



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1234174
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1234174

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 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				

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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	Gayle 1-2
Doc ID	1234174

All Electric Logs Run

CDL/CNL/PE
DIL
MEL
SONIC

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	Gayle 1-2
Doc ID	1234174

Tops

Name	Top	Datum
Anhydrite	2648	+ 790
B/Anhydrite	2668	+ 770
Topeka	3841	- 403
Heebner Shale	4081	- 643
Lansing	4132	- 694
Muncie Creek	4322	- 884
Stark	4414	- 976
Marmaton	4582	- 1144
Ft. Scott	4687	- 1249
Cherokee	4737	- 1299
Atoka	4778	- 1340
Morrow Shale	4900	- 1462
Mississippian	5025	- 1587

CONSOLIDATED
Oil Well Services, LLC

271262

TICKET NUMBER 47699
LOCATION Oakley, Ks.
FOREMAN Dauen

Box 884, Chanute, KS 66720
431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
9/20/14	5659	Gayle #1-2	2	16	38	Wichita	
CUSTOMER		Leoti N To CL Rd A 6w 3/4 S + 6 Int		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS				731	Cory		
				693	Robert		
					Larry		
CITY	STATE	ZIP CODE					

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 218 CASING SIZE & WEIGHT 8 5/8 23"
 CASING DEPTH 216.03 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 14.8 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 20'
 DISPLACEMENT 12.54 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety Meeting Rig up on Duke #4 Run Casing Break Circulation with Rig Pump Hook up to Pump Truck mix 165 SKs Cem 3% CC 2% Gel Washup Pump + Lines + Displace with 12.54 bbl Water Shut in Rig Down
Cement Did Circulate

Approx 2 bbls To Pit

Thanks Dauen + Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401 S	1	PUMP CHARGE	\$ 1150.00	\$ 1150.00
5406	65	MILEAGE	\$ 5.25	\$ 341.25
5407 A	7.8	Ton Mileage Delivery	\$ 1.25	\$ 887.25
1104 S	165 SKs	Class "A" Cement	\$ 18.55	\$ 3060.75
1102	465 #	Calcium Chloride	\$.94	\$ 437.10
1118 B	310 #	Bentonite	\$.27	\$ 83.70
			Sub Total	\$ 5960.05
			Less 10%	\$ 596.00
			Sub Total	\$ 5364.05
				262.70
			SALES TAX	
			ESTIMATED TOTAL	5626.75

Form 3737

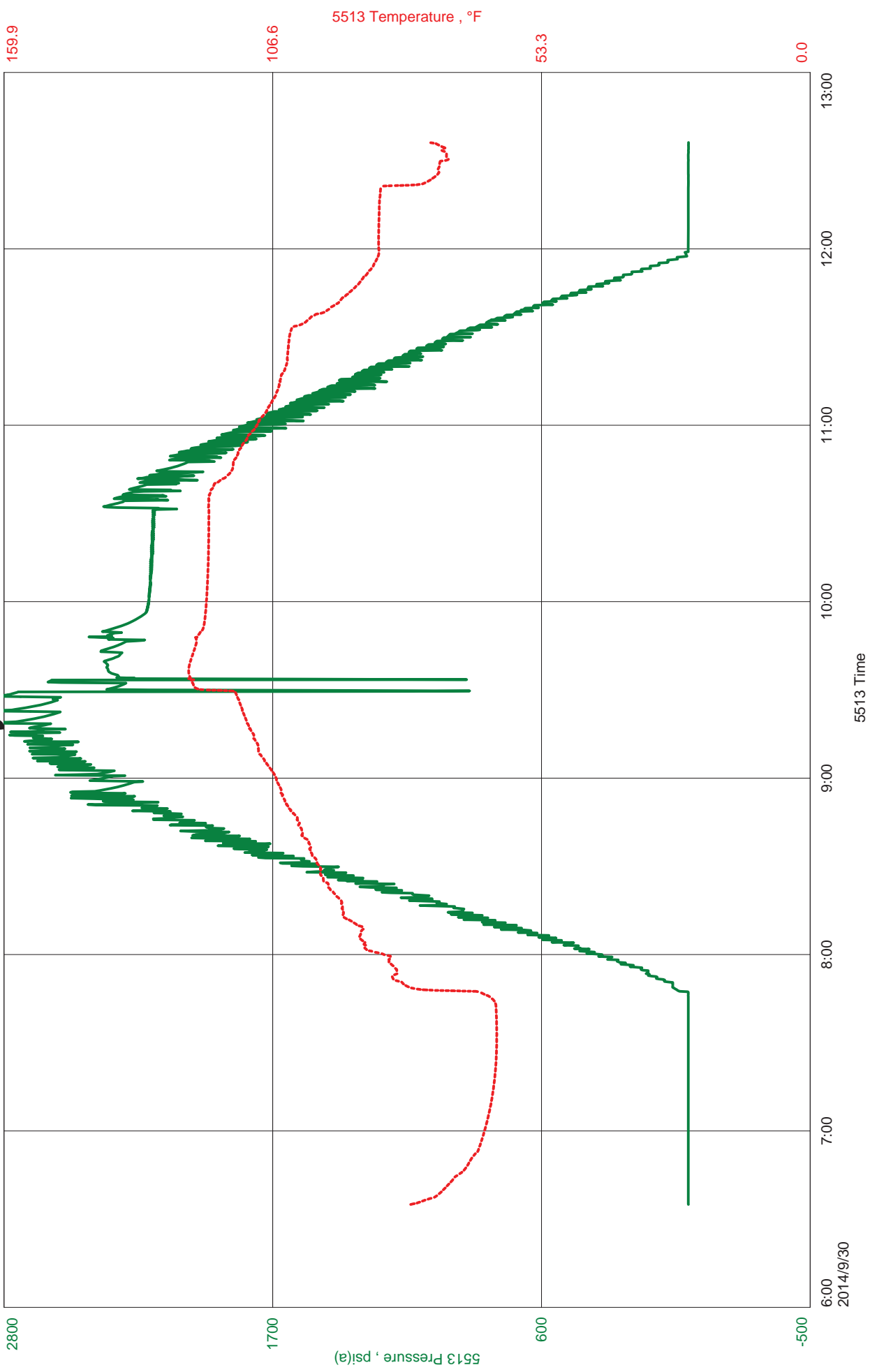
AUTHORIZATION Rich Wheeler TITLE TP DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form

Mull Drilling Company
DST #1 Lower Morrow 4952-5024
Start Test Date: 2014/09/30
Final Test Date: 2014/09/30

Gayle #1-2
Formation: Lower Morrow Sand
Pool: Wildcat
Job Number: K176

Gayle #1-2





JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Mull Drilling Company	Mark Shreve	Job Number	K176
Contact		Gayle #1-2	Representative	Jason McLemore
Well Name		DST #1 Lower Morrow 4952-5024	Well Operator	Mull Drilling Company
Unique Well ID		2-16s-38w-Wichita	Prepared By	Jason McLemore
Surface Location		Wildcat	Qualified By	Steve Reed
Field		Vertical	Test Unit	6
Well Type				

