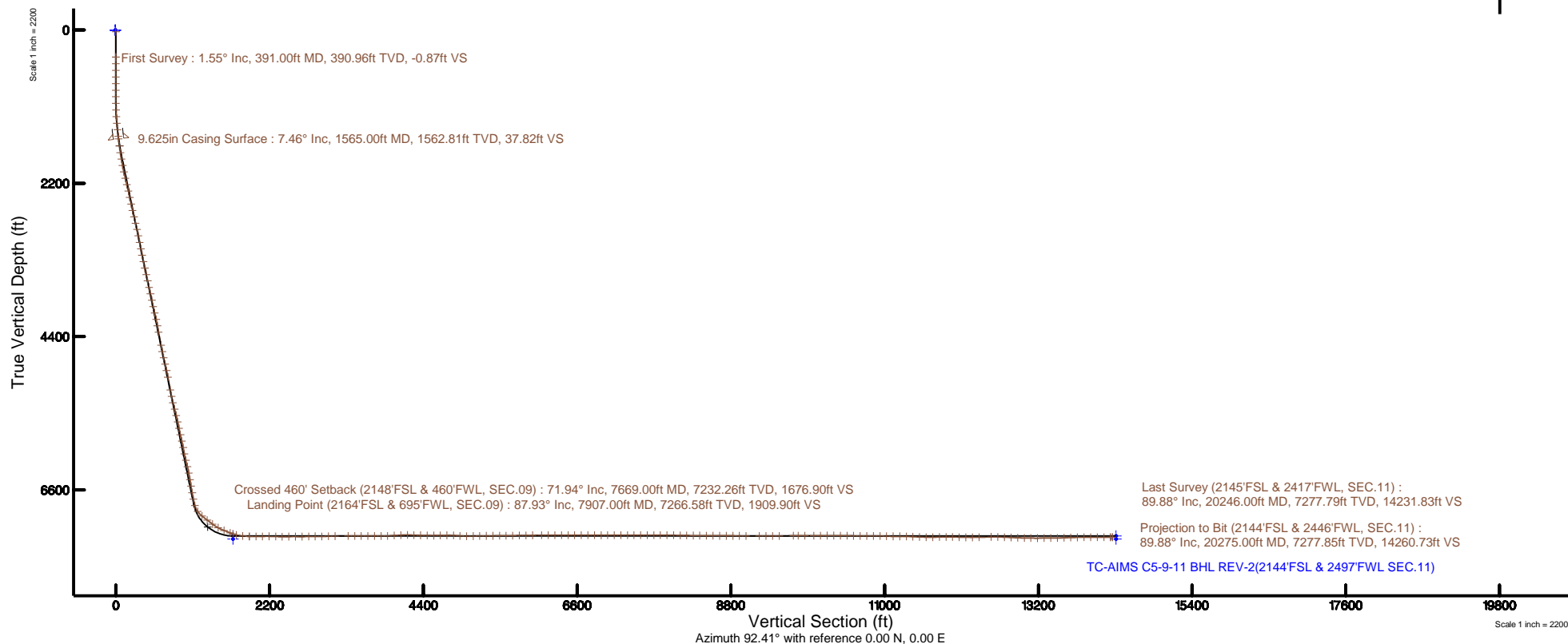
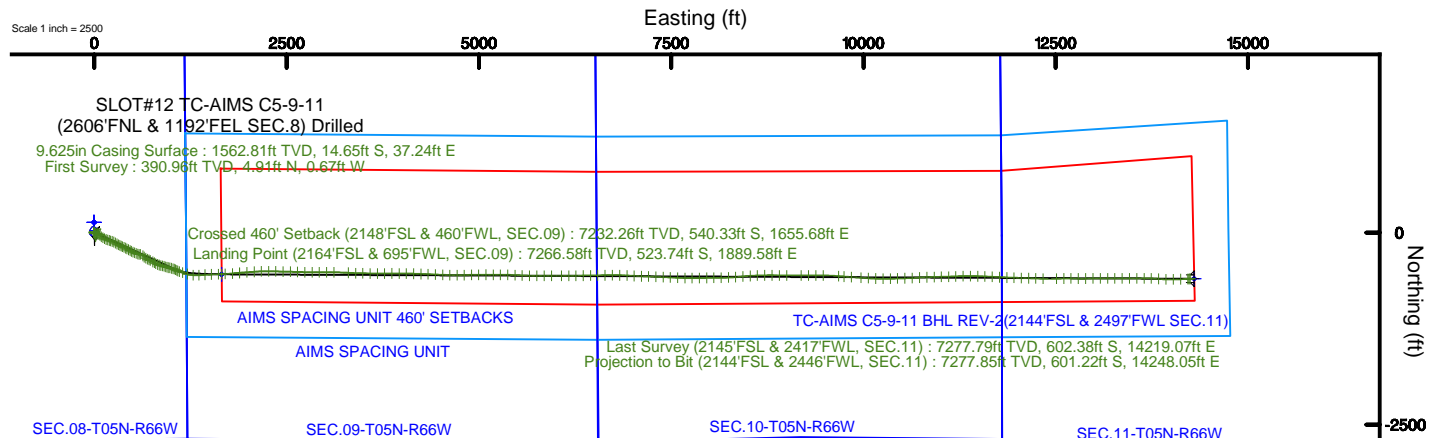


EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: TC-AIMS C5-9-11
Facility: SEC.08-T05N-R66W Wellbore: TC-AIMS C5-9-11 PWB

Plot reference wellpath is TC-AIMS C5-9-11 REV-C.0 PWB	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to PATTERSON 341 (25) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to PATTERSON 341 (25) (RKB)	North Reference: True north
PATTERSON 341 (25) (RKB) to Mean Sea Level: 4815 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjamm on 2017-06-12
	Database: WA_DEN_Denver_Deln





Actual Wellpath Report

TC-AIMS C5-9-11 AWP

Page 1 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999961	Report Generated	6/12/2017 at 2:14:20 PM
Convergence at slot	0.46° East	Database/Source file	WA_DEN_Denver_Defn/TC-AIMS_C5-9-11_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-94.72	2.78	3195284.57	1394523.89	40°24'51.300"N	104°47'55.212"W
Facility Reference Pt			3195281.04	1394618.58	40°24'52.236"N	104°47'55.248"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

WELLPATH DATUM

Calculation method	Minimum curvature	PATTERSON 341 (25') (RKB) to Facility Vertical Datum	4815.00ft
Horizontal Reference Pt	Slot	PATTERSON 341 (25') (RKB) to Mean Sea Level	4815.00ft
Vertical Reference Pt	PATTERSON 341 (25') (RKB)	PATTERSON 341 (25') (RKB) to Mud Line at Slot (SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled)	4815.00ft
MD Reference Pt	PATTERSON 341 (25') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	92.41°

REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 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	352.250	0.00	0.00	0.00	0.00	40°24'51.300"N	104°47'55.212"W	0.00	
25.00	0.000	352.250	25.00	0.00	0.00	0.00	40°24'51.300"N	104°47'55.212"W	0.00	
391.00	1.550	352.250	390.96	-0.87	4.91	-0.67	40°24'51.348"N	104°47'55.221"W	0.42	First Survey
485.00	1.490	346.590	484.92	-1.43	7.35	-1.12	40°24'51.373"N	104°47'55.227"W	0.17	
580.00	0.400	264.300	579.91	-2.09	8.52	-1.74	40°24'51.384"N	104°47'55.234"W	1.57	
675.00	1.860	190.330	674.89	-2.64	6.97	-2.35	40°24'51.369"N	104°47'55.242"W	1.89	
770.00	1.950	182.130	769.84	-2.84	3.84	-2.68	40°24'51.338"N	104°47'55.247"W	0.30	
865.00	2.050	174.720	864.78	-2.61	0.53	-2.59	40°24'51.305"N	104°47'55.245"W	0.29	
960.00	1.780	170.040	959.73	-2.06	-2.61	-2.17	40°24'51.274"N	104°47'55.240"W	0.33	
1055.00	1.530	122.850	1054.69	-0.65	-4.75	-0.85	40°24'51.253"N	104°47'55.223"W	1.42	
1149.00	1.580	109.730	1148.66	1.67	-5.87	1.42	40°24'51.242"N	104°47'55.194"W	0.38	
1244.00	3.310	109.400	1243.57	5.54	-7.22	5.24	40°24'51.229"N	104°47'55.144"W	1.82	
1339.00	5.300	103.750	1338.30	12.46	-9.18	12.09	40°24'51.209"N	104°47'55.056"W	2.14	
1434.00	6.290	101.210	1432.81	21.91	-11.23	21.46	40°24'51.189"N	104°47'54.935"W	1.08	
1529.00	7.550	102.470	1527.12	33.20	-13.59	32.66	40°24'51.166"N	104°47'54.790"W	1.34	
1670.00	7.230	106.920	1666.95	50.91	-18.18	50.19	40°24'51.120"N	104°47'54.563"W	0.46	
1764.00	9.100	129.580	1760.01	62.56	-24.64	61.58	40°24'51.057"N	104°47'54.416"W	3.92	
1859.00	14.500	132.590	1852.97	77.64	-37.48	76.14	40°24'50.930"N	104°47'54.228"W	5.72	
1953.00	13.430	134.250	1944.19	94.77	-53.06	92.62	40°24'50.776"N	104°47'54.015"W	1.22	
2048.00	14.380	120.880	2036.43	113.36	-66.82	110.65	40°24'50.640"N	104°47'53.781"W	3.52	
2143.00	14.320	119.610	2128.47	134.18	-78.68	130.99	40°24'50.523"N	104°47'53.519"W	0.34	
2237.00	14.170	111.360	2219.59	155.40	-88.61	151.82	40°24'50.424"N	104°47'53.249"W	2.16	
2332.00	13.350	106.850	2311.86	177.02	-96.03	173.14	40°24'50.351"N	104°47'52.974"W	1.42	
2427.00	12.170	103.190	2404.52	197.48	-101.49	193.39	40°24'50.297"N	104°47'52.712"W	1.51	
2522.00	13.150	109.150	2497.21	217.67	-107.32	213.35	40°24'50.239"N	104°47'52.454"W	1.72	
2616.00	11.800	108.710	2588.99	237.13	-113.91	232.56	40°24'50.174"N	104°47'52.206"W	1.44	
2710.00	14.970	118.780	2680.44	257.24	-122.85	252.31	40°24'50.086"N	104°47'51.950"W	4.17	
2805.00	15.780	120.230	2772.03	279.66	-135.26	274.22	40°24'49.963"N	104°47'51.667"W	0.94	
2899.00	14.330	119.840	2862.81	301.29	-147.48	295.36	40°24'49.843"N	104°47'51.394"W	1.55	
2994.00	12.510	117.810	2955.21	321.02	-158.13	314.66	40°24'49.737"N	104°47'51.144"W	1.98	

