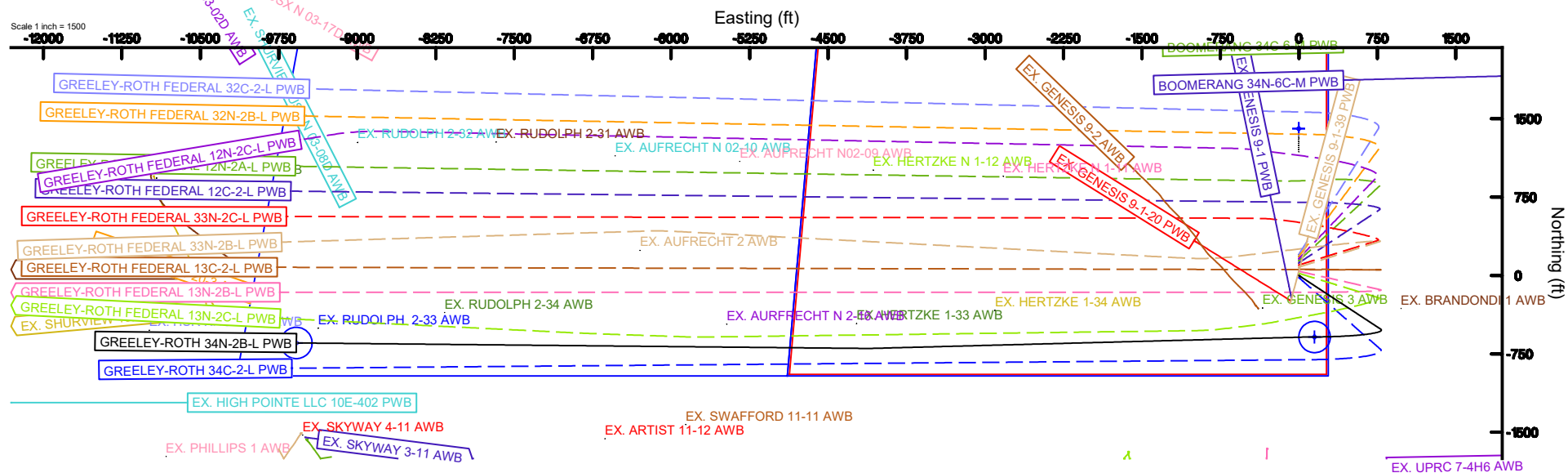
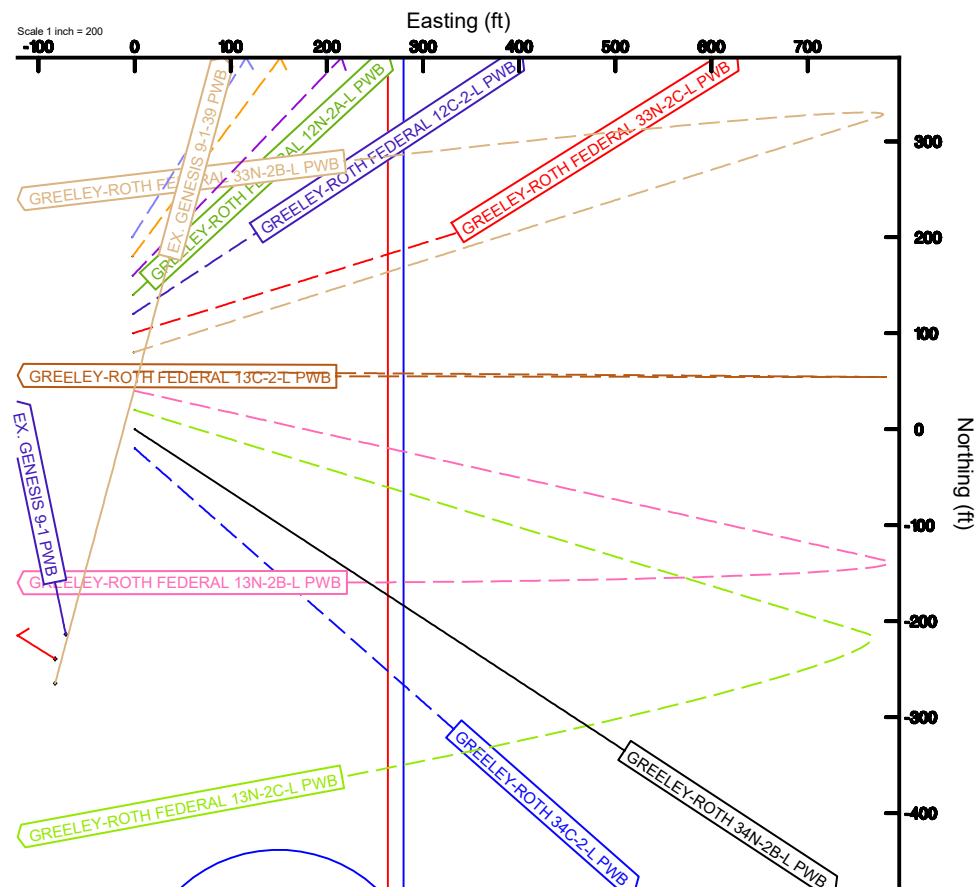


Location:	COLORADO	Slot:	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	GREELEY-ROTH 34N-2B-L
Facility:	SEC.01-T05N-R67W	Wellbore:	GREELEY-ROTH 34N-2B-L PWB





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 1 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Doddanna
Scale	0.999961	Report Generated	11/28/2017 at 9:43:24 AM
Convergence at slot	0.43° East	Database/Source file	WellArchitectDB/GREELEY-ROTH_34N-2B-L_PWP_REV-B.1_CR.xml

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1404.83	2.24	3185558.30	1398072.63	40°25'27.109"N	104°50'00.611"W
Facility Reference Pt			3185545.50	1399477.36	40°25'40.991"N	104°50'00.640"W
Field Reference Pt			3171284.48	1426358.81	40°30'07.643"N	104°53'02.634"W

WELLPATH DATUM			
Calculation method	Minimum Curvature	PRECISION 462 (20') (RKB) to Facility Vertical Datum	4893.00ft
Horizontal Reference Pt	Slot	PRECISION 462 (20') (RKB) to Mean Sea Level	4893.00ft
Vertical Reference Pt	PRECISION 462 (20') (RKB)	PRECISION 462 (20') (RKB) to Mud Line at Slot (SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01))	4893.00ft
MD Reference Pt	PRECISION 462 (20') (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS					
Ellipse Confidence Limit	3.00 Std Dev	Ellipse Start MD	20.00ft	Surface Position Uncertainty	Included
Declination	8.39° East of TN	Dip Angle	66.87°	Mag Field Strength	52416 nT
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical	3.000ft
Positional Uncertainty values in the WELLPATH DATA table are the projection of the ellipsoid of uncertainty onto the vertical and horizontal planes					



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 2 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

ANTI-COLLISION RULE			
Rule Name	Baker Hughes Stop Drilling (offset is HSE risk)	Rule Based On	Ratio
Plane of Rule	Closest Approach	Threshold Value	1.00
Include Casing & Hole Size	yes	Apply Cone of Safety	no

HOLE & CASING SECTIONS - Ref Wellbore: GREELEY-ROTH 34N-2B-L PWB    Ref Wellpath: GREELEY-ROTH 34N-2B-L PWP (REV-B.1)									
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	20.00	1750.00	1730.00	20.00	1739.10	0.00	0.00	-76.35	116.23
9.625in Casing Surface	20.00	1750.00	1730.00	20.00	1739.10	0.00	0.00	-76.35	116.23
8.5in Open Hole	1750.00	17161.54	15411.54	1739.10	6937.00	-76.35	116.23	-645.51	-9581.84

SURVEY PROGRAM - Ref Wellbore: GREELEY-ROTH 34N-2B-L PWB    Ref Wellpath: GREELEY-ROTH 34N-2B-L PWP (REV-B.1)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (IFR1, Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH 34N-2B-L PWB
1750.00	17161.54	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH 34N-2B-L PWB



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 3 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CALCULATION RANGE & CUTOFF		
From: 20.00ft MD	To: 17161.54ft MD	C-C Cutoff: 1000.00 ft

OFFSET WELL CLEARANCE SUMMARY (60 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane											
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	C-C Clearance Distance			ACR Separation Ratio			
					Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	ACR Status
SEC.02-T05N-R67W	SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR)	EX. RUDOLPH 2-33	EX. RUDOLPH 2-33 AWB	EX. RUDOLPH 2-33 AWP	16954.71	144.00	16954.81	16954.81	0.18	16954.81	FAIL
SEC.01-T05N-R67W	SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 13N-2C-L	GREELEY-ROTH FEDERAL 13N-2C-L PWB	GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)	743.88	19.81	13320.00	14420.00	0.24	14420.00	FAIL
SEC.02-T05N-R67W	SLOT#06 EX. AUFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR)	EX. AUFRECHT N 2-16	EX. AUFRECHT N 2-16 AWB	EX. AUFRECHT N 2-16 AWP	13050.58	219.83	13050.58	13051.12	0.36	13051.12	FAIL
SEC.02-T05N-R67W	SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR)	EX. RUDOLPH 2-34	EX. RUDOLPH 2-34 AWB	EX. RUDOLPH 2-34 AWP	15747.89	304.58	15747.89	15749.73	0.42	15749.73	FAIL
SEC.01-T05N-R67W	SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI)	EX. HERTZKE 1-33	EX. HERTZKE 1-33 AWB	EX. HERTZKE 1-33 AWP	11810.19	235.89	11810.19	11811.18	0.43	11811.18	FAIL
SEC.01-T05N-R67W	SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01)	GREELEY-ROTH 34C-2-L	GREELEY-ROTH 34C-2-L PWB	GREELEY-ROTH 34C-2-L PWP (REV-A.1)	920.00	18.96	11636.58	17161.54	0.46	17161.54	FAIL
SEC.01-T05N-R67W	SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 13N-2B-L	GREELEY-ROTH FEDERAL 13N-2B-L PWB	GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)	743.39	39.57	17161.54	17161.54	0.51	17161.54	FAIL
SEC.01-T05N-R67W	SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI)	EX. HERTZKE 1-34	EX. HERTZKE 1-34 AWB	EX. HERTZKE 1-34 AWP	10475.89	333.86	10475.89	10483.86	0.69	10483.86	FAIL
SEC.01-T05N-R67W	SLOT#01 EX. GENESIS 3 (660'FSL & 660'FEL, PR/CODL)	EX. GENESIS 3	EX. GENESIS 3 AWB	EX. GENESIS 3 AWP	7918.67	289.30	7918.67	7920.00	0.77	7920.00	FAIL
SEC.01-T05N-R67W	SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 13C-2-L	GREELEY-ROTH FEDERAL 13C-2-L PWB	GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)	620.00	60.11	17161.54	17161.54	0.81	17161.54	FAIL
SEC.06-T05N-R66W	SLOT#01 EX. BRANDONDI 1 (682'FSL & 666'FWL, NB-CD/SI)	EX. BRANDONDI 1	EX. BRANDONDI 1 AWB	EX. BRANDONDI 1 AWP	6362.17	277.06	6362.17	6398.32	0.87	6398.32	FAIL
SEC.01-T05N-R67W	SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 33N-2B-L	GREELEY-ROTH FEDERAL 33N-2B-L PWB	GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)	20.00	80.15	17161.54	17161.54	1.02	17161.54	PASS
SEC.11-T05N-R67W	SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD)	EX. SKYWAY 4-11	EX. SKYWAY 4-11 AWB	EX. SKYWAY 4-11 AWP	17095.00	881.05	17095.00	17120.00	1.12	17120.00	PASS
SEC.11-T05N-R67W	SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD)	EX. SWAFFORD 11-11	EX. SWAFFORD 11-11 AWB	EX. SWAFFORD 11-11 AWP	13432.50	743.80	13432.50	13466.28	1.20	13466.28	PASS
SEC.01-T05N-R67W	SLOT#18 GREELEY-ROTH FEDERAL 33N-2C-L (1063'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 33N-2C-L	GREELEY-ROTH FEDERAL 33N-2C-L PWB	GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)	20.00	100.19	17161.54	17161.54	1.28	17161.54	PASS
SEC.11-T05N-R67W	SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR)	EX. ARTIST 11-12	EX. ARTIST 11-12 AWB	EX. ARTIST 11-12 AWP	14202.50	888.39	14202.50	14246.91	1.35	14246.91	PASS
SEC.02-T05N-R67W	SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB)	EX. AUFRECHT 2	EX. AUFRECHT 2 AWB	EX. AUFRECHT 2 AWP	13886.09	917.29	13886.09	13920.00	1.43	13920.00	PASS
SEC.01-T05N-R67W	SLOT#17 GREELEY-ROTH FEDERAL 12C-2-L (1083'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 12C-2-L	GREELEY-ROTH FEDERAL 12C-2-L PWB	GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)	20.00	120.23	320.00	17161.54	1.55	17161.54	PASS
SEC.01-T05N-R67W	SLOT#16 GREELEY-ROTH FEDERAL 12N-2A-L (1103'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 12N-2A-L	GREELEY-ROTH FEDERAL 12N-2A-L PWB	GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)	20.00	139.97	7620.00	17161.54	1.79	17161.54	PASS
SEC.01-T05N-R67W	SLOT#15 GREELEY-ROTH FEDERAL 12N-2C-L (1123'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 12N-2C-L	GREELEY-ROTH FEDERAL 12N-2C-L PWB	GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)	20.00	160.01	17161.54	17161.54	2.05	17161.54	PASS
SEC.03-T05N-R67W	SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR)	EX. SHURVIEW 33C-3HZ	EX. SHURVIEW 33C-3HZ AWB	EX. SHURVIEW 33C-3HZ AWP	17161.54	925.56	17161.54	17161.54	2.20	17161.54	PASS
SEC.11-T05N-R67W	SLOT#02 EX. SKYWAY 3-11 (489'FNL & 627'FWL, PR/NB-CD)	EX. SKYWAY 3-11	EX. SKYWAY 3-11 AWB	EX. SKYWAY 3-11 AWP	15720.00	1060.26	15720.00	15782.79	2.26	15782.79	PASS
SEC.01-T05N-R67W	SLOT#14 GREELEY-ROTH FEDERAL 32N-2B-L (1143'FSL & 294'FEL, SEC.01)	GREELEY-ROTH FEDERAL 32N-2B-L	GREELEY-ROTH FEDERAL 32N-2B-L PWB	GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)	20.00	180.05	220.00	17161.54	2.29	17161.54	PASS
SEC.02-T5N-R67W	SLOT#06 EX. RUDOLPH 2-32 (2335'FSL & 740'FWL, CODL/PR)	EX. RUDOLPH 2-32	EX. RUDOLPH 2-32 AWB	EX. RUDOLPH 2-32 AWP	16595.00	1923.45	16595.00	16720.00	2.52	16720.00	PASS
SEC.01-T05N-R67W	SLOT#13 GREELEY-ROTH FEDERAL 32C-2-L (1163'FSL & 295'FEL, SEC.01)	GREELEY-ROTH FEDERAL 32C-2-L	GREELEY-ROTH FEDERAL 32C-2-L PWB	GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)	20.00	200.08	120.00	17161.54	2.60	17161.54	PASS





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 4 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CALCULATION RANGE & CUTOFF		
From: 20.00ft MD	To: 17161.54ft MD	C-C Cutoff: 1000.00 ft

OFFSET WELL CLEARANCE SUMMARY (60 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane											
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	C-C Clearance Distance			ACR Separation Ratio			
					Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of [ft]	Min Ratio	Min Ratio Dvrg from [ft]	ACR Status
SEC.10-T05N-R67W	SLOT#02 EX. PHILLIPS 1 (650°FNL & 643°FEL, CODL/PR)	EX. PHILLIPS 1	EX. PHILLIPS 1 AWB	EX. PHILLIPS 1 AWP	17161.54	1652.21	17161.54	17161.54	2.65	17161.54	PASS
SEC.02-T5N-R67W	SLOT#05 EX. RUDOLPH 2-31 (2387°FSL & 2058°FWL, NB-CD/PR)	EX. RUDOLPH 2-31	EX. RUDOLPH 2-31 AWB	EX. RUDOLPH 2-31 AWP	15271.25	1940.10	15271.25	15420.00	2.75	15420.00	PASS
SEC.02-T05N-R67W	SLOT#02 EX. AUFRECHT N 02-10 (2252°FSL & 1849°FEL, CODL/PR)	EX. AUFRECHT N 02-10	EX. AUFRECHT N 02-10 AWB	EX. AUFRECHT N 02-10 AWP	14132.50	1820.71	14132.50	14272.33	2.78	14272.33	PASS
SEC.02-T05N-R67W	SLOT#03 EX. AUFRECHT N02-09 (2217°FSL & 660°FEL, CODL/SI)	EX. AUFRECHT N02-09	EX. AUFRECHT N02-09 AWB	EX. AUFRECHT N02-09 AWP	12942.50	1777.25	12942.50	13090.30	2.96	13090.30	PASS
SEC.03-T05N-R67W	SLOT#02 EX. HSR-KNOX 9-3 (1981°FSL & 701°FEL, JNB-CD/SI)	EX. HSR KNOX 9-3	EX. HSR KNOX 9-3 AWB	EX. HSR KNOX 9-3 AWP	17161.54	2068.03	17161.54	17161.54	3.05	17161.54	PASS
SEC.01-T05N-R67W	SLOT#03 EX. HERTZKE N 1-12 (2116°FSL & 619°FWL, CODL/PR)	EX. HERTZKE N 1-12	EX. HERTZKE N 1-12 AWB	EX. HERTZKE N 1-12 AWP	11602.50	1704.69	11602.50	11820.00	3.16	11820.00	PASS
SEC.11-T05N-R67W	SLOT#04 EX. SKYWAY FEDERAL 31-11 (450°FNL & 582°FWL, PR/NB-CD)	EX. SKYWAY FEDERAL 31-11	EX. SKYWAY FEDERAL 31-11 AWB	EX. SKYWAY FEDERAL 31-11 AWP	17161.54	1637.02	17161.54	17161.54	3.26	17161.54	PASS
SEC.01-T05N-R67W	SLOT#02 EX. HERTZKE N 1-11 (2012°FSL & 1864°FWL, CODL/SI)	EX. HERTZKE N 1-11	EX. HERTZKE N 1-11 AWB	EX. HERTZKE N 1-11 AWP	10362.50	1612.98	10362.50	10542.26	3.35	10542.26	PASS
SEC.11-T05N-R67W	SLOT#01 EX. SKYWAY 18-11 (507°FNL & 650°FWL, PR/NB-CD)	EX. SKYWAY 18-11	EX. SKYWAY 18-11 AWB	EX. SKYWAY 18-11 AWP	16382.50	1717.37	16382.50	16520.00	3.49	16520.00	PASS
SEC.01-T05N-R67W	SLOT#02 EX. GENESIS 9-1 (750°FSL & 377°FEL, AL/PWP)	EX. GENESIS 9-1	EX. GENESIS 9-1 PWB	EX. GENESIS 9-1 PWP	1447.57	185.67	7820.00	1471.07	3.63	8520.00	PASS
SEC.10-T05N-R67W	SLOT#01 EX. HIGH POINTE LLC 10E-402 (739°FNL & 425°FWL, XX)	EX. HIGH POINTE LLC 10E-402	EX. HIGH POINTE LLC 10E-402 PWB	EX. HIGH POINTE LLC 10E-402 PWP	17161.54	1206.45	17161.54	17161.54	3.74	17161.54	PASS
SEC.03-T05N-R67W	SLOT#07 EX. HSR-KNOX 16-3 (527° FSL & 831°FEL, AB/NB-CD)	EX. HSR-KNOX 16-3	EX. HSR-KNOX 16-3 AWB	EX. HSR-KNOX 16-3 AWP	17161.54	1412.04	17161.54	17161.54	3.77	17161.54	PASS
SEC.03-T05N-R67W	SLOT#03 EX. SHURVIEW 13N-3HZ (1999°FSL & 1164°FEL, NBR/PR)	EX. SHURVIEW 13N-3HZ	EX. SHURVIEW 13N-3HZ AWB	EX. SHURVIEW 13N-3HZ AWP	17161.54	943.65	17161.54	17161.54	4.17	17161.54	PASS
SEC.02-T05N-R67W	SLOT#04 EX. E. JOHNSON FEDERAL 2-23 (2129°FNL & 498°FWL, CODL/SI)	EX. E JOHNSON FEDERAL 2-23	EX. E JOHNSON FEDERAL 2-23 AWB	EX. E JOHNSON FEDERAL 2-23 AWP	16595.00	3357.06	16595.00	17020.00	4.35	17020.00	PASS
SEC.02-T05N-R67W	SLOT#05 EX. E. JOHNSON FEDERAL 2-24 (2074°FNL & 1707°FWL, CODL/PR)	EX. E JOHNSON FEDERAL 2-24	EX. E JOHNSON FEDERAL 2-24 AWB	EX. E JOHNSON FEDERAL 2-24 AWP	15311.09	3398.16	15311.09	15765.76	4.76	15765.76	PASS
SEC.01-T05N-R67W	SLOT#03 EX. GENESIS 9-1-20 (725°FSL & 378°FEL, AL/PWP)	EX. GENESIS 9-1-20	EX. GENESIS 9-1-20 PWB	EX. GENESIS 9-1-20 PWP	1247.25	245.65	8520.00	1279.56	4.85	8720.00	PASS
SEC.03-T05N-R67W	SLOT#02 EX. KNOX 32-3 (2270°FNL & 1839°FEL, JSND/SI)	EX. KNOX 32-3	EX. KNOX 32-3 AWB	EX. KNOX 32-3 AWP	17161.54	3696.84	17161.54	17161.54	5.08	17161.54	PASS
SEC.01-T05N-R67W	SLOT#04 EX. GENESIS 9-1-39 (700°FSL & 378°FEL, AL/PWP)	EX. GENESIS 9-1-39	EX. GENESIS 9-1-39 PWB	EX. GENESIS 9-1-39 PWP	1387.72	266.74	7478.43	1475.35	5.18	7720.00	PASS
SEC.02-T05N-R67W	SLOT#01 EX. AUFRECHT 1 (1368°FNL & 1287°FEL, J-CDL/PR)	EX. AUFRECHT 1	EX. AUFRECHT 1 AWB	EX. AUFRECHT 1 AWP	13907.50	3578.95	13907.50	14468.88	5.50	14468.88	PASS
SEC.03-T05N-R67W	SLOT#05 EX. SHURVIEW USX N 03-08D (2130°FNL & 1940°FEL, NB-CD/SI)	EX. SHURVIEW USX N 03-08D	EX. SHURVIEW USX N 03-08D AWB	EX. SHURVIEW USX N 03-08D AWP	17161.54	3284.13	17161.54	17161.54	6.20	17161.54	PASS
SEC.05-T05N-R66W	SLOT#12 BOOMERANG 34N-6C-M (1511°FNL & 2327°FWL, SEC.05)	BOOMERANG 34N-6C-M	BOOMERANG 34N-6C-M PWB	BOOMERANG 34N-6C-M PWP	7070.00	2452.52	7070.00	7235.03	6.38	7235.03	PASS
SEC.12-T05N-R67W	SLOT#02 EX. SHEEP 2-12 (2297°FSL & 1448°FEL, PR/NB-CD)	EX. SHEEP 2-12	EX. SHEEP 2-12 AWB	EX. SHEEP 2-12 AWP	9229.30	1067.57	9229.30	9401.28	6.47	9401.28	PASS
SEC.01-T05N-R67W	SLOT#04 EX. HERTZKE N 1-7 (2072°FNL & 1816°FEL, CODL/SI)	EX. HERTZKE N 1-7	EX. HERTZKE N 1-7 AWB	EX. HERTZKE N 1-7 AWP	20.00	2850.85	9020.00	9765.80	6.96	9765.80	PASS
SEC.05-T05N-R66W	SLOT#10 BOOMERANG 34C-6-M (1496°FNL & 2327°FWL, SEC.05)	BOOMERANG 34C-6-M	BOOMERANG 34C-6-M PWB	BOOMERANG 34C-6-M PWP	7120.00	2814.36	7120.00	7335.36	7.27	7335.36	PASS
SEC.01-T05N-R67W	SLOT#06 EX. ROTH 1-14 (2257°FNL & 505°FEL, NB-CD/PR)	EX. ROTH 1-14	EX. ROTH 1-14 AWB	EX. ROTH 1-14 AWP	120.00	2233.75	7720.00	8465.46	7.41	8465.46	PASS



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 5 of 184



REFERENCE WELLPATH IDENTIFICATION		
Operator	SRC ENERGY	Slot
Area	COLORADO	Well
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore
Facility	SEC.01-T05N-R67W	

CALCULATION RANGE & CUTOFF		
From: 20.00ft MD	To: 17161.54ft MD	C-C Cutoff: 1000.00 ft

