

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD  
 Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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 <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 Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	N-10 Exploration, LLC
Well Name	BERTHOLF C1
Doc ID	1705775

All Electric Logs Run

Dual Induction
Comp Neutron
Comp Porosity
Micro Log



# Timothy G. Pierce

## Petroleum Geologist

### GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY N-10 Exploration, LLC  
 LEASE Bertholf C-1  
 FIELD Spivey-Grabs  
 LOCATION NW NW NE  
 SEC 24 TWPSP 31S RGE 9W  
 COUNTY Harper STATE Kansas  
 CONTRACTOR Fossil Drilling Rig #3  
 SPUD 12-07-2022 COMP 12-17-2022  
 RTD 4600 LTD 4596  
 MUD UP 2800 TYPE MUD Chemical  
 SAMPLES SAVED FROM 2650-3000/3900-RTD TO RTD  
2000-2400/  
 DRILLING TIME KEPT FROM 2000 TO RTD  
 SAMPLES EXAMINED FROM 2650-3000 TO 3900-RTD  
 GEOLOGICAL SUPERVISION FROM 2000 TO RTD  
 GEOLOGIST ON WELL Tim Pierce

#### ELEVATIONS

KB 1607'  
 DF \_\_\_\_\_  
 GL 1595'  
 Measurements Are All  
 From Kelly Bushing

#### CASING

CONDUCTOR \_\_\_\_\_  
 SURFACE 8-5/8" at 252'  
 PRODUCTION 5-1/2" at 4597'

#### ELECTRICAL SURVEYS

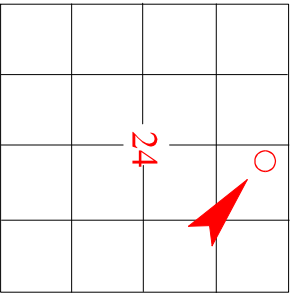
DIL / CN-CD / Micro  
Midwest Energy Svcs.

#### FORMATION TOPS

#### ELECTRIC LOG

#### SAMPLE

Red Eagle	2090 (-483)	2089 (-482)
Onaga Sh.	2340 (-733)	2347 (-740)
Topoka L.S.	2913 (-1307)	2915 (-1309)
Heebner Sh.	3422 (-1815)	3425 (-1818)
Lansing	3612 (-2005)	3616 (-2009)
Stark Sh.	4051 (-2444)	4054 (-2447)
Cherokee Sh.	4289 (-2682)	4293 (-2686)
Mississippi	4355 (-2748)	4361 (-2754)

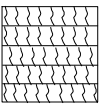


API # 15-077-22,191

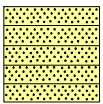
**REMARKS** Drill stem test covering the top 25 ft of Mississippi had negative results. A second DST further down in the section recovered a show of oil, indicating separate reservoirs within the Mississippi section. Further drilling samples indicated additional shows even deeper into the section, Casing was set to test these deeper shows for productivity.  
Several shallow zones indicated possibility of gas production, however these zones have been tested in offset wells and are deemed Non-commercial.

*Timothy G. Pierce*

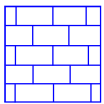
#### LEGEND



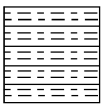
Anhydrite



Sandstone



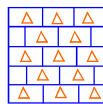
Limestone



Shale



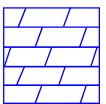
Carb Sh



Cherty LS



Chert



Dolomite

#### GAS SCALE

DRILLING TIME IN MINUTES PER FOOT

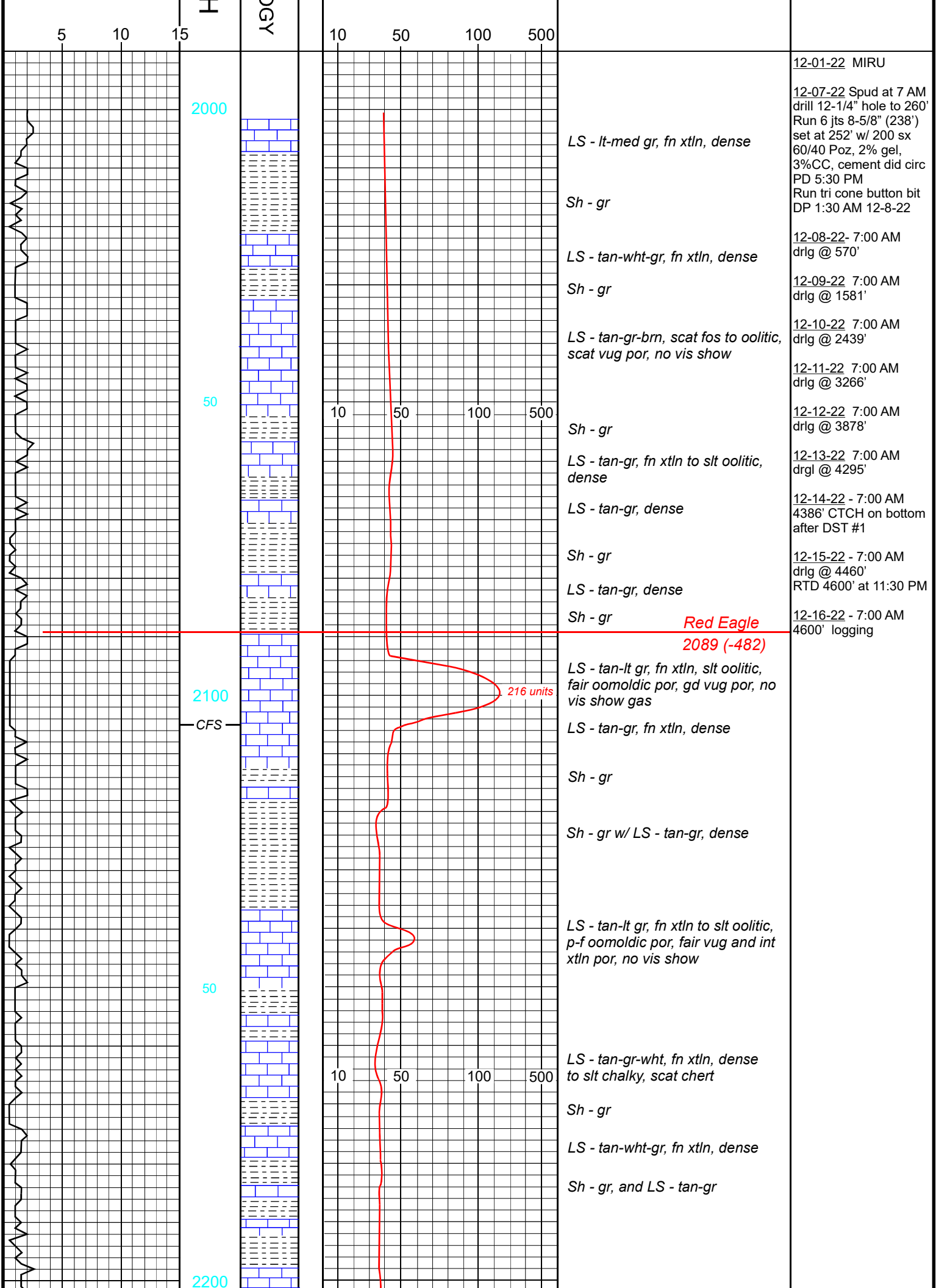
Rate of Penetration Decreases

DEPTH

LITHOLOG

SAMPLE DESCRIPTION

REMARKS



12-01-22 MIRU

12-07-22 Spud at 7 AM  
 drill 12-1/4" hole to 260'  
 Run 6 jts 8-5/8" (238')  
 set at 252' w/ 200 sx  
 60/40 Poz, 2% gel,  
 3%CC, cement did circ  
 PD 5:30 PM  
 Run tri cone button bit  
 DP 1:30 AM 12-8-22

12-08-22 7:00 AM  
 drlg @ 570'

12-09-22 7:00 AM  
 drlg @ 1581'

12-10-22 7:00 AM  
 drlg @ 2439'

12-11-22 7:00 AM  
 drlg @ 3266'

12-12-22 7:00 AM  
 drlg @ 3878'

12-13-22 7:00 AM  
 drlg @ 4295'

12-14-22 7:00 AM  
 4386' CTCH on bottom  
 after DST #1

12-15-22 7:00 AM  
 drlg @ 4460'  
 RTD 4600' at 11:30 PM

12-16-22 7:00 AM  
 4600' logging

LS - lt-med gr, fn xtl, dense

Sh - gr

LS - tan-wht-gr, fn xtl, dense

Sh - gr

LS - tan-gr-brn, scat fos to oolitic,  
 scat vug por, no vis show

Sh - gr

LS - tan-gr, fn xtl to slt oolitic,  
 dense

LS - tan-gr, dense

Sh - gr

LS - tan-gr, dense

Sh - gr

Red Eagle

2089 (-482)

LS - tan-lt gr, fn xtl, slt oolitic,  
 fair oomoldic por, gd vug por, no  
 vis show gas

216 units

LS - tan-gr, fn xtl, dense

Sh - gr

Sh - gr w/ LS - tan-gr, dense

LS - tan-lt gr, fn xtl to slt oolitic,  
 p-f oomoldic por, fair vug and int  
 xtl por, no vis show

LS - tan-gr-wht, fn xtl, dense  
 to slt chalky, scat chert

Sh - gr

LS - tan-wht-gr, fn xtl, dense

Sh - gr, and LS - tan-gr

2000

50

2100

CFS

50

2200

5

10

15

LITHOLOGY

10

50

100

500

10

50

100

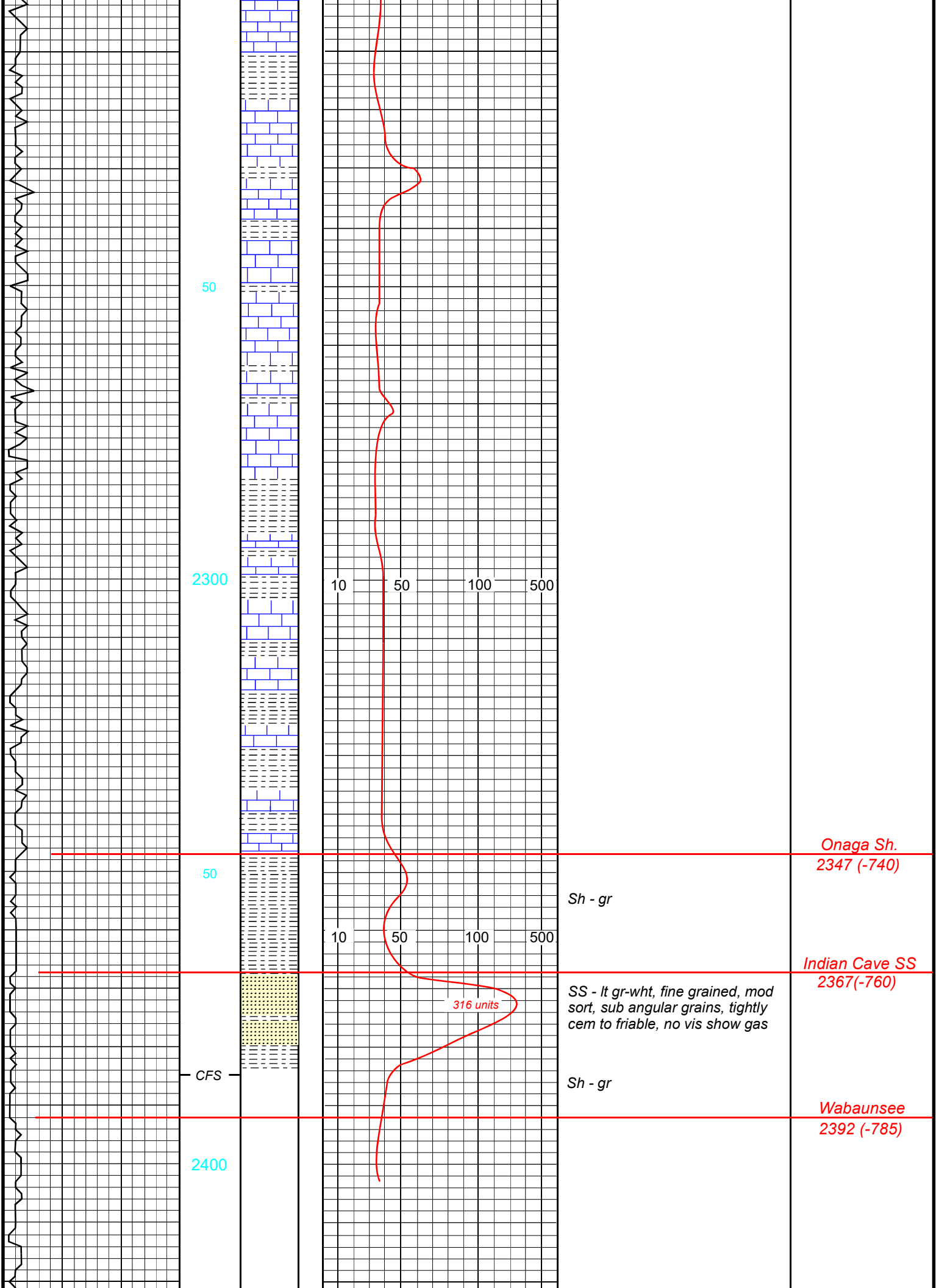
500

10

50

100

500



50

2300

10 50 100 500

50

10 50 100 500

*Onaga Sh.  
2347 (-740)*

*Sh - gr*

*Indian Cave SS  
2367 (-760)*

*SS - lt gr-wht, fine grained, mod  
sort, sub angular grains, tightly  
cem to friable, no vis show gas*

