



KANSAS CORPORATION COMMISSION 1075114
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total 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

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1075114

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

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

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KTM Unit 1-20
Doc ID	1075114

All Electric Logs Run

Micro
Sonic
Compensated Porosity
Dual Inductiom

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	KTM Unit 1-20
Doc ID	1075114

Tops

Name	Top	Datum
Top Anhydrite	1373'	+825
Base Anhydrite	1400'	+798
Heebner	3719'	-1521
LKC	3768'	-1570
BKC	4078'	-1880
Fort Scott	4248'	-2050
Cherokee Shale	4276'	-2078
Mississippi	4345'	-2147
Gilmore City	4397'	-2199
Viola	4490'	-2292
Simpson Shale	4682'	-2484
Arbuckle	4394'	-2496

JOB LOG

SWIFT Services, Inc.

CUSTOMER Downing-Nelson WELL NO. 1-20 LEASE HYM JOB TYPE LONGSTRING TICKET NO. 21301

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0800							ON LOCATION CMT: 200545 SMD
								RTO 4847 SET PIPE @ 4750, 51 42.42 TUB @ 4708 5 1/2 H*
								CMT 1, 3, 5, 8, 10, 12, 14 BASKET 5, 14 JOINTS OUT 6, 109, 117, 118
	0815							START CSM & FLOAT EQV
	1000							BREAK CIRC W/ RIG
	1030						1000	DROP BALL & SET PACKER SEAL
	1035							CIRC W/ RIG
	1045		7.5					PLUG RH 30, MH 20
	1050	50	12				300	500 GAL MUD FLUSH
			20					2000 GALS MCL FLUSH
			27					70545 SMD @ 10.5*
			28					102545 SMD @ 14.0*
	1105		55.0					END CMT DRIP DRUG, WASHOUT PL
	1110	6.0	0				300	START DISP
			61				400	CMT ON BITTEN
			105.0				600	
			110.0				700	
	1130	4.5	114.8				1500	LAND PLUG
	1135							RELEASE - DRY
	1200							JOB COMPLETE THANK YOU! DAVE JAMBROZ

ALLIED CEMENTING CO., LLC. 042478

Federal Tax I.D.# 20-5975804

PO BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Great Bend

DATE <u>2-10-12</u>	SEC. <u>20</u>	TWP. <u>20</u>	RANGE <u>20</u>	CALLED OUT	ON LOCATION	JOB START <u>3:00 pm</u>	JOB FINISH <u>4:00 pm</u>
LEASE <u>KTM unit</u>		WELL # <u>1-20</u>		LOCATION <u>Alexander, 1 1/4 South West</u>		COUNTY <u>Pawnee</u>	STATE <u>KS</u>
OLD OR <input checked="" type="radio"/> NEW (Circle one)				<u>into</u>			

CONTRACTOR Discovery Drilling
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D. 1157
 CASING SIZE 8 5/8 24# DEPTH 1157
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT 42.54
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT 71 BBLs

OWNER Downing Nelson
 CEMENT
 AMOUNT ORDERED 475 sks Class A 3% CC
2% gel

COMMON <u>475</u>	@ <u>16.25</u>	<u>7718.75</u>
POZMIX _____	@ _____	_____
GEL <u>9</u>	@ <u>21.25</u>	<u>191.25</u>
CHLORIDE <u>13</u>	@ <u>58.20</u>	<u>756.60</u>
ASC _____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
HANDLING <u>497</u>	@ <u>2.25</u>	<u>1118.25</u>
MILEAGE <u>497 x 40 x .11</u>		<u>2186.80</u>
TOTAL		<u>11971.65</u>

REMARKS:

pipe on bottom, Break circulation with rig mud,
Hookup to casing mix 475 sks class A 3% cc
2% gel shutdown Release plug
Displace 71 Bbls Freshwater
landed plug & 700 pgs
shutdown cement d/d circulation
washed up & Rig down

CHARGE TO: Downing & Nelson Oil Inc.
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB <u>1157</u>		
PUMP TRUCK CHARGE _____	<u>1125.00</u>	
EXTRA FOOTAGE <u>600</u>	@ <u>.95</u>	<u>570.00</u>
MILEAGE <u>HUM 80</u>	@ <u>7.00</u>	<u>560.00</u>
MANIFOLD _____	@ _____	_____
<u>HUM 80</u>	@ <u>4.00</u>	<u>320.00</u>
TOTAL		<u>2575.00</u>

PLUG & FLOAT EQUIPMENT

<u>Baf fel plug</u>	@ <u>112.00</u>	<u>112.00</u>
<u>wash plug</u>	@ <u>93.00</u>	
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____

To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or



DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

KTM Unit #1-20

20-20s-20w Pawnee,KS

Start Date: 2012.02.16 @ 09:00:06

End Date: 2012.02.16 @ 15:18:30

Job Ticket #: 46845 DST #: 1

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

Printed: 2012.02.17 @ 16:17:42

Downing-Nelson Oil Co Inc
20-20s-20w Pawnee,KS
KTM Unit #1-20
DST # 1
Miss
2012.02.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46845

DST#: 1

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 09:00:06

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:22:01
 Time Test Ended: 15:18:30
 Interval: **4290.00 ft (KB) To 4348.00 ft (KB) (TVD)**
 Total Depth: 4348.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 2196.00 ft (KB)
 2188.00 ft (CF)
 KB to GR/CF: 8.00 ft

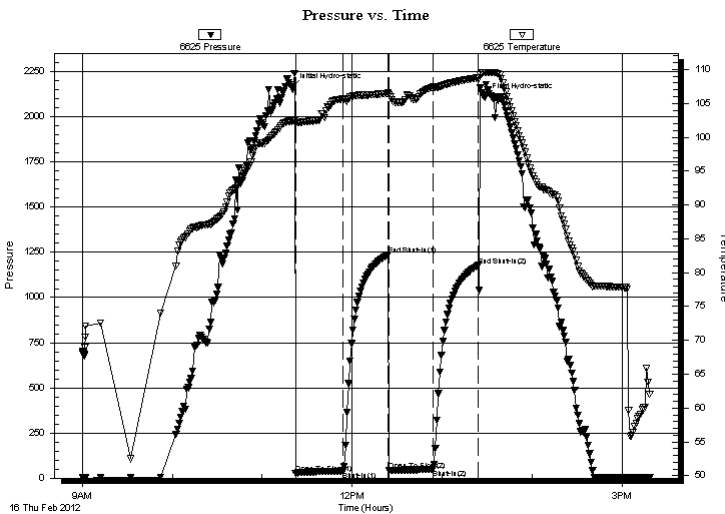
Serial #: 6625

Inside

Press @RunDepth: 50.64 psig @ 4294.00 ft (KB)
 Start Date: 2012.02.16 End Date: 2012.02.16
 Start Time: 09:00:06 End Time: 15:18:30
 Capacity: 8000.00 psig
 Last Calib.: 2012.02.16
 Time On Btm: 2012.02.16 @ 11:20:01
 Time Off Btm: 2012.02.16 @ 13:28:30

