

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)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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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	Joe Gerstner Oil, LLC
Well Name	WEISENBERGER-STOLL UNIT 1
Doc ID	1539526

Tops

Name	Top	Datum
Anhydrite	2196	726
Base Anhydrite	2257	665
Heebner	3854	-932
Lansing	3900	-978
Muncie Creek	4085	-1163
Stark	4187	-1265
BKC	4266	-1344
Marmaton	4315	-1393
Pawnee	4388	-1466
Myrick Station	4417	-1495
Ft. Scott	4437	-1515
Cherokee Shale	4459	-1537
Mississippian	4530	-1608



CHARGE TO: Joe Gardner O1
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET 033372

PAGE 1 OF 1

1. SERVICE LOCATIONS Ness City, KS WELL/PROJECT NO. #1 LEASE Wassenberg-Still COUNTY/PARISH Scott STATE KS CITY Gardner DATE 11-24-2020 OWNER
 2. TICKET TYPE SERVICE SALES CONTRACTOR W/W/Martin UNIT/RIG NAME/NO. Surface Pipe SHIPPED VIA Truck DELIVERED TO Location ORDER NO.
 3. WELL TYPE Oil WELL CATEGORY Surface Pipe JOB PURPOSE Development WELL PERMIT NO.
 4. REFERRAL LOCATION Development WELL LOCATION Gardner, 1/2 N. W. 1/4

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	LOC	ACCT	DF	DESCRIPTION	QTY.		UNIT PRICE		AMOUNT	
						U/M	U/M	U/M	U/M		
575		1			MILEAGE <u>TRK #112</u>			50	mi	5.00	250.00
576S		1			<u>Pump Charge - Surface</u>			1	job	925.00	925.00
325		1			<u>Standard CMT</u>			150	sk	13.00	2025.00
278		1			<u>Calcium Chloride</u>			7	sk	40.00	280.00
279		1			<u>Benvente Gel</u>			3	sk	30.00	90.00
290		1			<u>D-Air</u>			2	gal	42.00	84.00
581		1			<u>CMT Service Charge</u>			150	sk	3.50	525.00
583		1			<u>Drillage</u>			1400	lbs	369.71	517,614.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

DATE SIGNED 11-24-2020 TIME SIGNED 8:00 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE? CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 1 TAX 5.00 TOTAL 4043.48

SWIFT OPERATOR William Taddy APPROVAL

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 11-24-2020 1
PAGE NO.
TICKET NO. 033372

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Joe Gerstner Oil		#1		Weisenberger-stell		Surface Pipe		033372	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		UNIT	DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING		
									ON Location 8 5/8 2316/ft
									RTD: 219'
	1745								START 8 5/8 2316/ft Csg in well
	1850								Break Circulation
	1855	3 1/2	5		✓		250		Pump 5bbl KCL Spacer
	1900	4	36		✓		200		Mix 150 sks of Standard 2% gel, 3% CC CMT @ 14.7ppg
	1910	4 1/2	0		✓		100		Start Displacement
		4 1/2	13		✓		300		Circulate CMT to Surface * < 5 sks to the Pit *
	1930	-	13 1/4		✓		200		KO Pump * Shut in * - Release Pressure - Hold -
	1900 35								Wash up Trk #112
	1945								Job Complete
									150 sks of Standard CMT w/ 2% gel, 3% CC used - 25 sks to the Pit
									Thanks! * Plug down @ 7:30 PM Gudean, Kirby, Isaac



CHARGE TO: Joe Gustner Oil
 ADDRESS _____
 CITY, STATE, ZIP CODE _____

TICKET 33502
 PAGE 1 OF 2

SERVICE LOCATION: Ness City, KS
 WELL PROJECT NO.: #1
 LEASE: WESSELBERGER-Still
 COUNTY/PARISH: Sto #
 STATE: KS
 CITY: Craigston
 DATE: 12-3-2020
 OWNER: _____

TICKET TYPE: SERVICE SALES
 CONTRACTOR: Wid Muffin
 RIG NAME/NO.: _____
 SHIPPED VIA: Cr
 DELIVERED TO: Location
 ORDER NO.: _____

WELL TYPE: D1
 WELL CATEGORY: Development
 JOB PURPOSE: Two-Stage 5th
 WELL PERMIT NO.: _____

WELL LOCATION: Craigston, 1/4-N
 REFERRAL LOCATION: _____
 INVOICE INSTRUCTIONS: W-107D

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF			U/M	U/M	U/M		
576					Trk # 112			50	M	5.00	250.00
579					Pump Charge - Two-Stage			1	job	1900.00	1900.00
403					CMT Basket			4	ea	275.00	1100.00
407					Insert Floor Shoe w/ Annul Fill			1	ea	325.00	325.00
409					Turbolizer			14	ea	90.00	1260.00
417					D.V. LATCH down Plug + Baffle			1	ea	200.00	200.00
408					D.V. Tool + Plug Set			1	ea	3375.00	3375.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

X [Signature]

DATE SIGNED: 12-3-2020 TIME SIGNED: 8:02 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UNDECIDED	DISAGREE
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL: 2
 TOTAL: 2116.31

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR: [Signature] APPROVAL: _____
 Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 335622

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				DATE	UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY	U/M	QTY	U/M			

CUSTOMER: Joe Gestner Oil

WELL: Wessenberg - Skill unit #1

DATE: 12-3-2000

PAGE 2 OF 2

325						Standard CMT									
384						Calseal									
383						SALT									
292						HALAD 322									
276						Fluocel	125	lbs					3	375	00
330						SMD CMT									
381						Mud Flush									
221						Liquid KCL									
290						D-Air									
581															
583															

SERVICE CHARGE
MILEAGE TOTAL WEIGHT CHARGE 54,360
LOADED MILES 50
CURING FEET
TON MILES

535
1 85
989 75
0 45
1291 05

CONTINUATION TOTAL 13,612 80

JOB LOG

SWIFT Services, Inc.

DATE 12-3-2020	PAGE NO. 2 of 2
TICKET NO. 33502	

CUSTOMER Joe Graetner Oil		WELL NO. #1		LEASE WEISENBERGER-STOLL		JOB TYPE Two-Stage		DESCRIPTION OF OPERATION AND MATERIALS	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		UNIT	
				T	C	TUBING	CASING		
									CONT...
1530	1530	4 1/2			✓		300	Pump	30 bbl KLL Spacer
	1535	4 1/2	147		✓		300	Mix	265 sks of SMD @ 11.2 ppg
		4	20		✓		250	Mix	70 sks of SMD @ 14 ppg
	1620								Wash P+L Release Top Plug
	1625	4 1/2	0		✓		200	START	Displacement
		4 1/2	22		✓		300	Lift	Pressure
		4 1/2	71		✓		750	MAX	lift Pressure
	1645	4 1/2	72		✓		1800	LAND	Top Plug - Close DV Tool - Release Pressure *Hold*
									CMT Circulated 58 bbl in to Displacement ~ 25 sks to the Pit
	1650								Washup Trk #112
	1730								Job Complete
									200 sks of EA-2 used on Bottom Stage + R.H. DV. opened @ 800 PSI 335 sks of SMD used on Top Stage D.V. Closed @ 1800 PSI
									THANKS !
									Bidcon, Kirby, Wayne, Dusty



DRILL STEM TEST REPORT

Prepared For: **Joe Gerstner Oil**

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

10-18s-31w Scott,KS

Weisenberger-Stoll Unit #1

Start Date: 2020.11.28 @ 12:24:00

End Date: 2020.11.28 @ 18:43:00

Job Ticket #: 66600 DST #: 1

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

Printed: 2020.12.03 @ 15:19:23

Joe Gerstner Oil
Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
DST # 1
LKC- E
2020.11.28



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Joe Gerstner Oil
 PO Box 509
 Ness City, KS 67560
 ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
 Job Ticket: 66600 **DST#: 1**
 Test Start: 2020.11.28 @ 12:24:00

GENERAL INFORMATION:

Formation: **LKC- E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:28:45
 Time Test Ended: 18:43:00
 Interval: **3989.00 ft (KB) To 4014.00 ft (KB) (TVD)**
 Total Depth: 4014.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 2922.00 ft (KB)
 2917.00 ft (CF)
 KB to GR/CF: 5.00 ft

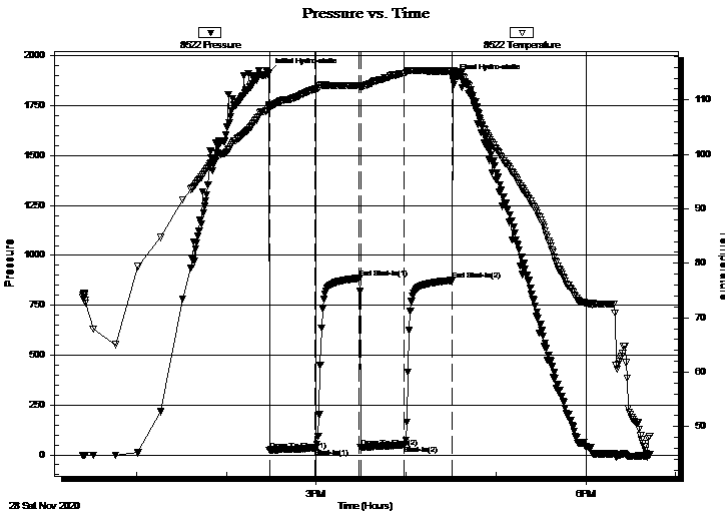
Serial #: 8522

Inside

Press@RunDepth: 49.94 psig @ 3990.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.11.28 End Date: 2020.11.28 Last Calib.: 2020.11.28
 Start Time: 12:24:05 End Time: 18:42:59 Time On Btm: 2020.11.28 @ 14:28:30
 Time Off Btm: 2020.11.28 @ 16:31:30

TEST COMMENT: 30- IF: 2" blow .
 30- IS: No return.
 30- FF: 2" blow .
 30- FS: No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.53	109.03	Initial Hydro-static
1	23.44	108.50	Open To Flow (1)
31	32.28	112.00	Shut-In(1)
61	885.92	112.65	End Shut-In(1)
61	37.05	112.33	Open To Flow (2)
91	49.94	114.89	Shut-In(2)
123	874.55	115.29	End Shut-In(2)
123	1884.36	115.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	ocm 30o 70m	0.30
2.00	oil 100o	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66600

DST#: 1

ATTN: Andrew Stenzel

Test Start: 2020.11.28 @ 12:24:00

Tool Information

Drill Pipe:	Length: 3861.00 ft	Diameter: 3.80 inches	Volume: 54.16 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 54.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3989.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3960.00	
Shut In Tool	5.00		Fluid	3965.00	
Hydraulic tool	5.00			3970.00	
Em Tool	3.00			3973.00	
Jars	5.00			3978.00	
Safety Joint	2.00			3980.00	
Packer	5.00		Inside	3985.00	30.00 Bottom Of Top Packer
Packer	4.00			3989.00	
Stubb	1.00			3990.00	
Recorder	0.00	8522	Inside	3990.00	
Recorder	0.00	8319	Outside	3990.00	
Perforations	21.00			4011.00	
Bullnose	3.00			4014.00	25.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66600 **DST#: 1**

ATTN: Andrew Stenzel

Test Start: 2020.11.28 @ 12:24:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	ocm 30o 70m	0.295
2.00	oil 100o	0.010

Total Length: 62.00 ft Total Volume: 0.305 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

