

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1245266
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: _____

1245266

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	Falcon Exploration, Inc.
Well Name	EMERY JOSSERAND SWD 1-5(SE)
Doc ID	1245266

All Electric Logs Run

DIL
MEL
BHCS
CNL/CDL



Cement Report

Customer <i>Falcon Exploration</i>		Lease No.		Date <i>12-5-14</i>	
Lease <i>Emery Trosser and SWD</i>		Well # <i>1-5</i>		Service Receipt <i>05112</i>	
Casing <i>5 1/2</i>	Depth <i>6481</i>	County <i>Gray</i>		State <i>KS</i>	
Job Type <i>242 Log Strng</i>		Formation		Legal Description <i>5-28-30</i>	
Pipe Data			Perforating Data		Cement Data
Casing size <i>5 1/2</i>	Tubing Size		Shots/Ft		Lead <i>50Bbl AAZ</i>
Depth <i>6481</i>	Depth <i>5541</i>		From	To	<i>7.85ft 3-9c</i>
Volume <i>153615</i>	Volume		From	To	<i>166Bbl-5K 12#</i>
Max Press <i>2000</i>	Max Press		From	To	Tail in <i>210 SK AAZ</i>
Well Connection <i>5 1/2</i>	Annulus Vol.		From	To	<i>11.51ft 3-5K</i>
Plug Depth <i>6440</i>	Packer Depth		From	To	<i>266Bbl-5K 14.8#</i>
Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>200</i>					<i>Arrive On location</i>
<i>700</i>					<i>Safety Meeting</i>
<i>600</i>					<i>Pig Run Casing</i>
<i>1000</i>					<i>Circulate w/ Pig</i>
<i>1055</i>					<i>Hook up TO P&S</i>
<i>1100</i>	<i>2000</i>		<i>1</i>	<i>1</i>	<i>Pressure Test</i>
<i>1101</i>	<i>400</i>		<i>5</i>	<i>6</i>	<i>Pump Water Spacer</i>
<i>1107</i>	<i>375</i>		<i>12</i>	<i>6</i>	<i>Pump Super Flush</i>
<i>1110</i>	<i>350</i>		<i>5</i>	<i>6</i>	<i>Pump Water Spacer</i>
<i>1115</i>	<i>300</i>		<i>25</i>	<i>6</i>	<i>Pump Scavenger cement @ 12#</i>
<i>1120</i>	<i>400</i>		<i>56</i>	<i>6</i>	<i>Pump AAZ cement @ 14.8#</i>
<i>1130</i>					<i>Drop Plug - Wash Up</i>
<i>1135</i>	<i>800</i>		<i>142</i>	<i>6.5</i>	<i>Displace</i>
<i>1155</i>	<i>1200</i>		<i>10</i>	<i>3</i>	<i>Shut Down</i>
<i>1200</i>	<i>1700</i>		<i>.1</i>	<i>.1</i>	<i>Land Plug - Float Held</i>
					<i>Plug - Rat & Mouse Hole</i>
					<i>Sub Complete</i>
Service Units	<i>78936</i>	<i>38117-19919</i>	<i>14335-19883</i>		
Driver Names	<i>Fitz</i>	<i>Donnel</i>	<i>Hector</i>		

Chuck

Customer Representative

Ben Beth

Station Manager

Frank Moore

Cementer

ALLIED OIL & GAS SERVICES, LLC 053358

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Liberal KS.

DATE <u>1-20-12</u>	SEC. <u>5</u>	TWP. <u>28s</u>	RANGE <u>30w</u>	CALLED OUT	ON LOCATION	JOB START <u>2:30 PM</u>	JOB FINISH <u>3:30 PM</u>
LEASE <u>Emergency</u>		WELL# <u>1-5</u>	LOCATION <u>Vee Cooplant KS. Non</u>		COUNTY <u>Gray</u>	STATE <u>KS.</u>	
OLD OR <u>NEW</u> (Circle one)			CR2 to CR4 east 1/2 mile s into				

CONTRACTOR Sterling Rig #5 OWNER _____

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 1880' CEMENT AMOUNT ORDERED 600^{SK} 65/35/6% gel 3%

CASING SIZE 8 5/8 24 1/2 DEPTH 1875' C.C. 1/4# Floceal

TUBING SIZE _____ DEPTH _____ 150^{SK} Class A 3% CC 2% gel

DRILL PIPE 4 1/2 DEPTH _____ + 50^{SK} Class A Neut

TOOL _____ DEPTH _____ COMMON 200 @ 16.25 3250.00

PRES. MAX 1000 PSI MINIMUM 500 PSI POZMIX _____

MEAS. LINE _____ SHOE JOINT 40.85" GEL _____ @ 20 60.00

CEMENT LEFT IN CSG. 40.85" CHLORIDE 25 @ 58.20 1455.00

PERFS. _____ ASC _____

DISPLACEMENT 115.8 BBL Light weight 600 @ 15.00 9000.00

EQUIPMENT _____ Floceal 150 @ 2.70 405.00

PUMP TRUCK CEMENTER Kenya Sugar 50 @ 1.75 87.50

470-484 HELPER Jose _____

BULK TRUCK _____

437-251 DRIVER Lenny _____

BULK TRUCK _____

272-467 DRIVER Ange & Jeremia _____

REMARKS:

Had to top off @ 12:00 Am to 12:30 Am w/ 50^{SK} of Class A Neut.

THANK YOU!!

