

# NOBLE ENERGY, INC

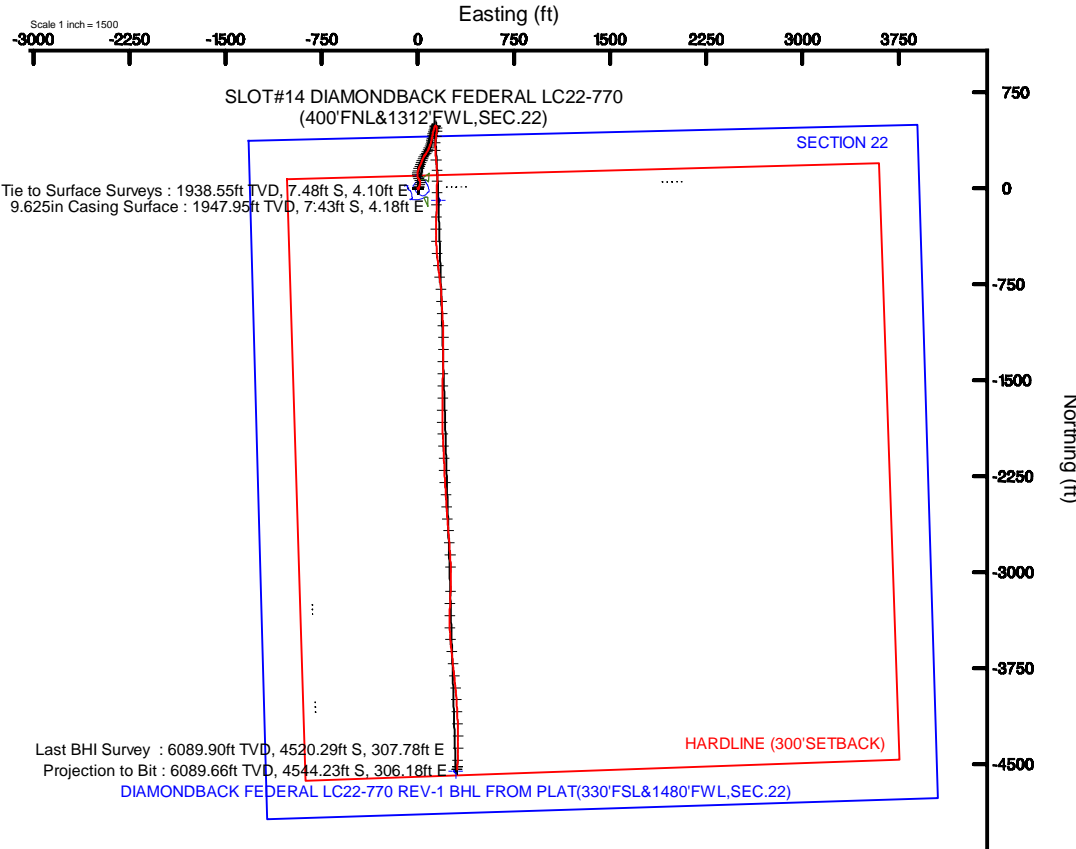
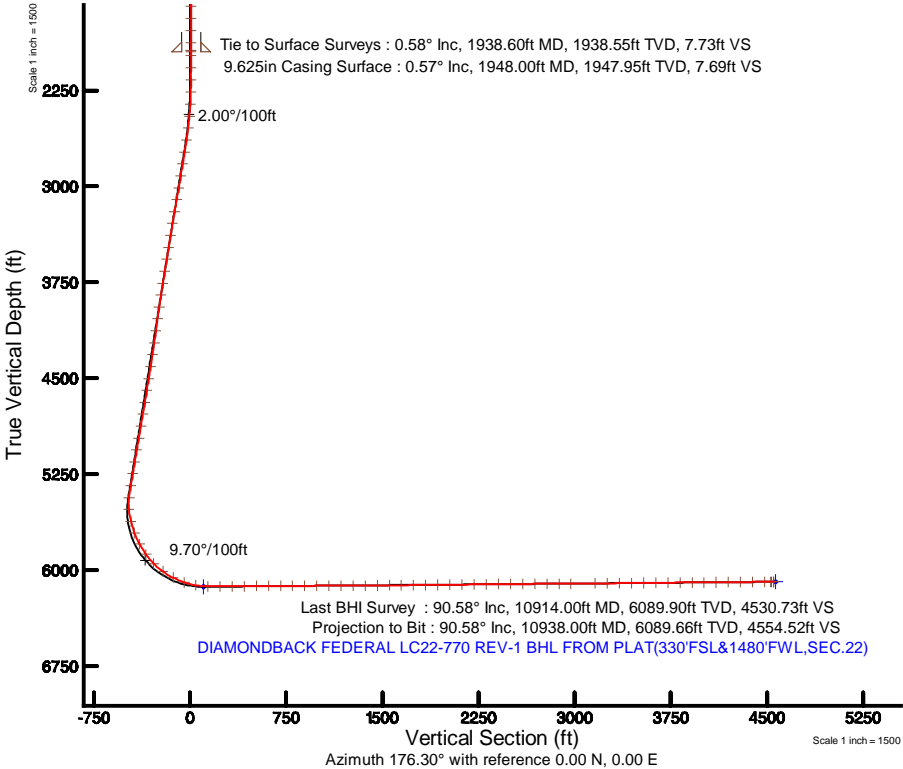
Location: COLORADO Slot: SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)  
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: DIAMONDBACK FEDERAL LC22-770  
Facility: SEC.22-T09N-R59W Wellbore: DIAMONDBACK FEDERAL LC22-770 PWB