TEST COMMENT: 30-IFP-w k bl 1/4"to 3/4"bl
 30-ISIP-no bl
 30-FFP-w k bl 3/4"bl
 30-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.44	102.38	Initial Hydro-static
2	26.32	102.02	Open To Flow (1)
34	39.66	105.68	Shut-In(1)
64	1237.21	106.50	End Shut-In(1)
65	42.29	106.24	Open To Flow (2)
94	50.64	107.42	Shut-In(2)
124	1177.38	108.79	End Shut-In(2)
129	2105.35	109.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCM 1%O99%M	0.57

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46845

DST#: 1

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 09:00:06

Tool Information

Drill Pipe:	Length: 4261.00 ft	Diameter: 3.80 inches	Volume: 59.77 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 59.92 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4290.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	58.00 ft				
Tool Length:	86.00 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			4263.00	
Shut In Tool	5.00			4268.00	
Hydraulic tool	5.00			4273.00	
Jars	5.00			4278.00	
Safety Joint	2.00			4280.00	
Packer	5.00			4285.00	28.00 Bottom Of Top Packer
Packer	5.00			4290.00	
Stubb	1.00			4291.00	
Perforations	3.00			4294.00	
Recorder	0.00	6625	Inside	4294.00	
Recorder	0.00	8700	Outside	4294.00	
Blank Spacing	31.00			4325.00	
Perforations	20.00			4345.00	
Bullnose	3.00			4348.00	58.00 Bottom Packers & Anchor

Total Tool Length: 86.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46845

DST#: 1

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 09:00:06

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.73 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	SOCM 1%O99%M	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 #: 6625

