



DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

23-9s-24w Graham,KS

Nickelson Farms 'B' #1-23

Start Date: 2012.01.22 @ 06:05:00

End Date: 2012.01.22 @ 13:01:30

Job Ticket #: 43089 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.01.27 @ 11:33:46

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

23-9s-24w Graham,KS

DST # 1

LKC "I"

2012.01.22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

ATTN: Marc Downing

Job Ticket: 43089

DST#: 1

Test Start: 2012.01.22 @ 06:05:00

GENERAL INFORMATION:

Formation: **LKC "I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:20:00

Time Test Ended: 13:01:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3984.00 ft (KB) To 4006.00 ft (KB) (TVD)

Reference Elevations: 2500.00 ft (KB)

Total Depth: 4006.00 ft (KB) (TVD)

2493.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6799

Inside

Press @ Run Depth: 40.76 psig @ 3985.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.22

End Date: 2012.01.22

Last Calib.: 2012.01.22

Start Time: 06:05:05

End Time: 13:01:29

Time On Btm: 2012.01.22 @ 08:19:30

Time Off Btm: 2012.01.22 @ 11:26:00

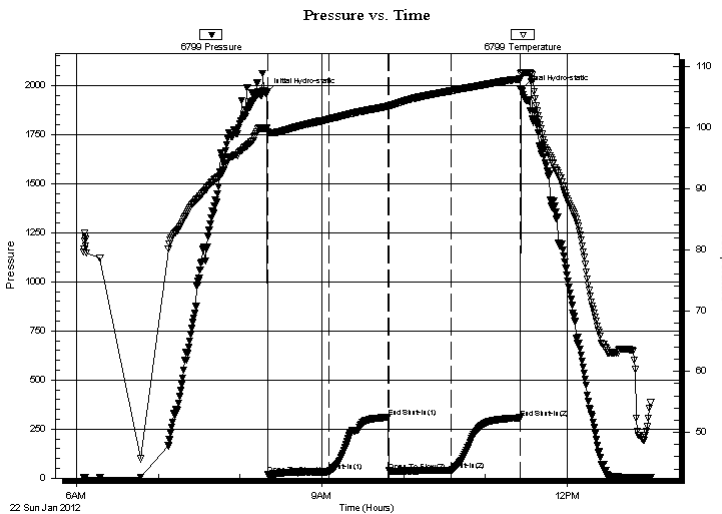
TEST COMMENT: IF- 1/4" Blow built to 3 1/4"

IS- No Return

FF- Surface blow started at 2 min. Did not build or die

FS- No Return

PRESSURE SUMMARY



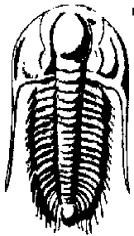
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1965.67	99.96	Initial Hydro-static
1	18.67	99.27	Open To Flow (1)
46	34.48	101.45	Shut-In(1)
90	310.60	103.56	End Shut-In(1)
90	36.96	103.54	Open To Flow (2)
136	40.76	106.09	Shut-In(2)
186	307.12	108.01	End Shut-In(2)
187	1980.48	108.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM 75M 20o 5W	0.57

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

Job Ticket: 43089 **DST#: 1**

ATTN: Marc Downing

Test Start: 2012.01.22 @ 06:05:00

GENERAL INFORMATION:

Formation: **LKC "I"**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 08:20:00

Time Test Ended: 13:01:30

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Kevin Mack**

Unit No: **43**

Interval: 3984.00 ft (KB) To 4006.00 ft (KB) (TVD)

Total Depth: **4006.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches**Hole Condition: **Good**

Reference Elevations: **2500.00 ft (KB)**

2493.00 ft (CF)

KB to GR/CF: **7.00 ft**

Serial #: 8648

Inside

Press @RunDepth: psig @ 3985.00 ft (KB)

