



GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

Geologist on Well: Alex Chapman

ELEVATIONS
 LEASE Ludwig A 1-32
 FIELD Trapd
 LOCATION 100' ENL & 825' FWL
 SEC 32 T1WSP 18S R0E 13W
 COUNTY Barton STATE Kansas
 CONTRACTOR Southwind Rig 9
 SPUD 9/18/2014 COMP 9/26/2014

MEASUREMENTS ARE ALL FROM KELLY BUSHING
 CASING
 RTD 3386 LTD 3384
 MUD UP 2700 TYPE MUD CHEMICAL
 SAMPLES SAVED FROM 2800 TO RTD
 DRILLING TIME KEPT FROM 2800 TO RTD
 SAMPLES EXAMINED FROM 2800 TO RTD
 GEOLOGICAL SUPERVISION FROM 2700

CONDUCTOR SURFACE 8.87' @ 218'
 PRODUCTION 5 1/2" @ 3375
 ELECTRICAL SURVEYS
 DIL, DUCP
 REFERENCE WELL: Perkins #1 Sec 32-16S-13W

Formation	Sample #	E-log Tops	Strat
Anhydrite	886 (+1060)	883 (+1065)	+8
Base Anhydrite	914 (+1052)	912 (+1034)	+6
Heebner	3065 (-1119)	3065 (-1119)	+3
Lansing	3151 (-1205)	3151 (-1205)	+1
Arbuckle	3384 (-1434)	3370 (-1424)	+15

REMARKS Due to our positive structural position and our encouraging test in multiple Lansing zones and in the Arbuckle, we decided to set 5 1/2" production casing.

LEGEND

