

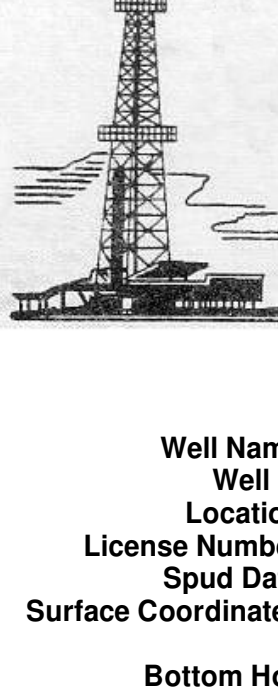
WELLSITE GEOLOGIST REPORT

WELLSITE GEOLOGIST'S REPORT

J. R. Husted
Consulting Geologist



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



Well Name: EBF No 1-12
Well Id:
Location: Sec 12-T19S-R14W
License Number: 15-009-26096-0000
Spud Date: April 28-2015
Surface Coordinates: 1815' FNL, 1675' FWL, 165' N., 25' E. of C W/2 SE NW
Region: BARTON, KS
Drilling Completed: May 9-2015
Bottom Hole Coordinates: VERTICAL
Ground Elevation (ft): 1878' K.B. Elevation (ft): 1886'
Logged Interval (ft): 1650' To: 3700' Total Depth (ft): 3700'
Formation: LANSING/KS, ARBUCKLE
Type of Drilling Fluid: STARCH/CHEMICAL
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

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 66030

ROCK TYPES

Anhy	Igne	Shgy	Sandylms
Bent	Lmst	Siltst	Shale
Bioclst	Meta	Ss	Siltstn
Cht	Mrfst	Till	Shlystls
Coal	Salt	Carb sh	Stlysh
Congl	Shale	Dol	Lms
Dol	Shcol	Dtd	
		Gry sh	

ACCESSORIES

Fossil	MINERAL	Salt	Dol
Algae	Anhy	Sandy	Grysh
Amph	Arggrn	Silt	Grysit
Belm	Arg	Sil	Lms
Bioclst	Bent	Sulphur	Sandylms
Brach	Bit	Tuff	Sh
Cephal	Breclst	Chlorite	Siltstn
Coral	Calc	Dol	
Crin	Carb	Sand	
Echin	Chtdk	Sity	
Fish	Chtlt		
Foram	Dol		
Fossil	Dol		
Gastro	Ferrpel		
Oolite	Ferr		
Ostra	Glau		
Pelec	Gyp		
Pellet	Hvymn		
Pisolite	Kaol		
Plant	Marl		
Strom	Minxl		
Fuss	Nodule		
Oomold	Phos		
	Pyr		

DRILLING CONTRACTOR

DUKE RIG #2, DRILL PIPE 4.5 INCHES X H (16.6#), COLLARS 6.25 X 2.25 X 495', BIT 7 7/8 INCHES, 3-15 JETS, DOUBLE DERRICK, KELLY BUSHING 8 FT ABOVE GROUND LEVEL; Mike Godfrey (TOOL-PUSHER)

SURFACE CASING

SURFACE CASING SET AT 8 5/8 INCHES AT 834' WITH 175 SAXS OF CEMENT
PRODUCTION CASING SET AT 5 1/2 INCHES AT 3696' WITH 160 SAXS OF CEMENT

GAS DETECTION

ANALOG UNIT MBC INC HW/CHROM (FROM 1500' TO 3700')

CIRCULATION SYSTEM

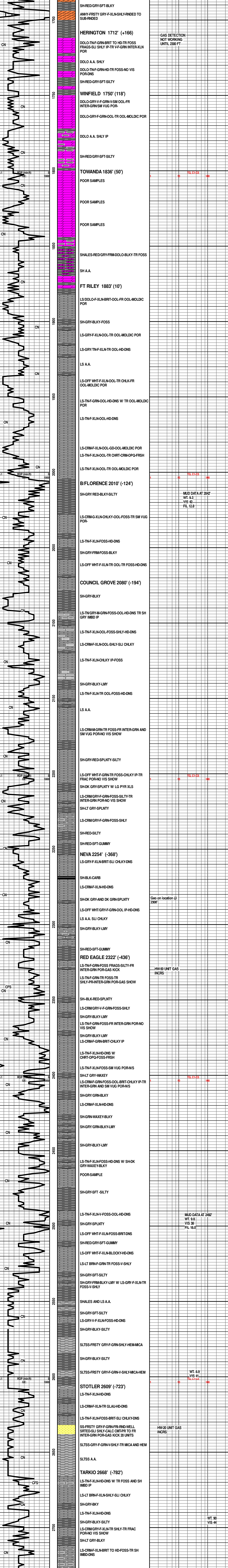
MUD CO SERVICE INC., EWCO, 14W-1400, LINER SIZE 6, STROKE 14, STRK/MIN 60 GAL/MIN, 326 GAL/MIN, RICK HUGHES- 1-620-752-5425 - GREAT BEND, KANSAS