Plot reference wellpath is DIAMONDBACK FEDERAL LC22-770 (REV-A.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (30'KB) (RKB)	North Reference: Grid north
Measured depths are referenced to RIG (30'KB) (RKB)	Scale: True distance
RIG (30'KB) (RKB) to Mean Sea Level: 4945 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)): 0 feet	Created by: guenier on 2017-08-01
Coordinates are in feet referenced to Slot	Database: WA_DEN_Denver_Defn

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
30.00	10977.61	OWSG MWD rev2	OWSG MWD rev2 + IFR1 + Multi-Station Correction		DIAMONDBACK FEDERAL LC22-770 PWB

Location Information						
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 22-T09N-R59W			3426161.443	1516985.929	40°44'32.532"N	103°57'43.238"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)	-47.61	-1908.72	3424252.736	1516938.320	40°44'32.388"N	103°58'08.040"W
RIG (30'KB) (RKB) to Ground level (N Slot: SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22))					4945R	
Mean Sea Level to Ground level (N Slot: SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22))					0R	
RIG (30'KB) (RKB) to Mean Sea Level					4945R	
Comments						
SHL: 40.74233N 103.96890W NENW						
API#: 05-123-42970						



## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)
Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWP
Facility	SEC.22-T09N-R59W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Guenaler
Scale	0.999994	Report Generated	8/1/2017 at 3:16:13 PM
Convergence at slot	0.99° East	Database/Source file	WA_DEN_Denver_Defn/DIAMONDBACK_FEDERAL_LC22-770_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-47.61	-1908.72	3424252.74	1516938.32	40°44'32.388"N	103°58'08.040"W
Facility Reference Pt			3426161.44	1516985.93	40°44'32.532"N	103°57'43.236"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.315"N	105°30'00.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	RIG (30'KB) (RKB) to Facility Vertical Datum	4945.00ft
Horizontal Reference Pt	Slot	RIG (30'KB) (RKB) to Mean Sea Level	4945.00ft
Vertical Reference Pt	RIG (30'KB) (RKB)	RIG (30'KB) (RKB) to Ground Level at Slot (SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22))	4945.00ft
MD Reference Pt	RIG (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	176.30°



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Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