CHARGE TO: Falcon
STREET Box 551
CITY Russell STATE Ks ZIP 67665

SERVICE

DEPTH OF JOB		<u>1880'</u>	
PUMP TRUCK CHARGE		<u>1925.00</u>	
EXTRA FOOTAGE	@		
MILEAGE	<u>100</u>	@ <u>7.00</u>	<u>700.00</u>
MANIFOLD	<u>1</u>	@ <u>200.00</u>	<u>200.00</u>
Light VM mileage	<u>100</u>	@ <u>4.00</u>	<u>400.00</u>
	@		

TOTAL 3225.00

PLUG & FLOAT EQUIPMENT

Guide Shoe	<u>1</u>	@ <u>404.00</u>	<u>404.00</u>
AFU Insert	<u>1</u>	@ <u>238.00</u>	<u>238.00</u>
Centralizer's	<u>3</u>	@ <u>67.00</u>	<u>201.00</u>
Baskets	<u>3</u>	@ <u>314.00</u>	<u>942.00</u>
Rubber Plug	<u>1</u>	@ <u>101.00</u>	<u>101.00</u>

TOTAL 1886.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____
TOTAL CHARGES \$ 25832.00
DISCOUNT \$ 19374.00 IF PAID IN 30 DAYS

PRINTED NAME Leon Kuhn
SIGNATURE [Signature]

OPERATOR

Company: Falcon Exploration, Inc.
 Address: 125 N. Market
 Suite 1252
 Wichita, KS 67202
 Contact Geologist: Brian Fisher
 Contact Phone Nbr: 316-262-1378
 Well Name: Emery Josserand SWD #1-5 (SE) (original Emery Josserand #1-5)
 Location: Sec 5 - T28S - R30W
 API: 15-069-20360-0001
 Pool: _____ Field: wildcat
 State: Kansas Country: USA

Scale 1:240 Imperial

Well Name: Emery Josserand SWD #1-5 (SE) (original Emery Josserand #1-5)
 Surface Location: Sec 5 - T28S - R30W
 Bottom Location: _____
 API: 15-069-20360-0001
 License Number: 5316
 Spud Date: 1/18/2012 Time: 12:00 AM
 Region: Gray County
 Drilling Completed: 1/28/2012 Time: 9:05 PM
 Surface Coordinates: 2570' FSL & 1850' FEL
 Bottom Hole Coordinates: _____
 Ground Elevation: 2810.00ft
 K.B. Elevation: 0.00ft
 Logged Interval: 3400.00ft To: 0.00ft
 Total Depth: 6780.00ft
 Formation: Mississippian
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: _____
 Latitude: _____
 N/S Co-ord: 2570' FSL
 E/W Co-ord: 1850' FEL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: Keith Reavis, Inc.
 Address: 3420 22nd Street
 Great Bend, KS 67530
 Phone Nbr: 620-617-4091
 Logged By: KLG #136 Name: Keith Reavis

CONTRACTOR

Contractor: Sterling Drilling Company and Val Energy
 Rig #: Sterling 5 - Val 2
 Rig Type: mud rotary
 Spud Date: 1/18/2012 Time: 12:00 AM
 TD Date: 1/28/2012 Time: 9:05 PM
 Rig Release: _____ Time: _____

ELEVATIONS

K.B. Elevation: 0.00ft Ground Elevation: 2810.00ft
 K.B. to Ground: 2823.00ft

NOTES

A Tooke Daq gas detector from Sterling Drilling Company was employed on the original well. Drill time and gas curves were imported from said system into this log.

Due to negative results of drill stem tests and review of electrical logs, it was determined by the operator that the Emery Josserand #1-5 be plugged and abandoned as a dry hole.

The original well samples as well as the re-entry samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

This well was re-entered on November 29, 2014 and deepened into the Arbuckle. 5 1/2 production casing was set 50 ft into the Arbuckle for saltwater disposal. The body of this mudlog contains the original mudlog and the new mudlog has been attached. A Blohound gas detector was employed on this well and ROP and gas data were imported into this mudlog.

Respectfully submitted,
 Keith Reavis

Falcon Exploration, Inc.
daily drilling report

DATE	7:00 AM DEPTH	REMARKS
01/23/2012	3584	Geologist Keith Reavis on location @ 0330 hrs, 3460 ft., drilling Stotler, Tarkio, Topeka, Lecompton
01/24/2012	4255	drilling ahead, Heebner, Douglas, Lansing
01/25/2012	4771	drilling ahead, lower KC, base KC, Marmaton, Cherokee, conduct short trip At 5040 ft.
01/26/2012	5109	finish short trip, drill ahead, Cherokee, Inola, Morrow, show in Inola and Morrow warrant DST, conduct and complete DST #1
01/27/2012	5173	Tripping tools and bit, on bottom, ctch, resume drilling Mississippian, cut St. Louis, show warrants test, TOH for DST #2
01/28/2012	5296	Conduct and complete DST #2, successful test, TIH w/bit, resume drilling, TD @ 2105 hrs, ctch, TOH w/bit for logs
01/29/2012	5375	conduct and complete logging operations, geologist off location 1000 hrs
11/29/2014		geologist Keith Reavis on location @ 0800 hrs, drilling bottom plug tripping in hole and breaking circ. as needed
11/30/2014	5377	on bottom old TD @ 0130 hrs, begin mixing mud in frac tanks, displace, drilling ahead @ 1420 hrs
12/01/2014	5689	drilling ahead, Mississippian-Warsaw, Osage
12/02/2014	6115	drilling Osage, Viola, Arbuckle
12/03/2014	6520	drilling Arbuckle
12/04/2014	6780	TD @ 0005 hrs, ctch, short trip, TOH w/bit for logs, conduct and complete logging operations @ 1450 hrs, geologist off loc @ 1615 hrs

Falcon Exploration, Inc.
well comparison sheet

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
Emery Josserand #1-5					Smith #1-5				Smith #2-5			
2570' FSL & 1850' FEL					1460' FNL & 330' FWL				2170' FNL & 2440' FWL			
Sec 5-T28S-R30W					Sec 5-T28S-R30W				Sec 5-T28S-R30W			
2823 KB					2832 KB		Structural Relationship		2826 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Stotler	3541	-718	3540	-717	3530	-698	-20	-19	3541	-715	-3	-2
Tarkio	3612	-789	3613	-790	3602	-770	-19	-20	3613	-787	-3	-3
Bern	3711	-888	3713	-890	3700	-868	-20	-22	3712	-886	-2	-4
Topeka	3810	-987	3810	-987	3800	-968	-19	-19	3810	-984	-3	-3
Heebner	4146	-1323	4146	-1323	4140	-1308	-15	-15	4146	-1320	-3	-3
Lansing	4250	-1427	4252	-1429	4236	-1404	-23	-25	4249	-1423	-4	-6
Stark	4606	-1783	4606	-1783	4590	-1758	-25	-25	4610	-1784	1	1
Marmaton	4747	-1924	4742	-1919	4738	-1906	-18	-13	4748	-1922	-2	3
Pawnee	4840	-2017	4838	-2015	4822	-1990	-27	-25	4832	-2006	-11	-9
Cherokee	4886	-2063	4885	-2062	4870	-2038	-25	-24	4881	-2055	-8	-7
Morrow Sand	5091	-2268	5091	-2268	5078	-2246	-22	-22	5081	-2255	-13	-13
Mississippian	5137	-2314	5136	-2313	5154	-2322	8	9	5145	-2319	5	6
St. Lo Por	5281	-2458	5284	-2461	5284	-2452	-6	-9	5276	-2450	-8	-11
Original TD	5375	-2552	5377	-2554	5552	-2720	168	166	5551	-2725	173	171
Warsaw	5629	-2806	5632	-2809								
Osage	5900	-3077	5884	-3061								
Viola	6131	-3308	6134	-3311								
Simpson Sand	not picked		6400	-3577								
Arbuckle	6394	-3571	6430	-3607								
Total Depth	6780	-3957	6789	-3966								

