



45035

HOBBS OCD

AUG 07 2018

Wellbore Schematic

Well: Red Bud State Com 25-36-32 097H
SHL: Sec. 32 25S-36E 200' FSL & 932' FEL
BHL: Sec. 29 25S-36E 200' FNL & 660' FEL
 Lea, NM
Wellhead: A - 13-5/8" 5M x 13-5/8" SOW
 B - 13-5/8" 5M x 13-5/8" 10M
 C - 13-5/8" 10M x 13-5/8" 10M
 Tubing Spool - 5-1/8" 15M x 13-3/8" 10M
Xmas Tree: 2-9/16" 10M
Tubing: 2-7/8" L-80 6.5# 8rd EUE

Co. Well ID: 40825
AFE No.: 2018-033
API No.: xxxxxxxxxxxx
GL: 3,003'
Field: Delaware_TBSG
Objective: Third Bone Spring
TVD: 11,475'
MD: 21,576'
Rig: TBD
E-Mail: Wellsite2@ameredev.com

RECEIVED

Hole Size	Formation Tops	Logs	Cement	Mud Weight
17.5"	Rustler 1,196' TVD 13.375" 54.5# J-55 BTC 1,321' MD/TVD	1045 Sacks TOC 0'	100% Excess	8.6 - 10 ppg WBM
12.25"	Salado 1,804' TVD Tansill 3,352' TVD Lamar 5,085' TVD Bell Canyon 5,114' TVD 9.625" 40# L-80HC BTC 5,135' MD/TVD	1385 Sacks TOC 0'	50% Excess	10 - 11.5 ppg Brine
8.75"	Brushy Canyon 6,975' TVD Bone Spring Lime 8,013' TVD First Bone Spring 9,500' TVD Second Bone Spring 10,015' TVD Third Bone Spring Upper 10,700' TVD 7.625" 29.7#P-110HC FJM 10,909' MD	Triple Combo 333 Sacks TOC 4635'	25% Excess	8.9 - 10.5 Cut Brine
10° Build KOP 10,909' MD // 10,902' TVD	Third Bone Spring 11,321' TVD 5.5" 20# P-110CYHP TMK UP SF TORQ 21,576' MD Target Third Bone Spring 11475' TVD // 21576' MD	Triple Combo 950 Sacks TOC 10409'	25% Excess	11.5 - 12.5 ppg OBM
6.75" □				

AMEREDEV

Ameredev Operating, LLC

Lea County, NM (NAD83 NME)

(Redbud State) Sec32_T-25-S_R-26-E

Redbud State Com 25-36-32 #097H

OWB

Plan: Plan #1

HOBBS OCD
AUG 07 2018
RECEIVED

Standard Planning Report

11 July, 2018

INTREPID

Database:	EDM5000	Local Co-ordinate Reference:	Well Redbud State Com 25-36-32 #097H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3030.0usft (Rig)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3030.0usft (Rig)
Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Project	Lea County, NM (NAD83 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	(Redbud State) Sec32_T-25-S_R-26-E		
Site Position:		Northing:	394,463.00 usft
From:	Map	Easting:	865,740.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32.0801291
		Longitude:	-103.2859471
		Grid Convergence:	0.56 °

Well	Redbud State Com 25-36-32 #097H		
Well Position	+N-S	13.0 usft	Northing: 394,476.00 usft
	+E-W	1,337.0 usft	Easting: 867,077.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32.0801291
			Longitude: -103.2816305
			Ground Level: 3,003.0 usft

Wellbore	OWB		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	07/09/18	(°)
			6.69
			Dip Angle
			(°)
			59.96
			Field Strength
			(nT)
			47,776.81868813

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			0.99

Plan Survey Tool Program	Date 07/10/18		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	21,576.0 Plan #1 (OWB)	MWD
			MWD - Standard

