

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-49691
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. 331180
7. Lease Name or Unit Agreement Name Grace 16 State Com
8. Well Number 901H
9. OGRID Number 7377
10. Pool name or Wildcat 13320 Corbin; Wolfcamp, South

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator EOG Resources, Inc.	
3. Address of Operator P.O. Box 2267, Midland, Texas 79702	
4. Well Location Unit Letter <u>P</u> : <u>870</u> feet from the <u>South</u> line and <u>391</u> feet from the East line Section <u>16</u> <u>18S</u> Township <u>33E</u> Range <u>NMNM</u> <u>Lee</u> County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3869' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☒ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐ CLOSED-LOOP SYSTEM ☐ OTHER: ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: ☐	
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes:

Update casing and cement program to allow a dual casing design.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Star L Harrell TITLE Sr Regulatory Specialist DATE 3/7/2022

Type or print name Star Harrell E-mail address: star_harrell@eogresources.com PHONE: 432-848-9161

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any): _____



Grace 16 State Com #901H
Lea County, New Mexico
Proposed Wellbore
Design A

870' FSL
391' FEL
Section 16
T-18-S, R-33-E

KB: 3894'
GL: 3869'

API: 30-025-49691

Bit Size: 12-1/4"
9-5/8", 36#, J-55, LTC, 0' - 1,770'

Bit Size: 8-3/4"
7-5/8", 29.7#, HCP-110, FXL, 0' - 12,000'

TOC: 11,500'

KOP: 11,383'

Bit Size: 6-3/4"
5-1/2", 17#, HCP-110, LTC, @ 0' - 16,786'

Bit Size: 6-3/4"

Pilot Hole Bit Size: 6-3/4" (Pilot hole vertical, 14,400' MD/14,400' TVD). Cement from 12,000 to 14,400'
Set bridge plug in casing, set whipstock @ ~11,500' TVD and mill out of casing.

Lateral: 16,786' MD, 11,700' TVD
BH Location: 100' FNL & 1000' FEL
Sec. 16
T-18-S R-33-E



Grace 16 State Com #901H
Lea County, New Mexico
Proposed Wellbore
Design B

870' FSL
391' FEL
Section 16
T-18-S, R-33-E

KB: 3894'
GL: 3869'

API: 30-025-49691

Bit Size: 16"
13-3/8", 54.5#, J-55, STC, 0' - 1,770'

Bit Size: 12-1/4"
9-5/8" 40.#, J-55, LTC, 0' - 4,000'

9-5/8" 40.#, HCK-55, LTC, 4,000' - 7,800'

Bit Size: 8-3/4"
7-5/8" 29.7#, HCP-110, FXL, 0' - 12,000'

Bit Size: 6-3/4"
5-1/2", 17#, HCP-110, LTC, @ 0' - 16,786'

Pilot Hole Bit Size: 6-3/4" (Pilot hole vertical,
14,400' MD/14,400' TVD). Cement from 12,000 to
14,400'

Set bridge plug in casing, set whipstock @ ~11,500'
TVD and mill out of casing.

TOC: 7,300'

TOC: 11,500'

KOP: 11,383'

Bit Size: 6-3/4"

Lateral: 16,786' MD, 11,700' TVD
BH Location: 100' FNL & 1000' FEL
Sec. 16
T-18-S R-33-E



Grace 16 State Com #901H

Permit Information:

Well Name: Grace 16 State Com #901H

Location:

SHL: 870' FSL & 391' FEL, Section 16, T-18-S, R-33-E, Lea Co., N.M.

BHL: 100' FNL & 1000' FEL, Section 16, T-18-S, R-33-E, Lea Co., N.M.

