OPERATOR

Company:	Falcon Explortation, Inc.		
Address:	125 N. Market Suite 1252 Wichita, KS 67202		
Contact Geologist:	Brian Fisher		
Contact Phone Nbr:	316-262-1378		
Well Name:	Nightgale #1-6 (NW)		
Location:	Sec 6 - T28S - R30W	API:	15-069-20395-0000
Pool:		Field:	Wildcat
State:	Kansas	Country:	USA

Scale 1:240 Imperial

Well Name:	Nightgale #1-6 (NW)		
Surface Location:	Sec 6 - T28S - R30W		
Bottom Location:			
API:	15-069-20395-0000		
License Number:	5316		
Spud Date:	9/15/2012	Time:	00:00
Region:	Gray County		
Drilling Completed:	9/23/2012	Time:	17:45
Surface Coordinates:	2050' FNL & 2050' FWL		
Bottom Hole Coordinates:			
Ground Elevation:	2835.00ft		
K.B. Elevation:	2844.00ft		
Logged Interval:	2600.00ft	To:	5450.00ft
Total Depth:	5450.00ft		
Formation:	Mississippian		
Drilling Fluid Type:	Chemical/Fresh Water Gel		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	2050' FNL		
E/W Co-ord:	2050' 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:	Tomcat Drilling		
Rig #:	4		
Rig Type:	mud rotary		
Spud Date:	9/15/2012	Time:	00:00
TD Date:	9/23/2012	Time:	17:45
Rig Release:		Time:	

ELEVATIONS

K.B. Elevation:	2844.00ft	Ground Elevation:	2835.00ft
K.B. to Ground:	9.00ft		

NOTES

Due to negative drill stem test results in the Morrow and Mississippian, it was determined by all parties that the Nightingale #1-6 be plugged and abandoned as a dry hole.

A Bloodhound gas detector operated by Bluestem Environmental was employed on this well. The ROP and gas data were imported into this mudlog, along with the gamma ray and caliper from the electrical log suite. The electrical log tops were generally 6 to 11 ft lower than sample/drill time tops. The curves were not shifted to provide an exact match, but rather left as recorded.

The samples from this well were saved and will be available for review at 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
09/20/2012	2024	Geologist Keith Reavis on location @ 1230 hrs, 2187 ft., drilling ahead Permian - check Bloodhound system, replace extractor
09/21/2012	2840	drilling ahead, Permian, Chase group, Ft. Riley, Neva, Foraker, Stotler
09/22/2012	3925	drilling ahead, Tarkio, Bern, Topeka, Heebner, Douglas, Lansing, Stark
09/23/2012	5054	drilling ahead Marmaton, Pawnee, Cherokee, Morrow, Mississippian, TD @ 5450 ft. 1745 hrs, cfs, short trip, ctch, TOH for e-logs
09/24/2012	5450	TOH for logs, conduct and complete logging operations, run straddle test on St. Louis, successful test, back in with bit, condition hole
09/25/2012	5450	TOH, in with tools, straddle test (DST #2) Morrow sand, successful test, geologist released @ 1250 hrs

Falcon Exploration, Inc.