ELECTRIC LOGS

DUAL COMPENSATED PORSITY, MICRO LOG; DUAL INDUCTION LOG; FRAC FINDER; BORE HOLE COMPENSATED; SONIC LOG; MICRO RESISTIVITY LOG

COMPLETION

PRODUCTION CASING SET ON LANSING/KC AND ARBUCKLE



TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)

SURVEYS
834 34 DEG
3376 1 DEG
3700 1 DEG

GAS DETECTION
NOT WORKING
UNTIL 2300 FT

MUD DATA AT 2042
WT. 9.3
VIS 42
FIL 12.8

Geo on location @
2300'

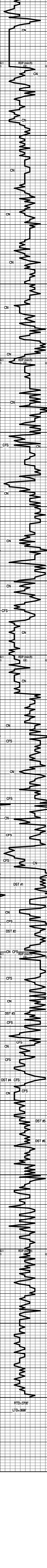
HW-50 UNIT GAS
INCRS

MUD DATA AT 2492
WT. 9.8
VIS 38
FIL 18.0

HW-20 UNIT GAS
INCRS

WT. 8.9
VIS 41
TG, C1-C5

WT. 90
VIS 44



SH-GRY/GRN-BLKY-SILTY
 LS-OFF WHT-F-GRN-HD-DNS

SH-LT GRAY-SILTY
 SH-A.A.

HOWARD 2804' (-918')

LS-LT BRN-V-F-XLN-HD-DNS
 SH-GRY-BLKY-SILTY
 LS-TN-F-XLN-HD-DNS TR FOSS

LS-A.A.
 LS-CRM-F-GRN-BRIT-CHLKY-TR FOSS-DNS

SH-GRY-BLKY-LMY
 LS-TN-V-F-XLN-SH-IMBD-DNS W/ TR FRAC

LS A.A.
 LS-GRY-F-XLN-HD-DNS

SH-GRY-BLKY-LMY
TOPEKA 2888' (-1002')

LS-GRY/TN-F-XLN-HD-DNS W/
 SH-GRY-BLKY-LMY

SH-GRY-BLKY-LMY-FOSS
 LS-CRM-F-XLN-TR FOSS-HD-DNS

LS A.A.
 LS-CRM-F-GRN-BRIT-FOSS-TR INTER-GRN
 POR-SCATT YEL FLOR-NO VIS CUT-NO VIS SHOW

LS-CRM-GRY-F-GRN-HD-FOSS-OOL-DNS
 LS-CRM-F-GRN-HD-DNS W/
 CHRT-GRY-OPQ-FRSH

SH-GRY-BLKY-SILTY
QUEEN SH 2976' (-1090')

SH-BLK-CARB
 SH-GRY-FRM-FOSS-LMY
 LS-CRM-F-XLN-V-FOSS IP-HD-DNS

SH-GRY-SPLNTY
 LS-CRM-GRY-F-XLN-FOSS-FUS-HD-DNS

LS A.A. W/ LG PYR XLS IN TRAY
 SH-GRY-FRM-BLKY-FOSS
 LS-CRM-F-GRN-FOSS-BRIT TO HD-SLI
 CHLKY-DNS

KING SH 3044' (-1158')

SH-BLK-CARB
 LS-CRM-GRY-F-XLN-HD-FOSS-SM PYR XLS
 IMBD-DNS
 LS-CRM-M-GRN-FOSS-PR TO FR INTER-GRN
 POR-DULL WHT MIN FLOR-NO VIS CUT-20 UNIT
 GAS INCREASE

POOR SAMPLE
 POOR SAMPLE
 LS-OFF WHT-F-XLN-OOL-FR TO GD
 OOL-MOLDIC POR-DULL WHT FLOR-NO VIS
 CUT

LS-CRM-V-F-GRN-HD-DNS W/
 CHRT-TN-OPQ-FRSH
 LS AND CHRT A.A.
 LS-OFF WHT-F-GRN-TR FOSS-BRIT-DNS-DULL
 WHT MIN FLOR-NO VIS CUT

