Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

[327173]

2. Name of Operator

[372224]

9. API Well No. **30-025-49630**

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory **[33813]**

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date

Title

Approved by *(Signature)*	Name *(Printed/Typed)*	Date

Title	Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

NGMP Rec 12/09/2021

KZ
12/13/2021

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 12/09/2021

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Approval Date: 12/09/2021

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 200 FNL / 1800 FEL / TWSP: 25S / RANGE: 36E / SECTION: 6 / LAT: 32.1661497 / LONG: -103.3013178 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 2640 FSL / 2309 FEL / TWSP: 25S / RANGE: 36E / SECTION: 6 / LAT: 32.1594566 / LONG: -103.3030367 (TVD: 11743 feet, MD: 14622 feet)

PPP: NWNE / 100 FNL / 2318 FEL / TWSP: 25S / RANGE: 36E / SECTION: 6 / LAT: 32.1664269 / LONG: -103.3029903 (TVD: 11743 feet, MD: 12086 feet)

BHL: SWSE / 50 FSL / 2318 FEL / TWSP: 25S / RANGE: 36E / SECTION: 7 / LAT: 32.137796 / LONG: -103.3031808 (TVD: 11743 feet, MD: 22503 feet)

BLM Point of Contact

Name: CIJI METHOLA
Title: GIS Support - Adjudicator
Phone: (575) 234-5924
Email: cmethola@blm.gov

Review and Appeal Rights

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-025-49630	33813	Jal; Wolfcamp, West

[4]Property Code	[5]Property Name	[6]Well Number
327173	PAR THREE FED COM 25 36 06	105H

[7]OGRID No.	[8]Operator Name	[9]Elevation
372224	AMEREDEV OPERATING, LLC.	3290'

[10]Surface Location

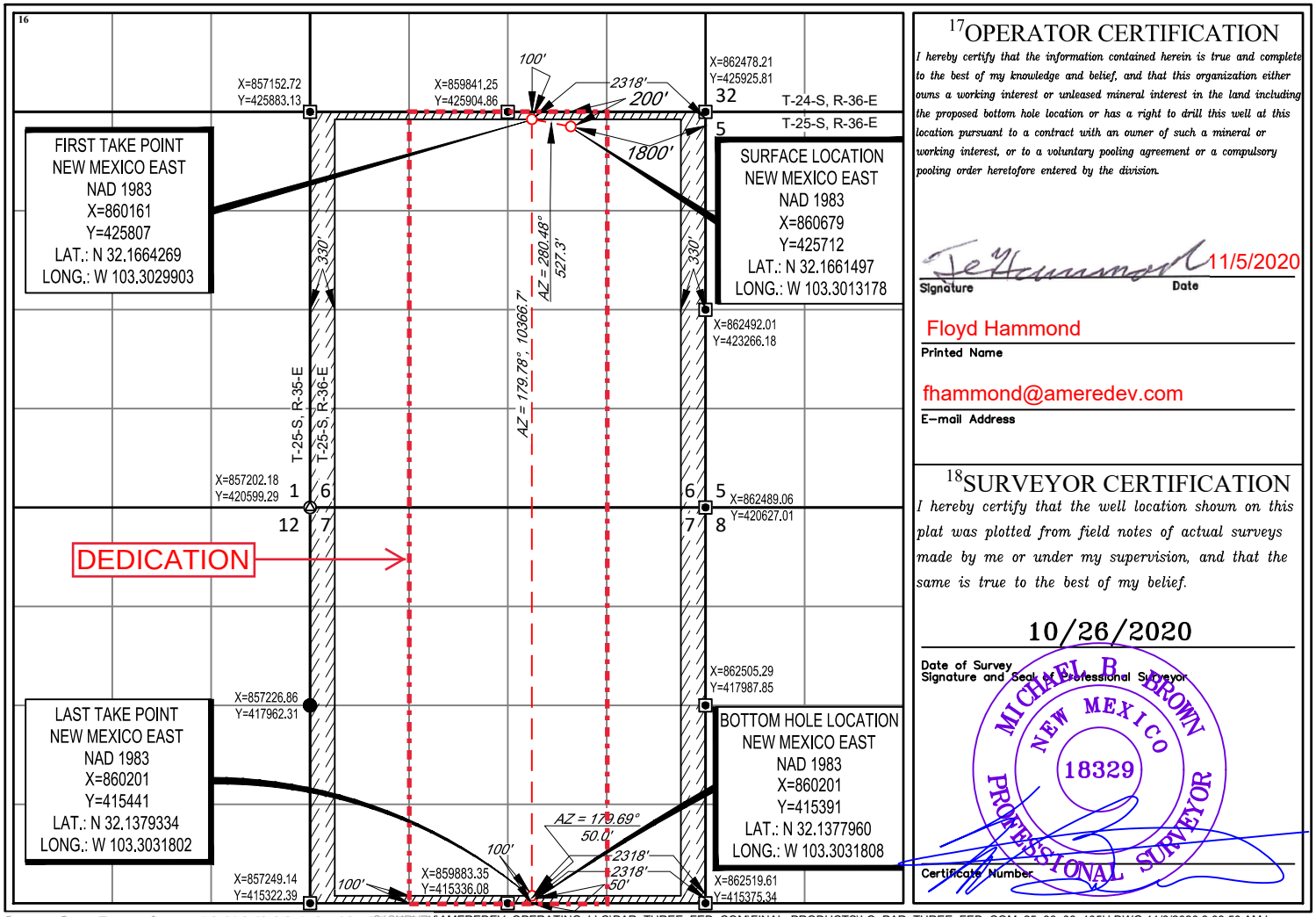
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	6	25-S	36-E	–	200'	NORTH	1800'	EAST	LEA

[11]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
0	7	25-S	36-E	–	50'	SOUTH	2318	EAST	LEA

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
640.52		C	

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.



[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 11/5/2020

Floyd Hammond
Printed Name

fhammond@ameredev.com
E-mail Address

[18]SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

10/26/2020
Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Certificate Number

G:\DRAWINGS\AMEREDEV_OPERATING_LLC\PAR_THREE_FED_COM\FINAL_PRODUCTS\LO_PAR_THREE_FED_COM_25_36_06_105H.DWG 11/3/2020 8:08:50 AM bgregory

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: AMEREDEV OPERATING, LLC **OGRID:** 372224 **Date:** 12/7/2021

II. Type: ☑ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
PAR THREE FED COM 25 36 06 105H	**30-025-49630**	2-6-25-S-36-E	200FNL & 1800FEL	+/- 1750	+/- 3400	+/- 2200

IV. Central Delivery Point Name: PINESTRAW CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
PAR THREE FED COM 25 36 06 105H	**30-025-49630**	1/28/2021	2/28/2021	8/27/2021	10/11/2021	10/13/2021

VI. Separation Equipment: ☑ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☑ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☑ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map.☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐will ☐will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐does ☐does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications
Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☑ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

(a) power generation on lease;
(b) power generation for grid;
(c) compression on lease;
(d) liquids removal on lease;
(e) reinjection for underground storage;
(f) reinjection for temporary storage;
(g) reinjection for enhanced oil recovery;
(h) fuel cell production; and
(i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	
Printed Name:	Dayeed Khan
Title:	Engineer
E-mail Address:	dkhan@ameredev.com
Date:	12/7/2021
Phone:	737-300-4735

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Natural Gas Management Plan

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

• Separation equipment is sized to allow for retention time and velocity to adequately separate oil, gas, and water at anticipated peak rates.
• All central tank battery equipment is designed to efficiently capture the remaining gas from the liquid phase.
• Valves and meters are designed to service without flow interruption or venting of gas.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

19.15.27.8 (A)

Ameredev's field operations are designed with the goal of minimizing flaring and preventing venting of natural gas. If capturing the gas is not possible then the gas is combusted/flared using properly sized flares or combustors in accordance with state air permit rules.

19.15.27.8 (B) Venting and Flaring during drilling operations

• A properly-sized flare stack will be located at a minimum 100' from the nearest surface hole location on the pad.
• All natural gas produced during drilling operations will be flared. Venting will only occur if there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment.

19.15.27.8 (C) Venting and Flaring during completions or recompletions operations.

• During all phases of flowback, wells will flow through a sand separator, or other appropriate flowback separation equipment, and the well stream will be directed to a central tank battery (CTB) through properly sized flowlines
• The CTB will have properly sized separation equipment for maximum anticipated flowrates
• Multiple stages of separation will be used to separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks equipped with a closed loop system that will recover any residual gas from the tanks and route such gas to a sales outlet.

19.15.27.8 (D) Venting and Flaring during production operations.

• During production, the well stream will be routed to the CTB where multiple stages of separation will separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks with a closed

loop system that will recover any residual gas from the tanks and route such gas to a sales outlet, minimizing tank emissions.
• Flares are equipped with auto-ignition systems and continuous pilot operations.
• Automatic gauging equipment is installed on all tanks.

19.15.27.8 (E) Performance Standards

• Production equipment will be designed to handle maximum anticipated rates and pressure.
• Automatic gauging equipment is installed on all tanks to minimize venting
• All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
•Flares are equipped with continuous pilots and auto-ignitors along with remote monitoring of the pilot status
• Weekly AVOs and monthly LDAR inspections will be performed on all wells and facilities that produce more than 60 Mcfd.
• Gas/H2S detectors will be installed throughout the facilities and wellheads to detect leaks and enable timely repairs.

19.15.27.8 (F) Measurement or estimation of vented and flared natural gas

• All high pressure flared gas is measured by equipment conforming to API 14.10.
• No meter bypasses are installed.
• When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated through flare flow curves with the assistance of air emissions consultants, as necessary.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

• Ameredev will use best management practices to vent as minimally as possible during well intervention operations and downhole well maintenance
• All natural gas is routed into the gas gathering system and directed to one of Ameredev's multiple gas sales outlets.
• All venting events will be recorded and all start-up, shutdown, maintenance logs will be kept for control equipment
• All control equipment will be maintained to provide highest run-time possible
• All procedures are drafted to keep venting and flaring to the absolute minimum

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
12/09/2021

APD ID: 10400065192
Submission Date: 11/15/2020
Operator Name: AMEREDEV OPERATING LLC
Well Name: PAR THREE FED COM 25 36 06
Well Number: 105H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1144323	RUSTLER ANHYDRITE	3290	1395	1395	ANHYDRITE	NONE	N
1144324	SALADO	1313	1977	1977	SALT	NONE	N
1144319	TANSILL	-343	3633	3633	LIMESTONE	NONE	N
1144320	CAPITAN REEF	-725	4015	4015	LIMESTONE	USEABLE WATER	N
1144329	LAMAR	-1979	5269	5269	LIMESTONE	NONE	N
1144321	BELL CANYON	-2118	5408	5408	SANDSTONE	NATURAL GAS, OIL	N
1144322	BRUSHY CANYON	-3892	7182	7182	SANDSTONE	NATURAL GAS, OIL	N
1144325	BONE SPRING LIME	-5051	8341	8341	LIMESTONE	NONE	N
1144330	BONE SPRING 1ST	-6433	9723	9723	SANDSTONE	NATURAL GAS, OIL	N
1144326	BONE SPRING 2ND	-6961	10251	10251	SANDSTONE	NATURAL GAS, OIL	N
1144327	BONE SPRING 3RD	-7564	10854	10854	LIMESTONE	NONE	N
1144328	BONE SPRING 3RD	-8156	11446	11446	SANDSTONE	NATURAL GAS, OIL	N
1144331	WOLFCAMP	-8373	11663	11663	SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Pressure Rating (PSI): 10M **Rating Depth:** 15000

Equipment: 10M BOPE SYSTEM WILL BE USED AFTER THE SURFACE CASING IS SET. A KELLY COCK WILL BE KEPT IN THE DRILL STRING AT ALL TIMES. A FULL OPENING DRILL PIPE STABBING VALVE WITH PROPER DRILL PIPE CONNECTIONS WILL BE ON THE RIG FLOOR AT ALL TIMES.
Requesting Variance? YES

Variance request: Co-Flex Choke Line, 5M Annular Preventer

Testing Procedure: See attachment

Choke Diagram Attachment:

10M_Choke_Manifold_REV_20201113140449.pdf

BOP Diagram Attachment:

5M_Annular_Preventer_Variance_and_Well_Control_Plan_20201113140457.pdf

Pressure_Control_Plan_Single_Well_MB4_3String_Big_Hole_BLM_20201113140457.pdf

5M_BOP_System_20201113140458.pdf

4_String_MB_Ameredev_Wellhead_Drawing_7.0625in_Spool_net_REV_20201113140510.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1520	0	1520	3290	1770	1520	J-55	68	OTHER - BTC	6.03	1	DRY	8.85	DRY	10.35
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	10979	0	10979	3001	-7689	10979	HCL-80	29.7	OTHER - FJM	1.25	1.24	DRY	1.99	DRY	2.88
3	PRODUCTION	6.75	5.5	NEW	API	N	0	22503	0	11743	3001	-8453	22503	P-110	23	OTHER - USS-EAGLE SFH	1.76	1.88	DRY	2.43	DRY	2.7

Casing Attachments

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

13.375_68_J55_SEAH_20201113140600.pdf

PAR_THREE_FED_COM_25_36_06_105H___WELLBORE_DIAGRAM_AND_CDA_20201113140610.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7.625_29.70_P110HC_LIBERTY_FJM_20201113140702.pdf

PAR_THREE_FED_COM_25_36_06_105H___WELLBORE_DIAGRAM_AND_CDA_20201113140711.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

5_20201113140810.5_23

PAR_THREE_FED_COM_25_36_06_105H___WELLBORE_DIAGRAM_AND_CDA_20201113140822.pdf

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1134	1047	1.76	13.5	1842	100	CLASS C	Bentonite, Accelerator, Kolseal, Defoamer, Celloflake
SURFACE	Tail		1134	1520	200	1.34	14.8	268	100	CLASS C	None
INTERMEDIATE	Lead	3633	0	3102	704	3.5	9	2463.95	50	Class C	Salt, Bentonite, Kolseal, Defoamer, Celloflake
INTERMEDIATE	Tail		3102	3633	200	1.33	14.8	266	25	Class C	None
INTERMEDIATE	Lead	3633	3633	9758	2263	2.47	11.9	5588.9	50	CLASS H	Bentonite, Retarder, Kolseal, Defoamer, Celloflake, Anti-Settling Expansion Additive
INTERMEDIATE	Tail		9758	10979	200	1.31	14.2	262	25	CLASS H	Salt, Bentonite, Retarder, Dispersant, Fluid Loss
PRODUCTION	Lead		0	22503	1752	1.34	14.2	2347.34	25	CLASS H	Salt, Bentonite, Fluid Loss, Dispersant, Retarder, Defoamer

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: All necessary supplies (e.g. bentonite, cedar bark) for fluid control will be on site.

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

Circulating Medium Table

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1520	WATER-BASED MUD	8.4	8.6							
1520	10979	OTHER : Diesel Brine Emulsion	8.5	9.4							
10979	11743	OIL-BASED MUD	10.5	12.5							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

A directional survey, measurement while drilling and a mudlog/geologic lithology log will all be run from surface to TD.