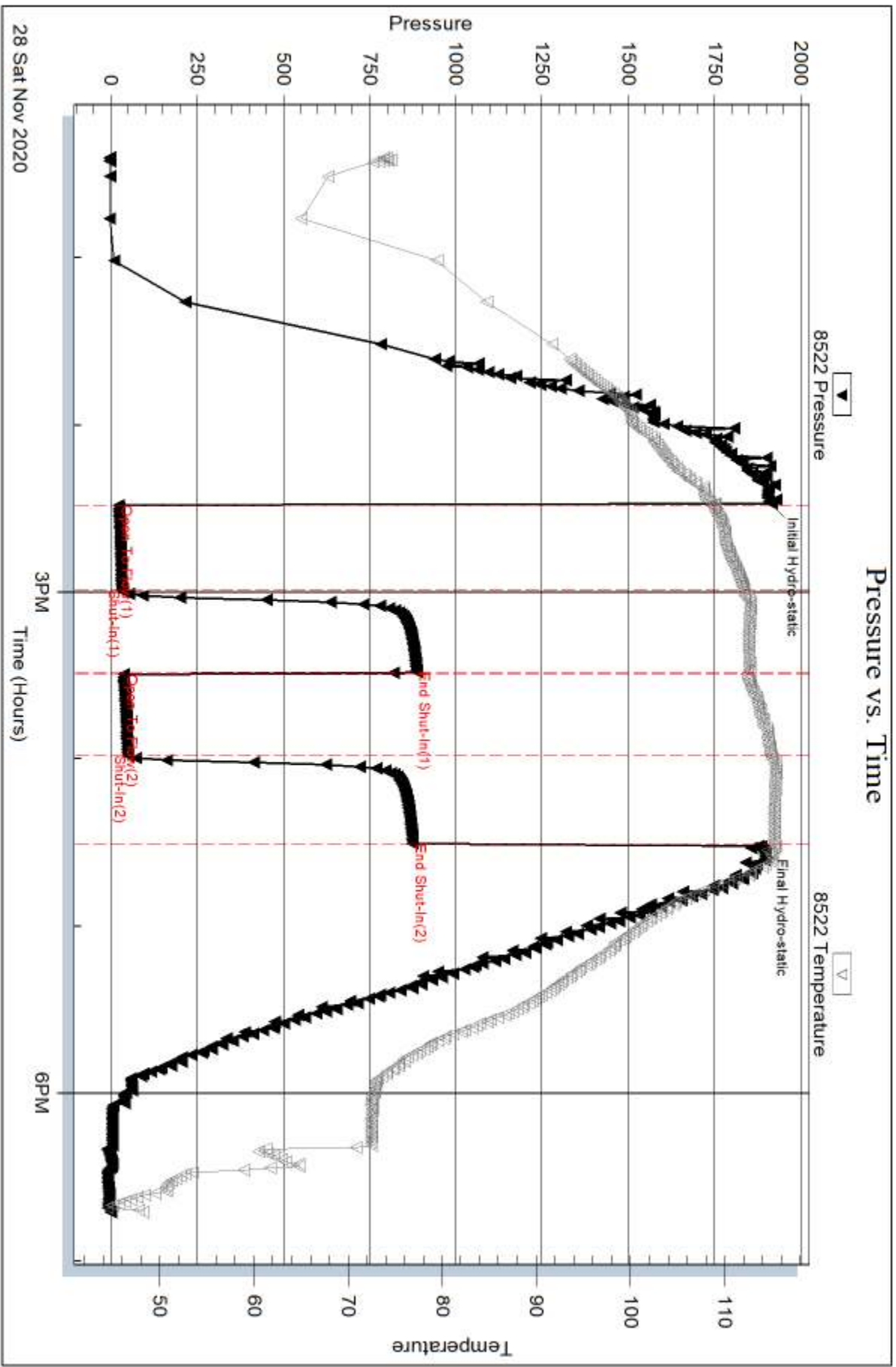
Serial #: 8522

Inside

Joe Gerstner Oil

10-18s-31w Scott, KS

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 66600

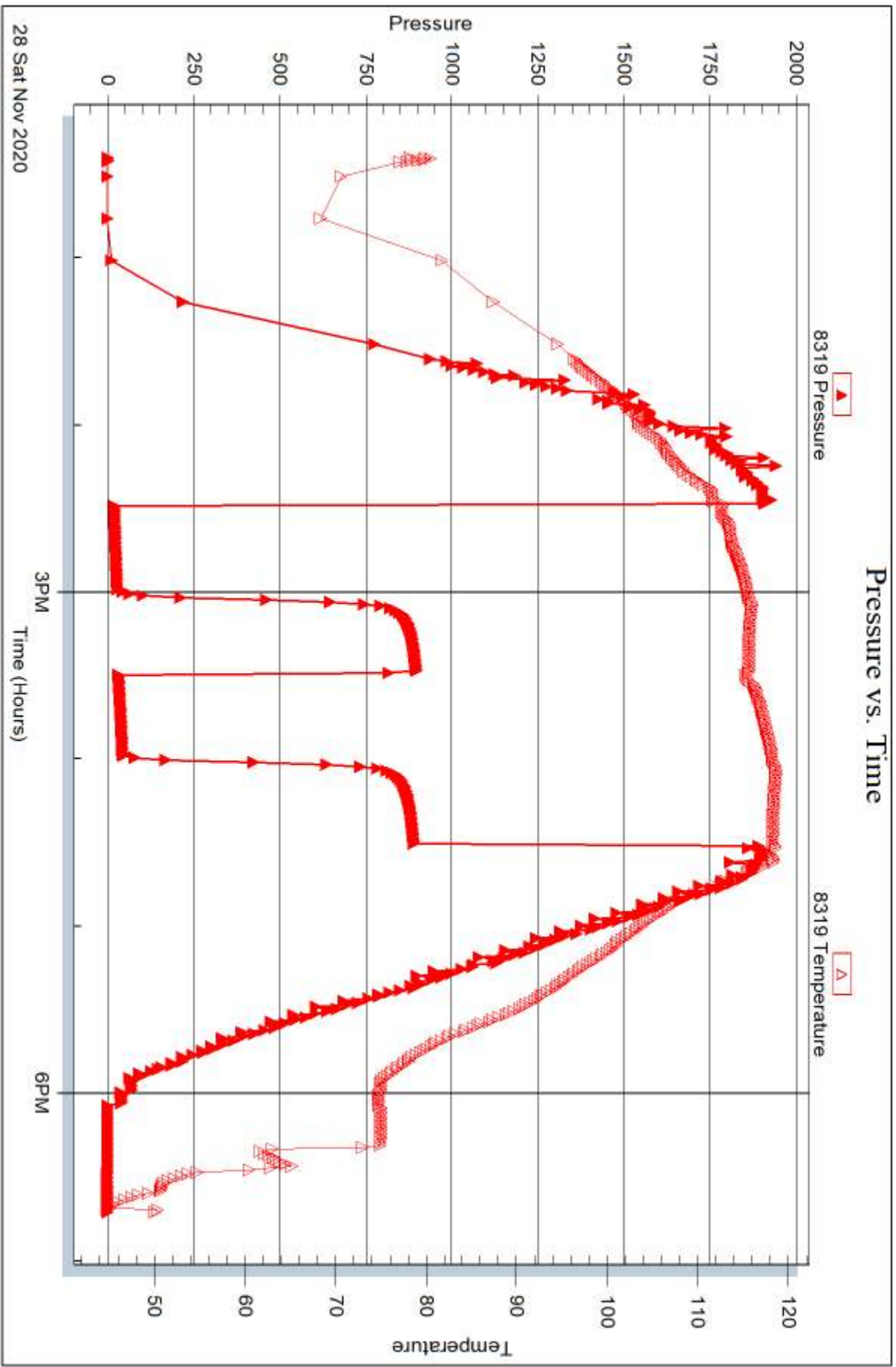
Printed: 2020.12.03 @ 15:19:24

Serial #: 8319

Outside Joe Gerstner Oil

10-18s-31w Scott KS

DST Test Number: 1



28 Sat Nov 2020

Triobite Testing, Inc

Ref. No: 66600

Printed: 2020.12.03 @ 15:19:24



DRILL STEM TEST REPORT

Prepared For: **Joe Gerstner Oil**

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

10-18s-31w Scott,KS

Weisenberger-Stoll Unit #1

Start Date: 2020.11.29 @ 13:24:00

End Date: 2020.11.29 @ 19:53:30

Job Ticket #: 66802 DST #: 2

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

Printed: 2020.12.03 @ 15:18:47

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

10-18s-31w Scott,KS

DST # 2

LKC- H,I,J

2020.11.29



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Joe Gerstner Oil
 PO Box 509
 Ness City, KS 67560
 ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
 Job Ticket: 66802 **DST#: 2**
 Test Start: 2020.11.29 @ 13:24:00

GENERAL INFORMATION:

Formation: **LKC- H,I,J**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:18:45
 Time Test Ended: 19:53:30
 Interval: **4084.00 ft (KB) To 4178.00 ft (KB) (TVD)**
 Total Depth: 4178.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 2922.00 ft (KB)
 2917.00 ft (CF)
 KB to GR/CF: 5.00 ft

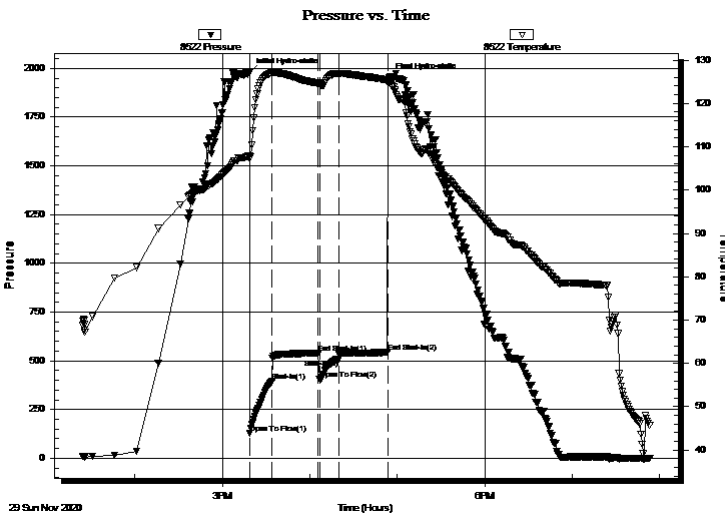
Serial #: 8522

Inside

Press@RunDepth: 508.00 psig @ 4085.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.11.29 End Date: 2020.11.29 Last Calib.: 2020.11.29
 Start Time: 13:24:05 End Time: 19:53:29 Time On Btm: 2020.11.29 @ 15:18:30
 Time Off Btm: 2020.11.29 @ 16:54:00

TEST COMMENT: 15- IF: BOB @ 2 min, built to 80".
 30- IS: No return.
 15- FF: BOB @ 5 min, built to 31"
 30- FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1978.17	107.90	Initial Hydro-static
1	127.08	107.24	Open To Flow (1)
16	396.52	127.05	Shut-In(1)
48	540.01	124.64	End Shut-In(1)
48	406.99	124.49	Open To Flow (2)
62	508.00	126.85	Shut-In(2)
95	544.09	125.38	End Shut-In(2)
96	1954.31	125.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1150.00	mcw 5m 95w (oil spots)	15.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66802

DST#: 2

ATTN: Andrew Stenzel

Test Start: 2020.11.29 @ 13:24:00

Tool Information

Drill Pipe:	Length: 3955.00 ft	Diameter: 3.80 inches	Volume: 55.48 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 75000.00 lb
		Total Volume: 56.06 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4084.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	124.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4055.00	
Shut In Tool	5.00		Fluid	4060.00	
Hydraulic tool	5.00			4065.00	
Em Tool	3.00			4068.00	
Jars	5.00			4073.00	
Safety Joint	2.00			4075.00	
Packer	5.00		Inside	4080.00	30.00 Bottom Of Top Packer
Packer	4.00			4084.00	
Stubb	1.00			4085.00	
Recorder	0.00	8522	Inside	4085.00	
Recorder	0.00	8319	Outside	4085.00	
Perforations	26.00			4111.00	
Change Over Sub	1.00			4112.00	
Drill Pipe	62.00			4174.00	
Change Over Sub	1.00			4175.00	
Bullnose	3.00			4178.00	94.00 Bottom Packers & Anchor
Total Tool Length:	124.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66802

DST#: 2

ATTN: Andrew Stenzel

Test Start: 2020.11.29 @ 13:24:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

45000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1150.00	mcw 5m 95w (oil spots)	15.066

Total Length: 1150.00 ft Total Volume: 15.066 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

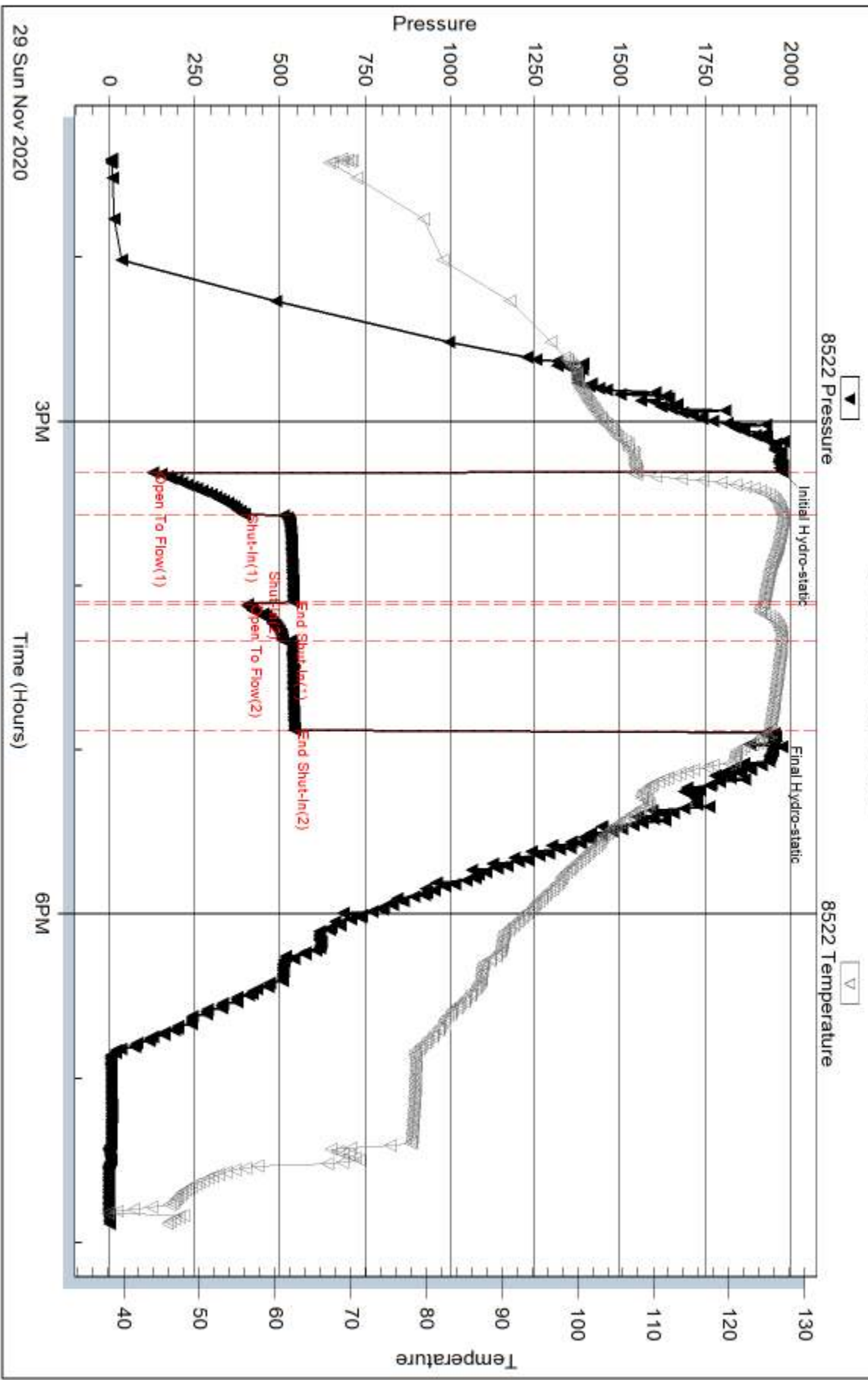
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .220 @ 50F = 45000ppm

