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 341690

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

1. Operator Name and Address	2. OGRID Number
AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	372224
	3. API Number 30-025-51901

4. Property Code	5. Property Name	6. Well No.
320762	RED BUD 25 36 32 STATE COM	183H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	32	25S	36E	O	200	S	1780	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	29	25S	36E	B	50	N	2310	E	Lea

9. Pool Information

WC-025 G-08 S263620C;LWR BONE SPRIN	98150

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3003
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	20749	2nd Bone Spring Sand		11/1/2023
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	1856	1454	0
Int1	12.25	10.75	45.5	4950	1179	0
Prod	8.75	5.5	17	20749	5869	0

Casing/Cement Program: Additional Comments

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:		**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:	8/25/2023	Expiration Date: 8/25/2025
Date:	8/24/2023 Phone: 737-300-4723	Conditions of Approval Attached		

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

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

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-025-	98150	WC-025 G-08 S263620C; LOWER BONE SPRING

[4]Property Code	[5]Property Name	[6]Well Number
320762	RED BUD 25 36 32 STATE COM	183H

[7]OGRID No.	[8]Operator Name	[9]Elevation
372224	AMEREDEV OPERATING, LLC.	3003'

[10]Surface Location

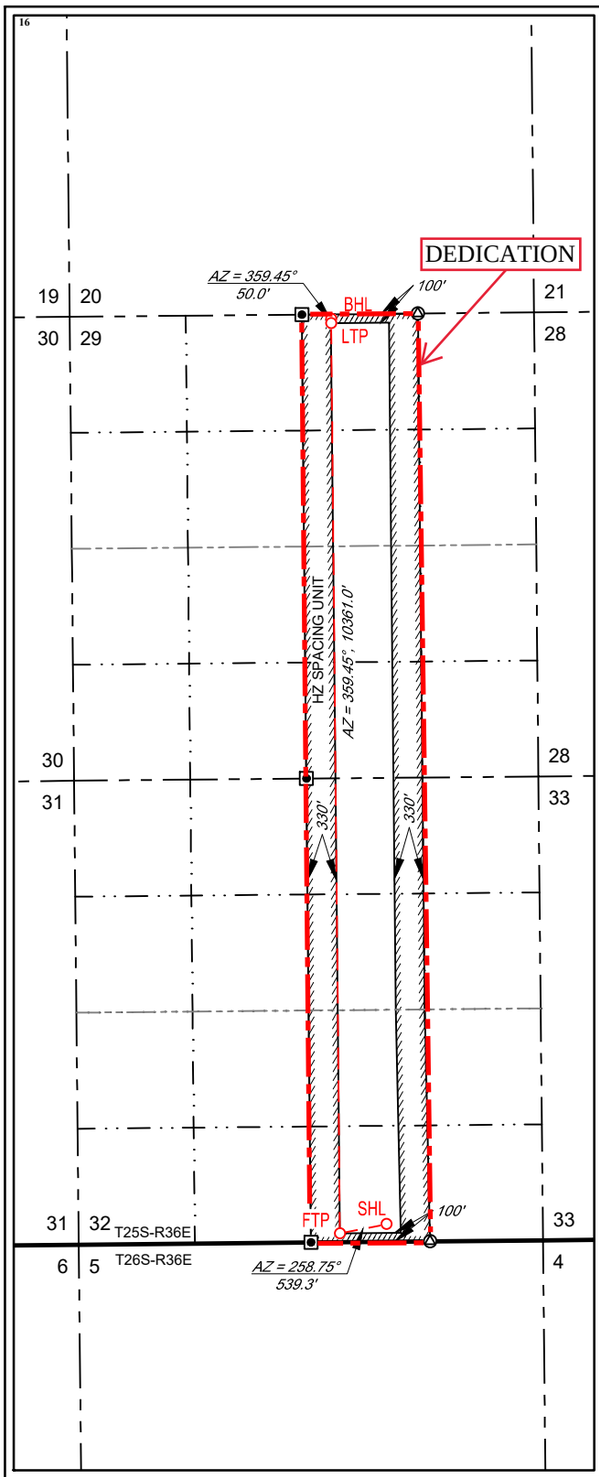
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	32	25-S	36-E	-	200'	SOUTH	1780'	EAST	LEA

[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	25-S	36-E	-	50'	NORTH	2310'	EAST	LEA

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

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)
200' FSL - SEC. 32 1780'
FEL - SEC. 32
X=866230 Y=394467
LAT.: N 32.0801283
LONG.: W 103.2843662

FIRST TAKE POINT (FTP)
100' FSL - SEC. 32
2310' FEL - SEC. 32
X=865701 Y=394362
LAT.: N 32.0798533
LONG.: W 103.2860771

LAST TAKE POINT (LTP)
100' FNL - SEC. 29
2310' FEL - SEC. 29
X=865601 Y=404723
LAT.: N 32.1083319
LONG.: W 103.2860736

BOTTOM HOLE LOCATION (BHL)
50' FNL - SEC. 29
2310' FEL - SEC. 29
X=865601 Y=404773
LAT.: N 32.1084693
LONG.: W 103.2860736

[17]OPERATOR CERTIFICATION

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

Signature Date: 5/26/2023

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.

