

CORPORATION

Apache Corporation

Location: Eddy County, NM
 Field: Eddy County, NM NAD83
 Facility: Thunderbird Pad

Slot: Thunderbird No. 15H
 Well: Thunderbird No. 15H
 Wellbore: Thunderbird No. 15H



30-015-44598

Well Profile Data

Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS ("/100ft)	VS (ft)
Tie On	25.00	0.000	269.410	25.00	0.00	0.00	0.00	0.00
End of Tangent	4213.05	0.000	269.410	4213.05	0.00	0.00	0.00	0.00
End of Build	5108.80	89.574	269.410	4786.00	-5.85	-568.67	10.00	568.70
End of Tangent	9145.19	89.574	269.410	4816.00	-47.40	-4604.74	0.00	4604.99

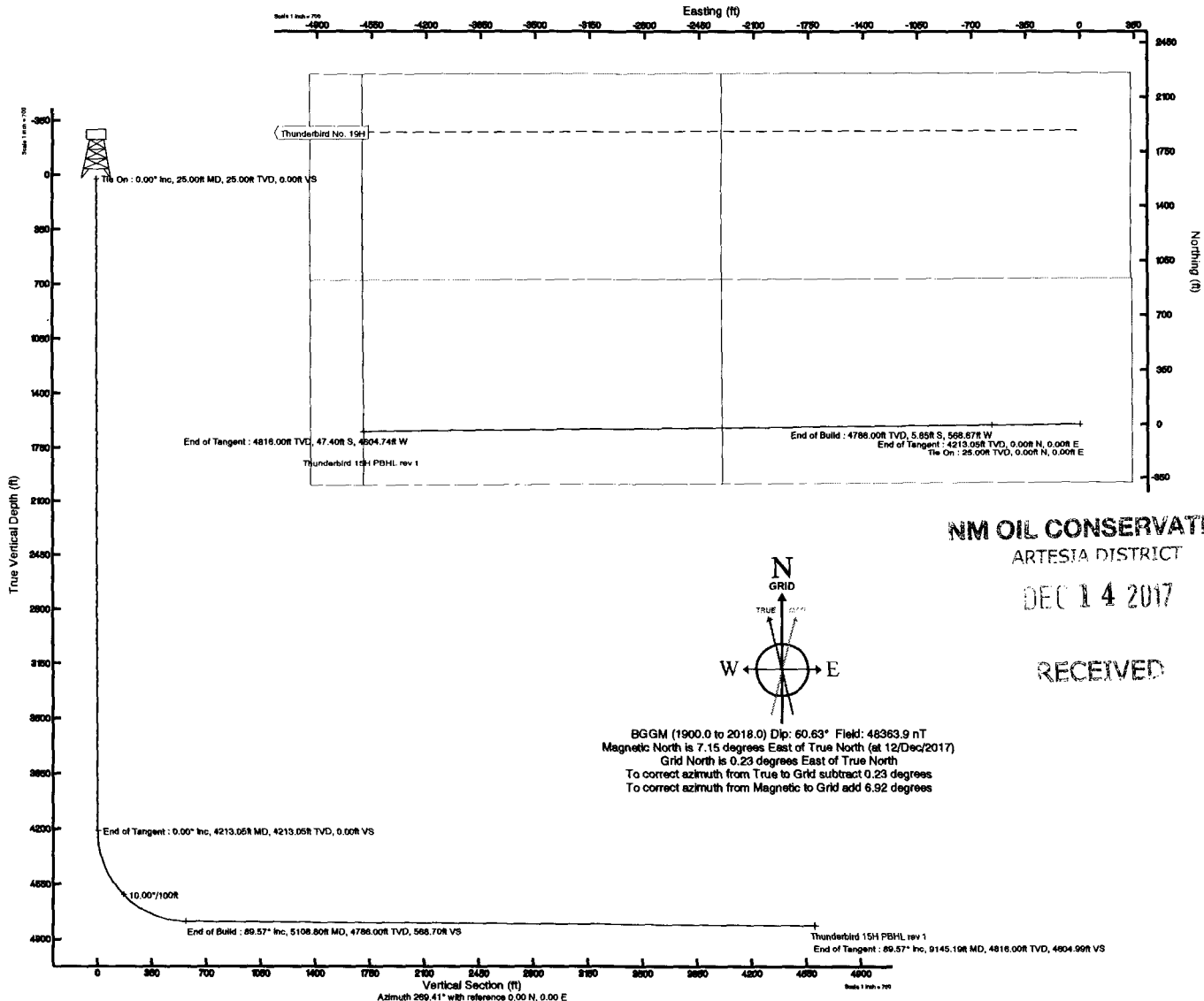
Bottom Hole Location

MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
9145.19	89.574	269.410	4816.00	-47.40	-4604.74	664291.10	681098.40	32°52'18.190"N	103°55'58.295"W

Plot reference wellpath is Thunderbird No. 15H Prelim 1
 Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
 True vertical depths are referenced to Rig on Thunderbird No. 15H (KB)
 North Reference: Grid north
 Measured depths are referenced to Rig on Thunderbird No. 15H (KB)
 Scale: True distance
 Rig on Thunderbird No. 15H (KB) to Mean Sea Level: 3841 feet
 Depths are in feet
 Mean Sea Level to Ground level (At Slot: Thunderbird No. 15H): -3816 feet
 Created by: bulduyh on 2017-12-12
 Coordinates are in feet referenced to Slot
 Database: WellArchitectDB

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Thunderbird Pad	668895.500	681145.800	32°52'18.483"N	103°55'04.305"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Thunderbird No. 15H	0.00	0.00	668895.500	681145.800	32°52'18.483"N	103°55'04.305"W
Rig on Thunderbird No. 15H (KB) to Ground level (At Slot: Thunderbird No. 15H)					25ft	
Mean Sea Level to Ground level (At Slot: Thunderbird No. 15H)					-3816ft	
Rig on Thunderbird No. 15H (KB) to Mean Sea Level					3841ft	



Planned Wellpath Report

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CORPORATION



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RECEIVED

REFERENCE WELLPATH IDENTIFICATION

Operator	Apache Corporation	Slot	Thunderbird No. 15H
Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect@ 5.1
North Reference	Grid	User	Buiduyh
Scale	0.999928	Report Generated	12/Dec/2017 at 15:24
Convergence at slot	0.23° East	Database/Source file	WellArchitectDB/Thunderbird_No_15H_Prelim_1.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	668895.50	681145.80	32°52'18.483"N	103°55'04.305"W
Facility Reference Pt			668895.50	681145.80	32°52'18.483"N	103°55'04.305"W
Field Reference Pt			165000.00	0.00	30°59'39.893"N	105°32'03.866"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on Thunderbird No. 15H (KB) to Facility Vertical Datum	3841.00ft