Pressure vs. Time

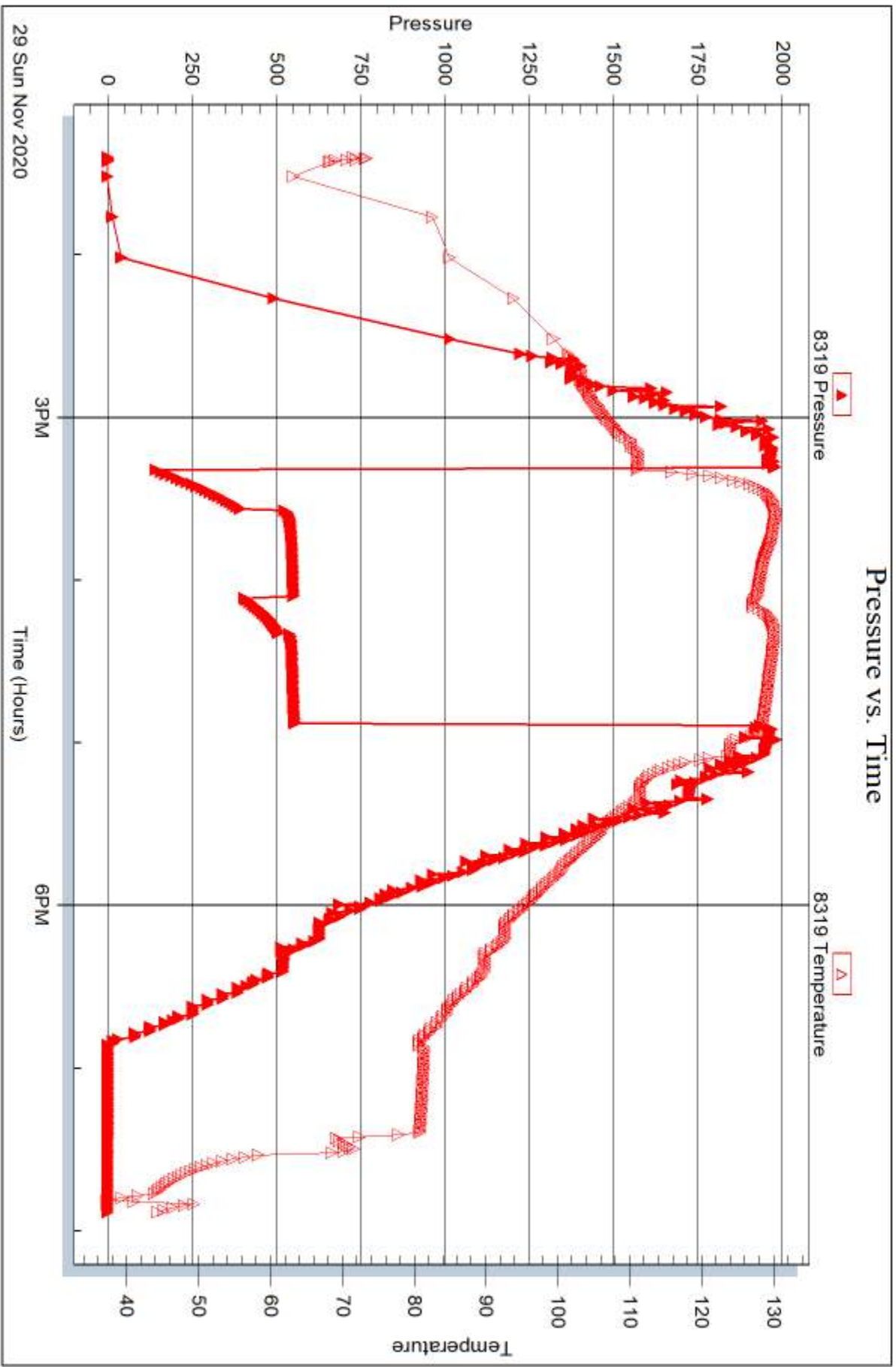


Serial #: 8319

Outside Joe Gerstner Oil

10-18s-31w Scott KS

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 66802

Printed: 2020.12.03 @ 15:18:49



DRILL STEM TEST REPORT

Prepared For: **Joe Gerstner Oil**

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

10-18s-31w Scott,KS

Weisenberger-Stoll Unit #1

Start Date: 2020.11.30 @ 07:20:00

End Date: 2020.11.30 @ 14:33:30

Job Ticket #: 66803 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2020.12.03 @ 14:24:49

Joe Gerstner Oil
Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
DST # 3
LKC K
2020.11.30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Joe Gerstner Oil
PO Box 509
Ness City, KS 67560
ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
Job Ticket: 66803 **DST#: 3**
Test Start: 2020.11.30 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:34:00
Time Test Ended: 14:33:30
Interval: **4182.00 ft (KB) To 4232.00 ft (KB) (TVD)**
Total Depth: 4232.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 78
Reference Elevations: 2922.00 ft (KB)
2917.00 ft (CF)
KB to GR/CF: 5.00 ft

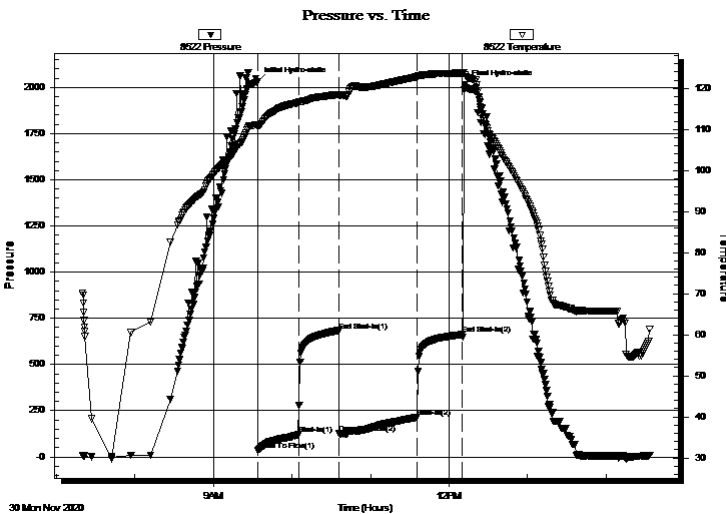
Serial #: 8522

Inside

Press@RunDepth: 214.75 psig @ 4183.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2020.11.30 End Date: 2020.11.30 Last Calib.: 2020.11.30
Start Time: 07:20:05 End Time: 14:33:29 Time On Btm: 2020.11.30 @ 09:33:45
Time Off Btm: 2020.11.30 @ 12:12:15

TEST COMMENT: 30- IF: BOB @ 14 min, built to 19.5".
30- IS: 1.4" return.
60- FF: BOB @ 16 min built to 35"
30- FS: 3" return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2030.11	111.17	Initial Hydro-static
1	33.84	110.61	Open To Flow (1)
32	119.97	116.50	Shut-In(1)
62	683.49	118.51	End Shut-In(1)
63	125.94	118.22	Open To Flow (2)
122	214.75	122.85	Shut-In(2)
157	661.93	123.73	End Shut-In(2)
159	2014.98	123.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
117.00	omcw 2o 30m 68w	0.58
108.00	gw ocm 15g 15w 30o 40m	1.51
250.00	go 30g 70o	3.51
0.00	270' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66803

DST#: 3

ATTN: Andrew Stenzel

Test Start: 2020.11.30 @ 07:20:00

Tool Information

Drill Pipe:	Length: 4050.00 ft	Diameter: 3.80 inches	Volume: 56.81 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 57.39 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4182.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4153.00	
Shut In Tool	5.00		Fluid	4158.00	
Hydraulic tool	5.00			4163.00	
Em Tool	3.00			4166.00	
Jars	5.00			4171.00	
Safety Joint	2.00			4173.00	
Packer	5.00		Inside	4178.00	30.00 Bottom Of Top Packer
Packer	4.00			4182.00	
Stubb	1.00			4183.00	
Recorder	0.00	8522	Inside	4183.00	
Recorder	0.00	8319	Outside	4183.00	
Perforations	13.00			4196.00	
Change Over Sub	1.00			4197.00	
Drill Pipe	31.00			4228.00	
Change Over Sub	1.00			4229.00	
Bullnose	3.00			4232.00	50.00 Bottom Packers & Anchor
Total Tool Length:	80.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66803

DST#: 3

ATTN: Andrew Stenzel

Test Start: 2020.11.30 @ 07:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

38000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
117.00	omcw 2o 30m 68w	0.575
108.00	gw ocm 15g 15w 30o 40m	1.515
250.00	go 30g 70o	3.507
0.00	270' GIP	0.000

Total Length: 475.00 ft Total Volume: 5.597 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .290 @ 45f = 38000ppm

