[redacted]

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1237206

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 6044
Name: Stelbar Oil Corporation, Inc.
Address 1: 1625 N WATERFRONT PKWY
Address 2:
City: WICHITA State: KS Zip: 67206 + 6602
Contact Person: Roscoe L. Mendenhall / Ty Lunn
Phone: (316) 264-8378
CONTRACTOR: License # 6044
Name: Stelbar Oil Corporation, Inc.
Wellsite Geologist: Dave Goldak
Purchaser: Plains Marketing LP

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

10/18/2014	10/28/2014	11/17/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-171-21103-00-00
Spot Description:
SW NE NE NE Sec. 12 Twp. 17 S. R. 33 ☐ East ☑ West
405 Feet from ☑ North / ☐ South Line of Section
335 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Scott
Lease Name: Ellis Well #: 1-12
Field Name: Wildcat
Producing Formation: Lansing
Elevation: Ground: 2972 Kelly Bushing: 2977
Total Vertical Depth: 4781 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 338 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2365 Feet
If Alternate II completion, cement circulated from: 2365
feet depth to: 0 w/ 400 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 34000 ppm Fluid volume: 1000 bbls
Dewatering method used: Evaporated

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: 02/09/2015
☑ **Confidential Release Date:** 02/08/2017
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 02/10/2015

[redacted]

1237206

Operator Name: Stelbar Oil Corporation, Inc. Lease Name: Ellis Well #: 1-12

Sec. 12 Twp. 17 S. R. 33 ☐ East ☑ West County: Scott

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.6250	23	338	Common	300	3% CC - 2% Gel
Production	12.25	5.50000	15.5	4493	AA-2 & A-con	620	5#/sk gilsonite

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Form	ACO1 - Well Completion
Operator	Stelbar Oil Corporation, Inc.
Well Name	Ellis 1-12
Doc ID	1237206

All Electric Logs Run

Array Induction Shallow Focused Electric Log
Compact Photo Density Compensated Neutron Microresistivity Log
Compensated Sonic w/Integrated Transit Time Log
Compensated Neutron Sonic Porosity Overlay Log
Microresistivity Log
Caliper Log
Sonic Cement Bond Log

Form	ACO1 - Well Completion
Operator	Stelbar Oil Corporation, Inc.
Well Name	Ellis 1-12
Doc ID	1237206

Tops

Name	Top	Datum
B/Anhydrite	2345	+632
Heebner	3910	-933
Lansing	3954	-977
Mun Cr Sh	4133	-1156
Stark Sh	4232	-1255
Hush Sh	4275	-1298
Marmaton	4356	-1379
Pawnee	4444	-1467
Cher Sh	4491	-1514
Lwr Ch Sh	4521	-1544
John Zone	4554	-1577
Mw Sh	4624	-1647
Basal P Sd	4649	-1672
Miss	4681	-1704

Form	ACO1 - Well Completion
Operator	Stelbar Oil Corporation, Inc.
Well Name	Ellis 1-12
Doc ID	1237206

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.6250	23	338	Common	300	3% CC - 2% Gel
Production	12.25	5.50000	15.5	4493	AA-2 & A-con	620	5#/sk gilsonite

DRILL STEM TEST REPORT

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59048 **DST#: 1**

Test Start: 2014.10.22 @ 07:04:15

GENERAL INFORMATION:

Formation: **LKC B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:35:05
Time Test Ended: 14:16:35

Test Type: Conventional Bottom Hole (Initial)
Tester: Brandon Turley
Unit No: 60

Interval: 3980.00 ft (KB) To 4005.00 ft (KB) (TVD)
Total Depth: 4005.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

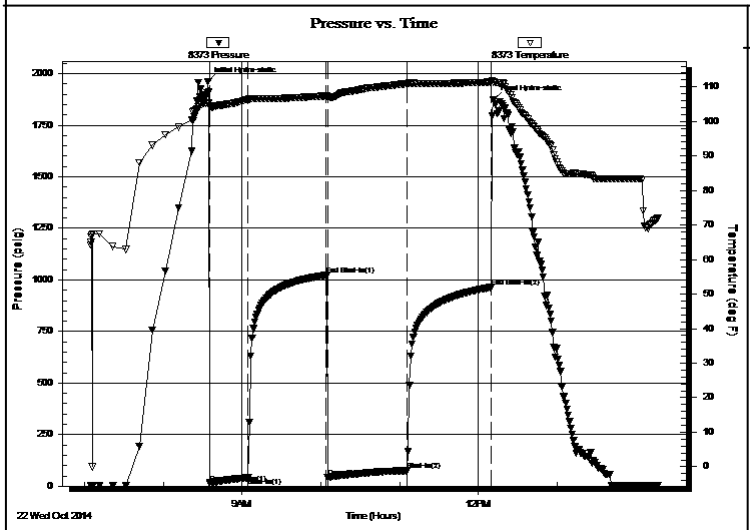
Reference Elevations: 2977.00 ft (KB)
2972.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8373 **Inside**

Press@RunDepth: 75.06 psig @ 3981.00 ft (KB)
Start Date: 2014.10.22 End Date: 2014.10.22
Start Time: 07:04:40 End Time: 14:16:35

Capacity: 8000.00 psig
Last Calib.: 2014.10.22
Time On Btm: 2014.10.22 @ 08:34:05
Time Off Btm: 2014.10.22 @ 12:11:35

TEST COMMENT: IF: 1/4 blow built to 2 1/2 in 30 min.
IS: No return.
FF: Surface blow built to 1 in 60 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1963.18	105.27	Initial Hydro-static
1	15.10	104.40	Open To Flow (1)
31	41.75	106.20	Shut-In(1)
90	1022.46	107.35	End Shut-In(1)
91	43.48	106.99	Open To Flow (2)
152	75.06	110.92	Shut-In(2)
216	964.00	111.39	End Shut-In(2)
218	1875.07	111.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 70%w 30%m	0.30
70.00	w cm 10%w 90%m	0.43
1.00	free oil 100%o	0.01

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Stelbar Oil Corp

1625 N Waterfront Pkw y
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59048 **DST#: 1**

Test Start: 2014.10.22 @ 07:04:15

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:	27000 ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mcw 70%w 30%m	0.295
70.00	w cm 10%w 90%m	0.426
1.00	free oil 100%o	0.014

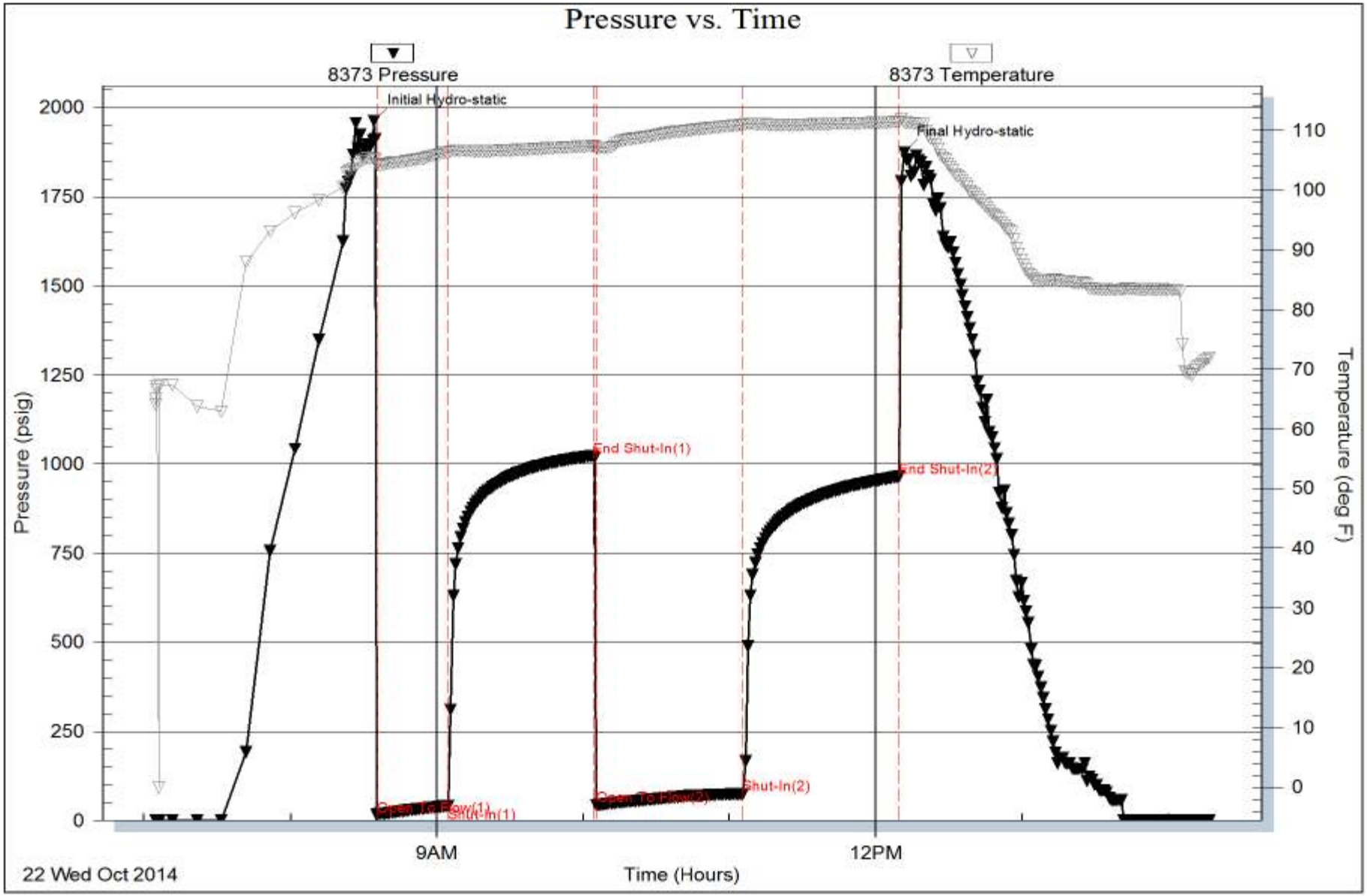
Total Length: 131.00 ft Total Volume: 0.735 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .24@75=27000

Serial #: 8373 **Inside** Stelbar Oil Corp Ellis 1-12 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 59048 Printed: 2014.10.22 @ 14:38:43

DRILL STEM TEST REPORT

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59049 **DST#: 2**

Test Start: 2014.10.23 @ 07:10:43

GENERAL INFORMATION:

Formation: **LKC I**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:50:43
Time Test Ended: 15:12:13

Test Type: Conventional Bottom Hole (Reset)
Tester: Brandon Turley
Unit No: 60

Interval: 4172.00 ft (KB) To 4195.00 ft (KB) (TVD)
Total Depth: 4172.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

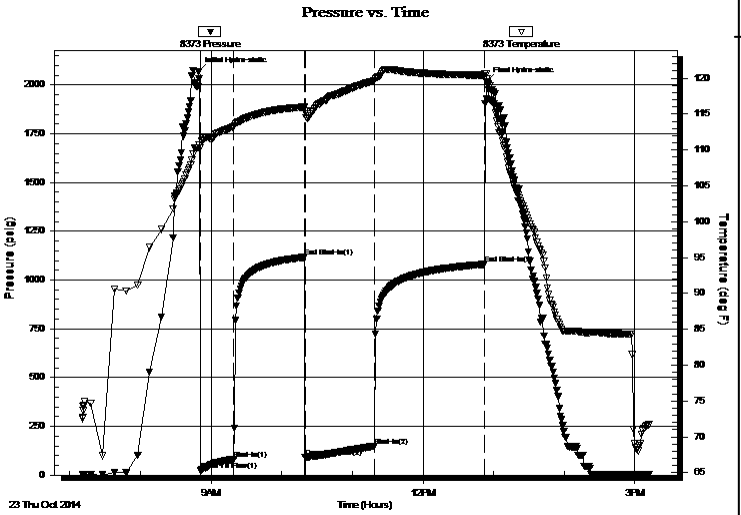
Reference Elevations: 2977.00 ft (KB)
2972.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8373 **Inside**