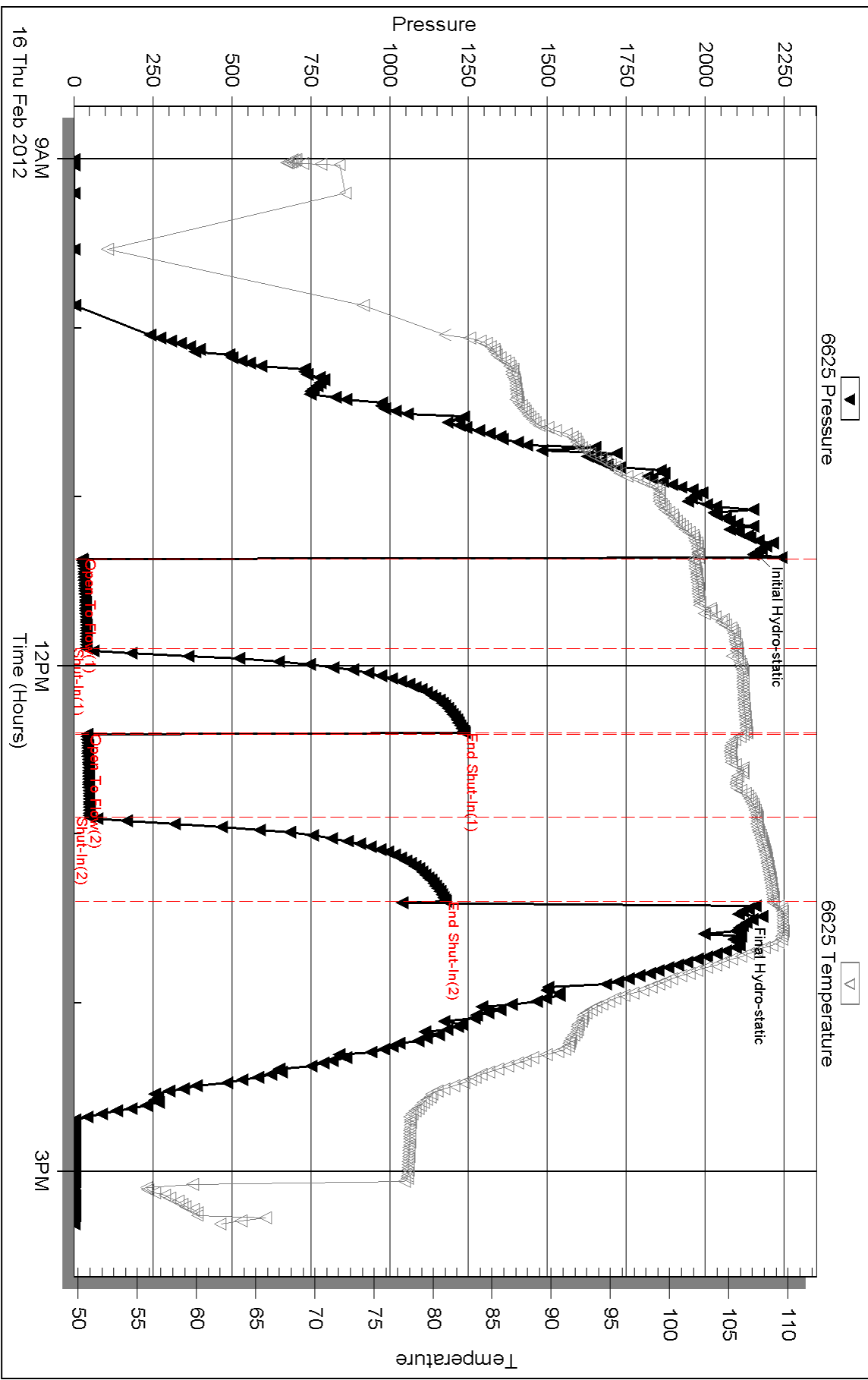
Inside

Dow nging-Nelson Oil Co Inc

KTM Unit #1-20

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 46845

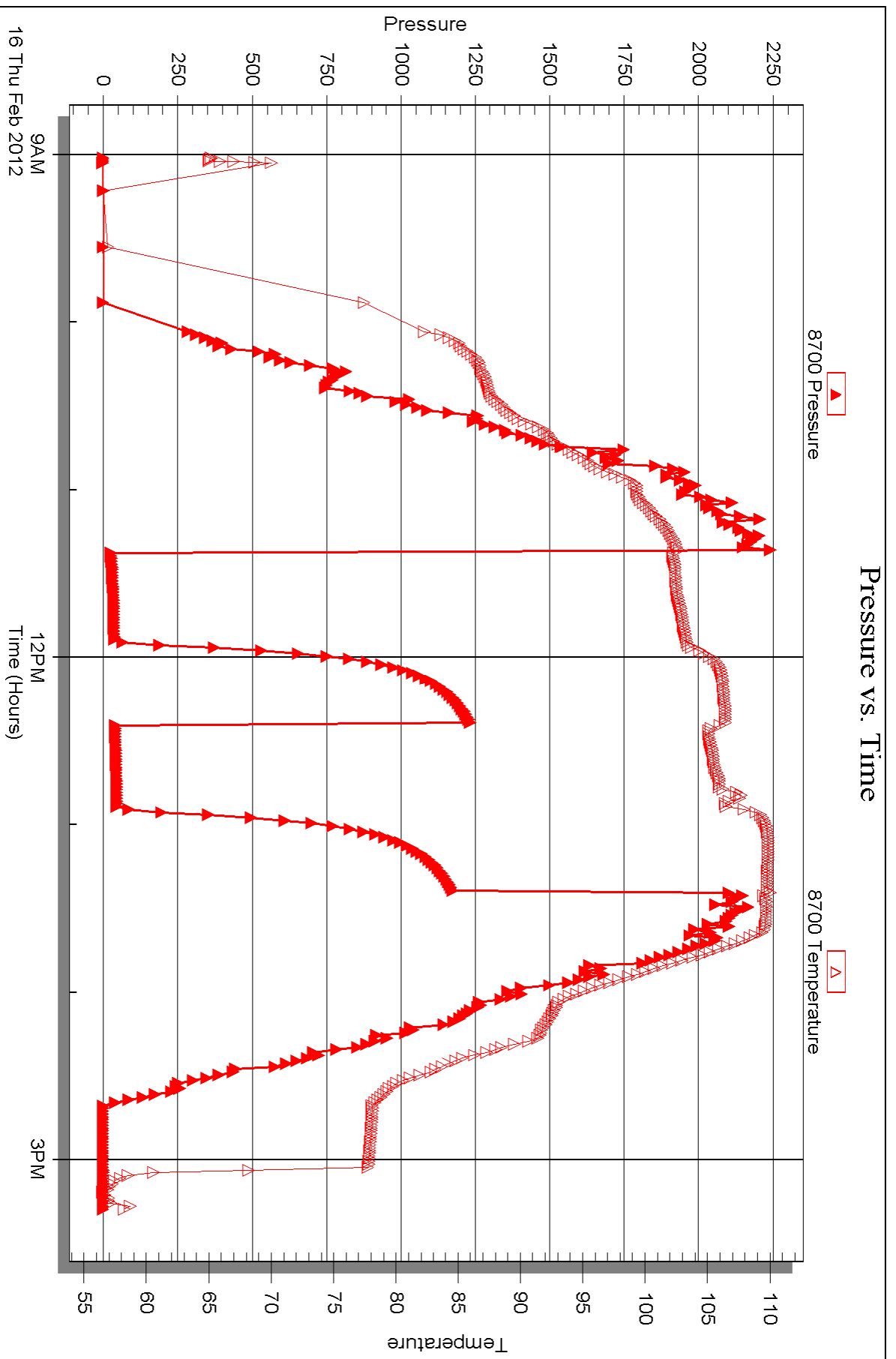
Printed: 2012.02.17 @ 16:17:44

Serial #: 8700

Outside Dow nmg-Nelson Oil Co Inc

KTM Unit #1-20

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

KTM Unit #1-20

20-20s-20w Pawnee,KS

Start Date: 2012.02.16 @ 23:45:36

End Date: 2012.02.17 @ 06:55:00

Job Ticket #: 46846 DST #: 2

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

Printed: 2012.02.17 @ 16:14:37



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46846

DST#: 2

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 23:45:36

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:48:31

Time Test Ended: 06:55:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 4348.00 ft (KB) To 4371.00 ft (KB) (TVD)

Reference Elevations: 2196.00 ft (KB)

Total Depth: 4371.00 ft (KB) (TVD)

2188.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6625 Inside

Press @RunDepth: 349.48 psig @ 4349.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.16

End Date:

2012.02.17

Last Calib.:

2012.02.17

Start Time: 23:45:36

End Time:

06:55:00

Time On Btm:

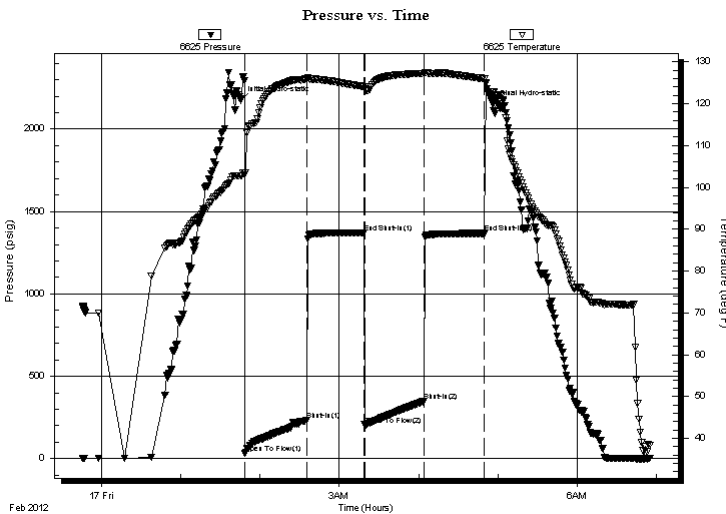
2012.02.17 @ 01:45:31

Time Off Btm:

2012.02.17 @ 04:56:30

TEST COMMENT: 45-IFP-w k to strg in 18 min
45-ISIP-no bl
45-FFP-w k to strg in 3 min
45-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.30	102.72	Initial Hydro-static
3	33.40	103.01	Open To Flow (1)
50	233.82	125.82	Shut-In(1)
93	1371.84	124.04	End Shut-In(1)
94	205.93	123.53	Open To Flow (2)
139	349.48	127.22	Shut-In(2)
185	1367.45	125.93	End Shut-In(2)
191	2149.70	122.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
105.00	SOCMW 1%O15%M84%W	1.20
600.00	Water	8.42

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46846

DST#: 2

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 23:45:36

Tool Information

Drill Pipe:	Length: 4320.00 ft	Diameter: 3.80 inches	Volume: 60.60 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4348.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 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			4321.00	
Shut In Tool	5.00			4326.00	
Hydraulic tool	5.00			4331.00	
Jars	5.00			4336.00	
Safety Joint	2.00			4338.00	
Packer	5.00			4343.00	28.00 Bottom Of Top Packer
Packer	5.00			4348.00	
Stubb	1.00			4349.00	
Recorder	0.00	6625	Inside	4349.00	
Recorder	0.00	8700	Outside	4349.00	
Perforations	19.00			4368.00	
Bullnose	3.00			4371.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

20-20s-20w Pawnee,KS

PO Box 1019
Hays KS 67601

KTM Unit #1-20

Job Ticket: 46846

DST#: 2

ATTN: Ron Nelson

Test Start: 2012.02.16 @ 23:45:36

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

27000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.69 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	SOCMW 1%O15%M84%W	1.200
600.00	Water	8.416

Total Length: 705.00 ft Total Volume: 9.616 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .24@70F

