

Well Name: MIDNIGHT HOUR 11 FED COM	Well Location: T26S / R30E / SEC 11 / SENE /	County or Parish/State:
Well Number: 768H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM93207	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Sundry ID: 2681628

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/13/2022

Time Sundry Submitted: 07:38

Date proposed operation will begin: 07/27/2022

Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change name from 721H to Midnight Hour 11 Fed Com 768H. Change BHL from T-26-S, R-30-E, Sec 14, 230' FSL, 334' FEL, Eddy Co., NM, to T-26-S, R-30-E, Sec 14, 230' FSL, 650' FEL, Eddy Co., N.M. Update casing and cement program to current design. EOG requests execution of Variance 3a (attached) to offline cement the intermediate sections.

NOI Attachments

Procedure Description

- MIDNIGHT_HOUR_11_FED_COM_768H_C_102_20220713073818.pdf
- Wellhead_10.750x8.750x6.00in_csg_20220713073710.pdf
- Wellhead_9.675x7.625x5.500in_csg_20220713073710.pdf
- EOG_BLM_Variance_3a___Offline_Cement_Intermediate_Operational_Procedure_20220713073651.pdf
- 9.625in_36lbf_J_55_LTC_20220713073635.pdf
- 7.625in_29.700lbf__HCP110_FXL_20220713073635.pdf
- 10.750in_40.500lbf_J55_STC_20220713073634.pdf
- 6.000in_24.00lbf_P110_HP_EAGLE_SF_H_SC_20220713073612.pdf
- 5.500in_20.00lbf_P110_EC_VAM_SPRINT_SF_20220713073613.pdf

Well Name: MIDNIGHT HOUR 11 FED COM	Well Location: T26S / R30E / SEC 11 / SENE /	County or Parish/State:
Well Number: 768H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM93207	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

5.500in_20.00lbf_P110_EC_DWC_C_IS_MS_20220713073612.pdf

Midnight_Hour_11_Fed_Com_768H_Sundry_Info__Dual____Rev_Name__BHL__csg__Comments_6.8.2022_20220713073558.pdf

Conditions of Approval

Additional

MIDNIGHT_HOUR_11_FED_COM_768H__SUNDRY_COA_20220714104855.pdf

Operator

I certify that the foregoing is true and correct. 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 States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: STAR HARRELL	Signed on: JUL 13, 2022 07:35 AM
Name: EOG RESOURCES INCORPORATED	
Title: Regulatory Specialist	
Street Address: 5509 CHAMPIONS DRIVE	
City: MIDLAND	State: TX
Phone: (432) 848-9161	
Email address: STAR_HARRELL@EOGRESOURCES.COM	

Field

Representative Name: Eric Brorman		
Street Address: 5509 Champions Drive		
City: Midland	State: TX	Zip: 79706
Phone: (432)556-1276		
Email address: eric_brorman@eogresources.com		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 07/25/2022
Signature: Chris Walls	

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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- 49718	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code 332869	Property Name MIDNIGHT HOUR 11 FED COM	Well Number 768H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3192'

Surface Location

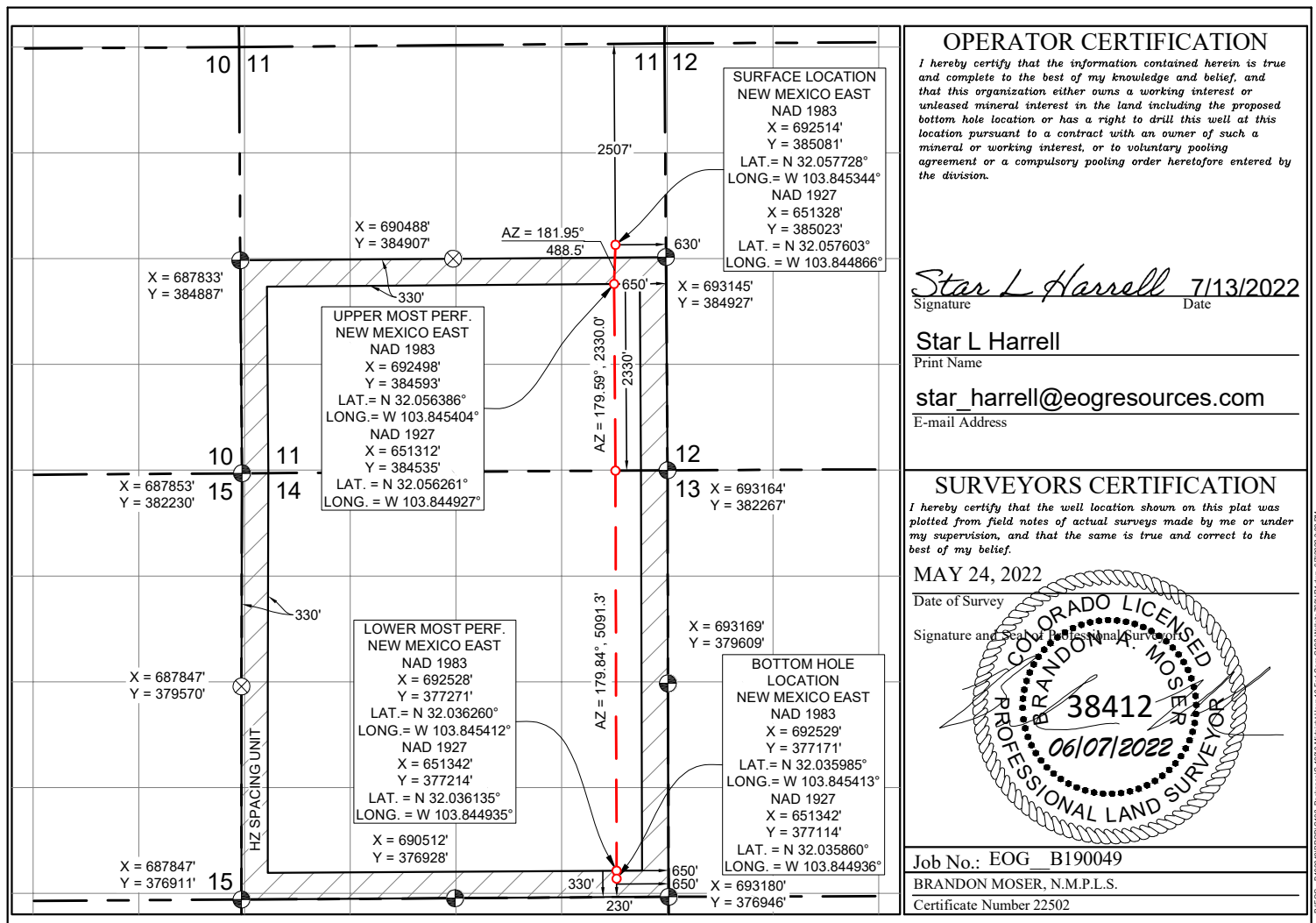
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	11	26 S	30 E		2507	NORTH	630	EAST	EDDY

Bottom 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	14	26 S	30 E		230	SOUTH	650	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidated Code	Order No.
960.00			

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.





Midnight Hour 11 Fed Com 768H

Revised Permit Information 06/08/2022:

Well Name: Midnight Hour 11 Fed Com 768H

Location: SHL: 2507' FNL & 630' FEL, Section 11, T-26-S, R-30-E, Eddy Co., N.M.

BHL: 230' FSL & 650' FEL, Section 14, T-26-S, R-30-E, Eddy Co., N.M.

Casing Program:

Hole Size	Interval MD		Interval TVD		Csg OD	Weight	Grade	Conn
	From (ft)	To (ft)	From (ft)	To (ft)				
12-1/4"	0	1,160	0	1,160	9-5/8"	36#	J-55	LTC
8-3/4"	0	9,840	0	9,835	7-5/8"	29.7#	HCP-110	FXL
6-3/4"	0	9,340	0	9,335	5-1/2"	20#	P110-EC	DWC/C IS MS
6-3/4"	9,340	9,840	9,335	9,835	5-1/2"	20#	P110-EC	Vam Sprint SF
6-3/4"	9,840	19,486	9,835	11,984	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:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,160' 9-5/8"	320	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 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 @ 960')
9,840' 7-5/8"	490	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 5,690')
	1000	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
19,486' 5-1/2"	870	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,340')



Midnight Hour 11 Fed Com 768H

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 (5,885') 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 100 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:

Measured Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,160'	Fresh - Gel	8.6-8.8	28-34	N/c
1,160' – 9,840'	Brine	10.0-10.2	28-34	N/c
9,840' – 11,511'	Oil Base	8.7-9.4	58-68	N/c - 6
11,511' – 19,486' Lateral	Oil Base	10.0-14.0	58-68	4 - 6



Midnight Hour 11 Fed Com 768H

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"



Midnight Hour 11 Fed Com 768H

2507' FNL

Revised Wellbore

KB: 3217'

630' FEL

GL: 3192'

Section 11

T-26-S, R-30-E

API: 30-015-*****

Bit Size: 12-1/4"
 9-5/8", 36#, J-55, LTC,
 @ 0' - 1,160'

Bit Size: 8-3/4"
 7-5/8", 29.7#, HCP-110, FXL,
 @ 0' - 9,840'

Bit Size: 6-3/4"
 5-1/2", 20#, P110-EC, DWC/C IS MS,
 @ 0' - 9,340'

5-1/2", 20#, P110-EC, Vam Sprint SF,
 @ 9,340' - 9,840'

5-1/2", 20#, P110-EC, DWC/C IS MS,
 @ 9,840' - 19,486'

KOP: 11,511' MD, 11,506' TVD
 EOC: 12,261' MD, 11,984' TVD

TOC: 9,340' MD, 9,335' TVD

Lateral: 19,486' MD, 11,984' TVD
 Upper Most Perf:
 2330' FSL & 650' FEL Sec. 11
 Lower Most Perf:
 330' FSL & 650' FEL Sec. 14
 BH Location: 230' FSL & 650' FEL
 Sec. 14
 T-26-S R-30-E



Midnight Hour 11 Fed Com 768H

Design B**4. CASING PROGRAM**

Hole Size	Interval MD		Interval TVD		Csg OD	Weight	Grade	Conn
	From (ft)	To (ft)	From (ft)	To (ft)				
13"	0	1,160	0	1,160	10-3/4"	40.5#	J-55	STC
9-7/8"	0	9,840	0	9,835	8-3/4"	38.5#	P110-EC	Vam Sprint-SF
7-7/8"	0	19,486	0	11,984	6"	24#	P110-HP	Eagle SFH SC

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:

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Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,160' 10-3/4"	300	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk 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 @ 960')
9,840' 8-3/4"	550	14.2	1.11	1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 5,690')
	1110	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
19,486' 6"	1420	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,340')



Midnight Hour 11 Fed Com 768H

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 (5,885') 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 109 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.
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- 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"



Midnight Hour 11 Fed Com 768H

2507' FNL
630' FEL
Section 11
T-26-S, R-30-E

Proposed Wellbore

KB: 3217'
GL: 3192'

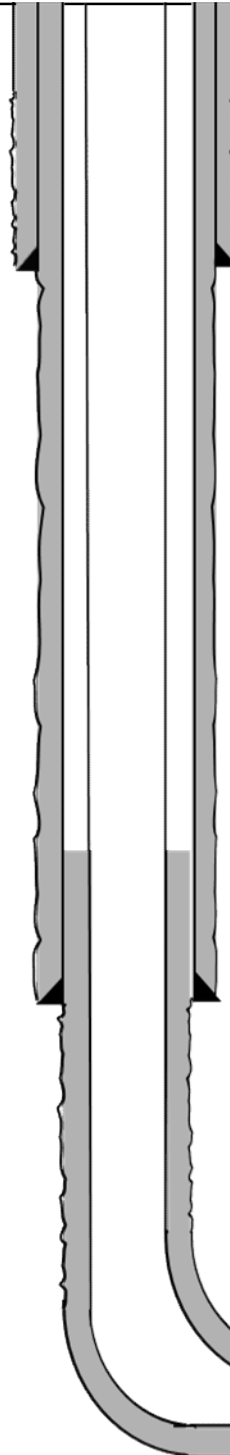
API: 30-015-*****

Bit Size: 13"
10-3/4", 40.5#, J-55, STC,
@ 0' - 1,160'

Bit Size: 9-7/8"
8-3/4" 38.5#, P110-EC, Vam Sprint-SF,
@ 0' - 9,840'

Bit Size: 7-7/8"
6", 24#, P110-HP, Eagle SFH SC,
@ 0' - 19,486'

KOP: 11,511' MD, 11,506' TVD
EOC: 12,261' MD, 11,984' TVD



TOC: 9,340' MD, 9,335' TVD

Lateral: 19,486' MD, 11,984' TVD
Upper Most Perf:
2330' FSL & 650' FEL Sec. 11
Lower Most Perf:
330' FSL & 650' FEL Sec. 14
BH Location: 230' FSL & 650' FEL
Sec. 14
T-26-S R-30-E



Offline Intermediate Cementing Procedure

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 nipped 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 nipped back up for any further remediation.



Offline Intermediate Cementing Procedure

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.



Offline Intermediate Cementing Procedure

2/24/2022

Example Well Control Plan Content

A. Well Control Component Table

The table below, which covers the cementing of the **5M MASP (Maximum Allowable Surface Pressure) portion of the well**, 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 nipped 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.



Offline Intermediate Cementing Procedure

2/24/2022

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

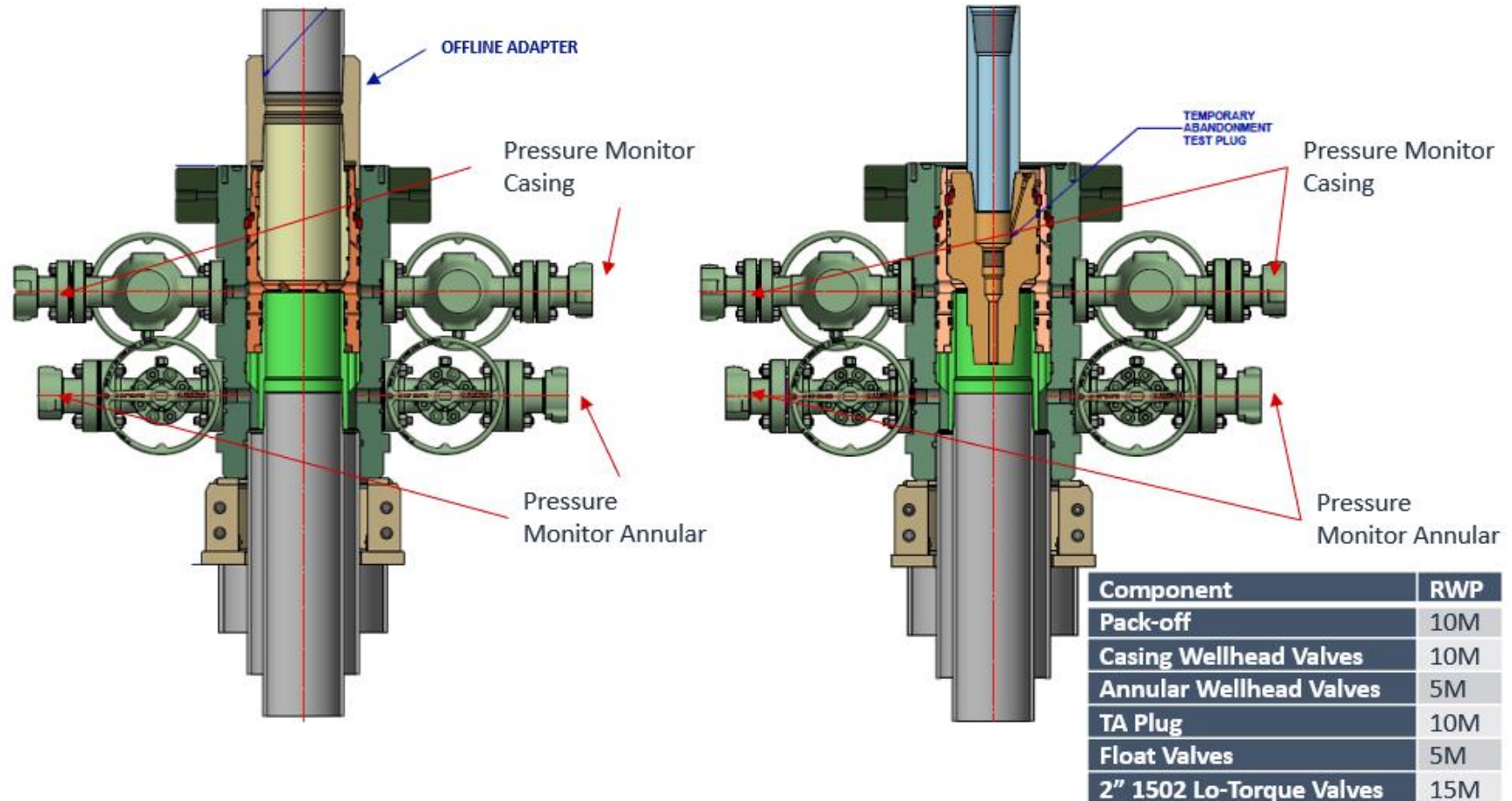
1. Sound alarm (alert crew).
2. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
3. Confirm shut-in.
4. Notify tool pusher/company representative.
5. Read and record the following:
 - a. SICP and AP
 - b. Pit gain
 - c. Time
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



Offline Intermediate Cementing Procedure

2/24/2022

Figure 1: Cameron TA Plug and Offline Adapter Schematic

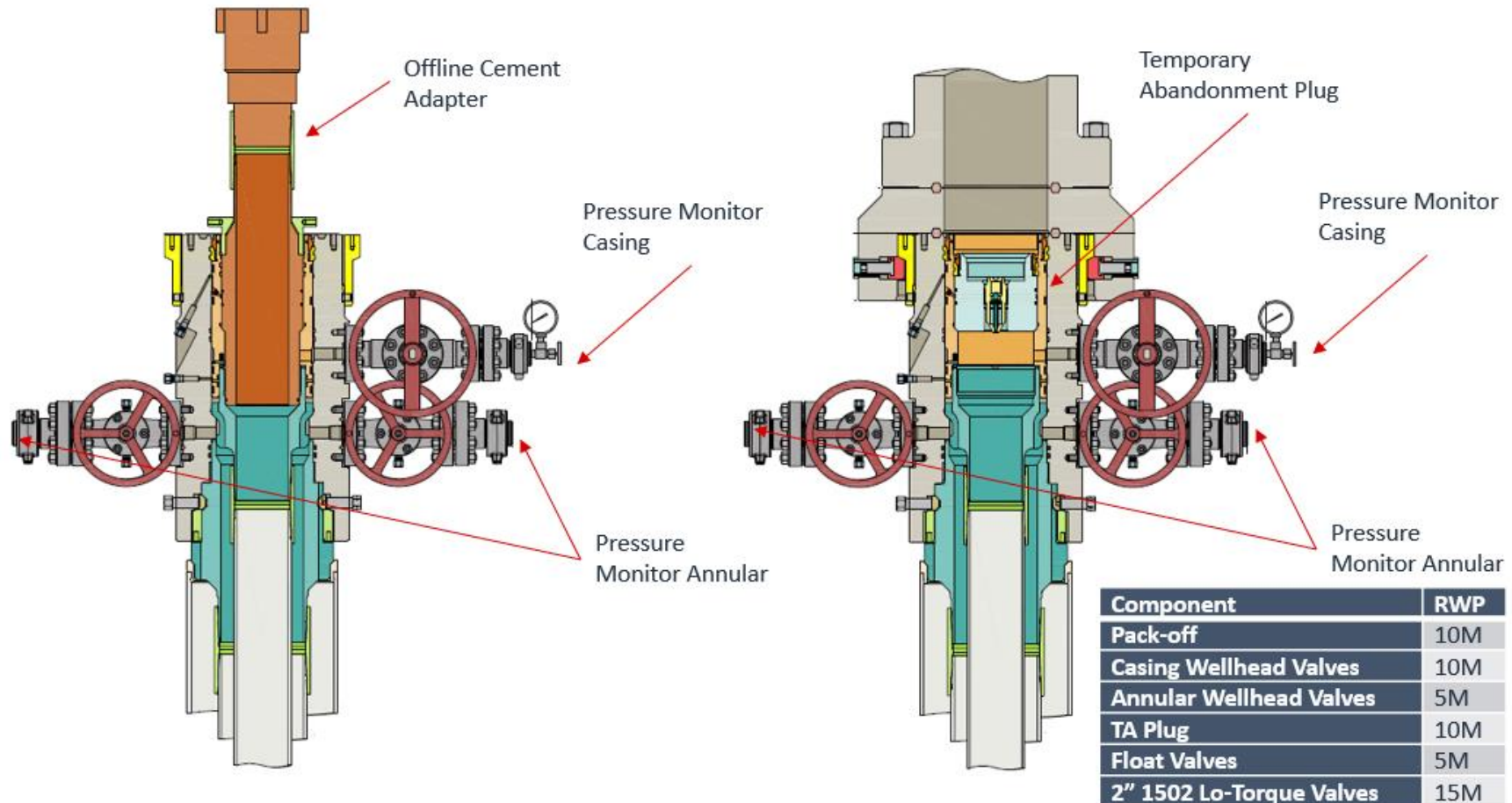




Offline Intermediate Cementing Procedure

2/24/2022

Figure 2: Cactus TA Plug and Offline Adapter Schematic

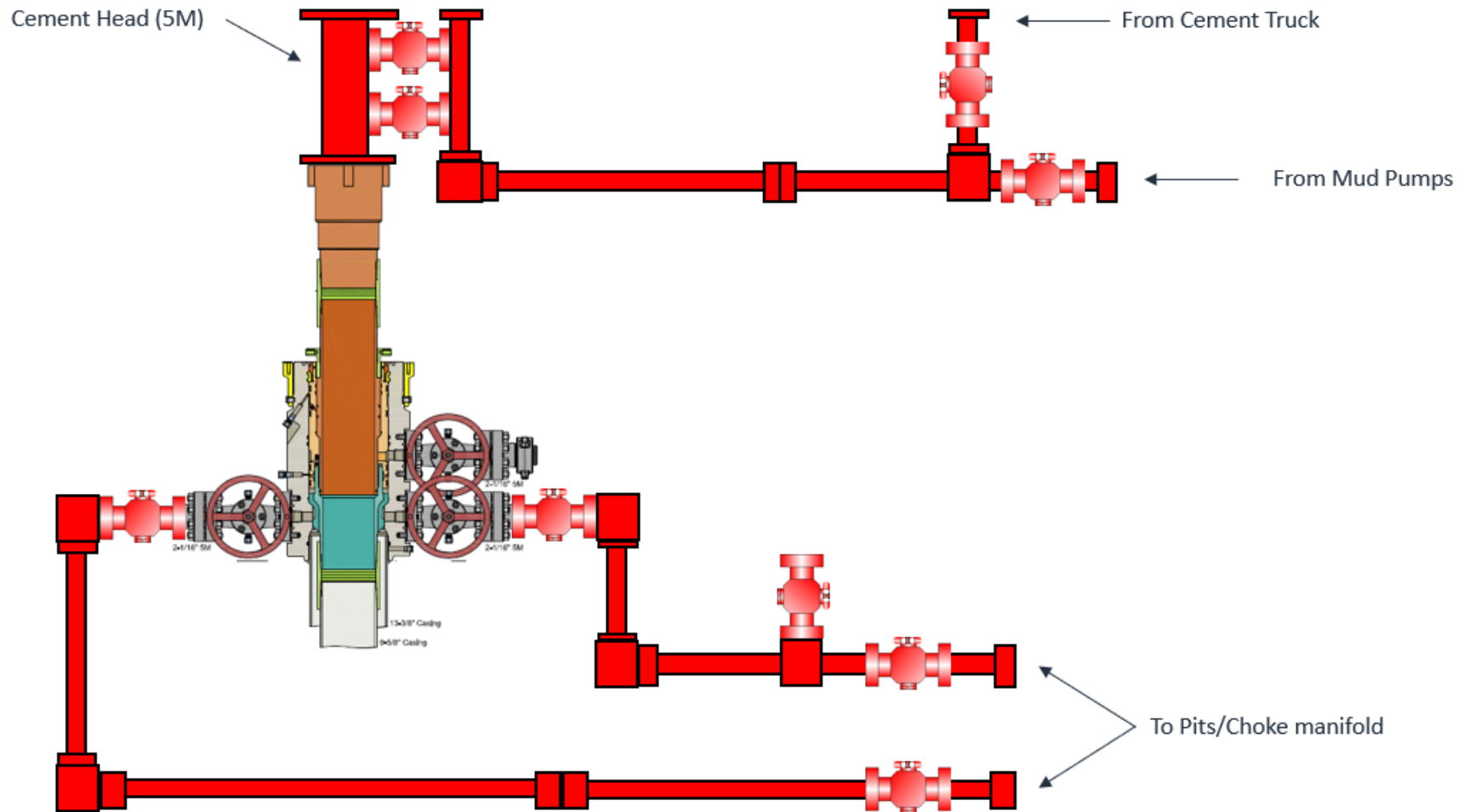




Offline Intermediate Cementing Procedure

2/24/2022

Figure 3: Back Yard Rig Up



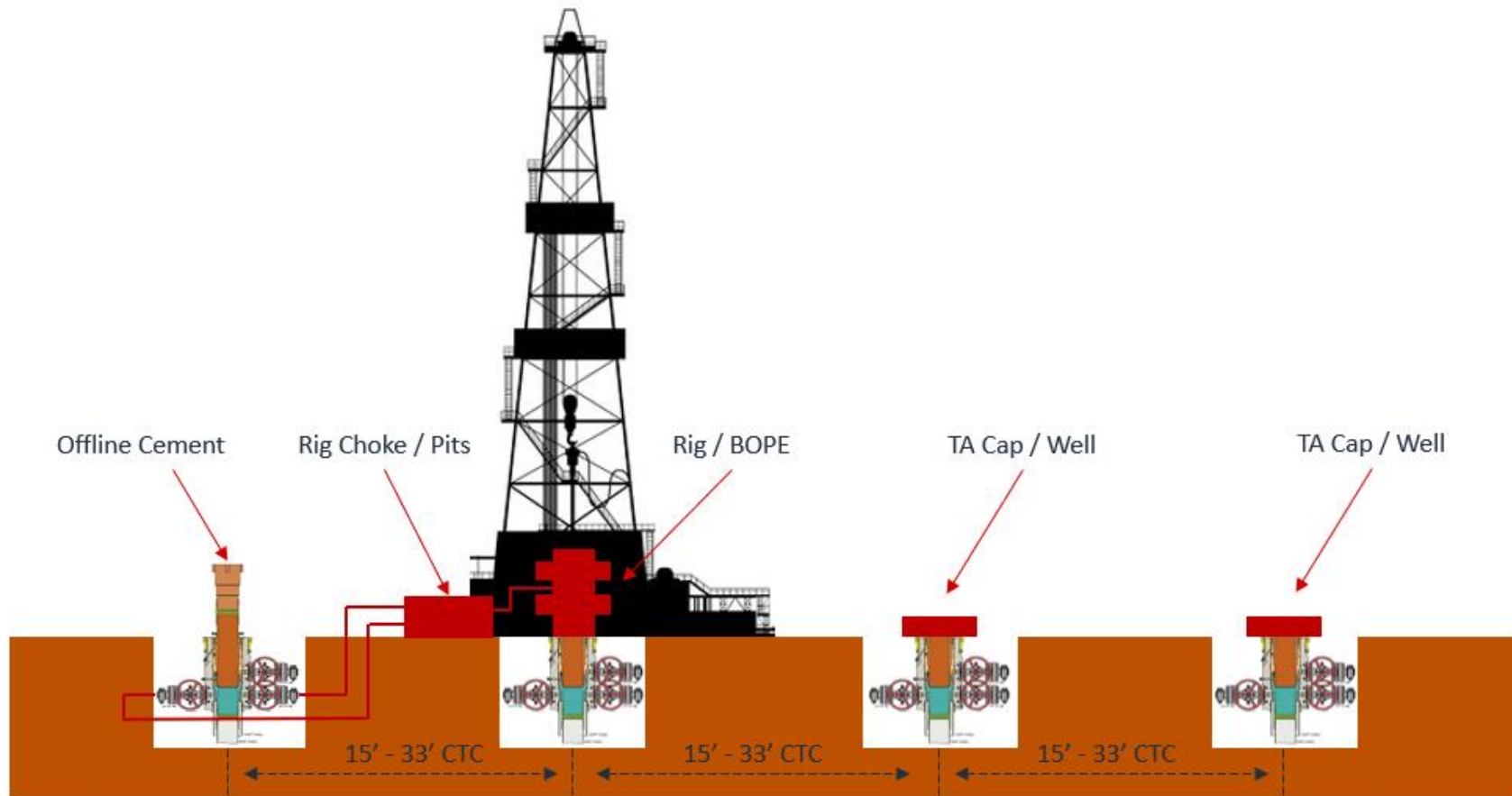
*** All Lines 10M rated working pressure



Offline Intermediate Cementing Procedure

2/24/2022

Figure 4: Rig Placement Diagram





Midland

Eddy County, NM (NAD 83 NME)

Midnight Hour 11 Fed Com

#768H

OH

Plan: Plan #0.3

Standard Planning Report

08 June, 2022



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

Project	Eddy County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Midnight Hour 11 Fed Com				
Site Position:		Northing:	384,955.00 usft	Latitude:	32.0574122°N
From:	Map	Easting:	690,054.00 usft	Longitude:	103.8532873°W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	#768H					
Well Position	+N/-S	0.0 usft	Northing:	385,081.00 usft	Latitude:	32.0577282°N
	+E/-W	0.0 usft	Easting:	692,514.00 usft	Longitude:	103.8453450°W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,192.0 usft
Grid Convergence:		0.26 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/3/2020	6.72	59.72	47,423.94851230

Design	Plan #0.3				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.89	

Plan Survey Tool Program	Date	6/8/2022			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,485.8 Plan #0.3 (OH)	EOG MWD+IFR1		
			MWD + IFR1		



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	
1,331.1	2.62	184.40	1,331.1	-3.0	-0.2	2.00	2.00	0.00	184.40	
5,758.6	2.62	184.40	5,753.9	-205.0	-15.8	0.00	0.00	0.00	0.00	
5,889.7	0.00	0.00	5,885.0	-208.0	-16.0	2.00	-2.00	0.00	180.00	
11,511.2	0.00	0.00	11,506.5	-208.0	-16.0	0.00	0.00	0.00	0.00	KOP(Midnight Hour 11
12,261.2	90.00	179.77	11,984.0	-685.5	-14.1	12.00	12.00	23.97	179.77	
19,385.8	90.00	179.77	11,984.0	-7,810.0	14.0	0.00	0.00	0.00	0.00	LTP(Midnight Hour 11
19,405.0	90.00	179.39	11,984.0	-7,829.2	14.1	2.00	0.00	-2.00	-89.95	
19,485.8	90.00	179.39	11,984.0	-7,910.0	15.0	0.00	0.00	0.00	0.00	PBHL(Midnight Hour 11



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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
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	2.00	184.40	1,300.0	-1.7	-0.1	1.7	2.00	2.00	0.00
1,331.1	2.62	184.40	1,331.1	-3.0	-0.2	3.0	2.00	2.00	0.00
1,400.0	2.62	184.40	1,399.9	-6.1	-0.5	6.1	0.00	0.00	0.00
1,500.0	2.62	184.40	1,499.8	-10.7	-0.8	10.7	0.00	0.00	0.00
1,600.0	2.62	184.40	1,599.7	-15.3	-1.2	15.3	0.00	0.00	0.00
1,700.0	2.62	184.40	1,699.6	-19.8	-1.5	19.8	0.00	0.00	0.00
1,800.0	2.62	184.40	1,799.5	-24.4	-1.9	24.4	0.00	0.00	0.00
1,900.0	2.62	184.40	1,899.4	-28.9	-2.2	28.9	0.00	0.00	0.00
2,000.0	2.62	184.40	1,999.3	-33.5	-2.6	33.5	0.00	0.00	0.00
2,100.0	2.62	184.40	2,099.1	-38.1	-2.9	38.1	0.00	0.00	0.00
2,200.0	2.62	184.40	2,199.0	-42.6	-3.3	42.6	0.00	0.00	0.00
2,300.0	2.62	184.40	2,298.9	-47.2	-3.6	47.2	0.00	0.00	0.00
2,400.0	2.62	184.40	2,398.8	-51.8	-4.0	51.8	0.00	0.00	0.00
2,500.0	2.62	184.40	2,498.7	-56.3	-4.3	56.3	0.00	0.00	0.00
2,600.0	2.62	184.40	2,598.6	-60.9	-4.7	60.9	0.00	0.00	0.00
2,700.0	2.62	184.40	2,698.5	-65.5	-5.0	65.4	0.00	0.00	0.00
2,800.0	2.62	184.40	2,798.4	-70.0	-5.4	70.0	0.00	0.00	0.00
2,900.0	2.62	184.40	2,898.3	-74.6	-5.7	74.6	0.00	0.00	0.00
3,000.0	2.62	184.40	2,998.2	-79.1	-6.1	79.1	0.00	0.00	0.00
3,100.0	2.62	184.40	3,098.1	-83.7	-6.4	83.7	0.00	0.00	0.00
3,200.0	2.62	184.40	3,198.0	-88.3	-6.8	88.3	0.00	0.00	0.00
3,300.0	2.62	184.40	3,297.9	-92.8	-7.1	92.8	0.00	0.00	0.00
3,400.0	2.62	184.40	3,397.8	-97.4	-7.5	97.4	0.00	0.00	0.00
3,500.0	2.62	184.40	3,497.7	-102.0	-7.8	101.9	0.00	0.00	0.00
3,600.0	2.62	184.40	3,597.6	-106.5	-8.2	106.5	0.00	0.00	0.00
3,700.0	2.62	184.40	3,697.5	-111.1	-8.5	111.1	0.00	0.00	0.00
3,800.0	2.62	184.40	3,797.4	-115.6	-8.9	115.6	0.00	0.00	0.00
3,900.0	2.62	184.40	3,897.3	-120.2	-9.2	120.2	0.00	0.00	0.00
4,000.0	2.62	184.40	3,997.2	-124.8	-9.6	124.7	0.00	0.00	0.00
4,100.0	2.62	184.40	4,097.1	-129.3	-9.9	129.3	0.00	0.00	0.00
4,200.0	2.62	184.40	4,196.9	-133.9	-10.3	133.9	0.00	0.00	0.00
4,300.0	2.62	184.40	4,296.8	-138.5	-10.7	138.4	0.00	0.00	0.00
4,400.0	2.62	184.40	4,396.7	-143.0	-11.0	143.0	0.00	0.00	0.00
4,500.0	2.62	184.40	4,496.6	-147.6	-11.4	147.6	0.00	0.00	0.00
4,600.0	2.62	184.40	4,596.5	-152.1	-11.7	152.1	0.00	0.00	0.00
4,700.0	2.62	184.40	4,696.4	-156.7	-12.1	156.7	0.00	0.00	0.00
4,800.0	2.62	184.40	4,796.3	-161.3	-12.4	161.2	0.00	0.00	0.00
4,900.0	2.62	184.40	4,896.2	-165.8	-12.8	165.8	0.00	0.00	0.00
5,000.0	2.62	184.40	4,996.1	-170.4	-13.1	170.4	0.00	0.00	0.00
5,100.0	2.62	184.40	5,096.0	-175.0	-13.5	174.9	0.00	0.00	0.00
5,200.0	2.62	184.40	5,195.9	-179.5	-13.8	179.5	0.00	0.00	0.00



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	2.62	184.40	5,295.8	-184.1	-14.2	184.1	0.00	0.00	0.00
5,400.0	2.62	184.40	5,395.7	-188.6	-14.5	188.6	0.00	0.00	0.00
5,500.0	2.62	184.40	5,495.6	-193.2	-14.9	193.2	0.00	0.00	0.00
5,600.0	2.62	184.40	5,595.5	-197.8	-15.2	197.7	0.00	0.00	0.00
5,700.0	2.62	184.40	5,695.4	-202.3	-15.6	202.3	0.00	0.00	0.00
5,758.6	2.62	184.40	5,753.9	-205.0	-15.8	205.0	0.00	0.00	0.00
5,800.0	1.79	184.40	5,795.3	-206.6	-15.9	206.6	2.00	-2.00	0.00
5,889.7	0.00	0.00	5,885.0	-208.0	-16.0	208.0	2.00	-2.00	0.00
5,900.0	0.00	0.00	5,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,595.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,695.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,795.3	-208.0	-16.0	208.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,595.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,695.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,795.3	-208.0	-16.0	208.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,595.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,695.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,795.3	-208.0	-16.0	208.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,595.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,695.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,795.3	-208.0	-16.0	208.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,000.0	0.00	0.00	9,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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)
10,500.0	0.00	0.00	10,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,600.0	0.00	0.00	10,595.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,700.0	0.00	0.00	10,695.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,800.0	0.00	0.00	10,795.3	-208.0	-16.0	208.0	0.00	0.00	0.00
10,900.0	0.00	0.00	10,895.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,000.0	0.00	0.00	10,995.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,100.0	0.00	0.00	11,095.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,200.0	0.00	0.00	11,195.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,300.0	0.00	0.00	11,295.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,400.0	0.00	0.00	11,395.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,500.0	0.00	0.00	11,495.3	-208.0	-16.0	208.0	0.00	0.00	0.00
11,511.2	0.00	0.00	11,506.5	-208.0	-16.0	208.0	0.00	0.00	0.00
KOP(Midnight Hour 11 Fed Com #721H)									
11,525.0	1.65	179.77	11,520.3	-208.2	-16.0	208.2	12.00	12.00	0.00
11,550.0	4.65	179.77	11,545.2	-209.6	-16.0	209.5	12.00	12.00	0.00
11,575.0	7.65	179.77	11,570.1	-212.3	-16.0	212.2	12.00	12.00	0.00
11,600.0	10.65	179.77	11,594.8	-216.2	-16.0	216.2	12.00	12.00	0.00
11,625.0	13.65	179.77	11,619.2	-221.5	-15.9	221.5	12.00	12.00	0.00
11,650.0	16.65	179.77	11,643.3	-228.0	-15.9	228.0	12.00	12.00	0.00
11,675.0	19.65	179.77	11,667.1	-235.8	-15.9	235.8	12.00	12.00	0.00
11,700.0	22.65	179.77	11,690.4	-244.8	-15.9	244.8	12.00	12.00	0.00
11,725.0	25.65	179.77	11,713.2	-255.1	-15.8	255.0	12.00	12.00	0.00
11,750.0	28.65	179.77	11,735.4	-266.5	-15.8	266.4	12.00	12.00	0.00
11,775.0	31.65	179.77	11,757.1	-279.0	-15.7	279.0	12.00	12.00	0.00
11,800.0	34.65	179.77	11,778.0	-292.7	-15.7	292.7	12.00	12.00	0.00
11,825.0	37.65	179.77	11,798.2	-307.4	-15.6	307.4	12.00	12.00	0.00
11,850.0	40.65	179.77	11,817.6	-323.2	-15.5	323.2	12.00	12.00	0.00
11,875.0	43.65	179.77	11,836.1	-340.0	-15.5	340.0	12.00	12.00	0.00
11,900.0	46.65	179.77	11,853.7	-357.7	-15.4	357.7	12.00	12.00	0.00
11,925.0	49.65	179.77	11,870.4	-376.3	-15.3	376.3	12.00	12.00	0.00
11,950.0	52.65	179.77	11,886.1	-395.8	-15.3	395.8	12.00	12.00	0.00
11,975.0	55.65	179.77	11,900.7	-416.1	-15.2	416.0	12.00	12.00	0.00
12,000.0	58.65	179.77	11,914.3	-437.1	-15.1	437.0	12.00	12.00	0.00
12,025.0	61.65	179.77	11,926.7	-458.8	-15.0	458.7	12.00	12.00	0.00
12,050.0	64.65	179.77	11,938.0	-481.1	-14.9	481.0	12.00	12.00	0.00
12,074.9	67.65	179.77	11,948.1	-503.9	-14.8	503.8	12.00	12.00	0.00
FTP(Midnight Hour 11 Fed Com #721H)									
12,075.0	67.65	179.77	11,948.1	-503.9	-14.8	503.9	12.00	12.00	0.00
12,100.0	70.65	179.77	11,957.0	-527.3	-14.7	527.2	12.00	12.00	0.00
12,125.0	73.65	179.77	11,964.7	-551.1	-14.6	551.0	12.00	12.00	0.00
12,150.0	76.65	179.77	11,971.1	-575.2	-14.6	575.2	12.00	12.00	0.00
12,175.0	79.65	179.77	11,976.2	-599.7	-14.5	599.7	12.00	12.00	0.00
12,200.0	82.65	179.77	11,980.0	-624.4	-14.4	624.4	12.00	12.00	0.00
12,225.0	85.65	179.77	11,982.6	-649.3	-14.3	649.2	12.00	12.00	0.00
12,250.0	88.65	179.77	11,983.8	-674.2	-14.2	674.2	12.00	12.00	0.00
12,261.2	90.00	179.77	11,984.0	-685.5	-14.1	685.4	12.00	12.00	0.00
12,300.0	90.00	179.77	11,984.0	-724.2	-14.0	724.2	0.00	0.00	0.00
12,400.0	90.00	179.77	11,984.0	-824.2	-13.6	824.2	0.00	0.00	0.00
12,500.0	90.00	179.77	11,984.0	-924.2	-13.2	924.2	0.00	0.00	0.00
12,600.0	90.00	179.77	11,984.0	-1,024.2	-12.8	1,024.2	0.00	0.00	0.00
12,700.0	90.00	179.77	11,984.0	-1,124.2	-12.4	1,124.2	0.00	0.00	0.00
12,800.0	90.00	179.77	11,984.0	-1,224.2	-12.0	1,224.2	0.00	0.00	0.00
12,900.0	90.00	179.77	11,984.0	-1,324.2	-11.6	1,324.2	0.00	0.00	0.00
13,000.0	90.00	179.77	11,984.0	-1,424.2	-11.2	1,424.2	0.00	0.00	0.00



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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)
13,100.0	90.00	179.77	11,984.0	-1,524.2	-10.8	1,524.2	0.00	0.00	0.00
13,200.0	90.00	179.77	11,984.0	-1,624.2	-10.4	1,624.2	0.00	0.00	0.00
13,300.0	90.00	179.77	11,984.0	-1,724.2	-10.0	1,724.2	0.00	0.00	0.00
13,400.0	90.00	179.77	11,984.0	-1,824.2	-9.6	1,824.2	0.00	0.00	0.00
13,500.0	90.00	179.77	11,984.0	-1,924.2	-9.2	1,924.2	0.00	0.00	0.00
13,600.0	90.00	179.77	11,984.0	-2,024.2	-8.8	2,024.2	0.00	0.00	0.00
13,700.0	90.00	179.77	11,984.0	-2,124.2	-8.4	2,124.2	0.00	0.00	0.00
13,800.0	90.00	179.77	11,984.0	-2,224.2	-8.0	2,224.2	0.00	0.00	0.00
13,900.0	90.00	179.77	11,984.0	-2,324.2	-7.6	2,324.2	0.00	0.00	0.00
14,000.0	90.00	179.77	11,984.0	-2,424.2	-7.3	2,424.2	0.00	0.00	0.00
14,100.0	90.00	179.77	11,984.0	-2,524.2	-6.9	2,524.2	0.00	0.00	0.00
14,200.0	90.00	179.77	11,984.0	-2,624.2	-6.5	2,624.2	0.00	0.00	0.00
14,300.0	90.00	179.77	11,984.0	-2,724.2	-6.1	2,724.2	0.00	0.00	0.00
14,400.0	90.00	179.77	11,984.0	-2,824.2	-5.7	2,824.2	0.00	0.00	0.00
14,500.0	90.00	179.77	11,984.0	-2,924.2	-5.3	2,924.2	0.00	0.00	0.00
14,600.0	90.00	179.77	11,984.0	-3,024.2	-4.9	3,024.2	0.00	0.00	0.00
14,700.0	90.00	179.77	11,984.0	-3,124.2	-4.5	3,124.2	0.00	0.00	0.00
14,800.0	90.00	179.77	11,984.0	-3,224.2	-4.1	3,224.2	0.00	0.00	0.00
14,900.0	90.00	179.77	11,984.0	-3,324.2	-3.7	3,324.2	0.00	0.00	0.00
15,000.0	90.00	179.77	11,984.0	-3,424.2	-3.3	3,424.2	0.00	0.00	0.00
15,100.0	90.00	179.77	11,984.0	-3,524.2	-2.9	3,524.2	0.00	0.00	0.00
15,200.0	90.00	179.77	11,984.0	-3,624.2	-2.5	3,624.2	0.00	0.00	0.00
15,300.0	90.00	179.77	11,984.0	-3,724.2	-2.1	3,724.2	0.00	0.00	0.00
15,400.0	90.00	179.77	11,984.0	-3,824.2	-1.7	3,824.2	0.00	0.00	0.00
15,500.0	90.00	179.77	11,984.0	-3,924.2	-1.3	3,924.2	0.00	0.00	0.00
15,600.0	90.00	179.77	11,984.0	-4,024.2	-0.9	4,024.2	0.00	0.00	0.00
15,700.0	90.00	179.77	11,984.0	-4,124.2	-0.5	4,124.2	0.00	0.00	0.00
15,800.0	90.00	179.77	11,984.0	-4,224.2	-0.2	4,224.2	0.00	0.00	0.00
15,900.0	90.00	179.77	11,984.0	-4,324.2	0.2	4,324.2	0.00	0.00	0.00
16,000.0	90.00	179.77	11,984.0	-4,424.2	0.6	4,424.2	0.00	0.00	0.00
16,100.0	90.00	179.77	11,984.0	-4,524.2	1.0	4,524.2	0.00	0.00	0.00
16,200.0	90.00	179.77	11,984.0	-4,624.2	1.4	4,624.2	0.00	0.00	0.00
16,300.0	90.00	179.77	11,984.0	-4,724.2	1.8	4,724.2	0.00	0.00	0.00
16,400.0	90.00	179.77	11,984.0	-4,824.2	2.2	4,824.2	0.00	0.00	0.00
16,500.0	90.00	179.77	11,984.0	-4,924.2	2.6	4,924.2	0.00	0.00	0.00
16,600.0	90.00	179.77	11,984.0	-5,024.2	3.0	5,024.2	0.00	0.00	0.00
16,700.0	90.00	179.77	11,984.0	-5,124.2	3.4	5,124.2	0.00	0.00	0.00
16,800.0	90.00	179.77	11,984.0	-5,224.2	3.8	5,224.2	0.00	0.00	0.00
16,900.0	90.00	179.77	11,984.0	-5,324.2	4.2	5,324.2	0.00	0.00	0.00
17,000.0	90.00	179.77	11,984.0	-5,424.2	4.6	5,424.2	0.00	0.00	0.00
17,100.0	90.00	179.77	11,984.0	-5,524.2	5.0	5,524.2	0.00	0.00	0.00
17,200.0	90.00	179.77	11,984.0	-5,624.2	5.4	5,624.2	0.00	0.00	0.00
17,300.0	90.00	179.77	11,984.0	-5,724.2	5.8	5,724.2	0.00	0.00	0.00
17,400.0	90.00	179.77	11,984.0	-5,824.2	6.2	5,824.2	0.00	0.00	0.00
17,500.0	90.00	179.77	11,984.0	-5,924.2	6.6	5,924.2	0.00	0.00	0.00
17,600.0	90.00	179.77	11,984.0	-6,024.2	7.0	6,024.2	0.00	0.00	0.00
17,700.0	90.00	179.77	11,984.0	-6,124.2	7.3	6,124.2	0.00	0.00	0.00
17,800.0	90.00	179.77	11,984.0	-6,224.2	7.7	6,224.2	0.00	0.00	0.00
17,900.0	90.00	179.77	11,984.0	-6,324.2	8.1	6,324.2	0.00	0.00	0.00
18,000.0	90.00	179.77	11,984.0	-6,424.2	8.5	6,424.2	0.00	0.00	0.00
18,100.0	90.00	179.77	11,984.0	-6,524.2	8.9	6,524.2	0.00	0.00	0.00
18,200.0	90.00	179.77	11,984.0	-6,624.2	9.3	6,624.2	0.00	0.00	0.00
18,300.0	90.00	179.77	11,984.0	-6,724.2	9.7	6,724.2	0.00	0.00	0.00
18,400.0	90.00	179.77	11,984.0	-6,824.2	10.1	6,824.2	0.00	0.00	0.00



Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #768H
Company:	Midland	TVD Reference:	kb = 25' @ 3216.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3216.0usft
Site:	Midnight Hour 11 Fed Com	North Reference:	Grid
Well:	#768H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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)	
18,500.0	90.00	179.77	11,984.0	-6,924.2	10.5	6,924.2	0.00	0.00	0.00	
18,600.0	90.00	179.77	11,984.0	-7,024.2	10.9	7,024.2	0.00	0.00	0.00	
18,700.0	90.00	179.77	11,984.0	-7,124.2	11.3	7,124.2	0.00	0.00	0.00	
18,800.0	90.00	179.77	11,984.0	-7,224.2	11.7	7,224.2	0.00	0.00	0.00	
18,900.0	90.00	179.77	11,984.0	-7,324.2	12.1	7,324.2	0.00	0.00	0.00	
19,000.0	90.00	179.77	11,984.0	-7,424.2	12.5	7,424.2	0.00	0.00	0.00	
19,100.0	90.00	179.77	11,984.0	-7,524.2	12.9	7,524.2	0.00	0.00	0.00	
19,200.0	90.00	179.77	11,984.0	-7,624.2	13.3	7,624.2	0.00	0.00	0.00	
19,300.0	90.00	179.77	11,984.0	-7,724.2	13.7	7,724.2	0.00	0.00	0.00	
19,385.8	90.00	179.77	11,984.0	-7,810.0	14.0	7,810.0	0.00	0.00	0.00	
LTP(Midnight Hour 11 Fed Com #721H)										
19,405.0	90.00	179.39	11,984.0	-7,829.2	14.1	7,829.2	2.00	0.00	-2.00	
19,485.8	90.00	179.39	11,984.0	-7,910.0	15.0	7,910.0	0.00	0.00	0.00	
PBHL(Midnight Hour 11 Fed Com #721H)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP(Midnight Hour 11 F - hit/miss target - Shape - Point	0.00	0.01	11,506.5	-208.0	-16.0	384,873.00	692,498.00	32.0571566°N	103.8453997°W	
PBHL(Midnight Hour 11 - plan hits target center - Point	0.00	0.00	11,984.0	-7,910.0	15.0	377,171.00	692,529.00	32.0359843°N	103.8454120°W	
FTP(Midnight Hour 11 F - plan misses target center by 39.3usft at 12074.9usft MD (11948.1 TVD, -503.9 N, -14.8 E) - Point	0.00	0.00	11,984.0	-488.0	-16.0	384,593.00	692,498.00	32.0563869°N	103.8454038°W	
LTP(Midnight Hour 11 F - plan hits target center - Point	0.00	0.00	11,984.0	-7,810.0	14.0	377,271.00	692,528.00	32.0362592°N	103.8454137°W	

Eddy County, NM (NAD 83 NME)
Midnight Hour 11 Fed Com #768H
Plan #0.3



To convert a Magnetic Direction to a Grid Direction, Add 6.46°
 To convert a Magnetic Direction to a True Direction, Add 6.72° East
 To convert a True Direction to a Grid Direction, Subtract 0.26°

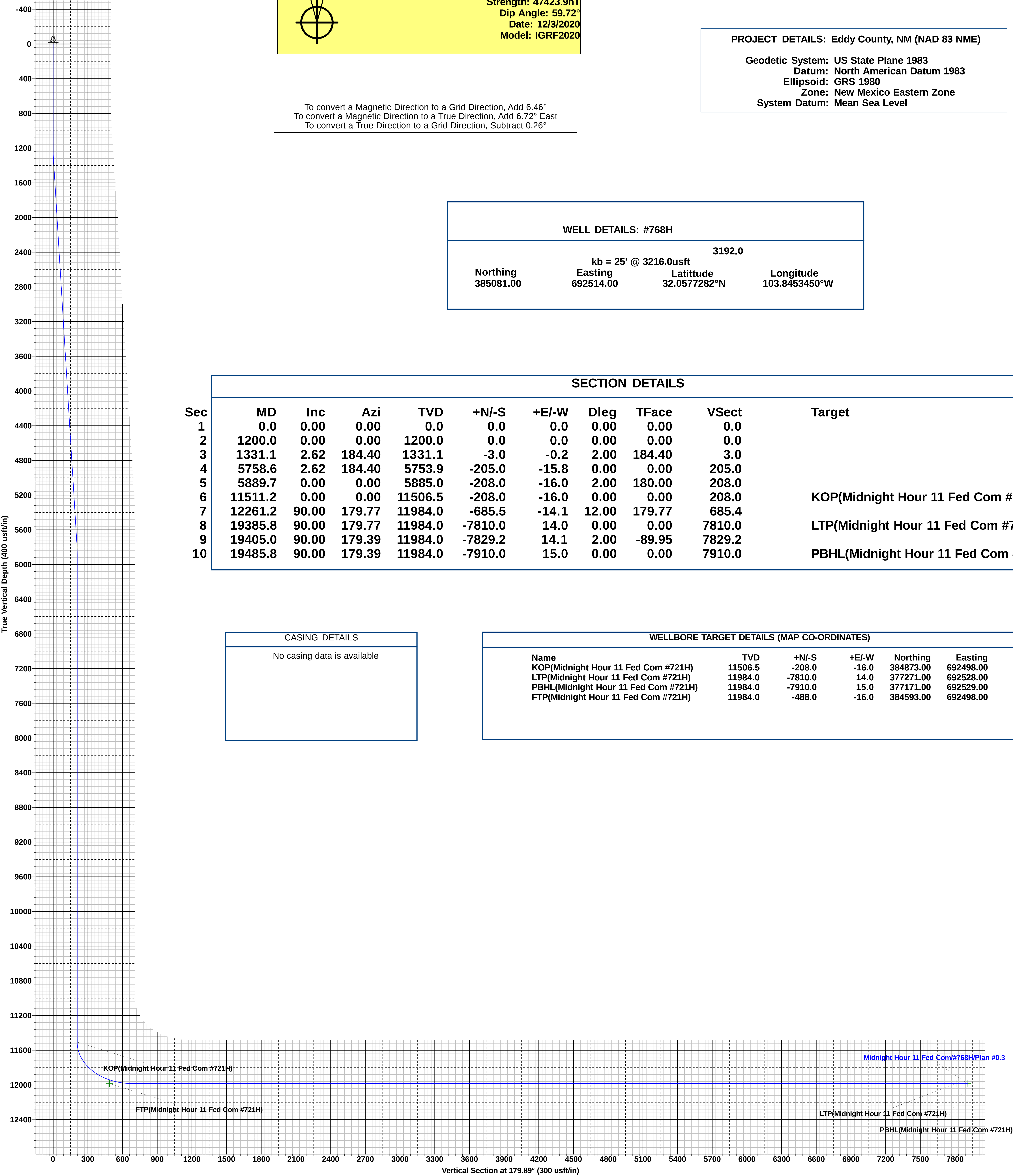
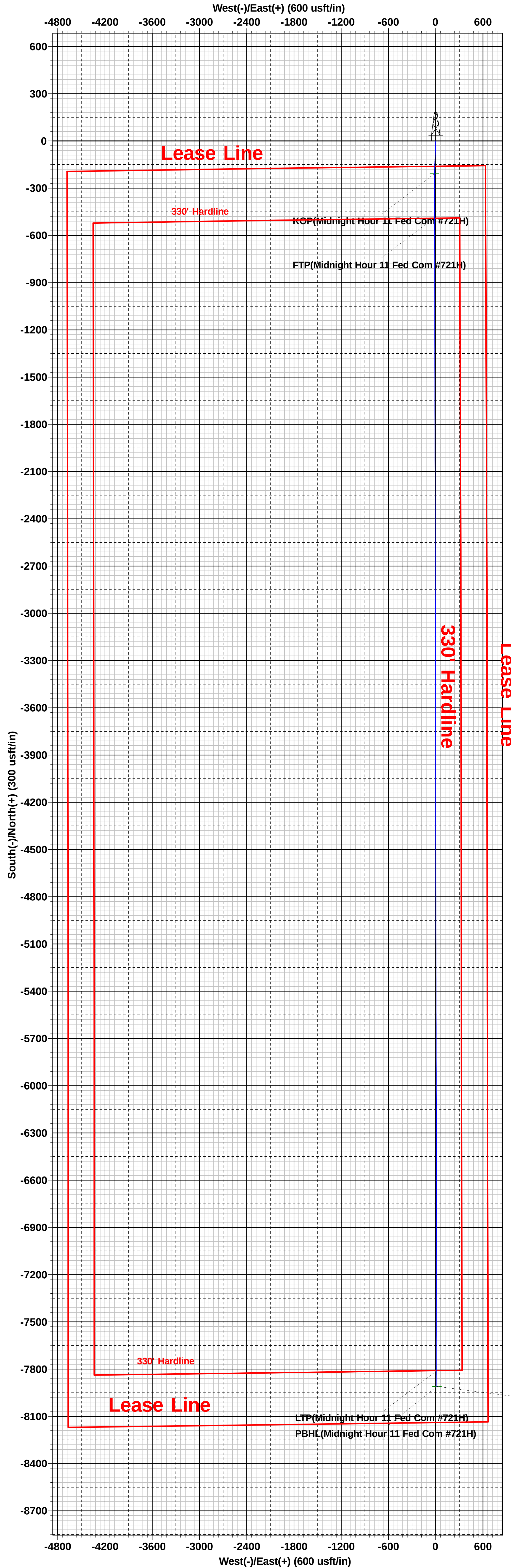
PROJECT DETAILS: Eddy County, NM (NAD 83 NME)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: #768H			
kb = 25' @ 3216.0usft			
3192.0			
Northing	Easting	Latitude	Longitude
385081.00	692514.00	32.0577282°N	103.8453450°W

SECTION DETAILS										
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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1331.1	2.62	184.40	1331.1	-3.0	-0.2	2.00	184.40	3.0	
4	5758.6	2.62	184.40	5753.9	-205.0	-15.8	0.00	0.00	205.0	
5	5889.7	0.00	0.00	5885.0	-208.0	-16.0	2.00	180.00	208.0	
6	11511.2	0.00	0.00	11506.5	-208.0	-16.0	0.00	0.00	208.0	KOP(Midnight Hour 11 Fed Com #721H)
7	12261.2	90.00	179.77	11984.0	-685.0	-14.1	12.00	179.77	685.4	
8	19385.8	90.00	179.77	11984.0	-7810.0	14.0	0.00	0.00	7810.0	LTP(Midnight Hour 11 Fed Com #721H)
9	19405.0	90.00	179.39	11984.0	-7829.2	14.1	2.00	-89.95	7829.2	
10	19485.8	90.00	179.39	11984.0	-7910.0	15.0	0.00	0.00	7910.0	PBHL(Midnight Hour 11 Fed Com #721H)

CASING DETAILS
No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Midnight Hour 11 Fed Com #721H)	11506.5	-208.0	-16.0	384873.00	692498.00
LTP(Midnight Hour 11 Fed Com #721H)	11984.0	-7810.0	14.0	377271.00	692528.00
PBHL(Midnight Hour 11 Fed Com #721H)	11984.0	-7910.0	15.0	377171.00	692529.00
FTP(Midnight Hour 11 Fed Com #721H)	11984.0	-488.0	-16.0	384593.00	692498.00



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 147750

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 147750
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	10/3/2022