

OPERATOR

Company: SANDLIN OIL CORPORATION
 Address: 621 17TH STREET, STE. 2055
 DENVER, COLORADO 80293-2001

Contact Geologist: GARY SANDLIN
 Contact Phone Nbr: 303-292-3313
 Well Name: SANDLIN OIL CORPORATION
 Location: SE NW SE NW Sec 14-12s-18w API: 15-051-26,421-00-00
 Pool: INFIELD Field: BEMIS-SHUTTS
 State: KANSAS Country: USA

Scale 1:240 Imperial

Well Name: SANDLIN OIL CORPORATION
 Surface Location: SE NW SE NW Sec 14-12s-18w
 Bottom Location:
 API: 15-051-26,421-00-00
 License Number: 6677
 Spud Date: 11/29/2012 Time: 3:00 PM
 Region: ELLIS COUNTY
 Drilling Completed: 12/3/2012 Time: 6:52 AM
 Surface Coordinates: 1730' FNL & 1880' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2140.00ft
 K.B. Elevation: 2145.00ft
 Logged Interval: 2900.00ft To: 3725.00ft
 Total Depth: 3725.00ft
 Formation: ARBUCKLE
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 1730' FNL
 E/W Co-ord: 1880' FWL

LOGGED BY

Company: SOLUTIONS CONSULTING
 Address: 108 W 35TH
 HAYS, KS 67601

Phone Nbr: (785) 639-1337
 Logged By: Geologist Name: HERB DEINES

CONTRACTOR

Contractor: ROYAL DRILLING INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 11/29/2012 Time: 3:00 PM
 TD Date: 12/3/2012 Time: 6:52 AM
 Rig Release: 12/3/2012 Time: 11:45 PM

ELEVATIONS

K.B. Elevation: 2145.00ft Ground Elevation: 2140.00ft
 K.B. to Ground: 5.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING TO FURTHER TEST AND DEVELOP ARBUCKLE DOLOMITE.

OPEN HOLE LOGGING BY NABORS COMPLETION AND SERVICES CO: DUAL INDUCTION LOG, COMPENSATED DENSITY/NEUTRON LOG, MICROLOG, SONIC LOG

NO DRILL STEM TESTS WERE RAN

WELL WAS DEEPEMED TO 3745' AFTER LOGGING TO ALLOW FOR ADEQUATE CASING DEPTH AND CEMENTING

FORMATION TOPS SUMMARY AND DAILY CHRONOLOGY OF ACTIVITY

**JOY # 2
1730' FNL & 1880' FWL, NW/4
Sec.14-12s-18w
2140' GL 2145' KB**

<u>FORMATION</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>
Anhydrite		1393+ 752
B-Anhydrite		1431+ 714
Topeka		3119- 974
Heebner Shale		3348-1203
Toronto		3370-1225
LKC		3393-1248
BKC		3634-1489
Simpson Shale		3645-1500
Arbuckle		3661-1516
RTD	3725-1580	
LTD		3724-1579
DDTD		3745-1600

SUMMARY OF DAILY ACTIVITY

11-29-12 RU, spud
11-30-12 212', set 8 5/8" surface casing to 212' w/150 sacks of Common, 2%Gel, 3% CC, plug down 9:00am, WOC 8 hours
12-01-12 2124', drilling, bit trip, slope 1/2 degree, board 2665.72 strap 2665.14
12-02-12 2865', drilling
12-03-12 3725', RTD, logging, lay down drill pipe and run production casing

ROCK TYPES

- | | | | |
|---|---|--|---|
|  Clystcol |  Lmst fw<7 |  shale, grn |  Carbon Sh |
|  Dolprim |  Lmst fw>7 |  shale, gry |  shale, red |

ACCESSORIES

MINERAL

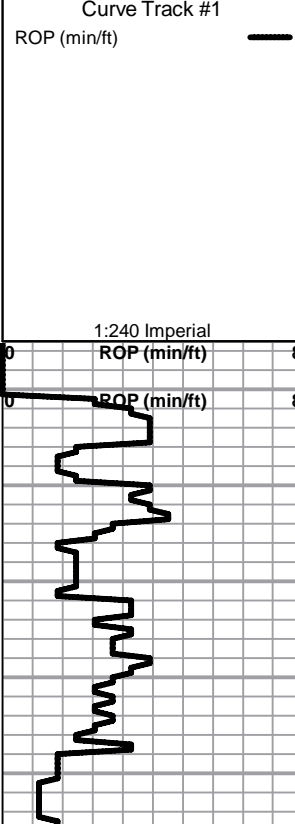
- ▲ Chert, dark
- P Pyrite
- Sandy
- △ Chert White

