

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: Werth Farms #1-12
Location: SW SE SW
License Number: API: 15-179-21367-00-00
Spud Date: July 21, 2014
Surface Coordinates: 330' FSL & 1650' FWL Section 12-TWP 10S - RNG 26 W
Region: Sheridan County, Kansas
Drilling Completed: July 29, 2014

Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 2589 K.B. Elevation (ft): 2594
Logged Interval (ft): 3500 To: RTD Total Depth (ft): 4120
Formation: Marmaton
Type of Drilling Fluid: Chemical Displace at 3245'

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Eternity Exploration, LLC
Address: 338 Spyglass Drive
Coppell, Texas 75019+5430

GEOLOGIST

Name: W. Scott Alberg
Company: Alberg Petroleum, LLC
Address: 609 Meadowlark Lane
Pratt, Ks 67124

COMMENTS

Surface Casing: Ran 5 joints new 20# 8 5/8" and set at 218.92', cement did circulate. Plug down at 6:30 am, July 22, 2014.

Production Casing: None

Deviation Surveys: 1/4 degree @ 220'; 1/4 - 3864', 1 1/4 degree @ 4120'.
Pipe Strap - 3854' - 2.03' Short to Board.

Contractor Bit Record: 1-12 1/4" out at 220'
2- 7 7/8" out at 4120'.

Mud: KDT Mud, Ken Rupp, Engineer
Logs: NABORS Completion and Production Services, Inc,
DIL, CDL/CDL, Micro
LTD - 4120'.
Gas Detector: None

FORMATION TOPS

	SAMPLE TOPS	LOG TOPS
ANHYDRITE	2211(+383)	2210(+384)
BASE ANHYDRITE	2245(+349)	2242(+352)
TOPEKA	3588(-994)	3586(-992)
HEEBNER	3811(-1217)	3810(-1216)
TORONTO	3830(-1236)	3832(-1238)
LANSING	3847(-1253)	3846(-1252)
'B' Zone	3873(-1279)	3876(-1282)
'H' Zone	3985(-1391)	3983(-1389)
'K' Zone	4046(-1452)	4046(-1452)
B/KC	4080(-1486)	4080(-1486)
RTD	4120(-1526)	
LTD		4120(-1526)

DSTs

DST #1 3804 to 3854 Toronto & Lansing A Zone

Times 30-60-30-60

1st Opening - BOB 18 minutes, no blow back

2nd Opening - Built to 9", no blow back

Recovery - 5' OMCW (5% O, 40% M, 55% W)

65' MCW (50% M, 50% W), 63' MCW (20% M, 80% W)

63' MCW (5% M, 95% W, 63' MCW (50% M, 50% W)

IFP 22-83# FFP 87-136#

ISIP 742# FSIP 714#

IHP/FHP 1896/1796#

Temp 123

DST #2 3856 to 3892 Lansing B & C Zones

Times 30-60-30-60

1st Opening - BOB 2 minutes, no blow back

2nd Opening - BOB 6 minutes, no blow back

Recovery: 302' OMCW (3% O, 67% W, 30% M)

1018' MCW (90% W, 10% M), 63' MCW (60% W, 40% M)

IFP 98-380# FFP 398-535#

ISIP 713# FSIP 697#

IHP/FHP 1864/1791#

Chlorides 41,000, Temp 126

DST #3 3964 to 3993' H Zone

Times 30-60-30-60

1st Opening - BOB 12 minutes, 1/4" blow back.

2nd Opening - BOB 16 minutes, 2" blow back.

Recovery: 20' GO (5% G, 95% O)

106' OMCW (5% O, 55% W, 40% M)

63' OMCW (2% O, 78% W, 20% M)

IFP 25-65# FFP 70-102#

ISIP 807# FSIP 747#

IHP/FHP 1985/1837#

Temp 126

DST #4 3996 to 4056' I, J & K Zones

Times 30-30-30-30

1st Opening - Built to 1 inch, no blow back.

2nd Opening - No Blow, no blow back.

Recovery: 2' Drilling Mud w few oil spots.

IFP 16-19# FFP 18-20#

ISIP 77# FSIP 47#

IHP/FHP 2041/1867#

Temp 117

CREWS

White Knight Drilling, Rig #1

Tool Pusher - Terry Austin

Daylight Driller - Gary Chard

Evening Driller - Jerry Rowe

Morning Driller - Marlan Garcia

Relief Driller - Robert Galbavy

Based on sample shows, structural position and the results of the DST's, it was recommended by all parties this test well be plugged and abandoned.