05/02/2018
Date of Survey
Signature and Seal of Professional Surveyor

ANGEL M. BAEZA
NEW MEXICO
25116
PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\AMEREDEV_OPERATING_LLC\RED_BUD_STATE_COM\FINAL_PRODUCTS\LO_REDBUD_STATE_COM_25_36_32_183H.DWG 5/25/2023 3:37:41 PM adisabella

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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 341690

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
AMEREDEV OPERATING, LLC [372224] 2901 Via Fortuna Austin, TX 78746	30-025-51901
	Well: RED BUD 25 36 32 STATE COM #183H

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:** 06/07/2023

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
Red Bud 25 36 32 State Com 063H	30-025-		200' FSL & 1760' FEL	1,322	4,691	2,840
Red Bud 25 36 32 State Com 064H	30-025-		230' FNL & 325' FEL	1,322	4,691	2,840
Red Bud 25 36 32 State Com 163H	30-025-		200' FSL & 1820' FEL	1,322	4,691	2,840
Red Bud 25 36 32 State Com 164H	30-025-		200' FSL & 1720' FEL	1,322	4,691	2,840
Red Bud 25 36 32 State Com 183H	30-025-		200' FSL & 1780' FEL	1,322	4,691	2,840
Red Bud 25 36 32 State Com 263H	30-025-		200' FSL & 1740' FEL	1,322	4,691	2,840

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
Red Bud 25 36 32 State Com 063H	30-025-	11/01/2023	11/17/2023	02/03/2024	02/20/2024	02/23/2024
Red Bud 25 36 32 State Com 064H	30-025-	11/17/2023	12/02/2023	02/25/2024	03/19/2024	03/22/2024
Red Bud 25 36 32 State Com 163H	30-025-	12/05/2023	12/24/2023	03/06/2024	03/22/2024	03/25/2024
Red Bud 25 36 32 State Com 164H	30-025-	12/20/2023	01/12/2024	03/17/2024	04/02/2024	04/05/2024
Red Bud 25 36 32 State Com 183H	30-025-	01/08/2024	02/01/2024	04/14/2024	05/03/2024	05/06/2024
Red Bud 25 36 32 State Com 263H	30-025-	01/19/2024	02/15/2024	04/28/2024	05/20/2024	05/23/2024

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: Cesca Yu
Printed Name: Cesca Yu
Title: Engineer
E-mail Address: cyu@ameredev.com
Date: 06/07/2023
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

Red Bud 25 36 32 State Com 183H

Second Bone Spring Sand | 2 Mile Lateral

County, St: Lea, NM
SHL: Section 32 , T25S , R36E
200' FSL, 1780' FEL
BHL: Section 29 , T25S , R36E
50' FNL, 2310' 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-XXXXX
Permit: NMOCD
GL: 3,003'
Field: Delaware
Rig: H&P 642
KB: 27.0'
Elevation: 3,030'
E-Mail: drillingengineering@ameredev.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**	**17-1/2"**		**Lead (100% OH excess)** 1114 sx 12.8 ppg Class C Top of Lead @ 0'	Conductor	122'	
1500 psi Surface Casing Test Done by Spudder Rig			**Tail (100% OH excess)** 340 sx 14.8 ppg Class C Top of Tail @ 1556'	Rustler	1,200'	8.4 - 8.6 ppg FW
				Salado	1,602'	
		1856' MD	**13.375 | 54.5 | J-55 | BTC** **0 - 1856**			
	12-1/4"		**Stg 1 Lead (50% OH excess)** 423 sx 11 ppg Class C - Low Portland Top of Lead @ 0'			
			Stg 1 Tail (50% OH excess) 177 sx 14.8 ppg Class C Top of Tail @ 4200'	Tansill	3,355'	
Stage 1 Designed to Circulate Cement to Surface				Capitan	3,802'	
DV Tool (Int) **3239**		X	**Stg 2 Lead (50% OH excess)** 464 sx 12.8 ppg Class C - Low Portland Top of Lead @ 0'			10 ppg Brine
Casing Test to 1500 psi			**Stg 2 Tail (25% OH excess)** 106 sx 14.8 ppg Class C Top of Tail @ 2639'			
			10.75 | 45.5 | HC L-80 | SC BTC **0 - 4950**			
		4950' MD **4950' TVD**				
FIT to 10.5 ppg EMW	**8-3/4"** **Vertical**			Lamar	5,076'	
				Bell Canyon	5,159'	
				Brushy Canyon	6,931'	9.0 - 9.5 ppg Cut Brine
				Bone Spring Lime	8,075'	
				First Bone Spring	9,493'	
		KOP **9555' MD** **9521' TVD**				
	8-3/4" **Curve**		**Lead (50% OH excess)** 1728 sx 10.6 ppg ProLite Top of Lead @ 0'			
			Tail (20% OH excess) 4141 sx 14.5 ppg Class H - Premium PozMix Top of Tail @ 8176'			
12° DLS curve section **Surveys: 45' Curve , 90' Lateral**				Second Bone Spring	9,983'	
			5.5 I 17 I USS RYS P-110 I Eagle SFH **0 - 18176**			9.0 - 9.5 ppg Cut Brine
LTP VS: 10311' **90° INC, 359.45° AZM**			**5-1/2" marker jts @ ~9410', 15750' MD**			
BHL VS: 10361' **90° INC, 359.45° AZM**	**8-1/2"** **Lateral**	EOC **10338' MD** **10030' TVD**		**No Casing Test**		
			20749' MD **10,030' TVD @ BHL** **10,361' VS**			

Ameredev Operating

Lea County, NM (N83-NME)
Red Bud_Holly
RED BUD 25 36 32 STATE COM 183H

OWB

Plan: PWP

Standard Planning Report - Geographic

01 June, 2023

AMEREDEV

Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	**Local Co-ordinate Reference:**	Well RED BUD STATE COM25 36 32 183H
Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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 Red Bud_Holly

Site Position:		**Northing:**	394,038.95 usft	**Latitude:**	32.0789464
From:	Lat/Long	**Easting:**	866,383.48 usft	**Longitude:**	-103.2838831
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well RED BUD STATE COM 25 36 32 183H

Well Position	**+N/-S**	0.0 usft	**Northing:**	394,467.47 usft	**Latitude:**	32.0801283
	+E/-W	0.0 usft	**Easting:**	866,229.66 usft	**Longitude:**	-103.2843662
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,003.0 usft
Grid Convergence:		0.56 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/1/2023	6.17	59.74	47,235.58182396

