

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 352481

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 30-025-52125
4. Property Code 320055	5. Property Name AMEN CORNER 26 36 27 STATE COM	6. Well No. 074H

7. Surface Location

UL - Lot A	Section 27	Township 26S	Range 36E	Lot Idn A	Feet From 200	N/S Line N	Feet From 250	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

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

WC-025 G-08 S263620C;LWR BONE SPRIN	98150
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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 2906
16. Multiple N	17. Proposed Depth 17163	18. Formation 1st Bone Spring Sand	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	54.5	2041	1589	0
Int1	12.25	10.75	45.5	5129	1270	0
Prod	8.75	5.5	17	17163	5657	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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature:	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Christie Hanna	Approved By: Paul F Kautz	
Title: Regulatory	Title: Geologist	
Email Address: channa@ameredev.com	Approved Date: 10/19/2023	Expiration Date: 10/19/2025
Date: 10/16/2023	Phone: 737-300-4723	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 98150	³ Pool Name WC-025 G-08 S263620C; LWR BONE SPRING
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 074H ⁹ Elevation 2906'

¹⁰Surface Location

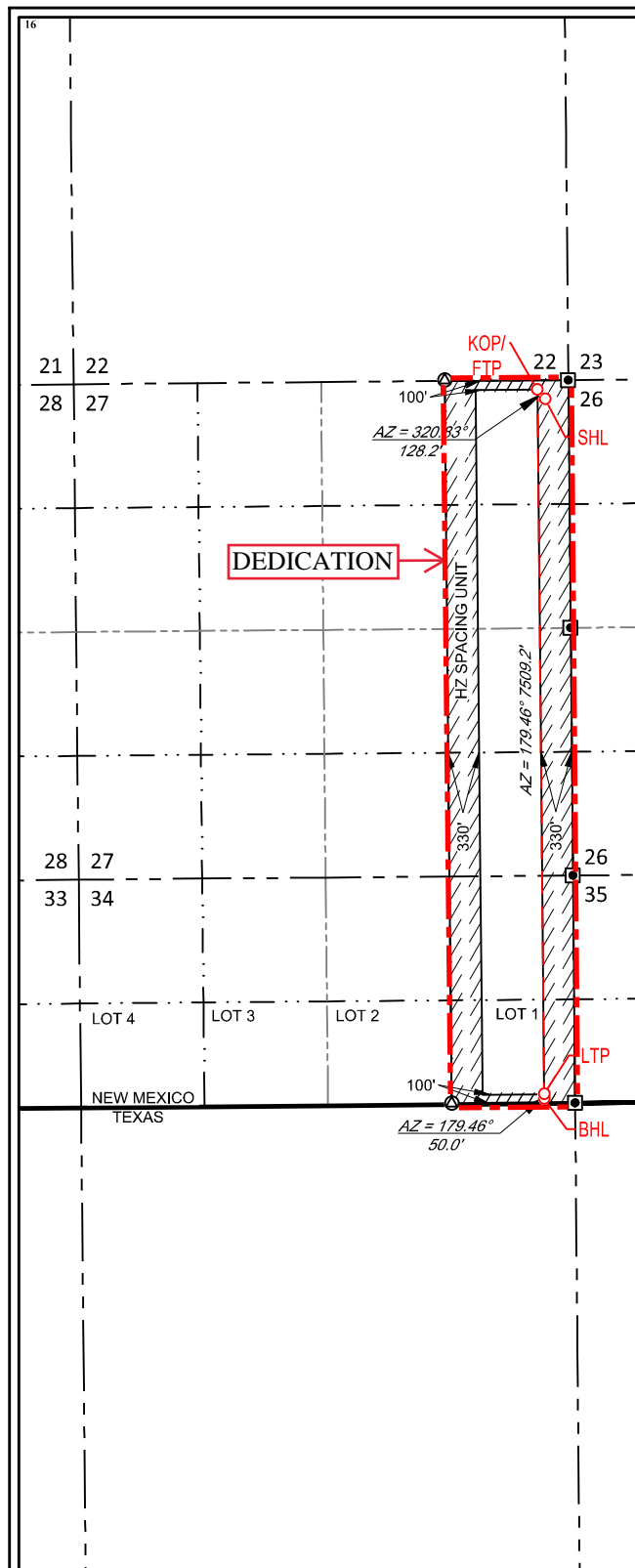
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	27	26-S	36-E	—	200'	NORTH	250'	EAST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	34	26-S	36-E	—	50'	SOUTH	330'	EAST	LEA

¹² Dedicated Acres 233.61	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)

200' FNL - SEC. 27
250' FEL - SEC. 27
X=878533 Y=373062
LAT.: N 32.0209611
LONG.: W 103.2453439

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

100' FNL - SEC. 27
330' FEL - SEC. 27
X=878452 Y=373162
LAT.: N 32.0212365
LONG.: W 103.2456019

LAST TAKE POINT (LTP)

100' FSL - SEC. 34
330' FEL - SEC. 34
X=878523 Y=365653
LAT.: N 32.0005964
LONG.: W 103.2456175

BOTTOM HOLE LOCATION (BHL)

50' FSL - SEC. 34
330' FEL - SEC. 34
X=878524 Y=365603
LAT.: N 32.0004589
LONG.: W 103.2456176

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

¹⁷OPERATOR 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.