List of open and cased hole logs run in the well:

DIRECTIONAL SURVEY,MEASUREMENT WHILE DRILLING,MUD LOG/GEOLOGIC LITHOLOGY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring will be done on this well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6412 **Anticipated Surface Pressure:** 3828

Anticipated Bottom Hole Temperature(F): 165

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Plan_20201113141355.pdf

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PT105_DR_20201113141419.pdf
PT105_LLR_20201113141420.pdf
5M_Annular_Preventer_Variance_and_Well_Control_Plan_20201113141430.pdf
Pressure_Control_Plan_Single_Well_MB4_3String_Big_Hole_BLM_20201113141430.pdf

Other proposed operations facets description:

4-STRING CONTINGENCY PLAN AND SKID PROCEDURE ATTACHED

Other proposed operations facets attachment:

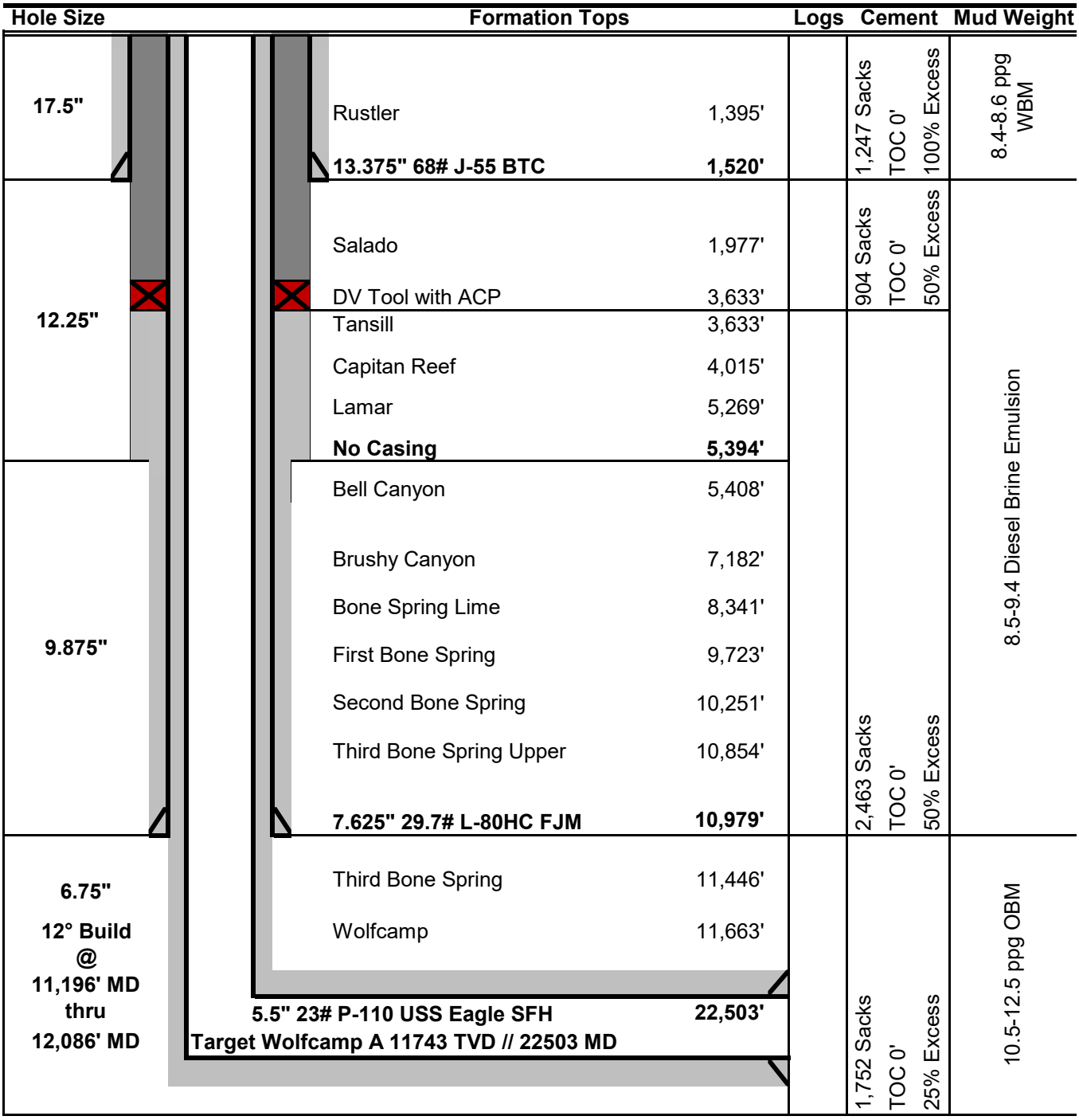
Wolfcamp_Contingency_20201113141457.pdf
Rig_Skid_Procedure_20201113141506.pdf

Other Variance attachment:

Requested_Exceptions___3_String_Revised_01312019_20201113141519.pdf
R616___CoC_for_hoses_12_18_17_20201113141613.pdf

Wellbore Schematic

Well:	Par Three Fed Com 25-36-06 105H	**Co. Well ID:**	xxxxxx
SHL:	Sec. 06 25S-36E 200' FNL & 1800' FEL	**AFE No.:**	xxxx-xxx
BHL:	Sec. 07 25S-36E 50' FSL & 2318' FEL	**API No.:**	xxxxxxxxxx
	Lea, NM	**GL:**	3,290'
Wellhead:	A - 13-5/8" 10M x 13-5/8" SOW	**Field:**	Delaware
	B - 13-5/8" 10M x 13-5/8" 10M	**Objective:**	Wolfcamp A
	C - 13-5/8" 10M x 13-5/8" 10M	**TVD:**	11,743'
	Tubing Spool - 7-1/16" 15M x 13-3/8" 10M	**MD:**	22,503'
Xmas Tree:	2-9/16" 10M	**Rig:**	TBD **KB** 27'
Tubing:	2-7/8" L-80 6.5# 8rd EUE	**E-Mail:**	Wellsite2@ameredev.com



Casing Design and Safety Factor Check

Casing Specifications						
Segment	**Hole ID**	**Depth**	**OD**	**Weight**	**Grade**	**Coupling**
Surface	17.5	1,520'	13.375	68	J-55	BTC
Intermediate	9.875	10,979'	7.625	29.7	HCL-80	FJM
Prod Segment A	6.75	11,196'	5.5	23	P-110	SFH
Prod Segment B	6.75	22,503'	5.5	23	P-110	SFH

Check Surface Casing				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
14.375	1,069	915	4,100	3,450
Safety Factors				
1.56	10.35	8.85	6.03	0.64
Check Intermediate Casing				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
7.625	940	558	6700	9460
Safety Factors				
1.13	2.88	1.99	1.25	1.24
Check Prod Casing, Segment A				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
5.777	728	655	12780	14360
Safety Factors				
0.49	2.70	2.43	1.76	1.88
Check Prod Casing, Segment B				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
5.777	728	655	12780	14360
Safety Factors				
0.49	57.87	52.06	1.67	1.88

PERFORMANCE DATA

API BTC **13.375 in** **68.00 lbs/ft** **J-55**

Technical Data Sheet

Tubular Parameters

Size	13.375	in	Minimum Yield	55,000	psi
Nominal Weight	68.00	lbs/ft	Minimum Tensile	75,000	psi
Grade	J-55		Yield Load	1,069,000	lbs
PE Weight	66.10	lbs/ft	Tensile Load	1,458,000	lbs
Wall Thickness	0.480	in	Min. Internal Yield Pressure	3,500	psi
Nominal ID	12.415	in	Collapse Pressure	1,950	psi
Drift Diameter	12.259	in			
Nom. Pipe Body Area	19.445	in²			

Connection Parameters

Connection OD	14.375	in
Coupling Length	10.625	in
Threads Per Inch	5.000	in
Standoff Thread Turns	1.000	
Make-Up Loss	4.513	in
Yield Load In Tension	---	lbs
Min. Internal Yield Pressure	3,500	psi

Printed on: February-13-2015

NOTE:
The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.

U. S. Steel Tubular Products

6/6/2017 6:18:53 PM

7.625" 29.70lbs/ft (0.375" Wall) P110 HC USS-LIBERTY FJM®

MECHANICAL PROPERTIES	Pipe	USS-LIBERTY FJM®	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	140,000	--	psi
Minimum Tensile Strength	125,000	--	psi
DIMENSIONS	**Pipe**	**USS-LIBERTY FJM®**	
Outside Diameter	7.625	7.625	in.
Wall Thickness	0.375	--	in.
Inside Diameter	6.875	6.789	in.
Standard Drift	6.750	6.750	in.
Alternate Drift	--	--	in.
Nominal Linear Weight, T&C	29.70	--	lbs/ft
Plain End Weight	29.06	--	lbs/ft
SECTION AREA	**Pipe**	**USS-LIBERTY FJM®**	
Critical Area	8.541	5.074	sq. in.
Joint Efficiency	--	59.4	%
PERFORMANCE	**Pipe**	**USS-LIBERTY FJM®**	
Minimum Collapse Pressure	6,700	6,700	psi
Minimum Internal Yield Pressure	9,460	9,460	psi
Minimum Pipe Body Yield Strength	940,000	--	lbs
Joint Strength	--	558,000	lbs
Compression Rating	--	558,000	lbs
Reference Length	--	12,810	ft
Maximum Uniaxial Bend Rating	--	39.3	deg/100 ft
MAKE-UP DATA	**Pipe**	**USS-LIBERTY FJM®**	
Make-Up Loss	--	3.92	in.
Minimum Make-Up Torque	--	10,800	ft-lbs
Maximum Make-Up Torque	--	15,250	ft-lbs

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
4. USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness and cannot be interchanged.
5. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
6. Reference length is calculated by joint strength divided by nominal plain end weight with 1.5 safety factor.
7. Connection external pressure leak resistance has been verified to 100% API pipe body collapse pressure following the guidelines of API 5C5 Cal III.

Legal Notice

USS-LIBERTY FJM® is a trademark of U. S. Steel Corporation. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U.S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

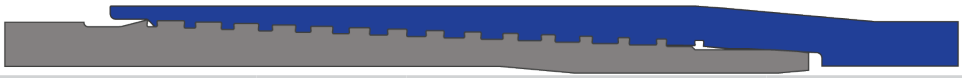
U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

U. S. Steel Tubular Products

11/14/2018 9:02:57 AM

5.500" 23.00lbs/ft (0.415" Wall) USS RYS110 USS-EAGLE SFH™



MECHANICAL PROPERTIES	Pipe	USS-EAGLE SFH™	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	125,000	--	psi
Minimum Tensile Strength	120,000	--	psi
DIMENSIONS	**Pipe**	**USS-EAGLE SFH™**	
Outside Diameter	5.500	5.830	in.
Wall Thickness	0.415	--	in.
Inside Diameter	4.670	4.585	in.
Standard Drift	4.545	4.545	in.
Alternate Drift	--	4.545	in.
Nominal Linear Weight, T&C	23.00	--	lbs/ft
Plain End Weight	22.56	--	lbs/ft
SECTION AREA	**Pipe**	**USS-EAGLE SFH™**	
Critical Area	6.630	5.507	sq. in.
Joint Efficiency	--	83.1	%
PERFORMANCE	**Pipe**	**USS-EAGLE SFH™**	
Minimum Collapse Pressure	14,540	14,540	psi
External Pressure Leak Resistance	--	10,000	psi
Minimum Internal Yield Pressure	14,520	14,520	psi
Minimum Pipe Body Yield Strength	729,000	--	lbs
Joint Strength	--	606,000	lbs
Compression Rating	--	606,000	lbs
Reference Length	--	17,909	ft
Maximum Uniaxial Bend Rating	--	76.2	deg/100 ft
MAKE-UP DATA	**Pipe**	**USS-EAGLE SFH™**	
Make-Up Loss	--	6.65	in.
Minimum Make-Up Torque	--	16,600	ft-lbs
Maximum Make-Up Torque	--	19,800	ft-lbs
Maximum Operating Torque	--	28,000	ft-lbs

Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

Ameredev Operating, LLC.

Par Three
Par Three 5-7
Par Three 105H

Wellbore #1

Plan: Design #1

Standard Planning Report

11 November, 2020

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project Par Three

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Par Three 5-7

Site Position:		**Northing:**	425,711.50 usft	**Latitude:**	32° 9' 58.139 N
From:	Lat/Long	**Easting:**	860,679.30 usft	**Longitude:**	103° 18' 4.744 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.55 °

Well Par Three 105H

Well Position	**+N/-S**	0.0 usft	**Northing:**	425,711.50 usft	**Latitude:**	32° 9' 58.139 N
	+E/-W	0.0 usft	**Easting:**	860,679.30 usft	**Longitude:**	103° 18' 4.744 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,290.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/4/2020	6.45	60.01	47,584.51846017

Design Design #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	182.65

Plan Survey Tool Program **Date** 11/11/2020

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,502.8	Design #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	6.00	310.00	2,299.5	10.1	-12.0	2.00	2.00	0.00	310.00	
10,545.7	6.00	310.00	10,500.0	564.1	-672.3	0.00	0.00	0.00	0.00	
10,845.7	0.00	0.00	10,799.5	574.2	-684.3	2.00	-2.00	0.00	180.00	
11,196.3	0.00	0.00	11,150.0	574.2	-684.3	0.00	0.00	0.00	0.00	
11,342.6	17.54	92.60	11,294.0	573.2	-662.1	11.99	11.99	0.00	92.60	
12,086.2	90.00	179.78	11,743.0	95.9	-518.5	11.99	9.74	11.72	87.30	Par Three 105 FTP
22,502.8	90.00	179.78	11,743.0	-10,320.7	-477.8	0.00	0.00	0.00	0.00	Par Three 105 BHL

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	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	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	310.00	2,100.0	1.1	-1.3	-1.1	2.00	2.00	0.00
2,200.0	4.00	310.00	2,199.8	4.5	-5.3	-4.2	2.00	2.00	0.00
2,300.0	6.00	310.00	2,299.5	10.1	-12.0	-9.5	2.00	2.00	0.00
2,400.0	6.00	310.00	2,398.9	16.8	-20.0	-15.9	0.00	0.00	0.00
2,500.0	6.00	310.00	2,498.4	23.5	-28.0	-22.2	0.00	0.00	0.00
2,600.0	6.00	310.00	2,597.8	30.2	-36.0	-28.5	0.00	0.00	0.00
2,700.0	6.00	310.00	2,697.3	37.0	-44.1	-34.9	0.00	0.00	0.00
2,800.0	6.00	310.00	2,796.7	43.7	-52.1	-41.2	0.00	0.00	0.00
2,900.0	6.00	310.00	2,896.2	50.4	-60.1	-47.6	0.00	0.00	0.00
3,000.0	6.00	310.00	2,995.6	57.1	-68.1	-53.9	0.00	0.00	0.00
3,100.0	6.00	310.00	3,095.1	63.8	-76.1	-60.3	0.00	0.00	0.00
3,200.0	6.00	310.00	3,194.5	70.6	-84.1	-66.6	0.00	0.00	0.00
3,300.0	6.00	310.00	3,294.0	77.3	-92.1	-72.9	0.00	0.00	0.00
3,400.0	6.00	310.00	3,393.4	84.0	-100.1	-79.3	0.00	0.00	0.00
3,500.0	6.00	310.00	3,492.9	90.7	-108.1	-85.6	0.00	0.00	0.00
3,600.0	6.00	310.00	3,592.3	97.4	-116.1	-92.0	0.00	0.00	0.00
3,700.0	6.00	310.00	3,691.8	104.2	-124.1	-98.3	0.00	0.00	0.00
3,800.0	6.00	310.00	3,791.2	110.9	-132.1	-104.6	0.00	0.00	0.00
3,900.0	6.00	310.00	3,890.7	117.6	-140.1	-111.0	0.00	0.00	0.00
4,000.0	6.00	310.00	3,990.1	124.3	-148.1	-117.3	0.00	0.00	0.00
4,100.0	6.00	310.00	4,089.6	131.0	-156.2	-123.7	0.00	0.00	0.00
4,200.0	6.00	310.00	4,189.0	137.7	-164.2	-130.0	0.00	0.00	0.00
4,300.0	6.00	310.00	4,288.5	144.5	-172.2	-136.4	0.00	0.00	0.00
4,400.0	6.00	310.00	4,387.9	151.2	-180.2	-142.7	0.00	0.00	0.00
4,500.0	6.00	310.00	4,487.4	157.9	-188.2	-149.0	0.00	0.00	0.00
4,600.0	6.00	310.00	4,586.9	164.6	-196.2	-155.4	0.00	0.00	0.00
4,700.0	6.00	310.00	4,686.3	171.3	-204.2	-161.7	0.00	0.00	0.00
4,800.0	6.00	310.00	4,785.8	178.1	-212.2	-168.1	0.00	0.00	0.00
4,900.0	6.00	310.00	4,885.2	184.8	-220.2	-174.4	0.00	0.00	0.00
5,000.0	6.00	310.00	4,984.7	191.5	-228.2	-180.7	0.00	0.00	0.00
5,100.0	6.00	310.00	5,084.1	198.2	-236.2	-187.1	0.00	0.00	0.00
5,200.0	6.00	310.00	5,183.6	204.9	-244.2	-193.4	0.00	0.00	0.00
5,300.0	6.00	310.00	5,283.0	211.7	-252.2	-199.8	0.00	0.00	0.00