Test Information

Test Type	Drill Stem Test	Representative	Jason McLemore
Formation	Lower Morrow Sand	Well Operator	Mull Drilling Company
Well Fluid Type	01 Oil	Report Date	2014/09/30
Test Purpose (AEUB)	Initial Test	Prepared By	Jason McLemore
Start Test Date	2014/09/30	Start Test Time	06:35:00
Final Test Date	2014/09/30	Final Test Time	11:33:00

Test Results

RECOVERED:

185	Drilling Mud
185	TOTAL FLUID



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: gayle1dst1

TIME ON: 6:35 AM
TIME OFF: 11:33 AM

Company Mull Drilling Company Lease & Well No. Gayle #1-2
Contractor Duke #4 Charge to Mull Drilling Company
Elevation KB 3438 Formation Lower Morrow Sand Effective Pay _____ Ft. Ticket No. K176
Date 9-30-14 Sec. 2 Twp. 16 S Range 38 W County Wichita State KANSAS
Test Approved By Steve Reed Diamond Representative Jason McLemore

Formation Test No. 1 Interval Tested from 4952 ft. to 5024 ft. Total Depth 5024 ft.
Packer Depth 4947 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4952 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4933 ft. Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4934 ft. Recorder Number 5588 Cap. 6000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 57 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 7000 P.P.M. Drill Pipe Length 4919 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 6 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? No Reversed Out No Anchor Length 72 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 63' DP in Anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Packer Failure, Pull Tool
2nd Open:

Recovered <u>185</u> ft. of <u>Drilling Mud</u>	
Recovered <u>185</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: <u>Shale Packer on Bottom</u>	Insurance
	Total

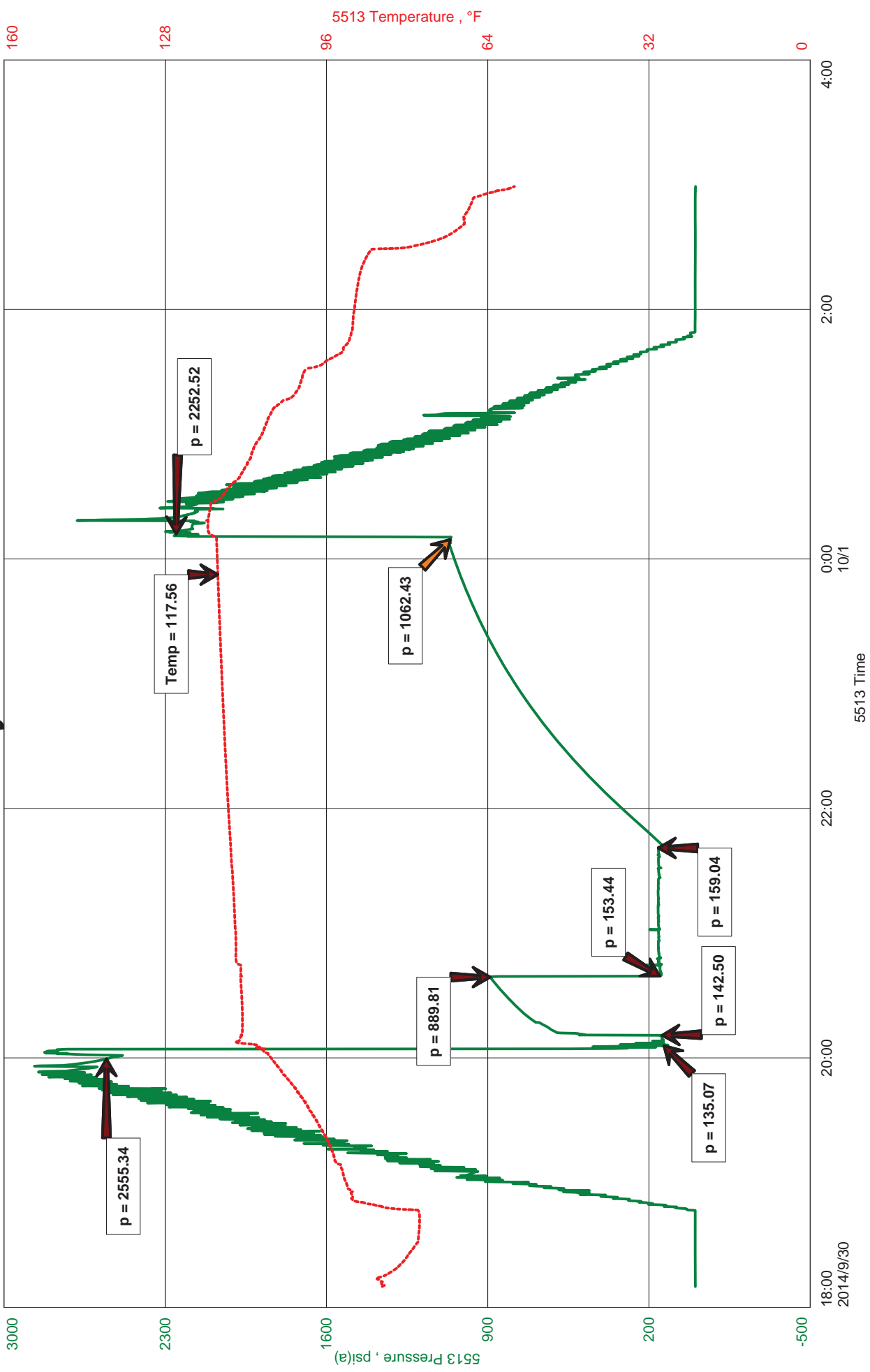
Time Set Packer(s) 9:32 AM A.M. P.M. Time Started Off Bottom 9:40 AM A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure..... (A) _____ P.S.I.
Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) _____ P.S.I.

Diamond Testing shall not be liable for damages of any kind to 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 statement or opinion concerning the result 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.