Te. Hammorsad 10/3/2023
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.

10/27/2017

Date of Survey
Signature and Seal of Professional Surveyor

Certificate Number

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

Form APD Conditions

Permit 352481

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: AMEREDEV OPERATING, LLC [372224] 2901 Via Fortuna Austin, TX 78746	API Number: 30-025-52125
	Well: AMEN CORNER 26 36 27 STATE COM #074H

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	If cement does not circulate on any string , a CBL is required for that string of casing.
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

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

Amen Corner 26 36 27 State Com 074H

First Bone Spring Sand | 1.5 Mile Lateral

County, St: Lea, NM

SHL: Section 27, T26S, R36E

200' FNL, 250' FEL

BHL: Section 34, T26S, R36E

50' FSL, 330' FEL

Wellhead: A - 13-5/8" 5M x 13-5/8" SOW

B - 13-5/8" 5M x 13-5/8" 5M

C - 13-5/8" 5M x 13-5/8" 5M

Tubing Spool: 7-1/16" 10M x 13-3/8" 5M

Xmas Tree: 2-9/16" 10M

Tubing: 3-1/2" L-80 6.5# 8rd EUE

Co. Well ID:

XXXXXX

AFE #:

2023-XXX

API #:

30-025-

Permit:

NMOC

GL:

2,906'

Field:

Delaware

Rig:

H&P 642

KB:

27.0'

Elevation:

2,933'

E-Mail:

drillingengineering@ameradev.com

Offsets:

General Notes	Hole Size	Casing & Cement	Geology	TVD	Mud Weight
Notify BLM prior to spud, running casing, cementing, and BOP testing Sundry to be sent before spud 1500 psi Surface Casing Test Done by Spudder Rig	17-1/2"	<u>Lead (100% OH excess)</u> 1249 sx 12.8 ppg Class C Top of Lead @ 0' <u>Tail (100% OH excess)</u> 340 sx 14.8 ppg Class C Top of Tail @ 1741' 13.375 54.5 J-55 BTC 0 - 2041	Conductor	122'	8.4 - 8.6 ppg FW
Stage 1 Designed to Circulate Cement to Surface DV Tool (Int) 3647 Casing Test to 1500 psi	12-1/4"	<u>Stg 1 Lead (50% OH excess)</u> 436 sx 11 ppg Class C - Low Portland Top of Lead @ 0' <u>Stg 1 Tail (50% OH excess)</u> 177 sx 14.8 ppg Class C Top of Tail @ 4379' <u>Stg 2 Lead (50% OH excess)</u> 551 sx 12.8 ppg Class C - Low Portland Top of Lead @ 0' <u>Stg 2 Tail (25% OH excess)</u> 106 sx 14.8 ppg Class C Top of Tail @ 3047' 10.75 45.5 HC L-80 SC BTC 0 - 5129	Rustler Salado Tansill Capitan Lamar	1,759' 2,227' 3,243' 3,883' 4,992'	10 ppg Brine
FIT to 10.5 ppg EMW	8-3/4" Vertical		Bell Canyon Brushy Canyon Bone Spring Lime	5,184' 6,852' 7,805'	9.0 - 9.5 ppg Cut Brine
12° DLS curve section Surveys: 45° Curve, 90° Lateral LTP VS: 7560' 90° INC, 179.41° AZM BHL VS: 7610' 90° INC, 179.41° AZM	8-3/4" Curve 8-1/2" Lateral	<u>Lead (50% OH excess)</u> 1516 sx 10.6 ppg ProLite Top of Lead @ 0' <u>Tail (20% OH excess)</u> 4141 sx 14.5 ppg Class H - Premium PozMix Top of Tail @ 7163' 5.5 17 USS RYS P-110 Eagle SFH 0 - 17163 5-1/2" marker jts @ ~8710', 12160' MD 17163' MD 9,308' TVD @ BHL 7,610' VS			9.0 - 9.5 ppg Cut Brine



Ameredev Operating

Lea County, NM (N83-NME)

AMEN CORNER ST COM PROJECT

AMEN 26 36 27 CORNER ST COM 074H

OWB

Plan: PWP

Survey Report - Geographic

13 June, 2023



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

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 "	Grid Convergence:	0.57 °

Well		AMEN CORNER ST COM 26 36 27 #74H				
Well Position	+N/-S	0.0 usft	Northing:	373,062.18 usft	Latitude:	32.0209611
	+E/-W	0.0 usft	Easting:	878,533.43 usft	Longitude:	-103.2453439
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	2,906.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/13/2023	6.14	59.69	47,201.59183761

Design	PWP				
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	

Survey Tool Program	Date	6/13/2023			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,162.9	PWP (OWB)	MWD	OWSG MWD - Standard	

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	373,062.18	878,533.43	32.0209611	-103.2453439
100.0	0.00	0.00	100.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
200.0	0.00	0.00	200.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
300.0	0.00	0.00	300.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
400.0	0.00	0.00	400.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
500.0	0.00	0.00	500.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
600.0	0.00	0.00	600.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
700.0	0.00	0.00	700.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
800.0	0.00	0.00	800.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
900.0	0.00	0.00	900.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
1,000.0	0.00	0.00	1,000.0	0.0	0.0	373,062.18	878,533.43	32.0209611	-103.2453439
Start Build 2.00									