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	6.00	310.00	5,382.5	218.4	-260.2	-206.1	0.00	0.00	0.00
5,500.0	6.00	310.00	5,481.9	225.1	-268.3	-212.4	0.00	0.00	0.00
5,600.0	6.00	310.00	5,581.4	231.8	-276.3	-218.8	0.00	0.00	0.00
5,700.0	6.00	310.00	5,680.8	238.5	-284.3	-225.1	0.00	0.00	0.00
5,800.0	6.00	310.00	5,780.3	245.3	-292.3	-231.5	0.00	0.00	0.00
5,900.0	6.00	310.00	5,879.7	252.0	-300.3	-237.8	0.00	0.00	0.00
6,000.0	6.00	310.00	5,979.2	258.7	-308.3	-244.2	0.00	0.00	0.00
6,100.0	6.00	310.00	6,078.6	265.4	-316.3	-250.5	0.00	0.00	0.00
6,200.0	6.00	310.00	6,178.1	272.1	-324.3	-256.8	0.00	0.00	0.00
6,300.0	6.00	310.00	6,277.5	278.8	-332.3	-263.2	0.00	0.00	0.00
6,400.0	6.00	310.00	6,377.0	285.6	-340.3	-269.5	0.00	0.00	0.00
6,500.0	6.00	310.00	6,476.4	292.3	-348.3	-275.9	0.00	0.00	0.00
6,600.0	6.00	310.00	6,575.9	299.0	-356.3	-282.2	0.00	0.00	0.00
6,700.0	6.00	310.00	6,675.3	305.7	-364.3	-288.5	0.00	0.00	0.00
6,800.0	6.00	310.00	6,774.8	312.4	-372.4	-294.9	0.00	0.00	0.00
6,900.0	6.00	310.00	6,874.3	319.2	-380.4	-301.2	0.00	0.00	0.00
7,000.0	6.00	310.00	6,973.7	325.9	-388.4	-307.6	0.00	0.00	0.00
7,100.0	6.00	310.00	7,073.2	332.6	-396.4	-313.9	0.00	0.00	0.00
7,200.0	6.00	310.00	7,172.6	339.3	-404.4	-320.3	0.00	0.00	0.00
7,300.0	6.00	310.00	7,272.1	346.0	-412.4	-326.6	0.00	0.00	0.00
7,400.0	6.00	310.00	7,371.5	352.8	-420.4	-332.9	0.00	0.00	0.00
7,500.0	6.00	310.00	7,471.0	359.5	-428.4	-339.3	0.00	0.00	0.00
7,600.0	6.00	310.00	7,570.4	366.2	-436.4	-345.6	0.00	0.00	0.00
7,700.0	6.00	310.00	7,669.9	372.9	-444.4	-352.0	0.00	0.00	0.00
7,800.0	6.00	310.00	7,769.3	379.6	-452.4	-358.3	0.00	0.00	0.00
7,900.0	6.00	310.00	7,868.8	386.3	-460.4	-364.6	0.00	0.00	0.00
8,000.0	6.00	310.00	7,968.2	393.1	-468.4	-371.0	0.00	0.00	0.00
8,100.0	6.00	310.00	8,067.7	399.8	-476.4	-377.3	0.00	0.00	0.00
8,200.0	6.00	310.00	8,167.1	406.5	-484.5	-383.7	0.00	0.00	0.00
8,300.0	6.00	310.00	8,266.6	413.2	-492.5	-390.0	0.00	0.00	0.00
8,400.0	6.00	310.00	8,366.0	419.9	-500.5	-396.4	0.00	0.00	0.00
8,500.0	6.00	310.00	8,465.5	426.7	-508.5	-402.7	0.00	0.00	0.00
8,600.0	6.00	310.00	8,564.9	433.4	-516.5	-409.0	0.00	0.00	0.00
8,700.0	6.00	310.00	8,664.4	440.1	-524.5	-415.4	0.00	0.00	0.00
8,800.0	6.00	310.00	8,763.8	446.8	-532.5	-421.7	0.00	0.00	0.00
8,900.0	6.00	310.00	8,863.3	453.5	-540.5	-428.1	0.00	0.00	0.00
9,000.0	6.00	310.00	8,962.7	460.3	-548.5	-434.4	0.00	0.00	0.00
9,100.0	6.00	310.00	9,062.2	467.0	-556.5	-440.7	0.00	0.00	0.00
9,200.0	6.00	310.00	9,161.7	473.7	-564.5	-447.1	0.00	0.00	0.00
9,300.0	6.00	310.00	9,261.1	480.4	-572.5	-453.4	0.00	0.00	0.00
9,400.0	6.00	310.00	9,360.6	487.1	-580.5	-459.8	0.00	0.00	0.00
9,500.0	6.00	310.00	9,460.0	493.9	-588.6	-466.1	0.00	0.00	0.00
9,600.0	6.00	310.00	9,559.5	500.6	-596.6	-472.4	0.00	0.00	0.00
9,700.0	6.00	310.00	9,658.9	507.3	-604.6	-478.8	0.00	0.00	0.00
9,800.0	6.00	310.00	9,758.4	514.0	-612.6	-485.1	0.00	0.00	0.00
9,900.0	6.00	310.00	9,857.8	520.7	-620.6	-491.5	0.00	0.00	0.00
10,000.0	6.00	310.00	9,957.3	527.4	-628.6	-497.8	0.00	0.00	0.00
10,100.0	6.00	310.00	10,056.7	534.2	-636.6	-504.2	0.00	0.00	0.00
10,200.0	6.00	310.00	10,156.2	540.9	-644.6	-510.5	0.00	0.00	0.00
10,300.0	6.00	310.00	10,255.6	547.6	-652.6	-516.8	0.00	0.00	0.00
10,400.0	6.00	310.00	10,355.1	554.3	-660.6	-523.2	0.00	0.00	0.00
10,500.0	6.00	310.00	10,454.5	561.0	-668.6	-529.5	0.00	0.00	0.00
10,545.7	6.00	310.00	10,500.0	564.1	-672.3	-532.4	0.00	0.00	0.00
10,600.0	4.91	310.00	10,554.0	567.4	-676.2	-535.6	2.00	-2.00	0.00

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.0	2.91	310.00	10,653.8	571.8	-681.5	-539.7	2.00	-2.00	0.00
10,800.0	0.91	310.00	10,753.7	574.0	-684.0	-541.7	2.00	-2.00	0.00
10,845.7	0.00	0.00	10,799.5	574.2	-684.3	-541.9	2.00	-2.00	0.00
10,900.0	0.00	0.00	10,853.7	574.2	-684.3	-541.9	0.00	0.00	0.00
11,000.0	0.00	0.00	10,953.7	574.2	-684.3	-541.9	0.00	0.00	0.00
11,100.0	0.00	0.00	11,053.7	574.2	-684.3	-541.9	0.00	0.00	0.00
11,196.3	0.00	0.00	11,150.0	574.2	-684.3	-541.9	0.00	0.00	0.00
Par Three 105 KOP									
11,200.0	0.45	92.60	11,153.7	574.2	-684.3	-541.9	11.99	11.99	0.00
11,300.0	12.44	92.60	11,252.9	573.7	-673.1	-542.0	11.99	11.99	0.00
11,342.6	17.54	92.60	11,294.0	573.2	-662.1	-542.0	11.99	11.99	0.00
11,400.0	19.10	114.07	11,348.6	569.0	-644.9	-538.5	11.99	2.72	37.37
11,500.0	26.15	139.76	11,441.1	545.4	-615.6	-516.3	11.99	7.05	25.69
11,600.0	35.78	153.80	11,526.8	502.2	-588.3	-474.4	11.99	9.64	14.04
11,700.0	46.42	162.29	11,602.1	441.2	-564.3	-414.6	11.99	10.63	8.49
11,800.0	57.49	168.17	11,663.7	365.2	-544.6	-339.6	11.99	11.07	5.88
11,900.0	68.77	172.73	11,708.9	277.3	-530.0	-252.5	11.99	11.28	4.56
12,000.0	80.15	176.64	11,735.6	181.6	-521.2	-157.3	11.99	11.39	3.90
12,086.2	90.00	179.78	11,743.0	95.9	-518.5	-71.8	11.99	11.43	3.64
Par Three 105 FTP									
12,100.0	90.00	179.78	11,743.0	82.1	-518.5	-58.0	0.00	0.00	0.00
12,200.0	90.00	179.78	11,743.0	-17.9	-518.1	41.9	0.00	0.00	0.00
12,300.0	90.00	179.78	11,743.0	-117.9	-517.7	141.8	0.00	0.00	0.00
12,400.0	90.00	179.78	11,743.0	-217.9	-517.3	241.6	0.00	0.00	0.00
12,500.0	90.00	179.78	11,743.0	-317.9	-516.9	341.5	0.00	0.00	0.00
12,600.0	90.00	179.78	11,743.0	-417.9	-516.5	441.4	0.00	0.00	0.00
12,700.0	90.00	179.78	11,743.0	-517.9	-516.1	541.3	0.00	0.00	0.00
12,800.0	90.00	179.78	11,743.0	-617.9	-515.7	641.1	0.00	0.00	0.00
12,900.0	90.00	179.78	11,743.0	-717.9	-515.3	741.0	0.00	0.00	0.00
13,000.0	90.00	179.78	11,743.0	-817.9	-514.9	840.9	0.00	0.00	0.00
13,100.0	90.00	179.78	11,743.0	-917.9	-514.6	940.7	0.00	0.00	0.00
13,200.0	90.00	179.78	11,743.0	-1,017.9	-514.2	1,040.6	0.00	0.00	0.00
13,300.0	90.00	179.78	11,743.0	-1,117.9	-513.8	1,140.5	0.00	0.00	0.00
13,400.0	90.00	179.78	11,743.0	-1,217.9	-513.4	1,240.4	0.00	0.00	0.00
13,500.0	90.00	179.78	11,743.0	-1,317.9	-513.0	1,340.2	0.00	0.00	0.00
13,600.0	90.00	179.78	11,743.0	-1,417.9	-512.6	1,440.1	0.00	0.00	0.00
13,700.0	90.00	179.78	11,743.0	-1,517.9	-512.2	1,540.0	0.00	0.00	0.00
13,800.0	90.00	179.78	11,743.0	-1,617.9	-511.8	1,639.9	0.00	0.00	0.00
13,900.0	90.00	179.78	11,743.0	-1,717.9	-511.4	1,739.7	0.00	0.00	0.00
14,000.0	90.00	179.78	11,743.0	-1,817.9	-511.0	1,839.6	0.00	0.00	0.00
14,100.0	90.00	179.78	11,743.0	-1,917.9	-510.6	1,939.5	0.00	0.00	0.00
14,200.0	90.00	179.78	11,743.0	-2,017.9	-510.3	2,039.4	0.00	0.00	0.00
14,300.0	90.00	179.78	11,743.0	-2,117.9	-509.9	2,139.2	0.00	0.00	0.00
14,400.0	90.00	179.78	11,743.0	-2,217.9	-509.5	2,239.1	0.00	0.00	0.00
14,500.0	90.00	179.78	11,743.0	-2,317.9	-509.1	2,339.0	0.00	0.00	0.00
14,600.0	90.00	179.78	11,743.0	-2,417.9	-508.7	2,438.9	0.00	0.00	0.00
14,622.1	90.00	179.78	11,743.0	-2,440.0	-508.6	2,460.9	0.00	0.00	0.00
Par Three 105 into NMNM127447									
14,700.0	90.00	179.78	11,743.0	-2,517.9	-508.3	2,538.7	0.00	0.00	0.00
14,800.0	90.00	179.78	11,743.0	-2,617.9	-507.9	2,638.6	0.00	0.00	0.00
14,900.0	90.00	179.78	11,743.0	-2,717.9	-507.5	2,738.5	0.00	0.00	0.00
15,000.0	90.00	179.78	11,743.0	-2,817.9	-507.1	2,838.4	0.00	0.00	0.00
15,100.0	90.00	179.78	11,743.0	-2,917.9	-506.7	2,938.2	0.00	0.00	0.00