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3088.00	11.360	117.200	3047.18	338.62	-167.11	331.90	40°24'49.649"N	104°47'50.921"W	1.23	
3183.00	11.280	112.740	3140.33	355.82	-174.98	348.79	40°24'49.571"N	104°47'50.703"W	0.93	
3277.00	12.170	111.250	3232.37	373.82	-182.13	366.50	40°24'49.500"N	104°47'50.474"W	1.00	
3372.00	12.990	117.150	3325.09	393.00	-190.63	385.34	40°24'49.416"N	104°47'50.230"W	1.60	
3467.00	14.780	119.150	3417.31	413.52	-201.40	405.42	40°24'49.310"N	104°47'49.971"W	1.95	
3562.00	12.730	118.570	3509.58	433.73	-212.31	425.20	40°24'49.202"N	104°47'49.715"W	2.16	
3656.00	14.330	117.530	3600.97	453.56	-222.64	444.61	40°24'49.100"N	104°47'49.464"W	1.72	
3751.00	13.380	117.200	3693.20	474.19	-233.10	464.81	40°24'48.997"N	104°47'49.203"W	1.00	
3846.00	13.190	117.140	3785.66	494.01	-243.07	484.24	40°24'48.898"N	104°47'48.952"W	0.20	
3940.00	13.240	116.560	3877.17	513.57	-252.78	503.41	40°24'48.802"N	104°47'48.704"W	0.15	
4035.00	13.450	116.710	3969.61	533.57	-262.61	523.01	40°24'48.705"N	104°47'48.451"W	0.22	
4129.00	13.960	109.040	4060.94	554.40	-271.22	543.49	40°24'48.620"N	104°47'48.186"W	2.01	
4224.00	12.470	103.620	4153.42	575.44	-277.37	564.30	40°24'48.559"N	104°47'47.917"W	2.04	
4318.00	10.090	100.590	4245.60	593.55	-281.28	582.26	40°24'48.520"N	104°47'47.685"W	2.61	
4411.00	11.240	93.870	4337.00	610.67	-283.39	599.31	40°24'48.500"N	104°47'47.464"W	1.82	
4600.00	14.090	136.420	4521.77	645.71	-301.34	633.62	40°24'48.322"N	104°47'47.021"W	5.03	
4695.00	14.230	133.800	4613.88	662.79	-317.80	650.02	40°24'48.160"N	104°47'46.809"W	0.69	
4789.00	15.630	123.900	4704.72	682.26	-332.86	668.88	40°24'48.011"N	104°47'46.565"W	3.09	
4884.00	14.550	116.460	4796.45	704.07	-345.31	690.18	40°24'47.888"N	104°47'46.289"W	2.33	
4978.00	13.050	113.860	4887.74	724.73	-354.87	710.46	40°24'47.793"N	104°47'46.027"W	1.73	
5073.00	11.460	111.950	4980.57	743.61	-362.74	729.03	40°24'47.715"N	104°47'45.787"W	1.73	
5261.00	12.310	122.930	5164.56	778.47	-380.61	763.17	40°24'47.539"N	104°47'45.346"W	1.28	
5356.00	12.750	127.710	5257.30	795.75	-392.53	779.97	40°24'47.421"N	104°47'45.129"W	1.19	
5450.00	15.180	116.300	5348.53	815.48	-404.33	799.21	40°24'47.304"N	104°47'44.880"W	3.90	
5545.00	16.480	109.200	5439.94	839.75	-414.28	823.09	40°24'47.206"N	104°47'44.571"W	2.45	
5639.00	13.690	108.520	5530.69	863.21	-422.20	846.24	40°24'47.128"N	104°47'44.272"W	2.97	
5734.00	12.450	106.590	5623.23	883.94	-428.69	866.71	40°24'47.064"N	104°47'44.007"W	1.38	
5828.00	11.570	98.950	5715.17	903.13	-433.05	885.74	40°24'47.021"N	104°47'43.761"W	1.93	
5922.00	12.350	107.100	5807.14	922.22	-437.47	904.66	40°24'46.977"N	104°47'43.517"W	1.98	
6016.00	13.290	108.410	5898.79	942.33	-443.84	924.52	40°24'46.914"N	104°47'43.260"W	1.05	

REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6111.00	12.270	107.210	5991.44	962.58	-450.28	944.52	40°24'46.850"N	104°47'43.001"W	1.11	
6205.00	10.340	104.560	6083.61	980.49	-455.35	962.23	40°24'46.800"N	104°47'42.772"W	2.13	
6299.00	14.410	98.610	6175.41	1000.37	-459.23	981.97	40°24'46.762"N	104°47'42.517"W	4.53	
6393.00	13.870	106.950	6266.57	1022.91	-464.26	1004.31	40°24'46.712"N	104°47'42.228"W	2.24	
6488.00	11.310	106.120	6359.28	1042.99	-470.17	1024.16	40°24'46.654"N	104°47'41.972"W	2.70	
6582.00	9.590	113.400	6451.72	1059.25	-475.84	1040.20	40°24'46.598"N	104°47'41.764"W	2.30	
6677.00	10.390	118.040	6545.28	1074.36	-483.01	1055.02	40°24'46.527"N	104°47'41.573"W	1.19	
6772.00	12.050	116.970	6638.47	1091.11	-491.54	1071.42	40°24'46.443"N	104°47'41.361"W	1.76	
6866.00	10.160	116.930	6730.70	1107.58	-499.74	1087.56	40°24'46.362"N	104°47'41.152"W	2.01	
6961.00	17.190	108.280	6822.96	1128.73	-507.95	1108.39	40°24'46.280"N	104°47'40.883"W	7.69	
7056.00	36.110	108.820	6907.48	1169.46	-521.51	1148.58	40°24'46.146"N	104°47'40.363"W	19.92	
7150.00	51.690	104.330	6975.02	1232.51	-539.69	1210.93	40°24'45.967"N	104°47'39.557"W	16.89	
7245.00	53.060	95.330	7033.09	1307.00	-552.46	1284.94	40°24'45.841"N	104°47'38.600"W	7.64	
7339.00	53.060	85.730	7089.67	1381.94	-553.15	1359.92	40°24'45.834"N	104°47'37.631"W	8.16	
7434.00	61.130	86.520	7141.23	1461.15	-547.79	1439.43	40°24'45.887"N	104°47'36.603"W	8.52	
7528.00	68.130	87.950	7181.49	1545.69	-543.73	1524.21	40°24'45.927"N	104°47'35.507"W	7.57	
7623.00	68.410	89.050	7216.66	1633.73	-541.42	1612.43	40°24'45.949"N	104°47'34.367"W	1.12	
7669.00†	71.936	88.086	7232.26	1676.90	-540.33	1655.68	40°24'45.960"N	104°47'33.808"W	7.91	Crossed 460' Setback (2148'FSL & 460'FWL, SEC.09)
7717.00	75.620	87.120	7245.67	1722.82	-538.40	1701.72	40°24'45.979"N	104°47'33.212"W	7.91	
7812.00	85.560	84.950	7261.18	1815.84	-531.90	1795.09	40°24'46.043"N	104°47'32.005"W	10.70	
7907.00	87.930	85.180	7266.58	1909.90	-523.74	1889.58	40°24'46.124"N	104°47'30.784"W	2.51	Landing Point (2164'FSL & 695'FWL, SEC.09)
8001.00	90.460	85.760	7267.90	2003.19	-516.32	1983.27	40°24'46.197"N	104°47'29.573"W	2.76	
8096.00	91.540	85.880	7266.24	2097.55	-509.40	2078.00	40°24'46.265"N	104°47'28.348"W	1.14	
8190.00	89.230	87.840	7265.61	2191.10	-504.25	2171.85	40°24'46.316"N	104°47'27.135"W	3.22	
8284.00	87.780	90.960	7268.06	2284.92	-503.27	2265.80	40°24'46.326"N	104°47'25.920"W	3.66	
8379.00	89.450	91.120	7270.36	2379.86	-504.99	2360.75	40°24'46.309"N	104°47'24.693"W	1.77	
8474.00	91.510	91.390	7269.56	2474.84	-507.07	2455.72	40°24'46.288"N	104°47'23.465"W	2.19	
8568.00	89.080	91.350	7269.08	2568.81	-509.32	2549.69	40°24'46.266"N	104°47'22.250"W	2.59	
8662.00	90.150	91.720	7269.71	2662.80	-511.83	2643.65	40°24'46.241"N	104°47'21.035"W	1.20	
8757.00	92.430	91.920	7267.57	2757.76	-514.85	2738.57	40°24'46.211"N	104°47'19.808"W	2.41	

REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
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Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8851.00	89.630	90.390	7265.88	2851.71	-516.74	2832.52	40°24'46.192"N	104°47'18.594"W	3.39	
8945.00	90.030	89.760	7266.16	2945.63	-516.87	2926.52	40°24'46.191"N	104°47'17.378"W	0.79	
9039.00	91.760	89.220	7264.69	3039.50	-516.03	3020.50	40°24'46.199"N	104°47'16.163"W	1.93	
9134.00	91.330	90.900	7262.13	3134.38	-516.13	3115.46	40°24'46.198"N	104°47'14.936"W	1.82	
9323.00	89.260	93.080	7261.16	3323.35	-522.69	3304.33	40°24'46.133"N	104°47'12.494"W	1.59	
9417.00	91.020	92.450	7260.93	3417.34	-527.23	3398.21	40°24'46.088"N	104°47'11.281"W	1.99	
9511.00	89.510	90.870	7260.49	3511.33	-529.95	3492.17	40°24'46.061"N	104°47'10.066"W	2.32	
9605.00	91.390	91.370	7259.75	3605.30	-531.79	3586.14	40°24'46.043"N	104°47'08.851"W	2.07	
9699.00	88.460	89.620	7259.88	3699.23	-532.60	3680.12	40°24'46.034"N	104°47'07.636"W	3.63	
9794.00	89.850	89.600	7261.28	3794.11	-531.95	3775.11	40°24'46.041"N	104°47'06.408"W	1.46	
9888.00	92.740	89.530	7259.15	3887.96	-531.24	3869.07	40°24'46.048"N	104°47'05.193"W	3.08	
9982.00	93.760	90.690	7253.82	3981.73	-531.42	3962.92	40°24'46.046"N	104°47'03.980"W	1.64	
10077.00	93.210	90.800	7248.05	4076.51	-532.65	4057.73	40°24'46.033"N	104°47'02.754"W	0.59	
10171.00	89.350	92.280	7245.95	4170.46	-535.18	4151.66	40°24'46.008"N	104°47'01.540"W	4.40	
10266.00	87.600	92.130	7248.48	4265.42	-538.83	4246.55	40°24'45.972"N	104°47'00.313"W	1.85	
10360.00	89.140	91.790	7251.15	4359.38	-542.05	4340.45	40°24'45.940"N	104°46'59.099"W	1.68	
10455.00	88.120	92.190	7253.42	4454.34	-545.34	4435.37	40°24'45.907"N	104°46'57.872"W	1.15	
10549.00	90.620	93.090	7254.46	4548.33	-549.67	4529.25	40°24'45.864"N	104°46'56.659"W	2.83	
10643.00	90.400	90.710	7253.62	4642.32	-552.79	4623.19	40°24'45.833"N	104°46'55.444"W	2.54	
10737.00	92.460	90.230	7251.27	4736.23	-553.56	4717.15	40°24'45.825"N	104°46'54.230"W	2.25	
10831.00	85.590	89.020	7252.87	4830.05	-552.95	4811.08	40°24'45.831"N	104°46'53.015"W	7.42	
10925.00	86.430	88.580	7259.41	4923.63	-550.98	4904.83	40°24'45.851"N	104°46'51.803"W	1.01	
11019.00	89.110	88.910	7263.07	5017.36	-548.93	4998.73	40°24'45.871"N	104°46'50.589"W	2.87	
11114.00	92.130	89.800	7262.04	5112.21	-547.86	5093.70	40°24'45.881"N	104°46'49.362"W	3.31	
11208.00	91.420	90.590	7259.13	5206.09	-548.18	5187.66	40°24'45.878"N	104°46'48.147"W	1.13	
11302.00	89.380	90.730	7258.47	5300.04	-549.26	5281.64	40°24'45.867"N	104°46'46.932"W	2.18	
11397.00	90.710	91.020	7258.40	5395.00	-550.71	5376.63	40°24'45.852"N	104°46'45.704"W	1.43	
11491.00	90.180	92.130	7257.67	5488.99	-553.29	5470.59	40°24'45.827"N	104°46'44.489"W	1.31	
11585.00	91.390	92.750	7256.38	5582.98	-557.29	5564.49	40°24'45.787"N	104°46'43.275"W	1.45	
11680.00	90.180	91.340	7255.08	5677.96	-560.68	5659.42	40°24'45.753"N	104°46'42.048"W	1.96	

