Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR BURGELLAND MANAGEMENT

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

BURE	EAU OF LAND MANAGEME	5. Lease Serial No.	5. Lease Serial No. NMNM0438001		
Do not use this fo	OTICES AND REPORTS O orm for proposals to drill o lse Form 3160-3 (APD) for	6. If Indian, Allottee	or Tribe Name		
SUBMIT IN T	RIPLICATE - Other instructions on	page 2		7. If Unit of CA/Agre	eement, Name and/or No.
1. Type of Well Oil Well Gas W	ell Other			8. Well Name and No	D. DEEP ELEM 4 FED COM/582H
2. Name of Operator EOG RESOURC	ES INCORPORATED			9. API Well No. 300	1547938
3a. Address 1111 BAGBY SKY LOBE			area code)	10. Field and Pool or	
4. Location of Well (Footage, Sec., T.,R. SEC 4/T26S/R31E/NMP	,M., or Survey Description)			11. Country or Parish EDDY/NM	ı, State
12. CHEC	CK THE APPROPRIATE BOX(ES) TO	O INDICATE N	NATURE OF 1	NOTICE, REPORT OR OT	HER DATA
TYPE OF SUBMISSION			TYPE OF	FACTION	
Notice of Intent	Alter Casing	Deepen Hydraulic Frac New Construct	cturing	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity Other
Subsequent Report		Plug and Aban		Recomplete Temporarily Abandon	Otner Otner
Final Abandonment Notice		Plug Back		Water Disposal	
the Bond under which the work will completion of the involved operation completed. Final Abandonment Noticis ready for final inspection.) EOG respectfully requests an athe following changes: Deep Elem 4 Fed Com 582H A	be perfonned or provide the Bond Nons. If the operation results in a multiple ices must be filed only after all require amendment to our approved APD for API #: 30-015-47938 1-E, Sec 16, 100' FSL, 1265' FEL, 1' FSL, 797' FEL, Eddy Co., N.M. gram to current design.	e. on file with B e completion or ements, including or this well to	ELM/BIA. Req r recompletion ng reclamation reflect	uired subsequent reports m in a new interval, a Form	of all pertinent markers and zones. Attach ust be filed within 30 days following 3160-4 must be filed once testing has been the operator has detennined that the site
STAR HARRELL / Ph: (432) 848-91	/	Regulatory Specialist Title			
Signature			02/22/2	2023	
	THE SPACE FOR F	EDERAL (OR STATE	OFICE USE	
Approved by	·		ENIONIE		00/00/0000
KEITH P IMMATTY / Ph: (575) 988	-4722 / Approved	Tit	ENGINEE tle	К	02/23/2023 Date
Conditions of approval, if any, are attach certify that the applicant holds legal or ed which would entitle the applicant to conditions.	quitable title to those rights in the subje		ffice CARLS	BAD	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency					

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United State any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(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, 3162.3-3, 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: SESE / 434 FSL / 1252 FEL / TWSP: 26S / RANGE: 31E / SECTION: 4 / LAT: 32.06596 / LONG: -103.778671 (TVD: 0 feet, MD: 0 feet) PPP: NENE / 100 FNL / 1265 FEL / TWSP: 26S / RANGE: 31E / SECTION: 9 / LAT: 32.064493 / LONG: -103.778714 (TVD: 10177 feet, MD: 10196 feet) BHL: SESE / 100 FSL / 1265 FEL / TWSP: 26S / RANGE: 31E / SECTION: 16 / LAT: 32.035742 / LONG: -103.77876 (TVD: 10516 feet, MD: 20792 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 Rd., Aztec, NM 87410
Phone: (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, New Mexico 87505

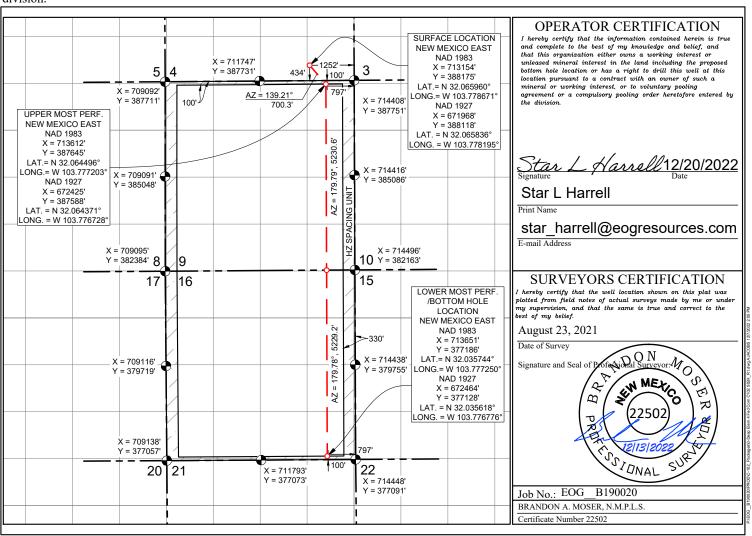
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Number 30-015-47938			Pool Code 98760		Jennings; Bone Spring, West				
Property Co	ode		•		Property Name			Well Nur	Well Number	
32997	' 0			DE	EP ELEM 4 FE	D COM		582H	ł	
OGRID N	0.				Operator Name			Elevati	on	
7377				EO	G RESOURCE	ES, INC.		3286	3286'	
	Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Р	4	26 S	31 E		434	434 SOUTH 1252			EDDY	
			Bott	om Hole l	Location If Diff	erent From Surfac	e			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	Feet from the North/South line Feet from the			County	
Р	16	26 S	31 E		100	100 SOUTH 797 EAS			EDDY	
Dedicated Acres	Joint or	Infill	Consolidated Cod	le Orde	r No.					
1280.00										

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 11/30/2022:

Well Name: Deep Elem 4 Fed Com 582H

Location: SHL: 434' FSL & 1252' FEL, Section 4, T-26-S, R-31-E, Eddy Co., N.M.

BHL: 100' FSL & 797' FEL, Section 16, T-26-S, R-31-E, Eddy Co., N.M.

Casing Program A:

Hole	Interv	al MD	Interva	ıl TVD	Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
16"	0	1,250	0	1,250	13-3/8"	54.5#	J-55	STC
11"	0	3,985	0	3,960	9-5/8"	40#	J-55	LTC
6-3/4"	0	21,164	0	10,500	5-1/2"	17#	HCP-110	LTC

Variance is requested to waive the centralizer requirements for the 9-5/8" casing in the 11" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 11" 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.

