

Company: Dixon Operating Company, LLC
 Address: 8100 E 22nd St N
 #300
 Wichita, KS 67226

Contact Geologist: #1-27 Teichmann
 Well Name: Section 27-22S-12W
 Location: Pool: Kansas
 State: Kansas

API: 15-185-24022
 Field: Spangenberg South
 Country: USA

Scale 1:240 Imperial

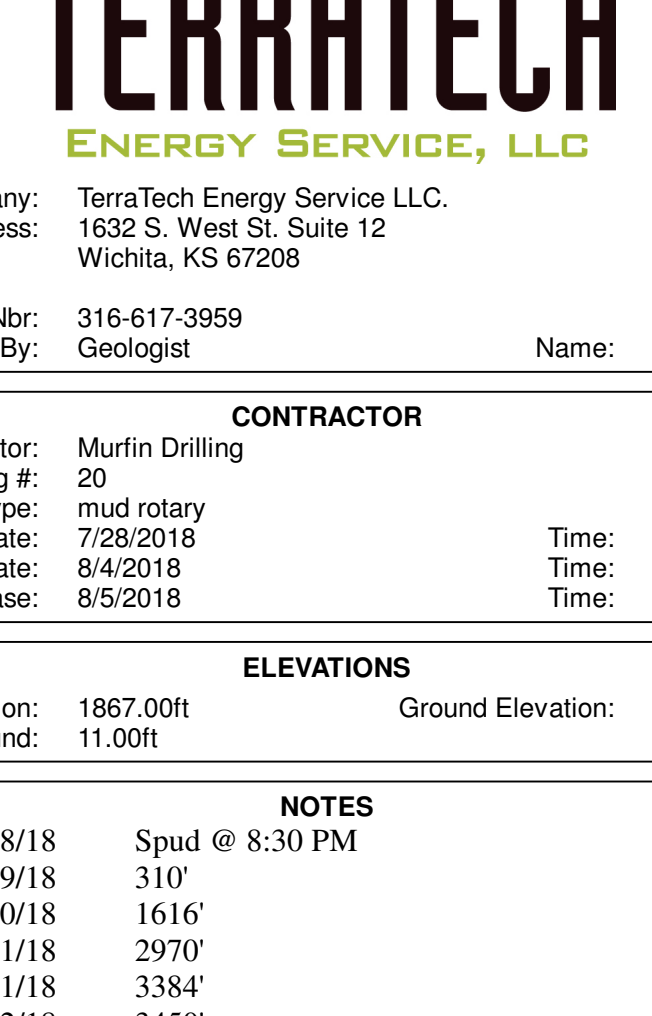
Well Name: #1-27 Teichmann
 Surface Location: Section 27-22S-12W
 Bottom Location: AFI: 15-185-24022

License Number: 7/28/2018 Time: 8:30 PM
 Spud Date: Stafford County
 Region: 8/4/2018 Time: 2:35 PM
 Drilling Completed: 3130' FSL & 330' FEL
 Surface Coordinates: 1856.00ft
 Ground Elevation: 1867.00ft
 K.B. Elevation: 2700.00ft To: 3770.00ft
 Logged Interval: 3770.00ft
 Total Depth: 3770.00ft
 Formation:
 Drilling Fluid Type: Chemical (MudCo)

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 3130' FSL
 E/W Co-ord: 330' FEL

LOGGED BY



Company: TerraTech Energy Service LLC.
 Address: 1632 S. West St. Suite 12
 Wichita, KS 67208

Phone Nbr: 316-617-3959
 Logged By: Geologist Name: Bruce Reed

CONTRACTOR

Contractor: Murrin Drilling
 Rig #: 20
 Rig Type: mud rotary
 Spud Date: 7/28/2018 Time: 8:30 PM
 TD Date: 8/4/2018 Time: 2:35 PM
 Rig Release: 8/5/2018 Time: 10:30 AM

ELEVATIONS

K.B. Elevation: 1867.00ft Ground Elevation: 1856.00ft
 K.B. to Ground: 11.00ft

NOTES

Daily Penetration: 07/28/18 Spud @ 8:30 PM
 07/29/18 310'
 07/30/18 1616'
 07/31/18 2970'
 08/01/18 3384'
 08/02/18 3450'
 08/03/18 3556'
 08/04/18 3676' Drilling completed @ 2:35 PM
 08/05/18 3770' Plug down 10:30 AM

DRILL STEM TESTS

DST #1 3309' to 3384' L/KC. Weak blow that increased to 4" during the initial flow period. Weak blow that increased to 4" during the second flow period. Recovered: 60' MW (88% water, 12% mud), 126' WM (30% water, 70% mud). IFP: 30" 20-69 psi, ISIP: 60" 1044 psi, FFP: 60" 79-109 psi, FSIP: 60" 1022 psi

DST #2 3425' to 3450' L/KC. Weak blow that increased to 1" during the initial flow period. Weak blow, 1/2 to 3/4" that decreased during the second flow period. Recovered: 20' DM (good odor). IFP: 30" 21-35 psi, ISIP: 60" 634 psi, FFP: 30" 30-54 psi, FSIP: 60" 479 psi

DST #3 3450' to 3556' L/KC. Strong blow, BOB in 10 minutes during the initial flow period. Fair blow, building during the second flow period. Recovered: 70' GIP, 90' mud with oil specks, 85' MW (72% water, 28% mud), 120' SW IFP: 30" 51-101 psi, ISIP: 60" 669 psi, FFP: 60" 114-150 psi, FSIP: 90" 585 psi

DST #4 3604' to 3676' Viola/Simpson. Strong blow, BOB in 2 minutes during the initial flow period. Fair blow, increased to 10" during the second flow period. Recovered: 65' GIP, 125' GCMW (3% gas, 76% water, 30% mud), 625' SGCW IFP: 30" 211-257 psi, ISIP: 60" 597 psi, FFP: 60" 302-345 psi, FSIP: 90" 601 psi

FORMATION TOPS

Formation	Sample Top	Datum	Log Top	Datum	Comparison*
Heebner	3143'	-1276	3144'	-1277	-14
Brown Lime	3276'	-1409	3276'	-1409	-15
Lansing	3304'	-1437	3308'	-1437	-16
Stark	3494'	-1627	3493'	-1626	-12
Base KC	3549'	-1682	3546'	-1679	-12
Viola	3604'	-1737	3600'	-1733	-45
Simpson	3637'	-1770	3636'	-1769	-34
Sand	3659'	-1792	3659'	-1792	-38
Arbuckle	3692'	-1825	3690'	-1823	-50

*Anstine & Musgrove, #4 Spangenberg, 2,080' FSL / 580' FWL, Section 26-22S-12W Stafford County, Kansas

ROCK TYPES

Cht Dolprim Lmst fw7+ shale, gry Carbon Sh Ss

ACCESSORIES

MINERAL Dolomitic

OTHER SYMBOLS

INTERVALS
 Core DST
 Oil Show
 Good Show
 Fair Show
 Poor Show
 Spotted or Trace
 Questionable Stn
 Dead Oil Stn
 Fluorescence
 Gas

DST
 DST Int
 DST alt
 Core
 Tail pipe