Respectfully,

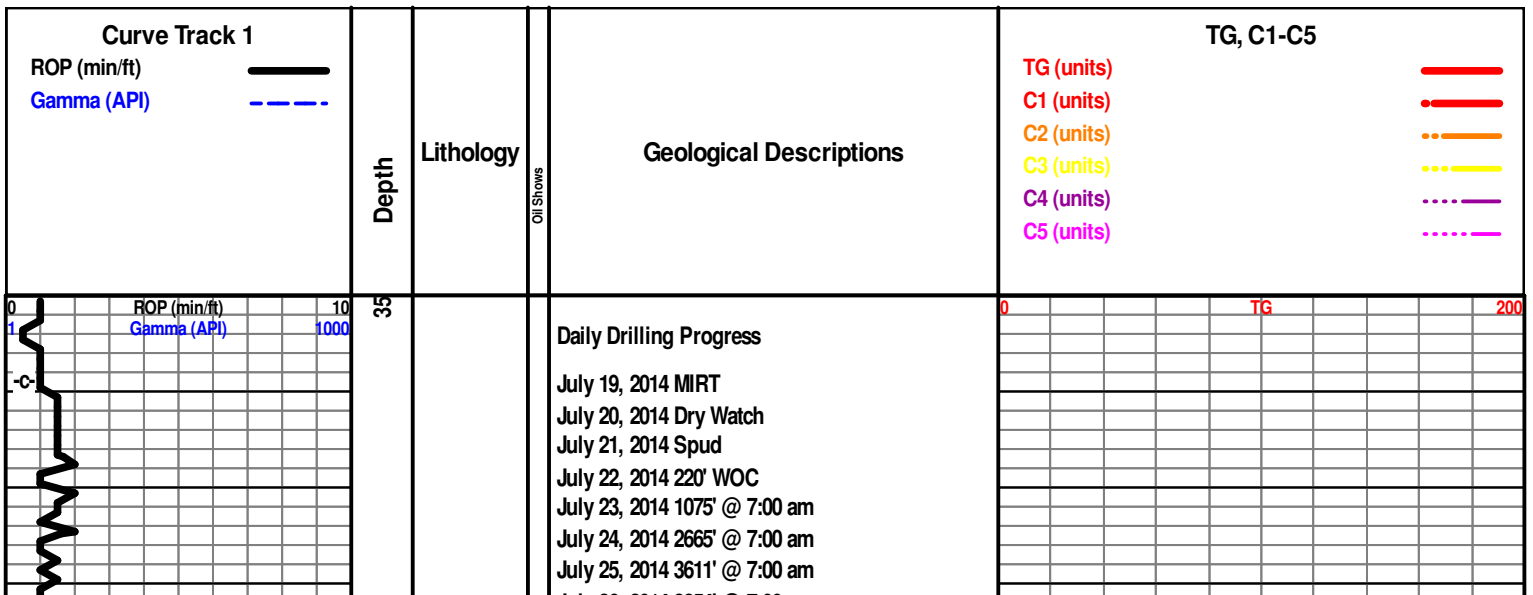
W. Scott Alberg

ROCK TYPES

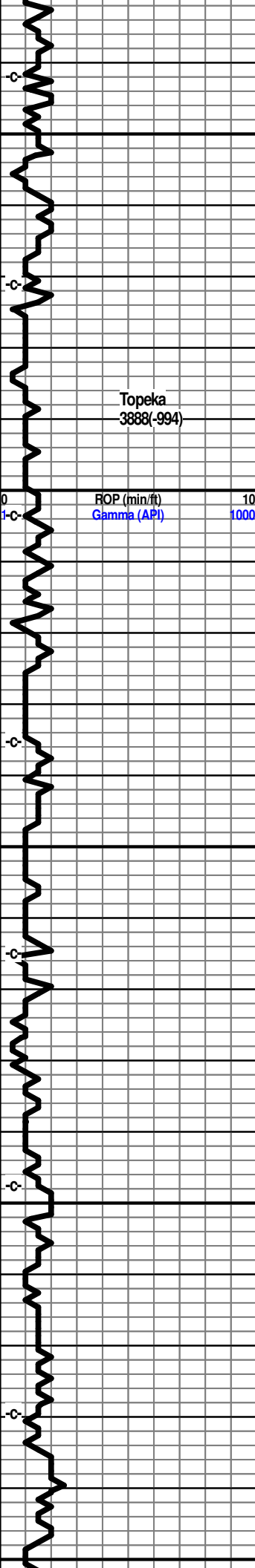
	Anhy		Congl		Lmst		Black sh
	Bent		Sdy dolo		Mrlst		Gry sh
	Brec		Shy dolo		Salt		Shale
	Cht		Dol		Shale		Shyslts
	Clyst		Gyp		Sltst		Sltys
	Coal		Sdy lms		Ss		

