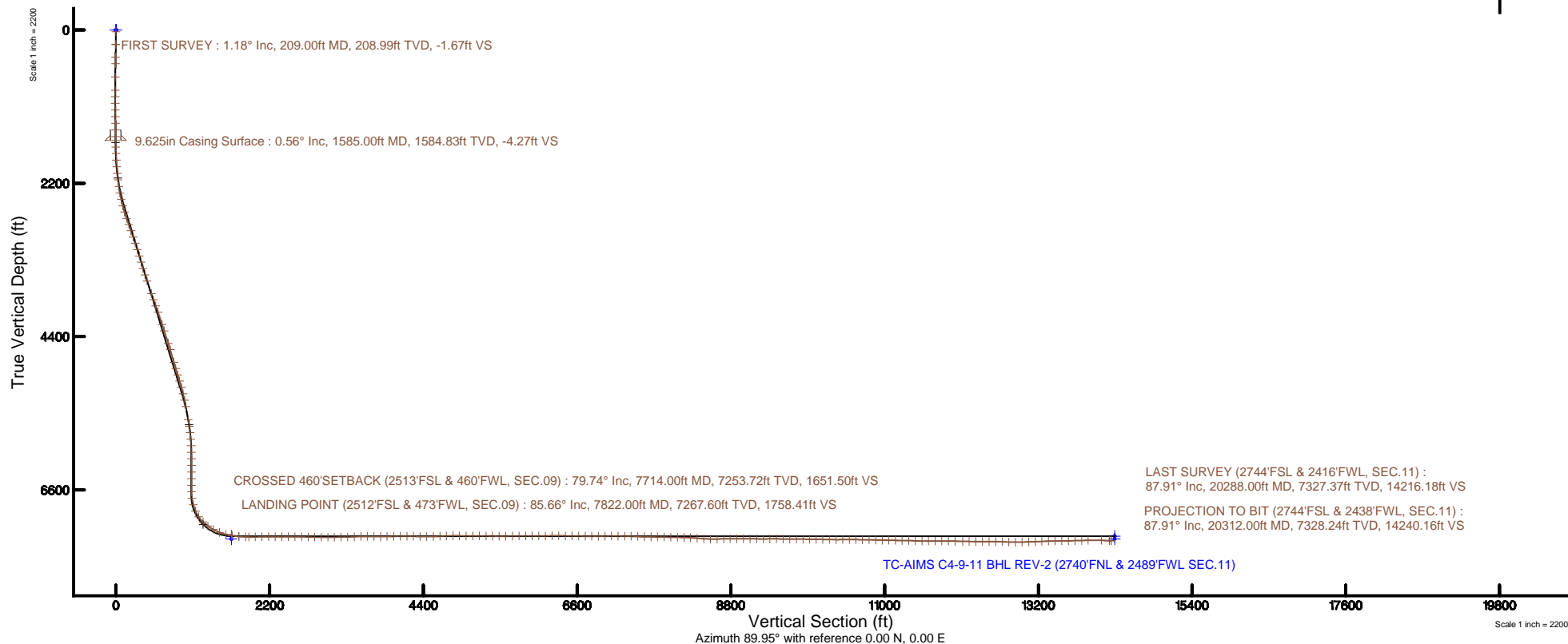
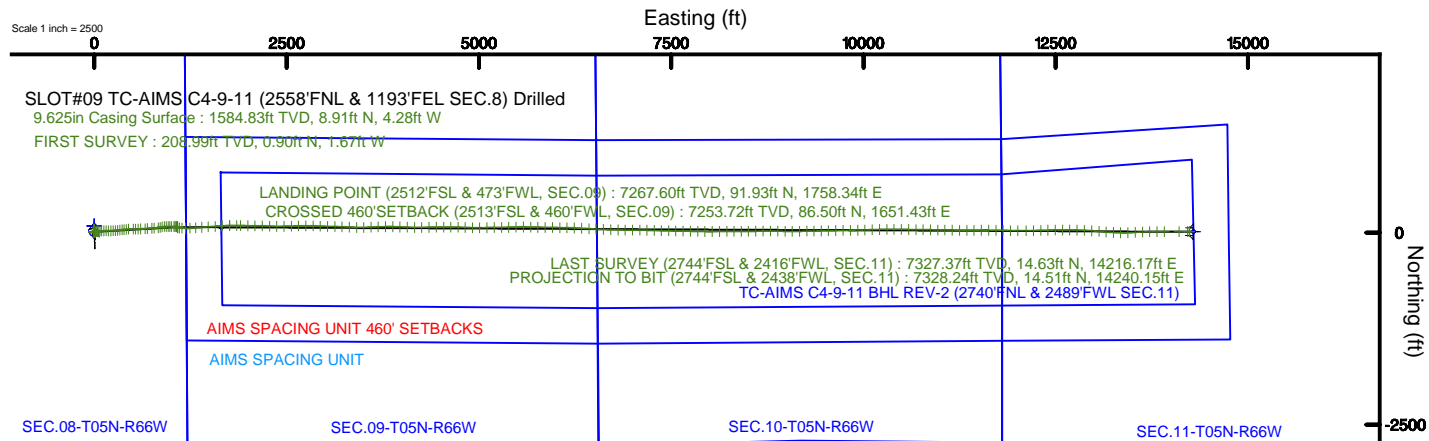


# EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled  
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: TC-AIMS C4-9-11  
Facility: SEC.08-T05N-R66W Wellbore: TC-AIMS C4-9-11 PWB

Plot reference wellpath is TC-AIMS C4-9-11 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: 4814 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'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 C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWP
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 2:12:36 PM
Convergence at slot	0.46° East	Database/Source file	WA_DEN_Denver_Defn/TC-AIMS_C4-9-11_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-47.36	0.00	3195281.42	1394571.22	40°24'51.768"N	104°47'55.248"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	4814.00ft
Horizontal Reference Pt	Slot	PATTERSON 341 (25') (RKB) to Mean Sea Level	4814.00ft
Vertical Reference Pt	PATTERSON 341 (25') (RKB)	PATTERSON 341 (25') (RKB) to Mud Line at Slot (SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled)	4814.00ft
MD Reference Pt	PATTERSON 341 (25') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.95°



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 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	298.250	0.00	0.00	0.00	0.00	40°24'51.768"N	104°47'55.248"W	0.00	
25.00	0.000	298.250	25.00	0.00	0.00	0.00	40°24'51.768"N	104°47'55.248"W	0.00	
209.00	1.180	298.250	208.99	-1.67	0.90	-1.67	40°24'51.777"N	104°47'55.270"W	0.64	FIRST SURVEY
391.00	1.020	291.930	390.95	-4.82	2.39	-4.82	40°24'51.792"N	104°47'55.310"W	0.11	
485.00	1.030	297.000	484.94	-6.35	3.08	-6.35	40°24'51.798"N	104°47'55.330"W	0.10	
675.00	0.820	341.290	674.92	-8.31	5.15	-8.31	40°24'51.819"N	104°47'55.355"W	0.38	
865.00	0.890	308.940	864.90	-9.89	7.36	-9.89	40°24'51.841"N	104°47'55.376"W	0.25	
960.00	0.810	281.280	959.89	-11.12	7.96	-11.13	40°24'51.847"N	104°47'55.392"W	0.44	
1055.00	0.810	96.470	1054.88	-11.11	8.01	-11.12	40°24'51.847"N	104°47'55.392"W	1.70	
1149.00	0.920	87.230	1148.87	-9.70	7.98	-9.70	40°24'51.847"N	104°47'55.373"W	0.19	
1244.00	0.960	91.890	1243.86	-8.14	7.99	-8.15	40°24'51.847"N	104°47'55.353"W	0.09	
1339.00	0.740	84.630	1338.85	-6.73	8.02	-6.74	40°24'51.847"N	104°47'55.335"W	0.26	
1434.00	0.730	62.930	1433.84	-5.58	8.35	-5.59	40°24'51.851"N	104°47'55.320"W	0.29	
1529.00	0.430	62.350	1528.84	-4.73	8.79	-4.74	40°24'51.855"N	104°47'55.309"W	0.32	
1680.00	0.880	103.330	1679.83	-3.10	8.79	-3.10	40°24'51.855"N	104°47'55.288"W	0.41	
1774.00	3.870	91.130	1773.74	0.78	8.56	0.77	40°24'51.853"N	104°47'55.238"W	3.21	
1869.00	3.810	78.720	1868.52	7.08	9.11	7.07	40°24'51.858"N	104°47'55.157"W	0.88	
1963.00	5.110	66.220	1962.24	13.97	11.41	13.96	40°24'51.881"N	104°47'55.067"W	1.72	
2058.00	5.950	60.310	2056.80	22.13	15.56	22.11	40°24'51.922"N	104°47'54.962"W	1.07	
2153.00	6.570	60.700	2151.23	31.15	20.65	31.13	40°24'51.972"N	104°47'54.846"W	0.65	
2247.00	7.880	75.040	2244.49	42.07	24.95	42.05	40°24'52.015"N	104°47'54.704"W	2.36	
2343.00	10.090	92.150	2339.32	56.83	26.33	56.81	40°24'52.028"N	104°47'54.514"W	3.59	
2437.00	12.240	97.300	2431.54	74.95	24.76	74.93	40°24'52.013"N	104°47'54.279"W	2.52	
2532.00	14.910	90.290	2523.88	97.16	23.42	97.14	40°24'51.999"N	104°47'53.992"W	3.30	
2626.00	17.020	87.760	2614.25	123.01	23.89	122.99	40°24'52.004"N	104°47'53.658"W	2.36	
2721.00	19.360	90.810	2704.50	152.65	24.21	152.63	40°24'52.007"N	104°47'53.275"W	2.66	
2815.00	20.010	90.480	2793.01	184.31	23.86	184.29	40°24'52.004"N	104°47'52.865"W	0.70	
2909.00	18.860	89.230	2881.65	215.58	23.93	215.57	40°24'52.004"N	104°47'52.461"W	1.30	
3004.00	17.680	87.290	2971.86	245.35	24.82	245.33	40°24'52.013"N	104°47'52.076"W	1.40	
3098.00	19.510	86.830	3060.95	275.28	26.36	275.26	40°24'52.028"N	104°47'51.689"W	1.95	



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
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
3193.00	17.560	84.820	3151.02	305.40	28.53	305.38	40°24'52.050"N	104°47'51.300"W	2.16	
3288.00	17.180	77.900	3241.70	333.40	32.77	333.37	40°24'52.092"N	104°47'50.938"W	2.21	
3383.00	16.240	84.930	3332.69	360.35	36.88	360.33	40°24'52.132"N	104°47'50.590"W	2.34	
3477.00	17.110	84.890	3422.74	387.22	39.28	387.19	40°24'52.156"N	104°47'50.242"W	0.93	
3572.00	18.050	81.970	3513.30	415.72	42.58	415.69	40°24'52.189"N	104°47'49.874"W	1.36	
3667.00	18.270	87.080	3603.58	445.17	45.39	445.13	40°24'52.216"N	104°47'49.493"W	1.69	
3856.00	19.230	89.750	3782.55	505.88	47.04	505.85	40°24'52.233"N	104°47'48.708"W	0.68	
3950.00	19.870	89.780	3871.13	537.34	47.16	537.30	40°24'52.234"N	104°47'48.302"W	0.68	
4045.00	20.060	89.100	3960.42	569.77	47.48	569.74	40°24'52.237"N	104°47'47.882"W	0.32	
4140.00	20.050	87.970	4049.66	602.34	48.32	602.30	40°24'52.245"N	104°47'47.461"W	0.41	
4328.00	16.890	86.810	4227.95	661.83	50.98	661.79	40°24'52.272"N	104°47'46.692"W	1.69	
4421.00	18.460	85.260	4316.56	690.00	52.95	689.96	40°24'52.291"N	104°47'46.328"W	1.76	
4610.00	17.880	86.020	4496.14	748.77	57.43	748.72	40°24'52.335"N	104°47'45.568"W	0.33	
4705.00	16.530	86.170	4586.88	776.80	59.35	776.76	40°24'52.354"N	104°47'45.206"W	1.42	
4894.00	16.360	84.060	4768.15	830.11	63.90	830.06	40°24'52.399"N	104°47'44.517"W	0.33	
4988.00	16.650	79.810	4858.28	856.53	67.65	856.48	40°24'52.436"N	104°47'44.175"W	1.32	
5082.00	17.800	72.160	4948.08	883.47	74.44	883.42	40°24'52.503"N	104°47'43.827"W	2.70	
5177.00	17.150	83.840	5038.72	911.24	80.39	911.17	40°24'52.562"N	104°47'43.468"W	3.75	
5271.00	15.560	92.900	5128.93	937.61	81.24	937.55	40°24'52.571"N	104°47'43.127"W	3.19	
5366.00	13.110	91.120	5220.96	961.11	80.38	961.05	40°24'52.562"N	104°47'42.823"W	2.62	
5460.00	12.440	93.830	5312.64	981.87	79.50	981.81	40°24'52.553"N	104°47'42.555"W	0.96	
5555.00	10.380	92.060	5405.76	1000.64	78.51	1000.58	40°24'52.544"N	104°47'42.312"W	2.20	
5744.00	9.980	84.920	5591.79	1033.97	79.35	1033.91	40°24'52.552"N	104°47'41.881"W	0.70	
5838.00	8.570	80.890	5684.56	1049.00	81.18	1048.94	40°24'52.570"N	104°47'41.687"W	1.65	
5932.00	6.130	94.760	5777.79	1060.92	81.87	1060.86	40°24'52.577"N	104°47'41.533"W	3.19	
6026.00	5.150	100.810	5871.33	1070.07	80.66	1070.00	40°24'52.565"N	104°47'41.415"W	1.22	
6121.00	2.460	112.440	5966.11	1076.14	79.08	1076.07	40°24'52.549"N	104°47'41.336"W	2.93	
6215.00	2.030	120.350	6060.04	1079.44	77.47	1079.38	40°24'52.533"N	104°47'41.294"W	0.56	
6309.00	1.050	165.280	6154.01	1081.09	75.80	1081.03	40°24'52.517"N	104°47'41.272"W	1.58	
6403.00	1.170	170.840	6247.99	1081.46	74.02	1081.40	40°24'52.499"N	104°47'41.267"W	0.17	

## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 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
6498.00	1.190	174.970	6342.97	1081.70	72.08	1081.64	40°24'52.480"N	104°47'41.264"W	0.09	
6592.00	1.290	167.550	6436.95	1082.01	70.07	1081.96	40°24'52.460"N	104°47'41.260"W	0.20	
6687.00	1.310	170.740	6531.92	1082.42	67.95	1082.36	40°24'52.439"N	104°47'41.255"W	0.08	
6782.00	1.300	174.750	6626.90	1082.69	65.81	1082.64	40°24'52.418"N	104°47'41.252"W	0.10	
6876.00	5.860	99.590	6720.72	1087.52	63.95	1087.47	40°24'52.400"N	104°47'41.189"W	6.03	
6971.00	17.390	96.990	6813.61	1106.46	61.40	1106.41	40°24'52.375"N	104°47'40.944"W	12.15	
7066.00	22.500	91.980	6902.89	1138.73	59.05	1138.69	40°24'52.351"N	104°47'40.527"W	5.67	
7160.00	35.340	93.110	6985.00	1184.04	56.94	1184.00	40°24'52.330"N	104°47'39.941"W	13.67	
7255.00	45.960	86.030	7057.01	1245.75	57.82	1245.71	40°24'52.339"N	104°47'39.143"W	12.17	
7349.00	53.890	84.450	7117.48	1317.37	63.84	1317.32	40°24'52.398"N	104°47'38.217"W	8.53	
7444.00	61.240	86.720	7168.40	1397.26	69.94	1397.21	40°24'52.459"N	104°47'37.185"W	7.99	
7538.00	68.460	86.010	7208.33	1482.13	75.35	1482.07	40°24'52.512"N	104°47'36.088"W	7.71	
7633.00	76.400	86.480	7236.98	1572.43	81.27	1572.37	40°24'52.571"N	104°47'34.920"W	8.37	
7714.00†	79.743	85.945	7253.72	1651.50	86.50	1651.43	40°24'52.622"N	104°47'33.898"W	4.18	CROSSED 460'SETBACK (2513'FSL & 460'FWL, SEC.09)
7727.00	80.280	85.860	7255.98	1664.27	87.42	1664.20	40°24'52.631"N	104°47'33.733"W	4.18	
7822.00	85.660	88.640	7267.60	1758.41	91.93	1758.34	40°24'52.676"N	104°47'32.516"W	6.36	LANDING POINT (2512'FSL & 473'FWL, SEC.09)
7917.00	88.120	91.060	7272.76	1853.26	92.17	1853.18	40°24'52.678"N	104°47'31.290"W	3.63	
7965.00	89.430	90.990	7273.78	1901.24	91.31	1901.16	40°24'52.670"N	104°47'30.669"W	2.73	
8059.00	91.520	90.480	7273.00	1995.22	90.11	1995.15	40°24'52.658"N	104°47'29.454"W	2.29	
8154.00	90.450	90.200	7271.37	2090.20	89.54	2090.13	40°24'52.652"N	104°47'28.226"W	1.16	
8248.00	89.180	92.080	7271.67	2184.17	87.67	2184.10	40°24'52.633"N	104°47'27.012"W	2.41	
8342.00	90.730	92.340	7271.75	2278.10	84.05	2278.03	40°24'52.597"N	104°47'25.797"W	1.67	
8437.00	90.300	90.720	7270.89	2373.06	81.51	2372.99	40°24'52.572"N	104°47'24.570"W	1.76	
8531.00	88.850	88.220	7271.59	2467.04	82.38	2466.97	40°24'52.581"N	104°47'23.355"W	3.07	
8626.00	90.510	88.230	7272.12	2561.99	85.32	2561.92	40°24'52.610"N	104°47'22.127"W	1.75	
8720.00	89.810	89.350	7271.86	2655.97	87.31	2655.90	40°24'52.629"N	104°47'20.912"W	1.41	
8815.00	87.740	88.760	7273.89	2750.93	88.88	2750.86	40°24'52.645"N	104°47'19.684"W	2.27	
8909.00	88.320	92.250	7277.12	2844.86	88.05	2844.79	40°24'52.636"N	104°47'18.470"W	3.76	
9003.00	89.940	92.040	7278.55	2938.77	84.53	2938.71	40°24'52.602"N	104°47'17.256"W	1.74	
9097.00	89.740	91.860	7278.81	3032.72	81.33	3032.65	40°24'52.570"N	104°47'16.041"W	0.29	



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
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
9191.00	91.510	91.020	7277.79	3126.67	78.97	3126.61	40°24'52.546"N	104°47'14.827"W	2.08	
9286.00	91.220	92.930	7275.52	3221.58	75.70	3221.52	40°24'52.514"N	104°47'13.600"W	2.03	
9381.00	91.280	92.180	7273.45	3316.46	71.46	3316.41	40°24'52.472"N	104°47'12.373"W	0.79	
9476.00	92.660	92.370	7270.19	3411.33	67.69	3411.27	40°24'52.435"N	104°47'11.147"W	1.46	
9569.00	91.580	87.870	7266.76	3504.24	67.50	3504.18	40°24'52.433"N	104°47'09.945"W	4.97	
9663.00	89.640	87.150	7265.76	3598.14	71.58	3598.08	40°24'52.473"N	104°47'08.731"W	2.20	
9757.00	88.250	88.570	7267.49	3692.06	75.09	3692.00	40°24'52.507"N	104°47'07.517"W	2.11	
9852.00	90.160	88.130	7268.81	3787.01	77.83	3786.95	40°24'52.534"N	104°47'06.290"W	2.06	
9946.00	91.330	91.910	7267.58	3880.98	77.80	3880.92	40°24'52.534"N	104°47'05.075"W	4.21	
10040.00	91.600	92.630	7265.18	3974.87	74.07	3974.81	40°24'52.497"N	104°47'03.861"W	0.82	
10135.00	90.620	92.100	7263.34	4069.77	70.15	4069.71	40°24'52.458"N	104°47'02.634"W	1.17	
10229.00	90.000	90.690	7262.83	4163.73	67.87	4163.68	40°24'52.435"N	104°47'01.419"W	1.64	
10323.00	87.720	89.500	7264.70	4257.71	67.71	4257.65	40°24'52.433"N	104°47'00.204"W	2.74	
10418.00	88.850	88.080	7267.55	4352.64	69.71	4352.59	40°24'52.453"N	104°46'58.977"W	1.91	
10512.00	89.410	90.100	7268.97	4446.61	71.21	4446.56	40°24'52.468"N	104°46'57.762"W	2.23	
10607.00	91.790	90.230	7267.98	4541.60	70.93	4541.55	40°24'52.465"N	104°46'56.534"W	2.51	
10701.00	93.610	89.990	7263.55	4635.49	70.75	4635.44	40°24'52.463"N	104°46'55.320"W	1.95	
10795.00	91.380	90.430	7259.46	4729.40	70.41	4729.34	40°24'52.459"N	104°46'54.106"W	2.42	
10889.00	90.690	92.860	7257.76	4823.33	67.71	4823.28	40°24'52.432"N	104°46'52.892"W	2.69	
10983.00	89.020	91.500	7258.00	4917.26	64.14	4917.21	40°24'52.397"N	104°46'51.678"W	2.29	
11077.00	89.270	89.110	7259.40	5011.24	63.64	5011.19	40°24'52.392"N	104°46'50.463"W	2.56	
11172.00	90.970	88.680	7259.20	5106.22	65.47	5106.17	40°24'52.410"N	104°46'49.235"W	1.85	
11267.00	88.590	89.610	7259.57	5201.20	66.88	5201.15	40°24'52.424"N	104°46'48.007"W	2.69	
11361.00	90.010	89.250	7260.71	5295.19	67.82	5295.13	40°24'52.433"N	104°46'46.792"W	1.56	
11455.00	88.300	88.210	7262.10	5389.15	69.90	5389.09	40°24'52.453"N	104°46'45.577"W	2.13	
11550.00	90.080	88.230	7263.44	5484.09	72.85	5484.04	40°24'52.482"N	104°46'44.350"W	1.87	
11644.00	90.610	90.490	7262.88	5578.08	73.90	5578.02	40°24'52.492"N	104°46'43.134"W	2.47	
11739.00	91.160	91.790	7261.41	5673.04	72.01	5672.99	40°24'52.473"N	104°46'41.907"W	1.49	
11834.00	89.090	90.750	7261.20	5768.01	69.91	5767.96	40°24'52.452"N	104°46'40.679"W	2.44	
11929.00	90.860	90.630	7261.24	5863.00	68.76	5862.95	40°24'52.441"N	104°46'39.451"W	1.87	



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
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
12023.00	89.890	91.560	7260.63	5956.98	66.97	5956.93	40°24'52.423"N	104°46'38.236"W	1.43	
12118.00	89.840	91.200	7260.85	6051.95	64.68	6051.90	40°24'52.400"N	104°46'37.008"W	0.38	
12213.00	91.640	90.760	7259.63	6146.92	63.06	6146.87	40°24'52.384"N	104°46'35.780"W	1.95	
12308.00	90.990	92.010	7257.45	6241.86	60.76	6241.82	40°24'52.361"N	104°46'34.553"W	1.48	
12403.00	89.410	93.130	7257.11	6336.76	56.50	6336.72	40°24'52.318"N	104°46'33.326"W	2.04	
12497.00	88.590	93.310	7258.76	6430.59	51.22	6430.55	40°24'52.266"N	104°46'32.113"W	0.89	
12592.00	89.980	93.070	7259.94	6525.43	45.93	6525.40	40°24'52.213"N	104°46'30.887"W	1.48	
12687.00	88.420	92.120	7261.27	6620.32	41.63	6620.29	40°24'52.171"N	104°46'29.660"W	1.92	
12782.00	90.190	91.400	7262.42	6715.26	38.72	6715.23	40°24'52.142"N	104°46'28.433"W	2.01	
12876.00	88.470	91.470	7263.52	6809.22	36.36	6809.19	40°24'52.118"N	104°46'27.218"W	1.83	
12970.00	89.660	90.750	7265.05	6903.18	34.54	6903.16	40°24'52.100"N	104°46'26.003"W	1.48	
13064.00	92.780	89.600	7263.05	6997.15	34.25	6997.12	40°24'52.097"N	104°46'24.788"W	3.54	
13159.00	90.530	90.780	7260.31	7092.10	33.94	7092.08	40°24'52.093"N	104°46'23.561"W	2.67	
13253.00	87.780	91.480	7261.69	7186.06	32.09	7186.04	40°24'52.075"N	104°46'22.346"W	3.02	
13347.00	89.840	91.460	7263.65	7280.00	29.68	7279.98	40°24'52.051"N	104°46'21.131"W	2.19	
13441.00	88.560	91.690	7264.96	7373.95	27.09	7373.93	40°24'52.025"N	104°46'19.917"W	1.38	
13536.00	87.380	91.600	7268.32	7468.85	24.37	7468.83	40°24'51.998"N	104°46'18.690"W	1.25	
13629.00	88.710	90.170	7271.50	7561.78	22.93	7561.76	40°24'51.983"N	104°46'17.489"W	2.10	
13724.00	89.680	90.930	7272.83	7656.76	22.02	7656.75	40°24'51.974"N	104°46'16.261"W	1.30	
13818.00	89.950	91.950	7273.13	7750.73	19.66	7750.72	40°24'51.950"N	104°46'15.046"W	1.12	
13913.00	87.450	91.250	7275.29	7845.66	17.01	7845.65	40°24'51.924"N	104°46'13.818"W	2.73	
14007.00	89.920	90.700	7277.45	7939.61	15.41	7939.60	40°24'51.908"N	104°46'12.604"W	2.69	
14102.00	88.040	89.520	7279.14	8034.59	15.22	8034.58	40°24'51.906"N	104°46'11.376"W	2.34	
14196.00	88.450	89.750	7282.02	8128.54	15.82	8128.53	40°24'51.911"N	104°46'10.161"W	0.50	
14291.00	86.830	89.360	7285.93	8223.46	16.56	8223.45	40°24'51.918"N	104°46'08.934"W	1.75	
14385.00	84.610	90.330	7292.94	8317.19	16.81	8317.18	40°24'51.920"N	104°46'07.722"W	2.58	
14480.00	86.970	89.880	7299.92	8411.92	16.64	8411.91	40°24'51.918"N	104°46'06.498"W	2.53	
14574.00	88.800	89.030	7303.39	8505.85	17.54	8505.84	40°24'51.927"N	104°46'05.283"W	2.15	
14669.00	91.230	88.940	7303.36	8600.83	19.22	8600.82	40°24'51.943"N	104°46'04.055"W	2.56	
14765.00	92.020	89.560	7300.64	8696.78	20.47	8696.77	40°24'51.955"N	104°46'02.815"W	1.05	





# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 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
14859.00	89.850	90.210	7299.10	8790.77	20.66	8790.75	40°24'51.957"N	104°46'01.600"W	2.41	
14954.00	88.670	90.390	7300.33	8885.75	20.17	8885.74	40°24'51.951"N	104°46'00.372"W	1.26	
15049.00	91.260	91.410	7300.39	8980.73	18.67	8980.72	40°24'51.936"N	104°45'59.144"W	2.93	
15143.00	89.750	89.640	7299.66	9074.72	17.81	9074.71	40°24'51.928"N	104°45'57.929"W	2.47	
15238.00	87.780	89.190	7301.61	9169.69	18.78	9169.67	40°24'51.937"N	104°45'56.701"W	2.13	
15333.00	90.060	89.030	7303.40	9264.65	20.26	9264.64	40°24'51.951"N	104°45'55.474"W	2.41	
15426.00	92.650	88.940	7301.20	9357.61	21.90	9357.59	40°24'51.967"N	104°45'54.272"W	2.79	
15521.00	88.010	88.850	7300.65	9452.56	23.74	9452.55	40°24'51.985"N	104°45'53.044"W	4.89	
15615.00	87.730	88.760	7304.15	9546.48	25.69	9546.46	40°24'52.004"N	104°45'51.830"W	0.31	
15710.00	90.540	89.000	7305.58	9641.44	27.55	9641.42	40°24'52.022"N	104°45'50.602"W	2.97	
15805.00	90.330	89.390	7304.86	9736.43	28.89	9736.41	40°24'52.034"N	104°45'49.374"W	0.47	
15900.00	88.930	89.110	7305.47	9831.42	30.13	9831.40	40°24'52.046"N	104°45'48.146"W	1.50	
15994.00	90.270	88.260	7306.13	9925.39	32.29	9925.37	40°24'52.067"N	104°45'46.931"W	1.69	
16089.00	89.230	88.580	7306.54	10020.35	34.91	10020.33	40°24'52.093"N	104°45'45.704"W	1.15	
16184.00	87.090	88.180	7309.59	10115.26	37.59	10115.24	40°24'52.119"N	104°45'44.477"W	2.29	
16279.00	89.470	88.130	7312.45	10210.17	40.65	10210.14	40°24'52.149"N	104°45'43.250"W	2.51	
16374.00	89.530	89.950	7313.27	10305.15	42.24	10305.12	40°24'52.164"N	104°45'42.022"W	1.92	
16468.00	92.230	90.000	7311.83	10399.13	42.28	10399.10	40°24'52.164"N	104°45'40.807"W	2.87	
16563.00	90.260	90.890	7309.77	10494.09	41.54	10494.06	40°24'52.156"N	104°45'39.579"W	2.28	
16657.00	87.480	90.670	7311.62	10588.06	40.26	10588.03	40°24'52.143"N	104°45'38.364"W	2.97	
16752.00	89.660	90.510	7313.99	10683.02	39.28	10682.99	40°24'52.133"N	104°45'37.137"W	2.30	
16846.00	89.680	90.950	7314.53	10777.01	38.09	10776.98	40°24'52.121"N	104°45'35.922"W	0.47	
16941.00	87.160	90.930	7317.15	10871.95	36.53	10871.92	40°24'52.105"N	104°45'34.694"W	2.65	
17036.00	89.070	91.600	7320.28	10966.87	34.43	10966.84	40°24'52.084"N	104°45'33.467"W	2.13	
17130.00	89.640	90.260	7321.33	11060.84	32.91	11060.82	40°24'52.069"N	104°45'32.252"W	1.55	
17225.00	87.600	90.630	7323.62	11155.81	32.17	11155.79	40°24'52.061"N	104°45'31.024"W	2.18	
17319.00	89.930	90.560	7325.65	11249.77	31.19	11249.75	40°24'52.051"N	104°45'29.810"W	2.48	
17414.00	89.390	90.140	7326.21	11344.77	30.61	11344.75	40°24'52.045"N	104°45'28.582"W	0.72	
17508.00	86.770	89.680	7329.36	11438.71	30.76	11438.69	40°24'52.046"N	104°45'27.367"W	2.83	
17603.00	89.060	89.170	7332.82	11533.63	31.71	11533.61	40°24'52.055"N	104°45'26.140"W	2.47	





# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
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	
17697.00	88.780	90.560	7334.59	11627.62	31.94	11627.59	40°24'52.057"N	104°45'24.925"W	1.51		
17792.00	91.450	90.880	7334.40	11722.60	30.74	11722.58	40°24'52.044"N	104°45'23.697"W	2.83		
17887.00	90.040	91.220	7333.16	11817.57	29.00	11817.55	40°24'52.027"N	104°45'22.469"W	1.53		
17982.00	89.980	90.990	7333.15	11912.55	27.17	11912.53	40°24'52.008"N	104°45'21.241"W	0.25		
18077.00	87.950	90.650	7334.86	12007.52	25.81	12007.50	40°24'51.994"N	104°45'20.013"W	2.17		
18186.00	89.850	89.490	7336.96	12116.49	25.68	12116.48	40°24'51.992"N	104°45'18.605"W	2.04		
18280.00	87.880	88.940	7338.82	12210.46	26.96	12210.44	40°24'52.005"N	104°45'17.390"W	2.18		
18375.00	89.260	88.650	7341.19	12305.41	28.96	12305.39	40°24'52.024"N	104°45'16.162"W	1.48		
18469.00	89.850	87.920	7341.92	12399.37	31.77	12399.34	40°24'52.051"N	104°45'14.948"W	1.00		
18564.00	90.030	89.730	7342.02	12494.34	33.72	12494.32	40°24'52.070"N	104°45'13.720"W	1.91		
18659.00	89.850	89.200	7342.12	12589.34	34.61	12589.32	40°24'52.078"N	104°45'12.492"W	0.59		
18753.00	88.280	90.630	7343.65	12683.32	34.75	12683.30	40°24'52.079"N	104°45'11.277"W	2.26		
18848.00	87.350	92.050	7347.27	12778.22	32.53	12778.20	40°24'52.057"N	104°45'10.050"W	1.79		
18942.00	89.910	91.930	7349.52	12872.13	29.27	12872.11	40°24'52.024"N	104°45'08.836"W	2.73		
19038.00	92.000	94.190	7347.92	12967.96	24.14	12967.95	40°24'51.973"N	104°45'07.597"W	3.21		
19133.00	91.380	94.830	7345.12	13062.62	16.68	13062.61	40°24'51.899"N	104°45'06.373"W	0.94		
19227.00	91.970	94.190	7342.37	13156.28	9.29	13156.28	40°24'51.825"N	104°45'05.162"W	0.93		
19321.00	93.050	93.040	7338.25	13250.00	3.37	13250.00	40°24'51.766"N	104°45'03.950"W	1.68		
19416.00	91.850	92.170	7334.19	13344.81	-0.95	13344.81	40°24'51.723"N	104°45'02.725"W	1.56		
19511.00	90.710	87.700	7332.07	13439.76	-0.84	13439.76	40°24'51.724"N	104°45'01.497"W	4.85		
19606.00	90.950	85.530	7330.69	13534.58	4.77	13534.58	40°24'51.778"N	104°45'00.271"W	2.30		
19701.00	90.830	88.530	7329.22	13629.43	9.69	13629.43	40°24'51.827"N	104°44'59.045"W	3.16		
19795.00	91.390	88.360	7327.40	13723.38	12.24	13723.38	40°24'51.851"N	104°44'57.830"W	0.62		
19890.00	91.320	89.950	7325.15	13818.34	13.64	13818.34	40°24'51.865"N	104°44'56.603"W	1.67		
19984.00	91.570	91.150	7322.78	13912.31	12.74	13912.30	40°24'51.855"N	104°44'55.388"W	1.30		
20175.00	88.060	88.460	7323.40	14103.26	13.39	14103.25	40°24'51.861"N	104°44'52.919"W	2.32		
20288.00	87.910	90.280	7327.37	14216.18	14.63	14216.17	40°24'51.872"N	104°44'51.460"W	1.62	LAST SURVEY (2744'FSL & 2416'FWL, SEC.11)	
20312.00	87.910	90.280	7328.24	14240.16	14.51	14240.15	40°24'51.871"N	104°44'51.149"W	0.00	PROJECTION TO BIT (2744'FSL & 2438'FWL, SEC.11)	



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
Facility	SEC.08-T05N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: TC-AIMS C4-9-11 AWB      Ref Wellpath: TC-AIMS C4-9-11 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	1619.00	1594.00	25.00	1618.83	0.00	0.00	8.92	-3.91
9.625in Casing Surface	25.00	1585.00	1560.00	25.00	1584.83	0.00	0.00	8.91	-4.28
8.5in Open Hole	1619.00	20312.00	18693.00	1618.83	7328.24	8.92	-3.91	14.51	14240.15



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 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	2.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.08-T05N-R66W	2.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.09-T05N-R66W	2.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.10-T05N-R66W	2.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
SEC.11-T05N-R66W	2.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon
TC-AIMS C4-9-11 BHL REV-2 (2740'FNL & 2489'FWL SEC.11)	7262.00	11.42	14290.70	3209570.99	1394695.66	40°24'51.840"N	104°44'50.496"W	point
TC-AIMS C4-9-11 LP REV-2 (2495'FNL & 460'FWL SEC.9)	7262.00	69.27	1651.28	3196932.03	1394653.55	40°24'52.452"N	104°47'33.900"W	point
TC-AIMS C4-9-11 BHL REV-1 (2740'FNL & 2489'FWL SEC.11)	7304.00	11.42	14290.70	3209570.99	1394695.66	40°24'51.840"N	104°44'50.496"W	point
TC-AIMS C4-9-11 LP REV-1 (2495'FNL & 460'FWL SEC.9)	7304.00	69.27	1651.28	3196932.03	1394653.55	40°24'52.452"N	104°47'33.900"W	point
AIMS SPACING UNIT 460' SETBACKS	7306.00	87.44	0.00	3195280.72	1394658.65	40°24'52.632"N	104°47'55.248"W	polygon



# Actual Wellpath Report

TC-AIMS C4-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#09 TC-AIMS C4-9-11 (2558'FNL & 1193'FEL SEC.8) Drilled
Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
Facility	SEC.08-T05N-R66W		

WELLPATH COMPOSITION - Ref Wellbore: TC-AIMS C4-9-11 AWB      Ref Wellpath: TC-AIMS C4-9-11 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1529.00	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	BHI NAVITRAK MWD, STD ROTATING, ROCKIES GT 13 1/2"<209-1529>	TC-AIMS C4-9-11 AWB
1529.00	20288.00	ISCWSA MWD, Rev. 4 (Standard)	PHOENIX MWD SURVEYS <1680-20288>	TC-AIMS C4-9-11 AWB
20288.00	20312.00	Blind Drilling (std)	Projection to bit	TC-AIMS C4-9-11 AWB



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TC-AIMS C4-9-11 AWP

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	TC-AIMS C4-9-11
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	TC-AIMS C4-9-11 AWB
Facility	SEC.08-T05N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
209.00	1.180	298.250	208.99	FIRST SURVEY
7714.00	79.743	85.945	7253.72	CROSSED 460'SETBACK (2513'FSL & 460'FWL, SEC.09)
7822.00	85.660	88.640	7267.60	LANDING POINT (2512'FSL & 473'FWL, SEC.09)
20288.00	87.910	90.280	7327.37	LAST SURVEY (2744'FSL & 2416'FWL, SEC.11)
20312.00	87.910	90.280	7328.24	PROJECTION TO BIT (2744'FSL & 2438'FWL, SEC.11)