EOG requests permission to allow deviation from the 0.422" annulus clearance requirement for the intermediate (salt) section from Onshore Order #2 under the following conditions:

- The variance is not applicable within the Potash Boundaries or Capitan Reef areas.
- Operator takes responsibility to get casing to set point in the event that the clearance causes stuck pipe issues.

Cementing Program:

	nung 1108	1		1	
		Wt.	Yld	Slurry Description	
Depth	No. Sacks	ppg	Ft3/sk	Slurry Description	
1,250' 13-3/8"	380	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)	
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,050')	
3,960' 9-5/8"	410	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)	
	140	14.8	1.32	Tail: Class C + 10% NaCL + 3% MagOx (TOC @ 3,170')	
21,164' 5-1/2"	350	11.0	3.21	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 3,460')	
	780	13.2	1.52	Tail: Class H + 5% NEX-020 + 0.2% NAC-102 + 0.15% NAS-725 + 0.5% NFL-549 + 0.2% NFP-703 + 1% NBE-737 + 0.3% NRT-241 (TOC @ 10050')	



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

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.

Mud Program:

Depth (TVD)	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,250'	Fresh - Gel	8.6-8.8	28-34	N/c
1,250' – 3,960'	Brine	8.6-8.8	28-34	N/c
3,960' – 21,164'	Oil Base	8.8-9.5	58-68	N/c - 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:

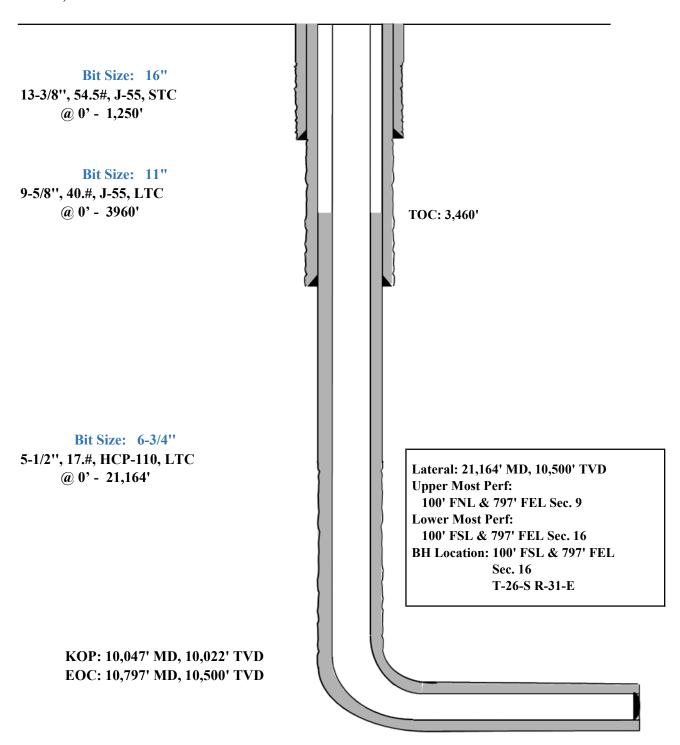
- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or 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"



434' FSL Revised Wellbore A: KB: 3311' 1252' FEL GL: 3286'

Section 4

T-26-S, R-31-E API: 30-025-47938





Revised Permit Information 11/30/2022:

Well Name: Deep Elem 4 Fed Com 582H

Location: SHL: 434' FSL & 1252' FEL, Section 4, T-26-S, R-31-E, Eddy Co., N.M.

BHL: 100' FSL & 797' FEL, Section 16, T-26-S, R-31-E, Eddy Co., N.M.

Casing Program B:

Hole	Interval MD		Interval TVD		Csg			
Size	From (ft)	To (ft)	From (ft)	To (ft)	OD	Weight	Grade	Conn
13-1/2"	0	1,250	0	1,250	10-3/4"	40.5#	J-55	STC
9-7/8"	0	3,985	0	3,960	8-5/8"	32#	J-55	BTC-SC
6-3/4"	0	21,164	0	10,500	5-1/2"	17#	HCP-110	LTC

Cementing Program:

	cementing 110grum							
Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description				
1,250' 10-3/4''	410	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello- Flake (TOC @ Surface)				
	110	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,050')				
3,960' 8-5/8"	280	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)				
	130	14.8	1.32	Tail: Class C + 10% NaCL + 3% MagOx (TOC @ 3,170')				
21,164 ['] 5-1/2''	640	11.0	3.21	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 3,460')				
	800	13.2	1.52	Tail: Class H + 5% NEX-020 + 0.2% NAC-102 + 0.15% NAS-725 + 0.5% NFL-549 + 0.2% NFP-703 + 1% NBE-737 + 0.3% NRT-241 (TOC @ 10050')				



Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
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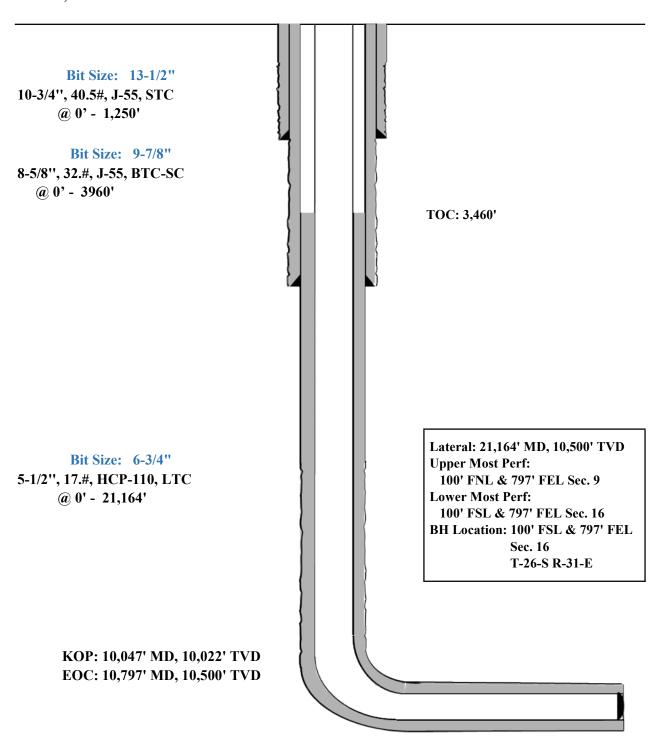
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- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
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 offline cement and/or remediate (if needed) any surface or intermediate sections,
 according 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"



434' Revised Wellbore B: KB: 3311' 1252' GL: 3286'