ACCESSORIES

MINERAL		Chlorite		Pelec		Grysh	
	Anhy		Dol		Pellet		Grylst
	Arg		Sand		Pisolite		Lms
	Bent		Silty		Plant		Sandylms
	Bit	FOSSIL			Strom		Sh
	Brecfrag		Algae		Fuss		Sltstn
	Calc		Amph		Oomoldic		
	Carb		Belm	STRINGER			Boundst
	Chtdk		Bioclst		Anhy		Chalky
	Chtlt		Brach		Arg		Cryxln
	Dol		Bryozoa		Bent		Earthy
	Ferrpel		Cephal		Coal		Finexln
	Ferr		Coral		Dol		Grainst
	Glau		Crin		Gyp		Lithogr
	Gyp		Echin		Ls		Microxln
	Marl		Fish		Mrst		Mudst
	Nodule		Foram		Sltstrg		Packst
	Phos		Fossil		Ssstrg		Wackest
	Pyr		Gastro		Carbsh		
	Salt		Oolite		Clystn		
	Sandy		Ostra		Dol		
	Silt						



July 26, 2014 3854' @ 7:00 am
July 27, 2014 3962' @ 7:00 am
July 28, 2014 4056' @ 7:00 am
July 29, 2014 4120' @ 7:00 am



3550
3600
3650
3700
750

Topeka
3888(-994)

ROP (min/ft) 10
Gamma (API) 1000

KDT Mud Check
July 25, 2014
3591' @ 6:30 am
Vis 39
Wt 8.8
pH 10.0
WL 2.0
Chlor 1000
LCM 1 1/2#

Vis 39
Wt 8.0

Start Samples

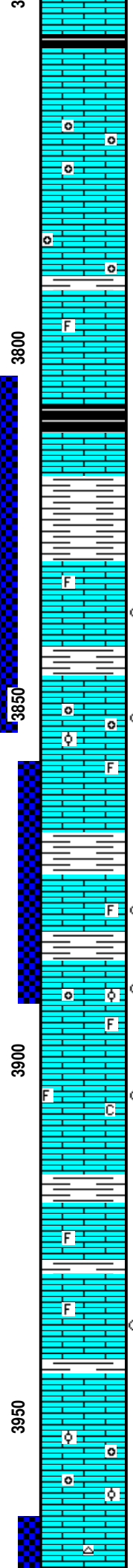
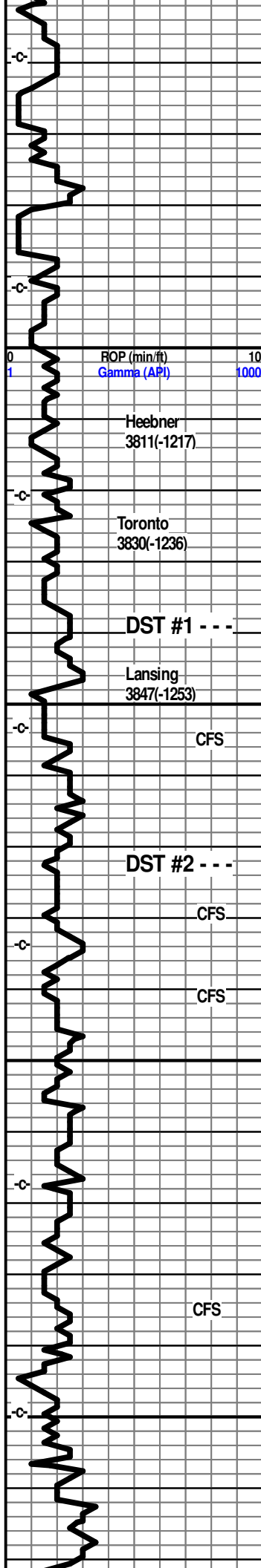
Shale, red-brown, grey.

