

GEOLOGICAL REPORT

Larry A. Nicholson

NAD 83
39.0271476
-100.4212083

COMPANY Suemaur Exploration & Production, LLC

API # 15-039-21230 **FIELD** Wildcat

LEASE Muirhead Farms **WELL #** #11-12

LOCATION NE SW SW SW

SURVEY 605' FSL 634' FWL

SECTION 12 **TWP** 5S **RGE** 28W

COUNTY Decatur **STATE** Kansas

CONTRACTOR Murfin Drilling Company, Inc. Rig # 7

SPUD 5:15 pm 5-06-16 **COMP.** _____

RTD 4:48:35 5:36am 05-13-16 **LT** 4483

MUD UP AT 3:120' 700 bbl

MUD TYPE Chemical, Morgan Mud, Dase Lines

SAMPLES SAVED FROM 3500' TO RTD

DRILLING TIME FROM 3400' TO RTD

SAMPLES EXAMINED FROM 3350' TO RTD

RECORDED FROM 3400' TO RTD

GEOLOGICAL SUPERVISION _____

WELL SITE GEOLOGIST LARRY A. NICHOLSON

ELEVATIONS

K.B. = 2736

D.F. = _____

G.L. = 2731

All measurements from K.B. 2736

CASING RECORD

Spud _____ of _____ of _____ SA

Surface Bl. HTCO 12-1/4" VMA # 45219122 out at 261'

Bl No. 2, PDC, HTCO DPS506F, 7-7/8" #1753465

Bl No. 3, HTCO D200C, 7-7/8" #18251934, in at 3500' - out at 4125'

Bl No. 4, HTCO DP506, 7-7/8" #17535000, in at 4125' - out at 4485'

ELECTRICAL SURVEYS Weatherford, Den, Neu, Dual, Micro, Sonic, HI-Res

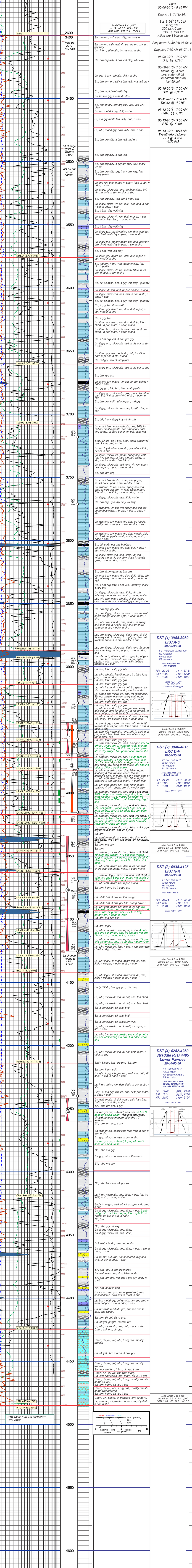
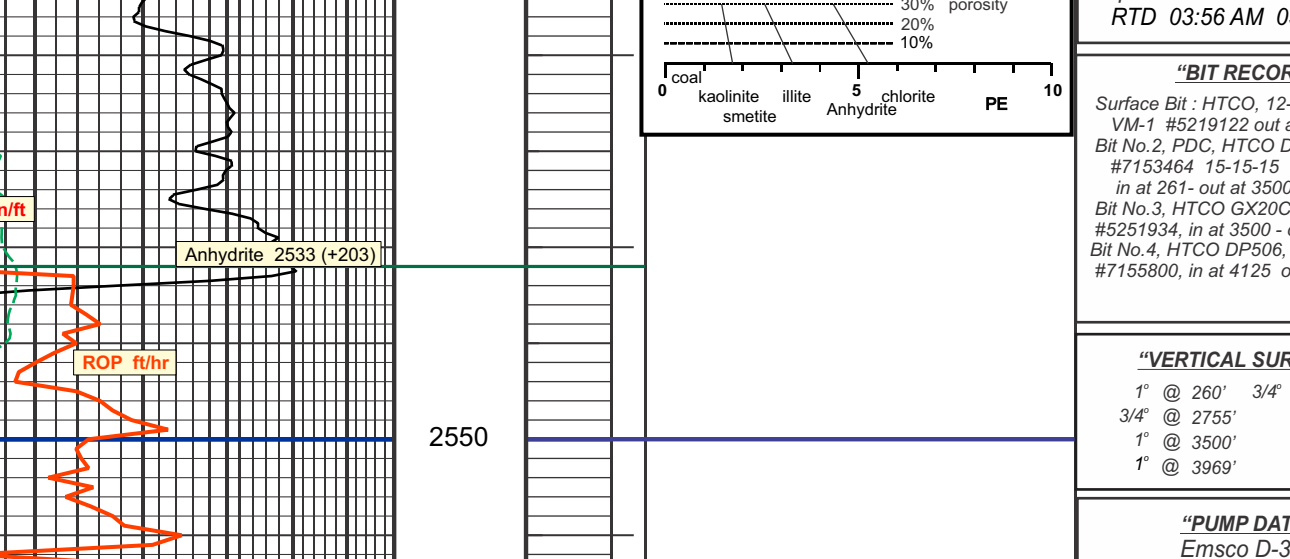
FORMATION TOPS & STRUCTURAL POSITION