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Wellbore:	OWB		
Design:	Plan #1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,150.1	3.00	130.76	2,150.1	-2.6	3.0	2.00	2.00	0.00	130.76	
7,116.8	3.00	130.76	7,109.9	-172.4	200.0	0.00	0.00	0.00	0.00	
7,267.0	0.00	0.00	7,260.0	-175.0	203.0	2.00	-2.00	0.00	180.00	
10,909.0	0.00	0.00	10,902.0	-175.0	203.0	0.00	0.00	0.00	0.00	
11,809.0	90.00	5.10	11,475.0	395.7	253.9	10.00	10.00	0.00	5.10	
12,091.3	90.00	359.45	11,475.0	677.7	265.1	2.00	0.00	-2.00	-90.00	
21,446.0	90.00	359.45	11,475.0	10,032.0	176.0	0.00	0.00	0.00	0.00	LTP (Redbud State
21,576.0	90.00	359.45	11,475.0	10,162.0	174.8	0.00	0.00	0.00	0.00	PBHL (Redbud Sta

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Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,196.0	0.00	0.00	1,196.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,321.0	0.00	0.00	1,321.0	0.0	0.0	0.0	0.00	0.00	0.00
13.375"									
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,804.0	0.00	0.00	1,804.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado									
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
BUILD - 2.00									
2,100.0	2.00	130.76	2,100.0	-1.1	1.3	-1.1	2.00	2.00	0.00
2,150.1	3.00	130.76	2,150.1	-2.6	3.0	-2.5	2.00	2.00	0.00
HOLD - 4966.7 at 2150.1 MD									
2,200.0	3.00	130.76	2,199.9	-4.3	5.0	-4.2	0.00	0.00	0.00
2,300.0	3.00	130.76	2,299.7	-7.7	8.9	-7.5	0.00	0.00	0.00
2,400.0	3.00	130.76	2,399.6	-11.1	12.9	-10.9	0.00	0.00	0.00
2,500.0	3.00	130.76	2,499.5	-14.5	16.9	-14.2	0.00	0.00	0.00
2,600.0	3.00	130.76	2,599.3	-18.0	20.8	-17.6	0.00	0.00	0.00
2,700.0	3.00	130.76	2,699.2	-21.4	24.8	-20.9	0.00	0.00	0.00
2,800.0	3.00	130.76	2,799.0	-24.8	28.8	-24.3	0.00	0.00	0.00
2,900.0	3.00	130.76	2,898.9	-28.2	32.7	-27.6	0.00	0.00	0.00
3,000.0	3.00	130.76	2,998.8	-31.6	36.7	-31.0	0.00	0.00	0.00
3,100.0	3.00	130.76	3,098.6	-35.1	40.7	-34.3	0.00	0.00	0.00
3,200.0	3.00	130.76	3,198.5	-38.5	44.6	-37.7	0.00	0.00	0.00
3,300.0	3.00	130.76	3,298.4	-41.9	48.6	-41.1	0.00	0.00	0.00
3,353.7	3.00	130.76	3,352.0	-43.7	50.7	-42.9	0.00	0.00	0.00
Tansill									
3,400.0	3.00	130.76	3,398.2	-45.3	52.6	-44.4	0.00	0.00	0.00
3,500.0	3.00	130.76	3,498.1	-48.7	56.5	-47.8	0.00	0.00	0.00
3,600.0	3.00	130.76	3,597.9	-52.2	60.5	-51.1	0.00	0.00	0.00
3,700.0	3.00	130.76	3,697.8	-55.6	64.5	-54.5	0.00	0.00	0.00
3,800.0	3.00	130.76	3,797.7	-59.0	68.4	-57.8	0.00	0.00	0.00
3,900.0	3.00	130.76	3,897.5	-62.4	72.4	-61.2	0.00	0.00	0.00
4,000.0	3.00	130.76	3,997.4	-65.8	76.4	-64.5	0.00	0.00	0.00
4,100.0	3.00	130.76	4,097.3	-69.3	80.3	-67.9	0.00	0.00	0.00

