

Location:	ARIZONA	Slot:	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Field:	WELD COUNTY (NAD83/TN)	Well:	STATE 02-63-16-1H
Facility:	SEC.16-T02N-R63W	Wellbore:	STATE 02-63-16-1H PWB

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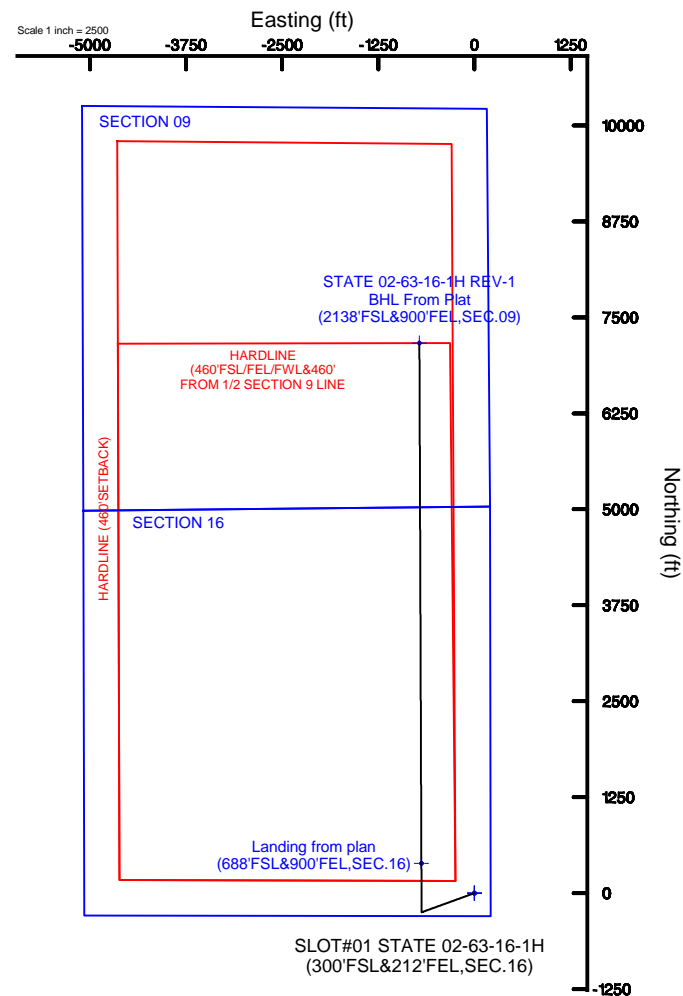
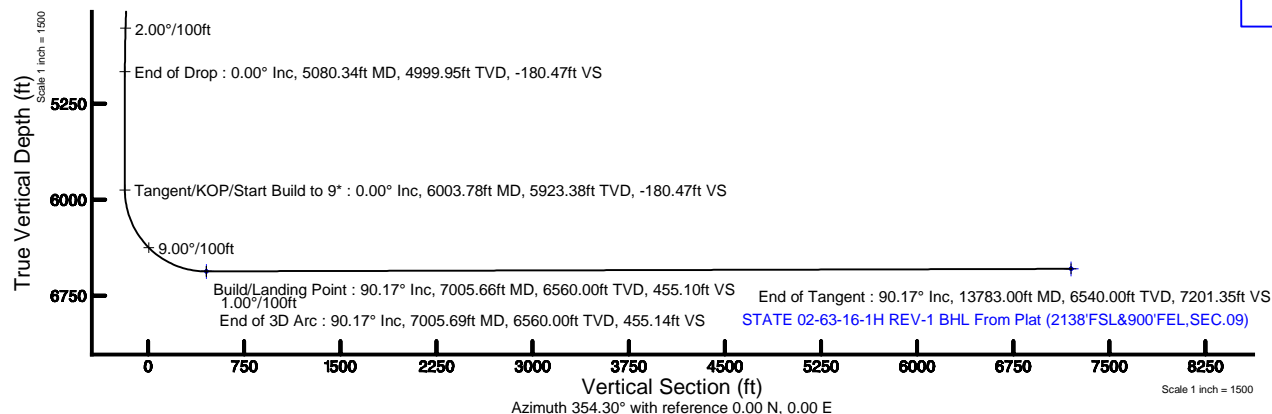
True vertical depths are referenced to RIG (RKB)	* = Welpath was transformed from a different geoidic datum
Measured depths are referenced to RIG (RKB)	North Reference: True north
RIG (RKB) to Mean Sea Level: 4775 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOTR#01 STATE 02-63-16-1H (300FSL&212FEL,SEC.16)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: guenaler on 2016-05-13
	Database: WA_DFN_Deriver_Data