Horizontal Reference Pt	Slot	Rig on Thunderbird No. 15H (KB) to Mean Sea Level	3841.00ft
Vertical Reference Pt	Rig on Thunderbird No. 15H (KB)	Rig on Thunderbird No. 15H (KB) to Ground Level at Slot (Thunderbird No. 15H)	25.00ft
MD Reference Pt	Rig on Thunderbird No. 15H (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.41°



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Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

WELLPATH DATA (107 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [F/100ft]	Build Rate [F/100ft]	Turn Rate [F/100ft]	Comments
0.00†	0.000	269.410	0.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
25.00	0.000	269.410	25.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Tie On
125.00†	0.000	269.410	125.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
225.00†	0.000	269.410	225.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
325.00†	0.000	269.410	325.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
425.00†	0.000	269.410	425.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
444.00†	0.000	269.410	444.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Salado
525.00†	0.000	269.410	525.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
725.00†	0.000	269.410	725.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
825.00†	0.000	269.410	825.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
925.00†	0.000	269.410	925.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1025.00†	0.000	269.410	1025.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1225.00†	0.000	269.410	1225.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1325.00†	0.000	269.410	1325.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1352.00†	0.000	269.410	1352.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Tansill
1425.00†	0.000	269.410	1425.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1525.00†	0.000	269.410	1525.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1625.00†	0.000	269.410	1625.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1725.00†	0.000	269.410	1725.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
1780.00†	0.000	269.410	1780.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Seven Rivers
1925.00†	0.000	269.410	1925.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2025.00†	0.000	269.410	2025.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2125.00†	0.000	269.410	2125.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2225.00†	0.000	269.410	2225.00	0.00	0.00	0.00	688895.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	

