



1114699

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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: 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: <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	JOAN WARD 1-32(SW)
Doc ID	1114699

All Electric Logs Run

DIL
MEL
BHCS
CNL/CDL

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

February 11, 2013

CYNDE WOLF
Falcon Exploration, Inc.
125 N MARKET STE 1252
WICHITA, KS 67202-1719

Re: ACO1
API 15-069-20409-00-00
JOAN WARD 1-32(SW)
SW/4 Sec.32-28S-30W
Gray County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
CYNDE WOLF

ALLIED OIL & GAS SERVICES, LLC K.B 053306

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Liberal KS

DATE <u>10-29-12</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START <u>11:00</u>	JOB FINISH <u>12:00</u>
LEASE <u>Jean Ward</u>	WELL # <u>1-325W</u>		LOCATION <u>Vec Copeland KS</u>			COUNTY <u>Gray</u>	STATE <u>KS</u>
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Sterling
 TYPE OF JOB Sur face
 HOLE SIZE 12 1/4 T.D. 1916
 CASING SIZE 8 3/8 DEPTH 1911
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX 1,500 MINIMUM _____
 MEAS. LINE _____ SHOE JOINT 42-17
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT 119 barrels

OWNER _____
 CEMENT
 AMOUNT ORDERED Class A 450sk 3% c.c.
2% Sodium Metasilicate 290gyp seal 1/4" #10
Class BC 150sk 2% c.c. 1/4" #40
 COMMON 450sk Class A @ 17.90 8055.00
 POZMIX _____ @ _____
 GEL _____ @ _____
 CHLORIDE 19sk @ 64.00 1216
 ASC _____ @ _____
Gyp seal 9sk @ 37.60 338.40
Sodium Metasilicate 846lb @ 3.30 2791.80
Flo Seal 11516 @ 2.97 335.61
Class C 150sk @ 24.40 3660.00
 HANDLING 660.40 @ 2.48 1637.79
 MILEAGE 1196.00 @ 2.60 3109.10
 Prnyage _____ @ _____
 TOTAL ~~21144.20~~
21144.20

EQUIPMENT
 PUMP TRUCK CEMENTER Lenny Baeza - Stephen Hines
 # 457-481 HELPER Vicen + Torrez
 BULK TRUCK
 # 562-554 DRIVER KIKO (TWS)
 BULK TRUCK
 # 472-467 DRIVER Angel Garcia

REMARKS:
Thank you

CHARGE TO: Falcon Exploration
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE
 DEPTH OF JOB 1000' - 2000'
 PUMP TRUCK CHARGE 2,213.75
 EXTRA FOOTAGE _____ @ _____
 MILEAGE 40 @ 7.70 308.00
 MANIFOLD 1 @ 275.00 275.00
Light Vehicle 40 @ 4.40 176.00

TOTAL \$ 2972.75

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.

PLUG & FLOAT EQUIPMENT
Guide shoes @ 460.98 460.98
AEU Float Valve @ 446.94 446.94
Centralizer 3 @ 74.88 224.64
Basket 4.3 @ 559.26 2406.72
Top Rubber Plug 1 @ 131 131.00

TOTAL ~~2972.75~~
2941.58

SALES TAX (If Any) 1410.69
 TOTAL CHARGES 27,058.33
 DISCOUNT 8117.50 IF PAID IN 30 DAYS

PRINTED NAME Leon Kuhn
 SIGNATURE [Signature]

Net = 18,940.83



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Falcon Exploration Inc.	Well Name	Joan Ward #1-32
Well Operator	Falcon Exploration Inc.	Unique Well ID	DST #1 Miss/St. Louis (5380'-5420')
Contact	Brian Fisher	Surface Location	Sec 32-28s-30w-Gray Co.-KS
Site Contact	Keith Reavis	Test Unit	#5
Field	Wildcat	Pool	Wildcat
Well Type	Vertical	Job Number	F041
Prepared By	Jake Fahrenbruch	Qualified By	Keith Reavis

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Miss / St Louis (5380'-5420')	Gauge Name	0062
Start Test Date	2012/11/03	Start Test Time	00:04:00
Final Test Date	2012/11/03	Final Test Time	10:36:00