LS-CRM-GRY-F-GRN-CHLKY IP-FOSS-TR PP
 POR-DULL WHT FLOR-NO VIS SHOW -PYR
 XLS AND FOSS-FUS IN TRAY

HEEBNER 3134' (-1248')

SH-BLK-CARB
 HW-40 UNIT GAS
 INCRS

TORONTO 3148' (-1260')

LS-OFF WHT-F-GRN-BRIT-CHLKY-DULL WHT
 MIN FLOR-NO VIS POR-NO VIS CUT-10 UNIT
 GAS INCRS

DOUGLAS SH 3165' (-1279')

SH-RED-GRN-GRY-BLKY-SILTY IP
 SH-GRY-GRN-RED-SPLNTY W/
 LS-CRM-F-XLN-FOSS-HD-DNS

SH-GRY-GRN-SPLNTY-TR SILTY
 SH-GRY-SILTY

SH-GRY-BLKY-SILTY

BROWN LS 3226' (-1340')

LANSING/KC 3238' (-1352')

LS-OFF WHT-F-XLN-PR TO FR INTER-GRN
 POR-LT BRN STN-NO VIS FLOR-GD STRM
 CUT-GD ODDOR-10 UNIT GAS INCRS

LS-TN-F-XLN-HD-DNS W SH-LT
 GRY-FRM-BLKY-FOSS
 LS A.A. W/ CHLK IN TRAY
 LS-CRM-GRY-F-GRN-CHLKY IP-FOSS-OOL-PR
 INTER-GRN SM VUG POR-LT BRN STN-SCATT
 DULL WHT FLOR-FR STRM CUT-NO ODDOR

LS-CRM-GRY-F-XLN-FOSS-OOL-TR SH LT GRY
 IMBD-10-TR PR INTER-GRN POR-LT BRN
 STN-SCATT DULL WHT FLOR-GD STRM
 CUT-NO ODDOR

LS-OFF WHT-GRY-F-XLN-FOSS-OOL-HD-
 DNS W/ LS-CHLKY IP-DULL WHT MIN
 FLOR-NO VIS SHOW

LS-GRY-F-XLN-HD-TR FOSS-DNS-DULL WHT
 FLOR-NO VIS SHOW

LS-TN-F-XLN-OOL-GD OOL-MOLDIC
 POR-BRITE WHT FLOR-BARREN

LS-CRM-F-XLN-HD-TR FOSS-PR SM VUG
 POR-SCATT YEL FLOR-NO VIS CUT

SH-GRY-BLKY-WAXEY-SILTY
 LS-CRM-F-XLN-OOL-FR OOL-MOLDIC POR-SLI
 TR LT BRN STN-SCATT YEL FLOR-RARE VIS
 CUT-NO ODDOR-CHLK IN TRAY

LS-TN-F-XLN-HD-DNS W/ CHLK IN TRAY
 LS-TN-F-XLN-HD-DNS W/ LS-OFF
 WHT-F-XLN-BRIT-SLI CHLKY-DNS
 LS-TN-F-XLN-TR OOL-HD-DNS-DULL WHT
 FLOR-NO VIS SHOW

LS-CRM-F-XLN-FOSS-HD-DNS W/ SLI CHLKY
 IP-DULL WHT MIN FLOR-NO VIS SHOW

LS-OFF WHT/CRM-F-XLN-OOL-PR TO FR
 INTER-GRN SM OOL-MOLDIC-INTER-PRT
 POR-LT BRN TO DK BRN STN-SCATT YEL /GLD
 FLOR-GD STRM CUT-SSFO-V-FNT ODDOR

LS-OFF WHT-F-XLN-FOSS-OOL-TR INTER-PRT
 POR-TR LT BRN STN-TR SCATT YEL FLOR-TR
 FR STRM CUT-V-FNT ODDOR

BASE OF THE KC

CHRT-VARIG-OPQ-OOL IP-FRSH W/ SH-
 CHRT-RED-OPQ-FRSH W/
 CHRT-VARIG-OPQ-FRSH-SH-RED-GRN-
 SILTY-SSFO

SH-GRY-GRN-SPLNTY W/
 CHRT-RED-VARIG-OPQ-FRSH

ARBUCKLE

DOLO-TN-F-GRN W CHRT OFF WHT IMBD IP-PR
 TO FR LG VUG POR-LT BRN STN-DULL WHT
 FLOR-GD STRM CUT-GD ODDOR

DOLO-CRM-F-GRN-PR INTER-GRN POR-DULL
 WHT FLOR-TR LT BRN STN-FLSH CUT WHEN
 CRUSHED-GD ODDOR

DOLO-CRM-M-GRN-FR TO GD INTER-GRN
 POR-BRITE WHT FLOR-LT BRN AND DK BRN
 STN-GD STRM CUT-ABUNDT FREE OIL IN
 CUP-GD ODDOR