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
15,200.0	90.00	179.78	11,743.0	-3,017.9	-506.3	3,038.1	0.00	0.00	0.00
15,300.0	90.00	179.78	11,743.0	-3,117.9	-506.0	3,138.0	0.00	0.00	0.00
15,400.0	90.00	179.78	11,743.0	-3,217.9	-505.6	3,237.9	0.00	0.00	0.00
15,500.0	90.00	179.78	11,743.0	-3,317.9	-505.2	3,337.7	0.00	0.00	0.00
15,600.0	90.00	179.78	11,743.0	-3,417.9	-504.8	3,437.6	0.00	0.00	0.00
15,700.0	90.00	179.78	11,743.0	-3,517.9	-504.4	3,537.5	0.00	0.00	0.00
15,800.0	90.00	179.78	11,743.0	-3,617.9	-504.0	3,637.4	0.00	0.00	0.00
15,900.0	90.00	179.78	11,743.0	-3,717.9	-503.6	3,737.2	0.00	0.00	0.00
16,000.0	90.00	179.78	11,743.0	-3,817.9	-503.2	3,837.1	0.00	0.00	0.00
16,100.0	90.00	179.78	11,743.0	-3,917.9	-502.8	3,937.0	0.00	0.00	0.00
16,200.0	90.00	179.78	11,743.0	-4,017.9	-502.4	4,036.8	0.00	0.00	0.00
16,300.0	90.00	179.78	11,743.0	-4,117.9	-502.0	4,136.7	0.00	0.00	0.00
16,400.0	90.00	179.78	11,743.0	-4,217.9	-501.7	4,236.6	0.00	0.00	0.00
16,500.0	90.00	179.78	11,743.0	-4,317.9	-501.3	4,336.5	0.00	0.00	0.00
16,600.0	90.00	179.78	11,743.0	-4,417.9	-500.9	4,436.3	0.00	0.00	0.00
16,700.0	90.00	179.78	11,743.0	-4,517.9	-500.5	4,536.2	0.00	0.00	0.00
16,800.0	90.00	179.78	11,743.0	-4,617.9	-500.1	4,636.1	0.00	0.00	0.00
16,900.0	90.00	179.78	11,743.0	-4,717.9	-499.7	4,736.0	0.00	0.00	0.00
17,000.0	90.00	179.78	11,743.0	-4,817.9	-499.3	4,835.8	0.00	0.00	0.00
17,100.0	90.00	179.78	11,743.0	-4,917.9	-498.9	4,935.7	0.00	0.00	0.00
17,200.0	90.00	179.78	11,743.0	-5,017.9	-498.5	5,035.6	0.00	0.00	0.00
17,300.0	90.00	179.78	11,743.0	-5,117.9	-498.1	5,135.5	0.00	0.00	0.00
17,400.0	90.00	179.78	11,743.0	-5,217.9	-497.7	5,235.3	0.00	0.00	0.00
17,500.0	90.00	179.78	11,743.0	-5,317.9	-497.4	5,335.2	0.00	0.00	0.00
17,600.0	90.00	179.78	11,743.0	-5,417.9	-497.0	5,435.1	0.00	0.00	0.00
17,700.0	90.00	179.78	11,743.0	-5,517.9	-496.6	5,535.0	0.00	0.00	0.00
17,800.0	90.00	179.78	11,743.0	-5,617.9	-496.2	5,634.8	0.00	0.00	0.00
17,900.0	90.00	179.78	11,743.0	-5,717.9	-495.8	5,734.7	0.00	0.00	0.00
18,000.0	90.00	179.78	11,743.0	-5,817.9	-495.4	5,834.6	0.00	0.00	0.00
18,100.0	90.00	179.78	11,743.0	-5,917.9	-495.0	5,934.5	0.00	0.00	0.00
18,200.0	90.00	179.78	11,743.0	-6,017.9	-494.6	6,034.3	0.00	0.00	0.00
18,300.0	90.00	179.78	11,743.0	-6,117.9	-494.2	6,134.2	0.00	0.00	0.00
18,400.0	90.00	179.78	11,743.0	-6,217.9	-493.8	6,234.1	0.00	0.00	0.00
18,500.0	90.00	179.78	11,743.0	-6,317.9	-493.4	6,334.0	0.00	0.00	0.00
18,600.0	90.00	179.78	11,743.0	-6,417.9	-493.1	6,433.8	0.00	0.00	0.00
18,700.0	90.00	179.78	11,743.0	-6,517.9	-492.7	6,533.7	0.00	0.00	0.00
18,800.0	90.00	179.78	11,743.0	-6,617.9	-492.3	6,633.6	0.00	0.00	0.00
18,900.0	90.00	179.78	11,743.0	-6,717.9	-491.9	6,733.4	0.00	0.00	0.00
19,000.0	90.00	179.78	11,743.0	-6,817.9	-491.5	6,833.3	0.00	0.00	0.00
19,100.0	90.00	179.78	11,743.0	-6,917.9	-491.1	6,933.2	0.00	0.00	0.00
19,200.0	90.00	179.78	11,743.0	-7,017.9	-490.7	7,033.1	0.00	0.00	0.00
19,300.0	90.00	179.78	11,743.0	-7,117.9	-490.3	7,132.9	0.00	0.00	0.00
19,400.0	90.00	179.78	11,743.0	-7,217.9	-489.9	7,232.8	0.00	0.00	0.00
19,500.0	90.00	179.78	11,743.0	-7,317.9	-489.5	7,332.7	0.00	0.00	0.00
19,600.0	90.00	179.78	11,743.0	-7,417.9	-489.1	7,432.6	0.00	0.00	0.00
19,700.0	90.00	179.78	11,743.0	-7,517.9	-488.8	7,532.4	0.00	0.00	0.00
19,800.0	90.00	179.78	11,743.0	-7,617.9	-488.4	7,632.3	0.00	0.00	0.00
19,900.0	90.00	179.78	11,743.0	-7,717.9	-488.0	7,732.2	0.00	0.00	0.00
20,000.0	90.00	179.78	11,743.0	-7,817.9	-487.6	7,832.1	0.00	0.00	0.00
20,100.0	90.00	179.78	11,743.0	-7,917.9	-487.2	7,931.9	0.00	0.00	0.00
20,200.0	90.00	179.78	11,743.0	-8,017.9	-486.8	8,031.8	0.00	0.00	0.00
20,300.0	90.00	179.78	11,743.0	-8,117.9	-486.4	8,131.7	0.00	0.00	0.00
20,400.0	90.00	179.78	11,743.0	-8,217.9	-486.0	8,231.6	0.00	0.00	0.00
20,500.0	90.00	179.78	11,743.0	-8,317.9	-485.6	8,331.4	0.00	0.00	0.00

AMEREDEV

Ameredev Operating, LLC

Planning Report

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Par Three 105H
Company:	Ameredev Operating, LLC.	**TVD Reference:**	KB @ 3317.0usft
Project:	Par Three	**MD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**North Reference:**	Grid
Well:	Par Three 105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
20,600.0	90.00	179.78	11,743.0	-8,417.9	-485.2	8,431.3	0.00	0.00	0.00
20,700.0	90.00	179.78	11,743.0	-8,517.9	-484.8	8,531.2	0.00	0.00	0.00
20,800.0	90.00	179.78	11,743.0	-8,617.9	-484.5	8,631.1	0.00	0.00	0.00
20,900.0	90.00	179.78	11,743.0	-8,717.9	-484.1	8,730.9	0.00	0.00	0.00
21,000.0	90.00	179.78	11,743.0	-8,817.9	-483.7	8,830.8	0.00	0.00	0.00
21,100.0	90.00	179.78	11,743.0	-8,917.9	-483.3	8,930.7	0.00	0.00	0.00
21,200.0	90.00	179.78	11,743.0	-9,017.9	-482.9	9,030.6	0.00	0.00	0.00
21,300.0	90.00	179.78	11,743.0	-9,117.9	-482.5	9,130.4	0.00	0.00	0.00
21,400.0	90.00	179.78	11,743.0	-9,217.9	-482.1	9,230.3	0.00	0.00	0.00
21,500.0	90.00	179.78	11,743.0	-9,317.9	-481.7	9,330.2	0.00	0.00	0.00
21,600.0	90.00	179.78	11,743.0	-9,417.9	-481.3	9,430.1	0.00	0.00	0.00
21,700.0	90.00	179.78	11,743.0	-9,517.9	-480.9	9,529.9	0.00	0.00	0.00
21,800.0	90.00	179.78	11,743.0	-9,617.9	-480.5	9,629.8	0.00	0.00	0.00
21,900.0	90.00	179.78	11,743.0	-9,717.9	-480.2	9,729.7	0.00	0.00	0.00
22,000.0	90.00	179.78	11,743.0	-9,817.9	-479.8	9,829.5	0.00	0.00	0.00
22,100.0	90.00	179.78	11,743.0	-9,917.9	-479.4	9,929.4	0.00	0.00	0.00
22,200.0	90.00	179.78	11,743.0	-10,017.9	-479.0	10,029.3	0.00	0.00	0.00
22,300.0	90.00	179.78	11,743.0	-10,117.9	-478.6	10,129.2	0.00	0.00	0.00
22,400.0	90.00	179.78	11,743.0	-10,217.9	-478.2	10,229.0	0.00	0.00	0.00
22,452.8	90.00	179.78	11,743.0	-10,270.7	-478.0	10,281.8	0.00	0.00	0.00
Par Three 105 LTP									
22,500.0	90.00	179.78	11,743.0	-10,317.9	-477.8	10,328.9	0.00	0.00	0.00
22,502.8	90.00	179.78	11,743.0	-10,320.7	-477.8	10,331.7	0.00	0.00	0.00
Par Three 105 BHL									

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
Par Three 105 LTP	0.00	0.00	11,743.0	-10,270.7	-478.1	415,440.81	860,201.21	32° 8' 16.560 N	103° 18' 11.449 W
- plan misses target center by 0.1usft at 22452.8usft MD (11743.0 TVD, -10270.7 N, -478.0 E)									
- Point									
Par Three 105 BHL	0.00	0.01	11,743.0	-10,320.7	-477.8	415,390.83	860,201.50	32° 8' 16.066 N	103° 18' 11.451 W
- plan hits target center									
- Point									
Par Three 105 FTP	0.00	0.00	11,743.0	95.9	-518.5	425,807.38	860,160.78	32° 9' 59.137 N	103° 18' 10.765 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,196.3	11,150.0	574.2	-684.3	Par Three 105 KOP
14,622.1	11,743.0	-2,440.0	-508.6	Par Three 105 into NMNM127447

Ameredev Operating, LLC.

Par Three
Par Three 5-7
Par Three 105H
Wellbore #1

Plan: Design #1

Lease Penetration Section Line Foot

11 November, 2020

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Project Par Three

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Par Three 5-7

Site Position:		**Northing:**	425,711.50 usft	**Latitude:**	32° 9' 58.139 N
From:	Lat/Long	**Easting:**	860,679.30 usft	**Longitude:**	103° 18' 4.744 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.55 °

Well Par Three 105H

Well Position	**+N/-S**	0.0 usft	**Northing:**	425,711.50 usft	**Latitude:**	32° 9' 58.139 N
	+E/-W	0.0 usft	**Easting:**	860,679.30 usft	**Longitude:**	103° 18' 4.744 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,290.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/4/2020	6.45	60.01	47,584.51846017

Design Design #1

Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	182.65

Survey Tool Program **Date** 11/11/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	22,502.8	Design #1 (Wellbore #1)	MWD	OWSG MWD - Standard