well comparison sheet

	DRILLING WELL Nightingale #1-6 2050' FNL & 2050' FWL Sec 6-T28S-R30W 2844 KB				COMPARISON WELL Falcon - Smith #1-5 1460' FNL & 330' FWL Sec 5-T28S-R30W 2832 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Chase	2668	176	2681	163	2673	159	17	4
Ft. Riley	2842	2	2853	-9	2852	-20	22	11
Neva	3171	-327	3179	-335	3181	-349	22	14
Foraker	3289	-445	3294	-450	3286	-454	9	4
Stotler	3526	-682	3532	-688	3530	-698	16	10
Tarkio	3597	-753	3604	-760	3602	-770	17	10
Bern	3689	-845	3701	-857	3700	-868	23	11
Topeka	3794	-950	3799	-955	3800	-968	18	13
Heebner	4126	-1282	4134	-1290	4140	-1308	26	18
Lansing	4223	-1379	4230	-1386	4236	-1404	25	18
Stark	4580	-1736	4591	-1747	4590	-1758	22	11
Marmaton	4723	-1879	4725	-1881	4738	-1906	27	25
Pawnee	4813	-1969	4821	-1977	4822	-1990	21	13
Cherokee	4854	-2010	4862	-2018	4870	-2038	28	20
Morrow	5056	-2212	5066	-2222	5070	-2238	26	16
Morrow Sand	5060	-2216	5069	-2225	5078	-2246	30	21
St. Gen	5179	-2335	5189	-2345	5192	-2360	25	15
St. Louis	5270	-2426	5276	-2432	5284	-2452	26	20
Salem	nr	-	-	-	5475	-2643	-	-
Total Depth	5450	-2606	5458	-2614	5552	-2720	114	106

DST #1 (straddle)

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: NIGHTINGALE1-6NWDST1

TIME ON: 13:48
TIME OFF: 23:24

Company FALCON EXPLORATION, INC. Lease & Well No. NIGHTINGALE #1-6 (NW)
Contractor TOMCAT DRILLING CO. RIG #4 Charge to FALCON EXPLORATION, INC.
Elevation 2844 KB Formation MISSISSIPPIAN Effective Pay _____ Ft. Ticket No. T100
Date 9-24-12 Sec. 6 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 5270 ft. to 5330 ft. Total Depth 5458 ft.
Packer Depth 5270 ft. Size 6 3/4 in. Packer depth 5330 ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth 5335 ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 5226 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 5327 ft. Recorder Number 11029 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth 5455 ft. Recorder Number 11030 Cap. 5,025 P.S.I.

Mud Type CHEMICAL Viscosity 50 Drill Collar Length 177 ft. I.D. 2 1/4 in.
Weight 9.5 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in
Chlorides 3,000 P.P.M. Drill Pipe Length 5065 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 29 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
31' DP IN ANCHOR 128' TP

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 1/4 INCHES (NOBB)
2nd Open: NO BLOW THROUGHOUT PERIOD. (NOBB)

Recovered 60 ft. of MUD
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____ Price Job
Recovered _____ ft. of _____ Other Charges
Remarks: 12 MIN. INTO FINAL FLOW, WE FLUSHED TOOL & JUST GOT SURGE BLOW. Insurance

Remarks:

THE BOTTOM RECORDER PRESSURE WAS 2422 PSI.

TOOL SAMPLE: 100% MUD

Insurance

Total

Time Set Packer(s) 5:02 PM A.M. P.M. Time Started Off Bottom 7:13 PM A.M. P.M. Maximum Temperature 130 deg.

Initial Hydrostatic Pressure ..... (A) 2542 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 8 P.S.I. to (C) 14 P.S.I.

Initial Closed In Period ..... Minutes 90 (D) 1502 P.S.I.

Final Flow Period ..... Minutes 23 (E) 17 P.S.I. to (F) 39 P.S.I.

Final Closed In Period ..... Minutes 13 (G) 1305 P.S.I.

Final Hydrostatic Pressure ..... (H) 2541 P.S.I.

DST #2 (straddle)

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

DRILL-STEM TEST TICKET
FILE: NIGHTINGALE1-6NWDST2

TIME ON: 08:04
TIME OFF: 16:06

Company FALCON EXPLORATION, INC. Lease & Well No. NIGHTINGALE #1-6 (NW)

Contractor TOMCAT DRILLING CO. RIG #4 Charge to FALCON EXPLORATION, INC.

Elevation 2844 KB Formation MORROW SD. Effective Pay Ft. Ticket No. T101

Date 9-25-12 Sec. 6 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 5063 ft. to 5095 ft. Total Depth 5458 ft.

Packer Depth 5063 ft. Size 6 3/4 in. Packer depth 5095 ft. Size 6 3/4 in.