Mull Drilling Company
DST #2 Morrow Sand 4854-5024
Start Test Date: 2014/09/30
Final Test Date: 2014/10/01

Gayle #1-2
Formation: Morrow Sand
Pool: Wildcat
Job Number: K177

Gayle #1-2





JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Mull Drilling Company	Job Number	K177
Contact		Representative	Jason McLemore
Well Name	Mark Shreve	Well Operator	Mull Drilling Company
Unique Well ID	Gayle #1-2	Prepared By	Jason McLemore
Surface Location	DST #2 Morrow Sand 4854-5024	Qualified By	Steve Reed
Field	2-16s-38w-Wichita	Test Unit	6
Well Type	Wildcat		
	Vertical		

Test Information

Test Type	Drill Stem Test	Representative	Jason McLemore
Formation	Morrow Sand	Well Operator	Mull Drilling Company
Well Fluid Type	01 Oil	Report Date	2014/10/01
Test Purpose (AEUB)	Initial Test	Prepared By	Jason McLemore
Start Test Date	2014/09/30	Start Test Time	18:10:00
Final Test Date	2014/10/01	Final Test Time	03:00:00

Test Results

RECOVERED:

250	Drilling Mud
250	TOTAL FLUID



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: gayle1dst2

TIME ON: 6:10 PM
TIME OFF: 3:00 AM

Company Mull Drilling Company Lease & Well No. Gayle #1-2
Contractor Duke #4 Charge to Mull Drilling Company
Elevation KB 3438 Formation Morrow Sand Effective Pay _____ Ft. Ticket No. K177
Date 9-30-14 Sec. 2 Twp. _____ 16 S Range _____ 38 W County Wichita State KANSAS
Test Approved By Steve Reed Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 4854 ft. to 5024 ft. Total Depth 5024 ft.
Packer Depth 4849 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4854 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 4835 ft. Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4836 ft. Recorder Number 5588 Cap. 6000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 57 Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 7000 P.P.M. Drill Pipe Length 4821 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 6 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? No Reversed Out No Anchor Length 170 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{157' DP in Anchor} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong, BOB in 1 Min., No Blowback (Tool Slid 1' On Open)
2nd Open: Weak Blow, Built to 1/2", Died in 15 Min., No Blowback

Recovered 250 ft. of Drilling Mud
Recovered 250 ft. of TOTAL FLUID
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: <u>Shale Packer on Bottom</u>	Total

Time Set Packer(s) 9:11 PM ^{A.M.}/_{P.M.} Time Started Off Bottom 12:46 AM ^{A.M.}/_{P.M.} Maximum Temperature 118

Initial Hydrostatic Pressure..... (A) 2555 P.S.I.
Initial Flow Period..... Minutes (B) 135 P.S.I. to (C) 143 P.S.I.
Initial Closed In Period..... Minutes (D) 890 P.S.I.
Final Flow Period..... Minutes (E) 153 P.S.I. to (F) 159 P.S.I.
Final Closed In Period..... Minutes (G) 1062 P.S.I.
Final Hydrostatic Pressure..... (H) 2253 P.S.I.

Diamond Testing shall not be liable for damages of any kind to 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 statement or opinion concerning the result 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.

OPERATOR

Company: MULL DRILLING COMPANY, INC
 Address: 1700 N WATERFRONT PKWY
 BLDG 1200
 WICHITA, KANSAS 67206-6637
 Contact Geologist: TOBY ECK
 Contact Phone Nbr: 316-264-6366
 Well Name: GAYLE #1-2
 Location: SW SW SW NE S2 T16S R38W
 API: 15-203-20285-00-00
 Pool: KANSAS
 State: KANSAS
 Field: WILDCAT
 Country:



DRILLING COMPANY, INC.
 WICHITA, KANSAS

Scale 1:240 Imperial

Well Name: GAYLE #1-2
 Surface Location: SW SW SW NE S2 T16S R38W
 Bottom Location:
 API: 15-203-20285-00-00
 License Number: 5144
 Spud Date: 9/20/2014 Time: 3:00 PM
 Region: WICHITA COUNTY
 Drilling Completed: 10/1/2014 Time: 2:38 PM
 Surface Coordinates: 2690 FSL & 2127 FEL
 Bottom Hole Coordinates:
 Ground Elevation: 3429.00ft
 K.B. Elevation: 3438.00ft
 Logged Interval: 3700.00ft To: 5100.00ft
 Total Depth: 5100.00ft
 Formation: LOWER MORROW SAND
 Drilling Fluid Type: CHEMICAL / FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -101.483683882
 Latitude: 38.691913831
 N/S Co-ord: 2690 FSL
 E/W Co-ord: 2127 FEL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 WEST 35TH
 HAYS, KANSAS 67601
 Phone Nbr: 785-650-4540 / 785-639-1337
 Logged By: GEOLOGIST Name: STEVE REED

CONTRACTOR

Contractor: DUKE DRILLING COMPANY, INC.
 Rig #: 4
 Rig Type: MUD ROTARY
 Spud Date: 9/20/2014 Time: 3:00 PM
 TD Date: 10/1/2014 Time: 2:38 PM
 Rig Release: 10/2/2014 Time: 12:00 PM

ELEVATIONS

K.B. Elevation: 3438.00ft Ground Elevation: 3429.00ft
 K.B. to Ground: 9.00ft

NOTES

BASED ON OVERALL LACK OF SHOWS, NEGATIVE RESULTS OF DST #2 AND LOG ANALYSIS THE DECISION WAS MADE TO PLUG AND ABANDON WELL

OPEN HOLE LOGGING PROVIDED BY: NABORS COMPLETION AND PRODUCTION SERVICES COMPANY
 DUAL COMPENSATED POROSITY LOG, DUAL INDUCTION LOG, MICRORESISTIVITY LOG, PE LOG,
 AND SONIC LOGS WERE COMPLETED

DRILL STEM TESTING PROVIDED BY: DIAMOND TESTING
 ONE (1) MISRUN AND ONE (1) CONVENTIONAL TESTS WERE PERFORMED

LOG TOPS COMPARISON AND DAILY ACTIVITY SUMMARY

	WELL NAME		COMPARISON WELL	COMPARISON WELL
	GAYLE # 1-2		BRADFORD #1-1	JOY # 1-1
	API: 15-203-20285		API: 15-203-20136	API: 15-203-20255
FORMATION	SAMPLE TOPS	LOG TOPS	LOG TOPS (DATUM)	LOG TOPS (DATUM)
ANHYDRITE TOP	2652' (+786')	2648' (+790')	+784'	+780'
AHYDRITE BASE	2674' (+764')	2668' (+770')	+767'	+766'
TOPEKA	3842 (-404')	3841' (-403')	-408'	-402'
HEEBNER	4081' (-643')	4081' (-643')	-647'	-640'
LKC	4128' (-690')	4130' (-692')	-697'	-690'
MUNCIE CREEK	4321' (-883')	4322' (-884')	-884'	-876'
STARK	4412' (-974')	4414' (-976')	-977'	-966'
BKC	4508' (-1070')	4516' (-1078')	-1073'	-1063'
MARMATON	4577' (-1139')	4578' (-1140')	-1140'	-1132'
FORT SCOTT	4685' (-1247')	4686' (-1248')	-1248'	-1252'
CHEROKEE SHALE	4735' (-1297')	4737' (-1299')	-1300'	-1286'
ATOKA	4789' (-1351')	4790' (-1352')	-1354'	-1335'
MORROW SHALE	4906' (-1468')	4904' (-1466')	-1463'	-1449'
UPPER SANDSTONE	4922' (-1484')	4914' (-1476')	-1474'	-1465'
BASAL SANDSTONE	5012' (-1574')	5014' (-1576')	-1562'	NA
MISSISSIPPIAN	5025' (-1587')	5024' (-1586')	-1584'	-1574'
RTD	5100' (-1662')	5098' (-1660')	-1665'	-1969'

