

WELLSITE GEOLOGIST'S REPORT

J. R. Husted Consulting Geologist



Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: RUDIGER NO 1-7
Well Id:
Location: SEC 7-T20S-R14W
License Number: 15-009-25,951-0000
Spud Date: FEB 27-2014
Surface Coordinates: 2310' FN1,400' FWL,70' E. OF SW SW NW

Region: BARTON CO
Drilling Completed: MARCH 11-2014

Bottom Hole VERTICAL
Coordinates:
Ground Elevation (ft): 1911'
Logged Interval (ft): 1700' To: 3850'
K.B. Elevation (ft): 1919'
Total Depth (ft): 3850'
Formation: ARBUCKLE
Type of Drilling Fluid: STARCH/CHEMICAL

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

ROCK TYPES legend table with categories like Gyp, Igne, Lmst, Meta, Mrlst, Salt, Shale, Shcol, Shgty, Silst, Ss, Tlll, Carb sh, Dol, Dtd, Gry sh, Sandylms, Shale, Slststn, Shlyst, Slys, Lms.

ACCESSORIES legend table with categories like FOSSIL (Algae, Amph, Balm, Blect, Brach, Bryozoa, Cephal, Coral, Crin, Echin, Fish, Foram, Gastro, Oolite, Onch, Palet, Pileol, Plant, Strom, Fuss, Oomold), MINERAL (Anhy, Arg, Arggrn, Bent, Bit, Breccfrag, Calc, Carb, Chtdk, Chtt, Dol, Feldspar, Ferr, Glau, Gyp, Hvymin, Kao, Marl, Mixl, Nodule, Phos, Pyr), and STRINGER (Anhy, Arg, Bent, Coal, Dol, Gyp, Ls, Mrlst, Silstrg, Ssstrg, Carsh, Clystn).

OPERATOR: Company: F.G. HOLL COMPANY, Address: 9431 E. CENTRAL STE 100 WICHITA, KANSAS 67206

GEOLOGIST: Name: RENE HUSTEAD, Company: HUSTEAD EXPLORATION, Address: 600 N. WINWOOD ST GARDNER, KANSAS 66630

DRILLING CONTRACTOR: DUKE RIG #2 DOUBLE DERRICK; DP-4.5 X H(20#); DC 6.25" X 2.25" X 480.73 FT; KELLY BUSHING 8 FT ABOVE GROUND LEVEL; DION VASQUEZ (TOOL-PUSHER) NOTE -RTD =3850' AND LTD=3846' DIFF OF 4 FT

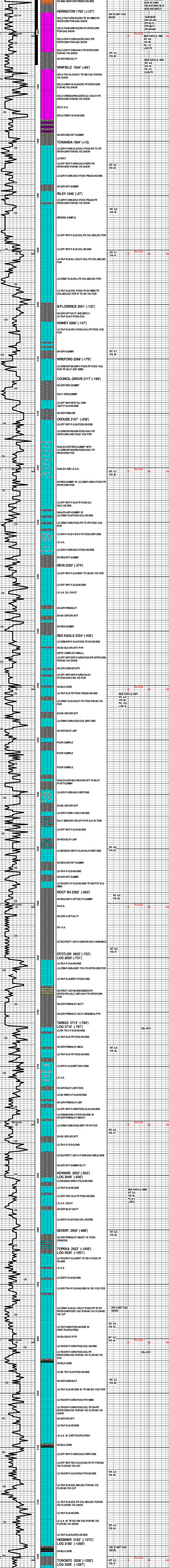
SURFACE CASING: SURFACE CASING SET AT 8 5/8 INCHES AT 880' WITH 400 SAXS OF CEMENT. PRODUCTION CASING SET AT 5 1/2 INCHES AT 3748' WITH 200 SAXS OF CEMENT

GAS DETECTION: ANALOG UNIT MBC INC HW/CHROM (FROM 1600' TO 3850')

CIRCULATION SYSTEM: EWCO 14W400 ;BB/STRK 129; STK/MIN 60;BB/MIN 7.7;GAL/MIN 325;EARTH PITS;MUD CO SERVICE INC-RICK HUGHES-1-620-752-5425

ELECTRIC LOGS: DUAL COMPENSATED POROSITY MICRO LOG; DUAL INDUCTION LOG; FRAC FINDER; BORE HOLE COMPENSATED; SONIC LOG; MICRO RESISTIVITY LOG

COMPLETION: PRODUCTION CASING SET ON ARBUCKLE





DOUGLAS SH 3223' (-1304')  
 LOG 3220' (-1301')  
 SH-GRY-BLKY-WAXEY W/ PYR XLS

SH-GRY-BLKY-WAXEY-SILTY

SH-GRY-SFT-SILTY

SH A.A.

