

30-025-43673



Actual Wellpath Report

SD WE 24 FED P24 6H PWB_awp 258.5' - 19229'proj: 19286'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Tranlam
Scale	0.999965	Report Generated	10/13/2017 at 1:08:36 PM
Convergence at slot	0.38° East	Database/Source file	WA_Midland/SD_WE_24_FED_P24_6H_PWB_awp_258.5_-19229_proj_19286_.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	25.00	720070.00	372221.00	32°01'16.903"N	103°37'23.741"W
Facility Reference Pt			720045.00	372221.00	32°01'16.904"N	103°37'24.031"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig: Nabors X-30 (KB) to Facility Vertical Datum	3170.00ft
Horizontal Reference Pt	Slot	Rig: Nabors X-30 (KB) to Mean Sea Level	3170.00ft
Vertical Reference Pt	Rig: Nabors X-30 (KB)	Rig: Nabors X-30 (KB) to Ground Level at Slot (SD WE 24 FED P24 6H)	33.00ft
MD Reference Pt	Rig: Nabors X-30 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.65°

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well.

MWD COORDINATOR



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Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 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]	Comments
0.00†	0.000	304.000	0.00	0.00	0.00	0.00	720070.00	372221.00	32°01'16.903"N	103°37'23.741"W	0.00	
33.00	0.000	304.000	33.00	0.00	0.00	0.00	720070.00	372221.00	32°01'16.903"N	103°37'23.741"W	0.00	
258.50	0.600	304.000	258.50	0.67	0.66	-0.98	720069.02	372221.66	32°01'16.909"N	103°37'23.752"W	0.27	
458.50	0.500	230.000	458.49	0.70	0.68	-2.52	720067.48	372221.68	32°01'16.910"N	103°37'23.770"W	0.33	
638.50	0.800	228.000	638.48	-0.64	-0.66	-4.05	720065.95	372220.34	32°01'16.897"N	103°37'23.788"W	0.17	
683.50	0.800	205.000	683.47	-1.13	-1.16	-4.42	720065.58	372219.84	32°01'16.892"N	103°37'23.792"W	0.71	
797.00	0.850	169.760	796.96	-2.67	-2.70	-4.60	720065.40	372218.30	32°01'16.876"N	103°37'23.794"W	0.44	
976.00	1.600	184.550	975.92	-6.47	-6.50	-4.56	720065.44	372214.50	32°01'16.839"N	103°37'23.794"W	0.45	
1153.00	1.920	201.420	1152.84	-11.69	-11.72	-5.84	720064.16	372209.28	32°01'16.787"N	103°37'23.809"W	0.34	
1330.00	2.220	205.690	1329.72	-17.52	-17.57	-8.41	720061.59	372203.43	32°01'16.729"N	103°37'23.840"W	0.19	