Serial #: 6625

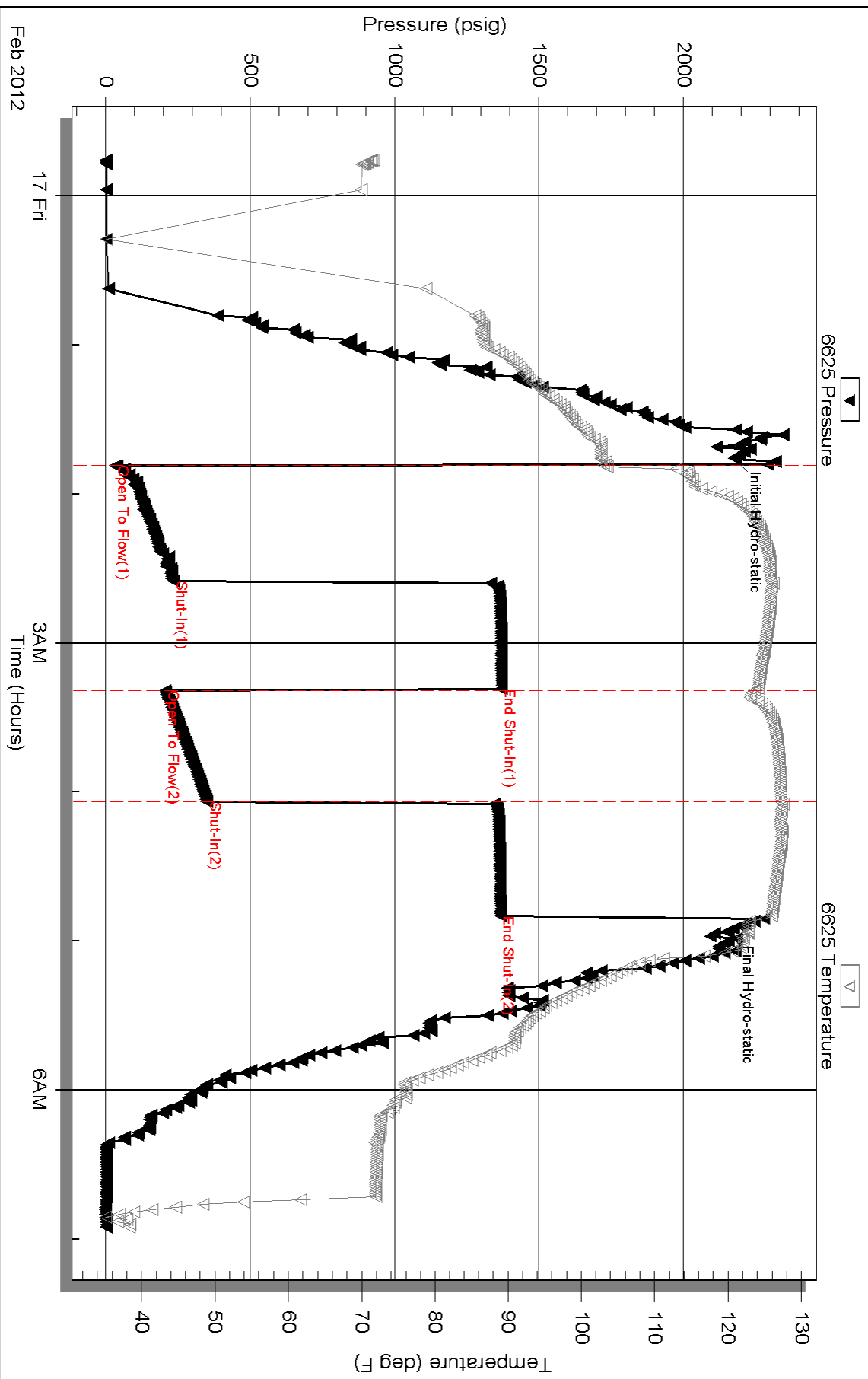
Inside

Dow nung-Nelson Oil Co Inc

KTM Unit #1-20

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 46846

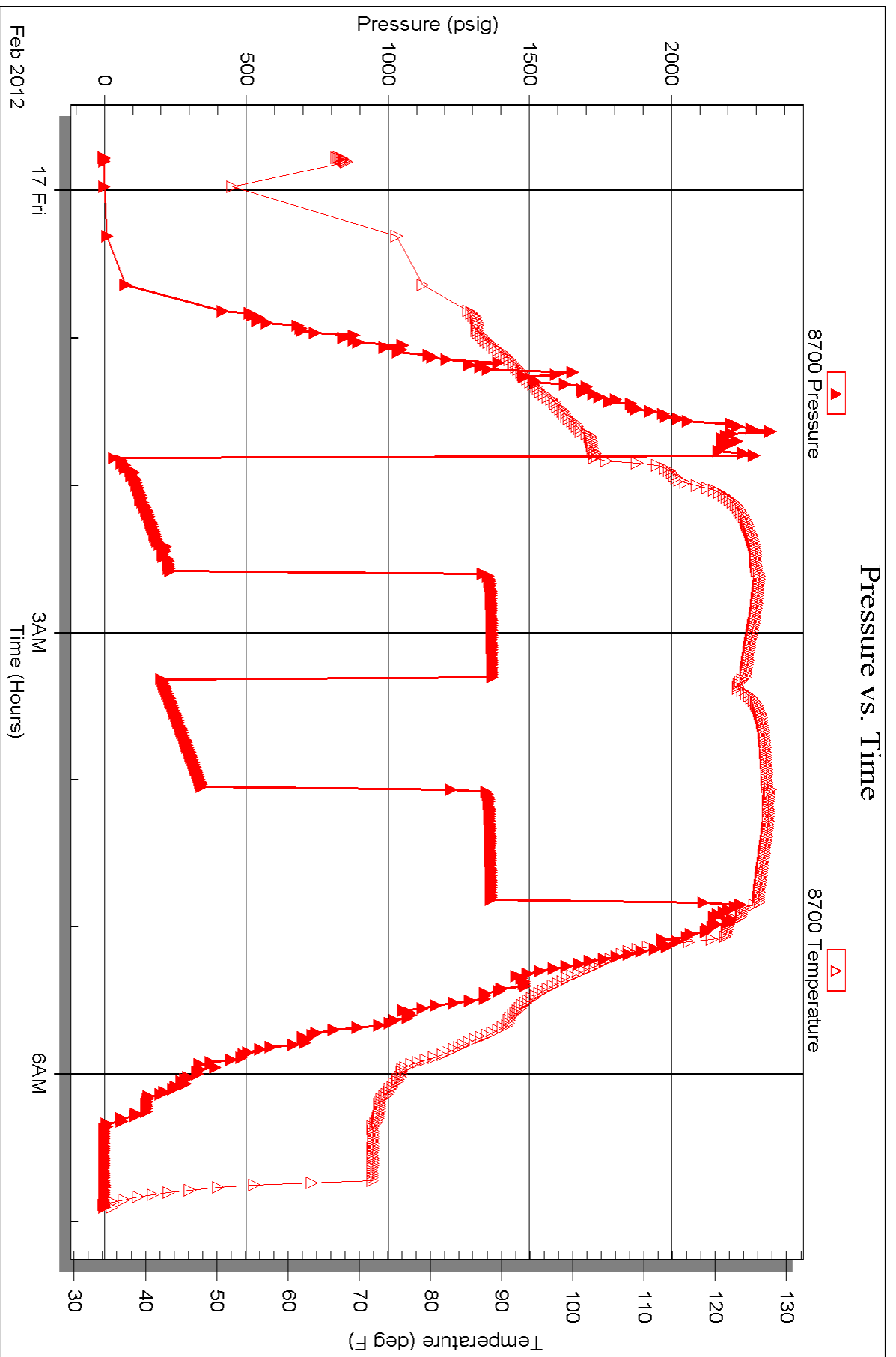
Printed: 2012.02.17 @ 16:14:39

Serial #: 8700

Outside Dow nting-Nelson Oil Co Inc

KTM Unit #1-20

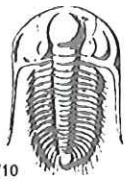
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 46846

Printed: 2012.02.17 @ 16:14:39



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 17 2012

Test Ticket

NO. 46845

4/10

BY: _____

Well Name & No. KT M Unit #1-20 Test No. 1 Date 2-16-12

Company Downing-Nelson Oil Co Inc Elevation 2196 KB 2188 GL _____

Address PO Box 1019 Hays Ks 67601

Co. Rep / Geo. MARC Downing Rig Discovery rig

Location: Sec. 20 Twp. 20^S Rge. 20^W Co. PAWNEE State K

Interval Tested 4290-4348 Zone Tested Miss

Anchor Length 58 Drill Pipe Run 4261 Mud Wt. 9.5

Top Packer Depth 4285 Drill Collars Run 30 Vis 60

Bottom Packer Depth 4290 Wt. Pipe Run - WL 8.8

Total Depth 4348 Chlorides 5800 ppm System LCM 1#

Blow Description IFP - WEAK BLOW 1/4" TO 3/4"

ISIP - NO BLOW

FFP - WEAK BLOW 3/4" BLOW

FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>50CM</u>	<u>1</u>		<u>99</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 109° Gravity - API RW - @ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2160 Test 1225 T-On Location 0735

(B) First Initial Flow 26 Jars 250 T-Started 0900

(C) First Final Flow 39 Safety Joint 75' T-Open 1120

(D) Initial Shut-In 1237 Circ Sub _____ T-Pulled 1320

(E) Second Initial Flow 42 Hourly Standby _____ T-Out 1518

(F) Second Final Flow 50 Mileage 112 RT 156.80 Comments _____

(G) Final Shut-In 1177 Sampler _____

(H) Final Hydrostatic 2105 Straddle _____ Ruined Shale Packer _____

Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____

Initial Shut-In 30 Extra Recorder _____ Sub Total 0

Final Flow 30 Day Standby _____ Total 1706.80

Final Shut-In 30 Accessibility _____ MP/DST Disc't _____

Sub Total 1706.80

Approved By _____ Our Representative RAY SCHWAGER Thank you

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 17 2012

Test Ticket

NO. 46846

4/10

BY: _____

Well Name & No. KTM Unit # 1-20 Test No. 2 Date 2-16-12
 Company Downing-Nelson Oil Co. Inc Elevation 2196 KB 2188 GL
 Address PO Box 1019 Hays, Ks 67601
 Co. Rep / Geo. MARC Downing Rig Discovery rig 4
 Location: Sec. 20 Twp. 20^s Rge. 20^w Co. PAWNEE State Ks

