



KANSAS CORPORATION COMMISSION 1052968  
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 # 30717  
Name: Downing-Nelson Oil Co Inc  
Address 1: PO BOX 372  
Address 2: \_\_\_\_\_  
City: HAYS State: KS Zip: 67601 + 0372  
Contact Person: Ron Nelson  
Phone: ( 785 ) 621-2610  
CONTRACTOR: License # 31548  
Name: Discovery Drilling  
Wellsite Geologist: Marc Downing  
Purchaser: \_\_\_\_\_

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

If Workover/Re-entry: Old Well Info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_  
02/28/2011    03/07/2011    03/08/2011  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 15-145-21636-00-00  
Spot Description: \_\_\_\_\_  
SW NE NW NW Sec. 19 Twp. 20 S. R. 20  East  West  
560 Feet from  North /  South Line of Section  
670 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Pawnee  
Lease Name: Franz Trust Well #: 1-19  
Field Name: Steffen NW  
Producing Formation: None  
Elevation: Ground: 2198 Kelly Bushing: 2206  
Total Depth: 4483 Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 1162 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: 16000 ppm Fluid volume: 320 bbls  
Dewatering method used: Hauled to Disposal  
Location of fluid disposal if hauled offsite:  
Operator Name: Downing Nelson Oil Company Inc  
Lease Name: Chaddick SWD License #: 30717  
Quarter SE Sec. 31 Twp. 20 S. R. 20  East  West  
County: Pawnee Permit #: D14220

**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: Deanna Garrison Date: 03/31/2011



1052968

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Franz Trust Well #: 1-19  
 Sec. 19 Twp. 20 S. R. 20  East  West County: Pawnee

**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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: <b>Attached</b>	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum Attached Attached Attached
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CASING RECORD <input checked="" 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
Surface Pipe	12.25	8.625	23	1162	Common	450	2% Gel & 3% CC

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	-			
	-			

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Franz Trust 1-19
Doc ID	1052968

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Density Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Franz Trust 1-19
Doc ID	1052968

Tops

Top Anhydrite	1402	+805
Base Anhydrite	1428	+779
Heebner	3722	-1515
LKC	3772	-1565
BKC	4088	-1881
Fort Scott	4274	-2067
Cherokee Shale	4294	-2087
Mississippi	4359	-2152
Osage	4386	-2179

# ALLIED CEMENTING CO., LLC. 038714

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
G-ent Bc-JW

DATE <u>3-1-11</u>	SEC. <u>19</u>	TWP. <u>20</u>	RANGE <u>20</u>	CALLED OUT	ON LOCATION	JOB START <u>530</u>	JOB FINISH <u>600 PM</u>
LEASE <u>Trust</u>	WELL # <u>1-19</u>	LOCATION <u>Alexander 11 South Tow RD</u>			COUNTY <u>Pawnee</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)			<u>2 west 4 south East into</u>				

CONTRACTOR Discovery Risky  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D. 1162  
 CASING SIZE 8 3/4 DEPTH  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX 500 MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 42.53  
 PERFS.  
 DISPLACEMENT 71.25 BBLS

EQUIPMENT

PUMP TRUCK CEMENTER Wayne  
 # 224 HELPER Bob-R  
 BULK TRUCK  
 # 344-170 DRIVER G-eg  
 BULK TRUCK  
 # DRIVER

REMARKS:

Pipe on Bottom B-cell circulation with Rig mud shut down  
Hook up to cement line  
Run 10 BBLS spacer fresh water  
Mix 450sx class A 3%cc + 2% gel  
Shut down Release Plus  
Displace 71.25 BBLS A-cell water  
Cement did circulate Rig down  
hand plus 500 PSI

CHARGE TO: Downing & Nelson  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To Allied Cementing Co., LLC.

OWNER Downing & Nelson

CEMENT  
 AMOUNT ORDERED 450sx class A 3%cc + 2% gel

COMMON	<u>450</u>	@	<u>16.25</u>	<u>7312.50</u>
POZMIX		@		
GEL	<u>8</u>	@	<u>21.25</u>	<u>170.00</u>
CHLORIDE	<u>15</u>	@	<u>58.20</u>	<u>873.00</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>473</u>	@	<u>2.25</u>	<u>1064.25</u>
MILEAGE	<u>473 x 29 x .11</u>			<u>1508.87</u>
TOTAL				<u>10928.62</u>

SERVICE

DEPTH OF JOB	<u>1162</u>		
PUMP TRUCK CHARGE			<u>1925.00</u>
EXTRA FOOTAGE		@	
MILEAGE Heavy	<u>58</u>	@	<u>7.00</u> <u>406.00</u>
MANIFOLD		@	
Mileage light	<u>58</u>	@	<u>4.00</u> <u>232.00</u>
		@	

TOTAL 2563.00

PLUG & FLOAT EQUIPMENT

<u>1 Rubber Plug</u>	@	<u>74.00</u>	<u>74.00</u>
<u>1 8 3/4" Bottle Plate</u>	@	<u>67.20</u>	<u>67.20</u>
	@		

# ALLIED CEMENTING CO., LLC. 038727

EMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665.

SERVICE POINT:  
Crest Bend KS

DATE <u>3-7-11</u>	SEC. <u>19</u>	TWP. <u>20</u>	RANGE <u>20</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00 am</u>	JOB FINISH <u>2:30 am</u>	
LEASE <u>Front Trust</u>		WELL # <u>1-19</u>	LOCATION <u>Alexander South to W Rd</u>		COUNTY <u>Pawnee</u>	STATE <u>KS</u>		
OLD OR NEW <input checked="" type="radio"/> (Circle one)			<u>2 west 1/4 south Emdo</u>					

CONTRACTOR Discoveries Rig #4

TYPE OF JOB Rotary Plug

HOLE SIZE 7 7/8 0 1/2 1 D.