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	356.51

Plan Survey Tool Program **Date** 6/1/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,748.9	PWP (OWB)	MWD OWSG MWD - Standard	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,259.7	5.19	220.37	1,259.4	-9.0	-7.6	2.00	2.00	0.00	220.37	
9,555.2	5.19	220.37	9,520.8	-581.2	-494.1	0.00	0.00	0.00	0.00	
10,337.9	90.00	359.45	10,030.0	-105.2	-529.0	12.00	10.84	17.77	138.97	FTP(RBSC 183H)
20,748.9	90.00	359.45	10,030.0	10,305.3	-629.0	0.00	0.00	0.00	0.00	BHL(RBSC 183H)

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Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	**Local Co-ordinate Reference:**	Well RED BUD STATE COM25 36 32 183H
Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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	394,467.47	866,229.66	32.0801283	-103.2843662
100.0	0.00	0.00	100.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
200.0	0.00	0.00	200.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
300.0	0.00	0.00	300.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
400.0	0.00	0.00	400.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
500.0	0.00	0.00	500.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
600.0	0.00	0.00	600.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
700.0	0.00	0.00	700.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
800.0	0.00	0.00	800.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
900.0	0.00	0.00	900.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
1,000.0	0.00	0.00	1,000.0	0.0	0.0	394,467.47	866,229.66	32.0801283	-103.2843662
Start Build 2.00									
1,100.0	2.00	220.37	1,100.0	-1.3	-1.1	394,466.14	866,228.53	32.0801247	-103.2843699
1,200.0	4.00	220.37	1,199.8	-5.3	-4.5	394,462.16	866,225.14	32.0801138	-103.2843810
1,259.7	5.19	220.37	1,259.4	-9.0	-7.6	394,458.51	866,222.04	32.0801039	-103.2843911
Start 8295.5 hold at 1259.7 MD									
1,300.0	5.19	220.37	1,299.5	-11.7	-10.0	394,455.73	866,219.68	32.0800963	-103.2843988
1,400.0	5.19	220.37	1,399.1	-18.6	-15.8	394,448.83	866,213.81	32.0800775	-103.2844179
1,500.0	5.19	220.37	1,498.7	-25.5	-21.7	394,441.93	866,207.95	32.0800587	-103.2844371
1,600.0	5.19	220.37	1,598.2	-32.4	-27.6	394,435.03	866,202.09	32.0800399	-103.2844562
1,700.0	5.19	220.37	1,697.8	-39.3	-33.4	394,428.14	866,196.22	32.0800211	-103.2844754
1,800.0	5.19	220.37	1,797.4	-46.2	-39.3	394,421.24	866,190.36	32.0800023	-103.2844945
1,900.0	5.19	220.37	1,897.0	-53.1	-45.2	394,414.34	866,184.49	32.0799835	-103.2845137
2,000.0	5.19	220.37	1,996.6	-60.0	-51.0	394,407.44	866,178.63	32.0799647	-103.2845328
2,100.0	5.19	220.37	2,096.2	-66.9	-56.9	394,400.54	866,172.77	32.0799459	-103.2845520
2,200.0	5.19	220.37	2,195.8	-73.8	-62.8	394,393.64	866,166.90	32.0799271	-103.2845711
2,300.0	5.19	220.37	2,295.4	-80.7	-68.6	394,386.75	866,161.04	32.0799083	-103.2845903
2,400.0	5.19	220.37	2,395.0	-87.6	-74.5	394,379.85	866,155.17	32.0798895	-103.2846094
2,500.0	5.19	220.37	2,494.6	-94.5	-80.3	394,372.95	866,149.31	32.0798707	-103.2846285
2,600.0	5.19	220.37	2,594.1	-101.4	-86.2	394,366.05	866,143.45	32.0798519	-103.2846477
2,700.0	5.19	220.37	2,693.7	-108.3	-92.1	394,359.15	866,137.58	32.0798331	-103.2846668
2,800.0	5.19	220.37	2,793.3	-115.2	-97.9	394,352.25	866,131.72	32.0798143	-103.2846860
2,900.0	5.19	220.37	2,892.9	-122.1	-103.8	394,345.35	866,125.85	32.0797955	-103.2847051
3,000.0	5.19	220.37	2,992.5	-129.0	-109.7	394,338.46	866,119.99	32.0797767	-103.2847243
3,100.0	5.19	220.37	3,092.1	-135.9	-115.5	394,331.56	866,114.13	32.0797578	-103.2847434
3,200.0	5.19	220.37	3,191.7	-142.8	-121.4	394,324.66	866,108.26	32.0797390	-103.2847626
3,300.0	5.19	220.37	3,291.3	-149.7	-127.3	394,317.76	866,102.40	32.0797202	-103.2847817
3,400.0	5.19	220.37	3,390.9	-156.6	-133.1	394,310.86	866,096.53	32.0797014	-103.2848009
3,500.0	5.19	220.37	3,490.4	-163.5	-139.0	394,303.96	866,090.67	32.0796826	-103.2848200
3,600.0	5.19	220.37	3,590.0	-170.4	-144.9	394,297.06	866,084.81	32.0796638	-103.2848392
3,700.0	5.19	220.37	3,689.6	-177.3	-150.7	394,290.17	866,078.94	32.0796450	-103.2848583
3,800.0	5.19	220.37	3,789.2	-184.2	-156.6	394,283.27	866,073.08	32.0796262	-103.2848775
3,900.0	5.19	220.37	3,888.8	-191.1	-162.4	394,276.37	866,067.21	32.0796074	-103.2848966
4,000.0	5.19	220.37	3,988.4	-198.0	-168.3	394,269.47	866,061.35	32.0795886	-103.2849157
4,020.0	5.19	220.37	4,008.3	-199.4	-169.5	394,268.09	866,060.18	32.0795849	-103.2849196
NMNM137470 Entry at 4020.0 MD									
4,100.0	5.19	220.37	4,088.0	-204.9	-174.2	394,262.57	866,055.49	32.0795698	-103.2849349
4,200.0	5.19	220.37	4,187.6	-211.8	-180.0	394,255.67	866,049.62	32.0795510	-103.2849540
4,242.6	5.19	220.37	4,230.0	-214.7	-182.5	394,252.73	866,047.12	32.0795430	-103.2849622
Rustler									
4,300.0	5.19	220.37	4,287.2	-218.7	-185.9	394,248.78	866,043.76	32.0795322	-103.2849732
4,400.0	5.19	220.37	4,386.7	-225.6	-191.8	394,241.88	866,037.89	32.0795134	-103.2849923
4,500.0	5.19	220.37	4,486.3	-232.5	-197.6	394,234.98	866,032.03	32.0794946	-103.2850115
4,600.0	5.19	220.37	4,585.9	-239.4	-203.5	394,228.08	866,026.17	32.0794758	-103.2850306