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
100.0	0.00	0.00	100.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
200.0	0.00	0.00	200.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
300.0	0.00	0.00	300.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
400.0	0.00	0.00	400.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
500.0	0.00	0.00	500.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
600.0	0.00	0.00	600.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
700.0	0.00	0.00	700.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
800.0	0.00	0.00	800.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
900.0	0.00	0.00	900.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,000.0	0.00	0.00	1,000.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,100.0	0.00	0.00	1,100.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
1,200.0	0.00	0.00	1,200.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,300.0	0.00	0.00	1,300.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,400.0	0.00	0.00	1,400.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,500.0	0.00	0.00	1,500.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,600.0	0.00	0.00	1,600.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,700.0	0.00	0.00	1,700.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,800.0	0.00	0.00	1,800.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
1,900.0	0.00	0.00	1,900.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
2,000.0	0.00	0.00	2,000.0	-200.0	-1,800.0	32° 9' 58.139 N	103° 18' 4.744 W
2,100.0	2.00	310.00	2,100.0	-198.9	-1,801.3	32° 9' 58.150 N	103° 18' 4.760 W
2,200.0	4.00	310.00	2,199.8	-195.5	-1,805.3	32° 9' 58.184 N	103° 18' 4.806 W
2,300.0	6.00	310.00	2,299.5	-189.9	-1,812.0	32° 9' 58.240 N	103° 18' 4.883 W
2,400.0	6.00	310.00	2,398.9	-183.2	-1,820.0	32° 9' 58.307 N	103° 18' 4.975 W
2,500.0	6.00	310.00	2,498.4	-176.5	-1,828.0	32° 9' 58.374 N	103° 18' 5.068 W
2,600.0	6.00	310.00	2,597.8	-169.8	-1,836.0	32° 9' 58.442 N	103° 18' 5.160 W
2,700.0	6.00	310.00	2,697.3	-163.0	-1,844.1	32° 9' 58.509 N	103° 18' 5.252 W
2,800.0	6.00	310.00	2,796.7	-156.3	-1,852.1	32° 9' 58.576 N	103° 18' 5.345 W
2,900.0	6.00	310.00	2,896.2	-149.6	-1,860.1	32° 9' 58.643 N	103° 18' 5.437 W
3,000.0	6.00	310.00	2,995.6	-142.9	-1,868.1	32° 9' 58.711 N	103° 18' 5.530 W
3,100.0	6.00	310.00	3,095.1	-136.2	-1,876.1	32° 9' 58.778 N	103° 18' 5.622 W
3,200.0	6.00	310.00	3,194.5	-129.4	-1,884.1	32° 9' 58.845 N	103° 18' 5.714 W
3,300.0	6.00	310.00	3,294.0	-122.7	-1,892.1	32° 9' 58.912 N	103° 18' 5.807 W
3,400.0	6.00	310.00	3,393.4	-116.0	-1,900.1	32° 9' 58.980 N	103° 18' 5.899 W
3,500.0	6.00	310.00	3,492.9	-109.3	-1,908.1	32° 9' 59.047 N	103° 18' 5.992 W
3,600.0	6.00	310.00	3,592.3	-102.6	-1,916.1	32° 9' 59.114 N	103° 18' 6.084 W
3,700.0	6.00	310.00	3,691.8	-95.8	-1,924.1	32° 9' 59.181 N	103° 18' 6.176 W
3,800.0	6.00	310.00	3,791.2	-89.1	-1,932.1	32° 9' 59.248 N	103° 18' 6.269 W
3,900.0	6.00	310.00	3,890.7	-82.4	-1,940.1	32° 9' 59.316 N	103° 18' 6.361 W
4,000.0	6.00	310.00	3,990.1	-75.7	-1,948.1	32° 9' 59.383 N	103° 18' 6.454 W
4,100.0	6.00	310.00	4,089.6	-69.0	-1,956.2	32° 9' 59.450 N	103° 18' 6.546 W
4,200.0	6.00	310.00	4,189.0	-62.3	-1,964.2	32° 9' 59.517 N	103° 18' 6.638 W
4,300.0	6.00	310.00	4,288.5	-55.5	-1,972.2	32° 9' 59.585 N	103° 18' 6.731 W
4,400.0	6.00	310.00	4,387.9	-48.8	-1,980.2	32° 9' 59.652 N	103° 18' 6.823 W
4,500.0	6.00	310.00	4,487.4	-42.1	-1,988.2	32° 9' 59.719 N	103° 18' 6.916 W
4,600.0	6.00	310.00	4,586.9	-35.4	-1,996.2	32° 9' 59.786 N	103° 18' 7.008 W
4,700.0	6.00	310.00	4,686.3	-28.7	-2,004.2	32° 9' 59.854 N	103° 18' 7.100 W
4,800.0	6.00	310.00	4,785.8	-21.9	-2,012.2	32° 9' 59.921 N	103° 18' 7.193 W
4,900.0	6.00	310.00	4,885.2	-15.2	-2,020.2	32° 9' 59.988 N	103° 18' 7.285 W
5,000.0	6.00	310.00	4,984.7	-8.5	-2,028.2	32° 10' 0.055 N	103° 18' 7.378 W
5,100.0	6.00	310.00	5,084.1	-1.8	-2,036.2	32° 10' 0.123 N	103° 18' 7.470 W
5,200.0	6.00	310.00	5,183.6	4.9	-2,044.2	32° 10' 0.190 N	103° 18' 7.562 W
5,300.0	6.00	310.00	5,283.0	11.7	-2,052.2	32° 10' 0.257 N	103° 18' 7.655 W
5,400.0	6.00	310.00	5,382.5	18.4	-2,060.2	32° 10' 0.324 N	103° 18' 7.747 W
5,500.0	6.00	310.00	5,481.9	25.1	-2,068.3	32° 10' 0.392 N	103° 18' 7.839 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
5,600.0	6.00	310.00	5,581.4	31.8	-2,076.3	32° 10' 0.459 N	103° 18' 7.932 W
5,700.0	6.00	310.00	5,680.8	38.5	-2,084.3	32° 10' 0.526 N	103° 18' 8.024 W
5,800.0	6.00	310.00	5,780.3	45.3	-2,092.3	32° 10' 0.593 N	103° 18' 8.117 W
5,900.0	6.00	310.00	5,879.7	52.0	-2,100.3	32° 10' 0.661 N	103° 18' 8.209 W
6,000.0	6.00	310.00	5,979.2	58.7	-2,108.3	32° 10' 0.728 N	103° 18' 8.301 W
6,100.0	6.00	310.00	6,078.6	65.4	-2,116.3	32° 10' 0.795 N	103° 18' 8.394 W
6,200.0	6.00	310.00	6,178.1	72.1	-2,124.3	32° 10' 0.862 N	103° 18' 8.486 W
6,300.0	6.00	310.00	6,277.5	78.8	-2,132.3	32° 10' 0.929 N	103° 18' 8.579 W
6,400.0	6.00	310.00	6,377.0	85.6	-2,140.3	32° 10' 0.997 N	103° 18' 8.671 W
6,500.0	6.00	310.00	6,476.4	92.3	-2,148.3	32° 10' 1.064 N	103° 18' 8.763 W
6,600.0	6.00	310.00	6,575.9	99.0	-2,156.3	32° 10' 1.131 N	103° 18' 8.856 W
6,700.0	6.00	310.00	6,675.3	105.7	-2,164.3	32° 10' 1.198 N	103° 18' 8.948 W
6,800.0	6.00	310.00	6,774.8	112.4	-2,172.4	32° 10' 1.266 N	103° 18' 9.041 W
6,900.0	6.00	310.00	6,874.3	119.2	-2,180.4	32° 10' 1.333 N	103° 18' 9.133 W
7,000.0	6.00	310.00	6,973.7	125.9	-2,188.4	32° 10' 1.400 N	103° 18' 9.225 W
7,100.0	6.00	310.00	7,073.2	132.6	-2,196.4	32° 10' 1.467 N	103° 18' 9.318 W
7,200.0	6.00	310.00	7,172.6	139.3	-2,204.4	32° 10' 1.535 N	103° 18' 9.410 W
7,300.0	6.00	310.00	7,272.1	146.0	-2,212.4	32° 10' 1.602 N	103° 18' 9.503 W
7,400.0	6.00	310.00	7,371.5	152.8	-2,220.4	32° 10' 1.669 N	103° 18' 9.595 W
7,500.0	6.00	310.00	7,471.0	159.5	-2,228.4	32° 10' 1.736 N	103° 18' 9.687 W
7,600.0	6.00	310.00	7,570.4	166.2	-2,236.4	32° 10' 1.804 N	103° 18' 9.780 W
7,700.0	6.00	310.00	7,669.9	172.9	-2,244.4	32° 10' 1.871 N	103° 18' 9.872 W
7,800.0	6.00	310.00	7,769.3	179.6	-2,252.4	32° 10' 1.938 N	103° 18' 9.965 W
7,900.0	6.00	310.00	7,868.8	186.3	-2,260.4	32° 10' 2.005 N	103° 18' 10.057 W
8,000.0	6.00	310.00	7,968.2	193.1	-2,268.4	32° 10' 2.073 N	103° 18' 10.149 W
8,100.0	6.00	310.00	8,067.7	199.8	-2,276.4	32° 10' 2.140 N	103° 18' 10.242 W
8,200.0	6.00	310.00	8,167.1	206.5	-2,284.5	32° 10' 2.207 N	103° 18' 10.334 W
8,300.0	6.00	310.00	8,266.6	213.2	-2,292.5	32° 10' 2.274 N	103° 18' 10.427 W
8,400.0	6.00	310.00	8,366.0	219.9	-2,300.5	32° 10' 2.342 N	103° 18' 10.519 W
8,500.0	6.00	310.00	8,465.5	226.7	-2,308.5	32° 10' 2.409 N	103° 18' 10.611 W
8,600.0	6.00	310.00	8,564.9	233.4	-2,316.5	32° 10' 2.476 N	103° 18' 10.704 W
8,700.0	6.00	310.00	8,664.4	240.1	-2,324.5	32° 10' 2.543 N	103° 18' 10.796 W
8,800.0	6.00	310.00	8,763.8	246.8	-2,332.5	32° 10' 2.610 N	103° 18' 10.889 W
8,900.0	6.00	310.00	8,863.3	253.5	-2,340.5	32° 10' 2.678 N	103° 18' 10.981 W
9,000.0	6.00	310.00	8,962.7	260.3	-2,348.5	32° 10' 2.745 N	103° 18' 11.073 W
9,100.0	6.00	310.00	9,062.2	267.0	-2,356.5	32° 10' 2.812 N	103° 18' 11.166 W
9,200.0	6.00	310.00	9,161.7	273.7	-2,364.5	32° 10' 2.879 N	103° 18' 11.258 W
9,300.0	6.00	310.00	9,261.1	280.4	-2,372.5	32° 10' 2.947 N	103° 18' 11.351 W
9,400.0	6.00	310.00	9,360.6	287.1	-2,380.5	32° 10' 3.014 N	103° 18' 11.443 W
9,500.0	6.00	310.00	9,460.0	293.9	-2,388.6	32° 10' 3.081 N	103° 18' 11.535 W
9,600.0	6.00	310.00	9,559.5	300.6	-2,396.6	32° 10' 3.148 N	103° 18' 11.628 W
9,700.0	6.00	310.00	9,658.9	307.3	-2,404.6	32° 10' 3.216 N	103° 18' 11.720 W
9,800.0	6.00	310.00	9,758.4	314.0	-2,412.6	32° 10' 3.283 N	103° 18' 11.813 W
9,900.0	6.00	310.00	9,857.8	320.7	-2,420.6	32° 10' 3.350 N	103° 18' 11.905 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
10,000.0	6.00	310.00	9,957.3	327.4	-2,428.6	32° 10' 3.417 N	103° 18' 11.997 W
10,100.0	6.00	310.00	10,056.7	334.2	-2,436.6	32° 10' 3.485 N	103° 18' 12.090 W
10,200.0	6.00	310.00	10,156.2	340.9	-2,444.6	32° 10' 3.552 N	103° 18' 12.182 W
10,300.0	6.00	310.00	10,255.6	347.6	-2,452.6	32° 10' 3.619 N	103° 18' 12.275 W
10,400.0	6.00	310.00	10,355.1	354.3	-2,460.6	32° 10' 3.686 N	103° 18' 12.367 W
10,500.0	6.00	310.00	10,454.5	361.0	-2,468.6	32° 10' 3.754 N	103° 18' 12.459 W
10,545.7	6.00	310.00	10,500.0	364.1	-2,472.3	32° 10' 3.784 N	103° 18' 12.502 W
10,600.0	4.91	310.00	10,554.0	367.4	-2,476.2	32° 10' 3.818 N	103° 18' 12.547 W
10,700.0	2.91	310.00	10,653.8	371.8	-2,481.5	32° 10' 3.861 N	103° 18' 12.608 W
10,800.0	0.91	310.00	10,753.7	374.0	-2,484.0	32° 10' 3.883 N	103° 18' 12.637 W
10,845.7	0.00	0.00	10,799.5	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
10,900.0	0.00	0.00	10,853.7	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
11,000.0	0.00	0.00	10,953.7	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
11,100.0	0.00	0.00	11,053.7	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
11,196.3	0.00	0.00	11,150.0	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
Par Three 105 KOP							
11,200.0	0.45	92.60	11,153.7	374.2	-2,484.3	32° 10' 3.885 N	103° 18' 12.640 W
11,300.0	12.44	92.60	11,252.9	373.7	-2,473.1	32° 10' 3.879 N	103° 18' 12.510 W
11,342.6	17.54	92.60	11,294.0	373.2	-2,462.1	32° 10' 3.873 N	103° 18' 12.382 W
11,400.0	19.10	114.07	11,348.6	369.0	-2,444.9	32° 10' 3.830 N	103° 18' 12.182 W
11,500.0	26.15	139.76	11,441.1	345.4	-2,415.6	32° 10' 3.594 N	103° 18' 11.844 W
11,600.0	35.78	153.80	11,526.8	302.2	-2,388.3	32° 10' 3.163 N	103° 18' 11.532 W
11,700.0	46.42	162.29	11,602.1	241.2	-2,364.3	32° 10' 2.558 N	103° 18' 11.260 W
11,800.0	57.49	168.17	11,663.7	165.2	-2,344.6	32° 10' 1.804 N	103° 18' 11.038 W
11,900.0	68.77	172.73	11,708.9	77.3	-2,330.0	32° 10' 0.933 N	103° 18' 10.878 W
12,000.0	80.15	176.64	11,735.6	-18.4	-2,321.2	32° 9' 59.985 N	103° 18' 10.787 W
12,086.2	90.00	179.78	11,743.0	-104.1	-2,318.5	32° 9' 59.137 N	103° 18' 10.765 W
Par Three 105 FTP							
12,100.0	90.00	179.78	11,743.0	-117.9	-2,318.5	32° 9' 59.000 N	103° 18' 10.766 W
12,200.0	90.00	179.78	11,743.0	-217.9	-2,318.1	32° 9' 58.011 N	103° 18' 10.773 W
12,300.0	90.00	179.78	11,743.0	-317.9	-2,317.7	32° 9' 57.021 N	103° 18' 10.779 W
12,400.0	90.00	179.78	11,743.0	-417.9	-2,317.3	32° 9' 56.032 N	103° 18' 10.786 W
12,500.0	90.00	179.78	11,743.0	-517.9	-2,316.9	32° 9' 55.042 N	103° 18' 10.792 W
12,600.0	90.00	179.78	11,743.0	-617.9	-2,316.5	32° 9' 54.053 N	103° 18' 10.799 W
12,700.0	90.00	179.78	11,743.0	-717.9	-2,316.1	32° 9' 53.063 N	103° 18' 10.806 W
12,800.0	90.00	179.78	11,743.0	-817.9	-2,315.7	32° 9' 52.074 N	103° 18' 10.812 W
12,900.0	90.00	179.78	11,743.0	-917.9	-2,315.3	32° 9' 51.084 N	103° 18' 10.819 W
13,000.0	90.00	179.78	11,743.0	-1,017.9	-2,314.9	32° 9' 50.095 N	103° 18' 10.825 W
13,100.0	90.00	179.78	11,743.0	-1,117.9	-2,314.6	32° 9' 49.105 N	103° 18' 10.832 W
13,200.0	90.00	179.78	11,743.0	-1,217.9	-2,314.2	32° 9' 48.116 N	103° 18' 10.838 W
13,300.0	90.00	179.78	11,743.0	-1,317.9	-2,313.8	32° 9' 47.126 N	103° 18' 10.845 W
13,400.0	90.00	179.78	11,743.0	-1,417.9	-2,313.4	32° 9' 46.137 N	103° 18' 10.852 W
13,500.0	90.00	179.78	11,743.0	-1,517.9	-2,313.0	32° 9' 45.147 N	103° 18' 10.858 W
13,600.0	90.00	179.78	11,743.0	-1,617.9	-2,312.6	32° 9' 44.158 N	103° 18' 10.865 W
13,700.0	90.00	179.78	11,743.0	-1,717.9	-2,312.2	32° 9' 43.168 N	103° 18' 10.871 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
13,800.0	90.00	179.78	11,743.0	-1,817.9	-2,311.8	32° 9' 42.179 N	103° 18' 10.878 W
13,900.0	90.00	179.78	11,743.0	-1,917.9	-2,311.4	32° 9' 41.189 N	103° 18' 10.885 W
14,000.0	90.00	179.78	11,743.0	-2,017.9	-2,311.0	32° 9' 40.200 N	103° 18' 10.891 W
14,100.0	90.00	179.78	11,743.0	-2,117.9	-2,310.6	32° 9' 39.210 N	103° 18' 10.898 W
14,200.0	90.00	179.78	11,743.0	-2,217.9	-2,310.3	32° 9' 38.221 N	103° 18' 10.904 W
14,300.0	90.00	179.78	11,743.0	-2,317.9	-2,309.9	32° 9' 37.231 N	103° 18' 10.911 W
14,400.0	90.00	179.78	11,743.0	-2,417.9	-2,309.5	32° 9' 36.242 N	103° 18' 10.918 W
14,500.0	90.00	179.78	11,743.0	-2,517.9	-2,309.1	32° 9' 35.252 N	103° 18' 10.924 W
14,600.0	90.00	179.78	11,743.0	-2,617.9	-2,308.7	32° 9' 34.263 N	103° 18' 10.931 W
14,622.1	90.00	179.78	11,743.0	-2,640.0	-2,308.6	32° 9' 34.044 N	103° 18' 10.932 W
Par Three 105 into NMNM127447							
14,700.0	90.00	179.78	11,743.0	-2,717.9	-2,308.3	32° 9' 33.273 N	103° 18' 10.937 W
14,800.0	90.00	179.78	11,743.0	-2,817.9	-2,307.9	32° 9' 32.284 N	103° 18' 10.944 W
14,900.0	90.00	179.78	11,743.0	-2,917.9	-2,307.5	32° 9' 31.294 N	103° 18' 10.950 W
15,000.0	90.00	179.78	11,743.0	-3,017.9	-2,307.1	32° 9' 30.305 N	103° 18' 10.957 W
15,100.0	90.00	179.78	11,743.0	-3,117.9	-2,306.7	32° 9' 29.315 N	103° 18' 10.964 W
15,200.0	90.00	179.78	11,743.0	-3,217.9	-2,306.3	32° 9' 28.326 N	103° 18' 10.970 W
15,300.0	90.00	179.78	11,743.0	-3,317.9	-2,306.0	32° 9' 27.336 N	103° 18' 10.977 W
15,400.0	90.00	179.78	11,743.0	-3,417.9	-2,305.6	32° 9' 26.347 N	103° 18' 10.983 W
15,500.0	90.00	179.78	11,743.0	-3,517.9	-2,305.2	32° 9' 25.358 N	103° 18' 10.990 W
15,600.0	90.00	179.78	11,743.0	-3,617.9	-2,304.8	32° 9' 24.368 N	103° 18' 10.997 W
15,700.0	90.00	179.78	11,743.0	-3,717.9	-2,304.4	32° 9' 23.379 N	103° 18' 11.003 W
15,800.0	90.00	179.78	11,743.0	-3,817.9	-2,304.0	32° 9' 22.389 N	103° 18' 11.010 W
15,900.0	90.00	179.78	11,743.0	-3,917.9	-2,303.6	32° 9' 21.400 N	103° 18' 11.016 W
16,000.0	90.00	179.78	11,743.0	-4,017.9	-2,303.2	32° 9' 20.410 N	103° 18' 11.023 W
16,100.0	90.00	179.78	11,743.0	-4,117.9	-2,302.8	32° 9' 19.421 N	103° 18' 11.029 W
16,200.0	90.00	179.78	11,743.0	-4,217.9	-2,302.4	32° 9' 18.431 N	103° 18' 11.036 W
16,300.0	90.00	179.78	11,743.0	-4,317.9	-2,302.0	32° 9' 17.442 N	103° 18' 11.043 W
16,400.0	90.00	179.78	11,743.0	-4,417.9	-2,301.7	32° 9' 16.452 N	103° 18' 11.049 W
16,500.0	90.00	179.78	11,743.0	-4,517.9	-2,301.3	32° 9' 15.463 N	103° 18' 11.056 W
16,600.0	90.00	179.78	11,743.0	-4,617.9	-2,300.9	32° 9' 14.473 N	103° 18' 11.062 W
16,700.0	90.00	179.78	11,743.0	-4,717.9	-2,300.5	32° 9' 13.484 N	103° 18' 11.069 W
16,800.0	90.00	179.78	11,743.0	-4,817.9	-2,300.1	32° 9' 12.494 N	103° 18' 11.076 W
16,900.0	90.00	179.78	11,743.0	-4,917.9	-2,299.7	32° 9' 11.505 N	103° 18' 11.082 W
17,000.0	90.00	179.78	11,743.0	-5,017.9	-2,299.3	32° 9' 10.515 N	103° 18' 11.089 W
17,100.0	90.00	179.78	11,743.0	-5,117.9	-2,298.9	32° 9' 9.526 N	103° 18' 11.095 W
17,200.0	90.00	179.78	11,743.0	-5,217.9	-2,298.5	32° 9' 8.536 N	103° 18' 11.102 W
17,300.0	90.00	179.78	11,743.0	-5,317.9	-2,298.1	32° 9' 7.547 N	103° 18' 11.109 W
17,400.0	90.00	179.78	11,743.0	-5,417.9	-2,297.7	32° 9' 6.557 N	103° 18' 11.115 W
17,500.0	90.00	179.78	11,743.0	-5,517.9	-2,297.4	32° 9' 5.568 N	103° 18' 11.122 W
17,600.0	90.00	179.78	11,743.0	-5,617.9	-2,297.0	32° 9' 4.578 N	103° 18' 11.128 W
17,700.0	90.00	179.78	11,743.0	-5,717.9	-2,296.6	32° 9' 3.589 N	103° 18' 11.135 W
17,800.0	90.00	179.78	11,743.0	-5,817.9	-2,296.2	32° 9' 2.599 N	103° 18' 11.141 W
17,900.0	90.00	179.78	11,743.0	-5,917.9	-2,295.8	32° 9' 1.610 N	103° 18' 11.148 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
18,000.0	90.00	179.78	11,743.0	-6,017.9	-2,295.4	32° 9' 0.620 N	103° 18' 11.155 W
18,100.0	90.00	179.78	11,743.0	-6,117.9	-2,295.0	32° 8' 59.631 N	103° 18' 11.161 W
18,200.0	90.00	179.78	11,743.0	-6,217.9	-2,294.6	32° 8' 58.641 N	103° 18' 11.168 W
18,300.0	90.00	179.78	11,743.0	-6,317.9	-2,294.2	32° 8' 57.652 N	103° 18' 11.174 W
18,400.0	90.00	179.78	11,743.0	-6,417.9	-2,293.8	32° 8' 56.662 N	103° 18' 11.181 W
18,500.0	90.00	179.78	11,743.0	-6,517.9	-2,293.4	32° 8' 55.673 N	103° 18' 11.188 W
18,600.0	90.00	179.78	11,743.0	-6,617.9	-2,293.1	32° 8' 54.683 N	103° 18' 11.194 W
18,700.0	90.00	179.78	11,743.0	-6,717.9	-2,292.7	32° 8' 53.694 N	103° 18' 11.201 W
18,800.0	90.00	179.78	11,743.0	-6,817.9	-2,292.3	32° 8' 52.704 N	103° 18' 11.207 W
18,900.0	90.00	179.78	11,743.0	-6,917.9	-2,291.9	32° 8' 51.715 N	103° 18' 11.214 W
19,000.0	90.00	179.78	11,743.0	-7,017.9	-2,291.5	32° 8' 50.725 N	103° 18' 11.220 W
19,100.0	90.00	179.78	11,743.0	-7,117.9	-2,291.1	32° 8' 49.736 N	103° 18' 11.227 W
19,200.0	90.00	179.78	11,743.0	-7,217.9	-2,290.7	32° 8' 48.747 N	103° 18' 11.234 W
19,300.0	90.00	179.78	11,743.0	-7,317.9	-2,290.3	32° 8' 47.757 N	103° 18' 11.240 W
19,400.0	90.00	179.78	11,743.0	-7,417.9	-2,289.9	32° 8' 46.768 N	103° 18' 11.247 W
19,500.0	90.00	179.78	11,743.0	-7,517.9	-2,289.5	32° 8' 45.778 N	103° 18' 11.253 W
19,600.0	90.00	179.78	11,743.0	-7,617.9	-2,289.1	32° 8' 44.789 N	103° 18' 11.260 W
19,700.0	90.00	179.78	11,743.0	-7,717.9	-2,288.8	32° 8' 43.799 N	103° 18' 11.266 W
19,800.0	90.00	179.78	11,743.0	-7,817.9	-2,288.4	32° 8' 42.810 N	103° 18' 11.273 W
19,900.0	90.00	179.78	11,743.0	-7,917.9	-2,288.0	32° 8' 41.820 N	103° 18' 11.280 W
20,000.0	90.00	179.78	11,743.0	-8,017.9	-2,287.6	32° 8' 40.831 N	103° 18' 11.286 W
20,100.0	90.00	179.78	11,743.0	-8,117.9	-2,287.2	32° 8' 39.841 N	103° 18' 11.293 W
20,200.0	90.00	179.78	11,743.0	-8,217.9	-2,286.8	32° 8' 38.852 N	103° 18' 11.299 W
20,300.0	90.00	179.78	11,743.0	-8,317.9	-2,286.4	32° 8' 37.862 N	103° 18' 11.306 W
20,400.0	90.00	179.78	11,743.0	-8,417.9	-2,286.0	32° 8' 36.873 N	103° 18' 11.313 W
20,500.0	90.00	179.78	11,743.0	-8,517.9	-2,285.6	32° 8' 35.883 N	103° 18' 11.319 W
20,600.0	90.00	179.78	11,743.0	-8,617.9	-2,285.2	32° 8' 34.894 N	103° 18' 11.326 W
20,700.0	90.00	179.78	11,743.0	-8,717.9	-2,284.8	32° 8' 33.904 N	103° 18' 11.332 W
20,800.0	90.00	179.78	11,743.0	-8,817.9	-2,284.5	32° 8' 32.915 N	103° 18' 11.339 W
20,900.0	90.00	179.78	11,743.0	-8,917.9	-2,284.1	32° 8' 31.925 N	103° 18' 11.345 W
21,000.0	90.00	179.78	11,743.0	-9,017.9	-2,283.7	32° 8' 30.936 N	103° 18' 11.352 W
21,100.0	90.00	179.78	11,743.0	-9,117.9	-2,283.3	32° 8' 29.946 N	103° 18' 11.359 W
21,200.0	90.00	179.78	11,743.0	-9,217.9	-2,282.9	32° 8' 28.957 N	103° 18' 11.365 W
21,300.0	90.00	179.78	11,743.0	-9,317.9	-2,282.5	32° 8' 27.967 N	103° 18' 11.372 W
21,400.0	90.00	179.78	11,743.0	-9,417.9	-2,282.1	32° 8' 26.978 N	103° 18' 11.378 W
21,500.0	90.00	179.78	11,743.0	-9,517.9	-2,281.7	32° 8' 25.988 N	103° 18' 11.385 W
21,600.0	90.00	179.78	11,743.0	-9,617.9	-2,281.3	32° 8' 24.999 N	103° 18' 11.391 W
21,700.0	90.00	179.78	11,743.0	-9,717.9	-2,280.9	32° 8' 24.009 N	103° 18' 11.398 W
21,800.0	90.00	179.78	11,743.0	-9,817.9	-2,280.5	32° 8' 23.020 N	103° 18' 11.405 W
21,900.0	90.00	179.78	11,743.0	-9,917.9	-2,280.2	32° 8' 22.030 N	103° 18' 11.411 W
22,000.0	90.00	179.78	11,743.0	-10,017.9	-2,279.8	32° 8' 21.041 N	103° 18' 11.418 W
22,100.0	90.00	179.78	11,743.0	-10,117.9	-2,279.4	32° 8' 20.051 N	103° 18' 11.424 W
22,200.0	90.00	179.78	11,743.0	-10,217.9	-2,279.0	32° 8' 19.062 N	103° 18' 11.431 W
22,300.0	90.00	179.78	11,743.0	-10,317.9	-2,278.6	32° 8' 18.072 N	103° 18' 11.438 W

