

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

Form C-101

August 1, 2011

Permit 347891

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746		2. OGRID Number 372224
		3. API Number 30-025-51890
4. Property Code 320055	5. Property Name AMEN CORNER 26 36 27 STATE COM	6. Well No. 121H

7. Surface Location

UL - Lot M	Section 22	Township 26S	Range 36E	Lot Idn M	Feet From 230	N/S Line S	Feet From 310	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot E	Section 34	Township 26S	Range 36E	Lot Idn 4	Feet From 50	N/S Line S	Feet From 330	E/W Line W	County Lea
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9. Pool Information

WC-025 G-09 S263619C;WOLFCAMP	98234
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2911
16. Multiple N	17. Proposed Depth 19527	18. Formation Wolfcamp	19. Contractor	20. Spud Date 11/1/2024
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	68	1849	1506	0
Int1	9.875	7.625	29.7	10869	3218	0
Prod	6.75	5.5	23	19527	1520	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	TBD

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

Signature:

Printed Name: Electronically filed by Christie Hanna

Title: Regulatory

Email Address: channa@ameredev.com

Date: 8/21/2023

Phone: 737-300-4723

OIL CONSERVATION DIVISION

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 8/25/2023

Expiration Date: 8/25/2025

Conditions of Approval Attached

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

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-	² Pool Code 98234	³ Pool Name WC-025 G-09 S263619C; WOLFCAMP
⁴ Property Code 320055	⁵ Property Name AMEN CORNER 26 36 27 STATE COM	
⁷ OGRID No. 372224	⁸ Operator Name AMEREDEV OPERATING, LLC.	⁶ Well Number 121H ⁹ Elevation 2911'

¹⁰Surface Location

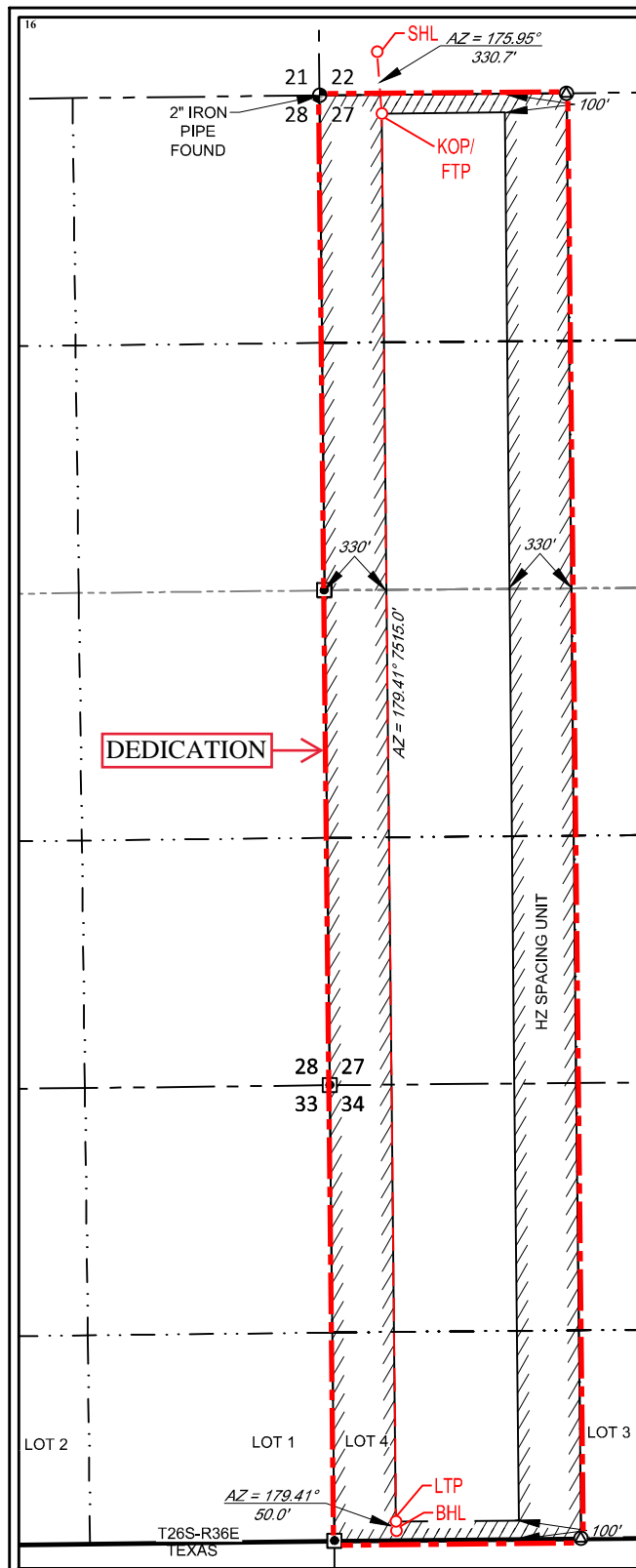
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	26-S	36-E	—	230'	SOUTH	310'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	34	26-S	36-E	—	50'	SOUTH	330'	WEST	LEA

¹² Dedicated Acres 233.69	¹³ Joint or Infill	¹⁴ Consolidation Code C	¹⁵ Order No.
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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.

NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)

230' FSL - SEC. 22
310' FWL - SEC. 22
X=873819 Y=373453
LAT.: N 32.0221653
LONG.: W 103.2605415

KICK OFF POINT (KOP)
FIRST TAKE POINT (FTP)

100' FNL - SEC. 27
330' FWL - SEC. 27
X=873842 Y=373123
LAT.: N 32.0212579
LONG.: W 103.2604768

LAST TAKE POINT (LTP)

100' FSL - SEC. 34
330' FWL - SEC. 34
X=873919 Y=365609
LAT.: N 32.0006017
LONG.: W 103.2604693

BOTTOM HOLE LOCATION (BHL)

50' FSL - SEC. 34
330' FWL - SEC. 34
X=873919 Y=365559
LAT.: N 32.0004643
LONG.: W 103.2604692

T-26-S, R-36-E
SECTION 34
LOT 1 - 33.61 ACRES
LOT 2 - 33.64 ACRES
LOT 3 - 33.66 ACRES
LOT 4 - 33.69 ACRES

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.

De Hammorsal 8/18/2023
Signature Date

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.

02/01/2018

Date of Survey
Signature and Seal of Professional Surveyor



Certificate Number

District I

1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 347891

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: AMEREDEV OPERATING, LLC [372224] 2901 Via Fortuna Austin, TX 78746	API Number: 30-025-51890
	Well: AMEN CORNER 26 36 27 STATE COM #121H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
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
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
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A RCBL MUST BE RUN ON THAT STRING OF CASING.

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

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 II, LLC _____ **OGRID:** _____ 372224 _____ **Date:** _____ 06/21/2023 _____

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
Amen Corner 26 36 27 State Com 061H	30025-		230' FSL & 230' FWL	680	3,412	2,610
Amen Corner 26 36 27 State Com 064H	30025-		230' FSL & 975' FEL	680	3,412	2,610
Amen Corner 26 36 27 State Com 071H	30025-		230' FSL & 1100' FWL	680	3,412	2,610
Amen Corner 26 36 27 State Com 074H	30025-		200' FNL & 250' FEL	680	3,412	2,610
Amen Corner 26 36 27 State Com 121H	30025-		230' FSL & 330' FWL	680	3,412	2,610
Amen Corner 26 36 27 State Com 127H	30025-		230' FSL & 935' FEL	680	3,412	2,610

IV. Central Delivery Point Name: _____ [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
Amen Corner 26 36 27 State Com 061H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 064H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 071H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 074H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 121H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 127H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025

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: <i>Cesca Yu</i>
Printed Name: Cesca Yu
Title: Engineer
E-mail Address: cyu@amerev.com
Date: 06/21/2023
Phone: 512-775-1417

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



Ameredev II, LLC

Wellbore Schematic

Well: Amen Corner 26 36 27 State Com 121H
SHL: Sec. 22 26S-36E 230' FSL & 310' FWL
BHL: Sec. 34 26S-36E 50' FSL & 330' FWL
 Lea, NM
Wellhead: A - 13-5/8" 10M x 13-5/8" SOW
 B - 13-5/8" 10M x 13-5/8" 10M
 C - 13-5/8" 10M x 13-5/8" 10M
 Tubing Spool - 7-1/16" 15M x 13-3/8" 10M
Xmas Tree: 2-9/16" 10M
Tubing: 2-7/8" L-80 6.5# 8rd EUE

Co. Well ID: xxxxxx
AFE No.: xxxx-xxx
API No.: xxxxxxxxxxxx
GL: 2,911'
Field: Delaware
Objective: Wolfcamp B
TVD: 12,153'
MD: 19,527'
Rig: TBD **KB 27'**
E-Mail: Wellsite2@ameredev.com

Hole Size	Formation Tops	Logs	Cement	Mud Weight
17.5"	Rustler 1,724'	1,506 Sacks	TOC 0'	8.4-8.6 ppg WBM
	13.375" 68# J-55 BTC 1,849'			
12.25"	Salado 2,205'	820 Sacks	TOC 0'	7.5-9.4 Diesel Brine Emulsion
	DV Tool with ACP 3,244'		50% Excess	
	Tansill 3,244'			
	Capitan Reef 3,845'			
	Lamar 4,982'			
	No Casing 5,107'			
9.875"	Bell Canyon 5,178'			7.5-9.4 Diesel Brine Emulsion
	Brushy Canyon 6,900'			
	Bone Spring Lime 7,866'			
	First Bone Spring 9,521'			
	Second Bone Spring 10,051'			
	Third Bone Spring Upper 10,744'			
	7.625" 29.7# L-80HC BTC 10,869'	2,398 Sacks	TOC 0'	50% Excess
6.75"	Third Bone Spring 11,327'			10.5-12.5 ppg OBM
12° Build @	Wolfcamp A 11,532'			
11,542' MD thru	Wolfcamp B 11,929'			
12,292' MD	5.5" 23# P-110 USS-Eagle SFH 19,527'	1,520 Sacks	TOC 0'	
	Target Wolfcamp B 12153 TVD // 19527 MD		25% Excess	