Test Results

Recovered:	25' in DC	OSM	2% oil, 98% mud
	50' in DC	GCOM	20% gas, 30% oil, 50% mud
	-----		275' Gas In Pipe
	-----		Total Fluid Recovered: 75'
	-----		Tool Sample: HOCM 30% oil, 70% mud



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

TIME ON: _____
TIME OFF: _____

Company _____ Lease & Well No. _____
Contractor _____ Charge to _____
Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____
Date _____ Sec. _____ Twp. _____ S Range _____ W County _____ State **KANSAS**
Test Approved By _____ Diamond Representative _____

Formation Test No. _____ Interval Tested from _____ ft. to _____ ft. Total Depth _____ ft.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Bottom Recorder Depth (Outside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type _____ Viscosity _____ Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length _____ ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length _____ ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

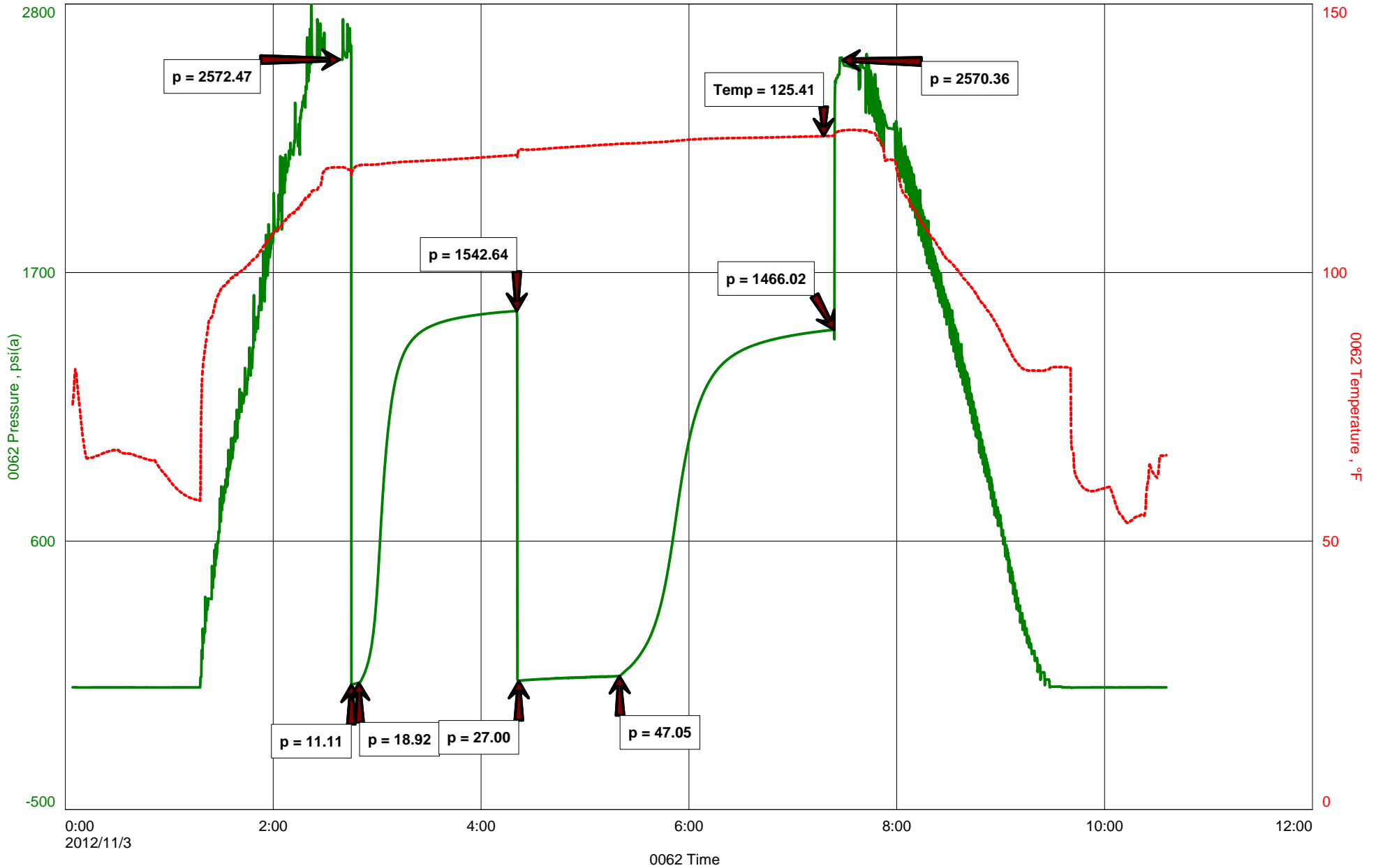
Blow: 1st Open: _____
2nd Open: _____

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ 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.

