

Well Specifications

Well Name: WLSU No. 25
Start Date: 12-19-2008
Client: Energen Resources
Rig Name: Key 880
County: Lea County, New Mexico
Field: (WLSU) Sec 6, T16S, R36E

SUR: B-6-16s-36e, 1025/N & 1953/E
BHL: D-6-16s-36e, 1014/N & 4447/E
API # 30-025-03732

Well Coordinates:

NAD 27 / NM - Eastern Zone (3001)

Grid Coordinates

Easting = 788859.20
Northing = 715589.8

Geographical Coordinates

Longitude: 103° 23' 29.573" W
Latitude: 32° 57' 49.237" N

RKB: 3976' ft above M.S.L.

Date TD Reached: 04-2-2009

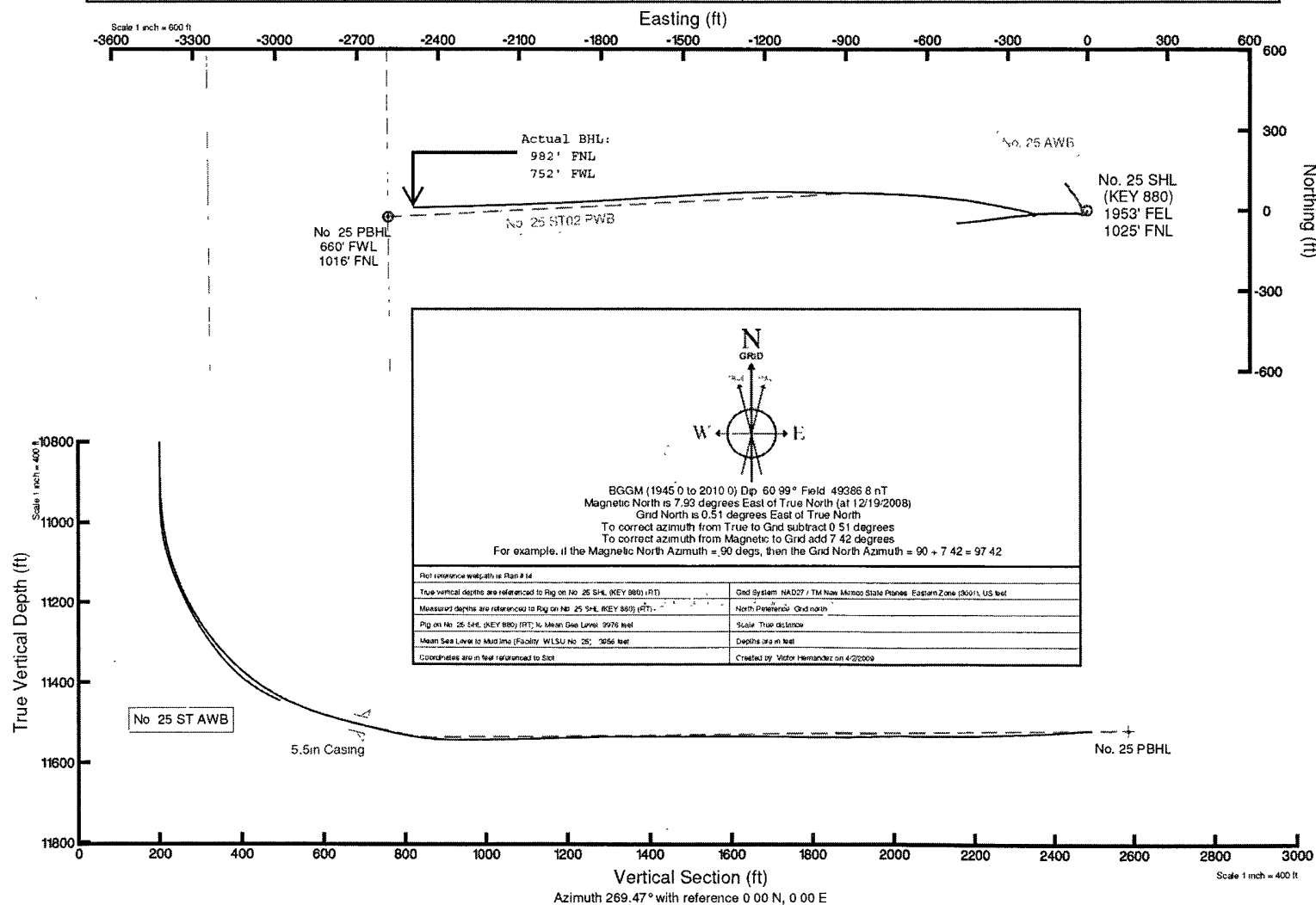
Final Depth MD: 13,575 ft

Final Depth TVD: 11520.66 ft

INTEO

Slot: No. 25 SHL (KEY 880)
Well: No. 25
Wellbore: No. 25 ST02 PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (%/100ft)	VS (ft)
Tie On	11726.00	74.700	274.800	11496.88	56.71	-651.98	0.00	651.43
PROJ. TO BIT	11780.00	77.200	273.000	11509.99	60.26	-704.24	5.65	703.65
EST. HOLD	11860.00	77.200	273.000	11527.71	64.35	-782.14	0.00	781.51
END OF CURVE/TURN	11957.02	90.603	267.039	11538.00	64.32	-878.35	15.10	877.71
No. 25 BHL	13666.94	90.603	267.039	11520.00	-24.00	-2585.89	0.00	2586.00



Actual Wellpath Report

No. 25 ST02 AWP

Page 1 of 13



REFERENCE WELLPATH IDENTIFICATION

Operator	Energien Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWB
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWB at 10899.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	1	Report Generated	4/2/2009 at 2:37:42 PM
Convergence at slot	0.51° East	Database/Source file	WA_Midland/No. 25_ST02_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	788859.20	715589.80	32°57'49.237"N	103°23'29.573"W
Facility Reference Pt			788859.20	715589.80	32°57'49.237"N	103°23'29.573"W
Field Reference Pt			788859.20	715589.80	32°57'49.237"N	103°23'29.573"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 25 SHL (KEY 880) (RT) to Facility Vertical Datum	20.00ft
Horizontal Reference Pt	Slot	Rig on No. 25 SHL (KEY 880) (RT) to Mean Sea Level	3976.00ft
Vertical Reference Pt	Rig on No. 25 SHL (KEY 880) (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
1D Reference Pt	Rig on No. 25 SHL (KEY 880) (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.47°