Packer Depth ft. Size 6 3/4 in. Packer depth 5100 ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 5049 ft. Recorder Number 8457 Cap. 10,000 P.S.I.

Bottom Recorder Depth (Outside) 5092 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth 5455 ft. Recorder Number 11030 Cap. 5,025 P.S.I.

Mud Type CHEMICAL Viscosity 50 Drill Collar Length 177 ft. I.D. 2 1/4 in.

Weight 9.5 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,000 P.P.M. Drill Pipe Length 4858 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 32 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 363' TP Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW THROUGHOUT PERIOD. (NOBB)

2nd Open: VERY WEAK SURFACE BLOW LASTING 6 MIN. (NOBB)

Recovered 30 ft. of MUD

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Price Job

Other Charges

Insurance

Remarks: 10 MIN. INTO FINAL FLOW, WE FLUSHED TOOL & JUST GOT SURGE BLOW.

THE BOTTOM RECORDER PRESSURE WAS 2359 PSI.

TOOL SAMPLE: TRACE OIL, 100% MUD

Total

Time Set Packer(s) 10:49 AM A.M. P.M. Time Started Off Bottom 12:49 PM A.M. P.M. Maximum Temperature 123 deg.

Initial Hydrostatic Pressure ..... (A) 2437 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 16 P.S.I. to (C) 18 P.S.I.

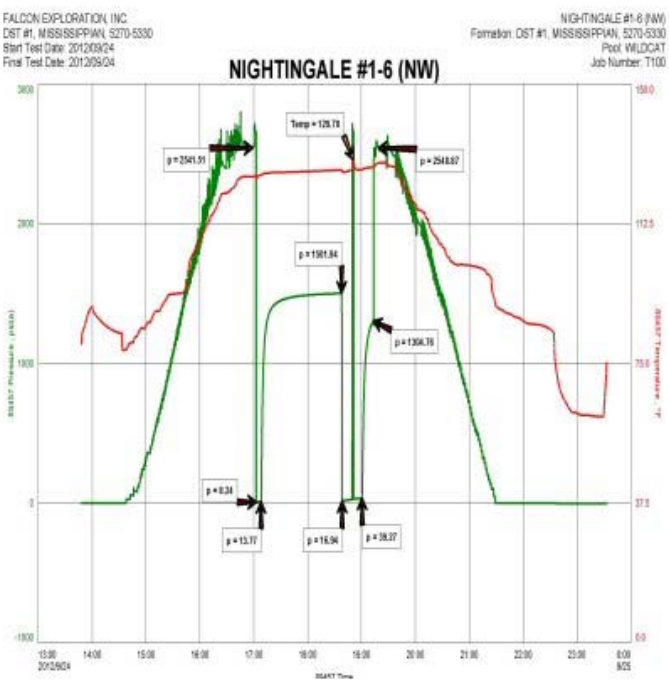
Initial Closed In Period ..... Minutes 90 (D) 271 P.S.I.

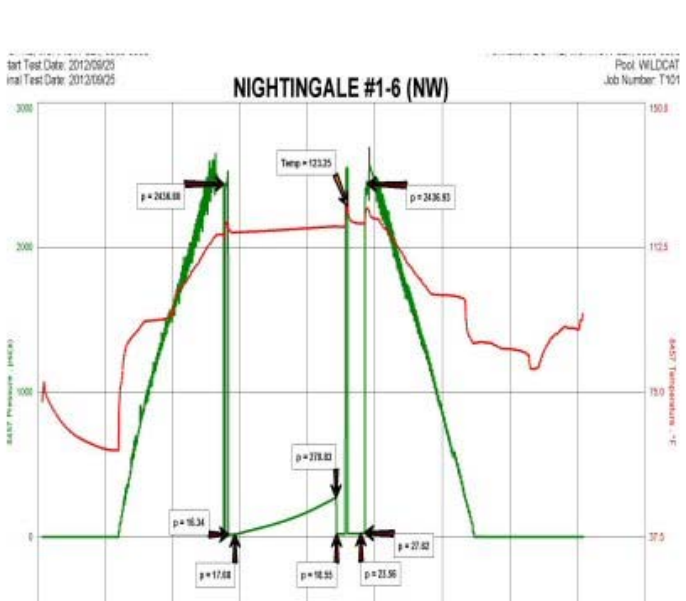
Final Flow Period ..... Minutes 20 (E) 19 P.S.I. to (F) 24 P.S.I.

