

EOG RESOURCES, INC.
OSPREY 10 #706H

325' FSL
1316' FEL
Section 10
T-25-S, R-34-E

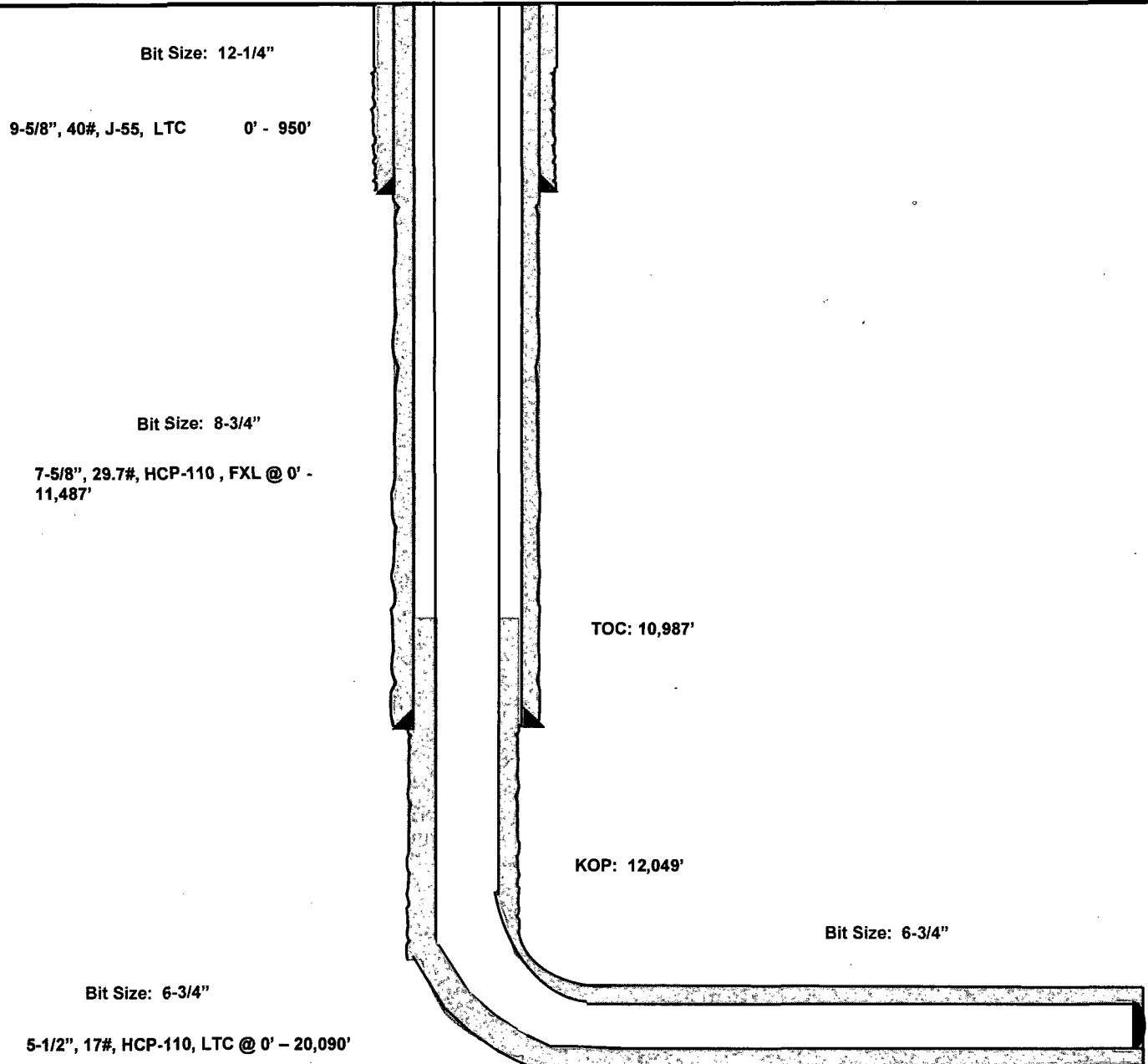
Lea County, New Mexico HOBBS OCD KB: 3,358'
GL: 3,333'

