Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BURI	EAU OF LAND MANAGEMENT	5. Lease Serial No.	5. Lease Serial No. NMNM108971				
Do not use this t	OTICES AND REPORTS ON Vorm for proposals to drill or to Use Form 3160-3 (APD) for su	o re-enter an		6. If Indian, Allottee or Tribe Name			
SUBMIT IN	TRIPLICATE - Other instructions on pag	ge 2	7. If Unit of CA/Agr	reement, Name and/or No.			
1. Type of Well	_		9 Wall Name and N	0			
Oil Well Gas W	_		8. Well Name and N	<sup>0.</sup> JEFE 29 FED COM/707H			
2. Name of Operator EOG RESOURC	CES INCORPORATED		9. API Well No. 30-0	025-48850			
3a. Address 1111 BAGBY SKY LOB	BY 2, HOUSTON, TX 77( 3b. Phone No. (713) 651-70	. (include area code 000		r Exploratory Area :53216D; UPPER WOLFCAMP			
4. Location of Well (Footage, Sec., T.,R SEC 29/T25S/R32E/NMP	.,M., or Survey Description)		11. Country or Parisi	h, State			
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE	OF NOTICE, REPORT OR OT	THER DATA			
TYPE OF SUBMISSION		TYI	PE OF ACTION				
Notice of Intent	Acidize Dee Alter Casing Hyd	pen Iraulic Fracturing	Production (Start/Resume Reclamation	Water Shut-Off Well Integrity			
Subsequent Report		v Construction	Recomplete	<b>V</b> Other			
Final Abandonment Notice		g and Abandon g Back	Temporarily Abandon Water Disposal				
is ready for final inspection.)  EOG respectfully requests an the following changes:  Change name from 707H to Je  Change target formation to Wo  Update casing and cement pro	olfcamp U3.	nis well to reflect		the operator has detennined that the site			
14. I hereby certify that the foregoing is STAR HARRELL / Ph: (432) 848-9	true and correct. Name (Printed/Typed) 161	Regulatory Title	/ Specialist				
Signature		Date	09/21/	2022			
	THE SPACE FOR FED	ERAL OR ST	ATE OFICE USE				
Approved by							
KEITH P IMMATTY / Ph: (575) 988	3-4722 / Approved	Title ENG	NEER	10/14/2022 Date			
	ned. Approval of this notice does not warran equitable title to those rights in the subject l duct operations thereon.		RLSBAD	,			
	3 U.S.C Section 1212, make it a crime for a ents or representations as to any matter with		y and willfully to make to any	department or agency of the United States			

(Instructions on page 2)

### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law 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, are either shown below, will be issued by or may be obtained from the local Federal office.

### SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. 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 the 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., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

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 Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

### **Additional Information**

### **Location of Well**

 $0. \ SHL: \ NESE\ /\ 1707\ FSL\ /\ 770\ FEL\ /\ TWSP: \ 25S\ /\ RANGE: \ 32E\ /\ SECTION: \ 29\ /\ LAT: \ 32.0988204\ /\ LONG: \ -103.6911205\ (\ TVD: \ 0\ feet\ ,\ MD: \ 0\ feet\ )$   $PPP: \ NESE\ /\ 2536\ FSL\ /\ 660\ FEL\ /\ TWSP: \ 25S\ /\ RANGE: \ 32E\ /\ SECTION: \ 29\ /\ LAT: \ 32.1010996\ /\ LONG: \ -103.69077\ (\ TVD: \ 11705\ feet\ ,\ MD: \ 11752\ feet\ )$   $BHL: \ SESE\ /\ 100\ FSL\ /\ 660\ FEL\ /\ TWSP: \ 25S\ /\ RANGE: \ 32E\ /\ SECTION: \ 32\ /\ LAT: \ 32.0798932\ /\ LONG: \ -103.6908066\ (\ TVD: \ 11970\ feet\ ,\ MD: \ 19569\ feet\ )$ 



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

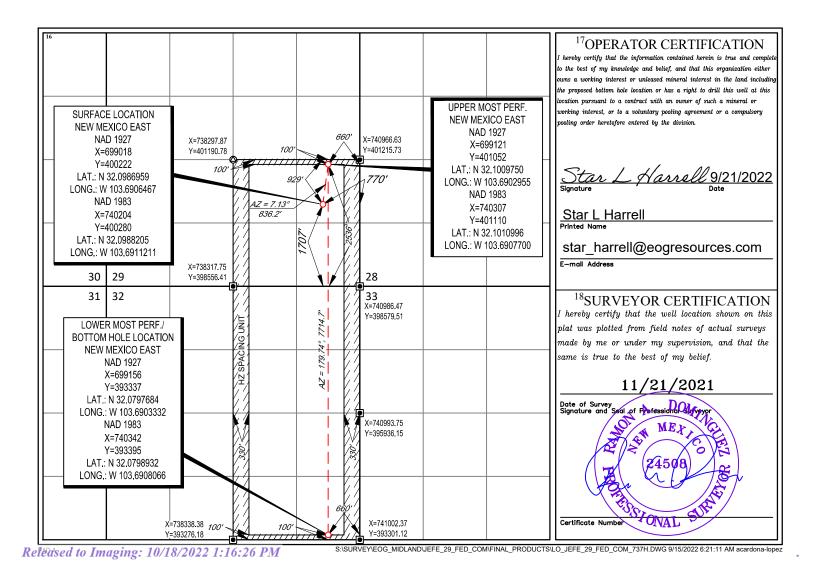
### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name						
30-025-48850		98270	WC-025 G-08 S253216D; Upper Wolfcamp						
1	<sup>4</sup> Property Code		<sup>5</sup> Pr	operty Name	<sup>6</sup> Well Number				
	330803		JEFE 2	29 FED COM	737H				
	<sup>7</sup> OGRID No.		<sup>8</sup> O <sub>I</sub>	perator Name	<sup>9</sup> Elevation				
	7377		EOG RESOURCES, INC.						

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
I	29	25-S	32-E	-	1707'	SOUTH	770'	EAST	LEA		
	11Bottom 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		
P	32	25-S	32-E	-	100'	SOUTH	660'	EAST	LEA		
12Dedicated Acres	<sup>13</sup> Joint or I	nfill <sup>14</sup> Co	nsolidation Cod	le <sup>15</sup> Ord	er No.			•			
480.00											

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.





### **Revised Permit Information 08/22/2022:**

Well Name: Jefe 29 Fed Com 737H

Location: SHL: 1707' FSL & 770' FEL, Section 29, T-25-S, R-32-E, Lea Co., N.M. BHL: 100' FSL & 660' FEL, Section 32, T-25-S, R-32-E, Lea Co., N.M.