OFFSET WELL CLEARANCE SUMMARY (60 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane											
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	C-C Clearance Distance			ACR Separation Ratio			
					Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	ACR Status
SEC.02-T5N-R67W	Slot #3 Aufrecht N 2-7	Aufrecht N 2-7	Aufrecht N2-7 AWB	Aufrecht N2-7 AWP	14115.00	3095.78	14115.00	14700.23	7.81	14700.23	PASS
SEC.03-T05N-R67W	SLOT#06 EX. SHURVIEW USX N 03-17D (2085°FNL & 1928°FEL, NB-CD/SI)	EX. SHURVIEW USX N 03-17D	EX. SHURVIEW USX N 03-17D AWB	EX. SHURVIEW USX N 03-17D AWP	17161.54	3979.79	17161.54	17161.54	7.83	17161.54	PASS
SEC.03-T05N-R67W	SLOT#08 EX. SHUR VIEW 20-3 (1317°FSL & 1498°FEL, SI/NB-CD)	EX. SHUR VIEW 20-3	EX. SHUR VIEW 20-3 AWB	EX. SHUR VIEW 20-3 AWP	17161.54	2180.41	17161.54	17161.54	8.21	17161.54	PASS
SEC.02-T5N-R67W	Slot #4 Aufrecht N 2-8	Aufrecht N 2-8	Aufrecht N 2-8 AWB	Aufrecht N 2-8 AWP	12702.50	3062.55	12702.50	13462.09	8.52	13462.09	PASS
SEC.01-T05N-R67W	SLOT#05 EX. GENESIS 9-2 (656°FSL & 673°FEL, PR/JNB-CD)	EX. GENESIS 9-2	EX. GENESIS 9-2 AWB	EX. GENESIS 9-2 AWP	344.38	500.00	9120.00	9594.94	9.20	9594.94	PASS
SEC.12-T05N-R67W	SLOT#01 EX. DETIENNE 1-12 (1960°FNL & 604°FEL, PR/NB-CD)	EX. DETIENNE 1-12	EX. DETIENNE 1-12AWB	EX. DETIENNE 1-12AWP	7908.25	1056.66	7908.25	8195.15	9.23	8195.15	PASS
SEC.03-T05N-R67W	SLOT#09 EX. SHURVIEW USX N 03-02D (2108°FNL & 1934°FEL, SI/NB-CD)	EX. SHURVIEW USX N 03-02D	EX. SHURVIEW USX N 03-02D AWB	EX. SHURVIEW USX N 03-02D AWP	17161.54	4797.28	17161.54	17161.54	9.64	17161.54	PASS
SEC.01-T05N-R67W	SLOT#07 EX. ROTH 1-15 (963°FNL & 978°FEL, CODL/PR)	EX. ROTH 1-15	EX. ROTH 1-15 AWB	EX. ROTH 1-15 AWP	20.00	3532.65	8220.00	9576.28	9.87	9576.28	PASS
SEC.02-T5N-R67W	Slot #1 Aufrecht N 2-1	Aufrecht N 2-1	Aufrecht N 2-1 AWB	Aufrecht N 2-1 AWP	12732.50	4581.64	12732.50	14070.03	12.03	14070.03	PASS
SEC.07-T5N-R66W	SLOT#02 EX. UPRC 7-4H6 (671°FNL & 646°FNL, PR/NB-CD)	EX. UPRC 7-4H6	EX. UPRC 7-4H6 AWB	EX. UPRC 7-4H6 AWP	6832.50	1280.10	6832.50	7194.60	17.70	7194.60	PASS



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 6 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W				Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR)				Well: EX. RUDOLPH 2-33		Threshold Value=1.00 † = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status			
20.00	20.00	0.00	0.00	45.00	20.00	-503.50	-9373.82	-93.08	9387.33	50.26	190.41	PASS			
120.00†	120.00	0.00	0.00	145.00	120.00	-503.50	-9373.82	-93.08	9387.33	50.80	188.36	PASS			
220.00†	220.00	0.00	0.00	245.00	220.00	-503.50	-9373.82	-93.08	9387.33	52.06	183.70	PASS			
320.00†	320.00	0.00	0.00	345.00	320.00	-503.50	-9373.82	-93.08	9387.33	53.99	177.02	PASS			
420.00†	420.00	0.00	0.00	445.00	420.00	-503.50	-9373.82	-93.08	9387.33	56.46	169.13	PASS			
520.00†	520.00	0.00	0.00	545.00	520.00	-503.50	-9373.82	-93.08	9387.33	59.36	160.73	PASS			
620.00†	620.00	0.00	0.00	645.00	620.00	-503.50	-9373.82	-93.08	9387.33	62.59	152.31	PASS			
700.00	700.00	0.00	0.00	725.00	700.00	-503.50	-9373.82	-93.08	9387.33	65.35	145.78	PASS			
720.00†	720.00	-0.04	0.06	745.00	720.00	-503.50	-9373.82	143.62	9387.39	66.07	144.17	PASS			
820.00†	819.96	-1.38	2.10	844.96	819.96	-503.50	-9373.82	143.61	9389.35	69.75	136.48	PASS			
920.00†	919.78	-4.64	7.06	944.78	919.78	-503.50	-9373.82	143.57	9394.13	73.61	129.30	PASS			
1020.00†	1019.33	-9.80	14.92	1044.33	1019.33	-503.50	-9373.82	143.52	9401.71	77.57	122.71	PASS			
1120.00†	1118.50	-16.87	25.69	1143.50	1118.50	-503.50	-9373.82	143.44	9412.09	81.62	116.69	PASS			
1200.18	1197.64	-23.91	36.40	1222.64	1197.64	-503.50	-9373.82	143.36	9422.43	84.89	112.26	PASS			
1220.00†	1217.16	-25.80	39.28	1242.16	1217.16	-503.50	-9373.82	143.37	9425.21	85.70	111.21	PASS			
1320.00†	1315.64	-35.34	53.80	1340.64	1315.64	-503.50	-9373.82	143.44	9439.23	89.81	106.23	PASS			
1420.00†	1414.12	-44.88	68.32	1439.12	1414.12	-503.50	-9373.82	143.50	9453.27	93.98	101.62	PASS			
1520.00†	1512.60	-54.42	82.84	1537.60	1512.60	-503.50	-9373.82	143.56	9467.31	98.18	97.37	PASS			
1620.00†	1611.08	-63.95	97.35	1636.08	1611.08	-503.50	-9373.82	143.62	9481.37	102.43	93.44	PASS			
1720.00†	1709.56	-73.49	111.87	1734.56	1709.56	-503.50	-9373.82	143.69	9495.43	106.70	89.79	PASS			
1820.00†	1808.04	-83.03	126.39	1833.04	1808.04	-503.50	-9373.82	143.75	9509.51	110.72	86.43	PASS			
1920.00†	1906.52	-92.56	140.91	1931.52	1906.52	-503.50	-9373.82	143.81	9523.60	114.98	83.33	PASS			
2020.00†	2005.00	-102.10	155.43	2030.00	2005.00	-503.50	-9373.82	143.87	9537.70	119.28	80.44	PASS			
2120.00†	2103.48	-111.64	169.95	2128.48	2103.48	-503.50	-9373.82	143.93	9551.81	123.59	77.72	PASS			
2220.00†	2201.96	-121.18	184.46	2226.96	2201.96	-503.50	-9373.82	143.99	9565.93	127.94	75.18	PASS			
2320.00†	2300.44	-130.71	198.98	2325.44	2300.44	-503.50	-9373.82	144.05	9580.06	132.31	72.79	PASS			
2420.00†	2398.92	-140.25	213.50	2423.92	2398.92	-503.50	-9373.82	144.11	9594.20	136.70	70.55	PASS			
2520.00†	2497.40	-149.79	228.02	2522.40	2497.40	-503.50	-9373.82	144.17	9608.35	141.11	68.43	PASS			
2620.00†	2595.88	-159.33	242.54	2620.88	2595.88	-503.50	-9373.82	144.23	9622.51	145.54	66.44	PASS			
2720.00†	2694.36	-168.86	257.06	2719.36	2694.36	-503.50	-9373.82	144.29	9636.69	149.99	64.55	PASS			

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 7 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-33 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2817.84	2792.84	-503.50	-9373.82	144.35	9650.87	154.45	62.77	PASS
2920.00†	2891.32	-187.94	286.09	2916.32	2891.32	-503.50	-9373.82	144.41	9665.06	158.94	61.08	PASS
3020.00†	2989.80	-197.48	300.61	3014.80	2989.80	-503.50	-9373.82	144.47	9679.27	163.44	59.48	PASS
3120.00†	3088.28	-207.01	315.13	3113.28	3088.28	-503.50	-9373.82	144.53	9693.48	167.95	57.96	PASS
3220.00†	3186.76	-216.55	329.65	3211.76	3186.76	-503.50	-9373.82	144.59	9707.71	172.49	56.51	PASS
3320.00†	3285.24	-226.09	344.17	3310.24	3285.24	-503.50	-9373.82	144.65	9721.94	177.03	55.13	PASS
3420.00†	3383.71	-235.62	358.69	3408.71	3383.71	-503.50	-9373.82	144.71	9736.19	181.59	53.82	PASS
3520.00†	3482.19	-245.16	373.20	3507.19	3482.19	-503.50	-9373.82	144.77	9750.45	186.17	52.57	PASS
3620.00†	3580.67	-254.70	387.72	3605.67	3580.67	-503.50	-9373.82	144.83	9764.71	190.75	51.38	PASS
3720.00†	3679.15	-264.24	402.24	3704.15	3679.15	-503.50	-9373.82	144.89	9778.99	195.35	50.24	PASS
3820.00†	3777.63	-273.77	416.76	3802.63	3777.63	-503.50	-9373.82	144.94	9793.27	199.96	49.15	PASS
3920.00†	3876.11	-283.31	431.28	3901.11	3876.11	-503.50	-9373.82	145.00	9807.57	204.58	48.10	PASS
4020.00†	3974.59	-292.85	445.80	3999.59	3974.59	-503.50	-9373.82	145.06	9821.87	209.22	47.10	PASS
4120.00†	4073.07	-302.39	460.32	4098.07	4073.07	-503.50	-9373.82	145.12	9836.19	213.86	46.14	PASS
4220.00†	4171.55	-311.92	474.83	4196.55	4171.55	-503.50	-9373.82	145.17	9850.51	218.52	45.22	PASS
4320.00†	4270.03	-321.46	489.35	4295.03	4270.03	-503.50	-9373.82	145.23	9864.85	223.18	44.34	PASS
4420.00†	4368.51	-331.00	503.87	4393.51	4368.51	-503.50	-9373.82	145.29	9879.19	227.86	43.49	PASS
4520.00†	4466.99	-340.53	518.39	4491.99	4466.99	-503.50	-9373.82	145.35	9893.55	232.54	42.67	PASS
4620.00†	4565.47	-350.07	532.91	4590.47	4565.47	-503.50	-9373.82	145.40	9907.91	237.23	41.89	PASS
4720.00†	4663.95	-359.61	547.43	4688.95	4663.95	-503.50	-9373.82	145.46	9922.29	241.93	41.13	PASS
4820.00†	4762.43	-369.15	561.94	4787.43	4762.43	-503.50	-9373.82	145.51	9936.67	246.64	40.40	PASS
4920.00†	4860.91	-378.68	576.46	4885.91	4860.91	-503.50	-9373.82	145.57	9951.06	251.36	39.70	PASS
5020.00†	4959.39	-388.22	590.98	4984.39	4959.39	-503.50	-9373.82	145.63	9965.47	256.09	39.02	PASS
5120.00†	5057.87	-397.76	605.50	5082.87	5057.87	-503.50	-9373.82	145.68	9979.88	260.82	38.36	PASS
5220.00†	5156.35	-407.30	620.02	5181.35	5156.35	-503.50	-9373.82	145.74	9994.30	265.56	37.73	PASS
5320.00†	5254.83	-416.83	634.54	5279.83	5254.83	-503.50	-9373.82	145.80	10008.73	270.31	37.12	PASS
5420.00†	5353.31	-426.37	649.06	5378.31	5353.31	-503.50	-9373.82	145.85	10023.17	275.07	36.53	PASS
5520.00†	5451.79	-435.91	663.57	5476.79	5451.79	-503.50	-9373.82	145.91	10037.62	279.83	35.96	PASS
5620.00†	5550.27	-445.45	678.09	5575.27	5550.27	-503.50	-9373.82	145.96	10052.08	284.60	35.41	PASS
5720.00†	5648.75	-454.98	692.61	5673.75	5648.75	-503.50	-9373.82	146.02	10066.55	289.37	34.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 8 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W				Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR)		Well: EX. RUDOLPH 2-33		Threshold Value=1.00		† = interpolated/extrapolated station		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5820.00†	5747.23	-464.52	707.13	5772.23	5747.23	-503.50	-9373.82	146.07	10081.02	294.15	34.35	PASS
5920.00†	5845.71	-474.06	721.65	5870.71	5845.71	-503.50	-9373.82	146.13	10095.51	298.94	33.85	PASS
6020.00†	5944.19	-483.59	736.17	5969.19	5944.19	-503.50	-9373.82	146.18	10110.00	303.73	33.36	PASS
6120.00†	6042.67	-493.13	750.68	6067.67	6042.67	-503.50	-9373.82	146.24	10124.51	308.52	32.89	PASS
6220.00†	6141.15	-502.67	765.20	6166.15	6141.15	-503.50	-9373.82	146.29	10139.02	313.32	32.43	PASS
6320.00†	6239.63	-512.21	779.72	6264.63	6239.63	-503.50	-9373.82	146.34	10153.54	318.13	31.99	PASS
6333.38	6252.80	-513.48	781.66	6277.80	6252.80	-503.50	-9373.82	146.35	10155.49	318.77	31.93	PASS
6420.00†	6338.69	-521.84	788.38	6363.69	6338.69	-503.50	-9373.82	95.73	10162.21	323.00	31.53	PASS
6520.00†	6437.87	-531.58	781.50	6462.87	6437.87	-503.50	-9373.82	34.06	10155.36	328.23	31.00	PASS
6620.00†	6534.75	-541.19	759.12	6559.75	6534.75	-503.50	-9373.82	18.63	10133.01	333.76	30.42	PASS
6720.00†	6626.95	-550.44	721.78	6651.95	6626.95	-503.50	-9373.82	13.06	10095.71	338.84	29.85	PASS
6820.00†	6712.19	-559.10	670.41	6737.19	6712.19	-503.50	-9373.82	10.39	10044.38	343.42	29.31	PASS
6920.00†	6788.37	-566.95	606.27	6813.37	6788.37	-503.50	-9373.82	8.95	9980.29	347.41	28.78	PASS
7020.00†	6853.62	-573.80	530.93	6878.62	6853.62	-503.50	-9373.82	8.22	9905.00	350.76	28.29	PASS
7120.00†	6906.33	-579.49	446.27	6931.33	6906.33	-503.50	-9373.82	8.02	9820.38	353.39	27.84	PASS
7220.00†	6945.20	-583.87	354.35	6970.20	6945.20	-503.50	-9373.82	8.49	9728.50	355.28	27.44	PASS
7320.00†	6969.29	-586.83	257.44	6994.29	6969.29	-503.50	-9373.82	10.76	9631.62	356.42	27.07	PASS
7420.00†	6977.98	-588.31	157.94	7002.98	6977.98	-503.50	-9373.82	60.80	9532.13	356.83	26.76	PASS
7428.43	6978.00	-588.37	149.50	7003.00	6978.00	-503.50	-9373.82	105.87	9523.70	356.83	26.74	PASS
7478.43	6977.79	-588.66	99.50	7002.79	6977.79	-503.50	-9373.82	105.79	9473.70	356.82	26.60	PASS
7520.00†	6977.61	-589.21	57.94	7002.61	6977.61	-503.50	-9373.82	98.12	9432.15	356.81	26.49	PASS
7536.58	6977.55	-589.59	41.36	7002.55	6977.55	-503.50	-9373.82	96.79	9415.57	356.81	26.44	PASS
7620.00†	6977.19	-591.78	-42.02	7002.19	6977.19	-503.50	-9373.82	96.73	9332.21	356.80	26.21	PASS
7720.00†	6976.77	-594.39	-141.99	7001.77	6976.77	-503.50	-9373.82	96.66	9232.28	356.78	25.93	PASS
7820.00†	6976.35	-597.01	-241.95	7001.35	6976.35	-503.50	-9373.82	96.59	9132.34	356.77	25.65	PASS
7920.00†	6975.93	-599.63	-341.92	7000.93	6975.93	-503.50	-9373.82	96.51	9032.41	356.76	25.37	PASS
8020.00†	6975.51	-602.25	-441.88	7000.51	6975.51	-503.50	-9373.82	96.44	8932.48	356.76	25.09	PASS
8120.00†	6975.09	-604.86	-541.85	7000.09	6975.09	-503.50	-9373.82	96.37	8832.55	356.75	24.81	PASS
8220.00†	6974.67	-607.48	-641.81	6999.67	6974.67	-503.50	-9373.82	96.30	8732.62	356.75	24.52	PASS
8320.00†	6974.25	-610.10	-741.78	6999.25	6974.25	-503.50	-9373.82	96.23	8632.70	356.75	24.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 9 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWP Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-33 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
8420.00†	6973.83	-612.72	-841.74	6998.83	6973.83	-503.50	-9373.82	96.16	8532.77	356.76	23.96	PASS		
8520.00†	6973.41	-615.33	-941.71	6998.41	6973.41	-503.50	-9373.82	96.08	8432.85	356.78	23.68	PASS		
8620.00†	6972.99	-617.95	-1041.67	6997.99	6972.99	-503.50	-9373.82	96.01	8332.93	356.77	23.40	PASS		
8720.00†	6972.57	-620.57	-1141.64	6997.57	6972.57	-503.50	-9373.82	95.94	8233.01	356.78	23.12	PASS		
8820.00†	6972.15	-623.19	-1241.60	6997.15	6972.15	-503.50	-9373.82	95.87	8133.10	356.80	22.84	PASS		
8920.00†	6971.73	-625.81	-1341.57	6996.73	6971.73	-503.50	-9373.82	95.80	8033.18	356.81	22.56	PASS		
9020.00†	6971.31	-628.42	-1441.53	6996.31	6971.31	-503.50	-9373.82	95.73	7933.27	356.83	22.27	PASS		
9120.00†	6970.88	-631.04	-1541.50	6995.88	6970.88	-503.50	-9373.82	95.65	7833.36	356.86	21.99	PASS		
9220.00†	6970.46	-633.66	-1641.46	6995.46	6970.46	-503.50	-9373.82	95.58	7733.45	356.88	21.71	PASS		
9320.00†	6970.04	-636.28	-1741.43	6995.04	6970.04	-503.50	-9373.82	95.51	7633.55	356.91	21.43	PASS		
9420.00†	6969.62	-638.89	-1841.39	6994.62	6969.62	-503.50	-9373.82	95.44	7533.64	356.95	21.15	PASS		
9520.00†	6969.20	-641.51	-1941.36	6994.20	6969.20	-503.50	-9373.82	95.37	7433.74	356.98	20.86	PASS		
9620.00†	6968.78	-644.13	-2041.32	6993.78	6968.78	-503.50	-9373.82	95.30	7333.84	357.02	20.58	PASS		
9720.00†	6968.36	-646.75	-2141.29	6993.36	6968.36	-503.50	-9373.82	95.22	7233.95	357.07	20.30	PASS		
9820.00†	6967.94	-649.36	-2241.25	6992.94	6967.94	-503.50	-9373.82	95.15	7134.06	357.12	20.01	PASS		
9920.00†	6967.52	-651.98	-2341.22	6992.52	6967.52	-503.50	-9373.82	95.08	7034.17	357.17	19.73	PASS		
10020.00†	6967.10	-654.60	-2441.18	6992.10	6967.10	-503.50	-9373.82	95.01	6934.28	357.23	19.45	PASS		
10120.00†	6966.68	-657.22	-2541.15	6991.68	6966.68	-503.50	-9373.82	94.94	6834.40	357.29	19.16	PASS		
10220.00†	6966.26	-659.84	-2641.11	6991.26	6966.26	-503.50	-9373.82	94.86	6734.52	357.36	18.88	PASS		
10320.00†	6965.84	-662.45	-2741.08	6990.84	6965.84	-503.50	-9373.82	94.79	6634.63	357.44	18.60	PASS		
10420.00†	6965.42	-665.07	-2841.04	6990.42	6965.42	-503.50	-9373.82	94.72	6534.78	357.51	18.31	PASS		
10520.00†	6965.00	-667.69	-2941.01	6990.00	6965.00	-503.50	-9373.82	94.65	6434.91	357.60	18.03	PASS		
10620.00†	6964.58	-670.31	-3040.97	6989.58	6964.58	-503.50	-9373.82	94.58	6335.04	357.69	17.74	PASS		
10720.00†	6964.15	-672.92	-3140.93	6989.15	6964.15	-503.50	-9373.82	94.50	6235.19	357.79	17.46	PASS		
10820.00†	6963.73	-675.54	-3240.90	6988.73	6963.73	-503.50	-9373.82	94.43	6135.33	357.90	17.17	PASS		
10920.00†	6963.31	-678.16	-3340.86	6988.31	6963.31	-503.50	-9373.82	94.36	6035.48	358.01	16.89	PASS		
11020.00†	6962.89	-680.78	-3440.83	6987.89	6962.89	-503.50	-9373.82	94.29	5935.64	358.13	16.60	PASS		
11120.00†	6962.47	-683.39	-3540.79	6987.47	6962.47	-503.50	-9373.82	94.22	5835.80	358.26	16.32	PASS		
11220.00†	6962.05	-686.01	-3640.76	6987.05	6962.05	-503.50	-9373.82	94.14	5735.96	358.40	16.03	PASS		
11320.00†	6961.63	-688.63	-3740.72	6986.63	6961.63	-503.50	-9373.82	94.07	5636.14	358.55	15.75	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 10 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWP Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-33 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	6986.21	6961.21	-503.50	-9373.82	94.00	5536.31	358.70	15.46	PASS	
11520.00†	6960.79	-693.86	-3940.65	6985.79	6960.79	-503.50	-9373.82	93.93	5436.50	358.87	15.18	PASS	
11620.00†	6960.37	-696.48	-4040.62	6985.37	6960.37	-503.50	-9373.82	93.86	5336.69	359.05	14.89	PASS	
11636.58	6960.30	-696.92	-4057.20	6985.30	6960.30	-503.50	-9373.82	93.84	5320.14	359.09	14.84	PASS	
11720.00†	6959.95	-697.89	-4140.60	6984.95	6959.95	-503.50	-9373.82	97.03	5236.82	359.22	14.61	PASS	
11739.19	6959.87	-697.77	-4159.80	6984.87	6959.87	-503.50	-9373.82	98.69	5217.64	359.24	14.55	PASS	
11820.00†	6959.53	-696.99	-4240.60	6984.53	6959.53	-503.50	-9373.82	98.55	5136.88	359.32	14.32	PASS	
11920.00†	6959.10	-696.02	-4340.59	6984.10	6959.10	-503.50	-9373.82	98.39	5036.91	359.44	14.04	PASS	
12020.00†	6958.68	-695.06	-4440.59	6983.68	6958.68	-503.50	-9373.82	98.22	4936.95	359.55	13.76	PASS	
12120.00†	6958.26	-694.10	-4540.58	6983.26	6958.26	-503.50	-9373.82	98.06	4836.99	359.68	13.47	PASS	
12220.00†	6957.84	-693.13	-4640.58	6982.84	6957.84	-503.50	-9373.82	97.90	4737.04	359.81	13.19	PASS	
12320.00†	6957.42	-692.17	-4740.57	6982.42	6957.42	-503.50	-9373.82	97.73	4637.09	359.94	12.91	PASS	
12420.00†	6957.00	-691.20	-4840.57	6982.00	6957.00	-503.50	-9373.82	97.57	4537.14	360.08	12.62	PASS	
12520.00†	6956.57	-690.24	-4940.56	6981.57	6956.57	-503.50	-9373.82	97.40	4437.19	360.23	12.34	PASS	
12620.00†	6956.15	-689.28	-5040.55	6981.15	6956.15	-503.50	-9373.82	97.24	4337.24	360.39	12.06	PASS	
12720.00†	6955.73	-688.31	-5140.55	6980.73	6955.73	-503.50	-9373.82	97.07	4237.30	360.56	11.77	PASS	
12820.00†	6955.31	-687.35	-5240.54	6980.31	6955.31	-503.50	-9373.82	96.91	4137.36	360.74	11.49	PASS	
12920.00†	6954.89	-686.38	-5340.54	6979.89	6954.89	-503.50	-9373.82	96.74	4037.42	360.93	11.21	PASS	
13020.00†	6954.47	-685.42	-5440.53	6979.47	6954.47	-503.50	-9373.82	96.57	3937.49	361.12	10.92	PASS	
13120.00†	6954.04	-684.46	-5540.53	6979.04	6954.04	-503.50	-9373.82	96.41	3837.56	361.34	10.64	PASS	
13220.00†	6953.62	-683.49	-5640.52	6978.62	6953.62	-503.50	-9373.82	96.24	3737.63	361.56	10.36	PASS	
13320.00†	6953.20	-682.53	-5740.52	6978.20	6953.20	-503.50	-9373.82	96.08	3637.71	361.80	10.07	PASS	
13420.00†	6952.78	-681.57	-5840.51	6977.78	6952.78	-503.50	-9373.82	95.91	3537.79	362.05	9.79	PASS	
13520.00†	6952.36	-680.60	-5940.50	6977.36	6952.36	-503.50	-9373.82	95.74	3437.88	362.33	9.51	PASS	
13620.00†	6951.94	-679.64	-6040.50	6976.94	6951.94	-503.50	-9373.82	95.58	3337.97	362.62	9.22	PASS	
13720.00†	6951.51	-678.67	-6140.49	6976.51	6951.51	-503.50	-9373.82	95.41	3238.07	362.93	8.94	PASS	
13820.00†	6951.09	-677.71	-6240.49	6976.09	6951.09	-503.50	-9373.82	95.25	3138.17	363.27	8.65	PASS	
13920.00†	6950.67	-676.75	-6340.48	6975.67	6950.67	-503.50	-9373.82	95.08	3038.28	363.63	8.37	PASS	
14020.00†	6950.25	-675.78	-6440.48	6975.25	6950.25	-503.50	-9373.82	94.91	2938.40	364.03	8.09	PASS	
14120.00†	6949.83	-674.82	-6540.47	6974.83	6949.83	-503.50	-9373.82	94.75	2838.52	364.45	7.80	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 11 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWP Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-33 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
14220.00†	6949.41	-673.86	-6640.47	6974.41	6949.41	-503.50	-9373.82	94.58	2738.66	364.92	7.52	PASS		
14320.00†	6948.98	-672.89	-6740.46	6973.98	6948.98	-503.50	-9373.82	94.41	2638.80	365.43	7.23	PASS		
14420.00†	6948.56	-671.93	-6840.45	6973.56	6948.56	-503.50	-9373.82	94.25	2538.96	365.99	6.95	PASS		
14520.00†	6948.14	-670.96	-6940.45	6973.14	6948.14	-503.50	-9373.82	94.08	2439.12	366.60	6.66	PASS		
14620.00†	6947.72	-670.00	-7040.44	6972.72	6947.72	-503.50	-9373.82	93.91	2339.31	367.28	6.38	PASS		
14720.00†	6947.30	-669.04	-7140.44	6972.30	6947.30	-503.50	-9373.82	93.75	2239.51	368.04	6.09	PASS		
14820.00†	6946.87	-668.07	-7240.43	6971.87	6946.87	-503.50	-9373.82	93.58	2139.72	368.88	5.81	PASS		
14920.00†	6946.45	-667.11	-7340.43	6971.45	6946.45	-503.50	-9373.82	93.41	2039.96	369.83	5.52	PASS		
15020.00†	6946.03	-666.15	-7440.42	6971.03	6946.03	-503.50	-9373.82	93.24	1940.23	370.90	5.24	PASS		
15120.00†	6945.61	-665.18	-7540.42	6970.61	6945.61	-503.50	-9373.82	93.08	1840.52	372.11	4.95	PASS		
15220.00†	6945.19	-664.22	-7640.41	6970.19	6945.19	-503.50	-9373.82	92.91	1740.84	373.49	4.67	PASS		
15320.00†	6944.77	-663.25	-7740.40	6969.77	6944.77	-503.50	-9373.82	92.74	1641.21	375.08	4.38	PASS		
15420.00†	6944.34	-662.29	-7840.40	6969.34	6944.34	-503.50	-9373.82	92.57	1541.62	376.93	4.10	PASS		
15520.00†	6943.92	-661.33	-7940.39	6968.92	6943.92	-503.50	-9373.82	92.41	1442.09	379.09	3.81	PASS		
15620.00†	6943.50	-660.36	-8040.39	6968.50	6943.50	-503.50	-9373.82	92.24	1342.62	381.63	3.52	PASS		
15720.00†	6943.08	-659.40	-8140.38	6968.08	6943.08	-503.50	-9373.82	92.07	1243.25	384.67	3.24	PASS		
15820.00†	6942.66	-658.44	-8240.38	6967.66	6942.66	-503.50	-9373.82	91.90	1143.98	388.33	2.95	PASS		
15920.00†	6942.24	-657.47	-8340.37	6967.24	6942.24	-503.50	-9373.82	91.74	1044.85	392.81	2.66	PASS		
16020.00†	6941.81	-656.51	-8440.37	6966.81	6941.81	-503.50	-9373.82	91.57	945.91	398.38	2.38	PASS		
16120.00†	6941.39	-655.54	-8540.36	6966.39	6941.39	-503.50	-9373.82	91.40	847.21	405.43	2.09	PASS		
16220.00†	6940.97	-654.58	-8640.35	6965.97	6940.97	-503.50	-9373.82	91.23	748.86	414.54	1.81	PASS		
16320.00†	6940.55	-653.62	-8740.35	6965.55	6940.55	-503.50	-9373.82	91.07	651.01	426.64	1.53	PASS		
16420.00†	6940.13	-652.65	-8840.34	6965.13	6940.13	-503.50	-9373.82	90.90	553.93	443.27	1.25	PASS		
16520.00†	6939.71	-651.69	-8940.34	6964.71	6939.71	-503.50	-9373.82	90.73	458.11	467.10	0.98	FAIL		
16620.00†	6939.28	-650.72	-9040.33	6964.28	6939.28	-503.50	-9373.82	90.56	364.54	503.11	0.72	FAIL		
16720.00†	6938.86	-649.76	-9140.33	6963.86	6938.86	-503.50	-9373.82	90.39	275.52	560.91	0.49	FAIL		
16820.00†	6938.44	-648.80	-9240.32	6963.44	6938.44	-503.50	-9373.82	90.23	197.31	655.70	0.30	FAIL		
16920.00†	6938.02	-647.83	-9340.32	6963.02	6938.02	-503.50	-9373.82	90.06	148.17	766.94	0.19	FAIL		
16954.71†	6937.87	-647.50	-9375.03	6962.69	6937.69	-503.50	-9373.82	89.93	144.00	779.76	0.18	FAIL		
16954.81†	6937.87	-647.50	-9375.13	6962.87	6937.87	-503.50	-9373.82	90.00	144.00	779.77	0.18	FAIL		

