

EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: VARRA #5
Facility: SEC.05-T06N-R67W Wellbore: VARRA #5 PWB

Plot reference wellpath is VARRA #5 PWP (REV-B.0)

True vertical depths are referenced to SAVANNA 802 (15'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to SAVANNA 802 (15'KB) (RKB)	North Reference: True north
SAVANNA 802 (15'KB) (RKB) to Mean Sea Level: 4889 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingram on 7/31/2015

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-T06N-R67W			3160186.786	1430380.222	40°30'48.118"N	104°55'25.957"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)	-103.83	-0.85	3160186.611	1430276.391	40°30'47.092"N	104°55'25.968"W
SAVANNA 802 (15'KB) (RKB) to Mud line (At Slot: SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05))					4889ft	
Mean Sea Level to Mud line (At Slot: SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05))					0ft	
SAVANNA 802 (15'KB) (RKB) to Mean Sea Level					4889ft	

Targets

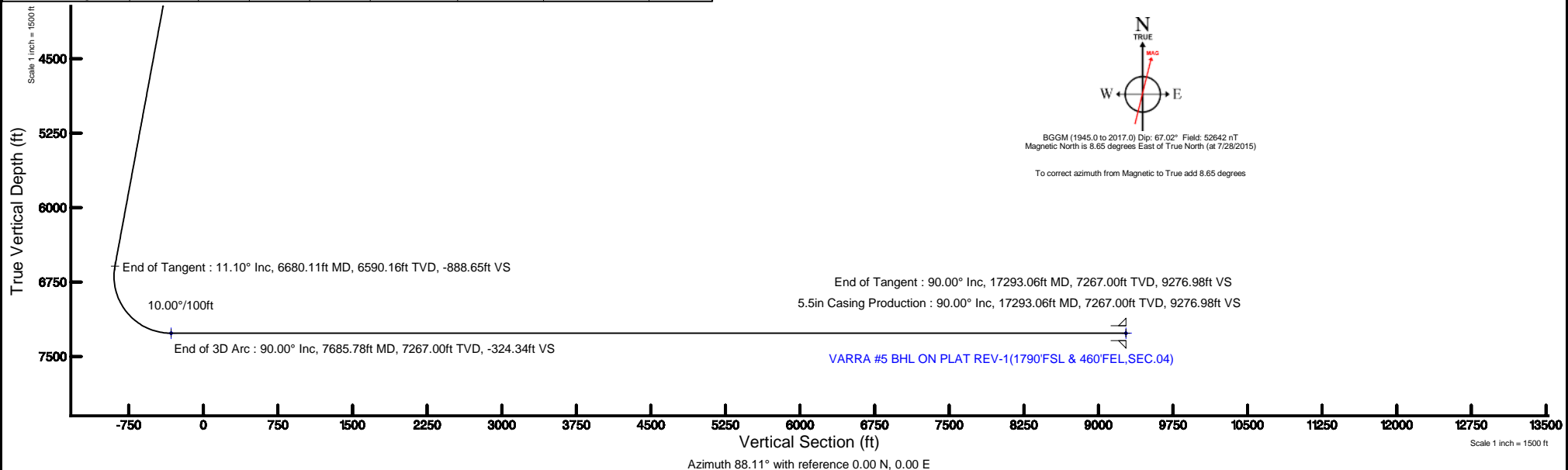
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
VARRA PAD SECTION 04		-9.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W
VARRA PAD SECTION 05		-9.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W
VARRA #5 BHL ON PLAT REV-1(1790'FSL & 460'FEL,SEC.04)	17293.06	7267.00	306.27	9271.92	3169456.03	1430642.88	40°30'50.101"N	104°53'25.922"W
VARRA #5 LANDING POINT	7685.78	7267.00	327.48	-335.33	3159848.17	1430601.68	40°30'50.328"N	104°53'30.310"W
VARRA PAD SOUTH 1/2 HARDLINE(S(460'/SETBACKS))		7411.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
15.00	17293.06	NaviTrak	NaviTrak (Standard)		VARRA #5 PWB