Press@RunDepth: 147.78 psig @ 4173.00 ft (KB)
Start Date: 2014.10.23 End Date: 2014.10.23
Start Time: 07:10:48 End Time: 15:12:12

Capacity: 8000.00 psig
Last Calib.: 2014.10.23
Time On Btm: 2014.10.23 @ 08:49:13
Time Off Btm: 2014.10.23 @ 12:54:13

TEST COMMENT: IF: 1/4 blow BOB in 28 min.
IS: No return.
FF: Surface blow BOB in 40 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2066.13	110.27	Initial Hydro-static
2	22.25	110.32	Open To Flow (1)
30	82.74	113.20	Shut-In(1)
90	1116.91	115.97	End Shut-In(1)
91	91.39	115.44	Open To Flow (2)
150	147.78	119.62	Shut-In(2)
243	1080.75	120.39	End Shut-In(2)
245	2014.86	119.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	ocm 10%o 90%m	0.30
124.00	gocm 10%g 20%o 70%m	1.20
154.00	go 10%g 90%o	2.16
0.00	90 GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59049 **DST#: 2**

Test Start: 2014.10.23 @ 07:10:43

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	22 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	ocm 10%o 90%m	0.305
124.00	gocm 10%g 20%o 70%m	1.202
154.00	go 10%g 90%o	2.160
0.00	90 GIP	0.000

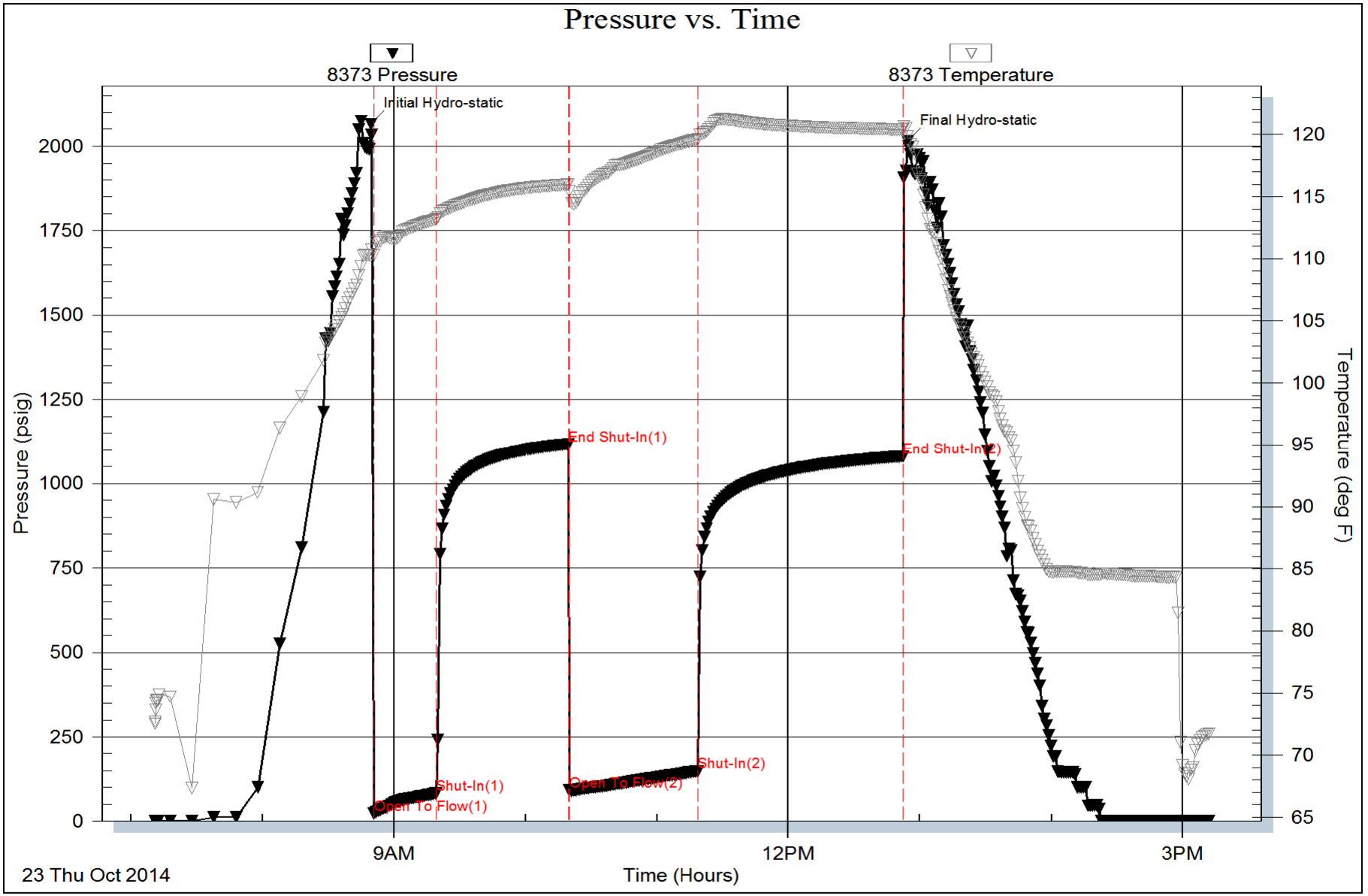
Total Length: 340.00 ft Total Volume: 3.667 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 23@70=22

Serial #: 8373 **Inside** Stelbar Oil Corp Ellis 1-12 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 59049 Printed: 2014.10.23 @ 15:52:33

DRILL STEM TEST REPORT

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59050 **DST#: 3**

Test Start: 2014.10.25 @ 00:57:15

GENERAL INFORMATION:

Formation: **Marmaton- Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:55:15
Time Test Ended: 19:04:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Brandon Turley
Unit No: 60

Interval: 4386.00 ft (KB) To 4520.00 ft (KB) (TVD)
Total Depth: 4520.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

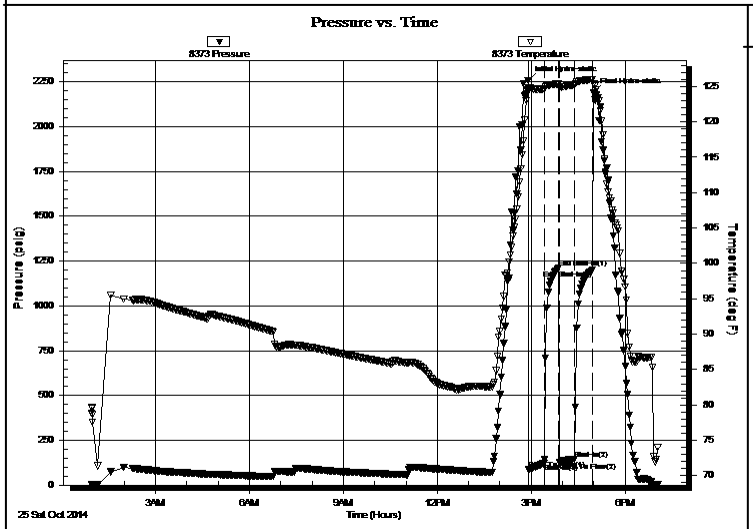
Reference Elevations: 2977.00 ft (KB)
2972.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8373 **Inside**

Press@RunDepth: 145.18 psig @ 4387.00 ft (KB)
Start Date: 2014.10.25 End Date: 2014.10.25
Start Time: 00:57:20 End Time: 19:04:14

Capacity: 8000.00 psig
Last Calib.: 2014.10.25
Time On Btm: 2014.10.25 @ 14:54:15
Time Off Btm: 2014.10.25 @ 17:00:15

TEST COMMENT: IF: 1/2 blow built to 2 in 30 min.
IS: No return.
FF: Surface blow built to 1 in 30 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2259.11	124.54	Initial Hydro-static
1	85.77	124.77	Open To Flow (1)
31	120.35	124.63	Shut-In(1)
59	1213.27	125.37	End Shut-In(1)
60	125.57	125.00	Open To Flow (2)
89	145.18	125.23	Shut-In(2)
124	1201.16	125.99	End Shut-In(2)
126	2188.64	125.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 80%w 20%m	0.30
90.00	w cm 5%w 95%M	0.71

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59050 **DST#: 3**

Test Start: 2014.10.25 @ 00:57:15

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:	15000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mcw 80%w 20%m	0.295
90.00	w cm 5%w 95%M	0.707

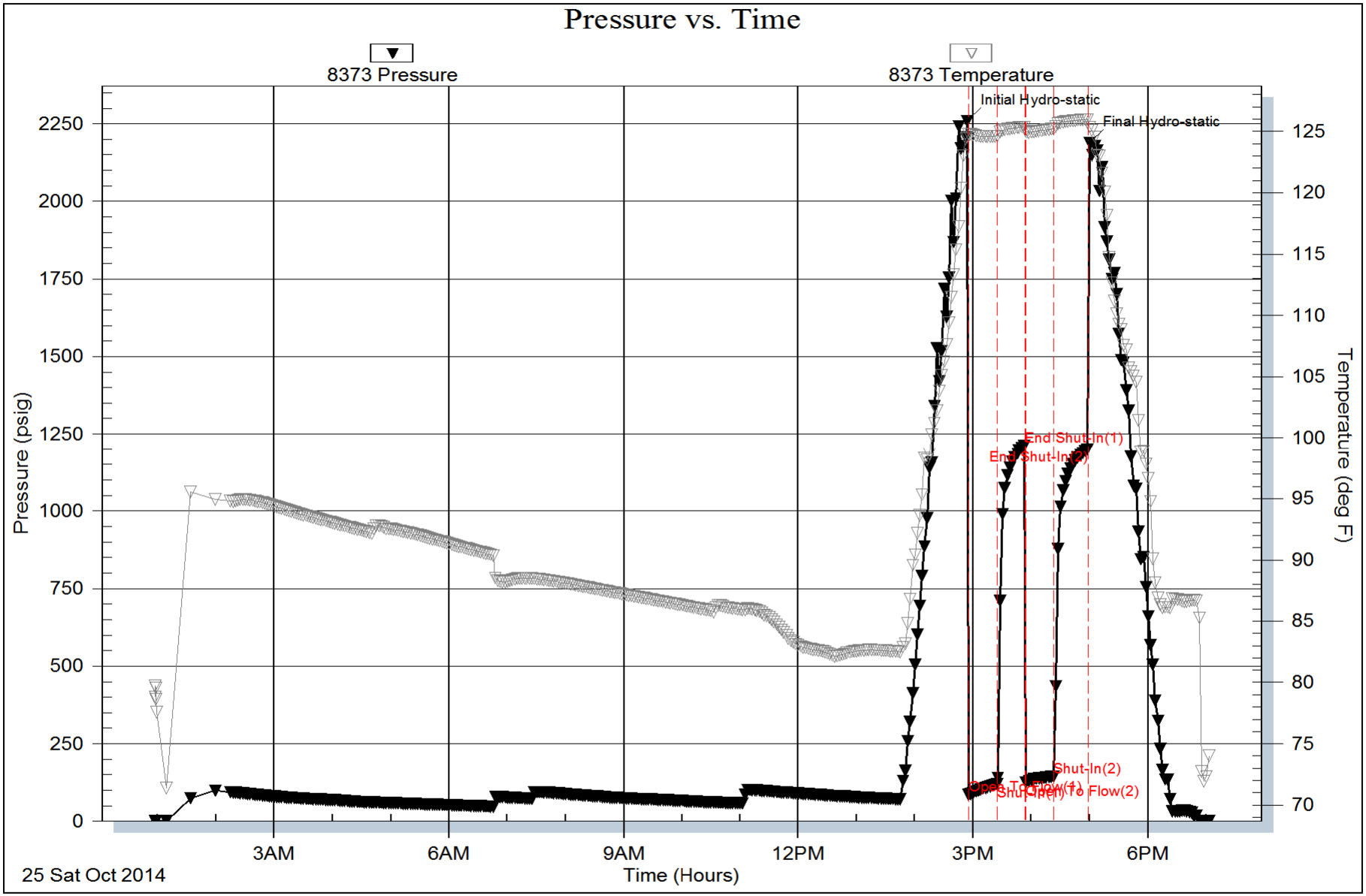
Total Length: 150.00 ft Total Volume: 1.002 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .34@89@15000