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Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,200.0	3.00	130.76	4,197.1	-72.7	84.3	-71.2	0.00	0.00	0.00
4,300.0	3.00	130.76	4,297.0	-76.1	88.3	-74.6	0.00	0.00	0.00
4,400.0	3.00	130.76	4,396.8	-79.5	92.2	-77.9	0.00	0.00	0.00
4,500.0	3.00	130.76	4,496.7	-82.9	96.2	-81.3	0.00	0.00	0.00
4,600.0	3.00	130.76	4,596.6	-86.4	100.2	-84.6	0.00	0.00	0.00
4,700.0	3.00	130.76	4,696.4	-89.8	104.1	-88.0	0.00	0.00	0.00
4,800.0	3.00	130.76	4,796.3	-93.2	108.1	-91.3	0.00	0.00	0.00
4,900.0	3.00	130.76	4,896.2	-96.6	112.1	-94.7	0.00	0.00	0.00
5,000.0	3.00	130.76	4,996.0	-100.0	116.0	-98.0	0.00	0.00	0.00
5,089.1	3.00	130.76	5,085.0	-103.1	119.6	-101.0	0.00	0.00	0.00
Lamar									
5,100.0	3.00	130.76	5,095.9	-103.5	120.0	-101.4	0.00	0.00	0.00
5,118.1	3.00	130.76	5,114.0	-104.1	120.7	-102.0	0.00	0.00	0.00
Bell Canyon									
5,139.2	3.00	130.76	5,135.0	-104.8	121.6	-102.7	0.00	0.00	0.00
9.625"									
5,200.0	3.00	130.76	5,195.7	-106.9	124.0	-104.7	0.00	0.00	0.00
5,300.0	3.00	130.76	5,295.6	-110.3	127.9	-108.1	0.00	0.00	0.00
5,400.0	3.00	130.76	5,395.5	-113.7	131.9	-111.4	0.00	0.00	0.00
5,500.0	3.00	130.76	5,495.3	-117.1	135.9	-114.8	0.00	0.00	0.00
5,600.0	3.00	130.76	5,595.2	-120.6	139.8	-118.1	0.00	0.00	0.00
5,700.0	3.00	130.76	5,695.1	-124.0	143.8	-121.5	0.00	0.00	0.00
5,800.0	3.00	130.76	5,794.9	-127.4	147.8	-124.8	0.00	0.00	0.00
5,900.0	3.00	130.76	5,894.8	-130.8	151.7	-128.2	0.00	0.00	0.00
6,000.0	3.00	130.76	5,994.6	-134.2	155.7	-131.5	0.00	0.00	0.00
6,100.0	3.00	130.76	6,094.5	-137.7	159.7	-134.9	0.00	0.00	0.00
6,200.0	3.00	130.76	6,194.4	-141.1	163.6	-138.2	0.00	0.00	0.00
6,300.0	3.00	130.76	6,294.2	-144.5	167.6	-141.6	0.00	0.00	0.00
6,400.0	3.00	130.76	6,394.1	-147.9	171.6	-144.9	0.00	0.00	0.00
6,500.0	3.00	130.76	6,494.0	-151.3	175.6	-148.3	0.00	0.00	0.00
6,600.0	3.00	130.76	6,593.8	-154.8	179.5	-151.6	0.00	0.00	0.00
6,700.0	3.00	130.76	6,693.7	-158.2	183.5	-155.0	0.00	0.00	0.00
6,800.0	3.00	130.76	6,793.5	-161.6	187.5	-158.3	0.00	0.00	0.00
6,900.0	3.00	130.76	6,893.4	-165.0	191.4	-161.7	0.00	0.00	0.00
6,981.7	3.00	130.76	6,975.0	-167.8	194.7	-164.4	0.00	0.00	0.00
Brushy Canyon									
7,000.0	3.00	130.76	6,993.3	-168.4	195.4	-165.1	0.00	0.00	0.00
7,100.0	3.00	130.76	7,093.1	-171.9	199.4	-168.4	0.00	0.00	0.00
7,116.8	3.00	130.76	7,109.9	-172.4	200.0	-169.0	0.00	0.00	0.00
DROP -2.00									
7,200.0	1.34	130.76	7,193.1	-174.5	202.4	-171.0	2.00	-2.00	0.00
7,267.0	0.00	0.00	7,260.0	-175.0	203.0	-171.5	2.00	-2.00	0.00
HOLD - 3642.0 at 7267.0 MD									
7,300.0	0.00	0.00	7,293.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,393.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,493.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,593.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,693.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,793.0	-175.0	203.0	-171.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,893.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,993.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,020.0	0.00	0.00	8,013.0	-175.0	203.0	-171.5	0.00	0.00	0.00
Bone Spring Lime									