Planned Wellpath Report

Thunderbird No. 15H Prelim 1
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CORPORATION

REFERENCE WELLPATH IDENTIFICATION

Operator	Apache Corporation	Slot	Thunderbird No. 15H
Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

WELLPATH DATA (107 stations) † = interpolated/extrapolated station

MD (ft)	Inclination [°]	Azimuth [°]	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
2378.00†	0.000	269.410	2378.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Queen
2425.00†	0.000	269.410	2425.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2525.00†	0.000	269.410	2525.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2625.00†	0.000	269.410	2625.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2794.00†	0.000	269.410	2794.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	Grayburg
2825.00†	0.000	269.410	2825.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
2925.00†	0.000	269.410	2925.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3025.00†	0.000	269.410	3025.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3125.00†	0.000	269.410	3125.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3225.00†	0.000	269.410	3225.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3325.00†	0.000	269.410	3325.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3425.00†	0.000	269.410	3425.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3625.00†	0.000	269.410	3625.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3725.00†	0.000	269.410	3725.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3825.00†	0.000	269.410	3825.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
3925.00†	0.000	269.410	3925.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
4125.00†	0.000	269.410	4125.00	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	
4213.05	0.000	269.410	4213.05	0.00	0.00	0.00	688995.50	681145.80	32°52'18.483"N	103°55'04.305"W	0.00	0.00	0.00	End of Tangent
4225.00†	1.195	269.410	4225.00	0.12	0.00	-0.12	688995.38	681145.80	32°52'18.483"N	103°55'04.306"W	10.00	10.00	-758.35	
4325.00†	11.195	269.410	4324.29	10.90	-0.11	-10.90	688984.60	681145.69	32°52'18.483"N	103°55'04.432"W	10.00	10.00	0.00	
4525.00†	31.195	269.410	4509.82	82.84	-0.85	-82.84	688812.67	681144.95	32°52'18.476"N	103°55'05.276"W	10.00	10.00	0.00	
4552.51†	33.946	269.410	4533.00	97.65	-1.01	-97.65	688797.86	681144.79	32°52'18.477"N	103°55'05.449"W	10.00	10.00	0.00	Glorieta
4625.00†	41.195	269.410	4590.41	141.82	-1.46	-141.81	688753.70	681144.34	32°52'18.474"N	103°55'05.967"W	10.00	10.00	0.00	
4637.87†	42.481	269.410	4600.00	150.40	-1.55	-150.39	688745.12	681144.25	32°52'18.474"N	103°55'06.068"W	10.00	10.00	0.00	Paddock



Planned Wellpath Report

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Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