Serial #: 8522

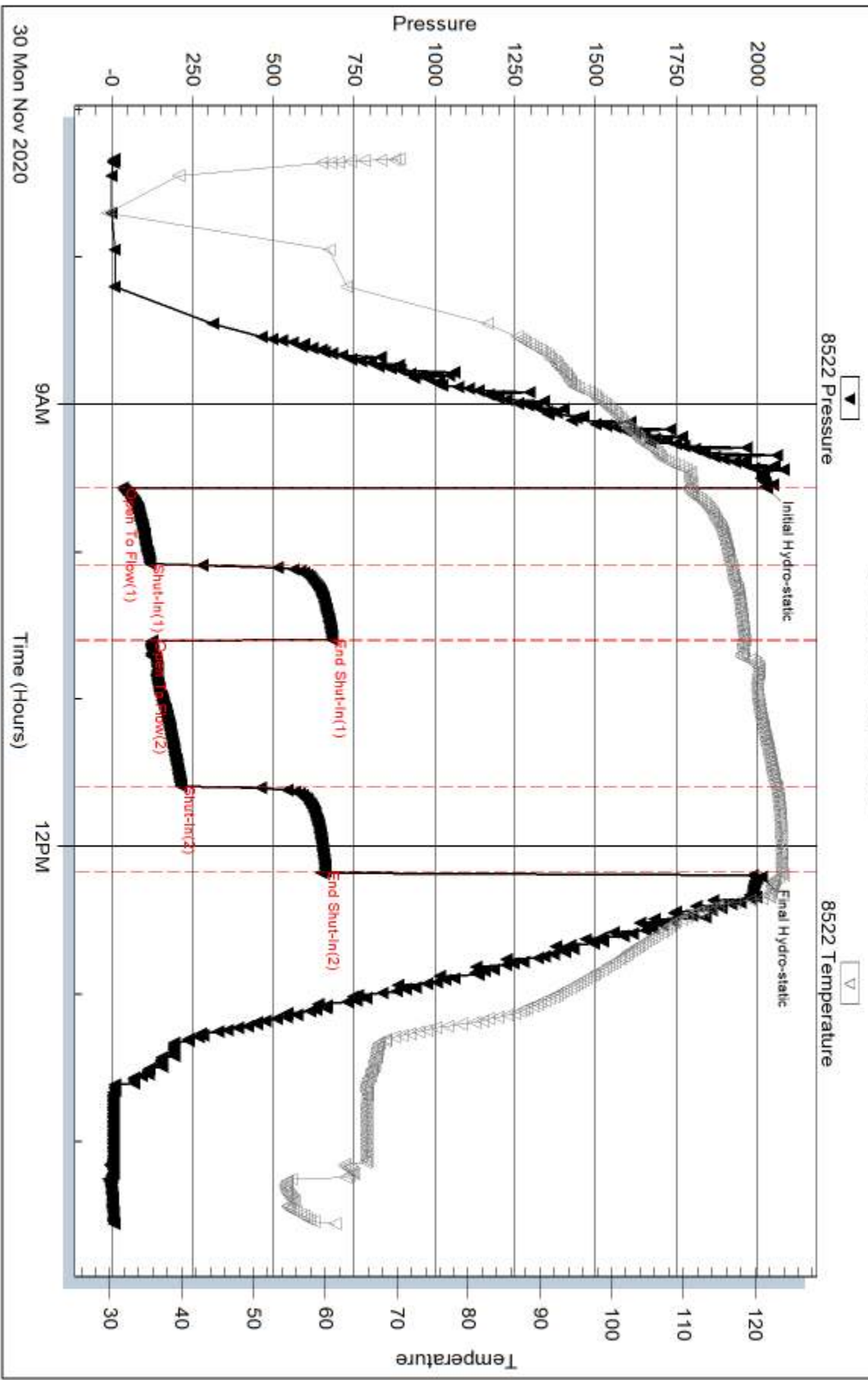
Inside

Joe Gerstner Oil

10-18s-31w Scott KS

DST Test Number: 3

Pressure vs. Time

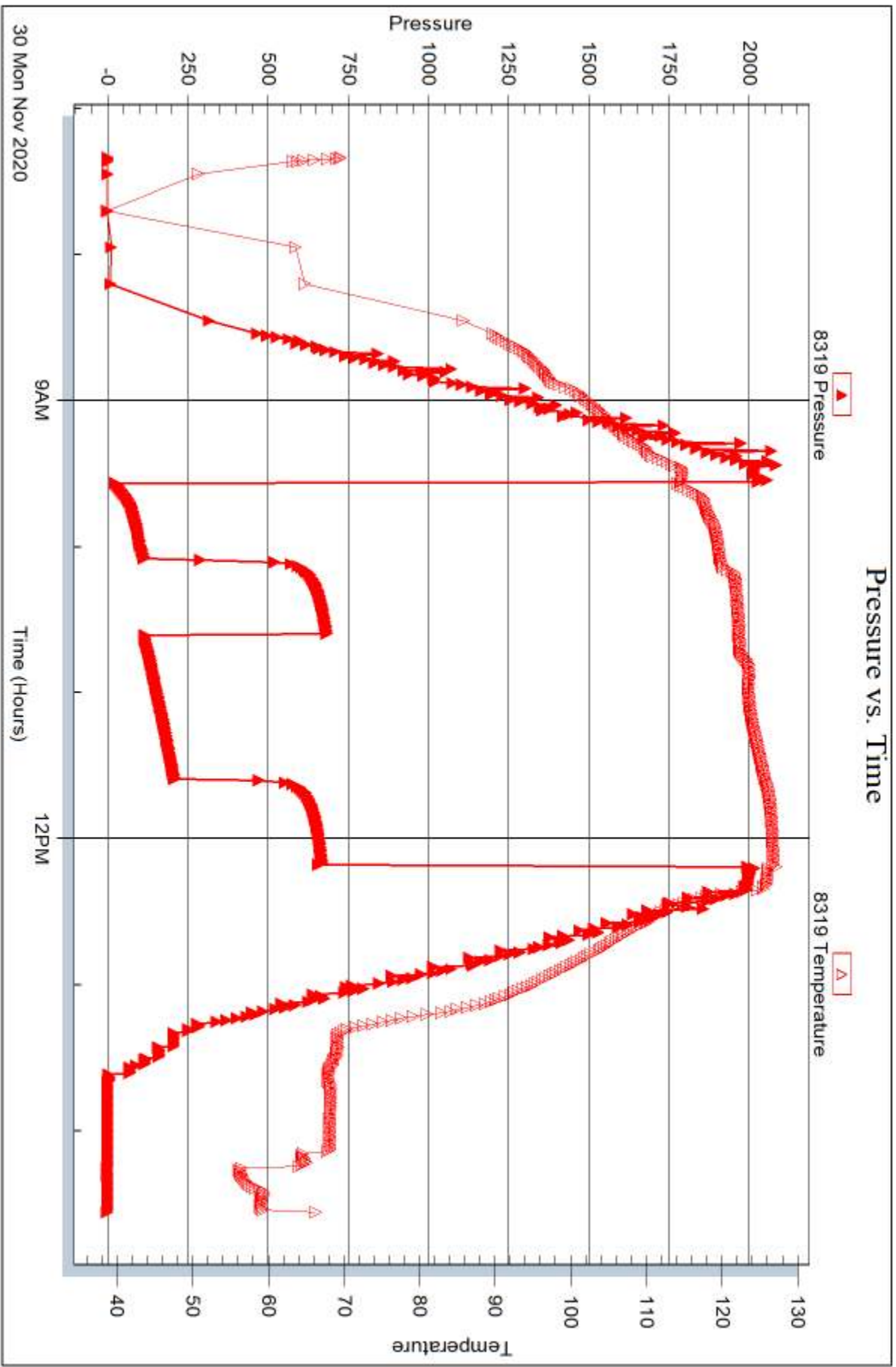


Serial #: 8319

Outside Joe Gerstner Oil

10-18s-31w Scott KS

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 66803

Printed: 2020.12.03 @ 14:24:50



DRILL STEM TEST REPORT

Prepared For: **Joe Gerstner Oil**

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

10-18s-31w Scott,KS

Weisenberger-Stoll Unit #1

Start Date: 2020.12.01 @ 07:04:00

End Date: 2020.12.01 @ 14:26:15

Job Ticket #: 66804 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2020.12.03 @ 14:23:30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Joe Gerstner Oil
PO Box 509
Ness City, KS 67560
ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
Job Ticket: 66804 **DST#: 4**
Test Start: 2020.12.01 @ 07:04:00

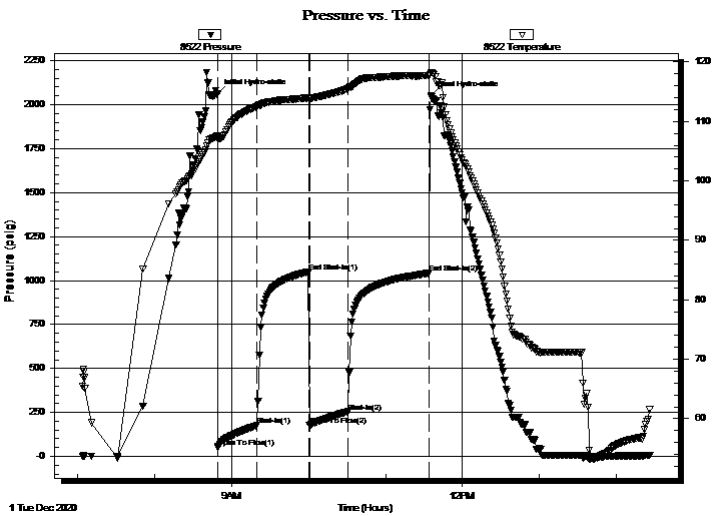
GENERAL INFORMATION:

Formation: **LKC L - Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:49:15
Time Test Ended: 14:26:15
Interval: **4231.00 ft (KB) To 4363.00 ft (KB) (TVD)**
Total Depth: 4363.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 78
Reference Elevations: 2922.00 ft (KB)
2917.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8522 Inside
Press@RunDepth: 252.66 psig @ 4232.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2020.12.01 End Date: 2020.12.01 Last Calib.: 2020.12.01
Start Time: 07:04:05 End Time: 14:26:14 Time On Btm: 2020.12.01 @ 08:49:00
Time Off Btm: 2020.12.01 @ 11:35:15

TEST COMMENT: 30- IF: BOB @ 10 built to 34"
40- IS: 2" return.
30- FF: BOB @ 10 min, built to 31"
60- FS: 9" return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.94	107.62	Initial Hydro-static
1	52.33	107.00	Open To Flow (1)
31	174.89	112.55	Shut-In(1)
71	1049.83	113.96	End Shut-In(1)
72	178.64	113.80	Open To Flow (2)
102	252.66	115.51	Shut-In(2)
165	1041.30	117.70	End Shut-In(2)
167	2052.46	118.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
540.00	gmco 40g 25m 35o	6.51
0.00	GIP- Not detected	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott, KS

Job Ticket: 66804

DST#: 4

ATTN: Andrew Stenzel

Test Start: 2020.12.01 @ 07:04:00

Tool Information

Drill Pipe:	Length: 4112.00 ft	Diameter: 3.80 inches	Volume: 57.68 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 58.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4231.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	132.00 ft			
Tool Length:	162.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4202.00	
Shut In Tool	5.00		Fluid	4207.00	
Hydraulic tool	5.00			4212.00	
Em Tool	3.00			4215.00	
Jars	5.00			4220.00	
Safety Joint	2.00			4222.00	
Packer	5.00		Inside	4227.00	30.00 Bottom Of Top Packer
Packer	4.00			4231.00	
Stubb	1.00			4232.00	
Recorder	0.00	8522	Inside	4232.00	
Recorder	0.00	8319	Outside	4232.00	
Perforations	31.00			4263.00	
Change Over Sub	1.00			4264.00	
Drill Pipe	95.00			4359.00	
Change Over Sub	1.00			4360.00	
Bullnose	3.00			4363.00	132.00 Bottom Packers & Anchor
Total Tool Length:	162.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Joe Gerstner Oil

Weisenberger-Stoll Unit #1

PO Box 509
Ness City, KS 67560

10-18s-31w Scott,KS

Job Ticket: 66804

DST#: 4

ATTN: Andrew Stenzel

Test Start: 2020.12.01 @ 07:04:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
540.00	gmco 40g 25m 35o	6.509
0.00	GIP- Not detected	0.000

Total Length: 540.00 ft Total Volume: 6.509 bbf

Num Fluid Samples: 0

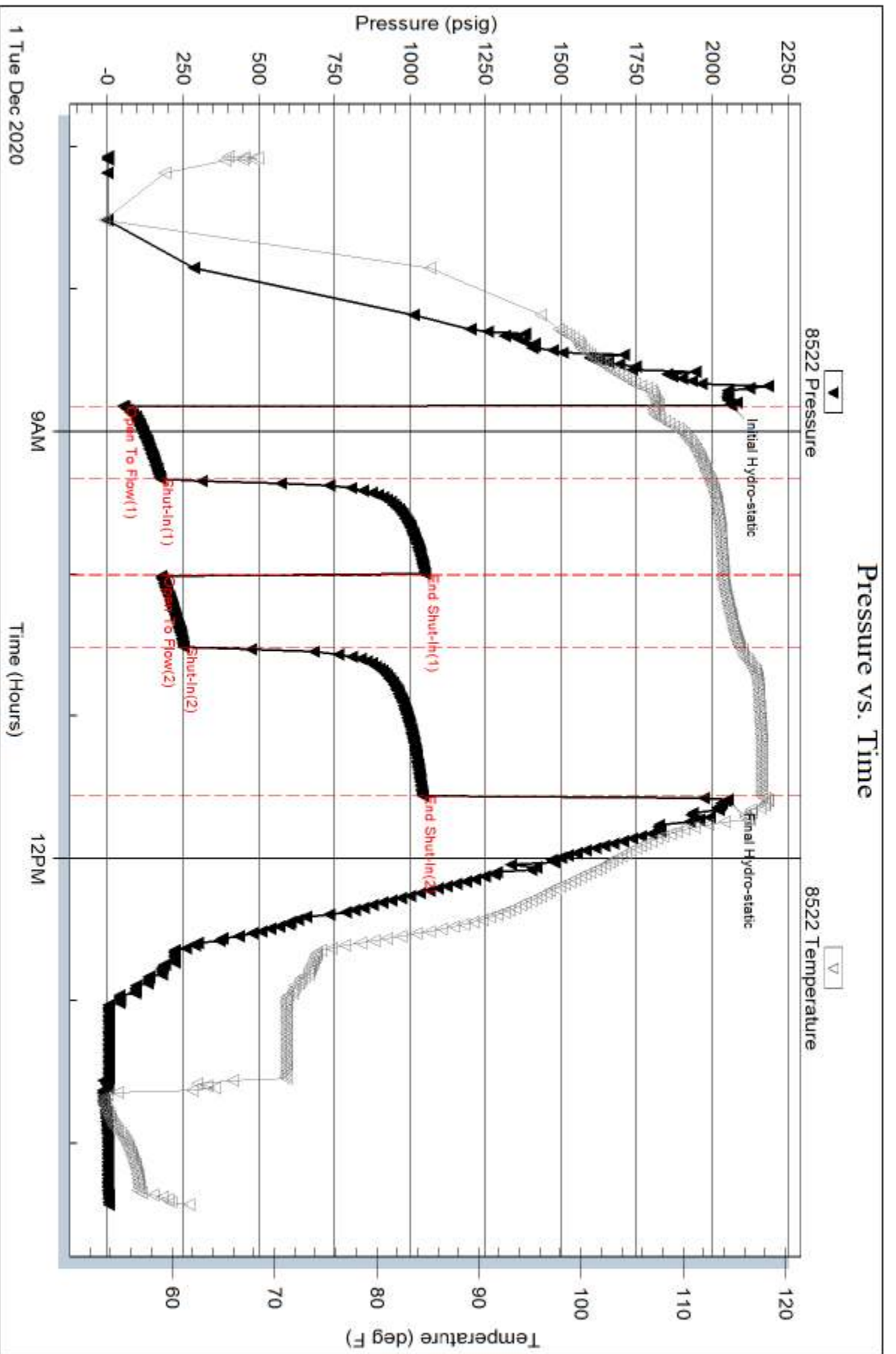
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8319

Outside Joe Gerstner Oil

10-18s-31w Scott KS

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 66804

Printed: 2020.12.03 @ 14:23:32



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66600

NO.

Well Name & No. Weisenberger-Stoll Unit #1 Test No. 1 Date 11/28/2020
 Company Joe Gerstner Oil Elevation 2922 KB 2917 GL
 Address PO Box 509 Noss City Mo 67560
 Co. Rep / Geo. Andrew Stenzel Rig Martin 102
 Location: Sec. 10 Twp 18S Rge. 31W Co. Scott State Ks

Interval Tested 3989-4014 Zone Tested LKC E
 Anchor Length 25' Drill Pipe Run 3861 Mud Wt. _____
 Top Packer Depth 3984 Drill Collars Run 117 Vis _____
 Bottom Packer Depth 3989 Wt. Pipe Run 0 WL _____
 Total Depth 4014 Chlorides _____ ppm System LCM _____
 Blow Description IF: 2" blow
ISF: No return.
FF: 2" blow.
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>oil</u>		<u>100%</u>		
<u>60</u>	<u>OCM</u>		<u>30%</u>	<u>70%</u>	
____	____	%gas	%oil	%water	%mud
____	____	%gas	%oil	%water	%mud
____	____	%gas	%oil	%water	%mud

Rec Total 62 BHT 115 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1914 Test 1300 T-On Location 1100
 (B) First Initial Flow 23 Jars 250 T-Started 1224
 (C) First Final Flow 32 Safety Joint 75 T-Open 1429
 (D) Initial Shut-In 885 Circ Sub 4C T-Pulled 1630
 (E) Second Initial Flow 37 Hourly Standby _____ T-Out 1843
 (F) Second Final Flow 49 Mileage 23 AT 23 Comments _____
 (G) Final Shut-In 874 Sampler _____
 (H) Final Hydrostatic 1884 Straddle _____ EM Tool 350
 Shale Packer _____ Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1648
 Sub Total 1648 MP/DST Disc't _____

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

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 66802

Well Name & No. Weisenberger-Stoll Unit #1 Test No. 2 Date 11/29/2020
 Company Joe Gerstner O.I. Elevation 2922 KB 2917 GL
 Address PO Box 509 Nass City Ks 67560
 Co. Rep / Geo. Andrew Stenzel Rig Mudm 102
 Location: Sec. 10 Twp 18s Rge. 31w Co. Scott State Ks

Interval Tested 4084 - 4178 Zone Tested LKL - H-I-J
 Anchor Length 94' Drill Pipe Run 3955 Mud Wt. 9.1
 Top Packer Depth 4079 Drill Collars Run 117 Vis 51
 Bottom Packer Depth 4084 Wt. Pipe Run 0 WL 7.2
 Total Depth 4178 Chlorides 3000 ppm System LCM 1#
 Blow Description IF BOB @ 2 min built to 80"
ISI No return.
FF BOB @ 5 min built to 31"
ISI No return.