WELLPATH DATA (118 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	83.550	0.00	0.00	0.00	0.00	40°44'32.388"N	103°58'08.040"W	0.00	
81.91	0.070	83.550	81.91	0.00	0.01	0.05	40°44'32.388"N	103°58'08.039"W	0.09	
179.01	0.500	160.270	179.01	0.40	-0.39	0.25	40°44'32.384"N	103°58'08.037"W	0.50	
270.01	0.100	166.300	270.01	0.86	-0.84	0.40	40°44'32.380"N	103°58'08.035"W	0.44	
364.03	0.060	260.190	364.03	0.95	-0.93	0.38	40°44'32.379"N	103°58'08.035"W	0.13	
458.59	0.610	131.690	458.59	1.31	-1.27	0.70	40°44'32.375"N	103°58'08.031"W	0.69	
553.15	0.450	136.450	553.14	1.95	-1.87	1.33	40°44'32.369"N	103°58'08.023"W	0.18	
647.81	0.190	137.190	647.80	2.36	-2.26	1.70	40°44'32.365"N	103°58'08.018"W	0.27	
742.16	0.420	168.770	742.15	2.83	-2.71	1.87	40°44'32.361"N	103°58'08.016"W	0.29	
836.45	0.060	179.640	836.44	3.22	-3.10	1.94	40°44'32.357"N	103°58'08.016"W	0.38	
931.01	0.010	85.500	931.00	3.27	-3.15	1.95	40°44'32.357"N	103°58'08.015"W	0.07	
1025.60	0.190	135.250	1025.59	3.39	-3.26	2.07	40°44'32.355"N	103°58'08.014"W	0.19	
1120.16	0.780	137.840	1120.14	4.01	-3.85	2.61	40°44'32.350"N	103°58'08.007"W	0.62	
1214.78	0.500	140.860	1214.76	4.85	-4.65	3.30	40°44'32.342"N	103°58'07.998"W	0.30	
1309.34	0.620	182.730	1309.31	5.69	-5.48	3.54	40°44'32.333"N	103°58'07.995"W	0.44	
1403.78	0.530	167.070	1403.75	6.63	-6.41	3.61	40°44'32.324"N	103°58'07.995"W	0.19	
1498.51	0.450	230.210	1498.48	7.28	-7.08	3.42	40°44'32.317"N	103°58'07.997"W	0.55	
1593.22	0.370	232.670	1593.18	7.67	-7.50	2.89	40°44'32.313"N	103°58'08.004"W	0.09	
1687.55	0.340	194.970	1687.51	8.11	-7.96	2.58	40°44'32.309"N	103°58'08.008"W	0.25	
1781.96	0.450	70.340	1781.92	8.27	-8.10	2.86	40°44'32.307"N	103°58'08.005"W	0.74	
1876.64	0.520	60.540	1876.60	7.98	-7.77	3.58	40°44'32.311"N	103°58'07.995"W	0.11	
1938.60	0.580	61.210	1938.55	7.73	-7.48	4.10	40°44'32.313"N	103°58'07.988"W	0.10	Tie to Surface Surveys
1978.00	0.550	72.530	1977.95	7.60	-7.32	4.45	40°44'32.315"N	103°58'07.984"W	0.29	
2073.00	0.660	358.840	2072.95	6.94	-6.64	4.88	40°44'32.322"N	103°58'07.978"W	0.77	
2167.00	0.560	145.370	2166.95	6.79	-6.48	5.13	40°44'32.323"N	103°58'07.975"W	1.24	
2262.00	1.570	13.190	2261.94	5.95	-5.59	5.69	40°44'32.332"N	103°58'07.967"W	2.09	
2356.00	3.590	16.070	2355.84	1.94	-1.51	6.80	40°44'32.372"N	103°58'07.952"W	2.15	
2451.00	5.420	16.730	2450.54	-5.06	5.65	8.91	40°44'32.442"N	103°58'07.923"W	1.93	
2545.00	7.440	18.900	2543.94	-14.84	15.66	12.16	40°44'32.541"N	103°58'07.878"W	2.16	
2640.00	9.300	19.810	2637.93	-27.56	28.70	16.76	40°44'32.669"N	103°58'07.816"W	1.96	