1508.00	2.930	205.560	1507.54	-24.71	-24.78	-11.87	720058.13	372196.22	32°01'16.658"N	103°37'23.880"W	0.40	
1685.00	3.460	207.680	1684.27	-33.50	-33.60	-16.30	720053.70	372187.41	32°01'16.571"N	103°37'23.932"W	0.31	
1862.00	4.070	213.840	1860.88	-43.41	-43.54	-22.28	720047.72	372177.46	32°01'16.473"N	103°37'24.003"W	0.41	
2041.00	4.900	213.060	2039.33	-55.04	-55.23	-29.99	720040.01	372165.78	32°01'16.358"N	103°37'24.093"W	0.46	
2218.00	4.690	209.630	2215.71	-67.62	-67.85	-37.69	720032.31	372153.15	32°01'16.234"N	103°37'24.184"W	0.20	
2395.00	3.080	207.290	2392.30	-78.10	-78.37	-43.45	720026.55	372142.63	32°01'16.130"N	103°37'24.251"W	0.91	
2572.00	2.760	207.280	2569.07	-86.09	-86.38	-47.58	720022.42	372134.62	32°01'16.051"N	103°37'24.300"W	0.18	
2750.00	3.550	208.590	2746.80	-94.71	-95.03	-52.18	720017.82	372125.97	32°01'15.966"N	103°37'24.354"W	0.45	
2927.00	2.800	203.150	2923.53	-103.47	-103.82	-56.51	720013.50	372117.19	32°01'15.879"N	103°37'24.405"W	0.46	
3104.00	1.730	210.220	3100.39	-109.73	-110.10	-59.55	720010.45	372110.90	32°01'15.817"N	103°37'24.441"W	0.62	
3281.00	1.020	177.180	3277.34	-113.61	-113.98	-60.82	720009.18	372107.02	32°01'15.779"N	103°37'24.456"W	0.59	
3458.00	1.870	105.260	3454.29	-115.96	-116.32	-57.95	720012.05	372104.69	32°01'15.756"N	103°37'24.423"W	1.03	
3635.00	0.560	40.900	3631.25	-116.09	-116.42	-54.60	720015.40	372104.58	32°01'15.754"N	103°37'24.384"W	0.96	
3813.00	0.770	349.470	3809.24	-114.26	-114.59	-54.25	720015.75	372106.42	32°01'15.772"N	103°37'24.379"W	0.34	
3990.00	1.160	26.180	3986.22	-111.48	-111.81	-53.68	720016.32	372109.19	32°01'15.800"N	103°37'24.373"W	0.40	
4167.00	1.820	67.770	4163.16	-108.83	-109.14	-50.29	720019.72	372111.86	32°01'15.826"N	103°37'24.333"W	0.69	
4344.00	2.470	99.020	4340.04	-108.41	-108.68	-43.92	720026.09	372112.33	32°01'15.830"N	103°37'24.259"W	0.74	
4432.00	2.220	111.870	4427.97	-109.36	-109.61	-40.46	720029.54	372111.40	32°01'15.821"N	103°37'24.219"W	0.66	12 1/4 BH MWD 797' - 4432'
4611.00	2.050	119.910	4606.85	-112.28	-112.50	-34.47	720035.53	372108.51	32°01'15.792"N	103°37'24.149"W	0.19	
4789.00	2.070	37.010	4784.77	-111.33	-111.52	-29.77	720040.23	372109.49	32°01'15.801"N	103°37'24.095"W	1.53	