Joan Ward #1-32



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: Joan Ward #1-32 (SW)
 Location: Sec. 32 - T28S - R30W
 Pool: _____
 State: Kansas
 API: 15-069-20409-0000
 Field: Wildcat
 Country: USA

Scale 1:240 Imperial

Well Name: Joan Ward #1-32 (SW)
 Surface Location: Sec. 32 - T28S - R30W
 Bottom Location: _____
 API: 15-069-20409-0000
 License Number: 5316
 Spud Date: 10/27/2012 Time: 00:00
 Region: Gray County
 Drilling Completed: 11/3/2012 Time: 15:35
 Surface Coordinates: 1150' FSL & 130' FWL
 Bottom Hole Coordinates: _____
 Ground Elevation: 2818.00ft
 K.B. Elevation: 2831.00ft
 Logged Interval: 3400.00ft To: 5496.00ft
 Total Depth: 5496.00ft
 Formation: Morrow/Mississippian
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: _____ Latitude: _____
 N/S Co-ord: 1150' FSL
 E/W Co-ord: 130' FWL

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
 Rig #: 5
 Rig Type: mud rotary
 Spud Date: 10/27/2012 Time: 00:00
 TD Date: 11/3/2012 Time: 15:35
 Rig Release: _____ Time: _____

ELEVATIONS

K.B. Elevation: 2831.00ft Ground Elevation: 2818.00ft
 K.B. to Ground: 13.00ft

NOTES

Due to negative results of DST #1 and negative electrical log analysis, it was agreed upon by all parties that the Joan Ward #1-32 be plugged and abandoned as a dry test.

A Tooke Daq gas detection system operated by Sterling Drilling was employed on this well. ROP and gas data were imported into this mudlog. The caliper and gamma ray were also imported from the electrical log data. Sample formation picks were generally within 2-4 ft. of actual electrical log tops, these curves were not shifted to provide an exact match, but rather left as recorded in the field.

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

Respectfully submitted,
 Keith Reavis

Falcon Exploration, Inc
daily drilling report

DATE	7:00 AM DEPTH	REMARKS
10/31/2012	3840	Geologist Keith Reavis on location @ 0330 hrs, 3550 ft., drilling ahead Stotler, Tarkio, Topeka, Heebner, Douglas, Lansing, BKC, Marmaton
11/01/2012	5062	drilling ahead, Marmaton, Pawnee, Cherokee, pull PDC bit and back in with button bit @ 5062 ft, ctoh, resume drilling Cherokee, Morrow
11/02/2012	5260	cfs for Morrow sand, drilling ahead Miss/Chester, St. Gen, St. Louis show and gas kick in St. Louis warrants test, ctoh, TOH for DST #1
11/03/2012	5420	running tools, conduct and complete DST #1, TIH with PDC, rathole ahead to TD 5500', reach TD @ hrs, conduct logging operations
11/04/2012	5496	complete logging operations, geologist released 0200 hrs