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DIAMONDBACK FEDERAL LC22-770 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)
Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

WELLPATH DATA (118 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2734.00	9.660	358.420	2730.67	-42.41	43.73	19.11	40°44'32.817"N	103°58'07.782"W	3.75	
2829.00	10.250	327.650	2824.31	-57.80	58.85	14.37	40°44'32.967"N	103°58'07.840"W	5.57	
2923.00	10.110	327.170	2916.83	-72.35	72.85	5.42	40°44'33.107"N	103°58'07.953"W	0.17	
3018.00	10.050	344.090	3010.38	-87.74	87.83	-1.37	40°44'33.256"N	103°58'08.038"W	3.11	
3113.00	10.140	358.920	3103.93	-104.19	104.17	-3.80	40°44'33.418"N	103°58'08.066"W	2.73	
3208.00	10.230	12.790	3197.44	-120.64	120.76	-2.09	40°44'33.581"N	103°58'08.040"W	2.58	
3302.00	10.140	16.080	3289.96	-136.43	136.85	2.05	40°44'33.740"N	103°58'07.983"W	0.63	
3397.00	9.990	20.990	3383.50	-151.79	152.58	7.31	40°44'33.894"N	103°58'07.911"W	0.92	
3492.00	10.260	23.850	3477.02	-166.77	168.01	13.69	40°44'34.046"N	103°58'07.825"W	0.60	
3586.00	10.190	23.450	3569.53	-181.59	183.29	20.38	40°44'34.195"N	103°58'07.734"W	0.11	
3681.00	10.010	21.780	3663.06	-196.53	198.67	26.79	40°44'34.346"N	103°58'07.647"W	0.36	
3775.00	9.900	20.670	3755.64	-211.26	213.82	32.67	40°44'34.495"N	103°58'07.568"W	0.24	
3870.00	9.850	22.670	3849.24	-225.98	228.96	38.69	40°44'34.643"N	103°58'07.486"W	0.36	
3965.00	10.000	27.210	3942.82	-240.34	243.79	45.59	40°44'34.789"N	103°58'07.393"W	0.84	
4059.00	9.990	35.640	4035.39	-253.64	257.67	54.07	40°44'34.924"N	103°58'07.280"W	1.56	
4154.00	9.970	35.370	4128.96	-266.40	271.08	63.63	40°44'35.055"N	103°58'07.153"W	0.05	
4248.00	9.900	30.900	4221.55	-279.37	284.65	72.49	40°44'35.188"N	103°58'07.034"W	0.82	
4343.00	9.910	26.140	4315.13	-293.18	298.99	80.29	40°44'35.328"N	103°58'06.930"W	0.86	
4437.00	10.020	20.670	4407.72	-307.65	313.91	86.74	40°44'35.474"N	103°58'06.843"W	1.01	
4532.00	9.940	23.980	4501.28	-322.44	329.13	92.99	40°44'35.624"N	103°58'06.758"W	0.61	
4626.00	9.940	17.180	4593.87	-337.20	344.29	98.68	40°44'35.773"N	103°58'06.681"W	1.25	
4721.00	9.900	12.920	4687.45	-352.69	360.09	102.93	40°44'35.928"N	103°58'06.622"W	0.77	
4815.00	10.010	12.750	4780.04	-368.27	375.93	106.54	40°44'36.084"N	103°58'06.572"W	0.12	
4910.00	9.970	12.100	4873.60	-384.10	392.03	110.09	40°44'36.242"N	103°58'06.522"W	0.13	
5005.00	9.950	11.210	4967.17	-399.94	408.12	113.41	40°44'36.401"N	103°58'06.475"W	0.16	
5099.00	10.030	8.470	5059.74	-415.79	424.18	116.19	40°44'36.559"N	103°58'06.436"W	0.51	
5194.00	9.630	15.550	5153.35	-431.38	440.02	119.54	40°44'36.715"N	103°58'06.388"W	1.34	
5288.00	9.900	16.530	5245.99	-446.39	455.34	123.95	40°44'36.865"N	103°58'06.328"W	0.34	
5382.00	9.940	13.660	5338.58	-461.71	470.97	128.16	40°44'37.019"N	103°58'06.270"W	0.53	
5477.00	7.880	22.580	5432.44	-475.38	484.95	132.60	40°44'37.157"N	103°58'06.209"W	2.60	



