



# Texas Geologic Services

Scale: 1" / 100'  
Measured Depth Log

**Well Name** Wagner Unit 3 1in

**Location** Section 28, T18S-R16W

**State** Kansas

**County** Rush

**Country** USA

**Rig Number** Duke 8

**API Number** 15-165-22156

**AFE #** DCP002

**Spud Date**  
3/2/2018

**Field** Otis-Albert Field

**Drilling Completed** 3/10/2018

**Surface Coordinates** Lat : 38.4581959 Long: -99.0993793

**Ground Elevation** 2034'

**K.B. Elevation** 2040'

**Logged Interval** 1110' To 3822'

**Total Depth** 3822'

**Formation** Reagan Sand

**Type of Drilling Fluid** WBM

## Operator

**Company** H2Oil

**Address** Houston, TX

## Geologist

**Name** Kate Kozicki

**Company** H2Oil

**Address** 1400 Post Oak Blvd, Ste 400  
Houston, TX 77056

## Other

**Day Logger** Dennis Weaver

**Night Logger** Jeff Patterson

## Core Information

### Core Intervals

From	To	Cut	Recovered
0.0	0.0	0.0	0.0

## Zone Color Coding

Oil	Condensate	Gas
Note	Core	Pressure
Error	Water	Seal

## Rock Types

UNKNOWN	DOLOMITE	SHALE GRAY	TILL
ANHYDRITE	CHERT	SHALE COLORED	BENTONITE
GYPSUM	COAL	SILTSTONE	TUFF
SALT	MARLSTONE	SANDSTONE	IGNEOUS
SIDERITE or LIMONITE	CLAYSTONE	CONGLOMERATE	METAMORPHIC
LIMESTONE	SHALE	BRECCIA	CEMENT

## Accessories

### Fossils

ALGAE
AMPHIPORA
BELEMNITE
BIOCLASTIC
BRACHIOPOD
BRYOZOA
CEPHALOPOD
CORAL
CRINOID
ECHINOID
FISH
FORAMINIFERA

### F FOSSIL

GASTROPOD
OOLITE
OSTRACOD
PELECYPOD
PELLET
PISOLITE
PLANT REMAINS
PLANT SPORES
SCAPHOPOD
STROMATOPOROID

### Minerals

ANHYDRITIC
------------

### ARGILLACEOUS

ARGILLITE GRAIN
BENTONITE
BITUMENOUS SUBSTANCE
BRECCIA FRAGMENTS
CALCAREOUS
CARBONACEOUS FLAKES
CHTDK
CHTLT
COAL - THIN BEDS
DOLOMITIC
FELDSPAR
FERRUGINOUS PELLETT
FERRUGINOUS

### GLAUCONITE

GYPSIFEROUS
HEAVY MINERAL
KAOLIN
MARLSTONE
MINERAL CRYSTALS
NODULES
PHOSPHATE PELLETS
PYRITE
SALT CAST
SANDY
SILICEOUS
SILTY
TUFFACEOUS

### Stringer

ANHYDRITE STRINGER
BENTONITE STRINGER
COAL STRINGER
DOLOMITE STRINGER
GYPSUM STRINGER
LIMESTONE STRINGER
MARLSTONE (CALC) STRG
MARLSTONE (DOL) STRG
SANDSTONE STRINGER
SHALE STRINGER
SILTSTONE STRINGER

## Other Symbols

### Oil Show

DEAD
EVEN
QUESTIONABLE
SPOTTED STAINING

### Porosity

EARTHY
FENESTRAL
FRACTURE
INTERCRYSTALLINE
INTEROOLITIC
MOLDIC

### ORGANIC

PINPOINT
VUGGY

### Engineering

BIT
CASING
CONNECTION (LEFT)
CONNECTION (RIGHT)
CONNECTION GAS
CORE - LOST
CORE - RECOVERED
DST INTERVAL
FAULT

### FORMATION TOP

GAS SHOW
MN DEPTH
NORMAL FAULT
OIL SHOW
OVERTURNED STRATA
REVERSE FAULT
SIDEWALL CORE (LEFT)
SIDEWALL CORE (RIGHT)
SLIDE
SURVEY
TRIP GAS
WIRELINE TESTED - LEFT
WIRELINE TESTED - RT