SUMMARY OF DAILY ACTIVITY

- 9-20-14** R.U., spud @ 3:00pm, 8 5/8" surface casing set at 216' w/165 sxs common, 2% gel, 3% cc
- 9-21-14** 220', WOC, drilling
- 9-22-14** 338', replace Kelly bushings, master bushing, and oil lines, drilling
- 9-23-14** 1300, drilling
- 9-24-14** 2665, drilling
- 9-25-14** 3419, drilling, replace clutch on mud pump
- 9-26-14** 3782, drilling, CFS @ 4270
- 9-27-14** 4270, drilling, replace gland rubbers on mud pump, CFS @ 4600
- 9-28-14** 4635, drilling, bit trip @ 4728, CFS @ 4745
- 9-29-14** 4836, drilling, CFS @4920, CFS @ 4927, CFS @ 4937, CFS @ 5017, CFS @ 5024, short trip, CTCH, TOWB for DST #1, DST #1 4952 to 5024
- 9-30-14** 5024, TIWT, DST misrun, TOWT, TIWB, CTCH, TOWB FOR DST #2, DST #2 4854 to 5024
- 10-1-14** 5024, drilling, TD 5100 @ 2:38 pm, CTCH, TOWB for logs, logging, prepare for plugging

DST #1 SUMMARY



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: gayle1dst1

TIME ON: 6:35 AM
 TIME OFF: 11:33 AM

Company Mull Drilling Company Lease & Well No. Gayle #1-2
 Contractor Duke #4 Charge to Mull Drilling Company
 Elevation KB 3438 Formation Lower Morrow Sand Effective Pay _____ Ft. Ticket No. K176
 Date 9-30-14 Sec. 2 Twp. 16 S Range 38 W County Wichita State KANSAS
 Test Approved By Steve Reed Diamond Representative Jason McLemore

Formation Test No. 1 Interval Tested from 4952 ft. to 5024 ft. Total Depth 5024 ft.
 Packer Depth 4947 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 4952 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4933 ft. Recorder Number 5513 Cap. 5000 P.S.I.
 Bottom Recorder Depth (Outside) 4934 ft. Recorder Number 5588 Cap. 6000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
 Mud Type Chemical Viscosity 57 Drill Collar Length 0 ft. I.D. 2 1/4 in.
 Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 7000 P.P.M. Drill Pipe Length 4919 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number 6 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? No Reversed Out No Anchor Length 72 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 63' DP in Anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Packer Failure, Pull Tool
2nd Open:

Recovered <u>185</u> ft. of <u>Drilling Mud</u>	
Recovered <u>185</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: <u>Shale Packer on Bottom</u>	Insurance
	Total

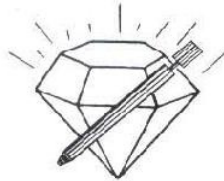
Time Set Packer(s) 9:32 AM A.M. P.M. Time Started Off Bottom 9:40 AM A.M. P.M. Maximum Temperature _____

Initial Hydrostatic Pressure..... (A) _____ P.S.I.
 Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
 Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
 Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.

Final Closed In Period.....Minutes.....(G).....P.S.I.
 Final Hydrostatic Pressure.....(H).....P.S.I.

Diamond Testing shall not be liable for damages of any kind to 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 statement or opinion concerning the result 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.

DST #2 SUMMARY



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: gayle1dst2

TIME ON: 6:10 PM
 TIME OFF: 3:00 AM

Company Mull Drilling Company Lease & Well No. Gayle #1-2
 Contractor Duke #4 Charge to Mull Drilling Company
 Elevation KB 3438 Formation Morrow Sand Effective Pay _____ Ft. Ticket No. K177
 Date 9-30-14 Sec. 2 Twp. 16 S Range 38 W County Wichita State KANSAS
 Test Approved By Steve Reed Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 4854 ft. to 5024 ft. Total Depth 5024 ft.
 Packer Depth 4849 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 4854 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
 Top Recorder Depth (Inside) 4835 ft. Recorder Number 5513 Cap. 5000 P.S.I.
 Bottom Recorder Depth (Outside) 4836 ft. Recorder Number 5588 Cap. 6000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 57 Drill Collar Length 0 ft. I.D. 2 1/4 in.
 Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 7000 P.P.M. Drill Pipe Length 4821 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number 6 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? No Reversed Out No Anchor Length 170 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong, BOB in 1 Min., No Blowback (Tool Slid 1' On Open)
 2nd Open: Weak Blow, Built to 1/2", Died in 15 Min., No Blowback

Recovered <u>250</u> ft. of <u>Drilling Mud</u>	
Recovered <u>250</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: <u>Shale Packer on Bottom</u>	Insurance
	Total

Time Set Packer(s) 9:11 PM A.M. P.M. Time Started Off Bottom 12:46 AM A.M. P.M. Maximum Temperature 118
 Initial Hydrostatic Pressure.....(A) 2555 P.S.I.
 Initial Flow Period..... Minutes (B) 135 P.S.I. to (C) 143 P.S.I.
 Initial Closed In Period..... Minutes (D) 890 P.S.I.
 Final Flow Period..... Minutes (E) 153 P.S.I. to (F) 159 P.S.I.
 Final Closed In Period..... Minutes (G) 1062 P.S.I.

