

Well Name: DEEP ELEM 4 FED COM	Well Location: T26S / R31E / SEC 4 / SWSE /	County or Parish/State:
Well Number: 704H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0438001	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001548583	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Type of Submission: Notice of Intent

Type of Action Other

Date Sundry Submitted: 06/16/2021

Time Sundry Submitted: 09:36

Date proposed operation will begin: 06/29/2021

Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change BHL to T-26-S, R-31-E, Sec 16, 230' FSL, 1485' FEL, Eddy Co., N.M.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

DEEP_ELEM_4_FED_COM_704H_C_102_20210616093608.pdf

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Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: STAR HARRELL
Signed on: JUN 16, 2021 09:36 AM
Name: EOG RESOURCES INCORPORATED
Title: Regulatory Specialist
Street Address: 5509 CHAMPIONS DRIVE
City: MIDLAND **State:** TX
Phone: (432) 848-9161
Email address: STAR_HARRELL@EOGRESOURCES.COM

Field Representative

Representative Name: Eric Brorman
Street Address: 5509 Champions Drive
City: Midland **State:** TX **Zip:** 79706
Phone: (432)556-1276
Email address: eric_brorman@eogresources.com

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS
BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234
BLM POC Email Address: cwalls@blm.gov
Disposition: Approved
Disposition Date: 09/01/2021
Signature: Chris Walls

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DISTRICT IV
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code 329970	Property Name DEEP ELEM 4 FED COM	Well Number 704H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3280'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	4	26 S	31 E		375	SOUTH	1998	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	16	26 S	31 E		230	SOUTH	1485	EAST	EDDY
Dedicated Acres 1280.00	Joint or Infill	Consolidated Code	Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Star L Harrell</i> 6/16/2021 Signature Date</p> <p>Star L Harrell Print Name</p> <p>star_harrell@eogresources.com E-mail Address</p> <p>SURVEYORS CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>March 25, 2021 Date of Survey</p> <p>Signature and Seal of Professional Surveyor: <i>Ralph B. Chustz, Jr.</i></p> <p>RALPH B. CHUSTZ, JR. NEW MEXICO PROFESSIONAL SURVEYOR 26264 06/09/2021</p> <p>Job No.: EOG B190020 RALPH B. CHUSTZ, JR., N.M.P.L.S. Certificate Number 26264</p>
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Deep Elem 4 Fed Com 704H

Revised Permit Information 06/10/2021:

Well Name: Deep Elem 4 Fed Com 704H

Location: SHL: 375' FSL & 1998' FEL, Section 4, T-26-S, R-31-E, Eddy Co., N.M.

BHL: 230' FSL & 1485' FEL, Section 16, T-26-S, R-31-E, Eddy Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	DFmin Tension
12.25"	0' - 1,500'	9.625"	36#	J-55	LTC	1.125	1.25	1.6
8.75"	0' - 10,370'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 9,870'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.6
6.75"	9,870' - 10,370'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.6
6.75"	10,370' - 21,745'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.6

Variance is requested to waive the centralizer requirements for the 7-5/8" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 5-1/2" casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 5-1/2" casing by 7-5/8" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422" annulus clearance requirement from Onshore Order #2 under the following conditions:

- Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings.
- Annular clearance less than 0.422" is acceptable for the production open hole section.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /sk	Slurry Description
1,500' 9-5/8"	400	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	80	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,295')
10,370' 7-5/8"	510	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 6,050')
	1040	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
21,745' 5-1/2"	1010	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,870')



Deep Elem 4 Fed Com 704H

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

EOG requests variance from minimum standards 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 (6,250') 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 1,039 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,500'	Fresh - Gel	8.6-8.8	28-34	N/c
1,500' – 10,370'	Brine	10.0-10.2	28-34	N/c
10,370' – 11,094'	Oil Base	8.7-9.4	58-68	N/c - 6
11,094' – 21,745'	Oil Base	10.0-14.0	58-68	4 - 6