AMEREDEV

Ameredev Operating, LLC

Lease Penetration Section Line Footages

Company:	Ameredev Operating, LLC.	**Local Co-ordinate Reference:**	Well Par Three 105H
Project:	Par Three	**TVD Reference:**	KB @ 3317.0usft
Site:	Par Three 5-7	**MD Reference:**	KB @ 3317.0usft
Well:	Par Three 105H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
22,400.0	90.00	179.78	11,743.0	-10,417.9	-2,278.2	32° 8' 17.083 N	103° 18' 11.444 W
22,452.8	90.00	179.78	11,743.0	-10,470.7	-2,278.0	32° 8' 16.560 N	103° 18' 11.448 W
Par Three 105 LTP							
22,500.0	90.00	179.78	11,743.0	-10,517.9	-2,277.8	32° 8' 16.093 N	103° 18' 11.451 W
22,502.8	90.00	179.78	11,743.0	-10,520.7	-2,277.8	32° 8' 16.066 N	103° 18' 11.451 W
Par Three 105 BHL							

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,196.3	11,150.0	574.2	-684.3	Par Three 105 KOP
14,622.1	11,743.0	-2,440.0	-508.6	Par Three 105 into NMNM127447

Checked By: _____ Approved By: _____ Date: _____

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	AMEREDEV OPERATING, LLC
WELL NAME & NO.:	PAR THREE FED COM 25 36 06 105H
LOCATION:	Section 6, T.25 S., R.36 E., NMP
COUNTY:	Lea County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	○ Multibowl	◉ Both
Other	☐ 4 String Area	☑ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☑ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 1485 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. Because the nearest geophysical data is more than two miles away and the proposed project is very near the Central Basin Platform margin the likelihood any gridding is anywhere near projections is highly suspect. Because of this discrepancy, BLM requests that a mudlogger be present for this well on this pad to verify the top of the Rustler Formation and top of the Salt Formation. GR and CNL geophysical logging MUST be run from surface to total depth because of the lack of data. If salt is encountered, set casing a minimum of 25 feet above the salt.
    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

Operator has proposed to pump down 13-3/8" X 9-5/8" annulus. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to BLM.

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing (alternate design) is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- Fresh-water based mud is to be used across the Capitan interval

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

 Approval Date: 12/09/2021

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

H_2S Drilling Operation Plan

1. **All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:**
    a. Characteristics of H_2S
    b. Physical effects and hazards
    c. Principal and operation of H_2s detectors, warning system and briefing areas
    d. Evacuation procedure, routes and first aid
    e. Proper use of safety equipment and life support systems
    f. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

2. **Briefing Area:**
    a. Two perpendicular areas will be designated by signs and readily accessible.
    b. Upon location entry there will be a designated area to establish all safety compliance criteria (1.) has been met.

3. **H_2S Detection and Alarm Systems:**
    a. H_2S sensors/detectors shall be located on the drilling rig floor, in the base of the sub structure/cellar area, and on the mud pits in the shale shaker area. Additional H_2S detectors may be placed as deemed necessary. All detectors will be set to initiate visual alarm at 10 ppm and visual with audible at 14 ppm and all equipment will be calibrated every 30 days or as needed.
    b. An audio alarm will be installed on the derrick floor and in the top doghouse.

4. **Protective Equipment for Essential Personnel:**
    a. **Breathing Apparatus:**
        i. Rescue Packs (SCBA) - 1 Unit shall be placed at each briefing area.
        ii. Two (SCBA) Units will be stored in safety trailer on location.
        iii. Work/Escape packs - 1 Unit will be available on rig floor in doghouse for emergency evacuation for driller.
    b. **Auxiliary Rescue Equipment:**
        i. Stretcher
        ii. 2 - OSHA full body harnesses
        iii. 100 ft. 5/8” OSHA approved rope
        iv. 1 - 20# class ABC fire extinguisher

5. **Windsock and/or Wind Streamers:**
    a. Windsock at mud pit area should be high enough to be visible.
    b. Windsock on the rig floor should be high enough to be visible.

6. **Communication:**
    a. While working under mask scripting boards will be used for communication where applicable.
    b. Hand signals will be used when script boards are not applicable.

c. Two way radios will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at Drilling Foreman's Office.

7. **Drill Stem Testing:** - No Planned DST at this time.

8. **Mud program:**
   a. If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

9. **Metallurgy:**

   a. All drill strings, casing, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.
   b. Drilling Contractor supervisor will be required to be familiar with the effect H_2S has on tubular goods and other mechanical equipment provided through contractor.

H_2S Contingency Plan

Emergency Procedures

In the event of a release of H_2S, the first responder(s) must:

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H_2S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response.
- Take precautions to avoid personal injury during this operation.
- Contact Operator and/or local officials the aid in operation. See list of phone numbers attached.
- Have received training in the:
    - Detection of H_2S and
    - Measures for protection against the gas,
    - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air=1	2 ppm	N/A	1000 ppm

Contacting Authorities

Ameredev Operating LLC personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including direction to site. The following call list of essential and potential responders has been prepared for use during a release. Ameredev Operating LLC's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER)

H_2S Contingency Plan

Ameredev Operating LLC – Emergency Phone 737-300-4799			
Key Personnel:			
Name	Title	Office	Mobile
Floyd Hammond	Chief Operating officer	737-300-4724	512-783-6810
Shane McNeely	Operations Engineer	737-300-4729	432-413-8593
Joe Bob Jones	Construction Foreman		432-260-9261

Artesia	
Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283
Carlsbad	
Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544
Santa Fe	
New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635
National	
National Emergency Response Center (Washington, D.C.)	800-424-8802
Medical	
Flight for Life - 4000 24th St.; Lubbock, TX	806-743-9911
Aerocare - R3, Box 49F; Lubbock, TX	806-747-8923
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
.'SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

SUPO Data Report
12/09/2021

APD ID: 10400065192
Submission Date: 11/15/2020
Operator Name: AMEREDEV OPERATING LLC
Well Name: PAR THREE FED COM 25 36 06
Well Number: 105H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

PAR_THREE_FED_COM_25_36_06_105H___WELL_PAD_ACCESS_MAP_20201113141647.pdf

Existing Road Purpose: ACCESS **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

PAR_THREE_FED_COM_25_36_06_105H___WELL_PAD_ACCESS_MAP_20201113141715.pdf
EP_PAR_THREE_5S_RD_SEC_6_REV1_S_20201113141728.pdf

New road type: RESOURCE

Length: 2651 Feet **Width (ft.):** 30

Max slope (%): 2 **Max grade (%):** 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Crowned and Ditched

New road access plan or profile prepared? N

New road access plan attachment:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Access road engineering design? N

Access road engineering design attachment:

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: CALICHE

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: GRADER

Access other construction information: NM One Call (811) will be notified before construction start.