Actual Wellpath Report

No. 25 ST02 AWP

Page 2 of 13



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	191.240	0.00	0.00	0.00	0.00	788859.20	715589.80	32°57'49.237"N	103°23'29.573"W	0.00
106.00	0.490	191.240	106.00	0.09	-0.44	-0.09	788859.11	715589.36	32°57'49.233"N	103°23'29.574"W	0.46
206.00	0.470	166.100	206.00	0.08	-1.26	-0.07	788859.13	715588.54	32°57'49.225"N	103°23'29.574"W	0.21
306.00	0.450	177.650	305.99	-0.02	-2.05	0.04	788859.24	715587.75	32°57'49.217"N	103°23'29.573"W	0.05
406.00	0.460	183.710	405.99	-0.01	-2.85	0.03	788859.23	715586.95	32°57'49.209"N	103°23'29.573"W	0.05
506.00	0.530	179.900	505.99	0.03	-3.71	0.01	788859.21	715586.09	32°57'49.201"N	103°23'29.573"W	0.08
606.00	0.530	177.540	605.98	0.02	-4.63	0.03	788859.23	715585.17	32°57'49.192"N	103°23'29.573"W	0.02
706.00	0.590	191.880	705.98	0.11	-5.60	-0.06	788859.14	715584.20	32°57'49.182"N	103°23'29.574"W	0.15
806.00	0.510	203.730	805.97	0.40	-6.51	-0.34	788858.86	715583.29	32°57'49.173"N	103°23'29.578"W	0.14
906.00	0.410	203.350	905.97	0.73	-7.25	-0.67	788858.53	715582.55	32°57'49.166"N	103°23'29.582"W	0.10
1006.00	0.370	206.100	1005.97	1.02	-7.86	-0.95	788858.25	715581.94	32°57'49.160"N	103°23'29.585"W	0.04
1106.00	0.320	196.270	1105.96	1.25	-8.42	-1.17	788858.03	715581.38	32°57'49.154"N	103°23'29.588"W	0.08
1206.00	0.230	222.370	1205.96	1.46	-8.84	-1.38	788857.82	715580.96	32°57'49.150"N	103°23'29.590"W	0.15
1306.00	0.240	250.840	1305.96	1.80	-9.06	-1.72	788857.48	715580.74	32°57'49.148"N	103°23'29.594"W	0.12
1406.00	0.220	215.390	1405.96	2.11	-9.28	-2.02	788857.18	715580.52	32°57'49.146"N	103°23'29.598"W	0.14
1506.00	0.390	223.240	1505.96	2.46	-9.69	-2.37	788856.83	715580.11	32°57'49.142"N	103°23'29.602"W	0.17
1606.00	0.290	257.770	1605.96	2.94	-9.99	-2.85	788856.35	715579.81	32°57'49.139"N	103°23'29.608"W	0.22
1706.00	0.410	239.950	1705.96	3.50	-10.22	-3.41	788855.79	715579.58	32°57'49.137"N	103°23'29.614"W	0.16
1806.00	0.290	250.210	1805.95	4.05	-10.49	-3.95	788855.25	715579.31	32°57'49.134"N	103°23'29.621"W	0.13
1906.00	0.460	242.890	1905.95	4.65	-10.75	-4.55	788854.65	715579.05	32°57'49.131"N	103°23'29.628"W	0.18
2006.00	0.330	254.320	2005.95	5.29	-11.01	-5.18	788854.02	715578.79	32°57'49.129"N	103°23'29.635"W	0.15
2106.00	0.450	250.070	2105.95	5.93	-11.23	-5.83	788853.37	715578.57	32°57'49.127"N	103°23'29.643"W	0.12
2206.00	0.400	246.400	2205.95	6.63	-11.50	-6.52	788852.68	715578.30	32°57'49.124"N	103°23'29.651"W	0.06
2306.00	0.660	234.820	2305.94	7.42	-11.97	-7.31	788851.89	715577.83	32°57'49.120"N	103°23'29.660"W	0.28
2406.00	0.570	238.880	2405.93	8.32	-12.56	-8.21	788850.99	715577.24	32°57'49.114"N	103°23'29.671"W	0.10
2506.00	0.740	235.050	2505.93	9.28	-13.19	-9.16	788850.04	715576.61	32°57'49.108"N	103°23'29.682"W	0.18
2606.00	0.690	245.640	2605.92	10.37	-13.81	-10.24	788848.96	715575.99	32°57'49.102"N	103°23'29.695"W	0.14
2706.00	0.860	243.610	2705.91	11.59	-14.39	-11.46	788847.74	715575.41	32°57'49.096"N	103°23'29.709"W	0.17
2806.00	0.720	245.080	2805.90	12.84	-14.99	-12.70	788846.50	715574.81	32°57'49.090"N	103°23'29.724"W	0.14
2906.00	0.920	240.810	2905.89	14.12	-15.64	-13.97	788845.23	715574.16	32°57'49.084"N	103°23'29.739"W	0.21

Actual Wellpath Report

No. 25 ST02 AWP

Page 3 of 13



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWB
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWB at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
3006.00	0.790	249.640	3005.88	15.47	-16.27	-15.32	788843.88	715573.53	32°57'49.078"N	103°23'29.755"W	0.18
3106.00	0.770	251.050	3105.87	16.76	-16.73	-16.60	788842.60	715573.07	32°57'49.073"N	103°23'29.770"W	0.03
3206.00	0.400	247.210	3205.87	17.72	-17.08	-17.56	788841.64	715572.72	32°57'49.070"N	103°23'29.781"W	0.37
3306.00	0.280	279.280	3305.86	18.28	-17.18	-18.12	788841.08	715572.62	32°57'49.069"N	103°23'29.788"W	0.22
3406.00	0.220	251.460	3405.86	18.70	-17.20	-18.55	788840.65	715572.60	32°57'49.069"N	103°23'29.793"W	0.13
3506.00	0.150	287.900	3505.86	19.01	-17.22	-18.85	788840.35	715572.58	32°57'49.069"N	103°23'29.796"W	0.13
3606.00	0.290	283.080	3605.86	19.38	-17.13	-19.22	788839.98	715572.67	32°57'49.070"N	103°23'29.800"W	0.14
3706.00	0.290	310.540	3705.86	19.82	-16.90	-19.66	788839.54	715572.90	32°57'49.072"N	103°23'29.806"W	0.14
3806.00	0.170	275.640	3805.86	20.16	-16.72	-20.00	788839.20	715573.08	32°57'49.074"N	103°23'29.810"W	0.18
3906.00	0.240	313.360	3905.86	20.46	-16.57	-20.30	788838.90	715573.23	32°57'49.075"N	103°23'29.813"W	0.15
4006.00	0.450	6.030	4005.86	20.56	-16.03	-20.41	788838.79	715573.77	32°57'49.081"N	103°23'29.814"W	0.36
4106.00	0.450	11.950	4105.85	20.43	-15.26	-20.29	788838.91	715574.54	32°57'49.088"N	103°23'29.813"W	0.05
4206.00	0.450	337.430	4205.85	20.49	-14.51	-20.36	788838.84	715575.29	32°57'49.096"N	103°23'29.814"W	0.27
4253.00	0.620	347.900	4252.85	20.61	-14.09	-20.48	788838.72	715575.71	32°57'49.100"N	103°23'29.815"W	0.42
4336.00	4.800	279.500	4335.75	24.13	-13.08	-24.01	788835.19	715576.72	32°57'49.110"N	103°23'29.856"W	5.55
4368.00	5.400	277.800	4367.62	26.93	-12.65	-26.82	788832.38	715577.15	32°57'49.115"N	103°23'29.889"W	1.93
4402.00	5.500	277.400	4401.47	30.13	-12.23	-30.02	788829.18	715577.57	32°57'49.119"N	103°23'29.927"W	0.31
4426.00	5.500	277.800	4425.36	32.41	-11.92	-32.30	788826.90	715577.88	32°57'49.122"N	103°23'29.953"W	0.16
4465.00	5.500	277.800	4464.18	36.11	-11.41	-36.00	788823.20	715578.39	32°57'49.128"N	103°23'29.997"W	0.00
4497.00	5.400	278.100	4496.03	39.11	-10.99	-39.01	788820.19	715578.81	32°57'49.132"N	103°23'30.032"W	0.32
4530.00	5.400	276.100	4528.88	42.19	-10.61	-42.09	788817.11	715579.19	32°57'49.136"N	103°23'30.068"W	0.57
4562.00	5.400	266.200	4560.74	45.19	-10.55	-45.09	788814.11	715579.25	32°57'49.137"N	103°23'30.103"W	2.91
4594.00	5.600	261.200	4592.60	48.24	-10.89	-48.14	788811.06	715578.91	32°57'49.134"N	103°23'30.139"W	1.62
4626.00	5.800	260.200	4624.44	51.38	-11.40	-51.27	788807.93	715578.40	32°57'49.129"N	103°23'30.176"W	0.70
4659.00	5.400	265.800	4657.28	54.57	-11.80	-54.47	788804.73	715578.00	32°57'49.125"N	103°23'30.214"W	2.05
4691.00	5.000	271.700	4689.15	57.47	-11.87	-57.36	788801.84	715577.93	32°57'49.125"N	103°23'30.247"W	2.09
4723.00	5.100	270.400	4721.03	60.29	-11.82	-60.18	788799.02	715577.98	32°57'49.126"N	103°23'30.281"W	0.47
4754.00	4.900	269.700	4751.91	62.99	-11.82	-62.88	788796.32	715577.98	32°57'49.126"N	103°23'30.312"W	0.67
4786.00	4.900	269.000	4783.79	65.72	-11.85	-65.61	788793.59	715577.95	32°57'49.126"N	103°23'30.344"W	0.19
4819.00	5.800	270.700	4816.65	68.80	-11.85	-68.69	788790.51	715577.95	32°57'49.126"N	103°23'30.380"W	2.77