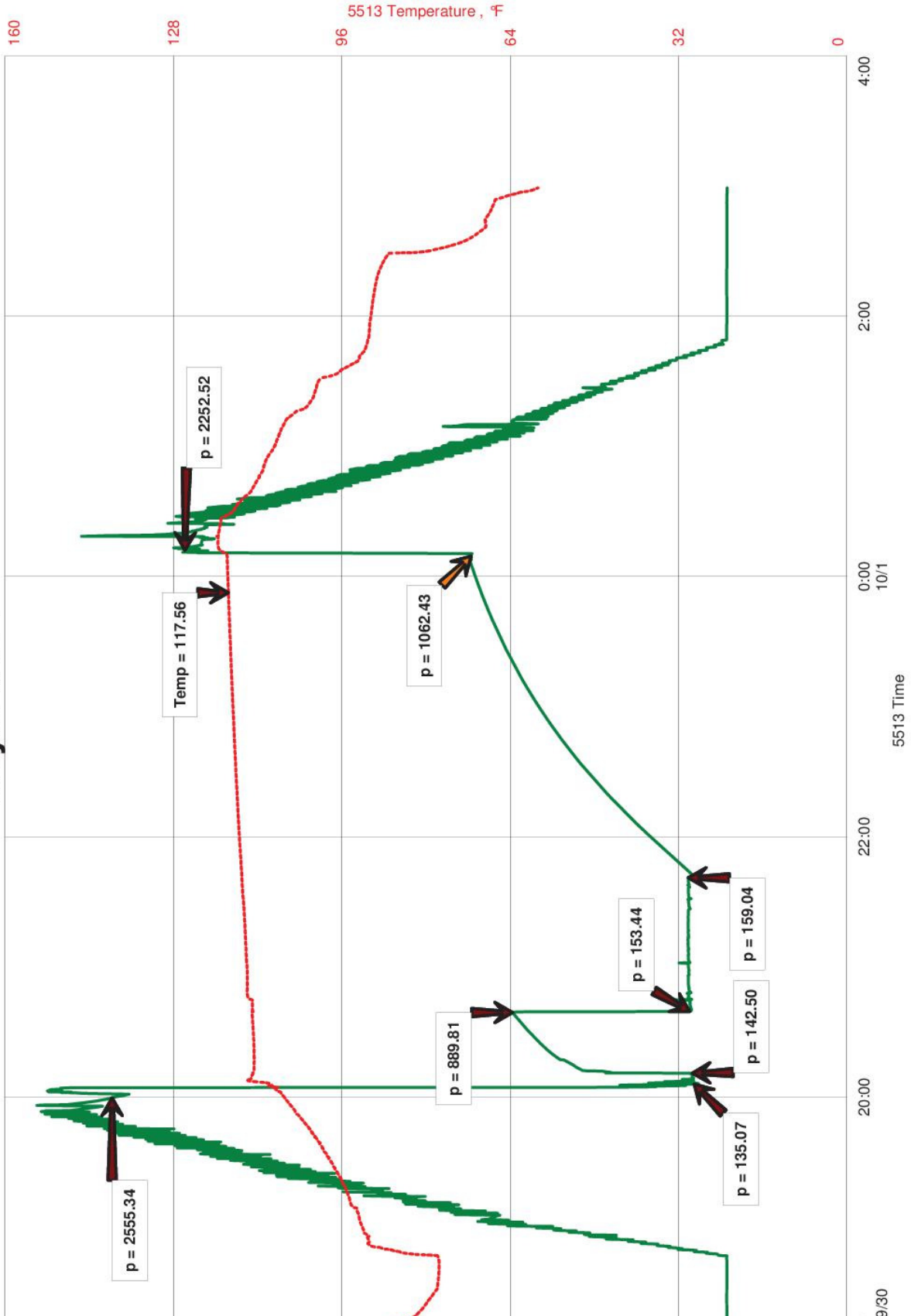
Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

DST #2 PRESSURE VS TIME CHART

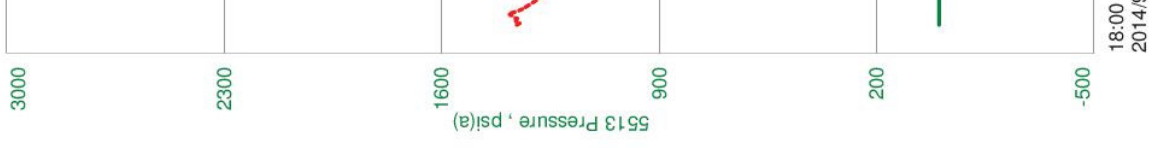
Gayle #1-2
 Formation: Morrow Sand
 Pool: Wildcat
 Job Number: K177

