Robert D. Hendrix
Petroleum Geologist

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY	Cobalt Energy LLC
LEASE	Deutsch Trust U.A. #1-13
FIELD	Mississippian N.A.
SEC-TOWN-RGE	13-16S-25W
COUNTY-STATE	Bourbon, Kansas
API NO.	15-011-23-579-0000
SPUD	4/13/2012
COMP.	4/23/2012
TYPE HOLE	Vertical
CONTRACTOR	Mississippian Air-Air
PRODUCTION	Shut-in

ELEVATIONS
GL 2312'
KB 2327'

DRILLING TIME KEPT FROM 3600' TO 4310'
SAMPLES KEPT FROM 3600' TO 4310'
GEOLOGICAL SUPERVISION FROM 3600' TO 4310'
GEOLOGIST ON WELL: Robert D. Hendrix

CASING
SURFACE 20' 8 5/8" new
PRODUCTION 5½" J-55 15.5# new

ELECTRICAL SURVEYS
Log-tech
Dual Induction
Compensated Density/Neutron
Borehole Compensated Sonic
Micro Resistivity

FORMATION TOPS / ELECTRIC LOG / SAMPLE

Anhydrite	1910	(+611)
Base Anhydrite	1932	(+589)
Topeka	3677	(-1156)
Heebner	3844	(-1323)
Toronto	3861	(-1340)
Lansing	3884	(-1363)
Stark	4119	(-1598)
BKC	4150	(-1659)
Pawnee	4309	(-1788)
Ft Scott	4386	(-1865)
Cherokee	4412	(-1891)
Mississippian	4490	(-1969)
RTD	4521	
LTD	4517	

REMARKS: *All Shows were tested with negative results due to lack of porosity. The decision was made to plug and abandon this test.*

LEGEND

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases

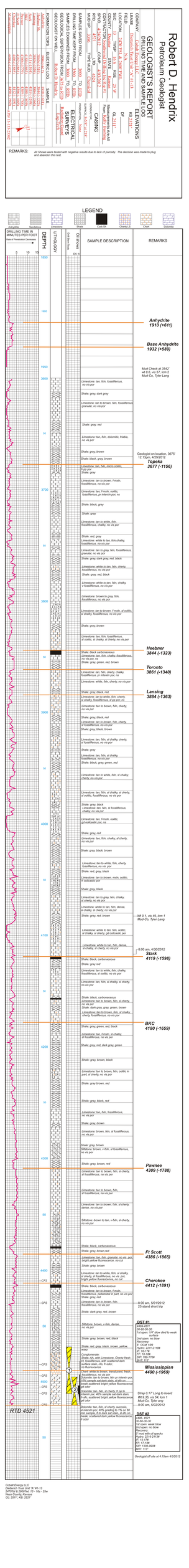
DEPTH

LITHOLOGY: Limestone, Shale, Sandstone, Chert, Dolomite

Oil Shows: Gas Shows, Ex %

SAMPLE DESCRIPTION

REMARKS



Cobalt Energy LLC
Deutsch Trust Sec 13 - R1-13
247S/T & 25S/R6E, 13 - 16s - 25w
Bourbon Co., Kansas
GL: 2311', KB: 2327'