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Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 stations)

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]	Comments
4967.00	1.850	39.230	4962.66	-106.56	-106.72	-26.02	720043.98	372114.28	32°01'15.848"N	103°37'24.051"W	0.13	
5144.00	1.400	318.350	5139.61	-102.74	-102.89	-25.65	720044.35	372118.11	32°01'15.886"N	103°37'24.046"W	1.21	
5321.00	1.150	314.490	5316.57	-99.86	-100.03	-28.36	720041.65	372120.97	32°01'15.915"N	103°37'24.078"W	0.15	
5498.00	0.960	318.100	5493.54	-97.50	-97.69	-30.61	720039.39	372123.32	32°01'15.938"N	103°37'24.104"W	0.11	
5675.00	0.820	304.780	5670.51	-95.66	-95.86	-32.64	720037.36	372125.14	32°01'15.956"N	103°37'24.127"W	0.14	
5852.00	0.670	290.130	5847.50	-94.57	-94.78	-34.66	720035.35	372126.22	32°01'15.967"N	103°37'24.150"W	0.14	
6029.00	0.520	290.270	6024.49	-93.92	-94.15	-36.38	720033.62	372126.86	32°01'15.974"N	103°37'24.170"W	0.08	
6206.00	0.530	288.020	6201.48	-93.38	-93.61	-37.91	720032.09	372127.39	32°01'15.979"N	103°37'24.188"W	0.01	
6383.00	0.440	286.630	6378.48	-92.92	-93.17	-39.34	720030.66	372127.84	32°01'15.983"N	103°37'24.205"W	0.05	
6560.00	0.120	280.310	6555.47	-92.69	-92.94	-40.18	720029.83	372128.06	32°01'15.986"N	103°37'24.214"W	0.18	
6737.00	0.410	258.970	6732.47	-92.77	-93.03	-40.98	720029.02	372127.98	32°01'15.985"N	103°37'24.224"W	0.17	
6914.00	0.910	245.070	6909.46	-93.48	-93.74	-42.88	720027.13	372127.26	32°01'15.978"N	103°37'24.246"W	0.29	
7091.00	1.080	237.270	7086.43	-94.95	-95.23	-45.55	720024.45	372125.77	32°01'15.963"N	103°37'24.277"W	0.12	
7269.00	0.930	242.170	7264.41	-96.52	-96.82	-48.24	720021.76	372124.19	32°01'15.948"N	103°37'24.308"W	0.10	
7446.00	1.270	231.560	7441.37	-98.39	-98.71	-51.05	720018.95	372122.30	32°01'15.929"N	103°37'24.341"W	0.22	
7623.00	1.170	217.210	7618.33	-101.04	-101.37	-53.68	720016.32	372119.64	32°01'15.903"N	103°37'24.372"W	0.18	
7800.00	0.840	220.360	7795.31	-103.45	-103.79	-55.61	720014.39	372117.21	32°01'15.879"N	103°37'24.394"W	0.19	
7977.00	1.050	226.550	7972.28	-105.54	-105.90	-57.63	720012.37	372115.11	32°01'15.859"N	103°37'24.418"W	0.13	
8155.00	1.190	226.410	8150.25	-107.92	-108.29	-60.15	720009.85	372112.71	32°01'15.835"N	103°37'24.447"W	0.08	
8332.00	1.110	224.420	8327.21	-110.40	-110.78	-62.68	720007.32	372110.22	32°01'15.811"N	103°37'24.477"W	0.05	
8492.00	1.530	215.150	8487.17	-113.24	-113.64	-65.00	720005.01	372107.37	32°01'15.783"N	103°37'24.504"W	0.29	
8581.00	4.410	338.610	8576.09	-111.01	-111.42	-66.93	720003.07	372109.58	32°01'15.805"N	103°37'24.526"W	6.07	
8669.00	20.610	350.510	8661.72	-92.44	-92.87	-70.74	719999.26	372128.13	32°01'15.988"N	103°37'24.569"W	18.54	
8758.00	28.930	350.420	8742.46	-55.66	-56.13	-76.92	719993.08	372164.87	32°01'16.352"N	103°37'24.638"W	9.35	
8846.00	34.640	356.660	8817.25	-9.62	-10.12	-81.92	719988.08	372210.88	32°01'16.808"N	103°37'24.693"W	7.48	
8934.00	41.770	358.610	8886.36	44.73	44.22	-84.10	719985.91	372265.22	32°01'17.346"N	103°37'24.714"W	8.22	
9023.00	51.770	0.610	8947.25	109.49	108.98	-84.44	719985.56	372329.97	32°01'17.987"N	103°37'24.713"W	11.35	
9111.00	60.300	359.770	8996.37	182.40	181.89	-84.23	719985.77	372402.89	32°01'18.708"N	103°37'24.705"W	9.73	
9204.00	70.050	359.980	9035.36	266.71	266.20	-84.41	719985.60	372487.19	32°01'19.542"N	103°37'24.701"W	10.49	
9293.00	78.750	2.430	9059.28	352.31	351.81	-82.57	719987.44	372572.80	32°01'20.390"N	103°37'24.673"W	10.13	