Final Closed In Period ..... Minutes 5 (G) 28 P.S.I.

Final Hydrostatic Pressure ..... (H) 2437 P.S.I.

DST Charts





ROCK TYPES

Clystgy	sdy lmst	shale, grn	shale, red
Dolprim	Lmst fw<7	shale, gry	Ss
Dolsec	Lmst fw7>	Carbon Sh	Sltst

ACCESSORIES

MINERAL
- Argillaceous
- Chert, dark
- Chert, tripolitic
- Dolomitic
- Pyrite
- Chert White
- Argillaceous/Shale

FOSSIL
- Bioclastic or Fragmental
- Fossils < 20%
- Oolite
- Pellets
- Oomoldic

STRINGER
- Dolomite
- Limestone
- Sandstone
- Siltstone
- Shale
- green shale
- red shale
- carb shale

TEXTURE
- Chalky
- Earthy
- 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 4.0.7.0 (www.grsi.ca)

Curve Track #1
ROP (min/ft)
Gamma (API)
Cal (in)
1:240 Imperial

Depth | Intervals
Cored Interval
DST Interval

DST

Lithology

Oil Show

Geological Descriptions

TG, C1 - C5
Total Gas (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
1:240 Imperial

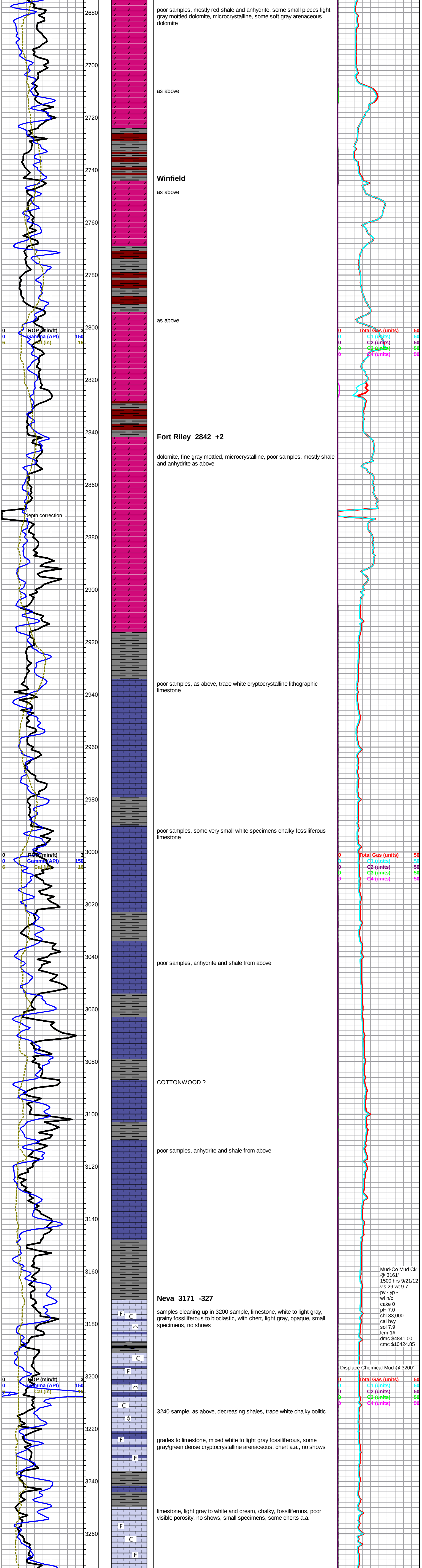
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16