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	2.00	350.81	1,100.0	1.7	-0.3	373,063.90	878,533.15	32.0209659	-103.2453447
1,200.0	4.00	350.81	1,199.8	6.9	-1.1	373,069.07	878,532.32	32.0209801	-103.2453473
1,250.0	5.00	350.81	1,249.7	10.8	-1.7	373,072.94	878,531.69	32.0209908	-103.2453492
Start 6433.0 hold at 1250.0 MD									
1,300.0	5.00	350.81	1,299.5	15.1	-2.4	373,077.24	878,530.99	32.0210026	-103.2453513
1,400.0	5.00	350.81	1,399.1	23.7	-3.8	373,085.85	878,529.60	32.0210263	-103.2453555
1,500.0	5.00	350.81	1,498.7	32.3	-5.2	373,094.45	878,528.21	32.0210500	-103.2453597
1,600.0	5.00	350.81	1,598.4	40.9	-6.6	373,103.05	878,526.82	32.0210737	-103.2453639
1,700.0	5.00	350.81	1,698.0	49.5	-8.0	373,111.66	878,525.43	32.0210973	-103.2453681
1,800.0	5.00	350.81	1,797.6	58.1	-9.4	373,120.26	878,524.04	32.0211210	-103.2453723
1,900.0	5.00	350.81	1,897.2	66.7	-10.8	373,128.87	878,522.64	32.0211447	-103.2453765
2,000.0	5.00	350.81	1,996.8	75.3	-12.2	373,137.47	878,521.25	32.0211684	-103.2453807
2,019.2	5.00	350.81	2,016.0	76.9	-12.4	373,139.13	878,520.99	32.0211730	-103.2453815
Rustler									
2,100.0	5.00	350.81	2,096.4	83.9	-13.6	373,146.07	878,519.86	32.0211921	-103.2453849
2,200.0	5.00	350.81	2,196.1	92.5	-15.0	373,154.68	878,518.47	32.0212158	-103.2453892
2,300.0	5.00	350.81	2,295.7	101.1	-16.4	373,163.28	878,517.08	32.0212395	-103.2453934
2,355.5	5.00	350.81	2,351.0	105.9	-17.1	373,168.06	878,516.31	32.0212526	-103.2453957
Salado									
2,400.0	5.00	350.81	2,395.3	109.7	-17.7	373,171.88	878,515.69	32.0212631	-103.2453976
2,500.0	5.00	350.81	2,494.9	118.3	-19.1	373,180.49	878,514.29	32.0212868	-103.2454018
2,600.0	5.00	350.81	2,594.5	126.9	-20.5	373,189.09	878,512.90	32.0213105	-103.2454060
2,700.0	5.00	350.81	2,694.2	135.5	-21.9	373,197.70	878,511.51	32.0213342	-103.2454102
2,800.0	5.00	350.81	2,793.8	144.1	-23.3	373,206.30	878,510.12	32.0213579	-103.2454144
2,900.0	5.00	350.81	2,893.4	152.7	-24.7	373,214.90	878,508.73	32.0213816	-103.2454186
2,937.7	5.00	350.81	2,931.0	156.0	-25.2	373,218.15	878,508.20	32.0213905	-103.2454202
Dewey Lake									
3,000.0	5.00	350.81	2,993.0	161.3	-26.1	373,223.51	878,507.34	32.0214053	-103.2454228
3,100.0	5.00	350.81	3,092.6	169.9	-27.5	373,232.11	878,505.95	32.0214289	-103.2454270
3,179.7	5.00	350.81	3,172.0	176.8	-28.6	373,238.96	878,504.84	32.0214478	-103.2454304
Tansill									
3,200.0	5.00	350.81	3,192.3	178.5	-28.9	373,240.71	878,504.55	32.0214526	-103.2454313
3,300.0	5.00	350.81	3,291.9	187.1	-30.3	373,249.32	878,503.16	32.0214763	-103.2454355
3,400.0	5.00	350.81	3,391.5	195.7	-31.7	373,257.92	878,501.77	32.0215000	-103.2454397
3,500.0	5.00	350.81	3,491.1	204.3	-33.1	373,266.53	878,500.38	32.0215237	-103.2454439
3,600.0	5.00	350.81	3,590.7	213.0	-34.4	373,275.13	878,498.99	32.0215474	-103.2454481
3,700.0	5.00	350.81	3,690.4	221.6	-35.8	373,283.73	878,497.60	32.0215711	-103.2454523
3,756.9	5.00	350.81	3,747.0	226.4	-36.6	373,288.63	878,496.81	32.0215845	-103.2454547
Capitan									
3,800.0	5.00	350.81	3,790.0	230.2	-37.2	373,292.34	878,496.20	32.0215947	-103.2454565
3,900.0	5.00	350.81	3,889.6	238.8	-38.6	373,300.94	878,494.81	32.0216184	-103.2454607
4,000.0	5.00	350.81	3,989.2	247.4	-40.0	373,309.54	878,493.42	32.0216421	-103.2454649
4,100.0	5.00	350.81	4,088.8	256.0	-41.4	373,318.15	878,492.03	32.0216658	-103.2454691
4,200.0	5.00	350.81	4,188.5	264.6	-42.8	373,326.75	878,490.64	32.0216895	-103.2454733
4,300.0	5.00	350.81	4,288.1	273.2	-44.2	373,335.36	878,489.25	32.0217132	-103.2454776
4,400.0	5.00	350.81	4,387.7	281.8	-45.6	373,343.96	878,487.86	32.0217369	-103.2454818
4,500.0	5.00	350.81	4,487.3	290.4	-47.0	373,352.56	878,486.46	32.0217605	-103.2454860
4,600.0	5.00	350.81	4,586.9	299.0	-48.4	373,361.17	878,485.07	32.0217842	-103.2454902
4,700.0	5.00	350.81	4,686.6	307.6	-49.7	373,369.77	878,483.68	32.0218079	-103.2454944
4,800.0	5.00	350.81	4,786.2	316.2	-51.1	373,378.38	878,482.29	32.0218316	-103.2454986
4,900.0	5.00	350.81	4,885.8	324.8	-52.5	373,386.98	878,480.90	32.0218553	-103.2455028
5,000.0	5.00	350.81	4,985.4	333.4	-53.9	373,395.58	878,479.51	32.0218790	-103.2455070
5,018.7	5.00	350.81	5,004.0	335.0	-54.2	373,397.19	878,479.25	32.0218834	-103.2455078
Lamar									



