

TOTCO DEVIATION SURVEY

Depth	Degrees Off Vertical	Depth	Degrees Off Vertical	Depth	Degrees Off Vertical
220	1/2	5957	3	9520	1 1/4
355	1	6089	2 3/4	9740	1
496	2	6227	2 1/4	9806	3/4
870	1 1/4	6441	2	9892	1
1120	1/2	6638	1 3/4	10004	1/2
1476	1/4	6856	2	10405	1/4
2959	3/4	7236	1 3/4	10600	3/4
3251	1	7379	1 1/2	10935	3
4000	2	7456	1 3/4	11038	2 3/4
4200	1 1/4	7583	1 1/2	11170	2
4346	3/4	7688	1 3/4	11265	2 1/4
4455	1	7803	1 1/2	11340	2 3/4
4610	3/4	8143	1 1/4	11450	3 1/4
5372	1 1/2	8335	1 1/2	11598	3 1/2
5729	2 1/4	8853	1 3/4	11706	3 1/4
5827	3 1/4	9358	1 1/2		

DRILL STEM TESTS

No.	Date	From	To	No. Kind & Size Of Perforations (Or Open Hole)	Tool Set @	Chokes Top Bottom	Water Cushion	Time Tested
1	10/23/56	10370	10439	Open Hole	10370	5/8" 1"	None	2 hours
	(Wolfcamp) Gas to surface in 12 minutes, 50 MCF/day. Recovered 250' oil and gas cut mud and 1560' of free oil (37 @ 60°) no water. SFP 2#, BHFP 150-495#, 30 minute SIP 3020#, HH 4505-4330#.							
2	10/29/56	10605	10644	Open Hole	10605	5/8" 1"	None	2 hours
	(Perm Penn) Nothing to surface. Recovered 60' of gas cut drilling mud, no water or oil. SFP 0#, BHFP 115#, 30 minute SIP 690#, HH 4555-4555#.							
3	11/4/56	10794	10831	Open Hole	10794	5/8" 1"	None	2 hours
	(Perm) Nothing to surface. Recovered 10' slightly gas cut drilling mud. All pressures 0#. HH 4410# in and out.							
4	11/9/56	10981	11045	Open Hole	10981	5/8" 1"	None	2 hours
	(Penn) Nothing to surface. Recovered 30' of slightly oil and gas cut drilling mud + 25' of free oil (Gravity 38 @ 60°) + 10' of salt water. SFP 0#, BHFP 0#, 30 minute SIP 420#, HH 5030-4980#.							
5	11/12/56	11045	11111	Open Hole	11045	5/8" 1"	None	2 hours
	(Penn) Nothing to surface. Recovered 30' of drilling mud, no shows. All pressures 0#. HH 4650# in and out.							

CORE RECORD

No.	From	To	Rec.	Description
1	10288	10346	26'	Lime with shale partings, dense tan to gray, no show. Core barrel jammed.
2	10405	10426	19'	Lime and dolomite. 10405-10419 - limestone, trace to 5% pin point and pin head inner crystalline porosity with good stain, fluorescence, and cut. 10419-10426 - dolomite, no show.
3	10426	10439	11 1/2'	Lime and shale. 10426-10429 - limestone, trace of porosity stain fluorescence and cut. 10429-10439 - lime and shale, no show.
4	10600	10628	23'	Lime and shale, no show.
5	10628	10644	15'	Lime and shale, with show of oil 10637-10644.
6	11038	11045	0'	No Recovery.
7	11045	11060	0'	No recovery, core barrel jammed.
8	11060	11111	51'	Lime and shale, no show.
9	11530	11549	17'	Lime, trace to 10% porosity with salt water, no show. Core barrel jammed.
10	11598	11654	56'	Shale and lime, no show.