0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

2640
2660

elevation 2844' KB 2835' GL
surface casing 8 5/8" set @ 1860' KB

Chase 2668 +176


0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
depth correction
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180
3200
3220
3240
3260
F
C
poor samples, mostly red shale and anhydrite, some small pieces light gray mottled dolomite, microcrystalline, some soft gray arenaceous dolomite
as above
Winfield
as above
as above
Fort Riley 2842 +2
dolomite, fine gray mottled, microcrystalline, poor samples, mostly shale and anhydrite as above
poor samples, as above, trace white cryptocrystalline lithographic limestone
poor samples, some very small white specimens chalky fossiliferous limestone
poor samples, anhydrite and shale from above
COTTONWOOD ?
poor samples, anhydrite and shale from above
Neva 3171 -327
samples cleaning up in 3200 sample, limestone, white to light gray, grainy fossiliferous to bioclastic, with chert, light gray, opaque, small specimens, no shows
3240 sample, as above, decreasing shales, trace white chalky oolitic
grades to limestone, mixed white to light gray fossiliferous, some gray/green dense cryptocrystalline arenaceous, chert a.a., no shows
limestone, light gray to white and cream, chalky, fossiliferous, poor visible porosity, no shows, small specimens, some cherts a.a.
Mud-Co Mud Ck
@ 3161'
1500 hrs 9/21/12
vis 29 wt 9.7
pv - yp -
wl n/c
cake 0
pH 7.0
chl 33,000
cal hvy
sol 7.9
lcm 1#
dmc $4841.00
cmc $10424.85
Displace Chemical Mud @ 3200'

0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16

3280
3300
3320
3340
3360
3380
3400
3420
3440
3460
3480
3500
3520
3540
3560
3580
3600
3620
3640
3660
3680
3700
3720
3740
3760
3780
3800
3820
3840
3860

depth correction

0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

Foraker 3289 -445

limestone, light gray to gray, mottled, fossiliferous to pelletal, chalky, poor visible porosity, no shows

limestone, gray to dark gray, microcrystalline, dense, arenaceous, slightly fossilifeorus, gray argillaceous to limey shale, no show

limestone, light gray to blue/gray, microcrystalline, mottled fossiliferous, with: dolomite, light gray, microcrystalline, sub-sucrosic, no shows

limestone as above with limestone, white to cream, cryptocrystalline, dense lithographic

limestone, mixed grainy fossiliferous, with limestone, pale gray/green, cryptocrystalline, dense, lithographic, no shows

limestone, light gray, mottled, very fossilifeorus, dense, some large clasts, no shows

shale, soft gray and red

Stotler 3526 -682

limestone, cream, microcrystalline, bioclastic, dense, with limestone, pale green, microcrystalline, lithographic to slightly fossiliferous, dense

as above with light gray chalky fossiliferous limestone

limestone, cream to gray and brown, mottled to grainy, earthy, fossiliferous, some weathering, green limey to silty shales, dense, no shows

Tarkio 3597 -753

limestone, mixed light gray to cream and gray/green, bioclastic to fossiliferous, fairly dense, no shows

limestone, light gray to tan, bioclastic, fossiliferous, very chalky, poor visible porosity, no shows

limestone, mixed tan to gray and brown, fossiliferous and bioclastic, chalky to dense, no shows, some mixed shales

as above

Bern 3689 -845

poor samples, very fine, mixed fossiliferous

limestone, dark gray, cryptocrystalline, lithographic to fossiliferous, dense, with gray shales

as above, with limestone, cream, dense, fossilifeorus,

limestone, cream to light gray, bioclastic to fossiliferous, chalky, poor visible porosity, no shows, some chalk in samples