CASING SIZE 8 5/8 DEPTH

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH 1200

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT

OWNER Downing - Nelson Oil Co

CEMENT

AMOUNT ORDERED 170# 60/40 4% gel  
1/4 flo seal

COMMON	<u>1025#</u>	@	<u>13.50</u>	<u>1377.00</u>
POZMIX	<u>68#</u>	@	<u>7.55</u>	<u>513.40</u>
GEL	<u>6</u>	@	<u>20.25</u>	<u>121.50</u>
CHLORIDE		@		
ASC		@		
	<u>50# flo seal</u>	@	<u>2.45</u>	<u>122.50</u>
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>178</u>	@	<u>2.25</u>	<u>400.50</u>
MILEAGE	<u>178 x 30 x .10</u>			<u>534.00</u>
TOTAL				<u>3068.20</u>

**EQUIPMENT**

PUMP TRUCK CEMENTER Bobby Rother

# 366 HELPER Gregg

BULK TRUCK

# 452-188 DRIVER Kevin W.

BULK TRUCK

# DRIVER

REMARKS:

1st plug 1700ft 50# 50#

2nd plug 450ft 40# 50#

3rd plug 60ft 20# 50#

Retrude 30# 50#

Mouse hole 20# 50#

Rig down

**SERVICE**

DEPTH OF JOB	<u>1200</u>			
PUMP TRUCK CHARGE				<u>991.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>30</u>	@	<u>7.00</u>	<u>210.00</u>
MANIFOLD		@		
	<u>high truck mileage</u>	@	<u>4.00</u>	<u>NC</u>
		@		

TOTAL 1201.00

CHARGE TO: Downing - Nelson Oil Co.

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

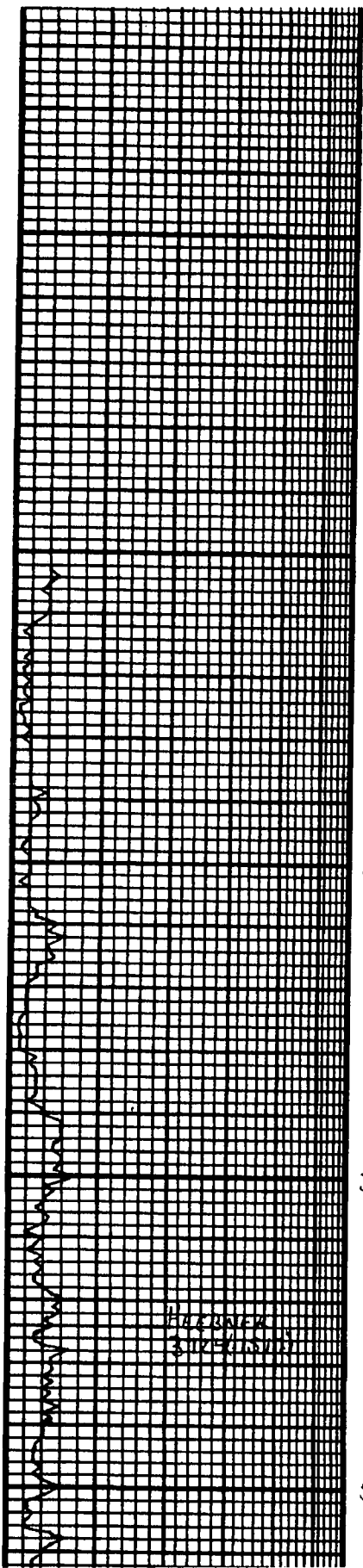
	@		
	@		
	@		
	@		

To Allied Cementing Co., LLC.  
You are hereby requested to rent cementing equipment