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Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 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]	Comments
9332.00†	81.750	2.457	9065.88	390.69	390.21	-80.93	719989.08	372611.19	32°01'20.769"N	103°37'24.651"W	7.69	8 3/4 BH MWD 4611' - 8332'
9381.00	85.520	2.490	9071.31	439.32	438.85	-78.83	719991.18	372659.83	32°01'21.251"N	103°37'24.623"W	7.69	
9469.00	87.190	2.530	9076.91	527.03	526.58	-74.98	719995.02	372747.56	32°01'22.119"N	103°37'24.571"W	1.90	
9558.00	91.730	3.450	9077.75	615.85	615.43	-70.34	719999.66	372836.41	32°01'22.997"N	103°37'24.511"W	5.20	
9646.00	91.270	3.180	9075.44	703.64	703.26	-65.25	720004.75	372924.23	32°01'23.866"N	103°37'24.445"W	0.61	
9734.00	88.610	3.630	9075.54	791.45	791.09	-60.03	720009.98	373012.06	32°01'24.735"N	103°37'24.377"W	3.07	
9822.00	85.780	3.150	9079.84	879.14	878.83	-54.83	720015.17	373099.79	32°01'25.603"N	103°37'24.310"W	3.26	
9911.00	88.060	1.890	9084.62	967.90	967.60	-50.92	720019.08	373188.57	32°01'26.481"N	103°37'24.258"W	2.93	
9999.00	89.410	2.320	9086.57	1055.79	1055.52	-47.69	720022.31	373276.48	32°01'27.351"N	103°37'24.214"W	1.61	
10088.00	90.150	1.860	9086.91	1144.71	1144.46	-44.45	720025.56	373365.42	32°01'28.231"N	103°37'24.169"W	0.98	
10176.00	89.880	1.680	9086.88	1232.65	1232.42	-41.73	720028.27	373453.37	32°01'29.101"N	103°37'24.131"W	0.37	
10264.00	90.370	359.010	9086.69	1320.63	1320.41	-41.20	720028.80	373541.36	32°01'29.972"N	103°37'24.118"W	3.08	
10353.00	91.730	358.620	9085.06	1409.61	1409.37	-43.04	720026.96	373630.32	32°01'30.852"N	103°37'24.133"W	1.59	
10442.00	87.100	356.320	9085.97	1498.51	1498.25	-46.96	720023.04	373719.19	32°01'31.732"N	103°37'24.172"W	5.81	
10530.00	84.940	355.220	9092.08	1586.09	1585.79	-53.44	720016.56	373806.73	32°01'32.599"N	103°37'24.240"W	2.75	
10619.00	86.610	358.320	9098.64	1674.72	1674.39	-58.44	720011.57	373895.33	32°01'33.476"N	103°37'24.291"W	3.95	
10707.00	90.370	359.920	9100.96	1762.67	1762.34	-59.79	720010.22	373983.27	32°01'34.346"N	103°37'24.300"W	4.64	
10795.00	90.030	359.380	9100.65	1850.67	1850.33	-60.32	720009.68	374071.26	32°01'35.217"N	103°37'24.300"W	0.73	
10884.00	88.460	359.430	9101.82	1939.66	1939.32	-61.25	720008.76	374160.24	32°01'36.097"N	103°37'24.304"W	1.76	
10973.00	90.060	2.050	9102.97	2028.62	2028.29	-60.10	720009.90	374249.22	32°01'36.978"N	103°37'24.284"W	3.45	
11061.00	89.850	1.320	9103.04	2116.57	2116.25	-57.51	720012.49	374337.17	32°01'37.848"N	103°37'24.247"W	0.86	
11150.00	91.390	0.380	9102.08	2205.54	2205.23	-56.19	720013.81	374426.15	32°01'38.729"N	103°37'24.225"W	2.03	
11241.00	88.640	358.960	9102.05	2296.53	2296.22	-56.71	720013.29	374517.14	32°01'39.629"N	103°37'24.224"W	3.40	
11331.00	85.680	355.200	9106.51	2386.30	2385.97	-61.29	720008.71	374606.88	32°01'40.517"N	103°37'24.270"W	5.31	
11422.00	85.310	355.910	9113.66	2476.79	2476.41	-68.32	720001.68	374697.32	32°01'41.413"N	103°37'24.345"W	0.88	
11513.00	91.970	358.240	9115.82	2567.61	2567.21	-72.96	719997.05	374788.12	32°01'42.312"N	103°37'24.392"W	7.75	
11604.00	94.100	359.450	9111.00	2658.47	2658.06	-74.79	719995.21	374878.96	32°01'43.211"N	103°37'24.406"W	2.69	
11694.00	94.110	359.820	9104.56	2748.24	2747.83	-75.36	719994.64	374968.72	32°01'44.099"N	103°37'24.406"W	0.41	
11786.00	93.920	359.510	9098.12	2840.01	2839.60	-75.90	719994.11	375060.49	32°01'45.007"N	103°37'24.405"W	0.39	
11877.00	94.130	358.990	9091.73	2930.78	2930.37	-77.08	719992.92	375151.26	32°01'45.905"N	103°37'24.412"W	0.61	



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Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 stations)