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.16-T02N-R63W			3298145.308	1292713.015	40°07'55.092"N	104°26'01.284"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 STATE 02-63-16-1H (300°FLA212FEL,SEC.16)	0.00	0.00	3298145.308	1292713.015	40°07'55.092"N	104°26'01.284"W
RIG (RKB) to Ground level (At Slot: SLOT#01 STATE 02-63-16-1H (300°FLA212FEL,SEC.16))					4775ft	
Mean Sea Level to Ground level (At Slot: SLOT#01 STATE 02-63-16-1H (300°FLA212FEL,SEC.16))					0ft	
RIG (RKB) to Mean Sea Level					4775ft	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	250.020	0.00	0.00	0.00	0.00	0.00
Tangent/Start Build/KOP #1	1200.00	0.000	250.020	1200.00	0.00	0.00	0.00	0.00
End of Build	2115.33	13.730	250.020	2106.60	-37.30	-102.58	1.50	-26.92
Tangent/Start Drop	4393.84	13.730	250.020	4329.00	-222.08	-610.83	0.00	-160.28
End of Drop	5080.34	0.000	359.785	4999.95	-250.05	-687.76	2.00	-180.47
Tangent/KOP/Start Build to 9"	6003.78	0.000	359.785	5923.38	-250.05	-687.76	0.00	-180.47
Build/Landing Point	7005.66	90.169	359.785	6560.00	388.44	-690.16	9.00	455.10
End of 3D Arc	7005.69	90.169	359.785	6560.00	388.48	-690.16	1.00	455.14
End of Tangent	13783.00	90.169	359.785	6540.00	7165.71	-715.63	0.00	7201.35

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SECTION 09	0.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	
SECTION 16	0.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	
STATE 02-63-16-1H REV-1 BHL From Plat (2138FSL&000FEL,SEC.09)	13783.00	6540.00	7165.71	-715.83	3297343.60	3298669.29	40°09'05.904"N	104°26'10.500"W
HARDLINE (460FSL&FEL&0FROM 12 SECTION 3 LINE	6560.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	
HARDLINE (460SETBACK)	6560.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	
STATE 02-63-16-1H Landing from plat (688FSL&000FEL,SEC.16)	6560.00	384.30	-689.30	3297451.42	1293092.98	40°07'58.929"N	104°26'10.159"W	

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
13783.00	90.169	359.785	6540.00	7165.71	-715.63	3297343.60	1299869.29	40°09'05.904"N	104°26'10.500"W



BGGM (1945.0 to 2017.0) Dip: 66.79° Field: 52439.1 nT
Magnetic North is 8.26 degrees East of True North (at 5/13/2016)

To correct azimuth from Magnetic to True add 8.26 degrees



Planned Wellpath Report

STATE 02-63-16-1H (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	ARIZONA	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Guenaler
Scale	0.999959	Report Generated	5/13/2016 at 5:34:20 PM
Convergence at slot	0.69° East	Database/Source file	WA_DEN_Denver_Defn/STATE_02-63-16-1H__REV-A.0__PWP.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	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W
Facility Reference Pt			3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W
Field Reference Pt			3242930.13	1254608.21	40°01'44.490"N	104°37'56.946"W

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (RKB) to Facility Vertical Datum	4775.00ft
Horizontal Reference Pt	Slot	RIG (RKB) to Mean Sea Level	4775.00ft
Vertical Reference Pt	RIG (RKB)	RIG (RKB) to Ground Level at Slot (SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16))	4775.00ft
MD Reference Pt	RIG (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	354.30°