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11775.00	91.690	91.010	7253.53	5772.93	-562.63	5754.38	40°24'45.734"N	104°46'40.820"W	1.63	
11870.00	89.940	89.870	7252.18	5867.86	-563.36	5849.37	40°24'45.726"N	104°46'39.593"W	2.20	
11965.00	91.140	89.610	7251.28	5962.75	-562.93	5944.36	40°24'45.730"N	104°46'38.364"W	1.29	
12094.00	90.430	89.730	7249.52	6091.59	-562.19	6073.34	40°24'45.737"N	104°46'36.697"W	0.56	
12189.00	89.880	89.830	7249.26	6186.49	-561.82	6168.34	40°24'45.741"N	104°46'35.469"W	0.59	
12284.00	89.850	89.200	7249.48	6281.36	-561.02	6263.34	40°24'45.748"N	104°46'34.241"W	0.66	
12378.00	89.910	89.030	7249.68	6375.21	-559.57	6357.33	40°24'45.763"N	104°46'33.026"W	0.19	
12473.00	89.880	88.940	7249.85	6470.04	-557.88	6452.31	40°24'45.779"N	104°46'31.798"W	0.10	
12567.00	89.910	89.190	7250.03	6563.88	-556.35	6546.30	40°24'45.794"N	104°46'30.583"W	0.27	
12662.00	90.000	89.760	7250.10	6658.76	-555.48	6641.29	40°24'45.802"N	104°46'29.355"W	0.61	
12757.00	89.910	89.520	7250.17	6753.64	-554.88	6736.29	40°24'45.808"N	104°46'28.127"W	0.27	
12852.00	89.880	91.020	7250.35	6848.58	-555.33	6831.29	40°24'45.803"N	104°46'26.898"W	1.58	
12946.00	90.000	92.880	7250.45	6942.57	-558.53	6925.23	40°24'45.771"N	104°46'25.684"W	1.98	
13040.00	90.180	93.250	7250.30	7036.56	-563.55	7019.10	40°24'45.721"N	104°46'24.471"W	0.44	
13135.00	90.220	91.890	7249.97	7131.56	-567.81	7114.00	40°24'45.679"N	104°46'23.244"W	1.43	
13229.00	90.220	91.580	7249.61	7225.55	-570.66	7207.95	40°24'45.651"N	104°46'22.029"W	0.33	
13323.00	90.180	92.130	7249.28	7319.55	-573.70	7301.90	40°24'45.620"N	104°46'20.814"W	0.59	
13417.00	90.220	92.620	7248.95	7413.55	-577.60	7395.82	40°24'45.581"N	104°46'19.600"W	0.52	
13511.00	90.030	93.060	7248.75	7507.54	-582.25	7489.71	40°24'45.535"N	104°46'18.387"W	0.51	
13605.00	90.000	92.420	7248.72	7601.54	-586.75	7583.60	40°24'45.490"N	104°46'17.173"W	0.68	
13700.00	89.970	91.360	7248.75	7696.54	-589.88	7678.54	40°24'45.459"N	104°46'15.945"W	1.12	
13794.00	89.910	90.310	7248.84	7790.50	-591.25	7772.53	40°24'45.445"N	104°46'14.730"W	1.12	
13888.00	89.910	88.940	7248.99	7884.39	-590.64	7866.53	40°24'45.451"N	104°46'13.515"W	1.46	
13983.00	88.830	89.080	7250.04	7979.21	-588.99	7961.51	40°24'45.467"N	104°46'12.287"W	1.15	
14078.00	88.770	89.370	7252.03	8074.04	-587.71	8056.48	40°24'45.479"N	104°46'11.060"W	0.31	
14172.00	88.920	89.330	7253.92	8167.89	-586.64	8150.45	40°24'45.490"N	104°46'09.845"W	0.17	
14267.00	90.000	87.920	7254.82	8262.68	-584.36	8245.42	40°24'45.512"N	104°46'08.617"W	1.87	
14360.00	90.000	85.650	7254.82	8355.22	-579.15	8338.26	40°24'45.563"N	104°46'07.417"W	2.44	
14455.00	89.450	84.840	7255.27	8449.48	-571.27	8432.94	40°24'45.641"N	104°46'06.193"W	1.03	
14550.00	88.890	86.260	7256.65	8543.79	-563.90	8527.64	40°24'45.713"N	104°46'04.968"W	1.61	

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14645.00	89.820	87.870	7257.72	8638.37	-559.04	8622.50	40°24'45.761"N	104°46'03.742"W	1.96	
14740.00	89.970	88.780	7257.89	8733.12	-556.26	8717.46	40°24'45.788"N	104°46'02.514"W	0.97	
14835.00	89.750	90.500	7258.12	8828.01	-555.67	8812.45	40°24'45.794"N	104°46'01.286"W	1.83	
14929.00	89.750	90.570	7258.53	8921.96	-556.54	8906.45	40°24'45.785"N	104°46'00.071"W	0.07	
15024.00	89.850	90.680	7258.87	9016.91	-557.58	9001.44	40°24'45.774"N	104°45'58.843"W	0.16	
15214.00	89.850	90.250	7259.36	9206.80	-559.12	9191.44	40°24'45.758"N	104°45'56.387"W	0.23	
15309.00	89.880	88.680	7259.59	9301.67	-558.24	9286.43	40°24'45.766"N	104°45'55.159"W	1.65	
15404.00	89.970	89.750	7259.71	9396.53	-556.93	9381.42	40°24'45.779"N	104°45'53.931"W	1.13	
15499.00	90.280	90.880	7259.50	9491.46	-557.46	9476.41	40°24'45.773"N	104°45'52.703"W	1.23	
15700.00	90.920	94.720	7257.40	9692.41	-567.27	9677.12	40°24'45.676"N	104°45'50.108"W	1.94	
15771.00	89.970	93.940	7256.85	9763.36	-572.63	9747.92	40°24'45.622"N	104°45'49.193"W	1.73	
15866.00	89.970	93.130	7256.90	9858.34	-578.49	9842.74	40°24'45.564"N	104°45'47.967"W	0.85	
15994.00	89.850	93.600	7257.10	9986.32	-586.00	9970.52	40°24'45.489"N	104°45'46.315"W	0.38	
16089.00	91.240	94.090	7256.19	10081.29	-592.37	10065.30	40°24'45.426"N	104°45'45.090"W	1.55	
16184.00	90.420	92.250	7254.82	10176.26	-597.63	10160.14	40°24'45.374"N	104°45'43.864"W	2.12	
16279.00	89.450	89.840	7254.93	10271.23	-599.36	10255.11	40°24'45.356"N	104°45'42.636"W	2.73	
16374.00	90.340	89.230	7255.10	10366.11	-598.59	10350.11	40°24'45.364"N	104°45'41.408"W	1.14	
16469.00	88.430	88.300	7256.12	10460.91	-596.54	10445.07	40°24'45.383"N	104°45'40.180"W	2.24	
16564.00	88.720	88.320	7258.48	10555.63	-593.74	10540.00	40°24'45.411"N	104°45'38.953"W	0.31	
16659.00	89.180	87.110	7260.22	10650.30	-589.95	10634.91	40°24'45.448"N	104°45'37.726"W	1.36	
16754.00	90.360	86.460	7260.60	10744.84	-584.62	10729.76	40°24'45.500"N	104°45'36.500"W	1.42	
16849.00	90.460	88.620	7259.92	10839.49	-580.55	10824.66	40°24'45.540"N	104°45'35.273"W	2.28	
16944.00	88.020	88.710	7261.18	10934.27	-578.33	10919.62	40°24'45.561"N	104°45'34.045"W	2.57	
17038.00	88.340	88.460	7264.17	11028.01	-576.01	11013.54	40°24'45.584"N	104°45'32.831"W	0.43	
17132.00	89.520	88.140	7265.93	11121.75	-573.23	11107.48	40°24'45.611"N	104°45'31.617"W	1.30	
17227.00	90.550	87.570	7265.87	11216.45	-569.67	11202.42	40°24'45.646"N	104°45'30.389"W	1.24	
17322.00	88.640	88.430	7266.54	11311.17	-566.35	11297.35	40°24'45.678"N	104°45'29.162"W	2.20	
17416.00	86.790	90.560	7270.29	11404.96	-565.53	11391.26	40°24'45.686"N	104°45'27.948"W	3.00	
17511.00	87.770	92.150	7274.80	11499.83	-567.77	11486.12	40°24'45.663"N	104°45'26.722"W	1.96	
17606.00	89.200	92.370	7277.31	11594.80	-571.52	11581.01	40°24'45.626"N	104°45'25.495"W	1.52	