Serial #: 8373 **Inside** Stelbar Oil Corp Ellis 1-12 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 59050 Printed: 2014.10.25 @ 22:54:20

DRILL STEM TEST REPORT

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59651 **DST#: 4**

Test Start: 2014.10.26 @ 08:49:24

GENERAL INFORMATION:

Formation: **Johnson Zone**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:48:24
Time Test Ended: 17:24:54

Test Type: Conventional Bottom Hole (Reset)
Tester: Brandon Turley
Unit No: 60

Interval: 4572.00 ft (KB) To 4616.00 ft (KB) (TVD)
Total Depth: 4616.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

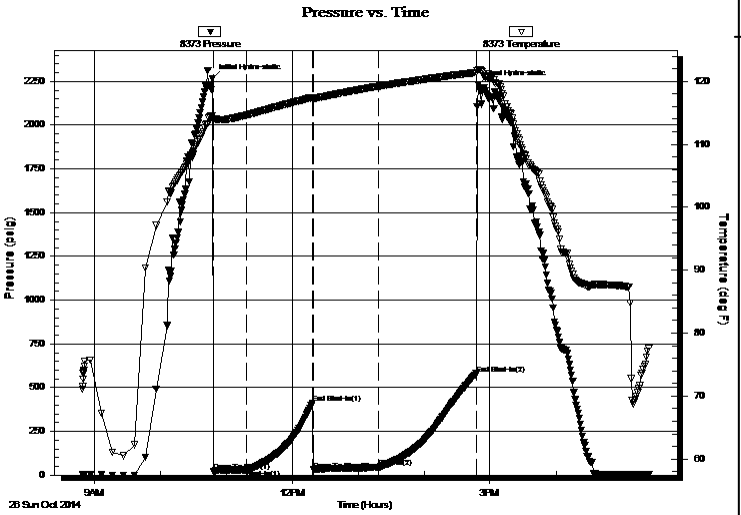
Reference Elevations: 2977.00 ft (KB)
2972.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8373 **Inside**

Press@RunDepth: 43.47 psig @ 4573.00 ft (KB)
Start Date: 2014.10.26 End Date: 2014.10.26
Start Time: 08:49:29 End Time: 17:24:54

Capacity: 8000.00 psig
Last Calib.: 2014.10.26
Time On Btm: 2014.10.26 @ 10:47:24
Time Off Btm: 2014.10.26 @ 14:49:24

TEST COMMENT: IF: 1/4 blow built to 3 in 30 min.
IS: No return.
FF: 2" blow built 3 3/4 in 60 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2266.62	114.54	Initial Hydro-static
1	22.75	114.10	Open To Flow (1)
32	30.63	114.65	Shut-In(1)
91	410.37	117.43	End Shut-In(1)
92	29.95	117.26	Open To Flow (2)
151	43.47	119.20	Shut-In(2)
240	579.98	121.40	End Shut-In(2)
242	2233.66	121.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	gocm 10%g 40%o 50%m	0.30
0.00	186 GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Stelbar Oil Corp

1625 N Waterfront Pkwy
Wichita, KS 67206

ATTN: Dave Goldak

12-17s-33w Scott Ks

Ellis 1-12

Job Ticket: 59651 **DST#: 4**

Test Start: 2014.10.26 @ 08:49:24

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	30 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	gocm 10%g 40%o 50%m	0.300
0.00	186 GIP	0.000

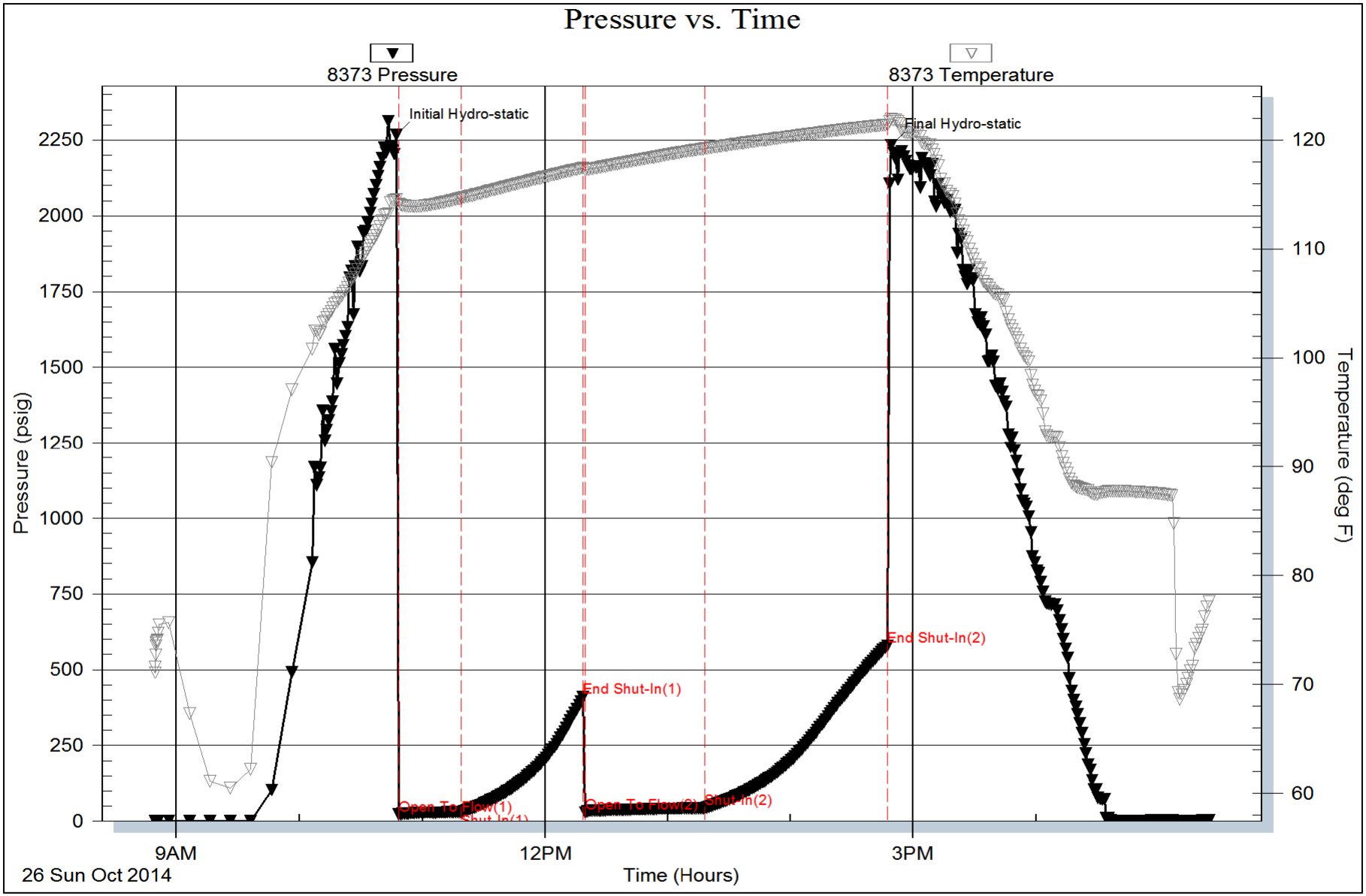
Total Length: 61.00 ft Total Volume: 0.300 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 33@90=30

Serial #: 8373 **Inside** Stelbar Oil Corp Ellis 1-12 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 59651 Printed: 2014.10.26 @ 23:01:32

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.
Liberal, Kansas 67905
Phone 620-624-2277

FIELD SERVICE TICKET
1717 06149 A

DATE 10/12 TICKET NO.

DATE OF JOB 10/18/14 DISTRICT	NEW WELL [X] OLD WELL [ ] PROD [ ] INJ [ ] WDW [ ] CUSTOMER ORDER NO.:
CUSTOMER Stelbar	LEASE Ellis 1-12 WELL NO. 12
ADDRESS	COUNTY Scott STATE KS
CITY STATE	SERVICE CREW Tommy Daniel Javier
AUTHORIZED BY Tyce Davis	JOB TYPE: 7 1/2 Surface

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
86573	4				
38117/19919	4				
37021/111284	4				

TRUCK CALLED	DATE 10/18	AM PM TIME 2:30
ARRIVED AT JOB		AM PM 5:00
START OPERATION		AM PM 7:20
FINISH OPERATION		AM PM 8:15
RELEASED		AM PM 9:00
MILES FROM STATION TO WELL	100 m.	

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: X
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CL110	Premium Plus Cement	SK	300		
CC109	Calcium Chloride	lb	574		
CC102	Cello Flake	lb	76		
E101	Heavy Equip. Mileage	mi	200		
CE740	Blending & Mixing Service Charge	SK	300		
E113	Pump & Bulk Delivery Charge	tm	1410		
CE200	Depth Charge 0'-500'	4hr	1		
CE504	Plug Container Utilization	Job	1		
E100	Light Mileage Charge Pickup	mi	100		
S003	Service Supervisor Trey Shoemaker	ea	1		
T105	Cement Data Acquisition Monitor	ea	1		

SUB TOTAL 3505.51

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON $
MATERIALS	%TAX ON $
	TOTAL

SERVICE REPRESENTATIVE Tommy Marcellus

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: X
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: Stelbar	Lease No.:	Date: 10/18/14	
Lease: Ellis A-20	Well #: 1-12	Service Receipt: 1717-06149A	
Casing: 5 3/8	Depth: 343.51	County: Scott	State: KS
Job Type: Surface	Formation:	Legal Description: 12/17/33	

Pipe Data		Perforating Data		Cement Data
Casing size: 5 3/8	Tubing Size:	Shots/Ft		Lead: 300 SK from 0 @ 111.5
Depth: 343.51	Depth:	From	To	
Volume: 19 BBL	Volume:	From	To	1.34 6.33
Max Press: 2000 psi	Max Press:	From	To	Tail in
Well Connection: PC	Annulus Vol.:	From	To	
Plug Depth: 313.51 Shut in	Packer Depth:	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
17:00					On location
15:00					Safety Mtg w/ BES Emp.
15:05					Spotting / Rig up
19:00					Safety Mtg w/ Rig crew
19:20					Pressure test 2000 psi
19:27	90		71.5 BBL	4.6	Start Cementing
19:53					Cement Returns to pit
19:58					Start Displacement / Washup Downhole
20:15			19		Displacement Complete
					Shut in Well
					Leaving Swage, 5 Valve On location
					Job Complete

Service Units	16573	35114/19919	35021/14784			
Driver Names	Tommy M	Daniel B	Javier O.			

Sid
Customer Representative

Jeremy Bennett
Station Manager

Tommy Marcellus
Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.
Liberal, Kansas 67905
Phone 620-624-2277

FIELD SERVICE TICKET
1717 05026 A

DATE TICKET NO.