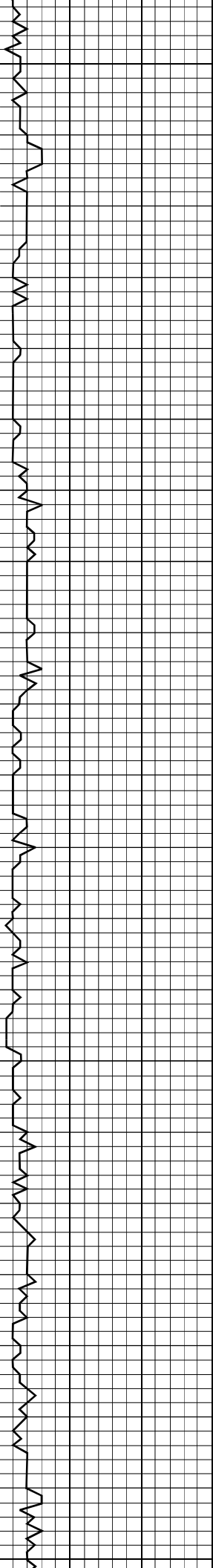
*316 units*

CFS

*Sh - gr*

*Wabaunsee  
2392 (-785)*

2400

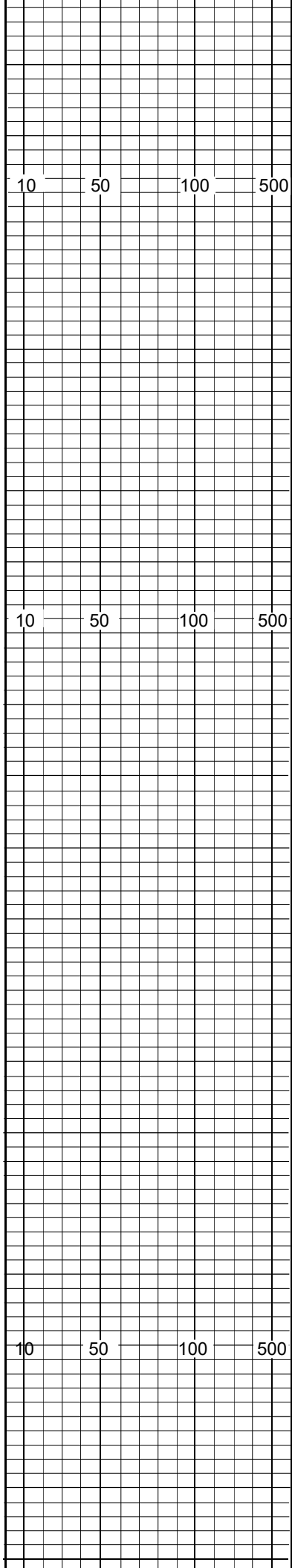


50

2500

50

2600

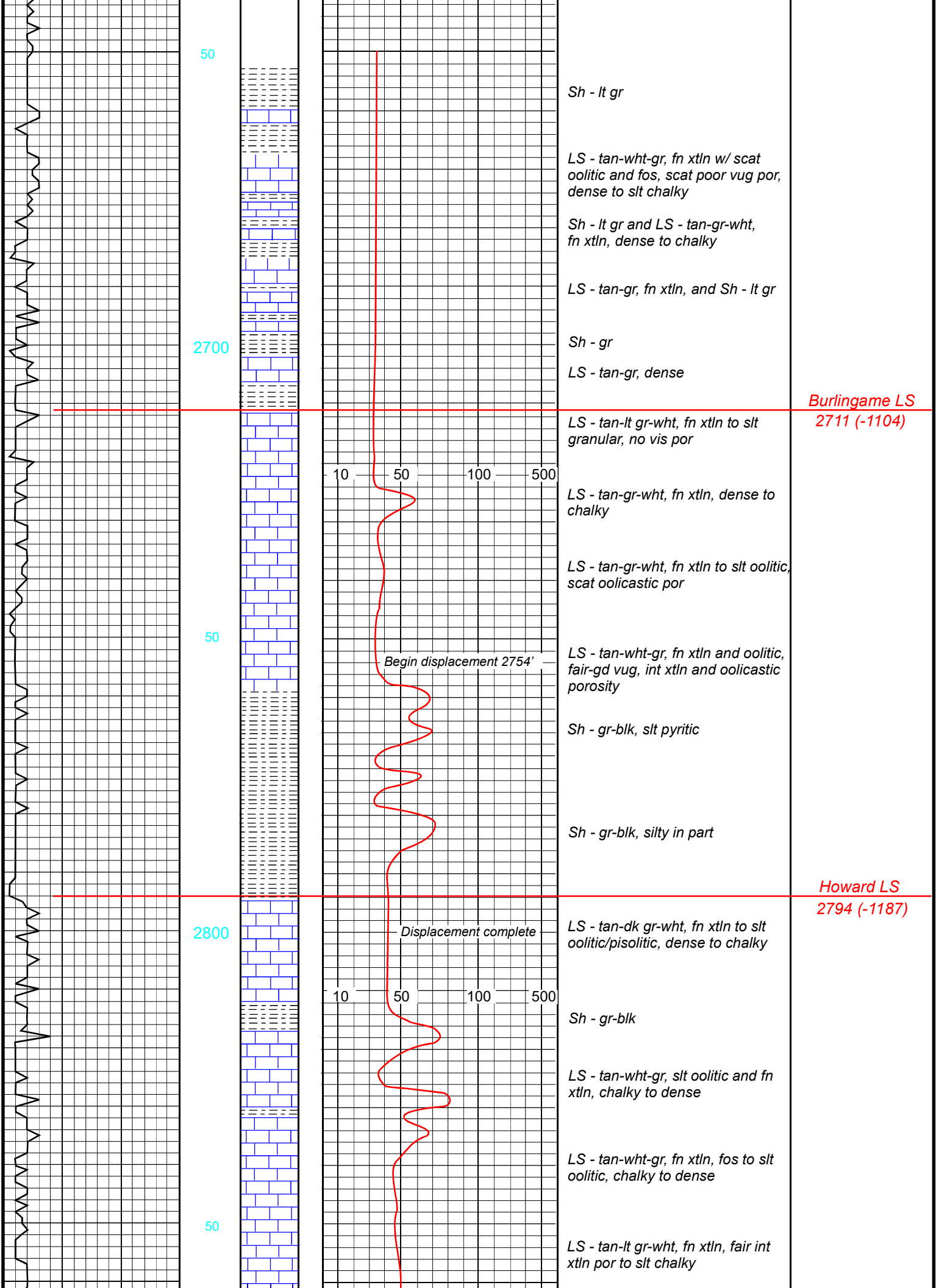


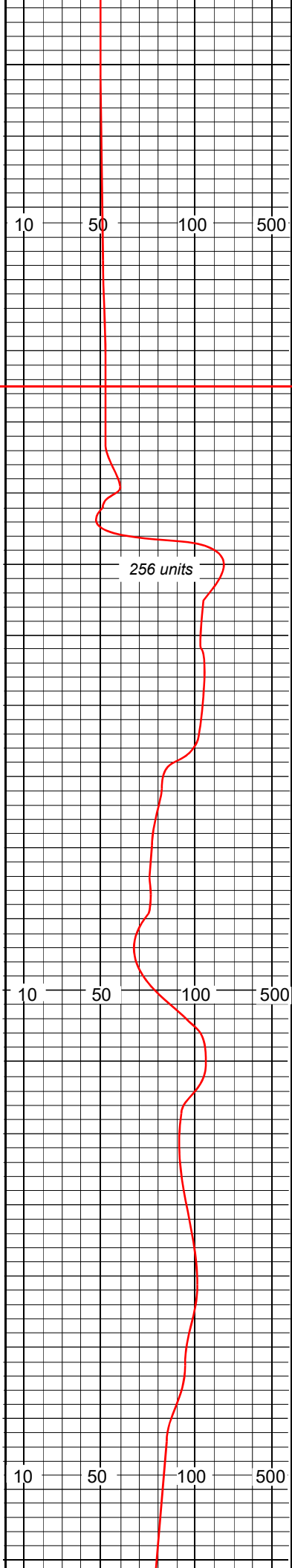
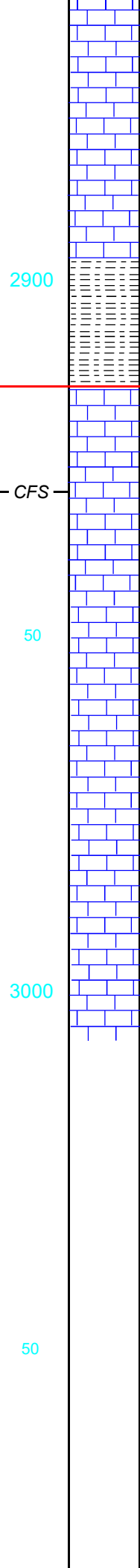
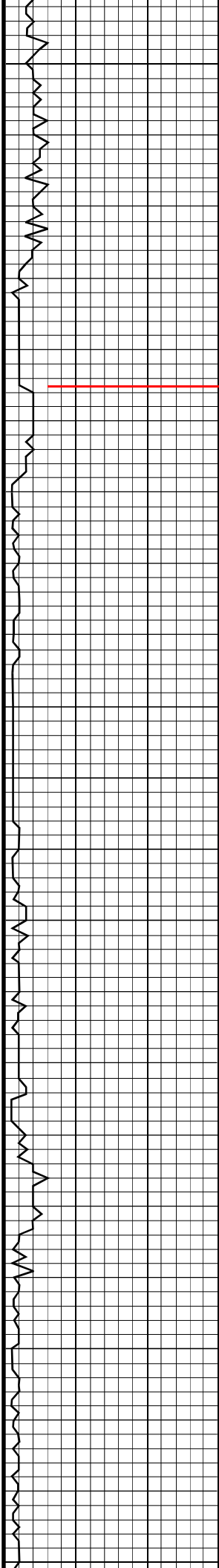
10 50 100 500

10 50 100 500

10 50 100 500







*LS - tan-gr-wht, fn xtl, slt fos, fair int xtl to vug por, chalky in part*

*LS - tan-gr-wht, fn xtl, fair int xtl por to highly chalky*

*Sh - blk-gr, silty in part*

*LS - tan-gr, fn xtl, dense*

*LS - tan-lt gr-wht, fn xtl, gd int xtl and vug por, no show*

*LS - tan-lt gr, fn-med xtl, fos, gd vug and int xtl por*

*LS - tan-lt gr, fn and med xtl, fos, gd vug por*

*LS - tan-lt gr, fn-med xtl, fos, gd int xtl and vug por*

*Topeka LS  
2915 (-1308)*

2900

CFS

50

3000

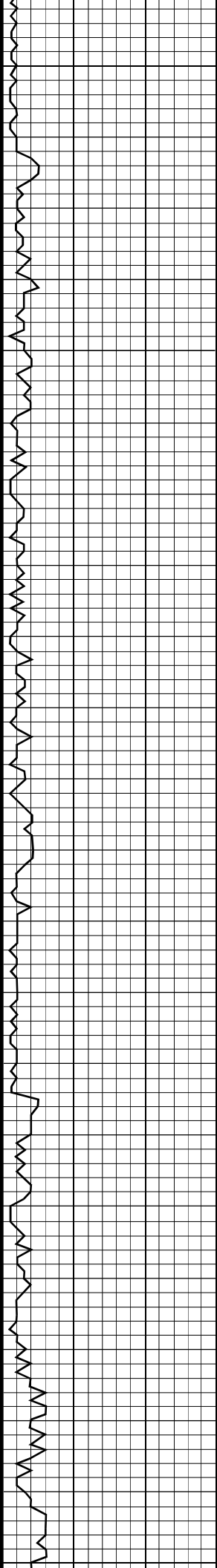
50

10 50 100 500

10 50 100 500

10 50 100 500

256 units



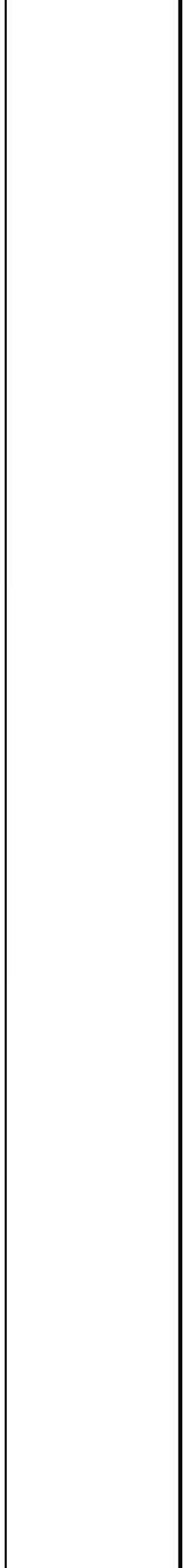
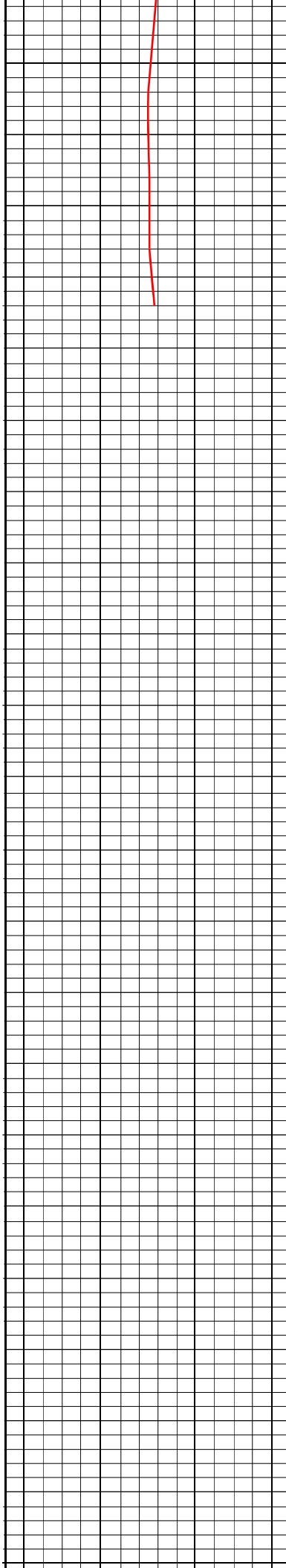
3100

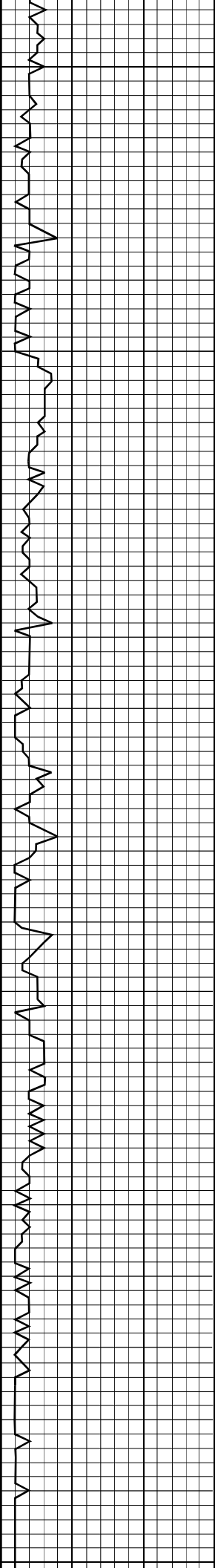
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3200

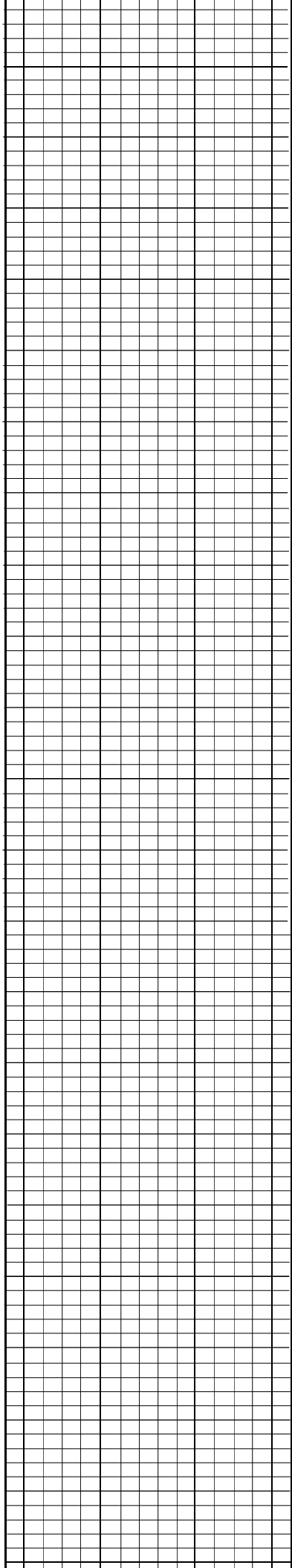
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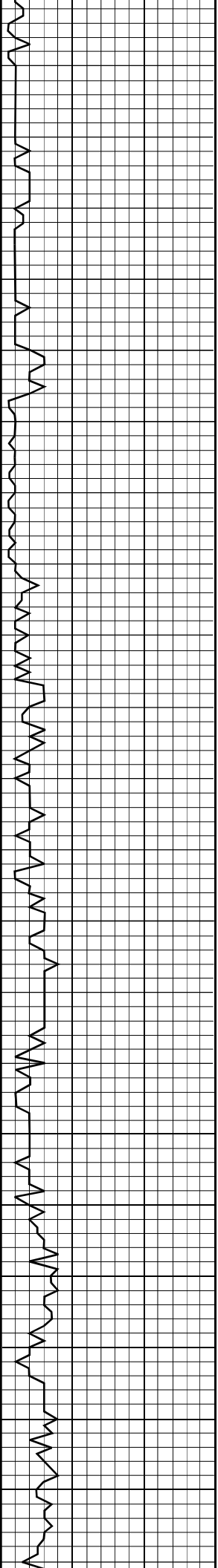
3300





50  
3400  
50  
3500



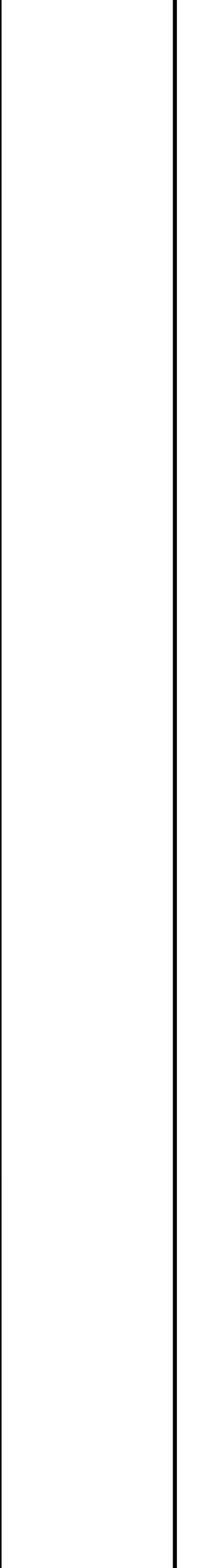
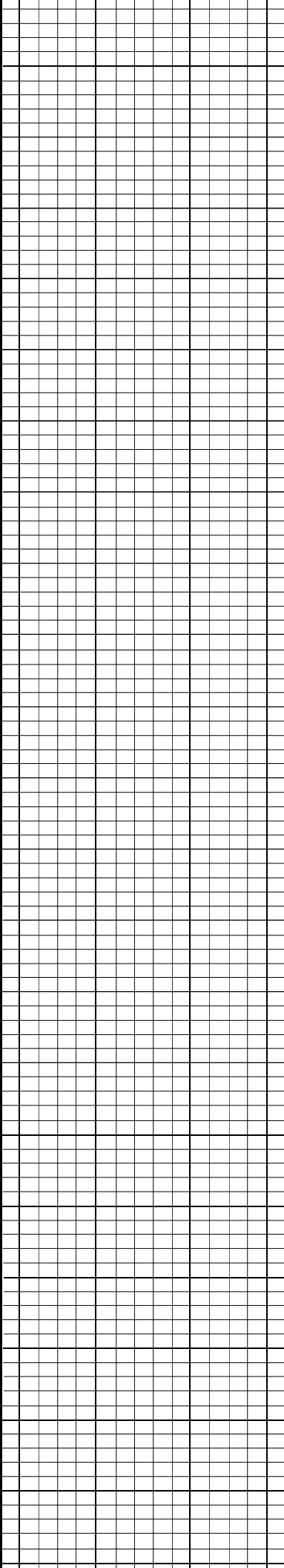


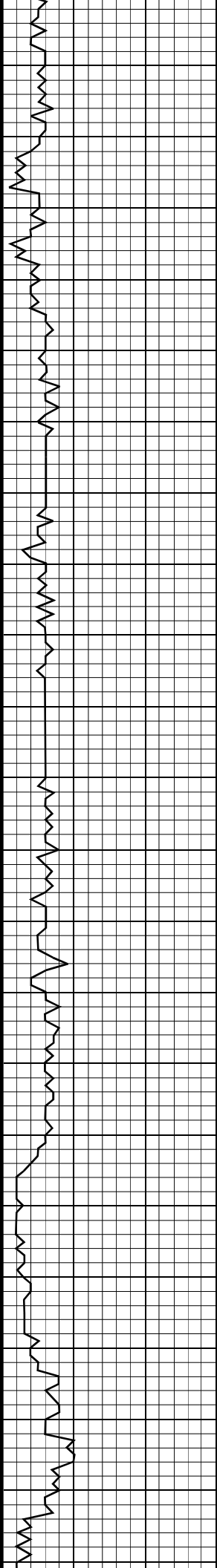
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3600