Falcon Exploration, Inc.
well comparison sheet

DRILLING WELL					COMPARISON WELL					COMPARISON WELL				
Joan Ward #1-32 (SE)					James Koehn No. 1-31 (NW)					Sherlyn Koehn No. 1-31 (SW)				
1150' FSL & 130' FWL					2310' FNL & 1670' FWL					1700' FSL and 2000' FWL				
Sec 32-T28S-R30W					Sec 31-T28S-R30W					Sec 31-T28S-R30W				
2831 KB					2842 KB					2842 KB				
					Structural Relationship					Structural Relationship				
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Log	Sub-Sea	Sample	Log	Log
Stotler	3544	-713	3546	-715	3542	-700	-13	-15	3544	-702	-11	-13		
Tarkio	3614	-783	3614	-783	3609	-767	-16		3611	-769	-14			
Topeka	3812	-981	3813	-982	3813	-971	-10		3817	-975	-6			
Heebner	4150	-1319	4151	-1320	4148	-1306	-13		4154	-1312	-7			
Douglas	4189	-1358	4189	-1358	4189	-1347	-11		4197	-1355	-3			
Lansing	4261	-1430	4261	-1430	4260	-1418	-12		4264	-1422	-8			
Stark	4641	-1810	4642	-1811	4648	-1806	-4		4654	-1812	2			
Marmaton	4775	-1944	4780	-1949	4776	-1934	-10		4776	-1934	-10			
Pawnee	4879	-2048	4878	-2047	4875	-2033	-15		4888	-2046	-2			
Cherokee	4920	-2089	4922	-2091	4915	-2073	-16		4926	-2084	-5			
Morrow	5154	-2323	5152	-2321	5135	-2293	-30		5148	-2306	-17			
Morrow Sand	np	np	np	np	5159	-2317			5172	-2330				
Chester	5188	-2357	5194	-2363	5216	-2374	17		5237	-2395	38			
St. Gen	5278	-2447	5490	-2659	5296	-2454	7		5306	-2464	17			
St. Louis por	5393	-2562	5395	-2564	5402	-2560	-2		5425	-2583	21			
Total Depth	5496	-2665	5498	-2667	5449	-2607	-58		5519	-2677	12			

COMPARISON WELL				
Ward #1-31 (SE)				
2445' FSL & 1370' FWL				
Sec 31-T28S-R30W				
2821 KB				
Structural Relationship				
Formation	Log	Sub-Sea	Sample	Log
Stotler	3534	-713	0	-2
Tarkio	3602	-781	-2	-2
Topeka	3804	-983	2	1
Heebner	4140	-1319	0	-1
Douglas	4178	-1357	-1	-1
Lansing	4249	-1428	-2	-2
Stark	4628	-1807	-3	-4
Marmaton	4764	-1943	-1	-6
Pawnee	4869	-2048	0	1
Cherokee	4909	-2088	-1	-3
Morrow	5131	-2310	-13	-11
Morrow Sand	5168	-2347		
Chester	5231	-2410	53	47
St. Gen	5270	-2449	2	-210
St. Louis por	5384	-2563	1	-1
Total Depth	5484	-2663	-2	-4



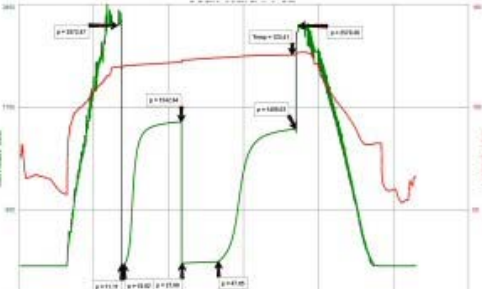
DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: joanward1dst1

TIME ON: 00:04
 TIME OFF: 10:36

Company Falcon Exploration Inc. Lease & Well No. Joan Ward #1-32
 Contractor SDC #5 Charge to Falcon Exploration Inc.
 Elevation 2831' KB Formation Miss / St. Louis Effective Pay _____ Ft. Ticket No. F041
 Date 11.3.12 Sec. 32 Twp. 28 S Range 30 W County Gray State KANSAS
 Test Approved By Keith Reavis Diamond Representative Jake Fahrenbruch

Formation Test No. 1 Interval Tested from 5380 ft. to 5420 ft. Total Depth 5420 ft.
 Packer Depth 5375 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 5380 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Depth of Selective Zone Set _____
 Top Recorder Depth (Inside) 5359 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 5417 ft. Recorder Number 11033 Cap. 5,150 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.
 Mud Type Chemical Viscosity 58 Drill Collar Length 332 ft. I.D. 2 1/4 in.
 Weight 9.0 Water Loss 8.8 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
 Chlorides 1450 P.P.M. Drill Pipe Length 5015 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number #5 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 40 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 blow, increased to .5". No blowback.
2nd Open: Fair blow, increased to 11". No blowback
 Recovered 25 ft. of OSM 2% oil, 98% mud
 Recovered 50 ft. of GCOM 20% gas, 30% oil, 50% mud
 Recovered _____ ft. of 275' GIP
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: Total Fluid Recovered: 75' in DC
 Tool Sample: HOCM 30% oil, 70% mud