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,100.0	5.00	350.81	5,085.0	342.0	-55.3	373,404.19	878,478.11	32.0219027	-103.2455112	
5,200.0	5.00	350.81	5,184.7	350.6	-56.7	373,412.79	878,476.72	32.0219263	-103.2455154	
5,290.7	5.00	350.81	5,275.0	358.4	-58.0	373,420.59	878,475.46	32.0219478	-103.2455193	
Bell Canyon										
5,300.0	5.00	350.81	5,284.3	359.2	-58.1	373,421.39	878,475.33	32.0219500	-103.245519	
5,400.0	5.00	350.81	5,383.9	367.8	-59.5	373,430.00	878,473.94	32.0219737	-103.2455239	
5,500.0	5.00	350.81	5,483.5	376.4	-60.9	373,438.60	878,472.55	32.0219974	-103.2455281	
5,600.0	5.00	350.81	5,583.1	385.0	-62.3	373,447.21	878,471.16	32.0220211	-103.2455323	
5,700.0	5.00	350.81	5,682.7	393.6	-63.7	373,455.81	878,469.76	32.0220448	-103.2455365	
5,800.0	5.00	350.81	5,782.4	402.2	-65.1	373,464.41	878,468.37	32.0220685	-103.2455407	
5,900.0	5.00	350.81	5,882.0	410.8	-66.4	373,473.02	878,466.98	32.0220921	-103.2455449	
6,000.0	5.00	350.81	5,981.6	419.4	-67.8	373,481.62	878,465.59	32.0221158	-103.2455491	
6,100.0	5.00	350.81	6,081.2	428.0	-69.2	373,490.22	878,464.20	32.0221395	-103.2455533	
6,200.0	5.00	350.81	6,180.8	436.6	-70.6	373,498.83	878,462.81	32.0221632	-103.2455575	
6,300.0	5.00	350.81	6,280.5	445.3	-72.0	373,507.43	878,461.42	32.0221869	-103.2455618	
6,400.0	5.00	350.81	6,380.1	453.9	-73.4	373,516.04	878,460.02	32.0222106	-103.2455660	
6,500.0	5.00	350.81	6,479.7	462.5	-74.8	373,524.64	878,458.63	32.0222343	-103.2455702	
6,600.0	5.00	350.81	6,579.3	471.1	-76.2	373,533.24	878,457.24	32.0222579	-103.2455744	
6,696.0	5.00	350.81	6,675.0	479.3	-77.5	373,541.51	878,455.90	32.0222807	-103.2455784	
Brushy Canyon										
6,700.0	5.00	350.81	6,678.9	479.7	-77.6	373,541.85	878,455.85	32.0222816	-103.2455786	
6,800.0	5.00	350.81	6,778.6	488.3	-79.0	373,550.45	878,454.46	32.0223053	-103.2455828	
6,900.0	5.00	350.81	6,878.2	496.9	-80.4	373,559.05	878,453.07	32.0223290	-103.2455870	
7,000.0	5.00	350.81	6,977.8	505.5	-81.8	373,567.66	878,451.67	32.0223527	-103.2455912	
7,100.0	5.00	350.81	7,077.4	514.1	-83.1	373,576.26	878,450.28	32.0223764	-103.2455954	
7,200.0	5.00	350.81	7,177.0	522.7	-84.5	373,584.87	878,448.89	32.0224001	-103.2455996	
7,300.0	5.00	350.81	7,276.7	531.3	-85.9	373,593.47	878,447.50	32.0224238	-103.2456039	
7,400.0	5.00	350.81	7,376.3	539.9	-87.3	373,602.07	878,446.11	32.0224474	-103.2456081	
7,477.0	5.00	350.81	7,453.0	546.5	-88.4	373,608.70	878,445.04	32.0224657	-103.2456113	
Bone Spring Lime										
7,500.0	5.00	350.81	7,475.9	548.5	-88.7	373,610.68	878,444.72	32.0224711	-103.2456123	
7,600.0	5.00	350.81	7,575.5	557.1	-90.1	373,619.28	878,443.33	32.0224948	-103.2456165	
7,683.0	5.00	350.81	7,658.2	564.2	-91.3	373,626.42	878,442.17	32.0225145	-103.2456200	
Start Drop -2.00										
7,700.0	4.66	350.81	7,675.1	565.7	-91.5	373,627.83	878,441.94	32.0225184	-103.2456207	
7,800.0	2.66	350.81	7,774.9	572.0	-92.5	373,634.13	878,440.92	32.0225357	-103.2456238	
7,900.0	0.66	350.81	7,874.9	574.8	-93.0	373,636.99	878,440.46	32.0225436	-103.2456252	
7,933.0	0.00	0.00	7,907.8	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
Start 922.7 hold at 7933.0 MD										
8,000.0	0.00	0.00	7,974.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,100.0	0.00	0.00	8,074.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,200.0	0.00	0.00	8,174.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,300.0	0.00	0.00	8,274.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,400.0	0.00	0.00	8,374.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,500.0	0.00	0.00	8,474.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,600.0	0.00	0.00	8,574.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,700.0	0.00	0.00	8,674.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,800.0	0.00	0.00	8,774.9	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
8,855.6	0.00	0.00	8,830.5	575.0	-93.0	373,637.18	878,440.43	32.0225441	-103.2456252	
KOP-Start DLS 12.00 TFO 179.41										
8,875.0	2.33	179.41	8,849.9	574.6	-93.0	373,636.79	878,440.43	32.0225430	-103.2456252	
8,900.0	5.33	179.41	8,874.8	572.9	-93.0	373,635.12	878,440.45	32.0225384	-103.2456252	
8,925.0	8.33	179.41	8,899.6	570.0	-92.9	373,632.15	878,440.48	32.0225303	-103.2456252	
8,950.0	11.33	179.41	8,924.3	565.7	-92.9	373,627.88	878,440.53	32.0225185	-103.2456252	