DATE OF JOB 10/28/14	DISTRICT 1717	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐	CUSTOMER ORDER NO.:
CUSTOMER Stelbar		LEASE Ellis 1-12	WELL NO.
ADDRESS		COUNTY Scott	STATE KS
CITY	STATE	SERVICE CREW Gabe E, Margarito, Mario	
AUTHORIZED BY Tyce		JOB TYPE: Z42 Production	

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS		DATE	TIME
178939	17					TRUCK CALLED		AM 2:30
37223 37726	12					ARRIVED AT JOB		AM 6:00
30464 37724	9					START OPERATION		AM 11:30
27808 19863	9					FINISH OPERATION		PM 5:07
						RELEASED		PM 6:00
						MILES FROM STATION TO WELL		100

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: X
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CL105	AA-2	SK	150		2730 00
CL101	A-Con Blend	SK	400		7440 00
CL110	Premium Plus	SK	120		1956 00
CC113	Gypsum	Lb	705		528 75
CC111	Salt	Lb	829		414 50
CC103	C-15	Lb	106		1325 00
CC107	C-42P	Lb	36		288 00
CC201	Gilsonite	Lb	750		502 50
CC102	Cello Flake	Lb	131		484 70
CC109	Calcium Chloride	Lb	1354		1421 70
CF1251	Auto fill float Shoe	EA	1		360 00
CF601	Latch Down P+B	EA	1		850 00
CF401	TWO Stage Collar	EA	1		6100 00
CF4452	Centralizers	EA	1		750 00
CF4552	Cement Baskets	EA	1		955 00
CF3000	Thread Lock Kit	EA	1		34 00
CC155	Super Flush II	gal	500		765 00
E101	Heavy Equip Mileage	Mi	300		2100 00
CE240	Blending & Mixing Charge	SK	670		938 00

1700.00 off ticket, truck motor wouldn't start

CHEMICAL / ACID DATA:			

	SUB TOTAL	~~29,050.08~~ 27,350.08
MATERIALS	%TAX ON $	
	TOTAL	

SERVICE REPRESENTATIVE Chad Hinz

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY X [signature]
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.
P.O. Box 129
Liberal, Kansas 67905
Phone 620-624-2277

FIELD SERVICE TICKET CONT.

TICKET NO. 1717 050264

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
E113	Bulk Delivery	TM	3,150		6930 00
CE205	Depth Charge 4001'-5000'	4hrs	1		2520 00
CE409	Add Stage Charge	4hrs	1		2160 00
CE504	Plug Container	Job	1		250 00
E100	Pickup Mileage	mi	100		425 00
5003	Service Supervisor	EA	1		175 00
T105	Cement Data	EA	1		550 00

TAYLOR PRINTING, INC.
(800) 870-7102

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer Stelbar	Lease No.	Date 10/28/14
Lease Ellis	Well # 1-12	Service Receipt
Casing 5 1/2 / Depth 4781	County Scott	State KS
Job Type L.S D.V.	Formation	Legal Description

Pipe Data		Perforating Data		Cement Data
Casing size 5 1/2	Tubing Size	Shots/Ft		~~Lead~~ 1st Stage 150 sk AA-2 @ 14.8#
Depth 4485'	Depth	From D.V. @ 2365'	To	
Volume 105.68	Volume	From	To	1.51 6.63
Max Press	Max Press	From	To	~~Tail in~~ 2nd Stage 400 sk A-Con @ 11.4#
Well Connection P.C.	Annulus Vol.	From	To	90 sk PP @ 14.8#
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
01:30					on Loc
02:30					RON F.E.
11:23	3000				Test Lines
11:25	200		12	6	Pump SuperFlush
11:29	200		5	6	H2O Spacer
11:31	230		0	6	Mix AA-2 @ 14.8#
11:50	0		40		Shut Down, Drop Plug, Washup
11:56	50		0	4.2	Start Disp.
12:13	210		50	7.5	on Mud
12:26	510-1400		106	—	Plug Down, Drop Bomb
12:43	1200-1300		12	4	Open Tool
12:49					Hook to Rig Circ 4 hrs
16:00					Plug Rat hole
16:17	140		0	6	Start Mixing @ 11.4#
16:40	190		210	5.6	On Tail @ 14.8#
16:45	0		21.5	0	Finished Mixing, Drop Plug, Washup
16:53	70		0	5	Start Disp
17:04	140		46	3.5	Slow Rate
17:07	550-1490		56	0	Plug Down, Tool Shut
					Job Complete

Service Units	78939	39223377216	30464394724	27805819883		
Driver Names	C Hinz	G Echevarria	Margarito	Mario		

Ty Lund
Customer Representative

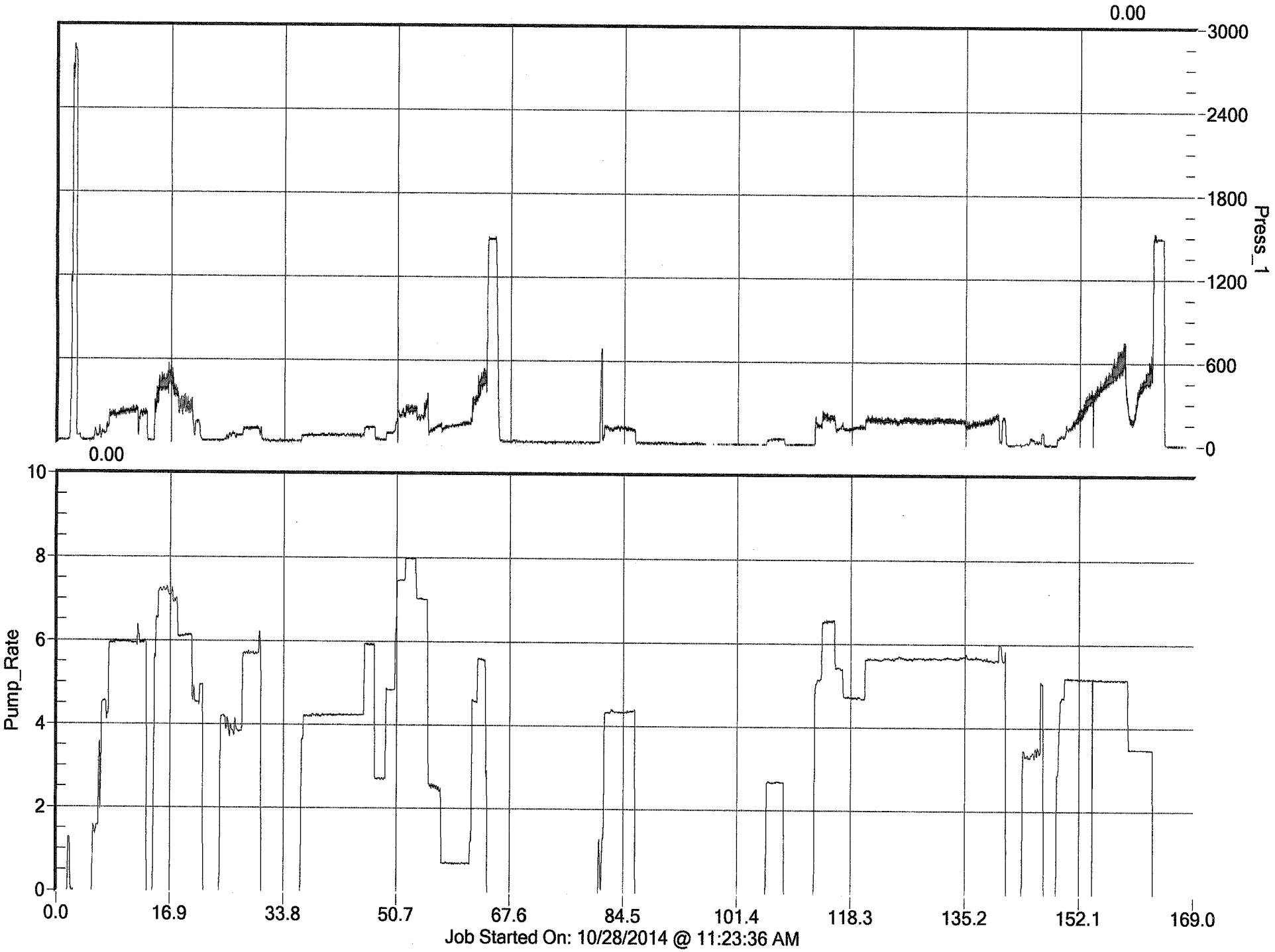
Jerry Bennett
Station Manager

Chad Hinz
Cementer

BASIC ENERGY SERVICES

STELBAR

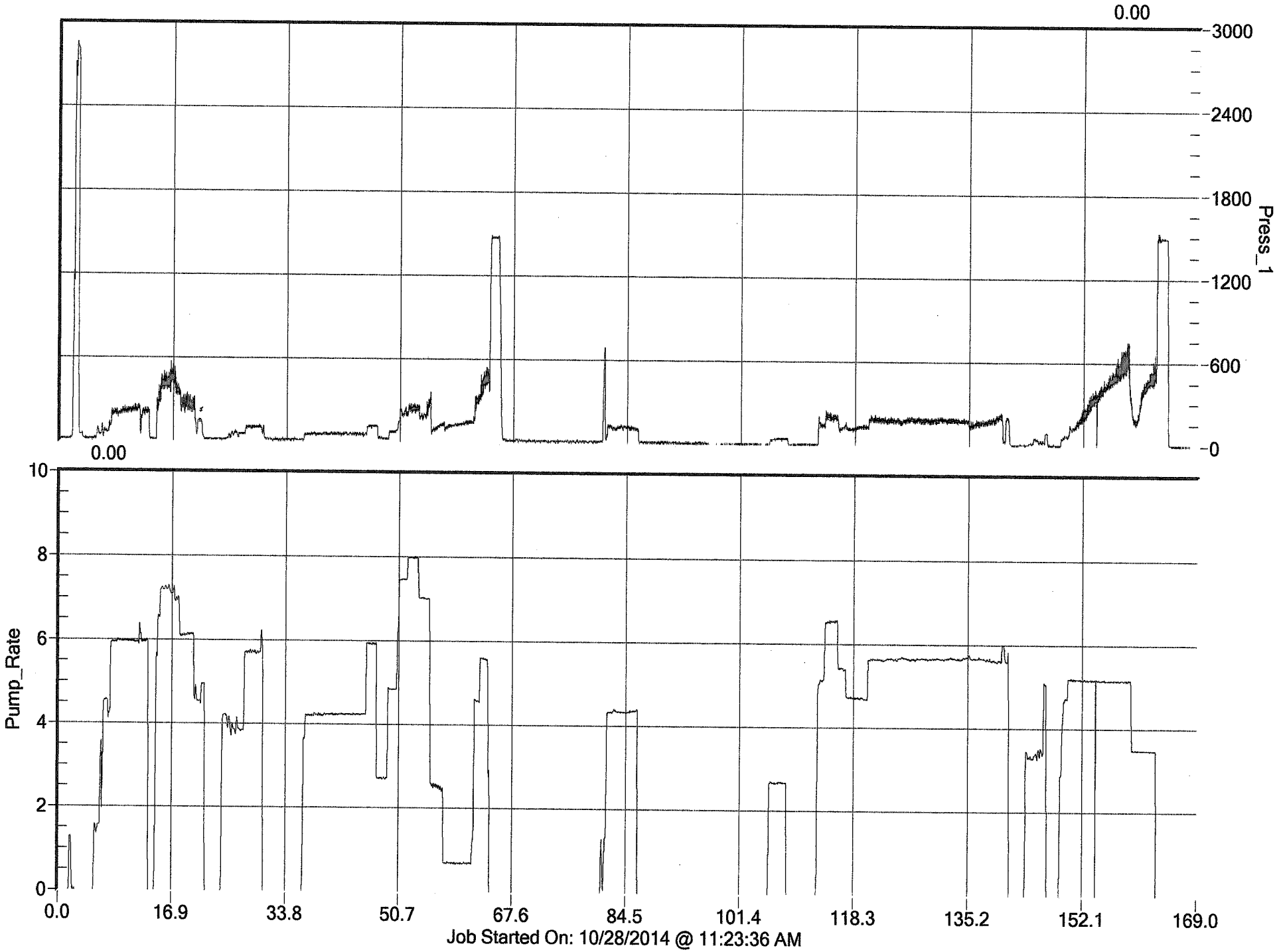
ELLIS 1-12



BASIC

STELBAR

ELLIS 1-12



GEOLOGIC REPORT

DAVID J. GOLDAK

WICHITA, KANSAS

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

Well Name:	**Ellis #1-12**		
Location:	**Section 12 - T17S - R33W**		
License Number:	**API: 15-171-21103**	**Region:**	**Scott Co., KS**
Spud Date:	**10 / 18 / 2014**	**Drilling Completed:**	**10 / 27 / 2014**
Surface Coordinates:	**405' FNL and 335' FEL** **SW - NE - NE - NE**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**2972'**	**K.B. Elevation (ft):**	**2977'**
Logged Interval (ft):	**3700'** **To: 4781'**	**Total Depth (ft):**	**4781'**
Formation:	**Mississippian - St Louis**		
Type of Drilling Fluid:	**Chemical - Mud-Co**		

OPERATOR

Company: **Stelbar Oil Corporation**
Address: **1625 N. Waterfront Pkwy., Suite 200**
Wichita, Kansas 67206-6602

GEOLOGIST

Name: **David J. Goldak**
Company: **D. J. GOLDAK, INC.**
Address: **155 N. Market, Suite 710**
Wichita, Kansas 67202

General Info

CONTRACTOR: WW Drilling, Rig #8

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	Smith-?	15-14-14	339	339	3.50
2	7-7/8	Smith-F27	15-14-14	4781	4442	108.50

SURVEYS: 339'-0.50, 4005'-0.75, 4781'-0.25

GENERAL DRILLING & PUMP INFORMATION:
Drilling with 7 stands of collars (6.25"x2.25"): 426.71'
Drilling with 35,000-36,000 lbs on bit and 80-85 RPM.
Pumping 57 S/M; 7.35 B/M; 900 psi at the standpipe.