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DIAMONDBACK FEDERAL LC22-770 AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)
Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

WELLPATH DATA (118 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5571.00	8.580	123.220	5525.85	-476.95	487.07	140.97	40°44'37.176"N	103°58'06.100"W	13.47	
5666.00	14.260	171.030	5619.12	-461.00	471.59	148.75	40°44'37.022"N	103°58'06.002"W	11.13	
5760.00	20.370	189.160	5708.88	-433.47	443.95	147.95	40°44'36.749"N	103°58'06.019"W	8.60	
5855.00	28.930	187.550	5795.14	-394.75	404.78	142.29	40°44'36.363"N	103°58'06.101"W	9.04	
5950.00	36.660	186.020	5874.94	-344.18	353.72	136.28	40°44'35.859"N	103°58'06.190"W	8.18	
6044.00	43.870	175.520	5946.71	-283.80	293.19	135.88	40°44'35.261"N	103°58'06.209"W	10.51	
6139.00	54.070	174.050	6008.99	-212.26	221.92	142.46	40°44'34.556"N	103°58'06.140"W	10.80	
6233.00	63.250	176.620	6057.83	-132.08	141.99	148.89	40°44'33.765"N	103°58'06.074"W	10.04	
6328.00	71.070	181.210	6094.70	-44.73	54.55	150.45	40°44'32.901"N	103°58'06.073"W	9.36	
6422.00	80.790	181.540	6117.52	45.99	-36.49	148.26	40°44'32.002"N	103°58'06.122"W	10.35	
6517.00	89.080	180.770	6125.90	140.19	-131.02	146.36	40°44'31.069"N	103°58'06.168"W	8.76	
6611.00	90.580	181.540	6126.18	233.85	-224.99	144.46	40°44'30.141"N	103°58'06.214"W	1.79	
6706.00	90.490	180.800	6125.29	328.50	-319.97	142.52	40°44'29.203"N	103°58'06.260"W	0.78	
6801.00	90.710	177.920	6124.30	423.35	-414.95	143.58	40°44'28.264"N	103°58'06.268"W	3.04	
6895.00	90.250	174.960	6123.51	517.34	-508.75	149.42	40°44'27.336"N	103°58'06.213"W	3.19	
6990.00	90.150	174.560	6123.18	612.30	-603.35	158.10	40°44'26.400"N	103°58'06.122"W	0.43	
7084.00	90.220	171.840	6122.87	706.16	-696.68	169.22	40°44'25.476"N	103°58'05.998"W	2.89	
7178.00	90.370	175.140	6122.39	800.03	-790.06	179.88	40°44'24.552"N	103°58'05.881"W	3.51	
7273.00	90.250	177.360	6121.88	895.02	-884.85	186.09	40°44'23.614"N	103°58'05.821"W	2.34	
7367.00	90.460	176.290	6121.29	989.02	-978.70	191.30	40°44'22.686"N	103°58'05.775"W	1.16	
7462.00	90.220	178.090	6120.73	1084.00	-1073.59	195.96	40°44'21.748"N	103°58'05.736"W	1.91	
7556.00	90.180	179.340	6120.40	1177.91	-1167.56	198.06	40°44'20.819"N	103°58'05.729"W	1.33	
7650.00	90.120	180.390	6120.16	1271.73	-1261.56	198.29	40°44'19.891"N	103°58'05.747"W	1.12	
7745.00	90.520	181.250	6119.63	1366.43	-1356.54	196.93	40°44'18.952"N	103°58'05.786"W	1.00	
7839.00	90.550	180.740	6118.75	1460.11	-1450.53	195.29	40°44'18.024"N	103°58'05.829"W	0.54	
7934.00	90.430	180.680	6117.94	1554.83	-1545.52	194.12	40°44'17.086"N	103°58'05.865"W	0.14	
8028.00	90.620	180.820	6117.07	1648.54	-1639.50	192.89	40°44'16.157"N	103°58'05.902"W	0.25	
8123.00	90.620	180.880	6116.05	1743.23	-1734.49	191.48	40°44'15.219"N	103°58'05.942"W	0.06	
8217.00	90.650	179.220	6115.00	1837.02	-1828.48	191.40	40°44'14.291"N	103°58'05.964"W	1.77	
8312.00	90.550	177.040	6114.01	1931.96	-1923.42	194.49	40°44'13.352"N	103°58'05.945"W	2.30	