**Casing Program:** 

Hole	Interval MD		Interval TVD		Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
12-1/4"	0	1,190	0	1,190	9-5/8"	36#	J-55	LTC
8-3/4"	0	10,937	0	10,900	7-5/8"	29.7#	HCP-110	FXL
6-3/4"	0	10,437	0	10,400	6"	24.5#	P110-EC	VAM Sprint-SF
6-3/4"	10,437	10,937	10,400	10,900	5-1/2"	20#	P110-EC	VAM Sprint SF
6-3/4"	10,937	19,912	10,900	12,315	5-1/2"	20#	P110-EC	DWC/C IS MS

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:** 

		Wt.	Yld	Slurry Description
Depth	No. Sacks	ppg	Ft3/sk	oldiny Description
1,190' 9-5/8''	330	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 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 @ 990')
10,900' 7-5/8''	500	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 6,680')
	1140	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
19,912' 5-1/2''	820	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,400')



Jefe 29 Fed Com 737H

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 (6,875') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 140 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:**

<b>Measured Depth</b>	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,190'	Fresh - Gel	8.6-8.8	28-34	N/c
1,190' – 10,900'	Brine	10.0-10.2	28-34	N/c
10,900' - 11,875'	Oil Base	8.7-9.4	58-68	N/c - 6
11,875' – 19,912' Lateral	Oil Base	10.0-14.0	58-68	4 - 6



### Wellhead & Offline Cementing:

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 30 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to
  offline cement and/or remediate (if needed) any surface or intermediate sections,
  according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside
  the casing will be monitored via the valve on the TA cap as per standard batch
  drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"



1707' FSL 770' FEL **Revised Wellbore** 

KB: 3371' GL: 3346'

**Section 29** 

T-25-S, R-32-E

API: 30-025-48850

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

@ 0' - 1,190'

Bit Size: 8-3/4"

7-5/8", 29.7#, HCP-110, FXL,

@ 0' - 10,937'

Bit Size: 6-3/4"

6", 24.5#, P110-EC, VAM Sprint-SF,

@ 0' - 10,437'

5-1/2", 20#, P110-EC, VAM Sprint SF,

@ 10,437' - 10,937'

5-1/2", 20#, P110-EC, DWC/C IS MS,

@ 10,937' - 19,912'

KOP: 11,875' MD, 11,838' TVD

EOC: 12,625' MD, 12,315' TVD

TOC: 10,437' MD, 10,400' TVD

Lateral: 19,912' MD, 12,315' TVD

**Upper Most Perf:** 

2536' FSL & 660' FEL Sec. 29

**Lower Most Perf:** 

100' FSL & 660' FEL Sec. 32

BH Location: 100' FSL & 660' FEL

Sec. 32

T-25-S R-32-E



### **Design B**

### 4. CASING PROGRAM

Hole	Interval MD		Interval MD Interval TVD		Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
13"	0	1,190	0	1,190	10-3/4"	40.5#	J-55	STC
9-7/8"	0	10,937	0	10,900	8-3/4"	38.5#	P110-EC	Vam Sprint-SF
7-7/8"	0	11,875	0	11,838	6"	24.5#	P110-EC	DWC/C IS
7.875"	11,875	19,912	11,838	12,315	5-1/2"	20#	P110-EC	DWC/C IS MS

Variance is requested to waive the centralizer requirements for the 8-3/4" casing in the 9-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 9-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 6" casing in the 7-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 7-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 6" casing by 8-3/4" 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:**

<b>D</b> 41	N. C. I	Wt. Yld Ft3/sk		Slurry Description
Depth	No. Sacks	ppg	Ft3/sk	
1,190'	310	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk
10-3/4"				Cello-Flake (TOC @ Surface)
	70	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 990')
10,900'	560	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3%
8-3/4"				Microbond (TOC @ 6,680')
	1300	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-
				M + 6% Bentonite Gel (TOC @ surface)
19,912'	1340	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond
6"				(TOC @ 10,400')



EOG requests variance from minimum standards to pump a two stage cement job on the 8-3/4" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (6,875') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 297 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.

### Wellhead & Offline Cementing:

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 30 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"



1707' FSL 770' FEL **Proposed Wellbore** 

KB: 3371' GL: 3346'

**Section 29** 

T-25-S, R-32-E

API: 30-025-48850

Bit Size: 13" 10-3/4", 40.5#, J-55, STC, @ 0' - 1,190' Bit Size: 9-7/8" 8-3/4" 38.5#, P110-EC, Vam Sprint-SF, @ 0' - 10,937' TOC: 10,437' MD, 10,400' TVD Lateral: 19,912' MD, 12,315' TVD Bit Size: 7-7/8" **Upper Most Perf:** 2536' FSL & 660' FEL Sec. 29 6", 24.5#, P110-EC, DWC/C IS, **Lower Most Perf:** @ 0' - 11,875' 100' FSL & 660' FEL Sec. 32 5-1/2", 20#, P110-EC, DWC/C IS MS, BH Location: 100' FSL & 660' FEL @ 11,875' - 19,912' Sec. 32 T-25-S R-32-E KOP: 11,875' MD, 11,838' TVD

EOC: 12,625' MD, 12,315' TVD



2/24/2022

### **Cement Program**

1. No changes to the cement program will take place for offline cementing.

### **Summarized Operational Procedure for Intermediate Casing**

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment back pressure valves.
  - a. Float equipment is equipped with two back pressure valves rated to a minimum of 5,000 psi.
- 2. Land production casing on mandrel hanger through BOP.
  - a. If casing is unable to be landed with a mandrel hanger, then the casing will be cemented online.
- 3. Break circulation and confirm no restrictions.
  - a. Ensure no blockage of float equipment and appropriate annular returns.
  - b. Perform flow check to confirm well is static.
- 4. Set pack-off
  - a. If utilizing a fluted/ported mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid, remove landing joint, and set annular packoff through BOP. Pressure test to 5,000 psi for 10 min.
  - b. If utilizing a solid mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid. Pressure test seals to 5,000 psi for 10 min. Remove landing joint through BOP.
- 5. After confirmation of both annular barriers and the two casing barriers, install TA plug and pressure test to 5,000 psi for 10 min. Notify the BLM with intent to proceed with nipple down and offline cementing.
  - a. Minimum 4 hrs notice.
- 6. With the well secured and BLM notified, nipple down BOP and secure on hydraulic carrier or cradle.
  - a. Note, if any of the barriers fail to test, the BOP stack will not be nippled down until after the cement job has concluded and both lead and tail slurry have reached 500 psi.
- 7. Skid/Walk rig off current well.
- 8. Confirm well is static before removing TA Plug.
  - a. Cementing operations will not proceed until well is under control. (If well is not static, notify BLM and proceed to kill)
  - b. Casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing.
  - c. Well control plan can be seen in Section B, Well Control Procedures.
  - d. If need be, rig can be moved back over well and BOP nippled back up for any further remediation.