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	287.795	15.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	287.795	1500.00	0.00	0.00	0.00	0.00
End of Build	2054.86	11.097	287.795	2051.40	16.37	-51.00	2.00	-50.44
End of Tangent	6680.11	11.097	287.795	6590.16	288.44	-898.66	0.00	-888.65
End of 3D Arc	7685.78	90.000	90.126	7267.00	327.48	-335.33	10.00	-324.34
End of Tangent	17293.06	90.000	90.126	7267.00	306.27	9271.92	0.00	9276.98





Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 1 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-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	7/31/2015 at 3:37:32 PM
Convergence at slot	0.37° East	Database/Source file	Denver/VARRA_#5_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-103.83	-0.85	3160186.61	1430276.39	40°30'47.092"N	104°55'25.968"W
Facility Reference Pt			3160186.79	1430380.22	40°30'48.118"N	104°55'25.957"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	4889.00ft
Horizontal Reference Pt	Slot	SAVANNA 802 (15'KB) (RKB) to Mean Sea Level	4889.00ft
Vertical Reference Pt	SAVANNA 802 (15'KB) (RKB)	SAVANNA 802 (15'KB) (RKB) to Mud Line at Slot (SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05))	4889.00ft
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	88.11°



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	287.795	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	287.795	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	287.795	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	287.795	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	287.795	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	287.795	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	287.795	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	287.795	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	287.795	715.00	0.00	0.00	0.00	0.00	
815.00†	0.000	287.795	815.00	0.00	0.00	0.00	0.00	
915.00†	0.000	287.795	915.00	0.00	0.00	0.00	0.00	
1015.00†	0.000	287.795	1015.00	0.00	0.00	0.00	0.00	
1115.00†	0.000	287.795	1115.00	0.00	0.00	0.00	0.00	
1215.00†	0.000	287.795	1215.00	0.00	0.00	0.00	0.00	
1315.00†	0.000	287.795	1315.00	0.00	0.00	0.00	0.00	
1415.00†	0.000	287.795	1415.00	0.00	0.00	0.00	0.00	
1500.00	0.000	287.795	1500.00	0.00	0.00	0.00	0.00	End of Tangent
1515.00†	0.300	287.795	1515.00	-0.04	0.01	-0.04	2.00	
1615.00†	2.300	287.795	1614.97	-2.17	0.71	-2.20	2.00	
1715.00†	4.300	287.795	1714.80	-7.59	2.46	-7.68	2.00	
1815.00†	6.300	287.795	1814.37	-16.29	5.29	-16.47	2.00	
1915.00†	8.300	287.795	1913.55	-28.25	9.17	-28.57	2.00	
2015.00†	10.300	287.795	2012.23	-43.47	14.11	-43.96	2.00	
2054.86	11.097	287.795	2051.40	-50.44	16.37	-51.00	2.00	End of Build
2115.00†	11.097	287.795	2110.41	-61.33	19.91	-62.02	0.00	
2215.00†	11.097	287.795	2208.54	-79.46	25.79	-80.35	0.00	
2315.00†	11.097	287.795	2306.67	-97.58	31.67	-98.68	0.00	
2415.00†	11.097	287.795	2404.80	-115.70	37.55	-117.00	0.00	
2515.00†	11.097	287.795	2502.93	-133.82	43.44	-135.33	0.00	
2615.00†	11.097	287.795	2601.06	-151.95	49.32	-153.66	0.00	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2715.00†	11.097	287.795	2699.19	-170.07	55.20	-171.98	0.00	
