Form 3160-3 (June 2015)

HOBBS OCD

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

UNITED STATES DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE IN	NTERIOR	TOM O	-W	ease NM0	Serial No. 26394		
DEPARTMENT OF THE INBUREAU OF LAND MANA APPLICATION FOR PERMIT TO DI	RILL OR I	REENTREC	Elv	6. If Indi	an, Allotce or	Tribe 1	Vame
1a. Type of Work: DRILL RE 1b. Type of Well: Oil Well Gas Well Ot	EENTER her ngle Zone	Multiple Zone		8. Lease	Name and We	ll No.	OM .
2. Name of Operator EOG RESOURCES INCORPORATED (7377)				9. API W	/ell No.	H	(10)
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone No. (713)651-70	o. (include area code 100	<u>"</u>)		and Pool, or E LS / WC-025		
 Location of Well (Report location clearly and in accordance w At surface NWSE / 2390 FSL / 2382 FEL / LAT 32.129 At proposed prod. zone LOT SWSE / 100 FSL / 2590 FE 	8898 / LONG	3 -103.5764774	03.5771 £		T. R. M. or Bl / T25S / R33I		Survey or Area
14. Distance in miles and direction from nearest town or post offi 22 miles	ce*			12. Coui LEA	ity or Parish		13, State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of ac 2560				init dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 33 feet	19. Proposed	d Depth / 19832 feet	20. BLM/ FED: NM	/BIA Bond No. in file //2308			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3398 feet	03/01/2019		start*	23. Estir 25 days	mated duration		
The following, completed in accordance with the requirements of (as applicable)	24. Attac		, and the F	fydraulic	Fracturing rule	per 4	3 CFR 3162.3-3
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Systes SUPO must be filed with the appropriate Forest Service Office 		4. Bond to cover the Item 20 above). 5. Operator certific 6. Such other site space. BLM.	ation.		·	·	·
25. Signature (Electronic Submission)	I .	(Printed/Typed) arrell / Ph: (432)84	18-9161			ate 9/19/2	2018
Title Regulatory Specialist						_	
Approved by (Signature) (Electronic Submission)	Cody	(Printed/Typed) Layton / Ph: (575)	234-5959			ate 6/03/2	2019
Title Assistant Field Manager Lands & Minerals		SBAD					
Application approval does not warrant or certify that the applican applicant to conduct operations thereon. Conditions of approval, if any, are attached.	nt holds legal	or equitable title to t	hose rights	in the sub	ject lease whic	ch wou	ild entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, nof the United States any false, fictitious or fraudulent statements						/ depai	tment or agency
Br A Rea pelant			-	1	11.	$\Box T$,9

(Continued on page 2)

Approval Date: 06/03/2019

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Form 3160-3, page 2)

Additional Operator Remarks

Location of Well

1. SHL: NWSE / 2390 FSL / 2382 FEL / TWSP: 25S / RANGE: 33E / SECTION: 16 / LAT: 32.1298898 / LONG: -103.5764774 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 2540 FSL / 2577 FEL / TWSP: 25S / RANGE: 33E / SECTION: 16 / LAT: 32.1303034 / LONG: -103.5771076 (TVD: 12047 feet, MD: 12059 feet)

PPP: NWNE / 2540 FSL / 2590 FEL / TWSP: 25S / RANGE: 33E / SECTION: 21 / LAT: 32.1233211 / LONG: -103.577151 (TVD: 12312 feet, MD: 14651 feet)

BHL: LOT SWSE / 100 FSL / 2590 FEL / TWSP: 25S / RANGE: 33E / SECTION: 21 / LAT: 32.1090788 / LONG: -103.5771564 (TVD: 12312 feet, MD: 19832 feet)

BLM Point of Contact

Name: Ciji Methola

Title: GIS Support - Adjudicator

Phone: 5752345924 Email: cmethola@blm.gov

(Form 3160-3, page 3)

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

(Form 3160-3, page 4)

PECOS DISTRICT DRILLING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME: | EOG RESOURCES INCORPORATED

LEASE NO.: NMNM026394

WELL NAME & NO.: GREEN DRAKE 16 FED COM 708H

SURFACE HOLE FOOTAGE: 2390'/S & 2382'/E BOTTOM HOLE FOOTAGE 100'/S & 2590'/E

LOCATION: | SECTION 16, T25S, R33E, NMPM

COUNTY: | LEA

Potash	• None	Secretary	Ր R-111-P
Cave/Karst Potential	• Low		↑ High
Variance	None	Flex Hose	Other
Wellhead	Conventional	Multibowl	
Other	☐4 String Area	☐Capitan Reef	□WIPP

A. Hydrogen Sulfide

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The 13 3/8" surface casing shall be set at approximately 1040 feet (a minimum of 25' into the Rustler Anhydrite and above the salt) and cemented to surface.
 - a. If cement does not circulate to surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of 6 hours after pumping cement, ideally between 8-10 hours after completing the cement job.
 - b. WOC time for a primary cement job will be a minimum of <u>8 hours</u> or <u>500 psi</u> compressive strength, whichever is greater. This is to include the lead cement.
 - c. If cement falls back, remedial cementing will be done prior to drilling out that string.
 - d. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.

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- 2. The minimum required fill of cement behind the 9 5/8" first intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. The minimum required fill of cement behind the 7 5/8" second intermediate casing is:
 - Cement should tie-back at least 200 feet into previous string. If cement does not circulate see B.1.a, c-d above.
- 4. The minimum required fill of cement behind the 5-1/2" production casing is:
 - Cement should tie-back at least **200 feet** into previous string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. BOP break testing is not permitted as a means to continue drilling on a different well on the same pad. Full BOP test must be conducted when skidding to another well.
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance approved to use a 5M annular. The annular must be tested to full working pressure (5,000 psi).
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed

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D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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GENERAL REQUIREMENTS

- 1. The BLM is to be notified in advance for a representative to witness:
 - a. Spudding well (minimum of 24 hours)
 - b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
 - c. BOPE tests (minimum of 4 hours)
 - \[
 \] Chaves and Roosevelt Counties
 \[
 \] Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
 \[
 \] During office hours call (575) 627-0272.
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 \] After office hours call (575)
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 393-3612
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log (one log per well pad is acceptable) run from TD to surface (horizontal well vertical portion of hole) shall

be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a

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larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done.