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8,100.0	0.00	0.00	8,093.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,193.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,293.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,393.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,493.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,593.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,693.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,793.0	-175.0	203.0	-171.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,893.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,993.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,100.0	0.00	0.00	9,093.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,193.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,293.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,393.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,493.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,507.0	0.00	0.00	9,500.0	-175.0	203.0	-171.5	0.00	0.00	0.00
First Bone Spring									
9,600.0	0.00	0.00	9,593.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,693.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,793.0	-175.0	203.0	-171.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,893.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,993.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,022.0	0.00	0.00	10,015.0	-175.0	203.0	-171.5	0.00	0.00	0.00
Second Bone Spring									
10,100.0	0.00	0.00	10,093.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,200.0	0.00	0.00	10,193.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,293.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,393.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,500.0	0.00	0.00	10,493.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,600.0	0.00	0.00	10,593.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,693.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,707.0	0.00	0.00	10,700.0	-175.0	203.0	-171.5	0.00	0.00	0.00
Third Bone Spring Upper									
10,800.0	0.00	0.00	10,793.0	-175.0	203.0	-171.5	0.00	0.00	0.00
10,909.0	0.00	0.00	10,902.0	-175.0	203.0	-171.5	0.00	0.00	0.00
KOP - Build 10.00 - 7.625"									
10,950.0	4.10	5.10	10,943.0	-173.5	203.1	-170.0	10.00	10.00	0.00
11,000.0	9.10	5.10	10,992.7	-167.8	203.6	-164.3	10.00	10.00	0.00
11,050.0	14.10	5.10	11,041.6	-157.8	204.5	-154.3	10.00	10.00	0.00
11,100.0	19.10	5.10	11,089.5	-143.6	205.8	-140.0	10.00	10.00	0.00
11,150.0	24.10	5.10	11,136.0	-125.2	207.4	-121.7	10.00	10.00	0.00
11,200.0	29.10	5.10	11,180.7	-102.9	209.4	-99.3	10.00	10.00	0.00
11,250.0	34.10	5.10	11,223.3	-76.9	211.8	-73.2	10.00	10.00	0.00
11,300.0	39.10	5.10	11,263.4	-47.2	214.4	-43.5	10.00	10.00	0.00
11,350.0	44.10	5.10	11,300.8	-14.1	217.4	-10.4	10.00	10.00	0.00
11,378.9	46.99	5.10	11,321.0	6.4	219.2	10.2	10.00	10.00	0.00
Third Bone Spring									
11,400.0	49.10	5.10	11,335.1	22.1	220.6	25.9	10.00	10.00	0.00
11,450.0	54.10	5.10	11,366.1	61.1	224.1	64.9	10.00	10.00	0.00
11,500.0	59.10	5.10	11,393.7	102.7	227.8	106.6	10.00	10.00	0.00
11,550.0	64.10	5.10	11,417.4	146.5	231.7	150.4	10.00	10.00	0.00
11,563.8	65.48	5.10	11,423.3	158.9	232.8	162.8	10.00	10.00	0.00
FTP (Redbud State Com 25-36-32 #097H)									