Section 4

T-26-S, R-31-E API: 30-025-47938





GEOLOGIC NAME OF SURFACE FORMATION:

Permian

ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,143'
Tamarisk Anhydrite	1,227'
Top of Salt	1,501'
Base of Salt	3,862'
Lamar	4,072'
Bell Canyon	4,095'
Cherry Canyon	5,047'
Brushy Canyon	6,278'
Bone Spring Lime	8,036'
Leonard (Avalon) Shale	8,127'
1st Bone Spring Sand	8,977'
2nd Bone Spring Shale	9,244'
2nd Bone Spring Sand	9,591'
3rd Bone Spring Carb	10,045'
3rd Bone Spring Sand	10,906'
Wolfcamp	11,303'
TD	10,500'

ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0- 400'	Fresh Wate
Bell Canyon	4,095'	Oil
Cherry Canyon	5,047'	Oil
Brushy Canyon	6,278'	Oil
Leonard (Avalon) Shale	8,127'	Oil
1st Bone Spring Sand	8,977'	Oil
2nd Bone Spring Shale	9,244'	Oil
2nd Bone Spring Sand	9,591'	Oil



Midland

Eddy County, NM (NAD 83 NME) Deep Elem 4 Fed Com #582H

OH

Plan: Plan #0.2

Standard Planning Report

19 December, 2022



Database: Company: PEDM

Midland

Eddy County, NM (NAD 83 NME)

Site: Deep Elem 4 Fed Com Well: #582H

Wellbore: ОН Plan #0.2 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Minimum Curvature

Project

Project:

Eddy County, NM (NAD 83 NME)

Map System: Geo Datum:

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

System Datum:

Mean Sea Level

Site

Map Zone:

Deep Elem 4 Fed Com

Site Position: From: Мар

Northing: Easting: Slot Radius:

0.0 usft

0.29

388,239.00 usft 713,374.00 usft 13-3/16 "

Latitude: Longitude:

32° 3' 58.075 N 103° 46' 40.657 W

Position Uncertainty:

0.0 usft

388,175.00 usft 713,154.00 usft

6.74

(usft)

0.0

Remarks

Latitude: Longitude:

32° 3' 57.453 N 103° 46' 43.218 W

Position Uncertainty Grid Convergence:

Well Position

+E/-W 0.0 usft 0.0 usft

IGRF2020

Wellhead Elevation:

usft

Ground Level:

3,286.0 usft

Wellbore

Ма

Well

ОН

#582H

+N/-S

agnetics	Model Name	Samp

Plan #0.2

le Date 7/6/2020

Northing:

Easting:

Declination (°)

Dip Angle (°) 59.76 Field Strength (nT)

47,477.78416157

Design

Audit Notes:

Version:

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

PLAN

+N/-S +E/-W

Tie On Depth: Direction

> (°) 177.41

0.0

Plan Survey Tool Program

Date 12/19/2022

0.0

Depth From Depth To (usft)

0.0

(usft)

21,163.7

Survey (Wellbore)

Plan #0.2 (OH)

Tool Name

EOG MWD+IFR1

MWD + IFR1

(usft)

0.0

12/19/2022 3:55:17PM



Database: PEDM Company: Midland

Project: Eddy County, NM (NAD 83 NME)

Site: Deep Elem 4 Fed Com

 Well:
 #582H

 Wellbore:
 OH

 Design:
 Plan #0.2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Grid

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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,699.5	5.99	107.57	1,699.0	-4.7	14.9	2.00	2.00	0.00	107.57	
6,003.1	5.99	107.57	5,979.0	-140.3	443.1	0.00	0.00	0.00	0.00	
6,302.6	0.00	0.00	6,278.0	-145.0	458.0	2.00	-2.00	0.00	180.00	
10,047.1	0.00	0.00	10,022.5	-145.0	458.0	0.00	0.00	0.00	0.00	KOP (Deep Elem 4 Fe
10,704.0	78.84	180.00	10,490.9	-530.0	458.0	12.00	12.00	27.40	180.00	FTP (Deep Elem 4 Fe
10,797.1	90.00	179.79	10,499.9	-622.5	458.2	12.00	12.00	-0.23	-1.11	
21,163.7	90.00	179.79	10,500.0	-10,989.0	497.0	0.00	0.00	0.00	0.00	LTP/PBHL (Deep Eler



Database: PEDM Company: Midland

Project: Eddy County, NM (NAD 83 NME)