Limestone cream-grey-white, crystalline, fossils,
trace oolitic porosity, no shows.

Shale, grey-black.

Limestone, cream-white, crystalline, dense,
chalky in part.

0 TG 200



Shale, grey-black.

Limestone, tan, buff, crystalline, oolitic, oolitic porosity, barron.

Limestone, tan, buff, crystalline, oolitic porosity, barron.

Shale, grey-black

Shale, grey, red-brown.

Limestone, cream-white, crystalline, slightly fossiliferous, trace foss porosity, very slight show oil, very faint odor, trace chalky.

Shale red-brown, grey.

Limestone cream-white, buff, crystalline, fossils, oolitic in part, oolitic porosity, foss porosity, small pin point porosity, few small vugs, faint odor, show of free oil.

Shale, grey-red.

Limestone tan-buff, crystalline, oolitic & fossil porosity, light show of free oil, fair porosity, faint odor spottv staining.

Limestone, buff-cream, finely crystalline, fossil to oolitic porosity, light show of oil, trace spotty stain, very faint odor.

Limestone, cream, off-white, crystalline, trace fossils, chalky in part trace fossil porosity, trace spottv stain.

Shale, grey-black, red-brown.

Limestone, cream, buff, dense, trace fossils, ??? staining, no detectable odor.

Shale, red-brown,

Limestone, cream, tan, crystalline, dense, lightly fossiliferous, trace oolitic porosity, ?? stain, no detectable odor.

Shale, grey-green.

Limestone, cream, buff, off-white, crystalline, oolitic, oolitic, barron.

Limestone, tan, buff, crystalline, dense, trace grey chert.

Shale, grey-black.

Vis 47
Wt 8.8

DST #1 3804-3854'
Times 30-60-30-60
1st Opening - BOB
18 minutes, no blow back.
2nd Opening - Built to 9', no blow back.
Recovery:
63' MCW(50%M, 50% W)
63' MCW (5% M, 95% W)
63' MCW (2-% M 80% W)
65' MCW (50%M, 50% W)
5' OMCW (5% O, 40% M, 55% W)
IFP 22-83#
FFP 87-136#
ISIP 742#
FSIP 714#
IHP/FHP 1896/1796#

KDT Mud Check
July 27, 2014
3867' @ 11:00 am
Vis 33
Wt 9.1
pH 9.5
WL 12.0
Chlor 1000
LCM 1 1/2#

Vis 50
Wt 9.1

Strap At 3854'
2.03' Short to Board
Survey 1/4 degree.

DST #2 3856-3892'
Times 30-60-30-60
1st Opening - BOB
2 minutes. no blow back.
2nd Opening - BOB
6 minutes, no blow back.
Recovery:
302' OMCW (3% O, 67% W, 30% M)
1018' MCW(90% W, 10% M)
63' MCW(60%W 40% M)
IFP 98-380#
FFP 398-535#
IDIP 713#
FSIP 697#
IHP/FHP 1864/1791#
Chlorides 41,000