C-C Clearance Distance Cutoff: 1000.00 ft





Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 12 of 184



REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-33 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17020.00†	6937.60	-646.87	-9440.31	6962.60	6937.60	-503.50	-9373.82	89.89	158.04	738.48	0.21	FAIL
17120.00†	6937.18	-645.91	-9540.31	6962.18	6937.18	-503.50	-9373.82	89.72	219.08	621.39	0.35	FAIL
17161.54	6937.00	-645.51	-9581.84	6962.00	6937.00	-503.50	-9373.82	89.65	251.87	582.17	0.43	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7378.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7378>	EX. RUDOLPH 2-33 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. RUDOLPH 2-33 AWB Offset Wellpath: EX. RUDOLPH 2-33 AWP

MD Reference: Rig on SLOT#03 EX. RUDOLPH 2-33 (740'FSL & 640'FWL, NB-CD/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 13 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	AC Sta
20.00	20.00	0.00	0.00	20.00	20.00	20.04	0.00	0.00	20.04	1.56	31.79	PA
120.00†	120.00	0.00	0.00	120.00	120.00	20.04	0.00	0.00	20.04	1.88	20.76	PA
220.00†	220.00	0.00	0.00	220.00	220.00	20.04	0.00	0.00	20.04	2.45	12.84	PA
320.00†	320.00	0.00	0.00	320.00	320.00	20.04	0.00	0.00	20.04	3.05	9.14	PA
420.00†	420.00	0.00	0.00	420.00	420.00	20.04	0.00	0.00	20.04	3.67	7.06	PA
520.00†	520.00	0.00	0.00	520.00	520.00	20.04	0.00	0.00	20.04	4.28	5.74	PA
620.00†	620.00	0.00	0.00	620.00	620.00	20.04	0.00	0.00	20.04	4.91	4.84	PA
700.00	700.00	0.00	0.00	700.10	700.09	19.91	0.42	1.21	19.91	5.40	4.27	PA
720.00†	720.00	-0.04	0.06	720.13	720.12	19.79	0.82	-121.10	19.84	5.53	4.14	PA
743.88†	743.87	-0.18	0.28	744.02	744.00	19.59	1.48	-119.85	19.81	5.69	3.99	PA
820.00†	819.96	-1.38	2.10	820.26	820.16	18.56	4.84	-115.49	20.13	6.19	3.67	PA
920.00†	919.78	-4.64	7.06	920.30	919.90	16.31	12.19	-109.51	21.57	6.87	3.49	PA
1020.00†	1019.33	-9.80	14.92	1020.25	1019.22	13.05	22.85	-104.06	24.19	7.56	3.52	PA
1120.00†	1118.50	-16.87	25.69	1120.14	1118.12	8.95	36.29	-100.75	27.91	8.30	3.68	PA
1200.18	1197.64	-23.91	36.40	1200.23	1197.37	5.58	47.31	-102.72	31.44	8.95	3.82	PA
1220.00†	1217.16	-25.80	39.28	1220.03	1216.96	4.74	50.04	-103.64	32.39	9.11	3.86	PA
1320.00†	1315.64	-35.34	53.80	1319.88	1315.78	0.54	63.78	-107.53	37.25	9.96	4.03	PA
1420.00†	1414.12	-44.88	68.32	1419.74	1414.59	-3.66	77.53	-110.52	42.24	10.83	4.18	PA
1520.00†	1512.60	-54.42	82.84	1519.59	1513.41	-7.86	91.28	-112.86	47.32	11.70	4.32	PA
1620.00†	1611.08	-63.95	97.35	1619.44	1612.22	-12.06	105.02	-114.76	52.47	12.57	4.44	PA
1720.00†	1709.56	-73.49	111.87	1719.30	1711.03	-16.27	118.77	-116.31	57.66	13.43	4.55	PA
1820.00†	1808.04	-83.03	126.39	1819.15	1809.85	-20.47	132.52	-117.60	62.89	13.66	4.80	PA
1920.00†	1906.52	-92.56	140.91	1919.01	1908.66	-24.67	146.26	-118.70	68.14	13.83	5.14	PA
2020.00†	2005.00	-102.10	155.43	2018.86	2007.48	-28.87	160.01	-119.64	73.42	14.08	5.44	PA
2120.00†	2103.48	-111.64	169.95	2118.71	2106.29	-33.07	173.76	-120.45	78.71	14.43	5.69	PA
2220.00†	2201.96	-121.18	184.46	2218.57	2205.10	-37.27	187.50	-121.16	84.02	14.85	5.89	PA
2320.00†	2300.44	-130.71	198.98	2318.42	2303.92	-41.48	201.25	-121.79	89.34	15.34	6.06	PA
2420.00†	2398.92	-140.25	213.50	2418.28	2402.73	-45.68	215.00	-122.34	94.66	15.91	6.18	PA
2520.00†	2497.40	-149.79	228.02	2518.13	2501.55	-49.88	228.74	-122.84	100.00	16.53	6.28	PA
2620.00†	2595.88	-159.33	242.54	2617.98	2600.36	-54.08	242.49	-123.28	105.34	17.20	6.34	PA

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 14 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st													AC
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	PA	Sta
2720.00†	2694.36	-168.86	257.06	2717.84	2699.17	-58.28	256.24	-123.68	110.69	17.92	6.39	PA	
2820.00†	2792.84	-178.40	271.58	2817.69	2797.99	-62.48	269.98	-124.05	116.04	18.69	6.42	PA	
2920.00†	2891.32	-187.94	286.09	2917.55	2896.80	-66.69	283.73	-124.38	121.40	19.49	6.43	PA	
3020.00†	2989.80	-197.48	300.61	3017.40	2995.61	-70.89	297.48	-124.69	126.76	20.32	6.43	PA	
3120.00†	3088.28	-207.01	315.13	3117.25	3094.43	-75.09	311.22	-124.97	132.13	21.18	6.42	PA	
3220.00†	3186.76	-216.55	329.65	3217.11	3193.24	-79.29	324.97	-125.23	137.49	22.06	6.41	PA	
3320.00†	3285.24	-226.09	344.17	3316.96	3292.06	-83.49	338.72	-125.47	142.86	22.96	6.39	PA	
3420.00†	3383.71	-235.62	358.69	3416.82	3390.87	-87.69	352.46	-125.69	148.23	23.89	6.36	PA	
3520.00†	3482.19	-245.16	373.20	3516.67	3489.68	-91.89	366.21	-125.89	153.61	24.83	6.34	PA	
3620.00†	3580.67	-254.70	387.72	3616.52	3588.50	-96.10	379.96	-126.09	158.98	25.79	6.31	PA	
3720.00†	3679.15	-264.24	402.24	3716.38	3687.31	-100.30	393.70	-126.27	164.36	26.76	6.28	PA	
3820.00†	3777.63	-273.77	416.76	3816.23	3786.13	-104.50	407.45	-126.43	169.74	27.74	6.25	PA	
3920.00†	3876.11	-283.31	431.28	3916.09	3884.94	-108.70	421.20	-126.59	175.12	28.73	6.22	PA	
4020.00†	3974.59	-292.85	445.80	4015.94	3983.75	-112.90	434.94	-126.74	180.50	29.74	6.19	PA	
4120.00†	4073.07	-302.39	460.32	4115.79	4082.57	-117.10	448.69	-126.88	185.89	30.75	6.16	PA	
4220.00†	4171.55	-311.92	474.83	4215.65	4181.38	-121.31	462.44	-127.01	191.27	31.77	6.14	PA	
4320.00†	4270.03	-321.46	489.35	4315.50	4280.20	-125.51	476.18	-127.14	196.66	32.79	6.11	PA	
4420.00†	4368.51	-331.00	503.87	4415.36	4379.01	-129.71	489.93	-127.26	202.04	33.83	6.08	PA	
4520.00†	4466.99	-340.53	518.39	4515.21	4477.82	-133.91	503.68	-127.37	207.43	34.87	6.05	PA	
4620.00†	4565.47	-350.07	532.91	4615.06	4576.64	-138.11	517.42	-127.47	212.82	35.91	6.03	PA	
4720.00†	4663.95	-359.61	547.43	4714.92	4675.45	-142.31	531.17	-127.58	218.21	36.96	6.00	PA	
4820.00†	4762.43	-369.15	561.94	4814.77	4774.27	-146.52	544.92	-127.67	223.59	38.02	5.97	PA	
4920.00†	4860.91	-378.68	576.46	4914.63	4873.08	-150.72	558.66	-127.76	228.98	39.07	5.95	PA	
5020.00†	4959.39	-388.22	590.98	5014.48	4971.89	-154.92	572.41	-127.85	234.37	40.14	5.93	PA	
5120.00†	5057.87	-397.76	605.50	5114.33	5070.71	-159.12	586.16	-127.93	239.76	41.20	5.90	PA	
5220.00†	5156.35	-407.30	620.02	5214.19	5169.52	-163.32	599.90	-128.01	245.15	42.27	5.88	PA	
5320.00†	5254.83	-416.83	634.54	5314.04	5268.34	-167.52	613.65	-128.09	250.55	43.34	5.86	PA	
5420.00†	5353.31	-426.37	649.06	5413.90	5367.15	-171.73	627.40	-128.16	255.94	44.42	5.84	PA	
5520.00†	5451.79	-435.91	663.57	5513.75	5465.96	-175.93	641.14	-128.23	261.33	45.49	5.82	PA	
5620.00†	5550.27	-445.45	678.09	5613.60	5564.78	-180.13	654.89	-128.30	266.72	46.57	5.80	PA	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 15 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	AC Sta	
5720.00†	5648.75	-454.98	692.61	5713.46	5663.59	-184.33	668.64	-128.37	272.12	47.66	5.78	PA	
5820.00†	5747.23	-464.52	707.13	5813.31	5762.41	-188.53	682.38	-128.43	277.51	48.74	5.76	PA	
5920.00†	5845.71	-474.06	721.65	5913.17	5861.22	-192.73	696.13	-128.49	282.90	49.82	5.75	PA	
6020.00†	5944.19	-483.59	736.17	6013.02	5960.03	-196.94	709.88	-128.55	288.30	50.91	5.73	PA	
6120.00†	6042.67	-493.13	750.68	6112.87	6058.85	-201.14	723.62	-128.60	293.69	52.00	5.71	PA	
6220.00†	6141.15	-502.67	765.20	6212.73	6157.66	-205.34	737.37	-128.65	299.09	53.09	5.70	PA	
6320.00†	6239.63	-512.21	779.72	6312.58	6256.48	-209.54	751.12	-128.71	304.48	54.19	5.68	PA	
6333.38	6252.80	-513.48	781.66	6325.94	6269.69	-210.10	752.95	-128.71	305.20	54.33	5.68	PA	
6420.00†	6338.69	-521.84	788.38	6413.77	6356.69	-213.93	764.35	-178.81	309.36	55.33	5.65	PA	
6520.00†	6437.87	-531.58	781.50	6519.54	6462.10	-220.94	765.38	120.80	311.99	56.87	5.54	PA	
6620.00†	6534.75	-541.19	759.12	6626.79	6567.45	-231.20	748.87	106.70	311.87	58.80	5.36	PA	
6720.00†	6626.95	-550.44	721.78	6735.23	6669.35	-244.51	714.68	102.54	308.94	59.86	5.21	PA	
6820.00†	6712.19	-559.10	670.41	6844.48	6764.36	-260.50	663.45	101.29	303.20	61.16	5.00	PA	
6920.00†	6788.37	-566.95	606.27	6954.18	6849.21	-278.70	596.58	101.30	294.76	62.86	4.73	PA	
7020.00†	6853.62	-573.80	530.93	7063.93	6921.02	-298.52	516.17	101.95	283.80	65.51	4.37	PA	
7120.00†	6906.33	-579.49	446.27	7173.39	6977.49	-319.31	424.89	102.99	270.58	68.79	3.96	PA	
7220.00†	6945.20	-583.87	354.35	7282.28	7017.00	-340.39	325.78	104.25	255.44	72.93	3.53	PA	
7320.00†	6969.29	-586.83	257.44	7390.40	7038.64	-361.11	222.03	105.65	238.77	77.40	3.10	PA	
7420.00†	6977.98	-588.31	157.94	7495.13	7042.94	-380.47	119.28	107.25	221.16	82.24	2.70	PA	
7428.43	6978.00	-588.37	149.50	7503.43	7042.93	-381.98	111.12	107.48	219.74	82.63	2.67	PA	
7478.43	6977.79	-588.66	99.50	7552.65	7042.83	-390.95	62.73	108.23	211.36	84.98	2.50	PA	
7520.00†	6977.61	-589.21	57.94	7593.61	7042.74	-398.41	22.45	108.82	204.70	86.98	2.36	PA	
7536.58	6977.55	-589.59	41.36	7609.98	7042.71	-401.40	6.35	109.05	202.21	87.79	2.31	PA	
7620.00†	6977.19	-591.78	-42.02	7692.37	7042.55	-416.41	-74.66	110.39	189.97	92.04	2.07	PA	
7720.00†	6976.77	-594.39	-141.99	7791.14	7042.35	-434.41	-171.77	112.23	175.45	97.24	1.81	PA	
7820.00†	6976.35	-597.01	-241.95	7887.53	7042.15	-451.61	-266.62	114.29	161.49	102.39	1.58	PA	
7920.00†	6975.93	-599.63	-341.92	7982.10	7041.96	-465.80	-360.11	116.21	150.34	107.61	1.40	PA	
8020.00†	6975.51	-602.25	-441.88	8080.03	7041.77	-477.94	-457.28	118.01	141.70	112.92	1.26	PA	
8120.00†	6975.09	-604.86	-541.85	8179.57	7041.57	-490.07	-556.08	120.02	133.41	117.97	1.13	PA	
8220.00†	6974.67	-607.48	-641.81	8279.11	7041.37	-502.20	-654.88	122.30	125.31	122.54	1.02	PA	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 16 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st													At Sta
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		
8320.00†	6974.25	-610.10	-741.78	8376.61	7041.17	-513.45	-751.72	124.65	117.97	126.60	0.93	FA	
8420.00†	6973.83	-612.72	-841.74	8473.26	7040.98	-521.59	-848.03	126.35	113.37	131.00	0.86	FA	
8520.00†	6973.41	-615.33	-941.71	8570.19	7040.78	-526.48	-944.83	127.16	111.56	136.33	0.82	FA	
8620.00†	6972.99	-617.95	-1041.67	8668.36	7040.59	-528.36	-1042.98	127.03	112.24	143.01	0.78	FA	
8720.00†	6972.57	-620.57	-1141.64	8768.35	7040.39	-529.67	-1142.96	126.72	113.42	150.28	0.75	FA	
8820.00†	6972.15	-623.19	-1241.60	8868.34	7040.19	-530.98	-1242.95	126.42	114.60	157.64	0.73	FA	
8920.00†	6971.73	-625.81	-1341.57	8968.34	7039.98	-532.29	-1342.93	126.12	115.78	164.79	0.70	FA	
9020.00†	6971.31	-628.42	-1441.53	9068.33	7039.78	-533.60	-1442.91	125.83	116.97	172.64	0.68	FA	
9120.00†	6970.88	-631.04	-1541.50	9168.32	7039.58	-534.91	-1542.89	125.55	118.16	180.27	0.65	FA	
9220.00†	6970.46	-633.66	-1641.46	9268.31	7039.38	-536.22	-1642.88	125.27	119.36	187.97	0.63	FA	
9320.00†	6970.04	-636.28	-1741.43	9368.30	7039.18	-537.53	-1742.86	124.99	120.56	195.74	0.61	FA	
9420.00†	6969.62	-638.89	-1841.39	9468.29	7038.98	-538.83	-1842.84	124.73	121.76	203.57	0.60	FA	
9520.00†	6969.20	-641.51	-1941.36	9568.28	7038.78	-540.14	-1942.82	124.46	122.96	211.46	0.58	FA	
9620.00†	6968.78	-644.13	-2041.32	9668.27	7038.58	-541.45	-2042.81	124.20	124.16	219.40	0.56	FA	
9720.00†	6968.36	-646.75	-2141.29	9768.27	7038.38	-542.76	-2142.79	123.95	125.37	227.39	0.55	FA	
9820.00†	6967.94	-649.36	-2241.25	9868.26	7038.18	-544.07	-2242.77	123.70	126.58	235.43	0.54	FA	
9920.00†	6967.52	-651.98	-2341.22	9968.25	7037.98	-545.38	-2342.75	123.46	127.79	243.52	0.52	FA	
10020.00†	6967.10	-654.60	-2441.18	10068.24	7037.78	-546.69	-2442.74	123.22	129.01	251.64	0.51	FA	
10120.00†	6966.68	-657.22	-2541.15	10168.23	7037.58	-548.00	-2542.72	122.99	130.22	259.81	0.50	FA	
10220.00†	6966.26	-659.84	-2641.11	10268.22	7037.38	-549.31	-2642.70	122.76	131.44	268.01	0.49	FA	
10320.00†	6965.84	-662.45	-2741.08	10368.21	7037.17	-550.61	-2742.68	122.53	132.66	276.25	0.48	FA	
10420.00†	6965.42	-665.07	-2841.04	10468.20	7036.97	-551.92	-2842.67	122.31	133.89	284.52	0.47	FA	
10520.00†	6965.00	-667.69	-2941.01	10568.19	7036.77	-553.23	-2942.65	122.09	135.11	292.82	0.46	FA	
10620.00†	6964.58	-670.31	-3040.97	10668.19	7036.57	-554.54	-3042.63	121.88	136.34	301.15	0.45	FA	
10720.00†	6964.15	-672.92	-3140.93	10768.18	7036.37	-555.85	-3142.61	121.67	137.57	309.51	0.44	FA	
10820.00†	6963.73	-675.54	-3240.90	10868.17	7036.17	-557.16	-3242.59	121.46	138.80	317.90	0.44	FA	
10920.00†	6963.31	-678.16	-3340.86	10968.16	7035.97	-558.47	-3342.58	121.26	140.03	326.31	0.43	FA	
11020.00†	6962.89	-680.78	-3440.83	11068.15	7035.77	-559.78	-3442.56	121.06	141.26	334.75	0.42	FA	
11120.00†	6962.47	-683.39	-3540.79	11168.14	7035.57	-561.09	-3542.54	120.86	142.50	343.21	0.41	FA	
11220.00†	6962.05	-686.01	-3640.76	11268.13	7035.37	-562.39	-3642.52	120.67	143.74	351.69	0.41	FA	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 17 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st													At Sta
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		
11320.00†	6961.63	-688.63	-3740.72	11368.12	7035.17	-563.70	-3742.51	120.48	144.97	360.19	0.40	FA	
11420.00†	6961.21	-691.25	-3840.69	11468.12	7034.97	-565.01	-3842.49	120.29	146.21	368.72	0.40	FA	
11520.00†	6960.79	-693.86	-3940.65	11568.11	7034.77	-566.32	-3942.47	120.11	147.46	377.26	0.39	FA	
11620.00†	6960.37	-696.48	-4040.62	11668.10	7034.57	-567.63	-4042.45	119.93	148.70	385.82	0.38	FA	
11636.58	6960.30	-696.92	-4057.20	11684.68	7034.53	-567.85	-4059.04	119.90	148.91	387.24	0.38	FA	
11720.00†	6959.95	-697.89	-4140.60	11768.09	7034.37	-568.94	-4142.44	119.99	148.89	393.59	0.38	FA	
11739.19	6959.87	-697.77	-4159.80	11787.28	7034.33	-569.19	-4161.63	120.08	148.59	394.81	0.38	FA	
11820.00†	6959.53	-696.99	-4240.60	11868.07	7034.16	-570.25	-4242.41	120.50	147.10	399.74	0.37	FA	
11920.00†	6959.10	-696.02	-4340.59	11968.04	7033.96	-571.56	-4342.37	121.03	145.26	405.66	0.36	FA	
12020.00†	6958.68	-695.06	-4440.59	12068.02	7033.76	-572.86	-4442.34	121.58	143.43	411.44	0.35	FA	
12120.00†	6958.26	-694.10	-4540.58	12167.99	7033.56	-574.17	-4542.30	122.13	141.61	417.05	0.34	FA	
12220.00†	6957.84	-693.13	-4640.58	12267.96	7033.36	-575.48	-4642.27	122.71	139.81	422.48	0.33	FA	
12320.00†	6957.42	-692.17	-4740.57	12367.94	7033.16	-576.79	-4742.23	123.29	138.03	427.72	0.32	FA	
12420.00†	6957.00	-691.20	-4840.57	12467.91	7032.96	-578.10	-4842.20	123.90	136.26	432.75	0.31	FA	
12520.00†	6956.57	-690.24	-4940.56	12567.89	7032.76	-579.41	-4942.16	124.51	134.50	437.58	0.31	FA	
12620.00†	6956.15	-689.28	-5040.55	12667.86	7032.56	-580.72	-5042.13	125.15	132.76	442.18	0.30	FA	
12720.00†	6955.73	-688.31	-5140.55	12767.83	7032.36	-582.02	-5142.09	125.80	131.04	446.55	0.29	FA	
12820.00†	6955.31	-687.35	-5240.54	12867.81	7032.16	-583.33	-5242.06	126.47	129.33	450.66	0.29	FA	
12920.00†	6954.89	-686.38	-5340.54	12967.78	7031.96	-584.64	-5342.02	127.15	127.65	454.52	0.28	FA	
13020.00†	6954.47	-685.42	-5440.53	13067.76	7031.76	-585.95	-5441.99	127.86	125.98	458.10	0.27	FA	
13120.00†	6954.04	-684.46	-5540.53	13167.73	7031.56	-587.26	-5541.95	128.58	124.33	461.39	0.27	FA	
13220.00†	6953.62	-683.49	-5640.52	13267.70	7031.36	-588.57	-5641.92	129.32	122.70	464.38	0.26	FA	
13320.00†	6953.20	-682.53	-5740.52	13366.46	7031.16	-589.61	-5740.67	130.00	121.29	467.30	0.26	FA	
13420.00†	6952.78	-681.57	-5840.51	13463.31	7030.96	-587.97	-5837.50	129.86	121.99	474.45	0.26	FA	
13520.00†	6952.36	-680.60	-5940.50	13563.18	7030.76	-584.49	-5937.31	129.20	124.08	485.71	0.25	FA	
13620.00†	6951.94	-679.64	-6040.50	13663.14	7030.56	-581.00	-6037.21	128.55	126.18	496.94	0.25	FA	
13720.00†	6951.51	-678.67	-6140.49	13763.11	7030.36	-577.51	-6137.12	127.92	128.31	508.12	0.25	FA	
13820.00†	6951.09	-677.71	-6240.48	13863.08	7030.16	-574.02	-6237.03	127.32	130.44	519.24	0.25	FA	
13920.00†	6950.67	-676.75	-6340.48	13963.05	7029.96	-570.53	-6336.93	126.73	132.59	530.30	0.25	FA	
14020.00†	6950.25	-675.78	-6440.48	14063.01	7029.76	-567.04	-6436.84	126.16	134.76	541.30	0.25	FA	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 18 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated st													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	At Sta	
14120.00†	6949.83	-674.82	-6540.47	14162.98	7029.56	-563.56	-6536.75	125.61	136.93	552.25	0.25	FA	
14220.00†	6949.41	-673.86	-6640.47	14262.95	7029.36	-560.07	-6636.65	125.08	139.12	563.15	0.25	FA	
14320.00†	6948.98	-672.89	-6740.46	14362.92	7029.16	-556.58	-6736.56	124.57	141.32	574.00	0.25	FA	
14420.00†	6948.56	-671.93	-6840.45	14462.03	7028.96	-553.04	-6835.60	124.05	143.60	584.61	0.24	FA	
14520.00†	6948.14	-670.96	-6940.45	14561.11	7028.76	-548.25	-6934.57	123.29	146.95	596.83	0.25	FA	
14620.00†	6947.72	-670.00	-7040.44	14661.03	7028.57	-543.33	-7034.37	122.53	150.39	609.28	0.25	FA	
14720.00†	6947.30	-669.04	-7140.44	14760.95	7028.37	-538.42	-7134.17	121.81	153.86	621.56	0.25	FA	
14820.00†	6946.87	-668.07	-7240.43	14860.87	7028.17	-533.51	-7233.97	121.12	157.35	633.68	0.25	FA	
14920.00†	6946.45	-667.11	-7340.43	14960.79	7027.97	-528.60	-7333.77	120.46	160.86	645.65	0.25	FA	
15020.00†	6946.03	-666.15	-7440.42	15060.71	7027.78	-523.68	-7433.57	119.83	164.39	657.47	0.25	FA	
15120.00†	6945.61	-665.18	-7540.42	15160.64	7027.58	-518.77	-7533.37	119.23	167.94	669.17	0.25	FA	
15220.00†	6945.19	-664.22	-7640.41	15260.56	7027.38	-513.86	-7633.17	118.65	171.51	680.74	0.25	FA	
15320.00†	6944.77	-663.25	-7740.40	15360.48	7027.19	-508.95	-7732.97	118.09	175.10	692.19	0.25	FA	
15420.00†	6944.34	-662.29	-7840.40	15460.40	7026.99	-504.04	-7832.77	117.56	178.70	703.53	0.25	FA	
15520.00†	6943.92	-661.33	-7940.39	15560.32	7026.79	-499.12	-7932.57	117.05	182.31	714.78	0.25	FA	
15620.00†	6943.50	-660.36	-8040.39	15660.24	7026.60	-494.21	-8032.37	116.55	185.94	725.92	0.26	FA	
15720.00†	6943.08	-659.40	-8140.38	15760.17	7026.40	-489.30	-8132.17	116.08	189.59	736.98	0.26	FA	
15820.00†	6942.66	-658.44	-8240.38	15860.09	7026.20	-484.39	-8231.98	115.62	193.24	747.96	0.26	FA	
15920.00†	6942.24	-657.47	-8340.37	15960.01	7026.00	-479.47	-8331.78	115.19	196.91	758.85	0.26	FA	
16020.00†	6941.81	-656.51	-8440.37	16059.93	7025.81	-474.56	-8431.58	114.76	200.59	769.68	0.26	FA	
16120.00†	6941.39	-655.54	-8540.36	16159.85	7025.61	-469.65	-8531.38	114.36	204.28	780.43	0.26	FA	
16220.00†	6940.97	-654.58	-8640.35	16259.77	7025.41	-464.74	-8631.18	113.96	207.98	791.12	0.26	FA	
16320.00†	6940.55	-653.62	-8740.35	16359.70	7025.22	-459.83	-8730.98	113.58	211.69	801.74	0.26	FA	
16420.00†	6940.13	-652.65	-8840.34	16459.62	7025.02	-454.91	-8830.78	113.22	215.40	812.31	0.26	FA	
16520.00†	6939.71	-651.69	-8940.34	16559.54	7024.82	-450.00	-8930.58	112.86	219.13	822.82	0.27	FA	
16620.00†	6939.28	-650.72	-9040.33	16659.46	7024.62	-445.09	-9030.38	112.52	222.86	833.28	0.27	FA	
16720.00†	6938.86	-649.76	-9140.33	16759.38	7024.43	-440.18	-9130.18	112.19	226.61	843.69	0.27	FA	
16820.00†	6938.44	-648.80	-9240.32	16859.30	7024.23	-435.26	-9229.98	111.87	230.35	854.06	0.27	FA	
16920.00†	6938.02	-647.83	-9340.32	16959.22	7024.03	-430.35	-9329.78	111.56	234.11	864.38	0.27	FA	
17020.00†	6937.60	-646.87	-9440.31	17059.15	7023.84	-425.44	-9429.58	111.26	237.87	874.66	0.27	FA	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 19 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#22 GREELEY-ROTH FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2C-L Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	At Sta	
17120.00†	6937.18	-645.91	-9540.31	17159.07	7023.64	-420.53	-9529.38	110.97	241.64	884.90	0.27	F	
17161.54	6937.00	-645.51	-9581.84	17200.58	7023.56	-418.49	-9570.84	110.85	243.21	889.14	0.27	F	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	20.00	1741.42	12.21	0.00	0.76	37.49
9.625in Casing Surface	20.00	1750.00	1730.00	20.00	1741.42	12.21	0.00	0.76	37.49
8.5in Open Hole	20.00	17483.31	17463.31	20.00	7023.00	12.21	0.00	-117.21	-3003.26

## SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13N-2C-L PWB
1750.00	17483.31	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13N-2C-L PWB





Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 20 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2C-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20') (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 21 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT N 2-16 AWB Offset Wellpath: EX. AUFRECHT N 2-16 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AUFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR) Well: EX. AUFRECHT N 2-16 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	59.00	20.00	-465.31	-5468.86	-94.86	5488.62	50.29	111.25	PASS	
120.00†	120.00	0.00	0.00	159.00	120.00	-465.31	-5468.86	-94.86	5488.62	50.93	109.83	PASS	
220.00†	220.00	0.00	0.00	259.00	220.00	-465.31	-5468.86	-94.86	5488.62	52.29	106.91	PASS	
320.00†	320.00	0.00	0.00	359.00	320.00	-465.31	-5468.86	-94.86	5488.62	54.30	102.88	PASS	
420.00†	420.00	0.00	0.00	459.00	420.00	-465.31	-5468.86	-94.86	5488.62	56.84	98.21	PASS	
520.00†	520.00	0.00	0.00	559.00	520.00	-465.31	-5468.86	-94.86	5488.62	59.79	93.28	PASS	
620.00†	620.00	0.00	0.00	659.00	620.00	-465.31	-5468.86	-94.86	5488.62	63.06	88.37	PASS	
700.00	700.00	0.00	0.00	739.00	700.00	-465.31	-5468.86	-94.86	5488.62	65.85	84.57	PASS	
720.00†	720.00	-0.04	0.06	759.00	720.00	-465.31	-5468.86	141.84	5488.67	66.57	83.65	PASS	
820.00†	819.96	-1.38	2.10	858.96	819.96	-465.31	-5468.86	141.83	5490.59	70.28	79.20	PASS	
920.00†	919.78	-4.64	7.06	958.78	919.78	-465.31	-5468.86	141.81	5495.26	74.15	75.08	PASS	
1020.00†	1019.33	-9.80	14.92	1058.33	1019.33	-465.31	-5468.86	141.78	5502.67	78.12	71.30	PASS	
1120.00†	1118.50	-16.87	25.69	1157.50	1118.50	-465.31	-5468.86	141.73	5512.81	82.17	67.87	PASS	
1200.18	1197.64	-23.91	36.40	1236.64	1197.64	-465.31	-5468.86	141.69	5522.93	85.46	65.35	PASS	
1220.00†	1217.16	-25.80	39.28	1256.16	1217.16	-465.31	-5468.86	141.71	5525.64	86.27	64.76	PASS	
1320.00†	1315.64	-35.34	53.80	1354.64	1315.64	-465.31	-5468.86	141.82	5539.37	90.39	61.93	PASS	
1420.00†	1414.12	-44.88	68.32	1453.12	1414.12	-465.31	-5468.86	141.93	5553.11	94.56	59.32	PASS	
1520.00†	1512.60	-54.42	82.84	1551.60	1512.60	-465.31	-5468.86	142.04	5566.88	98.77	56.91	PASS	
1620.00†	1611.08	-63.95	97.35	1650.08	1611.08	-465.31	-5468.86	142.15	5580.66	103.02	54.67	PASS	
1720.00†	1709.56	-73.49	111.87	1748.56	1709.56	-465.31	-5468.86	142.26	5594.47	107.30	52.60	PASS	
1820.00†	1808.04	-83.03	126.39	1847.04	1808.04	-465.31	-5468.86	142.37	5608.29	111.32	50.70	PASS	
1920.00†	1906.52	-92.56	140.91	1945.52	1906.52	-465.31	-5468.86	142.47	5622.14	115.58	48.93	PASS	
2020.00†	2005.00	-102.10	155.43	2044.00	2005.00	-465.31	-5468.86	142.58	5636.00	119.88	47.29	PASS	
2120.00†	2103.48	-111.64	169.95	2142.48	2103.48	-465.31	-5468.86	142.69	5649.88	124.20	45.75	PASS	
2220.00†	2201.96	-121.18	184.46	2240.96	2201.96	-465.31	-5468.86	142.79	5663.79	128.55	44.30	PASS	
2320.00†	2300.44	-130.71	198.98	2339.44	2300.44	-465.31	-5468.86	142.90	5677.71	132.92	42.94	PASS	
2420.00†	2398.92	-140.25	213.50	2437.92	2398.92	-465.31	-5468.86	143.00	5691.65	137.31	41.66	PASS	
2520.00†	2497.40	-149.79	228.02	2536.40	2497.40	-465.31	-5468.86	143.11	5705.61	141.72	40.46	PASS	
2620.00†	2595.88	-159.33	242.54	2634.88	2595.88	-465.31	-5468.86	143.21	5719.59	146.15	39.32	PASS	
2720.00†	2694.36	-168.86	257.06	2733.36	2694.36	-465.31	-5468.86	143.32	5733.58	150.60	38.25	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 22 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963°FSL & 294°FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AURFRECHT N 2-16 (660°FSL & 660°FEL, CODL/PR) Well: EX. AURFRECHT N 2-16 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2831.84	2792.84	-465.31	-5468.86	143.42	5747.60	155.07	37.23	PASS
2920.00†	2891.32	-187.94	286.08	2930.32	2891.32	-465.31	-5468.86	143.52	5761.63	159.56	36.27	PASS
3020.00†	2989.80	-197.48	300.61	3028.80	2989.80	-465.31	-5468.86	143.62	5775.68	164.06	35.35	PASS
3120.00†	3088.28	-207.01	315.13	3127.28	3088.28	-465.31	-5468.86	143.72	5789.73	168.58	34.49	PASS
3220.00†	3186.76	-216.55	329.65	3225.76	3186.76	-465.31	-5468.86	143.82	5803.84	173.11	33.66	PASS
3320.00†	3285.24	-226.09	344.17	3324.24	3285.24	-465.31	-5468.86	143.93	5817.95	177.65	32.88	PASS
3420.00†	3383.71	-235.62	358.69	3422.71	3383.71	-465.31	-5468.86	144.03	5832.07	182.21	32.13	PASS
3520.00†	3482.19	-245.16	373.20	3521.19	3482.19	-465.31	-5468.86	144.13	5846.21	186.79	31.41	PASS
3620.00†	3580.67	-254.70	387.72	3619.67	3580.67	-465.31	-5468.86	144.22	5860.37	191.38	30.73	PASS
3720.00†	3679.15	-264.24	402.24	3718.15	3679.15	-465.31	-5468.86	144.32	5874.54	195.98	30.08	PASS
3820.00†	3777.63	-273.77	416.76	3816.63	3777.63	-465.31	-5468.86	144.42	5888.73	200.59	29.46	PASS
3920.00†	3876.11	-283.31	431.28	3915.11	3876.11	-465.31	-5468.86	144.52	5902.94	205.21	28.86	PASS
4020.00†	3974.59	-292.85	445.80	4013.59	3974.59	-465.31	-5468.86	144.62	5917.17	209.84	28.29	PASS
4120.00†	4073.07	-302.39	460.32	4112.07	4073.07	-465.31	-5468.86	144.71	5931.41	214.49	27.74	PASS
4220.00†	4171.55	-311.92	474.83	4210.55	4171.55	-465.31	-5468.86	144.81	5945.67	219.14	27.22	PASS
4320.00†	4270.03	-321.46	489.35	4309.03	4270.03	-465.31	-5468.86	144.90	5959.95	223.81	26.71	PASS
4420.00†	4368.51	-331.00	503.87	4407.51	4368.51	-465.31	-5468.86	145.00	5974.24	228.48	26.23	PASS
4520.00†	4466.99	-340.53	518.39	4505.99	4466.99	-465.31	-5468.86	145.09	5988.55	233.17	25.76	PASS
4620.00†	4565.47	-350.07	532.91	4604.47	4565.47	-465.31	-5468.86	145.19	6002.87	237.86	25.31	PASS
4720.00†	4663.95	-359.61	547.43	4702.95	4663.95	-465.31	-5468.86	145.28	6017.21	242.56	24.88	PASS
4820.00†	4762.43	-369.15	561.94	4801.43	4762.43	-465.31	-5468.86	145.38	6031.57	247.27	24.46	PASS
4920.00†	4860.91	-378.68	576.46	4899.91	4860.91	-465.31	-5468.86	145.47	6045.94	251.99	24.06	PASS
5020.00†	4959.39	-388.22	590.98	4998.39	4959.39	-465.31	-5468.86	145.56	6060.33	256.71	23.67	PASS
5120.00†	5057.87	-397.76	605.50	5096.87	5057.87	-465.31	-5468.86	145.65	6074.73	261.45	23.30	PASS
5220.00†	5156.35	-407.30	620.02	5195.35	5156.35	-465.31	-5468.86	145.75	6089.15	266.19	22.93	PASS
5320.00†	5254.83	-416.83	634.54	5293.83	5254.83	-465.31	-5468.86	145.84	6103.59	270.94	22.58	PASS
5420.00†	5353.31	-426.37	649.06	5392.31	5353.31	-465.31	-5468.86	145.93	6118.04	275.69	22.25	PASS
5520.00†	5451.79	-435.91	663.57	5490.79	5451.79	-465.31	-5468.86	146.02	6132.50	280.45	21.92	PASS
5620.00†	5550.27	-445.45	678.08	5589.27	5550.27	-465.31	-5468.86	146.11	6146.98	285.22	21.60	PASS
5720.00†	5648.75	-454.98	692.61	5687.75	5648.75	-465.31	-5468.86	146.20	6161.48	289.99	21.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 23 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AURFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR) Well: EX. AURFRECHT N 2-16 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
5820.00†	5747.23	-464.52	707.13	5786.23	5747.23	-465.31	-5468.86	146.29	6175.99	294.77	21.00	PASS		
5920.00†	5845.71	-474.06	721.63	5884.71	5845.71	-465.31	-5468.86	146.38	6190.51	299.56	20.71	PASS		
6020.00†	5944.19	-483.59	736.17	5983.19	5944.19	-465.31	-5468.86	146.47	6205.05	304.35	20.43	PASS		
6120.00†	6042.67	-493.13	750.68	6081.67	6042.67	-465.31	-5468.86	146.55	6219.60	309.14	20.16	PASS		
6220.00†	6141.15	-502.67	765.20	6180.15	6141.15	-465.31	-5468.86	146.64	6234.17	313.94	19.90	PASS		
6320.00†	6239.63	-512.21	779.72	6278.63	6239.63	-465.31	-5468.86	146.73	6248.75	318.75	19.65	PASS		
6333.38	6252.80	-513.48	781.66	6291.80	6252.80	-465.31	-5468.86	146.74	6250.71	319.39	19.61	PASS		
6420.00†	6338.69	-521.84	788.38	6377.69	6338.69	-465.31	-5468.86	96.15	6257.49	323.62	19.38	PASS		
6520.00†	6437.87	-531.58	781.50	6476.87	6437.87	-465.31	-5468.86	34.51	6250.71	328.85	19.05	PASS		
6620.00†	6534.75	-541.19	759.12	6573.75	6534.75	-465.31	-5468.86	19.13	6228.44	334.39	18.66	PASS		
6720.00†	6626.95	-550.44	721.78	6665.95	6626.95	-465.31	-5468.86	13.64	6191.22	339.48	18.27	PASS		
6820.00†	6712.19	-559.10	670.41	6751.19	6712.19	-465.31	-5468.86	11.07	6139.98	344.05	17.88	PASS		
6920.00†	6788.37	-566.95	606.27	6827.37	6788.37	-465.31	-5468.86	9.78	6075.97	348.05	17.49	PASS		
7020.00†	6853.62	-573.80	530.93	6892.62	6853.62	-465.31	-5468.86	9.26	6000.77	351.39	17.11	PASS		
7120.00†	6906.33	-579.49	446.27	6945.33	6906.33	-465.31	-5468.86	9.43	5916.23	354.03	16.74	PASS		
7220.00†	6945.20	-583.87	354.35	6984.20	6945.20	-465.31	-5468.86	10.63	5824.41	355.92	16.40	PASS		
7320.00†	6969.29	-586.83	257.44	7008.29	6969.29	-465.31	-5468.86	14.92	5727.59	357.06	16.07	PASS		
7420.00†	6977.98	-588.31	157.94	7016.98	6977.98	-465.31	-5468.86	72.81	5628.14	357.47	15.77	PASS		
7428.43	6978.00	-588.37	149.50	7017.00	6978.00	-465.31	-5468.86	98.61	5619.71	357.47	15.75	PASS		
7478.43	6977.79	-588.66	99.50	7016.79	6977.79	-465.31	-5468.86	98.53	5569.73	357.46	15.61	PASS		
7520.00†	6977.61	-589.21	57.94	7016.61	6977.61	-465.31	-5468.86	95.61	5528.19	357.46	15.49	PASS		
7536.58	6977.55	-589.59	41.36	7016.55	6977.55	-465.31	-5468.86	94.93	5511.62	357.45	15.45	PASS		
7620.00†	6977.19	-591.78	-42.02	7016.19	6977.19	-465.31	-5468.86	94.86	5428.31	357.45	15.21	PASS		
7720.00†	6976.77	-594.39	-141.99	7015.77	6976.77	-465.31	-5468.86	94.77	5328.43	357.44	14.93	PASS		
7820.00†	6976.35	-597.01	-241.95	7015.35	6976.35	-465.31	-5468.86	94.68	5228.56	357.43	14.66	PASS		
7920.00†	6975.93	-599.63	-341.92	7014.93	6975.93	-465.31	-5468.86	94.59	5128.70	357.43	14.38	PASS		
8020.00†	6975.51	-602.25	-441.88	7014.51	6975.51	-465.31	-5468.86	94.50	5028.84	357.43	14.10	PASS		
8120.00†	6975.09	-604.86	-541.85	7014.09	6975.09	-465.31	-5468.86	94.41	4928.98	357.44	13.82	PASS		
8220.00†	6974.67	-607.48	-641.81	7013.67	6974.67	-465.31	-5468.86	94.32	4829.14	357.45	13.53	PASS		
8320.00†	6974.25	-610.10	-741.78	7013.25	6974.25	-465.31	-5468.86	94.23	4729.30	357.47	13.25	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 24 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AURFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR) Well: EX. AURFRECHT N 2-16 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7012.83	6973.83	-465.31	-5468.86	94.14	4629.46	357.49	12.97	PASS	
8520.00†	6973.41	-615.33	-941.71	7012.41	6973.41	-465.31	-5468.86	94.05	4529.63	357.52	12.69	PASS	
8620.00†	6972.99	-617.95	-1041.67	7011.99	6972.99	-465.31	-5468.86	93.96	4429.81	357.55	12.41	PASS	
8720.00†	6972.57	-620.57	-1141.64	7011.57	6972.57	-465.31	-5468.86	93.87	4330.00	357.59	12.13	PASS	
8820.00†	6972.15	-623.19	-1241.60	7011.15	6972.15	-465.31	-5468.86	93.78	4230.20	357.63	11.85	PASS	
8920.00†	6971.73	-625.81	-1341.57	7010.73	6971.73	-465.31	-5468.86	93.70	4130.41	357.69	11.57	PASS	
9020.00†	6971.31	-628.42	-1441.53	7010.31	6971.31	-465.31	-5468.86	93.61	4030.63	357.75	11.29	PASS	
9120.00†	6970.88	-631.04	-1541.50	7009.88	6970.88	-465.31	-5468.86	93.52	3930.86	357.82	11.01	PASS	
9220.00†	6970.46	-633.66	-1641.46	7009.46	6970.46	-465.31	-5468.86	93.43	3831.10	357.91	10.72	PASS	
9320.00†	6970.04	-636.28	-1741.43	7009.04	6970.04	-465.31	-5468.86	93.34	3731.35	358.00	10.44	PASS	
9420.00†	6969.62	-638.89	-1841.39	7008.62	6969.62	-465.31	-5468.86	93.25	3631.62	358.11	10.16	PASS	
9520.00†	6969.20	-641.51	-1941.36	7008.20	6969.20	-465.31	-5468.86	93.16	3531.90	358.23	9.88	PASS	
9620.00†	6968.78	-644.13	-2041.32	7007.78	6968.78	-465.31	-5468.86	93.07	3432.20	358.37	9.59	PASS	
9720.00†	6968.36	-646.75	-2141.29	7007.36	6968.36	-465.31	-5468.86	92.98	3332.51	358.53	9.31	PASS	
9820.00†	6967.94	-649.36	-2241.25	7006.94	6967.94	-465.31	-5468.86	92.89	3232.85	358.70	9.03	PASS	
9920.00†	6967.52	-651.98	-2341.22	7006.52	6967.52	-465.31	-5468.86	92.80	3133.21	358.90	8.75	PASS	
10020.00†	6967.10	-654.60	-2441.18	7006.10	6967.10	-465.31	-5468.86	92.71	3033.59	359.13	8.46	PASS	
10120.00†	6966.68	-657.22	-2541.15	7005.68	6966.68	-465.31	-5468.86	92.62	2933.99	359.39	8.18	PASS	
10220.00†	6966.26	-659.84	-2641.11	7005.26	6966.26	-465.31	-5468.86	92.53	2834.43	359.68	7.89	PASS	
10320.00†	6965.84	-662.45	-2741.08	7004.84	6965.84	-465.31	-5468.86	92.44	2734.90	360.01	7.61	PASS	
10420.00†	6965.42	-665.07	-2841.04	7004.42	6965.42	-465.31	-5468.86	92.35	2635.40	360.39	7.33	PASS	
10520.00†	6965.00	-667.69	-2941.01	7004.00	6965.00	-465.31	-5468.86	92.26	2535.94	360.82	7.04	PASS	
10620.00†	6964.58	-670.31	-3040.97	7003.58	6964.58	-465.31	-5468.86	92.17	2436.53	361.32	6.75	PASS	
10720.00†	6964.15	-672.92	-3140.93	7003.15	6964.15	-465.31	-5468.86	92.08	2337.16	361.88	6.47	PASS	
10820.00†	6963.73	-675.54	-3240.90	7002.73	6963.73	-465.31	-5468.86	91.99	2237.85	362.53	6.18	PASS	
10920.00†	6963.31	-678.16	-3340.86	7002.31	6963.31	-465.31	-5468.86	91.90	2138.61	363.27	5.90	PASS	
11020.00†	6962.89	-680.78	-3440.83	7001.89	6962.89	-465.31	-5468.86	91.81	2039.44	364.14	5.61	PASS	
11120.00†	6962.47	-683.39	-3540.79	7001.47	6962.47	-465.31	-5468.86	91.72	1940.36	365.14	5.32	PASS	
11220.00†	6962.05	-686.01	-3640.76	7001.05	6962.05	-465.31	-5468.86	91.64	1841.37	366.30	5.03	PASS	
11320.00†	6961.63	-688.63	-3740.72	7000.63	6961.63	-465.31	-5468.86	91.55	1742.50	367.67	4.75	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 25 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AUFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR) Well: EX. AUFRECHT N 2-16 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	7000.21	6961.21	-465.31	-5468.86	91.46	1643.77	369.28	4.46	PASS	
11520.00†	6960.79	-693.86	-3940.65	6999.79	6960.79	-465.31	-5468.86	91.37	1545.20	371.18	4.17	PASS	
11620.00†	6960.37	-696.48	-4040.62	6999.37	6960.37	-465.31	-5468.86	91.28	1446.83	373.44	3.88	PASS	
11636.58	6960.30	-696.92	-4057.20	6999.30	6960.30	-465.31	-5468.86	91.26	1430.53	373.85	3.83	PASS	
11720.00†	6959.95	-697.89	-4140.60	6998.95	6959.95	-465.31	-5468.86	91.40	1348.46	375.97	3.59	PASS	
11739.19	6959.87	-697.77	-4159.80	6998.87	6959.87	-465.31	-5468.86	91.44	1329.54	376.45	3.54	PASS	
11820.00†	6959.53	-696.99	-4240.60	6998.53	6959.53	-465.31	-5468.86	91.35	1249.92	378.65	3.31	PASS	
11920.00†	6959.10	-696.02	-4340.59	6998.10	6959.10	-465.31	-5468.86	91.24	1151.61	381.87	3.02	PASS	
12020.00†	6958.68	-695.06	-4440.59	6997.68	6958.68	-465.31	-5468.86	91.13	1053.62	385.83	2.73	PASS	
12120.00†	6958.26	-694.10	-4540.58	6997.26	6958.26	-465.31	-5468.86	91.02	956.05	390.74	2.45	PASS	
12220.00†	6957.84	-693.13	-4640.58	6996.84	6957.84	-465.31	-5468.86	90.91	859.04	396.93	2.17	PASS	
12320.00†	6957.42	-692.17	-4740.57	6996.42	6957.42	-465.31	-5468.86	90.80	762.80	404.88	1.89	PASS	
12420.00†	6957.00	-691.20	-4840.57	6996.00	6957.00	-465.31	-5468.86	90.69	667.67	415.29	1.61	PASS	
12520.00†	6956.57	-690.24	-4940.56	6995.57	6956.57	-465.31	-5468.86	90.58	574.19	429.25	1.34	PASS	
12620.00†	6956.15	-689.28	-5040.55	6995.15	6956.15	-465.31	-5468.86	90.47	483.33	448.45	1.08	PASS	
12720.00†	6955.73	-688.31	-5140.55	6994.73	6955.73	-465.31	-5468.86	90.36	396.88	475.44	0.83	FAIL	
12820.00†	6955.31	-687.35	-5240.54	6994.31	6955.31	-465.31	-5468.86	90.25	318.48	513.23	0.62	FAIL	
12920.00†	6954.89	-686.38	-5340.54	6993.89	6954.89	-465.31	-5468.86	90.14	255.62	561.01	0.45	FAIL	
13020.00†	6954.47	-685.42	-5440.53	6993.47	6954.47	-465.31	-5468.86	90.03	221.93	598.53	0.37	FAIL	
13050.58†	6954.34	-685.13	-5471.11	6993.33	6954.33	-465.31	-5468.86	90.00	219.83	601.56	0.36	FAIL	
13051.12†	6954.33	-685.12	-5471.65	6993.33	6954.33	-465.31	-5468.86	90.00	219.83	601.56	0.36	FAIL	
13120.00†	6954.04	-684.46	-5540.53	6993.04	6954.04	-465.31	-5468.86	89.92	230.57	589.31	0.39	FAIL	
13220.00†	6953.62	-683.49	-5640.52	6992.62	6953.62	-465.31	-5468.86	89.81	277.62	545.01	0.51	FAIL	
13320.00†	6953.20	-682.53	-5740.52	6992.20	6953.20	-465.31	-5468.86	89.70	347.82	501.14	0.69	FAIL	
13420.00†	6952.78	-681.57	-5840.51	6991.78	6952.78	-465.31	-5468.86	89.59	429.99	468.29	0.92	FAIL	
13520.00†	6952.36	-680.60	-5940.50	6991.36	6952.36	-465.31	-5468.86	89.48	518.46	444.90	1.17	PASS	
13620.00†	6951.94	-679.64	-6040.50	6990.94	6951.94	-465.31	-5468.86	89.37	610.50	428.08	1.43	PASS	
13720.00†	6951.51	-678.67	-6140.49	6990.51	6951.51	-465.31	-5468.86	89.26	704.71	415.69	1.70	PASS	
13820.00†	6951.09	-677.71	-6240.49	6990.09	6951.09	-465.31	-5468.86	89.15	800.33	406.35	1.97	PASS	
13920.00†	6950.67	-676.75	-6340.48	6989.67	6950.67	-465.31	-5468.86	89.04	896.90	399.14	2.25	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 26 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP													