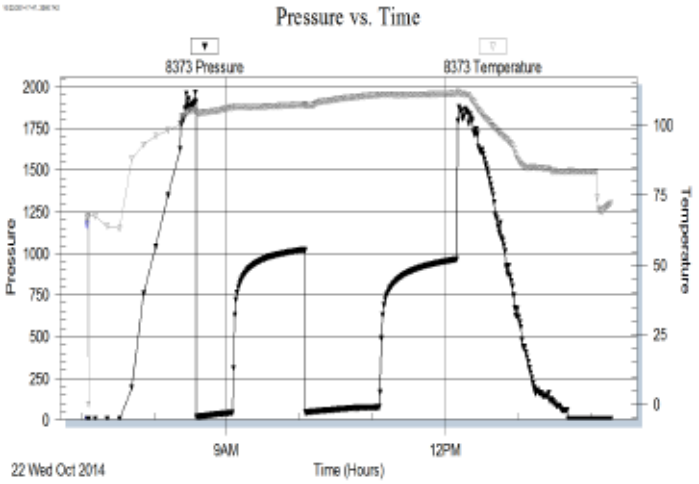
Daily Status

10/18/14 - Spud at 2:00 PM; Set 8-5/8" csg at 338'
10/19/14 - 688' Drilling
10/20/14 - 2,863' Drilling; Displace mud @ 3,469'
10/21/14 - 3,625' Drilling
10/22/14 - 4,005' MUTT for DST #1
10/23/14 - 4,195' MUTT for DST #2
10/24/14 - 4,364' CFS
10/25/14 - 4,520' Down for repairs; DST #3 in PM
10/26/14 - 4,616' TOH for DST #4
10/27/14 - 4,745' Drilling; Log well in PM

DST #1: 3,980' - 4,005' (LKC "B")
30" - 60" - 60" - 60"

IF: Surface blow building to 2-1/2 inches
ISI: No blow back
FF: Surface blow building to 1 inch
FSI: No blow back

RECOVERY: 131' Total Fluid, consisting of:
1' FO (100% O)
70' WCM (10% W, 90% M)
60' MCW (70% W, 30% M)
Sampler: 2000 ml Water @ 400 psi
Chlorides recovery: 27,000 ppm

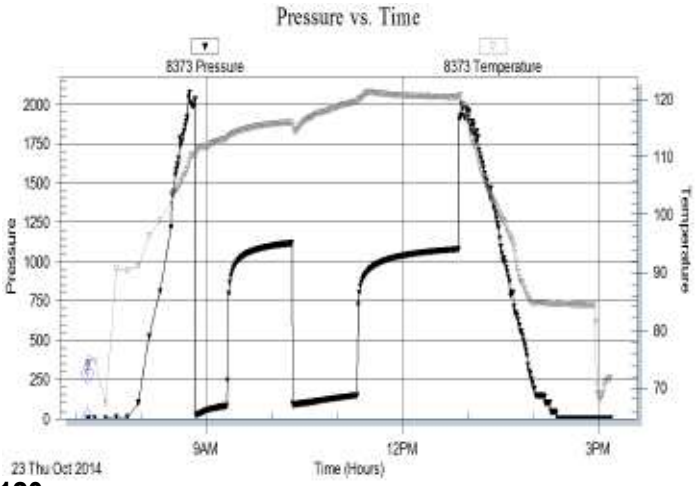


SIP: 1022-964; FP: 15-42, 43-75; HP: 1963-1875; BHT: 111

DST #2: 4,172' - 4,195' (LKC "I")
30" - 60" - 60" - 90"

IF: Fair blow building to BOB in 28 minutes
ISI: No blow back
FF: Fair blow building to BOB in 40 minutes
FSI: No blow back

RECOVERY: 90' GIP & 340' TF, consisting of:
154' GO (10% G, 90% O); Gravity: 22 API
124' GOCM (10% G, 20% O, 70% M)
62' OCM (10% O, 90% M)
Sampler: 800 ml Gas & 1200 ml Oil @ 75 psi

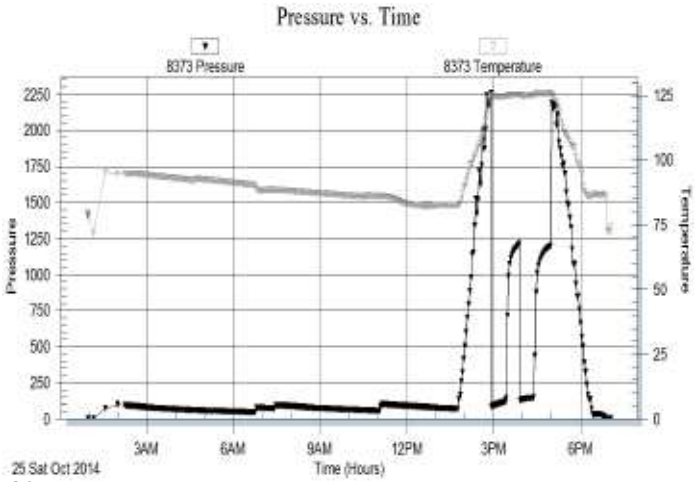


SIP: 1117-1081; FP: 22-83, 91-148; HP: 2066-2015; BHT: 120

DST #3: 4,286' - 4,520' (Marmaton - Cherokee)
30" - 30" - 30" - 30"

IF: Weak blow building to 2 inches
ISI: No blow back
FF: Surface blow building to 1 inch
FSI: No blow back

RECOVERY: 150' Total Fluid, consisting of:
90' WCM (5% W, 95% M)
60' MCW (80% W, 20% M)
Sampler: 2000 ml Water @ 50 psi
Chlorides recovery: 15,000 ppm

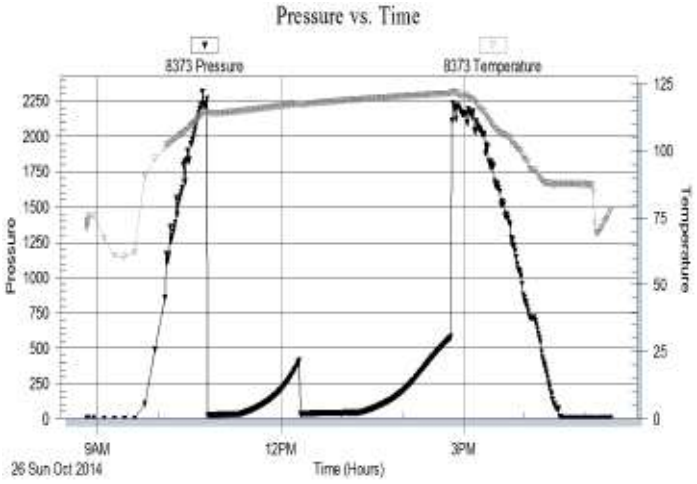


SIP: 1213-1201; FP: 86-120, 126-145; HP: 2259-2189; BHT: 125

DST #4: 4,572' - 4,616' (Johnson Zone)
30" - 60" - 60" - 90"

IF: Weak blow building to 3 inches
ISI: No blow back
FF: Fair blow building to 4 inches
FSI: No blow back

RECOVERY: 186' GIP & 61' TF, consisting of:
61' GOCM (10% G, 40% O, 50% M)
Sampler: 1000 ml Gas & 1000 ml Oil @ 50 psi
Oil Gravity: 30 API



SIP: 410-580; FP: 23-31, 30-43; HP: 2267-2234; BHT: 121

ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Lms

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING
- Well
- Moderate
- Poor

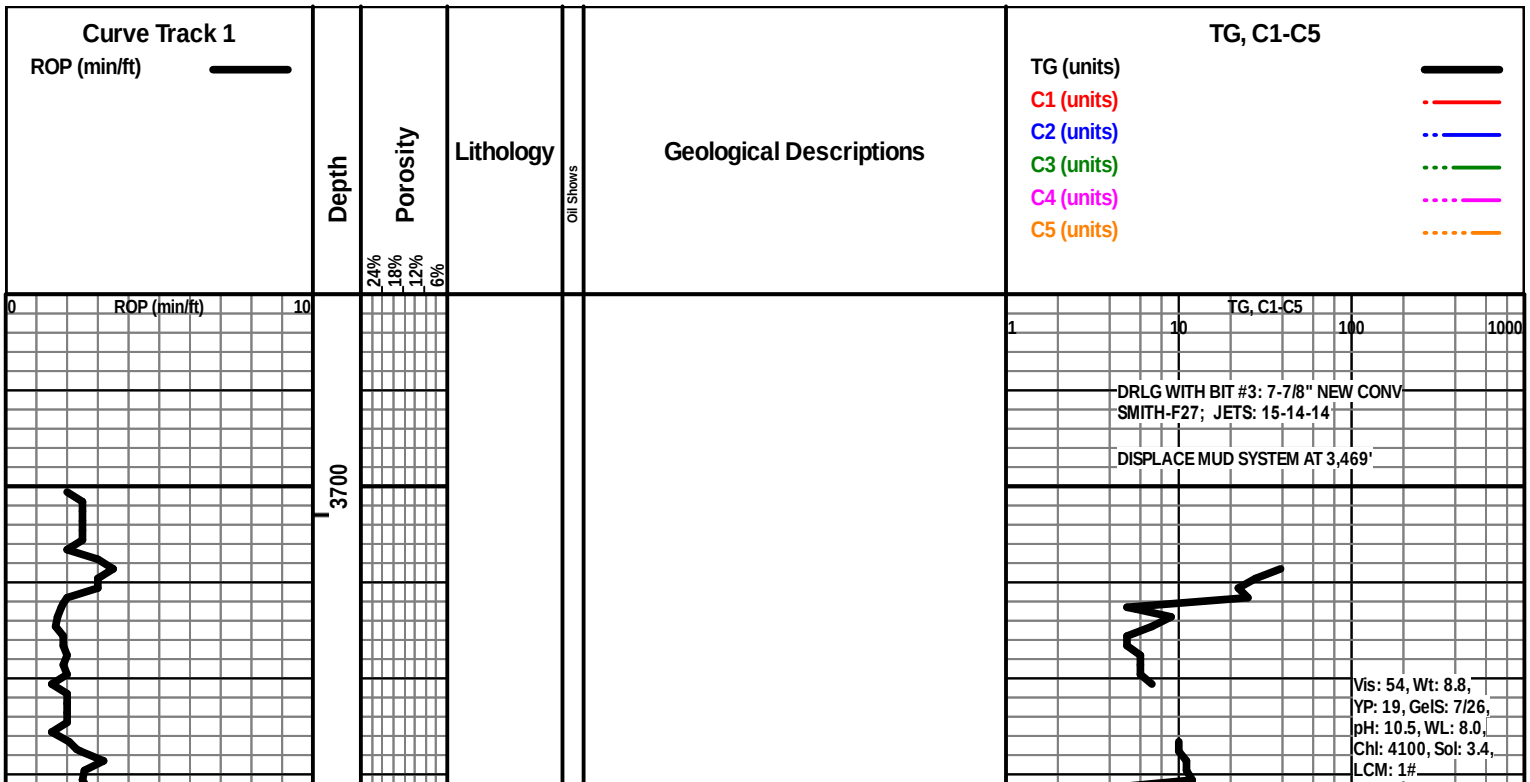
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