50

3700





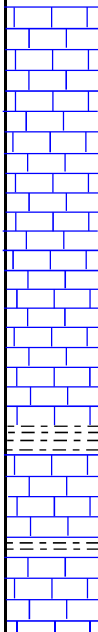
50

3800

50

3900

50



*LS - tan-lt gr, fn xtl, dense*

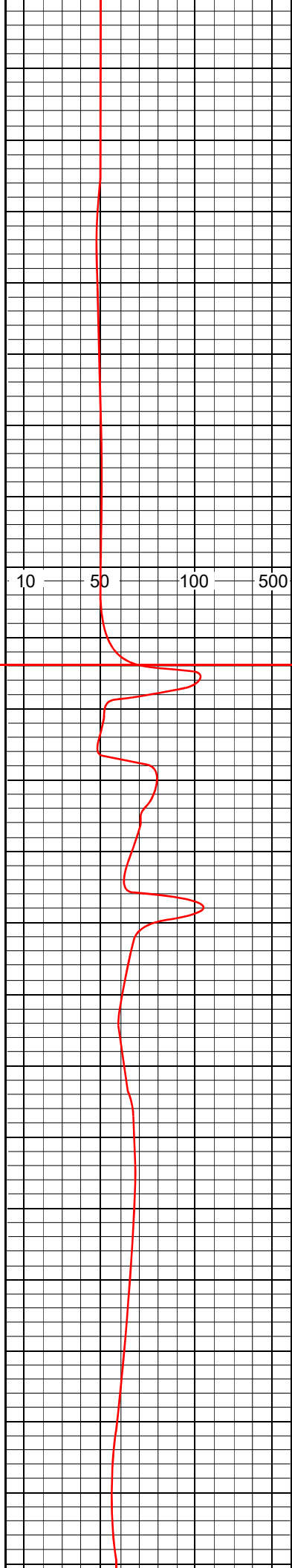
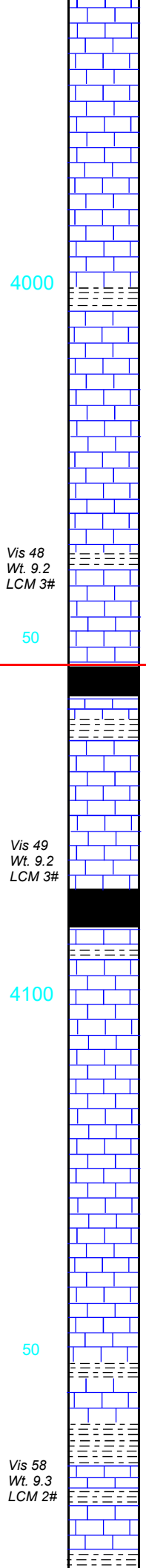
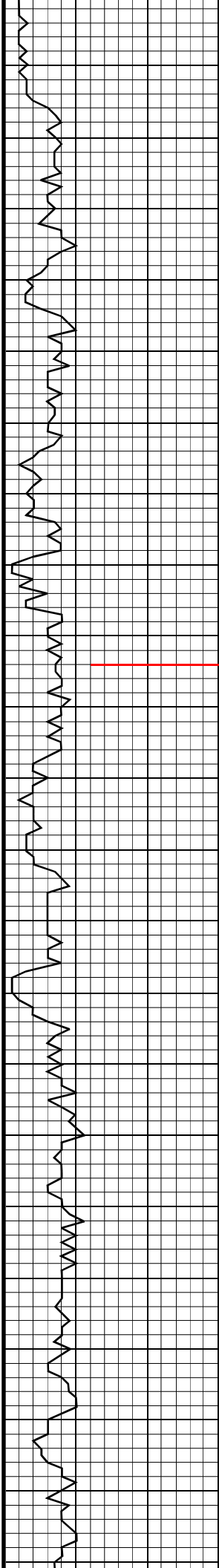
*LS - wht, fn xtl, extremely chalky*

*LS - tan-gr, fn xtl, dense*

*Sh - gr-blk*

*LS - tan-gr, dense*

*LS - tan-crm. fn xtl. f-od vug and*



int xtln por, abundant chalk

LS - tan-gr, dense

LS - gr-tan, fn xtln, slt fos, dense

LS - dk gr, fos, dense and Sh - gr-  
blk

LS - gr, fn xtln, dense

LS - gr-tan, fn xtln, dense

LS - gr, fn xtln dense w/ chert -  
gr-blk vitreous

LS - gr-tan, dense

Sh - blk

LS - gr-tan, fn xtln, dense, no vis  
por

Sh - blk carb

LS - gr-tan, fn xtln, scat p-f  
pinpoint por, chalky in part  
faint odor, scat bright fluor, scat  
brn stain, no vis show

LS - gr-tan, fn xtln, dense

Sh - blk carb

LS - tan-brn, fn xtln to oolitic, scat  
fair oolitic por, fair odor, scat  
bright fluor, spty brn stain, no vis  
show

LS - lt-dk gr, fn xtln, dense, fos

LS - dk-lt gr, fn xtln, dense

LS - dk gr-blk, fn xtln, dense

Sh - blk / w LS - dk gr, dense

Sh - blk

LS - dk gr, dense

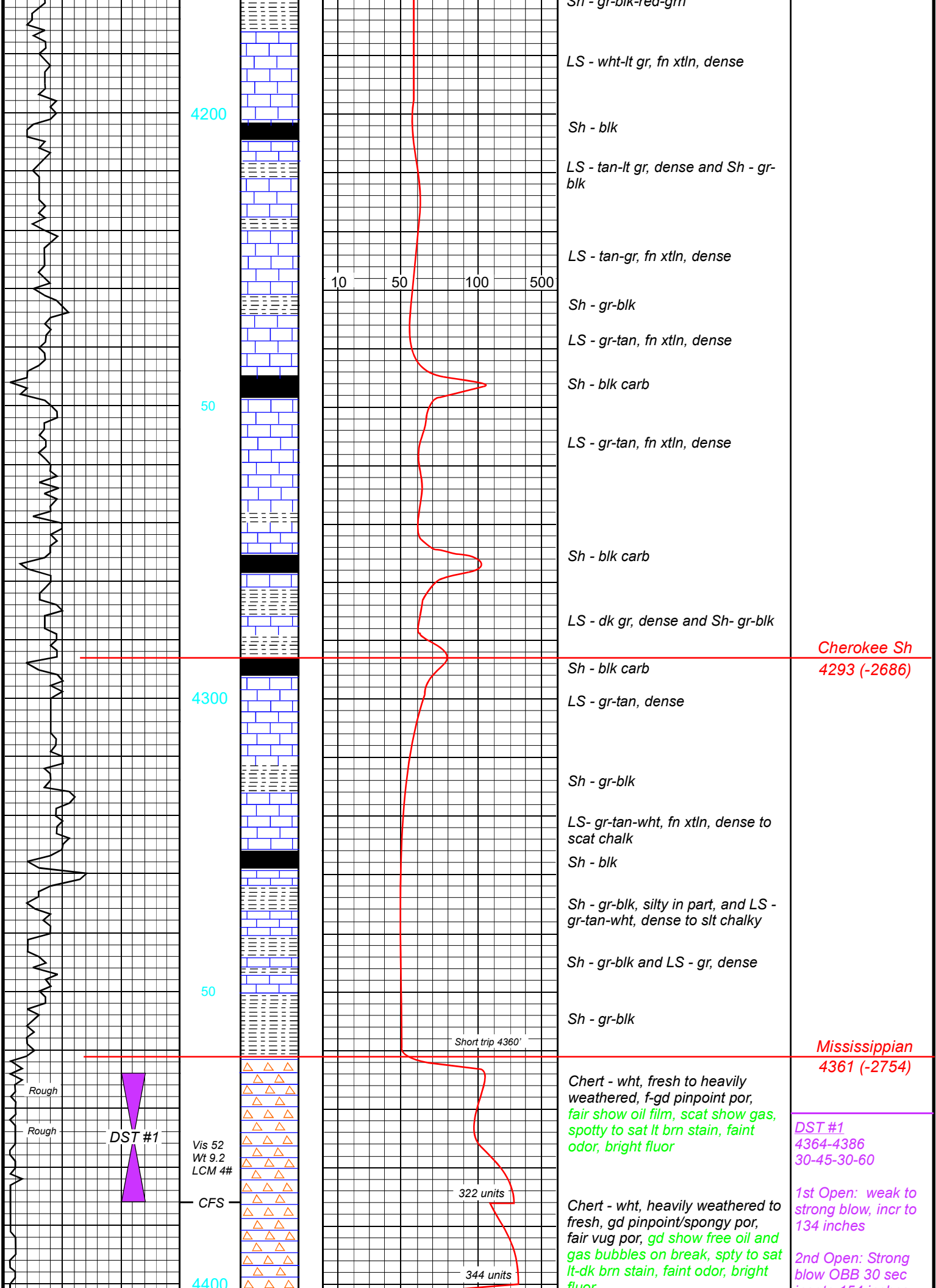
Sh - gr blk, red grn

Stark Sh  
4054 (-2447)

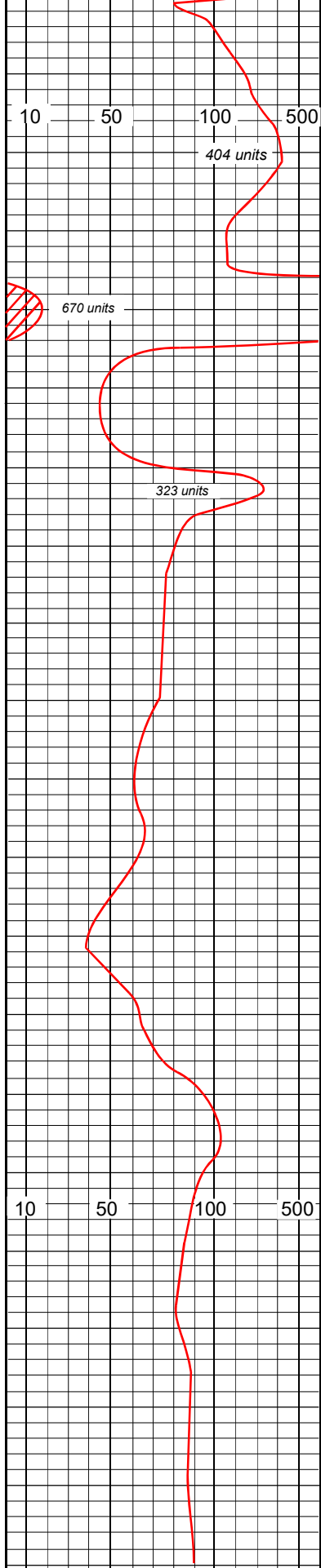
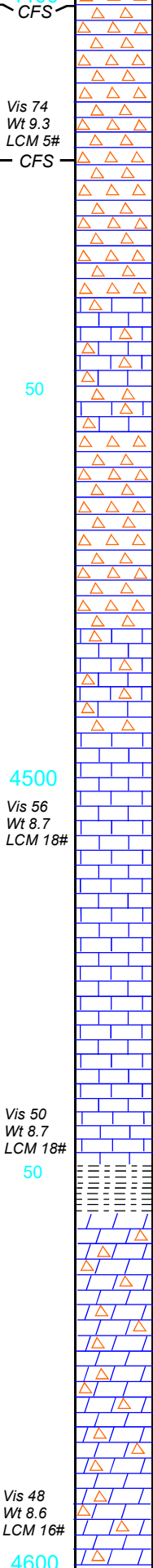
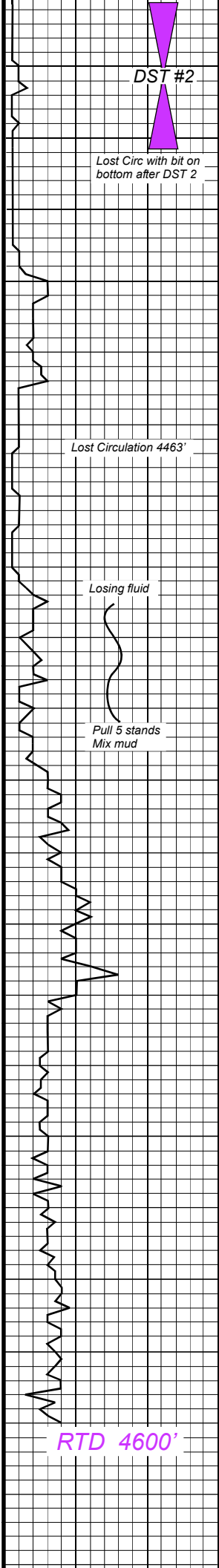
Vis 48  
Wt. 9.2  
LCM 3#

Vis 49  
Wt. 9.2  
LCM 3#

Vis 58  
Wt. 9.3  
LCM 2#







Chert - wht, partly weath to fresh, f-gd vug por, gd show oil film, scat gd show free oil and gas on break spty to sat lt brn to blk stain, gd odor, bright fluor

Samples questionable due to loss circulation below 4421'

Chert - wht-weath to tripolitic, gd show oil film, no show gas, spotty to sat lt brn stain, gd odor, bright fluor

LS - tan-gr, fn xtl, dense

Chert - wht, weathered, f-gd vug por, gd show dk oil film, no show gas, spty to sat brn-blk stain, gd odor, bright fluor

Chert - wht, weathered, f-gd vug por, gd show dk oil film, scat gd show free dk oil and gas, spty to sat dk brn-blk stain, gd odor, bright fluor

Chert - wht, fresh to devitrified, angular, some weathered surfaces slt show oil film, scat brn-blk stain, faint odor

Chert - wht, fresh to devitrified, angular, as above w/ LS - tan, lt gr and wht, granular, dense

LS - lt gr-wht, fn xtl, dense to somewhat granular

LS - lt gr-wht, fn xtl, dense, slt granular

LS / Dolo - lt gr-tan-wht, fn xtl, dense to granular, scat gr vitreous chert

LS / Dolo - lt gr-tan-wht, fn xtl, dense, scat gr vitreous chert

Recovery: 300' GIP  
165' OSGMW  
(5% gas, 35% m, 60%w)  
IFP: 37-64#  
FFP: 51-84#  
SIP: 397-398#  
HP: 2149-2088#  
BHT: 119 degrees

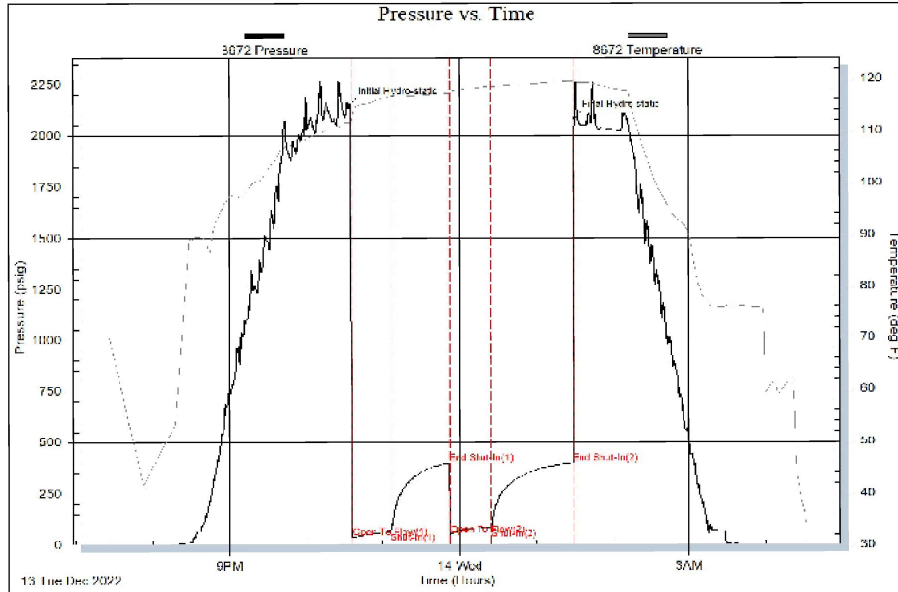
DST #2  
4401-4421  
30-60-30-60

1st Open: weak to strong blow, incr to 163 inches

2nd Open: Strong blow OBB immed incr to 197 inches

Recovery:  
165' OCMW  
(10% oil, 30% m, 60%w)  
IFP: 28-64#  
FFP: 36-82#  
SIP: 454-442#  
HP: 2069-2054#  
BHT: 118 degrees

Serial #: 8672 Inside No. 0 Exporation, LLC Bernhof C-1 DST Test Number: 1



**DST #1**  
4364-4386  
30-45-30-60

1st Open: weak to strong blow, incr to 134 inches

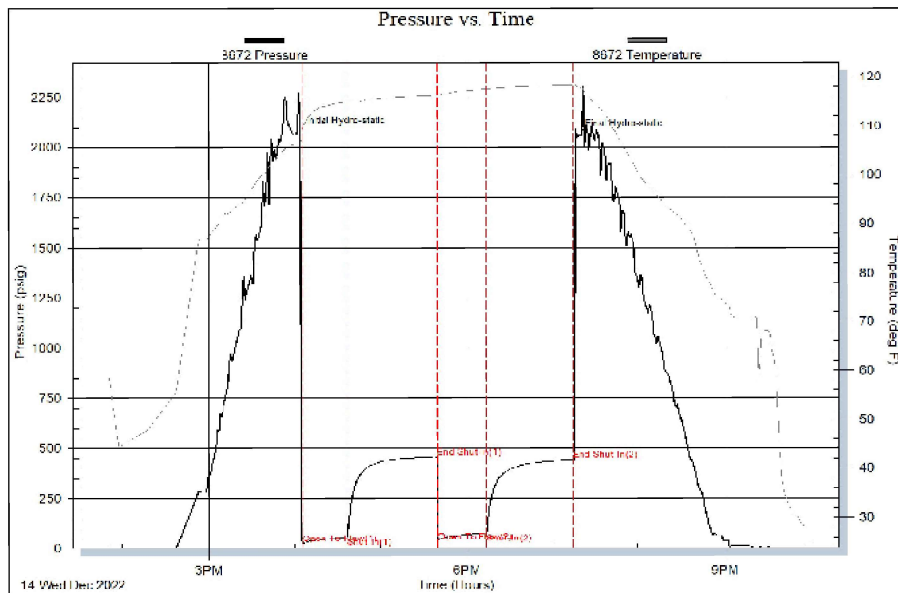
2nd Open: Strong blow OBB 30 sec incr to 154 inches

Recovery: 300' GIP  
165' OSGMW  
(5% gas, 35% m, 60%w)

