

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
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

Form C-101
August 1, 2011
Permit 181858

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702		2. OGRID Number 7377
4. Property Code 40402		3. API Number 30-025-41667
5. Property Name Thor 21		6. Well No. 001H

7. Surface Location

UL - Lot	P	Section	21	Township	26S	Range	33E	Lot Idn		Feet From	230	N/S Line	S	Feet From	380	E/W Line	E	County	Lea
----------	---	---------	----	----------	-----	-------	-----	---------	--	-----------	-----	----------	---	-----------	-----	----------	---	--------	-----

8. Proposed Bottom Hole Location

UL - Lot	A	Section	21	Township	26S	Range	33E	Lot Idn	A	Feet From	230	N/S Line	N	Feet From	380	E/W Line	E	County	Lea
----------	---	---------	----	----------	-----	-------	-----	---------	---	-----------	-----	----------	---	-----------	-----	----------	---	--------	-----

9. Pool Information

RED HILLS;UPPER BONE SPRING SHALE	97900
-----------------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3252
16. Multiple N	17. Proposed Depth 14047	18. Formation Bone Spring	19. Contractor	20. Spud Date 4/1/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	855	500	0
Int1	12.25	9.625	40	4000	1000	0
Int2	12.25	9.625	40	5100	1000	0
Prod	8.75	5.5	17	14047	2075	4600

Casing/Cement Program: Additional Comments

--

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ , if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Stan Wagner	Approved By: Paul Kautz
Title: Regulatory Analyst	Title: Geologist
Email Address: Stan_Wagner@eogresources.com	Approved Date: 2/20/2014 Expiration Date: 2/20/2016
Date: 2/20/2014 Phone: 432-686-3689	Conditions of Approval Attached

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 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

Form C-102
 August 1, 2011
 Permit 181858

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-41667	2. Pool Code 97900	3. Pool Name RED HILLS;UPPER BONE SPRING SHALE
4. Property Code 40402	5. Property Name Thor 21	6. Well No. 001H
7. OGRID No. 7377	8. Operator Name EOG RESOURCES INC	9. Elevation 3252

10. Surface Location

UL - Lot P	Section 21	Township 26S	Range 33E	Lot Idn	Feet From 230	N/S Line S	Feet From 380	E/W Line E	County Lea
---------------	---------------	-----------------	--------------	---------	------------------	---------------	------------------	---------------	---------------

11. Bottom Hole Location If Different From Surface

UL - Lot A	Section 21	Township 26S	Range 33E	Lot Idn	Feet From 230	N/S Line N	Feet From 380	E/W Line E	County Lea
12. Dedicated Acres 160.00			13. Joint or Infill		14. Consolidation Code			15. 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

	OPERATOR CERTIFICATION	
	<i>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(s) 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 a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
	E-Signed By: Stan Wagner Title: Regulatory Analyst Date: 2/20/2014	
	SURVEYOR CERTIFICATION	
<i>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.</i>		
Surveyed By: Michael Brown Date of Survey: 2/17/2014 Certificate Number: 18329		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8181 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-8178 Fax:(505) 334-8170
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

Form APD Comments

Permit 181858

PERMIT COMMENTS

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702		API Number: 30-025-41667
		Well: Thor 21 #001H

Created By	Comment	Comment Date
------------	---------	--------------

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-8161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 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

Form APD Conditions

Permit 181858

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-025-41667
	Well: Thor 21 #001H

OCD Reviewer	Condition
DMULL	Will require a directional survey with the C-104
DMULL	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
DMULL	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	1) SURFACE & INTERNEMIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water