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,975.0	14.33	179.41	8,948.6	560.2	-92.8	373,622.33	878,440.58	32.0225033	-103.2456252
9,000.0	17.33	179.41	8,972.7	553.3	-92.8	373,615.52	878,440.65	32.0224845	-103.2456252
9,025.0	20.33	179.41	8,996.4	545.3	-92.7	373,607.45	878,440.74	32.0224624	-103.2456252
9,050.0	23.33	179.41	9,019.6	536.0	-92.6	373,598.16	878,440.83	32.0224368	-103.2456252
9,075.0	26.33	179.41	9,042.2	525.5	-92.5	373,587.66	878,440.94	32.0224080	-103.2456252
9,100.0	29.33	179.41	9,064.4	513.8	-92.4	373,575.99	878,441.06	32.0223759	-103.2456252
9,125.0	32.33	179.41	9,085.8	501.0	-92.2	373,563.18	878,441.20	32.0223407	-103.2456252
9,150.0	35.33	179.41	9,106.6	487.1	-92.1	373,549.27	878,441.34	32.0223024	-103.2456252
9,175.0	38.33	179.41	9,126.6	472.1	-91.9	373,534.29	878,441.50	32.0222613	-103.2456251
9,200.0	41.33	179.41	9,145.8	456.1	-91.8	373,518.28	878,441.66	32.0222173	-103.2456251
9,225.0	44.33	179.41	9,164.1	439.1	-91.6	373,501.29	878,441.84	32.0221705	-103.2456251
9,250.0	47.33	179.41	9,181.5	421.2	-91.4	373,483.36	878,442.02	32.0221213	-103.2456251
9,275.0	50.33	179.41	9,198.0	402.4	-91.2	373,464.54	878,442.22	32.0220695	-103.2456251
9,300.0	53.33	179.41	9,213.5	382.7	-91.0	373,444.89	878,442.42	32.0220155	-103.2456251
9,325.0	56.33	179.41	9,227.9	362.3	-90.8	373,424.46	878,442.63	32.0219594	-103.2456250
9,350.0	59.33	179.41	9,241.2	341.1	-90.6	373,403.31	878,442.85	32.0219012	-103.2456250
9,375.0	62.33	179.41	9,253.3	319.3	-90.4	373,381.48	878,443.08	32.0218412	-103.2456250
9,400.0	65.33	179.41	9,264.4	296.9	-90.1	373,359.05	878,443.31	32.0217796	-103.2456250
9,425.0	68.33	179.41	9,274.2	273.9	-89.9	373,336.07	878,443.55	32.0217164	-103.2456250
9,450.0	71.33	179.41	9,282.8	250.4	-89.6	373,312.61	878,443.79	32.0216519	-103.2456249
9,475.0	74.33	179.41	9,290.2	226.5	-89.4	373,288.72	878,444.04	32.0215863	-103.2456249
9,500.0	77.33	179.41	9,296.3	202.3	-89.1	373,264.49	878,444.29	32.0215196	-103.2456249
9,507.9	78.27	179.41	9,298.0	194.6	-89.1	373,256.77	878,444.37	32.0214984	-103.2456249
First Bone Spring									
9,525.0	80.33	179.41	9,301.2	177.8	-88.9	373,239.97	878,444.55	32.0214522	-103.2456249
9,550.0	83.33	179.41	9,304.7	153.0	-88.6	373,215.23	878,444.80	32.0213842	-103.2456248
9,575.0	86.33	179.41	9,307.0	128.2	-88.4	373,190.33	878,445.06	32.0213158	-103.2456248
9,600.0	89.33	179.41	9,307.9	103.2	-88.1	373,165.35	878,445.32	32.0212471	-103.2456248