Actual Wellpath Report

No. 25 ST02 AWP

Page 4 of 13



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
4851.00	6.200	272.900	4848.47	72.14	-11.74	-72.03	788787.17	715578.06	32°57'49.128"N	103°23'30.420"W	1.44
4883.00	6.700	273.600	4880.27	75.73	-11.54	-75.62	788783.58	715578.26	32°57'49.130"N	103°23'30.462"W	1.58
4916.00	7.500	272.500	4913.01	79.80	-11.32	-79.69	788779.51	715578.48	32°57'49.132"N	103°23'30.510"W	2.46
4948.00	8.000	270.400	4944.72	84.11	-11.22	-84.01	788775.19	715578.58	32°57'49.134"N	103°23'30.560"W	1.80
4981.00	8.000	268.300	4977.40	88.70	-11.27	-88.60	788770.60	715578.53	32°57'49.134"N	103°23'30.614"W	0.89
5013.00	8.300	267.600	5009.08	93.23	-11.43	-93.13	788766.07	715578.37	32°57'49.133"N	103°23'30.667"W	0.99
5045.00	8.200	266.500	5040.75	97.82	-11.67	-97.72	788761.48	715578.13	32°57'49.131"N	103°23'30.721"W	0.58
5078.00	7.900	267.900	5073.42	102.44	-11.90	-102.33	788756.87	715577.90	32°57'49.129"N	103°23'30.775"W	1.09
5110.00	7.500	269.000	5105.13	106.73	-12.01	-106.62	788752.58	715577.79	32°57'49.128"N	103°23'30.826"W	1.39
5142.00	7.400	269.700	5136.86	110.87	-12.06	-110.77	788748.43	715577.74	32°57'49.128"N	103°23'30.874"W	0.42
5175.00	7.400	271.400	5169.59	115.12	-12.02	-115.02	788744.18	715577.78	32°57'49.129"N	103°23'30.924"W	0.66
5207.00	7.400	271.100	5201.32	119.24	-11.93	-119.14	788740.06	715577.87	32°57'49.130"N	103°23'30.972"W	0.12
5239.00	7.400	271.700	5233.06	123.36	-11.83	-123.26	788735.94	715577.97	32°57'49.131"N	103°23'31.021"W	0.24
5271.00	7.500	271.800	5264.79	127.51	-11.70	-127.41	788731.79	715578.10	32°57'49.133"N	103°23'31.070"W	0.32
5304.00	7.400	270.400	5297.51	131.79	-11.62	-131.68	788727.52	715578.18	32°57'49.134"N	103°23'31.120"W	0.63
5336.00	7.600	269.300	5329.23	135.96	-11.63	-135.86	788723.34	715578.17	32°57'49.134"N	103°23'31.169"W	0.77
5368.00	7.600	266.900	5360.95	140.19	-11.77	-140.09	788719.11	715578.03	32°57'49.133"N	103°23'31.218"W	0.99
5400.00	7.200	266.500	5392.69	144.31	-12.01	-144.20	788715.00	715577.79	32°57'49.131"N	103°23'31.267"W	1.26
5432.00	7.000	267.600	5424.44	148.26	-12.21	-148.15	788711.05	715577.59	32°57'49.130"N	103°23'31.313"W	0.76
5433.00	7.000	267.600	5425.43	148.38	-12.22	-148.27	788710.92	715577.58	32°57'49.130"N	103°23'31.314"W	0.00
5465.00	6.800	270.400	5457.20	152.22	-12.29	-152.12	788707.08	715577.51	32°57'49.129"N	103°23'31.360"W	1.22
5497.00	6.700	270.000	5488.98	155.99	-12.27	-155.88	788703.32	715577.53	32°57'49.130"N	103°23'31.404"W	0.35
5530.00	7.400	268.900	5521.73	160.04	-12.31	-159.93	788699.27	715577.49	32°57'49.130"N	103°23'31.451"W	2.16
5562.00	7.700	268.600	5553.45	164.24	-12.40	-164.13	788695.07	715577.40	32°57'49.129"N	103°23'31.501"W	0.95
5595.00	7.700	268.300	5586.15	168.66	-12.52	-168.55	788690.65	715577.28	32°57'49.128"N	103°23'31.552"W	0.12
5627.00	7.800	268.300	5617.86	172.98	-12.65	-172.87	788686.33	715577.15	32°57'49.128"N	103°23'31.603"W	0.31
5659.00	7.400	265.800	5649.58	177.20	-12.87	-177.09	788682.11	715576.93	32°57'49.126"N	103°23'31.653"W	1.62
5691.00	7.000	263.400	5681.33	181.20	-13.24	-181.08	788678.12	715576.56	32°57'49.122"N	103°23'31.700"W	1.56
5724.00	6.600	265.100	5714.10	185.09	-13.64	-184.97	788674.23	715576.16	32°57'49.119"N	103°23'31.745"W	1.36
5756.00	6.100	264.800	5745.90	188.62	-13.95	-188.50	788670.70	715575.85	32°57'49.116"N	103°23'31.787"W	1.57