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The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

- 1. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.
- 2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,014'
Top of Salt	1,339'
Base of Salt	4,708'
Lamar	4,956'
Bell Canyon	4,979'
Cherry Canyon	5,964'
Brushy Canyon	7,560'
Bone Spring Lime	9,101'
1 st Bone Spring Sand	10,105
2 nd Bone Spring Shale	10,318'
2 nd Bone Spring Sand	10,608
3 rd Bone Spring Carb	11,155'
3 rd Bone Spring Sand	11,807'
Wolfcamp	12,265
TD	12,312'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0-400'	Fresh Water
Cherry Canyon	5,964'	Oil
Brushy Canyon	7,560'	Oil
1st Bone Spring Sand	10,105'	Oil
2 nd Bone Spring Shale	10,318'	Oil
2 nd Bone Spring Sand	10,608'	Oil
3 rd Bone Spring Carb	11,155'	Oil
3 rd Bone Spring Sand	11,807'	Oil
Wolfcamp	12,265'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 1,040' and circulating cement back to surface.

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0-1,040'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0 – 4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 4,800'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0-11,300*	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0' - 10,800'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
6.75"	10,800`-19,832'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60

Variance is requested to wave the centralizer requirements for the 7-5/8" FJ 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 wave any centralizer requirements for the 5-1/2" FJ 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 for the 7-5/8" x 5-1/2" casing (minimum clearance) from the top of the cement overlap to surface.

Cementing Program:

Depth	No. Sacks	Wt.	Yld Ft³/ft	Slurry Description
13-3/8" 1,040'	610	13.5	1.74	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk Cello- Flake (TOC @ Surface)
	160	14.8	1.35	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 840')
9-5/8"	760	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @
4,800'				Surface)
	300	14.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 3,840')
7-5/8"	210	10.8	3.67	Lead: Class C + 3% CaCl2 + 3% Microbond (TOC @ 4,300')
11,300'	100	14.8	2.38	Tail: Class H + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @
	1			9,800')
5-1/2"	730	14.8	1.31	Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @
19,832'				10,800')

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

	_						
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						

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig.

Before drilling out of the intermediate casing strings (both the 9-5/8" and 7-5/8" strings), the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig.

Pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 1,040'	Fresh - Gel	8.6-8.8	28-34	N/c
1,040' - 4,800'	Brine	10.0-10.2	28-34	N/c
4,800' – 11,300'	Oil Base	8.7-9.4	58-68	N/c - 6
11,300' – 19,832'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 8963 psig (based on 14.0 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,300' to Intermediate casing point.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

(A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both "A" and "B" sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 10,000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

Green Drake 16 Fed Com #708H Lea County, New Mexico

2390' FSL 2382' FEL Section 16 T-25-S, R-33-E

Proposed Wellbore

API: 30-025-****

KB: 3,423' GL: 3,398'

Bit Size: 17-1/2" 13-3/8", 54.5#, J-55, STC 0' - 1,040' TOC: 4,300' Bit Size: 12-1/4" 9-5/8", 40#, J-55 , LT&C 0' - 4,000' 9-5/8", 40#, HCK-55, LT&C 4,000' - 4,800' Bit Size: 8-3/4" TOC: 10,800' 7-5/8", 29.7#, HCP-110, FXL @ 0' - 11,300' KOP: 11,838' Bit Size: 6-3/4" 5-1/2", 20#, P-110EC, DWC/C-IS MS @ 0' - 10,800' 5-1/2", 20#, P-110EC, VAM SFC @ 10,800' - 19,832'

> Lateral: 19,832' MD, 12,312' TVD Upper Most Perf: 2540' FSL & 2590' FEL Sec. 16 Lower Most Perf: 100' FSL & 2590' FEL Sec. 21 BH Location: 100' FSL & 2590' FEL

Section 21 T-25-S, R-33-E



EOG Resources - Midland

Lea County, NM (NAD 83 NME) Green Drake 16 Fed Com #708H

OH

Plan: Plan #2

Standard Planning Report

13 February, 2019



Company: Project:

EDM 5000.14

EOG Resources - Midland Lea County, NM (NAD 83 NME) Green Drake 16 Fed Com

Well: Wellbore:

Site:

#708H ОН Plan #2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423.0usft

Grid

Minimum Curvature

Design: Project

Site

Lea County, NM (NAD 83 NME)

Map System:

US State Plane 1983 North American Datum 1983

System Datum:

Mean Sea Level

Geo Datum: Map Zone:

New Mexico Eastern Zone

Green Drake 16 Fed Com

Site Position: From:

Мар

Northing: Easting: 0.0 usft Slot Radius: 411,802.00 usft 773,380,00 usft

13-3/16 "

Latitude: Longitude:

Grid Convergence:

32" 7' 47.652 N 103" 35' 1.431 W

0.40 *

Well #708H

+N/-S +E/-W

11.0 usft 2,245.0 usft Northing: Easting:

411,813.00 usft 775,625.00 usft Latitude: Longitude:

32* 7' 47.605 N 103* 34* 35,324 W

Position Uncertainty

Position Uncertainty:

0.0 usft

Wellhead Elevation:

7/3/2018

Ground Level:

3,398.0 usft

Wellbore

Well Position

OH

Magnetics **Model Name** Sample Date

Declination (*) 6.84 Dip Angle (*)

Field Strength

(nT) 47,774.63897703

Plan #2 Design

Audit Notes:

Version:

Vertical Section:

Phase:

Depth From (TVD)

(usft)

