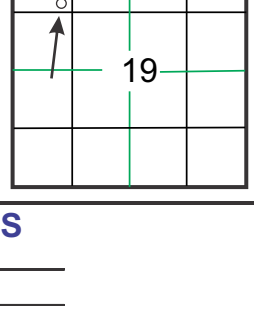


GEOLOGICAL REPORT

Larry A. Nicholson

NAD 83
39 51987004
-100.157561

COMPANY Cobalt Energy, LLC
 API # 15-065-24128 FIELD Wildcat
 LEASE Kaus WELL # "A" #1-19
 LOCATION SE SE NW NW
 SURVEY 1281 FNL 1314 FWL
 SECTION 19 TWP 6S RGE 25W
 COUNTY Graham STATE Kansas



CONTRACTOR Murfin Drilling Company, Inc. Rig # Z
 SPUD 6:30 pm 3-7-17 COMP. _____
 RTD 3:28 5:22 pm 03-13-17 LTD. 3:28
 MUD UP AT 3135 700bbbl
 MUD TYPE Chemical MudCo Schmidtberger

ELEVATIONS
 K.B. 2596
 D.F. _____
 G.L. 2591
 All measurements from K.B. 2596

SAMPLES SAVED FROM 3400 TO RTD
 DRILLING TIME FROM 3400 TO RTD
 SAMPLES EXAMINED FROM 3400 TO RTD
 GEOLOGICAL SUPERVISION FROM 3400 TO RTD
 WELLSITE GEOLOGIST LARRY A. NICHOLSON

CASING RECORD
 Conductor _____ of _____ sx
 Surface 340 of 8.5/8 23# w/ 210 _____ sx
 Production _____ of _____ w/ _____ sx

ELECTRICAL SURVEYS Pioneer, Den, Neu, Dual, Micro

FORMATION TOPS & STRUCTURAL POSITION

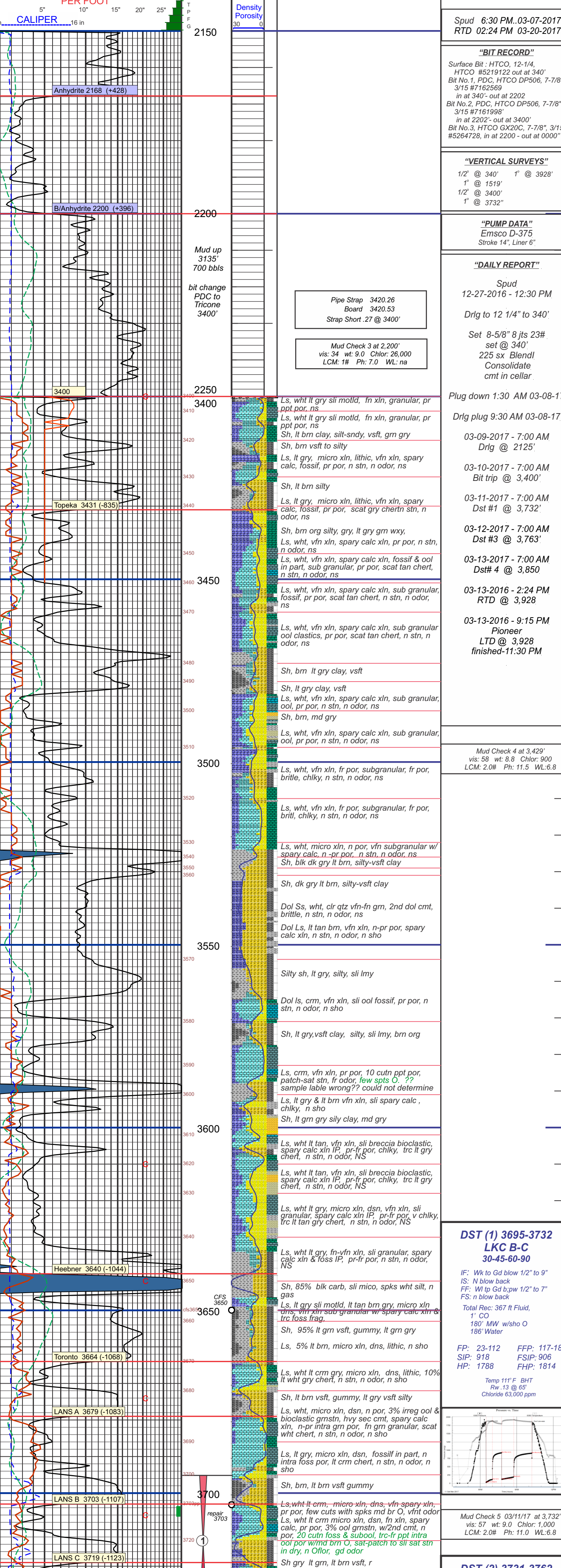
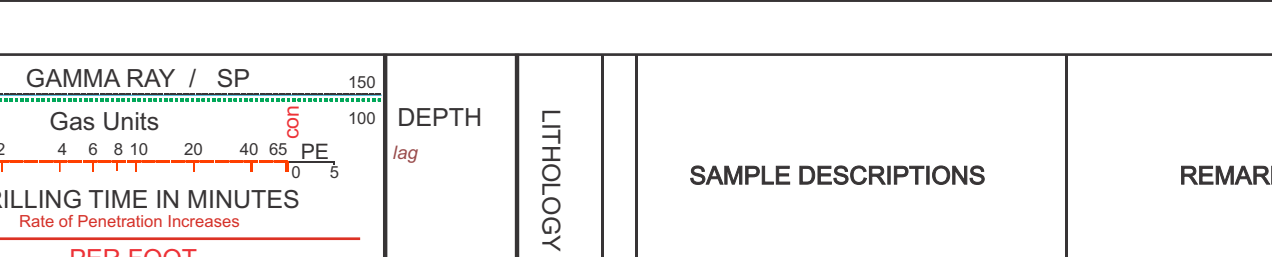
FORMATION	SAMPLE TOPS	SUBSEA DATUM	ELEC LOG TOPS	SUBSEA DATUM	REFERENCE WELL	
					A	B
Anhydrite			2168	+428	2186	+431 -4
B/Anhydrite			2200	+396	2218	+399 -3
Topeka			3431	-835	3456	-839 +3
Heebner			3640	-1044	3658	-1041 -6
LANS A			3679	-1083	3698	-1081 -3
LANS G			3756	-1160	3772	-1155 -5
LANS H			3792	-1196	3808	-1191 -5
LANS J			3821	-1225	3838	-1221 -4
LANS K			3837	-1241	3852	-1235 -6
LANS L			3851	-1255	3868	-1251 -4
BKC			3864	-1268	3882	-1265 -3
RTD			3928	-1332	3970	-1353
LTD			3928	-1332	3970	-1353

