



Tamaroa Development , LLC.

Chaves County,N.M.

Section 25-8S-28E Hellcat 2H

Hellcat 2H

Original Hole

Plan: Plan #3

Standard Planning Report

20 May, 2019



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Hellcat 2H
Company:	Tamaroa Development LLC	TVD Reference:	3943 + 20 @ 3963.0usft
Project:	Chaves County, N.M.	MD Reference:	3943 + 20 @ 3963.0usft
Site:	Section 25-8S-28E Hellcat 2H	North Reference:	Grid
Well:	Hellcat 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #3		

Project	Chaves County, N.M.		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Section 25-8S-28E Hellcat 2H		
Site Position:		Northing:	942,965.80 usft
From:	Map	Easting:	590,609.30 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	33° 35' 30.548 N
		Longitude:	104° 2' 8.830 W
		Grid Convergence:	0.16 °

Well	Hellcat 2H		
Well Position	+N/-S	0.0 usft	Northing: 942,965.80 usft
	+E/-W	0.0 usft	Easting: 590,609.30 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	20.0 usft
		Latitude:	33° 35' 30.548 N
		Longitude:	104° 2' 8.830 W
		Ground Level:	3,943.0 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	05/06/19	7.07
			Dip Angle
			61.20
			Field Strength
			48,494.56456061 (nT)

Design	Plan #3		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			356.16

Plan Survey Tool Program	Date	05/20/19		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.0	7,085.0	Plan #3 (Original Hole)	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,681.0	0.00	0.00	1,681.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,514.3	50.00	327.00	2,412.5	286.1	-185.8	6.00	6.00	0.00	327.00	
2,614.3	50.00	327.00	2,476.8	350.3	-227.5	0.00	0.00	0.00	0.00	
3,031.2	90.00	0.01	2,620.0	716.2	-320.4	12.00	9.59	7.92	45.30	
7,085.0	90.00	0.01	2,620.0	4,770.0	-320.0	0.00	0.00	0.00	0.00	PBHL HellCat 2H

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Site:	Section 25-8S-28E Hellcat 2H	North Reference:	Grid
Well:	Hellcat 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,681.0	0.00	0.00	1,681.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	1.14	327.00	1,700.0	0.2	-0.1	0.2	6.00	6.00	0.00
1,800.0	7.14	327.00	1,799.7	6.2	-4.0	6.5	6.00	6.00	0.00
1,900.0	13.14	327.00	1,898.1	21.0	-13.6	21.8	6.00	6.00	0.00
2,000.0	19.14	327.00	1,994.1	44.3	-28.8	46.1	6.00	6.00	0.00
2,100.0	25.14	327.00	2,086.7	75.9	-49.3	79.0	6.00	6.00	0.00
2,200.0	31.14	327.00	2,174.8	115.4	-74.9	120.2	6.00	6.00	0.00
2,300.0	37.14	327.00	2,257.6	162.4	-105.5	169.1	6.00	6.00	0.00
2,400.0	43.14	327.00	2,334.0	216.5	-140.6	225.4	6.00	6.00	0.00
2,500.0	49.14	327.00	2,403.2	276.9	-179.8	288.3	6.00	6.00	0.00
2,514.3	50.00	327.00	2,412.5	286.1	-185.8	297.9	6.00	6.00	0.00
2,600.0	50.00	327.00	2,467.6	341.1	-221.5	355.2	0.00	0.00	0.00
2,614.3	50.00	327.00	2,476.8	350.3	-227.5	364.8	0.00	0.00	0.00
2,700.0	57.57	335.64	2,527.4	410.9	-260.4	427.4	12.00	8.83	10.09
2,800.0	67.01	344.02	2,573.9	493.9	-290.6	512.3	12.00	9.45	8.38
2,900.0	76.84	351.28	2,605.0	586.7	-310.7	606.1	12.00	9.83	7.26
3,000.0	86.86	357.96	2,619.1	685.0	-319.9	704.9	12.00	10.02	6.69
3,031.2	90.00	0.01	2,620.0	716.2	-320.4	736.1	12.00	10.06	6.54
3,100.0	90.00	0.01	2,620.0	785.0	-320.4	804.7	0.00	0.00	0.00
3,200.0	90.00	0.01	2,620.0	885.0	-320.4	904.5	0.00	0.00	0.00
3,300.0	90.00	0.01	2,620.0	985.0	-320.4	1,004.3	0.00	0.00	0.00
3,400.0	90.00	0.01	2,620.0	1,085.0	-320.4	1,104.0	0.00	0.00	0.00
3,500.0	90.00	0.01	2,620.0	1,185.0	-320.4	1,203.8	0.00	0.00	0.00
3,600.0	90.00	0.01	2,620.0	1,285.0	-320.4	1,303.6	0.00	0.00	0.00
3,700.0	90.00	0.01	2,620.0	1,385.0	-320.4	1,403.4	0.00	0.00	0.00
3,800.0	90.00	0.01	2,620.0	1,485.0	-320.4	1,503.1	0.00	0.00	0.00
3,900.0	90.00	0.01	2,620.0	1,585.0	-320.3	1,602.9	0.00	0.00	0.00
4,000.0	90.00	0.01	2,620.0	1,685.0	-320.3	1,702.7	0.00	0.00	0.00
4,100.0	90.00	0.01	2,620.0	1,785.0	-320.3	1,802.5	0.00	0.00	0.00
4,200.0	90.00	0.01	2,620.0	1,885.0	-320.3	1,902.2	0.00	0.00	0.00
4,300.0	90.00	0.01	2,620.0	1,985.0	-320.3	2,002.0	0.00	0.00	0.00
4,400.0	90.00	0.01	2,620.0	2,085.0	-320.3	2,101.8	0.00	0.00	0.00
4,500.0	90.00	0.01	2,620.0	2,185.0	-320.3	2,201.6	0.00	0.00	0.00
4,600.0	90.00	0.01	2,620.0	2,285.0	-320.3	2,301.3	0.00	0.00	0.00
4,700.0	90.00	0.01	2,620.0	2,385.0	-320.3	2,401.1	0.00	0.00	0.00
4,800.0	90.00	0.01	2,620.0	2,485.0	-320.2	2,500.9	0.00	0.00	0.00
4,900.0	90.00	0.01	2,620.0	2,585.0	-320.2	2,600.7	0.00	0.00	0.00