Drill Stem Test #1



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313

TIME ON: 14:35 1.26.12
 TIME OFF: 00:27 1.27.12

DRILL-STEM TEST TICKET
 FILE: EMERYJOSSEAND1-5DST1

Company **FALCON EXPLORATION, INC.** Lease & Well No. **EMERY JOSSEAND #1-5 (SE)**
 Contractor **STERLING DRILLING CO. RIG #5** Charge to **FALCON EXPLORATION, INC.**
 Elevation **2823 KB** Formation **MORROW** Effective Pay _____ Ft. Ticket No. **T005**
 Date **1-26-12** Sec. **5** Twp. _____ 28 S Range _____ 30 W County **GRAY** State **KANSAS**
 Test Approved By **KEITH REAVIS** Diamond Representative **TIMOTHY T. VENTERS**

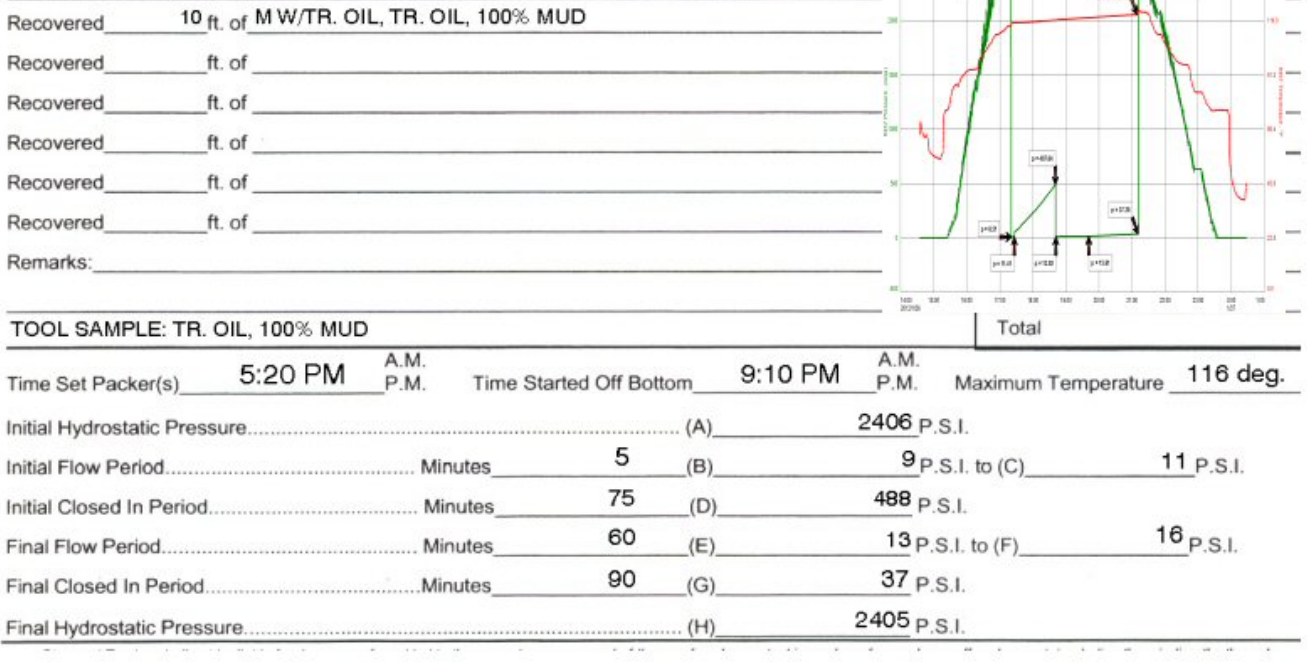
Formation Test No. **1** Interval Tested from **5067** ft. to **5115** ft. Total Depth **5147** ft.
 Packer Depth **5067** ft. Size **6 3/4** in. Packer depth **5120** ft. Size **6 3/4** in.
 Packer Depth **5115** ft. Size **6 3/4** in. Packer depth _____ ft. Size **6 3/4** in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 5053 ft. Recorder Number **8457** Cap. **10,000** P.S.I.
 Bottom Recorder Depth (Outside) _____ 5108 ft. Recorder Number **11030** Cap. **5,025** P.S.I.
 Below Straddle Recorder Depth _____ 5144 ft. Recorder Number **11029** Cap. **5,025** P.S.I.

Mud Type **CHEMICAL** Viscosity _____ Drill Collar Length **334** ft. I.D. **2 1/4** in.
 Weight **9.2** Water Loss **7.2** cc. Weight Pipe Length **0** ft. I.D. **2 7/8** in.
 Chlorides _____ 1,900 P.P.M. Drill Pipe Length **4705** ft. I.D. **3 1/2** in.
 Jars: Make **STERLING** Serial Number **#4** Test Tool Length **28** ft. Tool Size **3 1/2-IF** in.
 Did Well Flow? **NO** Reversed Out **NO** Anchor Length **80** ft. Size **4 1/2-FH** in.
 Main Hole Size **7 7/8** Tool Joint Size **4 1/2 XH** in. 31' DP IN ANCHOR Surface Choke Size **1** in. Bottom Choke Size **5/8** in.