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Planning Report - Geographic

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Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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
4,646.3	5.19	220.37	4,632.0	-242.6	-206.2	394,224.89	866,023.45	32.0794671	-103.2850395
Salado									
4,700.0	5.19	220.37	4,685.5	-246.3	-209.4	394,221.18	866,020.30	32.0794570	-103.2850498
4,800.0	5.19	220.37	4,785.1	-253.2	-215.2	394,214.28	866,014.44	32.0794382	-103.2850689
4,900.0	5.19	220.37	4,884.7	-260.1	-221.1	394,207.38	866,008.57	32.0794194	-103.2850881
5,000.0	5.19	220.37	4,984.3	-267.0	-227.0	394,200.49	866,002.71	32.0794006	-103.2851072
5,100.0	5.19	220.37	5,083.9	-273.9	-232.8	394,193.59	865,996.85	32.0793818	-103.2851264
5,200.0	5.19	220.37	5,183.5	-280.8	-238.7	394,186.69	865,990.98	32.0793630	-103.2851455
5,300.0	5.19	220.37	5,283.0	-287.7	-244.5	394,179.79	865,985.12	32.0793442	-103.2851646
5,400.0	5.19	220.37	5,382.6	-294.6	-250.4	394,172.89	865,979.25	32.0793254	-103.2851838
5,500.0	5.19	220.37	5,482.2	-301.5	-256.3	394,165.99	865,973.39	32.0793066	-103.2852029
5,600.0	5.19	220.37	5,581.8	-308.4	-262.1	394,159.10	865,967.53	32.0792877	-103.2852221
5,700.0	5.19	220.37	5,681.4	-315.3	-268.0	394,152.20	865,961.66	32.0792689	-103.2852412
5,800.0	5.19	220.37	5,781.0	-322.2	-273.9	394,145.30	865,955.80	32.0792501	-103.2852604
5,900.0	5.19	220.37	5,880.6	-329.1	-279.7	394,138.40	865,949.93	32.0792313	-103.2852795
6,000.0	5.19	220.37	5,980.2	-336.0	-285.6	394,131.50	865,944.07	32.0792125	-103.2852987
6,100.0	5.19	220.37	6,079.8	-342.9	-291.5	394,124.60	865,938.21	32.0791937	-103.2853178
6,200.0	5.19	220.37	6,179.4	-349.8	-297.3	394,117.70	865,932.34	32.0791749	-103.2853370
6,300.0	5.19	220.37	6,278.9	-356.7	-303.2	394,110.81	865,926.48	32.0791561	-103.2853561
6,400.0	5.19	220.37	6,378.5	-363.6	-309.0	394,103.91	865,920.61	32.0791373	-103.2853753
6,406.5	5.19	220.37	6,385.0	-364.0	-309.4	394,103.46	865,920.23	32.0791361	-103.2853765
Tansill									
6,500.0	5.19	220.37	6,478.1	-370.5	-314.9	394,097.01	865,914.75	32.0791185	-103.2853944
6,600.0	5.19	220.37	6,577.7	-377.4	-320.8	394,090.11	865,908.89	32.0790997	-103.2854136
6,700.0	5.19	220.37	6,677.3	-384.3	-326.6	394,083.21	865,903.02	32.0790809	-103.2854327
6,800.0	5.19	220.37	6,776.9	-391.2	-332.5	394,076.31	865,897.16	32.0790621	-103.2854518
6,855.3	5.19	220.37	6,832.0	-395.0	-335.7	394,072.50	865,893.91	32.0790517	-103.2854624
Capitan									
6,900.0	5.19	220.37	6,876.5	-398.1	-338.4	394,069.41	865,891.29	32.0790433	-103.2854710
7,000.0	5.19	220.37	6,976.1	-405.0	-344.2	394,062.52	865,885.43	32.0790245	-103.2854901
7,100.0	5.19	220.37	7,075.7	-411.9	-350.1	394,055.62	865,879.57	32.0790057	-103.2855093
7,200.0	5.19	220.37	7,175.2	-418.8	-356.0	394,048.72	865,873.70	32.0789869	-103.2855284
7,300.0	5.19	220.37	7,274.8	-425.7	-361.8	394,041.82	865,867.84	32.0789681	-103.2855476
7,400.0	5.19	220.37	7,374.4	-432.6	-367.7	394,034.92	865,861.97	32.0789493	-103.2855667
7,500.0	5.19	220.37	7,474.0	-439.4	-373.6	394,028.02	865,856.11	32.0789305	-103.2855859
7,600.0	5.19	220.37	7,573.6	-446.3	-379.4	394,021.13	865,850.25	32.0789117	-103.2856050
7,700.0	5.19	220.37	7,673.2	-453.2	-385.3	394,014.23	865,844.38	32.0788929	-103.2856242
7,800.0	5.19	220.37	7,772.8	-460.1	-391.1	394,007.33	865,838.52	32.0788741	-103.2856433
7,900.0	5.19	220.37	7,872.4	-467.0	-397.0	394,000.43	865,832.65	32.0788553	-103.2856625
8,000.0	5.19	220.37	7,972.0	-473.9	-402.9	393,993.53	865,826.79	32.0788365	-103.2856816
8,100.0	5.19	220.37	8,071.5	-480.8	-408.7	393,986.63	865,820.93	32.0788176	-103.2857007
8,134.6	5.19	220.37	8,106.0	-483.2	-410.8	393,984.25	865,818.90	32.0788111	-103.2857074
Lamar									
8,200.0	5.19	220.37	8,171.1	-487.7	-414.6	393,979.73	865,815.06	32.0787988	-103.2857199
8,217.9	5.19	220.37	8,189.0	-489.0	-415.7	393,978.50	865,814.01	32.0787955	-103.2857233
Bell Canyon									
8,300.0	5.19	220.37	8,270.7	-494.6	-420.5	393,972.84	865,809.20	32.0787800	-103.2857390
8,400.0	5.19	220.37	8,370.3	-501.5	-426.3	393,965.94	865,803.33	32.0787612	-103.2857582
8,500.0	5.19	220.37	8,469.9	-508.4	-432.2	393,959.04	865,797.47	32.0787424	-103.2857773
8,600.0	5.19	220.37	8,569.5	-515.3	-438.1	393,952.14	865,791.61	32.0787236	-103.2857965
8,700.0	5.19	220.37	8,669.1	-522.2	-443.9	393,945.24	865,785.74	32.0787048	-103.2858156
8,800.0	5.19	220.37	8,768.7	-529.1	-449.8	393,938.34	865,779.88	32.0786860	-103.2858348
8,900.0	5.19	220.37	8,868.3	-536.0	-455.6	393,931.44	865,774.01	32.0786672	-103.2858539
9,000.0	5.19	220.37	8,967.9	-542.9	-461.5	393,924.55	865,768.15	32.0786484	-103.2858731