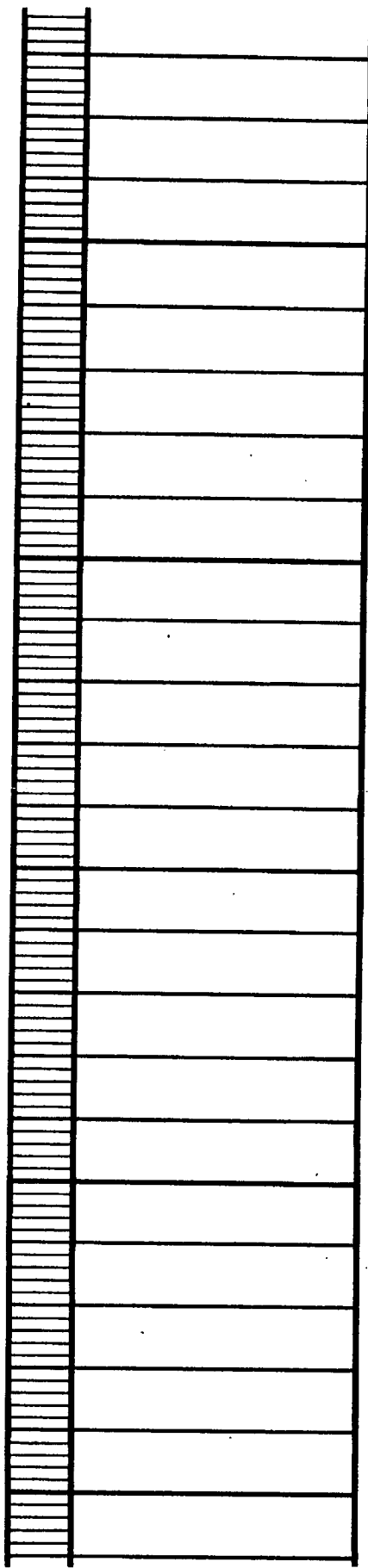


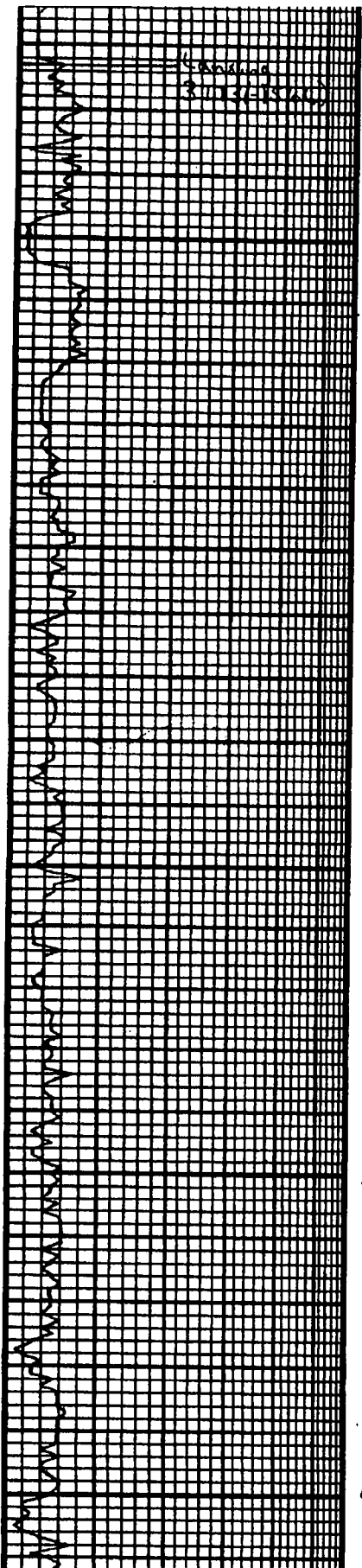
3600

50

3700

50





Handwritten text at the top of the grid, possibly a title or header.