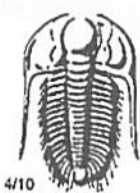
Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>mcw</u>			<u>95</u>	<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1150 BHT - Gravity - API RW 220 @ 50 °F Chlorides 45000 ppm

(A) Initial Hydrostatic <u>1978</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>1230</u>
(B) First Initial Flow <u>127</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1324</u>
(C) First Final Flow <u>396</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1519</u>
(D) Initial Shut-In <u>540</u>	<input checked="" type="checkbox"/> Circ Sub <u>H/L</u>	T-Pulled <u>1653</u>
(E) Second Initial Flow <u>406</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1954</u>
(F) Second Final Flow <u>508</u>	<input checked="" type="checkbox"/> Mileage <u>23 RT 23</u>	Comments
(G) Final Shut-In <u>544</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1954</u>	<input type="checkbox"/> Straddle	<input checked="" type="checkbox"/> EM Tool <u>350</u>
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1648</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1648</u>	

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 66803

Well Name & No. Weisenberger-Stoll Unit #1 Test No. 3 Date 11/30/2020
 Company Joe Gerstner Oil Elevation 2922 KB 2917 GL
 Address PO Box 509 Moss City Ks 67560
 Co. Rep / Geo. Andrew Stenzel Rig Mufm 102
 Location: Sec. 10 Twp 18S Rge. 31W Co. Scott State Ks

Interval Tested 4182 - 4232 Zone Tested LKC K
 Anchor Length 50 Drill Pipe Run 4050 Mud Wt. 9.2
 Top Packer Depth 4177 Drill Collars Run 117 Vis 51
 Bottom Packer Depth 4182 Wt. Pipe Run 0 WL 7.2
 Total Depth 4232 Chlorides 3000 ppm System LCM 1#
 Blow Description IF BOB@ 14 min built to 19.5" 195"
ISI 1.4" return.
FF BOB@ 16 min. built to 35"
FSI 3" return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>250</u>	<u>60</u>	<u>30</u>	<u>70</u>		
<u>108</u>	<u>GWOCM</u>	<u>15</u>	<u>30</u>	<u>15</u>	<u>40</u>
<u>117</u>	<u>OMCW</u>		<u>2</u>	<u>68</u>	<u>30</u>
	<u>270' GIP</u>				

Rec Total 475 BHT 127 Gravity 33 API RW .299 @ 45 °F Chlorides 38,000 ppm

(A) Initial Hydrostatic <u>2030</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>0500</u>
(B) First Initial Flow <u>33</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0720</u>
(C) First Final Flow <u>119</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0931</u>
(D) Initial Shut-In <u>683</u>	<input checked="" type="checkbox"/> Circ Sub <u>4/c</u>	T-Pulled <u>1202</u>
(E) Second Initial Flow <u>125</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1434</u>
(F) Second Final Flow <u>214</u>	<input type="checkbox"/> Mileage <u>23</u>	Comments
(G) Final Shut-In <u>661</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2014</u>	<input type="checkbox"/> Straddle	<input checked="" type="checkbox"/> EM Tool <u>350</u>
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1648</u>
	Sub Total <u>1648</u>	MP/DST Disc't

Approved By _____ Our Representative [Signature]
 TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 66804

Well Name & No. Wesenberg-Stoll Unit #1 Test No. 4 Date 12/31/2020
 Company Joe Gerstner Oil Elevation _____ KB _____ GL _____
 Address PO Box 509 Ness City, KS 67560
 Co. Rep / Geo. Andrew Stenzel Rig M. Sten 102
 Location: Sec. 10 Twp 18S Rge. 31W Co. Scott State KS

Interval Tested 4231 - 4363 Zone Tested LKC ~~K~~ - 10 minutes
 Anchor Length 937' Drill Pipe Run 412 Mud Wt. 9.2
 Top Packer Depth 4226 Drill Collars Run 117 Vis 56
 Bottom Packer Depth 4231 Wt. Pipe Run 0 WL ~~7.2~~ 7.2
 Total Depth 4363 Chlorides 3000 ppm System LCM 2#
 Blow Description IF BOB@ 10 min built to 34"
ISI 2" return.
PF BOB@ 10 min built to 31"
FSI 9" return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>S40</u>	<u>GMCO</u>	<u>40</u>	<u>35</u>	<u>25</u>	
Rec	Feet of	%gas	%oil	%water	%mud
	<u>GIP - Not detected</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total S40 BHT 118 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2063</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>0615</u>
(B) First Initial Flow <u>52</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0704</u>
(C) First Final Flow <u>174</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0850</u>
(D) Initial Shut-In <u>1049</u>	<input checked="" type="checkbox"/> Circ Sub <u>46</u>	T-Pulled <u>1130</u>
(E) Second Initial Flow <u>178</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>1500</u>
(F) Second Final Flow <u>252</u>	<input checked="" type="checkbox"/> Mileage <u>2647 x 2</u> 46	Comments _____
(G) Final Shut-In <u>1041</u>	<input type="checkbox"/> Sampler _____	<u>90 Tool 2100 12/02</u>
(H) Final Hydrostatic <u>2052</u>	<input type="checkbox"/> Straddle _____	<input checked="" type="checkbox"/> EM Tool <u>350</u>
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>40</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Extra Copies _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility _____	Total <u>1671</u>
	Sub Total <u>1671</u>	MP/DST Disc _____

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



Home
(785) 798-2400

Andrew Stenzel Geologist

Ness City, Kansas



Cell
(785) 798-5977

Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Weisenberger-Stoll Unit #1
API: 15-171-21266-00-00
Location: SW-NE-NW-SE Sec. 10-18S-31W (Scott Co)
License Number: _____ Region: KANSAS
Spud Date: 11/24/2020 Drilling Completed: 12/3/2020
Surface Coordinates: 2003' FSL & 1881' FEL

Bottom Hole
Coordinates:
Ground Elevation (ft): 2917 K.B. Elevation (ft): 2922
Logged Interval (ft): 2500 To: TD Total Depth (ft): 4516
Formation: MISSISSIPPIAN
Type of Drilling Fluid: Mud-Co Chemical

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Joe Gerstner Oil, LLC
Address: PO Box 509
Ness City, KS 67560

GEOLOGIST

Name: Andrew Stenzel
Company: Petroleum Geologist
Address: 501 S. Franklin
Ness City, KS 67560

Drilling Report

DAILY DRILLING REPORT:

11/24/2020 MIRU, ran surface casing
11/25/2020 Drilling @ 430'
11/26/2020 Drilling @ 2600'
11/27/2020 Drilling @ 3616'
11/28/2020 Drilling @ 3988', DST #1
11/29/2020 Circulating @ 4178', DST #2
11/30/2020 Tripping in with DST #3
12/1/2020 DST #4
12/2/2020 Drilling @ 4575', ran electric logs
12/3/2020 Ran production casing

Services

RIG: Murfin Drilling, Rig #102

MUD: MUDCO

LOGS: Gemini Wireline; CNDL, PE, DIL, ML

Casing Record

SURFACE Casing: Ran 5 jts new 8 5/8", 23# casing @ 219'

PRODUCTION Casing: Ran 114 jts used 5.5", 14# casing set @ 4615'. Landed plug w 1500#, held. DV tool @ 2949', closed @ 800#. Plug down @ 4:45 pm.

Formation Tops

Sample Tops		Log Tops	
Anhy.	2198 (+724)	Anhy.	2196 (+726)
Base Anhy.	2259 (+663)	Base Anhy.	2257 (+665)
Heebner	3857 (-935)	Heebner	3854 (-932)
Lansing	3904 (-982)	Lansing	3900 (-978)
Muncie Cr	4086 (-1164)	Muncie Cr	4085 (-1163)
Stark Sh	4182 (-1260)	Stark Sh	4187 (-1265)
BKC	4271 (-1349)	BKC	4266 (-1344)
Marmaton	4322 (-1400)	Marmaton	4315 (-1393)
Pawnee	4390 (-1468)	Pawnee	4388 (-1466)
Myrick St.	4421 (-1569)	Myrick St.	4417 (-1495)
Ft. Scott	4440 (-1518)	Ft. Scott	4437 (-1515)
Cher. Sh.	4463 (-1541)	Cher. Sh.	4459 (-1537)
Miss.	4532 (-1610)	Miss.	4530 (-1608)
RTD	4620 (-1698)	LTD	4616 (-1694)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Joe Gerstner Oil

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1

10-18s-31w Scott,KS

Job Ticket: 66600 **DST#: 1**

Test Start: 2020.11.28 @ 12:24:00

GENERAL INFORMATION:

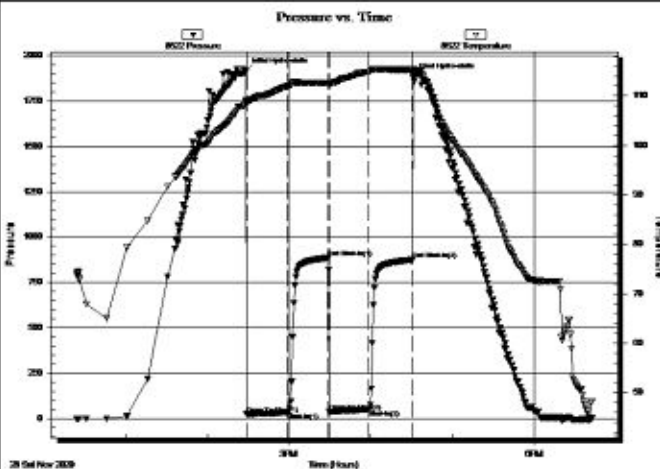
Formation: **LKC- E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:28:45
 Time Test Ended: 18:43:00
 Interval: **3989.00 ft (KB) To 4014.00 ft (KB) (TVD)**
 Total Depth: 4014.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 2922.00 ft (KB)
 2917.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8522

Inside

Press@RunDepth: 49.94 psig @ 3990.00 ft (KB)
 Start Date: 2020.11.28 End Date: 2020.11.28
 Start Time: 12:24:05 End Time: 18:42:59
 Capacity: 8000.00 psig
 Last Calib.: 2020.11.28
 Time On Btmr: 2020.11.28 @ 14:28:30
 Time Off Btmr: 2020.11.28 @ 16:31:30

TEST COMMENT: 30- IF: 2" blow .
 30- IS: No return.
 30- FF: 2" blow .
 30- FS: No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.53	109.03	Initial Hydro-static
1	23.44	108.50	Open To Flow (1)
31	32.28	112.00	Shut-In(1)
61	885.92	112.65	End Shut-In(1)
61	37.05	112.33	Open To Flow (2)
91	49.94	114.89	Shut-In(2)
123	874.55	115.29	End Shut-In(2)
123	1884.36	115.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	ocm 30o 70m	0.30
2.00	oil 100o	0.01

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Joe Gerstner Oil

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1

10-18s-31w Scott,KS

Job Ticket: 66802 **DST#:2**

Test Start: 2020.11.29 @ 13:24:00

GENERAL INFORMATION:

Formation: **LKC- H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:18:45

Time Test Ended: 19:53:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: **4084.00 ft (KB) To 4178.00 ft (KB) (TVD)**

Total Depth: 4178.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2922.00 ft (KB)

2917.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8522 Inside

Press@RunDepth: 508.00 psig @ 4085.00 ft (KB)

Start Date: 2020.11.29

End Date: 2020.11.29

Start Time: 13:24:05

End Time: 19:53:29

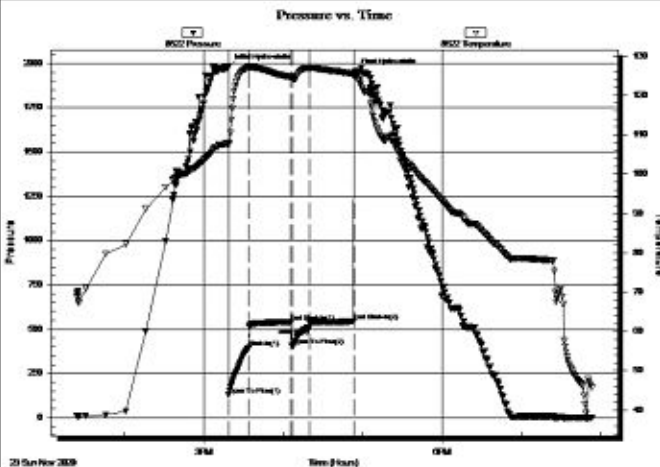
Capacity: 8000.00 psig

Last Calib.: 2020.11.29

Time On Btmr: 2020.11.29 @ 15:18:30

Time Off Btmr: 2020.11.29 @ 16:54:00

TEST COMMENT: 15- IF: BOB @ 2 min, built to 80".
30- IS: No return.
15- FF: BOB @ 5 min, built to 31"
30- FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1978.17	107.90	Initial Hydro-static
1	127.08	107.24	Open To Flow (1)
16	396.52	127.05	Shut-In(1)
48	540.01	124.64	End Shut-In(1)
48	406.99	124.49	Open To Flow (2)
62	508.00	126.85	Shut-In(2)
95	544.09	125.38	End Shut-In(2)
96	1954.31	125.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1150.00	mcw 5m 95w (oil spots)	15.07