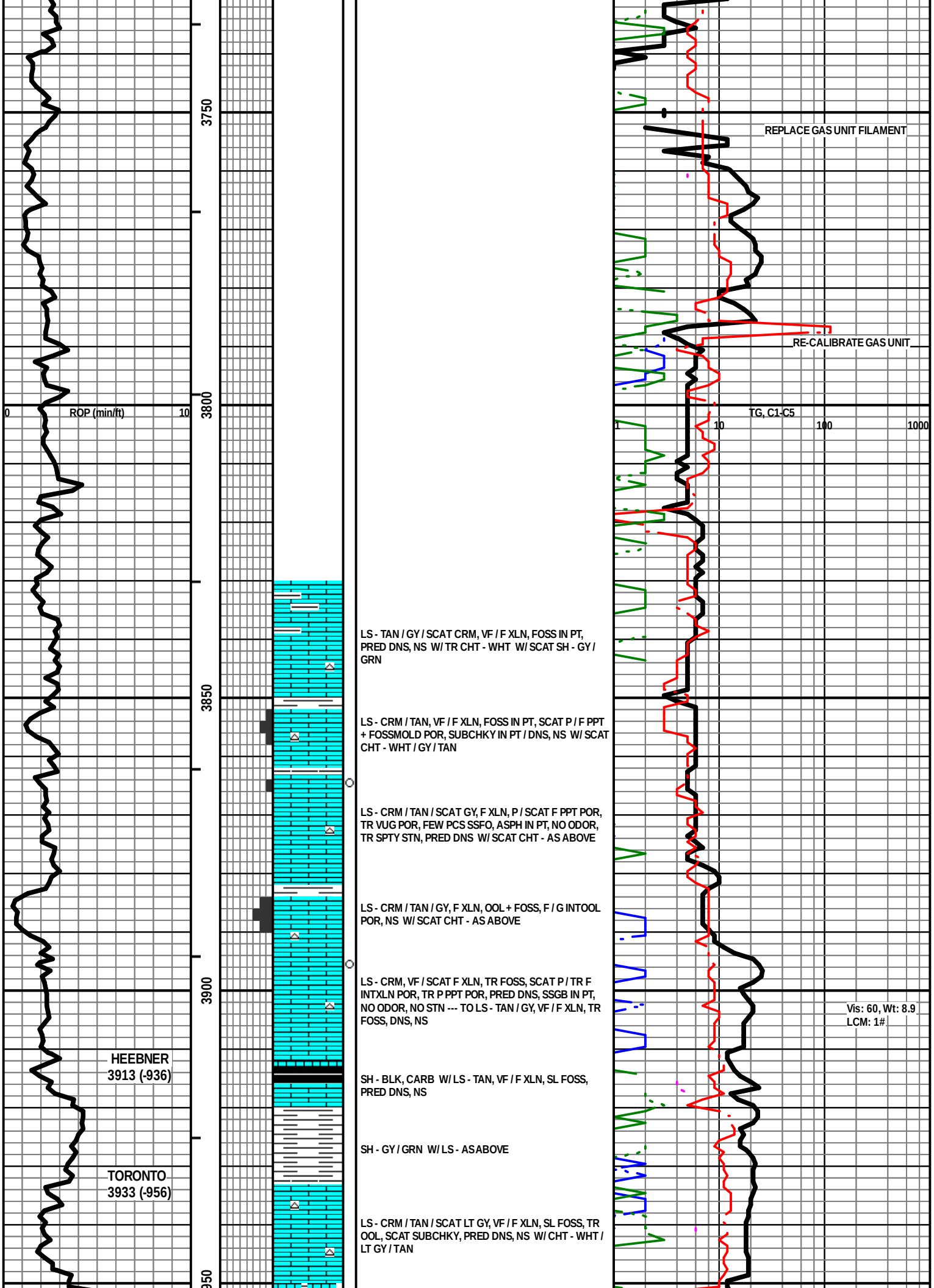
OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