Database:	EDM5000	Local Co-ordinate Reference:	Well Redbud State Com 25-36-32 #097H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3030.0usft (Rig)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3030.0usft (Rig)
Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,600.0	69.10	5.10	11,437.3	192.1	235.8	196.2	10.00	10.00	0.00
11,650.0	74.10	5.10	11,453.0	239.4	240.0	243.5	10.00	10.00	0.00
11,700.0	79.10	5.10	11,464.6	287.8	244.3	292.0	10.00	10.00	0.00
11,750.0	84.10	5.10	11,471.9	337.1	248.7	341.3	10.00	10.00	0.00
11,800.0	89.10	5.10	11,474.9	386.8	253.1	391.1	10.00	10.00	0.00
11,809.0	90.00	5.10	11,475.0	395.7	253.9	400.0	10.00	10.00	0.00
EOC/TURN - DLS 2.00 TFO -90.00									
11,900.0	90.00	3.28	11,475.0	486.5	260.6	490.9	2.00	0.00	-2.00
12,000.0	90.00	1.28	11,475.0	586.4	264.6	590.9	2.00	0.00	-2.00
12,091.3	90.00	359.45	11,475.0	677.7	265.1	682.1	2.00	0.00	-2.00
HOLD - 9354.8 at 12091.3 MD									
12,100.0	90.00	359.45	11,475.0	686.4	265.1	690.9	0.00	0.00	0.00
12,200.0	90.00	359.45	11,475.0	786.4	264.1	790.8	0.00	0.00	0.00
12,300.0	90.00	359.45	11,475.0	886.4	263.2	890.8	0.00	0.00	0.00
12,400.0	90.00	359.45	11,475.0	986.4	262.2	990.7	0.00	0.00	0.00
12,500.0	90.00	359.45	11,475.0	1,086.4	261.2	1,090.7	0.00	0.00	0.00
12,600.0	90.00	359.45	11,475.0	1,186.4	260.3	1,190.7	0.00	0.00	0.00
12,700.0	90.00	359.45	11,475.0	1,286.4	259.3	1,290.6	0.00	0.00	0.00
12,800.0	90.00	359.45	11,475.0	1,386.4	258.4	1,390.6	0.00	0.00	0.00
12,900.0	90.00	359.45	11,475.0	1,486.4	257.4	1,490.6	0.00	0.00	0.00
13,000.0	90.00	359.45	11,475.0	1,586.4	256.5	1,590.5	0.00	0.00	0.00
13,100.0	90.00	359.45	11,475.0	1,686.4	255.5	1,690.5	0.00	0.00	0.00
13,200.0	90.00	359.45	11,475.0	1,786.3	254.6	1,790.5	0.00	0.00	0.00
13,300.0	90.00	359.45	11,475.0	1,886.3	253.6	1,890.4	0.00	0.00	0.00
13,400.0	90.00	359.45	11,475.0	1,986.3	252.7	1,990.4	0.00	0.00	0.00
13,500.0	90.00	359.45	11,475.0	2,086.3	251.7	2,090.4	0.00	0.00	0.00
13,600.0	90.00	359.45	11,475.0	2,186.3	250.8	2,190.3	0.00	0.00	0.00
13,700.0	90.00	359.45	11,475.0	2,286.3	249.8	2,290.3	0.00	0.00	0.00
13,800.0	90.00	359.45	11,475.0	2,386.3	248.9	2,390.2	0.00	0.00	0.00
13,900.0	90.00	359.45	11,475.0	2,486.3	247.9	2,490.2	0.00	0.00	0.00
14,000.0	90.00	359.45	11,475.0	2,586.3	247.0	2,590.2	0.00	0.00	0.00
14,100.0	90.00	359.45	11,475.0	2,686.3	246.0	2,690.1	0.00	0.00	0.00
14,200.0	90.00	359.45	11,475.0	2,786.3	245.0	2,790.1	0.00	0.00	0.00
14,300.0	90.00	359.45	11,475.0	2,886.3	244.1	2,890.1	0.00	0.00	0.00
14,400.0	90.00	359.45	11,475.0	2,986.3	243.1	2,990.0	0.00	0.00	0.00
14,500.0	90.00	359.45	11,475.0	3,086.3	242.2	3,090.0	0.00	0.00	0.00
14,600.0	90.00	359.45	11,475.0	3,186.3	241.2	3,190.0	0.00	0.00	0.00
14,700.0	90.00	359.45	11,475.0	3,286.3	240.3	3,289.9	0.00	0.00	0.00
14,800.0	90.00	359.45	11,475.0	3,386.3	239.3	3,389.9	0.00	0.00	0.00
14,900.0	90.00	359.45	11,475.0	3,486.3	238.4	3,489.9	0.00	0.00	0.00
15,000.0	90.00	359.45	11,475.0	3,586.3	237.4	3,589.8	0.00	0.00	0.00
15,100.0	90.00	359.45	11,475.0	3,686.3	236.5	3,689.8	0.00	0.00	0.00
15,200.0	90.00	359.45	11,475.0	3,786.3	235.5	3,789.7	0.00	0.00	0.00
15,300.0	90.00	359.45	11,475.0	3,886.3	234.6	3,889.7	0.00	0.00	0.00
15,400.0	90.00	359.45	11,475.0	3,986.2	233.6	3,989.7	0.00	0.00	0.00
15,500.0	90.00	359.45	11,475.0	4,086.2	232.7	4,089.6	0.00	0.00	0.00
15,600.0	90.00	359.45	11,475.0	4,186.2	231.7	4,189.6	0.00	0.00	0.00
15,700.0	90.00	359.45	11,475.0	4,286.2	230.8	4,289.6	0.00	0.00	0.00
15,800.0	90.00	359.45	11,475.0	4,386.2	229.8	4,389.5	0.00	0.00	0.00
15,900.0	90.00	359.45	11,475.0	4,486.2	228.8	4,489.5	0.00	0.00	0.00
16,000.0	90.00	359.45	11,475.0	4,586.2	227.9	4,589.5	0.00	0.00	0.00
16,100.0	90.00	359.45	11,475.0	4,686.2	226.9	4,689.4	0.00	0.00	0.00
16,200.0	90.00	359.45	11,475.0	4,786.2	226.0	4,789.4	0.00	0.00	0.00
16,300.0	90.00	359.45	11,475.0	4,886.2	225.0	4,889.4	0.00	0.00	0.00