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWP
Facility	SEC.08-T05N-R66W		

WELLPATH DATA (208 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17701.00	90.630	92.700	7277.45	11689.79	-575.72	11675.92	40°24'45.584"N	104°45'24.268"W	1.54	
17795.00	91.900	93.090	7275.37	11783.77	-580.46	11769.77	40°24'45.536"N	104°45'23.055"W	1.41	
17890.00	90.230	92.160	7273.61	11878.74	-584.81	11864.65	40°24'45.493"N	104°45'21.828"W	2.01	
17984.00	88.590	91.430	7274.58	11972.73	-587.76	11958.60	40°24'45.463"N	104°45'20.614"W	1.91	
18079.00	87.970	91.530	7277.43	12067.67	-590.21	12053.52	40°24'45.439"N	104°45'19.387"W	0.66	
18174.00	89.220	91.760	7279.76	12162.64	-592.94	12148.45	40°24'45.411"N	104°45'18.159"W	1.34	
18268.00	90.250	92.120	7280.19	12256.63	-596.12	12242.40	40°24'45.379"N	104°45'16.945"W	1.16	
18363.00	91.380	91.440	7278.84	12351.61	-599.07	12337.34	40°24'45.350"N	104°45'15.718"W	1.39	
18536.00	92.280	88.470	7273.31	12524.34	-598.93	12510.23	40°24'45.350"N	104°45'13.482"W	1.79	
18631.00	87.540	89.300	7273.46	12619.14	-597.09	12605.18	40°24'45.368"N	104°45'12.255"W	5.07	
18726.00	87.510	90.320	7277.57	12713.95	-596.77	12700.09	40°24'45.371"N	104°45'11.028"W	1.07	
18821.00	87.380	90.580	7281.80	12808.80	-597.52	12795.00	40°24'45.363"N	104°45'09.801"W	0.31	
18916.00	87.540	89.440	7286.01	12903.62	-597.53	12889.90	40°24'45.362"N	104°45'08.574"W	1.21	
19011.00	89.020	89.040	7288.86	12998.43	-596.27	12984.85	40°24'45.374"N	104°45'07.347"W	1.61	
19106.00	88.860	89.530	7290.62	13093.27	-595.09	13079.82	40°24'45.385"N	104°45'06.119"W	0.54	
19201.00	90.280	89.900	7291.33	13188.16	-594.62	13174.82	40°24'45.390"N	104°45'04.891"W	1.54	
19296.00	90.680	89.820	7290.54	13283.07	-594.38	13269.81	40°24'45.391"N	104°45'03.663"W	0.43	
19391.00	90.430	90.590	7289.62	13377.99	-594.72	13364.81	40°24'45.387"N	104°45'02.435"W	0.85	
19486.00	90.520	90.940	7288.83	13472.95	-595.99	13459.80	40°24'45.374"N	104°45'01.207"W	0.38	
19581.00	92.340	89.130	7286.46	13567.83	-596.05	13554.76	40°24'45.373"N	104°44'59.979"W	2.70	
19676.00	92.580	89.420	7282.38	13662.60	-594.85	13649.66	40°24'45.385"N	104°44'58.752"W	0.40	
19771.00	90.180	92.430	7280.09	13757.52	-596.38	13744.61	40°24'45.369"N	104°44'57.525"W	4.05	
19866.00	90.830	94.430	7279.25	13852.50	-602.07	13839.43	40°24'45.312"N	104°44'56.299"W	2.21	
19961.00	90.710	92.770	7277.98	13947.47	-608.03	13934.23	40°24'45.253"N	104°44'55.073"W	1.75	
20056.00	89.820	88.630	7277.54	14042.40	-609.19	14029.20	40°24'45.241"N	104°44'53.846"W	4.46	
20151.00	90.000	87.720	7277.69	14137.14	-606.17	14124.15	40°24'45.270"N	104°44'52.618"W	0.98	
20246.00	89.880	87.710	7277.79	14231.83	-602.38	14219.07	40°24'45.307"N	104°44'51.391"W	0.13	Last Survey (2145'FSL & 2417'FWL, SEC.11)
20275.00	89.880	87.710	7277.85	14260.73	-601.22	14248.05	40°24'45.318"N	104°44'51.016"W	0.00	Projection to Bit (2144'FSL & 2446'FWL, SEC.11)