Time Set Packer(s) 2:45 am A.M. Time Started Off Bottom 7:20 am A.M. Maximum Temperature 125 deg F

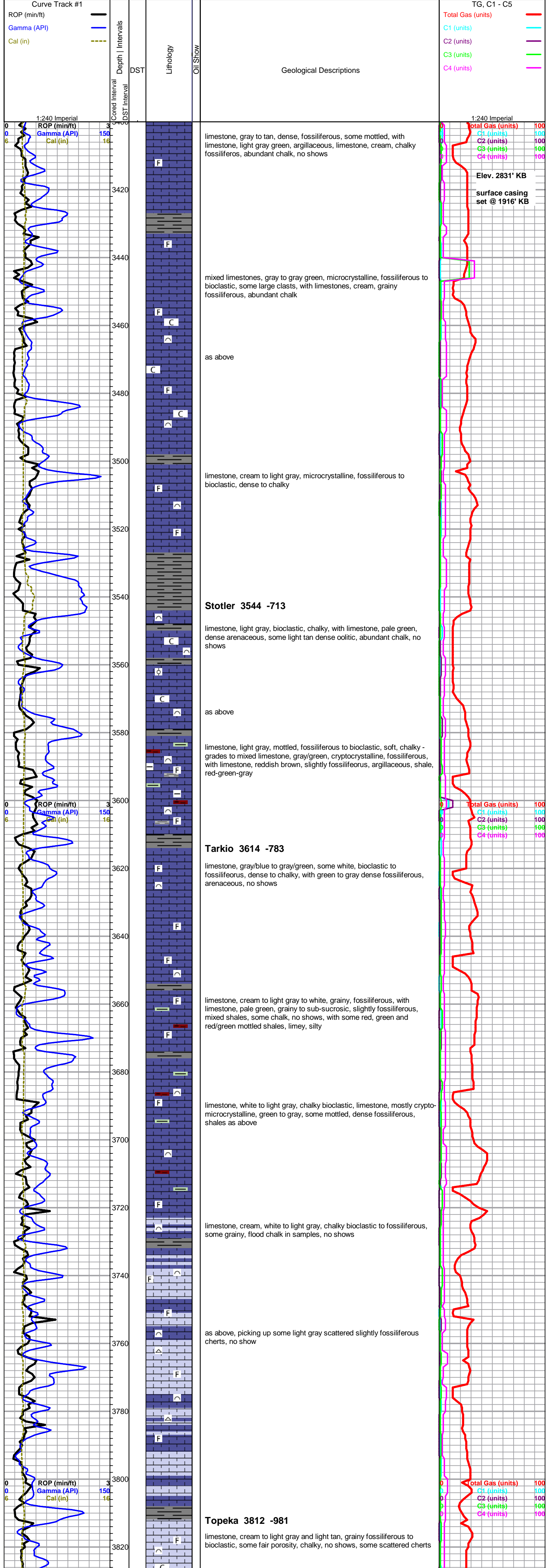
Initial Hydrostatic Pressure.....	(A)	2572 P.S.I.	
Initial Flow Period.....	Minutes	5 (B)	11 P.S.I. to (C) 19 P.S.I.
Initial Closed In Period.....	Minutes	90 (D)	1543 P.S.I.
Final Flow Period.....	Minutes	60 (E)	27 P.S.I. to (F) 47 P.S.I.
Final Closed In Period.....	Minutes	120 (G)	1466 P.S.I.
Final Hydrostatic Pressure.....	(H)	2570 P.S.I.	