Actual Wellpath Report

No. 25 ST02 AWP

Page 5 of 13



REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
5788.00	5.800	265.800	5777.73	191.93	-14.22	-191.80	788667.40	715575.58	32°57'49.114"N	103°23'31.826"W	0.99
5820.00	5.300	265.200	5809.58	195.01	-14.46	-194.89	788664.31	715575.34	32°57'49.112"N	103°23'31.862"W	1.57
5853.00	4.400	268.300	5842.46	197.80	-14.63	-197.67	788661.53	715575.17	32°57'49.110"N	103°23'31.894"W	2.84
5885.00	3.900	271.400	5874.37	200.11	-14.64	-199.99	788659.21	715575.16	32°57'49.110"N	103°23'31.922"W	1.71
5917.00	3.200	271.800	5906.31	202.09	-14.58	-201.97	788657.23	715575.22	32°57'49.111"N	103°23'31.945"W	2.19
5949.00	1.900	266.400	5938.28	203.52	-14.59	-203.39	788655.81	715575.21	32°57'49.111"N	103°23'31.962"W	4.12
5982.00	1.500	231.100	5971.27	204.40	-14.89	-204.27	788654.93	715574.91	32°57'49.108"N	103°23'31.972"W	3.33
6014.00	1.700	211.700	6003.26	204.98	-15.56	-204.85	788654.35	715574.24	32°57'49.102"N	103°23'31.979"W	1.79
6046.00	1.400	196.600	6035.24	205.35	-16.34	-205.21	788653.99	715573.46	32°57'49.094"N	103°23'31.983"W	1.58
6078.00	1.100	157.200	6067.24	205.35	-17.00	-205.20	788654.00	715572.80	32°57'49.087"N	103°23'31.983"W	2.78
6111.00	1.100	135.700	6100.23	205.01	-17.51	-204.86	788654.34	715572.29	32°57'49.082"N	103°23'31.979"W	1.24
6143.00	1.300	115.000	6132.22	204.47	-17.89	-204.31	788654.89	715571.91	32°57'49.079"N	103°23'31.973"W	1.48
6175.00	1.300	108.000	6164.22	203.80	-18.15	-203.64	788655.56	715571.65	32°57'49.076"N	103°23'31.965"W	0.50
6207.00	1.600	107.600	6196.21	203.03	-18.40	-202.87	788656.33	715571.40	32°57'49.073"N	103°23'31.956"W	0.94
6240.00	1.700	99.500	6229.19	202.11	-18.62	-201.95	788657.25	715571.18	32°57'49.071"N	103°23'31.945"W	0.77
6272.00	1.600	100.200	6261.18	201.20	-18.78	-201.04	788658.16	715571.02	32°57'49.069"N	103°23'31.934"W	0.32
6310.00	2.100	91.100	6299.16	199.99	-18.89	-199.82	788659.38	715570.91	32°57'49.068"N	103°23'31.920"W	1.52
6336.00	2.200	90.000	6325.14	199.01	-18.89	-198.84	788660.36	715570.91	32°57'49.068"N	103°23'31.909"W	0.42
6368.00	1.200	86.200	6357.13	198.06	-18.87	-197.90	788661.30	715570.93	32°57'49.068"N	103°23'31.898"W	3.14
6400.00	1.100	39.800	6389.12	197.53	-18.61	-197.36	788661.84	715571.19	32°57'49.071"N	103°23'31.891"W	2.85
6432.00	1.400	25.700	6421.11	197.16	-18.03	-197.00	788662.20	715571.77	32°57'49.077"N	103°23'31.887"W	1.34
6465.00	1.300	18.000	6454.10	196.86	-17.31	-196.71	788662.49	715572.49	32°57'49.084"N	103°23'31.883"W	0.63
6497.00	1.400	18.300	6486.09	196.62	-16.59	-196.47	788662.73	715573.21	32°57'49.091"N	103°23'31.881"W	0.31
6529.00	1.400	15.900	6518.08	196.38	-15.84	-196.24	788662.96	715573.96	32°57'49.098"N	103°23'31.878"W	0.18
6561.00	1.200	344.900	6550.08	196.36	-15.14	-196.22	788662.98	715574.66	32°57'49.105"N	103°23'31.878"W	2.25
6594.00	1.700	316.400	6583.07	196.78	-14.46	-196.65	788662.55	715575.34	32°57'49.112"N	103°23'31.882"W	2.61
6626.00	1.500	311.500	6615.05	197.41	-13.83	-197.29	788661.91	715575.97	32°57'49.118"N	103°23'31.890"W	0.76
6658.00	0.700	308.000	6647.05	197.88	-13.44	-197.76	788661.44	715576.36	32°57'49.122"N	103°23'31.895"W	2.51
6690.00	0.400	316.100	6679.05	198.11	-13.24	-197.99	788661.21	715576.56	32°57'49.124"N	103°23'31.898"W	0.97
6723.00	0.600	308.700	6712.05	198.32	-13.04	-198.21	788660.99	715576.76	32°57'49.126"N	103°23'31.901"W	0.64

Actual Wellpath Report

No. 25 ST02 AWP

Page 6 of 13



REFERENCE WELLPATH IDENTIFICATION

Operator	Energen Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWB
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
6755.00	0.600	318.900	6744.04	198.56	-12.81	-198.45	788660.75	715576.99	32°57'49.128"N	103°23'31.903"W	0.33
6787.00	0.600	295.300	6776.04	198.82	-12.62	-198.71	788660.49	715577.18	32°57'49.130"N	103°23'31.906"W	0.77
6820.00	0.400	312.900	6809.04	199.06	-12.46	-198.95	788660.25	715577.34	32°57'49.132"N	103°23'31.909"W	0.76
6852.00	0.600	322.100	6841.04	199.24	-12.26	-199.13	788660.07	715577.54	32°57'49.134"N	103°23'31.911"W	0.67
6884.00	0.400	286.200	6873.04	199.45	-12.09	-199.34	788659.86	715577.71	32°57'49.135"N	103°23'31.914"W	1.13
6916.00	0.300	192.300	6905.04	199.57	-12.14	-199.47	788659.73	715577.66	32°57'49.135"N	103°23'31.915"W	1.61
6949.00	0.500	218.700	6938.04	199.68	-12.34	-199.58	788659.62	715577.46	32°57'49.133"N	103°23'31.917"W	0.81
6981.00	0.900	237.000	6970.03	199.98	-12.59	-199.88	788659.32	715577.21	32°57'49.131"N	103°23'31.920"W	1.42
7013.00	0.800	260.000	7002.03	200.42	-12.76	-200.31	788658.89	715577.04	32°57'49.129"N	103°23'31.925"W	1.10
7046.00	0.500	325.200	7035.03	200.72	-12.68	-200.62	788658.58	715577.12	32°57'49.130"N	103°23'31.929"W	2.26
7078.00	0.400	329.100	7067.03	200.86	-12.47	-200.75	788658.45	715577.33	32°57'49.132"N	103°23'31.930"W	0.33
7111.00	0.400	345.300	7100.03	200.95	-12.26	-200.84	788658.36	715577.54	32°57'49.134"N	103°23'31.931"W	0.34
7143.00	0.000	311.200	7132.03	200.97	-12.15	-200.87	788658.33	715577.65	32°57'49.135"N	103°23'31.932"W	1.25
7175.00	0.200	101.300	7164.03	200.92	-12.16	-200.81	788658.39	715577.64	32°57'49.135"N	103°23'31.931"W	0.62
7207.00	0.200	118.200	7196.03	200.81	-12.20	-200.71	788658.49	715577.60	32°57'49.134"N	103°23'31.930"W	0.18
7239.00	0.400	200.200	7228.03	200.81	-12.33	-200.70	788658.50	715577.47	32°57'49.133"N	103°23'31.930"W	1.32
7271.00	0.200	201.800	7260.03	200.87	-12.49	-200.76	788658.44	715577.31	32°57'49.132"N	103°23'31.930"W	0.63
7304.00	0.100	10.200	7293.03	200.88	-12.52	-200.78	788658.42	715577.28	32°57'49.131"N	103°23'31.931"W	0.90
7336.00	0.200	183.900	7325.03	200.88	-12.54	-200.77	788658.43	715577.26	32°57'49.131"N	103°23'31.931"W	0.94
7368.00	0.200	238.400	7357.03	200.93	-12.63	-200.83	788658.37	715577.17	32°57'49.130"N	103°23'31.931"W	0.57
7400.00	0.100	275.000	7389.03	201.01	-12.66	-200.90	788658.30	715577.14	32°57'49.130"N	103°23'31.932"W	0.42
7432.00	0.300	235.600	7421.03	201.11	-12.70	-201.00	788658.20	715577.10	32°57'49.130"N	103°23'31.933"W	0.72
7464.00	0.100	47.100	7453.03	201.16	-12.73	-201.05	788658.15	715577.07	32°57'49.129"N	103°23'31.934"W	1.25
7497.00	0.300	129.800	7486.03	201.07	-12.76	-200.96	788658.24	715577.04	32°57'49.129"N	103°23'31.933"W	0.92
7529.00	0.300	118.500	7518.02	200.93	-12.86	-200.82	788658.38	715576.94	32°57'49.128"N	103°23'31.931"W	0.18
7561.00	0.200	130.800	7550.02	200.82	-12.93	-200.70	788658.49	715576.87	32°57'49.127"N	103°23'31.930"W	0.35
7594.00	0.200	74.600	7583.02	200.72	-12.96	-200.61	788658.59	715576.84	32°57'49.127"N	103°23'31.929"W	0.57
7626.00	0.300	67.000	7615.02	200.59	-12.91	-200.47	788658.72	715576.89	32°57'49.127"N	103°23'31.927"W	0.33
7658.00	0.400	104.000	7647.02	200.40	-12.90	-200.29	788658.91	715576.90	32°57'49.127"N	103°23'31.925"W	0.75
7690.00	0.200	60.900	7679.02	200.24	-12.90	-200.13	788659.07	715576.90	32°57'49.127"N	103°23'31.923"W	0.90