SH-GRY-V-SFTSILTY

BROWN LS 3284' (-1365')  
 LOG 3281' (-1362')

LS-TNF-XLN-HD-DNS

LANSING/KC 3294' (-1375')  
 LOG 3292' (-1373')

LS-OFF WHT-F-GRN-PP AND SMALL VUG  
 POR-NO VIS FLOR-GD STRM CUT-FREE  
 OIL-GOOD ODOR

LS-OFF WHT-GRY-F-GRN-PR PP AND ISO VUG  
 POR-NO VIS FLOR-FR STRM CUT-GD ODOR

LS-TN-GRY-F-GRN-FOSS-SHLY-HD-DNS

LS-LT BRN-F-GRN-FOSS-PR INTER-GRN  
 POR-NO VIS FLOR-NO VIS SHOW

LS-GRY-F-GRN-OOL-SHLY-PR OOL-MOLDIC  
 VUG POR-NO VIS FLOR-GD STRM CUT-NO  
 ODOR

LS-TNF-XLN-TR FOSS-HD-DNS

LS-OFF WHT-F-XLN-TR INTER-GRN POR-TR LT  
 STN-NO VIS FLOR-NO VIS CUT

LS-TNF-XLN-OOL-GD OOL-MOLDIC POR-NO  
 VIS FLOR-NO VIS CUT

LS A.A.

LS-TNF-XLN-CHLKY IP-BRIT TO HD-DNS-DULL  
 WHT MIN FLOR-NO VIS CUT

LS-CRM-F-XLN-OOL-FR INTER-GRN/SM VUG  
 POR-LT BRN STN-NO VIS FLOR-FR STRM  
 CUT-FNT ODOR

LS-OFF WHT-F-GRN-CHLKY-OOL-TR PR  
 OOL-MOLDIC/FR INTER-GRN POR-SCATT  
 BRITE YEL FLOR-TR LT BRN STN-GD STRM  
 CUT-NO ODOR

LS-TNF-XLN-OOL-FR TO GD OOL-MOLDIC  
 POR-SCATT BRITE YEL FLOR-NO VIS CUT -NO  
 VIS ODOR-GAS SHOW

LS-OFF WHT-F-XLN-CHLKY IP-OOL-BRIT TO HD  
 DNS

LS-GRN-WHT-F-XLN-OOL-GLAU-HD-W/ TR ISO  
 VUG POR-DULL WHT FLOR-NO VIS SHOW

LS-OFF WHT-GRN-OOL-PR INTER-GRN POR-TR  
 DK BLK STN-NO VIS FLOR-GD STRM CUT-NO  
 ODOR

**B/KC 3511' (-1592')**

LS-TNF-XLN-CHLKY IP-OOL IP-SLI CHLKY BRIT TO  
 HD-MSTLY DNS W/ TR OOL-MOLDIC POR-BRITE WHT  
 FLOR-NO VIS CUT

**(CONGLOMERATE 3522'  
 (-1603'))**

SHALES-RED-GRY-BLKY-SNDY IP-W/ CRT-TN-OPQ-FRSH

SHALES-GRY-BLKY-W/ CRT-TN-OPQ-FRSH

SHALES AND CRT A.A.

SHALE-RED-SFT-GUMMY W/ CRT-TN-OPQ-FRSH

CRT-OFF WHT-TN-MSTLY OPQ-FRSH TR CRT-TRIP-FR  
 PP-POR-OK BLK STN

CRT A.A.

CRT-VARIG-OPQ-FRSH W/ TR DK BLK STN  
 SHALES-VARIG-SPLNTY

**ARBUCKLE 3610' (-1691')**

DOLO-CRM-F-GRN-TR SND IMBD-FR  
 INTER-GRN POR-LT BRN STN-SCATT YEL  
 FLOR-TR FLN CUT-STRNG ODOR

DOLO-TNF-F-GRN-BRIT-OOL-FR INTER-GRN WITH TR  
 OOL-MOLDIC POR-LT BRN STN-SCATT YEL FLOR-NO VIS  
 CUT-WHEN CRUSHED IMMED FLSH CUT-STRNG ODOR

DOLO A.A. WITH MSTLY SHALES-VARIG IN  
 TRAY

DOLO-CRM-F-GRN-BRIT-TR INTER-GRN  
 POR-TR LT BRN STN-NO VIS FLOR-NO VIS  
 CUT-FNT ODOR WITH CRT-BRN-OPQ-FRSH

DOLO-TNF-F-GRN-TR INTER-GRN POR-TR LT BRN STN-NO  
 VIS FLOR-NO VIS CUT-FNT ODOR

DOLO A.A.