Facility: SEC.02-T05N-R67W Slot: SLOT#06 EX. AUFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR)				Well: EX. AUFRECHT N 2-16		Threshold Value=1.00		† = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14020.00†	6950.25	-675.78	-6440.48	6989.25	6950.25	-465.31	-5468.86	88.93	994.15	393.46	2.53	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7813.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7813>	EX. AURFRECHT N 2-16 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. AURFRECHT N 2-16 AWB Offset Wellpath: EX. AURFRECHT N 2-16 AWP	
MD Reference: Rig on SLOT#-6 EX. AUFRECHT N 2-16 (660'FSL & 660'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 27 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWP Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-34 Threshold Value=1.00 † = Interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	73.00	20.00	-354.56	-8165.39	-92.49	8173.09	50.32	165.58	PASS	
120.00†	120.00	0.00	0.00	173.00	120.00	-354.56	-8165.39	-92.49	8173.09	51.06	163.13	PASS	
220.00†	220.00	0.00	0.00	273.00	220.00	-354.56	-8165.39	-92.49	8173.09	52.52	158.50	PASS	
320.00†	320.00	0.00	0.00	373.00	320.00	-354.56	-8165.39	-92.49	8173.09	54.62	152.31	PASS	
420.00†	420.00	0.00	0.00	473.00	420.00	-354.56	-8165.39	-92.49	8173.09	57.22	145.26	PASS	
520.00†	520.00	0.00	0.00	573.00	520.00	-354.56	-8165.39	-92.49	8173.09	60.22	137.90	PASS	
620.00†	620.00	0.00	0.00	673.00	620.00	-354.56	-8165.39	-92.49	8173.09	63.53	130.61	PASS	
700.00	700.00	0.00	0.00	753.00	700.00	-354.56	-8165.39	-92.49	8173.09	66.35	124.98	PASS	
720.00†	720.00	-0.04	0.06	773.00	720.00	-354.56	-8165.39	144.21	8173.14	67.07	123.62	PASS	
820.00†	819.96	-1.38	2.10	872.96	819.96	-354.56	-8165.39	144.20	8175.12	70.80	117.05	PASS	
920.00†	919.78	-4.64	7.06	972.78	919.78	-354.56	-8165.39	144.17	8179.94	74.69	110.94	PASS	
1020.00†	1019.33	-9.80	14.92	1072.33	1019.33	-354.56	-8165.39	144.12	8187.58	78.68	105.34	PASS	
1120.00†	1118.50	-16.87	25.69	1171.50	1118.50	-354.56	-8165.39	144.04	8198.04	82.75	100.23	PASS	
1200.18	1197.64	-23.91	36.40	1250.64	1197.64	-354.56	-8165.39	143.97	8208.46	86.04	96.47	PASS	
1220.00†	1217.16	-25.80	39.28	1270.16	1217.16	-354.56	-8165.39	143.99	8211.26	86.85	95.59	PASS	
1320.00†	1315.64	-35.34	53.80	1368.64	1315.64	-354.56	-8165.39	144.06	8225.39	90.98	91.37	PASS	
1420.00†	1414.12	-44.88	68.32	1467.12	1414.12	-354.56	-8165.39	144.13	8239.53	95.15	87.47	PASS	
1520.00†	1512.60	-54.42	82.84	1565.60	1512.60	-354.56	-8165.39	144.20	8253.69	99.37	83.86	PASS	
1620.00†	1611.08	-63.95	97.35	1664.08	1611.08	-354.56	-8165.39	144.27	8267.85	103.62	80.53	PASS	
1720.00†	1709.56	-73.49	111.87	1762.56	1709.56	-354.56	-8165.39	144.34	8282.03	107.91	77.43	PASS	
1820.00†	1808.04	-83.03	126.39	1861.04	1808.04	-354.56	-8165.39	144.41	8296.23	111.93	74.59	PASS	
1920.00†	1906.52	-92.56	140.91	1959.52	1906.52	-354.56	-8165.39	144.48	8310.43	116.20	71.95	PASS	
2020.00†	2005.00	-102.10	155.43	2058.00	2005.00	-354.56	-8165.39	144.55	8324.65	120.49	69.49	PASS	
2120.00†	2103.48	-111.64	169.95	2156.48	2103.48	-354.56	-8165.39	144.62	8338.88	124.81	67.19	PASS	
2220.00†	2201.96	-121.18	184.46	2254.96	2201.96	-354.56	-8165.39	144.69	8353.12	129.16	65.02	PASS	
2320.00†	2300.44	-130.71	198.98	2353.44	2300.44	-354.56	-8165.39	144.75	8367.37	133.53	62.99	PASS	
2420.00†	2398.92	-140.25	213.50	2451.92	2398.92	-354.56	-8165.39	144.82	8381.63	137.92	61.08	PASS	
2520.00†	2497.40	-149.79	228.02	2550.40	2497.40	-354.56	-8165.39	144.89	8395.91	142.34	59.28	PASS	
2620.00†	2595.88	-159.33	242.54	2648.88	2595.88	-354.56	-8165.39	144.96	8410.20	146.77	57.58	PASS	
2720.00†	2694.36	-168.86	257.06	2747.36	2694.36	-354.56	-8165.39	145.02	8424.49	151.22	55.97	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 28 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWB Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-34 Threshold Value=1.00 † = Interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2845.84	2792.84	-354.56	-8165.39	145.09	8438.81	155.69	54.45	PASS
2920.00†	2891.32	-187.94	286.09	2944.32	2891.32	-354.56	-8165.39	145.16	8453.13	160.17	53.00	PASS
3020.00†	2989.80	-197.48	300.61	3042.80	2989.80	-354.56	-8165.39	145.23	8467.46	164.68	51.64	PASS
3120.00†	3088.28	-207.01	315.13	3141.28	3088.28	-354.56	-8165.39	145.29	8481.81	169.19	50.34	PASS
3220.00†	3186.76	-216.55	329.65	3239.76	3186.76	-354.56	-8165.39	145.36	8496.16	173.73	49.10	PASS
3320.00†	3285.24	-226.09	344.17	3338.24	3285.24	-354.56	-8165.39	145.43	8510.53	178.27	47.93	PASS
3420.00†	3383.71	-235.62	358.69	3436.71	3383.71	-354.56	-8165.39	145.49	8524.91	182.83	46.80	PASS
3520.00†	3482.19	-245.16	373.20	3535.19	3482.19	-354.56	-8165.39	145.56	8539.30	187.41	45.73	PASS
3620.00†	3580.67	-254.70	387.72	3633.67	3580.67	-354.56	-8165.39	145.62	8553.70	191.99	44.71	PASS
3720.00†	3679.15	-264.24	402.24	3732.15	3679.15	-354.56	-8165.39	145.69	8568.11	196.59	43.74	PASS
3820.00†	3777.63	-273.77	416.76	3830.63	3777.63	-354.56	-8165.39	145.75	8582.53	201.20	42.80	PASS
3920.00†	3876.11	-283.31	431.28	3929.11	3876.11	-354.56	-8165.39	145.82	8596.96	205.82	41.91	PASS
4020.00†	3974.59	-292.85	445.80	4027.59	3974.59	-354.56	-8165.39	145.88	8611.41	210.46	41.05	PASS
4120.00†	4073.07	-302.39	460.32	4126.07	4073.07	-354.56	-8165.39	145.95	8625.86	215.10	40.23	PASS
4220.00†	4171.55	-311.92	474.83	4224.55	4171.55	-354.56	-8165.39	146.01	8640.33	219.76	39.44	PASS
4320.00†	4270.03	-321.46	489.35	4323.03	4270.03	-354.56	-8165.39	146.07	8654.81	224.42	38.68	PASS
4420.00†	4368.51	-331.00	503.87	4421.51	4368.51	-354.56	-8165.39	146.14	8669.29	229.10	37.96	PASS
4520.00†	4466.99	-340.53	518.39	4519.99	4466.99	-354.56	-8165.39	146.20	8683.79	233.78	37.25	PASS
4620.00†	4565.47	-350.07	532.91	4618.47	4565.47	-354.56	-8165.39	146.26	8698.30	238.47	36.58	PASS
4720.00†	4663.95	-359.61	547.43	4716.95	4663.95	-354.56	-8165.39	146.33	8712.82	243.17	35.93	PASS
4820.00†	4762.43	-369.15	561.94	4815.43	4762.43	-354.56	-8165.39	146.39	8727.35	247.88	35.31	PASS
4920.00†	4860.91	-378.68	576.46	4913.91	4860.91	-354.56	-8165.39	146.45	8741.89	252.60	34.70	PASS
5020.00†	4959.39	-388.22	590.98	5012.39	4959.39	-354.56	-8165.39	146.52	8756.44	257.33	34.12	PASS
5120.00†	5057.87	-397.76	605.50	5110.87	5057.87	-354.56	-8165.39	146.58	8771.00	262.06	33.56	PASS
5220.00†	5156.35	-407.30	620.02	5209.35	5156.35	-354.56	-8165.39	146.64	8785.57	266.80	33.01	PASS
5320.00†	5254.83	-416.83	634.54	5307.83	5254.83	-354.56	-8165.39	146.70	8800.15	271.55	32.49	PASS
5420.00†	5353.31	-426.37	649.06	5406.31	5353.31	-354.56	-8165.39	146.76	8814.74	276.30	31.98	PASS
5520.00†	5451.79	-435.91	663.57	5504.79	5451.79	-354.56	-8165.39	146.83	8829.34	281.07	31.49	PASS
5620.00†	5550.27	-445.45	678.09	5603.27	5550.27	-354.56	-8165.39	146.89	8843.95	285.83	31.02	PASS
5720.00†	5648.75	-454.98	692.61	5701.75	5648.75	-354.56	-8165.39	146.95	8858.57	290.61	30.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 29 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWP Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR) Well: EX. RUDOLPH 2-34 Threshold Value=1.00 † = Interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
5820.00†	5747.23	-464.52	707.13	5800.23	5747.23	-354.56	-8165.39	147.01	8873.20	295.39	30.11	PASS		
5920.00†	5845.71	-474.06	721.65	5898.71	5845.71	-354.56	-8165.39	147.07	8887.84	300.17	29.68	PASS		
6020.00†	5944.19	-483.59	736.17	5997.19	5944.19	-354.56	-8165.39	147.13	8902.49	304.96	29.26	PASS		
6120.00†	6042.67	-493.13	750.68	6095.67	6042.67	-354.56	-8165.39	147.19	8917.15	309.76	28.85	PASS		
6220.00†	6141.15	-502.67	765.20	6194.15	6141.15	-354.56	-8165.39	147.25	8931.82	314.56	28.46	PASS		
6320.00†	6239.63	-512.21	779.72	6292.63	6239.63	-354.56	-8165.39	147.31	8946.50	319.36	28.07	PASS		
6333.38	6252.80	-513.48	781.66	6305.80	6252.80	-354.56	-8165.39	147.32	8948.47	320.01	28.02	PASS		
6420.00†	6338.69	-521.84	788.38	6391.69	6338.69	-354.56	-8165.39	96.70	8955.33	324.24	27.68	PASS		
6520.00†	6437.87	-531.58	781.50	6490.87	6437.87	-354.56	-8165.39	35.04	8948.64	329.47	27.22	PASS		
6620.00†	6534.75	-541.19	759.12	6587.75	6534.75	-354.56	-8165.39	19.65	8926.46	335.02	26.70	PASS		
6720.00†	6626.95	-550.44	721.78	6679.95	6626.95	-354.56	-8165.39	14.17	8889.33	340.11	26.19	PASS		
6820.00†	6712.19	-559.10	670.41	6765.19	6712.19	-354.56	-8165.39	11.62	8838.17	344.69	25.69	PASS		
6920.00†	6788.37	-566.95	606.27	6841.37	6788.37	-354.56	-8165.39	10.37	8774.23	348.68	25.21	PASS		
7020.00†	6853.62	-573.80	530.93	6906.62	6853.62	-354.56	-8165.39	9.94	8699.09	352.03	24.76	PASS		
7120.00†	6906.33	-579.49	446.27	6959.33	6906.33	-354.56	-8165.39	10.26	8614.60	354.66	24.34	PASS		
7220.00†	6945.20	-583.87	354.35	6998.20	6945.20	-354.56	-8165.39	11.77	8522.83	356.55	23.95	PASS		
7320.00†	6969.29	-586.83	257.44	7022.29	6969.29	-354.56	-8165.39	16.97	8426.04	357.70	23.60	PASS		
7420.00†	6977.98	-588.31	157.94	7030.98	6977.98	-354.56	-8165.39	75.71	8326.61	358.10	23.30	PASS		
7428.43	6978.00	-588.37	149.50	7031.00	6978.00	-354.56	-8165.39	97.05	8318.18	358.11	23.27	PASS		
7478.43	6977.79	-588.66	99.50	7030.79	6977.79	-354.56	-8165.39	97.01	8268.21	358.10	23.13	PASS		
7520.00†	6977.61	-589.21	57.94	7030.61	6977.61	-354.56	-8165.39	94.91	8226.68	358.09	23.02	PASS		
7536.58	6977.55	-589.59	41.36	7030.55	6977.55	-354.56	-8165.39	94.38	8210.12	358.09	22.97	PASS		
7620.00†	6977.19	-591.78	-42.02	7030.19	6977.19	-354.56	-8165.39	94.34	8126.83	358.08	22.74	PASS		
7720.00†	6976.77	-594.39	-141.99	7029.77	6976.77	-354.56	-8165.39	94.29	8026.99	358.08	22.46	PASS		
7820.00†	6976.35	-597.01	-241.95	7029.35	6976.35	-354.56	-8165.39	94.23	7927.15	358.07	22.18	PASS		
7920.00†	6975.93	-599.63	-341.92	7028.93	6975.93	-354.56	-8165.39	94.18	7827.31	358.07	21.90	PASS		
8020.00†	6975.51	-602.25	-441.88	7028.51	6975.51	-354.56	-8165.39	94.13	7727.48	358.08	21.62	PASS		
8120.00†	6975.09	-604.86	-541.85	7028.09	6975.09	-354.56	-8165.39	94.07	7627.65	358.09	21.34	PASS		
8220.00†	6974.67	-607.48	-641.81	7027.67	6974.67	-354.56	-8165.39	94.02	7527.83	358.10	21.06	PASS		
8320.00†	6974.25	-610.10	-741.78	7027.25	6974.25	-354.56	-8165.39	93.97	7428.01	358.12	20.78	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 30 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWP Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W				Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR)				Well: EX. RUDOLPH 2-34		Threshold Value=1.00 † = Interpolated/extrapolated station			
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7026.83	6973.83	-354.56	-8165.39	93.91	7328.20	358.14	20.50	PASS	
8520.00†	6973.41	-615.33	-941.71	7026.41	6973.41	-354.56	-8165.39	93.86	7228.39	358.17	20.22	PASS	
8620.00†	6972.99	-617.95	-1041.67	7025.99	6972.99	-354.56	-8165.39	93.81	7128.59	358.20	19.94	PASS	
8720.00†	6972.57	-620.57	-1141.64	7025.57	6972.57	-354.56	-8165.39	93.75	7028.79	358.23	19.66	PASS	
8820.00†	6972.15	-623.19	-1241.60	7025.15	6972.15	-354.56	-8165.39	93.70	6929.00	358.28	19.38	PASS	
8920.00†	6971.73	-625.81	-1341.57	7024.73	6971.73	-354.56	-8165.39	93.65	6829.21	358.33	19.09	PASS	
9020.00†	6971.31	-628.42	-1441.53	7024.31	6971.31	-354.56	-8165.39	93.59	6729.43	358.38	18.81	PASS	
9120.00†	6970.88	-631.04	-1541.50	7023.88	6970.88	-354.56	-8165.39	93.54	6629.66	358.44	18.53	PASS	
9220.00†	6970.46	-633.66	-1641.46	7023.46	6970.46	-354.56	-8165.39	93.49	6529.90	358.51	18.25	PASS	
9320.00†	6970.04	-636.28	-1741.43	7023.04	6970.04	-354.56	-8165.39	93.43	6430.14	358.59	17.97	PASS	
9420.00†	6969.62	-638.89	-1841.39	7022.62	6969.62	-354.56	-8165.39	93.38	6330.39	358.67	17.68	PASS	
9520.00†	6969.20	-641.51	-1941.36	7022.20	6969.20	-354.56	-8165.39	93.33	6230.65	358.76	17.40	PASS	
9620.00†	6968.78	-644.13	-2041.32	7021.78	6968.78	-354.56	-8165.39	93.27	6130.91	358.87	17.12	PASS	
9720.00†	6968.36	-646.75	-2141.29	7021.36	6968.36	-354.56	-8165.39	93.22	6031.19	358.98	16.83	PASS	
9820.00†	6967.94	-649.36	-2241.25	7020.94	6967.94	-354.56	-8165.39	93.17	5931.47	359.10	16.55	PASS	
9920.00†	6967.52	-651.98	-2341.22	7020.52	6967.52	-354.56	-8165.39	93.11	5831.76	359.23	16.26	PASS	
10020.00†	6967.10	-654.60	-2441.18	7020.10	6967.10	-354.56	-8165.39	93.06	5732.07	359.37	15.98	PASS	
10120.00†	6966.68	-657.22	-2541.15	7019.68	6966.68	-354.56	-8165.39	93.01	5632.38	359.53	15.69	PASS	
10220.00†	6966.26	-659.84	-2641.11	7019.26	6966.26	-354.56	-8165.39	92.95	5532.71	359.70	15.41	PASS	
10320.00†	6965.84	-662.45	-2741.08	7018.84	6965.84	-354.56	-8165.39	92.90	5433.05	359.88	15.12	PASS	
10420.00†	6965.42	-665.07	-2841.04	7018.42	6965.42	-354.56	-8165.39	92.85	5333.40	360.08	14.84	PASS	
10520.00†	6965.00	-667.69	-2941.01	7018.00	6965.00	-354.56	-8165.39	92.79	5233.76	360.30	14.55	PASS	
10620.00†	6964.58	-670.31	-3040.97	7017.58	6964.58	-354.56	-8165.39	92.74	5134.14	360.53	14.27	PASS	
10720.00†	6964.15	-672.92	-3140.93	7017.15	6964.15	-354.56	-8165.39	92.69	5034.53	360.79	13.98	PASS	
10820.00†	6963.73	-675.54	-3240.90	7016.73	6963.73	-354.56	-8165.39	92.63	4934.94	361.06	13.69	PASS	
10920.00†	6963.31	-678.16	-3340.86	7016.31	6963.31	-354.56	-8165.39	92.58	4835.37	361.36	13.41	PASS	
11020.00†	6962.89	-680.78	-3440.83	7015.89	6962.89	-354.56	-8165.39	92.52	4735.81	361.68	13.12	PASS	
11120.00†	6962.47	-683.39	-3540.79	7015.47	6962.47	-354.56	-8165.39	92.47	4636.27	362.02	12.83	PASS	
11220.00†	6962.05	-686.01	-3640.76	7015.05	6962.05	-354.56	-8165.39	92.42	4536.76	362.40	12.54	PASS	
11320.00†	6961.63	-688.63	-3740.72	7014.63	6961.63	-354.56	-8165.39	92.36	4437.26	362.80	12.25	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 31 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWP Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR)						Well: EX. RUDOLPH 2-34		Threshold Value=1.00 † = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11420.00†	6961.21	-691.25	-3840.69	7014.21	6961.21	-354.56	-8165.39	92.31	4337.79	363.24	11.96	PASS
11520.00†	6960.79	-693.86	-3940.65	7013.79	6960.79	-354.56	-8165.39	92.26	4238.34	363.71	11.67	PASS
11620.00†	6960.37	-696.48	-4040.62	7013.37	6960.37	-354.56	-8165.39	92.20	4138.92	364.22	11.38	PASS
11636.58	6960.30	-696.92	-4057.20	7013.30	6960.30	-354.56	-8165.39	92.20	4122.43	364.31	11.34	PASS
11720.00†	6959.95	-697.89	-4140.60	7012.95	6959.95	-354.56	-8165.39	92.93	4039.40	364.72	11.09	PASS
11739.19	6959.87	-697.77	-4159.80	7012.87	6959.87	-354.56	-8165.39	93.18	4020.27	364.80	11.04	PASS
11820.00†	6959.53	-696.99	-4240.60	7012.53	6959.53	-354.56	-8165.39	93.11	3939.70	365.14	10.81	PASS
11920.00†	6959.10	-696.02	-4340.59	7012.10	6959.10	-354.56	-8165.39	93.03	3840.01	365.58	10.52	PASS
12020.00†	6958.68	-695.06	-4440.59	7011.68	6958.68	-354.56	-8165.39	92.96	3740.33	366.05	10.24	PASS
12120.00†	6958.26	-694.10	-4540.58	7011.26	6958.26	-354.56	-8165.39	92.88	3640.68	366.57	9.95	PASS
12220.00†	6957.84	-693.13	-4640.58	7010.84	6957.84	-354.56	-8165.39	92.80	3541.04	367.12	9.66	PASS
12320.00†	6957.42	-692.17	-4740.57	7010.42	6957.42	-354.56	-8165.39	92.72	3441.42	367.71	9.38	PASS
12420.00†	6957.00	-691.20	-4840.57	7010.00	6957.00	-354.56	-8165.39	92.64	3341.83	368.36	9.09	PASS
12520.00†	6956.57	-690.24	-4940.56	7009.57	6956.57	-354.56	-8165.39	92.56	3242.26	369.05	8.80	PASS
12620.00†	6956.15	-689.28	-5040.55	7009.15	6956.15	-354.56	-8165.39	92.48	3142.71	369.81	8.51	PASS
12720.00†	6955.73	-688.31	-5140.55	7008.73	6955.73	-354.56	-8165.39	92.40	3043.20	370.63	8.22	PASS
12820.00†	6955.31	-687.35	-5240.54	7008.31	6955.31	-354.56	-8165.39	92.32	2943.72	371.53	7.94	PASS
12920.00†	6954.89	-686.38	-5340.54	7007.89	6954.89	-354.56	-8165.39	92.24	2844.28	372.50	7.65	PASS
13020.00†	6954.47	-685.42	-5440.53	7007.47	6954.47	-354.56	-8165.39	92.16	2744.87	373.57	7.36	PASS
13120.00†	6954.04	-684.46	-5540.53	7007.04	6954.04	-354.56	-8165.39	92.08	2645.51	374.75	7.07	PASS
13220.00†	6953.62	-683.49	-5640.52	7006.62	6953.62	-354.56	-8165.39	92.01	2546.21	376.03	6.78	PASS
13320.00†	6953.20	-682.53	-5740.52	7006.20	6953.20	-354.56	-8165.39	91.93	2446.95	377.46	6.49	PASS
13420.00†	6952.78	-681.57	-5840.51	7005.78	6952.78	-354.56	-8165.39	91.85	2347.77	379.03	6.20	PASS
13520.00†	6952.36	-680.60	-5940.50	7005.36	6952.36	-354.56	-8165.39	91.77	2248.65	380.77	5.91	PASS
13620.00†	6951.94	-679.64	-6040.50	7004.94	6951.94	-354.56	-8165.39	91.69	2149.61	382.72	5.63	PASS
13720.00†	6951.51	-678.67	-6140.49	7004.51	6951.51	-354.56	-8165.39	91.61	2050.67	384.89	5.34	PASS
13820.00†	6951.09	-677.71	-6240.49	7004.09	6951.09	-354.56	-8165.39	91.53	1951.84	387.32	5.05	PASS
13920.00†	6950.67	-676.75	-6340.48	7003.67	6950.67	-354.56	-8165.39	91.45	1853.13	390.06	4.76	PASS
14020.00†	6950.25	-675.78	-6440.48	7003.25	6950.25	-354.56	-8165.39	91.37	1754.57	393.17	4.47	PASS
14120.00†	6949.83	-674.82	-6540.47	7002.83	6949.83	-354.56	-8165.39	91.29	1656.18	396.70	4.18	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 32 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-34 AWB Offset Wellpath: EX. RUDOLPH 2-34 AWP