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- e. Diagram for rig positioning relative to offline cementing can be seen in Figure 4.
- 9. Rig up return lines to take returns from wellhead to pits and rig choke.
  - a. Test all connections and lines from wellhead to choke manifold to 5,000 psi high for 10 min.
  - b. If either test fails, perform corrections and retest before proceeding.
  - c. Return line schematics can be seen in Figure 3.
- 10. Remove TA Plug from the casing.
- 11. Install offline cement tool.
  - a. Current offline cement tool schematics can be seen in Figure 1 (Cameron) and Figure 2 (Cactus).
- 12. Rig up cement head and cementing lines.
  - a. Pressure test cement lines against cement head to 80% of casing burst for 10 min.
- 13. Break circulation on well to confirm no restrictions.
  - a. If gas is present on circulation, well will be shut in and returns rerouted through gas buster.
  - b. Max anticipated time before circulating with cement truck is 6 hrs.
- 14. Pump cement job as per plan.
  - a. At plug bump, test casing to 0.22 psi/ft or 1500 psi, whichever is greater.
  - b. If plug does not bump on calculated, shut down and wait 8 hrs or 500 psi compressive strength, whichever is greater before testing casing.
- 15. Confirm well is static and floats are holding after cement job.
  - a. With floats holding and backside static:
    - i. Remove cement head.
  - b. If floats are leaking:
    - i. Shut-in well and WOC (Wait on Cement) until tail slurry reaches 500 psi compressive strength and the casing is static prior to removing cement head.
  - c. If there is flow on the backside:
    - i. Shut in well and WOC until tail slurry reaches 500 psi compressive strength. Ensure that the casing is static prior to removing cement head.
- 16. Remove offline cement tool.
- 17. Install night cap with pressure gauge for monitoring.
- 18. Test night cap to 5,000 psi for 10 min.



2/24/2022

### **Example Well Control Plan Content**

### A. Well Control Component Table

The table below, which covers the cementing of the <u>5M MASP (Maximum Allowable Surface Pressure) portion of the well</u>, outlines the well control component rating in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nippled up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2" 1502 Lo-Torque Valves	15M

### **B.** Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while circulating and cementing through the Offline Cement Adapter.

### **General Procedure While Circulating**

- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.

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- 6. Read and record the following:
  - a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

### **General Procedure While Cementing**

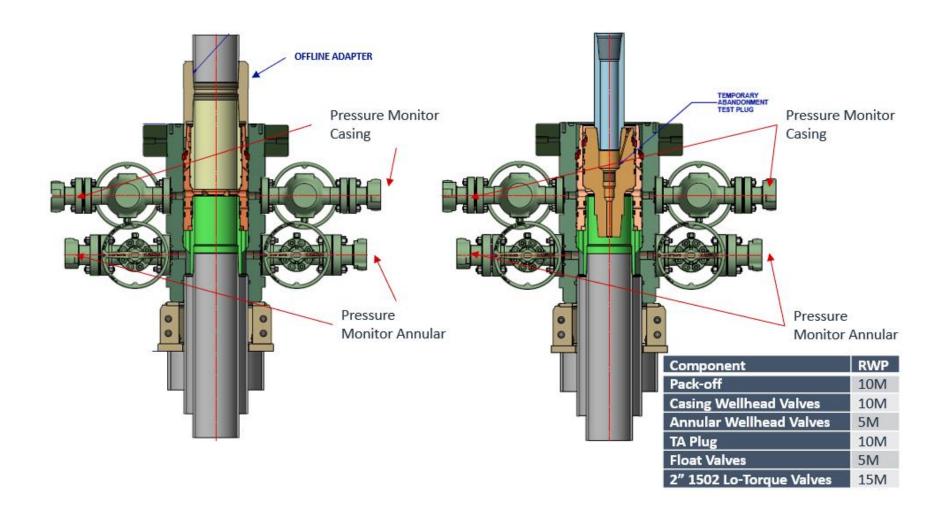
- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.
- 6. Open rig choke and begin pumping again taking returns through choke manifold and mud/gas separator.
- 7. Continue to place cement until plug bumps.
- 8. At plug bump close rig choke and cement head.
- 9. Read and record the following
  - a. SICP and AP
  - b. Pit gain
  - c. Time
  - d. Shut-in annulus valves on wellhead

### **General Procedure After Cementing**

- 1. Sound alarm (alert crew).
- 2. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 3. Confirm shut-in.
- 4. Notify tool pusher/company representative.
- 5. Read and record the following:
  - a. SICP and AP
  - b. Pit gain
  - c. Time
  - d. Shut-in annulus valves on wellhead



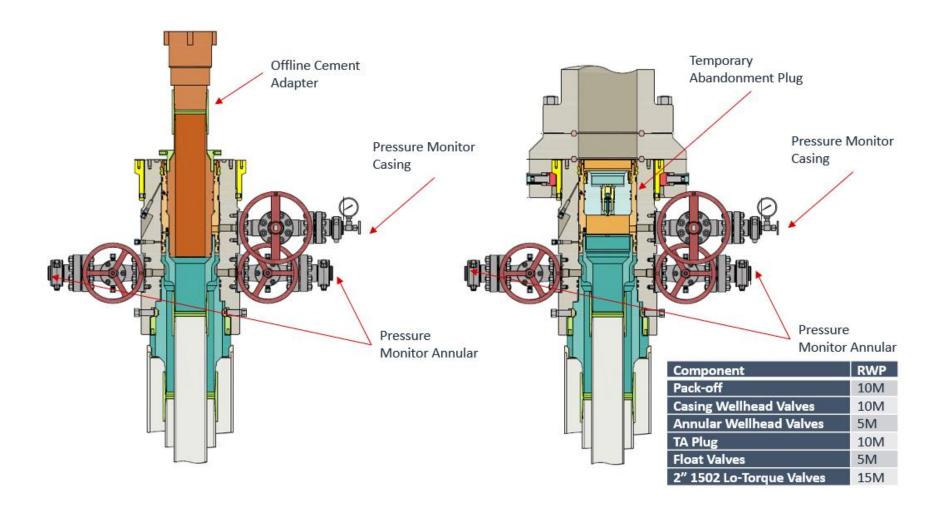
Figure 1: Cameron TA Plug and Offline Adapter Schematic