Actual Wellpath Report

No. 25 ST02 AWP

Page 7 of 13



REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
7722.00	0.200	68.800	7711.02	200.14	-12.86	-200.03	788659.17	715576.94	32°57'49.128"N	103°23'31.922"W	0.09
7755.00	0.300	106.600	7744.02	200.01	-12.86	-199.89	788659.30	715576.94	32°57'49.128"N	103°23'31.920"W	0.57
7787.00	0.300	104.500	7776.02	199.84	-12.90	-199.73	788659.47	715576.90	32°57'49.127"N	103°23'31.918"W	0.03
7818.00	0.200	58.000	7807.02	199.72	-12.90	-199.61	788659.59	715576.90	32°57'49.127"N	103°23'31.917"W	0.70
7851.00	0.200	52.100	7840.02	199.63	-12.83	-199.51	788659.68	715576.97	32°57'49.128"N	103°23'31.916"W	0.06
7883.00	0.400	62.600	7872.02	199.48	-12.74	-199.37	788659.83	715577.06	32°57'49.129"N	103°23'31.914"W	0.65
7915.00	0.300	93.200	7904.02	199.30	-12.70	-199.19	788660.01	715577.10	32°57'49.129"N	103°23'31.912"W	0.65
7947.00	0.200	186.400	7936.02	199.22	-12.76	-199.11	788660.09	715577.04	32°57'49.129"N	103°23'31.911"W	1.16
7979.00	0.400	212.000	7968.02	199.29	-12.91	-199.18	788660.02	715576.89	32°57'49.127"N	103°23'31.912"W	0.74
8012.00	0.400	201.800	8001.02	199.39	-13.11	-199.28	788659.92	715576.69	32°57'49.125"N	103°23'31.913"W	0.22
8044.00	0.400	209.200	8033.02	199.49	-13.31	-199.38	788659.82	715576.49	32°57'49.123"N	103°23'31.914"W	0.16
8076.00	0.300	210.300	8065.02	199.59	-13.48	-199.47	788659.73	715576.32	32°57'49.122"N	103°23'31.915"W	0.31
8108.00	0.400	191.600	8097.02	199.66	-13.67	-199.54	788659.66	715576.13	32°57'49.120"N	103°23'31.916"W	0.47
8141.00	0.400	149.100	8130.02	199.62	-13.88	-199.50	788659.70	715575.92	32°57'49.118"N	103°23'31.916"W	0.88
8173.00	0.100	216.200	8162.02	199.58	-14.00	-199.46	788659.74	715575.80	32°57'49.117"N	103°23'31.915"W	1.16
8205.00	0.300	20.100	8194.02	199.57	-13.94	-199.45	788659.75	715575.86	32°57'49.117"N	103°23'31.915"W	1.24
8237.00	0.400	29.600	8226.02	199.48	-13.76	-199.36	788659.83	715576.04	32°57'49.119"N	103°23'31.914"W	0.36
8270.00	0.400	15.900	8259.01	199.39	-13.55	-199.28	788659.92	715576.25	32°57'49.121"N	103°23'31.913"W	0.29
8303.00	0.300	23.600	8292.01	199.33	-13.36	-199.21	788659.99	715576.44	32°57'49.123"N	103°23'31.912"W	0.33
8335.00	0.200	14.100	8324.01	199.28	-13.23	-199.16	788660.04	715576.57	32°57'49.124"N	103°23'31.912"W	0.34
8359.00	0.200	304.600	8348.01	199.30	-13.17	-199.19	788660.01	715576.63	32°57'49.125"N	103°23'31.912"W	0.95
8391.00	0.400	263.400	8380.01	199.46	-13.15	-199.34	788659.86	715576.65	32°57'49.125"N	103°23'31.914"W	0.88
8423.00	0.400	267.900	8412.01	199.68	-13.17	-199.57	788659.63	715576.63	32°57'49.125"N	103°23'31.917"W	0.10
8456.00	0.400	163.900	8445.01	199.76	-13.28	-199.65	788659.55	715576.52	32°57'49.124"N	103°23'31.918"W	1.91
8488.00	0.800	162.800	8477.01	199.67	-13.60	-199.55	788659.65	715576.20	32°57'49.121"N	103°23'31.916"W	1.25
8520.00	0.500	167.000	8509.01	199.58	-13.95	-199.46	788659.74	715575.85	32°57'49.117"N	103°23'31.915"W	0.95
8553.00	0.400	196.200	8542.01	199.58	-14.20	-199.46	788659.74	715575.60	32°57'49.115"N	103°23'31.915"W	0.75
8585.00	0.400	202.500	8574.01	199.65	-14.41	-199.53	788659.67	715575.39	32°57'49.112"N	103°23'31.916"W	0.14
8617.00	0.800	170.500	8606.00	199.66	-14.74	-199.54	788659.66	715575.06	32°57'49.109"N	103°23'31.916"W	1.58
8650.00	0.400	195.900	8639.00	199.66	-15.07	-199.53	788659.67	715574.73	32°57'49.106"N	103°23'31.916"W	1.43

Actual Wellpath Report

No. 25 ST02 AWP

Page 8 of 13



REFERENCE WELLPATH IDENTIFICATION

Operator	Energen Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
8682.00	0.400	123.800	8671.00	199.60	-15.24	-199.47	788659.73	715574.56	32°57'49.104"N	103°23'31.916"W	1.47
8715.00	0.400	208.900	8704.00	199.56	-15.41	-199.43	788659.77	715574.39	32°57'49.103"N	103°23'31.915"W	1.64
8747.00	0.400	90.700	8736.00	199.50	-15.51	-199.37	788659.83	715574.29	32°57'49.102"N	103°23'31.914"W	2.15
8779.00	0.500	40.100	8768.00	199.30	-15.40	-199.17	788660.03	715574.40	32°57'49.103"N	103°23'31.912"W	1.23
8811.00	0.800	15.200	8800.00	199.15	-15.08	-199.02	788660.18	715574.72	32°57'49.106"N	103°23'31.910"W	1.27
8848.00	0.600	359.600	8837.00	199.08	-14.64	-198.95	788660.25	715575.16	32°57'49.110"N	103°23'31.909"W	0.74
8880.00	0.700	3.400	8868.99	199.07	-14.27	-198.94	788660.26	715575.53	32°57'49.114"N	103°23'31.909"W	0.34
8913.00	0.500	17.700	8901.99	199.01	-13.94	-198.89	788660.31	715575.86	32°57'49.117"N	103°23'31.909"W	0.75
8944.00	0.100	274.800	8932.99	198.99	-13.80	-198.87	788660.33	715576.00	32°57'49.118"N	103°23'31.908"W	1.71
8977.00	0.100	85.400	8965.99	198.99	-13.80	-198.87	788660.33	715576.00	32°57'49.118"N	103°23'31.908"W	0.60
9009.00	0.100	173.700	8997.99	198.96	-13.83	-198.84	788660.36	715575.97	32°57'49.118"N	103°23'31.908"W	0.44
9041.00	0.100	127.900	9029.99	198.94	-13.87	-198.82	788660.38	715575.93	32°57'49.118"N	103°23'31.908"W	0.24
9074.00	0.100	87.400	9062.99	198.88	-13.89	-198.76	788660.44	715575.91	32°57'49.118"N	103°23'31.907"W	0.21
9106.00	0.100	327.800	9094.99	198.87	-13.86	-198.75	788660.45	715575.94	32°57'49.118"N	103°23'31.907"W	0.54
9138.00	0.100	25.800	9126.99	198.87	-13.81	-198.75	788660.45	715575.99	32°57'49.118"N	103°23'31.907"W	0.30
9170.00	0.200	51.900	9158.99	198.82	-13.75	-198.70	788660.50	715576.05	32°57'49.119"N	103°23'31.906"W	0.37
9203.00	0.200	34.600	9191.99	198.74	-13.67	-198.62	788660.58	715576.13	32°57'49.120"N	103°23'31.905"W	0.18
9235.00	0.200	344.500	9223.99	198.72	-13.57	-198.60	788660.60	715576.23	32°57'49.121"N	103°23'31.905"W	0.53
9267.00	0.400	306.200	9255.99	198.82	-13.45	-198.71	788660.49	715576.35	32°57'49.122"N	103°23'31.906"W	0.85
9299.00	0.500	286.500	9287.99	199.05	-13.35	-198.93	788660.27	715576.45	32°57'49.123"N	103°23'31.909"W	0.57
9332.00	0.400	308.700	9320.99	199.27	-13.23	-199.16	788660.04	715576.57	32°57'49.124"N	103°23'31.912"W	0.60
9364.00	0.500	321.500	9352.99	199.45	-13.05	-199.33	788659.87	715576.75	32°57'49.126"N	103°23'31.914"W	0.44
9397.00	0.600	311.700	9385.99	199.66	-12.83	-199.55	788659.65	715576.97	32°57'49.128"N	103°23'31.916"W	0.41
9429.00	0.600	280.400	9417.98	199.95	-12.68	-199.84	788659.36	715577.12	32°57'49.130"N	103°23'31.920"W	1.01
9461.00	0.600	253.500	9449.98	200.28	-12.70	-200.17	788659.03	715577.10	32°57'49.129"N	103°23'31.924"W	0.87
9494.00	1.000	222.600	9482.98	200.64	-12.96	-200.53	788658.67	715576.84	32°57'49.127"N	103°23'31.928"W	1.74
9526.00	0.800	223.800	9514.98	200.99	-13.33	-200.87	788658.33	715576.47	32°57'49.123"N	103°23'31.932"W	0.63
9559.00	0.800	218.000	9547.97	201.29	-13.68	-201.17	788658.03	715576.12	32°57'49.120"N	103°23'31.935"W	0.25
9590.00	0.800	217.400	9578.97	201.56	-14.02	-201.44	788657.76	715575.78	32°57'49.117"N	103°23'31.939"W	0.03
9622.00	0.500	224.300	9610.97	201.80	-14.30	-201.67	788657.53	715575.50	32°57'49.114"N	103°23'31.941"W	0.97