Interval Tested 4348-4371 Zone Tested MISS
 Anchor Length 23 Drill Pipe Run 4320 Mud Wt. 9.5
 Top Packer Depth 4343 Drill Collars Run 30 Vis 60
 Bottom Packer Depth 4348 Wt. Pipe Run - WL 8.8
 Total Depth 4371 Chlorides 5800 ppm System LCM 1#
 Blow Description IFP - WEAK TO STRONG IN 18 MIN
ISIP - NO BLOW
FFP - WEAK TO STRONG IN 30 MIN
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>105</u>	<u>Feet of SOC MW</u>	<u>1</u>	<u>84</u>	<u>15</u>	
<u>600</u>	<u>Feet of WATER</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 705 BHT 126 Gravity - API RW .24 @ 70 ° F Chlorides 27000 ppm

(A) Initial Hydrostatic <u>2175</u>	<input checked="" type="checkbox"/> Test <u>1225</u>	T-On Location <u>2245</u>
(B) First Initial Flow <u>33</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2345</u>
(C) First Final Flow <u>233</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0150</u>
(D) Initial Shut-In <u>1371</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0450</u>
(E) Second Initial Flow <u>205</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0655</u>
(F) Second Final Flow <u>349</u>	<input checked="" type="checkbox"/> Mileage <u>112 RT 150.80</u>	Comments _____
(G) Final Shut-In <u>1367</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2149</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>Ø</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	Total <u>1706.80</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1706.80</u>	

Approved By _____ Our Representative RAY SCHWAGER Thank you

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



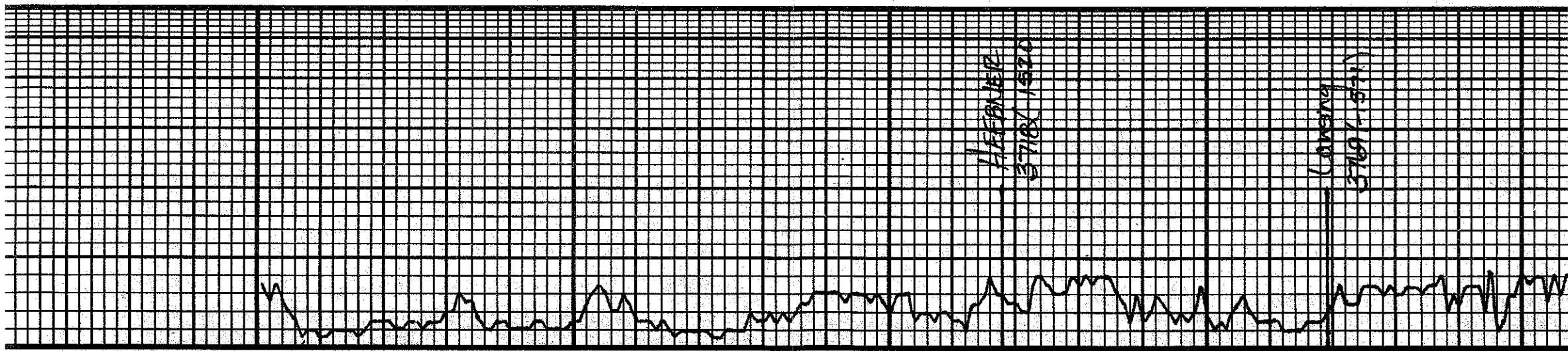
3600

50

3700

50

3800





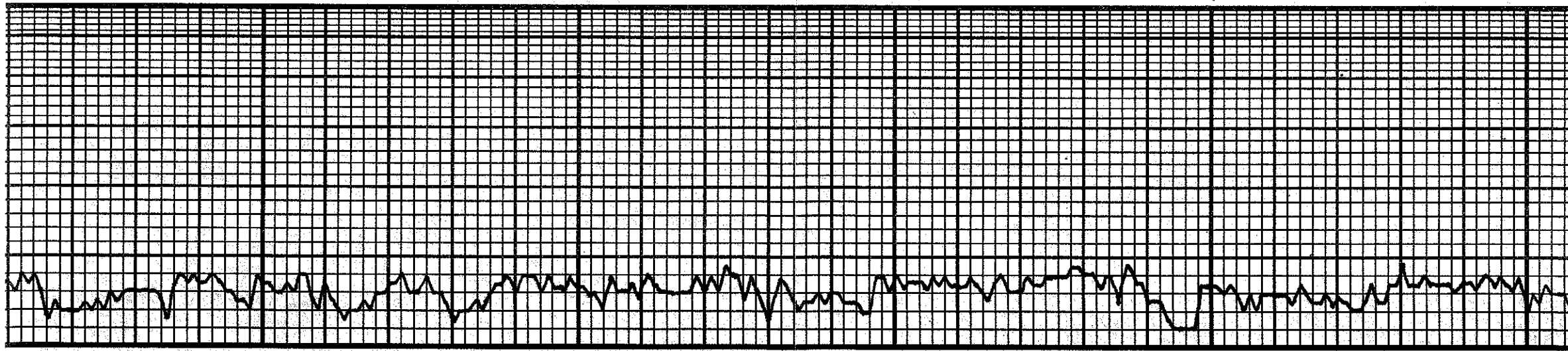
50

3900

50

4000

50



BK
4277 (1876)

4100

50

4200

50

FOUR SCAT
4275 (2071)

SHEWASE SR
4275 (2071)

4300

0
3
7

Sh: Black Carb

LS: wht, fin xln, dms.

Sh: gy

LS: tom, fin xln, pres, scat
wht chnt.

Sh: lt gr

LS: tom, fin, med xln. Rx
wld i apt

Sh: lt gr, silty

LS: tom, fin xln, pres

LS: tom, fin xln, scat foss,
few pes wht chnt.

Sh: Black Carb

Sh: gry w/ brn

LS: wht, fin xln, pres,
v dms

Sh: gry

LS: lt tom, vfn xln, All
pres & v dms

Sh: Black Carb

Sh: dk ggy, some
brn

LS: tom, fin xln, All
v dms w/ pres

Sh: Black Carb

LS: wht-tom, fin xln, fin
xt-A, NS.