2/24/2022

Figure 2: Cactus TA Plug and Offline Adapter Schematic

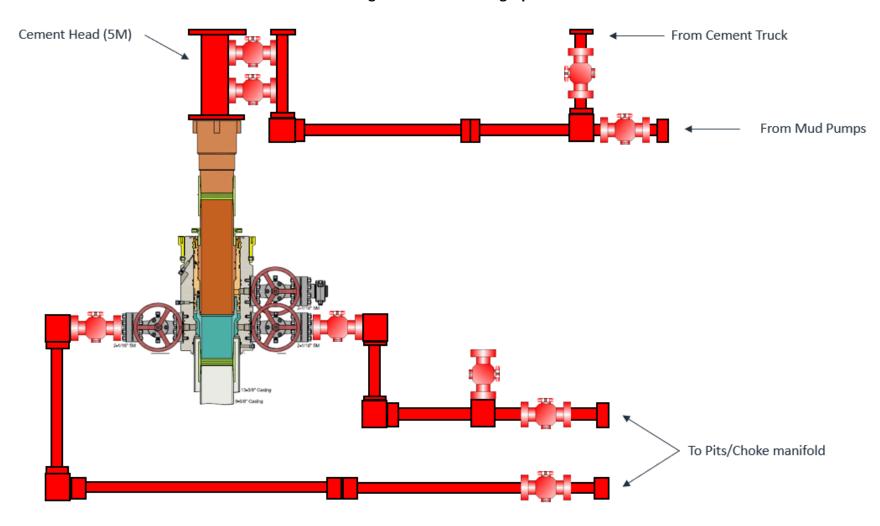


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2/24/2022

Figure 3: Back Yard Rig Up



\*\*\* All Lines 10M rated working pressure

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2/24/2022

Figure 4: Rig Placement Diagram



Page | 8



## **Midland**

Lea County, NM (NAD 83 NME) Jefe 29 Fed Com #737H

OH

Plan: Plan #0.1 RT

# **Standard Planning Report**

20 September, 2022



### Planning Report

Database: Company: PEDM Midland

Project:

Lea County, NM (NAD 83 NME)

Site: Jefe 29 Fed Com Well:

Wellbore:

#737H ОН

Design:

Plan #0.1 RT

Local Co-ordinate Reference:

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well #737H

kb = 25' @ 3373.0usft

kb = 25' @ 3373.0usft

Minimum Curvature

Project

Map System:

Lea County, NM (NAD 83 NME)

Geo Datum:

Map Zone:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Jefe 29 Fed Com Site

Site Position: From:

Мар

Northing: Easting:

400,660.00 usft 736,197.00 usft

Latitude: Longitude:

32° 5' 59.750 N 103° 42' 14.588 W

**Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 "

Well #737H

**Well Position** 

**Position Uncertainty** 

+N/-S +E/-W

0.0 usft 0.0 usft 0.0 usft

Northing: Easting:

400,280.00 usft 740,204.00 usft Wellhead Elevation: usft Latitude: Longitude: **Ground Level:** 

32° 5' 55.756 N 103° 41' 28.032 W

3,348.0 usft

0.34 ° **Grid Convergence:** 

Wellbore

ОН

**Model Name** Declination Field Strength Magnetics Sample Date Dip Angle (°) (°) (nT) IGRF2020 47,503.39716344 7/15/2020 6.70 59.80

Design Audit Notes:

Version:

Phase: Vertical Section: Depth From (TVD) (usft)

Plan #0.1 RT

PLAN

Tie On Depth: +E/-W

(usft)

0.0

0.0

Direction (°) 178.85

Plan Survey Tool Program

Date 9/20/2022

0.0

**Depth From** Depth To (usft)

(usft)

Survey (Wellbore)

**Tool Name** 

Remarks

19,912.5 Plan #0.1 RT (OH) 0.0

EOG MWD+IFR1 MWD + IFR1

+N/-S

(usft)

0.0

Plan Sections										
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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,443.6	4.87	6.68	1,443.3	10.3	1.2	2.00	2.00	0.00	6.68	
11,631.3	4.87	6.68	11,594.2	869.7	101.8	0.00	0.00	0.00	0.00	
11,874.9	0.00	0.00	11,837.5	880.0	103.0	2.00	-2.00	0.00	180.00	KOP(Jefe 29 Fed Cor
12,095.4	26.46	180.00	12,050.2	830.0	103.0	12.00	12.00	81.65	180.00	FTP(Jefe 29 Fed Con
12,624.9	90.00	179.74	12,314.9	402.5	104.4	12.00	12.00	-0.05	-0.30	
19,912.5	90.00	179.74	12,315.0	-6,885.0	138.0	0.00	0.00	0.00	0.00	PBHL(Jefe 29 Fed Co

# **b**eog resources

### Planning Report

Database: Company: PEDM Midland

Lea County, NM (NAD 83 NME)

