

Well: Newberry Federal #1E
 Location: 1,690' FNL & 990' FWL
 Sec 17 T31N R12W NMPM
 San Juan County, New Mexico
 API: 30-045-34532

Operator: Great Western Drilling Company
 Spud date: 3/5/2008
 Elevations: KB 5,950.50
 KB-GL 16.5'
 GL 5,934'

TOPS	NOTES	HOLE SIZE	CASING & CEMENT
		12 1/4"	
	230'	9 5/8" 36# J-55 set at 230'	cmd to GL w/ 135 sx
Ojo Alamo at 500'		8 3/4"	
Kirtland at 590'			
Fruitland at 1,845'		2 3/8" 4.7# J-55 tubing	
Pictured Cliffs at 2,225'			
		7" DV tool at 2,433' circulated 30 bbl from 1st stage then cmd 2nd stge w/380 sx and circulated 25 bbl from the 2nd stage	
Cliff House at 3,890'		TOC behind 4 1/2" at 4,140' by CBL	
Menafee at 4,105'	4,296'	7" 20 & 23# J-55 set at 4,296'	cmd 1st stage w/335 sx
Point Lookout at 4,675'			
Greenhorn at 6,715'			
Graneros at 6,770'			
Dakota at 6,833'	SN at 6,892'	Dakota perms 6,833 - 6,986' 5/8/08	acdz w/ 1,000 gal 7.5% HCl and frac w/27,468 gal X-link gel w/90,000# 20/40 Brady sand and 25,000# 20/40 SLC
		4 1/2" 10.5 & 11.6# J-55 set at 7,002'	cmd w/285 sx
	TD at 7,003'		
		pbt 6,990'	

OIL CONS. DIV DIST. 3
 OCT 18 2017

GREAT WESTERN DRILLING
OPERATIONS PLAN
Newberry Federal #1E

I. Location: 1690' FNL & 990' FWL
Sec 17, T31N, R12W
San Juan County, NM

Date: December 11, 2007

Field: Basin Dakota
Surface: BLM
Minerals: NM 021124

Elev: GL 5934'

II. Geology: Surface formation _ Nacimiento

A. Formation Tops	Depths
Ojo Alamo	500'
Kirtland	590'
Fruitland	1845'
Pictured Cliffs	2225'
Cliff House	3890'
Menefee	4105'
Point Lookout	4675'
Mancos	5015'
Gallup	5995'
Greenhorn	6715'
Graneros	6780'
Dakota	6840'
Morrison	7080'
Total Depth	7155'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 1845', 2225', 3890', 4675', and 6840'.

B. Logging Program: Induction/GR and density logs at TD.

C. No over pressured zones are expected in this well. No H₂S zones will be penetrated in this well. Max. BHP = 2000 psig.

III. Drilling

A. Contractor:

B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The intermediate hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.9 ppg.

The production hole will be drilled with air or air/mist.