Gayle #1-2

Company
 ow Sand 4854-5024
 ite: 2014/09/30
 ite: 2014/10/01



Mull Drilling C
 DST #2 Morr
 Start Test Da
 Final Test Da



C:\Users\Roger.Friedly\Desktop

ROCK TYPES

sdy lmst	Lmst fw>7	shale, gry	shale, red
Lmst fw<7	shale, grn	Carbon Sh	Ss

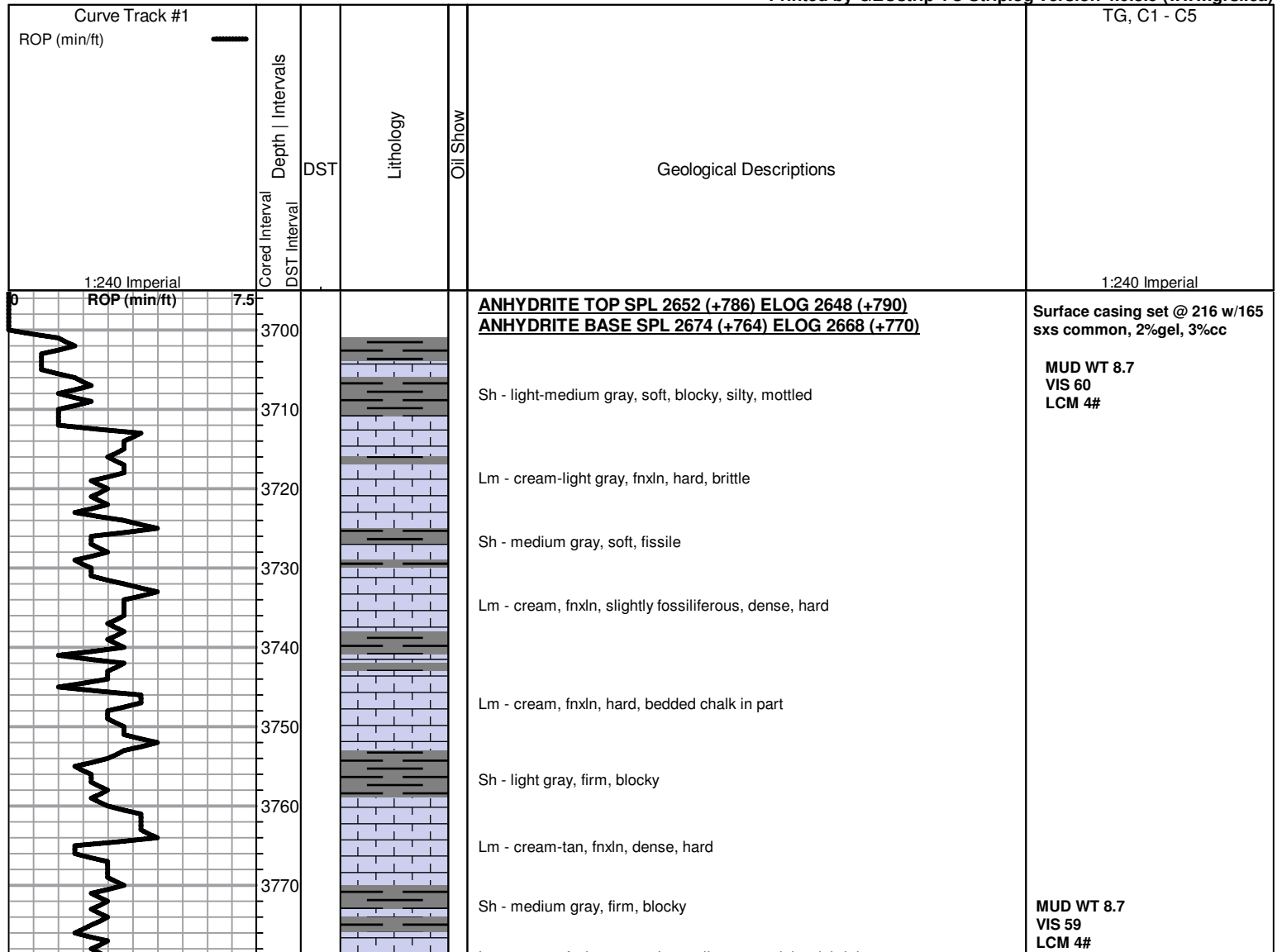
ACCESSORIES

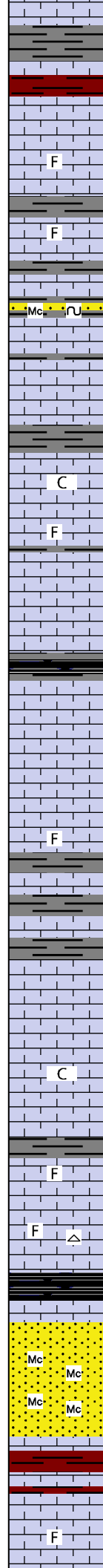
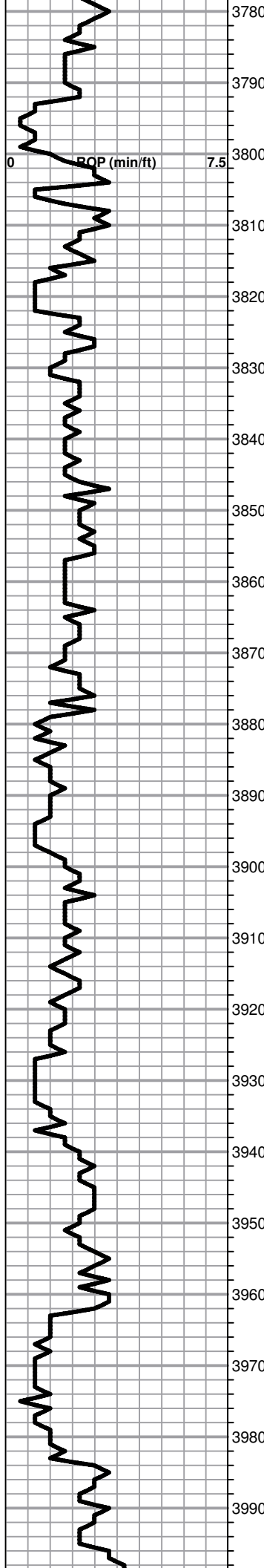
MINERAL	FOSSIL	STRINGER	TEXTURE
∩ Glauconite	F Fossils < 20%	~~~~ Chert	C Chalky
P Pyrite	φ Oolite	— green shale	L Lithogr
△ Chert White			
Mc Mica			

OTHER SYMBOLS

Oil Show	DST
● Good Show	■ DST Int
● Fair Show	■ DST alt
● Poor Show	■ Core
○ Spotted or Trace	■ tail pipe
○ Questionable Stn	■ DST
D Dead Oil Stn	■ DST
■ Fluorescence	■ DST
* Gas	

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Lm - cream, fnxn to granular, well cemented, hard, brittle

Sh - maroon / orange, soft, blocky

F Lm - tan, vf-fnxln, slightly fossiliferous, dense, very hard

F Lm - cream-medium gray, fnxn, slightly fossiliferous, dense, hard

Mc Sh - light gray-brown, soft, blocky, very silty, some sandstone clusters in part, friable, well sorted angular, micaceous, glauconitic

Sh - light gray, soft, very silty, gritty, blocky
TOPEKA SPL 3842 (-404) ELOG 3841 (-403)

C Lm - tan, fnxn, dense, hard, brittle, slightly chalky

F Lm - cream, fnxn, slightly fossiliferous, moderate hardness, bedded chalk in part

Lm - cream, granular, soft, chalky

Lm - cream-tan, fnxn to granular, brittle, bedded chalk

Sh - black, carbonaceous, waxy

Lm - cream, granular, loaded with white sticky clumps, very chalky

Lm - cream-tan, granular, friable, very chalky

F Lm - tan, fnxn, slightly fossiliferous, hard, chalky, white wash

Sh - medium gray, firm, fissile

Lm - tan, fine interxn porosity, brittle, bedded chalk

C Lm - cream, granular, friable, chalky throughout

F Lm - tan, fossiliferous with fine interxn matrix, well cemented, hard

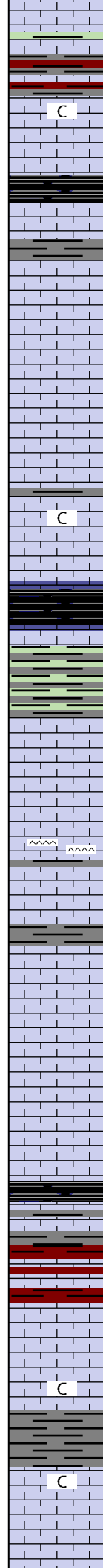
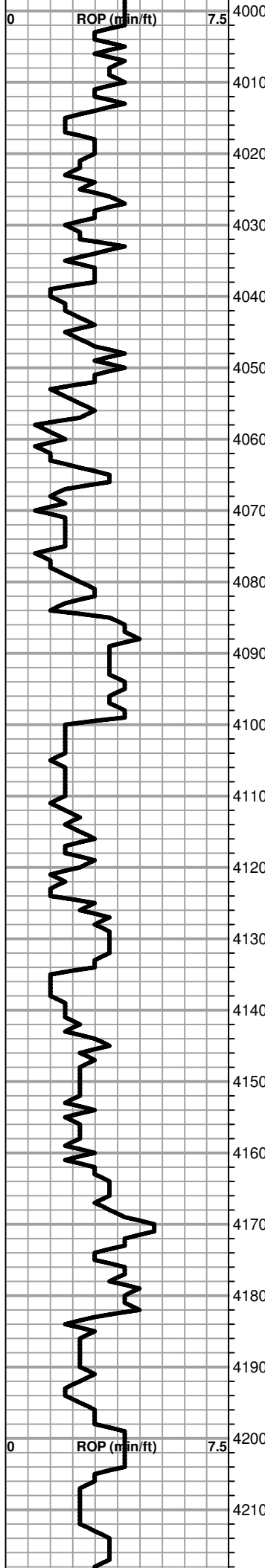
F Lm - cream-tan, slightly fossiliferous, fnxn, dense, hard, slightly chalky, white chert

Sh - black, carbonaceous, waxy

Mc SS - light gray, fine grained, well sorted, well rounded, friable, slightly micaceous