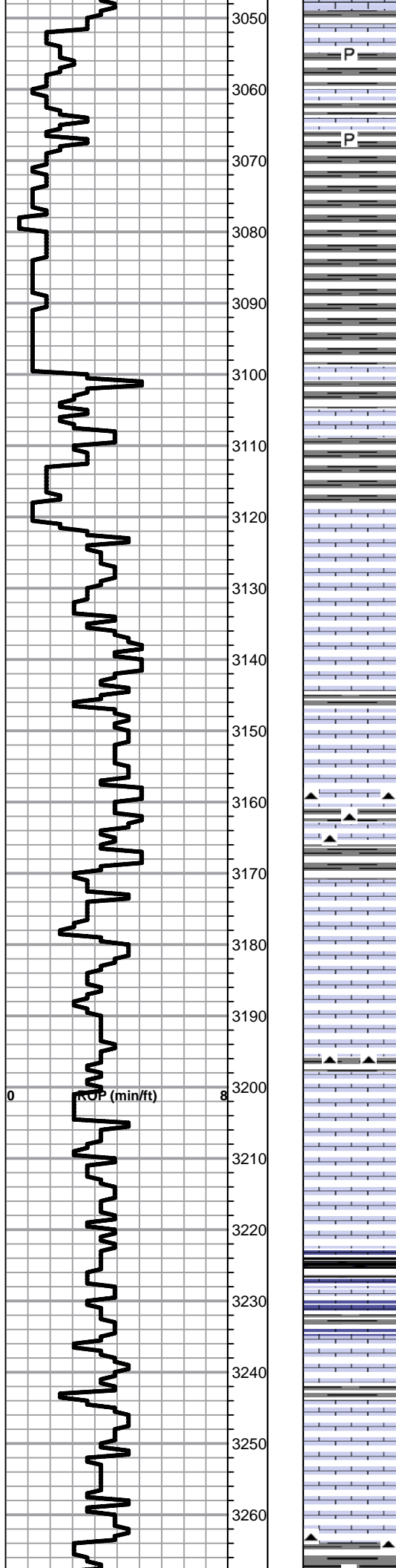
OTHER SYMBOLS

DST

-  DST Int
-  DST alt
-  Core

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

Curve Track #1 ROP (min/ft)	Depth Intervals	DST	Lithology	Oil Show	Geological Descriptions	TG, C1 - C5
<p>1:240 Imperial</p> 	<p>Cored Interval DST Interval</p>				<p>BEGIN 1' DRILL TIME FROM 3000' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 3000' TO 3600' BEGIN 5' WET AND DRY SAMPLES FROM 3600' TO RTD</p> <p>ANHYDRITE TOP 1393+752 ANHYDRITE BASE 1431+714</p> <p>Lime, med brn-med gray, fnxln, thin fossil beds- fusulinids</p> <p>Shale, med-dark gray, soft-firm, blocky, calcareous in transition between shale and lime</p> <p>Lime lt-med brn fnxln fossiliferous</p>	<p>1:240 Imperial</p> <p>8 5/8" SURFACE CASING SET TO 222' W/ 185 SXS COMMON, 2%GEL, 3%CC</p>