Actual Wellpath Report

No. 25 ST02 AWP

Page 9 of 13



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [%/100ft]
9654.00	0.600	212.600	9642.97	201.99	-14.54	-201.86	788657.34	715575.26	32°57'49.111"N	103°23'31.944"W	0.47
9686.00	0.200	221.900	9674.96	202.11	-14.72	-201.99	788657.21	715575.08	32°57'49.110"N	103°23'31.945"W	1.26
9718.00	0.300	144.500	9706.96	202.10	-14.83	-201.98	788657.22	715574.97	32°57'49.109"N	103°23'31.945"W	1.01
9751.00	0.200	242.800	9739.96	202.11	-14.93	-201.98	788657.22	715574.87	32°57'49.108"N	103°23'31.945"W	1.16
9783.00	0.200	130.600	9771.96	202.11	-14.99	-201.98	788657.22	715574.81	32°57'49.107"N	103°23'31.945"W	1.04
9815.00	0.200	190.700	9803.96	202.08	-15.08	-201.95	788657.25	715574.72	32°57'49.106"N	103°23'31.945"W	0.63
9848.00	0.200	256.500	9836.96	202.15	-15.15	-202.02	788657.18	715574.65	32°57'49.105"N	103°23'31.946"W	0.66
9880.00	0.200	267.900	9868.96	202.26	-15.16	-202.13	788657.07	715574.64	32°57'49.105"N	103°23'31.947"W	0.12
9912.00	0.300	61.660	9900.96	202.24	-15.13	-202.11	788657.09	715574.67	32°57'49.106"N	103°23'31.947"W	1.52
9944.00	1.000	46.400	9932.96	201.96	-14.89	-201.83	788657.36	715574.91	32°57'49.108"N	103°23'31.943"W	2.23
9977.00	0.500	47.800	9965.96	201.65	-14.60	-201.52	788657.68	715575.20	32°57'49.111"N	103°23'31.940"W	1.52
10012.00	0.600	48.700	10000.96	201.39	-14.38	-201.27	788657.93	715575.42	32°57'49.113"N	103°23'31.937"W	0.29
10044.00	0.700	61.100	10032.95	201.09	-14.17	-200.97	788658.23	715575.63	32°57'49.115"N	103°23'31.933"W	0.54
10077.00	0.900	58.100	10065.95	200.70	-13.94	-200.58	788658.62	715575.86	32°57'49.117"N	103°23'31.928"W	0.62
10109.00	0.800	53.200	10097.95	200.30	-13.67	-200.18	788659.02	715576.13	32°57'49.120"N	103°23'31.924"W	0.36
10142.00	0.800	66.900	10130.94	199.90	-13.44	-199.79	788659.41	715576.36	32°57'49.122"N	103°23'31.919"W	0.58
10174.00	0.700	50.800	10162.94	199.54	-13.23	-199.43	788659.77	715576.57	32°57'49.124"N	103°23'31.915"W	0.73
10206.00	0.800	57.600	10194.94	199.20	-12.99	-199.09	788660.11	715576.81	32°57'49.127"N	103°23'31.911"W	0.42
10239.00	0.700	62.200	10227.94	198.83	-12.77	-198.72	788660.48	715577.03	32°57'49.129"N	103°23'31.907"W	0.35
10271.00	0.800	61.300	10259.93	198.46	-12.57	-198.35	788660.85	715577.23	32°57'49.131"N	103°23'31.902"W	0.31
10304.00	0.700	63.900	10292.93	198.07	-12.37	-197.96	788661.23	715577.43	32°57'49.133"N	103°23'31.898"W	0.32
10336.00	0.400	107.300	10324.93	197.79	-12.32	-197.68	788661.52	715577.48	32°57'49.133"N	103°23'31.894"W	1.54
10368.00	0.500	152.000	10356.93	197.62	-12.48	-197.51	788661.69	715577.32	32°57'49.131"N	103°23'31.892"W	1.11
10401.00	0.900	169.900	10389.93	197.51	-12.86	-197.40	788661.80	715576.94	32°57'49.128"N	103°23'31.891"W	1.37
10433.00	1.000	169.000	10421.92	197.42	-13.38	-197.30	788661.90	715576.42	32°57'49.123"N	103°23'31.890"W	0.32
10465.00	0.900	168.000	10453.92	197.31	-13.90	-197.19	788662.01	715575.90	32°57'49.117"N	103°23'31.889"W	0.32
10498.00	0.600	172.000	10486.91	197.24	-14.32	-197.12	788662.08	715575.48	32°57'49.113"N	103°23'31.888"W	0.92
10531.00	0.500	181.500	10519.91	197.22	-14.64	-197.10	788662.10	715575.16	32°57'49.110"N	103°23'31.888"W	0.41
10563.00	0.600	202.100	10551.91	197.29	-14.93	-197.16	788662.04	715574.87	32°57'49.107"N	103°23'31.889"W	0.65
10595.00	0.600	218.200	10583.91	197.46	-15.22	-197.33	788661.87	715574.58	32°57'49.104"N	103°23'31.890"W	0.53