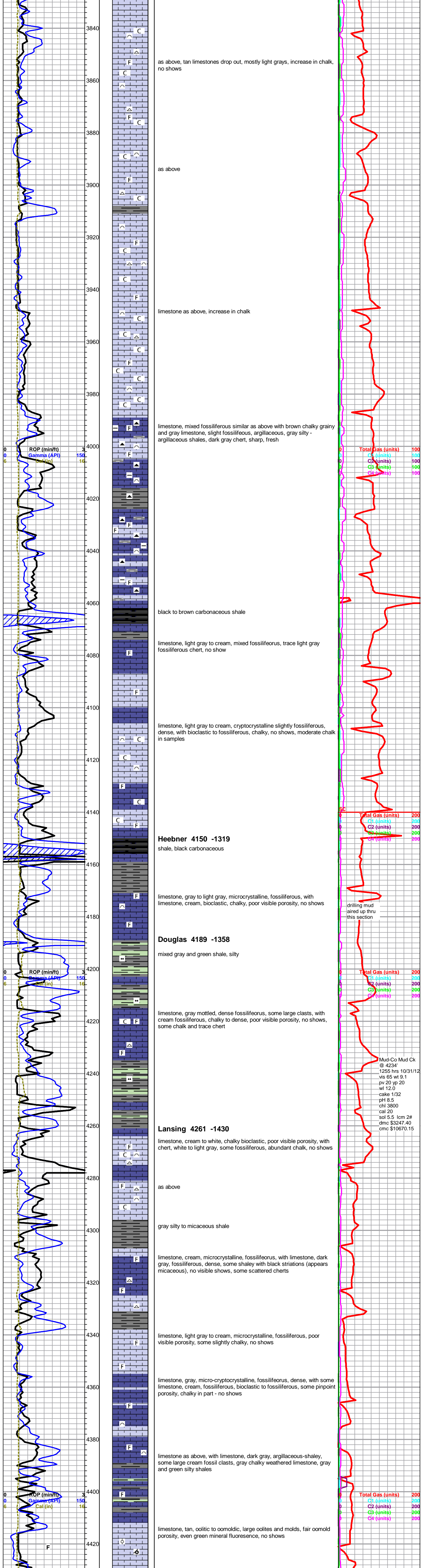
ROCK TYPES			
	sdymst		Lmst fw7>
	Lmst fw<7		shale, gry
	shale, gm		Carbon Sh
			Ss

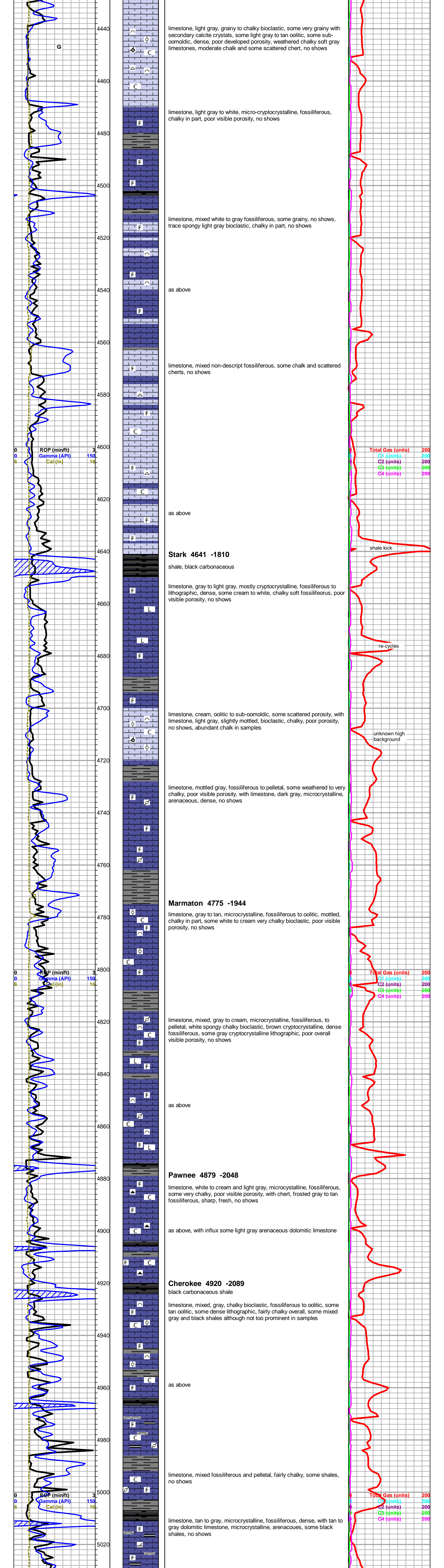
ACCESSORIES			
MINERAL	FOSSIL	STRINGER	TEXTURE
— Argillaceous	∩ Bioclastic or Fragmental	•• Sandstone	C Chalky
▲ Chert, dark	F Fossils < 20%	•• Siltstone	L Lithogr
∩ Dolomitic	∩ Oolite	— Shale	
∩ Glauconitic	∩ Pellets	— green shale	
•• Silty	∩ Oomoldic	— red shale	
△ Chert White		— carb shale	