Lime, lt-med brn, fnxln, fossiliferous

P

Shale, med-dark gray, soft, blocky

P

Lime, crm-med brn, fnxln
Shale, med-dark gray, soft, blocky

Shale, med gray, soft, blocky

TOPEKA 3119-974

Lime, lt-dark brn, fnxln, hard on crush

Lime, med-dark grayish brn, fn-vfxln, slightly fossiliferous

Lime, med brn-grayish brn, fn-vfxln, hard on crush

Lime, lt-med brn-gray, fnxln, slightly fossiliferous in part

Lime, lt-med brn-gray, fnxln, slightly fossiliferous

Lime, med brn-med gray, fnxln, hard on crush, slightly fossiliferous

Lime, med grayish brn-gray, fnxln

Lime, med brn-med gray, fnxln, scattered fossil fragments

Lime, med brn-gray, fnxln, abundant black chert in shale-lime boundary

Lime, lt brn-lt grayish brn, fnxln-granular in part, slightly fossiliferous

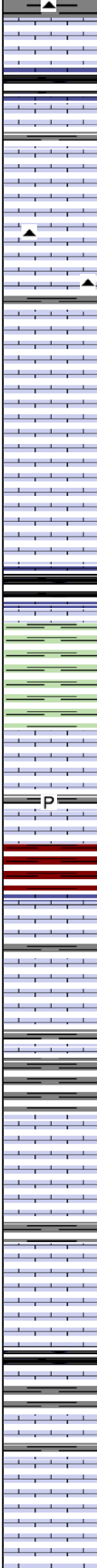
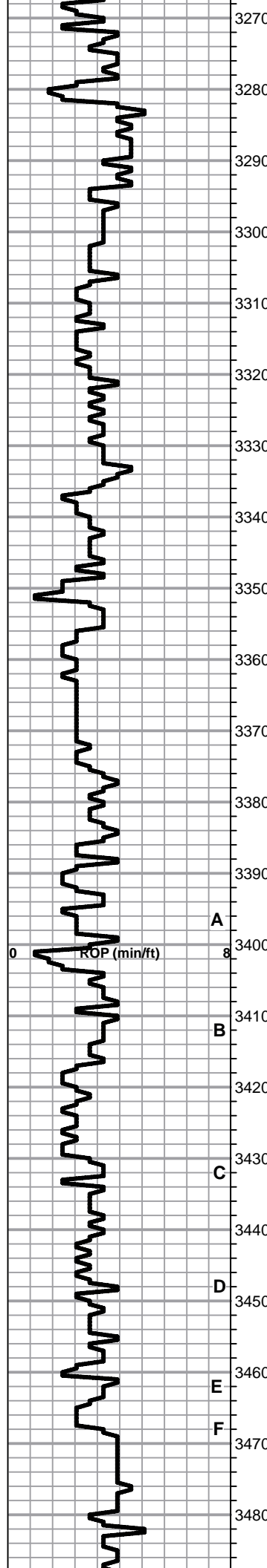
Lime, lt-med brn, mostly fnxln grading into black carbonaceous shale

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt brn, fnxln, slightly fossiliferous

Lime, crm, micro xln, thin, hard bedded chalk

Lime, lt-med brn, fnxln, scattered fossil fragments
Chert, tan-black, fresh, sharp



Lime, lt-med brn, fnxln, slightly fossiliferous

Shale, black carbonaceous, fissile, blocky

Lime, lt-med brn, fnxln
1 chip, trace of oil stain, NFO, No Odor

Lime, lt-med brn, fnxln, fossiliferous chert

Lime, lt brn-lt grayish brn, fnxln, scattered fusulinids

Lime, buff-lt brn, fn-vfxln

Lime, lt brn-lt grayish brn, frnxln

Lime, med brn, fnxln, chalky matrix in part, increasing darker brn lime near shale boundary

HEEBNER SHALE 3348-1203

Shale, black carbonaceous, fissile, blocky
Lime, med brn, vfxln, hard on crush

Shale, med gray-greenish gray, soft, blocky grading into soft sticky clumps

TORONTO 3370-1225

Lime, crm-lt brn, fnxln, NS

Lime, crm-lt brn, fnxln, slight bedded chalk in part NS

LKC 3393-1248

Lime, lt-med brn, fnxln, few fossil casts, few chips with vuggy porosity, lite scattered staining, No Odor, NFO

Lime, lt-med brn, mostly fnxln, few chips with fresh oil stain on surfaces, NFO, No Odor

Lime, lt brn-lt gray, fn-vfxln grading into calcareous gray shale with scattered fossil fragments

Lime, crm-lt brn, fnxln, few cemented oolitic chips, NS, No Odor, bedded chalk in part

Lime, crm-lt brn, fnxln, bedded chalk in part

Lime, crm-tan, mostly fnxln, few chips, oolitic with fossil fragments but well cemented, poor visible porosity

Shale, black carbonaceous, fissile, blocky
Lime, pale green, fnxln

Lime, crm-lt brn, mostly fnxln, few chips oolitic with fossil fragments back filled with sparry calcite cementing

Lime, offwhite-crm-lt brn, fnxln

ROP (min/ft)