Casing Design and Safety Factor Check

Casing Specifications						
Segment	Hole ID	Depth	OD	Weight	Grade	Coupling
Surface	17.5	1,849'	13.375	68	J-55	BTC
Intermediate	9.875	10,869'	7.625	29.7	HCL-80	BTC
Production	6.75	11,542'	5.5	23	P-110	SFH

Check Surface Casing				
OD Cplg	Body	Joint	Collapse	Burst
<i>inches</i>	<i>1000 lbs</i>	<i>1000 lbs</i>	<i>psi</i>	<i>psi</i>
14.375	1,069	915	4,100	3,450
Safety Factors				
1.56	8.51	7.28	4.96	0.65
Check Intermediate Casing				
OD Cplg	Body	Joint	Collapse	Burst
<i>inches</i>	<i>1000 lbs</i>	<i>1000 lbs</i>	<i>psi</i>	<i>psi</i>
7.625	940	558	6700	9460
Safety Factors				
1.13	2.91	1.97	1.26	1.20
Check Prod Casing, Segment A				
OD Cplg	Body	Joint	Collapse	Burst
<i>inches</i>	<i>1000 lbs</i>	<i>1000 lbs</i>	<i>psi</i>	<i>psi</i>
5.777	728	655	12780	14360
Safety Factors				
0.49	2.60	2.34	1.71	1.82



Ameredev Operating

Lea County, NM (N83-NME)

AMEN CORNER ST COM PROJECT

AMEN CORNER 26 36 27 ST COM #121H

OWB

Plan: PWP

Standard Planning Report - Geographic

19 June, 2023



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Project	Lea County, NM (N83-NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site						AMEN CORNER ST COM PROJECT											
Site Position:						Northing:			373,452.33 usft			Latitude:			32.0221652		
From:			Lat/Long			Easting:			873,738.68 usft			Longitude:			-103.2607997		
Position Uncertainty:			0.0 usft			Slot Radius:			13-3/16 "								

Well		AMEN CORNER ST COM 26 36 27 #121H				
Well Position	+N/-S	0.0 usft	Northing:	373,453.22 usft	Latitude:	32.0221649
	+E/-W	0.0 usft	Easting:	873,838.67 usft	Longitude:	-103.2604771
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	2,911.0 usft
Grid Convergence:		0.57 °				

Wellbore	OWB
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/19/2023	6.15	59.69	47,199.08073029

Design	PWP
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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	179.41

Plan Survey Tool Program	Date	6/19/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,526.8 PWP (OWB)	MWD		
			OWSG MWD - Standard		



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

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	
2,250.0	5.00	182.90	2,249.7	-10.9	-0.6	2.00	2.00	0.00	182.90	
5,793.3	5.00	182.90	5,779.5	-319.3	-16.1	0.00	0.00	0.00	0.00	
6,043.3	0.00	0.00	6,029.2	-330.2	-16.7	2.00	-2.00	0.00	180.00	
11,689.6	0.00	0.00	11,675.5	-330.2	-16.7	0.00	0.00	0.00	0.00	
12,439.6	90.00	179.41	12,153.0	-807.6	-11.8	12.00	12.00	23.92	179.41	
19,526.8	90.00	179.41	12,153.0	-7,894.5	60.8	0.00	0.00	0.00	0.00	PBHL (ACSC 121H)