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Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	250.020	0.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	Tie On
100.00†	0.000	250.020	100.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
200.00†	0.000	250.020	200.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
300.00†	0.000	250.020	300.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
400.00†	0.000	250.020	400.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
500.00†	0.000	250.020	500.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
600.00†	0.000	250.020	600.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
700.00†	0.000	250.020	700.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
800.00†	0.000	250.020	800.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
900.00†	0.000	250.020	900.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
1000.00†	0.000	250.020	1000.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
1100.00†	0.000	250.020	1100.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	
1200.00	0.000	250.020	1200.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.284"W	0.00	Tangent/Start Build/KOP #1
1300.00†	1.500	250.020	1299.99	-0.32	-0.45	-1.23	40°07'55.088"N	104°26'01.300"W	1.50	
1400.00†	3.000	250.020	1399.91	-1.29	-1.79	-4.92	40°07'55.074"N	104°26'01.347"W	1.50	
1500.00†	4.500	250.020	1499.69	-2.90	-4.02	-11.07	40°07'55.052"N	104°26'01.426"W	1.50	
1600.00†	6.000	250.020	1599.27	-5.16	-7.15	-19.67	40°07'55.021"N	104°26'01.537"W	1.50	
1700.00†	7.500	250.020	1698.57	-8.06	-11.17	-30.71	40°07'54.982"N	104°26'01.679"W	1.50	
1800.00†	9.000	250.020	1797.54	-11.60	-16.07	-44.20	40°07'54.933"N	104°26'01.853"W	1.50	
1900.00†	10.500	250.020	1896.09	-15.77	-21.86	-60.11	40°07'54.876"N	104°26'02.058"W	1.50	
2000.00†	12.000	250.020	1994.16	-20.58	-28.52	-78.45	40°07'54.810"N	104°26'02.294"W	1.50	
2100.00†	13.500	250.020	2091.70	-26.03	-36.06	-99.19	40°07'54.736"N	104°26'02.561"W	1.50	
2115.33	13.730	250.020	2106.60	-26.92	-37.30	-102.58	40°07'54.723"N	104°26'02.605"W	1.50	End of Build
2200.00†	13.730	250.020	2188.85	-31.87	-44.16	-121.46	40°07'54.656"N	104°26'02.848"W	0.00	
2300.00†	13.730	250.020	2285.99	-37.73	-52.27	-143.77	40°07'54.575"N	104°26'03.135"W	0.00	
2400.00†	13.730	250.020	2383.13	-43.58	-60.38	-166.08	40°07'54.495"N	104°26'03.422"W	0.00	
2500.00†	13.730	250.020	2480.27	-49.43	-68.49	-188.38	40°07'54.415"N	104°26'03.709"W	0.00	
2600.00†	13.730	250.020	2577.42	-55.29	-76.60	-210.69	40°07'54.335"N	104°26'03.997"W	0.00	
2700.00†	13.730	250.020	2674.56	-61.14	-84.71	-233.00	40°07'54.255"N	104°26'04.284"W	0.00	
2800.00†	13.730	250.020	2771.70	-66.99	-92.82	-255.30	40°07'54.175"N	104°26'04.571"W	0.00	