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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
9,100.0	5.19	220.37	9,067.4	-549.8	-467.4	393,917.65	865,762.29	32.0786296	-103.2858922
9,200.0	5.19	220.37	9,167.0	-556.7	-473.2	393,910.75	865,756.42	32.0786108	-103.2859114
9,300.0	5.19	220.37	9,266.6	-563.6	-479.1	393,903.85	865,750.56	32.0785920	-103.2859305
9,400.0	5.19	220.37	9,366.2	-570.5	-485.0	393,896.95	865,744.69	32.0785732	-103.2859496
9,500.0	5.19	220.37	9,465.8	-577.4	-490.8	393,890.05	865,738.83	32.0785544	-103.2859688
9,555.2	5.19	220.37	9,520.8	-581.2	-494.1	393,886.25	865,735.59	32.0785440	-103.2859794
KOP-Start DLS 12.00 TFO 138.97									
9,575.0	3.74	245.02	9,540.5	-582.2	-495.2	393,885.29	865,734.43	32.0785414	-103.2859832
9,600.0	3.70	292.56	9,565.5	-582.2	-496.7	393,885.26	865,732.94	32.0785414	-103.2859880
9,625.0	5.61	322.10	9,590.4	-580.9	-498.2	393,886.53	865,731.45	32.0785449	-103.2859927
9,650.0	8.19	335.01	9,615.2	-578.4	-499.7	393,889.11	865,729.94	32.0785520	-103.2859975
9,675.0	10.99	341.59	9,639.9	-574.5	-501.2	393,892.98	865,728.44	32.0785627	-103.2860022
9,700.0	13.87	345.50	9,664.3	-569.3	-502.7	393,898.15	865,726.93	32.0785770	-103.2860069
9,725.0	16.79	348.07	9,688.4	-562.9	-504.2	393,904.58	865,725.44	32.0785947	-103.2860116
9,750.0	19.74	349.90	9,712.1	-555.2	-505.7	393,912.27	865,723.95	32.0786159	-103.2860161
9,775.0	22.70	351.26	9,735.4	-546.3	-507.2	393,921.20	865,722.48	32.0786404	-103.2860206
9,800.0	25.67	352.33	9,758.2	-536.1	-508.6	393,931.33	865,721.02	32.0786683	-103.2860250
9,825.0	28.64	353.19	9,780.5	-524.8	-510.1	393,942.65	865,719.59	32.0786995	-103.2860293
9,850.0	31.62	353.90	9,802.1	-512.4	-511.5	393,955.12	865,718.18	32.0787338	-103.2860334
9,875.0	34.60	354.50	9,823.0	-498.8	-512.9	393,968.70	865,716.80	32.0787712	-103.2860374
9,900.0	37.59	355.01	9,843.2	-484.1	-514.2	393,983.37	865,715.46	32.0788115	-103.2860413
9,925.0	40.57	355.46	9,862.6	-468.4	-515.5	393,999.07	865,714.15	32.0788547	-103.2860450
9,950.0	43.56	355.86	9,881.2	-451.7	-516.8	394,015.77	865,712.89	32.0789006	-103.2860486
9,975.0	46.55	356.22	9,898.8	-434.1	-518.0	394,033.42	865,711.67	32.0789492	-103.2860520
10,000.0	49.54	356.54	9,915.6	-415.5	-519.2	394,051.97	865,710.49	32.0790002	-103.2860552
10,025.0	52.53	356.83	9,931.3	-396.1	-520.3	394,071.38	865,709.37	32.0790535	-103.2860582
10,050.0	55.52	357.11	9,946.0	-375.9	-521.4	394,091.58	865,708.30	32.0791091	-103.2860610
10,075.0	58.52	357.36	9,959.6	-354.9	-522.4	394,112.52	865,707.29	32.0791667	-103.2860636
10,077.8	58.85	357.39	9,961.0	-352.6	-522.5	394,114.88	865,707.18	32.0791732	-103.2860639
Brushy Canyon									
10,100.0	61.51	357.60	9,972.1	-333.3	-523.3	394,134.15	865,706.34	32.0792262	-103.2860660
10,125.0	64.50	357.82	9,983.4	-311.1	-524.2	394,156.41	865,705.45	32.0792874	-103.2860682
10,150.0	67.50	358.04	9,993.6	-288.2	-525.0	394,179.23	865,704.62	32.0793501	-103.2860701
10,175.0	70.49	358.24	10,002.5	-264.9	-525.8	394,202.55	865,703.87	32.0794142	-103.2860719
10,200.0	73.48	358.44	10,010.3	-241.2	-526.5	394,226.32	865,703.18	32.0794796	-103.2860733
10,225.0	76.48	358.63	10,016.7	-217.0	-527.1	394,250.45	865,702.56	32.0795459	-103.2860746
10,240.0	78.27	358.74	10,020.0	-202.4	-527.4	394,265.06	865,702.22	32.0795861	-103.2860752
NMNM137470 Exit at 10240.0 MD									
10,250.0	79.47	358.82	10,021.9	-192.6	-527.6	394,274.89	865,702.02	32.0796131	-103.2860756
10,275.0	82.47	359.00	10,025.9	-167.9	-528.1	394,299.58	865,701.54	32.0796810	-103.2860763
10,300.0	85.46	359.18	10,028.5	-143.0	-528.5	394,324.43	865,701.15	32.0797493	-103.2860768
10,325.0	88.46	359.36	10,029.8	-118.1	-528.8	394,349.39	865,700.83	32.0798179	-103.2860771
10,337.9	90.00	359.45	10,030.0	-105.2	-529.0	394,362.28	865,700.70	32.0798533	-103.2860771
LP-Start 10411.0 hold at 10337.9 MD									
10,400.0	90.00	359.45	10,030.0	-43.1	-529.6	394,424.39	865,700.10	32.0800240	-103.2860771
10,500.0	90.00	359.45	10,030.0	56.9	-530.5	394,524.38	865,699.14	32.0802989	-103.2860770
10,600.0	90.00	359.45	10,030.0	156.9	-531.5	394,624.38	865,698.18	32.0805738	-103.2860770
10,700.0	90.00	359.45	10,030.0	256.9	-532.4	394,724.37	865,697.22	32.0808486	-103.2860770
10,800.0	90.00	359.45	10,030.0	356.9	-533.4	394,824.37	865,696.26	32.0811235	-103.2860769
10,900.0	90.00	359.45	10,030.0	456.9	-534.4	394,924.36	865,695.30	32.0813984	-103.2860769
11,000.0	90.00	359.45	10,030.0	556.9	-535.3	395,024.36	865,694.33	32.0816732	-103.2860769
11,100.0	90.00	359.45	10,030.0	656.9	-536.3	395,124.35	865,693.37	32.0819481	-103.2860768
11,200.0	90.00	359.45	10,030.0	756.9	-537.2	395,224.35	865,692.41	32.0822230	-103.2860768
11,300.0	90.00	359.45	10,030.0	856.9	-538.2	395,324.34	865,691.45	32.0824978	-103.2860768