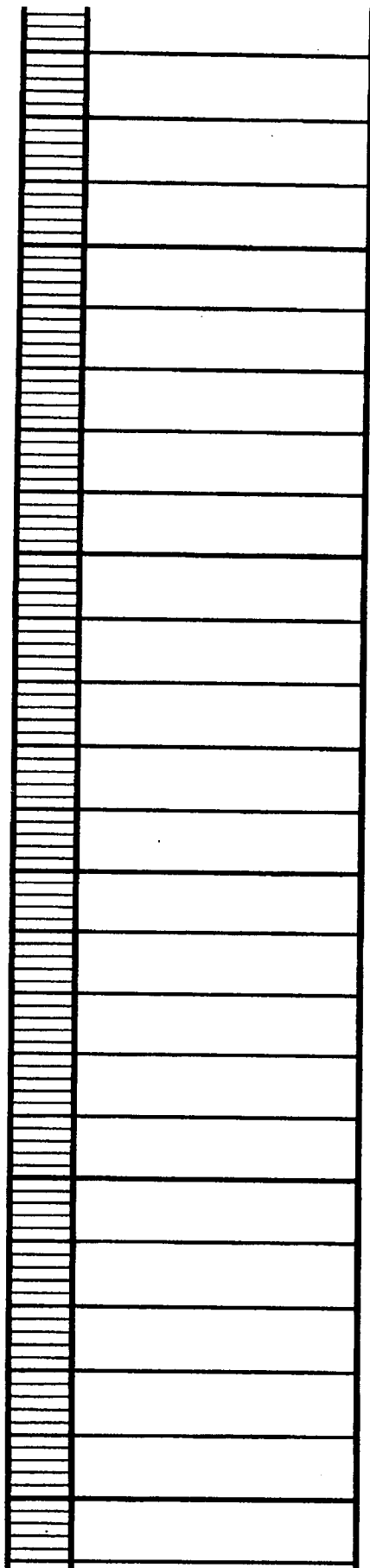
3800

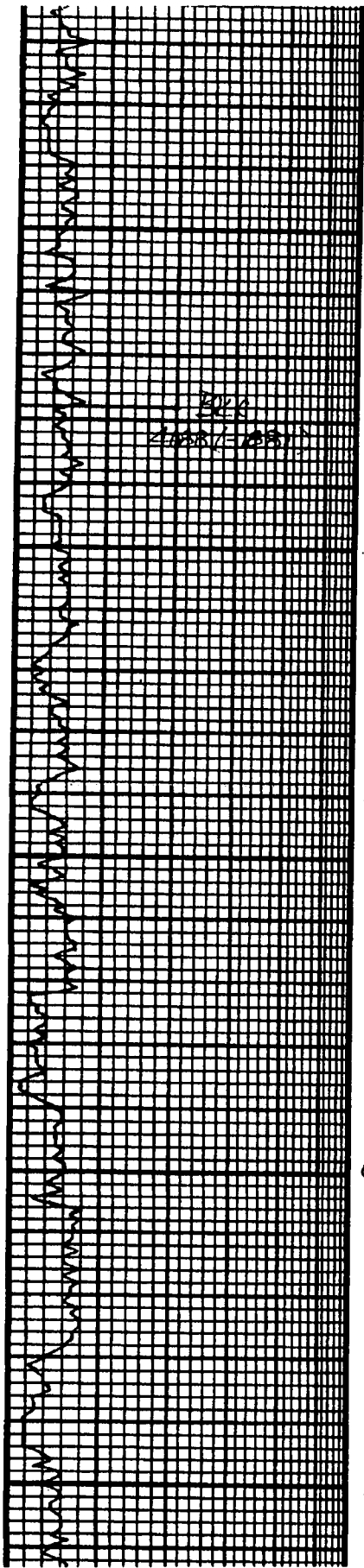
50

3900

50

4000





50

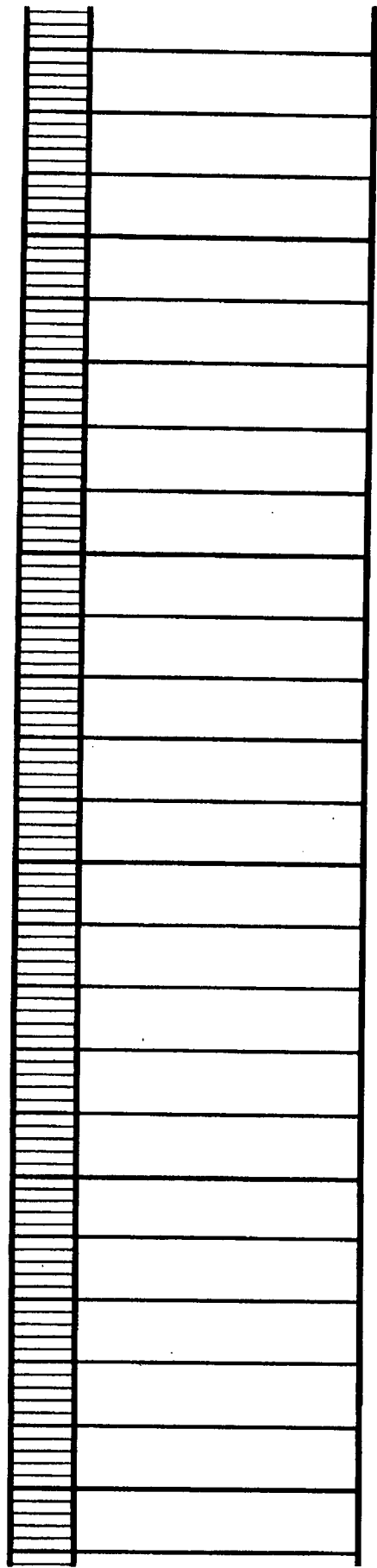
2024  
2023 (1/2023)

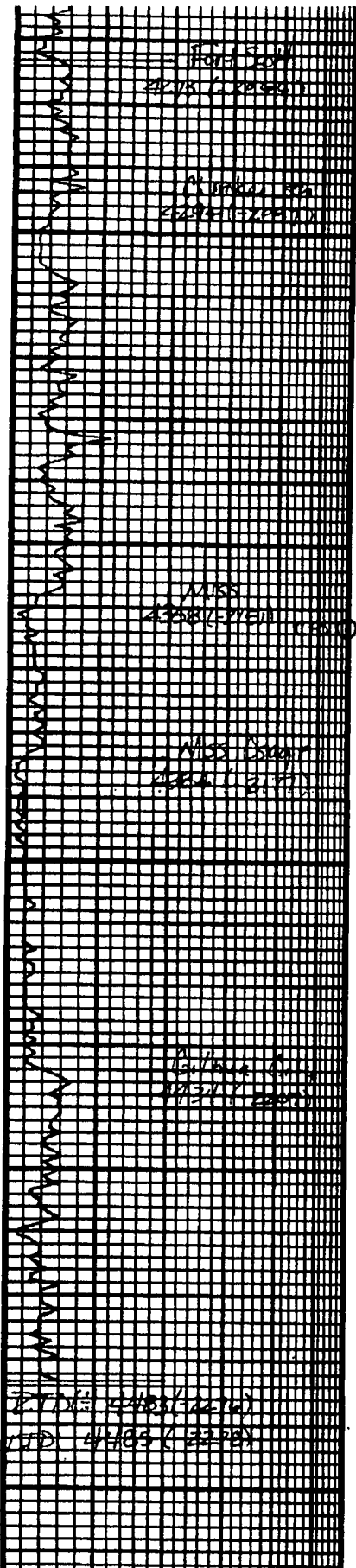
4100

50

4200

50



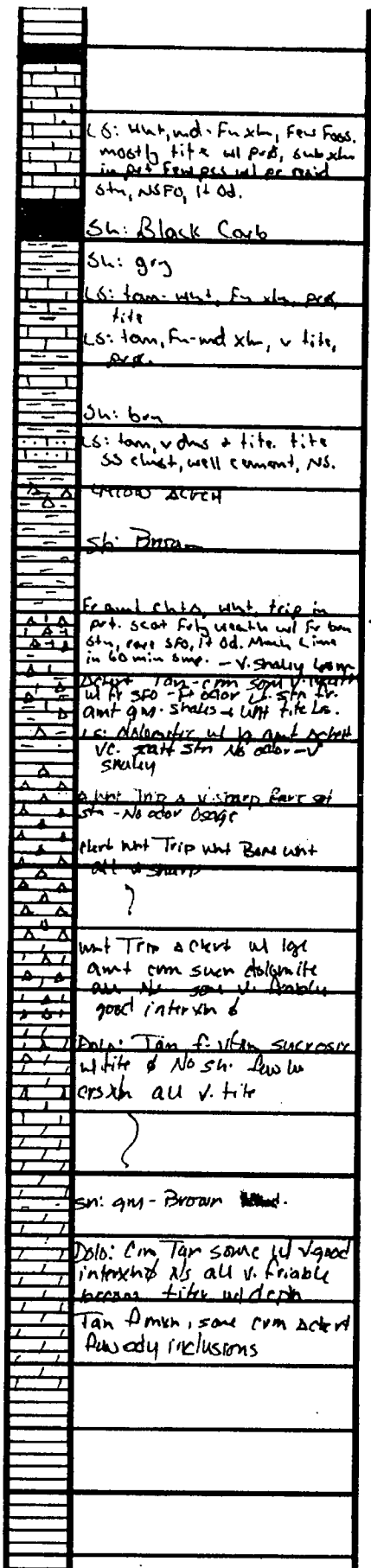


4300

50

4450

50



LS: Whit, med. Fin xln, Few Foss. mostly tite w/ prob. subxln in part. Few pers. w/ or w/out str., NSFO, it od.