IFP: 37-64#  
FFP: 51-84#  
SIP: 397-398#  
HP: 2149-2088#  
BHT: 119 degrees

Intronic Testing, Inc. Not. No. 60257 Printed: 2022.12.14 @ 05:17:30

Serial #: 8672 Inside No. 0 Exporation, LLC Bernhof C-1 DST Test Number: 2



**DST #2**  
4401-4421  
30-60-30-60

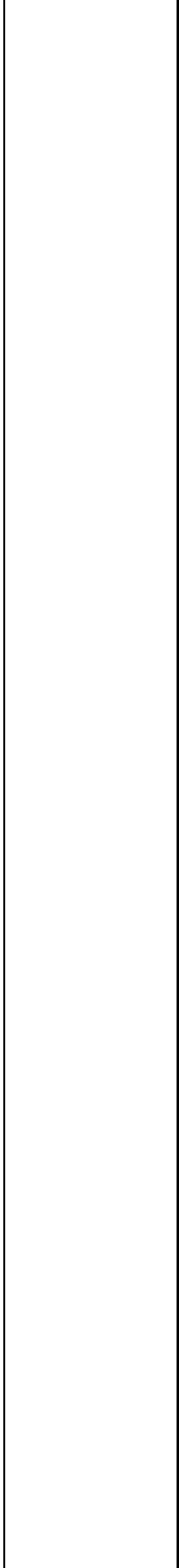
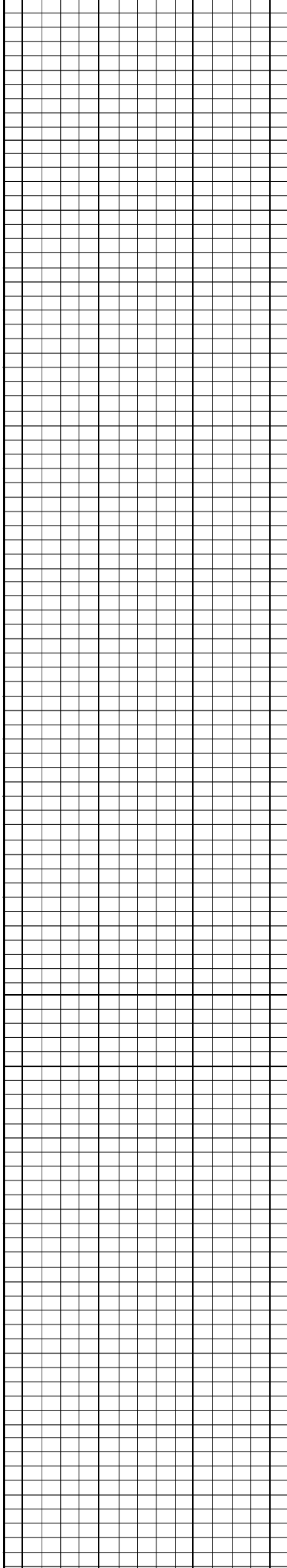
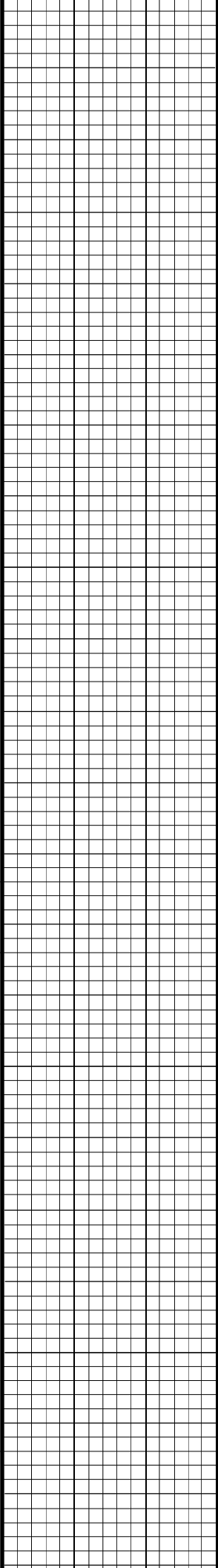
1st Open: weak to strong blow, incr to 163 inches

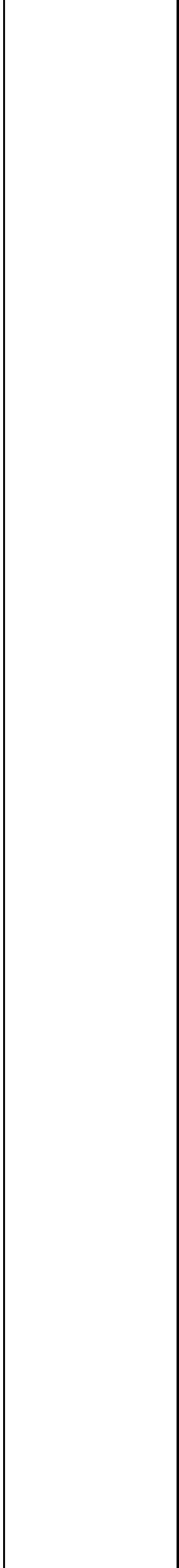
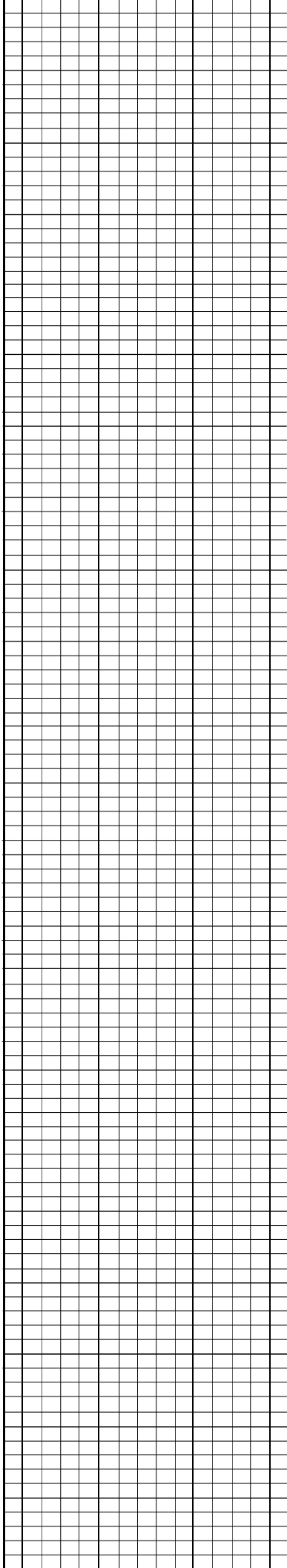
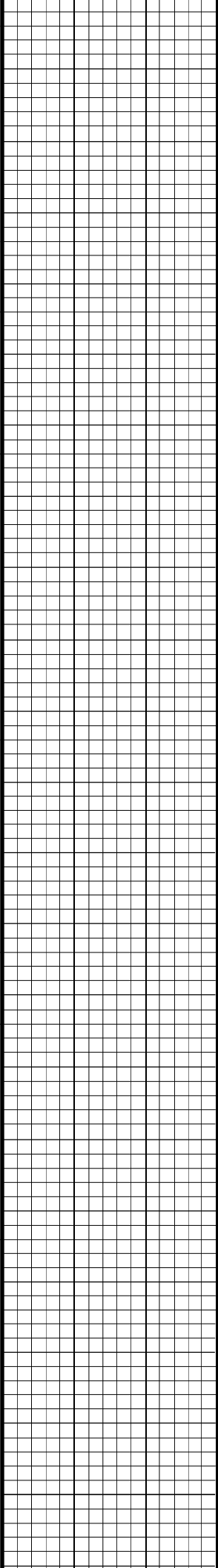
2nd Open: Strong blow OBB immed incr to 197 inches

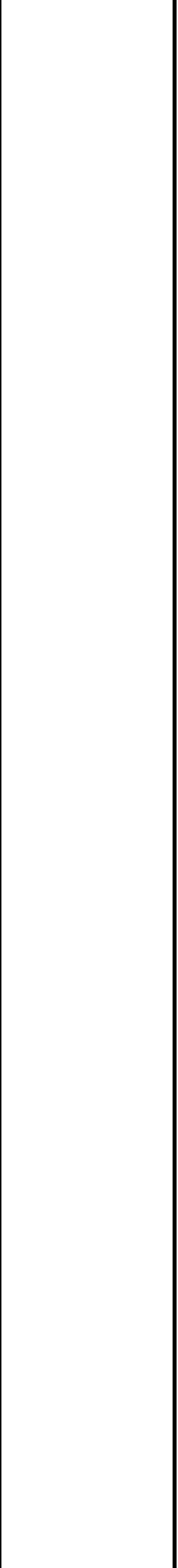
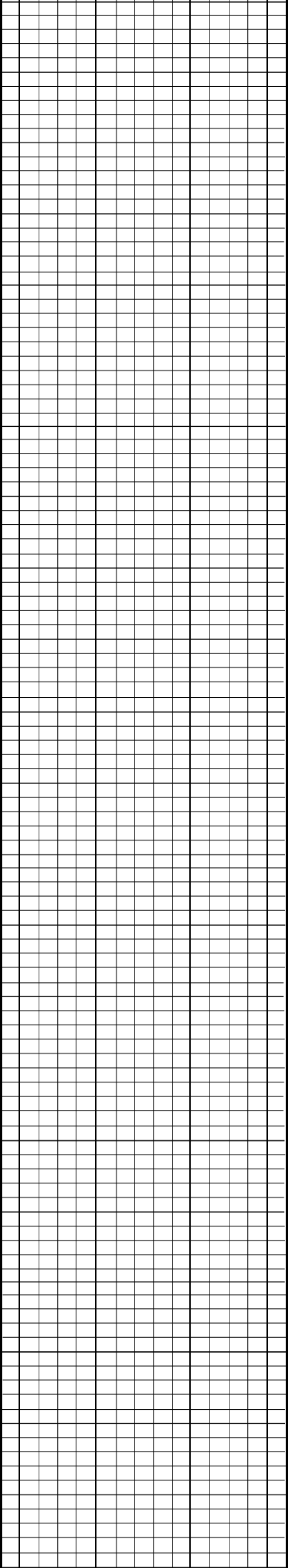
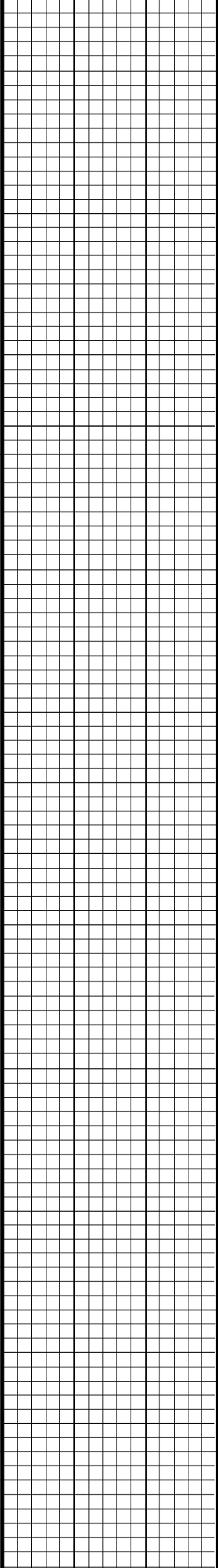
Recovery:  
165' OCMW  
(10% oil, 30% m, 60%w)

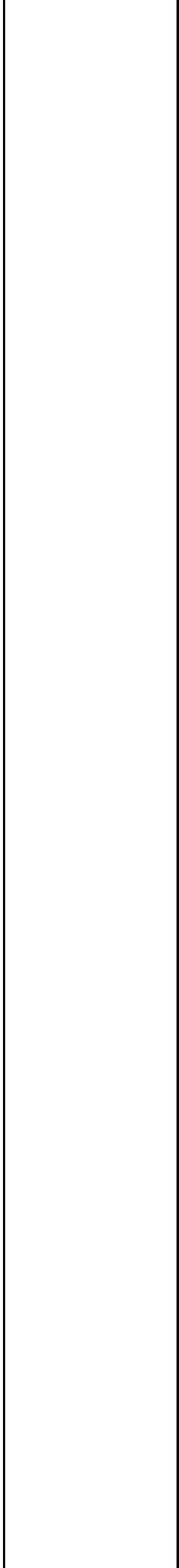
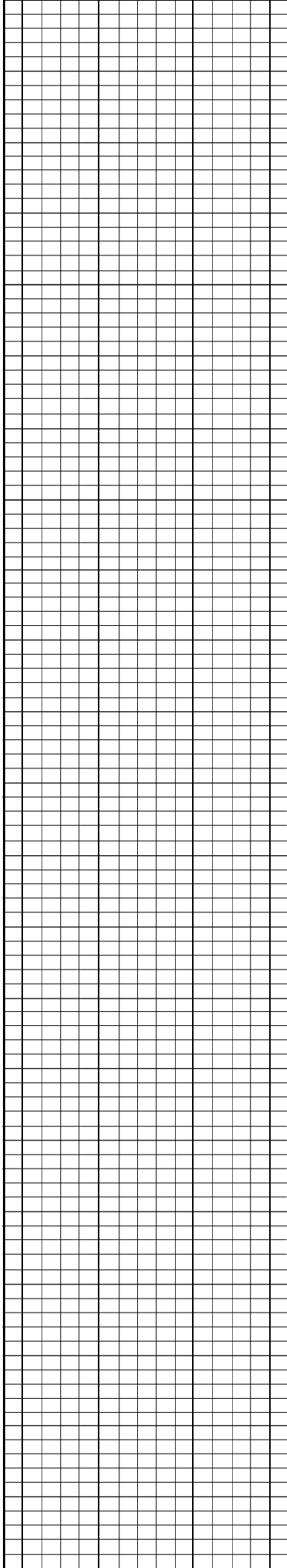
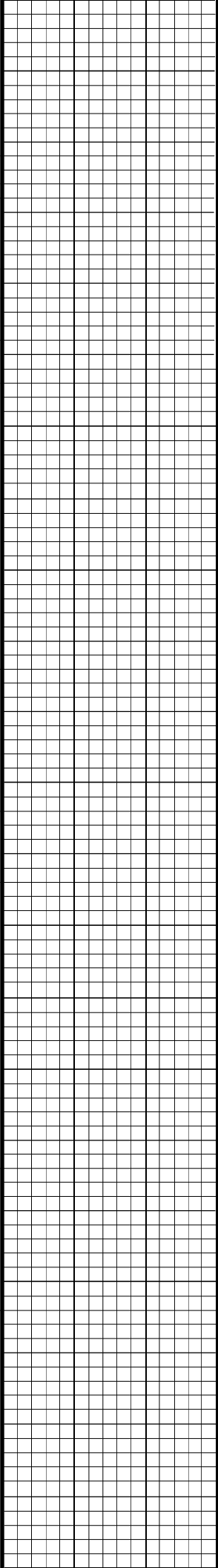
IFP: 28-64#  
FFP: 36-82#  
SIP: 454-442#  
HP: 2069-2054#  
BHT: 118 degrees

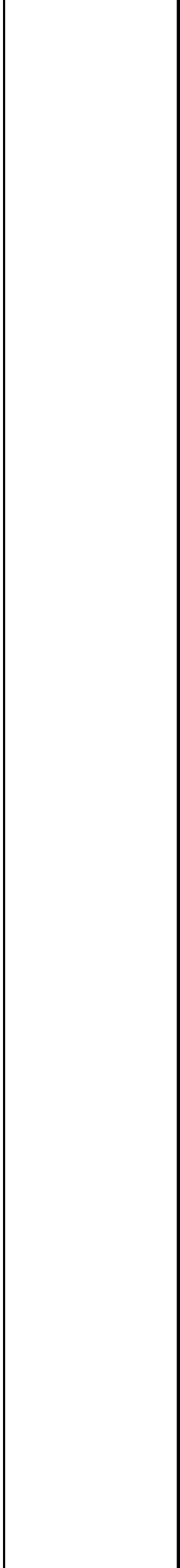
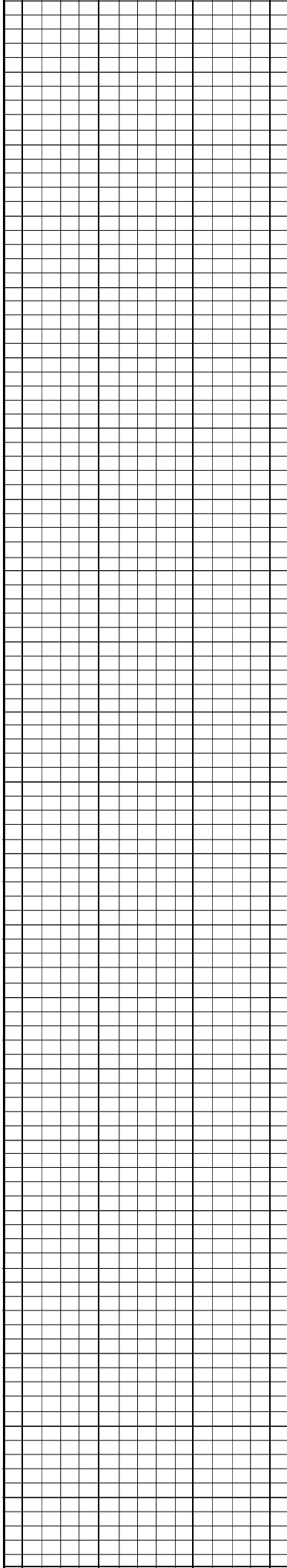
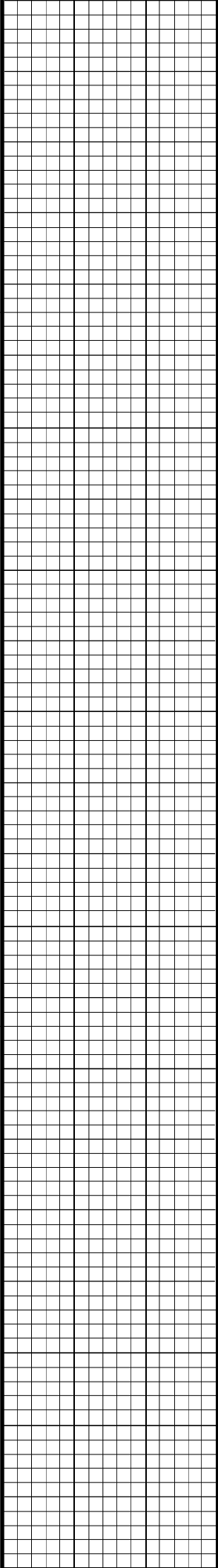
Intronic Testing, Inc. Not. No. 60258 Printed: 2022.12.14 @ 22:18:33