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
100.0	0.00	0.00	100.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
200.0	0.00	0.00	200.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
300.0	0.00	0.00	300.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
400.0	0.00	0.00	400.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
500.0	0.00	0.00	500.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
600.0	0.00	0.00	600.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
700.0	0.00	0.00	700.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
800.0	0.00	0.00	800.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
900.0	0.00	0.00	900.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,000.0	0.00	0.00	1,000.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,100.0	0.00	0.00	1,100.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,200.0	0.00	0.00	1,200.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,300.0	0.00	0.00	1,300.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,400.0	0.00	0.00	1,400.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,500.0	0.00	0.00	1,500.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,600.0	0.00	0.00	1,600.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,700.0	0.00	0.00	1,700.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,724.0	0.00	0.00	1,724.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
Rustler									
1,800.0	0.00	0.00	1,800.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
1,900.0	0.00	0.00	1,900.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
2,000.0	0.00	0.00	2,000.0	0.0	0.0	373,453.22	873,838.67	32.0221649	-103.2604771
Start Build 2.00									
2,100.0	2.00	182.90	2,100.0	-1.7	-0.1	373,451.47	873,838.58	32.0221601	-103.2604774
2,200.0	4.00	182.90	2,199.8	-7.0	-0.4	373,446.25	873,838.32	32.0221458	-103.2604785
2,205.2	4.10	182.90	2,205.0	-7.3	-0.4	373,445.88	873,838.30	32.0221448	-103.2604785
Salado									
2,250.0	5.00	182.90	2,249.7	-10.9	-0.6	373,442.33	873,838.12	32.0221350	-103.2604792
Start 3543.3 hold at 2250.0 MD									
2,300.0	5.00	182.90	2,299.5	-15.2	-0.8	373,437.98	873,837.90	32.0221231	-103.2604801
2,400.0	5.00	182.90	2,399.1	-23.9	-1.2	373,429.27	873,837.46	32.0220991	-103.2604818
2,500.0	5.00	182.90	2,498.7	-32.6	-1.7	373,420.57	873,837.02	32.0220752	-103.2604835
2,600.0	5.00	182.90	2,598.4	-41.4	-2.1	373,411.86	873,836.58	32.0220513	-103.2604852
2,700.0	5.00	182.90	2,698.0	-50.1	-2.5	373,403.16	873,836.14	32.0220274	-103.2604869
2,800.0	5.00	182.90	2,797.6	-58.8	-3.0	373,394.45	873,835.70	32.0220035	-103.2604886
2,900.0	5.00	182.90	2,897.2	-67.5	-3.4	373,385.75	873,835.26	32.0219796	-103.2604903
3,000.0	5.00	182.90	2,996.8	-76.2	-3.9	373,377.05	873,834.82	32.0219557	-103.2604920
3,100.0	5.00	182.90	3,096.4	-84.9	-4.3	373,368.34	873,834.38	32.0219318	-103.2604937
3,200.0	5.00	182.90	3,196.1	-93.6	-4.7	373,359.64	873,833.94	32.0219079	-103.2604954
3,248.1	5.00	182.90	3,244.0	-97.8	-4.9	373,355.45	873,833.72	32.0218963	-103.2604962
Tansill									
3,300.0	5.00	182.90	3,295.7	-102.3	-5.2	373,350.93	873,833.50	32.0218839	-103.2604971
3,400.0	5.00	182.90	3,395.3	-111.0	-5.6	373,342.23	873,833.06	32.0218600	-103.2604988
3,500.0	5.00	182.90	3,494.9	-119.7	-6.1	373,333.52	873,832.62	32.0218361	-103.2605005
3,600.0	5.00	182.90	3,594.5	-128.4	-6.5	373,324.82	873,832.18	32.0218122	-103.2605022
3,700.0	5.00	182.90	3,694.2	-137.1	-6.9	373,316.11	873,831.74	32.0217883	-103.2605039
3,800.0	5.00	182.90	3,793.8	-145.8	-7.4	373,307.41	873,831.30	32.0217644	-103.2605056
3,851.4	5.00	182.90	3,845.0	-150.3	-7.6	373,302.94	873,831.07	32.0217521	-103.2605064
Capitan									
3,900.0	5.00	182.90	3,893.4	-154.5	-7.8	373,298.71	873,830.86	32.0217405	-103.2605073
4,000.0	5.00	182.90	3,993.0	-163.2	-8.3	373,290.00	873,830.41	32.0217166	-103.2605090
4,100.0	5.00	182.90	4,092.6	-171.9	-8.7	373,281.30	873,829.97	32.0216926	-103.2605107



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,200.0	5.00	182.90	4,192.3	-180.6	-9.1	373,272.59	873,829.53	32.0216687	-103.2605124	
4,300.0	5.00	182.90	4,291.9	-189.3	-9.6	373,263.89	873,829.09	32.0216448	-103.2605140	
4,400.0	5.00	182.90	4,391.5	-198.0	-10.0	373,255.18	873,828.65	32.0216209	-103.2605157	
4,500.0	5.00	182.90	4,491.1	-206.7	-10.5	373,246.48	873,828.21	32.0215970	-103.2605174	
4,600.0	5.00	182.90	4,590.7	-215.4	-10.9	373,237.77	873,827.77	32.0215731	-103.2605191	
4,700.0	5.00	182.90	4,690.4	-224.1	-11.3	373,229.07	873,827.33	32.0215492	-103.2605208	
4,800.0	5.00	182.90	4,790.0	-232.9	-11.8	373,220.37	873,826.89	32.0215253	-103.2605225	
4,900.0	5.00	182.90	4,889.6	-241.6	-12.2	373,211.66	873,826.45	32.0215013	-103.2605242	
4,992.8	5.00	182.90	4,982.0	-249.6	-12.6	373,203.59	873,826.04	32.0214792	-103.2605258	
Lamar										
5,000.0	5.00	182.90	4,989.2	-250.3	-12.7	373,202.96	873,826.01	32.0214774	-103.2605259	
5,100.0	5.00	182.90	5,088.8	-259.0	-13.1	373,194.25	873,825.57	32.0214535	-103.2605276	
5,189.5	5.00	182.90	5,178.0	-266.8	-13.5	373,186.46	873,825.18	32.0214321	-103.2605292	
Bell Canyon										
5,200.0	5.00	182.90	5,188.5	-267.7	-13.5	373,185.55	873,825.13	32.0214296	-103.2605293	
5,300.0	5.00	182.90	5,288.1	-276.4	-14.0	373,176.84	873,824.69	32.0214057	-103.2605310	
5,400.0	5.00	182.90	5,387.7	-285.1	-14.4	373,168.14	873,824.25	32.0213818	-103.2605327	
5,500.0	5.00	182.90	5,487.3	-293.8	-14.9	373,159.43	873,823.81	32.0213579	-103.2605344	
5,600.0	5.00	182.90	5,586.9	-302.5	-15.3	373,150.73	873,823.37	32.0213340	-103.2605361	
5,700.0	5.00	182.90	5,686.6	-311.2	-15.7	373,142.03	873,822.93	32.0213100	-103.2605378	
5,793.3	5.00	182.90	5,779.5	-319.3	-16.1	373,133.90	873,822.52	32.0212877	-103.2605394	
Start Drop -2.00										
5,800.0	4.87	182.90	5,786.2	-319.9	-16.2	373,133.33	873,822.49	32.0212862	-103.2605395	
5,900.0	2.87	182.90	5,885.9	-326.6	-16.5	373,126.60	873,822.15	32.0212677	-103.2605408	
6,000.0	0.87	182.90	5,985.9	-329.9	-16.7	373,123.34	873,821.99	32.0212587	-103.2605415	
6,043.3	0.00	0.00	6,029.2	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
Start 5646.3 hold at 6043.3 MD										
6,100.0	0.00	0.00	6,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,200.0	0.00	0.00	6,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,300.0	0.00	0.00	6,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,400.0	0.00	0.00	6,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,500.0	0.00	0.00	6,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,600.0	0.00	0.00	6,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,700.0	0.00	0.00	6,685.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,800.0	0.00	0.00	6,785.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,900.0	0.00	0.00	6,885.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
6,914.1	0.00	0.00	6,900.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
Brushy Canyon										
7,000.0	0.00	0.00	6,985.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,100.0	0.00	0.00	7,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,200.0	0.00	0.00	7,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,300.0	0.00	0.00	7,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,400.0	0.00	0.00	7,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,500.0	0.00	0.00	7,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,600.0	0.00	0.00	7,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,700.0	0.00	0.00	7,685.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,800.0	0.00	0.00	7,785.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
7,880.1	0.00	0.00	7,866.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
Bone Spring Lime										
7,900.0	0.00	0.00	7,885.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
8,000.0	0.00	0.00	7,985.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
8,100.0	0.00	0.00	8,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	
8,200.0	0.00	0.00	8,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415	



