

HOBBS OCD

Revised Permit Information 1/16/18:

JAN 16 2018

Well Name: Gem 36 State Com No. 5H

RECEIVED

Location:

SL: 220' FSL & 2309' FWL, Section 36, T-25-S, R-32-E, Lea Co., N.M.

BHL: 230' FNL & 2462' FEL, Section 36, T-25-S, R-32-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 810'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4,000'-4,700'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0' - 14,052'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
810'	525	13.5	1.75	Class C + 2% CaCl ₂ + 4% Gel + 0.25 pps Celloflake (TOC @ Surface)
	300	14.8	1.34	Class C + 2% CaCl ₂
4,700'	1300	12.7	1.90	35:65 Poz:Class C + 6% Gel + 3% CaCl ₂ + 0.5% CPT-45 + 0.45% CPT-20 (TOC @ Surface)
	375	14.8	1.33	Class C + 0.20% CPT-19
14,052'	750	11.0	3.21	50:50 Poz:Class H + 0.4% CPT-503P + 3.0% CPT-45 + 5.0% Gypsum + 5.0% Salt + 0.15% Citric Acid + 0.15% CPT-20A + 1.0% CPT-19 (TOC @ 4,200')
	1400	14.4	1.20	50:50 Poz:Class H + 0.25% CPT-503P + 0.80% CPT-16A + 0.20% CPT-35 + 0.40% CPT-49 + 0.25% CPT-20A

Mud Program:

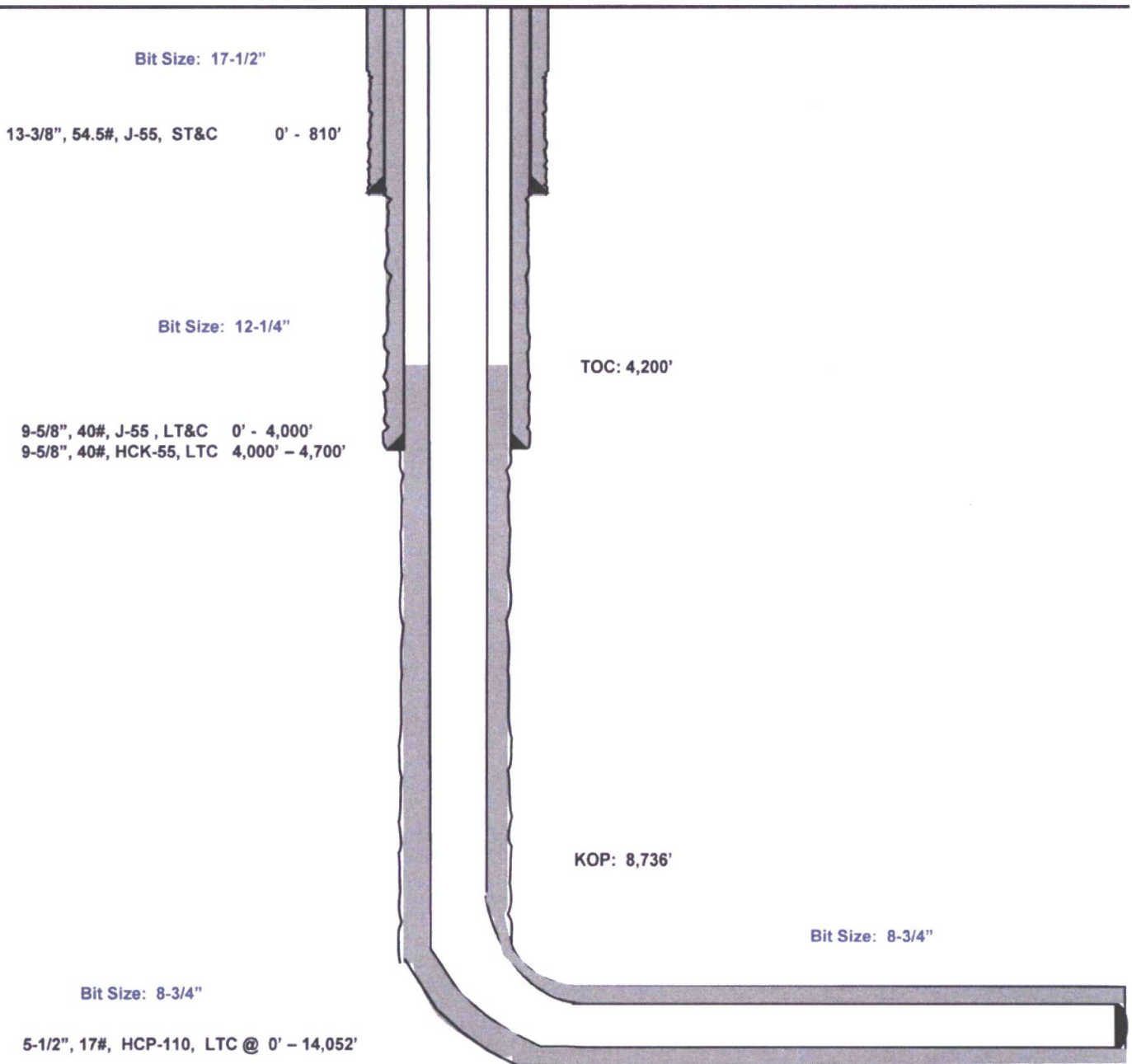
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 810'	Fresh - Gel	8.6-8.8	28-34	N/c
810' - 4,700'	Brine	8.8-10.0	28-34	N/c
4,700' - 8,736'	Brine	8.8-10.0	28-34	N/c
8,736' - 14,052' Lateral	Brine	8.8-10.0	28-34	N/c

Gem 36 State Com #5H

220' FSL
2309' FWL
Section 36
T-25-S, R-32-E

Lea County, New Mexico
Proposed Wellbore
Revised 1/16/18
API: 30-025-44263

KB: 3,394'
GL: 3,369'



Lateral: 14,052' MD, 9,284' TVD

BH Location: 230' FNL & 2462' FEL
Section 36
T-25-S, R-32-E