as above, some secondary calcite crystals

limestone, gray, microcrystalline, fossilifeorus, dense

Topeka 3794 -950

limestone, white to light gray, grainy/arenaceous, slightly fossilifeorus, with chert, white slighty weathered/tripolitic, and boney white, fresh, no shows

grades to limestone, light gray to cream, grainy/arenaceous to fossilifeorus, chalky in part, cherts drop out, with few scattered cherts, white fossilifeorus to smokey gray, no shows

as above

lighter test - fresh air re-zero bloodhound

depth correction

as above

limestone, cream to light gray, microcrystalline, fossiliferous, very chalky, some chalk in samples, scattered white to gray cherts

limestone, blue/gray, crypto-microcrystalline, dense, fossilferous, with limestone as above

limestone, mixed white to cream and tan, fossiliferous, very chalky, some scattered rotten cherts, flood chalk in samples, no shows

as above

limestone, dense gray arenaceous, some fossiferous, mixed gray cherts, no shows

Heebner 4126 -1282

shale, black carbonaceous

limestone, light gray, grainy fossiliferous to bioclastic, chalky, some scattered white cherts, no shows

Douglas 4168 -1324

green and gray shales

limestone, gray to tan, microcrystalline, fossiliferous, dense, no shows

shale, soft gray, silty, micaceous

Lansing 4223 -1379

limestone, white to light gray, microcrystalline, chalky fossiliferous, with limestone, dirty gray arenaceous, dense, chert, white to frosted gray fossilifeorus, no shows

limestone, light gray to cream, microcrystalline, fossiliferous, dense, with trace white spongy bioclastic, no show

limestone, mixed non-descript chalky fossiliferous, no shows

limestone, dark gray, mottled, dense, fossiliferous, some gray fossiliferous limey shale, no shows

limestone, mixed cream to gray and white fossiliferous, some chalky, some scattered light gray to white bioclastic to sub-oomoldic, no show

limestone, dark gray, mottled, dense, fossiliferous, some gray fossiliferous limey shale, no shows

limestone, cream to gray, oolitic to oomoldic, some good oomold porosity, barren, flood chalk in samples, spotty good green fluoresence

limestone, white to light gray, cryptocrystalline, fossiliferous to lithographic, chalky to dense, no shows

limestone, gray to light gray, slightly mottled, microcrystalline, dense, fossiliferous, some chalk, poor visible porosity, no shows

Mud-Co Mud Ck
@ 4216'
1215 hrs 9/22/12
vis 39 wt 9.4
pv 13 yp 9
wl 8.8
cake 1/32
pH 11.5
chl 4500
cal 40
sol 7.5
lcm 2#
dmc $5819.00
cmc $16243.85

lighter test

0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16

0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

as above

limestone as above, with limestone, white, microcrystalline, fossiliferous to bioclastic, poor visible porosity, no shows

limestone, mixed fossiferous, mostly dense, some pyritic, no shows

Stark Shale 4580 -1736

shale, black carbonaceous, gassy

limestone, white to cream, dolomitic, bioclastic to sucrosic, light fluoresence, no shows

limestone, light gray to white, dense fossiliferous, no shows

limestone, light gray, microcrystalline, dense, fossiliferous, with some light gray to white fossiliferous cherts, slightly weathered, no shows

limestone, tan, oolitic to oomoldic, large ooids, fair to good oomold porosity, fair mineral fluoresence, barren

limestone, dark gray, micro-cryptocrystalline, arenaceous-argillaceous, gritty, pyritic in part, very dense, some cream pyritic fossilifeous limestone, with large clasts, no shows

light green to light gray very silty shale to siltstone

Marmaton 4723 -1879

limestone, cream to gray, crypto-microcrystalline, compact dense fossiliferous to flattened oolitic, some cream lithographic, even pale green mineral fluoresence, no shows

limestone, light gray to cream, oolitic to flattened oolitic and fossiliferous, white to cream microcrystalline lithographic, with: limestone, white to cream grainy pelletal, chalky, no shows, even light green mineral fluoresence

limestone, as above, decrease in lithographic, influx gray dense fossiliferous, some large clasts

shale, black carbonaceous

Pawnee 4813 -1969

limestone, white to cream, spongy bioclastic, limestone, blue/gray, cryptocrystalline fossiliferous, some secondary calcite seams, chert, blue/gray to white, fossiliferous, sharp, fresh, no shows, some scattered good green mineral fluoresence