9,605.6	90.00	179.41	9,308.0	97.6	-88.1	373,159.74	878,445.38	32.0212317	-103.2456248
LP-Start 7557.5 hold at 9605.6 MD									
9,700.0	90.00	179.41	9,308.0	3.2	-87.1	373,065.36	878,446.35	32.0209723	-103.2456247
9,800.0	90.00	179.41	9,308.0	-96.8	-86.0	372,965.36	878,447.39	32.0206974	-103.2456246
9,900.0	90.00	179.41	9,308.0	-196.8	-85.0	372,865.37	878,448.43	32.0204225	-103.2456245
10,000.0	90.00	179.41	9,308.0	-296.8	-84.0	372,765.38	878,449.46	32.0201477	-103.2456244
10,100.0	90.00	179.41	9,308.0	-396.8	-82.9	372,665.38	878,450.50	32.0198728	-103.2456243
10,200.0	90.00	179.41	9,308.0	-496.8	-81.9	372,565.39	878,451.53	32.0195980	-103.2456242
10,300.0	90.00	179.41	9,308.0	-596.8	-80.9	372,465.39	878,452.57	32.0193231	-103.2456241
10,400.0	90.00	179.41	9,308.0	-696.8	-79.8	372,365.40	878,453.61	32.0190482	-103.2456240
10,500.0	90.00	179.41	9,308.0	-796.8	-78.8	372,265.40	878,454.64	32.0187734	-103.2456239
10,600.0	90.00	179.41	9,308.0	-896.8	-77.8	372,165.41	878,455.68	32.0184985	-103.2456239
10,700.0	90.00	179.41	9,308.0	-996.8	-76.7	372,065.41	878,456.71	32.0182236	-103.2456238
10,800.0	90.00	179.41	9,308.0	-1,096.8	-75.7	371,965.42	878,457.75	32.0179488	-103.2456237
10,900.0	90.00	179.41	9,308.0	-1,196.8	-74.6	371,865.42	878,458.79	32.0176739	-103.2456236
11,000.0	90.00	179.41	9,308.0	-1,296.8	-73.6	371,765.43	878,459.82	32.0173990	-103.2456235
11,100.0	90.00	179.41	9,308.0	-1,396.7	-72.6	371,665.43	878,460.86	32.0171242	-103.2456234
11,200.0	90.00	179.41	9,308.0	-1,496.7	-71.5	371,565.44	878,461.89	32.0168493	-103.2456233
11,300.0	90.00	179.41	9,308.0	-1,596.7	-70.5	371,465.45	878,462.93	32.0165745	-103.2456232
11,400.0	90.00	179.41	9,308.0	-1,696.7	-69.5	371,365.45	878,463.96	32.0162996	-103.2456231
11,500.0	90.00	179.41	9,308.0	-1,796.7	-68.4	371,265.46	878,465.00	32.0160247	-103.2456230
11,600.0	90.00	179.41	9,308.0	-1,896.7	-67.4	371,165.46	878,466.04	32.0157499	-103.2456229
11,700.0	90.00	179.41	9,308.0	-1,996.7	-66.4	371,065.47	878,467.07	32.0154750	-103.2456228
11,800.0	90.00	179.41	9,308.0	-2,096.7	-65.3	370,965.47	878,468.11	32.0152001	-103.2456227
11,900.0	90.00	179.41	9,308.0	-2,196.7	-64.3	370,865.48	878,469.14	32.0149253	-103.2456226
12,000.0	90.00	179.41	9,308.0	-2,296.7	-63.3	370,765.48	878,470.18	32.0146504	-103.2456225
12,100.0	90.00	179.41	9,308.0	-2,396.7	-62.2	370,665.49	878,471.22	32.0143755	-103.2456224



