

Max R. Lively
GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

Company: Ritchie Exploration, Inc.
Elevations: 2999

Field No: 4509
Location: 3501 N 1790 E
Section: 30
County: Goehle
State: KS
Date: 2-18-2013
Well ID: 4552

CONTRACTOR: W.M. P. #2
SPUD: 2-18-2013
RTD: 4655
MUD UP: 3508
TYPE MUD: Chem
ELECTRICAL SERVICES: Camp #12

FORMATION TOPS AND STRUCTURAL POSITION

Table with columns: Formation, Top, Log Top, Sub-Seq, Structural Position (A, B, C, D, E). Rows include Anhydrite, Base Anhydrite, Heebner, Toronto, Lansing, Dev 1, Dev 2, Dev 3, Dev 4, Dev 5, Dev 6, Dev 7, Dev 8, Dev 9, Dev 10, Dev 11, Dev 12, Dev 13, Dev 14, Dev 15, Dev 16, Dev 17, Dev 18, Dev 19, Dev 20, Dev 21, Dev 22, Dev 23, Dev 24, Dev 25, Dev 26, Dev 27, Dev 28, Dev 29, Dev 30, Dev 31, Dev 32, Dev 33, Dev 34, Dev 35, Dev 36, Dev 37, Dev 38, Dev 39, Dev 40, Dev 41, Dev 42, Dev 43, Dev 44, Dev 45, Dev 46, Dev 47, Dev 48, Dev 49, Dev 50, Dev 51, Dev 52, Dev 53, Dev 54, Dev 55, Dev 56, Dev 57, Dev 58, Dev 59, Dev 60, Dev 61, Dev 62, Dev 63, Dev 64, Dev 65, Dev 66, Dev 67, Dev 68, Dev 69, Dev 70, Dev 71, Dev 72, Dev 73, Dev 74, Dev 75, Dev 76, Dev 77, Dev 78, Dev 79, Dev 80, Dev 81, Dev 82, Dev 83, Dev 84, Dev 85, Dev 86, Dev 87, Dev 88, Dev 89, Dev 90, Dev 91, Dev 92, Dev 93, Dev 94, Dev 95, Dev 96, Dev 97, Dev 98, Dev 99, Dev 100.

REMARKS

LEGEND: Anhydrite, Salt, Sandstone, Shale, Carb sh, Limestone, Dol. Lime, Chert, Dolomite

DRILLING TIME IN MINUTES PER FOOT. Rate of Penetration Decreases. Scale: 5, 10, 15, 20, 25.

Main log table with columns: DEPTH, LITHOLOGY, SAMPLE DESCRIPTIONS, OIL SHOWS, REMARKS. Includes detailed geological descriptions and drilling data for various depths from 2300 to 4600 feet.

CONTRACTOR, LEASE, ELEVATION, IP, RTD, LOCATION, COUNTY, STATE, TWP, RING