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11968.00	94.130	358.730	9085.18	3021.54	3021.11	-78.89	719991.11	375242.00	32°01'46.804"N	103°37'24.426"W	0.28	
12056.00	94.610	358.240	9078.47	3109.26	3108.83	-81.21	719988.79	375329.71	32°01'47.672"N	103°37'24.447"W	0.78	
12145.00	92.440	359.490	9073.00	3198.08	3197.63	-82.97	719987.03	375418.51	32°01'48.551"N	103°37'24.460"W	2.81	
12233.00	89.750	358.430	9071.32	3286.05	3285.59	-84.57	719985.44	375506.47	32°01'49.421"N	103°37'24.472"W	3.29	
12322.00	88.370	359.660	9072.78	3375.03	3374.56	-86.05	719983.95	375595.44	32°01'50.302"N	103°37'24.482"W	2.08	
12411.00	91.630	359.760	9072.78	3464.01	3463.55	-86.50	719983.50	375684.42	32°01'51.182"N	103°37'24.481"W	3.66	
12500.00	92.560	0.810	9069.52	3552.95	3552.49	-86.06	719983.95	375773.36	32°01'52.062"N	103°37'24.469"W	1.58	
12588.00	93.400	1.080	9064.95	3640.81	3640.36	-84.61	719985.40	375861.22	32°01'52.932"N	103°37'24.445"W	1.00	
12677.00	89.910	357.940	9062.38	3729.74	3729.29	-85.37	719984.63	375950.15	32°01'53.812"N	103°37'24.447"W	5.27	
12765.00	90.590	357.390	9061.99	3817.69	3817.22	-88.96	719981.05	376038.07	32°01'54.682"N	103°37'24.482"W	0.99	
12853.00	89.260	359.430	9062.11	3905.66	3905.18	-91.40	719978.61	376126.03	32°01'55.553"N	103°37'24.504"W	2.77	
12942.00	89.540	1.300	9063.04	3994.65	3994.16	-90.83	719979.17	376215.02	32°01'56.433"N	103°37'24.491"W	2.12	
13030.00	85.780	359.580	9066.63	4082.54	4082.07	-90.15	719979.85	376302.92	32°01'57.303"N	103°37'24.476"W	4.70	
13119.00	88.920	1.770	9070.75	4171.42	4170.95	-89.10	719980.90	376391.80	32°01'58.183"N	103°37'24.457"W	4.30	
13207.00	90.090	3.390	9071.51	4259.30	4258.86	-85.14	719984.86	376479.70	32°01'59.052"N	103°37'24.404"W	2.27	
13296.00	88.490	1.150	9072.61	4348.19	4347.77	-81.62	719988.38	376568.61	32°01'59.932"N	103°37'24.357"W	3.09	
13384.00	88.280	0.710	9075.09	4436.13	4435.72	-80.19	719989.81	376656.56	32°02'00.802"N	103°37'24.333"W	0.55	
13473.00	87.900	0.100	9078.06	4525.07	4524.67	-79.56	719990.44	376745.50	32°02'01.682"N	103°37'24.319"W	0.81	
13562.00	87.840	359.560	9081.37	4614.01	4613.61	-79.83	719990.18	376834.44	32°02'02.562"N	103°37'24.316"W	0.61	
13650.00	86.760	359.060	9085.51	4701.91	4701.50	-80.88	719989.12	376922.33	32°02'03.432"N	103°37'24.321"W	1.35	
13739.00	89.140	358.890	9088.70	4790.84	4790.43	-82.48	719987.53	377011.25	32°02'04.312"N	103°37'24.333"W	2.68	
13827.00	89.970	359.110	9089.38	4878.83	4878.41	-84.01	719985.99	377099.23	32°02'05.183"N	103°37'24.344"W	0.98	
13916.00	89.690	358.020	9089.64	4967.81	4967.38	-86.24	719983.76	377188.19	32°02'06.063"N	103°37'24.363"W	1.26	
14004.00	88.340	357.450	9091.16	5055.75	5055.29	-89.72	719980.29	377276.11	32°02'06.934"N	103°37'24.397"W	1.67	
14093.00	86.760	358.710	9094.96	5144.63	5144.16	-92.70	719977.31	377364.97	32°02'07.813"N	103°37'24.425"W	2.27	
14182.00	87.960	0.560	9099.06	5233.53	5233.06	-93.26	719976.74	377453.86	32°02'08.693"N	103°37'24.424"W	2.48	
14270.00	88.370	0.700	9101.88	5321.47	5321.01	-92.30	719977.71	377541.81	32°02'09.563"N	103°37'24.406"W	0.49	
14359.00	87.660	0.460	9104.96	5410.40	5409.95	-91.39	719978.61	377630.75	32°02'10.443"N	103°37'24.389"W	0.84	
14447.00	91.260	0.720	9105.79	5498.37	5497.92	-90.49	719979.51	377718.72	32°02'11.314"N	103°37'24.372"W	4.10	
14537.00	91.790	0.800	9103.39	5588.33	5587.88	-89.30	719980.71	377808.68	32°02'12.204"N	103°37'24.351"W	0.60	



