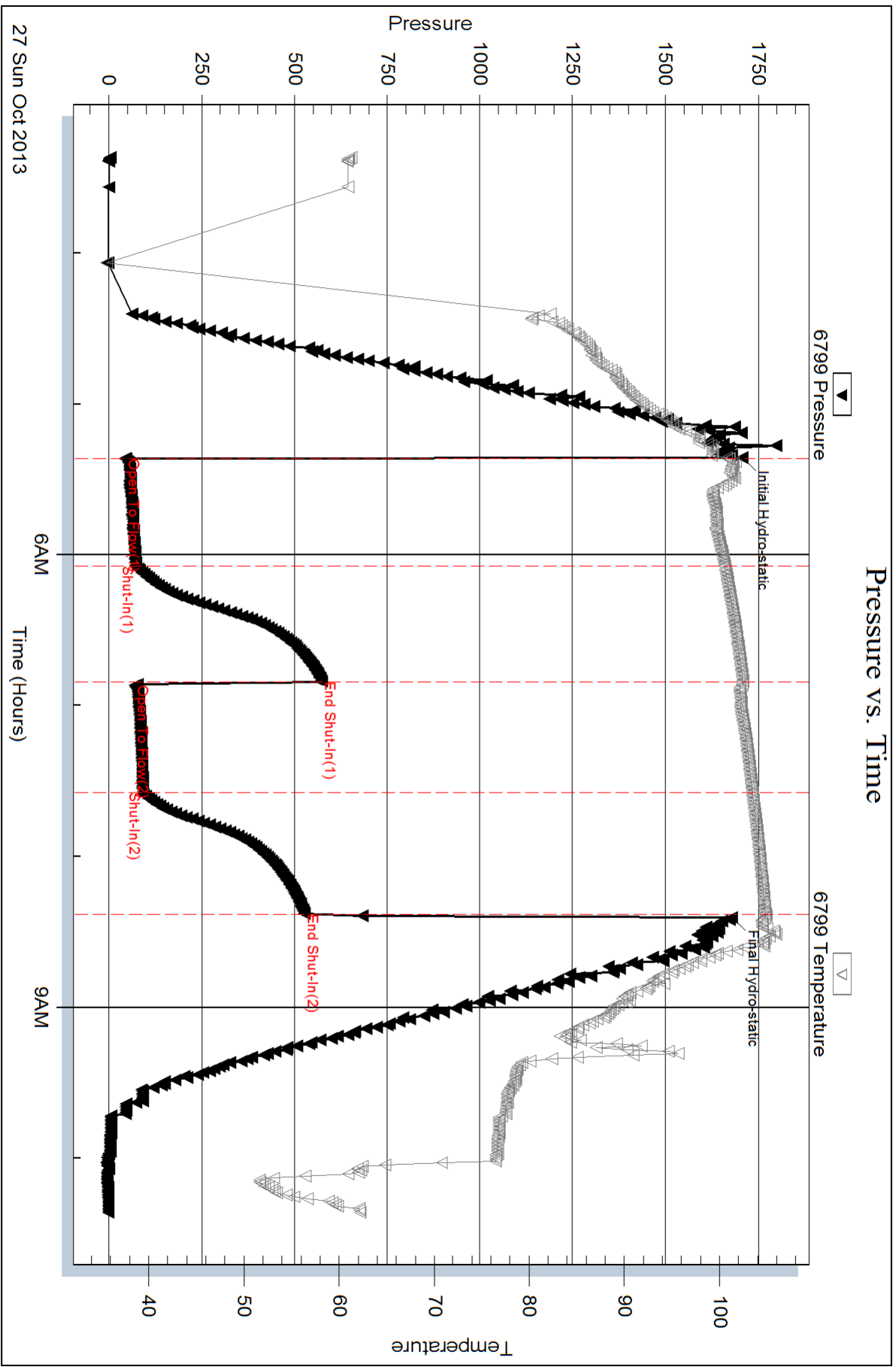
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 35 @ 80 Degrees = 33 Gravity