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,200.0	90.00	179.41	9,308.0	-2,496.7	-61.2	370,565.49	878,472.25	32.0141007	-103.2456223
12,300.0	90.00	179.41	9,308.0	-2,596.7	-60.1	370,465.50	878,473.29	32.0138258	-103.2456222
12,400.0	90.00	179.41	9,308.0	-2,696.7	-59.1	370,365.50	878,474.32	32.0135509	-103.2456221
12,500.0	90.00	179.41	9,308.0	-2,796.7	-58.1	370,265.51	878,475.36	32.0132761	-103.2456221
12,600.0	90.00	179.41	9,308.0	-2,896.7	-57.0	370,165.52	878,476.40	32.0130012	-103.2456220
12,700.0	90.00	179.41	9,308.0	-2,996.7	-56.0	370,065.52	878,477.43	32.0127264	-103.2456219
12,800.0	90.00	179.41	9,308.0	-3,096.7	-55.0	369,965.53	878,478.47	32.0124515	-103.2456218
12,900.0	90.00	179.41	9,308.0	-3,196.6	-53.9	369,865.53	878,479.50	32.0121766	-103.2456217
13,000.0	90.00	179.41	9,308.0	-3,296.6	-52.9	369,765.54	878,480.54	32.0119018	-103.2456216
13,100.0	90.00	179.41	9,308.0	-3,396.6	-51.9	369,665.54	878,481.58	32.0116269	-103.2456215
13,200.0	90.00	179.41	9,308.0	-3,496.6	-50.8	369,565.55	878,482.61	32.0113520	-103.2456214
13,300.0	90.00	179.41	9,308.0	-3,596.6	-49.8	369,465.55	878,483.65	32.0110772	-103.2456213
13,400.0	90.00	179.41	9,308.0	-3,696.6	-48.7	369,365.56	878,484.68	32.0108023	-103.2456212
13,500.0	90.00	179.41	9,308.0	-3,796.6	-47.7	369,265.56	878,485.72	32.0105274	-103.2456211
13,600.0	90.00	179.41	9,308.0	-3,896.6	-46.7	369,165.57	878,486.75	32.0102526	-103.2456210
13,700.0	90.00	179.41	9,308.0	-3,996.6	-45.6	369,065.57	878,487.79	32.0099777	-103.2456209
13,800.0	90.00	179.41	9,308.0	-4,096.6	-44.6	368,965.58	878,488.83	32.0097029	-103.2456208
13,900.0	90.00	179.41	9,308.0	-4,196.6	-43.6	368,865.58	878,489.86	32.0094280	-103.2456207
14,000.0	90.00	179.41	9,308.0	-4,296.6	-42.5	368,765.59	878,490.90	32.0091531	-103.2456206
14,100.0	90.00	179.41	9,308.0	-4,396.6	-41.5	368,665.60	878,491.93	32.0088783	-103.2456205
14,200.0	90.00	179.41	9,308.0	-4,496.6	-40.5	368,565.60	878,492.97	32.0086034	-103.2456204
14,300.0	90.00	179.41	9,308.0	-4,596.6	-39.4	368,465.61	878,494.01	32.0083285	-103.2456203
14,400.0	90.00	179.41	9,308.0	-4,696.6	-38.4	368,365.61	878,495.04	32.0080537	-103.2456202
14,500.0	90.00	179.41	9,308.0	-4,796.6	-37.4	368,265.62	878,496.08	32.0077788	-103.2456201
14,600.0	90.00	179.41	9,308.0	-4,896.6	-36.3	368,165.62	878,497.11	32.0075039	-103.2456201
14,700.0	90.00	179.41	9,308.0	-4,996.6	-35.3	368,065.63	878,498.15	32.0072291	-103.2456200
14,800.0	90.00	179.41	9,308.0	-5,096.5	-34.2	367,965.63	878,499.19	32.0069542	-103.2456199
14,900.0	90.00	179.41	9,308.0	-5,196.5	-33.2	367,865.64	878,500.22	32.0066793	-103.2456198
15,000.0	90.00	179.41	9,308.0	-5,296.5	-32.2	367,765.64	878,501.26	32.0064045	-103.2456197
15,100.0	90.00	179.41	9,308.0	-5,396.5	-31.1	367,665.65	878,502.29	32.0061296	-103.2456196
15,200.0	90.00	179.41	9,308.0	-5,496.5	-30.1	367,565.65	878,503.33	32.0058548	-103.2456195
15,300.0	90.00	179.41	9,308.0	-5,596.5	-29.1	367,465.66	878,504.37	32.0055799	-103.2456194
15,400.0	90.00	179.41	9,308.0	-5,696.5	-28.0	367,365.67	878,505.40	32.0053050	-103.2456193
15,500.0	90.00	179.41	9,308.0	-5,796.5	-27.0	367,265.67	878,506.44	32.0050302	-103.2456192
15,600.0	90.00	179.41	9,308.0	-5,896.5	-26.0	367,165.68	878,507.47	32.0047553	-103.2456191
15,700.0	90.00	179.41	9,308.0	-5,996.5	-24.9	367,065.68	878,508.51	32.0044804	-103.2456190
15,800.0	90.00	179.41	9,308.0	-6,096.5	-23.9	366,965.69	878,509.54	32.0042056	-103.2456189
15,900.0	90.00	179.41	9,308.0	-6,196.5	-22.8	366,865.69	878,510.58	32.0039307	-103.2456188
16,000.0	90.00	179.41	9,308.0	-6,296.5	-21.8	366,765.70	878,511.62	32.0036558	-103.2456187
16,100.0	90.00	179.41	9,308.0	-6,396.5	-20.8	366,665.70	878,512.65	32.0033810	-103.2456186
16,200.0	90.00	179.41	9,308.0	-6,496.5	-19.7	366,565.71	878,513.69	32.0031061	-103.2456185
16,300.0	90.00	179.41	9,308.0	-6,596.5	-18.7	366,465.71	878,514.72	32.0028312	-103.2456184
16,400.0	90.00	179.41	9,308.0	-6,696.5	-17.7	366,365.72	878,515.76	32.0025564	-103.2456183
16,500.0	90.00	179.41	9,308.0	-6,796.5	-16.6	366,265.72	878,516.80	32.0022815	-103.2456182
16,600.0	90.00	179.41	9,308.0	-6,896.5	-15.6	366,165.73	878,517.83	32.0020066	-103.2456181
16,700.0	90.00	179.41	9,308.0	-6,996.4	-14.6	366,065.73	878,518.87	32.0017318	-103.2456180
16,800.0	90.00	179.41	9,308.0	-7,096.4	-13.5	365,965.74	878,519.90	32.0014569	-103.2456179
16,900.0	90.00	179.41	9,308.0	-7,196.4	-12.5	365,865.75	878,520.94	32.0011821	-103.2456178
17,000.0	90.00	179.41	9,308.0	-7,296.4	-11.5	365,765.75	878,521.98	32.0009072	-103.2456178
17,100.0	90.00	179.41	9,308.0	-7,396.4	-10.4	365,665.76	878,523.01	32.0006323	-103.2456177
17,163.1	90.00	179.41	9,308.0	-7,459.5	-9.8	365,602.67	878,523.67	32.0004589	-103.2456176
TD at 17163.1									