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Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	**Local Co-ordinate Reference:**	Well RED BUD STATE COM25 36 32 183H
Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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
11,400.0	90.00	359.45	10,030.0	956.9	-539.2	395,424.34	865,690.49	32.0827727	-103.2860767
11,500.0	90.00	359.45	10,030.0	1,056.9	-540.1	395,524.34	865,689.53	32.0830475	-103.2860767
11,600.0	90.00	359.45	10,030.0	1,156.9	-541.1	395,624.33	865,688.57	32.0833224	-103.2860767
11,700.0	90.00	359.45	10,030.0	1,256.9	-542.1	395,724.33	865,687.61	32.0835973	-103.2860766
11,800.0	90.00	359.45	10,030.0	1,356.8	-543.0	395,824.32	865,686.65	32.0838721	-103.2860766
11,900.0	90.00	359.45	10,030.0	1,456.8	-544.0	395,924.32	865,685.69	32.0841470	-103.2860766
12,000.0	90.00	359.45	10,030.0	1,556.8	-544.9	396,024.31	865,684.73	32.0844219	-103.2860766
12,100.0	90.00	359.45	10,030.0	1,656.8	-545.9	396,124.31	865,683.77	32.0846967	-103.2860765
12,200.0	90.00	359.45	10,030.0	1,756.8	-546.9	396,224.30	865,682.81	32.0849716	-103.2860765
12,300.0	90.00	359.45	10,030.0	1,856.8	-547.8	396,324.30	865,681.84	32.0852465	-103.2860765
12,400.0	90.00	359.45	10,030.0	1,956.8	-548.8	396,424.29	865,680.88	32.0855213	-103.2860764
12,500.0	90.00	359.45	10,030.0	2,056.8	-549.7	396,524.29	865,679.92	32.0857962	-103.2860764
12,600.0	90.00	359.45	10,030.0	2,156.8	-550.7	396,624.28	865,678.96	32.0860710	-103.2860764
12,700.0	90.00	359.45	10,030.0	2,256.8	-551.7	396,724.28	865,678.00	32.0863459	-103.2860763
12,800.0	90.00	359.45	10,030.0	2,356.8	-552.6	396,824.28	865,677.04	32.0866208	-103.2860763
12,900.0	90.00	359.45	10,030.0	2,456.8	-553.6	396,924.27	865,676.08	32.0868956	-103.2860763
13,000.0	90.00	359.45	10,030.0	2,556.8	-554.5	397,024.27	865,675.12	32.0871705	-103.2860762
13,100.0	90.00	359.45	10,030.0	2,656.8	-555.5	397,124.26	865,674.16	32.0874454	-103.2860762
13,200.0	90.00	359.45	10,030.0	2,756.8	-556.5	397,224.26	865,673.20	32.0877202	-103.2860762
13,300.0	90.00	359.45	10,030.0	2,856.8	-557.4	397,324.25	865,672.24	32.0879951	-103.2860761
13,400.0	90.00	359.45	10,030.0	2,956.8	-558.4	397,424.25	865,671.28	32.0882700	-103.2860761
13,500.0	90.00	359.45	10,030.0	3,056.8	-559.3	397,524.24	865,670.31	32.0885448	-103.2860761
13,600.0	90.00	359.45	10,030.0	3,156.8	-560.3	397,624.24	865,669.35	32.0888197	-103.2860760
13,700.0	90.00	359.45	10,030.0	3,256.8	-561.3	397,724.23	865,668.39	32.0890945	-103.2860760
13,800.0	90.00	359.45	10,030.0	3,356.8	-562.2	397,824.23	865,667.43	32.0893694	-103.2860760
13,900.0	90.00	359.45	10,030.0	3,456.8	-563.2	397,924.22	865,666.47	32.0896443	-103.2860759
14,000.0	90.00	359.45	10,030.0	3,556.7	-564.1	398,024.22	865,665.51	32.0899191	-103.2860759
14,100.0	90.00	359.45	10,030.0	3,656.7	-565.1	398,124.22	865,664.55	32.0901940	-103.2860759
14,200.0	90.00	359.45	10,030.0	3,756.7	-566.1	398,224.21	865,663.59	32.0904689	-103.2860758
14,300.0	90.00	359.45	10,030.0	3,856.7	-567.0	398,324.21	865,662.63	32.0907437	-103.2860758
14,400.0	90.00	359.45	10,030.0	3,956.7	-568.0	398,424.20	865,661.67	32.0910186	-103.2860758
14,500.0	90.00	359.45	10,030.0	4,056.7	-569.0	398,524.20	865,660.71	32.0912935	-103.2860757
14,600.0	90.00	359.45	10,030.0	4,156.7	-569.9	398,624.19	865,659.75	32.0915683	-103.2860757
14,700.0	90.00	359.45	10,030.0	4,256.7	-570.9	398,724.19	865,658.79	32.0918432	-103.2860757
14,800.0	90.00	359.45	10,030.0	4,356.7	-571.8	398,824.18	865,657.82	32.0921180	-103.2860756
14,900.0	90.00	359.45	10,030.0	4,456.7	-572.8	398,924.18	865,656.86	32.0923929	-103.2860756
15,000.0	90.00	359.45	10,030.0	4,556.7	-573.8	399,024.17	865,655.90	32.0926678	-103.2860756
15,100.0	90.00	359.45	10,030.0	4,656.7	-574.7	399,124.17	865,654.94	32.0929426	-103.2860755
15,200.0	90.00	359.45	10,030.0	4,756.7	-575.7	399,224.16	865,653.98	32.0932175	-103.2860755
15,300.0	90.00	359.45	10,030.0	4,856.7	-576.6	399,324.16	865,653.02	32.0934924	-103.2860755
15,400.0	90.00	359.45	10,030.0	4,956.7	-577.6	399,424.16	865,652.06	32.0937672	-103.2860754
15,500.0	90.00	359.45	10,030.0	5,056.7	-578.6	399,524.15	865,651.10	32.0940421	-103.2860754
15,600.0	90.00	359.45	10,030.0	5,156.7	-579.5	399,624.15	865,650.14	32.0943169	-103.2860754
15,700.0	90.00	359.45	10,030.0	5,256.7	-580.5	399,724.14	865,649.18	32.0945918	-103.2860753
15,800.0	90.00	359.45	10,030.0	5,356.7	-581.4	399,824.14	865,648.22	32.0948667	-103.2860753
15,900.0	90.00	359.45	10,030.0	5,456.7	-582.4	399,924.13	865,647.26	32.0951415	-103.2860753
16,000.0	90.00	359.45	10,030.0	5,556.7	-583.4	400,024.13	865,646.29	32.0954164	-103.2860752
16,100.0	90.00	359.45	10,030.0	5,656.7	-584.3	400,124.12	865,645.33	32.0956913	-103.2860752
16,200.0	90.00	359.45	10,030.0	5,756.6	-585.3	400,224.12	865,644.37	32.0959661	-103.2860752
16,300.0	90.00	359.45	10,030.0	5,856.6	-586.2	400,324.11	865,643.41	32.0962410	-103.2860751
16,400.0	90.00	359.45	10,030.0	5,956.6	-587.2	400,424.11	865,642.45	32.0965159	-103.2860751
16,500.0	90.00	359.45	10,030.0	6,056.6	-588.2	400,524.10	865,641.49	32.0967907	-103.2860751
16,600.0	90.00	359.45	10,030.0	6,156.6	-589.1	400,624.10	865,640.53	32.0970656	-103.2860750
16,700.0	90.00	359.45	10,030.0	6,256.6	-590.1	400,724.10	865,639.57	32.0973404	-103.2860750
16,800.0	90.00	359.45	10,030.0	6,356.6	-591.1	400,824.09	865,638.61	32.0976153	-103.2860750