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Joe Gerstner Oil
 PO Box 509
 Ness City, KS 67560
 ATTN: Andrew Stenzel

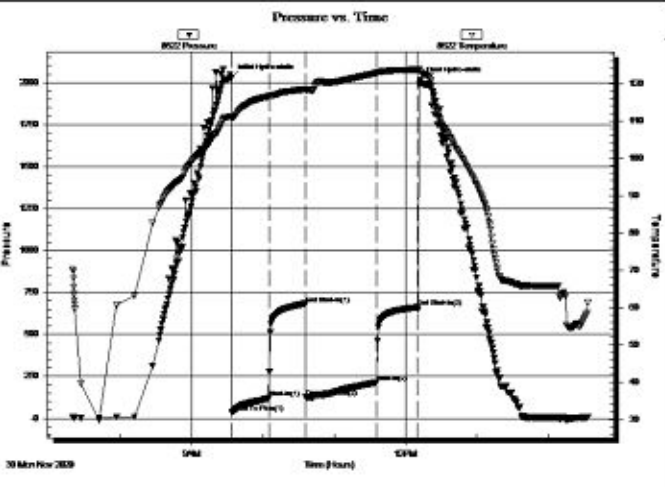
Weisenberger-Stoll Unit #1
10-18s-31w Scott,KS
 Job Ticket: 66803 **DST#: 3**
 Test Start: 2020.11.30 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:34:00
 Time Test Ended: 14:33:30
 Interval: **4182.00 ft (KB) To 4232.00 ft (KB) (TVD)**
 Total Depth: 4232.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 2922.00 ft (KB)
 2917.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8522 Inside
 Press@RunDepth: 214.75 psig @ 4183.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.11.30 End Date: 2020.11.30 Last Calib.: 2020.11.30
 Start Time: 07:20:05 End Time: 14:33:29 Time On Btmr: 2020.11.30 @ 09:33:45
 Time Off Btmr: 2020.11.30 @ 12:12:15

TEST COMMENT: 30- IF: BOB @ 14 min, built to 19.5".
 30- IS: 1.4" return.
 60- FF: BOB @ 16 min built to 35"
 30- FS: 3" return.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2030.11	111.17	Initial Hydro-static
1	33.84	110.61	Open To Flow (1)
32	119.97	116.50	Shut-In(1)
62	683.49	118.51	End Shut-In(1)
63	125.94	118.22	Open To Flow (2)
122	214.75	122.85	Shut-In(2)
157	661.93	123.73	End Shut-In(2)
159	2014.98	123.22	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
117.00	omcw 2o 30m 68w	0.58
108.00	gw ocm 15g 15w 30o 40m	1.51
250.00	go 30g 70o	3.51
0.00	270' GIP	0.00

Gas Rates			
	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests
 Trilobite Testing, Inc



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Joe Gerstner Oil

PO Box 509
Ness City, KS 67560

ATTN: Andrew Stenzel

Weisenberger-Stoll Unit #1

10-18s-31w Scott,KS

Job Ticket: 66804 **DST#: 4**

Test Start: 2020.12.01 @ 07:04:00

GENERAL INFORMATION:

Formation: **LKC L - Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:49:15

Time Test Ended: 14:26:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: **4231.00 ft (KB) To 4363.00 ft (KB) (TVD)**

Total Depth: 4363.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2922.00 ft (KB)

2917.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8522 Inside

Press@RunDepth: 252.66 psig @ 4232.00 ft (KB)

Start Date: 2020.12.01 End Date: 2020.12.01

Start Time: 07:04:05 End Time: 14:26:14

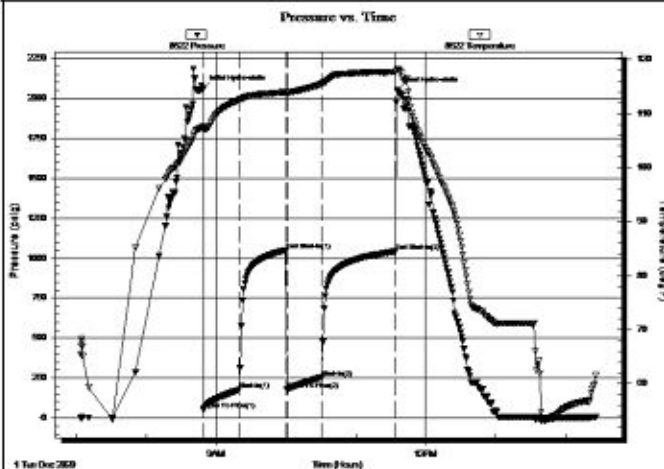
Capacity: 8000.00 psig

Last Calib.: 2020.12.01

Time On Btmr: 2020.12.01 @ 08:49:00

Time Off Btmr: 2020.12.01 @ 11:35:15

TEST COMMENT: 30- IF: BOB @ 10 built to 34"
40- ISL 2" return.
30- FF: BOB @ 10 min, built to 31"
60- FS: 9" return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.94	107.62	Initial Hydro-static
1	52.33	107.00	Open To Flow (1)
31	174.89	112.55	Shut-In(1)
71	1049.83	113.96	End Shut-In(1)
72	178.64	113.80	Open To Flow (2)
102	252.66	115.51	Shut-In(2)
165	1041.30	117.70	End Shut-In(2)
167	2052.46	118.19	Final Hydro-static

Recovery


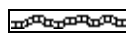
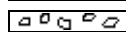
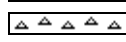
Length (ft)	Description	Volume (bbl)
540.00	gmco 40g 25m 35o	6.51
0.00	GIP- Not detected	0.00

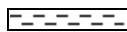



* Recovery from multiple tests



Gas Rates

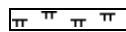

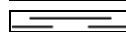
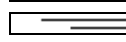
Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

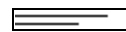



ROCK TYPES

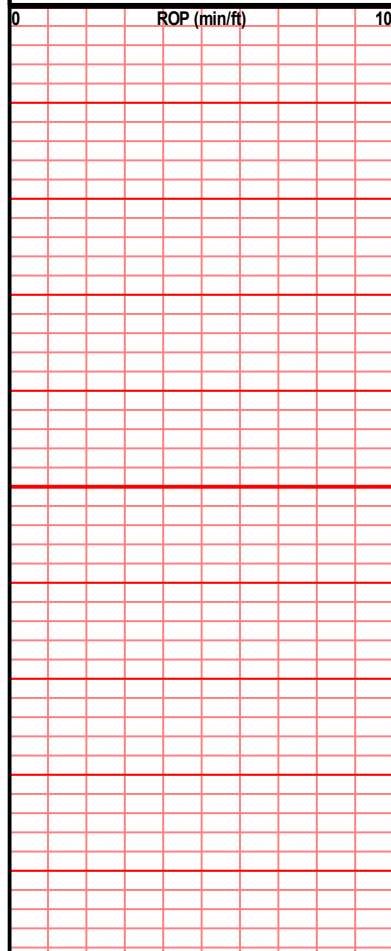
-  Anhy
-  Bent
-  Brec
-  Cht

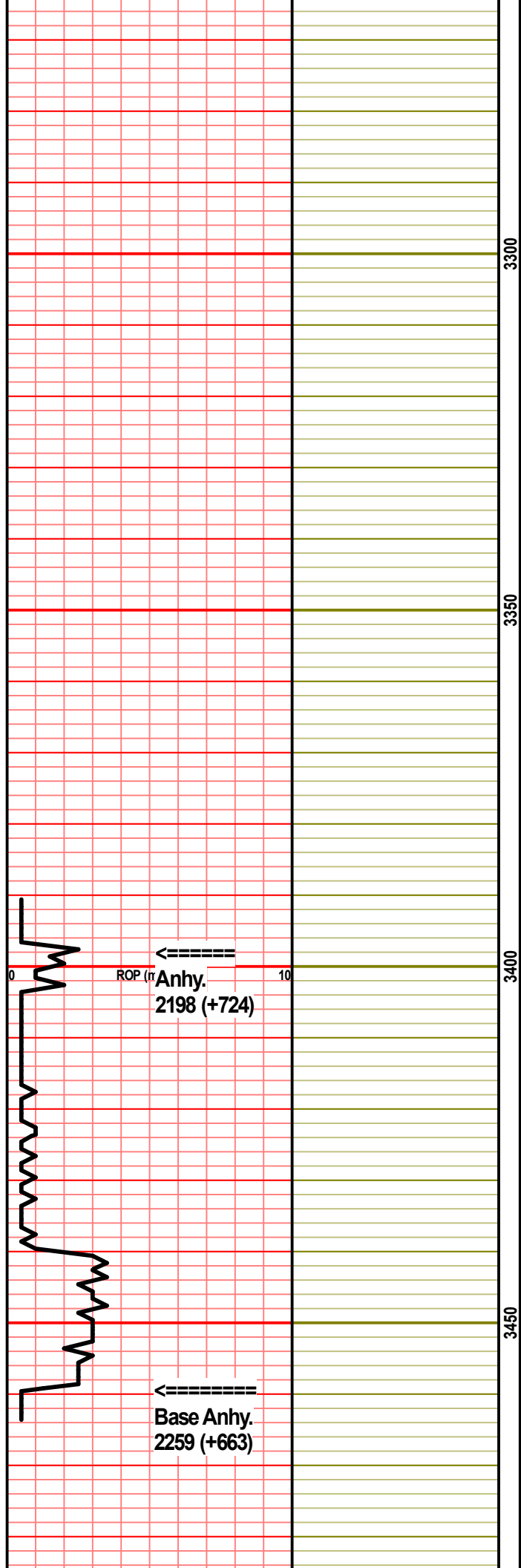
-  Clyst
-  Carb shale
-  Congl
-  Dol

-  Gyp
-  Igne
-  Lmst
-  Meta

-  Mrlst
-  Salt
-  Shale
-  Shcol

-  Shgy
-  Sltst
-  Ss
-  Till

ROP ROP (min/ft)	Misc	MD <small>Of Strips</small>	% Lithology	Geological Descriptions	DST
<div style="display: flex; justify-content: space-between; padding: 5px;"> 0 ROP (min/ft) 10 </div> 		31			
		3150			
<div style="display: flex; justify-content: space-between; padding: 5px;"> 0 ROP (min/ft) 10 </div> 		3200			
		3250			