Blow: 1st Open: **WEAK SURFACE BLOW BUILDING TO 1/4 INCH.**
 2nd Open: **WEAK SURFACE BLOW THROUGHOUT PERIOD.**



Drill Stem Test #2



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: JOSSERAND15DST2

TIME ON: 21:32 1-27-12
 TIME OFF: 07:59 1-28-12

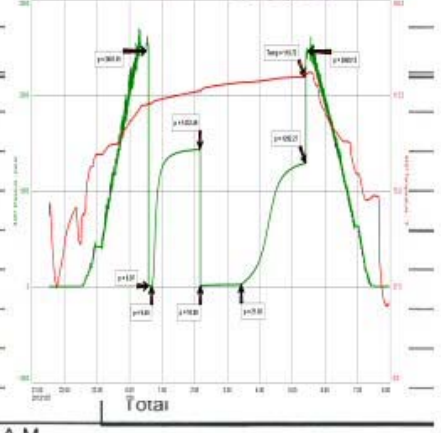
Company FALCON EXPLORATION, INC. Lease & Well No. EMERY JOSSERAND #1-5 (SE)
 Contractor STERLING DRILLING CO. RIG #5 Charge to FALCON EXPLORATION, INC.
 Elevation 2823 KB Formation ST. LOUIS Effective Pay _____ Ft. Ticket No. T006
 Date 1-28-12 Sec. 5 Twp. 28 S Range 30 W County GRAY State KANSAS
 Test Approved By KEITH REAVIS Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 2 Interval Tested from 5276 ft. to 5296 ft. Total Depth 5296 ft.
 Packer Depth 5276 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 5271 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set
 Top Recorder Depth (Inside) 5257 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
 Bottom Recorder Depth (Outside) 5293 ft. Recorder Number 11029 Cap. 5,025 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
 Mud Type CHEMICAL Viscosity 51 Drill Collar Length 334 ft. I.D. 2 1/4 in.
 Weight 9.2 Water Loss 5.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
 Chlorides 3,000 P.P.M. Drill Pipe Length 4909 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number #4 Test Tool Length 33 ft. Tool Size 3 1/2-FH in.
 Did Well Flow? NO Reversed Out NO Anchor Length 20 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: WEAK SURFACE BLOW THROUGHOUT PERIOD.
 2nd Open: WEAK SURFACE BLOW BUILDING TO 7 INCHES.

Recovered 215 ft. of GIP
 Recovered 30 ft. of OCM, 26% OIL, 74% MUD
 Recovered _____ ft. of
 Recovered _____ ft. of
 Recovered _____ ft. of
 Recovered _____ ft. of
 Remarks: _____



ROCK TYPES

- Cht
- Dolprim
- Dolsec
- sdymst
- Lmst fw<7
- Lmst fw>7
- shale, grn
- shale, grn
- shale, red
- Ss
- Carbon Sh

