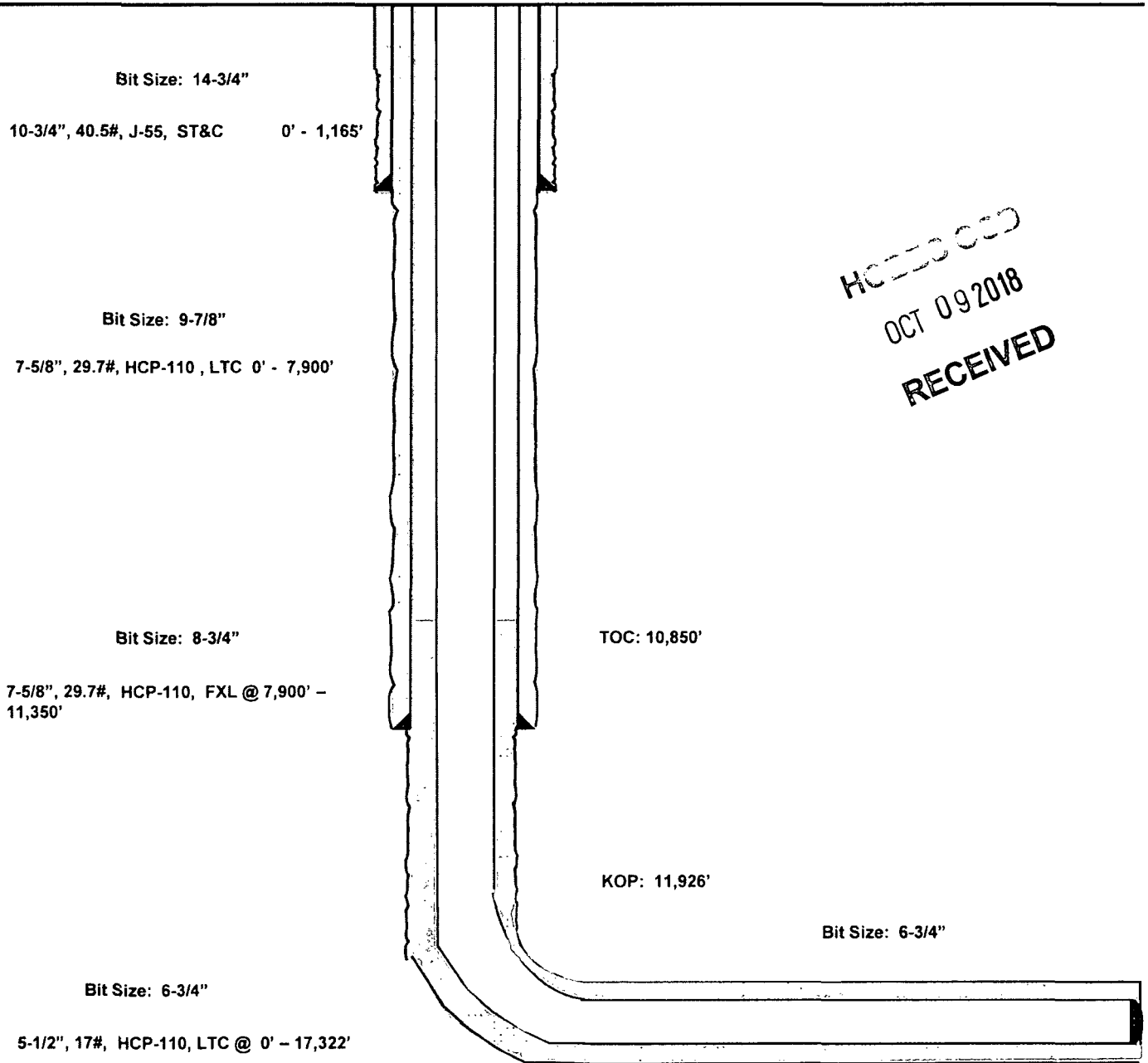


Cobalt 32 State #708H
Lea County, New Mexico

199' FSL
655' FWL
Section 32
T-24-S, R-34-E

Proposed Wellbore
Revised 10/5/18
API: 30-025-45137

KB: 3,450'
GL: 3,425'



HC 110 000
OCT 09 2018
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Lateral: 17,322' MD, 12,390' TVD
BH Location: 100' FNL & 1110' FWL
Section 32
T-24-S, R-34-E

Revised Permit Information 10/5/18:

Well Name: Cobalt 32 State No. 708H

Location:

SHL: 199' FSL & 655' FWL, Section 32, T-24-S, R-34-E, Lea Co., N.M.

BHL: 100' FNL & 1110' FWL, Section 32, T-24-S, R-34-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
14.75"	0 – 1,165'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0 – 7,900'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
8.75"	7,900' – 11,350'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	11,350' - 17,322'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,165'	697	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl ₂ (TOC @ Surface)
	333	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
11,350'	600	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ Surface)
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
17,322'	800	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,850')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,165'	Fresh - Gel	8.6-8.8	28-34	N/c
1,165' – 11,350'	Brine	8.8-10.0	28-34	N/c
11,350' – 17,322' Lateral	Oil Base	10.0-14.0	58-68	3 - 6