3300

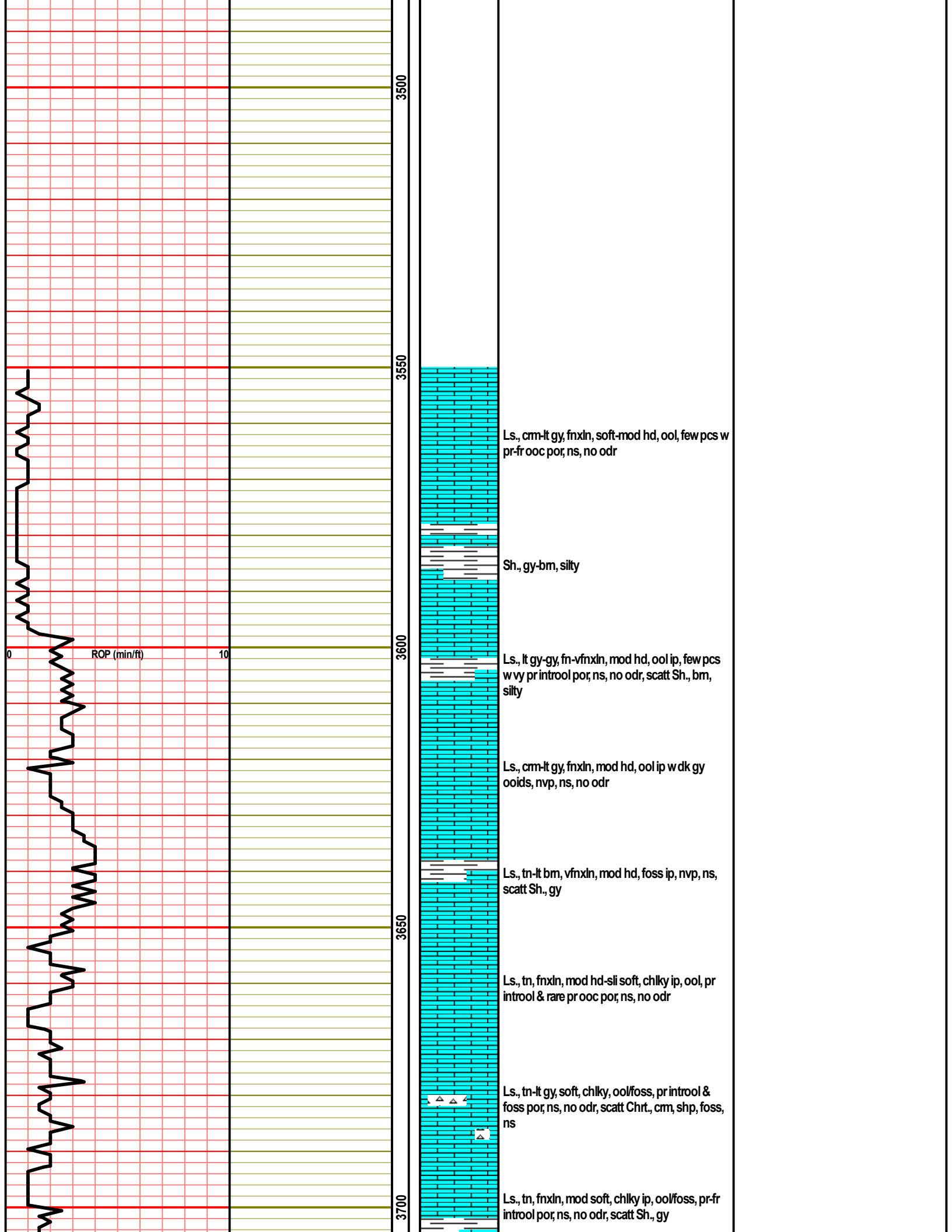
3350

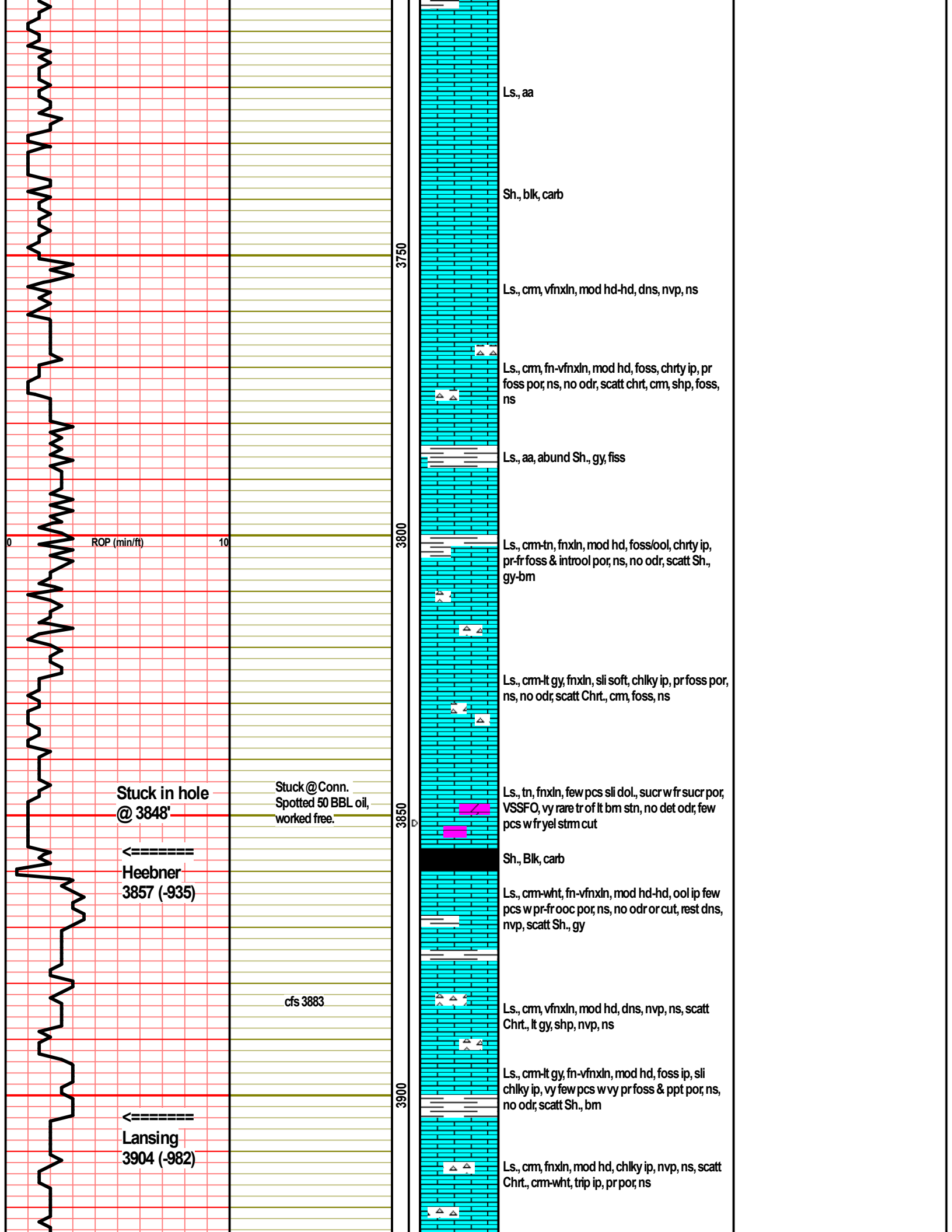
3400

3450

ROP (m Anhy.
2198 (+724))

Base Anhy.
2259 (+663)





Ls., aa

Sh., blk, carb

3750

Ls., cm, vfnxn, mod hd-hd, dns, nvp, ns

Ls., cm, fn-vfnxn, mod hd, foss, chrty ip, pr foss por, ns, no odr, scatt chrt, cm, shp, foss, ns

Ls., aa, abund Sh., gy, fiss

3800

Ls., cm-tn, fnxln, mod hd, foss/ool, chrty ip, pr-fr foss & introol por, ns, no odr, scatt Sh., gy-bm

Ls., cm-lt gy, fnxln, sli soft, chlky ip, pr foss por, ns, no odr, scatt Chrt., cm, foss, ns

Stuck in hole @ 3848'

Stuck @ Conn. Spotted 50 BBL oil, worked free.

3850

Ls., tn, fnxln, few pcs sli dol., sucr w fr sucr por, VSSFO, vy rare tr of lt bm stn, no det odr, few pcs w fr yel strm cut

Heebner 3857 (-935)

Sh., Blk, carb

Ls., cm-wht, fn-vfnxn, mod hd-hd, ool ip few pcs w pr-fr ooc por, ns, no odr or cut, rest dns, nvp, scatt Sh., gy

cfs 3883

3900

Ls., cm, vfnxn, mod hd, dns, nvp, ns, scatt Chrt., lt gy, shp, nvp, ns

Ls., cm-lt gy, fn-vfnxn, mod hd, foss ip, sli chlky ip, vy few pcs w vy pr foss & ppt por, ns, no odr, scatt Sh., bm

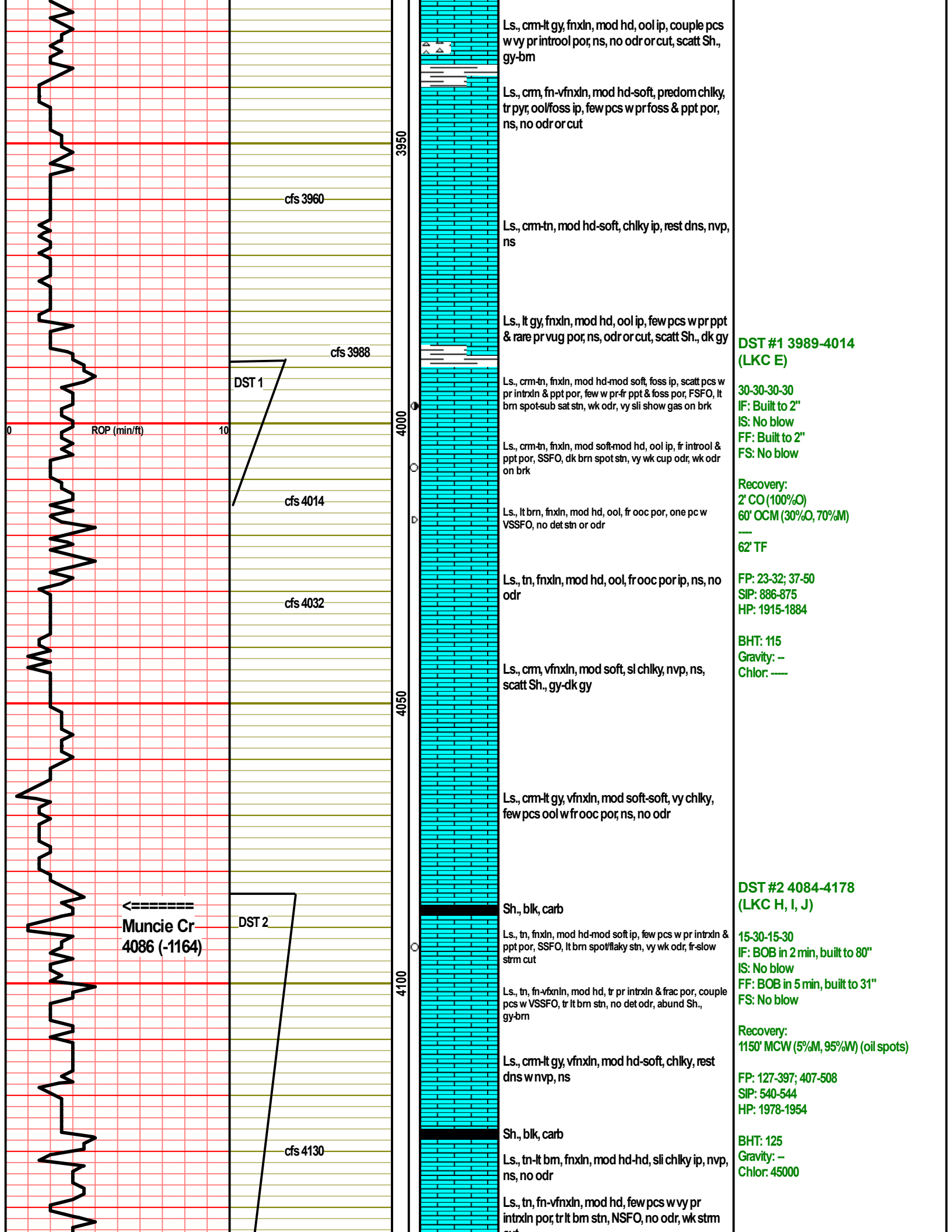
Lansing 3904 (-982)

Ls., cm, fnxln, mod hd, chlky ip, nvp, ns, scatt Chrt., cm-wht, trip ip, pr por, ns

ROP (min/ft)

0

10



Ls., crm-lt gy, fnxln, mod hd, ool ip, couple pcs w vy pr introol por, ns, no odr or cut, scatt Sh., gy-bm

Ls., crm, fn-vfnxln, mod hd-soft, predom chlky, tr pyr, ool/foss ip, few pcs w prfoss & ppt por, ns, no odr or cut

3950

cfs 3960

Ls., crm-tn, mod hd-soft, chlky ip, rest dns, nvp, ns

Ls., lt gy, fnxln, mod hd, ool ip, few pcs w pr ppt & rare pr vug por, ns, odr or cut, scatt Sh., dk gy

cfs 3988

DST 1

DST #1 3989-4014 (LKC E)

Ls., crm-tn, fnxln, mod hd-mod soft, foss ip, scatt pcs w pr intrxn & ppt por, few w pr-fr ppt & foss por, FSFO, lt brn spot-sub sat stn, wk odr, vy sli show gas on brk

30-30-30-30
IF: Built to 2"
IS: No blow
FF: Built to 2"
FS: No blow

Ls., crm-tn, fnxln, mod soft-mod hd, ool ip, fr introol & ppt por, SSFO, dk brn spot stn, vy wk cup odr, wk odr on brk

Recovery:
2' CO (100%O)
60' OCM (30%O, 70%M)
—
62' TF

Ls., lt brn, fnxln, mod hd, ool, fr ooc por, one pc w VSSFO, no det stn or odr

cfs 4014

Ls., tn, fnxln, mod hd, ool, frooc por ip, ns, no odr

cfs 4032

FP: 23-32; 37-50
SIP: 886-875
HP: 1915-1884

Ls., crm, vfnxln, mod soft, sl chlky, nvp, ns, scatt Sh., gy-dk gy

BHT: 115
Gravity: —
Chlor: —

4050

Ls., crm-lt gy, vfnxln, mod soft-soft, vy chlky, few pcs ool w frooc por, ns, no odr

← Muncie Cr 4086 (-1164)

DST 2

DST #2 4084-4178 (LKC H, I, J)

Sh., blk, carb

Ls., tn, fnxln, mod hd-mod soft ip, few pcs w pr intrxn & ppt por, SSFO, lt brn spot/flaky stn, vy wk odr, fr-slow strm cut

15-30-15-30
IF: BOB in 2 min, built to 80"
IS: No blow
FF: BOB in 5 min, built to 31"
FS: No blow

Ls., tn, fn-vfnxln, mod hd, tr pr intrxn & frac por, couple pcs w VSSFO, tr lt brn stn, no det odr, abund Sh., gy-brn

Recovery:
1150' MCW (5%M, 95%W) (oil spots)