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Crowned and Ditched

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

PAR_THREE_FED_COM_25_36_06_105H___1_MI_RADIUS_WELLS_20201113141841.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Produced oil, water and gas from the proposed well will be transported to an existing production facility named Pine Straw CTB, east of the well pad via a buried 4 inch poly flowline (700 psi maximum) that will run approximately 2,696 feet. An overhead electrical line will run in an electric easement parallel to the flowline easement and contain a power line approximately 2,756 feet in length. (See attached plats.) Should any type of production facilities be located on the well pad, they will be strategically placed to allow for maximum interim reclamation, re-contouring, and revegetation of the well location.

Production Facilities map:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

EP_PAR_THREE_N_ELECTRIC_SEC6_S_20201113142000.pdf
BO_PINE_STRAW_BATTERY_SITE_REV3_S_20201113142001.pdf
EP_PAR_THREE_5S_FL_SEC_6_REV1_S_20201113142001.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: SURFACE CASING
STIMULATION
DUST CONTROL
INTERMEDIATE/PRODUCTION CASING

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING
PIPELINE

Source land ownership: PRIVATE

Source transportation land ownership: FEDERAL

Water source volume (barrels): 20000 **Source volume (acre-feet):** 2.577862

Source volume (gal): 840000

Water source and transportation map:

PAR_THREE_FED_COM_25_36_06_105H___WATER_WELLS_LIST_20201113143918.pdf
PAR_THREE_FED_COM_25_36_06_105H___WATER_WELLS_MAP_20201113143924.pdf

Water source comments: Water will be trucked or surface piped from existing water wells on private land. See attached list of available wells.
New water well? N

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: NM One Call (811) will be notified before construction start. Top 6" of soil and brush will be stockpiled east of the pad. Closed loop drilling system will be used. Caliche will be hauled from an existing caliche pit on private (Dinwiddie Cattle Company) land in W2 08-25S-36E or an existing caliche pit on private (Dinwiddie Cattle Company) land in E2 17-25S-36E.

Construction Materials source location attachment:

PAR_THREE_FED_COM_25_36_06_105H___CALICHE_MAP_20201113144000.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings, mud, salts, and other chemicals

Amount of waste: 2000 barrels

Waste disposal frequency : Daily

Safe containment description: Steel tanks on pad

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: R360's State approved (NM-01-0006) disposal site at Halfway, NM

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location Steel tanks on pad

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

PAR_THREE_FED_COM_25_36_06_105H___WELLSITE_20201113144120.pdf
BO_PAR_THREE_7S_PAD_SITE_S_20201113144121.pdf

Comments:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: PT

Multiple Well Pad Number: 7S

Recontouring attachment:

PAR_THREE_FED_COM_25_36_06_105H___WELLSITE_20201113144153.pdf

Drainage/Erosion control construction: Crowned and ditched

Drainage/Erosion control reclamation: Harrowed on the contour

Well pad proposed disturbance (acres): 4.59
Road proposed disturbance (acres): 1.83
Powerline proposed disturbance (acres): 1.9
Pipeline proposed disturbance (acres): 1.97
Other proposed disturbance (acres): 0
Total proposed disturbance: 10.290000000000001

Well pad interim reclamation (acres): 0.79
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 0
Other interim reclamation (acres): 0
Total interim reclamation: 0.79

Well pad long term disturbance (acres): 3.8
Road long term disturbance (acres): 1.83
Powerline long term disturbance (acres): 1.9
Pipeline long term disturbance (acres): 1.97
Other long term disturbance (acres): 0
Total long term disturbance: 9.5

Disturbance Comments:

Reconstruction method: If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on location has been completed or plugged. Ameredev will gain written permission from the BLM if more time is needed. Interim reclamation will be completed within 6 months of completing the well. Interim reclamation will consist of shrinking the pad 17% (.79 acre) by removing caliche and reclaiming 40' wide swaths on the north and east sides of the pad. This will leave 3.8 acres for producing six wells, with tractor-trailer turn around. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with the surface owner's requirements. All topsoil for the battery will be reseeded in place for the life of the battery.
Topsoil redistribution: Enough stockpiled topsoil will be retained to cover the remainder of the pad when the well is plugged. New road will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.
Soil treatment: None

Existing Vegetation at the well pad: Sparse low brush and intermittent grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Sparse low brush and intermittent grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Sparse low brush and intermittent grasses

Existing Vegetation Community at the pipeline attachment:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Existing Vegetation Community at other disturbances: Sparse low brush and intermittent grasses

Existing Vegetation Community at other disturbances attachment:

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Christie **Last Name:** Hanna

Phone: (737)300-4723 **Email:** channa@ameredev.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: To BLM standards

Weed treatment plan attachment:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Monitoring plan description: To BLM standards

Monitoring plan attachment:

Success standards: To BLM satisfaction

Pit closure description: No pit

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: PIPELINE

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Fee Owner: Intrepid Potash – New Mexico, LLC **Fee Owner Address:** 1001 17th St., Suite 1050

Phone: (303)296-3006 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Ameredev and Intrepid have a Surface Use Agreement (SUA) in place for this location.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Fee Owner: Intrepid Potash – New Mexico, LLC **Fee Owner Address:** 1001 17th St., Suite 1050

Phone: (303)296-3006 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Ameredev and Intrepid have a Surface Use Agreement (SUA) in place for this location.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Fee Owner: Intrepid Potash – New Mexico, LLC **Fee Owner Address:** 1001 17th St., Suite 1050

Phone: (303)296-3006 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Ameredev and Intrepid have a Surface Use Agreement (SUA) in place for this location.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: OTHER

Describe: POWERLINE

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Fee Owner: Fee Owner Depercated **Fee Owner Address:**

Phone: (999)999-9999 **Email:** none@aol.com

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Ameredev and Intrepid have a Surface Use Agreement (SUA) in place for this location.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? N **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: No on-site inspection is required, as the surface location is on Fee land.

Other SUPO Attachment

PAR_THREE_FED_COM_25_36_06_105H___SURFACE_USE_PLAN_REV_20211015101745.pdf

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

PWD Data Report

12/09/2021

APD ID: 10400065192 **Submission Date:** 11/15/2020

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: AMEREDEV OPERATING LLC

Well Name: PAR THREE FED COM 25 36 06 **Well Number:** 105H

Other PWD type description:

Other PWD type attachment:

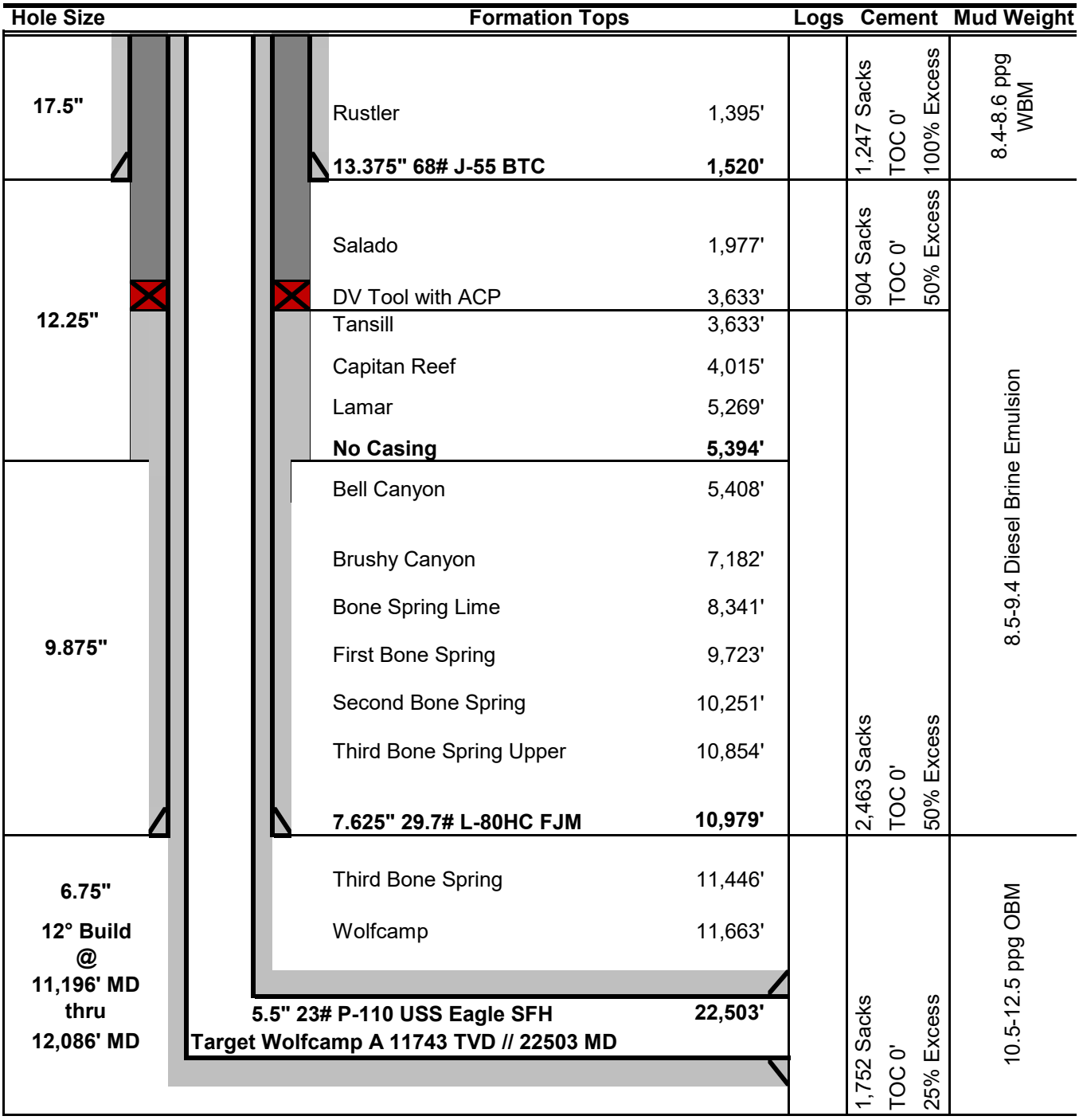
Have other regulatory requirements been met?

Other regulatory requirements attachment:

AMEREDEV
Ameredev II, LLC

Wellbore Schematic

Well:	Par Three Fed Com 25-36-06 105H	**Co. Well ID:**	xxxxxx
SHL:	Sec. 06 25S-36E 200' FNL & 1800' FEL	**AFE No.:**	xxxx-xxx
BHL:	Sec. 07 25S-36E 50' FSL & 2318' FEL	**API No.:**	xxxxxxxxxx
	Lea, NM	**GL:**	3,290'
Wellhead:	A - 13-5/8" 10M x 13-5/8" SOW	**Field:**	Delaware
	B - 13-5/8" 10M x 13-5/8" 10M	**Objective:**	Wolfcamp A
	C - 13-5/8" 10M x 13-5/8" 10M	**TVD:**	11,743'
	Tubing Spool - 7-1/16" 15M x 13-3/8" 10M	**MD:**	22,503'
Xmas Tree:	2-9/16" 10M	**Rig:**	TBD **KB** 27'
Tubing:	2-7/8" L-80 6.5# 8rd EUE	**E-Mail:**	Wellsite2@ameredev.com



5M Annular Preventer Variance Request and Well Control Procedures

Note: A copy of the Well Control Plan must be available at multiple locations on the rig for review by rig personnel, as well as review by the BLM PET/PE, and a copy must be maintained on the rig floor.

Dual Isolation Design for 5M Annular Exception

Ameredev will utilize 13-5/8" 10M (5M Annular) BOPE System consisting of:

- 13-5/8" 5M Annular
- 13-5/8" 10M Upper Pipe Rams
  - 3-1/2" – 5-1/2" Variable Bore Ram
- 13-5/8" 10M Blind Rams
- 13-5/8" 10M Drilling Spool /w 2 - 4" 10M Outlets Double 10M Isolation Valves
- 13-5/8" 10M Lower Blind Rams
  - 3-1/2" – 5-1/2" Variable Bore Ram

All drilling components and casing associated to exposure > 5000 psi BHP requiring a 10M system will have a double isolation (secondary barrier) below the 5M Annular that would provide a barrier to flow. The mud system will always be primary barrier, it will be maintained by adjusting values based on tourly mud tests and monitoring a PVT System to maintain static wellbore conditions, displacement procedures will be followed and recorded on daily drilling reports during tripping operations. Surge and swab pressure values will be calculated and maintained and static flow check will be monitored at previous casing shoe and verified static well conditions prior to tripping out of hole and again prior to pulling last joint of drill pipe through BOPE. The below table, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Drill Components	Size	Primary Barrier	Secondary Barrier	Third Barrier
Drillpipe	3-1/2"-5-1/2"	Drilling Fluid	Upper Pipe Rams	Lower Pipe Rams
HWDP Drillpipe	3-1/2"-5-1/2"	Drilling Fluid	Upper Pipe Rams	Lower Pipe Rams
Drill Collars	3-1/2"-5-1/2"	Drilling Fluid	Upper Pipe Rams	Lower Pipe Rams
Production Casing	3-1/2"-5-1/2"	Drilling Fluid	Upper Pipe Rams	Lower Pipe Rams
0pen Hole	13-5/8	Drilling Fluid	Blind Rams	
All Drilling Components in 10M Environment will have OD that will allow full Operational RATED WORKING PRESSURE for system design. Kill line with minimum 2" ID will be available outside substructure with 10M Check Valve for OOH Kill Operations				

Well Control Procedures

Proper well control procedures are dependent to differentiating well conditions, to cover the basic well control operations there are will be standard drilling ahead, tripping pipe, tripping BHA, running casing, and pipe out of the hole/open hole scenarios that will be defined by procedures below. Initial Shut In Pressure can be taken against the Uppermost BOPE component the 5M Annular, pressure control can be transferred from the lesser 5M Annular to the 10M Upper Pipe Rams if needed. Shut In Pressures may be equal to or less than the Rated Working Pressure but at no time will the pressure on the annular preventer exceed the Rated Working Pressure of the annular. The annular will be tested to 5,000 psi. This will be the Rated Working Pressure of the annular preventer. All scenarios will be written such as shut in will be performed by closing the 10,000 psi Upper Pipe Rams for faster Accumulator pressure recovery to allow safer reaction to controlling wellbore pressure.