Proposed Wellbore
Design A

JAN 29 2019

RECEIVED

API: 30-025-*****

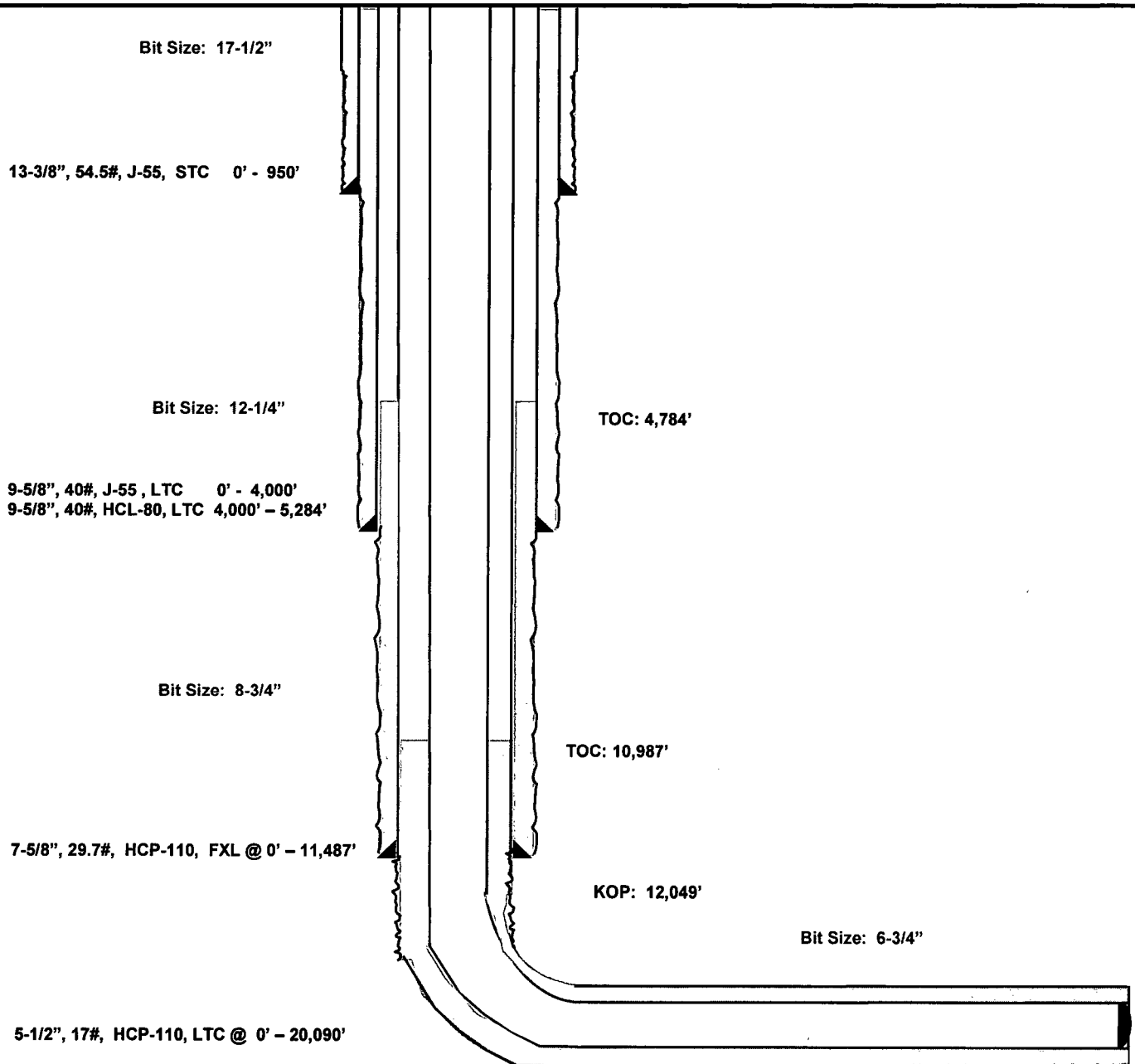


Lateral: 20,090' MD, 12,517' TVD
BH Location: 2539' FSL & 1020' FEL
Section 3
T-25-S, R-34-E

EOG RESOURCES, INC.
OSPREY 10 #706H

Proposed Wellbore
Design B

API: 30-025-*****



EOG RESOURCES, INC.
OSPREY 10 #706H

Permit Information:

Well Name: Osprey 10 No. 706H

Location:

SHL: 325' FSL & 1316' FEL, Section 10, T-25-S, R-34-E, Lea Co., N.M.

BHL: 2539' FSL & 1020' FEL, Section 3, T-25-S, R-34-E, Lea 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 – 950'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
8.75"	0' – 11,487'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0' -20,090'	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
950'	233	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)
	101	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
11,487'	226	14.2	1.11	1 st Stage (Tail): Class C + 5% Salt + (TOC @ 10,186')
	1,000	12.7	2.30	2 nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
20,090'	729	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,987')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 950'	Fresh - Gel	8.6-8.8	28-34	N/c
950' – 11,487'	Brine	8.8-10.0	28-34	N/c
11,487' – 12,049'	Oil Base	10.0-11.5	58-68	3 - 6
12,049' – 20,090' 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 – 950'	13.375"	54.5#	J-55	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' – 5,284'	9.625"	40#	HCL-80	LTC	1.125	1.25	1.60
8.75"	0 – 11,487'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0'-20,090'	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
950'	536	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl ₂ (TOC @ Surface)
	129	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)
5,284'	748	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)
	327	14.8	1.32	Tail: Class C + 0.13% C-20
11,487'	177	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,784')
	84	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
20,090'	729	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,987')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 950'	Fresh - Gel	8.6-8.8	28-34	N/c
950' – 5,284'	Brine	10.0-10.2	28-34	N/c
5,284' – 11,487'	Oil Base	8.7-9.4	58-68	N/c - 6
11,487' – 20,090' Lateral	Oil Base	10.0-11.5	58-68	3 - 6