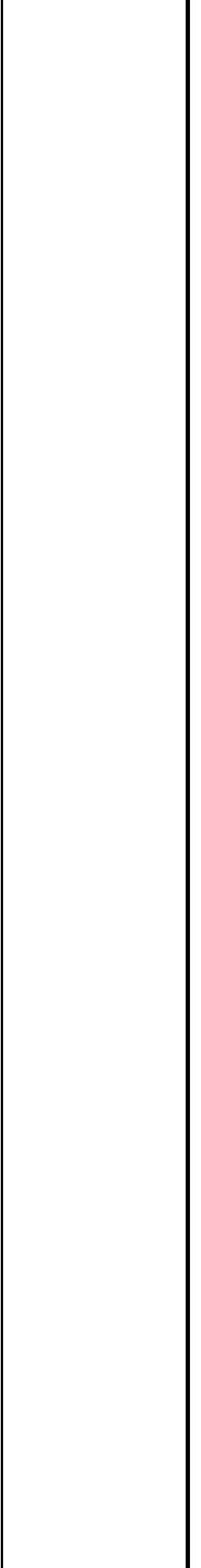
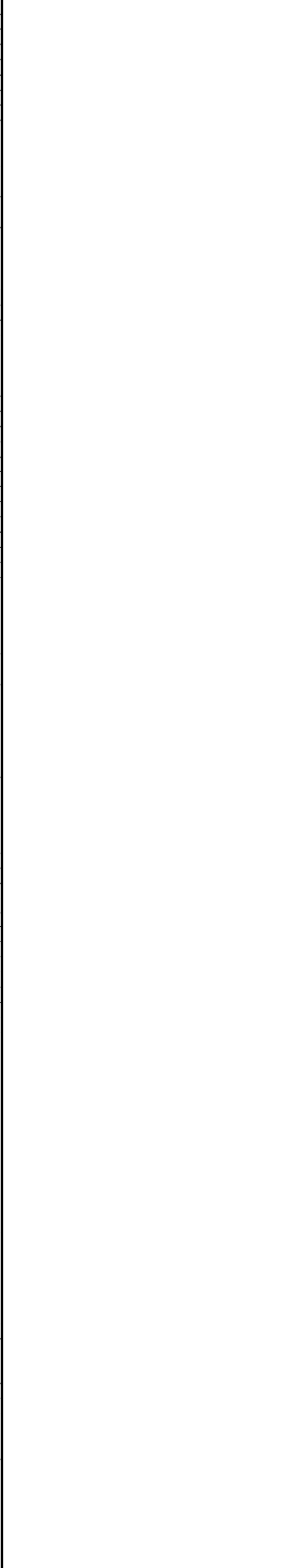
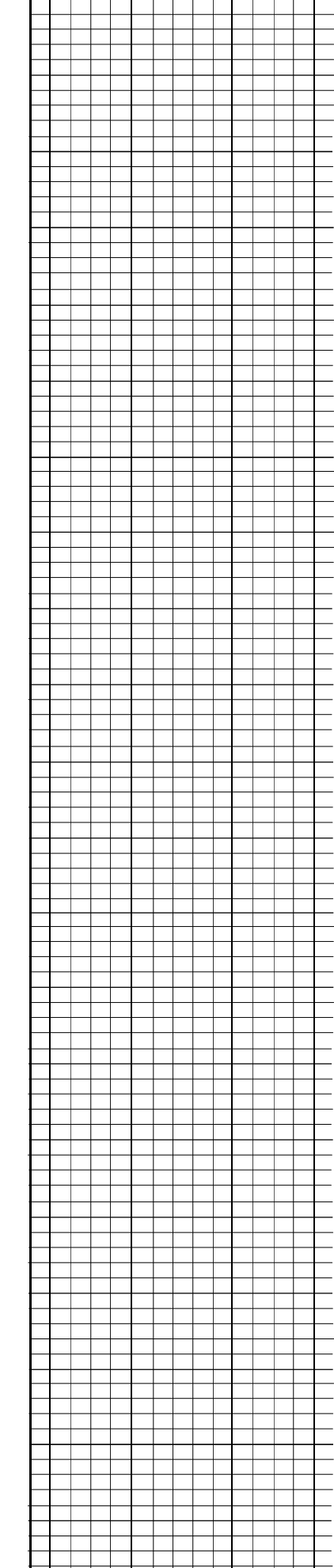
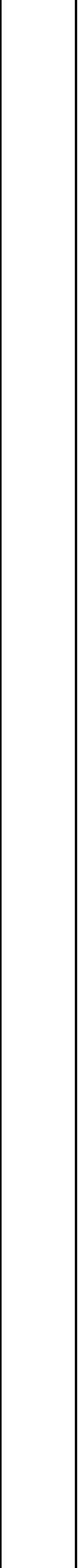
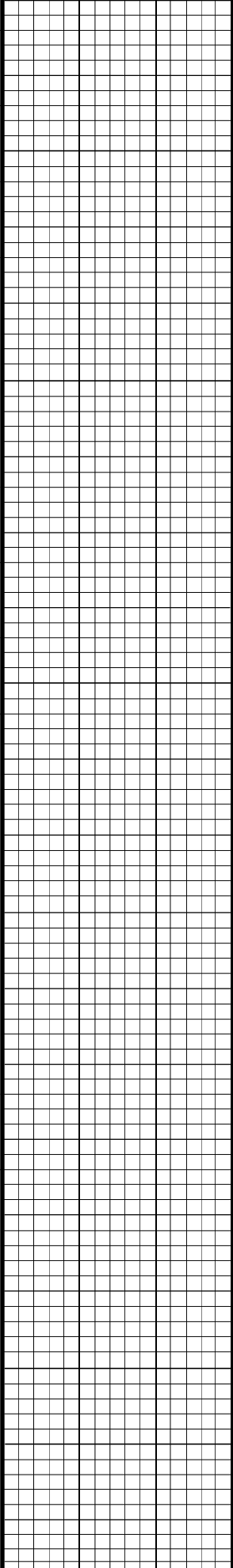
















## DRILL STEM TEST REPORT

Prepared For: **N-10 Exploration, LLC**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

### **Bertholf #C1**

#### **24-31s-9w Harper,KS**

Start Date: 2022.12.13 @ 19:25:00

End Date: 2022.12.14 @ 04:30:47

Job Ticket #: 69267                      DST #: 1

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

Printed: 2022.12.15 @ 10:40:09



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

N-10 Exploration, LLC

**24-31s-9w Harper,KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69267

**DST#: 1**

ATTN: Tim Pierce

Test Start: 2022.12.13 @ 19:25:00

## GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:36:02

Time Test Ended: 04:30:47

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

**Interval: 4364.00 ft (KB) To 4386.00 ft (KB) (TVD)**

Reference Elevations: 1607.00 ft (KB)

Total Depth: 4386.00 ft (KB) (TVD)

1595.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

**Serial #: 8672 Inside**

Press@RunDepth: 84.36 psig @ 4366.00 ft (KB)

Capacity: psig

Start Date: 2022.12.13

End Date: 2022.12.14

Last Calib.: 2022.12.13

Start Time: 19:25:01

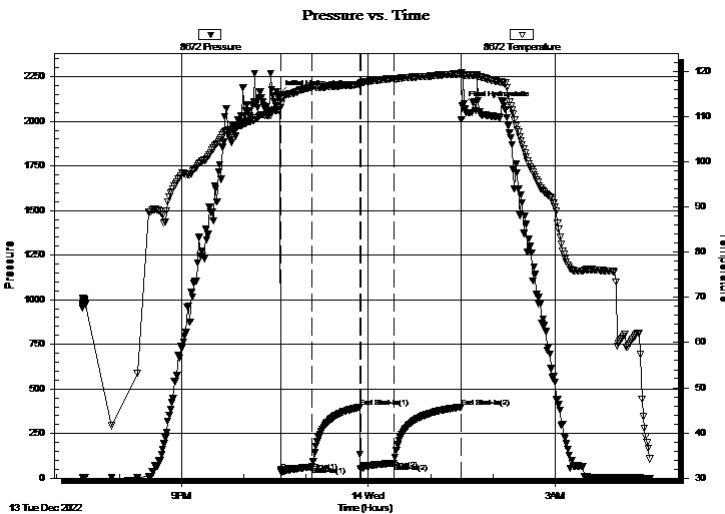
End Time: 04:30:47

Time On Btm: 2022.12.13 @ 22:34:02

Time Off Btm: 2022.12.14 @ 01:30:02

**TEST COMMENT:** IF: 30 min., BOB 1 min., strong building blow , 134 inches  
IS: 45 min., no blow back  
FF: 30 min., BOB 30 sec., strong building blow , 154 inches  
FS: 45 min., no blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2149.06	111.51	Initial Hydro-static
2	37.13	112.78	Open To Flow (1)
32	63.94	116.52	Shut-In(1)
78	397.31	117.10	End Shut-In(1)
79	50.77	117.20	Open To Flow (2)
111	84.36	118.42	Shut-In(2)
175	398.49	119.44	End Shut-In(2)
176	2087.50	119.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
165.00	GMCW w/ oil spots 5%G,65%W,35%M	1.22

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

N-10 Exploration, LLC

**24-31s-9w Harper, KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69267

**DST#: 1**

ATTN: Tim Pierce

Test Start: 2022.12.13 @ 19:25:00

## GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:36:02

Time Test Ended: 04:30:47

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

**Interval: 4364.00 ft (KB) To 4386.00 ft (KB) (TVD)**

Reference Elevations: 1607.00 ft (KB)

Total Depth: 4386.00 ft (KB) (TVD)

1595.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

**Serial #: 6751 Outside**

Press@RunDepth: psig @ 4366.00 ft (KB)

Capacity: psig

Start Date: 2022.12.13 End Date: 2022.12.14

Last Calib.: 1899.12.30

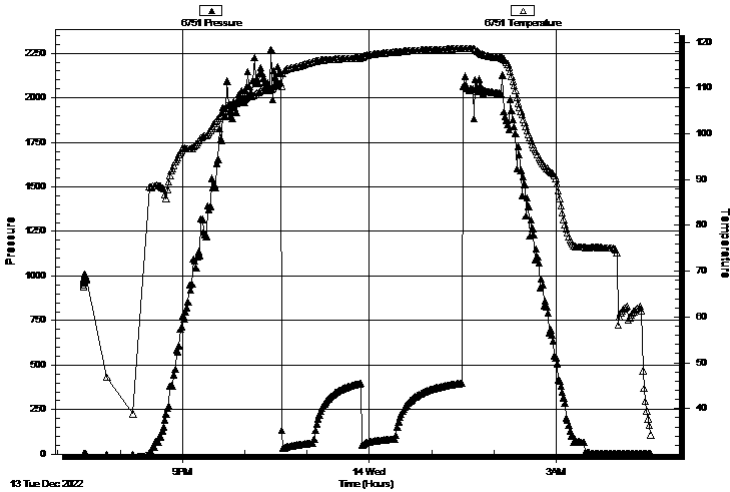
Start Time: 19:25:01 End Time: 04:30:47

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 30 min., BOB 1 min., strong building blow, 134 inches  
IS: 45 min., no blow back  
FF: 30 min., BOB 30 sec., strong building blow, 154 inches  
FS: 45 min., no blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
165.00	GMCW w/ oil spots 5%G,65%W,35%M	1.22

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

N-10 Exploration, LLC

**24-31s-9w Harper,KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69267

**DST#: 1**

ATTN: Tim Pierce

Test Start: 2022.12.13 @ 19:25:00

## Tool Information

Drill Pipe:	Length: 4244.00 ft	Diameter: 3.80 inches	Volume: 59.53 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4364.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4344.00	
Hydraulic tool	5.00			4349.00	
Isolator Sub	3.00			4352.00	
Safety Joint	3.00			4355.00	
Packer	5.00			4360.00	25.00 Bottom Of Top Packer
Packer	4.00			4364.00	
Stubb	1.00			4365.00	
Perforations	1.00			4366.00	
Recorder	0.00	8672	Inside	4366.00	
Recorder	0.00	6751	Outside	4366.00	
Pickup sub perf	5.00			4371.00	
Perforations	12.00			4383.00	
Bullnose	3.00			4386.00	22.00 Bottom Packers & Anchor

**Total Tool Length: 47.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

N-10 Exploration, LLC

**24-31s-9w Harper,KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69267

**DST#: 1**

ATTN: Tim Pierce

Test Start: 2022.12.13 @ 19:25:00

### 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:

38000 ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
165.00	GMCW w / oil spots 5%G,65%W,35%M	1.221

Total Length: 165.00 ft      Total Volume: 1.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 300' GIP