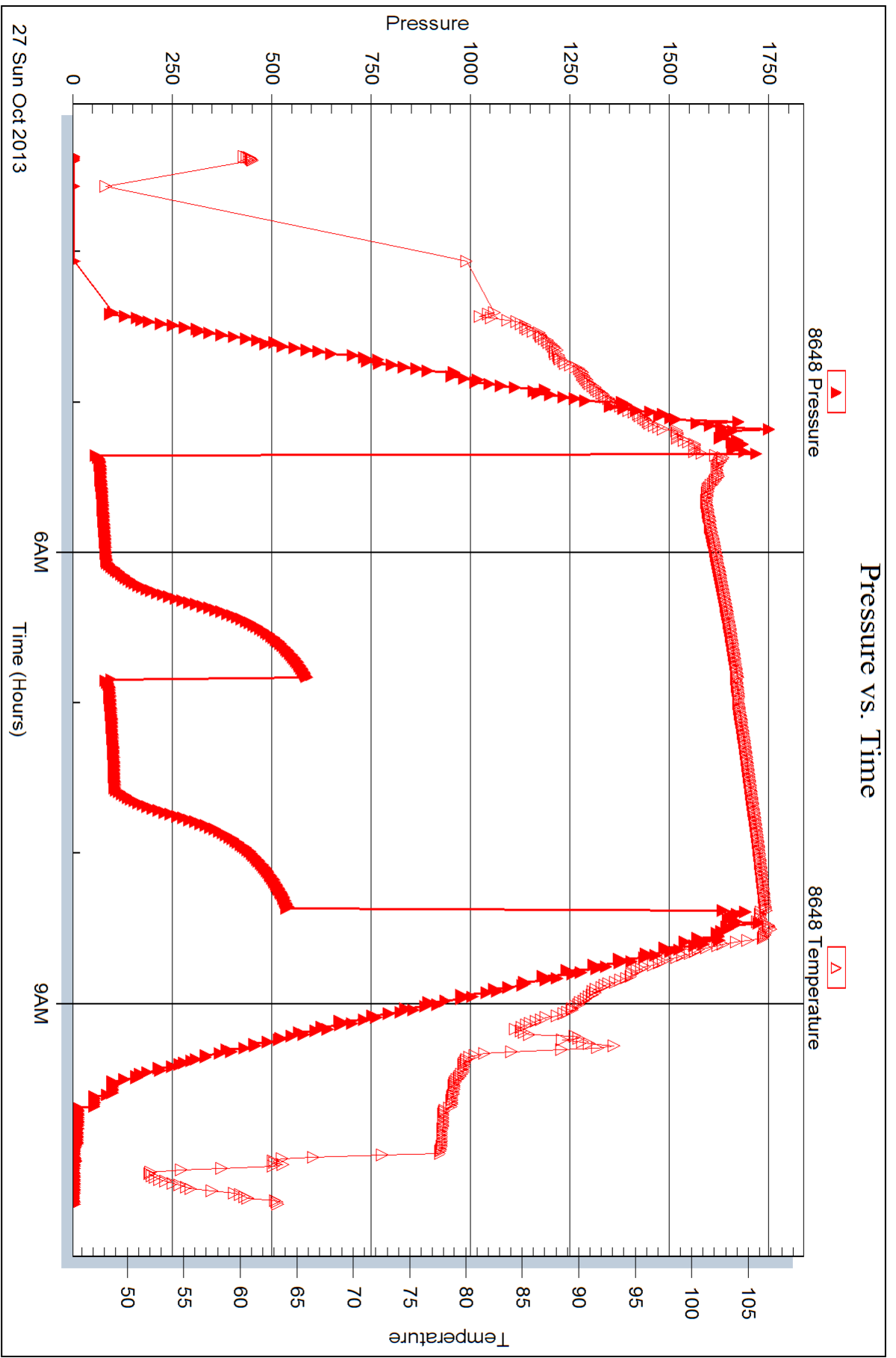


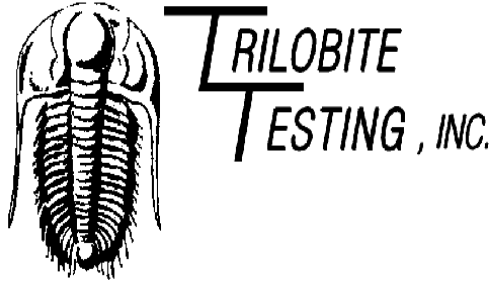
Serial #: 8648

Outside Dow n/ing Nelson Oil Co

KoBoDo #1-34

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019  
Hays KS 67601

ATTN: Marc Downing

### **KoBoDo #1-34**

### **34-15s-19w Ellis KS**

Start Date: 2013.10.27 @ 22:32:00

End Date: 2013.10.28 @ 05:02:15

Job Ticket #: 54488                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.29 @ 13:30:48