Sh: Black Carb

Sh: gray

LS: tan-med, Fin xln, med. tite

LS: tan, Fin-med xln, v. tite, med.

Sh: brown

LS: tan, v. dms + tite. tite SS chert, well cement, NS.

Sh: Brown

Sh: Brown

Fract. chert, med. trip in part. scat. Foss. visible w/ Fr. tan str., rare sfo, it od. Much lime in 60 min exp. - v. shaly ls.

med. tan - con. some v. shaly w/ fr sfo - Fr. odor L. str. fr. amt. gms. shales - w/ tite ls.

v. shaly ls. w/ amt. chert v. shaly str. no odor - v. shaly

a. med. trip a. v. shaly part of str. - no odor - orange

shaly med. trip w/ med. shaly

?

med. trip a. shaly w/ large amt. con. such dolomite all the same v. shaly good interstr. &

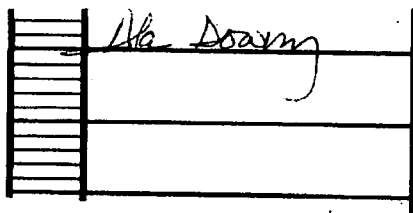
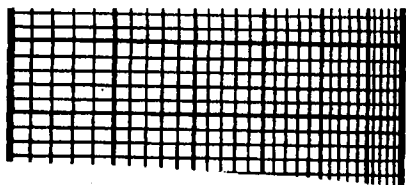
Dolo: Tan f. v. shaly success. w/ tite & no sh. low in crs. xln all v. tite

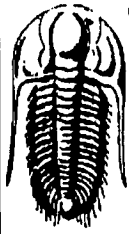
sh: gray - Brown med.

Dolo: fine tan some w/ good interstr. as all v. friable because tite w/ depth

Tan dms, some con. act. poorly inclusions

4





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

DNOC  
PO Box 1019  
Hays, KS 67601

ATTN: Marc Downing

**Franz Trust 1-19**

**19-20-20 Pawnee KS**

Job Ticket: 41793

**DST#: 1**

Test Start: 2011.03.06 @ 03:53:20

## GENERAL INFORMATION:

Formation: **Miss**

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

Time Tool Opened: 05:58:49

Time Test Ended: 09:34:49

Test Type: **Conventional Bottom Hole**

Tester: **Brian Fairbank**

Unit No: **41**

Interval: **4315.00 ft (KB) To 4363.00 ft (KB) (TVD)**

Total Depth: **4363.00 ft (KB) (TVD)**

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

Reference Elevations: **2204.00 ft (KB)**

**2196.00 ft (CF)**

KB to GR/CF: **8.00 ft**

**Serial #: 8372**

**Inside**

Press@RunDepth: **50.35 psig @ 4318.00 ft (KB)**

Start Date: **2011.03.06**

End Date:

**2011.03.06**

Capacity: **8000.00 psig**

Last Calib.: **2011.03.06**

Start Time: **03:53:20**

End Time:

**09:34:49**

Time On Btm: **2011.03.06 @ 05:57:49**

Time Off Btm: **2011.03.06 @ 08:00:49**

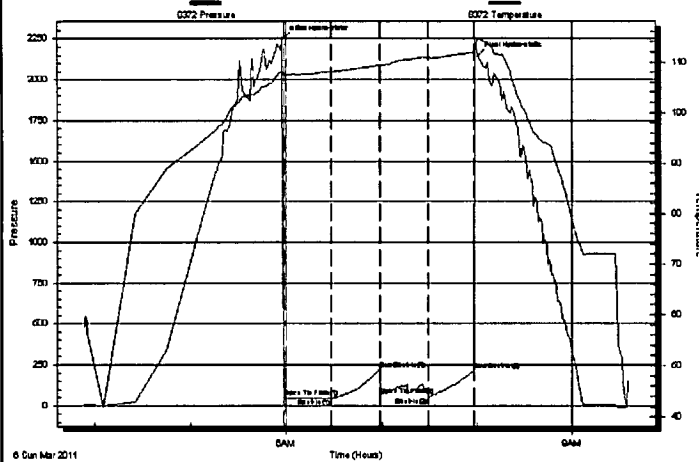
**TEST COMMENT:** IFP - 1/4" blow - died 14 min

ISI - no blow back

FFP - no blow

FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

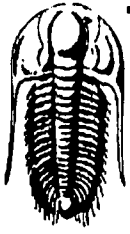
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2248.00	107.96	Initial Hydro-static
1	48.13	107.49	Open To Flow (1)
31	44.22	108.12	Shut-In(1)
61	220.72	109.37	End Shut-In(1)
61	60.83	109.31	Open To Flow (2)
92	50.35	110.84	Shut-In(2)
121	214.23	111.93	End Shut-In(2)
123	2144.95	114.48	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.02

