



COBALT ENERGY
OIL & NATURAL GAS

GEOLOGIST'S REPORT
DRILL TIME &
SAMPLE LOG

COMPANY: **COBALT ENERGY, LLC**
LEASE: **Gustus Unit 'A' #1-2**
FIELD: **Wildcat**

EL ELEVATIONS
KB: **1779'**

LOCATION: **907' FNL & 2537' FEL**
SEC: **2** TWP: **18S** RGE: **8W**
COUNTY: **Rice** STATE: **KS**
CONTRACTOR: **Southwind Drilling Co., Rig #6**
SPUD: **12/01/13** COMP: **2/27/13**

CASING
MUD UP: **2537'** TYPE MUD: **Chemical**
CONDUCTOR: **NA**
SURFACE: **8 5/8" @ 380'**
PRODUCTION: **NA**

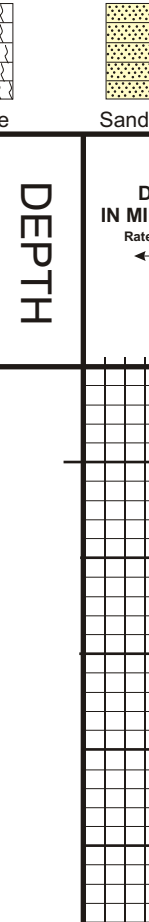
SAMPLES SAVED FROM: **2600' to RTD**
DRILLING TIME KEPT FROM: **2400' to RTD**
SAMPLES EXAMINED FROM: **2600' to RTD**
GEOLOGICAL SUPERVISION FROM: **2600' to RTD**

EDUCATIONAL SURVEYS
Radiation Guard Log

GEOLOGIST ON WELL: **Corey N. Baker**
Pioneer Energy Services

FORMATION TOPS
ELECTRIC LOG
SAMPLE

Heebner: 2696 (-917) 2698 (-919)
Brown Lime: 2819 (-1040) 2823 (-1044)
Lansing: 2843 (-1064) 2848 (-1069)
Stark: 3075 (-1296) 3075 (-1296)
BKC: 3154 (-1375) 3155 (-1376)
Viola: 3251 (-1472) 3258 (-1479)
Simpson Sand: 3299 (-1520) 3298 (-1521)
Simpson Shale: 3356 (-1577) 3365 (-1586)



REMARKS
The Gustus Unit 'A' #1-2 was drilled based on a 3D confirmed subsurface idea to encounter the Arbuckle at a higher datum than the offsetting dry holes. The top of the Arbuckle was encountered at a higher datum but the permeability was found too far into the Arbuckle. Based on samples, negative DST results and log tops, the Gustus Unit 'A' #1-2 was plugged & abandoned as a dry hole.

Loggers indicated some fill at TD.
Respectfully Submitted,
Corey Baker
Vice President - Exploration
Cobalt Energy, LLC

API #15-22759-00-00

LEGEND



LITHOLOGY

DEPTH

DRILLING TIME IN MINUTES PER FOOT

OIL SHOWS

SAMPLE DESCRIPTION

REMARKS

***All tops corrected to Electric Log**

C = Connections

Mud-Check
Vis: 56
Weight: 8.7
LCM: 0.5F

12/13/2013, 6:00pm
Geologist on location
@ 255'

Mud-Check
Vis: 46
Weight: 9.2
LCM: 3#

Heebner
2696 (-917)

Brown Lime
2819 (-1040)

Lansing
2843 (-1064)

Mud-Check
Vis: 50
Weight: 8.8
LCM: Trace

DST #1 (2860-85') Lansing 'B'
Open 30" Shut-in 45" Open 45" Shut-in 60"
1st OP: Fair blow, built to 6 1/2".
SI: No blow.
2nd OP: Weak blow, built to 2 1/2".
SI: No blow.

94' GIP
Rec: 10' Mud w/scum of oil

IFP: 17-17#
FFP: 15-18#
SIP: 57-57#

CFS @ 2885'

CFS @ 2930'

CFS @ 2980'

Stark
3075 (-1296)

Mud-Check
Vis: 58
Weight: 9.1
LCM: trace

7:00am, 12/15/2013

BKC
3154 (-1375)

CFS @ 3160'

CFS @ 3240'

Mud-Check
Vis: 59
Weight: 9.3
LCM: trace

Viola
3251 (-1472)

Simpson Shale
3293 (-1514)

Simpson Sand
3299 (-1520)

7:00am, 12/16/2013 **CFS @ 3320'**

Arbuckle
3342 (-1563)

CFS @ 3350'

CFS @ 3357'

CFS @ 3365'

RTD
3365 (-1586)

LTD
3356 (-1577)

DST #2 (3298-3320') Simpson Sand
Open 30" Shut-in 45" Open 45" Shut-in 60"
1st OP: Strong blow, built to 8.0.B. in 3.5"
SI: No return blow.
2nd OP: Strong blow, built to 8.0.B. in 5".
SI: No return blow.

(Recovery contained H2S gas)
Rec: 94' Watery Mud w/oil scum (20%w, 80%w)
126' Muddy Water w/oil scum (20%w, 80%w)
441' Muddy Water w/oil scum (5%w, 95%w)
661' Total Recovery

IFP: 28-161#
FFP: 168-301#
SIP: 783-750#

DST #3 (3337-3350') Arbuckle
Open 30" Shut-in 45" Open 45" Shut-in 60"
1st OP: Weak blow, built to 3.5".
SI: No return blow.
2nd OP: No blow, flushed tool, built to 1.5".
SI: No return blow.

Rec: 48' Watery Mud w/scum oil (15%w, 85%w)

IFP: 17-27#
FFP: 28-36#
SIP: 1155-1154#

DST #4 (3342-3365') Arbuckle
Misrun, Packer Failure

DST #5 (3334-3365') Arbuckle
Open 30" Shut-in 30" Open 15" Shut-in 45"
1st OP: Strong blow, built to 8.0.B. in 1".
SI: No return blow.
2nd OP: Strong blow, built to 8.0.B. in 1".
SI: No return blow.

Rec: 96' SOCWMI (5% oil, 45% water, 50% mud)
1,232' Muddy Water (90% water, 20% mud)
1,228' Total Recovery

IFP: 105-350#
FFP: 357-573#
SIP: 1152-1152#

SAMPLE DESCRIPTION

REMARKS

Company: **COBALT ENERGY, LLC** Elevation: **1779' KB**

Lease: **Gustus Unit 'A' #1-2**

Location: **907' FNL & 2537' FEL** SEC. **2** TWP **18S** RGE **8W**

County: **Rice** State: **Kansas**