Survey Report - Geographic

Company:	Ameredev Operating	Local Co-ordinate Reference:	Well AMEN CORNER ST COM 26 36 27 #74H
Project:	Lea County, NM (N83-NME)	TVD Reference:	KB=25' @ 2931.0usft
Site:	AMEN CORNER ST COM PROJECT	MD Reference:	KB=25' @ 2931.0usft
Well:	AMEN CORNER ST COM 26 36 27 #74H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP	Database:	AUS-COMPASS - EDM_15 - 32bit

Design Targets									
Target Name	- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
									Latitude Longitude
LTP (ACSC #74H)		0.00	0.00	9,308.0	-7,409.5	-10.2	365,652.70	878,523.19	32.0005964 -103.2456175
- plan misses target center by 13.1usft at 17100.0usft MD (9308.0 TVD, -7396.4 N, -10.4 E)									
- Point									
FTP (ACSC #74H)		0.00	0.00	9,308.0	99.4	-81.0	373,161.56	878,452.46	32.0212365 -103.2456019
- plan misses target center by 7.1usft at 9603.9usft MD (9308.0 TVD, 99.3 N, -88.1 E)									
- Point									
BHL (ACSC #74H)		0.00	0.00	9,308.0	-7,459.5	-9.8	365,602.67	878,523.67	32.0004589 -103.2456176
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
2,019.2	2,016.0	Rustler				
2,355.5	2,351.0	Salado				
2,937.7	2,931.0	Dewey Lake				
3,179.7	3,172.0	Tansill				
3,756.9	3,747.0	Capitan				
5,018.7	5,004.0	Lamar				
5,290.7	5,275.0	Bell Canyon				
6,696.0	6,675.0	Brushy Canyon				
7,477.0	7,453.0	Bone Spring Lime				
9,507.9	9,298.0	First Bone Spring				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
1000	1000	0	0	Start Build 2.00
1250	1250	11	-2	Start 6433.0 hold at 1250.0 MD
7683	7658	564	-91	Start Drop -2.00
7933	7908	575	-93	Start 922.7 hold at 7933.0 MD
8856	8831	575	-93	KOP-Start DLS 12.00 TFO 179.41
9606	9308	98	-88	LP-Start 7557.5 hold at 9605.6 MD
17,163	9308	-7460	-10	TD at 17163.1

Checked By: _____ Approved By: _____ Date: _____



H₂S Drilling Operation Plan

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:

- a. Characteristics of H₂S
- b. Physical effects and hazards
- c. Principal and operation of H₂S 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. H₂S Detection and Alarm Systems:

- a. H₂S 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 H₂S 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/Escapes 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.



H₂S Drilling Operation Plan

- 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 H₂S service.
 - b. Drilling Contractor supervisor will be required to be familiar with the effect H₂S has on tubular goods and other mechanical equipment provided through contractor.



H₂S Contingency Plan

Emergency Procedures

In the event of a release of H₂S, 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 H₂S 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 H₂S 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 (SO₂). 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 H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	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)



H₂S 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
Dayeed Khan	Construction Manager	737-300-4733	281-928-4692

<u>Artesia</u>	
Ambulance	911
State Police	575-748-9718
City Police	575-746-5000
Sheriff's Office	575-887-7551
Fire Department	575-746-5051
Artesia General Hospital	575-748-3333
New Mexico Oil Conservation Division	575-626-0830
<u>Carlsbad</u>	
Ambulance	911
State Police	575-885-3138
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-885-3125
Carlsbad Medical Center	575-887-4100
Hobbs Hospital	575-492-5000
BLM Hobbs Field Office	575-689-5981
BLM Carlsbad Field Office	575-361-2822
New Mexico Oil Conservation Division	575-626-0830
<u>Santa Fe</u>	
Department of Homeland Security and Emergency Management (Santa Fe)	505-476-9600
New Mexico State Emergency Operations Center	505-476-9635
<u>National</u>	
National Emergency Response Center (Washington, D.C.)	800-424-8802
<u>Medical</u>	
Aerocare - R3, Box 49F; Lubbock, TX	800-627-2376
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
Lifeguard Air Emergency Services- 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-243-2343