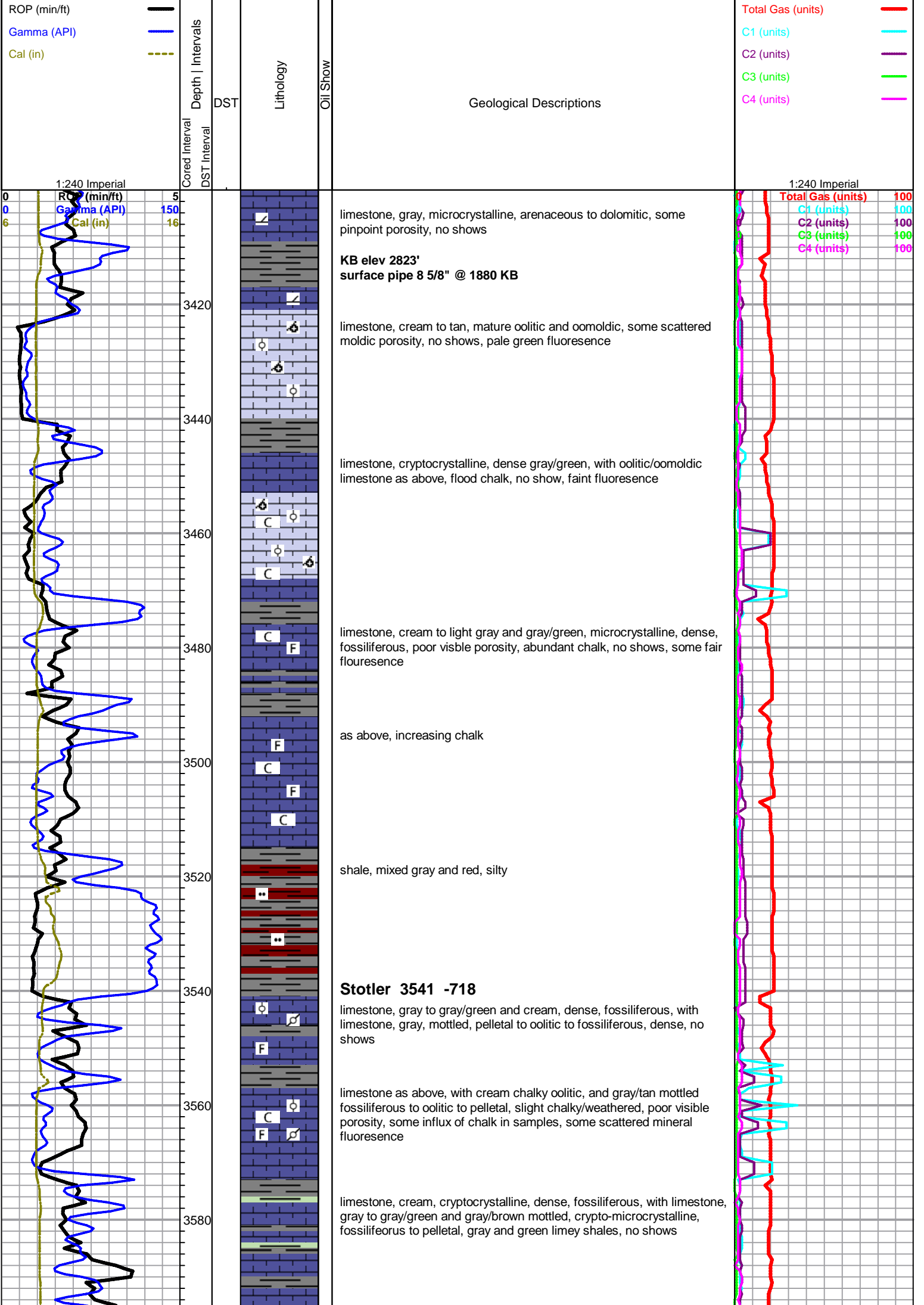
ACCESSORIES

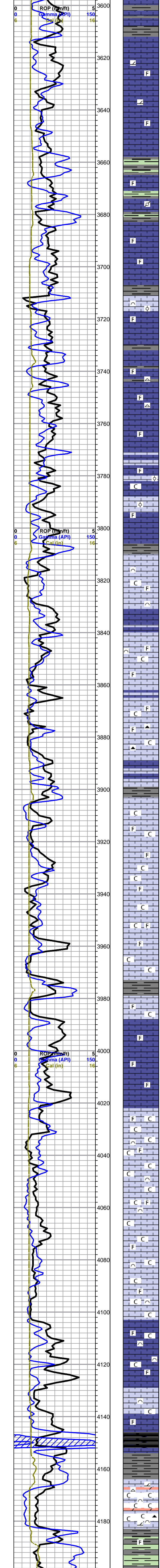
- MINERAL**
 - Argillaceous
 - ▲ Chert, dark
 - ▲ Dolomitic
 - ∞ Glauconite
 - × Mineral Crystals
 - P Pyrite
 - Silty
 - △ Chert White
- FOSSIL**
 - ∩ Bioclastic or Fragmental
 - ∩ Bryozoa
 - F Fossils < 20%
 - ∅ Oolite
 - ∩ Pellets
 - X Sponge Spicules
 - ∩ Oomoldic
- STRINGER**
 - Dolomite
 - Limestone
 - Sandstone
 - Siltstone
 - Shale
 - green shale
 - red shale
 - carb shale
- TEXTURE**
 - C Chalky
 - CX Cryptocrystalline
 - L Lithogr

OTHER SYMBOLS

- MISC**
 - Daily Report
 - Digital Photo
 - Document
 - Folder
 - Link
 - Vertical Log File
 - Horizontal Log File
 - Core Log File
 - Drill Cuttings Rpt
- DST**
 - DST Int
 - DST alt
 - Core
 - tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca) TG, C1 - C5





Tarkio 3612 -789

limestone, gray/green to cream, cryptocrystalline, dense, arenaceous, some dolomitic, some secondary calcite, some cream microcrystalline, grainy, dense fossiliferous, no shows, faint fluorescence

limestone, cream, grainy fossiliferous, with chalky gray/tan mottled fossiliferous to pelletal, poor visible porosity, no shows, abundant soft green shale, with green and gray limey shales

limestone, cream to light gray, microcrystalline, fossiliferous, mostly dense, some chalky

Bern 3711 -888

limestone, light gray to cream, microcrystalline, fossiliferous, trace bioclastic and trace oolitic, poor overall visible porosity, no shows, scattered light fluorescence

limestone, cream to light gray, micro-cryptocrystalline, arenaceous to fossiliferous, dense, some chalk, scattered white frosted fossiliferous chert, sharp, fresh, no shows, poor fluorescence

limestone, mixed gray non-descript fossiliferous, some grainy, some chalky, mostly dense, with bedded gray dense oolitic, no shows or fluorescence

Topeka 3810 -987

limestone, light gray to white, chalky fossiliferous to bioclastic, grainy, poor visible porosity, no shows, abundant chalk, some white scattered cherts, no shows

as above

limestone, mixed gray bioclastic to fossiliferous, some large clasts, grainy, with cream, chalky bioclastic to fossiliferous, some dark gray fossiliferous chert, abundant chalk, no shows

limestone, mixed white to gray, chalky, fossiliferous, poor visible porosity, no shows, abundant chalk in samples

as above

Lecompton

as above

limestone, light gray to light tan, crypto-microcrystalline, slightly fossiliferous, chalky to dense, some brown organic flecks, no shows

limestone, mixed fossiliferous to bioclastic, grainy, chalky, with flood chalk in samples, 30-40%

mixed gray fossiliferous, dense, some chalky, grainy, marked decrease in chalk, no shows

Heebner 4146 -1323

shale, black carbonaceous

limestone, dolomitic, gray, cryptocrystalline, grainy bioclastic to sub-sucrosic, weathered to dense, limestone appx 40%, with chert, scattered boney white weathered to fresh frosted gray fossiliferous, no shows

Douglas 4183 -1360

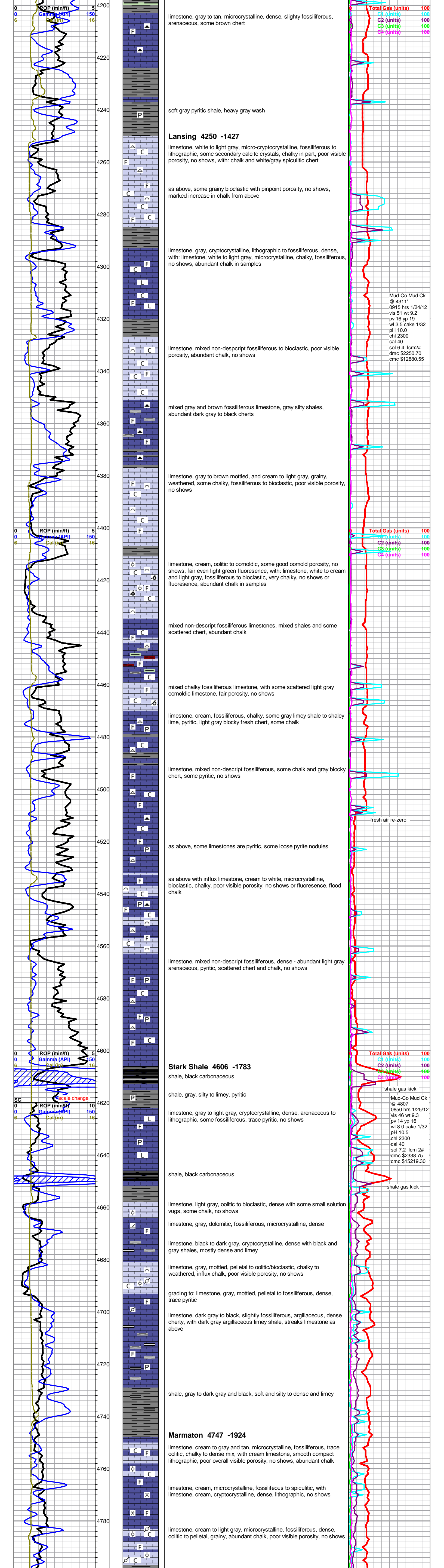
shale, mixed gray to green, some fossiliferous