Actual Wellpath Report

SD WE 24 FED P24 6H PWB_ awp 258.5' - 19229'proj: 19286'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 stations)

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]	Comments
14626.00	93.460	0.420	9099.32	5677.22	5676.78	-88.35	719981.65	377897.57	32°02'13.084"N	103°37'24.333"W	1.92	
14714.00	90.740	359.120	9096.09	5765.15	5764.71	-88.70	719981.30	377985.50	32°02'13.954"N	103°37'24.331"W	3.43	
14803.00	87.010	358.030	9097.84	5854.10	5853.65	-90.91	719979.09	378074.43	32°02'14.834"N	103°37'24.350"W	4.37	
14891.00	87.160	357.520	9102.32	5941.94	5941.47	-94.33	719975.68	378162.25	32°02'15.703"N	103°37'24.383"W	0.60	
14980.00	87.560	359.490	9106.42	6030.82	6030.34	-96.65	719973.36	378251.12	32°02'16.583"N	103°37'24.403"W	2.26	
15069.00	89.410	359.380	9108.77	6119.78	6119.30	-97.52	719972.48	378340.07	32°02'17.463"N	103°37'24.406"W	2.08	
15157.00	91.080	359.530	9108.39	6207.78	6207.29	-98.36	719971.64	378428.06	32°02'18.334"N	103°37'24.409"W	1.91	
15246.00	91.380	359.540	9106.48	6296.76	6296.27	-99.08	719970.92	378517.03	32°02'19.214"N	103°37'24.411"W	0.34	
15334.00	90.150	359.240	9105.31	6384.75	6384.26	-100.02	719969.98	378605.02	32°02'20.085"N	103°37'24.415"W	1.44	
15422.00	88.830	357.810	9106.09	6472.72	6472.22	-102.28	719967.72	378692.98	32°02'20.956"N	103°37'24.435"W	2.21	
15511.00	91.110	358.940	9106.14	6561.69	6561.18	-104.81	719965.20	378781.93	32°02'21.836"N	103°37'24.457"W	2.86	
15599.00	90.340	358.250	9105.02	6649.67	6649.14	-106.96	719963.04	378869.89	32°02'22.707"N	103°37'24.475"W	1.17	
15688.00	89.230	359.960	9105.36	6738.66	6738.12	-108.36	719961.65	378958.87	32°02'23.587"N	103°37'24.485"W	2.29	
15776.00	89.410	0.000	9106.40	6826.65	6826.12	-108.39	719961.62	379046.86	32°02'24.458"N	103°37'24.478"W	0.21	
15865.00	89.630	359.280	9107.15	6915.65	6915.11	-108.95	719961.06	379135.85	32°02'25.339"N	103°37'24.478"W	0.85	
15953.00	89.010	358.250	9108.19	7003.63	7003.08	-110.84	719959.16	379223.82	32°02'26.209"N	103°37'24.493"W	1.37	
16042.00	89.660	359.340	9109.23	7092.61	7092.06	-112.71	719957.29	379312.79	32°02'27.090"N	103°37'24.508"W	1.43	
16131.49	90.650	359.140	9108.98	7182.10	7181.54	-113.90	719956.10	379402.27	32°02'27.976"N	103°37'24.515"W	1.13	
16219.00	88.310	359.710	9109.78	7269.60	7269.03	-114.78	719955.23	379489.76	32°02'28.841"N	103°37'24.519"W	2.75	
16308.00	88.710	1.690	9112.09	7358.55	7357.99	-113.69	719956.31	379578.72	32°02'29.722"N	103°37'24.499"W	2.27	
16396.00	89.480	1.570	9113.48	7446.49	7445.95	-111.19	719958.82	379666.67	32°02'30.592"N	103°37'24.464"W	0.89	
16485.00	89.690	0.850	9114.13	7535.45	7534.92	-109.31	719960.70	379755.64	32°02'31.472"N	103°37'24.435"W	0.84	
16573.00	93.610	1.910	9111.59	7623.35	7622.84	-107.19	719962.81	379843.56	32°02'32.342"N	103°37'24.404"W	4.61	
16662.00	94.930	1.460	9104.97	7712.05	7711.55	-104.58	719965.42	379932.27	32°02'33.220"N	103°37'24.367"W	1.57	
16750.00	93.610	0.790	9098.41	7799.77	7799.29	-102.86	719967.14	380020.00	32°02'34.088"N	103°37'24.340"W	1.68	
16839.00	87.900	359.020	9097.24	7888.72	7888.24	-103.01	719967.00	380108.95	32°02'34.968"N	103°37'24.335"W	6.72	
16927.00	87.350	358.640	9100.89	7976.64	7976.15	-104.80	719965.20	380196.85	32°02'35.838"N	103°37'24.349"W	0.76	
17016.00	88.120	358.660	9104.41	8065.56	8065.05	-106.90	719963.11	380285.75	32°02'36.718"N	103°37'24.367"W	0.87	
17104.00	87.780	357.850	9107.55	8153.47	8152.96	-109.58	719960.43	380373.65	32°02'37.588"N	103°37'24.391"W	1.00	
17192.00	86.980	0.580	9111.58	8241.37	8240.85	-110.78	719959.22	380461.54	32°02'38.458"N	103°37'24.398"W	3.23	