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Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	**Local Co-ordinate Reference:**	Well RED BUD STATE COM25 36 32 183H
Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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
16,900.0	90.00	359.45	10,030.0	6,456.6	-592.0	400,924.09	865,637.65	32.0978902	-103.2860749
17,000.0	90.00	359.45	10,030.0	6,556.6	-593.0	401,024.08	865,636.69	32.0981650	-103.2860749
17,100.0	90.00	359.45	10,030.0	6,656.6	-593.9	401,124.08	865,635.73	32.0984399	-103.2860748
17,200.0	90.00	359.45	10,030.0	6,756.6	-594.9	401,224.07	865,634.77	32.0987148	-103.2860748
17,300.0	90.00	359.45	10,030.0	6,856.6	-595.9	401,324.07	865,633.80	32.0989896	-103.2860748
17,400.0	90.00	359.45	10,030.0	6,956.6	-596.8	401,424.06	865,632.84	32.0992645	-103.2860747
17,500.0	90.00	359.45	10,030.0	7,056.6	-597.8	401,524.06	865,631.88	32.0995393	-103.2860747
17,600.0	90.00	359.45	10,030.0	7,156.6	-598.7	401,624.05	865,630.92	32.0998142	-103.2860747
17,700.0	90.00	359.45	10,030.0	7,256.6	-599.7	401,724.05	865,629.96	32.1000891	-103.2860746
17,800.0	90.00	359.45	10,030.0	7,356.6	-600.7	401,824.04	865,629.00	32.1003639	-103.2860746
17,900.0	90.00	359.45	10,030.0	7,456.6	-601.6	401,924.04	865,628.04	32.1006388	-103.2860746
18,000.0	90.00	359.45	10,030.0	7,556.6	-602.6	402,024.04	865,627.08	32.1009137	-103.2860745
18,100.0	90.00	359.45	10,030.0	7,656.6	-603.5	402,124.03	865,626.12	32.1011885	-103.2860745
18,200.0	90.00	359.45	10,030.0	7,756.6	-604.5	402,224.03	865,625.16	32.1014634	-103.2860745
18,300.0	90.00	359.45	10,030.0	7,856.5	-605.5	402,324.02	865,624.20	32.1017382	-103.2860744
18,400.0	90.00	359.45	10,030.0	7,956.5	-606.4	402,424.02	865,623.24	32.1020131	-103.2860744
18,500.0	90.00	359.45	10,030.0	8,056.5	-607.4	402,524.01	865,622.28	32.1022880	-103.2860744
18,600.0	90.00	359.45	10,030.0	8,156.5	-608.3	402,624.01	865,621.31	32.1025628	-103.2860743
18,700.0	90.00	359.45	10,030.0	8,256.5	-609.3	402,724.00	865,620.35	32.1028377	-103.2860743
18,800.0	90.00	359.45	10,030.0	8,356.5	-610.3	402,824.00	865,619.39	32.1031126	-103.2860743
18,900.0	90.00	359.45	10,030.0	8,456.5	-611.2	402,923.99	865,618.43	32.1033874	-103.2860742
19,000.0	90.00	359.45	10,030.0	8,556.5	-612.2	403,023.99	865,617.47	32.1036623	-103.2860742
19,100.0	90.00	359.45	10,030.0	8,656.5	-613.1	403,123.98	865,616.51	32.1039372	-103.2860742
19,200.0	90.00	359.45	10,030.0	8,756.5	-614.1	403,223.98	865,615.55	32.1042120	-103.2860741
19,300.0	90.00	359.45	10,030.0	8,856.5	-615.1	403,323.98	865,614.59	32.1044869	-103.2860741
19,400.0	90.00	359.45	10,030.0	8,956.5	-616.0	403,423.97	865,613.63	32.1047617	-103.2860741
19,500.0	90.00	359.45	10,030.0	9,056.5	-617.0	403,523.97	865,612.67	32.1050366	-103.2860740
19,600.0	90.00	359.45	10,030.0	9,156.5	-618.0	403,623.96	865,611.71	32.1053115	-103.2860740
19,700.0	90.00	359.45	10,030.0	9,256.5	-618.9	403,723.96	865,610.75	32.1055863	-103.2860740
19,800.0	90.00	359.45	10,030.0	9,356.5	-619.9	403,823.95	865,609.78	32.1058612	-103.2860739
19,900.0	90.00	359.45	10,030.0	9,456.5	-620.8	403,923.95	865,608.82	32.1061361	-103.2860739
20,000.0	90.00	359.45	10,030.0	9,556.5	-621.8	404,023.94	865,607.86	32.1064109	-103.2860739
20,100.0	90.00	359.45	10,030.0	9,656.5	-622.8	404,123.94	865,606.90	32.1066858	-103.2860738
20,200.0	90.00	359.45	10,030.0	9,756.5	-623.7	404,223.93	865,605.94	32.1069606	-103.2860738
20,300.0	90.00	359.45	10,030.0	9,856.5	-624.7	404,323.93	865,604.98	32.1072355	-103.2860737
20,400.0	90.00	359.45	10,030.0	9,956.5	-625.6	404,423.92	865,604.02	32.1075104	-103.2860737
20,500.0	90.00	359.45	10,030.0	10,056.4	-626.6	404,523.92	865,603.06	32.1077852	-103.2860737
20,600.0	90.00	359.45	10,030.0	10,156.4	-627.6	404,623.92	865,602.10	32.1080601	-103.2860736
20,700.0	90.00	359.45	10,030.0	10,256.4	-628.5	404,723.91	865,601.14	32.1083350	-103.2860736
20,748.9	90.00	359.45	10,030.0	10,305.3	-629.0	404,772.79	865,600.67	32.1084693	-103.2860736
TD at 20748.9									