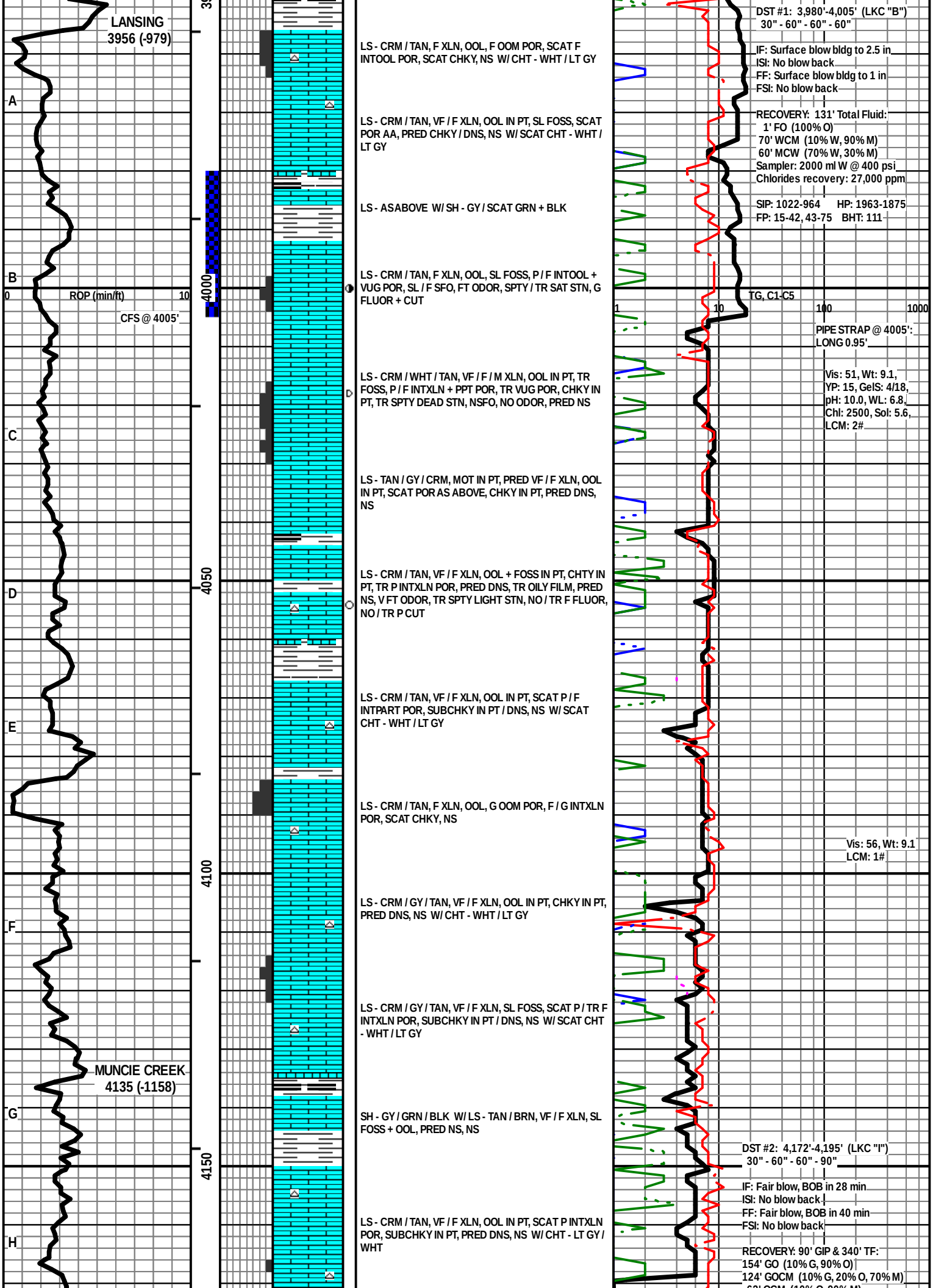
INTERVALS
- Core
- Dst

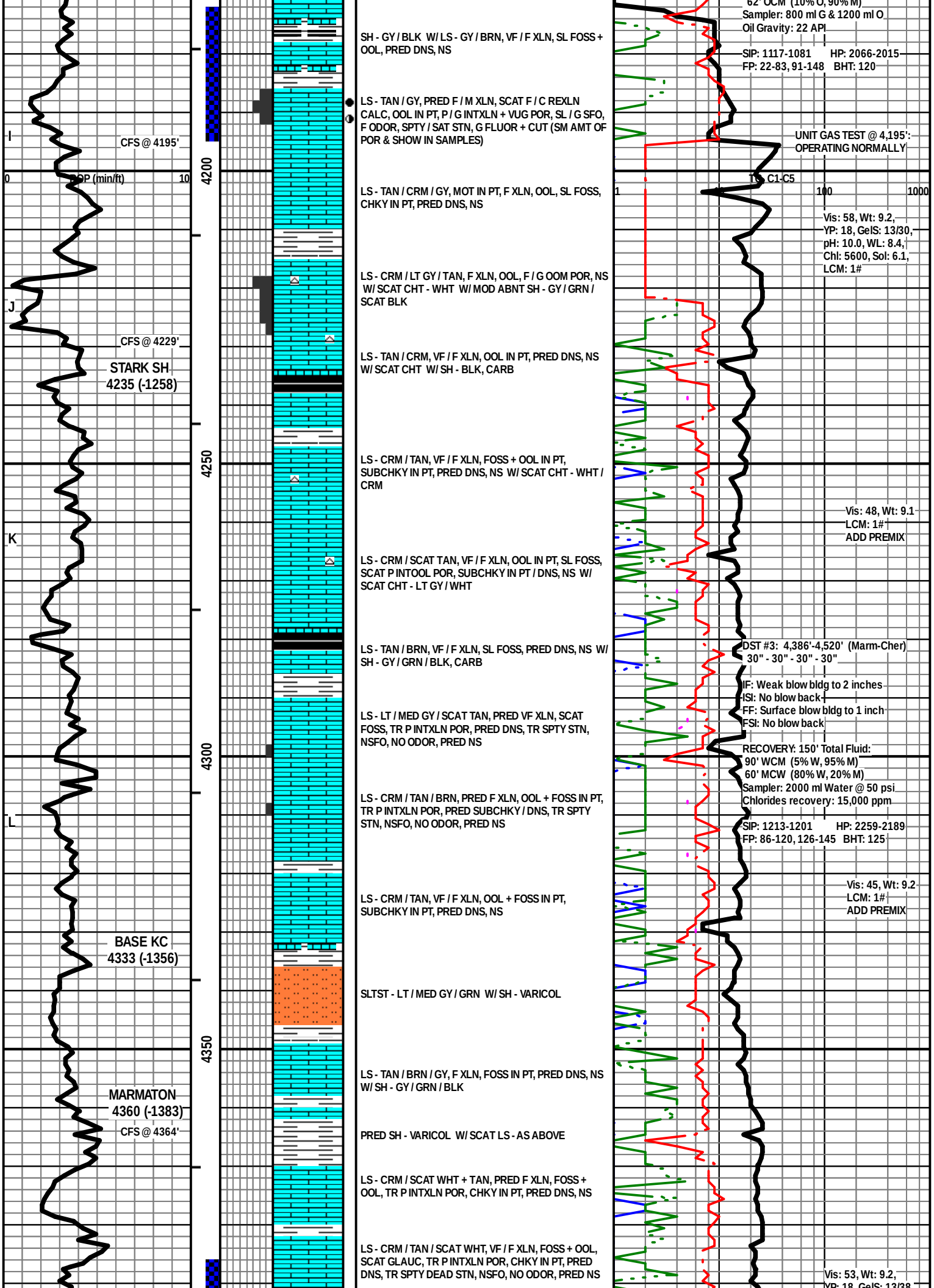
- Dst_1_t
- Dst_1_b
- Dst

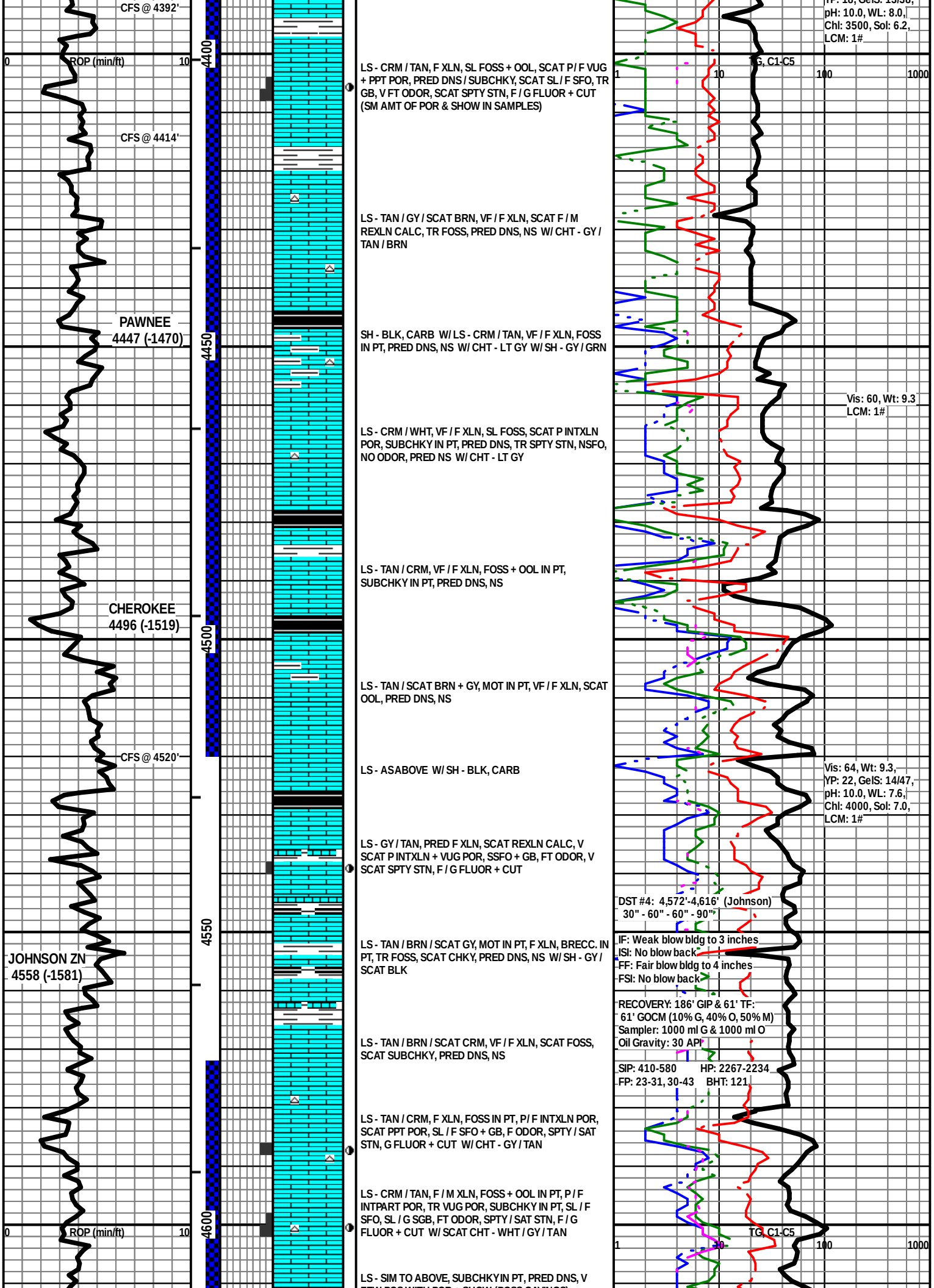
EVENTS
- Rft
- Sidewall
- Conn

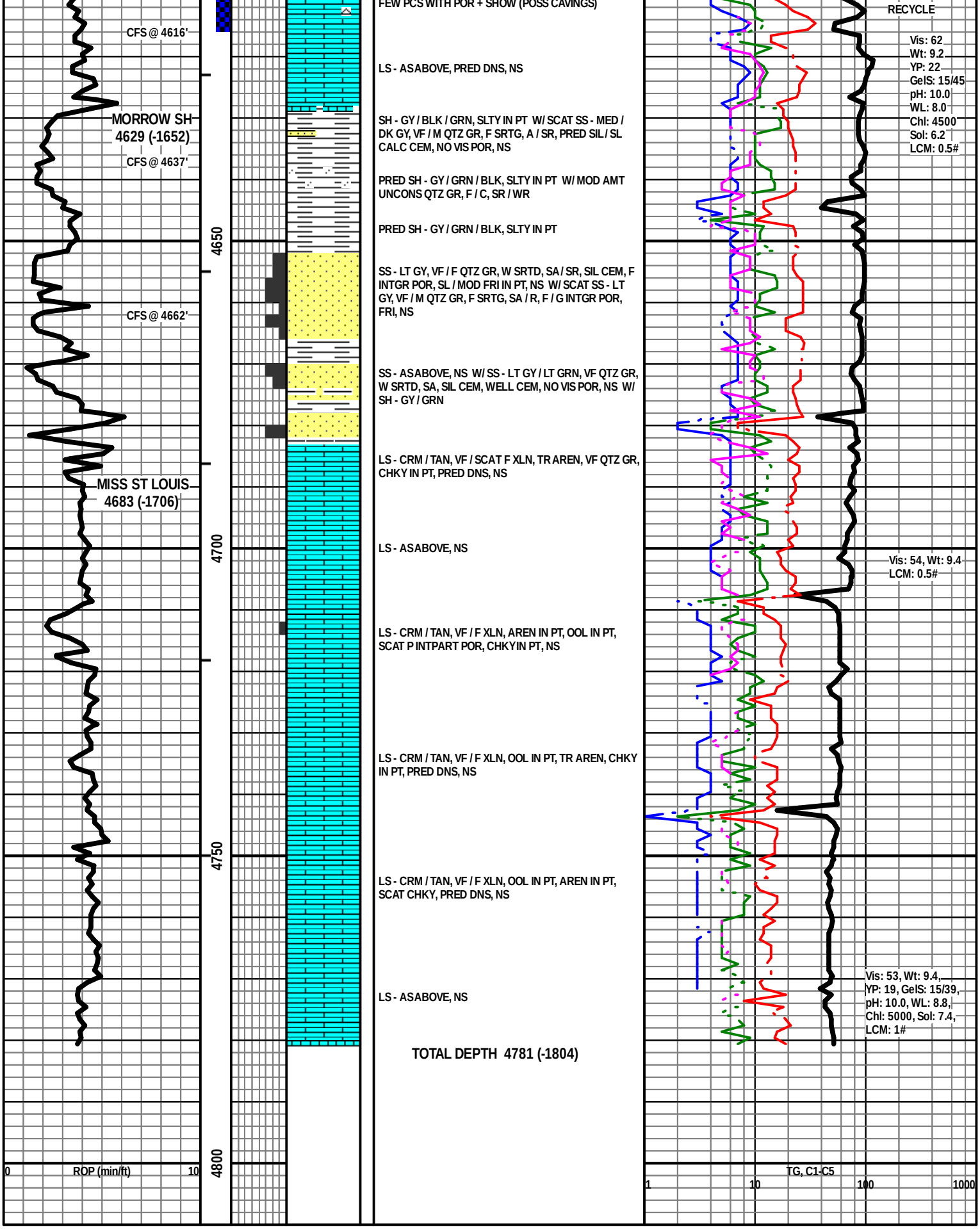



REPLACE GAS UNIT FILAMENT
RE-CALIBRATE GAS UNIT
0
ROP (min/ft)
10
TG, C1-C5
1
10
100
1000
3750
3800
3850
3900
3950
LS - TAN / GY / SCAT CRM, VF / F XLN, FOSS IN PT, PRED DNS, NS W/ TR CHT - WHT W/ SCAT SH - GY / GRN
LS - CRM / TAN, VF / F XLN, FOSS IN PT, SCAT P / F PPT + FOSSMOLD POR, SUBCHKY IN PT / DNS, NS W/ SCAT CHT - WHT / GY / TAN
LS - CRM / TAN / SCAT GY, F XLN, P / SCAT F PPT POR, TR VUG POR, FEW PCS SSFO, ASPH IN PT, NO ODOR, TR SPTY STN, PRED DNS W/ SCAT CHT - AS ABOVE
LS - CRM / TAN / GY, F XLN, OOL + FOSS, F / G INTOOL POR, NS W/ SCAT CHT - AS ABOVE
LS - CRM, VF / SCAT F XLN, TR FOSS, SCAT P / TR F INTXLN POR, TR P PPT POR, PRED DNS, SSGB IN PT, NO ODOR, NO STN --- TO LS - TAN / GY, VF / F XLN, TR FOSS, DNS, NS
Vis: 60, Wt: 8.9
LCM: 1#
HEEBNER
3913 (-936)
SH - BLK, CARB W/ LS - TAN, VF / F XLN, SL FOSS, PRED DNS, NS
SH - GY / GRN W/ LS - AS ABOVE
TORONTO
3933 (-956)
LS - CRM / TAN / SCAT LT GY, VF / F XLN, SL FOSS, TR OOL, SCAT SUBCHKY, PRED DNS, NS W/ CHT - WHT / LT GY / TAN


LANSING
3956 (-979)
A
B
C
D
E
F
MUNCIE CREEK
4135 (-1158)
G
H
0
ROP (min/ft)
10
CFS @ 4005'
4000
4050
4100
4150
LS - CRM / TAN, F XLN, OOL, F OOM POR, SCAT F INTOOL POR, SCAT CHKY, NS W/ CHT - WHT / LT GY
LS - CRM / TAN, VF / F XLN, OOL IN PT, SL FOSS, SCAT POR AA, PRED CHKY / DNS, NS W/ SCAT CHT - WHT / LT GY
LS - ASABOVE W/ SH - GY / SCAT GRN + BLK
LS - CRM / TAN, F XLN, OOL, SL FOSS, P / F INTOOL + VUG POR, SL / F SFO, FT ODOR, SPTY / TR SAT STN, G FLUOR + CUT
LS - CRM / WHT / TAN, VF / F / M XLN, OOL IN PT, TR FOSS, P / F INTXLN + PPT POR, TR VUG POR, CHKY IN PT, TR SPTY DEAD STN, NSFO, NO ODOR, PRED NS
LS - TAN / GY / CRM, MOT IN PT, PRED VF / F XLN, OOL IN PT, SCAT POR AS ABOVE, CHKY IN PT, PRED DNS, NS
LS - CRM / TAN, VF / F XLN, OOL + FOSS IN PT, CHTY IN PT, TR P INTXLN POR, PRED DNS, TR OILY FILM, PRED NS, V FT ODOR, TR SPTY LIGHT STN, NO / TR F FLUOR, NO / TR P CUT
LS - CRM / TAN, VF / F XLN, OOL IN PT, SCAT P / F INTPART POR, SUBCHKY IN PT / DNS, NS W/ SCAT CHT - WHT / LT GY
LS - CRM / TAN, F XLN, OOL, G OOM POR, F / G INTXLN POR, SCAT CHKY, NS
LS - CRM / GY / TAN, VF / F XLN, OOL IN PT, CHKY IN PT, PRED DNS, NS W/ CHT - WHT / LT GY
LS - CRM / GY / TAN, VF / F XLN, SL FOSS, SCAT P / TR F INTXLN POR, SUBCHKY IN PT / DNS, NS W/ SCAT CHT - WHT / LT GY
SH - GY / GRN / BLK W/ LS - TAN / BRN, VF / F XLN, SL FOSS + OOL, PRED NS, NS
LS - CRM / TAN, VF / F XLN, OOL IN PT, SCAT P INTXLN POR, SUBCHKY IN PT, PRED DNS, NS W/ CHT - LT GY / WHT
DST #1: 3,980'-4,005' (LKC "B")
30" - 60" - 60" - 60"
IF: Surface blow bldg to 2.5 in
ISI: No blow back
FF: Surface blow bldg to 1 in
FSI: No blow back
RECOVERY: 131' Total Fluid:
1' FO (100% O)
70' WCM (10% W, 90% M)
60' MCW (70% W, 30% M)
Sampler: 2000 ml W @ 400 psi
Chlorides recovery: 27,000 ppm
SIP: 1022-964 HP: 1963-1875
FP: 15-42, 43-75 BHT: 111
TG, C1-C5
1
10
100
1000
PIPE STRAP @ 4005':
LONG 0.95'
Vis: 51, Wt: 9.1,
YP: 15, GelS: 4/18,
pH: 10.0, WL: 6.8,
Chl: 2500, Sol: 5.6,
LCM: 2#
Vis: 56, Wt: 9.1
LCM: 1#
DST #2: 4,172'-4,195' (LKC "I")
30" - 60" - 60" - 90"
IF: Fair blow, BOB in 28 min
ISI: No blow back
FF: Fair blow, BOB in 40 min
FSI: No blow back
RECOVERY: 90' GIP & 340' TF:
154' GO (10% G, 90% O)
124' GOCM (10% G, 20% O, 70% M)


