

# GEOLOGICAL PROGNOSIS

Original Date: January 11, 2018

Well Name: ANGUS STATE 24-35 16 #602H

API #: 30 025 - -

Field: WILDCAT UPPER WOLFCAMP

Prospect: BIG HAT

Location: SHL: 300 FNL 1980 FWL, SEC 16 T24S R35E  
BHL: 330 FSL 2310 FWL, SEC 16 T24S R35E  
LEA CO, NEW MEXICO

Lat/Long: LAT = 32.2238361  
LONG = -103.3741157

Elevation:

GL(ft): 3389

KB(ft):

| <u>FORMATION</u>                   | <u>DEPTH (TVD)(ft)</u> | <u>SUBSEA(ft)</u> | <u>TYPE LOG (AZTEC-STATE 1)</u> |
|------------------------------------|------------------------|-------------------|---------------------------------|
| Rustler                            | 750                    |                   | 820                             |
| base Salt                          | 5080                   |                   | 5068                            |
| 1st Intermediate Casing            | 5170                   |                   |                                 |
| Top Delaware Group                 | 5220                   |                   | 5242                            |
| Bell Canyon                        | 5300                   |                   | 5254                            |
| Cherry Canyon                      | 6245                   |                   | 6248                            |
| Brushy Canyon                      | 7720                   |                   | 7715                            |
| Bone Spring                        | 8920                   |                   | 8968                            |
| 1st Bone Spring                    | 9175                   |                   | 9218                            |
| 1st Bone Spring Sand               | 10120                  |                   | 10099                           |
| 2nd Bone Spring                    | 10250                  |                   | 10257                           |
| 2nd Bone Spring Sand               | 10650                  |                   | 10679                           |
| 3rd Bone Spring                    | 11225                  |                   | 11253                           |
| 3rd Bone Spring Sand               | 11680                  |                   | 11715                           |
| KOP                                |                        |                   |                                 |
| 2nd Intermediate Casing            | IN CURVE               |                   |                                 |
| Wolfcamp Formation                 | 12040                  |                   | 12083                           |
| Wolfcamp A Shale                   | 12140                  |                   | 12183                           |
| APPROX. TARGET ZONE (A SHALE +30 ) | 12170                  |                   | 12212                           |
| Wolfcamp B                         | 12500                  |                   | 12535                           |
| ESTIMATED TD                       | 17320                  |                   |                                 |

Primary Objective(s): WOLFCAMP A SHALE

Mud Logger: TBD (beginning at 1st Intermediate Casing)

Electric Logging Program: NO LOGS PLANNED  
INTERMEDIATE:  
TD:

MWD Logging Program: GR from KOP

Coring Program: NO CORES PLANNED

Correlation Logs: 30025300620000 ENRON CINTA ROJA '17' FEC 1  
30025244120000 TEXAS INT'L PETR CORP AZTEC-STATE 1 (TYPE LOG)  
30025260800000 COG CINTA ROJA '10' 1

Remarks: SINGLE SECTION LATERAL

Operations Geologist: AL BONDURANT 205.568.5467 [albert.bondurant@energen.com](mailto:albert.bondurant@energen.com)

Secondary Geologist: GREG JENNINGS 205.326.2763 [greg.jennings@energen.com](mailto:greg.jennings@energen.com)

MIKE NIX 205.441.8678 [mike.nix@energen.com](mailto:mike.nix@energen.com)

Engineer: BRANNON SMITH, MANNY HEALD, RICHARD ADAMS

HOBBS OCD  
JAN 18 2018  
RECEIVED