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Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2900.00†	13.730	250.020	2868.84	-72.84	-100.93	-277.61	40°07'54.095"N	104°26'04.858"W	0.00	
3000.00†	13.730	250.020	2965.99	-78.70	-109.04	-299.91	40°07'54.014"N	104°26'05.145"W	0.00	
3100.00†	13.730	250.020	3063.13	-84.55	-117.15	-322.22	40°07'53.934"N	104°26'05.432"W	0.00	
3200.00†	13.730	250.020	3160.27	-90.40	-125.26	-344.53	40°07'53.854"N	104°26'05.720"W	0.00	
3300.00†	13.730	250.020	3257.41	-96.26	-133.37	-366.83	40°07'53.774"N	104°26'06.007"W	0.00	
3400.00†	13.730	250.020	3354.56	-102.11	-141.48	-389.14	40°07'53.694"N	104°26'06.294"W	0.00	
3500.00†	13.730	250.020	3451.70	-107.96	-149.59	-411.44	40°07'53.614"N	104°26'06.581"W	0.00	
3600.00†	13.730	250.020	3548.84	-113.82	-157.70	-433.75	40°07'53.534"N	104°26'06.868"W	0.00	
3700.00†	13.730	250.020	3645.98	-119.67	-165.81	-456.06	40°07'53.453"N	104°26'07.155"W	0.00	
3800.00†	13.730	250.020	3743.13	-125.52	-173.92	-478.36	40°07'53.373"N	104°26'07.443"W	0.00	
3900.00†	13.730	250.020	3840.27	-131.38	-182.03	-500.67	40°07'53.293"N	104°26'07.730"W	0.00	
4000.00†	13.730	250.020	3937.41	-137.23	-190.14	-522.98	40°07'53.213"N	104°26'08.017"W	0.00	
4100.00†	13.730	250.020	4034.55	-143.08	-198.25	-545.28	40°07'53.133"N	104°26'08.304"W	0.00	
4200.00†	13.730	250.020	4131.70	-148.94	-206.36	-567.59	40°07'53.053"N	104°26'08.591"W	0.00	
4300.00†	13.730	250.020	4228.84	-154.79	-214.47	-589.89	40°07'52.973"N	104°26'08.878"W	0.00	
4393.84	13.730	250.020	4320.00	-160.28	-222.08	-610.83	40°07'52.897"N	104°26'09.148"W	0.00	Tangent/Start Drop
4400.00†	13.607	250.020	4325.98	-160.64	-222.58	-612.19	40°07'52.892"N	104°26'09.166"W	2.00	
4500.00†	11.607	250.020	4423.57	-166.02	-230.04	-632.71	40°07'52.819"N	104°26'09.430"W	2.00	
4600.00†	9.607	250.020	4521.85	-170.56	-236.32	-650.00	40°07'52.757"N	104°26'09.652"W	2.00	
4700.00†	7.607	250.020	4620.72	-174.25	-241.44	-664.07	40°07'52.706"N	104°26'09.833"W	2.00	
4800.00†	5.607	250.020	4720.05	-177.09	-245.37	-674.88	40°07'52.667"N	104°26'09.973"W	2.00	
4900.00†	3.607	250.020	4819.72	-179.07	-248.11	-682.43	40°07'52.640"N	104°26'10.070"W	2.00	
5000.00†	1.607	250.020	4919.62	-180.19	-249.67	-686.70	40°07'52.625"N	104°26'10.125"W	2.00	
5080.34	0.000	359.785	4999.95	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	2.00	End of Drop
5100.00†	0.000	359.785	5019.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5200.00†	0.000	359.785	5119.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5300.00†	0.000	359.785	5219.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5400.00†	0.000	359.785	5319.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5500.00†	0.000	359.785	5419.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5600.00†	0.000	359.785	5519.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	