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Planning Report - Geographic

Database:	AUS-COMPASS - EDM_15 - 32bit	**Local Co-ordinate Reference:**	Well RED BUD STATE COM25 36 32 183H
Company:	Ameredev Operating	**TVD Reference:**	KB=27' @ 3030.0usft
Project:	Lea County, NM (N83-NME)	**MD Reference:**	KB=27' @ 3030.0usft
Site:	Red Bud_Holly	**North Reference:**	Grid
Well:	RED BUD STATE COM 25 36 32 183H	**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
FTP(RBSC 183H) - plan hits target center - Point	0.00	0.00	10,030.0	-105.2	-529.0	394,362.28	865,700.70	32.0798533	-103.2860771
BHL(RBSC 183H) - plan hits target center - Point	0.00	0.00	10,030.0	10,305.3	-629.0	404,772.79	865,600.67	32.1084693	-103.2860736
LTP(RBSC 183H) - plan hits target center - Point	0.00	0.00	10,030.0	10,255.3	-628.5	404,722.81	865,601.15	32.1083319	-103.2860736

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,242.6	4,230.0	Rustler			
4,646.3	4,632.0	Salado			
6,406.5	6,385.0	Tansill			
6,855.3	6,832.0	Capitan			
8,134.6	8,106.0	Lamar			
8,217.9	8,189.0	Bell Canyon			
10,077.8	9,961.0	Brushy Canyon			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,000.0	1,000.0	0.0	0.0	Start Build 2.00
1,259.7	1,259.4	-9.0	-7.6	Start 8295.5 hold at 1259.7 MD
4,020.0	4,008.3	-199.4	-169.5	NMNM137470 Entry at 4020.0 MD
9,555.2	9,520.8	-581.2	-494.1	KOP-Start DLS 12.00 TFO 138.97
10,240.0	10,020.0	-202.4	-527.4	NMNM137470 Exit at 10240.0 MD
10,337.9	10,030.0	-105.2	-529.0	LP-Start 10411.0 hold at 10337.9 MD
20,748.9	10,030.0	10,305.3	-629.0	TD at 20748.9