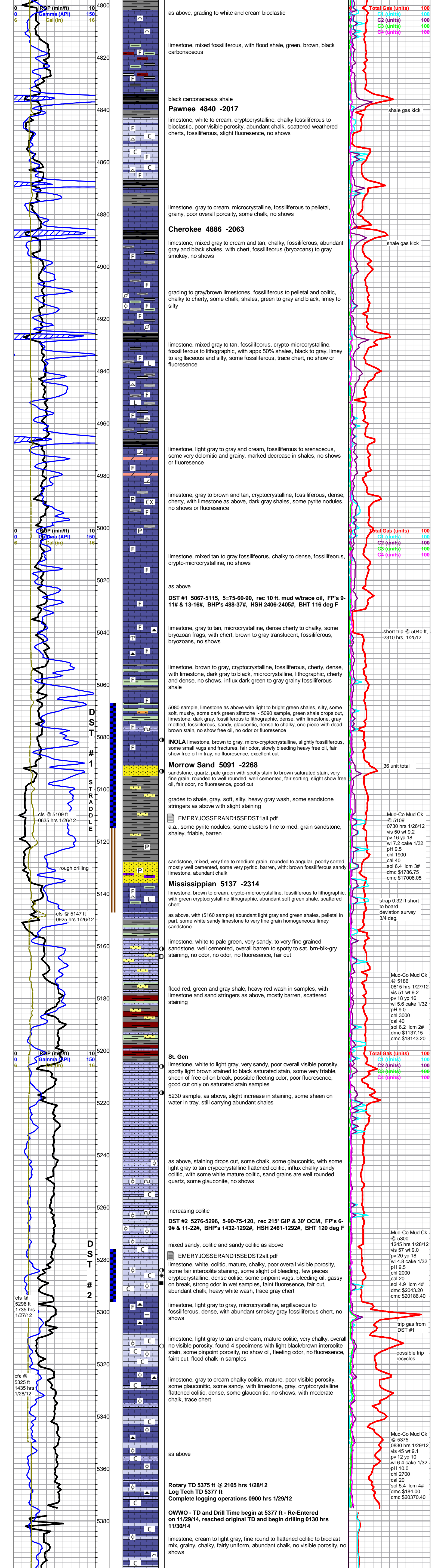
Total Gas (units)	100
C1 (units)	100
C2 (units)	100
C3 (units)	100
C4 (units)	100

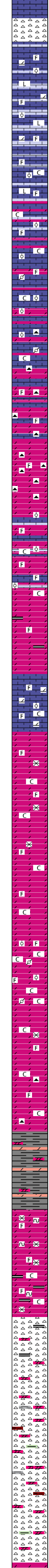
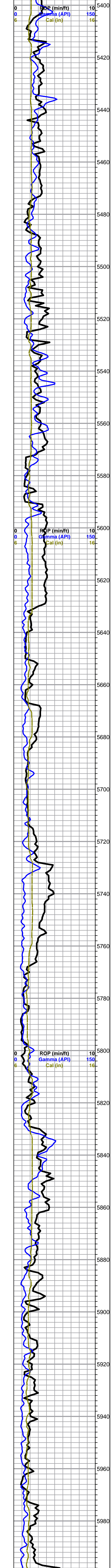
Mud-Co Mud Ck
@ 3616'
0840 hrs 1/23/12
vis 48 wt 8.8
pv 15 yp 18
wl 8.0 cake 1/32
pH 11.0
chl 2500
cal 40
sol 3.6 lcm2#
dmc \$1636.60
cmc \$10629.85

Total Gas (units)	100
C1 (units)	100
C2 (units)	100
C3 (units)	100
C4 (units)	100

Total Gas (units)	100
C1 (units)	100
C2 (units)	100
C3 (units)	100
C4 (units)	100







chert, white to gray, mostly opaque, fossiliferous and oolitic in part, no shows

limestone, as above, with gray to cream re-crystallized dolomitic oolitic and fossiliferous limestone, gray to dark gray limestone, slightly fossiliferous to lithographic, dense, no shows

as above

dolomitic limestone to limey dolomite, gray to light gray, flattened and recrystallized oolitic and chalky fossiliferous, no visible porosity, no shows

Spergen
as above with dolomite, brown to tan, microcrystalline, sub-sucrosic, dense, influx calcite crystals, trace chert, light gray, opaque to translucent, slightly fossiliferous, no shows

grades to limestone and dolomitic limestone, gray to tan, variable oolitic and pelletal, dense to weathered/chalky, with dolomite, brown to tan, re-crystallized fossiliferous to oolitic, mostly dense

as above, with some gray to brown arenaceous/argillaceous dolomite, influx cherts, gray fossiliferous, sharp, fresh

increasing chert

dolomite, cream, microcrystalline, fossiliferous, chalky in part, with limestone, cream, microcrystalline, dolomitic, chalky, fossiliferous, abundant chert as above, no shows

flood gray fossiliferous chert, with dolomite, cream, microcrystalline, some fossiliferous, no visible porosity, no shows

grading to dolomite and dolomitic limestone, slightly mottled, light gray to cream, flattened oolitic and fossiliferous, chalky to dense, cherts drop out, no shows

Warsaw 5629 -2806
dolomite, cream, microcrystalline, sub-sucrosic, some fossiliferous, dense, with chert, gray, fossiliferous, sharp, fresh, abundant black fissile shales, slightly pyritic, no shows

5690-5700 sample - dolomitic limestone, cream to tan, mottled, fossiliferous to oolitic, recrystallized and weathered, chalky, no visible porosity, no shows

dolomite, tan to gray, microcrystalline, altered fossiliferous, sub-sucrosic, flood large dolomite and quartz crystals, mostly euhedral, no shows

as above, some very weathered and chalky, varying degrees of quartz/dolomite crystals, no shows

as above

dolomite, gray to tan, mottled, microcrystalline, very oolitic and pelletal, some fossiliferous, some weathered to near chalk, flood chalk in samples

beginning 5810 sample, dolomite, gray to light gray, microcrystalline, some sub-sucrosic, some fossiliferous, fair small vugs, with: tan dolomite, altered fossiliferous, abundant chalk, no shows, scattered small quartz crystals

dolomite similar to that above, with influx gray mottled fossiliferous cherts

5850-70 samples, shale, variable gray, dense, limey, with variable gray argillaceous dolomite, no shows

dolomite, gray and cream mottled, altered sucrosic fossiliferous, glauconitic (similar to Cowley dolomites), abundant quartz and dolomite crystals

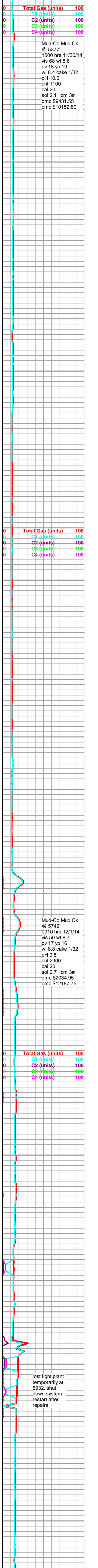
quickly grades to dolomite, mixed gray to tan, microcrystalline, fossiliferous to arenaceous, trace glauconitic, some very weathered, abundant chalk, with loose crystals as above

abundant black fissile shales in 5910 sample

Osage 5900 -3077 (log top 5884 -3061)
chert, white to gray and frosted gray, fossiliferous, sharp, fresh, with dolomite, light gray to tan, micro-fine crystalline, sub-sucrosic to fossiliferous, flood chalk, no shows, black shale a.a.

chert as above, dolomites mostly sucrosic, black shales mostly drop out, some scattered variable colored shales

dolomite, cream to gray, mostly microcrystalline, sub-sucrosic to sub-

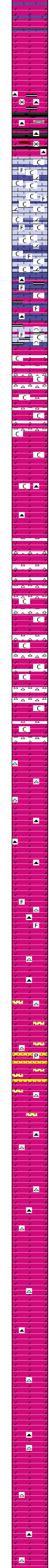
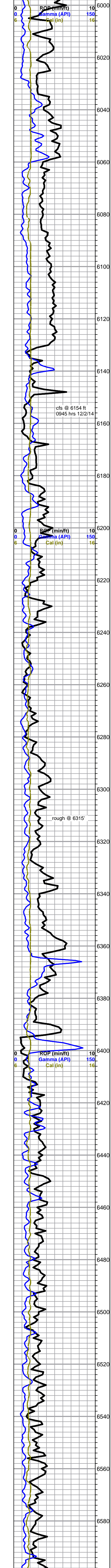


Mud-Co Mud Ck @ 5377
1500 hrs 11/30/14
vis 68 wt 8.6
pv 18 yp 19
wl 8.4 cake 1/32
pH 10.0
chl 1100
cal 20
sol 2.1 lcm 3#
dmc \$9431.55
cmc \$10152.80

Mud-Co Mud Ck @ 5749
0910 hrs 12/1/14
vis 50 wt 8.7
pv 17 yp 16
wl 8.8 cake 1/32
pH 9.5
chl 2900
cal 20
sol 2.7 lcm 3#
dmc \$2034.95
cmc \$12187.75

Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100

lost light plant temporarily at 5932, shut down system, restart after repairs



rhombic, dense, no visible porosity, with limestone, dolomitic, tan, fossiliferous, chalky, no shows

flood chalk in 6030 sample

dolomite, gray microcrystalline a.a., with variable gray arenaceous and argillaceous dolomite, flood dark gray chert, abundant black shale, abundant loose large quartz and dolomite crystals

increasing black shale, some other mixed shales

dolomitic limestone, light gray to cream, microcrystalline, fossiliferous, very chalky, no shows, with 20% + chalk, 5090 sample appx 50%, very heavy chalky white wash in samples

dolomitic limestone and dolomite, gray to tan, mixed crystalline and fossiliferous, some chalk, some black shale, pyritic, scattered small chips frosted gray chert

6150 sample, as above, flood cream chalky bioclastic limestone, friable, marked increase dense black pyritic shale

Viola 6131 -3308

dolomite, light gray to white, microcrystalline, sub-sucrosic, fairly dense, poor visible porosity, with appx 30-40% chert, gray, slightly fossiliferous, sharp, fresh, flood chalk, no shows

as above

6200 sample, dolomite, brown to dark gray, sucrosic to arenaceous, dense, decrease in chalk, no shows

6210 sample, grades to dolomite, tan to light gray, micro-cryptocrystalline, sub-sucrosic, fairly uniform, dense, no shows, some scattered small chips gray fossiliferous chert

6220 sample, dolomite, light gray, microcrystalline, arenaceous, small black flecks scattered in matrix, no odor, no oil, poor fluorescence

dolomite, mixed gray to tan, crypto-microcrystalline, sub-lithographic to sub-sucrosic, with chert, 30-40%, white, boney, sharp, fresh, fossiliferous in part, no shows, poor fluorescence

as above, slight decrease chert, flood chalk, heavy chalky wash in samples - 20-30%+

beginning 6280 sample, chert and chalk as above, dolomite grading to more uniform light gray, microcrystalline, sub-sucrosic, better crystal definition, some slight intercrystalline porosity, some of the fossiliferous chert exhibit slight weathering

6300 sample as above

6310-20 sample - dolomites as above with influx dolomite, gray to dark gray, microcrystalline, sub-sucrosic and sub-rhombic, some wormy small vugs, dense, marked decrease in chalk and chert, scattered fair fluorescence

6340-60 samples, dolomites as above, transition to more smokey gray chert from white, light even fluorescence

dolomite, brown, mottled, micro-fine crystalline, sub-rhombic, altered fossiliferous, poor visible porosity, mixed cherts, no shows

dolomite, tan to light gray, some brown, microcrystalline, sub-rhombic, some slight intercrystalline porosity, mixed cherts, some caliche, no shows, poor fluorescence

6410 sample - dolomite, cream to light gray, micro-cryptocrystalline, sub-sucrosic to sub-rhombic to lithographic, some sandy, with sandstone, quartz, white to translucent, very fine grain, well rounded and sorted, well cemented, pyritic, poor visible porosity, abundant small chert shards, mostly white, no shows

Simpson Sand Log Top 6400 -3577

as above, slightly increasing sand, dolomites takes on good bright yellow mineral fluorescence starting in 6440 sample

Arbuckle Log Top 6430 -3607

dolomite, cream to light gray, mixed crystalline, primary is cryptocrystalline, sand drops out beginning in 6450 sample, poor visible porosity, mixed small gray to white chert shards, no shows, good bright yellow mineral fluorescence

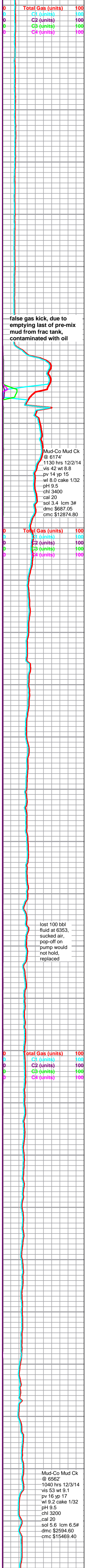
as above, rocks fairly uniform through this whole interval

as above

dolomite, mixed cream to gray and light brown, mostly cryptocrystalline, some microcrystalline, dense, with scattered cream and tan dolomite, microcrystalline, sub-rhombic to rhombic, some intercrystalline porosity, cherts as above, no shows

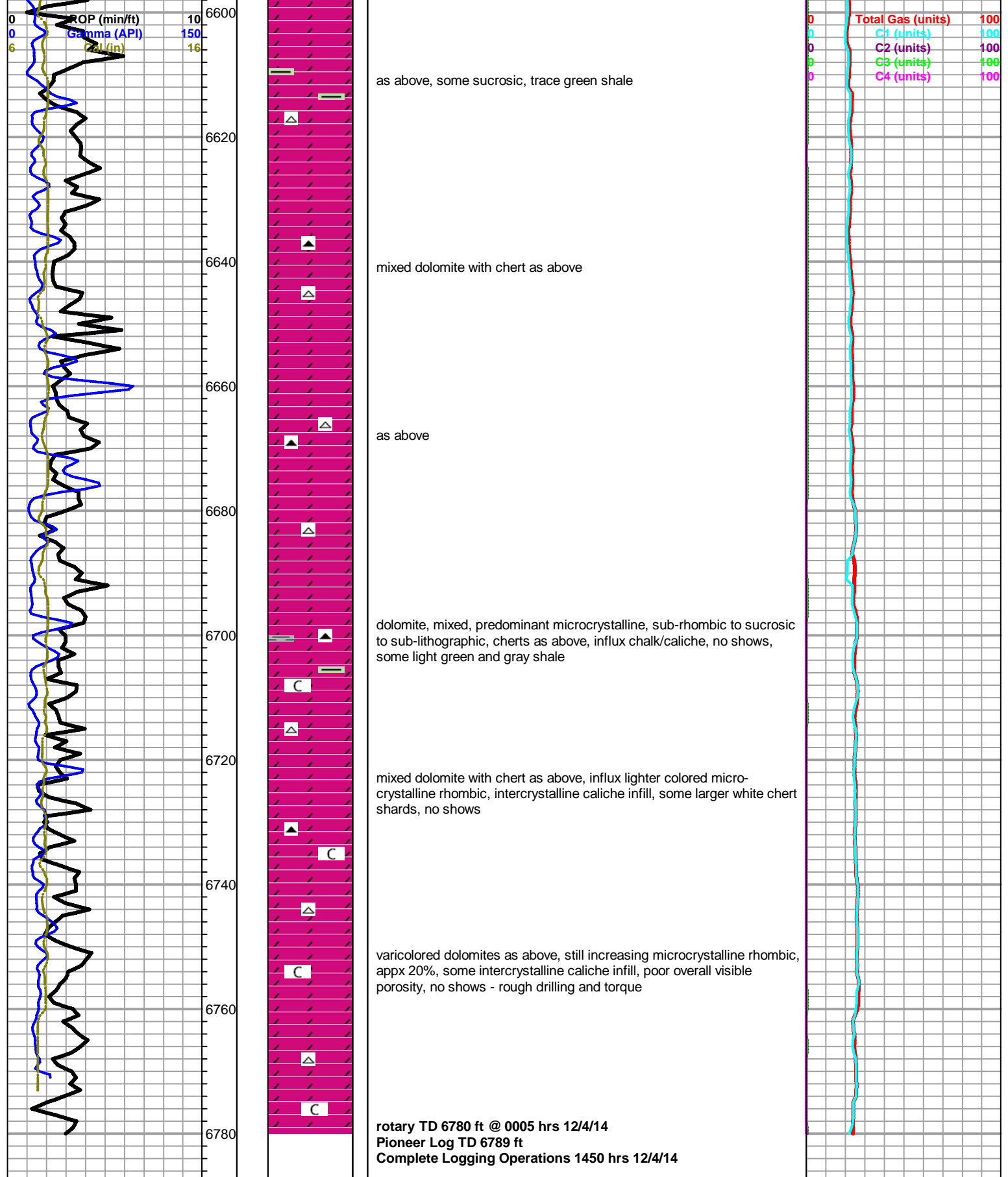
dolomites as above, slight increase in cream rhombic facies, cherts as above, some oolitic, fair even yellow mineral fluorescence, no shows

as above



Mud-Co Mud Ck @ 6174'
 1130 hrs 12/2/14
 vis 42 wt 8.8
 pv 14 yp 15
 wl 8.0 cake 1/32
 pH 9.5
 chl 3400
 cal 20
 sol 3.4 lcm 3#
 dmc \$687.05
 cmc \$12874.80

Mud-Co Mud Ck @ 6562'
 1040 hrs 12/3/14
 vis 53 wt 9.1
 pv 16 yp 17
 wl 9.2 cake 1/32
 pH 9.5
 chl 3200
 cal 20
 sol 5.6 lcm 6.5#
 dmc \$2594.60
 cmc \$15469.40



as above, some sucrosic, trace green shale

mixed dolomite with chert as above

as above

dolomite, mixed, predominant microcrystalline, sub-rhombic to sucrosic to sub-lithographic, cherts as above, influx chalk/caliche, no shows, some light green and gray shale

mixed dolomite with chert as above, influx lighter colored microcrystalline rhombic, intercrystalline caliche infill, some larger white chert shards, no shows

varicolored dolomites as above, still increasing microcrystalline rhombic, appx 20%, some intercrystalline caliche infill, poor overall visible porosity, no shows - rough drilling and torque

rotary TD 6780 ft @ 0005 hrs 12/4/14
 Pioneer Log TD 6789 ft
 Complete Logging Operations 1450 hrs 12/4/14

Total Gas (units) 100
 C1 (units) 100
 C2 (units) 100
 C3 (units) 100
 C4 (units) 100