Project: Lea County, NM (I Site: Jefe 29 Fed Com

 Well:
 #737H

 Wellbore:
 OH

 Design:
 Plan #0.1 RT

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #737H

kb = 25' @ 3373.0usft

kb = 25' @ 3373.0usft Grid

ign:	Plan #0.1 RT								
nned 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)
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	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00			0.0	0.0	0.0	0.00		
700.0		0.00	700.0					0.00	0.00
0.008	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	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00		,	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0		0.00	1,200.0						
1,300.0	2.00	6.68	1,300.0	1.7	0.2	-1.7	2.00	2.00	0.00
1,400.0	4.00	6.68	1,399.8	6.9	0.8	-6.9	2.00	2.00	0.00
1,443.6	4.87	6.68	1,443.3	10.3	1.2	-10.3	2.00	2.00	0.00
1,500.0	4.87	6.68	1,499.5	15.0	1.8	-15.0	0.00	0.00	0.00
1,600.0	4.87	6.68	1,599.1	23.5	2.7	-23.4	0.00	0.00	0.00
1,700.0	4.87	6.68	1,698.8	31.9	3.7	-31.8	0.00	0.00	0.00
1,800.0	4.87	6.68	1,798.4	40.3	4.7	-40.2	0.00	0.00	0.00
1,900.0	4.87	6.68	1.898.1	48.8	5.7	-48.7	0.00	0.00	0.00
2,000.0	4.87	6.68	1,997.7	57.2	6.7	-57.1	0.00	0.00	0.00
2,100.0	4.87	6.68	2,097.3	65.7	7.7	-65.5	0.00	0.00	0.00
2,200.0	4.87	6.68	2,197.0	74.1	8.7	-73.9	0.00	0.00	0.00
2,300.0	4.87	6.68	2,296.6	82.5	9.7	-82.3	0.00	0.00	0.00
2,400.0	4.87	6.68	2,396.3	91.0	10.6	-90.7	0.00	0.00	0.00
2,500.0	4.87	6.68	2,495.9	99.4	11.6	-99.1	0.00	0.00	0.00
2,600.0	4.87	6.68	2,595.5	107.8	12.6	-107.6	0.00	0.00	0.00
2,700.0	4.87	6.68	2,695.2	116.3	13.6	-116.0	0.00	0.00	0.00
2,800.0	4.87	6.68	2,794.8	124.7	14.6	-124.4	0.00	0.00	0.00
2,900.0	4.87	6.68	2,894.4	133.1	15.6	-132.8	0.00	0.00	0.00
3,000.0	4.87	6.68	2,994.1	141.6	16.6	-141.2	0.00	0.00	0.00
3,100.0	4.87	6.68	3,093.7	150.0	17.6	-149.6	0.00	0.00	0.00
3,200.0	4.87	6.68	3,193.4	158.5	18.5	-158.0	0.00	0.00	0.00
3,300.0	4.87	6.68	3,293.0	166.9	19.5	-166.5	0.00	0.00	0.00
3,400.0	4.87	6.68	3,392.6	175.3	20.5	-174.9	0.00	0.00	0.00
3,500.0	4.87	6.68	3,492.3	183.8	21.5	-183.3	0.00	0.00	0.00
3,600.0	4.87	6.68	3,591.9	192.2	22.5	-103.3	0.00	0.00	0.00
3,700.0	4.87	6.68	3,691.6	200.6	23.5	-200.1	0.00	0.00	0.00
3,800.0	4.87	6.68	3,791.2	209.1	24.5	-208.5	0.00	0.00	0.00
3,900.0	4.87	6.68	3,890.8	217.5	25.5	-216.9	0.00	0.00	0.00
4,000.0	4.87	6.68	3,990.5	225.9	26.4	-225.4	0.00	0.00	0.00
4,100.0	4.87	6.68	4,090.1	234.4	27.4	-233.8	0.00	0.00	0.00
4,200.0	4.87	6.68	4,189.7	242.8	28.4	-242.2	0.00	0.00	0.00
4,300.0	4.87	6.68	4,289.4	251.2	29.4	-250.6	0.00	0.00	0.00
4,400.0	4.87	6.68	4,389.0	259.7	30.4	-259.0	0.00	0.00	0.00
4,500.0	4.87	6.68	4,488.7	268.1	31.4	-267.4	0.00	0.00	0.00
4,600.0	4.87	6.68	4,588.3	276.6	32.4	-275.9	0.00	0.00	0.00
4,700.0				285.0		-275.9			
	4.87	6.68	4,687.9		33.4		0.00	0.00	0.00
4,800.0	4.87	6.68	4,787.6	293.4	34.3	-292.7	0.00	0.00	0.00
4,900.0	4.87	6.68	4,887.2	301.9	35.3	-301.1	0.00	0.00	0.00
5,000.0	4.87	6.68	4,986.9	310.3	36.3	-309.5	0.00	0.00	0.00
	4.87	6.68	5,086.5	318.7	37.3	-317.9	0.00	0.00	0.00
5,100.0									

# eog resources

### Planning Report

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Jefe 29 Fed Com

 Well:
 #737H

 Wellbore:
 OH

 Design:
 Plan #0.1 RT

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #737H

kb = 25' @ 3373.0usft kb = 25' @ 3373.0usft

Grid

Planned 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)
5,300.0	4.87	6.68	5,285.8	335.6	39.3	-334.8	0.00	0.00	0.00
5,400.0	4.87	6.68	5,385.4	344.0	40.3	-343.2	0.00	0.00	0.00
5,500.0	4.87	6.68	5,485.0	352.5	41.3	-351.6	0.00	0.00	0.00
5,600.0	4.87	6.68	5,584.7	360.9	42.2	-360.0	0.00	0.00	0.00
5,700.0	4.87	6.68	5,684.3	369.4	43.2	-368.4	0.00	0.00	0.00
5,800.0	4.87	6.68	5,784.0	377.8	44.2	-376.8	0.00	0.00	0.00
5,900.0	4.87	6.68	5,883.6	386.2	45.2	-385.2	0.00	0.00	0.00
6,000.0	4.87	6.68	5,983.2	394.7	46.2	-393.7	0.00	0.00	0.00
6,100.0	4.87	6.68	6,082.9	403.1	47.2	-402.1	0.00	0.00	0.00
6,200.0	4.87	6.68	6,182.5	411.5	48.2	-410.5	0.00	0.00	0.00
6,300.0	4.87	6.68	6,282.2	420.0	49.2	-418.9	0.00	0.00	0.00
6,400.0	4.87	6.68	6,381.8	428.4	50.1	-427.3	0.00	0.00	0.00
6,500.0	4.87	6.68	6,481.4	436.8	51.1	-435.7	0.00	0.00	0.00
6,600.0	4.87	6.68	6,581.1	445.3	52.1	-444.1	0.00	0.00	0.00
6,700.0	4.87	6.68	6,680.7	453.7	53.1	-452.6	0.00	0.00	0.00
6,800.0	4.87	6.68	6,780.4	462.1	54.1	-461.0	0.00	0.00	0.00
6,900.0	4.87	6.68	6,880.0	470.6	55.1	-469.4	0.00	0.00	0.00
,			,	470.6 479.0	56.1		0.00	0.00	
7,000.0	4.87	6.68	6,979.6			-477.8 -486.2	0.00		0.00
7,100.0	4.87	6.68	7,079.3	487.5	57.1 58.0		0.00	0.00	0.00
7,200.0 7,300.0	4.87 4.87	6.68 6.68	7,178.9 7,278.5	495.9 504.3	59.0	-494.6 -503.0	0.00	0.00 0.00	0.00 0.00
						-505.0			
7,400.0	4.87	6.68	7,378.2	512.8	60.0	-511.5	0.00	0.00	0.00
7,500.0	4.87	6.68	7,477.8	521.2	61.0	-519.9	0.00	0.00	0.00
7,600.0	4.87	6.68	7,577.5	529.6	62.0	-528.3	0.00	0.00	0.00
7,700.0	4.87	6.68	7,677.1	538.1	63.0	-536.7	0.00	0.00	0.00
7,800.0	4.87	6.68	7,776.7	546.5	64.0	-545.1	0.00	0.00	0.00
7,900.0	4.87	6.68	7,876.4	554.9	65.0	-553.5	0.00	0.00	0.00
8,000.0	4.87	6.68	7,976.0	563.4	65.9	-561.9	0.00	0.00	0.00
8,100.0	4.87	6.68	8,075.7	571.8	66.9	-570.4	0.00	0.00	0.00
8,200.0	4.87	6.68	8,175.3	580.3	67.9	-578.8	0.00	0.00	0.00
8,300.0	4.87	6.68	8,274.9	588.7	68.9	-587.2	0.00	0.00	0.00
0.400.0	4.07	0.00	0.074.0	F07.4	00.0	505.0	0.00	0.00	0.00
8,400.0	4.87	6.68	8,374.6	597.1	69.9	-595.6	0.00	0.00	0.00
8,500.0	4.87	6.68	8,474.2 8,573.8	605.6	70.9	-604.0	0.00	0.00	0.00
8,600.0 8,700.0	4.87	6.68	8,573.8 8,673.5	614.0 622.4	71.9 72.9	-612.4 -620.8	0.00	0.00	0.00
8,700.0 8,800.0	4.87 4.87	6.68 6.68	8,673.5 8,773.1	630.9	72.9 73.8	-629.3	0.00 0.00	0.00 0.00	0.00 0.00
	4.07		0,773.1			-029.3			
8,900.0	4.87	6.68	8,872.8	639.3	74.8	-637.7	0.00	0.00	0.00
9,000.0	4.87	6.68	8,972.4	647.7	75.8	-646.1	0.00	0.00	0.00
9,100.0	4.87	6.68	9,072.0	656.2	76.8	-654.5	0.00	0.00	0.00
9,200.0	4.87	6.68	9,171.7	664.6	77.8	-662.9	0.00	0.00	0.00
9,300.0	4.87	6.68	9,271.3	673.0	78.8	-671.3	0.00	0.00	0.00
9,400.0	4.87	6.68	9,371.0	681.5	79.8	-679.8	0.00	0.00	0.00
9,500.0	4.87	6.68	9,470.6	689.9	80.8	-688.2	0.00	0.00	0.00
9,600.0	4.87	6.68	9,570.2	698.4	81.7	-696.6	0.00	0.00	0.00
9,700.0	4.87	6.68	9,669.9	706.8	82.7	-705.0	0.00	0.00	0.00
9,800.0	4.87	6.68	9,769.5	715.2	83.7	-713.4	0.00	0.00	0.00
			,						
9,900.0	4.87	6.68	9,869.1	723.7	84.7	-721.8	0.00	0.00	0.00
10,000.0	4.87	6.68	9,968.8	732.1	85.7	-730.2	0.00	0.00	0.00
10,100.0	4.87	6.68	10,068.4	740.5	86.7	-738.7	0.00	0.00	0.00
10,200.0	4.87	6.68	10,168.1	749.0	87.7	-747.1	0.00	0.00	0.00
10,300.0	4.87	6.68	10,267.7	757.4	88.7	-755.5	0.00	0.00	0.00
10,400.0	4.87	6.68	10,367.3	765.8	89.6	-763.9	0.00	0.00	0.00
10,500.0	4.87	6.68	10,467.0	774.3	90.6	-772.3	0.00	0.00	0.00
10,600.0	4.87	6.68	10,566.6	782.7	91.6	-780.7	0.00	0.00	0.00