RW=.235@45F=38,000ppm

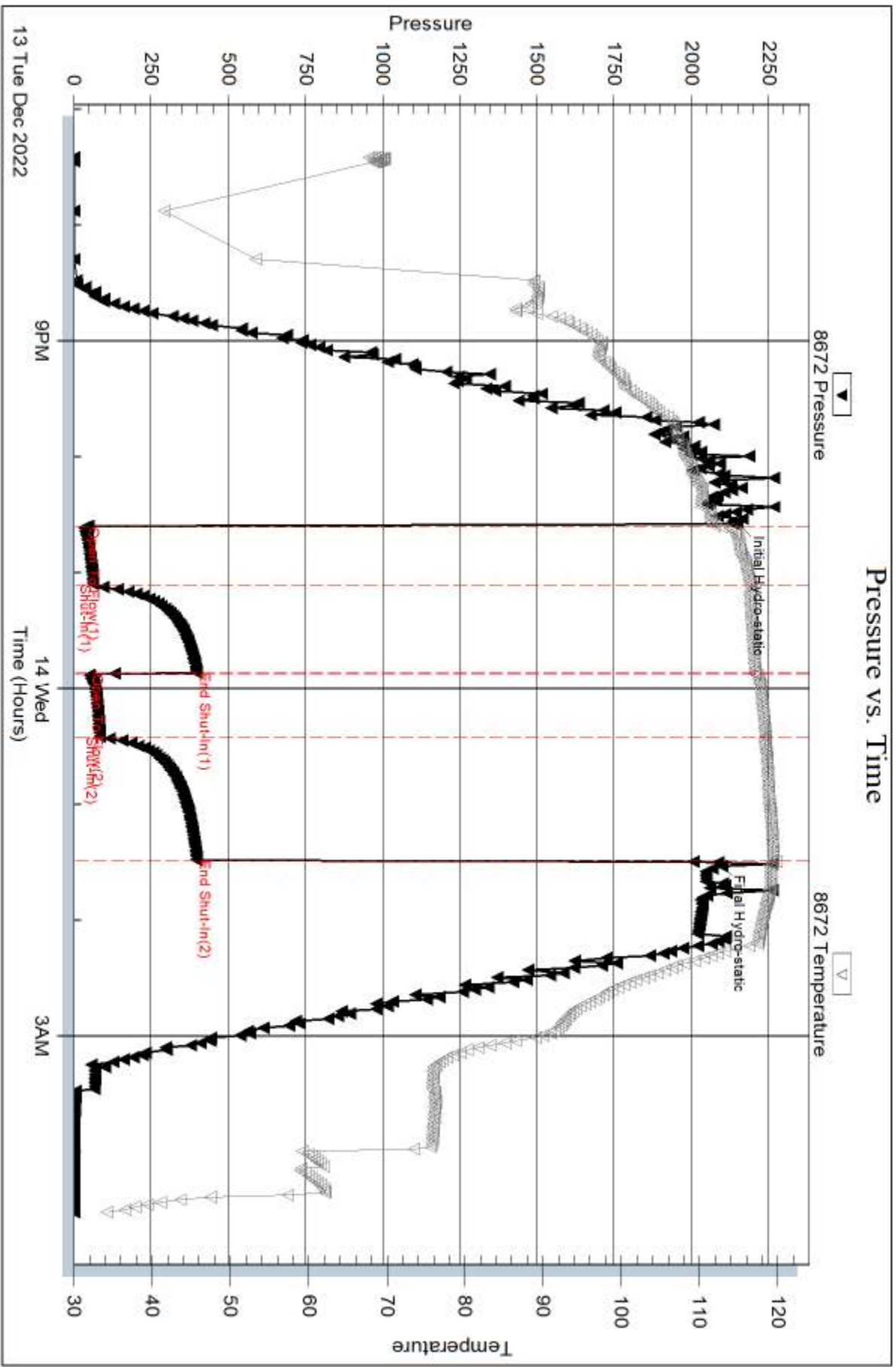
Serial #: 8672

Inside

N-10 Exploration, LLC

Berthoff #C1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 69267

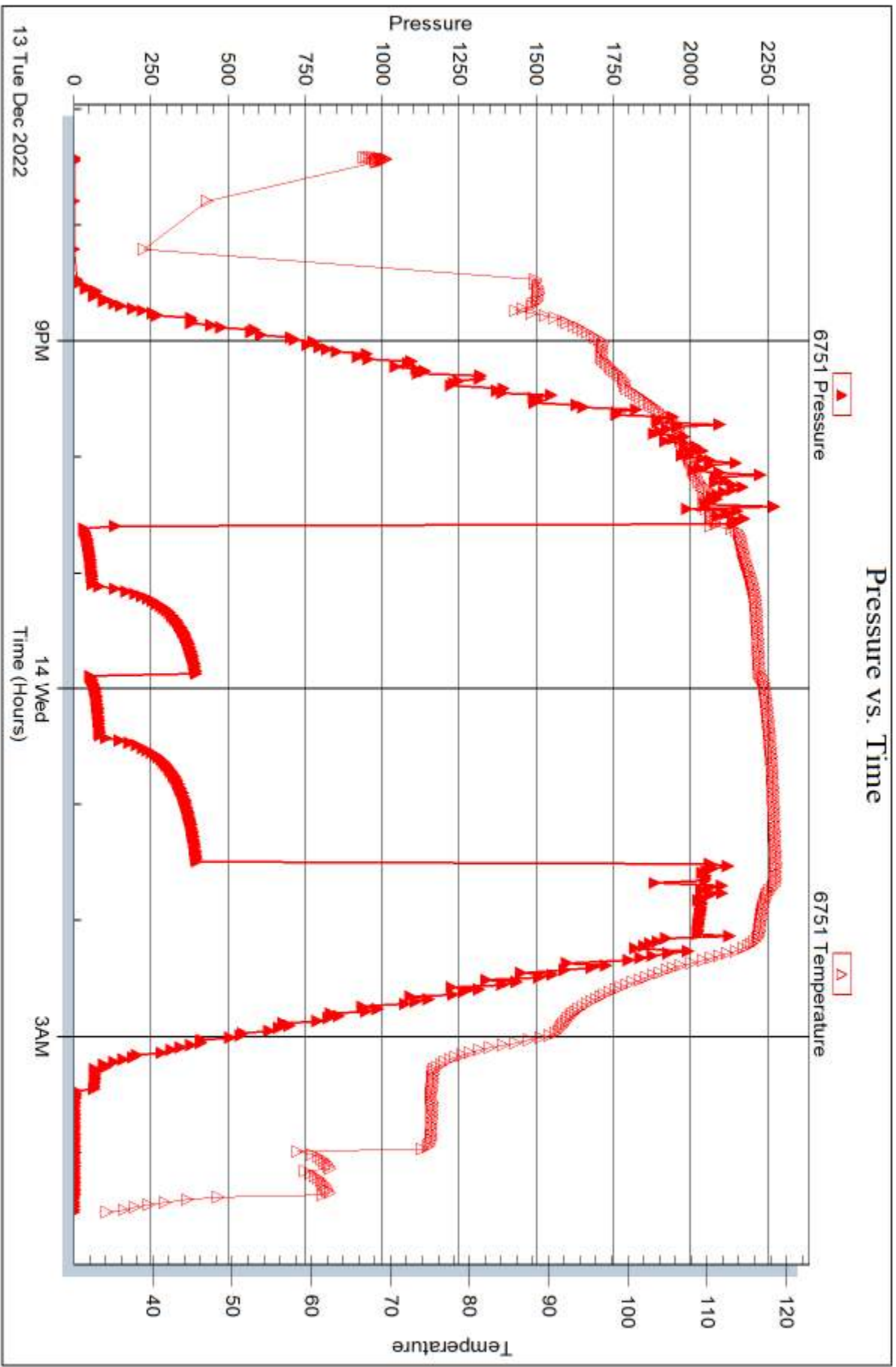
Printed: 2022.12.15 @ 10:40:10

Serial #: 6751

Outside N-10 Exploration, LLC

Berthof #C1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 69267

Printed: 2022.12.15 @ 10:40:10



## DRILL STEM TEST REPORT

Prepared For: **N-10 Exploration, LLC**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

### **Bertholf #C1**

#### **24-31s-9w Harper,KS**

Start Date: 2022.12.14 @ 13:50:00

End Date: 2022.12.14 @ 21:56:02

Job Ticket #: 69268                      DST #: 2

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

Printed: 2022.12.15 @ 10:39:32





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

N-10 Exploration, LLC

**24-31s-9w Harper,KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69268

**DST#: 2**

ATTN: Tim Pierce

Test Start: 2022.12.14 @ 13:50:00

## GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:05:17

Time Test Ended: 21:56:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

**Interval: 4401.00 ft (KB) To 4421.00 ft (KB) (TVD)**

Reference Elevations: 1607.00 ft (KB)

Total Depth: 4421.00 ft (KB) (TVD)

1595.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

**Serial #: 8672 Inside**

Press@RunDepth: 82.13 psig @ 4403.00 ft (KB)

Capacity: psig

Start Date: 2022.12.14

End Date: 2022.12.14

Last Calib.: 1899.12.30

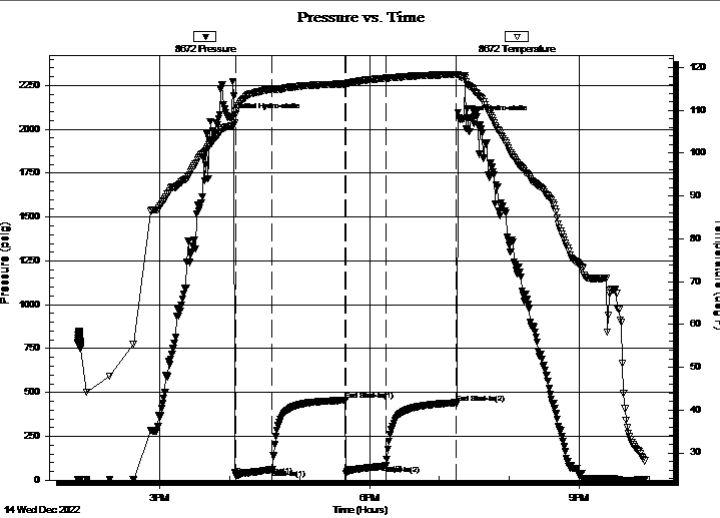
Start Time: 13:50:01

End Time: 21:56:02

Time On Btm: 2022.12.14 @ 16:01:47

Time Off Btm: 2022.12.14 @ 19:17:17

**TEST COMMENT:** IF: 30 min., BOB 2 min., strong building blow , 163 inches  
IS: 60 min., no blow back  
FF: 30 min., BOB ASAO, strong building blow , 197 inches  
FS: 60 min., no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2069.16	106.27	Initial Hydro-static
4	27.63	109.04	Open To Flow (1)
35	61.02	114.99	Shut-In(1)
98	454.39	116.16	End Shut-In(1)
98	36.32	116.17	Open To Flow (2)
133	82.13	117.50	Shut-In(2)
193	441.59	118.37	End Shut-In(2)
196	2054.45	117.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
165.00	oil cut muddy water 10%O, 60%W, 30%M.22	

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

N-10 Exploration, LLC

**24-31s-9w Harper, KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69268      **DST#: 2**

ATTN: Tim Pierce

Test Start: 2022.12.14 @ 13:50:00

### GENERAL INFORMATION:

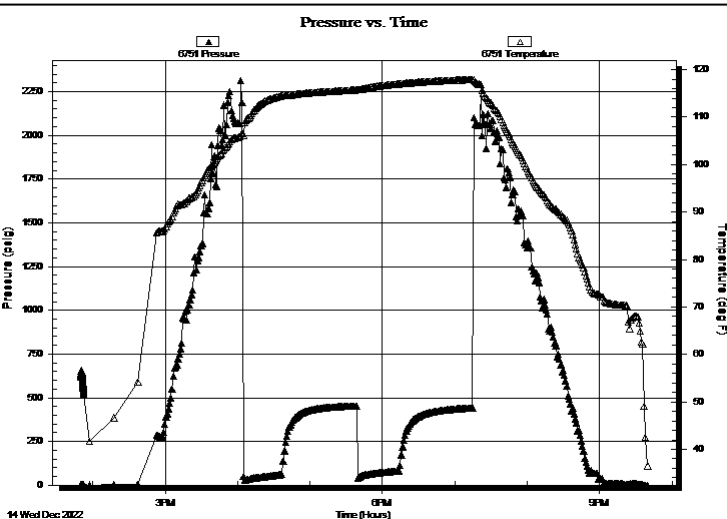
Formation: **Miss.**  
 Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 16:05:17      Tester: Chris Hagman  
 Time Test Ended: 21:56:02      Unit No: 69  
**Interval: 4401.00 ft (KB) To 4421.00 ft (KB) (TVD)**      Reference Elevations: 1607.00 ft (KB)  
 Total Depth: 4421.00 ft (KB) (TVD)      1595.00 ft (CF)  
 Hole Diameter: 7.80 inches Hole Condition: Good      KB to GR/CF: 12.00 ft

### Serial #: 6751

**Outside**

Press@RunDepth: psig @ 4403.00 ft (KB)      Capacity: psig  
 Start Date: 2022.12.14      End Date: 2022.12.14      Last Calib.: 1899.12.30  
 Start Time: 13:50:01      End Time: 21:39:47      Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: 30 min., BOB 2 min., strong building blow, 163 inches  
 IS: 60 min., no blow back  
 FF: 30 min., BOB ASAO, strong building blow, 197 inches  
 FS: 60 min., no blow back



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
165.00	oil cut muddy water 10%O, 60%W, 30%M	1.22

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

N-10 Exploration, LLC

**24-31s-9w Harper, KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69268

**DST#: 2**

ATTN: Tim Pierce

Test Start: 2022.12.14 @ 13:50:00

## Tool Information

Drill Pipe:	Length: 4281.00 ft	Diameter: 3.80 inches	Volume: 60.05 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 60.64 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	4401.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4381.00	
Hydraulic tool	5.00			4386.00	
Isolator Sub	3.00			4389.00	
Safety Joint	3.00			4392.00	
Packer	5.00			4397.00	25.00 Bottom Of Top Packer
Packer	4.00			4401.00	
Stubb	1.00			4402.00	
Perforations	1.00			4403.00	
Recorder	0.00	8672	Inside	4403.00	
Recorder	0.00	6751	Outside	4403.00	
Pickup sub perf	5.00			4408.00	
Perforations	10.00			4418.00	
Bullnose	3.00			4421.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 45.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

N-10 Exploration, LLC

**24-31s-9w Harper, KS**

PO Box 195  
Attica, KS 67009

**Bertholf #C1**

Job Ticket: 69268

**DST#: 2**

ATTN: Tim Pierce

Test Start: 2022.12.14 @ 13:50:00

## 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:

29000 ppm

Viscosity: 74.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 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 bbl
165.00	oil cut muddy water 10%O, 60%W, 30%M	1.221

Total Length: 165.00 ft      Total Volume: 1.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

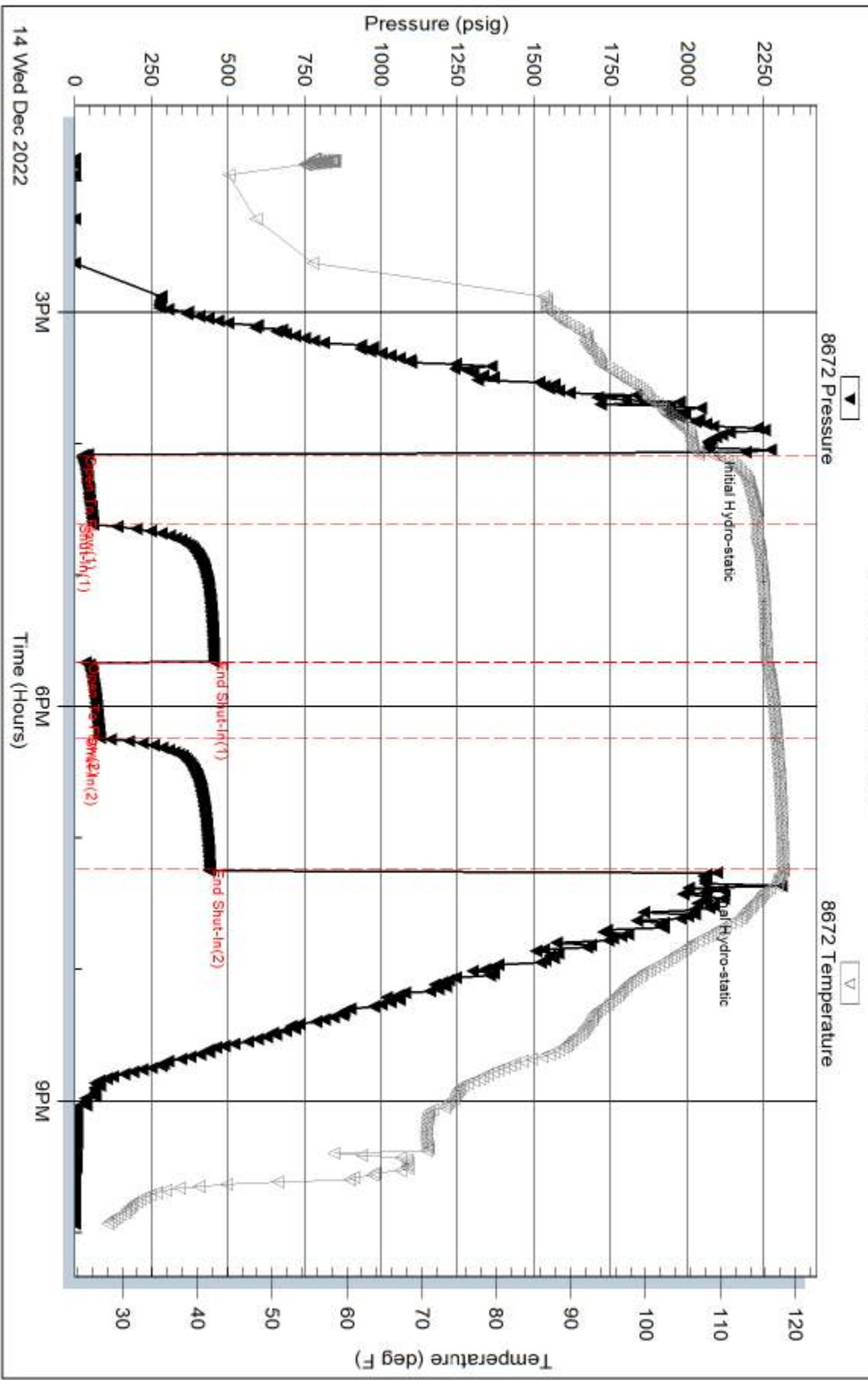
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.328@50F=29000ppm

### Pressure vs. Time

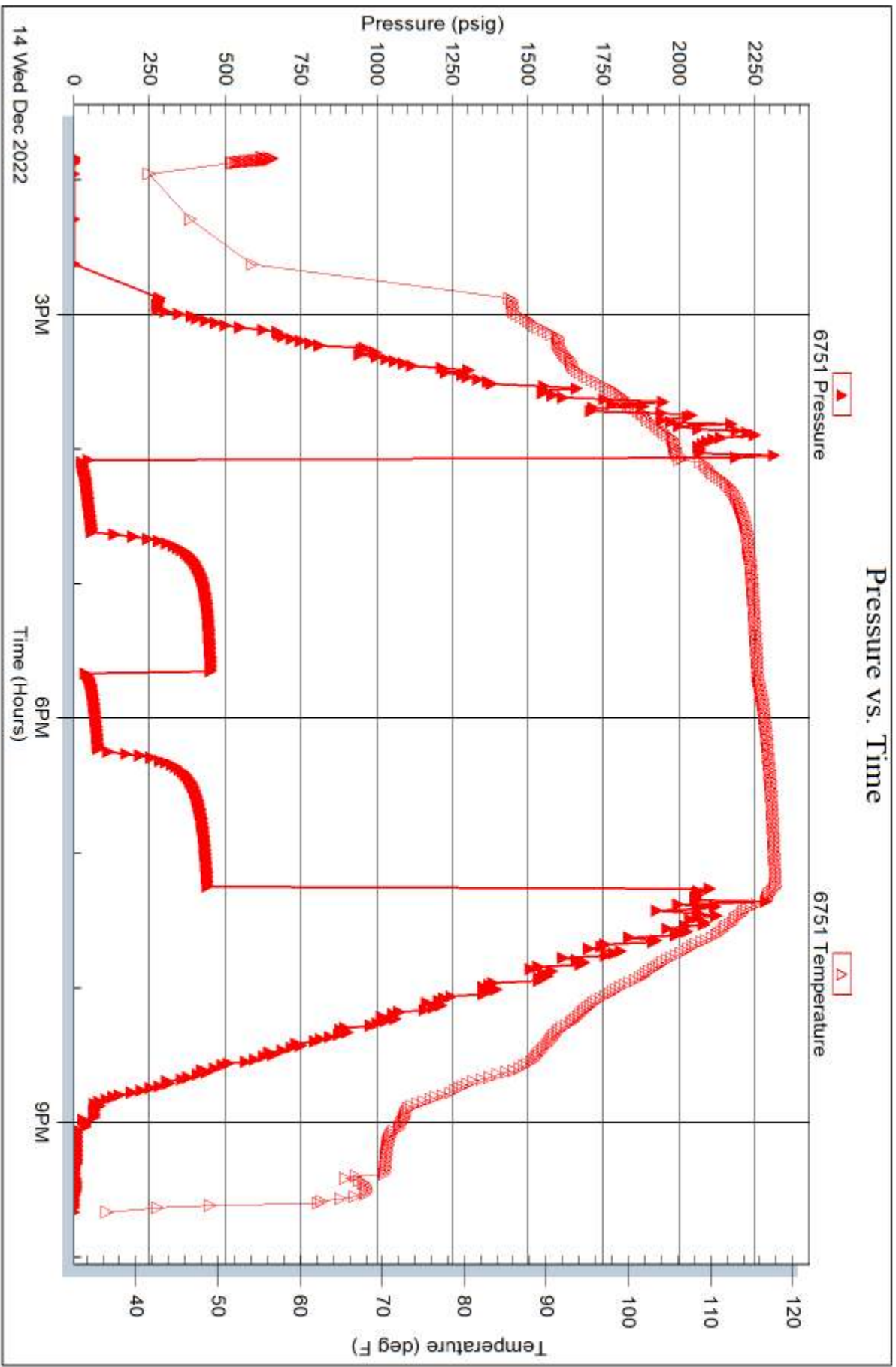


Serial #: 6751

Outside N-10 Exploration, LLC

Berthoff #C1

DST Test Number: 2



14 Wed Dec 2022

Triobite Testing, Inc

Ref. No: 69268

Printed: 2022.12.15 @ 10:39:33



# TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## TEST TICKET

NO. **69267**

Well Name & No. Bertholf C-1 Test No. 1 Date 12-13-22  
 Company U-10 Exploration, LLC Elevation ~~1607~~ 1595 GL  
 Address P.O. Box 195 Atticon, KS 67009  
 Co. Rep / Geo. Tim Pierce Rlg Fossil #3  
 Location: Sec. 24 Twp 31 Rge. 9 Co. Harper State KS

Interval Tested 4364-4386 Zone Tested Miss  
 Anchor Length 22 Drill Pipe Run 4244 Mud Wt. 9.3  
 Top Packer Depth 4359 Drill Collars Run 120 Vis 66  
 Bottom Packer Depth 4364 Wt. Pipe Run N.A. WL 8.0  
 Total Depth 4386 Chlorides 4500 ppm System LCM 4#

Blow Description IF: 30 min., BOB 1 min., strong building blow, 134 inches  
ISD: 45 min., no blow back  
FP: 30 min., BOB 30 sec., strong building blow, 154 inches  
FSD: 45 min., no blow back

Rec	Feet of	%gas	Spot	%oil	%water	%mud
<u>165</u>	<u>oil spotted gassy muddy water</u>				<u>60%</u>	<u>35%</u>
Rec	Feet of	%gas		%oil	%water	%mud
Rec	Feet of	%gas		%oil	%water	%mud
Rec	Feet of <u>300' GIP</u>	%gas		%oil	%water	%mud
Rec	Feet of	%gas		%oil	%water	%mud

Rec Total 165 BHT 119 Gravity \_\_\_\_\_ API RW, 235 @ 45 °F Chlorides 38,000 ppm  
 Test CONV. 1950 T-On Location 1800  
 Jars T-Started 2000  
 Safety Joint T-Open 2240  
 Circ Sub T-Pulled ~~2010~~ 2010  
 Hourly Standby T-Out 0430  
 Mileage 100 175 Comments 1925  
 Sampler  
 Straddle  EM Tool good  
 Shale Packer  Ruined Shale Packer  
 Extra Packer  Ruined Packer  
 Extra Recorder  Extra Copies  
 Day Standby Sub Total 0  
 Accessibility Total 2125  
 Sub Total 2125 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Chris Hegren

Tribolite 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.