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54488

**DST#: 4**

ATTN: Marc Downing

Test Start: 2013.10.27 @ 22:32:00

## GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:28:15

Time Test Ended: 05:02:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 53

**Interval: 3623.00 ft (KB) To 3649.00 ft (KB) (TVD)**

Reference Elevations: 2048.00 ft (KB)

Total Depth: 3649.00 ft (KB) (TVD)

2040.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6799 Inside**

Press @ Run Depth: 325.26 psig @ 3627.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.27 End Date: 2013.10.28

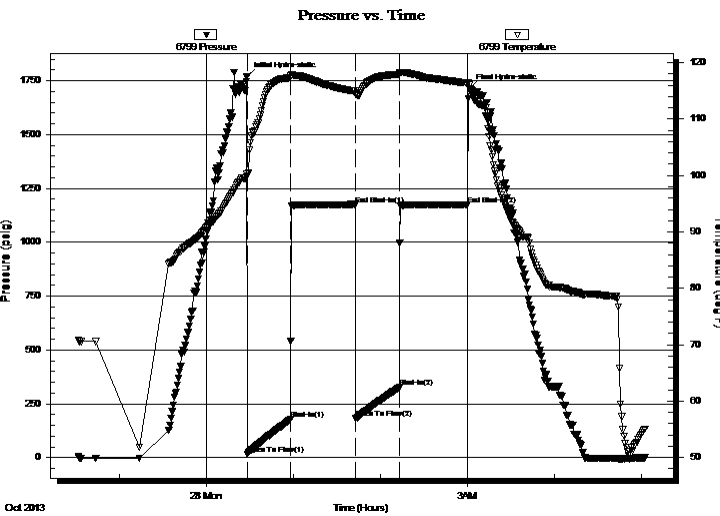
Last Calib.: 2013.10.28

Start Time: 22:32:05 End Time: 05:02:14

Time On Btm: 2013.10.28 @ 00:28:00

Time Off Btm: 2013.10.28 @ 03:01:15

**TEST COMMENT:** 30 - IF- B.O.B. in 8 minutes  
45 - IS- Weak surface return  
30 - FF- B.O.B. in 9 minutes  
45 - FS- Weak return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.75	100.22	Initial Hydro-static
1	14.34	99.93	Open To Flow (1)
30	177.39	117.37	Shut-In(1)
75	1173.74	114.92	End Shut-In(1)
75	183.46	114.45	Open To Flow (2)
105	325.26	117.90	Shut-In(2)
152	1175.17	116.39	End Shut-In(2)
154	1712.60	116.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
496.00	MW, 5%M, 95%W	6.68
186.00	MW, 40%M, 60%W	2.61
124.00	Mud with oil spots, 100%M	1.74
0.00	1240' of G.I.P.	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54488

**DST#: 4**

ATTN: Marc Downing

Test Start: 2013.10.27 @ 22:32:00

## Tool Information

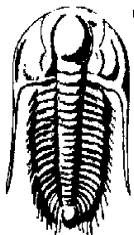
Drill Pipe:	Length: 3580.00 ft	Diameter: 3.80 inches	Volume: 50.22 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 50.37 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3623.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	47.00 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			3603.00	
Shut In Tool	5.00			3608.00	
Hydraulic tool	5.00			3613.00	
Packer	5.00			3618.00	21.00 Bottom Of Top Packer
Packer	5.00			3623.00	
Stubb	1.00			3624.00	
Perforations	3.00			3627.00	
Recorder	0.00	6799	Inside	3627.00	
Recorder	0.00	8648	Outside	3627.00	
Perforations	19.00			3646.00	
Bullnose	3.00			3649.00	26.00 Bottom Packers & Anchor

**Total Tool Length: 47.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing Nelson Oil Co

**34-15s-19w Ellis KS**

PO Box 1019  
Hays KS 67601

**KoBoDo #1-34**

Job Ticket: 54488

**DST#: 4**

ATTN: Marc Downing

Test Start: 2013.10.27 @ 22:32:00

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
496.00	MW, 5%M, 95%W	6.684
186.00	MW, 40%M, 60%W	2.609
124.00	Mud with oil spots, 100%M	1.739
0.00	1240' of G.I.P.	0.000