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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

WELLPATH DATA (118 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8406.00	90.650	176.850	6113.02	2025.95	-2017.28	199.50	40°44'12.424"N	103°58'05.901"W	0.23	
8501.00	90.620	177.820	6111.97	2120.93	-2112.17	203.92	40°44'11.486"N	103°58'05.865"W	1.02	
8595.00	90.830	177.630	6110.78	2214.89	-2206.09	207.65	40°44'10.557"N	103°58'05.838"W	0.30	
8690.00	90.770	176.960	6109.46	2309.87	-2300.97	212.14	40°44'09.619"N	103°58'05.801"W	0.71	
8785.00	90.740	175.910	6108.20	2404.86	-2395.78	218.04	40°44'08.682"N	103°58'05.745"W	1.11	
8879.00	90.310	176.720	6107.34	2498.85	-2489.58	224.08	40°44'07.754"N	103°58'05.688"W	0.98	
8974.00	90.280	175.620	6106.85	2593.85	-2584.36	230.43	40°44'06.816"N	103°58'05.627"W	1.16	
9068.00	90.370	175.250	6106.32	2687.84	-2678.06	237.91	40°44'05.889"N	103°58'05.551"W	0.41	
9163.00	90.280	175.580	6105.78	2782.82	-2772.76	245.50	40°44'04.952"N	103°58'05.473"W	0.36	
9258.00	90.120	176.640	6105.45	2877.82	-2867.54	251.95	40°44'04.015"N	103°58'05.411"W	1.13	
9352.00	90.310	178.530	6105.10	2971.79	-2961.45	255.91	40°44'03.086"N	103°58'05.380"W	2.02	
9541.00	91.020	182.140	6102.90	3160.28	-3150.40	254.80	40°44'01.220"N	103°58'05.437"W	1.95	
9636.00	90.250	182.570	6101.85	3254.74	-3245.31	250.90	40°44'00.283"N	103°58'05.509"W	0.93	
9730.00	90.520	180.890	6101.22	3348.31	-3339.26	248.06	40°43'59.355"N	103°58'05.567"W	1.81	
9825.00	90.860	178.240	6100.07	3443.14	-3434.25	248.78	40°43'58.417"N	103°58'05.579"W	2.81	
9919.00	90.650	175.410	6098.84	3537.12	-3528.08	253.99	40°43'57.489"N	103°58'05.533"W	3.02	
10014.00	90.520	173.980	6097.87	3632.08	-3622.67	262.77	40°43'56.553"N	103°58'05.440"W	1.51	
10108.00	90.520	173.540	6097.01	3725.98	-3716.11	272.99	40°43'55.628"N	103°58'05.328"W	0.47	
10203.00	90.580	173.730	6096.10	3820.87	-3810.52	283.52	40°43'54.693"N	103°58'05.212"W	0.21	
10298.00	90.250	174.860	6095.41	3915.81	-3905.04	292.96	40°43'53.758"N	103°58'05.111"W	1.24	
10392.00	90.520	175.800	6094.78	4009.80	-3998.73	300.62	40°43'52.831"N	103°58'05.033"W	1.04	
10487.00	90.550	177.100	6093.89	4104.79	-4093.54	306.50	40°43'51.893"N	103°58'04.977"W	1.37	
10581.00	90.430	177.930	6093.09	4198.76	-4187.45	310.57	40°43'50.965"N	103°58'04.946"W	0.89	
10675.00	90.550	179.650	6092.29	4292.67	-4281.42	312.56	40°43'50.036"N	103°58'04.941"W	1.83	
10769.00	90.620	179.960	6091.33	4386.49	-4375.41	312.88	40°43'49.107"N	103°58'04.958"W	0.34	
10864.00	90.520	182.730	6090.38	4481.10	-4470.37	310.65	40°43'48.169"N	103°58'05.008"W	2.92	
10914.00	90.580	183.840	6089.90	4530.73	-4520.29	307.78	40°43'47.677"N	103°58'05.057"W	2.22	Last BHI Survey
10938.00	90.580	183.840	6089.66	4554.52	-4544.23	306.18	40°43'47.441"N	103°58'05.083"W	0.00	Projection to Bit