Facility: SEC.02-T05N-R67W				Slot: SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR)				Well: EX. RUDOLPH 2-34		Threshold Value=1.00 † = Interpolated/extrapolated station			
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14220.00†	6949.41	-673.86	-6640.47	7002.41	6949.41	-354.56	-8165.39	91.21	1557.99	400.74	3.89	PASS	
14320.00†	6948.98	-672.89	-6740.46	7001.98	6948.98	-354.56	-8165.39	91.13	1460.06	405.39	3.61	PASS	
14420.00†	6948.56	-671.93	-6840.45	7001.56	6948.56	-354.56	-8165.39	91.05	1362.42	410.78	3.32	PASS	
14520.00†	6948.14	-670.96	-6940.45	7001.14	6948.14	-354.56	-8165.39	90.97	1265.15	417.08	3.04	PASS	
14620.00†	6947.72	-670.00	-7040.44	7000.72	6947.72	-354.56	-8165.39	90.90	1168.34	424.50	2.76	PASS	
14720.00†	6947.30	-669.04	-7140.44	7000.30	6947.30	-354.56	-8165.39	90.82	1072.11	433.34	2.48	PASS	
14820.00†	6946.87	-668.07	-7240.43	6999.87	6946.87	-354.56	-8165.39	90.74	976.65	443.96	2.20	PASS	
14920.00†	6946.45	-667.11	-7340.43	6999.45	6946.45	-354.56	-8165.39	90.66	882.19	456.90	1.93	PASS	
15020.00†	6946.03	-666.15	-7440.42	6999.03	6946.03	-354.56	-8165.39	90.58	789.09	472.87	1.67	PASS	
15120.00†	6945.61	-665.18	-7540.42	6998.61	6945.61	-354.56	-8165.39	90.50	697.91	492.85	1.42	PASS	
15220.00†	6945.19	-664.22	-7640.41	6998.19	6945.19	-354.56	-8165.39	90.42	609.50	518.17	1.18	PASS	
15320.00†	6944.77	-663.25	-7740.40	6997.77	6944.77	-354.56	-8165.39	90.34	525.26	550.52	0.95	FAIL	
15420.00†	6944.34	-662.29	-7840.40	6997.34	6944.34	-354.56	-8165.39	90.26	447.57	591.51	0.76	FAIL	
15520.00†	6943.92	-661.33	-7940.39	6996.92	6943.92	-354.56	-8165.39	90.18	380.43	640.87	0.59	FAIL	
15620.00†	6943.50	-660.36	-8040.39	6996.50	6943.50	-354.56	-8165.39	90.10	330.36	691.40	0.48	FAIL	
15720.00†	6943.08	-659.40	-8140.38	6996.08	6943.08	-354.56	-8165.39	90.02	305.86	723.32	0.42	FAIL	
15747.89†	6942.96	-659.13	-8168.27	6995.93	6942.93	-354.56	-8165.39	89.99	304.58	725.63	0.42	FAIL	
15749.73†	6942.95	-659.11	-8170.11	6995.95	6942.95	-354.56	-8165.39	90.00	304.59	725.66	0.42	FAIL	
15820.00†	6942.66	-658.44	-8240.38	6995.66	6942.66	-354.56	-8165.39	89.94	312.99	716.26	0.44	FAIL	
15920.00†	6942.24	-657.47	-8340.37	6995.24	6942.24	-354.56	-8165.39	89.86	349.82	676.46	0.52	FAIL	
16020.00†	6941.81	-656.51	-8440.37	6994.81	6941.81	-354.56	-8165.39	89.78	408.39	627.10	0.65	FAIL	
16120.00†	6941.39	-655.54	-8540.36	6994.39	6941.39	-354.56	-8165.39	89.71	480.82	582.52	0.83	FAIL	
16220.00†	6940.97	-654.58	-8640.35	6993.97	6940.97	-354.56	-8165.39	89.63	561.78	546.33	1.03	PASS	
16320.00†	6940.55	-653.62	-8740.35	6993.55	6940.55	-354.56	-8165.39	89.55	648.08	517.81	1.25	PASS	
16420.00†	6940.13	-652.65	-8840.34	6993.13	6940.13	-354.56	-8165.39	89.47	737.85	495.35	1.49	PASS	
16520.00†	6939.71	-651.69	-8940.34	6992.71	6939.71	-354.56	-8165.39	89.39	829.96	477.48	1.74	PASS	
16620.00†	6939.28	-650.72	-9040.33	6992.28	6939.28	-354.56	-8165.39	89.31	923.71	463.08	2.00	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 33 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. RUDOLPH 2-34 AWB Offset Wellpath: EX. RUDOLPH 2-34 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. RUDOLPH 2-34 AWB Offset Wellpath: EX. RUDOLPH 2-34 AWP				
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7386.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7386>	EX. RUDOLPH 2-34 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. RUDOLPH 2-34 AWB Offset Wellpath: EX. RUDOLPH 2-34 AWP	
MD Reference: Rig on SLOT#04 EX. RUDOLPH 2-34 (732'FSL & 1921'FWL, NB-CD/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 34 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-33 AWP Offset Wellpath: EX. HERTZKE 1-33 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI) Well: EX. HERTZKE 1-33 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
20.00	20.00	0.00	0.00	47.00	20.00	-461.20	-4228.46	-96.23	4253.54	2.93	2163.22	PASS		
120.00†	120.00	0.00	0.00	147.00	120.00	-461.20	-4228.46	-96.23	4253.54	6.33	792.94	PASS		
220.00†	220.00	0.00	0.00	247.00	220.00	-461.20	-4228.46	-96.23	4253.54	11.40	407.64	PASS		
320.00†	320.00	0.00	0.00	347.00	320.00	-461.20	-4228.46	-96.23	4253.54	16.17	279.65	PASS		
420.00†	420.00	0.00	0.00	447.00	420.00	-461.20	-4228.46	-96.23	4253.54	20.96	212.65	PASS		
520.00†	520.00	0.00	0.00	547.00	520.00	-461.20	-4228.46	-96.23	4253.54	25.76	171.50	PASS		
620.00†	620.00	0.00	0.00	647.00	620.00	-461.20	-4228.46	-96.23	4253.54	30.56	143.68	PASS		
700.00	700.00	0.00	0.00	727.00	700.00	-461.20	-4228.46	-96.23	4253.54	34.40	127.17	PASS		
720.00†	720.00	-0.04	0.06	747.00	720.00	-461.20	-4228.46	140.47	4253.59	35.36	123.62	PASS		
820.00†	819.96	-1.38	2.10	846.96	819.96	-461.20	-4228.46	140.47	4255.48	40.26	108.28	PASS		
920.00†	919.78	-4.64	7.06	946.78	919.78	-461.20	-4228.46	140.46	4260.06	45.34	95.98	PASS		
1020.00†	1019.33	-9.80	14.92	1046.33	1019.33	-461.20	-4228.46	140.45	4267.33	50.35	86.39	PASS		
1120.00†	1118.50	-16.87	25.69	1145.50	1118.50	-461.20	-4228.46	140.43	4277.29	55.31	78.69	PASS		
1200.18	1197.64	-23.91	36.40	1224.64	1197.64	-461.20	-4228.46	140.41	4287.22	59.22	73.57	PASS		
1220.00†	1217.16	-25.80	39.28	1244.16	1217.16	-461.20	-4228.46	140.44	4289.89	60.17	72.44	PASS		
1320.00†	1315.64	-35.34	53.80	1342.64	1315.64	-461.20	-4228.46	140.59	4303.38	64.87	67.32	PASS		
1420.00†	1414.12	-44.88	68.32	1441.12	1414.12	-461.20	-4228.46	140.74	4316.90	69.59	62.89	PASS		
1520.00†	1512.60	-54.42	82.84	1539.60	1512.60	-461.20	-4228.46	140.88	4330.45	74.32	59.02	PASS		
1620.00†	1611.08	-63.95	97.35	1638.08	1611.08	-461.20	-4228.46	141.02	4344.02	79.06	55.61	PASS		
1720.00†	1709.56	-73.49	111.87	1736.56	1709.56	-461.20	-4228.46	141.17	4357.62	83.80	52.59	PASS		
1820.00†	1808.04	-83.03	126.39	1835.04	1808.04	-461.20	-4228.46	141.31	4371.24	88.17	49.97	PASS		
1920.00†	1906.52	-92.56	140.91	1933.52	1906.52	-461.20	-4228.46	141.45	4384.89	92.67	47.68	PASS		
2020.00†	2005.00	-102.10	155.43	2032.00	2005.00	-461.20	-4228.46	141.59	4398.57	97.22	45.57	PASS		
2120.00†	2103.48	-111.64	169.95	2130.48	2103.48	-461.20	-4228.46	141.73	4412.28	101.81	43.63	PASS		
2220.00†	2201.96	-121.18	184.46	2228.96	2201.96	-461.20	-4228.46	141.87	4426.01	106.45	41.85	PASS		
2320.00†	2300.44	-130.71	198.98	2327.44	2300.44	-461.20	-4228.46	142.01	4439.76	111.12	40.20	PASS		
2420.00†	2398.92	-140.25	213.50	2425.92	2398.92	-461.20	-4228.46	142.14	4453.54	115.83	38.68	PASS		
2520.00†	2497.40	-149.79	228.02	2524.40	2497.40	-461.20	-4228.46	142.28	4467.35	120.56	37.27	PASS		
2620.00†	2595.88	-159.33	242.54	2622.88	2595.88	-461.20	-4228.46	142.41	4481.18	125.33	35.95	PASS		
2720.00†	2694.36	-168.86	257.06	2721.36	2694.36	-461.20	-4228.46	142.55	4495.04	130.11	34.73	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 35 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-33 AWB Offset Wellpath: EX. HERTZKE 1-33 AWB