Vis 46
Wt 9.1

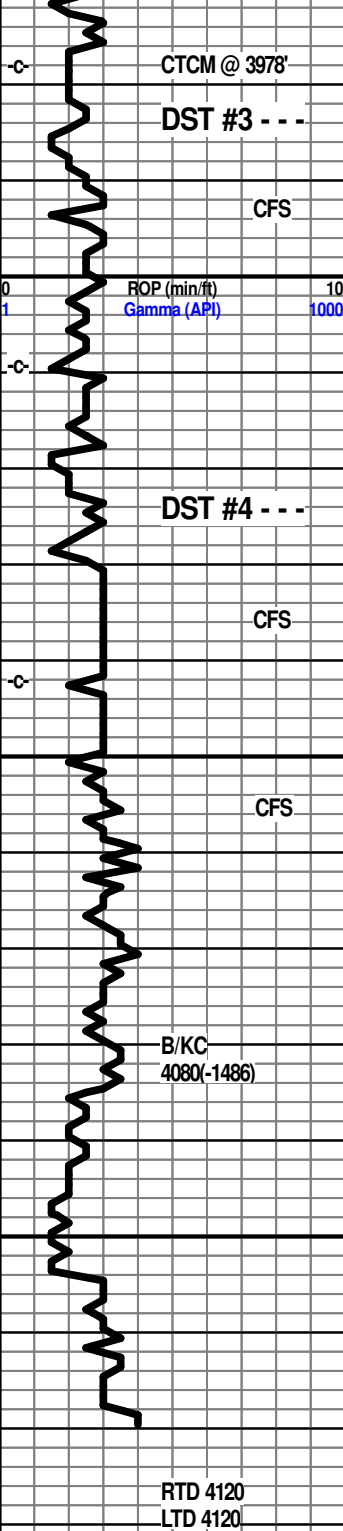
Vis 44
Wt 9.1

ABUNDANT SHALES IN SAMPLES

Vis 42
Wt 9.1

KDT Mud Check
3978' @ 8:30 am
Vis 44
Wt 9.2
pH 9.5

Vis 48
Wt 9.1



CTCM @ 3978'

DST #3 - - -

CFS

ROP (min/ft)
Gamma (API)

DST #4 - - -

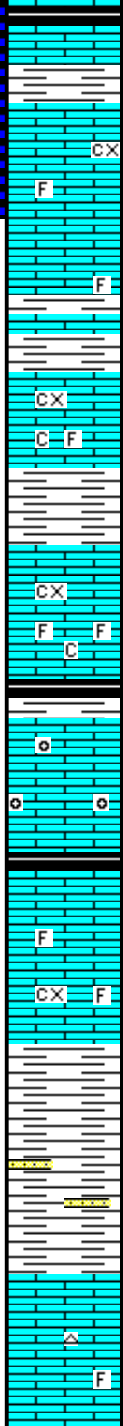
CFS

CFS

B/KC
4080(1486)

RTD 4120
LTD 4120

4000
4050
4100
4150



Shale, grey, dense.

Shale, grey-red-brown.

Limestone, buff, cream, crystalline, fossil frags, fossil porosity, trace crystalline porosity, few small vugs, fair odor, show of free gassy oil. spotty staining.

Limestone, cream-white, crystalline, dense, trace fossils.

Shale grey, red-brown.

Limestone, cream, tan, crystalline, trace pin point porosity, trace staining, chalky in part, ?? show light oil.

Shale, red-brown, grey, soft.

Limestone, cream-white, crystalline, trace foss porosity, trace pin point porosity, asphaltic stain, trace of free oil, no odor, poor porosity, chalky?.

Limestone, cream, tan, crystalline, trace pin point porosity, fossils, trace oolites, very poor show oil, very faint odor, trace asphaltic stain.

Shale, grey-black, some red-brown.

Limestone, buff-white, crystalline, dense, trace fossils, trace asphaltic stain, no odor.

Shale, red-green, grey, sandy in part.

Limestone, cream, buff-white, xln, dense, trace chert.

WL 9.6
Chlor 1000
LCM 1#

Vis 43
Wt 9.0
Mix Mud

DST #3 3964 - 3993
Times 30-60-30-60
1st Opening - BOB
12 minutes, 1/4:
blow back.

Vis 54
Wt 9.1

2nd Opening - BOB
16 minutes, 2' blow
back. TG 200

Recovery:
20' GO (5% G, 95%
O)

106' OMCW (5% O,
55% W, 40% M)
63' OMCW (2% O,
78% W, 20% M)

IFP 25-65#
FFP 70-102#
ISIP 807#
FSIP 747#
IHP/FHP 1985/1837#

Vis 54
Wt 9.1
LCM 1#
POOR SAMPLES

KDT Mud Check
July 28, 2014
Vis 68
Wt 9.3
PH 9.5
WL 8.8
Chlor 3000
LCM 1#

DST #4 3996-4056
Times 30-30-30-30
1st Opening - Built
to 1 inch, no blow
back.
2nd Opening - no
blow, no blow
back.

Recovery: 2'
Drilling Mud.
IFP 16-19#
FFP 18-20#
ISIP 77#
FSIP 47#
IHP/FHP 2041/1867#

Temp 117

Survey @ 4120'
1 1/4 degree