Database:	EDM5000	Local Co-ordinate Reference:	Well Redbud State Com 25-36-32 #097H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3030.0usft (Rig)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3030.0usft (Rig)
Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,400.0	90.00	359.45	11,475.0	4,986.2	224.1	4,989.3	0.00	0.00	0.00
16,500.0	90.00	359.45	11,475.0	5,086.2	223.1	5,089.3	0.00	0.00	0.00
16,600.0	90.00	359.45	11,475.0	5,186.2	222.2	5,189.2	0.00	0.00	0.00
16,700.0	90.00	359.45	11,475.0	5,286.2	221.2	5,289.2	0.00	0.00	0.00
16,800.0	90.00	359.45	11,475.0	5,386.2	220.3	5,389.2	0.00	0.00	0.00
16,900.0	90.00	359.45	11,475.0	5,486.2	219.3	5,489.1	0.00	0.00	0.00
17,000.0	90.00	359.45	11,475.0	5,586.2	218.4	5,589.1	0.00	0.00	0.00
17,100.0	90.00	359.45	11,475.0	5,686.2	217.4	5,689.1	0.00	0.00	0.00
17,200.0	90.00	359.45	11,475.0	5,786.2	216.5	5,789.0	0.00	0.00	0.00
17,300.0	90.00	359.45	11,475.0	5,886.2	215.5	5,889.0	0.00	0.00	0.00
17,400.0	90.00	359.45	11,475.0	5,986.2	214.6	5,989.0	0.00	0.00	0.00
17,500.0	90.00	359.45	11,475.0	6,086.2	213.6	6,088.9	0.00	0.00	0.00
17,600.0	90.00	359.45	11,475.0	6,186.1	212.6	6,188.9	0.00	0.00	0.00
17,700.0	90.00	359.45	11,475.0	6,286.1	211.7	6,288.9	0.00	0.00	0.00
17,800.0	90.00	359.45	11,475.0	6,386.1	210.7	6,388.8	0.00	0.00	0.00
17,900.0	90.00	359.45	11,475.0	6,486.1	209.8	6,488.8	0.00	0.00	0.00
18,000.0	90.00	359.45	11,475.0	6,586.1	208.8	6,588.7	0.00	0.00	0.00
18,100.0	90.00	359.45	11,475.0	6,686.1	207.9	6,688.7	0.00	0.00	0.00
18,200.0	90.00	359.45	11,475.0	6,786.1	206.9	6,788.7	0.00	0.00	0.00
18,300.0	90.00	359.45	11,475.0	6,886.1	206.0	6,888.6	0.00	0.00	0.00
18,400.0	90.00	359.45	11,475.0	6,986.1	205.0	6,988.6	0.00	0.00	0.00
18,500.0	90.00	359.45	11,475.0	7,086.1	204.1	7,088.6	0.00	0.00	0.00
18,600.0	90.00	359.45	11,475.0	7,186.1	203.1	7,188.5	0.00	0.00	0.00
18,700.0	90.00	359.45	11,475.0	7,286.1	202.2	7,288.5	0.00	0.00	0.00
18,800.0	90.00	359.45	11,475.0	7,386.1	201.2	7,388.5	0.00	0.00	0.00