Facility: SEC.01-T05N-R67W Slot: SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI) Well: EX. HERTZKE 1-33 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2819.84	2792.84	-461.20	-4228.46	142.68	4508.91	134.92	33.59	PASS
2920.00†	2891.32	-187.94	286.09	2918.32	2891.32	-461.20	-4228.46	142.81	4522.82	139.75	32.52	PASS
3020.00†	2989.80	-197.48	300.61	3016.80	2989.80	-461.20	-4228.46	142.95	4536.73	144.59	31.53	PASS
3120.00†	3088.28	-207.01	315.13	3115.28	3088.28	-461.20	-4228.46	143.08	4550.70	149.44	30.59	PASS
3220.00†	3186.76	-216.55	329.65	3213.76	3186.76	-461.20	-4228.46	143.21	4564.67	154.31	29.71	PASS
3320.00†	3285.24	-226.09	344.17	3312.24	3285.24	-461.20	-4228.46	143.34	4578.67	159.19	28.89	PASS
3420.00†	3383.71	-235.62	358.69	3410.71	3383.71	-461.20	-4228.46	143.46	4592.69	164.08	28.11	PASS
3520.00†	3482.19	-245.16	373.20	3509.19	3482.19	-461.20	-4228.46	143.59	4606.74	168.97	27.37	PASS
3620.00†	3580.67	-254.70	387.72	3607.67	3580.67	-461.20	-4228.46	143.72	4620.80	173.88	26.68	PASS
3720.00†	3679.15	-264.24	402.24	3706.15	3679.15	-461.20	-4228.46	143.85	4634.89	178.79	26.02	PASS
3820.00†	3777.63	-273.77	416.76	3804.63	3777.63	-461.20	-4228.46	143.97	4649.00	183.70	25.40	PASS
3920.00†	3876.11	-283.31	431.28	3903.11	3876.11	-461.20	-4228.46	144.10	4663.13	188.62	24.81	PASS
4020.00†	3974.59	-292.85	445.80	4001.59	3974.59	-461.20	-4228.46	144.22	4677.29	193.55	24.25	PASS
4120.00†	4073.07	-302.39	460.32	4100.07	4073.07	-461.20	-4228.46	144.34	4691.47	198.48	23.72	PASS
4220.00†	4171.55	-311.92	474.83	4198.55	4171.55	-461.20	-4228.46	144.47	4705.66	203.41	23.21	PASS
4320.00†	4270.03	-321.46	489.35	4297.03	4270.03	-461.20	-4228.46	144.59	4719.88	208.35	22.73	PASS
4420.00†	4368.51	-331.00	503.87	4395.51	4368.51	-461.20	-4228.46	144.71	4734.12	213.29	22.27	PASS
4520.00†	4466.99	-340.53	518.39	4493.99	4466.99	-461.20	-4228.46	144.83	4748.38	218.24	21.83	PASS
4620.00†	4565.47	-350.07	532.91	4592.47	4565.47	-461.20	-4228.46	144.95	4762.67	223.18	21.40	PASS
4720.00†	4663.95	-359.61	547.43	4690.95	4663.95	-461.20	-4228.46	145.07	4776.97	228.13	21.00	PASS
4820.00†	4762.43	-369.15	561.94	4789.43	4762.43	-461.20	-4228.46	145.19	4791.29	233.08	20.62	PASS
4920.00†	4860.91	-378.68	576.46	4887.91	4860.91	-461.20	-4228.46	145.31	4805.63	238.03	20.25	PASS
5020.00†	4959.39	-388.22	590.98	4986.39	4959.39	-461.20	-4228.46	145.42	4820.00	242.99	19.89	PASS
5120.00†	5057.87	-397.76	605.50	5084.87	5057.87	-461.20	-4228.46	145.54	4834.38	247.94	19.55	PASS
5220.00†	5156.35	-407.30	620.02	5183.35	5156.35	-461.20	-4228.46	145.65	4848.78	252.90	19.22	PASS
5320.00†	5254.83	-416.83	634.54	5281.83	5254.83	-461.20	-4228.46	145.77	4863.20	257.86	18.91	PASS
5420.00†	5353.31	-426.37	649.06	5380.31	5353.31	-461.20	-4228.46	145.88	4877.64	262.82	18.61	PASS
5520.00†	5451.79	-435.91	663.57	5478.79	5451.79	-461.20	-4228.46	146.00	4892.10	267.78	18.31	PASS
5620.00†	5550.27	-445.45	678.09	5577.27	5550.27	-461.20	-4228.46	146.11	4906.58	272.74	18.03	PASS
5720.00†	5648.75	-454.98	692.61	5675.75	5648.75	-461.20	-4228.46	146.22	4921.08	277.71	17.76	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 36 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-33 AWB Offset Wellpath: EX. HERTZKE 1-33 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI) Well: EX. HERTZKE 1-33 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5820.00†	5747.23	-464.52	707.13	5774.23	5747.23	-461.20	-4228.46	146.33	4935.59	282.67	17.50	PASS
5920.00†	5845.71	-474.06	721.65	5872.71	5845.71	-461.20	-4228.46	146.44	4950.13	287.63	17.25	PASS
6020.00†	5944.19	-483.59	736.17	5971.19	5944.19	-461.20	-4228.46	146.56	4964.68	292.60	17.01	PASS
6120.00†	6042.67	-493.13	750.68	6069.67	6042.67	-461.20	-4228.46	146.66	4979.25	297.57	16.77	PASS
6220.00†	6141.15	-502.67	765.20	6168.15	6141.15	-461.20	-4228.46	146.77	4993.84	302.54	16.54	PASS
6320.00†	6239.63	-512.21	779.72	6266.63	6239.63	-461.20	-4228.46	146.88	5008.44	307.50	16.32	PASS
6333.38	6252.80	-513.48	781.66	6279.80	6252.80	-461.20	-4228.46	146.90	5010.40	308.17	16.29	PASS
6420.00†	6338.69	-521.84	788.38	6365.69	6338.69	-461.20	-4228.46	96.32	5017.21	312.55	16.09	PASS
6520.00†	6437.87	-531.58	781.50	6464.87	6437.87	-461.20	-4228.46	34.71	5010.46	318.06	15.79	PASS
6620.00†	6534.75	-541.19	759.12	6561.75	6534.75	-461.20	-4228.46	19.36	4988.22	323.99	15.43	PASS
6720.00†	6626.95	-550.44	721.78	6653.95	6626.95	-461.20	-4228.46	13.91	4951.05	329.37	15.06	PASS
6820.00†	6712.19	-559.10	670.41	6739.19	6712.19	-461.20	-4228.46	11.40	4899.85	334.16	14.69	PASS
6920.00†	6788.37	-566.95	606.27	6815.37	6788.37	-461.20	-4228.46	10.19	4835.89	338.32	14.32	PASS
7020.00†	6853.62	-573.80	530.93	6880.62	6853.62	-461.20	-4228.46	9.79	4760.73	341.77	13.96	PASS
7120.00†	6906.33	-579.49	446.27	6933.33	6906.33	-461.20	-4228.46	10.16	4676.23	344.48	13.60	PASS
7220.00†	6945.20	-583.87	354.35	6972.20	6945.20	-461.20	-4228.46	11.75	4584.45	346.42	13.26	PASS
7320.00†	6969.29	-586.83	257.44	6996.29	6969.29	-461.20	-4228.46	17.11	4487.66	347.58	12.94	PASS
7420.00†	6977.98	-588.31	157.94	7004.98	6977.98	-461.20	-4228.46	76.05	4388.24	347.99	12.63	PASS
7428.43	6978.00	-588.37	149.50	7005.00	6978.00	-461.20	-4228.46	96.87	4379.81	348.00	12.61	PASS
7478.43	6977.79	-588.66	99.50	7004.79	6977.79	-461.20	-4228.46	96.79	4329.84	347.99	12.47	PASS
7520.00†	6977.61	-589.21	57.94	7004.61	6977.61	-461.20	-4228.46	94.78	4288.31	347.99	12.35	PASS
7536.58	6977.55	-589.59	41.36	7004.55	6977.55	-461.20	-4228.46	94.27	4271.75	347.98	12.30	PASS
7620.00†	6977.19	-591.78	-42.02	7004.19	6977.19	-461.20	-4228.46	94.19	4188.47	347.98	12.06	PASS
7720.00†	6976.77	-594.39	-141.99	7003.77	6976.77	-461.20	-4228.46	94.09	4088.64	347.98	11.77	PASS
7820.00†	6976.35	-597.01	-241.95	7003.35	6976.35	-461.20	-4228.46	93.99	3988.82	347.98	11.48	PASS
7920.00†	6975.93	-599.63	-341.92	7002.93	6975.93	-461.20	-4228.46	93.89	3889.01	348.00	11.20	PASS
8020.00†	6975.51	-602.25	-441.88	7002.51	6975.51	-461.20	-4228.46	93.79	3789.20	348.01	10.91	PASS
8120.00†	6975.09	-604.86	-541.85	7002.09	6975.09	-461.20	-4228.46	93.69	3689.41	348.04	10.62	PASS
8220.00†	6974.67	-607.48	-641.81	7001.67	6974.67	-461.20	-4228.46	93.59	3589.63	348.07	10.33	PASS
8320.00†	6974.25	-610.10	-741.78	7001.25	6974.25	-461.20	-4228.46	93.49	3489.86	348.12	10.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 37 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-33 AWB Offset Wellpath: EX. HERTZKE 1-33 AWP												
Facility: SEC.01-T05N-R67W				Slot: SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI)				Well: EX. HERTZKE 1-33		Threshold Value=1.00 † = Interpolated/extrapolated station		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8420.00†	6973.83	-612.72	-841.74	7000.83	6973.83	-461.20	-4228.46	93.39	3390.11	348.17	9.75	PASS
8520.00†	6973.41	-615.33	-941.71	7000.41	6973.41	-461.20	-4228.46	93.28	3290.37	348.23	9.47	PASS
8620.00†	6972.99	-617.95	-1041.67	6999.99	6972.99	-461.20	-4228.46	93.19	3190.64	348.31	9.18	PASS
8720.00†	6972.57	-620.57	-1141.64	6999.57	6972.57	-461.20	-4228.46	93.09	3090.94	348.40	8.89	PASS
8820.00†	6972.15	-623.19	-1241.60	6999.15	6972.15	-461.20	-4228.46	92.99	2991.25	348.51	8.60	PASS
8920.00†	6971.73	-625.81	-1341.57	6998.73	6971.73	-461.20	-4228.46	92.89	2891.58	348.64	8.31	PASS
9020.00†	6971.31	-628.42	-1441.53	6998.31	6971.31	-461.20	-4228.46	92.79	2791.94	348.79	8.02	PASS
9120.00†	6970.88	-631.04	-1541.50	6997.88	6970.88	-461.20	-4228.46	92.69	2692.33	348.97	7.73	PASS
9220.00†	6970.46	-633.66	-1641.46	6997.46	6970.46	-461.20	-4228.46	92.59	2592.74	349.18	7.44	PASS
9320.00†	6970.04	-636.28	-1741.43	6997.04	6970.04	-461.20	-4228.46	92.49	2493.19	349.42	7.15	PASS
9420.00†	6969.62	-638.89	-1841.39	6996.62	6969.62	-461.20	-4228.46	92.39	2393.67	349.70	6.86	PASS
9520.00†	6969.20	-641.51	-1941.36	6996.20	6969.20	-461.20	-4228.46	92.29	2294.20	350.03	6.57	PASS
9620.00†	6968.78	-644.13	-2041.32	6995.78	6968.78	-461.20	-4228.46	92.19	2194.78	350.42	6.27	PASS
9720.00†	6968.36	-646.75	-2141.29	6995.36	6968.36	-461.20	-4228.46	92.09	2095.41	350.88	5.98	PASS
9820.00†	6967.94	-649.36	-2241.25	6994.94	6967.94	-461.20	-4228.46	91.99	1996.10	351.41	5.69	PASS
9920.00†	6967.52	-651.98	-2341.22	6994.52	6967.52	-461.20	-4228.46	91.89	1896.86	352.05	5.40	PASS
10020.00†	6967.10	-654.60	-2441.18	6994.10	6967.10	-461.20	-4228.46	91.79	1797.71	352.80	5.10	PASS
10120.00†	6966.68	-657.22	-2541.15	6993.68	6966.68	-461.20	-4228.46	91.69	1698.66	353.69	4.81	PASS
10220.00†	6966.26	-659.84	-2641.11	6993.26	6966.26	-461.20	-4228.46	91.59	1599.73	354.77	4.52	PASS
10320.00†	6965.84	-662.45	-2741.08	6992.84	6965.84	-461.20	-4228.46	91.49	1500.94	356.06	4.22	PASS
10420.00†	6965.42	-665.07	-2841.04	6992.42	6965.42	-461.20	-4228.46	91.39	1402.32	357.62	3.93	PASS
10520.00†	6965.00	-667.69	-2941.01	6992.00	6965.00	-461.20	-4228.46	91.29	1303.91	359.52	3.63	PASS
10620.00†	6964.58	-670.31	-3040.97	6991.58	6964.58	-461.20	-4228.46	91.19	1205.76	361.86	3.34	PASS
10720.00†	6964.15	-672.92	-3140.93	6991.15	6964.15	-461.20	-4228.46	91.09	1107.94	364.75	3.04	PASS
10820.00†	6963.73	-675.54	-3240.90	6990.73	6963.73	-461.20	-4228.46	90.99	1010.55	368.38	2.75	PASS
10920.00†	6963.31	-678.16	-3340.86	6990.31	6963.31	-461.20	-4228.46	90.89	913.73	372.97	2.45	PASS
11020.00†	6962.89	-680.78	-3440.83	6989.89	6962.89	-461.20	-4228.46	90.78	817.67	378.85	2.16	PASS
11120.00†	6962.47	-683.39	-3540.79	6989.47	6962.47	-461.20	-4228.46	90.68	722.67	386.52	1.87	PASS
11220.00†	6962.05	-686.01	-3640.76	6989.05	6962.05	-461.20	-4228.46	90.58	629.23	396.68	1.59	PASS
11320.00†	6961.63	-688.63	-3740.72	6988.63	6961.63	-461.20	-4228.46	90.48	538.16	410.44	1.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 38 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-33 AWP Offset Wellpath: EX. HERTZKE 1-33 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI) Well: EX. HERTZKE 1-33 Threshold Value=1.00 † = Interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11420.00†	6961.21	-691.25	-3840.69	6988.21	6961.21	-461.20	-4228.46	90.38	450.88	429.39	1.05	PASS
11520.00†	6960.79	-693.86	-3940.65	6987.79	6960.79	-461.20	-4228.46	90.28	370.09	455.61	0.81	FAIL
11620.00†	6960.37	-696.48	-4040.62	6987.37	6960.37	-461.20	-4228.46	90.18	301.07	490.15	0.61	FAIL
11636.58	6960.30	-696.92	-4057.20	6987.30	6960.30	-461.20	-4228.46	90.17	291.36	496.45	0.59	FAIL
11720.00†	6959.95	-697.89	-4140.60	6986.95	6959.95	-461.20	-4228.46	90.09	252.46	526.37	0.48	FAIL
11739.19	6959.87	-697.77	-4159.80	6986.87	6959.87	-461.20	-4228.46	90.07	246.33	531.86	0.46	FAIL
11810.19†	6959.57	-697.08	-4230.79	6986.67	6959.67	-461.20	-4228.46	90.03	235.89	542.31	0.43	FAIL
11811.18†	6959.56	-697.07	-4231.78	6986.56	6959.56	-461.20	-4228.46	90.00	235.89	542.31	0.43	FAIL
11820.00†	6959.53	-696.99	-4240.60	6986.53	6959.53	-461.20	-4228.46	89.99	236.10	542.25	0.43	FAIL
11920.00†	6959.10	-696.02	-4340.59	6986.10	6959.10	-461.20	-4228.46	89.89	260.22	522.85	0.50	FAIL
12020.00†	6958.68	-695.06	-4440.59	6985.68	6958.68	-461.20	-4228.46	89.79	315.73	488.22	0.65	FAIL
12120.00†	6958.26	-694.10	-4540.58	6985.26	6958.26	-461.20	-4228.46	89.68	389.43	457.47	0.85	FAIL
12220.00†	6957.84	-693.13	-4640.58	6984.84	6957.84	-461.20	-4228.46	89.58	472.89	434.41	1.09	PASS
12320.00†	6957.42	-692.17	-4740.57	6984.42	6957.42	-461.20	-4228.46	89.48	561.78	417.61	1.35	PASS
12420.00†	6957.00	-691.20	-4840.57	6984.00	6957.00	-461.20	-4228.46	89.38	653.89	405.23	1.61	PASS
12520.00†	6956.57	-690.24	-4940.56	6983.57	6956.57	-461.20	-4228.46	89.27	748.02	395.92	1.89	PASS
12620.00†	6956.15	-689.28	-5040.55	6983.15	6956.15	-461.20	-4228.46	89.17	843.51	388.77	2.17	PASS
12720.00†	6955.73	-688.31	-5140.55	6982.73	6955.73	-461.20	-4228.46	89.07	939.94	383.17	2.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HERTZKE 1-33 AWP Offset Wellpath: EX. HERTZKE 1-33 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 39 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH COMPOSITION - Offset Wellbore: EX. HERTZKE 1-33 AWB Offset Wellpath: EX. HERTZKE 1-33 AWP			
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment
0.00	7334.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7334>
			EX. HERTZKE 1-33 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HERTZKE 1-33 AWB Offset Wellpath: EX. HERTZKE 1-33 AWP	
MD Reference: Rig on SLOT#25 EX. HERTZKE 1-33 (660'FSL & 641'FWL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 40 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	20.00	20.00	-20.04	0.31	179.12	20.04	1.56	31.79	PASS	
120.00†	120.00	0.00	0.00	120.00	120.00	-20.04	0.31	179.12	20.04	1.89	20.70	PASS	
220.00†	220.00	0.00	0.00	220.00	220.00	-20.04	0.31	179.12	20.04	2.43	12.79	PASS	
320.00†	320.00	0.00	0.00	320.00	320.00	-20.04	0.31	179.12	20.04	3.06	9.11	PASS	
420.00†	420.00	0.00	0.00	420.00	420.00	-20.04	0.31	179.12	20.04	3.67	7.04	PASS	
520.00†	520.00	0.00	0.00	520.00	520.00	-20.04	0.31	179.12	20.04	4.29	5.73	PASS	
620.00†	620.00	0.00	0.00	620.00	620.00	-20.04	0.31	179.12	20.04	4.92	4.83	PASS	
700.00	700.00	0.00	0.00	700.00	700.00	-20.04	0.31	179.12	20.04	5.41	4.29	PASS	
720.00†	720.00	-0.04	0.06	720.00	720.00	-20.04	0.31	55.98	20.00	5.54	4.16	PASS	
820.00†	819.96	-1.38	2.10	819.68	819.68	-20.60	0.95	60.13	19.25	6.20	3.43	PASS	
920.00†	919.78	-4.64	7.06	919.28	919.18	-23.34	4.06	65.74	18.96	6.98	2.99	PASS	
1020.00†	1019.33	-9.80	14.92	1018.94	1018.54	-28.38	9.77	72.05	19.29	7.65	2.74	PASS	
1120.00†	1118.50	-16.87	25.69	1118.64	1117.62	-35.70	18.08	78.47	20.33	8.23	2.67	PASS	
1200.18	1197.64	-23.91	36.40	1198.61	1196.78	-43.22	26.60	83.31	21.67	8.69	2.68	PASS	
1220.00†	1217.16	-25.80	39.28	1218.39	1216.31	-45.30	28.97	84.27	22.08	8.80	2.69	PASS	
1320.00†	1315.64	-35.34	53.80	1318.22	1314.52	-57.12	42.37	84.02	24.62	9.48	2.78	PASS	
1420.00†	1414.12	-44.88	68.32	1418.17	1412.67	-69.61	56.54	81.76	27.43	10.20	2.86	PASS	
1520.00†	1512.60	-54.42	82.84	1518.13	1510.83	-82.10	70.70	79.93	30.28	10.93	2.94	PASS	
1620.00†	1611.08	-63.95	97.35	1618.08	1608.98	-94.60	84.87	78.41	33.15	11.65	3.01	PASS	
1720.00†	1709.56	-73.49	111.87	1718.04	1707.14	-107.09	99.04	77.13	36.05	12.37	3.07	PASS	
1820.00†	1808.04	-83.03	126.39	1817.99	1805.29	-119.58	113.21	76.04	38.95	12.56	3.23	PASS	
1920.00†	1906.52	-92.56	140.91	1917.95	1903.44	-132.07	127.38	75.11	41.87	12.81	3.40	PASS	
2020.00†	2005.00	-102.10	155.43	2017.91	2001.60	-144.56	141.55	74.29	44.80	13.15	3.54	PASS	
2120.00†	2103.48	-111.64	169.95	2117.86	2099.75	-157.06	155.71	73.58	47.74	13.59	3.65	PASS	
2220.00†	2201.96	-121.18	184.46	2217.82	2197.91	-169.55	169.88	72.95	50.68	14.11	3.73	PASS	
2320.00†	2300.44	-130.71	198.98	2317.77	2296.06	-182.04	184.05	72.39	53.63	14.71	3.78	PASS	
2420.00†	2398.92	-140.25	213.50	2417.73	2394.22	-194.53	198.22	71.88	56.59	15.37	3.81	PASS	
2520.00†	2497.40	-149.79	228.02	2517.68	2492.37	-207.02	212.39	71.43	59.54	16.09	3.82	PASS	
2620.00†	2595.88	-159.33	242.54	2617.64	2590.52	-219.52	226.56	71.02	62.51	16.86	3.82	PASS	
2720.00†	2694.36	-168.86	257.06	2717.59	2688.68	-232.01	240.72	70.65	65.47	17.68	3.82	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 41 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2817.55	2786.83	-244.50	254.89	70.31	68.44	18.53	3.80	PASS
2920.00†	2891.32	-187.94	286.09	2917.50	2884.99	-256.99	269.06	70.00	71.40	19.41	3.78	PASS
3020.00†	2989.80	-197.48	300.61	3017.46	2983.14	-269.48	283.23	69.71	74.38	20.33	3.76	PASS
3120.00†	3088.28	-207.01	315.13	3117.41	3081.30	-281.98	297.40	69.44	77.35	21.26	3.73	PASS
3220.00†	3186.76	-216.55	329.65	3217.37	3179.45	-294.47	311.56	69.20	80.32	22.22	3.70	PASS
3320.00†	3285.24	-226.09	344.17	3317.32	3277.60	-306.96	325.73	68.97	83.30	23.20	3.67	PASS
3420.00†	3383.71	-235.62	358.69	3417.28	3375.76	-319.45	339.90	68.76	86.27	24.19	3.64	PASS
3520.00†	3482.19	-245.16	373.20	3517.23	3473.91	-331.94	354.07	68.56	89.25	25.20	3.62	PASS
3620.00†	3580.67	-254.70	387.72	3617.19	3572.07	-344.44	368.24	68.37	92.23	26.22	3.59	PASS
3720.00†	3679.15	-264.24	402.24	3717.14	3670.22	-356.93	382.41	68.20	95.21	27.25	3.56	PASS
3820.00†	3777.63	-273.77	416.76	3817.10	3768.37	-369.42	396.57	68.04	98.19	28.29	3.53	PASS
3920.00†	3876.11	-283.31	431.28	3917.05	3866.53	-381.91	410.74	67.88	101.17	29.34	3.51	PASS
4020.00†	3974.59	-292.85	445.80	4017.01	3964.68	-394.40	424.91	67.74	104.15	30.39	3.48	PASS
4120.00†	4073.07	-302.39	460.32	4116.96	4062.84	-406.89	439.08	67.60	107.14	31.46	3.46	PASS
4220.00†	4171.55	-311.92	474.83	4216.92	4160.99	-419.39	453.25	67.47	110.12	32.53	3.44	PASS
4320.00†	4270.03	-321.46	489.35	4316.87	4259.15	-431.88	467.41	67.35	113.10	33.60	3.42	PASS
4420.00†	4368.51	-331.00	503.87	4416.83	4357.30	-444.37	481.58	67.23	116.09	34.69	3.40	PASS
4520.00†	4466.99	-340.53	518.39	4516.79	4455.45	-456.86	495.75	67.12	119.07	35.77	3.38	PASS
4620.00†	4565.47	-350.07	532.91	4616.74	4553.61	-469.35	509.92	67.02	122.06	36.86	3.36	PASS
4720.00†	4663.95	-359.61	547.43	4716.70	4651.76	-481.85	524.09	66.92	125.04	37.96	3.34	PASS
4820.00†	4762.43	-369.15	561.94	4816.65	4749.92	-494.34	538.26	66.82	128.03	39.06	3.32	PASS
4920.00†	4860.91	-378.68	576.46	4916.61	4848.07	-506.83	552.42	66.73	131.01	40.16	3.30	PASS
5020.00†	4959.39	-388.22	590.98	5016.56	4946.23	-519.32	566.59	66.64	134.00	41.26	3.29	PASS
5120.00†	5057.87	-397.76	605.50	5116.52	5044.38	-531.81	580.76	66.56	136.99	42.37	3.27	PASS
5220.00†	5156.35	-407.30	620.02	5216.47	5142.53	-544.31	594.93	66.48	139.97	43.48	3.26	PASS
5320.00†	5254.83	-416.83	634.54	5316.43	5240.69	-556.80	609.10	66.41	142.96	44.60	3.24	PASS
5420.00†	5353.31	-426.37	649.06	5416.38	5338.84	-569.29	623.27	66.33	145.95	45.71	3.23	PASS
5520.00†	5451.79	-435.91	663.57	5516.34	5437.00	-581.78	637.43	66.26	148.93	46.83	3.21	PASS
5620.00†	5550.27	-445.45	678.09	5616.29	5535.15	-594.27	651.60	66.19	151.92	47.95	3.20	PASS
5720.00†	5648.75	-454.98	692.61	5716.25	5633.31	-606.77	665.77	66.13	154.91	49.07	3.19	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 42 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)												
Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01)				Well: GREELEY-ROTH 34C-2-L				Threshold Value=1.00 † = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5820.00†	5747.23	-464.52	707.13	5816.20	5731.46	-619.26	679.94	66.07	157.90	50.19	3.18	PASS
5920.00†	5845.71	-474.06	721.65	5916.16	5829.61	-631.75	694.11	66.01	160.89	51.32	3.17	PASS
6020.00†	5944.19	-483.59	736.17	6016.11	5927.77	-644.24	708.27	65.95	163.88	52.44	3.15	PASS
6120.00†	6042.67	-493.13	750.68	6116.07	6025.92	-656.73	722.44	65.89	166.86	53.57	3.14	PASS
6220.00†	6141.15	-502.67	765.20	6216.02	6124.08	-669.23	736.61	65.84	169.85	54.70	3.13	PASS
6320.00†	6239.63	-512.21	779.72	6315.98	6222.23	-681.72	750.78	65.79	172.84	55.83	3.12	PASS
6333.38	6252.80	-513.48	781.66	6329.35	6235.36	-683.39	752.67	65.78	173.24	55.98	3.12	PASS
6420.00†	6338.69	-521.84	788.38	6415.69	6320.14	-694.18	764.91	13.34	174.92	56.85	3.10	PASS
6520.00†	6437.87	-531.58	781.50	6513.33	6416.02	-706.38	778.75	-55.00	176.18	57.79	3.07	PASS
6620.00†	6534.75	-541.19	759.12	6610.34	6511.86	-718.63	786.43	-79.40	180.98	59.14	3.09	PASS
6720.00†	6626.95	-550.44	721.78	6712.20	6612.48	-731.62	778.68	-93.39	190.45	60.76	3.16	PASS
6820.00†	6712.19	-559.10	670.41	6819.70	6715.89	-745.11	753.08	-103.54	203.59	62.71	3.27	PASS
6920.00†	6788.37	-566.95	606.27	6933.55	6819.06	-758.73	707.29	-111.34	218.93	63.98	3.45	PASS
7020.00†	6853.62	-573.80	530.93	7054.29	6917.76	-771.97	639.34	-117.34	234.81	64.75	3.66	PASS
7120.00†	6906.33	-579.49	446.27	7182.05	7006.35	-784.09	548.39	-121.82	249.59	66.50	3.78	PASS
7220.00†	6945.20	-583.87	354.35	7316.38	7078.11	-794.23	435.58	-124.96	261.75	66.65	3.96	PASS
7320.00†	6969.29	-586.83	257.44	7456.01	7126.13	-801.46	304.96	-126.87	270.04	69.14	3.94	PASS
7420.00†	6977.98	-588.31	157.94	7598.84	7144.87	-805.02	163.71	-127.60	273.58	73.20	3.76	PASS
7428.43	6978.00	-588.37	149.50	7610.91	7145.00	-805.13	151.65	-127.61	273.65	73.59	3.74	PASS
7478.43	6977.79	-588.66	99.50	7660.91	7145.10	-805.55	101.65	-127.64	273.93	75.64	3.65	PASS
7520.00†	6977.61	-589.21	57.94	7702.47	7145.18	-805.90	60.09	-127.72	273.93	77.36	3.56	PASS
7536.58	6977.55	-589.59	41.36	7719.05	7145.21	-806.04	43.51	-127.77	273.80	78.04	3.53	PASS
7620.00†	6977.19	-591.78	-42.02	7802.46	7145.37	-806.74	-39.89	-128.04	272.95	81.72	3.36	PASS
7720.00†	6976.77	-594.39	-141.99	7902.44	7145.57	-807.58	-139.87	-128.38	271.93	86.43	3.16	PASS
7820.00†	6976.35	-597.01	-241.95	8002.42	7145.76	-808.43	-239.85	-128.71	270.92	91.41	2.98	PASS
7920.00†	6975.93	-599.63	-341.92	8102.40	7145.96	-809.27	-339.83	-129.05	269.93	96.61	2.81	PASS
8020.00†	6975.51	-602.25	-441.88	8202.38	7146.15	-810.11	-439.80	-129.39	268.94	101.99	2.65	PASS
8120.00†	6975.09	-604.86	-541.85	8302.37	7146.34	-810.95	-539.78	-129.73	267.96	107.49	2.50	PASS
8220.00†	6974.67	-607.48	-641.81	8402.35	7146.54	-811.79	-639.76	-130.08	266.99	113.09	2.37	PASS
8320.00†	6974.25	-610.10	-741.78	8502.33	7146.73	-812.63	-739.74	-130.42	266.03	118.76	2.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 43 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	8602.31	7146.93	-813.47	-839.72	-130.77	265.08	124.48	2.14	PASS	
8520.00†	6973.41	-615.33	-941.71	8702.30	7147.12	-814.31	-939.70	-131.13	264.14	130.23	2.03	PASS	
8620.00†	6972.99	-617.95	-1041.67	8802.28	7147.32	-815.15	-1039.68	-131.48	263.21	135.99	1.94	PASS	
8720.00†	6972.57	-620.57	-1141.64	8902.26	7147.51	-815.99	-1139.65	-131.84	262.29	141.76	1.85	PASS	
8820.00†	6972.15	-623.19	-1241.60	9002.24	7147.70	-816.83	-1239.63	-132.20	261.39	147.51	1.78	PASS	
8920.00†	6971.73	-625.81	-1341.57	9102.23	7147.90	-817.67	-1339.61	-132.56	260.49	153.23	1.70	PASS	
9020.00†	6971.31	-628.42	-1441.53	9202.21	7148.09	-818.51	-1439.59	-132.93	259.60	158.93	1.64	PASS	
9120.00†	6970.88	-631.04	-1541.50	9302.19	7148.29	-819.36	-1539.57	-133.29	258.72	164.59	1.57	PASS	
9220.00†	6970.46	-633.66	-1641.46	9402.17	7148.48	-820.20	-1639.55	-133.67	257.86	170.21	1.52	PASS	
9320.00†	6970.04	-636.28	-1741.43	9502.15	7148.68	-821.04	-1739.53	-134.04	257.00	175.77	1.46	PASS	
9420.00†	6969.62	-638.89	-1841.39	9602.14	7148.87	-821.88	-1839.50	-134.41	256.16	181.29	1.41	PASS	
9520.00†	6969.20	-641.51	-1941.36	9702.12	7149.06	-822.72	-1939.48	-134.79	255.32	186.74	1.37	PASS	
9620.00†	6968.78	-644.13	-2041.32	9802.10	7149.26	-823.56	-2039.46	-135.17	254.50	192.12	1.33	PASS	
9720.00†	6968.36	-646.75	-2141.29	9902.08	7149.45	-824.40	-2139.44	-135.55	253.69	197.44	1.29	PASS	
9820.00†	6967.94	-649.36	-2241.25	10002.07	7149.65	-825.24	-2239.42	-135.94	252.89	202.69	1.25	PASS	
9920.00†	6967.52	-651.98	-2341.22	10102.05	7149.84	-826.08	-2339.40	-136.32	252.10	207.86	1.21	PASS	
10020.00†	6967.10	-654.60	-2441.18	10202.03	7150.04	-826.92	-2439.38	-136.72	251.32	212.96	1.18	PASS	
10120.00†	6966.68	-657.22	-2541.15	10302.01	7150.23	-827.76	-2539.36	-137.11	250.56	217.97	1.15	PASS	
10220.00†	6966.26	-659.84	-2641.11	10402.00	7150.42	-828.60	-2639.33	-137.50	249.81	222.90	1.12	PASS	
10320.00†	6965.84	-662.45	-2741.08	10501.98	7150.62	-829.44	-2739.31	-137.90	249.06	227.74	1.09	PASS	
10420.00†	6965.42	-665.07	-2841.04	10601.96	7150.81	-830.28	-2839.29	-138.30	248.34	232.49	1.07	PASS	
10520.00†	6965.00	-667.69	-2941.01	10701.94	7151.01	-831.13	-2939.27	-138.70	247.62	237.16	1.04	PASS	
10620.00†	6964.58	-670.31	-3040.97	10801.92	7151.20	-831.97	-3039.25	-139.10	246.91	241.72	1.02	PASS	
10720.00†	6964.15	-672.92	-3140.93	10901.91	7151.40	-832.81	-3139.23	-139.51	246.22	246.20	1.00	PASS	
10820.00†	6963.73	-675.54	-3240.90	11001.89	7151.59	-833.65	-3239.21	-139.92	245.54	250.57	0.98	FAIL	
10920.00†	6963.31	-678.16	-3340.86	11101.87	7151.78	-834.49	-3339.18	-140.33	244.87	254.85	0.96	FAIL	
11020.00†	6962.89	-680.78	-3440.83	11201.85	7151.98	-835.33	-3439.16	-140.74	244.22	259.03	0.94	FAIL	
11120.00†	6962.47	-683.39	-3540.79	11301.84	7152.17	-836.17	-3539.14	-141.16	243.58	263.10	0.93	FAIL	
11220.00†	6962.05	-686.01	-3640.76	11401.82	7152.37	-837.01	-3639.12	-141.57	242.95	267.07	0.91	FAIL	
11320.00†	6961.63	-688.63	-3740.72	11501.80	7152.56	-837.85	-3739.10	-141.99	242.33	270.93	0.89	FAIL	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 44 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11420.00†	6961.21	-691.25	-3840.69	11601.78	7152.76	-838.69	-3839.08	-142.42	241.73	274.69	0.88	FAIL
11520.00†	6960.79	-693.86	-3940.65	11701.77	7152.95	-839.53	-3939.06	-142.84	241.14	278.33	0.87	FAIL
11620.00†	6960.37	-696.48	-4040.62	11801.75	7153.14	-840.37	-4039.03	-143.26	240.56	281.87	0.85	FAIL
11636.58	6960.30	-696.92	-4057.20	11818.33	7153.18	-840.51	-4055.61	-143.34	240.47	282.45	0.85	FAIL
11720.00†	6959.95	-697.89	-4140.60	11901.74	7153.34	-841.21	-4139.02	-143.46	240.72	286.57	0.84	FAIL
11739.19	6959.87	-697.77	-4159.80	11920.93	7153.38	-841.38	-4158.21	-143.42	240.98	287.88	0.84	FAIL
11820.00†	6959.53	-696.99	-4240.60	12001.72	7153.53	-842.06	-4239.00	-143.22	242.25	293.67	0.82	FAIL
11920.00†	6959.10	-696.02	-4340.59	12101.70	7153.73	-842.90	-4338.98	-142.96	243.83	300.88	0.81	FAIL
12020.00†	6958.68	-695.06	-4440.59	12201.69	7153.92	-843.74	-4438.96	-142.71	245.41	308.13	0.80	FAIL
12120.00†	6958.26	-694.10	-4540.58	12301.67	7154.12	-844.58	-4538.94	-142.47	246.99	315.42	0.78	FAIL
12220.00†	6957.84	-693.13	-4640.58	12401.65	7154.31	-845.42	-4638.91	-142.22	248.58	322.75	0.77	FAIL
12320.00†	6957.42	-692.17	-4740.57	12501.63	7154.50	-846.26	-4738.89	-141.98	250.18	330.11	0.76	FAIL
12420.00†	6957.00	-691.20	-4840.57	12601.61	7154.70	-847.10	-4838.87	-141.75	251.78	337.51	0.75	FAIL
12520.00†	6956.57	-690.24	-4940.56	12701.60	7154.89	-847.94	-4938.85	-141.51	253.38	344.95	0.73	FAIL
12620.00†	6956.15	-689.28	-5040.55	12801.58	7155.09	-848.78	-5038.83	-141.28	254.99	352.41	0.72	FAIL
12720.00†	6955.73	-688.31	-5140.55	12901.56	7155.28	-849.62	-5138.80	-141.05	256.60	359.91	0.71	FAIL
12820.00†	6955.31	-687.35	-5240.54	13001.54	7155.48	-850.46	-5238.78	-140.83	258.22	367.44	0.70	FAIL
12920.00†	6954.89	-686.38	-5340.54	13101.52	7155.67	-851.30	-5338.76	-140.60	259.84	375.00	0.69	FAIL
13020.00†	6954.47	-685.42	-5440.53	13201.50	7155.86	-852.14	-5438.74	-140.38	261.46	382.60	0.68	FAIL
13120.00†	6954.04	-684.46	-5540.53	13301.49	7156.06	-852.98	-5538.72	-140.17	263.09	390.22	0.67	FAIL
13220.00†	6953.62	-683.49	-5640.52	13401.47	7156.25	-853.83	-5638.69	-139.95	264.72	397.86	0.66	FAIL
13320.00†	6953.20	-682.53	-5740.52	13501.45	7156.45	-854.67	-5738.67	-139.74	266.35	405.54	0.66	FAIL
13420.00†	6952.78	-681.57	-5840.51	13601.43	7156.64	-855.51	-5838.65	-139.53	267.99	413.24	0.65	FAIL
13520.00†	6952.36	-680.60	-5940.50	13701.41	7156.84	-856.35	-5938.63	-139.32	269.63	420.97	0.64	FAIL
13620.00†	6951.94	-679.64	-6040.50	13801.40	7157.03	-857.19	-6038.61	-139.12	271.28	428.72	0.63	FAIL
13720.00†	6951.51	-678.67	-6140.49	13901.38	7157.22	-858.03	-6138.59	-138.92	272.93	436.50	0.62	FAIL
13820.00†	6951.09	-677.71	-6240.49	14001.36	7157.42	-858.87	-6238.56	-138.72	274.58	444.30	0.62	FAIL
13920.00†	6950.67	-676.75	-6340.48	14101.34	7157.61	-859.71	-6338.54	-138.52	276.23	452.13	0.61	FAIL
14020.00†	6950.25	-675.78	-6440.48	14201.32	7157.81	-860.55	-6438.52	-138.33	277.89	459.97	0.60	FAIL
14120.00†	6949.83	-674.82	-6540.47	14301.30	7158.00	-861.39	-6538.50	-138.13	279.55	467.84	0.60	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 45 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14220.00†	6949.41	-673.86	-6640.47	14401.29	7158.20	-862.23	-6638.48	-137.94	281.22	475.73	0.59	FAIL	
14320.00†	6948.98	-672.89	-6740.46	14501.27	7158.39	-863.07	-6738.45	-137.76	282.88	483.64	0.58	FAIL	
14420.00†	6948.56	-671.93	-6840.45	14601.25	7158.58	-863.91	-6838.43	-137.57	284.56	491.57	0.58	FAIL	
14520.00†	6948.14	-670.96	-6940.45	14701.23	7158.78	-864.75	-6938.41	-137.39	286.23	499.52	0.57	FAIL	
14620.00†	6947.72	-670.00	-7040.44	14801.21	7158.97	-865.60	-7038.39	-137.21	287.91	507.49	0.57	FAIL	
14720.00†	6947.30	-669.04	-7140.44	14901.20	7159.17	-866.44	-7138.37	-137.03	289.59	515.48	0.56	FAIL	
14820.00†	6946.87	-668.07	-7240.43	15001.18	7159.36	-867.28	-7238.34	-136.85	291.27	523.49	0.56	FAIL	
14920.00†	6946.45	-667.11	-7340.43	15101.16	7159.56	-868.12	-7338.32	-136.67	292.95	531.51	0.55	FAIL	
15020.00†	6946.03	-666.15	-7440.42	15201.14	7159.75	-868.96	-7438.30	-136.50	294.64	539.56	0.55	FAIL	
15120.00†	6945.61	-665.18	-7540.42	15301.12	7159.94	-869.80	-7538.28	-136.33	296.33	547.61	0.54	FAIL	
15220.00†	6945.19	-664.22	-7640.41	15401.10	7160.14	-870.64	-7638.26	-136.16	298.02	555.69	0.54	FAIL	
15320.00†	6944.77	-663.25	-7740.40	15501.09	7160.33	-871.48	-7738.23	-135.99	299.72	563.78	0.53	FAIL	
15420.00†	6944.34	-662.29	-7840.40	15601.07	7160.53	-872.32	-7838.21	-135.83	301.42	571.89	0.53	FAIL	
15520.00†	6943.92	-661.33	-7940.39	15701.05	7160.72	-873.16	-7938.19	-135.67	303.12	580.01	0.52	FAIL	
15620.00†	6943.50	-660.36	-8040.39	15801.03	7160.92	-874.00	-8038.17	-135.50	304.82	588.15	0.52	FAIL	
15720.00†	6943.08	-659.40	-8140.38	15901.01	7161.11	-874.84	-8138.15	-135.34	306.53	596.30	0.51	FAIL	
15820.00†	6942.66	-658.44	-8240.38	16001.00	7161.30	-875.68	-8238.13	-135.19	308.23	604.46	0.51	FAIL	
15920.00†	6942.24	-657.47	-8340.37	16100.98	7161.50	-876.53	-8338.10	-135.03	309.94	612.64	0.51	FAIL	
16020.00†	6941.81	-656.51	-8440.37	16200.96	7161.69	-877.37	-8438.08	-134.87	311.66	620.83	0.50	FAIL	
16120.00†	6941.39	-655.54	-8540.36	16300.94	7161.89	-878.21	-8538.06	-134.72	313.37	629.04	0.50	FAIL	
16220.00†	6940.97	-654.58	-8640.35	16400.92	7162.08	-879.05	-8638.04	-134.57	315.09	637.26	0.49	FAIL	
16320.00†	6940.55	-653.62	-8740.35	16500.90	7162.28	-879.89	-8738.02	-134.42	316.81	645.49	0.49	FAIL	
16420.00†	6940.13	-652.65	-8840.34	16600.89	7162.47	-880.73	-8837.99	-134.27	318.53	653.73	0.49	FAIL	
16520.00†	6939.71	-651.69	-8940.34	16700.87	7162.66	-881.57	-8937.97	-134.13	320.25	661.98	0.48	FAIL	
16620.00†	6939.28	-650.72	-9040.33	16800.85	7162.86	-882.41	-9037.95	-133.98	321.98	670.25	0.48	FAIL	
16720.00†	6938.86	-649.76	-9140.33	16900.83	7163.05	-883.25	-9137.93	-133.84	323.70	678.54	0.48	FAIL	
16820.00†	6938.44	-648.80	-9240.32	17000.81	7163.25	-884.09	-9237.91	-133.70	325.43	686.82	0.47	FAIL	
16920.00†	6938.02	-647.83	-9340.32	17100.80	7163.44	-884.93	-9337.88	-133.56	327.17	695.12	0.47	FAIL	
17020.00†	6937.60	-646.87	-9440.31	17200.78	7163.64	-885.77	-9437.86	-133.42	328.90	703.43	0.47	FAIL	
17120.00†	6937.18	-645.91	-9540.31	17300.76	7163.83	-886.61	-9537.84	-133.28	330.63	711.74	0.46	FAIL	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 46 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Facility: SEC.01-T05N-R67W Slot: SLOT#24 GREELEY-ROTH 34C-2-L (943'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH 34C-2-L Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17161.54	6937.00	-645.51	-9581.84	17342.29	7163.91	-886.96	-9579.37	-133.22	331.35	715.20	0.46	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