Cherokee 4854 -2010

shale, black carbonaceous

limestone, cream to light gray, mixed fossiliferous to oolitic, with limestone, gray, gritty argillaceous, some pyritic, abundant shale, black to dark gray, no show

limestone, tan to brown, oolitic to pelletal, with limestone, gray, dense, gritty argillaceous, gray and black argillaceous shales, no shows

as above, increase in shales

dolomtic limestone to limey dolomite, gray to light gray, microcrystalline, arenaceous, some pyritic with: limestone, gray to cream, microcrystalline, fossiliferous, dense, no shows

grading to: limestone, mixed gray to cream to brown, fossiliferous, dense, with: limestone, gray, microcrystalline, lithographic, dense, gray and black shale stringers, some scattered mixed cherts, no show

as above

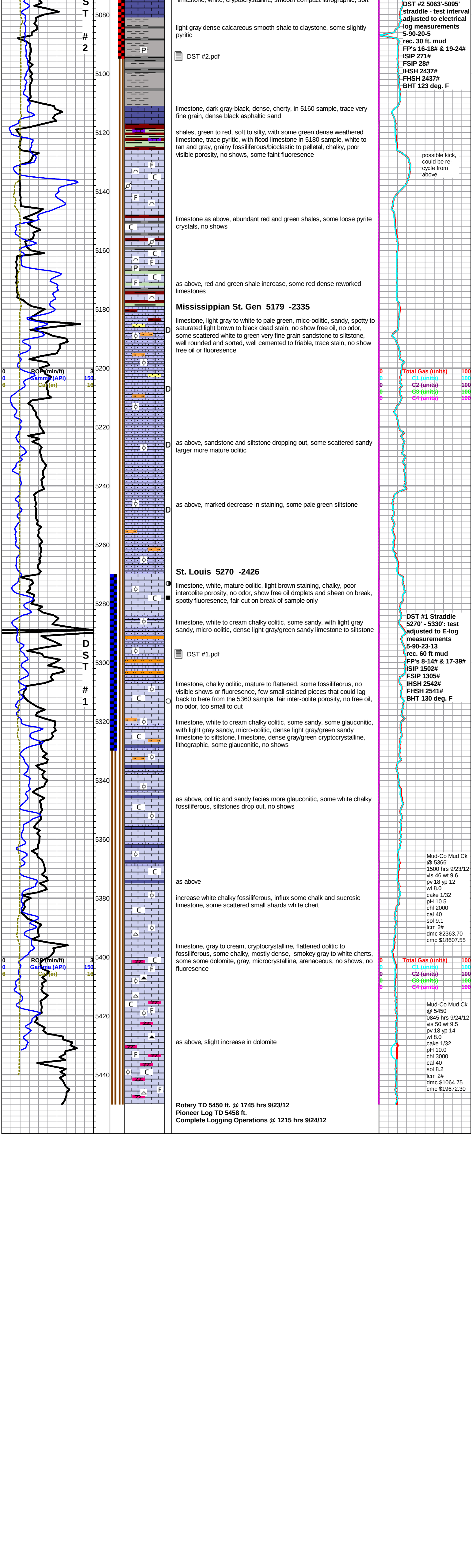
limestone, mixed gray to brown, some mottled, fossiliferous, dense, no shows