### Rounding

ANGULAR
ROUNDED
SUBANG
SUBRND

### Textures

BOUNDSTONE
CHALKY
CRYPTOXLN
EARTHY
FINELYXLN
GRAINSTONE

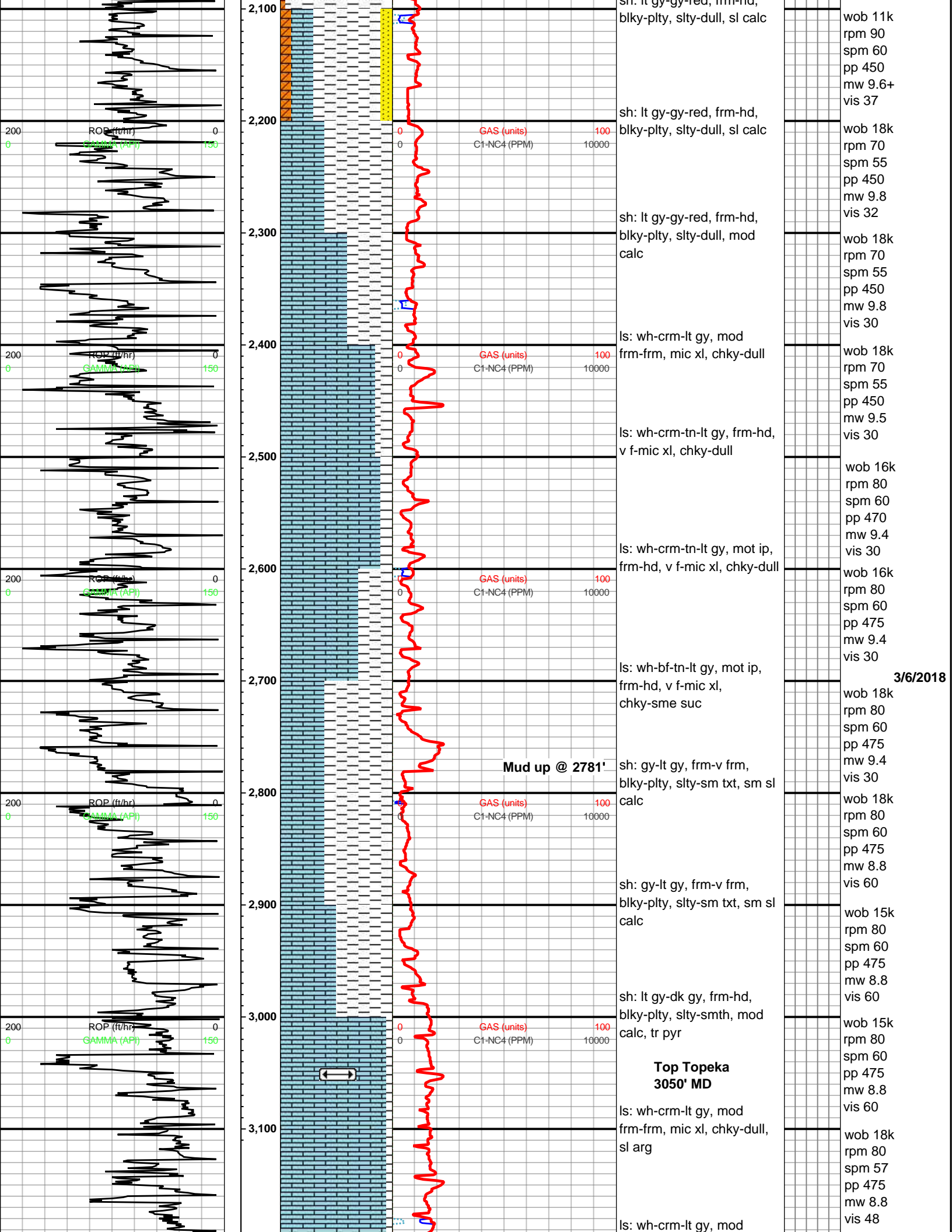
### L LITHOGRAPHIC

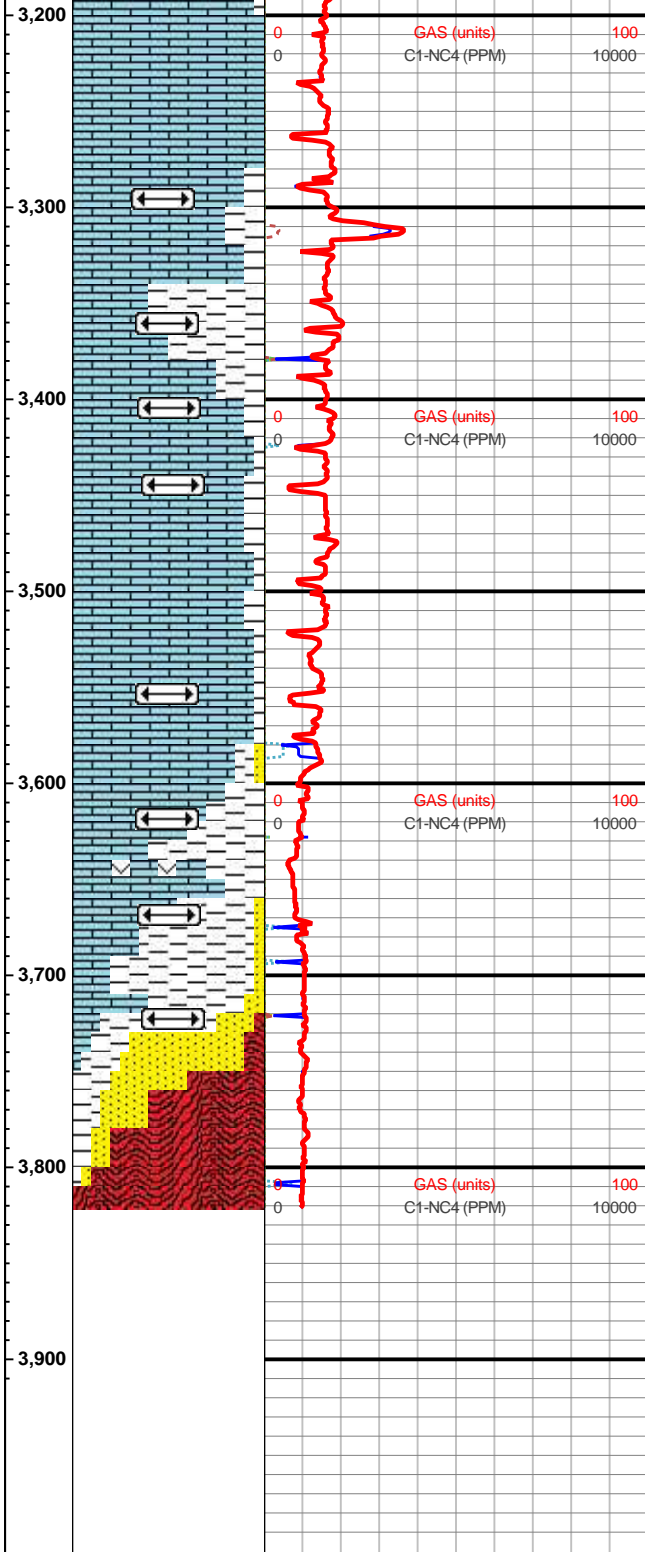
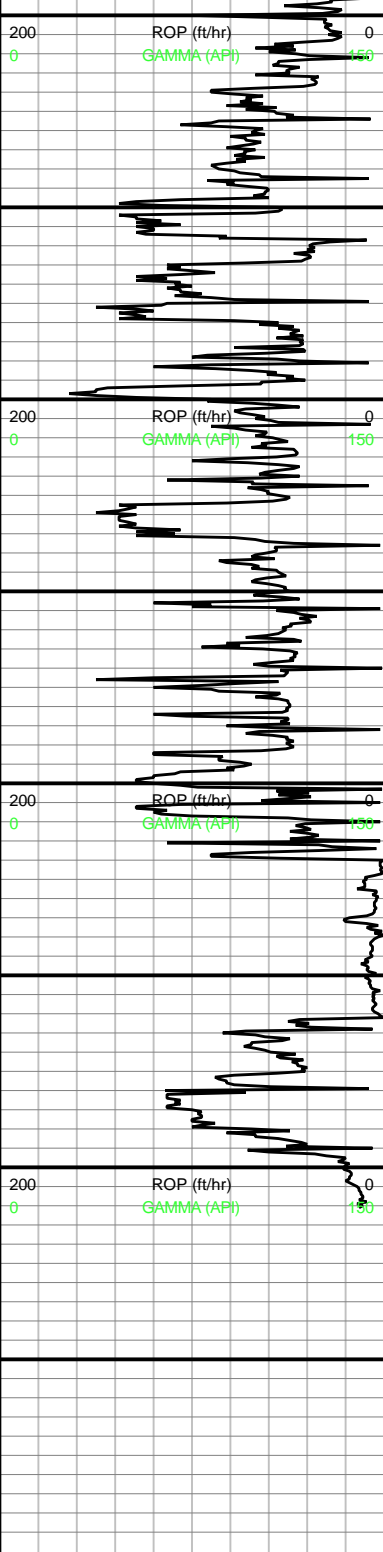
MICROXLN
MUDSTONE
PACKSTONE
WACKESTONE

### Sorting

MODERATE
POOR
WELL







frm-frm, mic xl, chky-dull, sl arg

**Top Heebner 3295' MD**  
 sh: dk gy, frm-hd, plty, slty-smth

**Top Lansing 3360' MD**

**Top Lansing D 3404' MD**

**Top Lansing G 3444' MD**

ls: wh-off wh-crm-bf, mod frm-v frm, mic-vf xl, chky-dull

**Top Lansing J**  
 ls: off wh-bf-lt tn, mod frm-v frm, mic-vf xl, chky-dull, sm suc, tr sl vugy

**Top Kansas City 3619' MD**

**Top Reagan 3668' MD**

**Top Granite 3722' MD**

granite: quartzite with tourmaline, tr hornblende, tr mica

wob 18k rpm 80 spm 57 pp 475 mw 8.8 vis 48

wob 18k rpm 80 spm 56 pp 475 mw 9.0 vis 48

wob 18k rpm 80 spm 56 pp 475 mw 9.0 vis 48

wob 18k rpm 80 spm 56 pp 475 mw 9.0 vis 48

3/7/2018  
 3640' Trip for wireline logs. Pick up coring tools 3/8/2018

3681' Trip for cores 3/9/2018

3722' Trip for cores, 3/10/2018 rr1b2

**TD @ 3822'**

**Thank You TGS**