Actual Wellpath Report

SD WE 24 FED P24 6H PWB_awp 258.5' - 19229'proj: 19286'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

WELLPATH DATA (174 stations)

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]	Comments
17281.00	90.680	2.630	9113.39	8330.28	8329.77	-108.29	719961.72	380550.46	32°02'39.338"N	103°37'24.362"W	4.75	
17370.00	91.570	1.640	9111.65	8419.18	8418.69	-104.97	719965.03	380639.38	32°02'40.217"N	103°37'24.317"W	1.50	
17459.00	92.840	1.410	9108.22	8508.06	8507.59	-102.61	719967.40	380728.27	32°02'41.097"N	103°37'24.283"W	1.45	
17547.00	92.530	0.290	9104.10	8595.94	8595.48	-101.30	719968.70	380816.16	32°02'41.966"N	103°37'24.261"W	1.32	
17635.00	91.140	359.320	9101.28	8683.89	8683.44	-101.60	719968.40	380904.11	32°02'42.837"N	103°37'24.258"W	1.93	
17724.00	92.560	359.480	9098.41	8772.84	8772.38	-102.53	719967.47	380993.05	32°02'43.717"N	103°37'24.262"W	1.61	
17812.00	91.480	0.360	9095.31	8860.79	8860.32	-102.66	719967.35	381080.99	32°02'44.587"N	103°37'24.256"W	1.58	
17900.00	92.430	0.050	9092.31	8948.73	8948.27	-102.34	719967.66	381168.94	32°02'45.458"N	103°37'24.246"W	1.14	
17989.00	90.030	359.310	9090.39	9037.70	9037.24	-102.84	719967.17	381257.90	32°02'46.338"N	103°37'24.245"W	2.82	
18077.00	89.630	358.290	9090.66	9125.69	9125.22	-104.68	719965.32	381345.88	32°02'47.209"N	103°37'24.260"W	1.25	
18166.00	90.180	358.150	9090.80	9214.66	9214.18	-107.45	719962.56	381434.83	32°02'48.089"N	103°37'24.285"W	0.64	
18254.00	88.610	356.710	9091.73	9302.59	9302.08	-111.39	719958.61	381522.73	32°02'48.959"N	103°37'24.324"W	2.42	
18343.00	88.340	359.570	9094.10	9391.52	9390.99	-114.28	719955.73	381611.64	32°02'49.839"N	103°37'24.351"W	3.23	
18432.00	92.310	3.150	9093.60	9480.44	9479.93	-112.17	719957.84	381700.58	32°02'50.719"N	103°37'24.320"W	6.01	
18520.00	93.570	2.800	9089.08	9568.18	9567.70	-107.61	719962.40	381788.34	32°02'51.587"N	103°37'24.260"W	1.49	
18608.00	92.160	1.270	9084.68	9655.99	9655.53	-104.49	719965.52	381876.17	32°02'52.456"N	103°37'24.217"W	2.36	
18697.00	89.380	1.150	9083.49	9744.94	9744.49	-102.61	719967.40	381965.13	32°02'53.337"N	103°37'24.188"W	3.13	
18786.00	88.860	1.070	9084.86	9833.90	9833.46	-100.88	719969.12	382054.09	32°02'54.217"N	103°37'24.162"W	0.59	
18874.00	90.400	2.120	9085.42	9921.84	9921.42	-98.43	719971.57	382142.05	32°02'55.087"N	103°37'24.126"W	2.12	
18962.00	88.710	0.750	9086.11	10009.79	10009.39	-96.23	719973.77	382230.01	32°02'55.957"N	103°37'24.094"W	2.47	
19051.00	89.880	0.380	9087.20	10098.77	10098.37	-95.35	719974.65	382319.00	32°02'56.838"N	103°37'24.077"W	1.38	
19140.00	90.620	359.840	9086.81	10187.76	10187.37	-95.18	719974.82	382407.99	32°02'57.719"N	103°37'24.068"W	1.03	
19229.00	92.150	0.200	9084.66	10276.73	10276.34	-95.15	719974.85	382496.96	32°02'58.599"N	103°37'24.061"W	1.77	8 1/2 BH MWD 8492' - 19229'
19286.00	92.150	0.200	9082.52	10333.69	10333.30	-94.95	719975.05	382553.92	32°02'59.163"N	103°37'24.054"W	0.00	Projection to TD: 19286'