2815.00†	11.097	287.795	2797.32	-188.19	61.08	-190.31	0.00	
2915.00†	11.097	287.795	2895.45	-206.31	66.97	-208.64	0.00	
3015.00†	11.097	287.795	2993.58	-224.44	72.85	-226.96	0.00	
3115.00†	11.097	287.795	3091.71	-242.56	78.73	-245.29	0.00	
3215.00†	11.097	287.795	3189.84	-260.68	84.61	-263.62	0.00	
3315.00†	11.097	287.795	3287.98	-278.80	90.49	-281.94	0.00	
3415.00†	11.097	287.795	3386.11	-296.93	96.38	-300.27	0.00	
3515.00†	11.097	287.795	3484.24	-315.05	102.26	-318.60	0.00	
3615.00†	11.097	287.795	3582.37	-333.17	108.14	-336.92	0.00	
3715.00†	11.097	287.795	3680.50	-351.29	114.02	-355.25	0.00	
3815.00†	11.097	287.795	3778.63	-369.42	119.90	-373.58	0.00	
3915.00†	11.097	287.795	3876.76	-387.54	125.79	-391.91	0.00	
4015.00†	11.097	287.795	3974.89	-405.66	131.67	-410.23	0.00	
4115.00†	11.097	287.795	4073.02	-423.78	137.55	-428.56	0.00	
4215.00†	11.097	287.795	4171.15	-441.91	143.43	-446.89	0.00	
4315.00†	11.097	287.795	4269.28	-460.03	149.32	-465.21	0.00	
4415.00†	11.097	287.795	4367.41	-478.15	155.20	-483.54	0.00	
4515.00†	11.097	287.795	4465.54	-496.27	161.08	-501.87	0.00	
4615.00†	11.097	287.795	4563.67	-514.40	166.96	-520.19	0.00	
4715.00†	11.097	287.795	4661.80	-532.52	172.84	-538.52	0.00	
4815.00†	11.097	287.795	4759.93	-550.64	178.73	-556.85	0.00	
4915.00†	11.097	287.795	4858.06	-568.76	184.61	-575.17	0.00	
5015.00†	11.097	287.795	4956.19	-586.89	190.49	-593.50	0.00	
5115.00†	11.097	287.795	5054.32	-605.01	196.37	-611.83	0.00	
5215.00†	11.097	287.795	5152.45	-623.13	202.26	-630.15	0.00	
5315.00†	11.097	287.795	5250.58	-641.25	208.14	-648.48	0.00	
5415.00†	11.097	287.795	5348.71	-659.38	214.02	-666.81	0.00	
5515.00†	11.097	287.795	5446.84	-677.50	219.90	-685.13	0.00	
5615.00†	11.097	287.795	5544.97	-695.62	225.78	-703.46	0.00	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5715.00†	11.097	287.795	5643.10	-713.74	231.67	-721.79	0.00	
5815.00†	11.097	287.795	5741.23	-731.87	237.55	-740.11	0.00	
5915.00†	11.097	287.795	5839.36	-749.99	243.43	-758.44	0.00	
6015.00†	11.097	287.795	5937.49	-768.11	249.31	-776.77	0.00	
6115.00†	11.097	287.795	6035.62	-786.23	255.20	-795.09	0.00	
6215.00†	11.097	287.795	6133.75	-804.36	261.08	-813.42	0.00	
6315.00†	11.097	287.795	6231.88	-822.48	266.96	-831.75	0.00	
6415.00†	11.097	287.795	6330.01	-840.60	272.84	-850.07	0.00	
6515.00†	11.097	287.795	6428.14	-858.72	278.72	-868.40	0.00	
6615.00†	11.097	287.795	6526.27	-876.85	284.61	-886.73	0.00	
6680.11	11.097	287.795	6590.16	-888.65	288.44	-898.66	0.00	End of Tangent
6715.00†	7.852	295.700	6624.57	-893.92	290.50	-904.00	10.00	
6815.00†	4.487	40.782	6724.21	-897.33	296.44	-907.61	10.00	
6915.00†	13.356	75.605	6822.95	-883.37	302.28	-893.84	10.00	
7015.00†	23.160	82.127	6917.81	-852.46	307.86	-863.09	10.00	
7115.00†	33.078	84.882	7005.90	-805.53	313.00	-816.31	10.00	
7215.00†	43.030	86.470	7084.55	-744.03	317.55	-754.92	10.00	
7315.00†	52.998	87.555	7151.36	-669.81	321.36	-680.79	10.00	
7415.00†	62.973	88.386	7204.31	-585.12	324.33	-596.15	10.00	
7515.00†	72.953	89.081	7241.78	-492.55	326.35	-503.60	10.00	
7615.00†	82.934	89.704	7262.64	-394.91	327.38	-405.94	10.00	
7685.78	90.000	90.126	7267.00 [†]	-324.34	327.48	-335.33	10.00	End of 3D Arc
