COBALT ENERGY
OIL & NATURAL GAS

GEOLOGIST'S REPORT
DRILL TIME & SAMPLE LOG

COMPANY	COBALT ENERGY, LLC
LEASE	*Wesley 'A' #1-15*
FIELD	*Wildcat*
LOCATION	*553' FNL & 349' FWL*

SEC *15* TWSP *11S* RGE *25W*
COUNTY *Trego* STATE *KS*

CONTRACTOR *Murfin Drilling , Rig #16*
SPUD *9/8/14* COMP *9/16/2014*
RTD *4100'* LTD *4098'*
MUD UP *3213'* TYPE MUD Chemical

SAMPLES SAVED FROM *3600' to RTD*
DRILLING TIME KEPT FROM *3600'* TO *RTD*
SAMPLES EXAMINED FROM *3600'* TO *RTD*
GEOLOGICAL SUPERVISION FROM *3455' to RTD*
GEOLOGIST ON WELL *Corey N. Baker*

ELEVATIONS

KB *2471'*
DF
GL *2466'*
Measurements Are All From KB

CASING

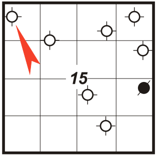
Conductor NA
Surface 8 5/8" @ 217'
Production NA

Electrical Surveys

Dual Induction, Neutron-Density
Microlog
Pioneer Energy Services

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	*2056 (+415)*	*2056 (+415)*
Base of Anhydrite	*2098 (+373)*	*2099 (+372)*
Heebner	*3757 (-1286)*	*3761 (-1290)*
Lansing	*3797 (-1326)*	*3800 (-1329)*
Stark	*3993 (-1522)*	*3994 (-1523)*
BKC	*4040 (-1569)*	*4042 (-1571)*
RTD / LTD	*4098 (-1627)*	*4100 (-1629)*

Section



REMARKS *The Wesley 'A' #1-15 was structurally high to the surrounding dry holes, but the shows were tested with negative results. Logs were reviewed and it was decided to plug & abandon as a dry hole.*

Drill Stem testing by Phillip Gage & Bob Hamel of Trilobite Testing.

API #15-195-22958-00-00

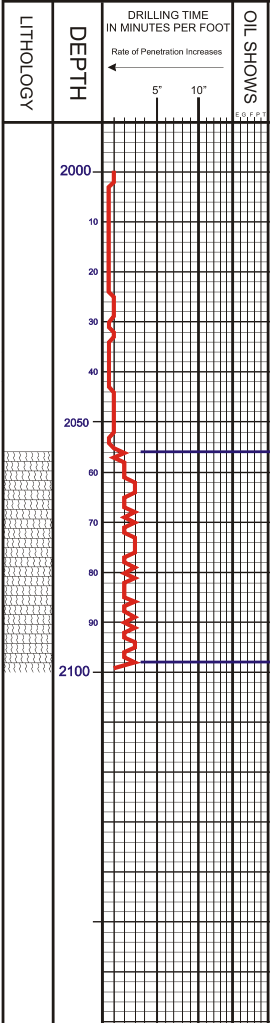
Respectfully Submitted,

Corey N. Baker
VP - Exploration
Cobalt Energy, LLC

LEGEND

▦	▨	▤	☰	■	▦	△	▱
Anhydrite	Sandstone	Limestone	Shale	Carb Sh	Cherty LS	Chert	Dolomite