Start Date: 2012.01.22

End Date: 2012.01.22

Capacity: 8000.00 psig

Last Calib.: 2012.01.22

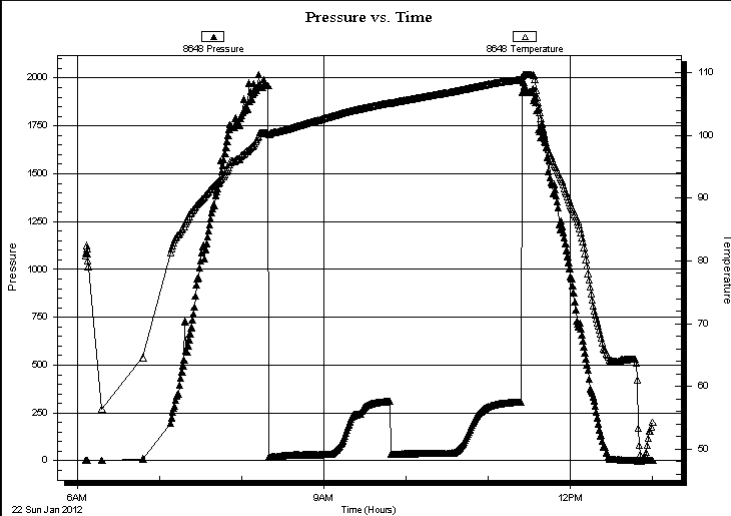
Start Time: 06:05:50

End Time: 13:00:44

Time On Btm

Time Off Btm

TEST COMMENT: IF- 1/4" Blow built to 3 1/4"
 IS- No Return
 FF- Surface blow started at 2 min. Did not build or die
 FS- No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM 75M 20o 5W	0.57

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham, KS

ATTN: Marc Downing

Job Ticket: 43089

DST#: 1

Test Start: 2012.01.22 @ 06:05:00

Tool Information

Drill Pipe:	Length: 3962.00 ft	Diameter: 3.80 inches	Volume: 55.58 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: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 84000.00 lb