7715.00†	90.000	90.126	7267.00	-295.14	327.42	-306.12	0.00	
7815.00†	90.000	90.126	7267.00	-195.20	327.20	-206.12	0.00	
7915.00†	90.000	90.126	7267.00	-95.26	326.98	-106.12	0.00	
8015.00†	90.000	90.126	7267.00	4.67	326.76	-6.12	0.00	
8115.00†	90.000	90.126	7267.00	104.61	326.54	93.88	0.00	
8215.00†	90.000	90.126	7267.00	204.55	326.32	193.88	0.00	
8315.00†	90.000	90.126	7267.00	304.49	326.10	293.88	0.00	
8415.00†	90.000	90.126	7267.00	404.43	325.87	393.88	0.00	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 5 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8515.00†	90.000	90.126	7267.00	504.36	325.65	493.88	0.00	
8615.00†	90.000	90.126	7267.00	604.30	325.43	593.88	0.00	
8715.00†	90.000	90.126	7267.00	704.24	325.21	693.88	0.00	
8815.00†	90.000	90.126	7267.00	804.18	324.99	793.88	0.00	
8915.00†	90.000	90.126	7267.00	904.12	324.77	893.88	0.00	
9015.00†	90.000	90.126	7267.00	1004.05	324.55	993.88	0.00	
9115.00†	90.000	90.126	7267.00	1103.99	324.33	1093.88	0.00	
9215.00†	90.000	90.126	7267.00	1203.93	324.11	1193.88	0.00	
9315.00†	90.000	90.126	7267.00	1303.87	323.89	1293.88	0.00	
9415.00†	90.000	90.126	7267.00	1403.81	323.67	1393.88	0.00	
9515.00†	90.000	90.126	7267.00	1503.74	323.45	1493.88	0.00	
9615.00†	90.000	90.126	7267.00	1603.68	323.23	1593.88	0.00	
9715.00†	90.000	90.126	7267.00	1703.62	323.00	1693.88	0.00	
9815.00†	90.000	90.126	7267.00	1803.56	322.78	1793.88	0.00	
9915.00†	90.000	90.126	7267.00	1903.50	322.56	1893.88	0.00	
10015.00†	90.000	90.126	7267.00	2003.43	322.34	1993.88	0.00	
10115.00†	90.000	90.126	7267.00	2103.37	322.12	2093.88	0.00	
10215.00†	90.000	90.126	7267.00	2203.31	321.90	2193.88	0.00	
10315.00†	90.000	90.126	7267.00	2303.25	321.68	2293.88	0.00	
10415.00†	90.000	90.126	7267.00	2403.19	321.46	2393.88	0.00	
10515.00†	90.000	90.126	7267.00	2503.12	321.24	2493.88	0.00	
10615.00†	90.000	90.126	7267.00	2603.06	321.02	2593.88	0.00	
10715.00†	90.000	90.126	7267.00	2703.00	320.80	2693.88	0.00	
10815.00†	90.000	90.126	7267.00	2802.94	320.58	2793.88	0.00	
10915.00†	90.000	90.126	7267.00	2902.88	320.36	2893.88	0.00	
11015.00†	90.000	90.126	7267.00	3002.81	320.13	2993.88	0.00	
11115.00†	90.000	90.126	7267.00	3102.75	319.91	3093.88	0.00	
11215.00†	90.000	90.126	7267.00	3202.69	319.69	3193.88	0.00	
11315.00†	90.000	90.126	7267.00	3302.63	319.47	3293.88	0.00	
11415.00†	90.000	90.126	7267.00	3402.57	319.25	3393.88	0.00	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11515.00†	90.000	90.126	7267.00	3502.50	319.03	3493.88	0.00	
11615.00†	90.000	90.126	7267.00	3602.44	318.81	3593.88	0.00	
11715.00†	90.000	90.126	7267.00	3702.38	318.59	3693.87	0.00	
11815.00†	90.000	90.126	7267.00	3802.32	318.37	3793.87	0.00	
11915.00†	90.000	90.126	7267.00	3902.26	318.15	3893.87	0.00	
12015.00†	90.000	90.126	7267.00	4002.19	317.93	3993.87	0.00	
12115.00†	90.000	90.126	7267.00	4102.13	317.71	4093.87	0.00	
12215.00†	90.000	90.126	7267.00	4202.07	317.49	4193.87	0.00	
12315.00†	90.000	90.126	7267.00	4302.01	317.26	4293.87	0.00	
12415.00†	90.000	90.126	7267.00	4401.94	317.04	4393.87	0.00	
12515.00†	90.000	90.126	7267.00	4501.88	316.82	4493.87	0.00	
12615.00†	90.000	90.126	7267.00	4601.82	316.60	4593.87	0.00	
12715.00†	90.000	90.126	7267.00	4701.76	316.38	4693.87	0.00	