Actual Wellpath Report

No. 25 ST02 AWP

Page 10 of 13



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energex Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
10628.00	0.800	246.900	10616.91	197.78	-15.45	-197.65	788661.55	715574.35	32°57'49.102"N	103°23'31.894"W	1.20
10641.00	0.600	242.600	10629.91	197.93	-15.51	-197.79	788661.41	715574.29	32°57'49.101"N	103°23'31.896"W	1.59
10673.00	0.600	246.900	10661.90	198.23	-15.66	-198.10	788661.10	715574.14	32°57'49.100"N	103°23'31.900"W	0.14
10706.00	0.700	295.200	10694.90	198.57	-15.64	-198.44	788660.76	715574.16	32°57'49.100"N	103°23'31.904"W	1.64
10738.00	0.700	307.000	10726.90	198.90	-15.44	-198.77	788660.43	715574.36	32°57'49.102"N	103°23'31.907"W	0.45
10770.00	0.700	299.100	10758.90	199.23	-15.23	-199.10	788660.10	715574.57	32°57'49.104"N	103°23'31.911"W	0.30
10802.00	0.400	283.400	10790.90	199.51	-15.10	-199.38	788659.82	715574.70	32°57'49.106"N	103°23'31.915"W	1.04
10835.00	0.600	313.000	10823.90	199.74	-14.96	-199.61	788659.59	715574.84	32°57'49.107"N	103°23'31.917"W	0.97
10867.00	0.600	305.300	10855.89	200.00	-14.75	-199.87	788659.33	715575.05	32°57'49.109"N	103°23'31.920"W	0.25
10899.00	0.500	303.100	10887.89	200.25	-14.58	-200.13	788659.07	715575.22	32°57'49.111"N	103°23'31.923"W	0.32
10935.00	2.300	283.100	10923.88	201.09	-14.33	-200.96	788658.24	715575.47	32°57'49.113"N	103°23'31.933"W	5.11
10966.00	5.700	283.100	10954.80	203.19	-13.84	-203.07	788656.13	715575.96	32°57'49.118"N	103°23'31.958"W	10.97
10998.00	6.100	297.500	10986.63	206.23	-12.69	-206.12	788653.08	715577.11	32°57'49.130"N	103°23'31.993"W	4.78
11030.00	9.200	291.300	11018.34	210.11	-10.98	-210.02	788649.18	715578.82	32°57'49.147"N	103°23'32.039"W	10.01
11062.00	12.400	289.200	11049.77	215.72	-8.92	-215.65	788643.55	715580.88	32°57'49.168"N	103°23'32.105"W	10.07
11094.00	16.400	285.600	11080.76	223.30	-6.57	-223.25	788635.95	715583.23	32°57'49.192"N	103°23'32.194"W	12.80
11126.00	19.400	284.500	11111.21	232.77	-4.02	-232.74	788626.46	715585.78	32°57'49.218"N	103°23'32.305"W	9.43
11158.00	22.100	281.900	11141.13	243.78	-1.45	-243.78	788615.42	715588.35	32°57'49.245"N	103°23'32.434"W	8.91
11190.00	24.100	282.300	11170.56	256.03	1.18	-256.06	788603.14	715590.98	32°57'49.272"N	103°23'32.578"W	6.27
11221.00	27.100	281.400	11198.52	269.12	3.93	-269.16	788590.03	715593.73	32°57'49.300"N	103°23'32.732"W	9.76
11253.00	30.400	281.200	11226.57	284.18	6.94	-284.26	788574.94	715596.74	32°57'49.331"N	103°23'32.908"W	10.32
11285.00	33.300	280.900	11253.75	300.72	10.17	-300.83	788558.37	715599.97	32°57'49.365"N	103°23'33.102"W	9.08
11317.00	36.400	281.600	11280.01	318.62	13.75	-318.76	788540.44	715603.55	32°57'49.402"N	103°23'33.313"W	9.77
11348.00	39.300	281.000	11304.48	337.23	17.47	-337.41	788521.79	715607.27	32°57'49.440"N	103°23'33.531"W	9.43
11380.00	42.100	280.300	11328.74	357.70	21.32	-357.92	788501.28	715611.12	32°57'49.480"N	103°23'33.771"W	8.87
11412.00	45.500	279.900	11351.83	379.47	25.20	-379.72	788479.48	715615.00	32°57'49.520"N	103°23'34.027"W	10.66
11444.00	49.100	279.900	11373.53	402.59	29.25	-402.88	788456.32	715619.05	32°57'49.562"N	103°23'34.298"W	11.25
11475.00	52.200	279.100	11393.18	426.20	33.20	-426.52	788432.68	715623.00	32°57'49.604"N	103°23'34.575"W	10.20
11507.00	56.700	277.700	11411.79	451.91	36.99	-452.27	788406.93	715626.79	32°57'49.643"N	103°23'34.877"W	14.51
11539.00	59.900	277.100	11428.60	478.87	40.49	-479.27	788379.93	715630.29	32°57'49.680"N	103°23'35.193"W	10.13

Actual Wellpath Report

No. 25 ST02 AWP

Page 11 of 13



**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energen Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWB
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
11571.00	63.500	276.500	11443.77	506.81	43.83	-507.24	788351.96	715633.63	32°57'49.716"N	103°23'35.521"W	11.37
11602.00	66.400	275.800	11456.89	534.70	46.83	-535.16	788324.04	715636.63	32°57'49.748"N	103°23'35.849"W	9.58
11634.00	68.800	275.300	11469.08	564.12	49.69	-564.61	788294.59	715639.49	32°57'49.779"N	103°23'36.194"W	7.64
11666.00	72.000	274.700	11479.82	594.12	52.32	-594.63	788264.57	715642.12	32°57'49.808"N	103°23'36.546"W	10.15
11698.00	73.700	274.000	11489.25	624.59	54.64	-625.12	788234.08	715644.44	32°57'49.833"N	103°23'36.904"W	5.71
11726.00	74.700	274.800	11496.88	651.43	56.71	-651.98	788207.22	715646.51	32°57'49.856"N	103°23'37.219"W	4.51
11793.00	76.500	271.100	11513.54	716.19	60.04	-716.78	788142.42	715649.84	32°57'49.895"N	103°23'37.979"W	5.99
11823.00	76.000	272.700	11520.68	745.30	61.00	-745.90	788113.30	715650.80	32°57'49.907"N	103°23'38.321"W	5.44
11855.00	77.500	272.500	11528.01	776.40	62.41	-777.01	788082.18	715652.21	32°57'49.924"N	103°23'38.686"W	4.73
11886.00	79.900	271.500	11534.08	806.77	63.47	-807.39	788051.81	715653.27	32°57'49.937"N	103°23'39.042"W	8.36
11918.00	82.300	271.500	11539.03	838.36	64.30	-838.99	788020.20	715654.10	32°57'49.948"N	103°23'39.413"W	7.50
11943.00	84.800	270.900	11541.84	863.19	64.82	-863.83	787995.37	715654.62	32°57'49.955"N	103°23'39.704"W	10.28
11952.00	85.700	271.200	11542.59	872.16	64.99	-872.80	787986.40	715654.79	32°57'49.958"N	103°23'39.809"W	10.54
11983.00	89.500	270.400	11543.89	903.11	65.42	-903.76	787955.44	715655.22	32°57'49.965"N	103°23'40.173"W	12.53
12015.00	90.200	270.700	11543.97	935.11	65.73	-935.76	787923.44	715655.53	32°57'49.970"N	103°23'40.548"W	2.38
12047.00	90.800	271.200	11543.69	967.10	66.26	-967.75	787891.45	715656.06	32°57'49.978"N	103°23'40.924"W	2.44
12079.00	90.600	271.400	11543.30	999.08	66.98	-999.74	787859.46	715656.78	32°57'49.988"N	103°23'41.299"W	0.88
12110.00	90.900	271.200	11542.89	1030.06	67.68	-1030.73	787828.47	715657.48	32°57'49.998"N	103°23'41.663"W	1.16
12142.00	91.600	271.100	11542.19	1062.04	68.33	-1062.72	787796.48	715658.13	32°57'50.007"N	103°23'42.038"W	2.21
12172.00	91.400	271.100	11541.41	1092.01	68.90	-1092.70	787766.50	715658.70	32°57'50.016"N	103°23'42.390"W	0.67
12204.00	91.400	270.500	11540.63	1124.00	69.35	-1124.69	787734.51	715659.15	32°57'50.023"N	103°23'42.765"W	1.87
12235.00	91.600	270.300	11539.82	1154.98	69.57	-1155.68	787703.52	715659.37	32°57'50.028"N	103°23'43.129"W	0.91
12267.00	91.600	269.600	11538.92	1186.97	69.54	-1187.66	787671.53	715659.34	32°57'50.030"N	103°23'43.504"W	2.19
12299.00	91.600	269.000	11538.03	1218.95	69.15	-1219.65	787639.55	715658.95	32°57'50.029"N	103°23'43.880"W	1.87
12330.00	91.500	268.300	11537.19	1249.94	68.42	-1250.63	787608.57	715658.22	32°57'50.025"N	103°23'44.243"W	2.28
12371.00	91.000	267.200	11536.30	1290.91	66.81	-1291.59	787567.61	715656.61	32°57'50.012"N	103°23'44.724"W	2.95
12403.00	90.400	267.200	11535.91	1322.88	65.24	-1323.55	787535.65	715655.04	32°57'50.000"N	103°23'45.099"W	1.87
12434.00	90.400	267.000	11535.69	1353.86	63.68	-1354.51	787504.69	715653.48	32°57'49.987"N	103°23'45.463"W	0.65
12466.00	90.300	267.200	11535.49	1385.83	62.06	-1386.46	787472.73	715651.86	32°57'49.974"N	103°23'45.838"W	0.70
12498.00	89.000	266.500	11535.69	1417.79	60.30	-1418.41	787440.78	715650.10	32°57'49.959"N	103°23'46.213"W	4.61