Ls., crm-lt gy, vfnxln, mod hd-soft, chlky, rest dns w nvp, ns

FP: 127-397; 407-508
SIP: 540-544
HP: 1978-1954

4100

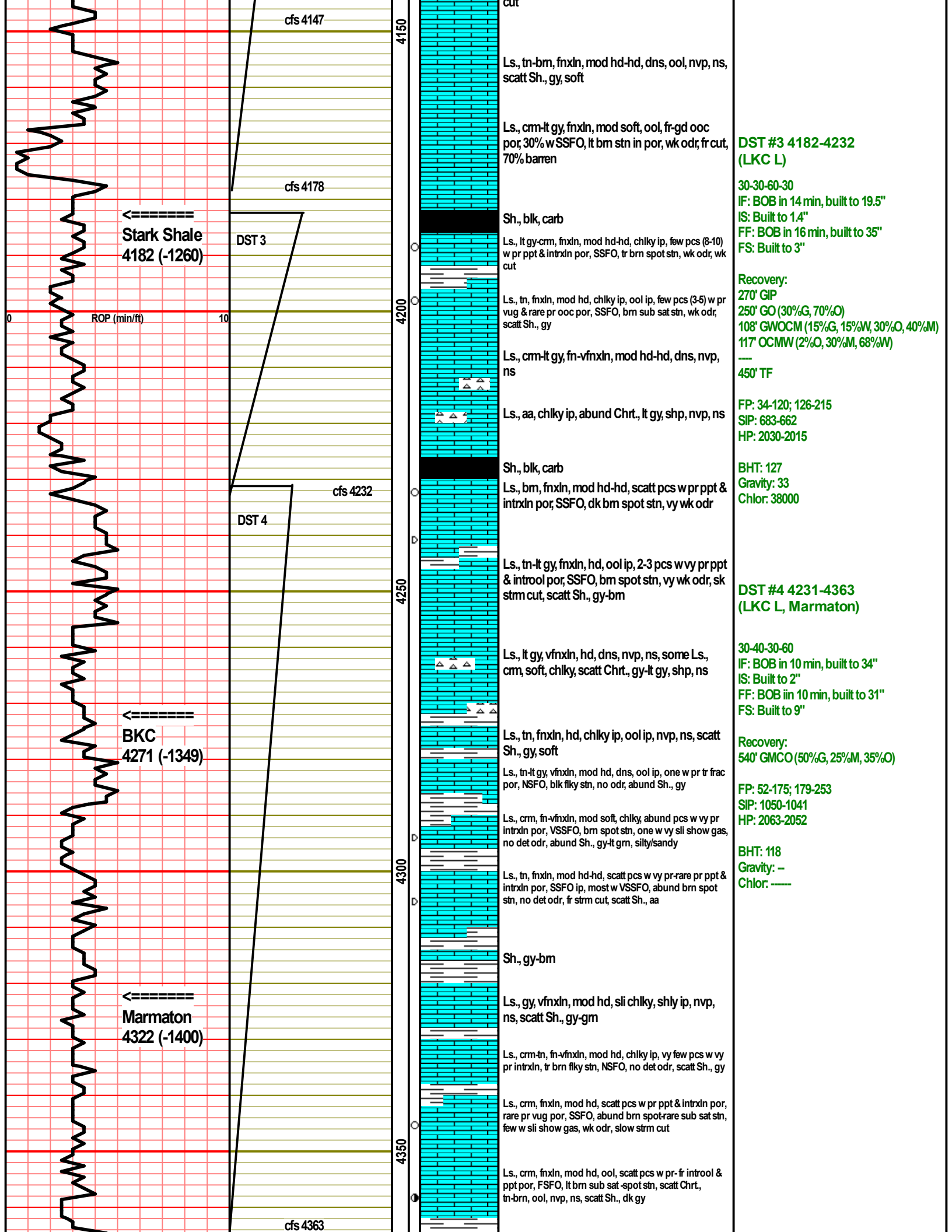
Sh., blk, carb

Ls., tn-lt brn, fnxln, mod hd-hd, sli chlky ip, nvp, ns, no odr

BHT: 125
Gravity: —
Chlor: 45000

cfs 4130

Ls., tn, fn-vfnxln, mod hd, few pcs w vy pr intrxn por, tr lt brn stn, NSFO, no odr, wk strm cut



cfs 4147

4150

Ls., tn-bm, fnxln, mod hd-hd, dns, ool, nvp, ns, scatt Sh., gy, soft

Ls., crm-lt gy, fnxln, mod soft, ool, fr-gd ooc por, 30% w SSFO, lt brn stn in por, wk odr, fr cut, 70% barren

DST #3 4182-4232 (LKC L)

30-30-60-30
IF: BOB in 14 min, built to 19.5"
IS: Built to 1.4"
FF: BOB in 16 min, built to 35"
FS: Built to 3"

cfs 4178

← Stark Shale 4182 (-1260)

DST 3

Sh., blk, carb

Ls., lt gy-crm, fnxln, mod hd-hd, chlky ip, few pcs (8-10) w pr ppt & intrxn por, SSFO, tr brn spot stn, wk odr, wk cut

Ls., tn, fnxln, mod hd, chlky ip, ool ip, few pcs (3-5) w pr vug & rare pr ooc por, SSFO, brn sub sat stn, wk odr, scatt Sh., gy

Recovery:
270' GIP
250' GO (30%G, 70%O)
108' GWOCM (15%G, 15%W, 30%O, 40%M)
117' OCMW (2%O, 30%M, 68%W)

ROP (min/ft)

10

4200

Ls., crm-lt gy, fn-vfnxln, mod hd-hd, dns, nvp, ns

Ls., aa, chlky ip, abund Chrt., lt gy, shp, nvp, ns

FP: 34-120; 126-215
SIP: 683-662
HP: 2030-2015

cfs 4232

DST 4

Sh., blk, carb

Ls., brn, fnxln, mod hd-hd, scatt pcs w pr ppt & intrxn por, SSFO, dk brn spot stn, vy wk odr

BHT: 127
Gravity: 33
Chlor: 38000

Ls., tn-lt gy, fnxln, hd, ool ip, 2-3 pcs wvy pr ppt & introol por, SSFO, brn spot stn, vy wk odr, sk stm cut, scatt Sh., gy-bm

DST #4 4231-4363 (LKC L, Marmaton)

Ls., lt gy, vfnxln, hd, dns, nvp, ns, some Ls., crm, soft, chlky, scatt Chrt., gy-lt gy, shp, ns

30-40-30-60
IF: BOB in 10 min, built to 34"
IS: Built to 2"
FF: BOB in 10 min, built to 31"
FS: Built to 9"

← BKC 4271 (-1349)

Ls., tn, fnxln, hd, chlky ip, ool ip, nvp, ns, scatt Sh., gy, soft

Recovery:
540' GMCO (50%G, 25%M, 35%O)

Ls., tn-lt gy, vfnxln, mod hd, dns, ool ip, one w pr tr frac por, NSFO, blk flky stn, no odr, abund Sh., gy

FP: 52-175; 179-253
SIP: 1050-1041
HP: 2063-2052

Ls., crm, fn-vfnxln, mod soft, chlky, abund pcs w vy pr intrxn por, VSSFO, brn spot stn, one w vy sli show gas, no det odr, abund Sh., gy-lt gm, silty/sandy

BHT: 118
Gravity: -
Chlor: -

4300

Ls., tn, fnxln, mod hd-hd, scatt pcs w vy pr-rare pr ppt & intrxn por, SSFO ip, most w VSSFO, abund brn spot stn, no det odr, fr stm cut, scatt Sh., aa

Sh., gy-bm

Ls., gy, vfnxln, mod hd, sli chlky, shly ip, nvp, ns, scatt Sh., gy-gm

← Marmaton 4322 (-1400)

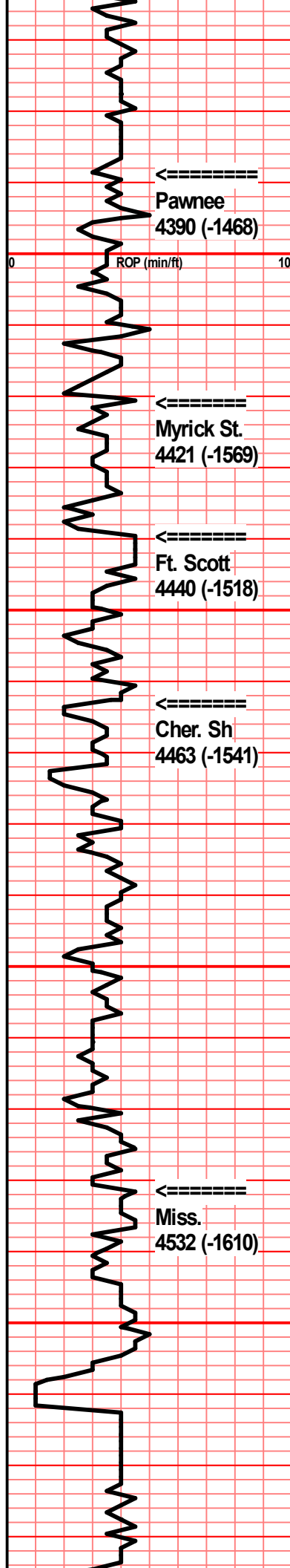
Ls., crm-tn, fn-vfnxln, mod hd, chlky ip, vy few pcs w vy pr intrxn, tr brn flky stn, NSFO, no det odr, scatt Sh., gy

Ls., crm, fnxln, mod hd, scatt pcs w pr ppt & intrxn por, rare pr vug por, SSFO, abund brn spot-rare sub sat stn, few w sli show gas, wk odr, slow stm cut

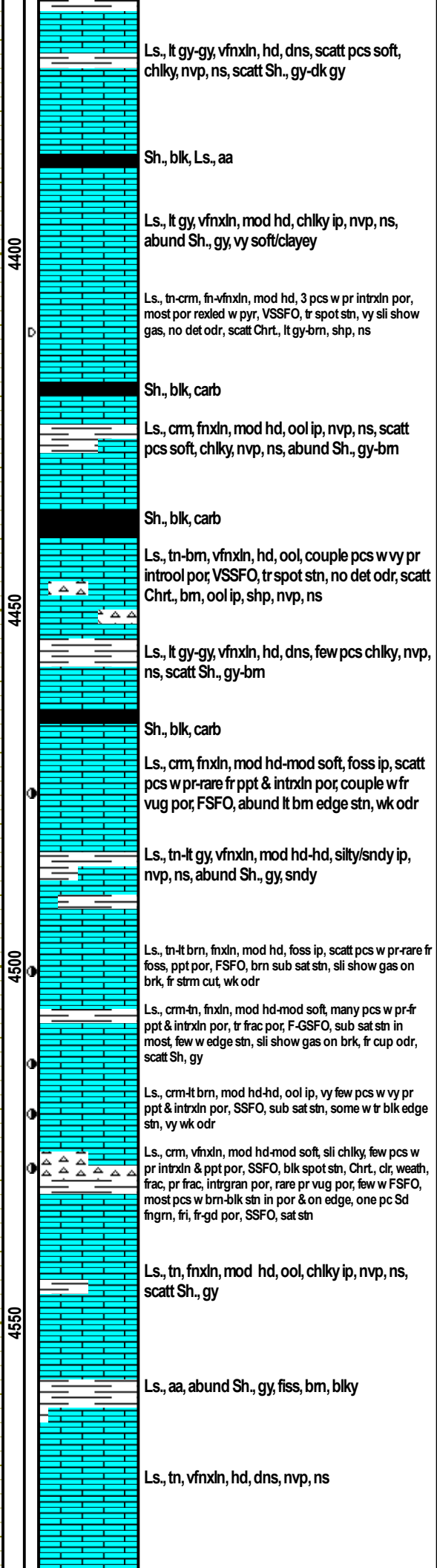
4350

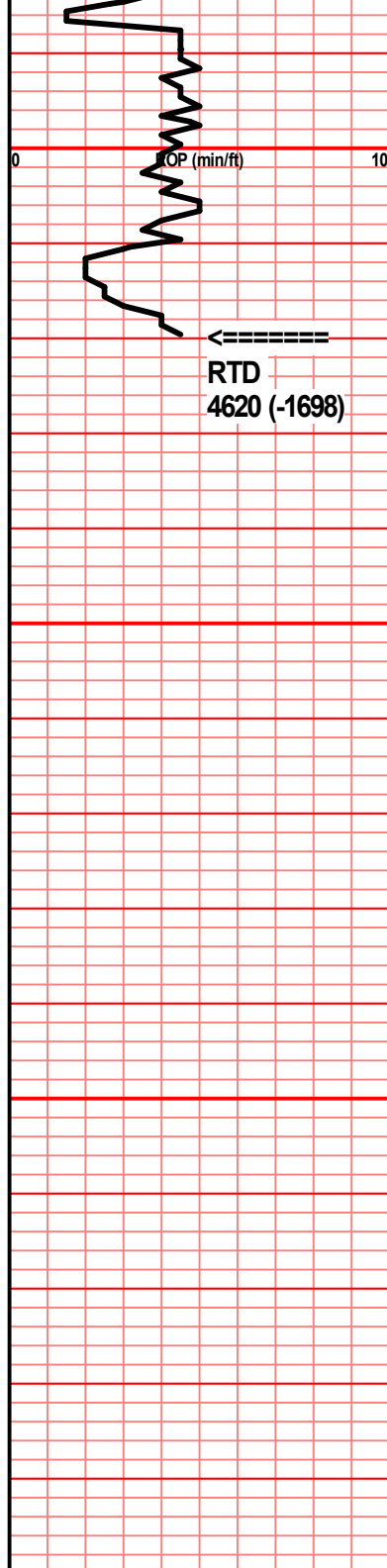
Ls., crm, fnxln, mod hd, ool, scatt pcs w pr-fr introol & ppt por, FSFO, lt brn sub sat-spot stn, scatt Chrt., tn-brn, ool, nvp, ns, scatt Sh., dk gy

cfs 4363

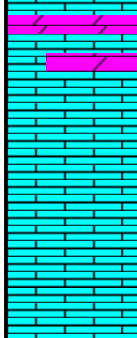


cfs 4530





4600
4650
4700
50



Ls., tn, fnxin, dol, ool, pr-rare fr ooc & intrxin
por, ns, no odr or fluoro

Ls., lt gy, vfnxin, mod hd-hd, dns, tr pyr, nvp, ns

Ls., tn, fnxin, mod hd-mod soft, chiky ip, ool,
few pcs w pr introol por, ns, no odr, or fluoro