Actual Wellpath Report

DIAMONDBACK FEDERAL LC22-770 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)
Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

HOLE & CASING SECTIONS - Ref Wellbore: DIAMONDBACK FEDERAL LC22-770 AWB      Ref Wellpath: DIAMONDBACK FEDERAL LC22-770 AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	30.00	1948.00	1918.00	30.00	1947.95	0.00	0.01	-7.43	4.18
9.625in Casing Surface	30.00	1948.00	1918.00	30.00	1947.95	0.00	0.01	-7.43	4.18
8.5in Open Hole	1948.00	10938.00	8990.00	1947.95	6089.66	-7.43	4.18	-4544.23	306.18

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
MAGPUL FEDERAL LC21-670 SECTION 22	7.00	-656.30	-656.61	3423596.13	1516282.03	40°44'26.016"N	103°58'16.716"W	polygon
DIAMONDBACK FEDERAL LC22-770 REV-1 BHL FROM PLAT(330'FSL&1480'FWL,SEC.22)	6090.04	-4557.04	294.91	3424547.64	1512381.32	40°43'47.316"N	103°58'05.232"W	point
DIAMONDBACK FEDERAL LC22-770 LANDING POINT (500'FNL&1480'FWL,SEC.22)	6129.00	-95.00	160.00	3424412.73	1516843.32	40°44'31.422"N	103°58'05.983"W	point
MAGPUL FEDERAL LC21-670 SECTION 22 HARDLINE (300'SETBACK)	6407.00	-656.30	-656.61	3423596.13	1516282.03	40°44'26.016"N	103°58'16.716"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: DIAMONDBACK FEDERAL LC22-770 AWB      Ref Wellpath: DIAMONDBACK FEDERAL LC22-770 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1938.60	Gyrodata relative depth - Drop gyro or Multi-shot	Surface Survey <81.91'-1938.6'>	DIAMONDBACK FEDERAL LC22-770 AWB
1938.60	10914.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	BHI/ATC BHI 8.5" OWSG MWD+IFR+MSA <1978'-10914'>	DIAMONDBACK FEDERAL LC22-770 AWB
10914.00	10938.00	Blind Drilling (std)	Projection to bit	DIAMONDBACK FEDERAL LC22-770 AWB



Actual Wellpath Report

DIAMONDBACK FEDERAL LC22-770 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#14 DIAMONDBACK FEDERAL LC22-770(400'FNL&1312'FWL,SEC.22)
Area	COLORADO	Well	DIAMONDBACK FEDERAL LC22-770
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	DIAMONDBACK FEDERAL LC22-770 AWB
Facility	SEC.22-T09N-R59W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1938.60	0.580	61.210	1938.55	Tie to Surface Surveys
10914.00	90.580	183.840	6089.90	Last BHI Survey
10938.00	90.580	183.840	6089.66	Projection to Bit

COMMENTS
<div>Wellpath general comments</div> <div>SHL: NENW</div> <div>40.74233N LAT.</div> <div>103.96890W LONG.</div> <div>API#: 05-123-42970</div>