Design A**Casing Program:**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	Dfmin Tension
12.25"	0' - 1,770'	9.625"	36#	J-55	LTC	1.125	1.25	1.6
8.75"	0' - 12,000'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 16,786'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.6

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,770'	460	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)
	80	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
12,000'	750	14.2	1.11	1st Stage (Tail): Class C + 5% Salt (TOC @ 5,509')
	1000	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
14,400' 6-3/4" Pilot Hole	626	15.6	1.19	Plug: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 7,300')
16,786'	490	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,500')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,770'	Fresh - Gel	8.6-8.8	28-34	N/c
1,770' - 12,000'	Brine	10.0-10.2	28-34	N/c
12,000' - 11,383'	Oil Base	8.7-9.4	58-68	N/c - 6
11,383' - 16,786' Lateral	Oil Base	10.0-14.0	58-68	4 - 6
11,383' - 14,400' Pilot Hole	Oil Base	10.0-14.0	58-68	4 - 6



Grace 16 State Com #901H

Design B**CASING PROGRAM**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	DFmin Tension
16"	0' - 1,770'	13.375"	54.5#	J-55	STC	1.125	1.25	1.6
12.25"	0' - 4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.6
12.25"	4000' - 7800'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.6
8.75"	0' - 12,000'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.6
6.75"	0' - 16,786'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.6

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,770'	540	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 2.0% CaCl ₂ (TOC @ Surface)
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
7,800'	1130	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)
	480	10.8	1.32	Tail: Class C + 0.13% C-20
12,000'	20	14.8	3.67	Lead: Class H + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 7,300')
	270	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800 (TOC @ 7,300')
14,400' 6-3/4" Pilot Hole	630	15.6	1.19	Plug 1: Class H + 5% Salt + 3% Microbond (TOC @ 12,000')
16,786'	490	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 7,300')

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 (5,709') 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 (1.5 yld, 14.8 ppg) will be executed.

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,770'	Fresh - Gel	8.6-8.8	28-34	N/c
1,770' - 7,800'	Brine	10.0-10.2	28-34	N/c
7,800' - 12,000'	Oil Base	8.7-9.4	58-68	N/c - 6
12,000' - 16,786' Lateral	Oil Base	10.0-14.0	58-68	4 - 6
11,383' - 14,400' Pilot Hole	Oil Base	10.0-14.0	58-68	4 - 6



Grace 16 State Com #901H

Hydrogen Sulfide Plan Summary

A. All personnel shall receive proper H₂S training in accordance with Onshore Order III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

■ Well control equipment

- a. Flare line 150' from wellhead to be ignited by flare gun.
- b. Choke manifold with a remotely operated choke.
- c. Mud/gas separator

■ Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs — 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

■ H₂S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

■ Visual warning systems.

- a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
- b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.



Grace 16 State Com #901H

■ Mud program:

The mud program has been designed to minimize the volume of H₂S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H₂S bearing zones.

■ Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

■ Communication:

Communication will be via cell phones and land lines where available.



Grace 16 State Com #901H
Emergency Assistance Telephone List

PUBLIC SAFETY: **911 or**

Lea County Sheriff's Department		(575) 396-3611
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Rod Coffman

Fire Department:

Carlsbad		(575) 885-3125
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Artesia		(575) 746-5050
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Hospitals:

Carlsbad		(575) 887-4121
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Artesia		(575) 748-3333
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Hobbs		(575) 392-1979
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Dept. of Public Safety/Carlsbad		(575) 748-9718
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Highway Department		(575) 885-3281
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New Mexico Oil Conservation		(575) 476-3440
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NMOCD Inspection Group - South: Gilbert Cordero		(575)-626-0830
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U.S. Dept. of Labor		(575) 887-1174
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EOG Resources, Inc.

EOG / Midland	Office	(432) 686-3600
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Company Drilling Consultants:

David Dominique	Cell	(985) 518-5839
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Mike Vann	Cell	(817) 980-5507
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Drilling Engineer

Esteban Del Valle	Cell	(432) 269-7063
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Daniel Moose	Cell	(432) 312-2803
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Drilling Manager

Aj Dach	Office	(432) 686-3751
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	Cell	(817) 480-1167
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Drilling Superintendent

Jason Townsend	Office	(432) 848-9209
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	Cell	(210) 776-5131
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H&P Drilling

H&P Drilling	Office	(432) 563-5757
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H&P 651 Drilling Rig	Rig	(903) 509-7131
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Tool Pusher:

Johnathan Craig	Cell	(817) 760-6374
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Brad Garrett

Safety:

Brian Chandler (HSE Manager)	Office	(432) 686-3695
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	Cell	(817) 239-0251
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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
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1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 87410

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 87410
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA'S APPLY	3/9/2022