Planned Wellpath Report

STATE 02-63-16-1H (REV-A.0) PWP

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Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5700.00†	0.000	359.785	5619.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5800.00†	0.000	359.785	5719.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
5900.00†	0.000	359.785	5819.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
6000.00†	0.000	359.785	5919.60	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	
6003.78	0.000	359.785	5923.38	-180.47	-250.05	-687.76	40°07'52.621"N	104°26'10.138"W	0.00	Tangent/KOP/Start Build to 9*
6100.00†	8.660	359.785	6019.24	-173.24	-242.79	-687.79	40°07'52.693"N	104°26'10.139"W	9.00	
6200.00†	17.660	359.785	6116.51	-150.61	-220.05	-687.87	40°07'52.917"N	104°26'10.140"W	9.00	
6300.00†	26.660	359.785	6209.03	-113.10	-182.37	-688.02	40°07'53.290"N	104°26'10.142"W	9.00	
6400.00†	35.660	359.785	6294.52	-61.64	-130.68	-688.21	40°07'53.800"N	104°26'10.144"W	9.00	
6500.00†	44.660	359.785	6370.86	2.49	-66.26	-688.45	40°07'54.437"N	104°26'10.147"W	9.00	
6600.00†	53.660	359.785	6436.19	77.72	9.32	-688.73	40°07'55.184"N	104°26'10.151"W	9.00	
6700.00†	62.660	359.785	6488.89	162.19	94.18	-689.05	40°07'56.023"N	104°26'10.155"W	9.00	
6800.00†	71.660	359.785	6527.67	253.83	186.25	-689.40	40°07'56.932"N	104°26'10.160"W	9.00	
6900.00†	80.660	359.785	6551.56	350.39	283.24	-689.76	40°07'57.891"N	104°26'10.164"W	9.00	
7000.00†	89.660	359.785	6559.99	449.47	382.78	-690.14	40°07'58.875"N	104°26'10.169"W	9.00	
7005.66	90.169	359.785	6560.00	455.10	388.44	-690.16	40°07'58.931"N	104°26'10.170"W	9.00	Build/Landing Point
7005.69	90.169	359.785	6560.00	455.14	388.48	-690.16	40°07'58.931"N	104°26'10.170"W	1.00	End of 3D Arc
7100.00†	90.169	359.785	6559.72	549.01	482.78	-690.51	40°07'59.863"N	104°26'10.174"W	0.00	
7200.00†	90.169	359.785	6559.43	648.55	582.78	-690.89	40°08'00.851"N	104°26'10.179"W	0.00	
7300.00†	90.169	359.785	6559.13	748.10	682.78	-691.26	40°08'01.839"N	104°26'10.184"W	0.00	
7400.00†	90.169	359.785	6558.84	847.64	782.78	-691.64	40°08'02.827"N	104°26'10.189"W	0.00	
7500.00†	90.169	359.785	6558.54	947.18	882.78	-692.01	40°08'03.816"N	104°26'10.194"W	0.00	
7600.00†	90.169	359.785	6558.25	1046.72	982.78	-692.39	40°08'04.804"N	104°26'10.199"W	0.00	
7700.00†	90.169	359.785	6557.95	1146.26	1082.78	-692.77	40°08'05.792"N	104°26'10.203"W	0.00	
7800.00†	90.169	359.785	6557.66	1245.80	1182.78	-693.14	40°08'06.780"N	104°26'10.208"W	0.00	
7900.00†	90.169	359.785	6557.36	1345.34	1282.77	-693.52	40°08'07.768"N	104°26'10.213"W	0.00	
8000.00†	90.169	359.785	6557.07	1444.88	1382.77	-693.89	40°08'08.757"N	104°26'10.218"W	0.00	
8100.00†	90.169	359.785	6556.77	1544.42	1482.77	-694.27	40°08'09.745"N	104°26'10.223"W	0.00	
8200.00†	90.169	359.785	6556.48	1643.97	1582.77	-694.65	40°08'10.733"N	104°26'10.228"W	0.00	
8300.00†	90.169	359.785	6556.18	1743.51	1682.77	-695.02	40°08'11.721"N	104°26'10.233"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	ARIZONA	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8400.00†	90.169	359.785	6555.89	1843.05	1782.77	-695.40	40°08'12.709"N	104°26'10.238"W	0.00	
8500.00†	90.169	359.785	6555.59	1942.59	1882.77	-695.77	40°08'13.698"N	104°26'10.242"W	0.00	
8600.00†	90.169	359.785	6555.30	2042.13	1982.77	-696.15	40°08'14.686"N	104°26'10.247"W	0.00	
8700.00†	90.169	359.785	6555.00	2141.67	2082.76	-696.53	40°08'15.674"N	104°26'10.252"W	0.00	
8800.00†	90.169	359.785	6554.70	2241.21	2182.76	-696.90	40°08'16.662"N	104°26'10.257"W	0.00	
8900.00†	90.169	359.785	6554.41	2340.75	2282.76	-697.28	40°08'17.650"N	104°26'10.262"W	0.00	
9000.00†	90.169	359.785	6554.11	2440.30	2382.76	-697.65	40°08'18.639"N	104°26'10.267"W	0.00	
9100.00†	90.169	359.785	6553.82	2539.84	2482.76	-698.03	40°08'19.627"N	104°26'10.272"W	0.00	
9200.00†	90.169	359.785	6553.52	2639.38	2582.76	-698.40	40°08'20.615"N	104°26'10.277"W	0.00	
9300.00†	90.169	359.785	6553.23	2738.92	2682.76	-698.78	40°08'21.603"N	104°26'10.281"W	0.00	
9400.00†	90.169	359.785	6552.93	2838.46	2782.76	-699.16	40°08'22.591"N	104°26'10.286"W	0.00	
9500.00†	90.169	359.785	6552.64	2938.00	2882.76	-699.53	40°08'23.580"N	104°26'10.291"W	0.00	