# eog resources

### Planning Report

PEDM Database: Company:

Project:

Midland

Lea County, NM (NAD 83 NME)

Jefe 29 Fed Com Site:

Well: #737H Wellbore: ОН Plan #0 1 RT Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #737H

kb = 25' @ 3373.0usft kb = 25' @ 3373.0usft

Grid

Design:	Plan #0.1 RT								
Planned 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)
10,700.0	4.87	6.68	10,666.3	791.2	92.6	-789.1	0.00	0.00	0.00
10,800.0	4.87	6.68	10,765.9	799.6	93.6	-797.6	0.00	0.00	0.00
10,900.0 11,000.0 11,100.0 11,200.0 11,300.0	4.87 4.87 4.87 4.87	6.68 6.68 6.68 6.68	10,865.5 10,965.2 11,064.8 11,164.5 11,264.1	808.0 816.5 824.9 833.3 841.8	94.6 95.6 96.6 97.5 98.5	-806.0 -814.4 -822.8 -831.2 -839.6	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,400.0 11,500.0 11,600.0 11,631.3 11,700.0	4.87 4.87 4.87 4.87 3.50	6.68 6.68 6.68 6.68	11,363.7 11,463.4 11,563.0 11,594.2 11,662.7	850.2 858.6 867.1 869.7 874.7	99.5 100.5 101.5 101.8 102.4	-848.0 -856.5 -864.9 -867.5 -872.5	0.00 0.00 0.00 0.00 2.00	0.00 0.00 0.00 0.00 -2.00	0.00 0.00 0.00 0.00 0.00
11,800.0	1.50	6.68	11,762.6	879.0	102.9	-876.8	2.00	-2.00	0.00
11,874.9	0.00	0.00	11,837.5	880.0	103.0	-877.8	2.00	-2.00	0.00
11,900.0	3.01	180.00	11,862.6	879.3	103.0	-877.1	12.00	12.00	0.00
11,925.0	6.01	180.00	11,887.5	877.4	103.0	-875.1	12.00	12.00	0.00
11,950.0	9.01	180.00	11,912.3	874.1	103.0	-871.9	12.00	12.00	0.00
11,975.0	12.01	180.00	11,936.9	869.5	103.0	-867.3	12.00	12.00	0.00
12,000.0	15.01	180.00	11,961.2	863.7	103.0	-861.5	12.00	12.00	0.00
12,025.0	18.01	180.00	11,985.1	856.6	103.0	-854.4	12.00	12.00	0.00
12,050.0	21.01	180.00	12,008.7	848.2	103.0	-846.0	12.00	12.00	0.00
12,075.0	24.01	180.00	12,031.8	838.7	103.0	-836.4	12.00	12.00	0.00
12,095.4	26.46	180.00	12,050.2	830.0	103.0	-827.8	12.00	12.00	0.00
12,100.0	27.01	179.99	12,054.4	827.9	103.0	-825.7	12.00	12.00	-0.14
12,125.0	30.01	179.96	12,076.3	816.0	103.0	-813.7	12.00	12.00	-0.12
12,150.0	33.01	179.94	12,097.6	802.9	103.0	-800.7	12.00	12.00	-0.10
12,175.0	36.01	179.92	12,118.2	788.7	103.0	-786.5	12.00	12.00	-0.09
12,200.0	39.01	179.90	12,138.1	773.5	103.1	-771.3	12.00	12.00	-0.07
12,225.0	42.01	179.88	12,157.1	757.3	103.1	-755.1	12.00	12.00	-0.07
12,250.0	45.01	179.87	12,175.2	740.1	103.1	-737.9	12.00	12.00	-0.06
12,275.0	48.01	179.85	12,192.4	721.9	103.2	-719.7	12.00	12.00	-0.05
12,300.0	51.01	179.84	12,208.6	702.9	103.2	-700.7	12.00	12.00	-0.05
12,325.0	54.01	179.83	12,223.8	683.1	103.3	-680.9	12.00	12.00	-0.04
12,350.0	57.01	179.82	12,238.0	662.5	103.3	-660.3	12.00	12.00	-0.04
12,375.0	60.01	179.81	12,251.0	641.2	103.4	-639.0	12.00	12.00	-0.04
12,4400.0	63.01	179.80	12,263.0	619.2	103.5	-617.0	12.00	12.00	-0.04
12,425.0	66.01	179.79	12,273.7	596.6	103.6	-594.4	12.00	12.00	-0.03
12,450.0	69.01	179.79	12,283.3	573.5	103.6	-571.3	12.00	12.00	-0.03
12,475.0	72.01	179.78	12,291.6	550.0	103.7	-547.8	12.00	12.00	-0.03
12,500.0	75.01	179.77	12,298.7	526.0	103.8	-523.8	12.00	12.00	-0.03
12,525.0	78.01	179.76	12,304.5	501.7	103.9	-499.5	12.00	12.00	-0.03
12,550.0	81.01	179.76	12,309.1	477.1	104.0	-474.9	12.00	12.00	-0.03
12,575.0	84.01	179.75	12,312.3	452.3	104.1	-450.2	12.00	12.00	-0.03
12,600.0	87.01	179.74	12,314.3	427.4	104.3	-425.2	12.00	12.00	-0.03
12,624.9	90.00	179.74	12,314.9	402.5	104.4	-400.4	12.00	12.00	-0.03
12,700.0	90.00	179.74	12,314.9	327.4	104.7	-325.3	0.00	0.00	0.00
12,800.0	90.00	179.74	12,314.9	227.4	105.2	-225.3	0.00	0.00	0.00
12,900.0	90.00	179.74	12,314.9	127.4	105.6	-125.3	0.00	0.00	0.00
13,000.0	90.00	179.74	12,314.9	27.4	106.1	-25.3	0.00	0.00	0.00
13,100.0	90.00	179.74	12,314.9	-72.6	106.6	74.7	0.00	0.00	0.00
13,200.0	90.00	179.74	12,314.9	-172.6	107.0	174.7	0.00	0.00	0.00
13,300.0	90.00	179.74	12,314.9	-272.6	107.5	274.7	0.00	0.00	0.00
13,400.0	90.00	179.74	12,314.9	-372.6	107.9	374.7	0.00	0.00	0.00
13,500.0	90.00	179.74	12,314.9	-472.6	108.4	474.6	0.00	0.00	0.00