0.0

PLAN

Tie On Depth: +E/-W (usft)

0.0

0.0

59,96

Direction (°) 181,19

Plan Survey Tool Program

Date 2/13/2019

Depth From (usft)

Depth To (usft)

Survey (Wellbore)

Tool Name

+N/-S

(usft)

0.0

Remarks

0.0

19,831.9 Plan #2 (OH)

IGRF2015

MWD

OWSG MWD - Standard

Measured Depth (usft)	Inclination (*)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (*/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,083.7	1.67	305.62	3,083.7	0.7	-1.0	2.00	2.00	0.00	305.62	
11,754.5	1.67	305.62	11,750.8	148.3	-207.0	0.00	0.00	0.00	0.00	
11,838.2	0.00	0.00	11,834.5	149.0	-208.0	2.00	-2.00	0.00	180.00	KOP(GD 16 FC #708
12,588.2	90.00	179.62	12,312.0	-328.5	-204.8	12.00	12.00	23.95	179.62	
19,831.9	90.00	179.62	12,312.0	-7,572.0	-157.0	0.00	0.00	0.00	0.00	PBHL(GD 16 FC #70



Database: Company: EDM 5000.14

EOG Resources - Midland Project: Lea County, NM (NAD 83 NME)

Site: Well: Wellbore: Green Drake 16 Fed Com #708H ОН Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423.0usft

Grid

esign:	Plan #2					DATE:			
lanned Survey					A. L		Maria Nasa		
Measured Depth (usft)	Inclination (*)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (*/100usft)	Build Rate (°/100usft)	Turn Rate (*/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0,0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0,00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600,0		0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0		0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0		0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0		0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0		0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0		0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
		0.00		0.0	0.0				
1,500.0			1,500.0			0.0	0.00	0.00	0.00
1,600.0		0.00 0.00	1,600.0 1,700.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00	0.00	0.00
1,700.0 1,800.0		0.00	1,800.0	0.0	0.0	0.0	00.00 00.0	0.00 0.00	0.00
1,900.0		0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0					0.0			0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0		0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0		0,00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0		0.00	2,800.0	0.0	0.0	0.0	0.00	0,00	0.00
2,900.0		0.00	2,900.0	0.0	0.0	0,0	0.00	0.00	0,00
3,000.0		0.00	3,000.0	0.0	0.0	0.0	0,00	0.00	0.00
3,083.7		305,62	3,083.7	0.7	-1.0	-0.7	2.00	2.00	0.00
3,100.0		305.62	3,100.0	1.0	-1.4	-1.0	0.00	0.00	0.00
3,200.0		305.62	3,199.9 3,299.9	2.7	-3.8	-2.6	0.00	0.00	0.00
3,300.0		305.62	•	4.4	-6.1	-4.3	0.00	0.00	0.00
3,400.0		305.62	3,399.9	6.1	-8.5	-5.9	0.00	0.00	0.00
3,500.0		305.62	3,499.8	7.8	-10.9	-7.6	0.00	0.00	0.00
3,600.0		305.62	3,599.8	9.5	-13.3	-9.2	0.00	0.00	0.00
3,700.0		305,62	3,699.7	11.2	-15.6	-10.9	0.00	0.00	0.00
3,800.0	1.67	305.62	3,799.7	12.9	-18.0	-12.5	0.00	0.00	0.00
3,900.0	1.67	305.62	3,899.6	14.6	-20.4	-14,2	0.00	0.00	0.00
4,000.0		305.62	3,999.6	16.3	-22.8	-15.8	0.00	0.00	0.00
4,100.0		305.62	4,099.6	18.0	-25.1	-17.5	0.00	0.00	0.00
4,200.0		305.62	4,199.5	19.7	-27.5	-19.1	0.00	0.00	0.00
4,300.0		305.62	4,299.5	21.4	-29.9	-20.8	0.00	0.00	0.00
4,400.0		305.62	4,399.4	23.1	-32.3	-22.4	0.00	0.00	0.00
4,500.0		305.62	4,499.4	24.8	-34.6	-24.1	0.00	0.00	0.00
4,600.0		305.62	4,599.3	26.5	-37.0	-25.7	0.00	0.00	0.00
4,700.0		305.62	4,699.3	28.2	-39.4	-27.4	0.00	0.00	0.00
4,800,0		305,62	4,799.3	29.9	-41.8	-29.1	0.00	0.00	0.00
4,900.0		305.62	4,899.2	31.6	-44.1	-30.7	0.00	0.00	0,00
5,000.0	1,67	305,62	4,999.2	33.3	-46.5	-32.4	0,00	0.00	0.00
5,100.0	1.67	305.62	5,099.1	35.0	-48.9	-34.0	0.00	0.00	0.00
5,200.6	1.67	305.62	5,199.1	36.7	-51.3	-35.7	0.00	0.00	0.00



Database: Company: Project:

Site:

EDM 5000.14

EOG Resources - Midland Lea County, NM (NAD 83 NME)