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,300.0	0.00	0.00	8,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,400.0	0.00	0.00	8,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,500.0	0.00	0.00	8,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,600.0	0.00	0.00	8,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,700.0	0.00	0.00	8,685.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,800.0	0.00	0.00	8,785.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
8,900.0	0.00	0.00	8,885.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,000.0	0.00	0.00	8,985.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,100.0	0.00	0.00	9,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,200.0	0.00	0.00	9,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,300.0	0.00	0.00	9,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,400.0	0.00	0.00	9,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,500.0	0.00	0.00	9,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,535.1	0.00	0.00	9,521.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
First Bone Spring									
9,600.0	0.00	0.00	9,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,700.0	0.00	0.00	9,685.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,800.0	0.00	0.00	9,785.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
9,900.0	0.00	0.00	9,885.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,000.0	0.00	0.00	9,985.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,065.1	0.00	0.00	10,051.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
Second Bone Spring									
10,100.0	0.00	0.00	10,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,200.0	0.00	0.00	10,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,300.0	0.00	0.00	10,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,400.0	0.00	0.00	10,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,500.0	0.00	0.00	10,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,600.0	0.00	0.00	10,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,700.0	0.00	0.00	10,685.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,758.1	0.00	0.00	10,744.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
Third Bone Spring Lime									
10,800.0	0.00	0.00	10,785.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
10,900.0	0.00	0.00	10,885.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,000.0	0.00	0.00	10,985.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,100.0	0.00	0.00	11,085.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,200.0	0.00	0.00	11,185.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,300.0	0.00	0.00	11,285.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,341.1	0.00	0.00	11,327.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
Third Bone Spring									
11,400.0	0.00	0.00	11,385.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,500.0	0.00	0.00	11,485.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,546.1	0.00	0.00	11,532.0	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
Wolfcamp									
11,600.0	0.00	0.00	11,585.9	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
11,689.6	0.00	0.00	11,675.5	-330.2	-16.7	373,123.02	873,821.97	32.0212578	-103.2605415
KOP-Start DLS 12.00 TFO 179.41									
11,700.0	1.25	179.41	11,685.9	-330.3	-16.7	373,122.90	873,821.97	32.0212575	-103.2605415
11,725.0	4.25	179.41	11,710.8	-331.5	-16.7	373,121.71	873,821.98	32.0212542	-103.2605415
11,750.0	7.25	179.41	11,735.7	-334.0	-16.7	373,119.20	873,822.01	32.0212473	-103.2605415
11,775.0	10.25	179.41	11,760.4	-337.8	-16.6	373,115.40	873,822.05	32.0212369	-103.2605415
11,800.0	13.25	179.41	11,784.9	-342.9	-16.6	373,110.31	873,822.10	32.0212229	-103.2605415
11,825.0	16.25	179.41	11,809.1	-349.3	-16.5	373,103.95	873,822.16	32.0212054	-103.2605415
11,850.0	19.25	179.41	11,832.9	-356.9	-16.4	373,096.33	873,822.24	32.0211845	-103.2605415