REFERENCE WELLS
 A: Cobalt Energy, LLC Caroline "A" #1-19 Sec 19 T6S R25W 570' FNL 743 FEL KB 2617
 B: _____

REMARKS & RECOMMENDATIONS:
Based on sample shows, dst recovery & pressures, the well was P&A

LAN 7/92, Modified 5/05, 11/11, 4/12 Hanover, KS 66945 1inch = 25.4mm 8.5 x 9.75 216 mm x 2460 mm

LEGEND



Spud 6:30 PM, 03-07-2017
 RTD 02:24 PM 03-20-2017

"BIT RECORD"
 Surface Bit - HTCO, 12-1/4, HTCO #52122 out at 340'
 Bit No. 1, PDC, HTCO DP506, 7-7/8" 3/15 #7162569
 In at 340' - out at 2202
 Bit No. 2, PDC, HTCO DP506, 7-7/8" 3/15 #7161988
 In at 2202' - out at 3400'
 Bit No. 3, HTCO GX20C, 7-7/8", 3/15 #5264728, in at 2200' - out at 0000'

"VERTICAL SURVEYS"
 1/2" @ 340' 1" @ 3928'
 1" @ 1519'
 1/2" @ 3400'
 1" @ 3732'

"PUMP DATA"
 Emco D-375
 Stroke 14", Liner 6"

"DAILY REPORT"
 Spud 12-27-2016 - 12:30 PM
 Drlg to 12 1/4' to 340'

Set 8-5/8" 8 Jts 23# set @ 340'
 225 sx Bhandl Consolidate cmt in cellar

Plug down 1:30 AM 03-08-17
 Drlg plug 9:30 AM 03-08-17

03-09-2017 - 7:00 AM Drlg @ 2125'
 03-10-2017 - 7:00 AM Bit trip @ 3,400'

03-11-2017 - 7:00 AM Dst#1 @ 3,732'
 03-12-2017 - 7:00 AM Dst#3 @ 3,763'

03-13-2017 - 7:00 AM Dst#4 @ 3,850
 03-13-2016 - 2:24 PM RTD @ 3,928

03-13-2016 - 9:15 PM Pioneer LTD @ 3,928 finished-11:30 PM

Mud Check 4 at 3,429' vis: 34 wt: 9.0 Chlor: 26.000 LCM: 1# Ph: 7.0 WL: ns

Mud Check 5 at 3,429' vis: 34 wt: 9.0 Chlor: 26.000 LCM: 2.0# Ph: 11.5 WL: 6.8

Mud Check 6 at 3,429' vis: 34 wt: 9.0 Chlor: 26.000 LCM: 2.0# Ph: 11.5 WL: 6.8

Mud Check 5 03/11/17 at 3,732' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.6

Mud Check 5 03/11/17 at 3,732' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.6

Mud Check 6 03/12/17 at 3,819' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.6

Mud Check 6 03/12/17 at 3,819' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.6

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

Mud Check 7 03/11/17 at 3,850' vis: 57 wt: 9.0 Chlor: 1,000 LCM: 2.0# Ph: 11.0 WL: 7.2

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COMPANY Cobalt Energy, LLC
 LEASE Kaus "A" #1-19 SE SE NW NW
 LOCATION 1281 FNL 1314 FWL SEC. 19 TWP 6S RGE 25W
 COUNTY Graham STATE Ks

ELEVATIONS
 K.B. 2596
 D.F. _____
 G.L. 2591
 All measurements from K.B. 2596