A

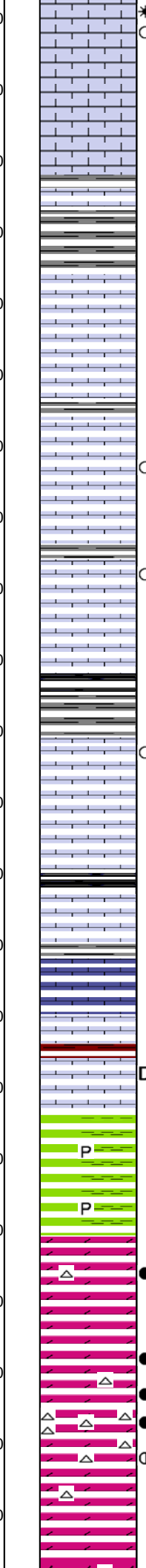
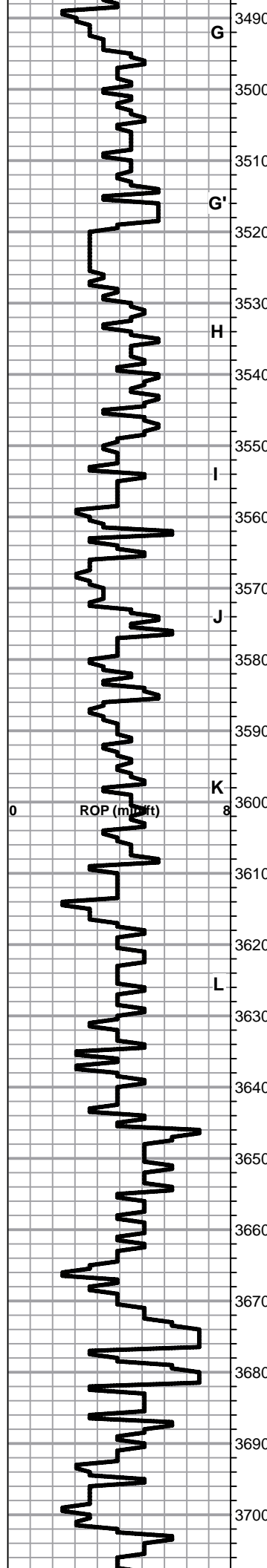
B

C

D

E

F



*
 3490 Lime, crm-tan, fnxln, few chips with honeycomb, pinpoint vuggy porosity with show of lt gassy oil on break, very lite odor

3500 Lime, crm-tan grading to lt brn, fnxln near shale boundary

3510 Lime, offwhite-crm, fn-vfxln, slight chalk in part

G'
 3520 Shale, med gray, soft, blocky

3530 Lime, offwhite-pale gray, fn-vfxln, slight bedded chalk in part

H
 3540 Lime, lt brn-lt grayish brn, fnxln

3550 Lime, crm-tan, fnxln, few chips oolitic with scattered pinpoint vuggy porosity, scattered lite stain near vugs

I
 3560

3570 Lime, lt-med brn, oolitic with fossil fragments with scattered fine pinpoint vuggy porosity, trace of spotted staining, No Odor, NFO

J
 3580 Lime, lt-med brn, fn-vfxln, grading into dark brn lime with thin fossil beds in transition zone

3590 Shale, gray-black carbonaceous

3600 Lime, lt-med brn, fnxln with few oolitic chips with lt scattered staining, No Odor, NFO

K
 3610 Lime, lt-med brn, fnxln

3620 Shale, gray-black carbonaceous

3630 Lime, white-crm, fnxln, bedded chalk

L
 3640 Shale, mix of grays and green, soft, blocky

3650 Lime, crm-tan, fnxln, Shale, vari colored grays and green shades

BKC 3634-1489

D
 3640 Shale, reddish brn, soft

3650 Lime, crm-tan, fnxln, scattered gilsonite

SIMPSON SHALE 3645-1500

P
 3650 Shale, lt blue, blocky, waxy, pyritic inclusions in part, few clusters of fine sand, NS

P
 3660

ARBUCKLE 3661-1516

3670 Dolomite, crm-lt brn, fnxln-granular, vuggy and interxln porosity, good odor, saturated staining

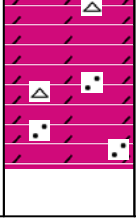
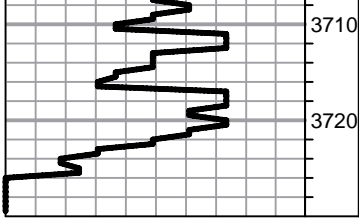
3680 Dolomite, crm, fnxln

3690 Dolomite, crm, fn-cxln, rhombic crystalline development with interxln porosity, good odor and floating globules of oil

3700 Dolomite, crm, fnxln, lot of white chert with oolitic chert in part, fn-cxln in breaks with good odor and staining decreasing gradually with depth

Dolomite, tan, fn-cxln, good odor, free floating oil in samples carryover from above ?

O/W CONTACT @ 3690' BASED ON AREA LOGS



Dolomite, crm-tan, fn-vfxln, clean appearance, lt sulfur odor

Dolomite, tan, oomoldic, fn-cxln, quartz grain inclusions

RTD 3725-1580 LTD 3724-1579

**WELL DEEPENED TO 3745'
TO FIT PRODUCTION CASING**