WELLPATH DATA (107 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
4825.00†	61.195	269.410	4715.11	296.89	-3.06	-296.87	668598.65	681142.74	32°52'18.464"N	103°55'07.785"W	10.00	10.00	0.00	
4925.00†	71.195	269.410	4755.43	388.26	-4.00	-388.24	668507.29	681141.80	32°52'18.459"N	103°55'08.857"W	10.00	10.00	0.00	
5025.00†	81.195	269.410	4779.26	485.25	-5.00	-485.22	668410.31	681140.81	32°52'18.453"N	103°55'09.994"W	10.00	10.00	0.00	
5108.80	89.574	269.410	4786.00	568.70	-5.85	-568.67	668326.87	681139.95	32°52'18.447"N	103°55'10.972"W	10.00	10.00	0.00	End of Build
5125.00†	89.574	269.410	4786.12	584.90	-6.02	-584.87	668310.67	681139.78	32°52'18.446"N	103°55'11.162"W	0.00	0.00	0.00	
5225.00†	89.574	269.410	4786.86	684.90	-7.05	-684.86	668210.69	681138.75	32°52'18.440"N	103°55'12.335"W	0.00	0.00	0.00	
5325.00†	89.574	269.410	4787.60	784.90	-8.08	-784.86	668110.70	681137.72	32°52'18.434"N	103°55'13.507"W	0.00	0.00	0.00	
5425.00†	89.574	269.410	4788.35	884.89	-9.11	-884.85	668010.72	681136.69	32°52'18.427"N	103°55'14.679"W	0.00	0.00	0.00	
5625.00†	89.574	269.410	4789.83	1084.89	-11.17	-1084.83	667810.75	681134.63	32°52'18.415"N	103°55'17.024"W	0.00	0.00	0.00	
5725.00†	89.574	269.410	4790.58	1184.89	-12.20	-1184.82	667710.76	681133.60	32°52'18.408"N	103°55'18.197"W	0.00	0.00	0.00	
5825.00†	89.574	269.410	4791.32	1284.88	-13.23	-1284.82	667610.78	681132.57	32°52'18.402"N	103°55'19.369"W	0.00	0.00	0.00	
5925.00†	89.574	269.410	4792.06	1384.88	-14.26	-1384.81	667510.80	681131.55	32°52'18.396"N	103°55'20.541"W	0.00	0.00	0.00	
6125.00†	89.574	269.410	4793.55	1584.88	-16.31	-1584.79	667310.83	681129.49	32°52'18.383"N	103°55'22.886"W	0.00	0.00	0.00	
6225.00†	89.574	269.410	4794.29	1684.87	-17.34	-1684.78	667210.84	681128.46	32°52'18.377"N	103°55'24.059"W	0.00	0.00	0.00	
6325.00†	89.574	269.410	4795.04	1784.87	-18.37	-1784.78	667110.86	681127.43	32°52'18.370"N	103°55'25.231"W	0.00	0.00	0.00	
6425.00†	89.574	269.410	4795.78	1884.87	-19.40	-1884.77	667010.87	681126.40	32°52'18.364"N	103°55'26.403"W	0.00	0.00	0.00	
6625.00†	89.574	269.410	4797.27	2084.86	-21.46	-2084.75	666810.90	681124.34	32°52'18.351"N	103°55'28.748"W	0.00	0.00	0.00	
6725.00†	89.574	269.410	4798.01	2184.86	-22.49	-2184.74	666710.92	681123.31	32°52'18.345"N	103°55'29.921"W	0.00	0.00	0.00	
6825.00†	89.574	269.410	4798.75	2284.86	-23.52	-2284.74	666610.93	681122.28	32°52'18.339"N	103°55'31.093"W	0.00	0.00	0.00	
6925.00†	89.574	269.410	4799.50	2384.85	-24.55	-2384.73	666510.95	681121.25	32°52'18.332"N	103°55'32.265"W	0.00	0.00	0.00	
7125.00†	89.574	269.410	4800.98	2584.85	-26.61	-2584.71	666310.98	681119.19	32°52'18.320"N	103°55'34.610"W	0.00	0.00	0.00	
7225.00†	89.574	269.410	4801.73	2684.85	-27.64	-2684.70	666211.00	681118.16	32°52'18.313"N	103°55'35.783"W	0.00	0.00	0.00	
7325.00†	89.574	269.410	4802.47	2784.84	-28.67	-2784.69	666111.01	681117.14	32°52'18.307"N	103°55'36.955"W	0.00	0.00	0.00	
7425.00†	89.574	269.410	4803.21	2884.84	-29.70	-2884.69	666011.03	681116.11	32°52'18.300"N	103°55'38.127"W	0.00	0.00	0.00	



Planned Wellpath Report

Thunderbird No. 15H Prelim 1

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CORPORATION

REFERENCE WELLPATH IDENTIFICATION

Operator	Apache Corporation	Slot	Thunderbird No. 15H
Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