Green Drake 16 Fed Com

 Well:
 #708H

 Wellbore:
 OH

 Design:
 Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423.0usft

Grid

Design:	Plan #2								
Planned Survey							/		
Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (*/100usft)	Build Rate (°/100uaft)	Turn Rate (°/100usft)
5,300.0	1.67	305.62	5,299.0	38.4	-53.7	-37.3	0.00	0.00	0.00
C 400 0	4.07	205.00	5 200 0	40.4	50.0	20.0	0.00	0.00	0.00
5,400.0	1.67	305.62	5,399.0	40.1	-56.0	-39.0	0.00	0.00	0.00
5,500.0	1.67	305.62	5,499.0	41.8	-58.4	-40.6	0.00	0.00	0.00
5,600,0	1.67 1.67	305.62 305.62	5,598.9	43.5 45.2	-60.8 -63.2	-42.3 -43.9	0.00	0.00 0.00	0.00 0.00
5,700.0 5,800.0	1.67	305.62	5,698.9 5,798.8	46.9	-65.5	-45.6	0.00 0.00	0.00	0.00
5,900.0	1.67	305.62	5,898.8	48.6	-67.9	-47.2	0.00	0,00	0,00
6,000.0	1.67	305.62	5,998.7	50.3	-70.3	-48.9	0.00	0.00	0.00
6,100.0	1,67	305,62	6,098,7	52,0	-72.7	-50.5	0.00	0.00	0.00
6,200.0	1.67	305.62	6,198.7	53.8	-75.0	-52.2	0.00	0.00	0.00
6,300.0	1.67	305.62	6,298.6	55.5	-77.4	-53.8	0.00	0.00	0.00
6,400.0	1.67	305.62	6,398.6	57.2	-79.8	-55.5	0.00	0.00	0.00
6,500.0	1.67	305.62	6,498.5	58.9	-82.2	-57.1	0.00	0.00	0.00
6,600.0	1.67	305.62	6,598.5	60.6	-84.5	-58.8	0.00	0.00	0.00
6,700.0	1,67	305.62	6,698.4	62,3	-86,9	-60,4	0.00	0.00	0.00
6,800.0	1,67	305,62	6,798.4	64.0	-89.3	-62.1	0.00	0.00	0.00
6,900.0	1.67	305.62	6,898.4	65.7	-91.7	-63.8	0.00	0.00	0,00
7,000.0	1.67	305.62	6,998.3	67,4	-94.0	-65.4	0.00	0.00	0.00
7,100.0	1,67	305,62	7,098,3	69.1	-96.4	-67,1	0.00	0.00	0.00
7,200.0	1.67	305.62	7,198.2	70.8	-98.8	-68.7	0.00	0.00	0.00
7,300.0	1.67	305.62	7,298.2	72.5	-101.2	-70.4	0.00	0.00	0.00
7,400.0	1.67	305.62	7,398.1	74.2	-103.5	-72.0	0.00	0.00	0.00
7,500.0	1.67	305.62	7,498.1	75.9	-105.9	-73.7	0.00	0.00	0.00
7,600.0	1.67	305.62	7,598.1	77.6	-108.3	-75.3	0.00	0.00	0.00
7,700.0 7,800.0	1,67 1,67	305,62 305.62	7,698.0 7,798.0	79,3 81.0	-110.7 -113.0	-77.0 -78.6	0.00 0.00	0.00 0.00	0.00 0.00
7,900.0	1.67	305.62	7,897.9	82.7	-115.4	-80.3	0.00	0.00	0.00
8,000.0	1.67	305.62	7,997.9	84.4	-117.8	-81.9	0.00	0.00	0.00
8,100.0	1.67	305,62	8,097,8	86.1	-120.2	-83.6	0.00	0.00	0.00
8.200.0	1.67	305.62	8,197.8	87.8	-122.6	-85.2	0.00	0.00	0.00
8,300.0	1.67	305.62	8,297.8	89.5	-124.9	-86.9	0.00	0.00	0.00
8,400.0	1.67	305.62	8,397.7	91,2	-127.3	-88.5	0.00	0.00	0.00
8,500.0	1.67	305.62	8,497.7	92.9	-129.7	-90.2	0.00	0.00	0.00
8,600.0	1.67	305.62	8,597.6	94.6	-132.1	-91.8	0.00	0.00	0.00
8,700.0	1.67	305.62	8,697.6	96.3	-134.4	-93.5	0.00	0.00	0,00
8,800.0	1,67	305,62	8,797.5	98,0	-136.8	-95,1	0.00	0.00	0.00
8,900.0	1.67	305.62	8,897.5	99.7	-139.2	-96.8	0.00	0.00	0.00
9,000.0	1.67	305.62	8,997.5	101.4	-141.6	-98.5	0.00	0.00	0.00
9,100.0	1.67	305.62	9,097.4	103.1	-143.9	-100.1	0.00	0.00	0.00
9,200.0	1.67	305,62	9,197.4	104.8	-146.3	-101.8	0.00	0.00	0.00
9,300.0	1.67	305.62	9,297.3	106.5	-148.7	-103.4	0.00	0.00	0.00
9,400.0	1.67	305.62	9,397.3	108.2	-151.1	-105.1	0.00	0.00	0.00
9,500.0	1.67	305.62	9,497.2	109.9	-153.4	-106.7	0.00	0.00	0.00
9,600.0	1.67	305.62	9,597.2	111.6	-155.8	-108.4	0.00	0.00	0.00
9,700.0	1.67	305.62	9,697.2	113.3	-158.2	-110.0	0.00	0.00	0.00
9,800.0	1,67	305.62	9,797.1	115.0	-160.6	-111.7	0.00	0,00	0.00
9,900.0	1.67	305.62	9,897.1	116.7	-162.9	-113.3	0.00	0.00	0.00
10,000.0	1.67	305.62	9,997.0	118.4	-165.3	-115.0	0.00	0.00	0.00
10,100.0	1.67	305.62	10,097.0	120.1	-167.7	-116.6	0.00	0.00	0.00
10,200.0	1,67	305,62	10,196.9	121,8	-170.1	-118.3	0.00	0.00	0.00
10,300.0	1.67	305.62	10,296.9	123.5	-172.4	-119.9	0.00	0.00	0.00
10,400.0	1.67	305.62	10,396.9	125.2	-174.8	-121.6	0.00	0.00	0.00
10,500.0	1.67	305,62	10,496.8	126.9	-177.2	-123.2	0.00	0.00	0.00
10,600.0	1.67	305.62	10,596.8	128.6	-179.6	-124.9	0.00	0.00	0.00



Database: Company: Project: EDM 5000.14

EOG Resources - Midland Lea County, NM (NAD 83 NME)

Site: Well: Wellbore: Green Drake 16 Fed Com #708H OH Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423.0usft