12815.00†	90.000	90.126	7267.00	4801.70	316.16	4793.87	0.00	
12915.00†	90.000	90.126	7267.00	4901.63	315.94	4893.87	0.00	
13015.00†	90.000	90.126	7267.00	5001.57	315.72	4993.87	0.00	
13115.00†	90.000	90.126	7267.00	5101.51	315.50	5093.87	0.00	
13215.00†	90.000	90.126	7267.00	5201.45	315.28	5193.87	0.00	
13315.00†	90.000	90.126	7267.00	5301.39	315.06	5293.87	0.00	
13415.00†	90.000	90.126	7267.00	5401.32	314.84	5393.87	0.00	
13515.00†	90.000	90.126	7267.00	5501.26	314.62	5493.87	0.00	
13615.00†	90.000	90.126	7267.00	5601.20	314.39	5593.87	0.00	
13715.00†	90.000	90.126	7267.00	5701.14	314.17	5693.87	0.00	
13815.00†	90.000	90.126	7267.00	5801.08	313.95	5793.87	0.00	
13915.00†	90.000	90.126	7267.00	5901.01	313.73	5893.87	0.00	
14015.00†	90.000	90.126	7267.00	6000.95	313.51	5993.87	0.00	
14115.00†	90.000	90.126	7267.00	6100.89	313.29	6093.87	0.00	
14215.00†	90.000	90.126	7267.00	6200.83	313.07	6193.87	0.00	
14315.00†	90.000	90.126	7267.00	6300.77	312.85	6293.87	0.00	
14415.00†	90.000	90.126	7267.00	6400.70	312.63	6393.87	0.00	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14515.00†	90.000	90.126	7267.00	6500.64	312.41	6493.87	0.00	
14615.00†	90.000	90.126	7267.00	6600.58	312.19	6593.87	0.00	
14715.00†	90.000	90.126	7267.00	6700.52	311.97	6693.87	0.00	
14815.00†	90.000	90.126	7267.00	6800.46	311.74	6793.87	0.00	
14915.00†	90.000	90.126	7267.00	6900.39	311.52	6893.87	0.00	
15015.00†	90.000	90.126	7267.00	7000.33	311.30	6993.87	0.00	
15115.00†	90.000	90.126	7267.00	7100.27	311.08	7093.87	0.00	
15215.00†	90.000	90.126	7267.00	7200.21	310.86	7193.87	0.00	
15315.00†	90.000	90.126	7267.00	7300.15	310.64	7293.87	0.00	
15415.00†	90.000	90.126	7267.00	7400.08	310.42	7393.87	0.00	
15515.00†	90.000	90.126	7267.00	7500.02	310.20	7493.87	0.00	
15615.00†	90.000	90.126	7267.00	7599.96	309.98	7593.87	0.00	
15715.00†	90.000	90.126	7267.00	7699.90	309.76	7693.87	0.00	
15815.00†	90.000	90.126	7267.00	7799.84	309.54	7793.86	0.00	
15915.00†	90.000	90.126	7267.00	7899.77	309.32	7893.86	0.00	
16015.00†	90.000	90.126	7267.00	7999.71	309.10	7993.86	0.00	
16115.00†	90.000	90.126	7267.00	8099.65	308.87	8093.86	0.00	
16215.00†	90.000	90.126	7267.00	8199.59	308.65	8193.86	0.00	
16315.00†	90.000	90.126	7267.00	8299.53	308.43	8293.86	0.00	
16415.00†	90.000	90.126	7267.00	8399.46	308.21	8393.86	0.00	
16515.00†	90.000	90.126	7267.00	8499.40	307.99	8493.86	0.00	
16615.00†	90.000	90.126	7267.00	8599.34	307.77	8593.86	0.00	
16715.00†	90.000	90.126	7267.00	8699.28	307.55	8693.86	0.00	
16815.00†	90.000	90.126	7267.00	8799.21	307.33	8793.86	0.00	
16915.00†	90.000	90.126	7267.00	8899.15	307.11	8893.86	0.00	
17015.00†	90.000	90.126	7267.00	8999.09	306.89	8993.86	0.00	
17115.00†	90.000	90.126	7267.00	9099.03	306.67	9093.86	0.00	
17215.00†	90.000	90.126	7267.00	9198.97	306.45	9193.86	0.00	
17293.06	90.000	90.126	7267.00 ²	9276.98	306.27	9271.92	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: VARRA #5 PWB Ref Wellpath: VARRA #5 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]
7.875in Open Hole	1500.00	17293.06	15793.06	1500.00	7267.00	0.00	0.00	306.27	9271.92
5.5in Casing Production	15.00	17293.06	17278.06	15.00	7267.00	0.00	0.00	306.27	9271.92