LITHOLOGY	DEPTH	DRILLING TIME IN MINUTES PER FOOT	OIL SHOWS	SAMPLE DESCRIPTION	REMARKS



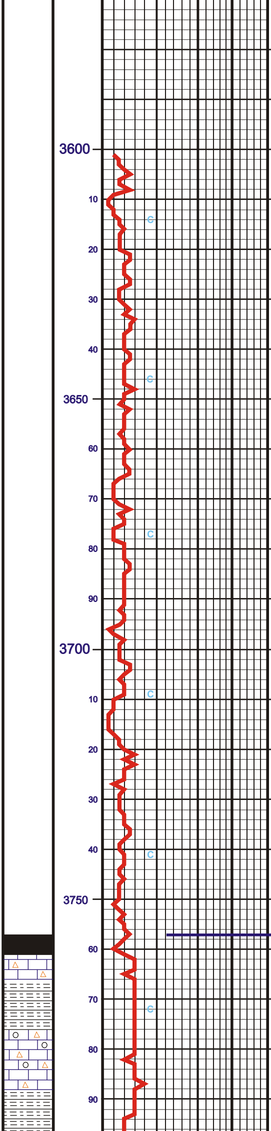
All tops corrected to Log

C = Connection

Anhydrite
2056 (+415)

Base of Anhydrite
2098 (+373)

9/13/2014, 8:05pm
Geologist on location
@ 3455’



DST #1 (3824-50') Lansing 'C & D'
Open 30" Shut-in 60" Open 60" Shut-in 90"
1st OP: BOB in 4 minutes.
SI: Weak surface blowback, died in 40 minutes.
2nd OP: BOB in 5 minutes.
SI: No return blow.

Rec: 1,552' Muddy Water

IFP: 64-345#
FFP: 362-755#
SIP: 1238-1238#

Heebner
3757 (-1286)

Shale: black, carb.

Limestone: tan- gry, vf xtln, chrty, dense

Shale: multi-color, arg

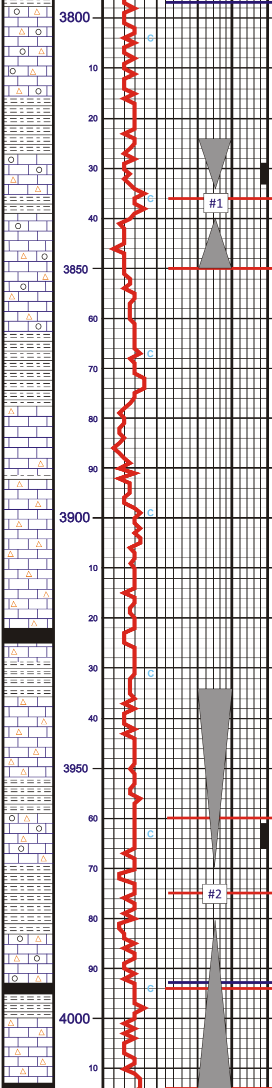
7:00am, 9/14/2014

Limestone: tan- wht, f xtln, granular, foss in prt, tr intrxtln por, ns w/Limestone, gry-tan, vry cherty, blky, ang, dense

Shale: multi-color, arg

Mud-Co Check
Vis: 54
Weight: 9.4
LCM: ½#

Lansing



3797 (-1326)

Limestone: wht-lt gry, f-vf xtln, foss in prt, chlky & chrty, tr-pr interxtln por, ns

Limestone: AA, vry tightly cemented, ool & chrty in prt.

Shale: multi-color, arg

Limestone: lt gry-gry, mott, vf-f xtln, foss, scatt ool, chrty in prt, no vis por, ns 2% of sample Limestone, crm-gry, f xtln, foss ool in prt, pr intrprt, intrxtln & scatt fr vug por, ssfo on brk, pr slow cut, pp to ptchy drk brn-blk stn, no odor

CFS @ 3836'

Shale: multi-color, waxy, arg

Limestone: wht-lt gry, vf-f xtln, calc, chrty & chlky in prt, foss in prt, pr intrxtln por, ns abdnt chlk, wht, soft

Pipe Strap
Strap: 3868.31
Board: 3867.82
.49 Long

CFS @ 3850'

Limestone: wht-gry, vf xtln, chrty, blky, dense

Shale: predom maroon, multi-color, arg & soft

DST #2 (3934-4014') Kansas City 'H, I, J & K'
Open 30" Shut-in 60" Open 30" Shut-in 30"
1st OP: Weak 1/4" blow, built to 3/4".
SI: No blow.
2nd OP: No blow.
SI: No blow.