Morrow 5056 -2212

shale, pale green, silty

sandstone, dirty gray, very fine grained, fair sorting and rounding, brown to black asphaltic saturated stain, shale inclusions, poor visible porosity, bleeding dark free oil, some stringy, trace gas, no odor, no fluoresence

limestone, white, cryptocrystalline, smooth compact lithographic, soft



light gray dense calcareous smooth shale to claystone, some slightly pyritic

DST #2.pdf

DST #2 5063'-5095' straddle - test interval adjusted to electrical log measurements
5-90-20-5
rec. 30 ft. mud
FP's 16-18# & 19-24#
ISIP 271#
FSIP 28#
IHSH 2437#
FHSH 2437#
BHT 123 deg. F

limestone, dark gray-black, dense, cherty, in 5160 sample, trace very fine grain, dense black asphaltic sand

shales, green to red, soft to silty, with some green dense weathered limestone, trace pyritic, with flood limestone in 5180 sample, white to tan and gray, grainy fossiliferous/bioclastic to pelletal, chalky, poor visible porosity, no shows, some faint fluoresence

possible kick, could be re-cycle from above

limestone as above, abundant red and green shales, some loose pyrite crystals, no shows

as above, red and green shale increase, some red dense reworked limestones

Mississippian St. Gen 5179 -2335

limestone, light gray to white to pale green, mico-oolitic, sandy, spotty to saturated light brown to black dead stain, no show free oil, no odor, some scattered white to green very fine grain sandstone to siltstone, well rounded and sorted, well cemented to friable, trace stain, no show free oil or fluoresence

as above, sandstone and siltstone dropping out, some scattered sandy larger more mature oolitic

as above, marked decrease in staining, some pale green siltstone

St. Louis 5270 -2426

limestone, white, mature oolitic, light brown staining, chalky, poor interoolite porosity, no odor, show free oil droplets and sheen on break, spotty fluoresence, fair cut on break of sample only

limestone, white to cream chalky oolitic, some sandy, with light gray sandy, micro-oolitic, dense light gray/green sandy limestone to siltstone

DST #1.pdf

DST #1 Straddle 5270' - 5330': test adjusted to E-log measurements
5-90-23-13
rec. 60 ft mud
FP's 8-14# & 17-39#
ISIP 1502#
FSIP 1305#
IHSH 2542#
FHSH 2541#
BHT 130 deg. F

limestone, chalky oolitic, mature to flattened, some fossilifeorus, no visible shows or fluoresence, few small stained pieces that could lag back to here from the 5360 sample, fair inter-oolite porosity, no free oil, no odor, too small to cut

limestone, white to cream chalky oolitic, some sandy, some glauconitic, with light gray sandy, micro-oolitic, dense light gray/green sandy limestone to siltstone, limestone, dense gray/green cryptocrystalline, lithographic, some glauconitic, no shows

as above, oolitic and sandy facies more glauconitic, some white chalky fossiliferous, siltstones drop out, no shows

Mud-Co Mud Ck
@ 5366'
1500 hrs 9/23/12
vis 46 wt 9.6
pv 18 yp 12
wl 8.0
cake 1/32
pH 10.5
chl 2000
cal 40
sol 9.1
lcm 2#
dmc $2363.70
cmc $18607.55

as above

increase white chalky fossiliferous, influx some chalk and sucrosic limestone, some scattered small shards white chert

limestone, gray to cream, cryptocrystalline, flattened oolitic to fossiliferous, some chalky, mostly dense, smokey gray to white cherts, some some dolomite, gray, microcrystalline, arenaceous, no shows, no fluoresence

as above, slight increase in dolomite

Mud-Co Mud Ck
@ 5450'
0845 hrs 9/24/12
vis 50 wt 9.5
pv 18 yp 14
wl 8.0
cake 1/32
pH 10.0
chl 3000
cal 40
sol 8.2
lcm 2#
dmc $1064.75
cmc $19672.30

Rotary TD 5450 ft. @ 1745 hrs 9/23/12
Pioneer Log TD 5458 ft.
Complete Logging Operations @ 1215 hrs 9/24/12