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
VARRA PAD SECTION 04		-9.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon
VARRA PAD SECTION 05		-9.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon
2) VARRA #5 BHL ON PLAT REV-1(1790'FSL &	17293.06	7267.00	306.27	9271.92	3169456.03	1430642.88	40°30'50.101"N	104°53'25.922"W	point

460'FEL,SEC.04)									
1) VARRA #5 LANDING POINT	7685.78	7267.00	327.48	-335.33	3159849.17	1430601.68	40°30'50.328"N	104°55'30.310"W	point
VARRA PAD SOUTH 1/2 HARDLINES(460'SETBACKS)		7411.00	103.79	0.83	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon

SURVEY PROGRAM - Ref Wellbore: VARRA #5 PWB					Ref Wellpath: VARRA #5 PWP (REV-B.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment			Wellbore	
15.00	17293.06	NaviTrak (Standard)						VARRA #5 PWB	



Planned Wellpath Report

VARRA #5 PWP (REV-B.0)

Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#05 VARRA #5(1641'FSL & 789'FWL,SEC.05)
Area	COLORADO	Well	VARRA #5
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #5 PWB
Facility	SEC.05-T06N-R67W		

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
15.00	0.000	287.795	15.00	Tie On
1500.00	0.000	287.795	1500.00	End of Tangent
2054.86	11.097	287.795	2051.40	End of Build
6680.11	11.097	287.795	6590.16	End of Tangent
7685.78	90.000	90.126	7267.00	End of 3D Arc
17293.06	90.000	90.126	7267.00	End of Tangent