CURRENT WELL SKETCH

eog resources

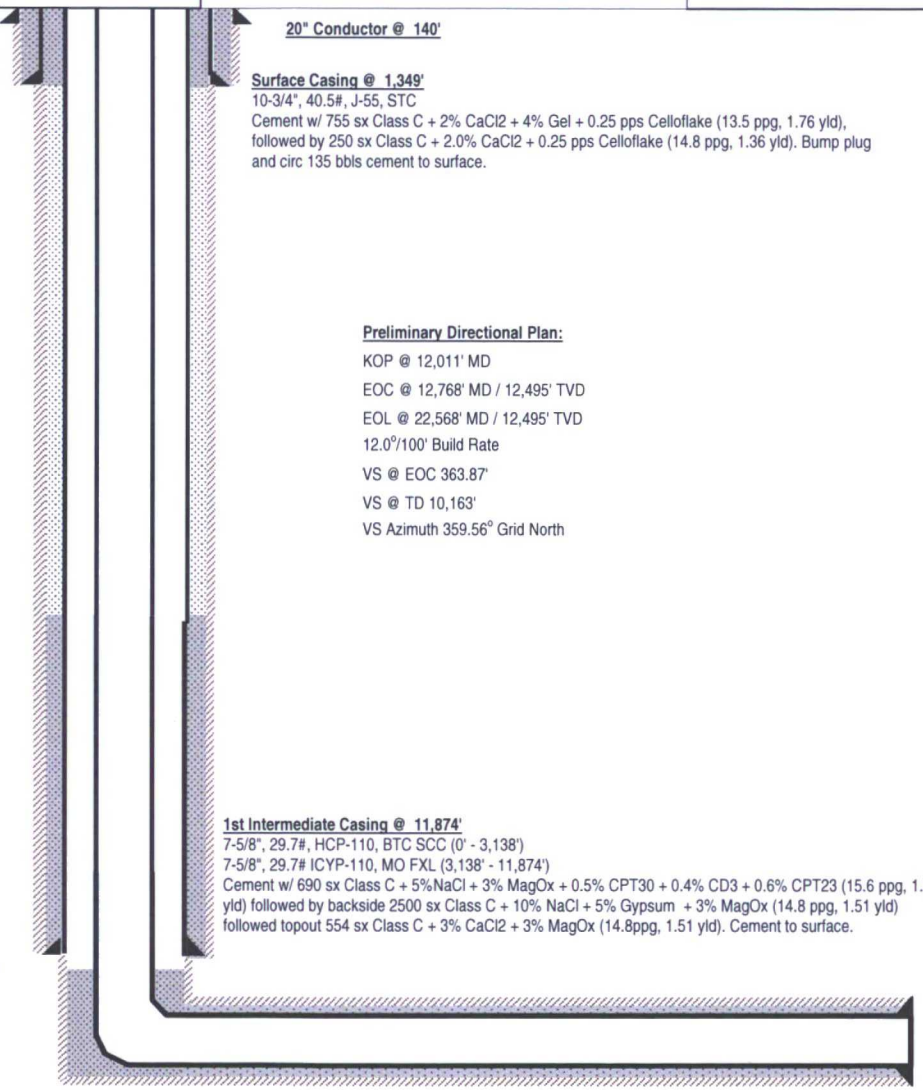
OGRID: 7377
API: 30-025-43806
AFE: 108403
SPUD: 10/2/17 @ 04:00 hrs
FRR: 11/12/17 @ 07:00 hrs
RIG: Charger / H&P #473

Neptune 10 State Com #703H
Red Hills (Bone Spring) Field
Lea County, New Mexico

SURF: 164' FSL & 1217' FWL
LOC: Sec. 10
SURVEY: T-24-S, R-33-E
GL: 3613'
KB: 3638'
ZERO: 25.0' AGL

DEPTH (ft)	MARKERS (KB)
1,000'	Rustler - 1,255'
	Top of Salt - 1,775'
3,000'	
5,000'	Base of Salt - 4,985'
	Lamar - 5,185'
	Bell Canyon - 5,220'
	Cherry Canyon - 6,175'
7,000'	
	Brushy Canyon - 7,680'
9,000'	
	Leonard - 9,170'
	Bone Spring LS - 9,060'
	1st BS Sand - 10,160'
11,000'	
	2nd BS Sand - 10,745'
	3rd BS Carb - 11,370'
	3rd BS Sand - 11,915'
	Wolfcamp - 12,360'
	Land - 12,495'
13,000'	

LITHOLOGY: Salt; H_2S; Press Ramp



20" Conductor @ 140'

Surface Casing @ 1,349'
10-3/4", 40.5#, J-55, STC
Cement w/ 755 sx Class C + 2% CaCl2 + 4% Gel + 0.25 pps Celloflake (13.5 ppg, 1.76 yld), followed by 250 sx Class C + 2.0% CaCl2 + 0.25 pps Celloflake (14.8 ppg, 1.36 yld). Bump plug and circ 135 bbls cement to surface.

Preliminary Directional Plan:
KOP @ 12,011' MD
EOC @ 12,768' MD / 12,495' TVD
EOL @ 22,568' MD / 12,495' TVD
12.0°/100' Build Rate
VS @ EOC 363.87'
VS @ TD 10,163'
VS Azimuth 359.56° Grid North

1st Intermediate Casing @ 11,874'
7-5/8", 29.7#, HCP-110, BTC SCC (0' - 3,138')
7-5/8", 29.7# ICYP-110, MO FXL (3,138' - 11,874')
Cement w/ 690 sx Class C + 5%NaCl + 3% MagOx + 0.5% CPT30 + 0.4% CD3 + 0.6% CPT23 (15.6 ppg, 1.26 yld) followed by backside 2500 sx Class C + 10% NaCl + 5% Gypsum + 3% MagOx (14.8 ppg, 1.51 yld) followed topout 554 sx Class C + 3% CaCl2 + 3% MagOx (14.8ppg, 1.51 yld). Cement to surface.

Production Casing @ 22,530' MD, 12,465' TVD
5-1/2", 20#, ECP-110, DWC CIS MS (Airlock @11,821', MJ @ 18,007')
Cement w/ 990 sx Class H + 3% MagOX + 0.6% CPT-30 + 0.1% CPT- 51A + 0.35% CPT-35 + 0.7% CPT-23 (15.6ppg 1.23yld). Bump plug, test casing to 5700 psi - OK. Did not circ cement - **TOC @ 12,400' Est.**

HOLE SIZE	MW (ppg)	MUD	BHST (°F)	LOT (ppg)	EVALUATION
14-3/4"	8.4 9.2	Spud	70 95	N/A	Mud Log
8-3/4"	8.4	Fresh water/ Cut Brine Water/OBM	183	N/A	Mud Log
6-3/4"		OBM	140	N/A	

BHST = (0.80°/100' *D + 70)*1.2

Drlg Eng:	C. Hathcock
Date:	11/13/2017

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