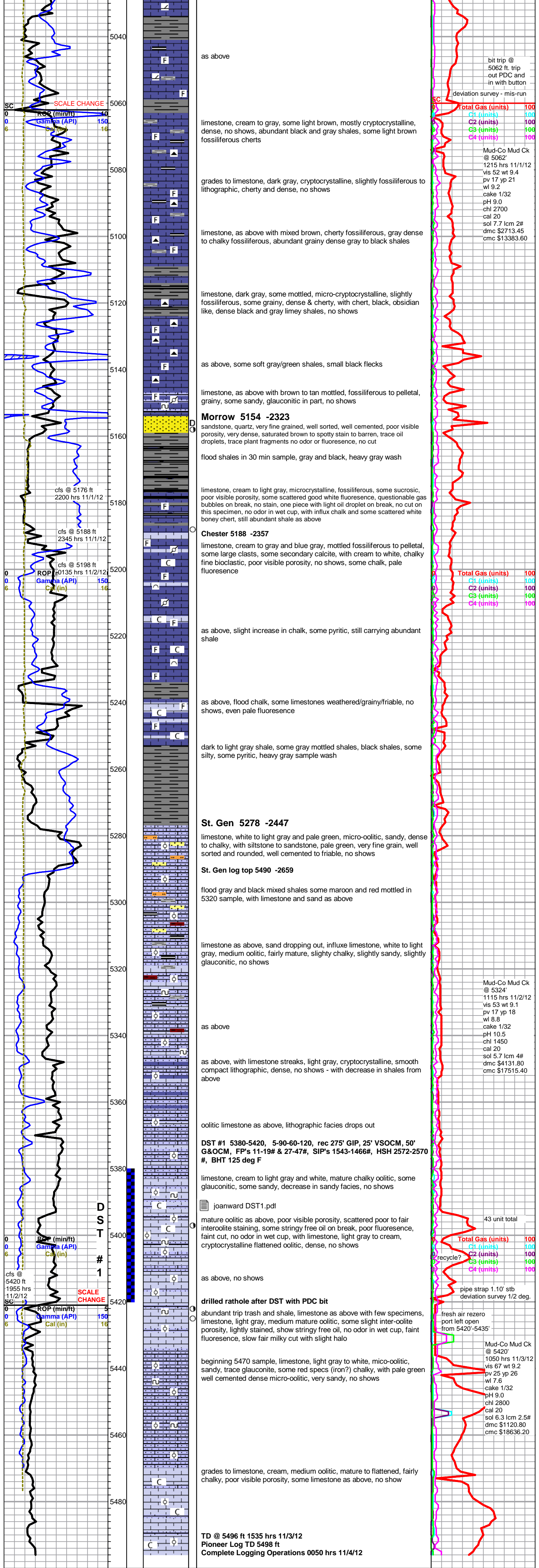
OTHER SYMBOLS	
MISC	DST
	Daily Report
	Digital Photo
	Document
	Folder
	Link
	Vertical Log File
	Horizontal Log File
	Core Log File
	Drill Cuttings Rpt
	DST Int
	DST alt
	Core
	tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)









as above

bit trip @
5062 ft. trip
out PDC and
in with button
deviation survey - mis-run

limestone, cream to gray, some light brown, mostly cryptocrystalline, dense, no shows, abundant black and gray shales, some light brown fossiliferous cherts

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

grades to limestone, dark gray, cryptocrystalline, slightly fossiliferous to lithographic, cherty and dense, no shows

Mud-Co Mud Ck
@ 5062'
1215 hrs 11/1/12
vis 52 wt 9.4
pv 17 yp 21
wl 9.2
cake 1/32
pH 9.0
chl 2700
cal 20
sol 7.7 lcm 2#
dmc \$2713.45
cmc \$13383.60

limestone, as above with mixed brown, cherty fossiliferous, gray dense to chalky fossiliferous, abundant grainy dense gray to black shales

limestone, dark gray, some mottled, micro-cryptocrystalline, slightly fossiliferous, some grainy, dense & cherty, with chert, black, obsidian like, dense black and gray limey shales, no shows

as above, some soft gray/green shales, small black flecks

limestone, as above with brown to tan mottled, fossiliferous to pelletal, grainy, some sandy, glauconitic in part, no shows