Actual Wellpath Report

SD WE 24 FED P24 6H PWB_awp 258.5' - 19229'proj: 19286'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SD WE 24 FED P24 6H FTP	9086.00	0.00	0.00	720070.00	372221.00	32°01'16.903"N	103°37'23.741"W	point
SD WE 24 FED P24 6H ip1	9087.00	5002.47	-86.28	719983.72	377223.28	32°02'06.411"N	103°37'24.361"W	point
SD WE 24 FED P24 6H ip3	9100.00	7326.69	-100.56	719969.44	379547.42	32°02'29.411"N	103°37'24.349"W	point
SD WE 24 FED P24 6H PBHL rev 3	9110.00	10329.39	-119.00	719951.00	382550.00	32°02'59.126"N	103°37'24.334"W	rectangle
SD WE 24 FED P24 6H ip2	9110.00	6097.01	-92.99	719977.01	378317.78	32°02'17.242"N	103°37'24.355"W	point

WELLPATH COMPOSITION - Ref Wellbore: SD WE 24 FED P24 6H PWB Ref Wellpath: SD WE 24 FED P24 6H PWB_awp 258.5' - 19229'proj: 19286'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
33.00	683.50	ISCWSA MWD, Rev. 4 (Standard)	Imported survey 258.5' - 683.5'	SD WE 24 FED P24 6H PWB
683.50	4432.00	BHI NaviTrak (Standard)	12 1/4 BH MWD 797' - 4432'	SD WE 24 FED P24 6H PWB
4432.00	8332.00	BHI NaviTrak (Standard)	8 3/4 BH MWD 4611' - 8332'	SD WE 24 FED P24 6H PWB
8332.00	19229.00	BHI NaviTrak (Standard)	8 1/2 BH MWD 8492' - 19229'	SD WE 24 FED P24 6H PWB
19229.00	19286.00	Blind Drilling (std)	Projection to bit	SD WE 24 FED P24 6H PWB



Actual Wellpath Report

SD WE 24 FED P24 6H PWB_ awp 258.5' - 19229'proj: 19286'

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**BAKER
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 24 FED P24 6H
Area	Lea County, NM	Well	SD WE 24 Federal P24 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 24 FED P24 6H PWB
Facility	SD WE 24 Fed P24		

COMMENTS

Wellpath general comments

Well: SD WE 24 Federal P24 No. 6H
Field: Jennings/Upper BN SPRN, Shale
Rig: Nabors X30
Location: Lea Co., NM
API: 30-025-43673-00
Latitude: 32° 01' 16.903" N
Longitude: 103° 37' 23.741" W
DF Elevation: 3170 feet
Elev. GL: 3137 feet
Proposed Direction: 359.65°
PBHL: 19286 feet
Duration: 08/18/2017-09/20/2017
FSE's: D. Hardeman
SO#: 8708441
12 1/4 BH MWD 797' - 4432'
8 3/4 BH MWD 4611' - 8332'
8 1/2 BH MWD 8492' - 19229'
Projection to TD: 19286'