# **b**eog resources

### Planning Report

Database: Company:

Project:

PEDM Midland

Lea County, NM (NAD 83 NME)

Site: Jefe 29 Fed Com

Well: #737H Wellbore: OH

OH Plan #0 1 RT Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #737H

kb = 25' @ 3373.0usft kb = 25' @ 3373.0usft

Grid

Design:	Plan #0.1 RT								
Planned 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)
13,600.0	90.00	179.74	12,315.0	-572.6	108.9	574.6	0.00	0.00	0.00
13,700.0 13,800.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-672.6 -772.6	109.3 109.8	674.6 774.6	0.00 0.00	0.00 0.00	0.00 0.00
13,900.0	90.00	179.74	12,315.0	-872.6	110.3	874.6	0.00	0.00	0.00
14,000.0	90.00	179.74	12,315.0	-972.6	110.7	974.6	0.00	0.00	0.00
14,100.0	90.00	179.74	12,315.0	-1,072.6	111.2	1,074.6	0.00	0.00	0.00
14,200.0 14,300.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-1,172.6 -1,272.6	111.6 112.1	1,174.6 1,274.6	0.00 0.00	0.00 0.00	0.00 0.00
14,400.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-1,372.6 -1,472.6	112.6	1,374.5 1,474.5	0.00 0.00	0.00 0.00	0.00 0.00
14,500.0 14,600.0	90.00	179.74	12,315.0	-1,472.6 -1,572.6	113.0 113.5	1,474.5	0.00	0.00	0.00
14,700.0	90.00	179.74	12,315.0	-1,672.6	113.9	1,674.5	0.00	0.00	0.00
14,800.0	90.00	179.74	12,315.0	-1,772.6	114.4	1,774.5	0.00	0.00	0.00
14,900.0	90.00	179.74	12,315.0	-1,872.6	114.9	1,874.5	0.00	0.00	0.00
15,000.0	90.00	179.74	12,315.0	-1,972.6	115.3	1,974.5	0.00	0.00	0.00
15,100.0	90.00	179.74	12,315.0	-2,072.6	115.8	2,074.5	0.00	0.00	0.00
15,200.0	90.00	179.74	12,315.0	-2,172.6	116.3	2,174.4	0.00	0.00	0.00
15,300.0	90.00	179.74	12,315.0	-2,272.6	116.7	2,274.4	0.00	0.00	0.00
15,400.0	90.00	179.74	12,315.0	-2,372.5	117.2	2,374.4	0.00	0.00	0.00
15,500.0	90.00	179.74	12,315.0	-2,472.5	117.6	2,474.4	0.00	0.00	0.00
15,600.0	90.00	179.74	12,315.0	-2,572.5	118.1	2,574.4	0.00	0.00	0.00
15,700.0 15,800.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-2,672.5 -2,772.5	118.6 119.0	2,674.4 2,774.4	0.00 0.00	0.00 0.00	0.00 0.00
15,900.0	90.00	179.74	12,315.0	-2,872.5	119.5	2,874.4	0.00	0.00	0.00
16,000.0 16,100.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-2,972.5 -3,072.5	119.9 120.4	2,974.3 3,074.3	0.00 0.00	0.00 0.00	0.00 0.00
16,200.0	90.00	179.74	12,315.0	-3,172.5	120.4	3,174.3	0.00	0.00	0.00
16,300.0	90.00	179.74	12,315.0	-3,272.5	121.3	3,274.3	0.00	0.00	0.00
16,400.0	90.00	179.74	12,315.0	-3,372.5	121.8	3,374.3	0.00	0.00	0.00
16,500.0	90.00	179.74	12,315.0	-3,472.5	122.3	3,474.3	0.00	0.00	0.00
16,600.0	90.00	179.74	12,315.0	-3,572.5	122.7	3,574.3	0.00	0.00	0.00
16,700.0	90.00	179.74	12,315.0	-3,672.5	123.2	3,674.3	0.00	0.00	0.00
16,800.0	90.00	179.74	12,315.0	-3,772.5	123.6	3,774.3	0.00	0.00	0.00
16,900.0	90.00	179.74	12,315.0	-3,872.5	124.1	3,874.2	0.00	0.00	0.00
17,000.0	90.00	179.74	12,315.0	-3,972.5	124.6	3,974.2	0.00	0.00	0.00
17,100.0	90.00 90.00	179.74 179.74	12,315.0	-4,072.5	125.0 125.5	4,074.2	0.00 0.00	0.00 0.00	0.00 0.00
17,200.0 17,300.0	90.00	179.74	12,315.0 12,315.0	-4,172.5 -4,272.5	125.5 125.9	4,174.2 4,274.2	0.00	0.00	0.00
17,400.0 17,500.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-4,372.5 -4,472.5	126.4 126.9	4,374.2 4,474.2	0.00 0.00	0.00 0.00	0.00 0.00
17,600.0	90.00	179.74	12,315.0	-4,472.5 -4,572.5	120.9	4,474.2	0.00	0.00	0.00
17,700.0	90.00	179.74	12,315.0	-4,672.5	127.8	4,674.1	0.00	0.00	0.00
17,800.0	90.00	179.74	12,315.0	-4,772.5	128.3	4,774.1	0.00	0.00	0.00
17,900.0	90.00	179.74	12,315.0	-4,872.5	128.7	4,874.1	0.00	0.00	0.00
18,000.0	90.00	179.74	12,315.0	-4,972.5	129.2	4,974.1	0.00	0.00	0.00
18,100.0	90.00	179.74	12,315.0	-5,072.5	129.6	5,074.1	0.00	0.00	0.00
18,200.0	90.00	179.74	12,315.0	-5,172.5	130.1	5,174.1	0.00	0.00	0.00
18,300.0	90.00	179.74	12,315.0	-5,272.5	130.6	5,274.1	0.00	0.00	0.00
18,400.0	90.00	179.74	12,315.0	-5,372.5	131.0	5,374.1	0.00	0.00	0.00
18,500.0	90.00	179.74	12,315.0	-5,472.5 5,572.5	131.5	5,474.1 5,574.0	0.00	0.00	0.00
18,600.0 18,700.0	90.00 90.00	179.74 179.74	12,315.0 12,315.0	-5,572.5 -5,672.5	131.9 132.4	5,574.0 5,674.0	0.00 0.00	0.00 0.00	0.00 0.00
18,800.0	90.00	179.74	12,315.0	-5,072.5 -5,772.5	132.4	5,774.0	0.00	0.00	0.00
18,900.0	90.00						0.00	0.00	0.00
18,900.0	90.00	179.74	12,315.0	-5,872.5	133.3	5,874.0	0.00	0.00	0.00