Morrow 5154 -2323

sandstone, quartz, very fine grained, well sorted, well cemented, poor visible porosity, very dense, saturated brown to spotty stain to barren, trace oil droplets, trace plant fragments no odor or fluorescence, no cut
flood shales in 30 min sample, gray and black, heavy gray wash

limestone, cream to light gray, microcrystalline, fossiliferous, some sucrosic, poor visible porosity, some scattered good white fluorescence, questionable gas bubbles on break, no stain, one piece with light oil droplet on break, no cut on this specimen, no odor in wet cup, with influx chalk and some scattered white boney chert, still abundant shale as above

Chester 5188 -2357

limestone, cream to gray and blue gray, mottled fossiliferous to pelletal, some large clasts, some secondary calcite, with cream to white, chalky fine bioclastic, poor visible porosity, no shows, some chalk, pale fluorescence

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

as above, slight increase in chalk, some pyritic, still carrying abundant shale

as above, flood chalk, some limestones weathered/grainy/friable, no shows, even pale fluorescence

dark to light gray shale, some gray mottled shales, black shales, some silty, some pyritic, heavy gray sample wash

St. Gen 5278 -2447

limestone, white to light gray and pale green, micro-oolitic, sandy, dense to chalky, with siltstone to sandstone, pale green, very fine grain, well sorted and rounded, well cemented to friable, no shows

St. Gen log top 5490 -2659

flood gray and black mixed shales some maroon and red mottled in 5320 sample, with limestone and sand as above

limestone as above, sand dropping out, influx limestone, white to light gray, medium oolitic, fairly mature, slightly chalky, slightly sandy, slightly glauconitic, no shows

Mud-Co Mud Ck
@ 5324'
1115 hrs 11/2/12
vis 53 wt 9.1
pv 17 yp 18
wl 8.8
cake 1/32
pH 10.5
chl 1450
cal 20
sol 5.7 lcm 4#
dmc \$4131.80
cmc \$17515.40

as above

as above, with limestone streaks, light gray, cryptocrystalline, smooth compact lithographic, dense, no shows - with decrease in shales from above

oolitic limestone as above, lithographic facies drops out

DST #1 5380-5420, 5-90-60-120, rec 275' GIP, 25' VSOCM, 50' G&OCM, FP's 11-19# & 27-47#, SIP's 1543-1466#, HSH 2572-2570 #, BHT 125 deg F

limestone, cream to light gray and white, mature chalky oolitic, some glauconitic, some sandy, decrease in sandy facies, no shows

joanward DST1.pdf

mature oolitic as above, poor visible porosity, scattered poor to fair interoolite staining, some stringy free oil on break, poor fluorescence, faint cut, no odor in wet cup, with limestone, light gray to cream, cryptocrystalline flattened oolitic, dense, no shows

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

as above, no shows

drilled rathole after DST with PDC bit

abundant trip trash and shale, limestone as above with few specimens, limestone, light gray, medium mature oolitic, some slight inter-oolite porosity, lightly stained, show stringy free oil, no odor in wet cup, faint fluorescence, slow fair milky cut with slight halo

43 unit total
recycle?
pipe strap 1.10' stb
deviation survey 1/2 deg.
fresh air zero
port left open
from 5420'-5435'

beginning 5470 sample, limestone, light gray to mico-oolitic, sandy, trace glauconite, some red specs (iron?) chalky, with pale green well cemented dense micro-oolitic, very sandy, no shows

Mud-Co Mud Ck
@ 5420'
1050 hrs 11/3/12
vis 67 wt 9.2
pv 25 yp 26
wl 7.6
cake 1/32
pH 9.0
chl 2800
cal 20
sol 6.3 lcm 2.5#
dmc \$1120.80
cmc \$18636.20

grades to limestone, cream, medium oolitic, mature to flattened, fairly chalky, poor visible porosity, some limestone as above, no show

**TD @ 5496 ft 1535 hrs 11/3/12
Pioneer Log TD 5498 ft
Complete Logging Operations 0050 hrs 11/4/12**