Actual Wellpath Report

TC-AIMS C5-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: TC-AIMS C5-9-11 AWB Ref Wellpath: TC-AIMS C5-9-11 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	25.00	1585.00	1560.00	25.00	1582.64	0.00	0.00	-15.27	39.75
9.625in Casing Surface	25.00	1565.00	1540.00	25.00	1562.81	0.00	0.00	-14.65	37.24
8.5in Open Hole	1565.00	20275.00	18710.00	1562.81	7277.85	-14.65	37.24	-601.22	14248.05



Actual Wellpath Report

TC-AIMS C5-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
AIMS SPACING UNIT	3.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.08-T05N-R66W	3.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.09-T05N-R66W	3.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.10-T05N-R66W	3.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.11-T05N-R66W	3.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
TC-AIMS C5-9-11 BHL REV-2(2144'FSL & 2497'FWL SEC.11)	7260.00	-600.62	14299.44	3209587.73	1394036.40	40°24'45.324"N	104°44'50.352"W	point
TC-AIMS C5-9-11 LP REV-2(2145'FSL & 460'FWL SEC.9)	7260.00	-542.77	1654.11	3196942.86	1393994.24	40°24'45.936"N	104°47'33.828"W	point
TC-AIMS C5-9-11 BHL REV-1(2144'FSL & 2497'FWL SEC.11)	7304.00	-600.62	14299.44	3209587.73	1394036.40	40°24'45.324"N	104°44'50.352"W	point
TC-AIMS C5-9-11 LP REV-1(2145'FSL & 460'FWL SEC.9)	7304.00	-542.77	1654.11	3196942.86	1393994.24	40°24'45.936"N	104°47'33.828"W	point
AIMS SPACING UNIT 460' SETBACKS	7307.00	134.80	-2.78	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon



Actual Wellpath Report

TC-AIMS C5-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

WELLPATH COMPOSITION - Ref Wellbore: TC-AIMS C5-9-11 AWB Ref Wellpath: TC-AIMS C5-9-11 AWP				
Start MD	End MD	Positional Uncertainty Model	Log Name/Comment	Wellbore
[ft]	[ft]			
25.00	1529.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	BHI NAVITRAK MWD STD ROTATING, AXIAL, ROCKIES GT 13 1/2" <391-1529>	TC-AIMS C5-9-11 AWB
1529.00	11965.00	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	BHI NAVITRAK STD ROTATING, ROCKIES GT <1670-11965	TC-AIMS C5-9-11 AWB
11965.00	15866.00	Custom BHI AutoTrak Curve (Short) (Rockies 0.03Gt model)	BHI ATC MWD, SHORT, ROCKIES GT <12094-15866>	TC-AIMS C5-9-11 AWB
15866.00	18363.00	ISCWSA MWD, Rev. 4 (Standard)	PHOENIX MWD 8 1/2" <15994-18363>	TC-AIMS C5-9-11 AWB
18363.00	20246.00	Custom BHI AutoTrak Curve (Short) (Rockies 0.03Gt model)	BHI ATC MWD, SHORT, ROCKIES GT <18536-20246>	TC-AIMS C5-9-11 AWB
20246.00	20275.00	Blind Drilling (std)	Projection to bit	TC-AIMS C5-9-11 AWB



Actual Wellpath Report

TC-AIMS C5-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 TC-AIMS C5-9-11 (2606'FNL & 1192'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C5-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C5-9-11 AWB
Facility	SEC.08-T05N-R66W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
391.00	1.550	352.250	390.96	First Survey	
7669.00	71.936	88.086	7232.26	Crossed 460' Setback (2148'FSL & 460'FWL, SEC.09)	
7907.00	87.930	85.180	7266.58	Landing Point (2164'FSL & 695'FWL, SEC.09)	
20246.00	89.880	87.710	7277.79	Last Survey (2145'FSL & 2417'FWL, SEC.11)	
20275.00	89.880	87.710	7277.85	Projection to Bit (2144'FSL & 2446'FWL, SEC.11)	