9600.00†	90.169	359.785	6552.34	3037.54	2982.75	-699.91	40°08'24.568"N	104°26'10.296"W	0.00	
9700.00†	90.169	359.785	6552.05	3137.08	3082.75	-700.28	40°08'25.556"N	104°26'10.301"W	0.00	
9800.00†	90.169	359.785	6551.75	3236.63	3182.75	-700.66	40°08'26.544"N	104°26'10.306"W	0.00	
9900.00†	90.169	359.785	6551.46	3336.17	3282.75	-701.04	40°08'27.532"N	104°26'10.311"W	0.00	
10000.00†	90.169	359.785	6551.16	3435.71	3382.75	-701.41	40°08'28.521"N	104°26'10.316"W	0.00	
10100.00†	90.169	359.785	6550.87	3535.25	3482.75	-701.79	40°08'29.509"N	104°26'10.320"W	0.00	
10200.00†	90.169	359.785	6550.57	3634.79	3582.75	-702.16	40°08'30.497"N	104°26'10.325"W	0.00	
10300.00†	90.169	359.785	6550.28	3734.33	3682.75	-702.54	40°08'31.485"N	104°26'10.330"W	0.00	
10400.00†	90.169	359.785	6549.98	3833.87	3782.75	-702.91	40°08'32.473"N	104°26'10.335"W	0.00	
10500.00†	90.169	359.785	6549.69	3933.41	3882.74	-703.29	40°08'33.462"N	104°26'10.340"W	0.00	
10600.00†	90.169	359.785	6549.39	4032.96	3982.74	-703.67	40°08'34.450"N	104°26'10.345"W	0.00	
10700.00†	90.169	359.785	6549.10	4132.50	4082.74	-704.04	40°08'35.438"N	104°26'10.350"W	0.00	
10800.00†	90.169	359.785	6548.80	4232.04	4182.74	-704.42	40°08'36.426"N	104°26'10.355"W	0.00	
10900.00†	90.169	359.785	6548.51	4331.58	4282.74	-704.79	40°08'37.414"N	104°26'10.359"W	0.00	
11000.00†	90.169	359.785	6548.21	4431.12	4382.74	-705.17	40°08'38.403"N	104°26'10.364"W	0.00	
11100.00†	90.169	359.785	6547.92	4530.66	4482.74	-705.55	40°08'39.391"N	104°26'10.369"W	0.00	
11200.00†	90.169	359.785	6547.62	4630.20	4582.74	-705.92	40°08'40.379"N	104°26'10.374"W	0.00	
11300.00†	90.169	359.785	6547.33	4729.74	4682.74	-706.30	40°08'41.367"N	104°26'10.379"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	ARIZONA	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11400.00†	90.169	359.785	6547.03	4829.29	4782.73	-706.67	40°08'42.355"N	104°26'10.384"W	0.00	
11500.00†	90.169	359.785	6546.74	4928.83	4882.73	-707.05	40°08'43.343"N	104°26'10.389"W	0.00	
11600.00†	90.169	359.785	6546.44	5028.37	4982.73	-707.42	40°08'44.332"N	104°26'10.394"W	0.00	
11700.00†	90.169	359.785	6546.15	5127.91	5082.73	-707.80	40°08'45.320"N	104°26'10.398"W	0.00	
11800.00†	90.169	359.785	6545.85	5227.45	5182.73	-708.18	40°08'46.308"N	104°26'10.403"W	0.00	
11900.00†	90.169	359.785	6545.56	5326.99	5282.73	-708.55	40°08'47.296"N	104°26'10.408"W	0.00	
12000.00†	90.169	359.785	6545.26	5426.53	5382.73	-708.93	40°08'48.284"N	104°26'10.413"W	0.00	
12100.00†	90.169	359.785	6544.97	5526.07	5482.73	-709.30	40°08'49.273"N	104°26'10.418"W	0.00	
12200.00†	90.169	359.785	6544.67	5625.62	5582.73	-709.68	40°08'50.261"N	104°26'10.423"W	0.00	
12300.00†	90.169	359.785	6544.38	5725.16	5682.72	-710.06	40°08'51.249"N	104°26'10.428"W	0.00	
12400.00†	90.169	359.785	6544.08	5824.70	5782.72	-710.43	40°08'52.237"N	104°26'10.433"W	0.00	
12500.00†	90.169	359.785	6543.79	5924.24	5882.72	-710.81	40°08'53.225"N	104°26'10.437"W	0.00	
12600.00†	90.169	359.785	6543.49	6023.78	5982.72	-711.18	40°08'54.214"N	104°26'10.442"W	0.00	
12700.00†	90.169	359.785	6543.20	6123.32	6082.72	-711.56	40°08'55.202"N	104°26'10.447"W	0.00	
12800.00†	90.169	359.785	6542.90	6222.86	6182.72	-711.93	40°08'56.190"N	104°26'10.452"W	0.00	
12900.00†	90.169	359.785	6542.61	6322.40	6282.72	-712.31	40°08'57.178"N	104°26'10.457"W	0.00	
13000.00†	90.169	359.785	6542.31	6421.94	6382.72	-712.69	40°08'58.166"N	104°26'10.462"W	0.00	
13100.00†	90.169	359.785	6542.02	6521.49	6482.71	-713.06	40°08'59.155"N	104°26'10.467"W	0.00	
13200.00†	90.169	359.785	6541.72	6621.03	6582.71	-713.44	40°09'00.143"N	104°26'10.472"W	0.00	
13300.00†	90.169	359.785	6541.43	6720.57	6682.71	-713.81	40°09'01.131"N	104°26'10.476"W	0.00	
13400.00†	90.169	359.785	6541.13	6820.11	6782.71	-714.19	40°09'02.119"N	104°26'10.481"W	0.00	
13500.00†	90.169	359.785	6540.84	6919.65	6882.71	-714.57	40°09'03.107"N	104°26'10.486"W	0.00	
13600.00†	90.169	359.785	6540.54	7019.19	6982.71	-714.94	40°09'04.096"N	104°26'10.491"W	0.00	
13700.00†	90.169	359.785	6540.24	7118.73	7082.71	-715.32	40°09'05.084"N	104°26'10.496"W	0.00	
13783.00	90.169	359.785	6540.00†	7201.35	7165.71	-715.63	40°09'05.904"N	104°26'10.500"W	0.00	End of Tangent