18,900.0	90.00	359.45	11,475.0	7,486.1	200.3	7,488.4	0.00	0.00	0.00
19,000.0	90.00	359.45	11,475.0	7,586.1	199.3	7,588.4	0.00	0.00	0.00
19,100.0	90.00	359.45	11,475.0	7,686.1	198.4	7,688.4	0.00	0.00	0.00
19,200.0	90.00	359.45	11,475.0	7,786.1	197.4	7,788.3	0.00	0.00	0.00
19,300.0	90.00	359.45	11,475.0	7,886.1	196.5	7,888.3	0.00	0.00	0.00
19,400.0	90.00	359.45	11,475.0	7,986.1	195.5	7,988.2	0.00	0.00	0.00
19,500.0	90.00	359.45	11,475.0	8,086.1	194.5	8,088.2	0.00	0.00	0.00
19,600.0	90.00	359.45	11,475.0	8,186.1	193.6	8,188.2	0.00	0.00	0.00
19,700.0	90.00	359.45	11,475.0	8,286.1	192.6	8,288.1	0.00	0.00	0.00
19,800.0	90.00	359.45	11,475.0	8,386.0	191.7	8,388.1	0.00	0.00	0.00
19,900.0	90.00	359.45	11,475.0	8,486.0	190.7	8,488.1	0.00	0.00	0.00
20,000.0	90.00	359.45	11,475.0	8,586.0	189.8	8,588.0	0.00	0.00	0.00
20,100.0	90.00	359.45	11,475.0	8,686.0	188.8	8,688.0	0.00	0.00	0.00
20,200.0	90.00	359.45	11,475.0	8,786.0	187.9	8,788.0	0.00	0.00	0.00
20,300.0	90.00	359.45	11,475.0	8,886.0	186.9	8,887.9	0.00	0.00	0.00
20,400.0	90.00	359.45	11,475.0	8,986.0	186.0	8,987.9	0.00	0.00	0.00
20,500.0	90.00	359.45	11,475.0	9,086.0	185.0	9,087.9	0.00	0.00	0.00
20,600.0	90.00	359.45	11,475.0	9,186.0	184.1	9,187.8	0.00	0.00	0.00
20,700.0	90.00	359.45	11,475.0	9,286.0	183.1	9,287.8	0.00	0.00	0.00
20,800.0	90.00	359.45	11,475.0	9,386.0	182.2	9,387.7	0.00	0.00	0.00
20,900.0	90.00	359.45	11,475.0	9,486.0	181.2	9,487.7	0.00	0.00	0.00
21,000.0	90.00	359.45	11,475.0	9,586.0	180.3	9,587.7	0.00	0.00	0.00
21,100.0	90.00	359.45	11,475.0	9,686.0	179.3	9,687.6	0.00	0.00	0.00
21,200.0	90.00	359.45	11,475.0	9,786.0	178.3	9,787.6	0.00	0.00	0.00
21,300.0	90.00	359.45	11,475.0	9,886.0	177.4	9,887.6	0.00	0.00	0.00
21,400.0	90.00	359.45	11,475.0	9,986.0	176.4	9,987.5	0.00	0.00	0.00
21,446.0	90.00	359.45	11,475.0	10,032.0	176.0	10,033.5	0.00	0.00	0.00
HOLD - 130.0 at 21446.0 MD - LTP (Redbud State Com 25-36-32 #097H)									
21,500.0	90.00	359.45	11,475.0	10,086.0	175.5	10,087.5	0.00	0.00	0.00