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

DNOC  
PO Box 1019  
Hays, KS 67601

**Franz Trust 1-19**  
**19-20-20 Pawnee KS**  
Job Ticket: 41793      **DST#: 1**  
Test Start: 2011.03.06 @ 03:53:20

ATTN: Marc Downing

**Mud and Cushion Information**

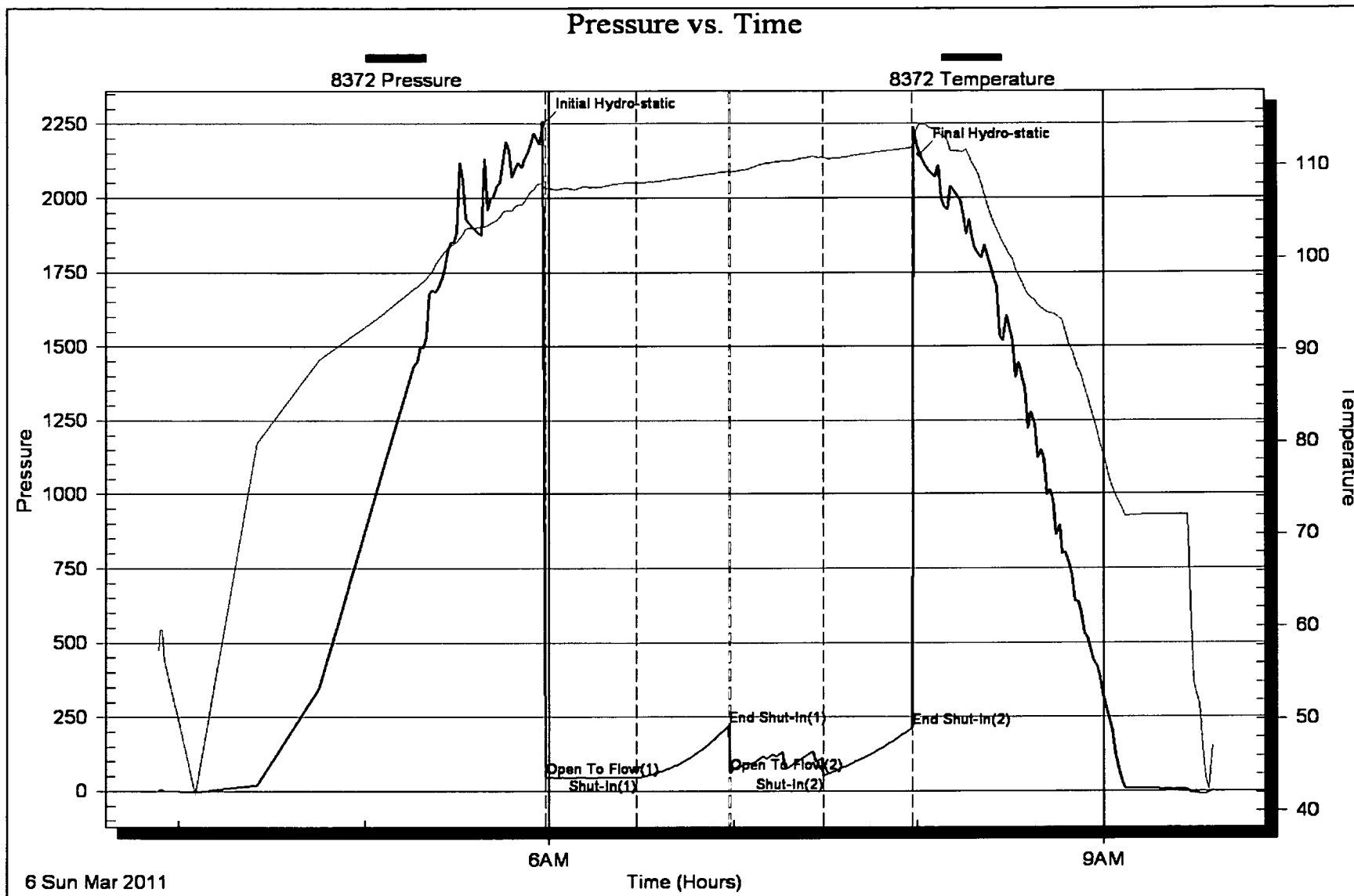
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.57 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4800.00 ppm			
Filter Cake: inches			

**Recovery Information**

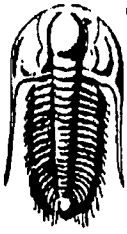
Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

DNOC  
PO Box 1019  
Hays, KS 67601  
ATTN: Marc Downing

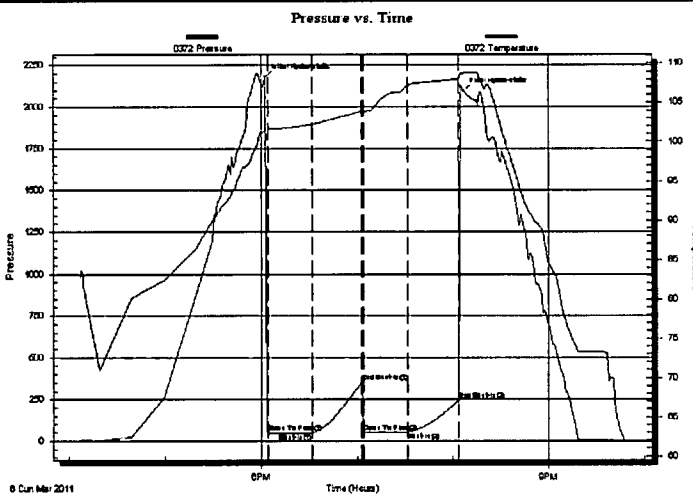
**Franz Trust 1-19**  
**19-20-20 Pawnee KS**  
Job Ticket: 41794      **DST#: 2**  
Test Start: 2011.03.06 @ 16:07:06