Rec: 5' Watery Mud w/oil spots (20% w, 80% m)

IFP: 56-60#
FFP: 64-68#
SIP: 1279-1074#

Limestone: tan-gry, vf xtln, chrty, blky, tr pp edge por, pp blk dead edge stn, no odor abdnt milky wht-translt, chrt, shrp, ang, dense

Limestone: wht-crm, vf-f xtln, granular, chrty & chlky in prt, tr-pr pp por, ns abdnt chrt AA

Limestone: wht-crm, vf xtln, calc, chrty, blky, no vis por, ns

Limestone: AA

7:00am, 9/15/2014

Mud-Co Check
Vis: 58
Weight: 9.4
LCM: Tr#

Shale: Blk, carb

Limestone: wht-lt gry, vf xtln, calc, chrty, blky, no vis por, ns

Shale: multi-color, arg

Limestone: crm- gry, vf-f xtln, granular, chlky, calc, tr pp por, ns abdnt loose chalk

Limestone: wht- gry, vf xtln, chrty, blky, no vis por, ns

Shale: multi-color, arg

CFS @ 3960'

Limestone: wht- lt gry, vf- f xtln, chrty in prt, scatt foss ool, tr pp por, some w/pr pp spots of free oil on brk, oil is thick & tarry, pp to ptchy drk brn- blk stn, tr-pr cut, vry fnt odor

Shale: multi-color, arg

CFS @ 3975'

Shale: AA

Limestone: wht- lt gry, vf- f xtln, scatt foss, calc, chrty, chlky in prt, no vis por, ns

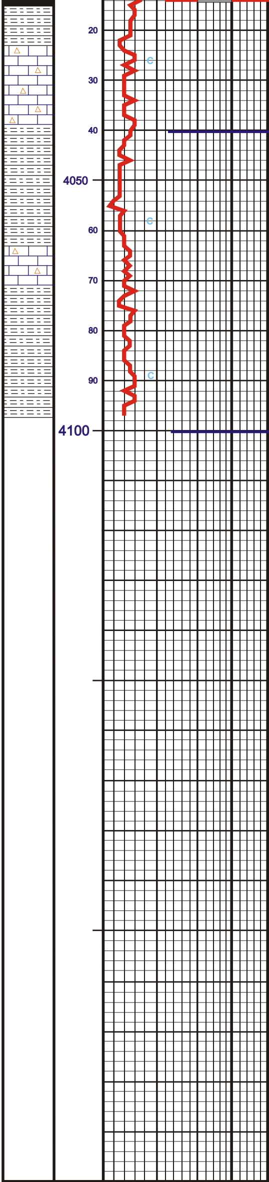
CFS @ 3994'

Stark
3993 (-1522)

Shale: blk-gry, multi-color, arg

Limestone: wht- lt gry, vf xtln, calc, chrty in prt, some chlky, no vis por, ns

CFS @ 4014'



Shale: blk, carb

Shale: maroon & gry, arg

Limestone: lt gry-gry, vf xtln, chrty, blky, no vis por, ns

Limestone: AA, abdnt chert, crm-brn, shrp, ang, dense

BKC
4040 (-1569)

Shale: multi-color, arg

Shale: AA, silty, w/SS, crm-brn, vf grained, well sorted, well rounded, friable, pr pp por, ns

Shale: AA

Limestone: wht- lt gry, vf xtln, calc, chrty & chlky in prt, no vis por, ns

Shale: multi-color, arg, silty

AA, SS, lt gry, silty

Shale: AA

RTD reached @ 5:32am 9/16/2014

RTD
4100 (-1629)

LTD
4098 (-1627)

Geologist off location @ 5:00pm, 9/16/2014

LITHOLOGY	DEPTH	5” 10” DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Increases ←	E G F P T OIL SHOWS	SAMPLE DESCRIPTION	REMARKS

Company **COBALT ENERGY, LLC** Elevation ***2471’ KB***

Lease ***Wesley ‘A’ #1-15***

Location ***553’ FNL & 349’ FWL*** SEC. ***15*** TWP ***11S*** RGE ***25W***

County ***Trego*** State ***Kansas***