FORMATION	SAMPLE TOPS	SURSEA DATE/TIME	ELEC LOG TOPS	REFERENCE WELL	
				A	B
Stone C	2533	+203	2534	+202	
Topoka	3708	-972	3708	-972	
Huebner	3990	-1154	3987	-1151	
Bilcheb	3995	-1159	3994	-1158	
LANS A	3935	-1109	3931	-1105	
LANS J	4085	-1349	4084	-1348	
LANS K	4111	-1375	4110	-1374	
LANS L	4127	-1401	4130	-1394	
BKC	4137	-1431	4142	-1406	
Cherokee	4314	-1578	4320	-1584	
Miss	4425	-1689	4425	-1689	
RTD	4485	-1748	4485	-1748	
LTD	4483	-1747	4483	-1747	

REFERENCE WELLS A: _____ B: _____

REMARKS & RECOMMENDATIONS:

LEGEND



REMARKS

Spud 05-16 PM 05-06-2016
RTD 03:56 AM 05-13-2016

"BIT RECORD"

Surface Bl. HTCO 12-1/4" VMA # 45219122 out at 261'

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"VERTICAL SURVEYS"

1" @ 261' ± 4" @ 4485'

3/4" @ 275'

1" @ 3500'

1" @ 3969'

"PUMP DATA"

Emasco D-375

Stroke 14", Lines 8"

"DAILY REPORT"

Spud 05-06-2016 - 5:15 PM

Drig to 12 1/4" to 261'

Set 8-5/8" 6 fts 2#

Bit @ 260'

250' to 4' Comm

3%CC, 1/4# Flo

Allied circ 8 bits to pits

Plug down 11:30 PM 05-06-16

Drig plug 7:30 AM 05-07-16

05-08-2016 - 7:00 AM

Drig @ 2,720'

05-09-2016 - 7:00 AM

Bit trip @ 3,500'

Lost cutter off bit

On bottom after 100'

lost 50 bbl

05-10-2016 - 7:00 AM

Circ @ 3,957'

05-11-2016 - 7:00 AM

Dst #2 @ 4,015'

05-12-2016 - 7:00 AM

Dst#3 @ 4,125'

05-13-2016 - 3:56 AM

RTD @ 4,485'

05-13-2016 - 9:16 AM

Weatherford Liberal LTD @ 4,483'

-3:30 PM

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LOCATION 605' FSL 634' FWL **SEC** 12 **TWP** 5S **RGE** 28W

COUNTY Decatur **STATE** Ks

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All measurements from K.B. 2736