## GENERAL INFORMATION:

Formation: **Miss (2)**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 18:04:05  
Time Test Ended: 21:47:35  
Interval: **4314.00 ft (KB) To 4368.00 ft (KB) (TVD)**  
Total Depth: 4368.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition:  
Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41  
Reference Elevations: 2204.00 ft (KB)  
2196.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8372**      **Inside**  
Press@RunDepth: 53.07 psig @ 4323.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2011.03.06      End Date: 2011.03.06      Last Calib.: 2011.03.06  
Start Time: 16:07:06      End Time: 21:47:35      Time On Btm: 2011.03.06 @ 18:02:35  
Time Off Btm: 2011.03.06 @ 20:06:35

**TEST COMMENT:** IFF - 1/4" blow - died 24 min  
ISI - no blow back  
FFP - no blow  
FSI - no blow back



## PRESSURE SUMMARY

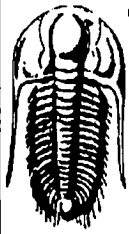
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.02	101.27	Initial Hydro-static
2	50.51	101.52	Open To Flow (1)
30	47.89	102.23	Shut-In(1)
60	352.66	103.85	End Shut-In(1)
62	52.24	103.81	Open To Flow (2)
89	53.07	107.13	Shut-In(2)
121	246.27	108.04	End Shut-In(2)
124	2093.24	108.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%	0.05

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

DNOC  
PO Box 1019  
Hays, KS 67601

**Franz Trust 1-19**  
**19-20-20 Pawnee KS**  
Job Ticket: 41794      **DST#: 2**  
Test Start: 2011.03.06 @ 16:07:06

ATTN: Marc Downing

**Mud and Cushion Information**

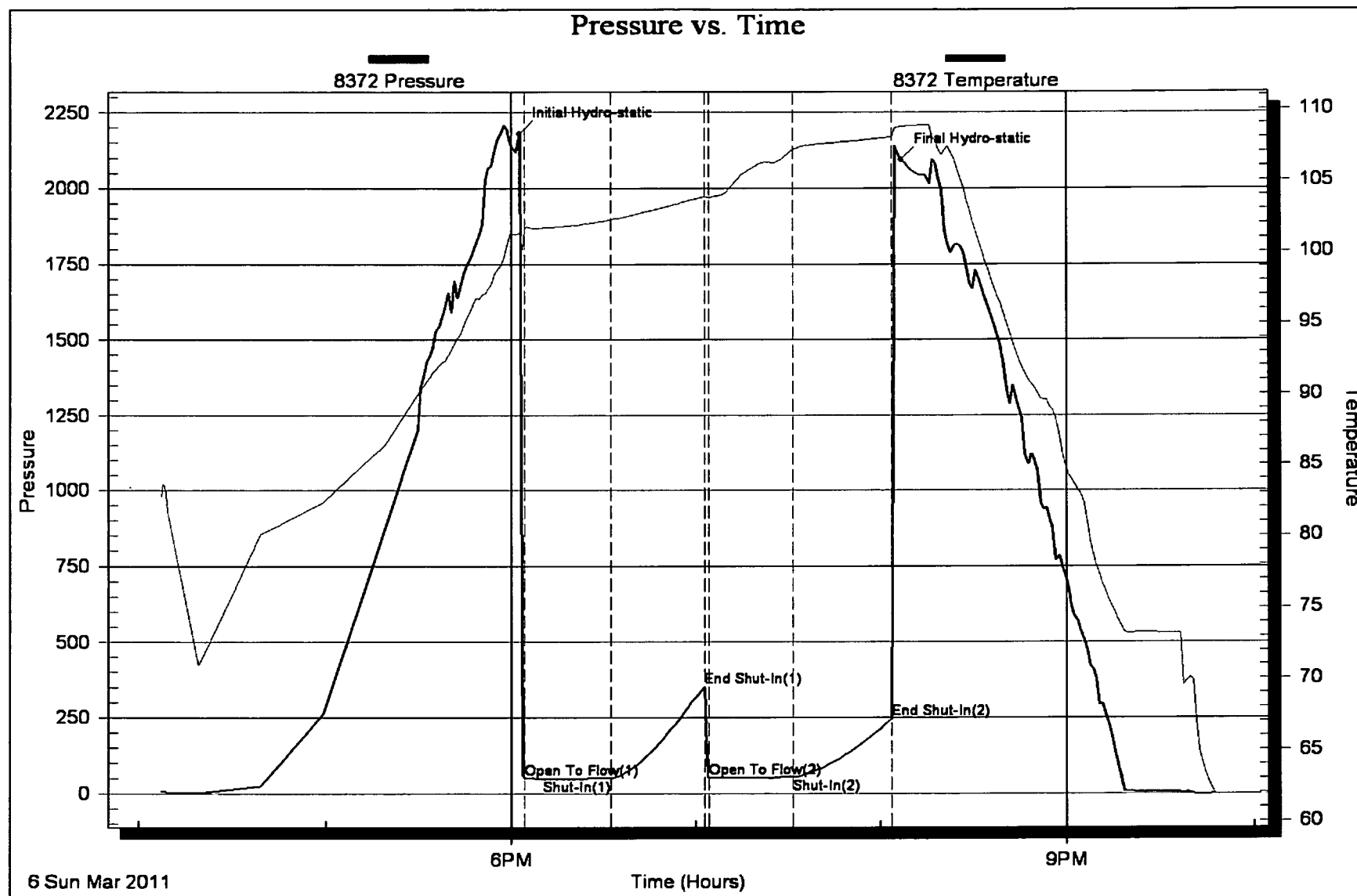
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 72.00 sec/qt	Cushion Volume: bbl		
Water Loss: 18.56 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 12000.00 ppm			
Filter Cake: inches			