Grid

esign:	Plan #2								
lanned Survey	The Landson		- X	. 5-12	HE AND SHOULD BE				
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(*)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(*/100usft)
10,700.0 10,800.0	1.67 1.67	305.62 305.62	10,696.7 10,796.7	130.3 132.0	-182.0 -184.3	-126.5 -128.2	0.00 0.00	0.00 0.00	0.00 0.00
10,900.0	1.67	305.62	10,896.6	133.7	-186.7	-129.8	0.00	0.00	0.00
11,000.0	1.67	305.62	10,996.6	135.4	-189.1	-131.5	0.00	0.00	0.00
11,100.0	1.67	305,62	11,096.6	137.1	-191.5	-133.1	0.00	0.00	0.00
11,200.0	1,67	305.62	11,196.5	138.9	-193.8	-134.8	0.00	0.00	0.00
11,300.0	1.67	305.62	11,296.5	140.6	-196.2	-136.5	0.00	0.00	0.00
11,400.0	1,67	305,62	11,396.4	142.3	-198.6	-138.1	0.00	0.00	0.00
11,500.0	1.67	305.62	11,496.4	144.0	-201.0	-139.8	0.00	0.00	0.00
11,600.0	1.67	305.62	11,596.3	145.7	-203.3	-141.4	0.00	0.00	0.00
11,700.0	1.67	305.62	11,696.3	147.4	-205.7	-143.1	0.00	0.00	0.00
11,754,5	1.67	305.62	11,750.8	148.3	-207.0	-144.0	0.00	0.00	0.00
11,800.0	0.76	305.62	11,796.3	148.9	-207.8	-144.5	2.00	-2.00	0.00
11,838.2	0.00	0.00	11,834.5	149.0	-208.0	-144.7	2.00	-2.00	0.00
KOP(GD 16									
11,850.0	1.41	179.62	11,846.3	148.9	-208.0	-144.5	12.00	12.00	0.00
11,875.0	4,41	179.62	11,871.2	147.6	-208.0	-143.2	12.00	12.00	0.00
11,900.0	7.41	179.62	11,896.1	145.0	-208.0	-140.7	12.00	12.00	0.00
11,925.0	10.41	179.62	11,920.8	141,1	-207.9	-136.8	12.00	12.00	0.00
11,950.0	13.41	179.62	11,945.3	136.0	-207.9	-131.6	12.00	12.00	0.00
11,975.0	16.41	179.62	11,969.4	129.5	-207.9	-125.2	12.00	12.00	0.00
12,000.0	19.41	179.62	11,993.2	121.9	-207.8	-117.5	12.00	12.00	0.00
12,025.0	22.41	179.62	12,016.5	112.9	-207.8	-108.6	12.00	12.00	0.00
12,050.0	25.41	179.62	12,039.4	102.8	-207.7	-98.5	12.00	12.00	0.00
12,075.0	28.41	179.62	12,061.7	91.5	-207.6	-87.2	12.00	12.00	0.00
12,100.0	31.41	179.62	12,083.4	79.0	-207.5	-74,7	12.00	12.00	0.00
12,125.0	34.41	179.62	12,104.3	65.4	-207.4	-61.1	12.00	12.00	0.00
12,150.0	37.41	179.62	12,124.6	50.8	-207.4	-46.5	12.00	12.00	0.00
12,175.0	40.41	179.62	12,144.0	35.1	-207.2	-30.8	12.00	12.00	0.00
12,200.0	43.41	179.62	12,162.6	18.4	-207.1	-14.1	12.00	12.00	0.00
12,213.6	45.04	179.62	12,172.3	8.9	-207.1	-4.6	12.00	12.00	0.00
FTP(GD 16	-	470.00	40.400.6		007.0		40.00	40.00	
12,225.0	46,41	179,62	12,180.3	0.7	-207.0	3.6	12,00	12.00	0.00
12,250.0	49.41	179.62	12,197.1	-17.8	-206.9	22.1	12.00	12.00	0.00
12,275.0	52.41	179.62	12,212,9	-37,2	-206,8	41.5	12.00	12.00	0.00
12,300.0	55.41	179.62	12,227.6	-57.4	-206.6	61.7	12.00	12.00	0.00
12,325.0	58.41	179.62	12,241.2	-78.4	-206.5	82.6	12.00	12.00	0.00
12,350.0	61.41	179.62	12,253.8	-100.0	-206.4	104.2	12.00	12.00	0.00
12,375.0	64.41	179,62	12,265.1	-122,2	-206,2	126,5	12.00	12.00	0.00
12,400.0	67.41	179.62	12,275.3	-145.1	-206.1	149.3	12.00	12.00	0.00
12,425.0	70,41	179.62	12,284.3	-168.4	-205.9	172.6	12.00	12.00	0.00
12,450,0	73,41	179.62	12,292,1	-192.2	-205.7	196.4	12.00	12.00	0.00
12,475,0	76.41	179.62	12,298.6	-216.3	-205.6	220,5	12,00	12.00	0.00
12,500.0	79.41	179.62	12,303.8	-240.7	-205.4	244.9	12.00	12.00	0.00
12,525.0		179.62	12,307,8	-265,4	-205.3	269,6	12.00	12.00	0.00
12,550,0		179.62	12,310.4	-290.3	-205.1	294.5	12.00	12.00	0.00
12,575.0		179.62	12,311.8	-315.2	-204.9	319.4	12.00	12.00	0.00
12,588.2		179.62	12,312.0	-328.5	-204.8	332.6	12.00	12.00	0.00
12,600.0		179.62	12,312.0	-340.2	-204.8	344.4	0.00	0.00	0.00
12,700.0		179.62	12,312.0	-440.2	-204.1	444.4	0.00	0.00	0.00
12,800.0		179.62	12,312.0	-540.2	-203.4	544.3	0.00	0.00	0.00
12,900,0		179.62	12,312.0	-640,2	-202,8	644,3	0.00	0.00	0.00
13,000.0		179.62	12,312.0	-740.2	-202.1	744.2	0.00	0.00	0.00
13,100.0	90.00	179.62	12,312.0	-840.2	-201.5	844.2	0.00	0.00	0.00