LS: wht w/ some lt tom, few
vfn xln, v dms, w/ NO vis
or scat foss. All NS w/
NO OD.

Sh: Black Carb

Sh: gy

LS: tom, fin, med vfn, few
sml foss, v dms, NO vis,
NS.

Vis: 60 Lt: 9.5

DST #1

4290-4348

30-30-30-30

I.F. 3/4" blow

F.F. 3/4" blow

IPP: 24-39

FFP: 42-50

SIP: 1237-1177

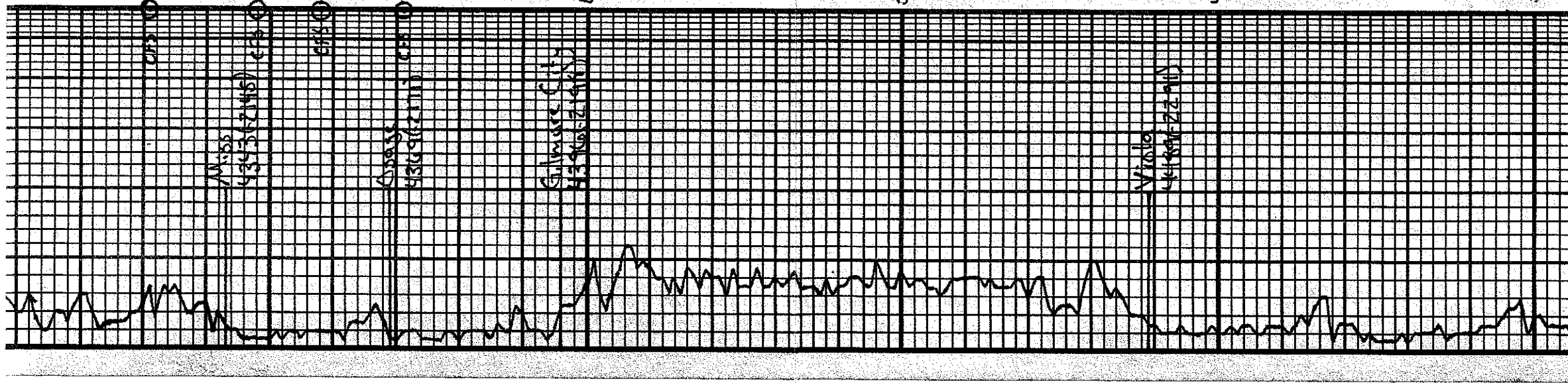
HP: 2100-2105

Rec: 60' vsocm 17.0

BHT: 109'

DST #2

4348-4371



#1	Scat dirty ss, wnt-gel, md gm, well sort, prg, calc cem, NS.
	SS: dk-wht, much AIA. Fr. sact sub and Fe-ox. IG R, slty dirty. All NS.
	Cht: wnt, impst w/ fr warty, scat sm, v. sh, 30 ppg w/ some rd fr. Gd sct, 30 ppg, 50 dull fr. Fr. sact sub and Fe-ox. IG R, slty dirty. All NS.
	Scat clst, frag bone wnt, slty warty, fresh, in part v. b. sh, m. No Od. 70-75% wnt-fan LS, NS, No flower include, flower in LS.
	4371' 60' cut impst, wnt-clst sm, v. sh, 30 ppg, 50 dull fr. Fr. sact sub and Fe-ox. IG R, slty dirty. All NS.
	Cht: wnt, Fresh, blue, 2-3 ex w/ warty edge, mostly barren w/ No Od.
	LS: wnt-fan, fr-v. fr. Xln, chms, ssc in prt, v. prg.
	LS: Same AIA, frag ss w/ scat fess. sct ssc ex, All prg w/ NS. Carrying fr. wnt w/ fresh chnts
	LS: Much AIA, ont. w/ Fr. Amt. fr. ssc xln rx. All prg w/ NS. chnto AIA. Scat fr. gran. well sort ss clst NS.
	Sh: G3 Fr. amt ss AIA, wnt-clst, fr gm, well sort, fr-well end, Gd s, friable, Totally barren, Pale: tom-wnt, fr ssc xln, xln, gd intxln, rx fely friable. All NS.
	Pale: tom-wnt, fr ssc xln, gd intxln, friable, fr. Amt wnt chnto, Totally barren. Tong v. chky w/ depth.
	4371' 60' cut impst, wnt-clst sm, v. sh, 30 ppg, 50 dull fr. Fr. sact sub and Fe-ox. IG R, slty dirty. All NS.
	Cht: wnt, Fresh, blue, 2-3 ex w/ warty edge, mostly barren w/ No Od.
	LS: wnt-fan, fr-v. fr. Xln, chms, ssc in prt, v. prg.
	LS: Same AIA, frag ss w/ scat fess. sct ssc ex, All prg w/ NS. Carrying fr. wnt w/ fresh chnts
	LS: Much AIA, ont. w/ Fr. Amt. fr. ssc xln rx. All prg w/ NS. chnto AIA. Scat fr. gran. well sort ss clst NS.
	Sh: G3 Fr. amt ss AIA, wnt-clst, fr gm, well sort, fr-well end, Gd s, friable, Totally barren, Pale: tom-wnt, fr ssc xln, xln, gd intxln, rx fely friable. All NS.
	Pale: tom-wnt, fr ssc xln, gd intxln, friable, fr. Amt wnt chnto, Totally barren. Tong v. chky w/ depth.