WELLPATH DATA (107 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
7625.00†	89.574269.410	4804.70	3084.83	31.76	-3084.67	665811.06	681114.05	32°52'18.288"N	103°55'40.472"W	0.00	0.00	0.00		
7725.00†	89.574269.410	4805.44	3184.83	32.78	-3184.66	665711.07	681113.02	32°52'18.281"N	103°55'41.645"W	0.00	0.00	0.00		
7825.00†	89.574269.410	4806.19	3284.83	33.81	-3284.65	665611.09	681111.99	32°52'18.275"N	103°55'42.817"W	0.00	0.00	0.00		
7925.00†	89.574269.410	4806.93	3384.83	34.84	-3384.65	665511.10	681110.96	32°52'18.269"N	103°55'43.989"W	0.00	0.00	0.00		
8125.00†	89.574269.410	4808.42	3584.82	36.90	-3584.63	665311.14	681108.90	32°52'18.256"N	103°55'46.334"W	0.00	0.00	0.00		
8225.00†	89.574269.410	4809.16	3684.82	37.93	-3684.62	665211.15	681107.87	32°52'18.249"N	103°55'47.507"W	0.00	0.00	0.00		
8325.00†	89.574269.410	4809.90	3784.81	38.96	-3784.61	665111.17	681106.84	32°52'18.243"N	103°55'48.679"W	0.00	0.00	0.00		
8425.00†	89.574269.410	4810.65	3884.81	39.99	-3884.61	665011.18	681105.81	32°52'18.236"N	103°55'49.851"W	0.00	0.00	0.00		
8625.00†	89.574269.410	4812.13	4084.81	42.05	-4084.59	664811.21	681103.75	32°52'18.224"N	103°55'52.196"W	0.00	0.00	0.00		
8725.00†	89.574269.410	4812.88	4184.80	43.08	-4184.58	664711.23	681102.73	32°52'18.217"N	103°55'53.369"W	0.00	0.00	0.00		
8825.00†	89.574269.410	4813.62	4284.80	44.11	-4284.57	664611.24	681101.70	32°52'18.211"N	103°55'54.541"W	0.00	0.00	0.00		
8925.00†	89.574269.410	4814.36	4384.80	45.14	-4384.57	664511.26	681100.67	32°52'18.204"N	103°55'55.713"W	0.00	0.00	0.00		
9125.00†	89.574269.410	4815.85	4584.79	47.20	-4584.55	664311.29	681098.61	32°52'18.192"N	103°55'58.058"W	0.00	0.00	0.00		
9145.19	89.574269.410	4816.00	4604.99	47.40	-4604.74	664291.10	681098.40	32°52'18.190"N	103°55'58.295"W	0.00	0.00	0.00	End of Tangent; Paddock LZ_Base	

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Thunderbird 15H PBHL rev 1	9145.19	4816.00	-47.40	-4604.74	664291.10	681098.40	32°52'18.190"N	103°55'58.295"W	point

Planned Wellpath Report

Thunderbird No. 15H Prelim 1
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CORPORATION

REFERENCE WELLPATH IDENTIFICATION

Operator	Apache Corporation	Slot	Thunderbird No. 15H
Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

SURVEY PROGRAM - Ref Wellbore: Thunderbird No. 15H Ref Wellpath: Thunderbird No. 15H Prelim 1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	9145.19	BHI NaviTrak (Standard)		Thunderbird No. 15H

Planned Wellpath Report

Thunderbird No. 15H Prelim 1
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CORPORATION

REFERENCE WELLPATH IDENTIFICATION

Operator	Apache Corporation	Slot	Thunderbird No. 15H
Area	Eddy County, NM	Well	Thunderbird No. 15H
Field	Eddy County, NM NAD83	Wellbore	Thunderbird No. 15H
Facility	Thunderbird Pad		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
286.00	0.000	269.410	286.00	Rustler
444.00	0.000	269.410	444.00	Salado
1352.00	0.000	269.410	1352.00	Tansill
1508.00	0.000	269.410	1508.00	Yates
1780.00	0.000	269.410	1780.00	Seven Rivers
2378.00	0.000	269.410	2378.00	Queen
2794.00	0.000	269.410	2794.00	Grayburg
3098.00	0.000	269.410	3098.00	San Andres
4552.51	33.946	269.410	4533.00	Glorieta
4637.87	42.481	269.410	4600.00	Paddock
5109.30	89.574	269.410	4786.00	Paddock LZ_Top
9145.19	89.574	269.410	4816.00	Paddock LZ_Base