Sh - maroon, soft, blocky

F Lm - cream, granular, friable, slightly fossiliferous, no shows



Sh - light green / medium brown / maroon, soft, blocky

Lm - tan-cream, fnxn to granular, firm , chalky

Sh - black, carbonaceous, waxy, bronze specks

Lm - tan, vfxln, dense, hard, slightly chalky

Lm - tan, granular, medxln, friable, chalky

Lm - tan, fnxln, dense, hard

Lm - cream-light gray, fn-medxln, moderate hardness

Lm - cream-light brown, granular-medxln, soft on crush, chalky

HEEBNER SH SPL 4081 (-643) ELOG 4081 (-643)
 Sh - black, carbonaceous, waxy

Lm - offwhitie, granular, hard, slightly chalky

Sh - light greenish gray, soft, blocky, some gritty

Lm - cream-tan, fn-medxln, brittle, bedded chalk in part

Lm - A/A with chert stringers

LANSING SPL 4128 (-690) ELOG 4130 (-692)

Lm - cream, oolitic, fine interxln porosity, poorly developed, dense, hard, no shows

Lm - cream-tan, slightly fossiliferous with oolites, granular matrix, friable, no shows

Lm - cream-tan, slightly fossiliferous, fnxln, hard, brittle, bedded chalk

Sh - black, carbonaceous, fissile

Sh - medium gray, firm, blocky, gritty

Sh - maroon, firm, blocky

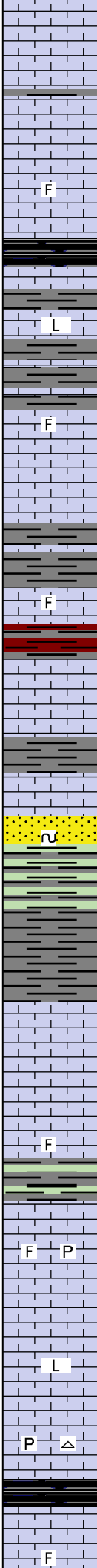
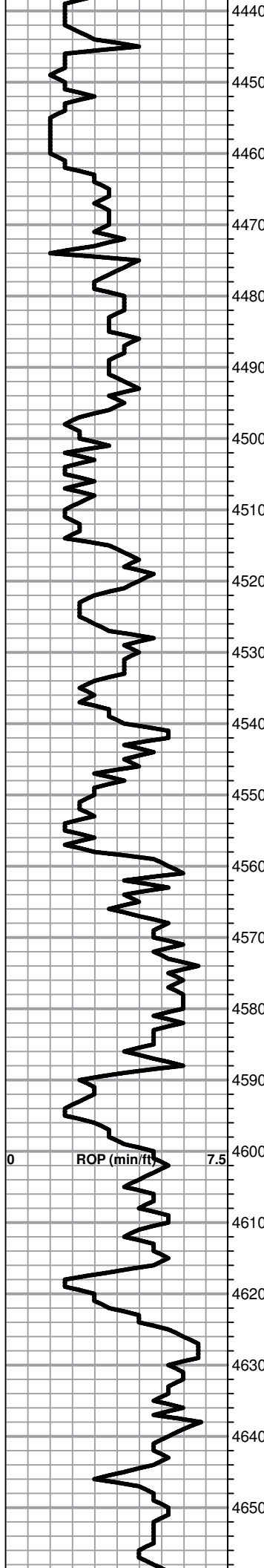
Lm - cream, fnxln to granular, soft on crush, bedded chalk, no shows

Lm - cream-tan, fnxln, hard, slightly chalky

Lm - tan, fine interxln porosity, dense, hard, slightly chalky

MUD WT 9.1
VIS 53

MUD WT 9.2
VIS 59
LCM 3#



Lm - tan, granular, friable, chalky, no shows

Lm - tan-cream, granular, friable, bedded chalk, clean and barren

F Lm - cream, fossiliferous, dense, hard, bedded chalk

Sh - black, carbonaceous, waxy, firm

L Lm - tan-light brown, lithographic, very hard, brittle

F Lm - tan, vfxln, slightly fossiliferous, dense, very hard, bedded chalk

BKC SPL 4508 (-1070) ELOG 4516 (-1078)

Sh - light gray, soft, blocky, some sticky

F Lm - tan-light brown, fnxln, fossiliferous, dense, hard

Sh - light gray / maroon, soft, blocky

Sh - light-medium gray, soft, blocky

SS - light gray, fine grained, well sorted, well rounded, angular, well cemented clusters, firm, glauconitic specks, no shows

Sh - greenish gray, soft, blocky, gritty

Sh - medium-dark gray, firm, fissile

MARMATON SPL 4577 (-1139) ELOG 4578 (-1140)

Lm - offwhite, fnxln, dense, hard, no shows

Lm - tan, fnxln, hard, no shows

F Lm - cream, fossiliferous, well cemented, dense, hard

Sh - dark greenish gray, firm, blocky

F P Lm - light-medium brown, vfxln, slightly fossiliferous, dense, very hard pyritic

L Lm - cream-medium brown, fnxln to lithographic, dense, very hard

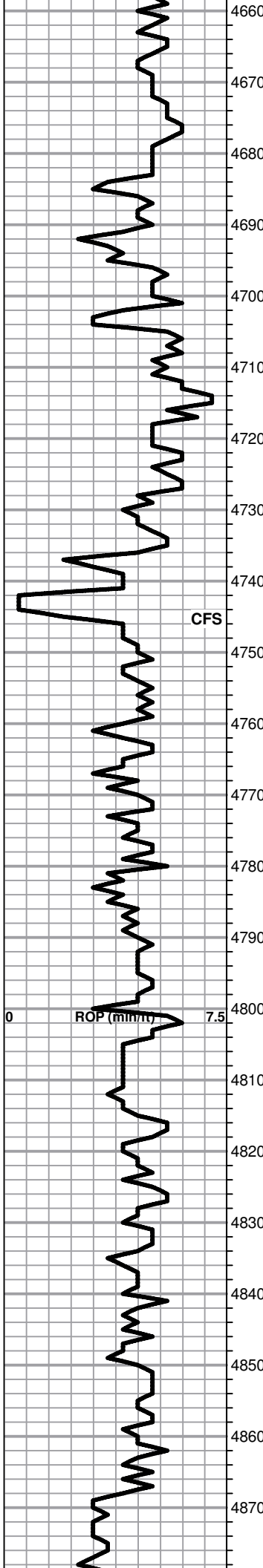
P Δ Lm - tan-light gray, vfxln, slightly fossiliferous, dense, very hard, pyrite, white chert

Sh - black, carbonaceous, firm, waxy

F Lm - light gray, slightly fossiliferous, dense, very hard, bedded chalk

MUD WT 9.3
VIS 53
LCM 4#

MUD WT 9.2
VIS 53
LCM 4#



C F

Lm - tan-medium brown, slightly fossiliferous, dense, very hard, slightly chalky

F

Lm - tan, fnxn with dark fossil fragments, dense, well cemented, very hard

Sh - black, carbonaceous, soft, fissile
FORT SCOTT SPL 4685 (-1247) ELOG 4686 (-1248)