62' OCM (10% O, 90% M)
Sampler: 800 ml G & 1200 ml O
Oil Gravity: 22 API
SIP: 1117-1081 HP: 2066-2015
FP: 22-83, 91-148 BHT: 120
SH - GY / BLK W/ LS - GY / BRN, VF / F XLN, SL FOSS + OOL, PRED DNS, NS
LS - TAN / GY, PRED F / M XLN, SCAT F / C REXLN CALC, OOL IN PT, P / G INTXLN + VUG POR, SL / G SFO, F ODOR, SPTY / SAT STN, G FLUOR + CUT (SM AMT OF POR & SHOW IN SAMPLES)
I
CFS @ 4195'
UNIT GAS TEST @ 4,195':
OPERATING NORMALLY
0
ROP (min/ft)
10
4200
TG, C1-C5
1
100
1000
LS - TAN / CRM / GY, MOT IN PT, F XLN, OOL, SL FOSS, CHKY IN PT, PRED DNS, NS
Vis: 58, Wt: 9.2,
YP: 18, GelS: 13/30,
pH: 10.0, WL: 8.4,
Chl: 5600, Sol: 6.1,
LCM: 1#
LS - CRM / LT GY / TAN, F XLN, OOL, F / G OOM POR, NS W/ SCAT CHT - WHT W/ MOD ABNT SH - GY / GRN / SCAT BLK
J
CFS @ 4229'
STARK SH
4235 (-1258)
LS - TAN / CRM, VF / F XLN, OOL IN PT, PRED DNS, NS W/ SCAT CHT W/ SH - BLK, CARB
4250
LS - CRM / TAN, VF / F XLN, FOSS + OOL IN PT, SUBCHKY IN PT, PRED DNS, NS W/ SCAT CHT - WHT / CRM
Vis: 48, Wt: 9.1
LCM: 1#
ADD PREMIX
K
LS - CRM / SCAT TAN, VF / F XLN, OOL IN PT, SL FOSS, SCAT P INTOOL POR, SUBCHKY IN PT / DNS, NS W/ SCAT CHT - LT GY / WHT
LS - TAN / BRN, VF / F XLN, SL FOSS, PRED DNS, NS W/ SH - GY / GRN / BLK, CARB
DST #3: 4,386'-4,520' (Marm-Cher)
30" - 30" - 30" - 30"
IF: Weak blow bldg to 2 inches
ISI: No blow back
FF: Surface blow bldg to 1 inch
FSI: No blow back
RECOVERY: 150' Total Fluid:
90' WCM (5% W, 95% M)
60' MCW (80% W, 20% M)
Sampler: 2000 ml Water @ 50 psi
Chlorides recovery: 15,000 ppm
4300
LS - LT / MED GY / SCAT TAN, PRED VF XLN, SCAT FOSS, TR P INTXLN POR, PRED DNS, TR SPTY STN, NSFO, NO ODOR, PRED NS
SIP: 1213-1201 HP: 2259-2189
FP: 86-120, 126-145 BHT: 125
L
LS - CRM / TAN / BRN, PRED F XLN, OOL + FOSS IN PT, TR P INTXLN POR, PRED SUBCHKY / DNS, TR SPTY STN, NSFO, NO ODOR, PRED NS
Vis: 45, Wt: 9.2
LCM: 1#
ADD PREMIX
LS - CRM / TAN, VF / F XLN, OOL + FOSS IN PT, SUBCHKY IN PT, PRED DNS, NS
BASE KC
4333 (-1356)
SLTST - LT / MED GY / GRN W/ SH - VARICOL
4350
LS - TAN / BRN / GY, F XLN, FOSS IN PT, PRED DNS, NS W/ SH - GY / GRN / BLK
MARMATON
4360 (-1383)
CFS @ 4364'
PRED SH - VARICOL W/ SCAT LS - AS ABOVE
LS - CRM / SCAT WHT + TAN, PRED F XLN, FOSS + OOL, TR P INTXLN POR, CHKY IN PT, PRED DNS, NS
LS - CRM / TAN / SCAT WHT, VF / F XLN, FOSS + OOL, SCAT GLAUC, TR P INTXLN POR, CHKY IN PT, PRED DNS, TR SPTY DEAD STN, NSFO, NO ODOR, PRED NS
Vis: 53, Wt: 9.2,


CFS @ 4392'
0
ROP (min/ft)
10
4400
CFS @ 4414'
PAWNEE
4447 (-1470)
4450
CHEROKEE
4496 (-1519)
4500
CFS @ 4520'
4550
JOHNSON ZN
4558 (-1581)
4600
0
ROP (min/ft)
10
LS - CRM / TAN, F XLN, SL FOSS + OOL, SCAT P / F VUG + PPT POR, PRED DNS / SUBCHKY, SCAT SL / F SFO, TR GB, V FT ODOR, SCAT SPTY STN, F / G FLUOR + CUT (SM AMT OF POR & SHOW IN SAMPLES)
LS - TAN / GY / SCAT BRN, VF / F XLN, SCAT F / M REXLN CALC, TR FOSS, PRED DNS, NS W/ CHT - GY / TAN / BRN
SH - BLK, CARB W/ LS - CRM / TAN, VF / F XLN, FOSS IN PT, PRED DNS, NS W/ CHT - LT GY W/ SH - GY / GRN
LS - CRM / WHT, VF / F XLN, SL FOSS, SCAT P INTXLN POR, SUBCHKY IN PT, PRED DNS, TR SPTY STN, NSFO, NO ODOR, PRED NS W/ CHT - LT GY
LS - TAN / CRM, VF / F XLN, FOSS + OOL IN PT, SUBCHKY IN PT, PRED DNS, NS
LS - TAN / SCAT BRN + GY, MOT IN PT, VF / F XLN, SCAT OOL, PRED DNS, NS
LS - ASABOVE W/ SH - BLK, CARB
LS - GY / TAN, PRED F XLN, SCAT REXLN CALC, V SCAT P INTXLN + VUG POR, SSFO + GB, FT ODOR, V SCAT SPTY STN, F / G FLUOR + CUT
LS - TAN / BRN / SCAT GY, MOT IN PT, F XLN, BRECC. IN PT, TR FOSS, SCAT CHKY, PRED DNS, NS W/ SH - GY / SCAT BLK
LS - TAN / BRN / SCAT CRM, VF / F XLN, SCAT FOSS, SCAT SUBCHKY, PRED DNS, NS
LS - TAN / CRM, F XLN, FOSS IN PT, P/ F INTXLN POR, SCAT PPT POR, SL / F SFO + GB, F ODOR, SPTY / SAT STN, G FLUOR + CUT W/ CHT - GY / TAN
LS - CRM / TAN, F / M XLN, FOSS + OOL IN PT, P / F INTPART POR, TR VUG POR, SUBCHKY IN PT, SL / F SFO, SL / G SGB, FT ODOR, SPTY / SAT STN, F / G FLUOR + CUT W/ SCAT CHT - WHT / GY / TAN
LS - SIM TO ABOVE, SUBCHKY IN PT, PRED DNS, V
pH: 10.0, WL: 8.0,
Chl: 3500, Sol: 6.2,
LCM: 1#
TG, C1-C5
1
10
100
1000
Vis: 60, Wt: 9.3
LCM: 1#
Vis: 64, Wt: 9.3,
YP: 22, GelS: 14/47,
pH: 10.0, WL: 7.6,
Chl: 4000, Sol: 7.0,
LCM: 1#
DST #4: 4,572'-4,616' (Johnson)
30" - 60" - 60" - 90"
IF: Weak blow bldg to 3 inches
ISI: No blow back
FF: Fair blow bldg to 4 inches
FSI: No blow back
RECOVERY: 186' GIP & 61' TF:
61' GOCM (10% G, 40% O, 50% M)
Sampler: 1000 ml G & 1000 ml O
Oil Gravity: 30 API
SIP: 410-580 HP: 2267-2234
FP: 23-31, 30-43 BHT: 121
TG, C1-C5
1
10
100
1000


FEW PCS WITH POR + SHOW (POSS CAVINGS)
LS - ASABOVE, PRED DNS, NS
SH - GY / BLK / GRN, SLTY IN PT W/ SCAT SS - MED / DK GY, VF / M QTZ GR, F SRTG, A / SR, PRED SIL / SL CALC CEM, NO VIS POR, NS
PRED SH - GY / GRN / BLK, SLTY IN PT W/ MOD AMT UNCONS QTZ GR, F / C, SR / WR
PRED SH - GY / GRN / BLK, SLTY IN PT
SS - LT GY, VF / F QTZ GR, W SRTD, SA / SR, SIL CEM, F INTGR POR, SL / MOD FRI IN PT, NS W/ SCAT SS - LT GY, VF / M QTZ GR, F SRTG, SA / R, F / G INTGR POR, FRI, NS
SS - ASABOVE, NS W/ SS - LT GY / LT GRN, VF QTZ GR, W SRTD, SA, SIL CEM, WELL CEM, NO VIS POR, NS W/ SH - GY / GRN
LS - CRM / TAN, VF / SCAT F XLN, TR AREN, VF QTZ GR, CHKY IN PT, PRED DNS, NS
LS - ASABOVE, NS
LS - CRM / TAN, VF / F XLN, AREN IN PT, OOL IN PT, SCAT P INTPART POR, CHKY IN PT, NS
LS - CRM / TAN, VF / F XLN, OOL IN PT, TR AREN, CHKY IN PT, PRED DNS, NS
LS - CRM / TAN, VF / F XLN, OOL IN PT, AREN IN PT, SCAT CHKY, PRED DNS, NS
LS - ASABOVE, NS
TOTAL DEPTH 4781 (-1804)
CFS @ 4616'
MORROW SH
4629 (-1652)
CFS @ 4637'
CFS @ 4662'
MISS ST LOUIS
4683 (-1706)
4650
4700
4750
4800
0
ROP (min/ft)
10
RECYCLE
Vis: 62
Wt: 9.2
YP: 22
GelS: 15/45
pH: 10.0
WL: 8.0
Chl: 4500
Sol: 6.2
LCM: 0.5#
Vis: 54, Wt: 9.4
LCM: 0.5#
Vis: 53, Wt: 9.4,
YP: 19, GelS: 15/39,
pH: 10.0, WL: 8.8,
Chl: 5000, Sol: 7.4,
LCM: 1#
TG, C1-C5
1
10
100
1000