Deep Elem 4 Fed Com 704H

375' FSL
1998' FEL
Section 4
T-26-S, R-31-E

Revised Wellbore

KB: 3305'
GL: 3280'

API: 30-015-*****

Bit Size: 12-1/4"
9-5/8", 36#, J-55, LTC, 0' - 1,500'

Bit Size: 8-3/4"
7-5/8", 29.7#, HCP-110, FXL, 0' - 10,370'

Bit Size: 6-3/4"
5-1/2", 20#, P-110EC, DWC/C-IS MS, @ 0' - 9,870'
5-1/2", 20#, P-110EC, VAM SFC, @ 9,870' - 10,370'
5-1/2", 20#, P-110EC, DWC/C-IS MS, @ 10,370' - 21,745'

TOC: 9,870'

Lateral: 21,745' MD, 11,525' TVD
Upper Most Perf:
330' FSL & 1485' FEL Sec. 9
Lower Most Perf:
330' FSL & 1485' FEL Sec. 16
BH Location: 230' FSL & 1485' FEL
Sec. 16
T-26-S R-31-E

KOP: 11,094'



Deep Elem 4 Fed Com 704H

Design B**4. CASING PROGRAM**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	DFmin Tension
16"	0' - 1,495'	13.375"	54.5#	J-55	STC	1.125	1.25	1.6
12.25"	0' - 3,970'	9.625"	40#	J-55	LTC	1.125	1.25	1.6
8.75"	0' - 10,370'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 9,870'	5.5"	20#	P-110EC	FXL	1.125	1.25	1.6
6.75"	9,870' - 10,370'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.6
6.75"	10,370' - 21,745'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.6

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,495' 13-3/8"	450	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,295')
3,965' 9-5/8"	580	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	260	10.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 3,172')
10,370' 7-5/8"	200	14.8	3.67	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 3,465')
21,745' 5-1/2"	100	14.8	2.38	Tail: Class H + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 8,870')
	1010	14.8	1.31	Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,870')

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 (6,250') 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:

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0 - 1,495'	Fresh - Gel	8.6-8.8	28-34	N/c
1,495' - 3,965'	Brine	10.0-10.2	28-34	N/c
3,965' - 10,370'	Oil Base	8.7-9.4	58-68	N/c - 6
10,370' - 21,745' Lateral	Oil Base	10.0-14.0	58-68	4 - 6



Deep Elem 4 Fed Com 704H

375'
1998'

Proposed Wellbore

KB: 3305'
GL: 3280'

Section 4

T-26-S, R-31-E

API: 30-015-*****

Bit Size: 16"
13-3/8", 54.5#, J-55, STC, 0' - 1,495'

Bit Size: 12-1/4"
9-5/8" 40#, J-55, LTC, 0' - 3,865'

Bit Size: 8-3/4"
7-5/8" 29.7#, HCP-110, FXL, 0' - 3,970'

Bit Size: 6-3/4"
5-1/2", 20#, P-110EC, DWC/C-IS MS, @ 0' - 9,870'
5-1/2", 20#, P-110EC, VAM SFC, @ 9,870' - 10,370'
5-1/2", 20#, P-110EC, DWC/C-IS MS, @ 10,370' - 21,745'

TOC: 9,870'

Lateral: 21,745' MD, 11,525' TVD
Upper Most Perf:
330' FSL & 1485' FEL Sec. 9
Lower Most Perf:
330' FSL & 1485' FEL Sec. 16
BH Location: 230' FSL & 1485' FEL
Sec. 16
T-26-S R-31-E

KOP: 11,094'

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 32693

COMMENTS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 32693
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 9/2/2021	9/2/2021
jagarcia	Accepted for Record	9/16/2021

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CONDITIONS

Action 32693

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Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 32693
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	Adhere to previous COAs	9/16/2021