Site: Deep Elem 4 Fed Com

 Well:
 #582H

 Wellbore:
 OH

 Design:
 Plan #0.2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

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)
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
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
700.0	0.00	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	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	2.00	107.57	1,500.0	-0.5	1.7	0.6	2.00	2.00	0.00
1,600.0	4.00	107.57	1,599.8	-2.1	6.7	2.4	2.00	2.00	0.00
1,699.5	5.99	107.57	1,699.0	-4.7	14.9	5.4	2.00	2.00	0.00
1,800.0	5.99	107.57	1,798.9	-7.9	24.9	9.0	0.00	0.00	0.00
1,900.0	5.99	107.57	1,898.4	-11.0	34.9	12.6	0.00	0.00	0.00
2,000.0	5.99	107.57	1,997.8	-14.2	44.8	16.2	0.00	0.00	0.00
2,100.0	5.99	107.57	2,097.3	-17.3	54.8	19.8	0.00	0.00	0.00
2,200.0	5.99	107.57	2,196.7	-20.5	64.7	23.4	0.00	0.00	0.00
2,300.0	5.99	107.57	2,296.2	-23.6	74.7	27.0	0.00	0.00	0.00
2,400.0	5.99	107.57	2,395.6	-26.8	84.6	30.6	0.00	0.00	0.00
2,500.0	5.99	107.57	2,495.1	-29.9	94.6	34.2	0.00	0.00	0.00
2,600.0	5.99	107.57	2,594.5	-33.1	104.5	37.8	0.00	0.00	0.00
2,700.0	5.99	107.57	2,694.0	-36.2	114.5	41.4	0.00	0.00	0.00
2,800.0	5.99	107.57	2,793.4	-39.4	124.4	45.0	0.00	0.00	0.00
2,900.0	5.99	107.57	2,892.9	-42.5	134.4	48.6	0.00	0.00	0.00
3,000.0	5.99	107.57	2,992.4	-45.7	144.3	52.2	0.00	0.00	0.00
3,100.0	5.99	107.57	3,091.8	-48.8	154.3	55.8	0.00	0.00	0.00
3,200.0	5.99	107.57	3,191.3	-52.0	164.2	59.4	0.00	0.00	0.00
3,300.0	5.99	107.57	3,290.7	-55.1	174.2	62.9	0.00	0.00	0.00
3,400.0	5.99	107.57	3,390.2	-58.3	184.1	66.5	0.00	0.00	0.00
	F 00	107 57					0.00	0.00	0.00
3,500.0	5.99	107.57	3,489.6	-61.4	194.0	70.1	0.00	0.00	0.00
3,600.0	5.99	107.57	3,589.1	-64.6	204.0	73.7	0.00	0.00	0.00
3,700.0	5.99	107.57	3,688.5	-67.7	213.9	77.3	0.00	0.00	0.00
3,800.0	5.99	107.57	3,788.0	-70.9	223.9	80.9	0.00	0.00	0.00
3,900.0	5.99	107.57	3,887.4	-74.0	233.8	84.5	0.00	0.00	0.00
4,000.0	5.99	107.57	3,986.9	-77.2	243.8	88.1	0.00	0.00	0.00
4,000.0	5.99	107.57	4,086.3	-77.2 -80.3	243.6 253.7	91.7	0.00	0.00	0.00
4,200.0	5.99	107.57	4,185.8	-83.5	263.7	95.3	0.00	0.00	0.00
4,300.0	5.99	107.57	4,285.3	-86.6	273.6	98.9	0.00	0.00	0.00
4,400.0	5.99	107.57	4,384.7	-89.8	283.6	102.5	0.00	0.00	0.00
4,500.0	5.99	107.57	4,484.2	-92.9	293.5	106.1	0.00	0.00	0.00
4,600.0	5.99	107.57	4,583.6	-92.9 -96.1	303.5	100.1	0.00	0.00	0.00
4,700.0	5.99	107.57	4,683.1	-99.2	313.4	113.3	0.00	0.00	0.00
4,800.0	5.99	107.57	4,782.5	-102.4	323.4	116.9	0.00	0.00	0.00
4,900.0	5.99	107.57	4,882.0	-105.5	333.3	120.5	0.00	0.00	0.00
5,000.0	5.99	107.57	4,981.4	-108.7	343.3	124.1	0.00	0.00	0.00
5,100.0	5.99	107.57	5,080.9	-111.8	353.2	127.7	0.00	0.00	0.00
	5.99	107.57	5,180.3	-111.0	363.2	131.3	0.00	0.00	0.00
			0.100.0	-1150	303.Z	131.3	0.00	0.00	U.UU
5,200.0 5,300.0	5.99	107.57	5,279.8	-118.1	373.1	134.9	0.00	0.00	0.00



PEDM Database:

Company: Midland

Project: Eddy County, NM (NAD 83 NME) Deep Elem 4 Fed Com Site:

Well: #582H

ОН Wellbore: Design: Plan #0.2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Grid

esign:	Plan #0.2								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	5.99	107.57	5,379.2	-121.3	383.1	138.5	0.00	0.00	0.00
5,500.0	5.99	107.57	5,478.7	-124.4	393.0	142.1	0.00	0.00	0.00
5,600.0	5.99	107.57	5,578.2	-127.6	403.0	145.7	0.00	0.00	0.00
5,700.0	5.99	107.57	5,677.6	-130.7	412.9	149.3	0.00	0.00	0.00
5,800.0	5.99	107.57	5,777.1	-133.9	422.9	152.9	0.00	0.00	0.00
5,900.0	5.99	107.57	5,876.5	-137.0	432.8	156.4	0.00	0.00	0.00
6,003.1	5.99	107.57	5,979.0	-140.3	443.1	160.2	0.00	0.00	0.00
6,100.0	4.05	107.57	6,075.6	-142.8	451.2	163.1	2.00	-2.00	0.00
6,200.0	2.05	107.57	6,175.4	-144.4	456.2	164.9	2.00	-2.00	0.00
6,302.6	0.00	0.00	6,278.0	-145.0	458.0	165.5	2.00	-2.00	0.00
6,400.0	0.00	0.00	6,375.4	-145.0	458.0	165.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,475.4	-145.0	458.0	165.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,575.4	-145.0	458.0	165.5	0.00	0.00	0.00
6,700.0	0.00	0.00	6,675.4	-145.0	458.0	165.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,775.4	-145.0	458.0	165.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,875.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,975.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,100.0	0.00	0.00	7,075.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,175.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,300.0	0.00	0.00	7,275.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,375.4	-145.0	458.0	165.5	0.00	0.00	0.00
7.500.0	0.00	0.00	7,475.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,575.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,675.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,775.4	-145.0	458.0	165.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,875.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,975.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,100.0	0.00	0.00	8,075.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,175.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,275.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,375.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,475.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,575.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,675.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,775.4	-145.0	458.0	165.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,875.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,975.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,100.0	0.00	0.00	9,075.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,175.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,275.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,375.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,475.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,600.0	0.00	0.00	9,575.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,675.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,775.4	-145.0	458.0	165.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,875.4	-145.0	458.0	165.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,975.4	-145.0	458.0	165.5	0.00	0.00	0.00
10,047.1	0.00	0.00	10,022.5	-145.0	458.0	165.5	0.00	0.00	0.00
10,050.0	0.35	180.00	10,025.4	-145.0	458.0	165.6	12.00	12.00	0.00
10,075.0	3.35	180.00	10,050.4	-145.8	458.0	166.4	12.00	12.00	0.00
10,100.0	6.35	180.00	10,075.3	-147.9	458.0	168.5	12.00	12.00	0.00
10,125.0	9.35	180.00	10,100.1	-151.3	458.0	171.9	12.00	12.00	0.00
10,150.0	12.35	180.00	10,124.6	-156.0	458.0	176.6	12.00	12.00	0.00
10,175.0	15.35	180.00	10,148.9	-162.0	458.0	182.6	12.00	12.00	0.00

eog resources

Planning Report

PEDM Database:

Company: Midland

Project: Eddy County, NM (NAD 83 NME)

Deep Elem 4 Fed Com Site:

#582H Well: ОН Wellbore: Design: Plan #0.2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Grid

esign:	Fidit #U.Z								
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)
10,200.0		180.00	10,172.8	-169.3	458.0	189.8	12.00	12.00	0.00
10,225.0	21.35	180.00	10,196.3	-177.8	458.0	198.3	12.00	12.00	0.00
10,250.0	24.35	180.00	10,219.4	-187.5	458.0	208.0	12.00	12.00	0.00
10,275.0	27.35	180.00	10,241.9	-198.4	458.0	218.9	12.00	12.00	0.00
10,300.0		180.00	10,263.7	-210.4	458.0	230.9	12.00	12.00	0.00
10,325.0		180.00	10,285.0	-223.6	458.0	244.1	12.00	12.00	0.00
10,350.0	36.35	180.00	10,305.5	-237.9	458.0	258.4	12.00	12.00	0.00
10,375.0		180.00	10,325.2	-253.2	458.0	273.7	12.00	12.00	0.00
10,400.0		180.00	10,344.1	-269.6	458.0	290.0	12.00	12.00	0.00
10,425.0		180.00	10,362.2	-286.9	458.0	307.3	12.00	12.00	0.00
10,450.0		180.00	10,379.3	-305.2	458.0	325.5	12.00	12.00	0.00
10,475.0	51.35	180.00	10,395.4	-324.3	458.0	344.6	12.00	12.00	0.00
10,500.0		180.00	10,410.5	-344.2	458.0	364.5	12.00	12.00	0.00
10,525.0		180.00	10,424.5	-364.9	458.0	385.2	12.00	12.00	0.00
10,550.0		180.00	10,437.4	-386.3	458.0	406.6	12.00	12.00	0.00
10,575.0		180.00	10,449.2	-408.3	458.0	428.6	12.00	12.00	0.00
10,600.0		180.00	10,459.8	-430.9	458.0	451.2	12.00	12.00	0.00
10,625.0		180.00	10,469.3	-454.1	458.0	474.3	12.00	12.00	0.00
10,650.0		180.00	10,477.5	-477.7	458.0	497.9	12.00	12.00	0.00
10,675.0		180.00	10,484.4	-501.7	458.0	521.9	12.00	12.00	0.00
10,700.0		180.00	10,490.1	-526.1	458.0	546.2	12.00	12.00	0.00
10,704.0	78.84	180.00	10,490.9	-530.0	458.0	550.2	12.00	12.00	0.00
10,725.0		179.95	10,494.5	-550.7	458.0	570.8	12.00	12.00	-0.23
10,750.0		179.89	10,497.6	-575.5	458.0	595.6	12.00	12.00	-0.23
10,775.0		179.84	10,499.4	-600.4	458.1	620.5	12.00	12.00	-0.23
10,797.1	90.00	179.79	10,499.9	-622.5	458.2	642.5	12.00	12.00	-0.23
10,800.0		179.79	10,499.9	-625.4	458.2	645.5	0.00	0.00	0.00
10,900.0		179.79	10,499.9	-725.4	458.6	745.4	0.00	0.00	0.00
11,000.0		179.79	10,499.9	-825.4	458.9	845.3	0.00	0.00	0.00
11,100.0		179.79	10,499.9	-925.4	459.3	945.2	0.00	0.00	0.00
11,200.0		179.79	10,499.9	-1,025.4	459.7	1,045.1	0.00	0.00	0.00
11,300.0		179.79	10,499.9	-1,125.4	460.1	1,145.0	0.00	0.00	0.00
11,400.0		179.79	10,499.9	-1,225.4	460.4	1,244.9	0.00	0.00	0.00
11,500.0		179.79	10,499.9	-1,325.4	460.8	1,344.9	0.00	0.00	0.00
11,600.0		179.79	10,499.9	-1,425.4	461.2	1,444.8	0.00	0.00	0.00
11,700.0		179.79	10,499.9	-1,525.4	461.6	1,544.7	0.00	0.00	0.00
11,800.0		179.79	10,499.9	-1,625.4	461.9	1,644.6	0.00	0.00	0.00
11,900.0		179.79	10,499.9	-1,725.4	462.3	1,744.5	0.00	0.00	0.00
12,000.0		179.79	10,499.9	-1,825.4	462.7	1,844.4	0.00	0.00	0.00
12,100.0		179.79	10,499.9	-1,925.4	463.1	1,944.3	0.00	0.00	0.00
12,200.0 12,300.0		179.79	10,499.9 10,499.9	-2,025.4	463.4	2,044.3	0.00	0.00	0.00
		179.79	,	-2,125.4	463.8	2,144.2	0.00	0.00	0.00
12,400.0		179.79	10,499.9	-2,225.4	464.2	2,244.1	0.00	0.00	0.00
12,500.0		179.79	10,499.9	-2,325.4	464.6	2,344.0	0.00	0.00	0.00
12,600.0		179.79	10,499.9	-2,425.4	464.9	2,443.9	0.00	0.00	0.00
12,700.0 12,800.0		179.79 179.79	10,499.9 10,499.9	-2,525.4 -2,625.4	465.3 465.7	2,543.8	0.00	0.00 0.00	0.00 0.00
					465.7	2,643.7	0.00		
12,900.0		179.79	10,499.9	-2,725.4	466.1	2,743.7	0.00	0.00	0.00
13,000.0		179.79	10,499.9	-2,825.4	466.4	2,843.6	0.00	0.00	0.00
13,100.0		179.79	10,499.9	-2,925.4	466.8	2,943.5	0.00	0.00	0.00
13,200.0 13,300.0		179.79 179.79	10,500.0 10,500.0	-3,025.4 -3,125.4	467.2 467.5	3,043.4 3,143.3	0.00	0.00 0.00	0.00 0.00
,			,				0.00		
13,400.0		179.79	10,500.0	-3,225.4	467.9	3,243.2	0.00	0.00	0.00
13,500.0	90.00	179.79	10,500.0	-3,325.4	468.3	3,343.1	0.00	0.00	0.00



Database: PEDM Company: Midland

Project: Eddy County, NM (NAD 83 NME)

Site: Deep Elem 4 Fed Com

 Well:
 #582H

 Wellbore:
 OH

 Design:
 Plan #0.2

Local Co-ordinate Reference:

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Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Grid

esign:	Fidil #U.Z									
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	179.79	10,500.0	-3,425.4	468.7	3,443.1	0.00	0.00	0.00	
13,700.0	90.00	179.79	10,500.0	-3,525.4	469.0	3,543.0	0.00	0.00	0.00	
13,800.0	90.00	179.79	10,500.0	-3,625.4	469.4	3,642.9	0.00	0.00	0.00	
13,900.0	90.00	179.79	10,500.0	-3,725.4	469.8	3,742.8	0.00	0.00	0.00	
14,000.0	90.00	179.79	10,500.0	-3,825.4	470.2	3,842.7	0.00	0.00	0.00	
14,100.0	90.00	179.79	10,500.0	-3,925.4	470.5	3,942.6	0.00	0.00	0.00	
14,200.0	90.00	179.79	10,500.0	-4,025.4	470.9	4,042.5	0.00	0.00	0.00	
14,300.0	90.00	179.79	10,500.0	-4,125.4	471.3	4,142.4	0.00	0.00	0.00	
14,400.0	90.00	179.79	10,500.0	-4,225.4	471.7	4,242.4	0.00	0.00	0.00	
14,500.0	90.00	179.79	10,500.0	-4,325.4	472.0	4,342.3	0.00	0.00	0.00	
14,600.0	90.00	179.79	10,500.0	-4,425.4	472.4	4,442.2	0.00	0.00	0.00	
14,700.0	90.00	179.79	10,500.0	-4,525.4	472.8	4,542.1	0.00	0.00	0.00	
14,800.0	90.00	179.79	10,500.0	-4,625.4	473.2	4,642.0	0.00	0.00	0.00	
14,900.0	90.00	179.79	10,500.0	-4,725.4	473.5	4,741.9	0.00	0.00	0.00	
15,000.0	90.00	179.79	10,500.0	-4,825.4	473.9	4,841.8	0.00	0.00	0.00	
15,100.0	90.00	179.79	10,500.0	-4,925.4	474.3	4,941.8	0.00	0.00	0.00	
15,200.0	90.00	179.79	10,500.0	-5,025.4	474.7	5,041.7	0.00	0.00	0.00	
15,300.0	90.00	179.79	10,500.0	-5,125.4	475.0	5,141.6	0.00	0.00	0.00	
15,400.0	90.00	179.79	10,500.0	-5,225.4	475.4	5,241.5	0.00	0.00	0.00	
15,500.0	90.00	179.79	10,500.0	-5,325.4	475.8	5,341.4	0.00	0.00	0.00	
15,600.0	90.00	179.79	10,500.0	-5,425.4	476.2	5,441.3	0.00	0.00	0.00	
15,700.0	90.00	179.79	10,500.0	-5,525.4	476.5	5,541.2	0.00	0.00	0.00	
15,800.0	90.00	179.79	10,500.0	-5,625.4	476.9	5,641.2	0.00	0.00	0.00	
15,900.0	90.00	179.79	10,500.0	-5,725.4	477.3	5,741.1	0.00	0.00	0.00	
16,000.0	90.00	179.79	10,500.0	-5,825.4	477.7	5,841.0	0.00	0.00	0.00	
16,100.0	90.00	179.79	10,500.0	-5,925.4	478.0	5,940.9	0.00	0.00	0.00	
16,200.0	90.00	179.79	10,500.0	-6,025.4	478.4	6,040.8	0.00	0.00	0.00	
16,300.0	90.00	179.79	10,500.0	-6,125.4	478.8	6,140.7	0.00	0.00	0.00	
16,400.0	90.00	179.79	10,500.0	-6,225.4	479.2	6,240.6	0.00	0.00	0.00	
16,500.0	90.00	179.79	10,500.0	-6,325.4	479.5	6,340.6	0.00	0.00	0.00	
16,600.0	90.00	179.79	10,500.0	-6,425.4	479.9	6,440.5	0.00	0.00	0.00	
16,700.0	90.00	179.79	10,500.0	-6,525.4	480.3	6,540.4	0.00	0.00	0.00	
16,800.0	90.00	179.79	10,500.0	-6,625.4	480.7	6,640.3	0.00	0.00	0.00	
16,900.0	90.00	179.79	10,500.0	-6,725.3	481.0	6,740.2	0.00	0.00	0.00	
17,000.0	90.00	179.79	10,500.0	-6,825.3	481.4	6,840.1	0.00	0.00	0.00	
17,100.0	90.00	179.79	10,500.0	-6,925.3	481.8	6,940.0	0.00	0.00	0.00	
17,200.0	90.00	179.79	10,500.0	-7,025.3	482.2	7,040.0	0.00	0.00	0.00	
17,300.0	90.00	179.79	10,500.0	-7,125.3	482.5	7,139.9	0.00	0.00	0.00	
17,400.0	90.00	179.79	10,500.0	-7,225.3	482.9	7,239.8	0.00	0.00	0.00	
17,500.0	90.00	179.79	10,500.0	-7,325.3	483.3	7,339.7	0.00	0.00	0.00	
17,600.0	90.00	179.79	10,500.0	-7,425.3	483.7	7,439.6	0.00	0.00	0.00	
17,700.0	90.00	179.79	10,500.0	-7,525.3	484.0	7,539.5	0.00	0.00	0.00	
17,800.0	90.00	179.79	10,500.0	-7,625.3	484.4	7,639.4	0.00	0.00	0.00	
17,900.0	90.00	179.79	10,500.0	-7,725.3	484.8	7,739.4	0.00	0.00	0.00	
18,000.0	90.00	179.79	10,500.0	-7,825.3	485.2	7,839.3	0.00	0.00	0.00	
18,100.0	90.00	179.79	10,500.0	-7,925.3	485.5	7,939.2	0.00	0.00	0.00	
18,200.0	90.00	179.79	10,500.0	-8,025.3	485.9	8,039.1	0.00	0.00	0.00	
18,300.0	90.00	179.79	10,500.0	-8,125.3	486.3	8,139.0	0.00	0.00	0.00	
18,400.0	90.00	179.79	10,500.0	-8,225.3	486.6	8,238.9	0.00	0.00	0.00	
18,500.0	90.00	179.79	10,500.0	-8,325.3	487.0	8,338.8	0.00	0.00	0.00	
18,600.0	90.00	179.79	10,500.0	-8,425.3	487.4	8,438.8	0.00	0.00	0.00	
18,700.0	90.00	179.79	10,500.0	-8,525.3	487.8	8,538.7	0.00	0.00	0.00	
18,800.0	90.00	179.79	10,500.0	-8,625.3	488.1	8,638.6	0.00	0.00	0.00	
18,900.0	90.00	179.79	10,500.0	-8,725.3	488.5	8,738.5	0.00	0.00	0.00	



Database: PEDM Company: Midland

Company: Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Deep Elem 4 Fed Com

 Well:
 #582H

 Wellbore:
 OH

 Design:
 Plan #0.2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #582H

KB = 25' @ 3311.0usft KB = 25' @ 3311.0usft

Grid

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)
19,000.0	90.00	179.79	10,500.0	-8,825.3	488.9	8,838.4	0.00	0.00	0.00
19,100.0	90.00	179.79	10,500.0	-8,925.3	489.3	8,938.3	0.00	0.00	0.00
19,200.0	90.00	179.79	10,500.0	-9,025.3	489.6	9,038.2	0.00	0.00	0.00
19,300.0	90.00	179.79	10,500.0	-9,125.3	490.0	9,138.2	0.00	0.00	0.00
19,400.0	90.00	179.79	10,500.0	-9,225.3	490.4	9,238.1	0.00	0.00	0.00
19,500.0	90.00	179.79	10,500.0	-9,325.3	490.8	9,338.0	0.00	0.00	0.00
19,600.0	90.00	179.79	10,500.0	-9,425.3	491.1	9,437.9	0.00	0.00	0.00
19,700.0	90.00	179.79	10,500.0	-9,525.3	491.5	9,537.8	0.00	0.00	0.00
19,800.0	90.00	179.79	10,500.0	-9,625.3	491.9	9,637.7	0.00	0.00	0.00
19,900.0	90.00	179.79	10,500.0	-9,725.3	492.3	9,737.6	0.00	0.00	0.00
20,000.0	90.00	179.79	10,500.0	-9,825.3	492.6	9,837.6	0.00	0.00	0.00
20,100.0	90.00	179.79	10,500.0	-9,925.3	493.0	9,937.5	0.00	0.00	0.00
20,200.0	90.00	179.79	10,500.0	-10,025.3	493.4	10,037.4	0.00	0.00	0.00
20,300.0	90.00	179.79	10,500.0	-10,125.3	493.8	10,137.3	0.00	0.00	0.00
20,400.0	90.00	179.79	10,500.0	-10,225.3	494.1	10,237.2	0.00	0.00	0.00
20,500.0	90.00	179.79	10,500.0	-10,325.3	494.5	10,337.1	0.00	0.00	0.00
20,600.0	90.00	179.79	10,500.0	-10,425.3	494.9	10,437.0	0.00	0.00	0.00
20,700.0	90.00	179.79	10,500.0	-10,525.3	495.3	10,537.0	0.00	0.00	0.00
20,800.0	90.00	179.79	10,500.0	-10,625.3	495.6	10,636.9	0.00	0.00	0.00
20,900.0	90.00	179.79	10,500.0	-10,725.3	496.0	10,736.8	0.00	0.00	0.00
21,000.0	90.00	179.79	10,500.0	-10,825.3	496.4	10,836.7	0.00	0.00	0.00
21,100.0	90.00	179.79	10,500.0	-10,925.3	496.8	10,936.6	0.00	0.00	0.00
21,163.7	90.00	179.79	10,500.0	-10,989.0	497.0	11,000.2	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 (Deep Elem 4 Fed - plan hits target cent - Point	0.00 er	0.00	10,022.5	-145.0	458.0	388,030.00	713,612.00	32° 3′ 55.995 N	103° 46' 37.904 W
FTP (Deep Elem 4 Fed (- plan hits target cent - Point	0.00 er	0.01	10,490.9	-530.0	458.0	387,645.00	713,612.00	32° 3′ 52.185 N	103° 46' 37.927 W
LTP/PBHL (Deep Elem 4 - plan hits target cent - Point	0.00 er	0.00	10,500.0	-10,989.0	497.0	377,186.00	713,651.00	32° 2' 8.682 N	103° 46' 38.100 W



1750

2450

2800

3150

4900

6300-

7000

7350

8400

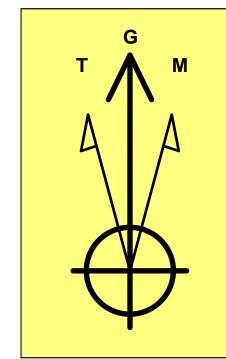
8750

9100

9450

10150-

10500



Azimuths to Grid North True North: -0.29° Magnetic North: 6.44°

Magnetic Field Strength: 47477.8nT Dip Angle: 59.76° Date: 7/6/2020 Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.44°
To convert a Magnetic Direction to a True Direction, Add 6.74° East
To convert a True Direction to a Grid Direction, Subtract 0.29°

Vertical Section at 177.41°

Eddy County, NM (NAD 83 NME)

Deep Elem 4 Fed Com #582H

Plan #0.2

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

Geodetic System: US State Plane 1983 **Datum: North American Datum 1983** Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone System Datum: Mean Sea Level

WELL DETAILS: #582H

3286.0

KB = 25' @ 3311.0usft Northing **Easting**

Longitude 103° 46' 43.218 W Latittude 32° 3' 57.453 N 388175.00 713154.00

							SECTIO	N DETAILS	3	
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	
3	1699.5	5.99	107.57	1699.0	-4.7	14.9	2.00	107.57	5.4	
4	6003.1	5.99	107.57	5979.0	-140.3	443.1	0.00	0.00	160.2	
5	6302.6	0.00	0.00	6278.0	-145.0	458.0	2.00	180.00	165.5	
6	10047.1	0.00	0.00	10022.5	-145.0	458.0	0.00	0.00	165.5	KOP (Deep Elem 4 Fed Com #582H)
7	10704.0	78.84	180.00	10490.9	-530.0	458.0	12.00	180.00	550.2	FTP (Deep Elem 4 Fed Com #582H)
8	10797.1	90.00	179.79	10499.9	-622.5	458.2	12.00	-1.11	642.5	
9	21163.7	90.00	179.79	10500.0	-10989.0	497.0	0.00	0.00	11000.2	LTP/PBHL (Deep Elem 4 Fed Com #582H)

CASING DETAILS No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES) Northing **Easting** KOP (Deep Elem 4 Fed Com #582H) 10022.5 -145.0 388030.00 713612.00 FTP (Deep Elem 4 Fed Com #582H) -530.0 387645.00 10490.9 713612.00 LTP/PBHL (Deep Elem 4 Fed Com #582H) 10500.0 -10989.0 377186.00 713651.00

West(-)/East(+) -1200 -1600 -2000 -2400 -3200 -4000 -4400 -4800 -6800 -7200 -7600 -8000 -8400 -9200 -9600 -10000 -10400 -10800 -11200 West(-)/East(+)

Eddy County, NM (NAD 83 NME) Deep Elem 4 Fed Com Plan #0.2 15:51, December 19 2022



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.



2/24/2022

- 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.



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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

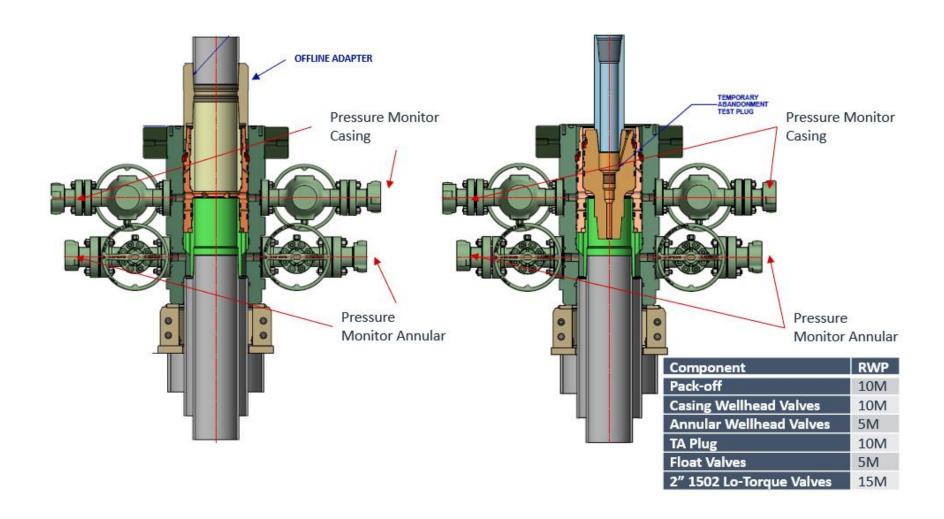
General Procedure After Cementing

- 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



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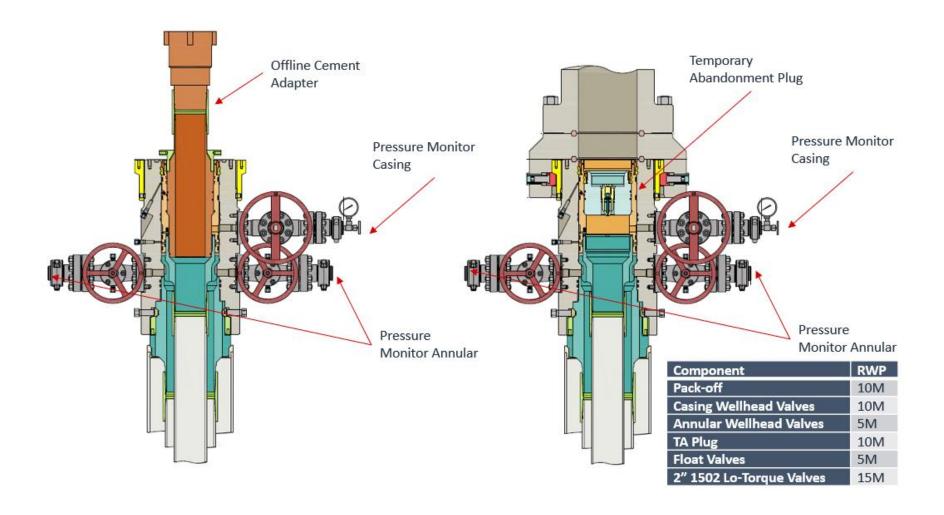
Figure 1: Cameron TA Plug and Offline Adapter Schematic





2/24/2022

Figure 2: Cactus TA Plug and Offline Adapter Schematic

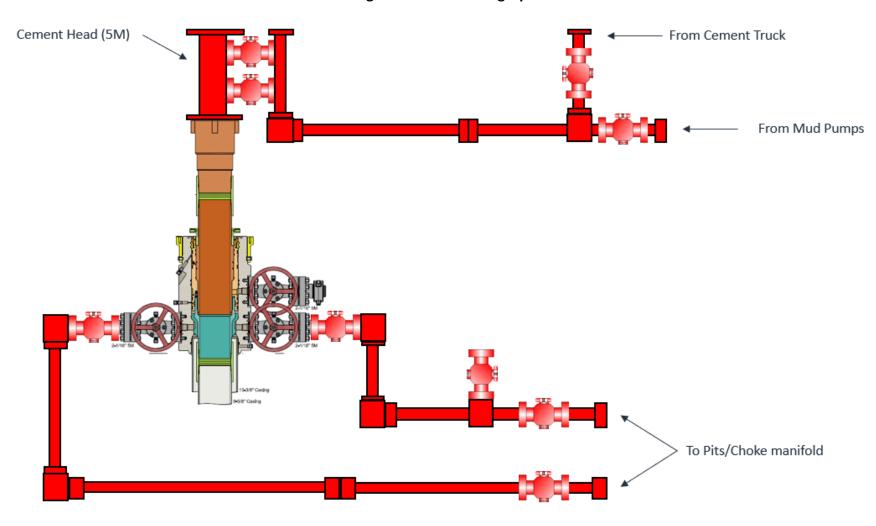


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Figure 3: Back Yard Rig Up



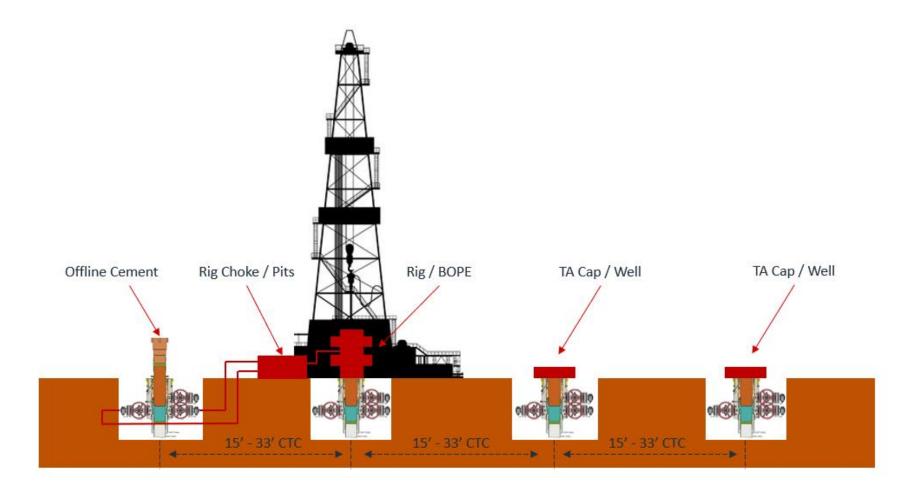
*** All Lines 10M rated working pressure

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Figure 4: Rig Placement Diagram



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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 190277

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	190277
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
kpickford	NSP Will require administrative order for non-standard spacing unit	3/6/2023
kpickford	Adhere to previous NMOCD Conditions of Approval	3/6/2023