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,875.0	22.25	179.41	11,856.3	-365.7	-16.3	373,087.48	873,822.33	32.0211601	-103.2605415
11,900.0	25.25	179.41	11,879.1	-375.8	-16.2	373,077.41	873,822.44	32.0211325	-103.2605415
11,925.0	28.25	179.41	11,901.5	-387.1	-16.1	373,066.17	873,822.55	32.0211016	-103.2605415
11,950.0	31.25	179.41	11,923.2	-399.5	-16.0	373,053.76	873,822.68	32.0210675	-103.2605415
11,956.9	32.07	179.41	11,929.0	-403.0	-16.0	373,050.17	873,822.72	32.0210576	-103.2605415
Wolfcamp B									
11,975.0	34.25	179.41	11,944.2	-413.0	-15.9	373,040.24	873,822.82	32.0210303	-103.2605415
12,000.0	37.25	179.41	11,964.5	-427.6	-15.7	373,025.64	873,822.97	32.0209902	-103.2605414
12,025.0	40.25	179.41	11,984.0	-443.2	-15.5	373,010.00	873,823.13	32.0209472	-103.2605414
12,050.0	43.25	179.41	12,002.6	-459.9	-15.4	372,993.35	873,823.30	32.0209014	-103.2605414
12,075.0	46.25	179.41	12,020.4	-477.5	-15.2	372,975.76	873,823.48	32.0208530	-103.2605414
12,100.0	49.25	179.41	12,037.2	-496.0	-15.0	372,957.26	873,823.67	32.0208022	-103.2605414
12,125.0	52.25	179.41	12,053.0	-515.3	-14.8	372,937.90	873,823.87	32.0207490	-103.2605414
12,150.0	55.25	179.41	12,067.8	-535.5	-14.6	372,917.74	873,824.07	32.0206936	-103.2605413
12,175.0	58.25	179.41	12,081.5	-556.4	-14.4	372,896.84	873,824.29	32.0206361	-103.2605413
12,200.0	61.25	179.41	12,094.1	-578.0	-14.2	372,875.25	873,824.51	32.0205768	-103.2605413
12,225.0	64.25	179.41	12,105.5	-600.2	-13.9	372,853.03	873,824.74	32.0205157	-103.2605413
12,250.0	67.25	179.41	12,115.8	-623.0	-13.7	372,830.24	873,824.97	32.0204530	-103.2605412
12,275.0	70.25	179.41	12,124.9	-646.3	-13.5	372,806.94	873,825.21	32.0203890	-103.2605412
12,300.0	73.25	179.41	12,132.7	-670.0	-13.2	372,783.21	873,825.45	32.0203238	-103.2605412
12,325.0	76.25	179.41	12,139.3	-694.1	-13.0	372,759.09	873,825.70	32.0202575	-103.2605412
12,350.0	79.25	179.41	12,144.6	-718.6	-12.7	372,734.66	873,825.95	32.0201903	-103.2605411
12,375.0	82.25	179.41	12,148.6	-743.2	-12.5	372,709.99	873,826.20	32.0201225	-103.2605411
12,400.0	85.25	179.41	12,151.3	-768.1	-12.2	372,685.15	873,826.46	32.0200542	-103.2605411
12,425.0	88.25	179.41	12,152.7	-793.0	-12.0	372,660.19	873,826.71	32.0199856	-103.2605411
12,439.6	90.00	179.41	12,153.0	-807.6	-11.8	372,645.58	873,826.86	32.0199454	-103.2605411
LP-Start 7087.2 hold at 12439.6 MD									
12,500.0	90.00	179.41	12,153.0	-868.0	-11.2	372,585.20	873,827.48	32.0197795	-103.2605410
12,600.0	90.00	179.41	12,153.0	-968.0	-10.2	372,485.20	873,828.51	32.0195046	-103.2605409
12,700.0	90.00	179.41	12,153.0	-1,068.0	-9.1	372,385.21	873,829.53	32.0192297	-103.2605408
12,800.0	90.00	179.41	12,153.0	-1,168.0	-8.1	372,285.21	873,830.56	32.0189549	-103.2605407
12,900.0	90.00	179.41	12,153.0	-1,268.0	-7.1	372,185.22	873,831.58	32.0186800	-103.2605406
13,000.0	90.00	179.41	12,153.0	-1,368.0	-6.1	372,085.22	873,832.61	32.0184051	-103.2605405
13,100.0	90.00	179.41	12,153.0	-1,468.0	-5.0	371,985.23	873,833.63	32.0181303	-103.2605404
13,200.0	90.00	179.41	12,153.0	-1,568.0	-4.0	371,885.23	873,834.65	32.0178554	-103.2605403
13,300.0	90.00	179.41	12,153.0	-1,668.0	-3.0	371,785.24	873,835.68	32.0175806	-103.2605402
13,400.0	90.00	179.41	12,153.0	-1,768.0	-2.0	371,685.24	873,836.70	32.0173057	-103.2605401
13,500.0	90.00	179.41	12,153.0	-1,868.0	-0.9	371,585.25	873,837.73	32.0170308	-103.2605400
13,600.0	90.00	179.41	12,153.0	-1,968.0	0.1	371,485.26	873,838.75	32.0167560	-103.2605399
13,700.0	90.00	179.41	12,153.0	-2,068.0	1.1	371,385.26	873,839.78	32.0164811	-103.2605398
13,800.0	90.00	179.41	12,153.0	-2,168.0	2.1	371,285.27	873,840.80	32.0162062	-103.2605397
13,900.0	90.00	179.41	12,153.0	-2,267.9	3.2	371,185.27	873,841.83	32.0159314	-103.2605395
14,000.0	90.00	179.41	12,153.0	-2,367.9	4.2	371,085.28	873,842.85	32.0156565	-103.2605394
14,100.0	90.00	179.41	12,153.0	-2,467.9	5.2	370,985.28	873,843.88	32.0153816	-103.2605393
14,200.0	90.00	179.41	12,153.0	-2,567.9	6.2	370,885.29	873,844.90	32.0151068	-103.2605392
14,300.0	90.00	179.41	12,153.0	-2,667.9	7.3	370,785.29	873,845.93	32.0148319	-103.2605391
14,400.0	90.00	179.41	12,153.0	-2,767.9	8.3	370,685.30	873,846.95	32.0145570	-103.2605390
14,500.0	90.00	179.41	12,153.0	-2,867.9	9.3	370,585.30	873,847.98	32.0142822	-103.2605389
14,600.0	90.00	179.41	12,153.0	-2,967.9	10.3	370,485.31	873,849.00	32.0140073	-103.2605388
14,700.0	90.00	179.41	12,153.0	-3,067.9	11.4	370,385.31	873,850.03	32.0137324	-103.2605387
14,800.0	90.00	179.41	12,153.0	-3,167.9	12.4	370,285.32	873,851.05	32.0134576	-103.2605386
14,900.0	90.00	179.41	12,153.0	-3,267.9	13.4	370,185.32	873,852.08	32.0131827	-103.2605385
15,000.0	90.00	179.41	12,153.0	-3,367.9	14.4	370,085.33	873,853.10	32.0129078	-103.2605384