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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	ARIZONA	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 09		0.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
SECTION 16		0.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
1) STATE 02-63-16-1H REV-1 BHL From Plat (2138'FSL&900'FEL,SEC.09)	13783.00	6540.00	7165.71	-715.63	3297343.60	1299869.29	40°09'05.904"N	104°26'10.500"W	point
HARDLINE (460'FSL/FEL/FWL&460'FROM 1/2 SECTION 9 LINE		6560.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
HARDLINE (460'SETBACK)		6560.00	0.00	0.00	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
STATE 02-63-16-1H Landing from plan (688'FSL&900'FEL,SEC.16)		6560.00	388.30	-689.30	3297451.42	1293092.98	40°07'58.929"N	104°26'10.159"W	point



Planned Wellpath Report

STATE 02-63-16-1H (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	ARIZONA	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H PWB
Facility	SEC.16-T02N-R63W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
0.00	0.000	250.020	0.00	Tie On
1200.00	0.000	250.020	1200.00	Tangent/Start Build/KOP #1
2115.33	13.730	250.020	2106.60	End of Build
4393.84	13.730	250.020	4320.00	Tangent/Start Drop
5080.34	0.000	359.785	4999.95	End of Drop
6003.78	0.000	359.785	5923.38	Tangent/KOP/Start Build to 9*
7005.66	90.169	359.785	6560.00	Build/Landing Point
7005.69	90.169	359.785	6560.00	End of 3D Arc
13783.00	90.169	359.785	6540.00	End of Tangent