Actual Wellpath Report

No. 25 ST02 AWP

Page 12 of 13



**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energen Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
12530.00	89.900	266.600	11536.00	1449.75	58.37	-1450.35	787408.84	715648.17	32°57'49.943"N	103°23'46.588"W	2.83
12561.00	90.400	266.500	11535.91	1480.71	56.51	-1481.30	787377.90	715646.31	32°57'49.927"N	103°23'46.952"W	1.64
12593.00	90.600	266.000	11535.64	1512.66	54.42	-1513.23	787345.97	715644.22	32°57'49.909"N	103°23'47.327"W	1.68
12625.00	90.500	266.300	11535.33	1544.60	52.27	-1545.15	787314.04	715642.07	32°57'49.891"N	103°23'47.701"W	0.99
12654.00	89.900	266.600	11535.23	1573.56	50.47	-1574.10	787285.10	715640.27	32°57'49.876"N	103°23'48.041"W	2.31
12686.00	89.800	266.400	11535.31	1605.52	48.52	-1606.04	787253.16	715638.32	32°57'49.859"N	103°23'48.416"W	0.70
12718.00	89.500	266.300	11535.51	1637.47	46.48	-1637.97	787221.22	715636.28	32°57'49.842"N	103°23'48.791"W	0.99
12750.00	89.600	266.500	11535.76	1669.42	44.47	-1669.91	787189.29	715634.27	32°57'49.825"N	103°23'49.166"W	0.70
12781.00	89.800	266.700	11535.92	1700.38	42.63	-1700.85	787158.34	715632.43	32°57'49.809"N	103°23'49.530"W	0.91
12812.00	89.000	266.300	11536.24	1731.34	40.74	-1731.79	787127.40	715630.54	32°57'49.793"N	103°23'49.893"W	2.89
12842.00	89.000	266.400	11536.77	1761.29	38.83	-1761.73	787097.47	715628.63	32°57'49.777"N	103°23'50.245"W	0.33
12873.00	89.400	267.000	11537.20	1792.25	37.05	-1792.67	787066.52	715626.85	32°57'49.762"N	103°23'50.608"W	2.33
12905.00	90.200	266.800	11537.31	1824.22	35.32	-1824.63	787034.57	715625.12	32°57'49.748"N	103°23'50.983"W	2.58
12936.00	90.800	266.900	11537.04	1855.19	33.61	-1855.58	787003.62	715623.41	32°57'49.734"N	103°23'51.347"W	1.96
12968.00	91.000	266.900	11536.54	1887.15	31.88	-1887.53	786971.67	715621.68	32°57'49.719"N	103°23'51.722"W	0.62
12999.00	91.600	267.200	11535.84	1918.11	30.29	-1918.48	786940.72	715620.09	32°57'49.706"N	103°23'52.085"W	2.16
13031.00	91.800	267.500	11534.89	1950.08	28.81	-1950.43	786908.77	715618.61	32°57'49.694"N	103°23'52.460"W	1.13
13063.00	91.500	268.000	11533.97	1982.05	27.55	-1982.39	786876.80	715617.35	32°57'49.685"N	103°23'52.835"W	1.82
13094.00	89.800	267.900	11533.61	2013.04	26.44	-2013.37	786845.83	715616.24	32°57'49.677"N	103°23'53.199"W	5.49
13126.00	89.300	267.400	11533.87	2045.02	25.13	-2045.34	786813.85	715614.93	32°57'49.666"N	103°23'53.574"W	2.21
13157.00	89.600	267.700	11534.16	2076.00	23.81	-2076.31	786782.88	715613.61	32°57'49.656"N	103°23'53.938"W	1.37
13189.00	89.600	267.800	11534.39	2107.99	22.55	-2108.29	786750.91	715612.35	32°57'49.646"N	103°23'54.313"W	0.31
13220.00	90.000	267.700	11534.49	2138.97	21.33	-2139.26	786719.93	715611.13	32°57'49.637"N	103°23'54.677"W	1.33
13252.00	90.300	268.700	11534.41	2170.96	20.33	-2171.24	786687.95	715610.13	32°57'49.630"N	103°23'55.053"W	3.26
13283.00	91.000	268.300	11534.06	2201.96	19.52	-2202.23	786656.96	715609.32	32°57'49.625"N	103°23'55.416"W	2.60
13313.00	91.900	267.800	11533.30	2231.94	18.50	-2232.20	786626.99	715608.30	32°57'49.617"N	103°23'55.768"W	3.43
13345.00	91.900	267.800	11532.24	2263.91	17.27	-2264.16	786595.03	715607.07	32°57'49.608"N	103°23'56.143"W	0.00
13377.00	91.900	268.600	11531.18	2295.88	16.26	-2296.13	786563.06	715606.06	32°57'49.601"N	103°23'56.519"W	2.50
13408.00	92.200	268.500	11530.07	2326.86	15.48	-2327.10	786532.09	715605.28	32°57'49.596"N	103°23'56.882"W	1.02
13440.00	92.300	268.000	11528.81	2358.82	14.50	-2359.06	786500.13	715604.30	32°57'49.589"N	103°23'57.257"W	1.59

Actual Wellpath Report

No. 25 ST02 AWP

Page 13 of 13



**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Energen Resources	Slot	No. 25 SHL (KEY 880)
Area	Lea County, NM	Well	No. 25
Field	(WLSU) Sec 6, T16S, R36E	Wellbore	No. 25 ST02 AWP
Facility	WLSU No. 25	Sidetrack from	No. 25 ST AWP at 10899.00 MD

WELLPATH DATA (333 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
13471.00	93.100	268.700	11527.35	2389.78	13.61	-2390.01	786469.18	715603.41	32°57'49.583"N	103°23'57.621"W	3.43
13503.00	93.800	268.800	11525.43	2421.72	12.91	-2421.95	786437.25	715602.71	32°57'49.579"N	103°23'57.996"W	2.21
13575.00†	93.800	268.800	11520.66	2493.56	11.41	-2493.77	786365.42	715601.21	32°57'49.570"N	103°23'58.839"W	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 25 BHL		11520.00	-24.00	-2585.89	786273.30	715565.80	32°57'49.228"N	103°23'59.924"W	point

WELLPATH COMPOSITION Ref Wellbore: No. 25 ST02 AWP Ref Wellpath: No. 25 ST02 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	4206.00	Generic gyro - continuous (Standard)	GYRO	No. 25 AWP
4206.00	10899.00	NaviTrak (Standard)	MWD	No. 25 ST AWP
10899.00	13503.00	NaviTrak (Standard)	MWD ST02	No. 25 ST02 AWP
13503.00	13575.00	Blind Drilling (std)	Projection to bit	No. 25 ST02 AWP