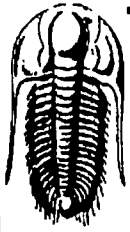
**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:





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DNOC  
PO Box 1019  
Hays, KS 67601  
  
ATTN: Marc Downing

**Franz Trust 1-19**  
**19-20-20 Pawnee KS**  
Job Ticket: 41795      **DST#: 3**  
Test Start: 2011.03.07 @ 13:09:04

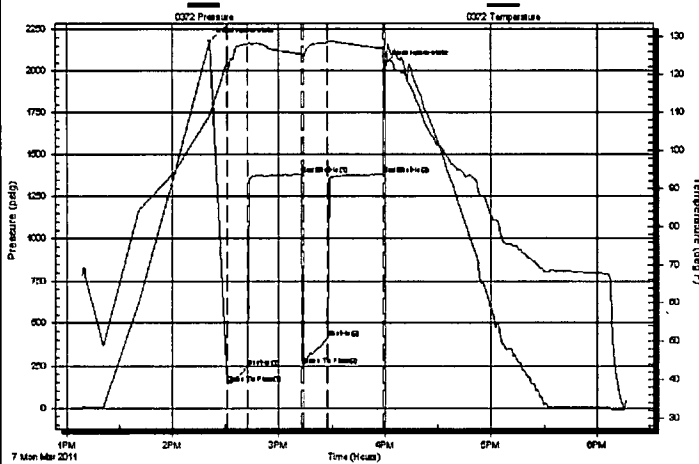
## GENERAL INFORMATION:

Formation: **Miss (3)**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 14:31:03  
Time Test Ended: 18:16:33  
  
Interval: **4370.00 ft (KB) To 4390.00 ft (KB) (TVD)**  
Total Depth: 4485.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition:  
  
Test Type: Conventional Straddle  
Tester: Brian Fairbank  
Unit No: 41  
  
Reference Elevations: 2204.00 ft (KB)  
2196.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8372**      **Inside**  
Press@RunDepth: 409.59 psig @ 4375.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2011.03.07      End Date: 2011.03.07      Last Calib.: 2011.03.07  
Start Time: 13:09:04      End Time: 18:16:33      Time On Btm: 2011.03.07 @ 14:21:03  
Time Off Btm: 2011.03.07 @ 16:00:03

**TEST COMMENT:** IFF - BOB 3 min  
ISI - no blow back  
FFP - BOB 3 min  
FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

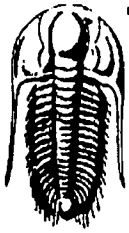
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2178.89	109.19	Initial Hydro-static
10	145.30	123.24	Open To Flow (1)
22	244.48	128.07	Shut-In(1)
52	1381.44	125.44	End Shut-In(1)
53	254.69	124.81	Open To Flow (2)
67	409.59	128.42	Shut-In(2)
98	1381.24	126.91	End Shut-In(2)
99	2043.10	126.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
885.00	MW 90%W, 10%M	12.13

## Gas Rates

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



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 Job Ticket: 41795      **DST#: 3**  
 Test Start: 2011.03.07 @ 13:09:04

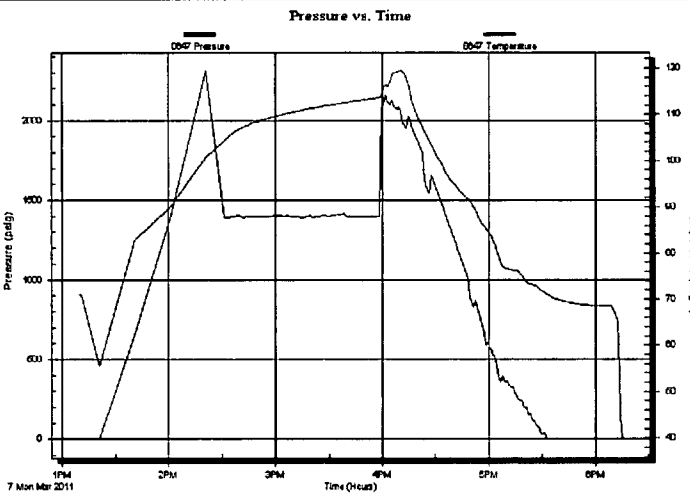
#### GENERAL INFORMATION:

Formation: **Miss (3)**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 14:31:03  
 Time Test Ended: 18:16:33  
 Interval: **4370.00 ft (KB) To 4390.00 ft (KB) (TVD)**  
 Total Depth: 4485.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches  
 Hole Condition:  
 Test Type: Conventional Straddle  
 Tester: Brian Fairbank  
 Unit No: 41  
 Reference Elevations: 2204.00 ft (KB)  
 2196.00 ft (CF)  
 KB to GR/CF: 8.00 ft

#### Serial #: 8647 Below (Straddle)

Press@RunDepth:      psig @ 4396.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2011.03.07      End Date: 2011.03.07      Last Calib.: 2011.03.07  
 Start Time: 13:09:04      End Time: 18:16:03      Time On Btm:  
 Time Off Btm:

TEST COMMENT: IFP - BOB 3 min  
 ISI - no blow back  
 FFP - BOB 3 min  
 FSI - no blow back



#### PRESSURE SUMMARY

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

#### Recovery

Length (ft)	Description	Volume (bbl)
885.00	MW 90%W, 10%M	12.13

#### Gas Rates

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



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Job Ticket: 41795      **DST#: 3**  
Test Start: 2011.03.07 @ 13:09:04

ATTN: Marc Downing

## 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:	45000 ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7200.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
885.00	MW 90%W, 10%M	12.132

Total Length: 885.00 ft      Total Volume: 12.132 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