Database:	EDM5000	Local Co-ordinate Reference:	Well Redbud State Com 25-36-32 #097H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3030.0usft (Rig)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3030.0usft (Rig)
Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
21,576.0	90.00	359.45	11,475.0	10,162.0	174.8	10,163.5	0.00	0.00	0.00
PBHL - 5.5" - PBHL (Redbud State Com 25-36-32 #097H)									

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 (Redbud State C - plan misses target center by 69.3usft at 11563.8usft MD (11423.3 TVD, 158.9 N, 232.8 E) - Point	0.00	0.00	11,475.0	133.0	271.0	394,609.00	867,348.00	32.0804874	-103.2807515
PBHL (Redbud State - plan misses target center by 0.2usft at 21576.0usft MD (11475.0 TVD, 10162.0 N, 174.8 E) - Point	0.00	0.00	11,475.0	10,162.0	175.0	404,638.00	867,252.00	32.1080546	-103.2807454
LTP (Redbud State C - plan hits target center - Point	0.00	0.00	11,475.0	10,032.0	176.0	404,508.00	867,253.00	32.1076973	-103.2807462

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,321.0	1,321.0	13.375"	13-3/8	17-1/2
5,139.2	5,135.0	9.625"	9-5/8	12-1/4
10,909.0	10,902.0	7.625"	7-5/8	8-3/4
21,576.0	11,475.0	5.5"	5-1/2	6-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,196.0	1,196.0	Rustler			
1,804.0	1,804.0	Salado			
3,353.7	3,352.0	Tansill			
5,089.1	5,085.0	Lamar			
5,118.1	5,114.0	Bell Canyon			
6,981.7	6,975.0	Brushy Canyon			
8,020.0	8,013.0	Bone Spring Lime			
9,507.0	9,500.0	First Bone Spring			
10,022.0	10,015.0	Second Bone Spring			
10,707.0	10,700.0	Third Bone Spring Upper			
11,378.9	11,321.0	Third Bone Spring			

Database:	EDM5000	Local Co-ordinate Reference:	Well Redbud State Com 25-36-32 #097H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3030.0usft (Rig)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3030.0usft (Rig)
Site:	(Redbud State) Sec32_T-25-S_R-26-E	North Reference:	Grid
Well:	Redbud State Com 25-36-32 #097H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	BUILD - 2.00
2,150.1	2,150.1	-2.6	3.0	HOLD - 4966.7 at 2150.1 MD
7,116.8	7,109.9	-172.4	200.0	DROP -2.00
7,267.0	7,260.0	-175.0	203.0	HOLD - 3642.0 at 7267.0 MD
10,909.0	10,902.0	-175.0	203.0	KOP - Build 10.00
11,809.0	11,475.0	395.7	253.9	EOC/TURN - DLS 2.00 TFO -90.00
12,091.3	11,475.0	677.7	265.1	HOLD - 9354.8 at 12091.3 MD
21,446.0	11,475.0	10,032.0	176.0	HOLD - 130.0 at 21446.0 MD
21,576.0	11,475.0	10,162.0	174.8	PBHL