I.F. - BSB 18 min
 F.F. - BSB 30 min
 I.F.F. - 38-233
 F.F.F. - 250-349
 S.I.F. - 1371-1347
 H.P. - 2176-2149
 Rec:
 105' SOC MW 170, 84/1-1
 600' W
 SHT: 126° Color: 27K

D ST #2

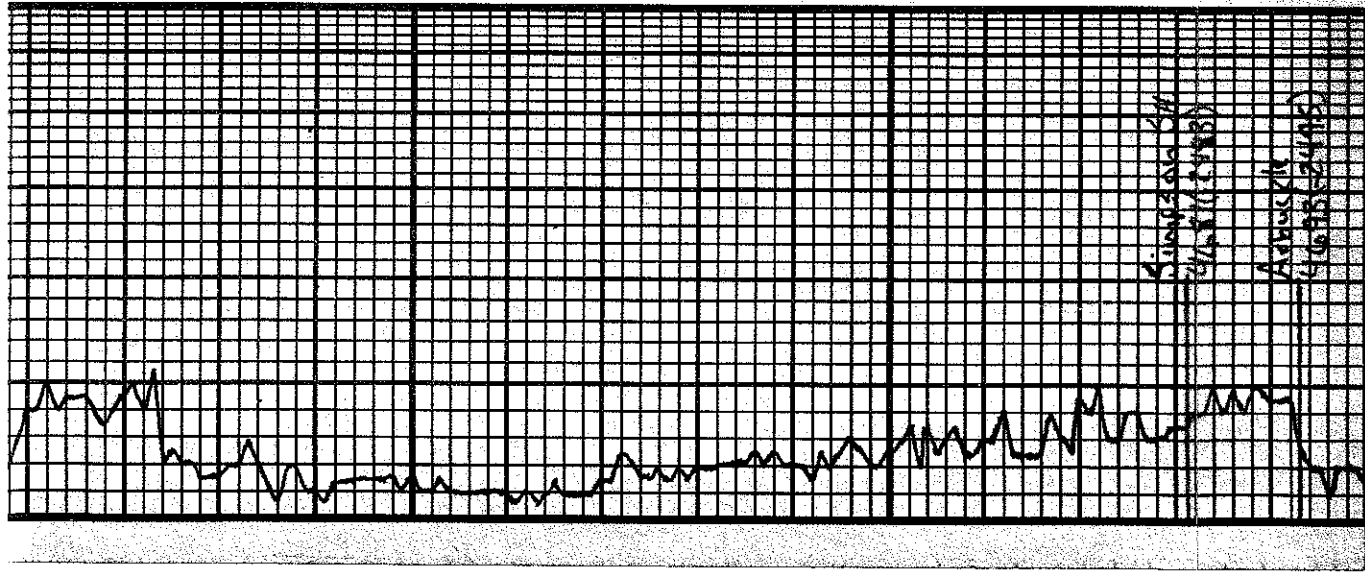
50

4400

50

4500

50



Kingston
4/11/1997

Abuckit
4/11/1997

4600

50

4700

1/1	v dms fr-u fr sue dlat
1/1	ul v dms tom LS, seat
1/1	001, no visx, NS.
1/1	Date: tom fr-u and sue xln
1/1	Abut wht cont, shp.
1/1	Date: tom and sue xln
1/1	seat gd vngx, fr amt
1/1	wht chnta. NS.
1/1	Date: AIA, tong chky
1/1	wht dsept.
1/1	Date: tom-wht, fr sue
1/1	xln fr cont xln, friable
1/1	in prt.
1/1	Date: wht, ccs sue xln, seat
1/1	smi- mid rhombs.
1/1	Date: AIA w/ fr vngx,
1/1	some gikomite str.
1/1	front wnt chnta.
1/1	Date: tom, ccs sue xln
1/1	seat and rhombs, seat
1/1	mid vngx, mostly tite.
1/1	ul vngx, sm, seat ss chnt
1/1	wht xln, wnt wht fr, mid, wh
1/1	insulation, etc. etc.

1/1	Date: tom-ben, ccs
1/1	rhomb xln, pr-fr, seat
1/1	xlnx, tite.
1/1	Date: tom-ben, mid-ccs
1/1	rhomb xln, fr-gd vngx,
1/1	Benven
1/1	Date: tom-ben, much
1/1	AIA tong dms fr cont
1/1	wht rhombs.
1/1	Date: tom-ben w/wht
1/1	mid-ccs rhomb xln
1/1	fr-gd vngx, fr
1/1	friable in prt

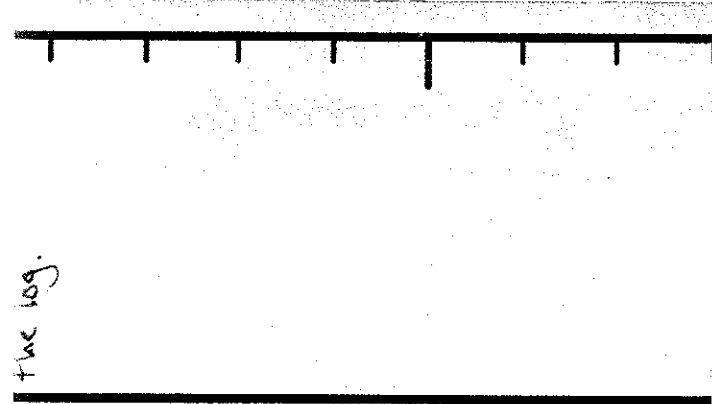
50

4800

ATTN: Kingston
4/11/1997

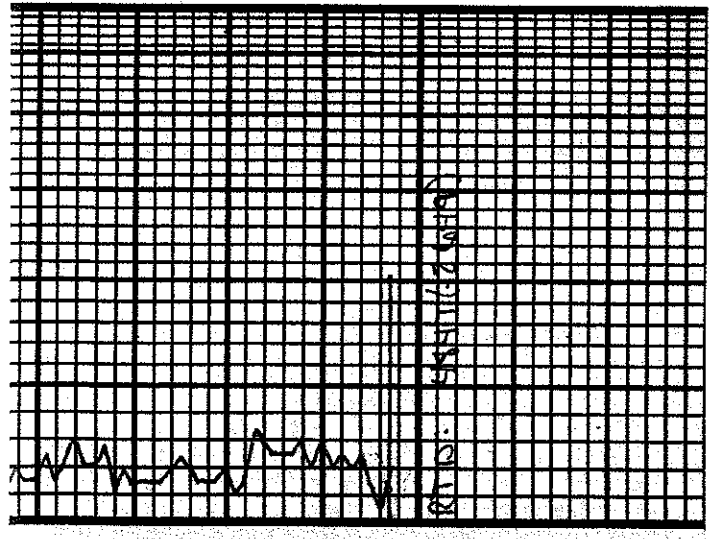
Note: Original RTD
was 4797. An extra
50' was drilled after

True log.



Date: 1900-1900-1900-1900	Show xln, gd vng q.	Frisable 215 for dms	wt depth		Manding

50



RTD: 5511122-0119