POOR SAMPLE
 CHRT-VARIG-OPQ-FRSH-SHALES-DK GRY
 WAXEY-OOL-CRM-M-GRN-F-INTER-GRN
 POR-DULL WHT FLOR-TR LT BRN STN-TR FR
 STRM CUT-FNT ODDOR

DOLO-CRM-M-GRN-FR INTER-GRN POR-TR LT
 BRN STN-DULL WHT FLOR-PR STRM CUT-FNT
 ODDOR

DOLO-CRM-F-M-GRN-FR INTER-GRN POR IP
 TO NO VIS POR-NO VIS STN-V-SLI ODDOR

DOLO-TN-F-GRN-BRIT-DNS
 DOLO-TN-F-M-GRN-NO VIS POR TO FR
 INTER-GRN SM VUG POR-DULL WHT FLOR-NO
 VIS SHOW

DOLO-OFF WHT-F-GRN-HD-DNS
 DOLO A.A. SLI CHLKY
 DOLO-OFF WHT-TN-F-GRN-HD-DNS W/ CHLK IN
 TRAY
 DOLO-OFF WHT-F-GRN-HD-DNS W/
 CHRT-WHT-OPQ-FRSH

DOLO-CRM-F-GRN-BRIT-DNS W/ CHRT IN TRAY
 DOLO-TN-CRM-F-GRN-OOL-DNS WITH
 CHRT-SH-PYR IN TRAY

DOLO-CRM-V-F-GRN-BRIT-DNS
 DOLO A.A.
 DOLO-OFF WHT-F-M-GRN-TR SM PYR XLS
 IMBD-BRIT-DNS W/ CHRT-OFF
 WHT-TN-OPQ-FRSH

WT. 9.0	VIS 43
TG, CI, CS	140
1000	
WT. 9	VIS 42
MUD DATA AT 3037	
VIS 9.2	
VIS 42	
FIL 8.0	
WT. 9.4	VIS 43
WT. 9.1	VIS 50
TG, CI, CS	140
1000	
DST #1	
180 FT	
30 FT OIL CUT	
MUD-GD SHOW	
OF FREE OIL BET	
TOOL	
IBLWV-WK SURF	
FBLWVWK BLDING	
BLW BOB IN 57	
MIN	
15:30:60:90	
SIP-114-163	
IFP-41-46	
FFP-44-64	
HP-1714-1672	
HW-100 UNIT GAS	
INCRS	
DST #2	
3378-3467	
REC-1607 GIP	
425-GASSEY OIL	
(20% GAS, 79% OIL, 5% MUD)	
180 GASSEY OIL	
(20% GAS, 80% OIL)	
485 SLI MUDDY	
GASSEY OIL	
(15% GAS, 75% OIL, 10% MUD)	
IBLWGD BLW BOB	
IN 4	
MIN-BLWBK-YES	
FBLWGD BLW BLT	
BOB IN 4	
MIN-BLWBK-YES	
30:60:45:90	
DST #3	
3446-3463	
REC-15 FT OIL CUT	
MUD 15% OIL AND	
85% MUD	
IBLWVWK BLW FOR	
7 MN AND DIED	
FBLWNO BLW	
SIP-266-115	
IFP-35-42	
FFP-47-47	
HP-1703-1703	
MUD DATA AT 3467	
VIS 9.2	
VIS 51	
FIL 7.2	
DST #4	
3443-3510	
REC-180' GIP, 135'	
MUDDY GASSEY	
OIL (28% GAS, 22%	
OIL 50% MUD)	
130' MUDDY	
GASSEY OIL (20%	
GAS, 28% OIL, 35%	
MUD)	
60' SLI MUDD CUT	
GASSEY OIL (60%	
GAS, 30% OIL, 10%	
MUD)	
5-60:45:90	
SIP-1155-1093	
IFP-70-102	
FFP-137-221	
HP-1720-1697	
MUD DATA AT 3535	
WT. 9.25	
VIS 49	
FIL 7.2	
DST #5	
3517-3526	
REC-5 VERY SLI	
OIL CUT MUD	
IBLWV-WK SURF	
BLW FOR 7 MN	
AND DIED	
FBLWNO BLW	
15:30:15:30	
SIP-1171-1144	
IFP-33-35	
FFP-35-37	
HP-1737-1704	
DST #6	
TG, CI, CS	140
1000	
RTD-3700	
LTD-3696	