

JUSTIN D. CARTER

CONSULTING GEOLOGIST

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

Well Name: COLBERG #4
Location: NE, NW, NW Sec. 27 - 14S - 21W Trego Co., KS
License Number: 15-195-22858-0000
Spud Date: 04/26/13
Surface Coordinates: 330' FNL & 990' FWL
Region: Sunny Slope
Drilling Completed: 05/02/13

Bottom Hole 1457': 1 DEG, 4010': 0.5 DEG
Coordinates:
Ground Elevation (ft): 2122' K.B. Elevation (ft): 2132'
Logged Interval (ft): 3100' To: 4010' Total Depth (ft): 4010'
Formation: L/KC, MARMATON, CHEROKEE, ARBUCKLE
Type of Drilling Fluid: Chemical Mud

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

OPERATOR

Company: CITATION OIL & GAS CORP.
Address: 14077 Cutten Road
Houston, TX 77069
Co. Geo.: Mr. Cameron Wieding

GEOLOGIST

Name: Justin D. Carter
Company: Consulting Geologist
Address: 5945 Westridge Dr.
Great Bend, KS 67530
Home: 620-603-6399, Cell: 620-655-1187

Comments

Drilling Contractor: Duke Drilling Co., Inc. Rig #10
Tool Pusher: Scott Edwards

8 5/8" surface casing set at 1457'

Mud: Andy's Mud
Engineer: Ken Rupp

Open-Hole Loggers: Nabors Services Co.

	Anhy		Gyp		Shgy		Sandylms
	Bent		Ign		Sltst		Shale
	Brec		Lmst		Ss		Sltstn
	Cht		Meta		Till		Shlyslts
	Clyst		Mrlst		Carb sh		Sltysht
	Coal		Salt		Dol		Lms
	Congl		Shale		Dtd		
	Dol		Shcol		Gry sh		

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

INTERVALS
 Core
 Dst
 Dst
OIL SHOWS
 Even
 Spotted
 Ques
 Dead
 Gas show

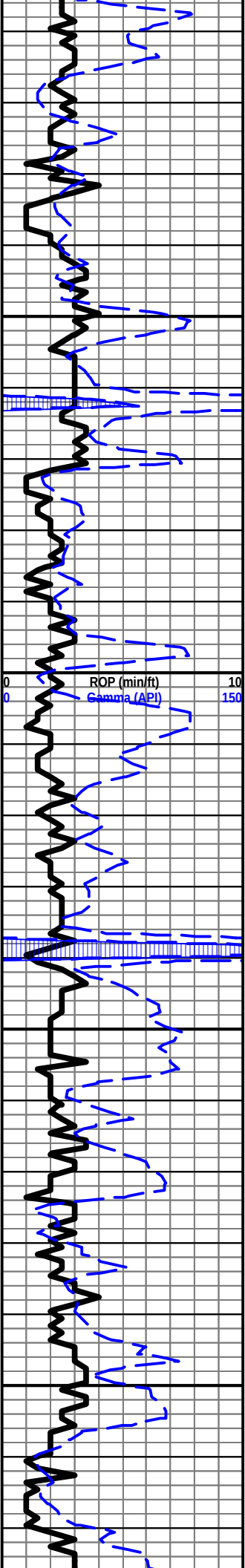
[illegible]

3300



LS- LT TN, BRITT, FVF-XLN, SUCRO MTRX THRU, NO FLO, FR MICRO PP
POR SCAT THRU, NS

 CN^-



3350

3400

3450

3500



SH- GY, FRM TO SFT IP, LMY, FISS

LS- LT GY CRM, HRD, F/VF-XLN, RE-XLN MTRX THRU TO TR SUB-SUCRO, IMBED SH IP, FOSS FRAGS IP, NO FLO, TR INTER-XLN POR, NS

LS- WHT CRM, BRITT, VF-XLN, RE-XLN MTRX IP TO SUB-CHLKY IP, IMBED FOSS FRAGS IP, SFT WHT CHLK IP, NO FLO, TR INTER-FOSS POR, NS

LS- BFF TN, HRD DNS, CRYPTO-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR

LS- TN, HRD DNS, VF-XLN, RE-XLN MTRX THRU, NO FLO, TR MICRO PP POR TO NO VIS POR THRU, NS

LS- CRM LT TN, BRITT, F-XLN, SUB-SUCRO MTRX THRU, IMBED DK GY OOL SCAT THRU, NO FLO, TR INTER-XLN POR TO NO VIS POR THRU, NS

LS- TN LT CRM, HRD, VF-XLN, RE-XLN MTRX THRU, NO FLO, NO VIS POR

HEEBNER 3438' (-1306')

TORONTO 3456' (-1324')

LS- LT CRM, HRD DNS, CRYPTO-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR

L/KC 3474' (-1342')

LS- CRM, HRD, VF-XLN, RE-XLN MTRX IP, IMBED OOL IP, DLL YEL GLD FLO IP, NO FLUSH TO PR SLO BLU STRM CUT, TR INTER-OOL POR TO NO VIS POR IP, BLK STAIN IN 20%, NO ODOR

LS- LT CRM, BRITT, VF-XLN, SUB-SUCRO MTRX THRU, ABDT OOL THRU, DLL YEL FLO THRU, PR FLUSH TO FAINT BLU STRM CUT, FR INTER-OOL POR THRU, BLK STAIN IN 50%, FAINT ODOR

SH- DK GY, FRM TO SFT IP, LMY, BLKY, IMBED FOSS FRAGS SCAT THRU

LS- WHT BLK, BRITT, F/VF-XLN, SUB-CHLKY MTRX THRU TO TR SUB-SUCRO, ABDT OOL IMBED THRU, DLL YEL FLO THRU, PR FLUSH TO PR BLU STRM CUT, PR/FR INTER-OOL POR THRU, BLK/TN STAIN IN 70%, FAINT ODOR

WT 8.8
VIS 59
LCM 2#

12:00 A.M. 05/01/13

CN

CN

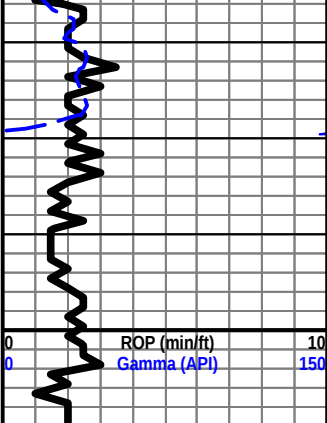
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	4000	     	ODOR DOLO- BFF TN, HRD, F/VF-XLN, RE-XLN MTRX THRU TO TR SUCRO MTRX, NO FLO, TR INTER-XLN POR TO NO VIS POR THRU, TR DEAD STAIN, NS DOLO- LT CRM, HRD, MD/VF-XLN, RE-XLN MTRX THRU TO TR SUCRO, TR WHT CHRT TO TR OOLITIC CHRT, NO FLO, PR INTER-XLN POR SCAT THRU, NS DOLO- TN, HRD TO BRITT IP, F/VF-XLN, SUCROMTRX THRU, OOLICASTS THRU, NO FLO, PR/FR OOMLD POR THRU, NS CTCH 1 HR. WIPER TRIP TO SURFACE CASING CTCH 1 HR. TOH FOR E-LOGS	CN WT 9.3 VIS 64 LCM 1# 7:50 A.M. 05/02/13
ROP (min/ft) Gamma (API)	10 150			
R.T.D. 4010'				
L.T.D. 3976'				
ADJUST GAMMA 34' DOWN HOLE TO CORRELATE W/ DRILL TIME				