785-656-3947



**TRIBOTITE TESTING INC.**  
1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **69268**

Well Name & No. Bertholf C-1 Test No. 2 Date 12-14-22  
 Company N-10 Exploration, LLC Elevation 1607 KB 1595 GL  
 Address P.O. Box 195 Attila, KS 67009  
 Co. Rep / Geo. Tim Pierce Rig Fossil #3  
 Location: Sec. 24 Twp 31 Rge. 9 Co. Harper State KS

Interval Tested 4401-4421 Zone Tested M35.  
 Anchor Length 20 Drill Pipe Run 4281 Mud Wt. 9.3  
 Top Packer Depth ~~4396~~ 4396 Drill Collars Run 120 Vls 74  
 Bottom Packer Depth 4401 Wt. Pipe Run N.A. WL 8.0  
 Total Depth 4421 Chlorides 4000 ppm System LCM S

Blow Description IP: 30 min., BOB 2 min., strong building blow, 163 inches  
150' 60 min., no blow back  
FPI 30 min., BOB ASAO, strong building blow, 197 inches  
FST: 60 min., no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>165</u>	<u>oil cut muddy water</u>		<u>10%</u>	<u>60%</u>	<u>30%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 165 BHT 118 Gravity API RW 2328 @ 50 °F Chlorides 29,000 ppm  
 (A) Initial Hydrostatic 2069  Test CONV. 1950 T-On Location 1345  
 (B) First Initial Flow 28  Jars \_\_\_\_\_ T-Started 1400  
 (C) First Final Flow 61  Safety Joint \_\_\_\_\_ T-Open 1610  
 (D) Initial Shut-In 454  Circ Sub \_\_\_\_\_ T-Pulled ~~1610~~ 1910  
 (E) Second Initial Flow 36  Hourly Standby \_\_\_\_\_ T-Out 2200  
 (F) Second Final Flow 82  Mileage x 100 175 Comments 1349  
 (G) Final Shut-In 442  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2054  Straddle \_\_\_\_\_  EM Tool good  
 Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 2125  
 Sub Total 2125 MP/DST Disc 1 \_\_\_\_\_

Initial Open 30  
 Initial Shut-In ~~30~~ 60  
 Final Flow 30  
 Final Shut-In ~~30~~ 60

Approved By \_\_\_\_\_ Our Representative Chris Hagman

Tribotite 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.





Customer	N-10 Exploration, LLC		Lease & Well #	Bertholf C-1		Date	12/7/2022	
Service District	Pratt Kansas		County & State	Harper, Kansas		Legals S/T/R	24-31s-09w	
Job Type	Surface		<input type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures						
916	M Brungardt	<input type="checkbox"/> Hard hat	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging			
523/522	K Lesely	<input type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection			
525/534	J Triveno	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations			
		<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations			
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below				
<b>Comments</b>								

Product/ Service Code	Description	Unit of Measure	Quantity	Net Amount
cp070	60/40/2 Pozmix A	sack	200.00	\$3,000.00
cp100	Calcium Chloride	lb	516.00	\$387.00
cp120	Cello-flake	lb	50.00	\$87.50
m015	Light Equipment Mileage	mi	50.00	\$100.00
m010	Heavy Equipment Mileage	mi	100.00	\$400.00
m020	Ton Mileage	tm	430.00	\$645.00
c060	Cement Blending & Mixing Service	sack	200.00	\$280.00
d010	Depth Charge: 0'-500'	job	1.00	\$1,000.00
c035	Cement Data Acquisition	job	1.00	\$250.00
r051	Service Supervisor	day	1.00	\$275.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Net:	\$6,424.50
Based on this job, how likely is it you would recommend HSI to a colleague?		Total Taxable	\$ -
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Tax Rate:	
Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely		Sale Tax:	\$ -
		Total:	\$ 6,424.50
		HSI Representative: <i>January 5, 1900</i>	

**TERMS:** Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 3/4% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

x *Paul Thompson*  
 \_\_\_\_\_ CUSTOMER AUTHORIZATION SIGNATURE



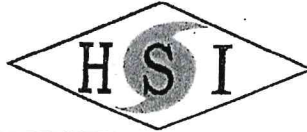
### CEMENT TREATMENT REPORT

<b>Customer:</b> N-10 Exploration,LLC	<b>Well:</b> Bertholf C-1	<b>Ticket:</b> wp 3709
<b>City, State:</b> Zenda Kansas	<b>County:</b> Harper.Kansas	<b>Date:</b> 12/7/2022
<b>Field Rep:</b> Gale Thompson	<b>S-T-R:</b> 24-31s-09w	<b>Service:</b> Surface

Downhole Information	Calculated Slurry - Lead	Calculated Slurry - Tail
<b>Hole Size:</b> 12 1/4 in	<b>Blend:</b> 60/40 2&3	<b>Blend:</b>
<b>Hole Depth:</b> 260 ft	<b>Weight:</b> 14.8 ppg	<b>Weight:</b> ppg
<b>Casing Size:</b> 8 5/8 in	<b>Water / Sx:</b> 5.2 gal / sx	<b>Water / Sx:</b> gal / sx
<b>Casing Depth:</b> 252 ft	<b>Yield:</b> 1.21 ft <sup>3</sup> / sx	<b>Yield:</b> ft <sup>3</sup> / sx
<b>Tubing / Liner:</b> in	<b>Annular Bbbs / Ft.:</b> bbs / ft.	<b>Annular Bbbs / Ft.:</b> bbs / ft.
<b>Depth:</b> ft	<b>Depth:</b> ft	<b>Depth:</b> ft
<b>Tool / Packer:</b>	<b>Annular Volume:</b> 0.0 bbbs	<b>Annular Volume:</b> 0 bbbs
<b>Tool Depth:</b> ft	<b>Excess:</b>	<b>Excess:</b>
<b>Displacement:</b> 14.0 bbbs	<b>Total Slurry:</b> 43.0 bbbs	<b>Total Slurry:</b> 0.0 bbbs
	<b>Total Sacks:</b> 200 sx	<b>Total Sacks:</b> 0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
4:20 PM			-	-	On location job and safety
4:30 PM			-	-	spot trucks and rig up
			-	-	
			-	-	casing was on bottom on arrival
			-	-	
			-	-	
5:10 PM			-	-	start cement
	6.0	200.0	5.0	5.0	fresh water
	4.5	200.0	43.0	48.0	mix 200 sacks cement
5:25 PM				48.0	cement in and shut down
				48.0	
5:26 AM					start displacement
	3.0	150.0	14.0		pump displacement
5:30 PM					plug down
					circulated 5 bbbs to the pit

CREW	UNIT	SUMMARY		
<b>Cementer:</b> M Brungardt	916	<b>Average Rate</b>	<b>Average Pressure</b>	<b>Total Fluid</b>
<b>Pump Operator:</b> K Lesely	523/522	4.5 bpm	183 psi	62 bbbs
<b>Bulk #1:</b> J Triveno	525/534			
<b>Bulk #2:</b>				



Customer	N-10 Exploration LLC	Lease & Well #	Bertholf C-1	Date	12/17/2022
Service District	Pratt Kansas	Country & State	Harper.Kansas	Legals S/T/R	24-31s-09w
Job Type	Longstring <input checked="" type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	Job #	
Equipment #	Driver	Ticket #			

Job Safety Analysis - A Discussion of Hazards & Safety Procedures					
916	M Brungardt	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
179/521	A Clifton	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
182/534	J Triveno	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
		<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input checked="" type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
Comments					

Product/ Service Code	Description	Unit of Measure	Quantity	Not Amount
cp030	H-Long	sack	150.00	\$5,250.00
cp055	H-Plug A	sack	50.00	\$700.00
cp120	Cello-flake	lb	39.00	\$68.25
fe135	5 1/2" Float Shoe - AFU Flapper Type	ea	1.00	\$375.00
fa170	5 1/2" Latch Down Plug & Baffle	ea	1.00	\$350.00
fa130	5 1/2" Cement Basket	ea	1.00	\$300.00
fe135	5 1/2 Turbolizer	ea	0.00	\$1,000.00
c025	walling time	hr	5.00	\$875.00
ef055	Liquid KCL Substitute 2	gal	5.00	\$100.00
m015	Light Equipment Mileage	mi	50.00	\$100.00
m010	Heavy Equipment Mileage	mi	100.00	\$400.00
m020	Ton Mileage	tn	450.00	\$687.00
c050	Cement Blending & Mixing Service	sack	200.00	\$280.00
d015	Depth Charge: 4001'-5000'	job	1.00	\$2,500.00
c035	Cement Data Acquisition	job	1.00	\$250.00
c050	Cement Plug Container	job	1.00	\$250.00
r051	Service Supervisor	day	1.00	\$275.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?

Based on this job, how likely is it you would recommend HSI to a colleague?

Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely

Total Taxable	\$ -	Tax Rate:		Net:	\$13,760.25
State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.				Sale Tax:	\$ -
				Total:	\$ 13,760.25

HSI Representative: *Mark Brungardt*

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X *[Signature]*  
 CUSTOMER AUTHORIZATION SIGNATURE



### CEMENT TREATMENT REPORT

Customer:	N-10 Exploration LLC	Well:	Bertholf C-1	Ticket:	wp 3750
City, State:	Zenda Kansas	County:	Harper, Kansas	Date:	12/17/2022
Field Rep:	Tim Pierce	S-T-R:	24-31s-09w	Service:	Longstring

Downhole Information	
Hole Sizes:	7 7/8 in
Hole Depth:	4600 ft
Casing Size:	5 1/2 in
Casing Depth:	4582 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	110.5 bbls

Calculated Slurry - Lead	
Blend:	H-Long
Weight:	15.0 ppg
Water / Sx:	6.0 gal / sx
Yield:	1.42 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	38.0 bbls
Total Sacks:	150 sx

Calculated Slurry - Tail	
Blend:	H-Plug
Weight:	13.7 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft <sup>3</sup> / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	12.7 bbls
Total Sacks:	50 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
6:00 PM			-	-	on location job and safety
7:00 PM			-	-	spot trucks and rig up
			-	-	turbolizers 2 5 7 9 11 13 15 17
			-	-	basket 8
10:36 PM			-	-	start casing in the hole
12:55 PM			-	-	casing on bottom and circulate
2:30 AM	2.0	-	12.7	12.7	plug rat hole 30 sacks and mouse hole 20 sacks
2:35 AM				12.7	start cement
	5.5	300.0	6.0	18.7	25 sacks scavenger
	5.5	300.0	38.0		mix 150 sacks cement
2:50 AM					cement in and shut down
					wash pump and lines and release the plug
2:55 AM					start displacement
	5.0	80.0	30.0		
	5.0	80.0	50.0		
	5.0	270.0	80.0		
	5.0	470.0	90.0		
	4.0	650.0	100.0		
	4.0	850.0	110.0		
3:20 AM	4.0	850.0	110.5		plug down,,,,,took pressure from 850 to 1500
					float did hold

CREW		UNIT	SUMMARY		
Cementer:	M Brungardt	916	Average Rate	Average Pressure	Total Fluid
Pump Operator:	A Clifton	179/521	4.5 bpm	385 psi	627 bbls
Bulk #1:	J Triveno	182/534			
Bulk #2:					

No 03



P.O. Box 758  
Blackwell, OK 74631

Customer:	<b>N-10 Exploration LLC</b>			Well Name:	<b>Bertholf C-1</b>			
Address:				Legals:	Sec 21 - T31S - 9W		Field Ticket #:	<b>AD012723</b>
City, State, Zip:				County:	Harper		Service District:	Cushing
Date:	Friday, January 27, 2023			State:	Kansas		Salesman:	Josh Mcclort
Product Code	Product Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount	
503.01	LB-1 - Liquid Biocide	gal(s)	96	\$68.00	\$6,528.00	62.00%	\$2,480.64	
503.05	LBC- 2 - SP-680	gal(s)	94	\$30.00	\$2,820.00	62.00%	\$1,071.60	
519.11	PSC Frac1 Advanced BioCatalytics Surfactant	gal(s)	183	\$86.00	\$15,738.00	62.00%	\$5,960.44	
508.01	FRA-1 - Friction Reducer - (anionic)	gal(s)	113	\$70.00	\$7,910.00	62.00%	\$3,005.80	
510.02	PB-1 - FR Breaker	gal(s)	68	\$36.00	\$2,448.00	62.00%	\$930.24	
504.14	KCL-LC - Liquid KCL Equivalent Concentrate (76%)	gal(s)	184	\$110.00	\$20,240.00	62.00%	\$7,691.20	
433.03	PropCure XA Component	gal(s)	17	\$275.20	\$4,678.40	62.00%	\$1,777.79	
433.04	PropCure XB Component	gal(s)	8	\$322.40	\$2,579.20	62.00%	\$980.10	
514.03	MBE - Mutual Solvent	gal(s)	20	\$106.00	\$2,120.00	62.00%	\$805.60	
432.01	100 Mesh Sand - Local	lb(s)	30080	\$0.52	\$15,641.60	62.00%	\$5,943.81	
432.11	40/70 Premium Sand - Local	lb(s)	125640	\$0.44	\$55,281.60	62.00%	\$21,007.01	
432.03	16/30 Brady	lb(s)	47640	\$0.77	\$36,682.80	62.00%	\$13,939.46	
200.01	Equipment Mileage - Light Equipment	mile(s)	95	\$3.25	\$308.75	62.00%	\$117.33	
200.02	Equipment Mileage - Heavy Equipment	mile(s)	1615	\$8.50	\$13,727.50	62.00%	\$5,216.45	
418.07	61 - 70 bpm Blender - 1st 2 hrs.	unit(s)	1	\$5,000.00	\$5,000.00	62.00%	\$1,900.00	
419.07	61 - 70 bpm Blender - Over 2 hrs.	hour(s)	1	\$2,500.00	\$2,500.00	62.00%	\$950.00	
421.01	Blending Services	unit(s)	1	\$1,800.00	\$1,800.00	62.00%	\$684.00	
410.07	Frac Pump Services - 61-70 BPM ( First 2 Hours )	per job	1	\$70,000.00	\$70,000.00	62.00%	\$26,600.00	
410.27	Frac Pump Services - 61-70 BPM ( Over 2 Hours )	hour(s)	1	\$35,000.00	\$35,000.00	62.00%	\$13,300.00	
435.05	Computer Data Accumulator/Satellite Relay Capable	unit(s)	1	\$2,500.00	\$2,500.00	62.00%	\$950.00	
210.03	Chemical Delivery - First 4 hours	unit(s)	1	\$1,500.00	\$1,500.00	62.00%	\$570.00	
421.03	Computerized Liquid Additives Unit	unit(s)	1	\$2,500.00	\$2,500.00	62.00%	\$950.00	
436.01	Line Truck (Frac Line) & Well Connection Unit	unit(s)	1	\$2,500.00	\$2,500.00	62.00%	\$950.00	
438.01	Discharge Manifold Trailer	unit(s)	1	\$2,500.00	\$2,500.00	62.00%	\$950.00	
428.01	Sandmaster - Portable Storage & Delivery System	unit(s)	1	\$3,000.00	\$3,000.00	62.00%	\$1,140.00	
401.01	Proppant Delivery Charge	ton mile	9500	\$2.20	\$20,900.00	62.00%	\$7,942.00	
429.01	Proppant Pump Charge - 20/40 or Smaller	per cwt.	1540	\$0.55	\$847.00	62.00%	\$321.86	
429.02	Proppant Pump Charge - 16/30 or Larger	per cwt.	460	\$0.90	\$414.00	62.00%	\$157.32	
433.01	PropCure Service Charge	ea	1	\$3,000.00	\$3,000.00	62.00%	\$1,140.00	
441.02	QC Services with Fluid Tech - First 8 hours	per job	1	\$1,800.00	\$1,800.00	62.00%	\$684.00	
Cost Estimate Before Applicable Local, County, and State Taxes Are Applied:				Gross:	\$342,464.85	Net:	\$130,136.64	

Applicable Local, County, and State Taxes (Office Use Only):

Total Invoiced Price (Office Use Only):

Customer Representative: **Dustin Newberry**  
 SPS Representative: **Jack O'Kelley**  
 Date: **1/27/2023**

TERMS: Cash in advance unless SPS, LLC has approved credit prior to sale. Credit terms of sale for approved accounts are 10% advance due on or before the 30th day from the date of invoice. Past due accounts may pay interest on the balance past due at the rate of 1.5% per month or the maximum allowable by applicable state or federal laws if such laws limit interest to a lesser amount. In the event it is necessary to employ an agency or attorney to collect on delinquent accounts, Customer hereby agrees to pay all fees, directly or indirectly incurred for such collection, to the extent that Customer's account with SPS, LLC becomes delinquent. SPS, LLC has the right to revoke any and all discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount will become retroactively due and owing and subject to collection.