Shutting In While Drilling

1. Sound alarm signaling well control event to Rig Crew
2. Space out drill string to allow FOSV installation
3. Shut down pumps
4. Shut in Upper Pipe Rams and open HCR against Open Chokes and Valves Open to working pressure gauge
5. Install open, full open safety valve and close valve, Close Chokes
6. Verify well is shut-in and flow has stopped
7. Notify supervisory personnel
8. Record data (SIDP, SICP, Pit Gain, and Time)
9. Hold pre-job safety meeting and discuss kill procedure

Shutting In While Tripping

1. Sound alarm signaling well control event to Rig Crew
2. Space out drill string to allow FOSV installation
3. Shut in Upper Pipe Rams and open HCR against Open Chokes and Valves Open to working pressure gauge
4. Install open, full open safety valve and close valve, Close Chokes
5. Verify well is shut-in and flow has stopped
6. Notify supervisory personnel
7. Record data (SIDP, SICP, Pit Gain, and Time)
8. Hold pre-job safety meeting and discuss kill procedure

Shutting In While Running Casing

1. Sound alarm signaling well control event to Rig Crew
2. Space out casing to allow circulating swedge installation
3. Shut in Upper Pipe Rams and open HCR against Open Chokes and Valves Open to working pressure gauge
4. Install circulating swedge, Close high pressure, low torque valves, Close Chokes
5. Verify well is shut-in and flow has stopped
6. Notify supervisory personnel
7. Record data (SIDP, SICP, Pit Gain, and Time)
8. Hold Pre-job safety meeting and discuss kill procedure

Shutting in while out of hole

1. Sound alarm signaling well control event to Rig Crew
2. Shut-in well: close blind rams and open HCR against Open Chokes and Valves Open to working pressure gauge
3. Close Chokes, Verify well is shut-in and monitor pressures
4. Notify supervisory personnel
5. Record data (SIDP, SICP, Pit Gain, and Time)
6. Hold Pre-job safety meeting and discuss kill procedure

Shutting in prior to pulling BHA through stack

Prior to pulling last joint of drill pipe thru the stack space out and check flow
If flowing see steps below.

1. Sound alarm signaling well control event to Rig Crew
2. Shut in upper pipe ram and open HCR against Open Chokes and Valves Open to working pressure gauge
3. Install open, full open safety valve and close valve, Close Chokes
4. Verify well is shut-in and flow has stopped
5. Notify supervisory personnel
6. Record data (SIDP, SICP, Pit Gain, and Time)
7. Hold pre-job safety meeting and discuss kill procedure

Shutting in while BHA is in the stack and ram preventer and combo immediately available

1. Sound alarm signaling well control event to Rig Crew
2. Space out BHA with upset just beneath the compatible pipe ram
3. Shut in upper compatible pipe ram and open HCR against Open Chokes and Valves Open to working pressure gauge
4. Install open, full open safety valve and close valve, Close Chokes
5. Verify well is shut-in and flow has stopped
6. Notify supervisory personnel
7. Record data (SIDP, SICP, Pit Gain, and Time)
8. Hold pre-job safety meeting and discuss kill procedure

*FOSV will be on rig floor in open position with operating handle for each type of connection utilized and tested to 10,000 psi

Shutting in while BHA is in the stack and no ram preventer or combo immediately available

1. Sound alarm signaling well control event to Rig Crew
2. If possible pick up high enough, to pull string clear and follow “Open Hole” scenario

If not possible to pick up high enough:

3. Stab Crossover, make up one joint/stand of drill pipe, and install open, full open safety valve (Leave Open)
4. Space out drill string with upset just beneath the compatible pipe ram.
5. Shut in upper compatible pipe ram and open HCR against Open Chokes and Valves Open to working pressure gauge
6. Close FOSV, Close Chokes, Verify well is shut-in and flow has stopped
7. Notify supervisory personnel
8. Record data (SIDP, SICP, Pit Gain, and Time)
9. Hold pre-job safety meeting and discuss kill procedure

Pressure Control Plan

Pressure Control Equipment

- Following setting of 13-3/8" Surface Casing Ameredev will install 13-5/8 MB4 Multi Bowl Casing Head by welding on a 13-5/8 SOW x 13-5/8" 5M in combination with 13-5/8 5M x 13-5/8 10M B-Sec to Land Intm #1 and a 13-5/8 10M x 13-5/8 10M shouldered to land C-Sec to Land Intm #2 (Installation procedure witnessed and verified by a manufacturer's representative).

- Casing will be tested to 1500 psi or .22 psi/ft whichever is greater for 30 minutes with <10% leak off, but will not exceed 70% of the burst rating per Onshore Order No. 2.

- Ameredev will install a 5M System Blowout Preventer (BOPE) with a 5M Annular Preventer and related equipment (BOPE). Full testing will be performed utilizing a full isolation test plug and limited to 5,000 psi MOP of MB4 Multi Bowl Casing Head. Pressure will be held for 10 min or until provisions of test are met on all valves and rams. The 5M Annular Preventer will be tested to 50% of approved working pressure (2,500 psi). Casing will be tested to 1500 psi or .22 psi/ft whichever is greater for 30 minutes with <10% leak off, but will not exceed 70% of the burst rating per Onshore Order No. 2.

- Setting of 9-5/8" (7-5/8" as applicable) Intermediate will be done by landing a wellhead hanger in the 13-5/8" 5M Bowl, Cementing and setting Well Head Packing seals and testing same. (Installation procedure witnessed and verified by a manufacturer's representative) Casing will be tested to 1500 psi or .22 psi/ft whichever is greater for 30 minutes with <10% leak off, but will not exceed 70% of the burst rating per Onshore Order No. 2.

- Full testing will be performed utilizing a full isolation test plug to 10,000 psi MOP of MB4 Multi Bowl B-Section. Pressure will be held for 10 min or until provisions of test are met on all valves and rams. The 5M Annular Preventer will be tested to 100% of approved working pressure (5,000 psi).

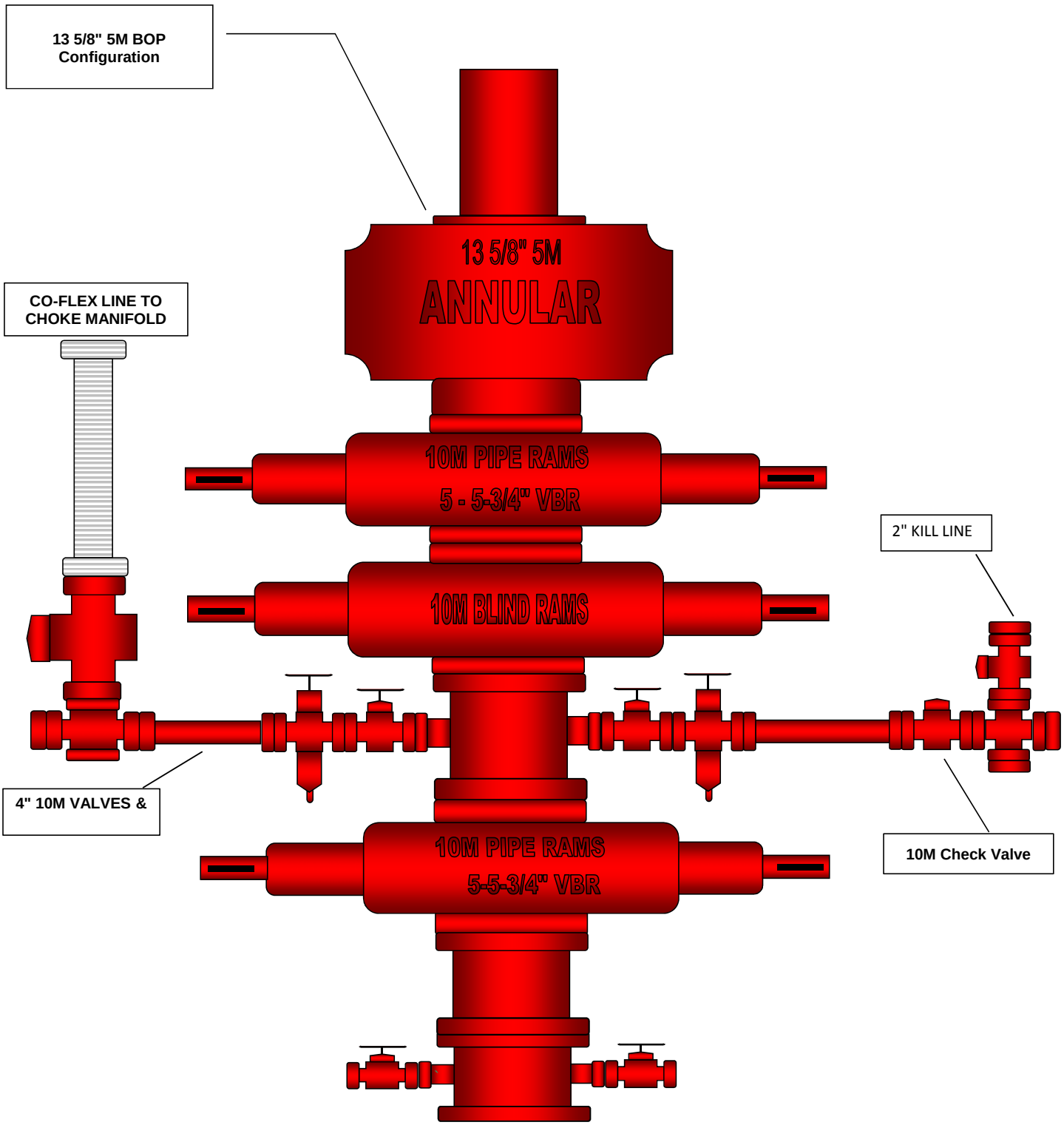
- Before drilling >20ft of new formation under the 9-5/8" (7-5/8" as applicable) Casing Shoe a pressure integrity test of the Casing Shoe will be performed to minimum of the MWE anticipated to control formation pressure to the next casing depth.

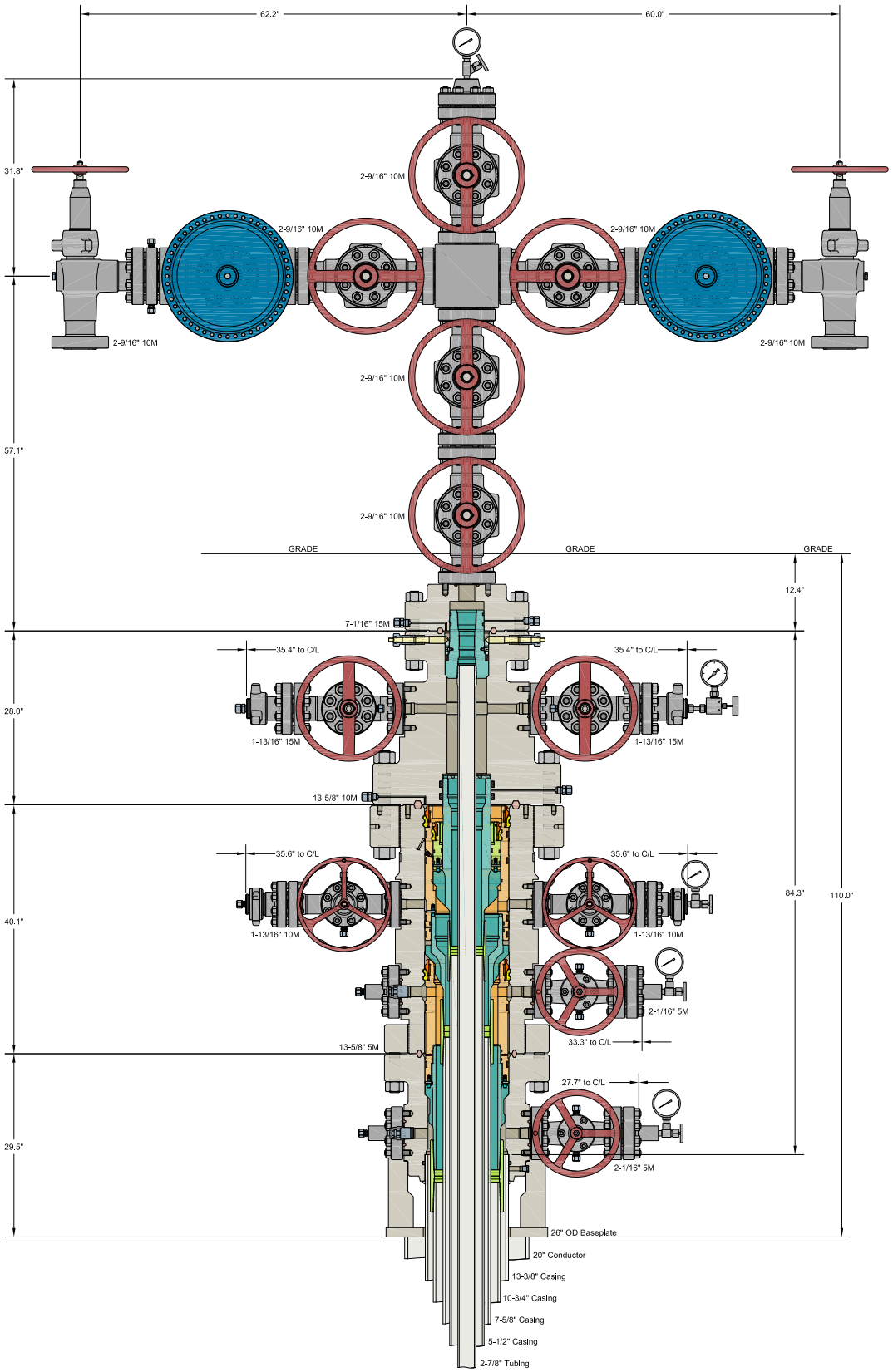
- Following setting of 5-1/2" Production Casing and adequate WOC time Ameredev will break 10M System Blowout Preventer (BOP) from 10M DOL-2 Casing Head, install annulus casing slips and test same (Installation procedure witnessed and verified by a manufacturer's representative) and install 11" 10M x 5-1/8" 15M Tubing Head (Installation procedure witnessed and verified by a manufacturer's representative). Ameredev will test head to 70% casing design and install Dry Hole cap with needle valve and pressure gauge to monitor well awaiting completion.

AMEREDEV
American Resource Development LLC

Pressure Control Plan

- Slow pump speeds will be taken daily by each crew and recorded on Daily Drilling Report after mudding up.
- A choke manifold and accumulator with floor and remote operating stations will be functional and in place after installation of BOPE, as well as full functioning mud gas separator.
- Weekly BOPE pit level drills will be conducted by each crew and recorded on Daily Drilling Report.
- BOP will be fully operated when out of hole and will be documented on the daily drilling log.
- All B.O.P.s and associated equipment will be tested in accordance with Onshore Order #2
- All B.O.P. testing will be done by an independent service company.
- The B.O.P. will be tested within 21 days of the original test if drilling takes more time than planned.
- Ameredev requests a variance to connect the B.O.P. choke outlet to the choke manifold using a co-flex hose with a 10,000 psi working pressure that has been tested to 15,000psi and is built to API Spec 16C. Once the flex line is installed it will be tied down with safety clamps. (certifications will be sent to Carlsbad BLM Office prior to install)
- Ameredev requests a variance to install a 5M Annular Preventer on the 10M System to drill the Production Hole below the 9-5/8” (7-5/8" as applicable) Intermediate Section. 5M Annular will be tested to 100% working pressure (5,000 psi). A full well control procedure will be included to isolate well bore.


13 5/8" 5M BOP Configuration
13 5/8" 5M
ANNULAR
CO-FLEX LINE TO CHOKE MANIFOLD
10M PIPE RAMS
5 - 5-3/4" VBR
2" KILL LINE
10M BLIND RAMS
4" 10M VALVES &
10M PIPE RAMS
5-5-3/4" VBR
10M Check Valve



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC	AMEREDEV DELAWARE		
20" x 13-3/8" x 10-3/4" x 7-5/8" x 5-1/2" x 2-7/8" MBU-4T-SOW Sys. With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 2-9/16" 10M x 2-9/16" 10M Production Tree Assembly	DRAWN	DLE	17DEC19
	APPRV		
	DRAWING NO.	HBE0000176	

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 66159

CONDITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 66159
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/13/2021
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/13/2021
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/13/2021
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	12/13/2021