Database: Company: EDM 5000.14

EOG Resources - Midland

Project: Site: Lea County, NM (NAD 83 NME) Green Drake 16 Fed Com

Well: Wellbore: #708H OH Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423.0usft

Grid

Measured Depth (usft) 13,200,0 13,300,0 13,400,0 13,500,0 13,600,0 13,700,0 13,800,0 13,900,0 14,000,0 14,100,0 14,200,0 14,300,0 14,400,0 14,500,0 14,600,0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	Azimuth (*) 179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62	Vertical Depth (usft) 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	+N/-S (usft) -940.2 -1,040.2 -1,140.2 -1,240.2 -1,340.2 -1,440.2	+E/-W (usft) -200.8 -200.1 -199.5 -198.8 -198.2	Vertical Section (usft) 944.2 1,044.1 1,144.1 1,244.1	Dogleg Rate (*/100usft) 0.00 0.00 0.00 0.00	Build Rate (*/100usft) 0.00 0.00 0.00	Turn Rate (°/100usft) 0.00 0.00 0.00
Depth (usft) 13,200,0 13,300.0 13,400.0 13,500.0 13,600.0 13,700.0 13,800.0 14,000.0 14,100.0 14,200.0 14,400.0 14,400.0 14,500.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62	Depth (usft) 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	-940.2 -1,040.2 -1,140.2 -1,240.2 -1,340.2 -1,440.2	-200.8 -200.1 -199.5 -198.8	944.2 1,044.1 1,144.1	Rate (*/100usft) 0.00 0.00 0.00	Rate (*/100usft) 0.00 0.00	Rate (*/100usft) 0.00 0.00
13,200.0 13,300.0 13,400.0 13,500.0 13,600.0 13,700.0 13,800.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	-940.2 -1,040.2 -1,140.2 -1,240.2 -1,340.2 -1,440.2	-200.8 -200.1 -199.5 -198.8	944.2 1,044.1 1,144.1	0.00 0.00 0.00 0.00	(°/100usft) 0.00 0.00	(°/100usft) 0.00 0.00
13,300.0 13,400.0 13,500.0 13,600.0 13,700.0 13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	-1,040.2 -1,140.2 -1,240.2 -1,340.2 -1,440.2	-200.1 -199.5 -198.8	1,044.1 1,144.1	0.00 0.00	0.00	0.00
13,400.0 13,500.0 13,600.0 13,700.0 13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	-1,140.2 -1,240.2 -1,340.2 -1,440.2	-199.5 -198.8	1,144.1	0.00		
13,500.0 13,600.0 13,700.0 13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62	12,312,0 12,312.0 12,312.0 12,312.0	-1,240,2 -1,340.2 -1,440.2	-198.8			0.00	2.00
13,600.0 13,700.0 13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0	90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0	-1,340.2 -1,440.2		1,244.1	0.00		0.00
13,600.0 13,700.0 13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0	90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0	-1,340.2 -1,440.2			0.00	0.00	0.00
13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00 90.00	179,62 179,62 179,62	12,312.0			1,344.0	0.00	0.00	0,00
13,800.0 13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00 90.00	179,62 179,62 179,62	12,312.0		-197.5	1,444.0	0.00	0.00	0.00
13,900.0 14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00	179.62 179.62		-1,540.2	-196.8	1,543.9	0.00	0.00	0.00
14,000.0 14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90.00 90.00	179.62	12,312,0	-1,640.2	-196,2	1,643.9	0.00	0.00	0.00
14,100.0 14,200.0 14,300.0 14,400.0 14,500.0	90.00 90,00		12,312.0	-1,740.2	-195,5	1,743.9	0.00	0.00	0,00
14,200.0 14,300.0 14,400.0 14,500.0	90,00		12,312.0	-1,740.2	-194.9	1,743.9	0.00	0.00	0.00
14,300.0 14,400.0 14,500.0				-1,040.2	-134.5	1,043.0	0.00	0.00	
14,400.0 14,500.0	90.00	179,62	12,312,0	-1,940.2	-194.2	1,943.8	0.00	0.00	0.00
14,500.0		179.62	12,312.0	-2,040.2	-193.5	2,043.8	0.00	0.00	0.00
	90.00	179.62	12,312.0	-2,140.2	-192.9	2,143.7	0.00	0.00	0.00
14,600.0	90.00	179,62	12,312.0	-2,240.2	-192.2	2,243.7	0.00	0.00	0.00
	90.00	179.62	12,312.0	-2,340.2	-191.6	2,343,7	0.00	0.00	0.00
14,700.0	90.00	179,62	12,312.0	-2,440.2	-190.9	2,443.6	0.00	0.00	0.00
14,800.0	90.00	179.62	12,312.0	-2,540.2	-190.2	2,543.6	0.00	0.00	0.00
14,900.0	90.00	179.62	12,312.0	-2,640.2	-189,6	2,643,5	0.00	0.00	0.00
15,000.0	90.00	179.62	12,312.0	-2,740.2	-188.9	2,743.5	0.00	0.00	0.00
15,100.0	90.00	179.62	12,312.0	-2,740.2 -2,840.2	-188.3	2,743.5	0.00	0.00	0.00
					-100.5			0.00	0.00
15,200.0	90.00	179.62	12,312.0	-2,940.2	-187.6	2,943.4	0.00	0.00	0.00
15,300.0	90.00	179.62	12,312.0	-3,040.2	-186.9	3,043.4	0.00	0.00	0.00
15,400.0	90.00	179.62	12,312.0	-3,140.2	-186.3	3,143.4	0.00	0.00	0.00
15,500.0	90.00	179.62	12,312.0	-3,240.2	-185.6	3,243.3	0.00	0.00	0.00
15,600.0	90.00	179.62	12,312.0	-3,340.2	-185,0	3,343.3	0.00	0.00	0.00
15,700.0	90.00	179.62	12,312.0	-3,440.2	-184.3	3,443.2	0.00	0.00	0.00
15,800.0	90.00	179,62	12,312,0	-3,540.2	-183.6	3,543.2	0.00	0.00	0.00
15,900.0	90.00	179.62	12,312.0	-3,640.2	-183.0	3,643.2	0.00	0.00	0.00
16,000.0	90.00	179.62	12,312.0	-3,740.2	-182,3	3,743.1	0.00	0.00	0.00
16,100.0	90.00	179.62	12,312.0	-3,840.1	-181.7	3,843.1	0.00	0.00	0.00
16,200.0	90.00	179.62	12,312.0	-3,940.1	-181.0	3,943.1	0.00	0.00	0.00
16,300.0	90.00	179.62	12,312.0	-4,040.1	-180.3	4,043.0	0.00	0.00	0.00
16,400.0	90.00	179.62	12,312.0	-4,140.1	-179.7	4,143.0	0.00	0.00	0.00
16,500.0	90.00	179.62	12,312.0	-4,240.1	-179.0	4,242.9	0.00	0.00	0.00
16,600.0	90.00	179.62	12,312,0	-4,340.1	-178.3	4,342.9	0.00	0.00	0.00
16,700.0	90.00	179.62	12,312.0	-4,440.1	-177.7	4,442.9	0.00	0.00	0.00
16,800.0	90.00	179.62	12,312.0	-4,540.1	-177.0	4,542.8	0.00	0.00	0.00
16,900.0	90.00	179,62	12,312.0	-4,640.1	-176.4	4,642.8	0.00	0.00	0.00
17,000.0	90.00	179.62	12,312.0	-4.740.1	-175.7	4,742.8	0.00	0.00	0.00
17,100.0	90.00	179.62	12,312.0	-4,840.1	-175.0	4,842.7	0.00	0.00	0.00
17,200.0	90.00	179.62	12,312.0	-4,940.1	-174.4	4,942.7	0.00	0.00	0.00
17,300.0	90.00	179.62	12,312.0	-5,040.1	-173.7	5,042.6	0.00	0.00	0.00
17,400.0	90.00	179.62	12,312.0	-5,140.1	-173.1	5,142.6	0.00	0.00	0.00
17,500.0	90.00	179.62	12,312.0	-5,240.1	-172.4	5,242.6	0.00	0.00	0.00
17,600.0	90.00	179.62	12,312.0	-5,340.1	-171,7	5,342.5	0.00	0.00	0.00
17,700.0	90.00	179.62	12,312.0	-5,440.1	-171.1	5,442.5	0.00	0.00	0.00
17,800.0	90.00	179.62	12,312.0	-5,540.1	-170.4	5,542.5	0.00	0.00	0.00
17,900.0	90.00	179.62	12,312.0	-5,640.1	-169.8	5,642.4	0.00	0.00	0.00
18,000.0	90.00	179.62	12,312.0	-5,740.1	-169,1	5,742.4	0.00	0.00	0.00
18,100.0	90.00	179.62	12,312.0	-5,840.1	-168.4	5,842.3	0.00	0.00	0.00
18,200.0	90.00	179,62	12,312.0	-5,940.1	-167.8	5,942.3	0.00	0.00	0.00
18,300.0	90.00	179.62	12,312.0	-6,040.1	-167.1	6,042.3	0.00	0.00	0.00
18,400.0 18,500.0	90.00 90.00	179.62 179.62	12,312.0 12,312.0	-6,140.1 -6,240.1	-166.5 -165.8	6,142.2 6,242.2	0.00	0.00 0.00	0.00 0.00