*[Signature]*  
 CUSTOMER AUTHORIZED AGENT

SERVICE ORDER: I AGREE THAT SERVICE ACCORDANCE WITH TERMS AND CONDITIONS ( INCLUDING IDENTIFICATION OBLIGATIONS ) LISTED HERE OR IN THE CUSTOMER CONTRACT FORM AND REPRESENT THAT I HAVE AUTHORITY TO ACCEPT AND SIGN THIS ORDER.

N

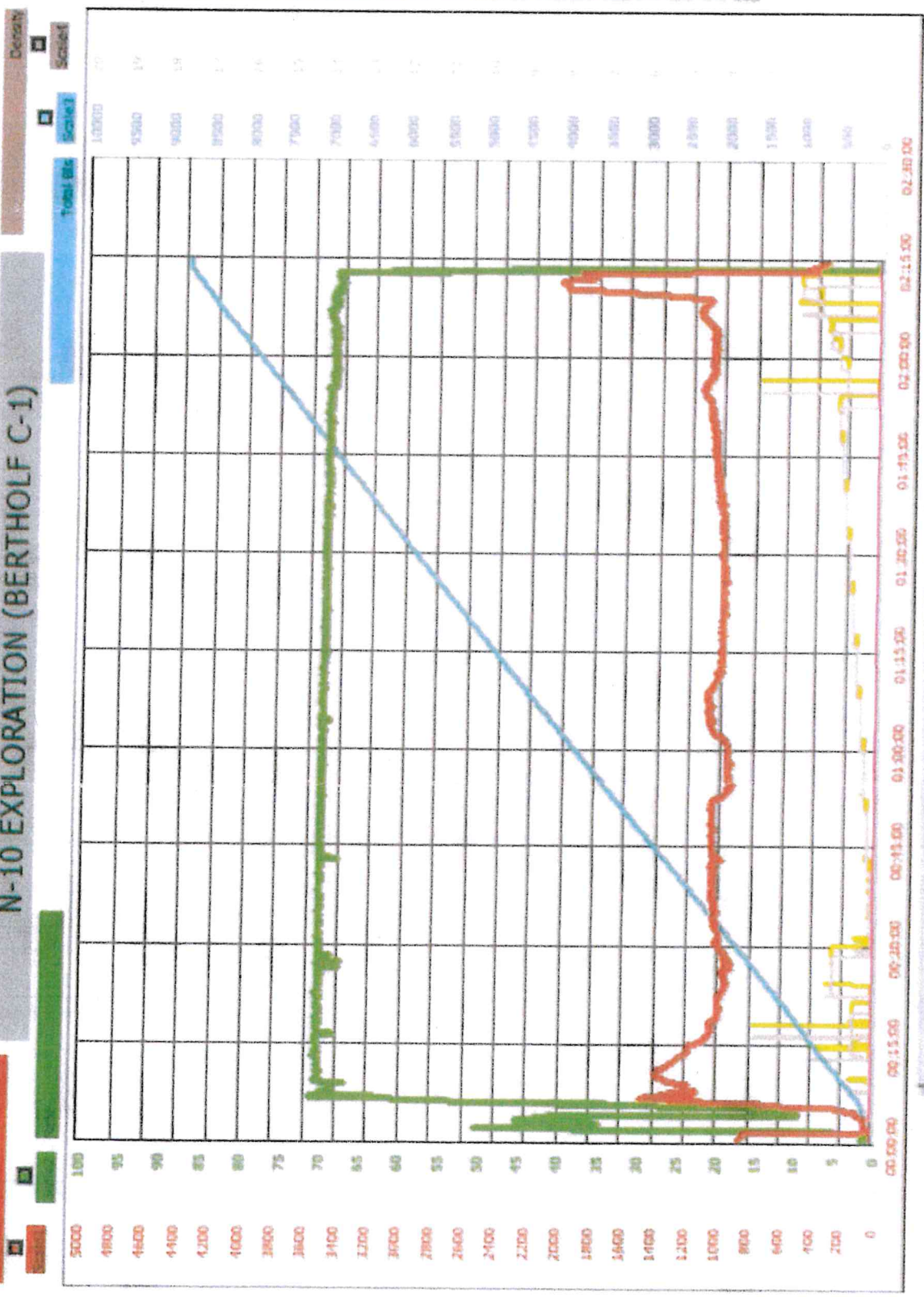
<b>SPS</b>	Customer:	N-10 Exploration LLC			SR No.:	AD012723	Date:	1/27/2023
	Well Name:	Bertholf C-1			Field:	0	Well Type:	Producer
	County:	Harper	State:	Kansas	Stage:	1	Max PSI:	3000
	Type of Job:	20 Tank Slick Water Frac			Treater:	Aaron Duncan	Formation:	Mississippi

EVENT # Substage	Event/Start Date & Time (in 24 Hr Format)	Event Type	Event Description	Wellhead Pressure	Clean Volume	Fluid	Proppant	Prop Conc.	Prop Volume	Slurry Volume	CLEAN RATE	SLURRY RATE	TOTAL
1	8:27:00 AM	PT	PSI TEST	6,780									
2	8:33:00 AM	OWH	OPEN WELL	10									
3	8:33:00 AM	PAD	PAD	1,290	467.8	SLIKWTR				468.7	70.8	70.1	469
4	8:43:00 AM	SAND	100 MESH SAND	990	611.8	SLIKWTR	100 Mesh	0.50	10,050	618.0	69.0	70.3	1,087
5	8:52:00 AM	PAD	SPACER	980	180.4	SLIKWTR				179.3	70.7	70.3	1,266
6	8:55:00 AM	SAND	100 MESH SAND	960	408.4	SLIKWTR	100 Mesh	1.00	17,880	423.8	67.6	70.0	1,690
7	9:01:00 AM	PAD	SPACER	1,000	190.3	SLIKWTR				189.7	70.9	70.3	1,879
8	9:04:00 AM	SAND	40/70 PREMIUM	1,040	711.7	SLIKWTR	40/70	0.10	2,990	709.9	70.6	70.3	2,589
9	9:13:00 AM	SAND	40/70 PREMIUM	1,050	632.0	SLIKWTR	40/70	0.20	5,590	633.6	70.1	70.3	3,223
10	9:22:00 AM	SAND	40/70 PREMIUM	940	643.2	SLIKWTR	40/70	0.30	8,450	647.4	69.4	70.1	3,870
11	9:32:00 AM	SAND	40/70 PREMIUM	1,090	547.0	SLIKWTR	40/70	0.40	9,600	553.0	69.5	70.1	4,423
12	9:39:00 AM	SAND	40/70 PREMIUM	990	551.0	SLIKWTR	40/70	0.50	12,050	559.6	68.9	70.0	4,983
13	9:47:00 AM	SAND	40/70 PREMIUM	980	551.0	SLIKWTR	40/70	0.60	14,470	562.0	68.5	69.8	5,545
14	9:55:00 AM	SAND	40/70 PREMIUM	1,000	552.2	SLIKWTR	40/70	0.70	16,870	565.7	68.3	70.0	6,111
15	10:03:00 AM	SAND	40/70 PREMIUM	1,020	503.7	SLIKWTR	40/70	0.80	17,640	518.2	67.8	69.8	6,629
16	10:11:00 AM	SAND	40/70 PREMIUM	1,050	491.6	SLIKWTR	40/70	0.90	19,360	507.8	67.6	69.6	7,173
17	10:18:00 AM	SAND	40/70 PREMIUM	1,090	376.7	SLIKWTR	40/70	1.00	16,440	390.7	66.9	70.0	7,527
18	10:23:00 AM	PAD	SPACER	1,130	159.3	SLIKWTR				158.2	70.3	69.7	7,686
19	10:26:00 AM	SAND	16/30 BRADY SAND	1,070	226.3	SLIKWTR	16/30	0.80	7,970	232.5	67.7	69.1	7,918
20	10:29:00 AM	SAND	16/30 BRADY SAND	1,060	207.0	SLIKWTR	16/30	1.00	9,010	214.7	66.9	69.3	8,133
21	10:32:00 AM	SAND	16/30 BRADY SAND	1,060	183.2	SLIKWTR	16/30	1.25	9,940	192.1	66.4	69.4	8,325
22	10:35:00 AM	PAD	SPACER	1,150	186.8	SLIKWTR				185.7	70.0	69.6	8,511
23	10:38:00 AM	SAND	16/30 BRADY SAND	1,100	94.1	SLIKWTR	16/30	1.50	6,220	996.0	65.2	68.7	8,610
24	10:39:00 AM	SAND	16/30 w/Liq Resin	1,200	47.7	SLIKWTR	16/30	1.50	3,120	50.6	65.5	69.1	8,661
25	10:40:00 AM	SAND	16/30 w/Liq Resin	2,010	125.6	SLIKWTR	16/30	2.00	10,990	135.8	63.3	38.5	8,797
26	10:42:00 AM	FLUSH	FLUSH	1,750	147.2	SLIKWTR				143.4	69.0	69.0	8,940
27	10:43:00 AM	ISIP	SHUTDOWN	450									

FLUID ADDITIVES			PROPPANT DESCRIPTION			PROPPANT VOLUMES				Rate and PSI		FLUID TYPE AND VOLUME		
Chemical Name	Design	Used	PROP	Design	Used	Conc.	Size	lbs	BBLs	Ave Rate	68.5	Fluid type	Design	Used
LB-1	95	96	100 Mesh	30,000	27,930	.5/1	100 Mesh	27,930	1,020	Max Rate	70.4	SlikWtr	9,000.0	8,940.0
LBC-2	95	94	40/70	124,000	123,460	.1/2	40/70	8,580	2,090	Pad Rate	70.0	0		
PSC FRAC1	189	183	16/30	46,000	47,250	.3/4	40/70	18,050	1,190	Sand Rate	69.9	0		
FR	114	113	0			.5/6	40/70	26,520	1,102	Flush Rate	69.0	0		
PB-1	76	68	0			.7/8	40/70	34,510	1,056	Ave PSI	1,125.0	0		
KCL	189	184	0			.9/1	40/70	35,800	434	Max PSI	2,120.0	0		
Propcure XA	20	17	0			0.80	16/30	7,970	226	PSI Pad	1,290.0	0		
Propcure XB	9	8	SHUT-IN PRESSURES			1.00	16/30	9,010	207	PSI Sand	1,100.0	0		
0			ISIP	450		1.25	16/30	9,940	183	PSI Flush	1,750.0	0		
0			5 Min	140		1.50	16/30	6,220	94	Break Rate	30.0	0		
0			10 Min	0		1.50	16/30	3,120	48	Break Psi	1,520.0	0	PSI	BBLs
0			15 Min			2.00	16/30	10,990	126	SS PSI		0		

CASING & TUBULAR DATA							Comments							
Tubular	Size	Wt	Grade	Top	Bottom	Capacity								
Tubing														
Casing	5 1/2	15.5		4,386	4,429	105	CREW ON LOCATION							
							ADAM, JACK, AARON, NATE, ERIK, TRAVIS, KP, DYLAN, MIKE, DONALD, LAMARK, LAMARR, TROY, BOB, LYLE, TJ, CHRIS, LADEAN, TYLER, COWBOY							

# N-10 EXPLORATION (BERTHOLF C-1)



10-15-14 AM  
1/27/2023

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Fri Jan 27, 2023  
 TVD 4429.00  
 Vit Vol 105.421  
 Tot Lag 4429.02  
 Tot Vol 105.421  
 Sur Vol 20.00

----- LEGEND -----  
 S = Start F = Formation E = Event

TIME	PPA	STP	PRES	HYD P	CLEAN	DIRTY	SAND	PPA	CLEAN	DIRTY	TOTALS
				BPM	TOTAL	BPM	TOTAL				SAND
08:33:00	S	870	1920	0.00	0	0.00	0	0.00	0.0	0.0	0.00
08:38:53	F	940	1920	29.28	125	45.98	126	0.00	0.0	0.0	0.00
08:43:54	S	1370	1920	70.85	468	70.15	469	0.00	467.8	468.7	0.64
08:45:41	F	1240	1920	70.89	594	70.29	594	0.50	611.8	618.0	10.05
08:52:38	S	990	1990	69.08	1080	70.32	1087	0.00	180.4	179.3	0.01
08:54:25	F	1000	1921	70.97	1206	70.35	1212	1.00	408.4	423.8	17.88
08:55:10	S	980	1920	70.72	1260	70.34	1266	0.00	190.3	189.7	0.51
08:56:56	F	940	2055	67.72	1381	70.40	1391	0.10	711.7	709.9	2.99
09:01:10	S	960	2057	67.62	1668	70.01	1690	0.20	632.0	633.6	5.59
09:02:57	F	1010	1937	70.89	1794	70.41	1815	0.30	643.2	647.4	8.45
09:03:51	S	1000	1929	70.98	1859	70.37	1879	0.40	547.0	553.0	9.60
09:05:38	F	1020	1928	70.43	1985	70.45	2005	0.50	551.0	559.6	12.05
09:13:53	S	1040	1934	70.62	2570	70.35	2589	0.60	562.0	562.0	14.47
09:15:40	F	1010	1949	69.32	2697	70.21	2716	0.70	552.2	565.7	16.87
09:22:50	S	1050	1948	70.15	3202	70.33	3223	0.80	503.7	518.2	17.64
09:24:37	F	1020	1961	69.87	3328	70.11	3349	0.90	491.6	507.8	19.36
09:32:00	S	940	1962	69.49	3845	70.17	3870	1.00	376.7	390.7	16.44
09:33:47	F	990	1976	69.50	3971	70.26	3997	0.00	159.3	158.2	0.01
09:38:49	S	1090	1976	69.50	4392	70.17	4423	0.80	226.3	232.5	7.97
09:41:36	F	1060	1989	68.90	4516	70.25	4549	1.00	207.0	214.7	9.01
09:47:45	S	990	1990	68.92	4943	70.07	4983	1.25	183.2	192.1	9.94
09:49:32	F	1000	2003	68.50	5067	70.06	5108	0.00	186.8	185.7	0.05
09:55:44	S	980	2004	68.52	5495	69.89	5545	0.00	0.0	0.0	0.00
09:57:31	F	980	2016	68.40	5618	69.99	5671	0.80	226.3	232.5	7.97
10:03:46	S	1000	2017	68.39	6047	70.06	6111	1.00	207.0	214.7	9.01
10:05:33	F	1000	2030	68.09	6169	70.00	6237	1.25	183.2	192.1	9.94
10:11:08	S	1020	2030	67.88	6550	69.83	6629	0.00	186.8	185.7	0.05
10:12:56	F	1030	2043	67.71	6673	69.97	6755	0.80	503.7	518.2	17.64
10:18:22	S	1050	2044	67.67	7042	69.68	7137	0.90	491.6	507.8	19.36
10:20:09	F	1050	2056	67.21	7163	69.71	7262	1.00	376.7	390.7	16.44
10:23:55	S	1090	2057	66.95	7419	70.00	7527	0.00	159.3	158.2	0.01
10:25:43	F	1120	1922	70.29	7545	69.76	7653	0.80	226.3	232.5	7.97
10:26:10	S	1130	1920	70.31	7578	69.78	7686	1.00	207.0	214.7	9.01
10:27:59	F	1090	2031	67.30	7701	69.35	7811	0.00	159.3	158.2	0.01
10:29:30	S	1070	2031	67.79	7804	69.15	7918	0.80	226.3	232.5	7.97
10:31:19	F	1070	2055	65.95	7926	69.00	8045	1.00	207.0	214.7	9.01
10:32:35	S	1060	2057	66.94	8011	69.32	8133	1.25	183.2	192.1	9.94
10:34:24	F	1070	2088	66.11	8132	69.25	8259	0.00	186.8	185.7	0.05
10:35:21	S	1060	2089	66.42	8195	69.41	8325	0.00	0.0	0.0	0.00
10:37:08	F	1140	1923	70.22	8321	69.74	8451	0.00	0.0	0.0	0.00
10:38:00	S	1150	1920	70.09	8381	69.60	8511	0.00	0.0	0.0	0.00



10:39:25 S	1.50	1100	2073	65.26	'8476	68.76	8610	185.8	1.50	94.1	99.6	6.22
10:39:48 F	1.50	1100	2122	65.39	8501	69.21	8637	187.4				
10:40:09 S	2.00	1200	2121	65.54	8523	69.11	8661	188.9	1.50	47.7	50.6	3.12
10:41:14 F	1.50	1860	2151	63.47	8593	69.01	8736	195.0				
10:41:58 F	2.00	2010	2181	63.64	8640	68.43	8786	199.0				
10:42:06 S	0.00	2010	2183	63.39	8649	68.52	8797	199.9	2.00	125.6	135.8	10.99
10:43:56 F	0.00	1560	1922	67.99	8776	60.22	8923	199.9				