F C

Lm - cream, slightly fossiliferous, granular, soft on crush, chalky

F

Lm - cream-tan, fossiliferous, well cemented, dense, very hard

Sh - black, carbonaceous, soft, fissile

F C

Lm - cream-tan, vfxln, dense, very hard, slight bedded chalk, cherty

F

Lm - cream-tan, fossiliferous, dense, very hard, limited total porosity

CHEROKEE SH SPL 4735 (-1297) ELOG 4737 (-1299)

Sh - black, carbonaceous, soft, fissile

Lm - tan with dark oolites of various sizes, well cemented, limited porosity, hard, no shows

CFS

Lm - light-medium brown, vfxln to lithographic in part, dense, very hard, bedded chalk

Sh - dark gray, firm, blocky

Sh - dark gray, firm, fissile

ATOKA SPL 4789 (-1351) ELOG 4790 (-1352)

Lm - light-medium brown, microxln, dense, very hard

Sh - dark gray, soft, blocky

Lm - tan-light brown, fnxn, hard, brittle

P

Sh - dark gray-black, carbonaceous, firm, fissile, pyrite

L

Lm - tan-medium brown, lithographic in part, vfxln, dense, very hard

Lm - medium brown, oolitic, poorly developed, dense, hard

C

Lm - light brown, fnxn, some granular, slightly chalky

P

Sh - medium gray, firm, blocky, pyrite

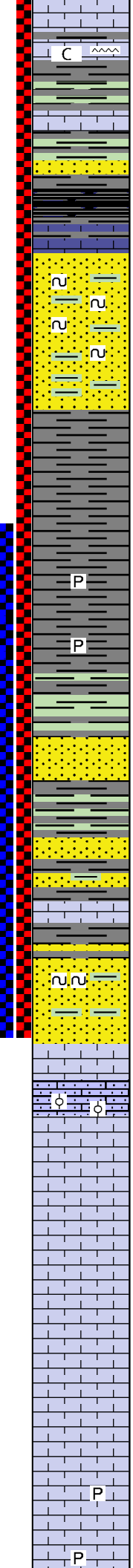
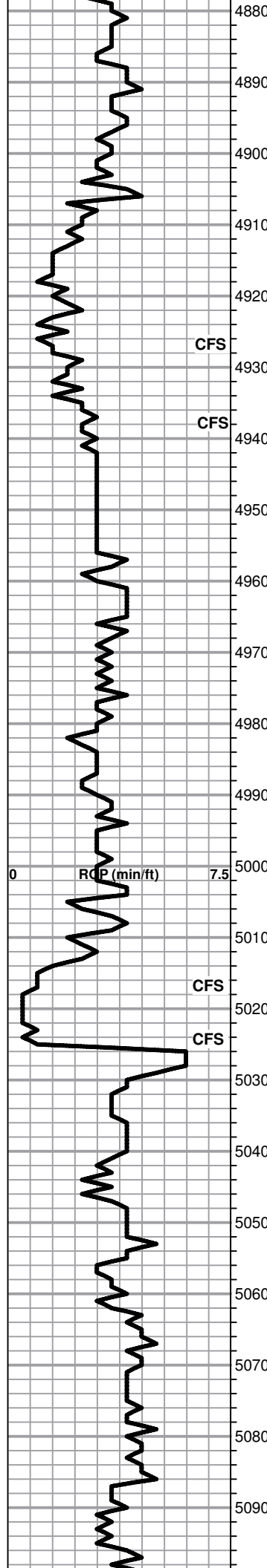
Sh - dark gray/black, carbonaceous, some green, firm, blocky

Lm - light-medium brown, fnxn to litho in part, bedded chalk

MUD WT 9.4
 VIS 60
 LCM 3#

MUD WT 9.3
 VIS 55
 LCM 4#

DST #2 4854 TO 5024 SEE
 HEADER FOR SUMMARY



Lm - medium brown-dark gray, fnxln, slightly chalky, cherty

Sh - dark green / gray, firm, blocky

Lm - dark gray, fnxln, dense, very hard

Sh - A/A

SS - white, sucrosic, friable clusters, clay matrix

MORROW SH SPL 4906 (-1468) ELOG 4904 (-1466)

Sh - black, carbonaceous, firm, waxy

UPPER SAND SPL 4922 (-1484) ELOG 4914 (-1476)

SS - light gray to dark green, very fine grained, well sorted, well rounded, glauconitic, well cemented, firm, white clay matrix, NSFO, no odor, no fluorescence, abundance of dark gray-green shales

Sh - dark gray, firm, gritty, fissile

Sh - dark gray, dense, firm to hard, fissile

Sh - dark gray, firm to hard, fissile, pyrite clusters

Sh - medium-dark gray, firm fissile, pyrite

Sh - lime green/dark gray, firm, fissile

SS - green-white clusters, medium grained, glauconitic, well sorted, angular, very well cemented, hard, no shows

Sh - gray/dark green, firm to hard, fissile

SS - white sucrosic clusters, friable, clay matrix, very fine grained, well sorted, well rounded clear quartz grains,

Lm - cream-tan, slightly oolitic, poorly developed, dense, hard

Sh - lime green-gray, firm, waxy

BASAL SAND SPL 5012 (-1574) ELOG 5014 (-1576)

SS - light to dark green, fine grained, well sorted, well rounded, friable clusters, white matrix, glauconitic, no shows

SS - snow white, sucrosic, white cement, friable, clean clear grains, no shows

MISSISSIPPIAN SPL 5025 (-1587) ELOG 5024 (-1586)

Lm - cream, fnxln with large quartz inclusions, dense, extremely hard

Lm - cream-offwhite, slightly oolitic, sandy, fine grained quartz inclusions, firm, clean and barren

Lm - tan, fnxln, dense, very hard, slight bedded chalk

Lm - cream-tan, granular, well cemented, hard, brittle

Lm - tan, fine interxln porosity, dense, hard

Lm - cream-tan, fnxln to granular in some, hard on crush, bedded chalk

Lm - cream-tan, slightly fossiliferous, moderate hardness, bedded chalk, cherty, pyrite

Lm - cream, granular, well cemented, dense, hard, slightly chalky, pyrite

RTD 5100 (-1662) LTD 5098 (-1660)

DST #1 4952 TO 5024 MISRUN
PACKER FAILURE.
RAN SHALE PACKER

SAMPLES THROUGH
MISSISSIPPIAN CONTAINED
ABUNDANT DARK GREEN
AND GRAY SHALES
SLOUGHING FROM ABOVE

MUD WT 9.2
VIS 52
LCM 4#

CFS 5100

RTD 5100 (-1002) LTD 5050 (-1000)