DOLO-CRM-F-GRN-SNDY TEX-HD-DNS W/  
 CRT-YEL-OPQ-FRSH-SHALES-VARIG

DOLO-OFF WHT-M-GRN-SNDY-HD-DNS W/  
 CRT AND SHALES IN TRAY

DOLO-OFF WHT-CRS XLN-TR INTER-GRN  
 POR-TR LT BRN STN-DULL YEL/GRN FLOR-GD  
 FLSH CUT WHEN CRSHED

DOLO-OFF WHT-M-CRS XLN-TR INTER-GRN-NO  
 VIS STN-BRITE YEL WHT FLOR-NO VIS CUT

DOLO-OFF WHT-CRS XLN-TR INTER-GRN  
 POR-BRITE WHT FLOR-NO VIS CUT-NO ODOR

DOLO-OFF WHT-F-XLN-SNDY-HD-DNS W/  
 BRITE WHT FLOR-NO VIS CUT

DOLO-OFF WHT-M-XLN-SNDY-HD-DNS

DOLO A.A.

DOLO-OFF WHT-F-XLN-LG SND GRNS IMB-BRIT-NO VIS  
 POR/ NOTE CUTTINGS ARE VERY SMALL/ SND GRNS VIS  
 IN TRAY-NO VIS SHOW

DOLO A.A.

KB=1919'		
WT 9.3 VIS 46		
7 UNIT GAS INCRS		
8 UNIT GAS INCRS		
WT 9.3 VIS 45		
MUD DATA @ 3334'		
WT 9.3 FIL 6.0		
DST #2 3300-3360' BLW BOB IN 26 MIN BLW BOB IN 27 MIN 30 60 45 90 SIP-928-913 JFP-35-71 HP-1671-1529		
WT 9.3 VIS 49		
5 UNIT GAS INCRS		
STRAP-2898.59 COLLARS 520.36 3418.95 3420.59 SHORT - 1.64		
MUD DATA @ 3433'		
20 UNIT HW GAS INCRS		
DST #4 3438-3449 REC 52 FT MUDDY H2O 10% MUD AND 90% WATER IBLWVK BLW BLT 2.5" IN BUCKET FBLWVK BLDNG BLW 2.5" IN BUCKET 30 60 30 60 SIP-966-957 JFP-33-51 HP-1715-1657		
DST #5 REC-7 FT OIL REC-124 FT MUDDY H2O (12% MUD AND 88% WATER) IBLWVK BLDNG BLW BLT TO 6.5" IN BUCKET FBLWVK BLDNG BLW BLT TO 8" IN BUCKET 15 60 30 60 SIP-912-906 JFP-39-70 HP-1722-1612		
MUD DATA @ 3433'		
20 UNIT HW GAS INCRS		
DST #6 3611-3620 REC-427 MUD IBLWVK BLW DIED FBLWDEAD 15 30 15 30 MIS-RUN		
MUD DATA @ 3617'		
DST #7 3614-3625 REC GAS AND 30 FT GASSY MUD IBLWSTRNG BLW BOB IN 25 SEC-BLWVK-YES FBLWSTRNG BLWBOB-BLWVK YES 5 60 60 90 SIP-1223-1192 JFP-53-94 JFP-50-43 HP-1816-1750		
GAS RATE TABLE		
MIN CK	PSIG	GAS RATE
5	25	37
10	38	82
20	5	100
30	5	128
40	5	131
50	5	145
DST #8 3625-3635 REC GAS AND 29 FT OFF SALT WATER IBLWSTRNG BLDNG BLW BOB INSTANTLY FBLWSTRNG BLDNG BLW INSTANTLY-BLWVK		
HW 30 UNIT GAS INCRS (NOT LAGGED)		
5 60 60 90 SIP-1208-1117		
GAS RATE TABLE		
MIN CK	PSIG	GAS RATE
10	5	9.5
20	5	37
30	5	12
40	7.5	342
50	7.5	342
50	7.5	342
RTD-2857 LTD-3846'		
RTD-2857 LTD-3846'		