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.0	90.00	0.01	2,620.0	2,685.0	-320.2	2,700.4	0.00	0.00	0.00
5,100.0	90.00	0.01	2,620.0	2,785.0	-320.2	2,800.2	0.00	0.00	0.00
5,200.0	90.00	0.01	2,620.0	2,885.0	-320.2	2,900.0	0.00	0.00	0.00
5,300.0	90.00	0.01	2,620.0	2,985.0	-320.2	2,999.8	0.00	0.00	0.00
5,400.0	90.00	0.01	2,620.0	3,085.0	-320.2	3,099.5	0.00	0.00	0.00
5,500.0	90.00	0.01	2,620.0	3,185.0	-320.2	3,199.3	0.00	0.00	0.00
5,600.0	90.00	0.01	2,620.0	3,285.0	-320.2	3,299.1	0.00	0.00	0.00
5,700.0	90.00	0.01	2,620.0	3,385.0	-320.1	3,398.9	0.00	0.00	0.00
5,800.0	90.00	0.01	2,620.0	3,485.0	-320.1	3,498.6	0.00	0.00	0.00
5,900.0	90.00	0.01	2,620.0	3,585.0	-320.1	3,598.4	0.00	0.00	0.00
6,000.0	90.00	0.01	2,620.0	3,685.0	-320.1	3,698.2	0.00	0.00	0.00
6,100.0	90.00	0.01	2,620.0	3,785.0	-320.1	3,798.0	0.00	0.00	0.00
6,200.0	90.00	0.01	2,620.0	3,885.0	-320.1	3,897.7	0.00	0.00	0.00
6,300.0	90.00	0.01	2,620.0	3,985.0	-320.1	3,997.5	0.00	0.00	0.00
6,400.0	90.00	0.01	2,620.0	4,085.0	-320.1	4,097.3	0.00	0.00	0.00
6,500.0	90.00	0.01	2,620.0	4,185.0	-320.1	4,197.1	0.00	0.00	0.00
6,600.0	90.00	0.01	2,620.0	4,285.0	-320.1	4,296.8	0.00	0.00	0.00
6,700.0	90.00	0.01	2,620.0	4,385.0	-320.0	4,396.6	0.00	0.00	0.00
6,800.0	90.00	0.01	2,620.0	4,485.0	-320.0	4,496.4	0.00	0.00	0.00
6,900.0	90.00	0.01	2,620.0	4,585.0	-320.0	4,596.2	0.00	0.00	0.00
7,000.0	90.00	0.01	2,620.0	4,685.0	-320.0	4,695.9	0.00	0.00	0.00
7,085.0	90.00	0.01	2,620.0	4,770.0	-320.0	4,780.7	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL HellCat 2H	0.00	0.00	2,620.0	4,770.0	-320.0	947,735.80	590,289.30	33° 36' 17.752 N	104° 2' 12.452 W
- hit/miss target									
- Shape									
- plan hits target center									
- Point									