Database: Company:

Project: Site:

Wellbore:

EDM 5000.14 EOG Resources - Midland Lea County, NM (NAD 83 NME)

Well:

Green Drake 16 Fed Com #708H ОН Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #708H

KB = 25 @ 3423.0usft KB = 25 @ 3423,0usft

Grid

inned Survey									
Measured Depth (usft)	Inclination (*)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (*/100usft)	Build Rate (°/100usft)	Turn Rate (*/100usft)
18,600.0	90.00	179.62	12,312.0	-6,340.1	-165.1	6,342.2	0.00	0.00	0.00
18,700.0 18,800.0 18,900.0 19,000.0 19,100.0 19,200.0 19,300.0 19,400.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.62 179.62 179.62 179.62 179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0 12,312.0	-6,440.1 -6,540.1 -6,640.1 -6,740.1 -6,840.1 -7,040.1 -7,140.1 -7,240.1	-164.5 -163.8 -163.2 -162.5 -161.8 -161.2 -160.5 -159.9 -159.9	6,442.1 6,542.1 6,642.0 6,742.0 6,842.0 6,941.9 7,041.9 7,141.9 7,241.8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
19,600.0 19,700.0 19,800.0 19,831.9	90.00 90.00 90.00	179.62 179.62 179.62 179.62	12,312.0 12,312.0 12,312.0 12,312.0	-7,340.1 -7,440.1 -7,540.1 -7,572.0	-158.5 -157.9 -157.2 -157.0	7,341.8 7,441.7 7,541.7 7,573.6	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00

Design Targets									
Target Name - hit/mlss target - Shape	Dip Angle	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(GD 16 FC #708H) - plan hits target cent - Point	0.00 er	0,00	11,834.5	149.0	-208.0	411,962.00	775,417.00	32" 7" 49.094 N	103* 34' 37.730 W
PBHL(GD 16 FC #708H - plan hits target cent - Point	0.00 er	0.00	12,312.0	-7,572.0	-157.0	404,241.00	775,468.00	32° 6' 32.689 N	103° 34' 37.767 W
FTP(GD 16 FC #708H) - plan misses target o - Point	0,00 center by 197.	0.00 8usft at 122	12,312.0 13.6usft MD	149.0 (12172,3 TVD	-208.0), 8.9 N, -207.	411,962.00 I E)	775,417.00	32° 7′ 49.094 N	103° 34' 37.730 W

This is a Patch T type separator sheet.