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,100.0	90.00	179.41	12,153.0	-3,467.9	15.5	369,985.33	873,854.13	32.0126330	-103.2605383
15,200.0	90.00	179.41	12,153.0	-3,567.9	16.5	369,885.34	873,855.15	32.0123581	-103.2605382
15,300.0	90.00	179.41	12,153.0	-3,667.9	17.5	369,785.34	873,856.17	32.0120833	-103.2605381
15,400.0	90.00	179.41	12,153.0	-3,767.9	18.5	369,685.35	873,857.20	32.0118084	-103.2605380
15,500.0	90.00	179.41	12,153.0	-3,867.9	19.6	369,585.36	873,858.22	32.0115335	-103.2605379
15,600.0	90.00	179.41	12,153.0	-3,967.9	20.6	369,485.36	873,859.25	32.0112587	-103.2605378
15,700.0	90.00	179.41	12,153.0	-4,067.9	21.6	369,385.37	873,860.27	32.0109838	-103.2605377
15,800.0	90.00	179.41	12,153.0	-4,167.8	22.6	369,285.37	873,861.30	32.0107089	-103.2605376
15,900.0	90.00	179.41	12,153.0	-4,267.8	23.7	369,185.38	873,862.32	32.0104341	-103.2605375
16,000.0	90.00	179.41	12,153.0	-4,367.8	24.7	369,085.38	873,863.35	32.0101592	-103.2605374
16,100.0	90.00	179.41	12,153.0	-4,467.8	25.7	368,985.39	873,864.37	32.0098843	-103.2605373
16,200.0	90.00	179.41	12,153.0	-4,567.8	26.7	368,885.39	873,865.40	32.0096095	-103.2605372
16,300.0	90.00	179.41	12,153.0	-4,667.8	27.8	368,785.40	873,866.42	32.0093346	-103.2605371
16,400.0	90.00	179.41	12,153.0	-4,767.8	28.8	368,685.40	873,867.45	32.0090597	-103.2605370
16,500.0	90.00	179.41	12,153.0	-4,867.8	29.8	368,585.41	873,868.47	32.0087849	-103.2605369
16,600.0	90.00	179.41	12,153.0	-4,967.8	30.8	368,485.41	873,869.50	32.0085100	-103.2605367
16,700.0	90.00	179.41	12,153.0	-5,067.8	31.9	368,385.42	873,870.52	32.0082351	-103.2605366
16,800.0	90.00	179.41	12,153.0	-5,167.8	32.9	368,285.42	873,871.55	32.0079603	-103.2605365
16,900.0	90.00	179.41	12,153.0	-5,267.8	33.9	368,185.43	873,872.57	32.0076854	-103.2605364
17,000.0	90.00	179.41	12,153.0	-5,367.8	34.9	368,085.43	873,873.60	32.0074105	-103.2605363
17,100.0	90.00	179.41	12,153.0	-5,467.8	36.0	367,985.44	873,874.62	32.0071357	-103.2605362
17,200.0	90.00	179.41	12,153.0	-5,567.8	37.0	367,885.44	873,875.65	32.0068608	-103.2605361
17,300.0	90.00	179.41	12,153.0	-5,667.8	38.0	367,785.45	873,876.67	32.0065859	-103.2605360
17,400.0	90.00	179.41	12,153.0	-5,767.8	39.0	367,685.45	873,877.69	32.0063111	-103.2605359
17,500.0	90.00	179.41	12,153.0	-5,867.8	40.0	367,585.46	873,878.72	32.0060362	-103.2605358
17,600.0	90.00	179.41	12,153.0	-5,967.8	41.1	367,485.47	873,879.74	32.0057614	-103.2605357
17,700.0	90.00	179.41	12,153.0	-6,067.7	42.1	367,385.47	873,880.77	32.0054865	-103.2605356
17,800.0	90.00	179.41	12,153.0	-6,167.7	43.1	367,285.48	873,881.79	32.0052116	-103.2605355
17,900.0	90.00	179.41	12,153.0	-6,267.7	44.1	367,185.48	873,882.82	32.0049368	-103.2605354
18,000.0	90.00	179.41	12,153.0	-6,367.7	45.2	367,085.49	873,883.84	32.0046619	-103.2605353
18,100.0	90.00	179.41	12,153.0	-6,467.7	46.2	366,985.49	873,884.87	32.0043870	-103.2605352
18,200.0	90.00	179.41	12,153.0	-6,567.7	47.2	366,885.50	873,885.89	32.0041122	-103.2605351
18,300.0	90.00	179.41	12,153.0	-6,667.7	48.2	366,785.50	873,886.92	32.0038373	-103.2605350
18,400.0	90.00	179.41	12,153.0	-6,767.7	49.3	366,685.51	873,887.94	32.0035624	-103.2605349
18,500.0	90.00	179.41	12,153.0	-6,867.7	50.3	366,585.51	873,888.97	32.0032876	-103.2605348
18,600.0	90.00	179.41	12,153.0	-6,967.7	51.3	366,485.52	873,889.99	32.0030127	-103.2605347
18,700.0	90.00	179.41	12,153.0	-7,067.7	52.3	366,385.52	873,891.02	32.0027378	-103.2605346
18,800.0	90.00	179.41	12,153.0	-7,167.7	53.4	366,285.53	873,892.04	32.0024630	-103.2605345
18,900.0	90.00	179.41	12,153.0	-7,267.7	54.4	366,185.53	873,893.07	32.0021881	-103.2605343
19,000.0	90.00	179.41	12,153.0	-7,367.7	55.4	366,085.54	873,894.09	32.0019132	-103.2605342
19,100.0	90.00	179.41	12,153.0	-7,467.7	56.4	365,985.54	873,895.12	32.0016384	-103.2605341
19,200.0	90.00	179.41	12,153.0	-7,567.7	57.5	365,885.55	873,896.14	32.0013635	-103.2605340
19,300.0	90.00	179.41	12,153.0	-7,667.7	58.5	365,785.55	873,897.17	32.0010886	-103.2605339
19,400.0	90.00	179.41	12,153.0	-7,767.7	59.5	365,685.56	873,898.19	32.0008138	-103.2605338
19,500.0	90.00	179.41	12,153.0	-7,867.7	60.5	365,585.57	873,899.21	32.0005389	-103.2605337
19,526.8	90.00	179.41	12,153.0	-7,894.5	60.8	365,558.72	873,899.49	32.0004651	-103.2605337
TD at 19526.8									



Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #121H
Company:	Ameredev Operating	TVD Reference:	KB=25' @ 2936.0usft
Project:	Lea County, NM (N83-NME)	MD Reference:	KB=25' @ 2936.0usft
Site:	AMEN CORNER ST COM PROJECT	North Reference:	Grid
Well:	AMEN CORNER ST COM 26 36 27 #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP		

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
PBHL (ACSC 121H) - plan hits target center - Point	0.00	0.00	12,153.0	-7,894.5	60.8	365,558.72	873,899.49	32.0004651	-103.2605337
LTP (ACSC 121H) - plan hits target center - Point	0.00	0.00	12,153.0	-7,844.8	60.3	365,608.45	873,898.97	32.0006018	-103.2605338
FTP (ACSC 121H) - plan misses target center by 197.8usft at 12065.5usft MD (12013.7 TVD, -470.7 N, -15.3 E) - Point	0.00	0.00	12,153.0	-330.2	-16.7	373,123.05	873,822.02	32.0212579	-103.2605414

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,724.0	1,724.0	Rustler			
2,205.2	2,205.0	Salado			
3,248.1	3,244.0	Tansill			
3,851.4	3,845.0	Capitan			
4,992.8	4,982.0	Lamar			
5,189.5	5,178.0	Bell Canyon			
6,914.1	6,900.0	Brushy Canyon			
7,880.1	7,866.0	Bone Spring Lime			
9,535.1	9,521.0	First Bone Spring			
10,065.1	10,051.0	Second Bone Spring			
10,758.1	10,744.0	Third Bone Spring Lime			
11,341.1	11,327.0	Third Bone Spring			
11,546.1	11,532.0	Wolfcamp			
11,956.9	11,929.0	Wolfcamp B			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	Start Build 2.00
2,250.0	2,249.7	-10.9	-0.6	Start 3543.3 hold at 2250.0 MD
5,793.3	5,779.5	-319.3	-16.1	Start Drop -2.00
6,043.3	6,029.2	-330.2	-16.7	Start 5646.3 hold at 6043.3 MD
11,689.6	11,675.5	-330.2	-16.7	KOP-Start DLS 12.00 TFO 179.41
12,439.6	12,153.0	-807.6	-11.8	LP-Start 7087.2 hold at 12439.6 MD
19,526.8	12,153.0	-7,894.5	60.8	TD at 19526.8