

EOG RESOURCES, INC.
GOLDEN GRAHAM 1 STATE COM #722H

Permit Information:

Well Name: Golden Graham 1 State Com #722H

Location:

SHL: 221' FSL & 1957' FWL, Section 1, T-26-S, R-28-E, Eddy Co., N.M.

BHL: 230' FNL & 2060' FWL, Section 36, T-25-S, R-28-E, Eddy Co., N.M.

Design A

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
12.25"	0 – 1,150'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
8.75"	0' – 8,716'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0'-20,027'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /sk	Slurry Description
1,150'	400	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	300	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
8,716'	600	14.2	1.11	1 st Stage (Tail): Class C + 5% Salt + (TOC @ 7,000')
	1,000	12.7	2.30	2 nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
20,027'	800	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 8,216')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,150'	Fresh - Gel	8.6-8.8	28-34	N/c
1,150' – 8,716'	Brine	8.8-10.0	28-34	N/c
8,716' – 9,364'	Oil Base	10.0-11.5	58-68	3 - 6
9,364' – 20,027' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

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Design B

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,150'	13.375"	54.5#	J-55	STC	1.125	1.25	1.60
12.25"	0-2,771'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
8.75"	0 - 8,716'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0'-20,027'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /sk	Slurry Description
1,150'	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)
2,771'	692	12.7	2.22	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	303	14.8	1.32	Tail: Class C + 0.13% C-20
8,716'	375	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 2,271')
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
20,027'	950	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 8,216')

As a contingency, EOG requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (4,914') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed.

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,150'	Fresh - Gel	8.6-8.8	28-34	N/c
1,150' - 2,771'	Brine	10.0-10.2	28-34	N/c
2,771' - 8,716'	Oil Base	8.7-9.4	58-68	N/c - 6
8,716' - 20,027' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

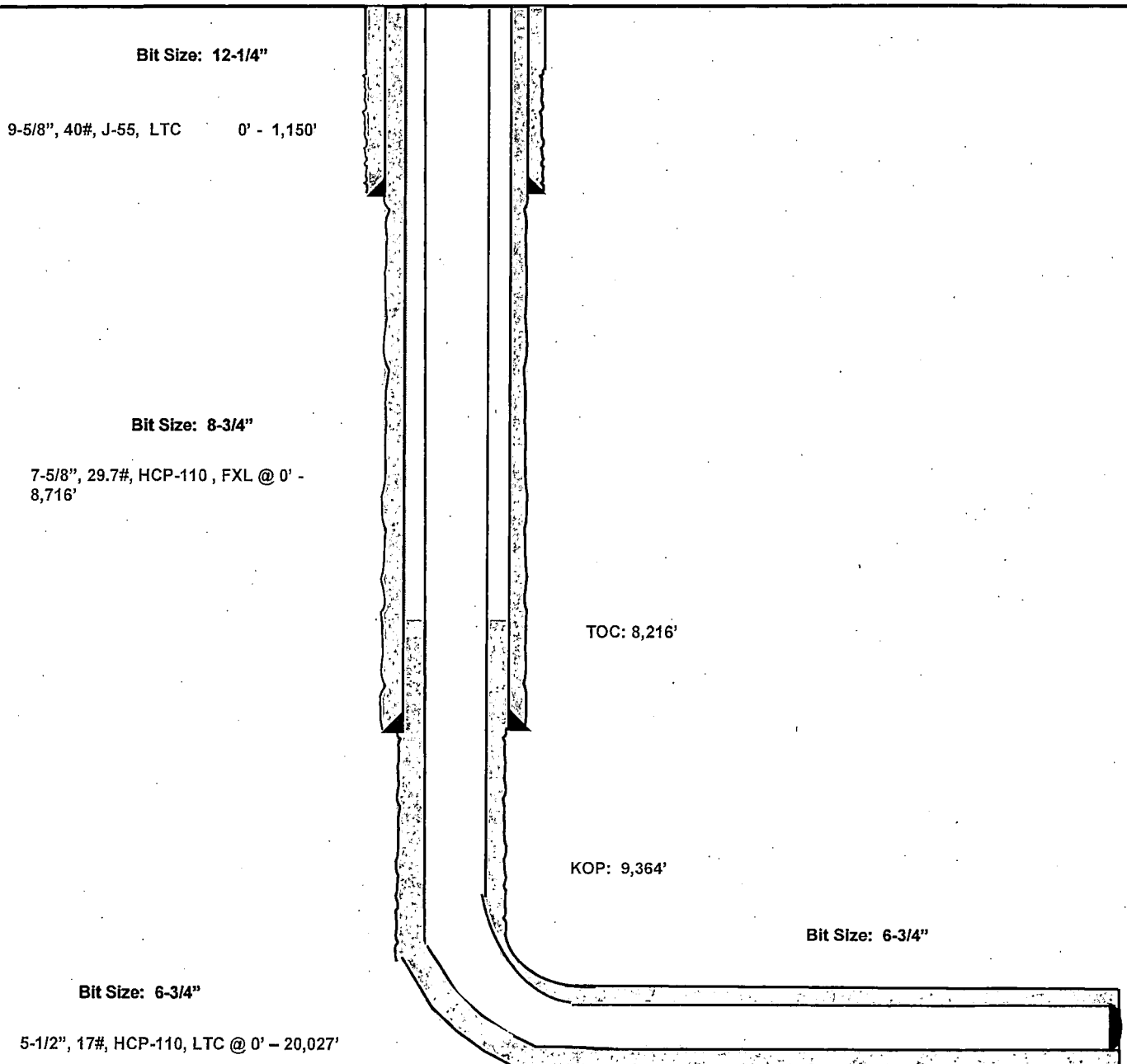
221' FSL
1957' FWL
Section 1
T-26-S, R-28-E

Golden Graham 1 State Com #722H
Eddy County, New Mexico

KB: 2,958'
GL: 2,933'

Proposed Wellbore
Design A

API: 30-025-*****



Lateral: 20,027' MD, 9,838' TVD
BH Location: 230' FNL & 2060' FWL
Section 36
T-25-S, R-28-E