Form Type = "Well file form"

CODE 128 type barcode



Portrait Feed
New Form Follows...

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Form Type = "Well file form" code128 type barcode



Landscape Feed

New Form Follows...

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

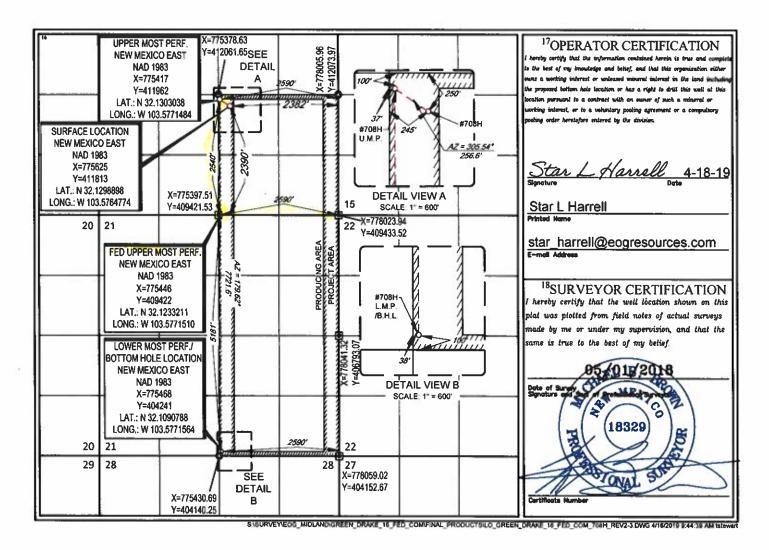
FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	'API Numbei 0-025-	16101		⁴ Pool Code 98180		³ Pool Name Red Hills/WC-025 G-09 S253309A					
Property (•	•	GREE	Property Na N DRAKE 1	hme 16 FED COM		Well Number #708H			
70GRID 1 7377				EO		Elevation 3398'					
					¹⁰ Surface Lo	cation					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
J	J 16 25-8		25-S 33-E		2390'	SOUTH	2382'	EAST	LEA		
			11 _E	Bottom Hol	e Location If D	ifferent From Sur	face				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
0	21	25-S	33-E	-	100'	SOUTH	2590'	EAST	LEA		
¹³ Dedicated Acres 480.00	¹³ Joint or	Infill 14Ce	ensolidation Cod	le ¹⁵ Orde	r 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.



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CODE 128 type barcode

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Landscape Feed
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Intent	x	As Drill	led									
API#	25- 40	5/101										
\vdash	ator Nar		l			Property	/ Name	:				Well Number
EOG	Resou	irces, Ind) .			Green	Orake	16 Fed C	Com			708H
Kick O	off Point	(KOP)										
UL	Section 16	Township 25S	Range 33E	Lot	Feet 2539	Fro	n N/S	Feet 2590	Fron	n E/W	County	
Latitu	de		OOL	l	Longitu	de		12000	Lac		NAD	
N 32	2.1303	034			W -1	03.577	1473				83	
First T	ake Poir	t (FTP)										
UL J	Section 16	Township 25S	Range 33E	Lot	Feet 2540	Fro So	n N/S	Feet 2577	Fron	n E/W	County	
Latitu	de		002		Longitu	de		12011	Luc		NAD	<u> </u>
N 3	2.1303	034			W -1	-103.5771076 83						
Last T	ake Poin	t (LTP)										
UL O	Section 21	Township 25S	Range 33E	Lot	Feet 100	From N/ South	S Fee 259		t E/W	Coun Lea	ty	
Latitu N 3	^{ide} 2.1090	788			Longitu	_{de} 03.577	1564			NAD 83		
140	2.1000	7.00			1 * * * *	00.077	1001			100		
le thie	wall tha	defining v	vall far th	م لامية	zantal Cr	aasina Ur	l	No				
15 (1115	well the	denning v	veli ioi tii	e nori.	zontai 5ț	Jacing Oi	itr	140				
					_							
Is this	well an	infill well?		Yes								
	l is yes p ng Unit.	lease prov	ide API if	availal	ole, Opei	rator Nan	ne and	well numb	er for	Defini	ng well fo	or Horizontal
API#			1									
)25-per	nding										
1 '	rator Na		•			Propert	•				-	Well Number
EOC	3 Reso	urces Inc	.			Green	Drake	16 Fed (Com			712H
												K7 06/29/2018

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Form Type = "Well file form"

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Portrait Feed
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Form Type = "Well file form" code:



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State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 09/17/2018			
☑ Original☑ Amended - Reason for Amendment:	Operator & OGRID No.:	EOG Resources, Inc. 7377	

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Green Drake 16 Fed Com 708H	30-025-*** 46101	J-16-25S-33E	2390 FSL & 2382 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 709H	30-025-45936	J-16-25S-33E	2390 FSL & 2349 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 710H	30-025-***	J-16-25S-33E	2390 FSL & 2316 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 711H	30-025-***	J-16-25S-33E	2395 FSL & 1340 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 712H	30-025-***	I-16-25S-33E	2395 FSL & 1307 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 713H	30-025-***	I-16-25S-33E	2390 FSL & 689 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 714H	30-025-45937	I-16-25S-33E	2390 FSL & 656 FEL	±3500	None Planned	APD Submission
Green Drake 16 Fed Com 715H	30-025-45938	I-16-25S-33E	2390 FSL & 623 FEL	±3500	None Planned	APD Submission

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Enterprise Field Services and will be connected to EOG Resources provides (periodically) to Enterprise Field Services a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, EOG Resources and Enterprise Field Services have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enterprise Field Services Processing Plant located in Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on **Enterprise Field Services** system at that time. Based on current information, it is **EOG Resources**' belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
 - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines