

Location:	COLORADO	Slot:	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Field:	WELD COUNTY (NAD83/TRUE NORTH)	Well:	WINDER #4
Facility:	SEC.09-T06N-R67W	Wellbore:	WINDER #4 PWB

Plot reference wellpath is WINDER #4 PWP (REV-B.0)	
True vertical depths are referenced to SAVANNA 802 (15KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to SAVANNA 802 (15KB) (RKB)	North Reference: True north
SAVANNA 802 (15KB) (RKB) to Mean Sea Level: 4883 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 WINDER #4(754FNL & 684FEL,SEC.09)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjmr on 7/13/2016

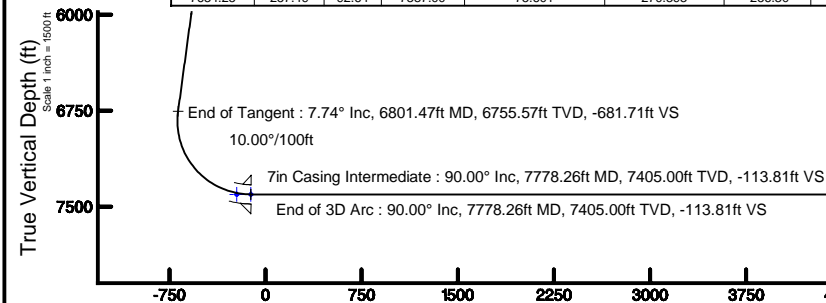
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.09-T06N-R67W				3169265.228	1428175.850	40°30'25.736"N	104°53'28.612"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#04 WINDER #4(754FNL & 684FEL_SEC.09)	-77.92	-0.54	3169265.222	1428097.927	40°30'24.966"N	104°53'28.619"W	
SAVANNA 002 (15KB) (RKB) to Mud line (At Slot: SLOT#04 WINDER #4(754FNL & 684FEL_SEC.09))						4883R	
Mean Sea Level to Mud line (At Slot: SLOT#04 WINDER #4(754FNL & 684FEL_SEC.09))						0ft	
SAVANNA 002 (15KB) (RKB) to Mean Sea Level						4883R	

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
TWELL/WINDER 1/2 SECTION 08		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
TWELL/WINDER 1/2 SECTION 09		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
TWELL/WINDER SECTION 08		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
TWELL/WINDER SECTION 09		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
WINDER #4 BHL ON PLAT REV 1(469FNL & 460FNL SEC.08)	17252.88	7435.00	118.36	-9359.58	3159950.38	1428152.03	40°30'26.118"N	104°55'29.788"W
WINDER #4 LANDING POINT		7435.00	93.27	224.98	3169489.55	1428192.73	40°30'25.888"N	104°55'23.706"W
WINDER #4 LANDING POINT REV-1	7778.26	7435.00	93.31	115.00	3169379.56	1428192.02	40°30'25.888"N	104°55'23.130"W
TWELL/WINDER PAD CENTER SECTION HARDLINE(S)460 SETBACK(S)		7439.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
WINDER PAD NORTH 1/2 HARDLINE(S)460 SETBACK(S)		7437.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W
WINDER PAD NORTH 1/4 HARDLINE(S)460 SETBACK(S)		7437.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W

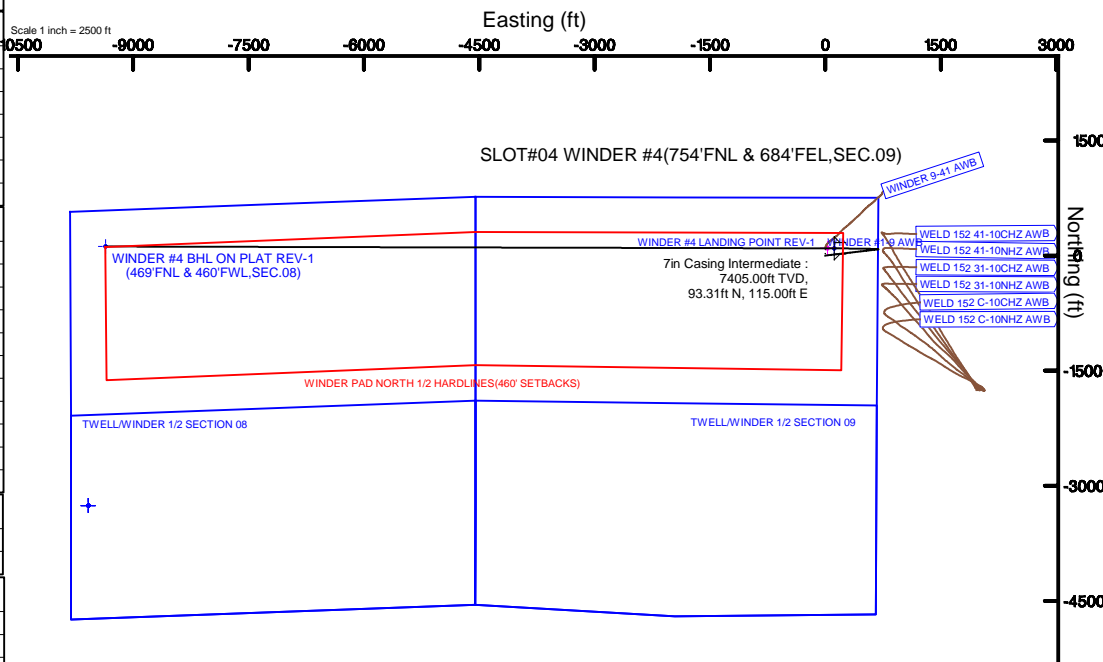
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
15.00	18991.00	NaviTrak	NaviTrak (Standard)		WINDER #4 PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	83.221	15.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	83.221	1500.00	0.00	0.00	0.00	0.00
End of Build	1886.78	7.736	83.221	1885.61	3.08	25.89	2.00	-25.85
End of Tangent	6801.47	7.736	83.221	6755.57	81.16	682.79	0.00	-681.71
End of 3D Arc	7778.26	90.000	270.151	7405.00	93.31	115.00	10.00	-113.81
End of Tangent	17252.88	90.000	270.151	7405.00	118.36	-9359.58	0.00	9360.33

MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
7263.58	563.19	88.58	7189.00	38.542	271.330	-562.02	NIO A
7351.05	503.70	89.79	7253.00	47.287	271.019	-502.52	NIO B
7441.75	432.49	90.89	7309.00	56.354	270.777	-431.31	NIO C
7568.40	320.20	92.14	7367.00	69.017	270.512	-319.01	FOR HAYS
7634.25	257.49	92.64	7387.00	75.601	270.393	-256.30	CODELL



Scale 1 inch = 2500 ft



BGGM (1945.0 to 2017.0) Dip: 67.02° Field: 52648.6 nT
Magnetic North is 8.64 degrees East of True North (at 7/13/2015)

To correct azimuth from Magnetic to True add 8.64 degrees

End of Tangent : 90.00° Inc, 17252.88ft MD, 7405.00ft TVD, 9360.33ft VS

WINDER #4 BHL ON PLAT REV-1(469'FNL & 460'FWL,SEC.08)

Scale 1 inch = 1500 ft



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Ingmjmr
Scale	0.999967	Report Generated	7/13/2015 at 1:12:29 PM
Convergence at slot	0.39° East	Database/Source file	Denver/WINDER_#4_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-77.92	-0.54	3169265.22	1428097.93	40°30'24.966"N	104°53'28.619"W
Facility Reference Pt			3169265.23	1428175.85	40°30'25.736"N	104°53'28.612"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

WELLPATH DATUM

Calculation method	Minimum curvature	SAVANNA 802 (15'KB) (RKB) to Facility Vertical Datum	4883.00ft
Horizontal Reference Pt	Slot	SAVANNA 802 (15'KB) (RKB) to Mean Sea Level	4883.00ft
Vertical Reference Pt	SAVANNA 802 (15'KB) (RKB)	SAVANNA 802 (15'KB) (RKB) to Mud Line at Slot (SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09))	4883.00ft
MD Reference Pt	SAVANNA 802 (15'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	270.72°



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	83.221	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	83.221	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	83.221	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	83.221	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	83.221	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	83.221	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	83.221	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	83.221	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	83.221	715.00	0.00	0.00	0.00	0.00	
815.00†	0.000	83.221	815.00	0.00	0.00	0.00	0.00	
915.00†	0.000	83.221	915.00	0.00	0.00	0.00	0.00	
1015.00†	0.000	83.221	1015.00	0.00	0.00	0.00	0.00	
1115.00†	0.000	83.221	1115.00	0.00	0.00	0.00	0.00	
1215.00†	0.000	83.221	1215.00	0.00	0.00	0.00	0.00	
1315.00†	0.000	83.221	1315.00	0.00	0.00	0.00	0.00	
1415.00†	0.000	83.221	1415.00	0.00	0.00	0.00	0.00	
1500.00	0.000	83.221	1500.00	0.00	0.00	0.00	0.00	End of Tangent
1515.00†	0.300	83.221	1515.00	-0.04	0.00	0.04	2.00	
1615.00†	2.300	83.221	1614.97	-2.29	0.27	2.29	2.00	
1715.00†	4.300	83.221	1714.80	-7.99	0.95	8.01	2.00	
1815.00†	6.300	83.221	1814.37	-17.15	2.04	17.18	2.00	
1886.78	7.736	83.221	1885.61	-25.85	3.08	25.89	2.00	End of Build
1915.00†	7.736	83.221	1913.57	-29.61	3.53	29.66	0.00	
2015.00†	7.736	83.221	2012.66	-42.96	5.11	43.03	0.00	
2115.00†	7.736	83.221	2111.75	-56.30	6.70	56.39	0.00	
2215.00†	7.736	83.221	2210.84	-69.65	8.29	69.76	0.00	
2315.00†	7.736	83.221	2309.93	-82.99	9.88	83.12	0.00	
2415.00†	7.736	83.221	2409.02	-96.34	11.47	96.49	0.00	
2515.00†	7.736	83.221	2508.11	-109.68	13.06	109.86	0.00	
2615.00†	7.736	83.221	2607.20	-123.03	14.65	123.22	0.00	



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2715.00†	7.736	83.221	2706.29	-136.37	16.24	136.59	0.00	
2815.00†	7.736	83.221	2805.38	-149.72	17.82	149.95	0.00	
2915.00†	7.736	83.221	2904.47	-163.06	19.41	163.32	0.00	
3015.00†	7.736	83.221	3003.56	-176.41	21.00	176.69	0.00	
3115.00†	7.736	83.221	3102.65	-189.75	22.59	190.05	0.00	
3215.00†	7.736	83.221	3201.74	-203.10	24.18	203.42	0.00	
3315.00†	7.736	83.221	3300.83	-216.44	25.77	216.79	0.00	
3415.00†	7.736	83.221	3399.92	-229.79	27.36	230.15	0.00	
3515.00†	7.736	83.221	3499.01	-243.13	28.95	243.52	0.00	
3615.00†	7.736	83.221	3598.10	-256.48	30.54	256.88	0.00	
3715.00†	7.736	83.221	3697.19	-269.82	32.12	270.25	0.00	
3815.00†	7.736	83.221	3796.28	-283.17	33.71	283.62	0.00	
3915.00†	7.736	83.221	3895.37	-296.51	35.30	296.98	0.00	
4015.00†	7.736	83.221	3994.46	-309.86	36.89	310.35	0.00	
4115.00†	7.736	83.221	4093.55	-323.20	38.48	323.71	0.00	
4215.00†	7.736	83.221	4192.64	-336.55	40.07	337.08	0.00	
4315.00†	7.736	83.221	4291.73	-349.89	41.66	350.45	0.00	
4415.00†	7.736	83.221	4390.82	-363.24	43.25	363.81	0.00	
4515.00†	7.736	83.221	4489.91	-376.58	44.83	377.18	0.00	
4615.00†	7.736	83.221	4589.00	-389.93	46.42	390.54	0.00	
4715.00†	7.736	83.221	4688.09	-403.27	48.01	403.91	0.00	
4815.00†	7.736	83.221	4787.18	-416.62	49.60	417.28	0.00	
4915.00†	7.736	83.221	4886.27	-429.96	51.19	430.64	0.00	
5015.00†	7.736	83.221	4985.36	-443.31	52.78	444.01	0.00	
5115.00†	7.736	83.221	5084.45	-456.65	54.37	457.37	0.00	
5215.00†	7.736	83.221	5183.54	-470.00	55.96	470.74	0.00	
5315.00†	7.736	83.221	5282.63	-483.34	57.54	484.11	0.00	
5415.00†	7.736	83.221	5381.72	-496.69	59.13	497.47	0.00	
5515.00†	7.736	83.221	5480.81	-510.03	60.72	510.84	0.00	
5615.00†	7.736	83.221	5579.90	-523.38	62.31	524.21	0.00	



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5715.00†	7.736	83.221	5678.99	-536.72	63.90	537.57	0.00	
5815.00†	7.736	83.221	5778.08	-550.07	65.49	550.94	0.00	
5915.00†	7.736	83.221	5877.17	-563.41	67.08	564.30	0.00	
6015.00†	7.736	83.221	5976.26	-576.76	68.67	577.67	0.00	
6115.00†	7.736	83.221	6075.35	-590.10	70.25	591.04	0.00	
6215.00†	7.736	83.221	6174.44	-603.44	71.84	604.40	0.00	
6315.00†	7.736	83.221	6273.53	-616.79	73.43	617.77	0.00	
6415.00†	7.736	83.221	6372.62	-630.13	75.02	631.13	0.00	
6515.00†	7.736	83.221	6471.71	-643.48	76.61	644.50	0.00	
6615.00†	7.736	83.221	6570.80	-656.82	78.20	657.87	0.00	
6715.00†	7.736	83.221	6669.89	-670.17	79.79	671.23	0.00	
6801.47	7.736	83.221	6755.57	-681.71	81.16	682.79	0.00	End of Tangent
6815.00†	6.395	81.742	6769.00	-683.36	81.38	684.44	10.00	
6915.00†	3.792	284.468	6868.83	-685.65	83.01	686.75	10.00	
7015.00†	13.706	274.005	6967.55	-670.57	84.67	671.70	10.00	
7115.00†	23.692	272.292	7062.15	-638.58	86.30	639.72	10.00	
7215.00†	33.686	271.561	7149.76	-590.65	87.86	591.80	10.00	
7263.58†	38.542	271.330	7189.00	-562.02	88.58	563.19	10.00	NIO A
7315.00†	43.682	271.135	7227.73	-528.23	89.31	529.40	10.00	
7351.05†	47.287	271.019	7253.00	-502.52	89.79	503.70	10.00	NIO B
7415.00†	53.680	270.842	7293.67	-453.22	90.58	454.40	10.00	
7441.75†	56.354	270.777	7309.00	-431.31	90.89	432.49	10.00	NIO C
7515.00†	63.678	270.616	7345.58	-367.90	91.66	369.09	10.00	
7568.40†	69.017	270.512	7367.00	-319.01	92.14	320.20	10.00	FORT HAYS
7615.00†	73.676	270.427	7381.90	-274.86	92.50	276.06	10.00	
7634.25†	75.601	270.393	7387.00	-256.30	92.64	257.49	10.00	CODELL
7715.00†	83.675	270.256	7401.51	-176.94	93.08	178.13	10.00	
7778.26	90.000	270.151	7405.00 ¹	-113.81	93.31	115.00	10.00	End of 3D Arc
7815.00†	90.000	270.151	7405.00	-77.07	93.40	78.26	0.00	
7915.00†	90.000	270.151	7405.00	22.92	93.67	-21.74	0.00	



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

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Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8015.00†	90.000	270.151	7405.00	122.92	93.93	-121.74	0.00	
8115.00†	90.000	270.151	7405.00	222.91	94.20	-221.74	0.00	
8215.00†	90.000	270.151	7405.00	322.91	94.46	-321.74	0.00	
8315.00†	90.000	270.151	7405.00	422.90	94.73	-421.74	0.00	
8415.00†	90.000	270.151	7405.00	522.90	94.99	-521.74	0.00	
8515.00†	90.000	270.151	7405.00	622.89	95.26	-621.74	0.00	
8615.00†	90.000	270.151	7405.00	722.89	95.52	-721.74	0.00	
8715.00†	90.000	270.151	7405.00	822.88	95.78	-821.74	0.00	
8815.00†	90.000	270.151	7405.00	922.88	96.05	-921.74	0.00	
8915.00†	90.000	270.151	7405.00	1022.87	96.31	-1021.74	0.00	
9015.00†	90.000	270.151	7405.00	1122.87	96.58	-1121.74	0.00	
9115.00†	90.000	270.151	7405.00	1222.86	96.84	-1221.74	0.00	
9215.00†	90.000	270.151	7405.00	1322.86	97.11	-1321.74	0.00	
9315.00†	90.000	270.151	7405.00	1422.85	97.37	-1421.74	0.00	
9415.00†	90.000	270.151	7405.00	1522.85	97.63	-1521.74	0.00	
9515.00†	90.000	270.151	7405.00	1622.84	97.90	-1621.74	0.00	
9615.00†	90.000	270.151	7405.00	1722.84	98.16	-1721.74	0.00	
9715.00†	90.000	270.151	7405.00	1822.83	98.43	-1821.74	0.00	
9815.00†	90.000	270.151	7405.00	1922.83	98.69	-1921.73	0.00	
9915.00†	90.000	270.151	7405.00	2022.82	98.96	-2021.73	0.00	
10015.00†	90.000	270.151	7405.00	2122.82	99.22	-2121.73	0.00	
10115.00†	90.000	270.151	7405.00	2222.81	99.49	-2221.73	0.00	
10215.00†	90.000	270.151	7405.00	2322.81	99.75	-2321.73	0.00	
10315.00†	90.000	270.151	7405.00	2422.80	100.01	-2421.73	0.00	
10415.00†	90.000	270.151	7405.00	2522.80	100.28	-2521.73	0.00	
10515.00†	90.000	270.151	7405.00	2622.79	100.54	-2621.73	0.00	
10615.00†	90.000	270.151	7405.00	2722.79	100.81	-2721.73	0.00	
10715.00†	90.000	270.151	7405.00	2822.78	101.07	-2821.73	0.00	
10815.00†	90.000	270.151	7405.00	2922.78	101.34	-2921.73	0.00	
10915.00†	90.000	270.151	7405.00	3022.77	101.60	-3021.73	0.00	



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11015.00†	90.000	270.151	7405.00	3122.77	101.87	-3121.73	0.00	
11115.00†	90.000	270.151	7405.00	3222.76	102.13	-3221.73	0.00	
11215.00†	90.000	270.151	7405.00	3322.76	102.39	-3321.73	0.00	
11315.00†	90.000	270.151	7405.00	3422.75	102.66	-3421.73	0.00	
11415.00†	90.000	270.151	7405.00	3522.75	102.92	-3521.73	0.00	
11515.00†	90.000	270.151	7405.00	3622.74	103.19	-3621.73	0.00	
11615.00†	90.000	270.151	7405.00	3722.74	103.45	-3721.73	0.00	
11715.00†	90.000	270.151	7405.00	3822.73	103.72	-3821.73	0.00	
11815.00†	90.000	270.151	7405.00	3922.73	103.98	-3921.73	0.00	
11915.00†	90.000	270.151	7405.00	4022.72	104.24	-4021.73	0.00	
12015.00†	90.000	270.151	7405.00	4122.72	104.51	-4121.73	0.00	
12115.00†	90.000	270.151	7405.00	4222.71	104.77	-4221.73	0.00	
12215.00†	90.000	270.151	7405.00	4322.71	105.04	-4321.73	0.00	
12315.00†	90.000	270.151	7405.00	4422.70	105.30	-4421.73	0.00	
12415.00†	90.000	270.151	7405.00	4522.70	105.57	-4521.73	0.00	
12515.00†	90.000	270.151	7405.00	4622.69	105.83	-4621.73	0.00	
12615.00†	90.000	270.151	7405.00	4722.69	106.10	-4721.73	0.00	
12715.00†	90.000	270.151	7405.00	4822.68	106.36	-4821.72	0.00	
12815.00†	90.000	270.151	7405.00	4922.68	106.62	-4921.72	0.00	
12915.00†	90.000	270.151	7405.00	5022.67	106.89	-5021.72	0.00	
13015.00†	90.000	270.151	7405.00	5122.67	107.15	-5121.72	0.00	
13115.00†	90.000	270.151	7405.00	5222.66	107.42	-5221.72	0.00	
13215.00†	90.000	270.151	7405.00	5322.66	107.68	-5321.72	0.00	
13315.00†	90.000	270.151	7405.00	5422.65	107.95	-5421.72	0.00	
13415.00†	90.000	270.151	7405.00	5522.65	108.21	-5521.72	0.00	
13515.00†	90.000	270.151	7405.00	5622.64	108.48	-5621.72	0.00	
13615.00†	90.000	270.151	7405.00	5722.64	108.74	-5721.72	0.00	
13715.00†	90.000	270.151	7405.00	5822.63	109.00	-5821.72	0.00	
13815.00†	90.000	270.151	7405.00	5922.63	109.27	-5921.72	0.00	
13915.00†	90.000	270.151	7405.00	6022.62	109.53	-6021.72	0.00	



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WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14015.00†	90.000	270.151	7405.00	6122.62	109.80	-6121.72	0.00	
14115.00†	90.000	270.151	7405.00	6222.61	110.06	-6221.72	0.00	
14215.00†	90.000	270.151	7405.00	6322.61	110.33	-6321.72	0.00	
14315.00†	90.000	270.151	7405.00	6422.60	110.59	-6421.72	0.00	
14415.00†	90.000	270.151	7405.00	6522.60	110.85	-6521.72	0.00	
14515.00†	90.000	270.151	7405.00	6622.59	111.12	-6621.72	0.00	
14615.00†	90.000	270.151	7405.00	6722.59	111.38	-6721.72	0.00	
14715.00†	90.000	270.151	7405.00	6822.58	111.65	-6821.72	0.00	
14815.00†	90.000	270.151	7405.00	6922.58	111.91	-6921.72	0.00	
14915.00†	90.000	270.151	7405.00	7022.57	112.18	-7021.72	0.00	
15015.00†	90.000	270.151	7405.00	7122.57	112.44	-7121.72	0.00	
15115.00†	90.000	270.151	7405.00	7222.56	112.71	-7221.72	0.00	
15215.00†	90.000	270.151	7405.00	7322.56	112.97	-7321.72	0.00	
15315.00†	90.000	270.151	7405.00	7422.55	113.23	-7421.72	0.00	
15415.00†	90.000	270.151	7405.00	7522.55	113.50	-7521.72	0.00	
15515.00†	90.000	270.151	7405.00	7622.54	113.76	-7621.72	0.00	
15615.00†	90.000	270.151	7405.00	7722.54	114.03	-7721.71	0.00	
15715.00†	90.000	270.151	7405.00	7822.53	114.29	-7821.71	0.00	
15815.00†	90.000	270.151	7405.00	7922.53	114.56	-7921.71	0.00	
15915.00†	90.000	270.151	7405.00	8022.52	114.82	-8021.71	0.00	
16015.00†	90.000	270.151	7405.00	8122.52	115.09	-8121.71	0.00	
16115.00†	90.000	270.151	7405.00	8222.51	115.35	-8221.71	0.00	
16215.00†	90.000	270.151	7405.00	8322.51	115.61	-8321.71	0.00	
16315.00†	90.000	270.151	7405.00	8422.50	115.88	-8421.71	0.00	
16415.00†	90.000	270.151	7405.00	8522.50	116.14	-8521.71	0.00	
16515.00†	90.000	270.151	7405.00	8622.49	116.41	-8621.71	0.00	
16615.00†	90.000	270.151	7405.00	8722.49	116.67	-8721.71	0.00	
16715.00†	90.000	270.151	7405.00	8822.48	116.94	-8821.71	0.00	
16815.00†	90.000	270.151	7405.00	8922.48	117.20	-8921.71	0.00	
16915.00†	90.000	270.151	7405.00	9022.47	117.46	-9021.71	0.00	



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
17015.00†	90.000	270.151	7405.00	9122.47	117.73	-9121.71	0.00	
17115.00†	90.000	270.151	7405.00	9222.46	117.99	-9221.71	0.00	
17215.00†	90.000	270.151	7405.00	9322.46	118.26	-9321.71	0.00	
17252.88	90.000	270.151	7405.00 ²	9360.33	118.36	-9359.58	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: WINDER #4 PWB Ref Wellpath: WINDER #4 PWP (REV-B.0)

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]
7in Casing Intermediate	15.00	7778.26	7763.26	15.00	7405.00	0.00	0.00	93.31	115.00



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
TWELL/WINDER 1/2 SECTION 08		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W	polygon
TWELL/WINDER 1/2 SECTION 09		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W	polygon
TWELL/WINDER SECTION 08		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W	polygon
TWELL/WINDER SECTION 09		47.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W	polygon
2) WINDER #4 BHL ON PLAT REV-1(469'FNL & 460'FWL,SEC.08)	17252.88	7405.00	118.36	-9359.58	3159905.38	1428152.03	40°30'26.118"N	104°55'29.788"W	point
WINDER #4 LANDING POINT		7405.00	93.27	224.98	3169489.55	1428192.73	40°30'25.888"N	104°53'25.706"W	point
1) WINDER #4 LANDING POINT REV-1	7778.26	7405.00	93.31	115.00	3169379.58	1428192.02	40°30'25.888"N	104°53'27.130"W	point
WINDER PAD NORTH 1/4 HARDLINES(460' SETBACKS)		7437.00	-3256.26	-9584.16	3159703.97	1424776.07	40°29'52.771"N	104°55'32.678"W	polygon

SURVEY PROGRAM - Ref Wellbore: WINDER #4 PWB Ref Wellpath: WINDER #4 PWP (REV-B.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	18991.00	NaviTrak (Standard)		WINDER #4 PWB



Planned Wellpath Report

WINDER #4 PWP (REV-B.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WINDER #4(754'FNL & 684'FEL,SEC.09)
Area	COLORADO	Well	WINDER #4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDER #4 PWB
Facility	SEC.09-T06N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7263.58	38.542	271.330	7189.00	NIO A
7351.05	47.287	271.019	7253.00	NIO B
7441.75	56.354	270.777	7309.00	NIO C
7568.40	69.017	270.512	7367.00	FORT HAYS
7634.25	75.601	270.393	7387.00	CODELL

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
15.00	0.000	83.221	15.00	Tie On
1500.00	0.000	83.221	1500.00	End of Tangent
1886.78	7.736	83.221	1885.61	End of Build
6801.47	7.736	83.221	6755.57	End of Tangent
7778.26	90.000	270.151	7405.00	End of 3D Arc
17252.88	90.000	270.151	7405.00	End of Tangent