Total Length: 806.00 ft

Total Volume: 11.032 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

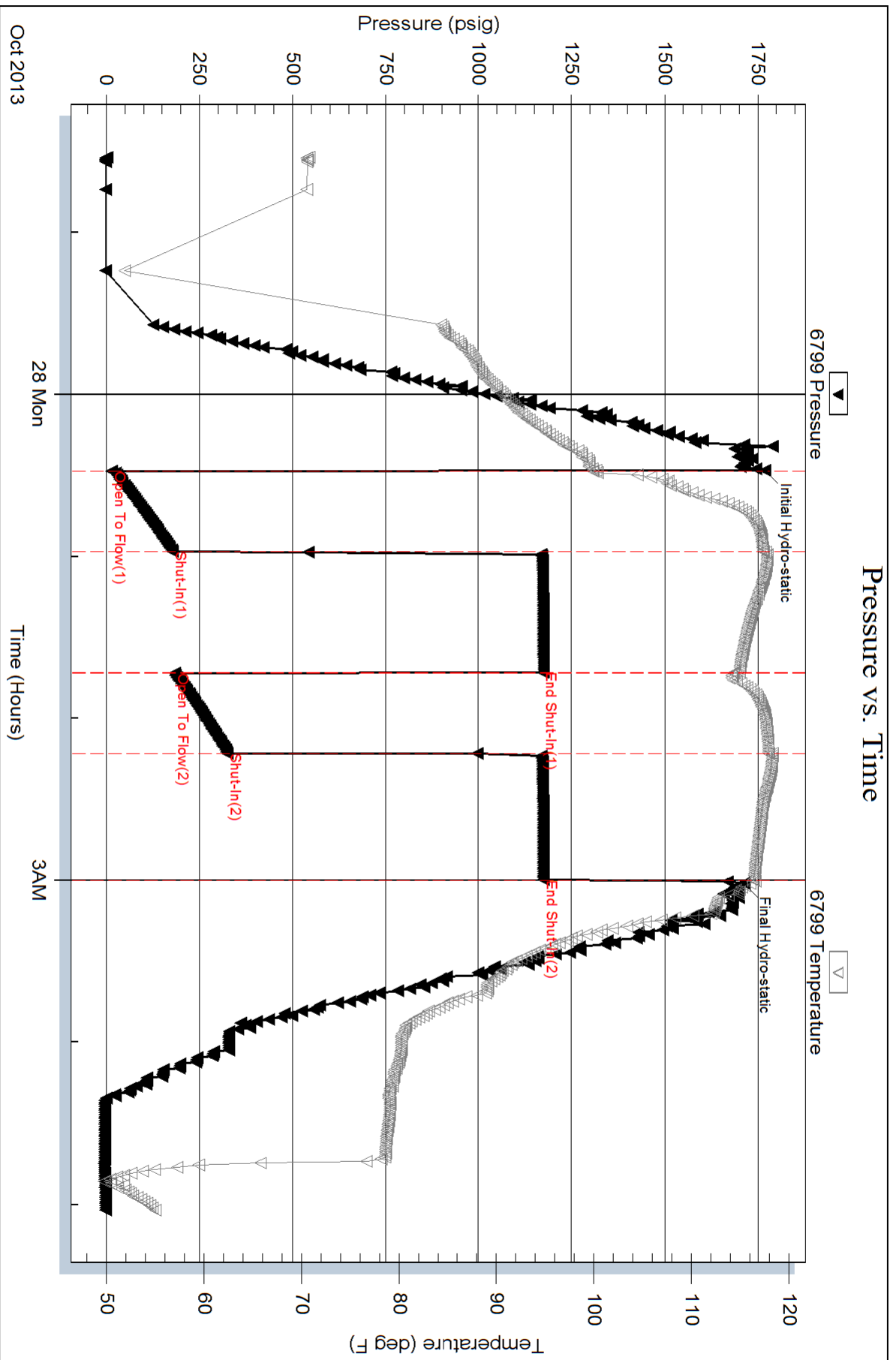
Laboratory Name:

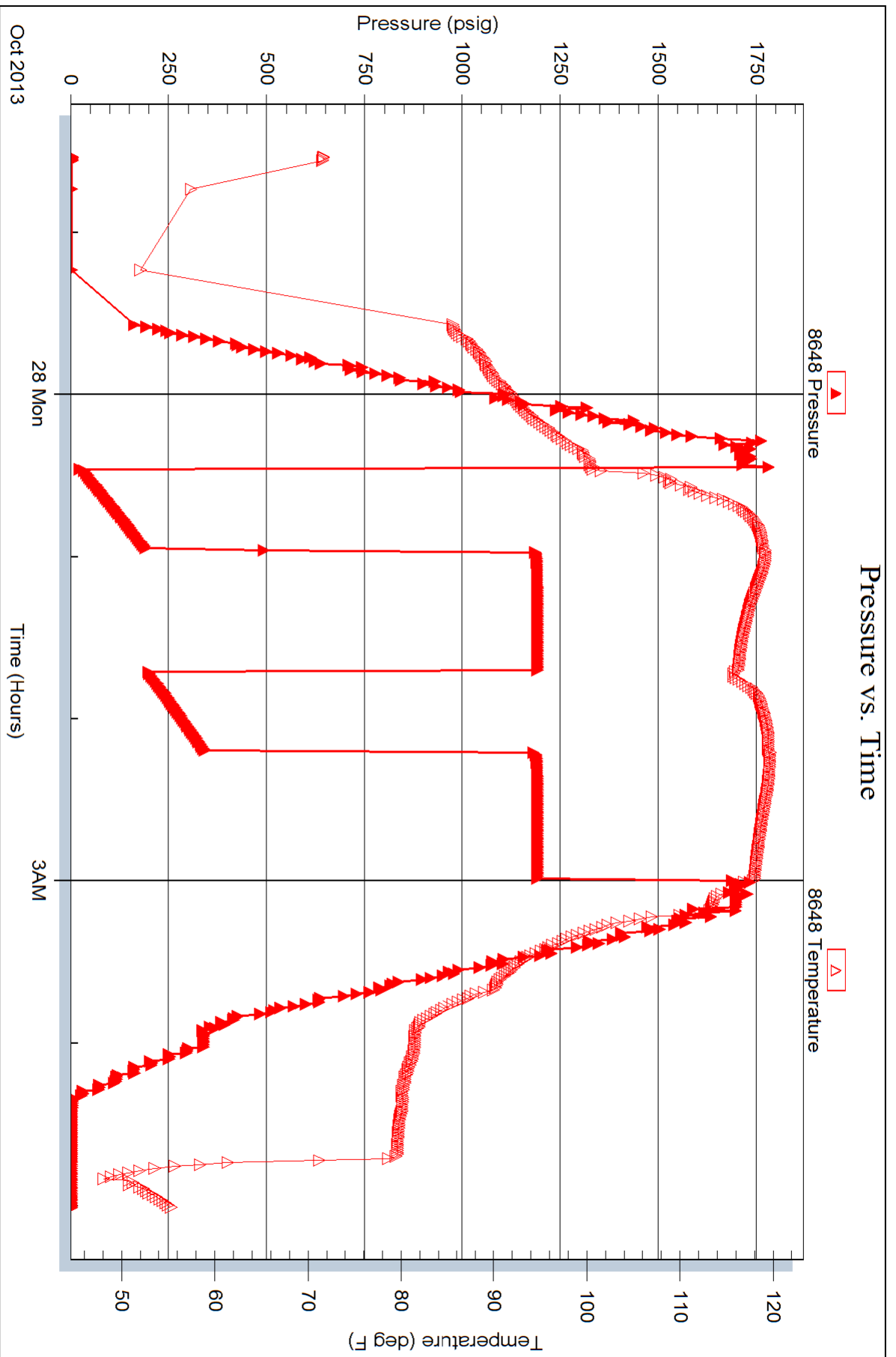
Laboratory Location:

Recovery Comments:



# Pressure vs. Time







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **54485**

Well Name & No. KoBoDo #1734 Test No. 1 Date 10-25-13  
 Company Downing-Nelson Oil Co Inc Elevation 2048 KB 2040 GL  
 Address Po Box 1019, Hays KS, 67601  
 Co. Rep / Geo. Marc Downing Rig Discovery #3  
 Location: Sec. 34 Twp. 15s Rge. 19w Co. Ellis State KS

Interval Tested 3229 - 3280 Zone Tested Plattsmouth  
 Anchor Length 51' Drill Pipe Run 3201' Mud Wt. 9.6  
 Top Packer Depth 3224 Drill Collars Run 30' Vis 48  
 Bottom Packer Depth 3229 Wt. Pipe Run - WL 6.4  
 Total Depth 3280 Chlorides 2,000 ppm System LCM -

Blow Description IF- 8" blow  
ISI- No return  
FF- 4" blow  
FSI- No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>WM</u>		<u>40</u>	<u>60</u>	
<u>161</u>	<u>MW</u>		<u>90</u>	<u>10</u>	
Rec Total	<u>191'</u>				

BHT 990 Gravity - API RW .25 @ 60 ° F Chlorides 38,000 ppm

(A) Initial Hydrostatic 1542  Test 1150 T-On Location 11:15 am  
 (B) First Initial Flow 26  Jars \_\_\_\_\_ T-Started 1:27 pm  
 (C) First Final Flow 72  Safety Joint \_\_\_\_\_ T-Open 3:33 pm  
 (D) Initial Shut-In 1050  Circ Sub \_\_\_\_\_ T-Pulled 6:33 pm  
 (E) Second Initial Flow 76  Hourly Standby \_\_\_\_\_ T-Out 8:22 pm  
 (F) Second Final Flow 111  Mileage 39 RT 60.45  
 (G) Final Shut-In 1024  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1500  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

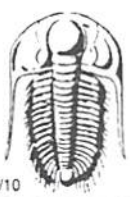
Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45

Sub Total 1210.45

MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Cody Blah

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.

54486

Well Name & No. KoBoDo #1-34 Test No. 2 Date 10-26-13  
 Company Downing - Nelson Oil Co Inc Elevation 2048 KB 2040 GL  
 Address Po Box 1019, Hays KS, 67601  
 Co. Rep / Geo. Marc Downing Rig Discovery #3  
 Location: Sec. 34 Twp. 15S Rge. 19W Co. Ellis State ks

Interval Tested 3336 - 3370 Zone Tested LKC "C"  
 Anchor Length 34' Drill Pipe Run 3296' Mud Wt. 8.6  
 Top Packer Depth 3331 Drill Collars Run 30' Vis 48  
 Bottom Packer Depth 3336 Wt. Pipe Run — WL 6.4  
 Total Depth 3370 Chlorides 2,000 ppm System LCM —  
 Blow Description IF - 2" blow  
ISI - No return  
FF - 1/4" blow  
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>62</u>	<u>MW</u>		<u>80</u>	<u>20</u>	
<u>20</u>	<u>WM</u>		<u>40</u>	<u>60</u>	

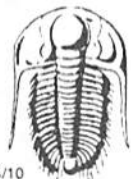
Rec Total 82' BHT 104° Gravity — API RW .31 @ 50° F Chlorides 31,000 ppm

(A) Initial Hydrostatic 1610  Test 1150 T-On Location 5:00 am  
 (B) First Initial Flow 10  Jars — T-Started 5:21 am  
 (C) First Final Flow 32  Safety Joint — T-Open 7:23 am  
 (D) Initial Shut-In 372  Circ Sub — T-Pulled 10:23 am  
 (E) Second Initial Flow 36  Hourly Standby — T-Out 11:51 am  
 (F) Second Final Flow 48  Mileage 39 RT 60.45  
 (G) Final Shut-In 363  Sampler —  
 (H) Final Hydrostatic 1593  Straddle —  Ruined Shale Packer —  
 Shale Packer —  Ruined Packer —  
 Extra Packer —  Extra Copies —  
 Initial Open 45  Extra Recorder — Sub Total 0  
 Initial Shut-In 45  Day Standby — Total 1210.45  
 Final Flow 45  Accessibility — MP/DST Disc't —  
 Final Shut-In 45 Sub Total 1210.45

Approved By \_\_\_\_\_

Our Representative Cody Bloodorn

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. **54487**

Well Name & No. KoBoDo #1-34 Test No. 3 Date 10-27-13  
 Company Downing-Nelson Oil Co Inc Elevation 2048 KB 2040 GL  
 Address Po Box 1019 Hays KS, 67601  
 Co. Rep / Geo. Marc Downing Rig Discovery #3  
 Location: Sec. 34 Twp. 15s Rge. 19w Co. Ellis State KS

Interval Tested 3448 - 3525 Zone Tested LKC "H-J"  
 Anchor Length 77' Drill Pipe Run 3422' Mud Wt. 8.7  
 Top Packer Depth 3443 Drill Collars Run 30' Vis 53  
 Bottom Packer Depth 3448 Wt. Pipe Run — WL 7.2  
 Total Depth 3525 Chlorides 3,000 ppm System LCM —

Blow Description IF - B.O.B. in 14 minutes  
ISI - Surface return  
FF - B.O.B. in 6 minutes  
FSI - Surface return

Rec	Feet of	%gas	%oil	%water	%mud
<u>134</u>	<u>6 HOCM</u>	<u>20</u>	<u>40</u>	<u>40</u>	<u>—</u>
<u>20</u>	<u>60</u>	<u>15</u>	<u>85</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>961' of G.I.P.</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>

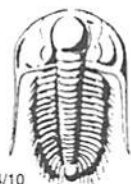
Rec Total 154' BHT 104° Gravity 33 API RW — @ —° F Chlorides — ppm

(A) Initial Hydrostatic 1707  Test 1150 T-On Location 2:46am  
 (B) First Initial Flow 44  Jars — T-Started 3:22am  
 (C) First Final Flow 72  Safety Joint — T-Open 5:21am  
 (D) Initial Shut-In 574  Circ Sub — T-Pulled 8:21am  
 (E) Second Initial Flow 69  Hourly Standby — T-Out 10:22am  
 (F) Second Final Flow 92  Mileage 39RT 60.45  
 (G) Final Shut-In 527  Sampler —  
 (H) Final Hydrostatic 1679  Straddle —  
 Ruined Shale Packer —  
 Ruined Packer —  
 Extra Copies —

Initial Open 45  Extra Packer —  
 Initial Shut-In 45  Extra Recorder —  
 Final Flow 45  Day Standby —  
 Final Shut-In 45  Accessibility —  
 Sub Total 1210.45 MP/DST Disc't —

Approved By \_\_\_\_\_ Our Representative Cody Plack

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. **54488**

Well Name & No. KoBoDo #1-34 Test No. 4 Date 10-27-13  
 Company Downing - Nelson Oil Co IHC Elevation 2048 KB 2040 GL  
 Address Po Box 1019 Hays KS, 67601  
 Co. Rep / Geo. Marc Downing Rig Discovery #3  
 Location: Sec. 34 Twp. 15s Rge. 19w Co. Ellis State KS

Interval Tested 3623 - 3649 Zone Tested Reagan Sand  
 Anchor Length 26' Drill Pipe Run 3580' Mud Wt. 9.1  
 Top Packer Depth 3618 Drill Collars Run 30' Vis 56  
 Bottom Packer Depth 3623 Wt. Pipe Run — WL 8.8  
 Total Depth 3649 Chlorides 4,000 ppm System LCM —

Blow Description IF - B.O.B. in 8 minutes  
ISI - Weak surface return  
FF - B.O.B. in 9 minutes  
FSI - Weak return

Rec	Feet of	%gas	%oil	%water	%mud
<u>496</u>	<u><del>had spots</del> MW</u>		<u>95</u>	<u>5</u>	<u>—</u>
<u>186</u>	<u>MW</u>		<u>60</u>	<u>40</u>	<u>—</u>
<u>124</u>	<u>Mud with oil spots</u>		<u>—</u>	<u>100</u>	<u>—</u>
	<u>1240 G.I.P.</u>				

Rec Total 806' BHT 116° Gravity — API RW 1.23 @ 52° F Chlorides 44,000 ppm

(A) Initial Hydrostatic <u>1768</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>10:09 pm</u>
(B) First Initial Flow <u>14</u>	<input type="checkbox"/> Jars	T-Started <u>10:32 pm</u>
(C) First Final Flow <u>177</u>	<input type="checkbox"/> Safety Joint	T-Open <u>12:28 am</u>
(D) Initial Shut-In <u>1173</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2:58 am</u>
(E) Second Initial Flow <u>183</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>5:02 am</u>
(F) Second Final Flow <u>325</u>	<input checked="" type="checkbox"/> Mileage <u>39 RT</u> 60.45	Comments
(G) Final Shut-In <u>1175</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1712</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 30  
 Initial Shut-In 45  
 Final Flow 30  
 Final Shut-In 45

Shale Packer  
 Extra Packer  
 Extra Recorder  
 Day Standby  
 Accessibility

Sub Total 1210.45

Approved By \_\_\_\_\_ Our Representative Cody Bloodorn

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COMPANY: Downing-Nelson Oil Co., Inc.  
WELL: Korbado #1-34

LOCATION: 2305' FSL + 2301' FEL  
SEC.: 34 TWP. 15S RGE. 19W  
COUNTY: Ellis  
STATE: Kansas

OPERATOR: DUCI  
CONTRACTOR: Discovery Drilling, Rig #3  
COMM. 10-21-13  
CASING RECORD: 10-21-13

SURF.: 49' @ 1242' PROD. 5 1/2" @ 3449'  
TOTAL DEPTH DRILLERS: 3449'  
TOTAL DEPTH LOG: 3449'

PRODUCTION LHC  
ELEVATION KB 2047  
DF 2039  
GL 2039

Drilling Measured from: 3000 to 3000 TD  
Samples Saved from: 2950 to 2950 TD  
Drilling Time from: 3000 to 3000 TD  
Samples Examined from: 3000 to 3000 TD  
Geological Supervision from: 3000 to 3000 TD  
Geological Geologist: Marc Downing  
Wellbit Geologist: Mark Downing

DIL: CNL/OL  
MEL: Somic

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SURF. SEA DATUM	STRUCTURAL POSITION
Top Anhydrite	1240	1242	+407	
Base Anhydrite	NA	1245	+705	
Tapcha	3015	3015	-1048	
Heberner	3286	3286	-1241	
Taranto	3308	3308	-1241	
LKC	3328	3328	-1243	
AKC	3579	3579	-1533	
Marmaton	3594	3594	-1557	
Reagan Sand	3644	3644	-1594	

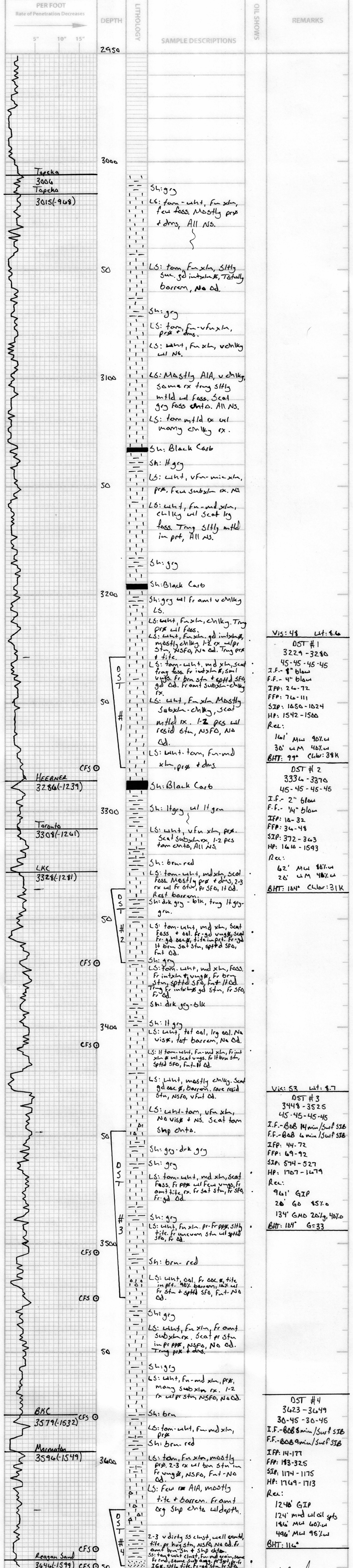
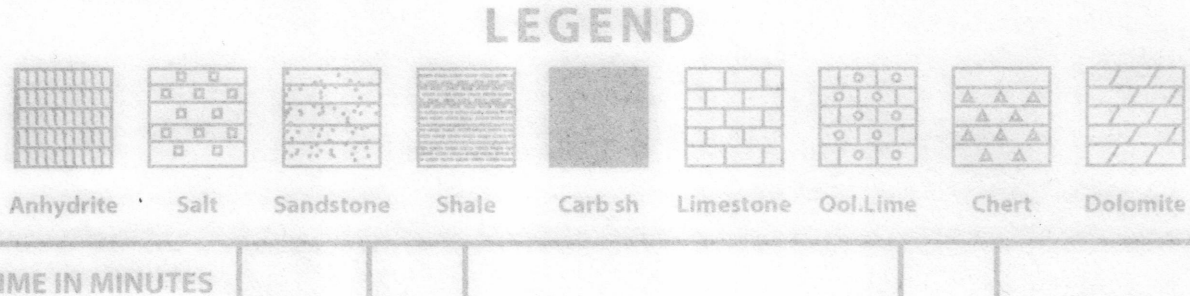
REFERENCE WELL FOR STRUCTURE: Triple H D-1  
Gottschalk #1  
5/2-54-NE  
Sec. 34-15S-19W

DRILL STEM TESTS

No.	Interval	IFP/Time	ISF/Time	FFP/Time	FSF/Time	HR-FRP	RECOVERY

REMARKS AND RECOMMENDATIONS  
Perforate "A" zone before abandonment.

LEGEND



Marc Downing