### Planning Report

Database: Company:

Project:

PEDM Midland

Lea County, NM (NAD 83 NME)

Jefe 29 Fed Com Site:

Well: #737H Wellbore: ОН Design:

Plan #0.1 RT

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #737H

kb = 25' @ 3373.0usft kb = 25' @ 3373.0usft

Grid

anned 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)
19,000.0	90.00	179.74	12,315.0	-5,972.5	133.8	5,974.0	0.00	0.00	0.00
19,100.0	90.00	179.74	12,315.0	-6,072.5	134.3	6,074.0	0.00	0.00	0.00
19,200.0	90.00	179.74	12,315.0	-6,172.5	134.7	6,174.0	0.00	0.00	0.00
19,300.0	90.00	179.74	12,315.0	-6,272.5	135.2	6,274.0	0.00	0.00	0.00
19,400.0	90.00	179.74	12,315.0	-6,372.5	135.6	6,373.9	0.00	0.00	0.00
19,500.0	90.00	179.74	12,315.0	-6,472.5	136.1	6,473.9	0.00	0.00	0.00
19,600.0	90.00	179.74	12,315.0	-6,572.5	136.6	6,573.9	0.00	0.00	0.00
19,700.0	90.00	179.74	12,315.0	-6,672.5	137.0	6,673.9	0.00	0.00	0.00
19,800.0	90.00	179.74	12,315.0	-6,772.5	137.5	6,773.9	0.00	0.00	0.00
19,900.0	90.00	179.74	12,315.0	-6,872.5	137.9	6,873.9	0.00	0.00	0.00
19,912.5	90.00	179.74	12,315.0	-6,885.0	138.0	6,886.4	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Jefe 29 Fed Com # - plan hits target cent - Point	0.00 ter	0.00	11,837.5	880.0	103.0	401,160.00	740,307.00	32° 6′ 4.458 N	103° 41' 26.773 W
FTP(Jefe 29 Fed Com # - plan hits target cent - Point	0.00 ter	0.01	12,050.2	830.0	103.0	401,110.00	740,307.00	32° 6' 3.963 N	103° 41' 26.777 W
PBHL(Jefe 29 Fed Com - plan hits target cent - Point	0.00 ter	0.00	12,315.0	-6,885.0	138.0	393,395.00	740,342.00	32° 4' 47.616 N	103° 41' 26.904 W

# de og resources

T M

Azi

0.00

0.00

6.68

6.68

0.00

1200.0

1443.3

11594.2

11837.5

12050.2

12314.9

402.5

-6885.0

104.4

138.0

Azimuths to Grid North
True North: -0.34°
Magnetic North: 6.36°
Magnetic Field

Magnetic Field Strength: 47503.4nT Dip Angle: 59.80° Date: 7/15/2020 Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.36°
To convert a Magnetic Direction to a True Direction, Add 6.70° East
To convert a True Direction to a Grid Direction, Subtract 0.34°

Lea County, NM (NAD 83 NME)

Jefe 29 Fed Com #737H

Plan #0.1 RT

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

PBHL(Jefe 29 Fed Com #707H)

System Datum: Mean Sea Level

WELL DETAILS: #737H

3348.0

kb = 25' @ 3373.0usft

-0.30

 Northing
 Easting
 Latittude
 Longitude

 400280.00
 740204.00
 32° 5' 55.756 N
 103° 41' 28.032 W

SECTION DETAILS +N/-S +E/-W **VSect Target** Dleg **TFace** 0.00 0.0 -10.3 869.7 101.8 -867.5 103.0 0.088 -877.8 KOP(Jefe 29 Fed Com #707H) 180.00 -827.8 FTP(Jefe 29 Fed Com #707H) 103.0

CASING DETAILS

0.00

Sec

1200.0

1443.6

11631.3

11874.9

12095.4

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

-400.4

6886.4

 Name
 TVD
 +N/-S
 +E/-W
 Northing
 Easting

 KOP(Jefe 29 Fed Com #707H)
 11837.5
 880.0
 103.0
 401160.00
 740307.00

 FTP(Jefe 29 Fed Com #707H)
 12050.2
 830.0
 103.0
 401110.00
 740307.00

 PBHL(Jefe 29 Fed Com #707H)
 12315.0
 -6885.0
 138.0
 393395.00
 740342.00

300 -1200 -1500 -1800 -2100 -2400 -2700 는 -3000-S -3300--3900 -5400 -6300 West(-)/East(+)

West(-)/East(+)

Jefe 29 Fed Com/#737H/Plan #0.1 RT
5250 5600 5950 6300 6650 7000

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

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 151456

### **CONDITIONS**

On another:	OORID:
Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	151456
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

### CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/18/2022