			<u>Total Volume: 55.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3984.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3964.00	
Shut In Tool	5.00			3969.00	
Hydraulic tool	5.00			3974.00	
Packer	5.00			3979.00	21.00 Bottom Of Top Packer
Packer	5.00			3984.00	
Stubb	1.00			3985.00	
Recorder	0.00	8648	Inside	3985.00	
Recorder	0.00	6799	Inside	3985.00	
Perforations	16.00			4001.00	
Bullnose	5.00			4006.00	22.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

Job Ticket: 43089 **DST#: 1**

ATTN: Marc Downing

Test Start: 2012.01.22 @ 06:05:00

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

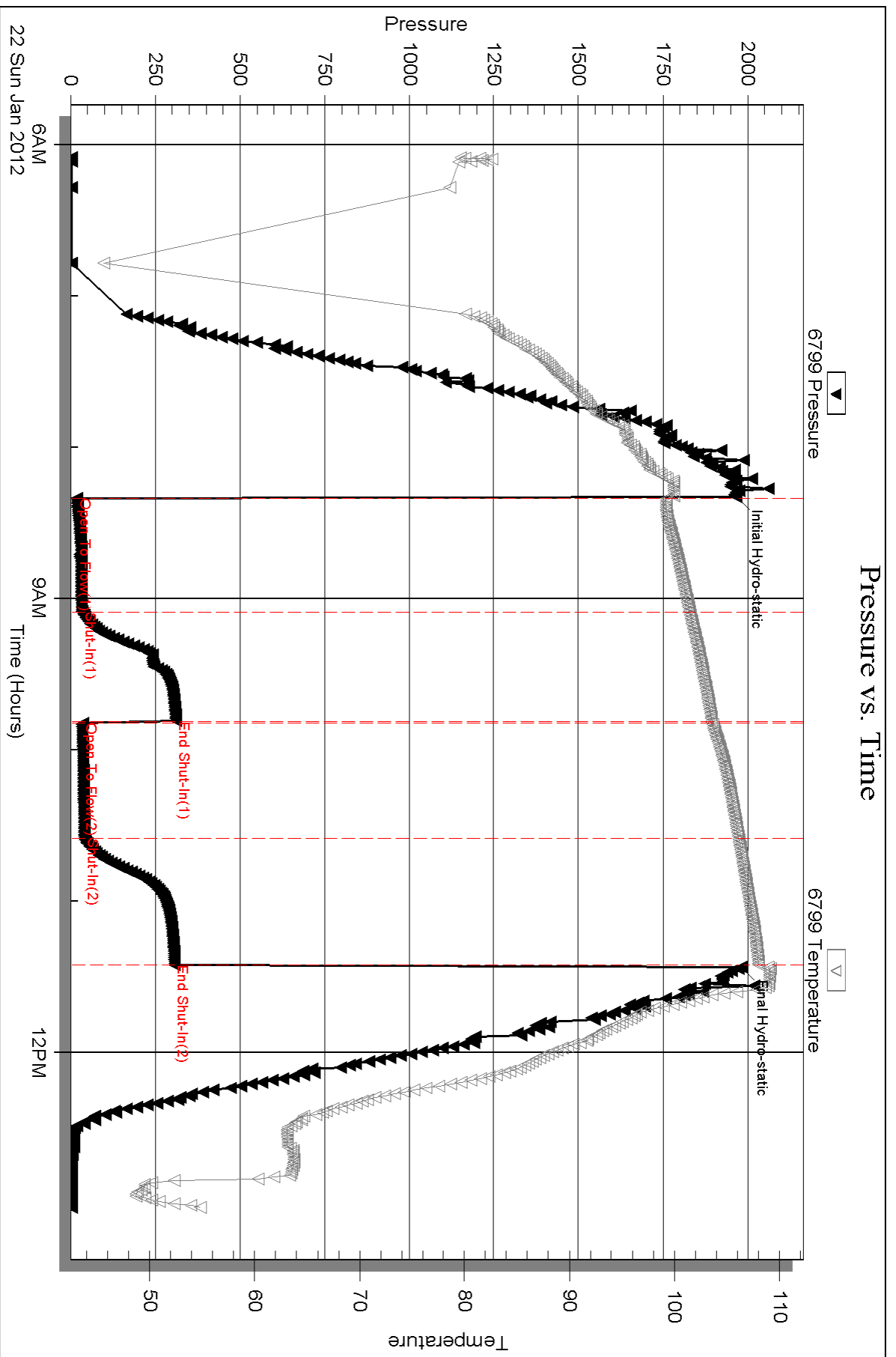
Length ft	Description	Volume bbl
60.00	OCWM 75M 20o 5W	0.568

Total Length: 60.00 ft Total Volume: 0.568 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



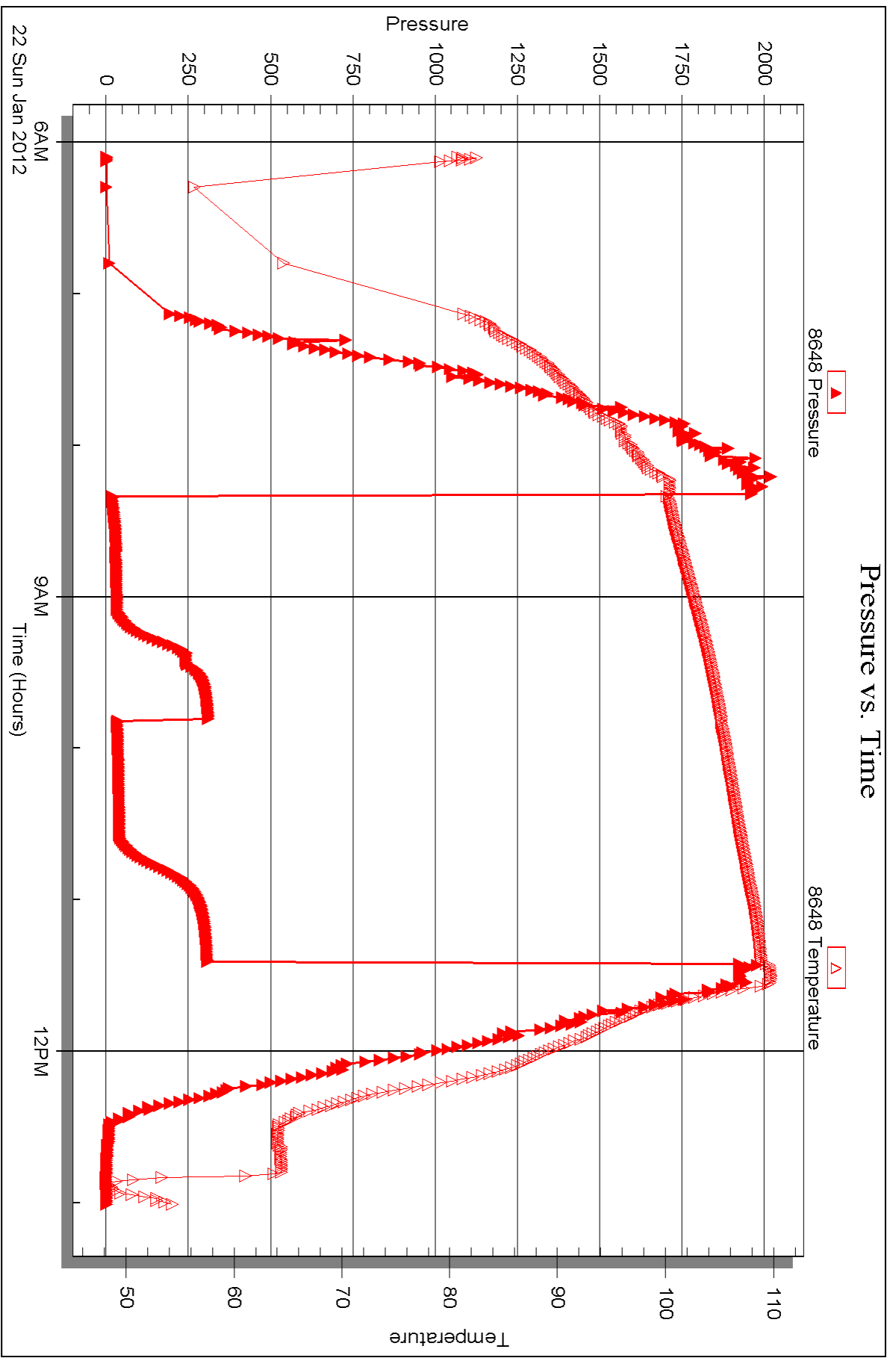
Serial #: 8648

Inside

Dow nung-Nelson Oil Co. Inc.

23-9s-24w Graham,KS

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

23-9s-24w Graham,KS

Nickelson Farms 'B' #1-23

Start Date: 2012.01.22 @ 20:22:00

End Date: 2012.01.23 @ 03:28:15

Job Ticket #: 43090 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.01.27 @ 11:32:11

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

23-9s-24w Graham,KS

DST # 2

LKC "I,J"

2012.01.22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

ATTN: Marc Downing

Job Ticket: 43090

DST#: 2

Test Start: 2012.01.22 @ 20:22:00

GENERAL INFORMATION:

Formation: **LKC "I,J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:17:30

Time Test Ended: 03:28:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3985.00 ft (KB) To 4030.00 ft (KB) (TVD)

Reference Elevations: 2500.00 ft (KB)

Total Depth: 4030.00 ft (KB) (TVD)

2493.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6799 Inside

Press @ Run Depth: 103.10 psig @ 3986.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.22 End Date: 2012.01.23

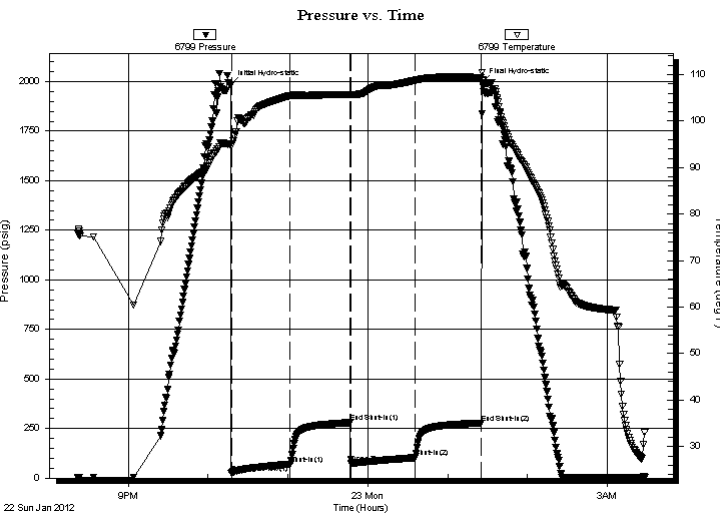
Last Calib.: 2012.01.23

Start Time: 20:22:05 End Time: 03:28:14

Time On Btm: 2012.01.22 @ 22:17:00

Time Off Btm: 2012.01.23 @ 01:26:15

TEST COMMENT: IF- 1/2" Blow built to BoB in 29 min.
IS- Weak Surface return started at 5 min. Died at 30 min.
FF- Surface Blow built to 7 1/2"
FS- Weak Surface return started at 12 min. Did not build or die.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1984.26	95.09	Initial Hydro-static
1	24.54	94.56	Open To Flow (1)
45	70.72	105.44	Shut-In(1)
90	279.97	105.72	End Shut-In(1)
91	72.18	105.69	Open To Flow (2)
139	103.10	108.73	Shut-In(2)
188	278.26	109.39	End Shut-In(2)
190	1993.25	108.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
119.00	OSMW 30M 70W (oil spots)	1.44
55.00	OCVM 50M 30W 20o	0.77
5.00	Free oil 100o	0.07

Gas Rates

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



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DRILL STEM TEST REPORT

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

ATTN: Marc Downing

Job Ticket: 43090

DST#: 2

Test Start: 2012.01.22 @ 20:22:00

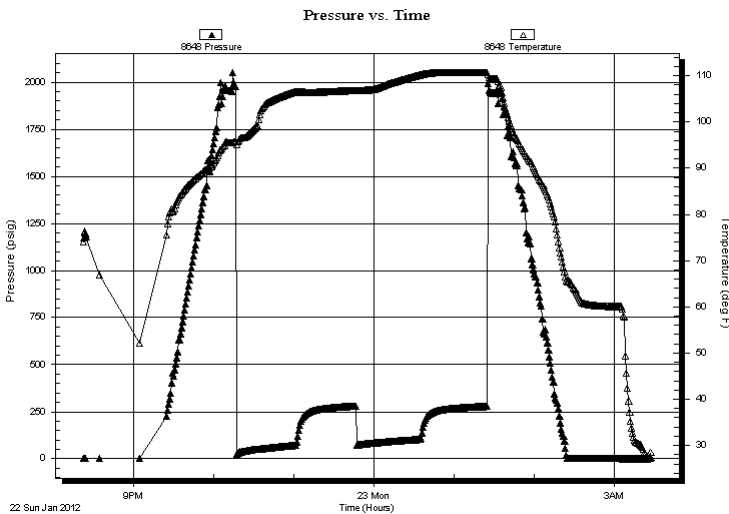
GENERAL INFORMATION:

Formation: LKC "I,J"			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Initial)	
Time Tool Opened: 22:17:30		Tester: Kevin Mack	
Time Test Ended: 03:28:15		Unit No: 43	
Interval: 3985.00 ft (KB) To 4030.00 ft (KB) (TVD)		Reference Elevations: 2500.00 ft (KB)	
Total Depth: 4030.00 ft (KB) (TVD)		2493.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 7.00 ft	

Serial #: 8648 Inside

Press @ Run Depth:	psig @ 3986.00 ft (KB)	Capacity:	8000.00 psig
Start Date:	2012.01.22	End Date:	2012.01.23
Start Time:	20:22:35	End Time:	03:26:59
		Last Calib.:	2012.01.23
		Time On Btm:	
		Time Off Btm:	

TEST COMMENT: IF- 1/2" Blow built to BoB in 29 min.
IS- Weak Surface return started at 5 min. Died at 30 min.
FF- Surface Blow built to 7 1/2"
FS- Weak Surface return started at 12 min. Did not build or die.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
119.00	OSMV 30M 70W (oil spots)	1.44
55.00	OCVM 50M 30W 20o	0.77
5.00	Free oil 100o	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

ATTN: Marc Downing

Job Ticket: 43090

DST#: 2

Test Start: 2012.01.22 @ 20:22:00

Tool Information

Drill Pipe:	Length: 3964.00 ft	Diameter: 3.80 inches	Volume: 55.60 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: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 55.75 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3985.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3965.00	
Shut In Tool	5.00			3970.00	
Hydraulic tool	5.00			3975.00	
Packer	5.00			3980.00	21.00 Bottom Of Top Packer
Packer	5.00			3985.00	
Stubb	1.00			3986.00	
Recorder	0.00	8648	Inside	3986.00	
Recorder	0.00	6799	Inside	3986.00	
Perforations	6.00			3992.00	
Change Over Sub	1.00			3993.00	
Drill Pipe	31.00			4024.00	
Change Over Sub	1.00			4025.00	
Bullnose	5.00			4030.00	45.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co. Inc.

Nickelson Farms 'B' #1-23

PO Box 1019
Hays, KS 67601

23-9s-24w Graham,KS

Job Ticket: 43090 **DST#: 2**

ATTN: Marc Downing

Test Start: 2012.01.22 @ 20:22:00

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:	27500 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud (Heavy) 100M	0.025
119.00	OSMW 30M 70W (oil spots)	1.442
55.00	OCWM 50M 30W 20o	0.772
5.00	Free oil 100o	0.070

Total Length: 184.00 ft Total Volume: 2.309 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .34@ 52 deg = 27500 ppm

Serial #: 6799

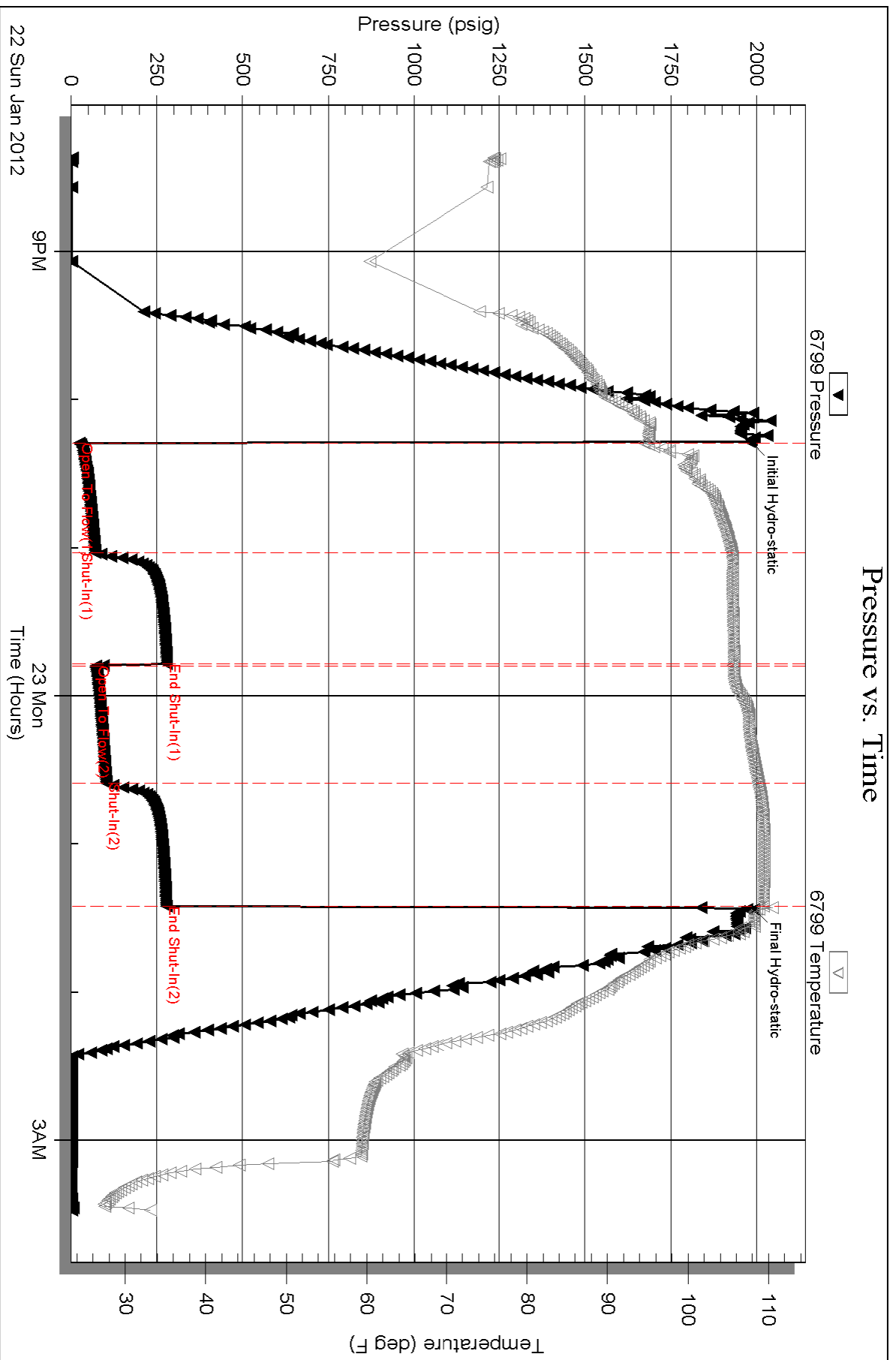
Inside

Dow nung-Nelson Oil Co. Inc.

23-9s-24w Graham,KS

DST Test Number: 2

Pressure vs. Time



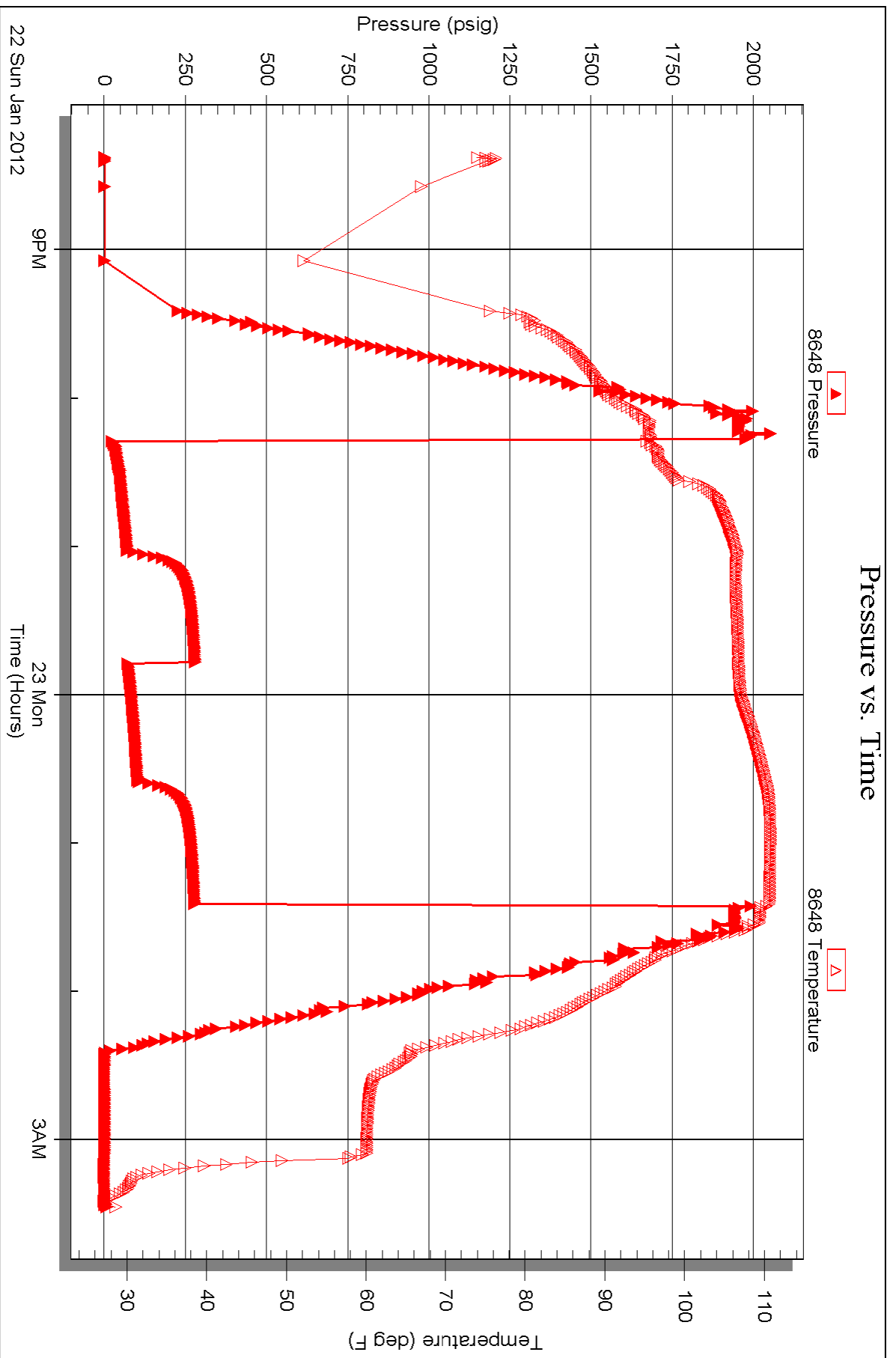
Serial #: 8648

Inside

Dow nung-Nelson Oil Co. Inc.

23-95-24w Graham,KS

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
JAN 26 2012
BY: _____

Test Ticket

NO. 043089

Well Name & No. Nickelson Farms "B" #1-23 Test No. 1 Date 1-22-12
 Company Downing-Nelson Oil Co. Inc. Elevation 2500 KB 2493 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #1
 Location: Sec. 23 Twp. 9S Rge. 24W Co. Graham State KS

Interval Tested 3984-4006 Zone Tested LKC "I"
 Anchor Length 22' Drill Pipe Run 3962 Mud Wt. 9
 Top Packer Depth 3980 Drill Collars Run 30' Vis 55
 Bottom Packer Depth 3984 Wt. Pipe Run Ø WL 8.0
 Total Depth 4006 Chlorides 4000 ppm System LCM 2#

Blow Description IF - 1/4" Blow built to 3 1/4"
IS - No Return
FF - Surface Blow started at 2 min. Built to did not build order
FS - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>OCUM</u>	<u>20</u>	<u>5</u>	<u>75</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

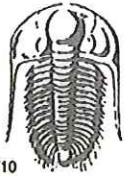
Rec Total 60 BHT 108 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1965 Test 1225 T-On Location 5:35 AM
 (B) First Initial Flow 18 Jars _____ T-Started 6:05 AM
 (C) First Final Flow 34 Safety Joint _____ T-Open 8:20 AM
 (D) Initial Shut-In 310 Circ Sub NIC T-Pulled 11:20 AM
 (E) Second Initial Flow 36 Hourly Standby _____ T-Out 1:01 PM
 (F) Second Final Flow 40 Mileage 148 RT 207²⁰ Comments 30' GIP
 (G) Final Shut-In 307 Sampler _____
 (H) Final Hydrostatic 1980 Straddle _____

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Copies _____
 Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1432.20
 Sub Total 1432.20
 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.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
JAN 26 2012

Test Ticket

NO. 043090

Well Name & No. Nickelson Farms "B" #1-23 Test No. 2 Date 1-22-12
 Company Downing - Nelson Oil Co. Inc. Elevation 2500 KB 2493 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #1
 Location: Sec. 23 Twp. 9s Rge. 24w Co. Graham State KS

Interval Tested 3985-4030 Zone Tested LKK "I, J"
 Anchor Length 45' Drill Pipe Run 3964 Mud Wt. 9.1
 Top Packer Depth 3981 Drill Collars Run 30' Vis 51
 Bottom Packer Depth 3985 Wt. Pipe Run Ø WL 8.0
 Total Depth 4030 Chlorides 1,000 ppm System LCM 1.5#

Blow Description IF - 1/2" Blow built to BOB in 29 min.
IS - Weak Surface return started at 5 min. Died at 30 min.
FF - Surface Blow built to 7 1/2"
FS - Weak Surface return started at 12 min. ~~Blow~~ did not build ordz.

Rec	Feet of	%gas	%oil	%water	%mud
5	Free Oil	100			
55	GCMW	20	30	50	
119	CSMW	spots	70	30	
5	heavy mud			100	

Rec Total 184 BHT 109 Gravity - API RW .34 @ 52 °F Chlorides 27,500 ppm

(A) Initial Hydrostatic 1984 Test 1225 T-On Location 8:15 PM
 (B) First Initial Flow 24 Jars T-Started 7:22 PM
 (C) First Final Flow 70 Safety Joint T-Open 10:17 PM
 (D) Initial Shut-In 279 Circ Sub 505 T-Pulled 1:17 AM
 (E) Second Initial Flow 72 Hourly Standby T-Out 3:28 AM

(F) Second Final Flow 103 Mileage 148RT 207²⁰ Comments _____
 (G) Final Shut-In 278 Sampler _____
 (H) Final Hydrostatic 1993 Straddle _____

Initial Open 45 Shale Packer _____
 Initial Shut-In 45 Extra Packer _____
 Final Flow 45 Extra Recorder _____
 Final Shut-In 45 Day Standby _____
 Accessibility _____
 Sub Total 1482.20

Approved By _____ Our Representative

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