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	20.00	1750.00	1730.00	20.00	1738.52	-12.21	0.19	-39.97	31.66
9.625in Casing Surface	20.00	1750.00	1730.00	20.00	1738.52	-12.21	0.19	-39.97	31.66
8.5in Open Hole	1750.00	17388.56	15638.56	1738.52	7164.00	-39.97	31.66	-276.57	-2933.80

## SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (IFR1, Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH 34C-2-L PWB
1750.00	17388.56	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH 34C-2-L PWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH 34C-2-L PWB Offset Wellpath: GREELEY-ROTH 34C-2-L PWP (REV-A.1)

MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 47 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
20.00	20.00	0.00	0.00	20.00	20.00	40.07	-0.23	-0.33	40.08	1.56	65.19	P/	
120.00†	120.00	0.00	0.00	120.00	120.00	40.07	-0.23	-0.33	40.08	1.88	42.59	P/	
220.00†	220.00	0.00	0.00	220.00	220.00	40.07	-0.23	-0.33	40.08	2.45	28.34	P/	
320.00†	320.00	0.00	0.00	320.00	320.00	40.07	-0.23	-0.33	40.08	3.05	18.74	P/	
420.00†	420.00	0.00	0.00	420.00	420.00	40.07	-0.23	-0.33	40.08	3.66	14.48	P/	
520.00†	520.00	0.00	0.00	520.00	520.00	40.07	-0.23	-0.33	40.08	4.28	11.78	P/	
620.00†	620.00	0.00	0.00	620.06	620.06	40.06	-0.16	-0.23	40.06	4.90	9.92	P/	
700.00	700.00	0.00	0.00	700.28	700.28	39.69	1.48	2.13	39.72	5.41	8.72	P/	
720.00†	720.00	-0.04	0.06	720.31	720.28	39.52	2.23	-120.16	39.62	5.53	8.47	P/	
743.39†	743.39	-0.18	0.27	743.71	743.65	39.28	3.28	-118.94	39.57	5.69	8.17	P/	
820.00†	819.96	-1.38	2.10	820.41	820.19	38.20	8.03	-114.77	40.03	6.19	7.48	P/	
920.00†	919.78	-4.64	7.06	920.35	919.68	36.12	17.22	-109.24	42.01	6.90	6.92	P/	
1020.00†	1019.33	-9.80	14.92	1020.11	1018.61	33.29	29.76	-104.12	45.58	7.63	6.69	P/	
1120.00†	1118.50	-16.87	25.69	1119.97	1117.41	30.09	43.89	-101.81	50.38	8.40	6.64	P/	
1200.18	1197.64	-23.91	36.40	1200.02	1196.61	27.52	55.22	-102.83	54.78	9.06	6.65	P/	
1220.00†	1217.16	-25.80	39.28	1219.80	1216.19	26.89	58.02	-103.36	55.93	9.22	6.66	P/	
1320.00†	1315.64	-35.34	53.80	1319.60	1314.93	23.69	72.14	-105.70	61.82	10.06	6.69	P/	
1420.00†	1414.12	-44.88	68.32	1419.40	1413.67	20.50	86.26	-107.63	67.79	10.92	6.71	P/	
1520.00†	1512.60	-54.42	82.84	1519.20	1512.41	17.30	100.39	-109.25	73.83	11.78	6.73	P/	
1620.00†	1611.08	-63.95	97.35	1619.00	1611.15	14.10	114.51	-110.62	79.92	12.66	6.75	P/	
1720.00†	1709.56	-73.49	111.87	1718.79	1709.90	10.90	128.63	-111.80	86.04	13.54	6.77	P/	
1820.00†	1808.04	-83.03	126.39	1818.59	1808.64	7.71	142.75	-112.82	92.20	13.77	7.00	P/	
1920.00†	1906.52	-92.56	140.91	1918.39	1907.38	4.51	156.88	-113.72	98.38	13.94	7.38	P/	
2020.00†	2005.00	-102.10	155.43	2018.19	2006.12	1.31	171.00	-114.50	104.59	14.20	7.70	P/	
2120.00†	2103.48	-111.64	169.95	2117.98	2104.86	-1.88	185.12	-115.20	110.81	14.55	7.95	P/	
2220.00†	2201.96	-121.18	184.46	2217.78	2203.60	-5.08	199.25	-115.83	117.05	14.98	8.15	P/	
2320.00†	2300.44	-130.71	198.98	2317.58	2302.34	-8.28	213.37	-116.39	123.29	15.48	8.30	P/	
2420.00†	2398.92	-140.25	213.50	2417.38	2401.09	-11.47	227.49	-116.90	129.55	16.04	8.40	P/	
2520.00†	2497.40	-149.79	228.02	2517.17	2499.83	-14.67	241.62	-117.36	135.82	16.67	8.46	P/	
2620.00†	2595.88	-159.33	242.54	2616.97	2598.57	-17.87	255.74	-117.78	142.10	17.35	8.50	P/	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 48 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2720.00†	2694.36	-168.86	257.06	2716.77	2697.31	-21.06	269.86	-118.16	148.38	18.07	8.50	P <sub>i</sub>	
2820.00†	2792.84	-178.40	271.58	2816.57	2796.05	-24.26	283.98	-118.51	154.67	18.84	8.49	P <sub>i</sub>	
2920.00†	2891.32	-187.94	286.09	2916.36	2894.79	-27.46	298.11	-118.84	160.97	19.64	8.46	P <sub>i</sub>	
3020.00†	2989.80	-197.48	300.61	3016.16	2993.54	-30.66	312.23	-119.14	167.27	20.48	8.43	P <sub>i</sub>	
3120.00†	3088.28	-207.01	315.13	3115.96	3092.28	-33.85	326.35	-119.42	173.57	21.34	8.38	P <sub>i</sub>	
3220.00†	3186.76	-216.55	329.65	3215.76	3191.02	-37.05	340.48	-119.68	179.88	22.23	8.33	P <sub>i</sub>	
3320.00†	3285.24	-226.09	344.17	3315.56	3289.76	-40.25	354.60	-119.92	186.19	23.14	8.27	P <sub>i</sub>	
3420.00†	3383.71	-235.62	358.69	3415.35	3388.50	-43.44	368.72	-120.15	192.50	24.06	8.21	P <sub>i</sub>	
3520.00†	3482.19	-245.16	373.20	3515.15	3487.24	-46.64	382.85	-120.36	198.82	25.01	8.15	P <sub>i</sub>	
3620.00†	3580.67	-254.70	387.72	3614.95	3585.98	-49.84	396.97	-120.56	205.14	25.97	8.09	P <sub>i</sub>	
3720.00†	3679.15	-264.24	402.24	3714.75	3684.73	-53.03	411.09	-120.74	211.46	26.94	8.03	P <sub>i</sub>	
3820.00†	3777.63	-273.77	416.76	3814.54	3783.47	-56.23	425.22	-120.92	217.78	27.93	7.97	P <sub>i</sub>	
3920.00†	3876.11	-283.31	431.28	3914.34	3882.21	-59.43	439.34	-121.08	224.11	28.93	7.92	P <sub>i</sub>	
4020.00†	3974.59	-292.85	445.80	4014.14	3980.95	-62.62	453.46	-121.24	230.44	29.93	7.86	P <sub>i</sub>	
4120.00†	4073.07	-302.39	460.32	4113.94	4079.69	-65.82	467.59	-121.39	236.77	30.95	7.81	P <sub>i</sub>	
4220.00†	4171.55	-311.92	474.83	4213.73	4178.43	-69.02	481.71	-121.53	243.10	31.97	7.75	P <sub>i</sub>	
4320.00†	4270.03	-321.46	489.35	4313.53	4277.18	-72.22	495.83	-121.66	249.43	33.00	7.70	P <sub>i</sub>	
4420.00†	4368.51	-331.00	503.87	4413.33	4375.92	-75.41	509.95	-121.79	255.76	34.04	7.65	P <sub>i</sub>	
4520.00†	4466.99	-340.53	518.39	4513.13	4474.66	-78.61	524.08	-121.91	262.10	35.08	7.60	P <sub>i</sub>	
4620.00†	4565.47	-350.07	532.91	4612.93	4573.40	-81.81	538.20	-122.03	268.43	36.13	7.56	P <sub>i</sub>	
4720.00†	4663.95	-359.61	547.43	4712.72	4672.14	-85.00	552.32	-122.14	274.77	37.18	7.51	P <sub>i</sub>	
4820.00†	4762.43	-369.15	561.94	4812.52	4770.88	-88.20	566.45	-122.24	281.11	38.24	7.47	P <sub>i</sub>	
4920.00†	4860.91	-378.68	576.46	4912.32	4869.62	-91.40	580.57	-122.34	287.45	39.30	7.43	P <sub>i</sub>	
5020.00†	4959.39	-388.22	590.98	5012.12	4968.37	-94.59	594.69	-122.44	293.79	40.37	7.39	P <sub>i</sub>	
5120.00†	5057.87	-397.76	605.50	5111.91	5067.11	-97.79	608.82	-122.53	300.13	41.44	7.35	P <sub>i</sub>	
5220.00†	5156.35	-407.30	620.02	5211.71	5165.85	-100.99	622.94	-122.62	306.47	42.51	7.31	P <sub>i</sub>	
5320.00†	5254.83	-416.83	634.54	5311.51	5264.59	-104.19	637.06	-122.70	312.81	43.58	7.28	P <sub>i</sub>	
5420.00†	5353.31	-426.37	649.06	5411.31	5363.33	-107.38	651.18	-122.78	319.15	44.66	7.24	P <sub>i</sub>	
5520.00†	5451.79	-435.91	663.57	5511.10	5462.07	-110.58	665.31	-122.86	325.50	45.74	7.21	P <sub>i</sub>	
5620.00†	5550.27	-445.45	678.09	5610.90	5560.82	-113.78	679.43	-122.94	331.84	46.83	7.18	P <sub>i</sub>	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 49 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
5720.00†	5648.75	-454.98	692.61	5710.70	5659.56	-116.97	693.55	-123.01	338.18	47.91	7.15	P	
5820.00†	5747.23	-464.52	707.13	5810.50	5758.30	-120.17	707.68	-123.08	344.53	49.00	7.12	P	
5920.00†	5845.71	-474.06	721.65	5910.29	5857.04	-123.37	721.80	-123.15	350.87	50.09	7.09	P	
6020.00†	5944.19	-483.59	736.17	6010.09	5955.78	-126.56	735.92	-123.21	357.22	51.18	7.06	P	
6120.00†	6042.67	-493.13	750.68	6109.89	6054.52	-129.76	750.05	-123.27	363.57	52.28	7.04	P	
6220.00†	6141.15	-502.67	765.20	6209.69	6153.26	-132.96	764.17	-123.33	369.91	53.37	7.01	P	
6320.00†	6239.63	-512.21	779.72	6309.49	6252.01	-136.15	778.29	-123.39	376.26	54.47	6.99	P	
6333.38	6252.80	-513.48	781.66	6322.80	6265.20	-136.58	780.03	-123.42	377.11	54.62	6.98	P	
6420.00†	6338.69	-521.84	788.38	6408.87	6351.04	-139.36	784.58	-174.90	382.69	55.68	6.95	P	
6520.00†	6437.87	-531.58	781.50	6507.88	6449.47	-142.56	775.48	122.44	389.24	57.47	6.84	P	
6620.00†	6534.73	-541.19	759.12	6606.55	6544.99	-145.66	751.30	106.06	395.74	59.23	6.73	P	
6720.00†	6626.95	-550.44	721.78	6704.94	6635.38	-148.61	712.80	99.59	402.02	60.43	6.72	P	
6820.00†	6712.19	-559.10	670.41	6803.09	6718.58	-151.32	660.98	96.05	407.93	61.91	6.65	P	
6920.00†	6788.37	-566.95	606.27	6901.07	6792.71	-153.75	597.12	93.80	413.32	64.04	6.52	P	
7020.00†	6853.62	-573.80	530.93	6998.92	6856.12	-155.83	522.74	92.27	418.06	66.74	6.32	P	
7120.00†	6906.33	-579.49	446.27	7096.69	6907.35	-157.52	439.60	91.21	422.02	70.35	6.05	P	
7220.00†	6945.20	-583.87	354.35	7194.43	6945.26	-158.78	349.62	90.51	425.12	74.70	5.74	P	
7320.00†	6969.29	-586.83	257.44	7292.19	6968.98	-159.58	254.89	90.12	427.26	79.62	5.41	P	
7420.00†	6977.98	-588.31	157.94	7390.01	6977.93	-159.91	157.58	90.00	428.40	84.82	5.09	P	
7428.43	6978.00	-588.37	149.50	7398.26	6978.00	-159.91	149.33	90.00	428.45	85.26	5.06	P	
7478.43	6977.79	-588.66	99.50	7448.17	6977.81	-159.92	99.41	90.00	428.74	88.05	4.90	P	
7520.00†	6977.61	-589.21	57.94	7489.74	6977.63	-159.93	57.85	90.00	429.27	90.47	4.77	P	
7536.58	6977.55	-589.59	41.36	7506.32	6977.56	-159.93	41.27	90.00	429.66	91.44	4.73	P	
7620.00†	6977.19	-591.78	-42.02	7589.70	6977.21	-159.95	-42.11	90.00	431.82	96.63	4.49	P	
7720.00†	6976.77	-594.39	-141.99	7689.67	6976.79	-159.97	-142.08	90.00	434.42	103.27	4.23	P	
7820.00†	6976.35	-597.01	-241.95	7789.64	6976.37	-159.99	-242.04	90.00	437.02	110.28	3.98	P	
7920.00†	6975.93	-599.63	-341.92	7889.60	6975.94	-160.01	-342.01	90.00	439.61	117.60	3.73	P	
8020.00†	6975.51	-602.25	-441.88	7989.57	6975.52	-160.03	-441.98	90.00	442.21	125.17	3.55	P	
8120.00†	6975.09	-604.86	-541.85	8089.53	6975.10	-160.06	-541.94	90.00	444.81	132.96	3.36	P	
8220.00†	6974.67	-607.48	-641.81	8189.50	6974.68	-160.08	-641.91	90.00	447.41	140.92	3.19	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 50 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	Z	St
8320.00†	6974.25	-610.10	-741.78	8289.47	6974.26	-160.10	-741.87	90.00	450.00	149.03	3.03	P	
8420.00†	6973.83	-612.72	-841.74	8389.43	6973.83	-160.12	-841.84	89.99	452.60	157.26	2.89	P	
8520.00†	6973.41	-615.33	-941.71	8489.40	6973.41	-160.14	-941.80	89.99	455.20	165.60	2.76	P	
8620.00†	6972.99	-617.95	-1041.67	8589.37	6972.99	-160.16	-1041.77	89.99	457.79	174.03	2.64	P	
8720.00†	6972.57	-620.57	-1141.64	8689.33	6972.57	-160.18	-1141.73	89.99	460.39	182.54	2.53	P	
8820.00†	6972.15	-623.19	-1241.60	8789.30	6972.15	-160.20	-1241.70	89.99	462.99	191.11	2.43	P	
8920.00†	6971.73	-625.81	-1341.57	8889.26	6971.73	-160.22	-1341.66	89.99	465.58	199.75	2.34	P	
9020.00†	6971.31	-628.42	-1441.53	8989.23	6971.30	-160.24	-1441.63	89.99	468.18	208.43	2.25	P	
9120.00†	6970.88	-631.04	-1541.50	9089.20	6970.88	-160.26	-1541.59	89.99	470.78	217.16	2.17	P	
9220.00†	6970.46	-633.66	-1641.46	9189.18	6970.46	-160.28	-1641.56	89.99	473.38	225.93	2.10	P	
9320.00†	6970.04	-636.28	-1741.43	9289.13	6970.04	-160.30	-1741.53	89.99	475.97	234.74	2.03	P	
9420.00†	6969.62	-638.89	-1841.39	9389.10	6969.62	-160.32	-1841.49	89.99	478.57	243.58	1.97	P	
9520.00†	6969.20	-641.51	-1941.36	9489.06	6969.20	-160.34	-1941.46	89.99	481.17	252.44	1.91	P	
9620.00†	6968.78	-644.13	-2041.32	9589.03	6968.77	-160.37	-2041.42	89.99	483.76	261.33	1.85	P	
9720.00†	6968.36	-646.75	-2141.29	9688.99	6968.35	-160.39	-2141.39	89.99	486.36	270.25	1.80	P	
9820.00†	6967.94	-649.36	-2241.25	9788.96	6967.93	-160.41	-2241.35	89.99	488.96	279.18	1.75	P	
9920.00†	6967.52	-651.98	-2341.22	9888.93	6967.51	-160.43	-2341.32	89.99	491.55	288.14	1.71	P	
10020.00†	6967.10	-654.60	-2441.18	9988.89	6967.09	-160.45	-2441.28	89.99	494.15	297.11	1.66	P	
10120.00†	6966.68	-657.22	-2541.15	10088.86	6966.66	-160.47	-2541.25	89.99	496.75	306.09	1.62	P	
10220.00†	6966.26	-659.84	-2641.11	10188.83	6966.24	-160.49	-2641.21	89.99	499.35	315.09	1.59	P	
10320.00†	6965.84	-662.45	-2741.08	10288.79	6965.82	-160.51	-2741.18	89.99	501.94	324.11	1.55	P	
10420.00†	6965.42	-665.07	-2841.04	10388.76	6965.40	-160.53	-2841.14	89.99	504.54	333.13	1.52	P	
10520.00†	6965.00	-667.69	-2941.01	10488.72	6964.98	-160.55	-2941.11	89.99	507.14	342.17	1.48	P	
10620.00†	6964.58	-670.31	-3040.97	10588.69	6964.56	-160.57	-3041.08	89.99	509.73	351.22	1.45	P	
10720.00†	6964.15	-672.92	-3140.93	10688.66	6964.13	-160.59	-3141.04	89.99	512.33	360.27	1.42	P	
10820.00†	6963.73	-675.54	-3240.90	10788.62	6963.71	-160.61	-3241.01	89.99	514.93	369.34	1.39	P	
10920.00†	6963.31	-678.16	-3340.86	10888.59	6963.29	-160.63	-3340.97	89.99	517.52	378.41	1.37	P	
11020.00†	6962.89	-680.78	-3440.83	10988.56	6962.87	-160.65	-3440.94	89.99	520.12	387.49	1.34	P	
11120.00†	6962.47	-683.39	-3540.79	11088.52	6962.45	-160.68	-3540.90	89.99	522.72	396.58	1.32	P	
11220.00†	6962.05	-686.01	-3640.76	11188.49	6962.03	-160.70	-3640.87	89.99	525.32	405.67	1.30	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 51 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													z
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		Si
11320.00†	6961.63	-688.63	-3740.72	11288.45	6961.60	-160.72	-3740.83	89.99	527.91	414.77	1.27	P	
11420.00†	6961.21	-691.25	-3840.69	11388.42	6961.18	-160.74	-3840.80	89.99	530.51	423.88	1.25	P	
11520.00†	6960.79	-693.86	-3940.65	11488.39	6960.76	-160.76	-3940.76	89.99	533.11	432.99	1.23	P	
11620.00†	6960.37	-696.48	-4040.62	11588.35	6960.34	-160.78	-4040.73	89.99	535.70	442.11	1.21	P	
11636.58	6960.30	-696.92	-4057.20	11604.93	6960.27	-160.78	-4057.31	89.99	536.13	443.62	1.21	P	
11720.00†	6959.95	-697.89	-4140.60	11688.34	6959.92	-160.80	-4140.71	90.00	537.09	451.24	1.19	P	
11739.19	6959.87	-697.77	-4159.80	11707.53	6959.84	-160.80	-4159.91	90.00	536.96	452.99	1.19	P	
11820.00†	6959.53	-696.99	-4240.60	11788.34	6959.49	-160.82	-4240.71	90.00	536.17	460.39	1.16	P	
11920.00†	6959.10	-696.02	-4340.59	11888.33	6959.07	-160.84	-4340.70	90.00	535.18	469.54	1.14	P	
12020.00†	6958.68	-695.06	-4440.59	11988.33	6958.65	-160.86	-4440.70	90.00	534.20	478.70	1.12	P	
12120.00†	6958.26	-694.10	-4540.58	12088.32	6958.23	-160.88	-4540.69	90.00	533.21	487.86	1.09	P	
12220.00†	6957.84	-693.13	-4640.58	12188.32	6957.81	-160.90	-4640.69	90.00	532.23	497.03	1.07	P	
12320.00†	6957.42	-692.17	-4740.57	12288.31	6957.38	-160.92	-4740.68	90.00	531.24	506.20	1.05	P	
12420.00†	6957.00	-691.20	-4840.57	12388.31	6956.96	-160.94	-4840.67	90.00	530.26	515.37	1.03	P	
12520.00†	6956.57	-690.24	-4940.56	12488.30	6956.54	-160.97	-4940.67	90.00	529.27	524.54	1.01	P	
12620.00†	6956.15	-689.28	-5040.55	12588.30	6956.12	-160.99	-5040.66	90.00	528.29	533.72	0.99	F	
12720.00†	6955.73	-688.31	-5140.55	12688.29	6955.70	-161.01	-5140.66	90.00	527.31	542.90	0.97	F	
12820.00†	6955.31	-687.35	-5240.54	12788.29	6955.28	-161.03	-5240.65	90.00	526.32	552.08	0.95	F	
12920.00†	6954.89	-686.38	-5340.54	12888.28	6954.85	-161.05	-5340.65	90.00	525.34	561.26	0.94	F	
13020.00†	6954.47	-685.42	-5440.53	12988.28	6954.43	-161.07	-5440.64	90.00	524.35	570.43	0.92	F	
13120.00†	6954.04	-684.46	-5540.53	13088.27	6954.01	-161.09	-5540.63	90.00	523.37	579.64	0.90	F	
13220.00†	6953.62	-683.49	-5640.52	13188.27	6953.59	-161.11	-5640.63	90.00	522.38	588.83	0.89	F	
13320.00†	6953.20	-682.53	-5740.52	13288.26	6953.17	-161.13	-5740.62	90.00	521.40	598.02	0.87	F	
13420.00†	6952.78	-681.57	-5840.51	13388.26	6952.74	-161.15	-5840.62	90.00	520.41	607.22	0.86	F	
13520.00†	6952.36	-680.60	-5940.50	13488.25	6952.32	-161.17	-5940.61	90.00	519.43	616.41	0.84	F	
13620.00†	6951.94	-679.64	-6040.50	13588.25	6951.90	-161.19	-6040.61	90.00	518.45	625.61	0.83	F	
13720.00†	6951.51	-678.67	-6140.49	13688.24	6951.48	-161.21	-6140.60	90.00	517.46	634.81	0.81	F	
13820.00†	6951.09	-677.71	-6240.49	13788.24	6951.06	-161.23	-6240.59	90.00	516.48	644.01	0.80	F	
13920.00†	6950.67	-676.75	-6340.48	13888.23	6950.63	-161.25	-6340.59	90.00	515.49	653.21	0.79	F	
14020.00†	6950.25	-675.78	-6440.48	13988.23	6950.21	-161.28	-6440.58	90.00	514.51	662.42	0.78	F	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 52 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)												
Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01)				Well: GREELEY-ROTH FEDERAL 13N-2B-L				Threshold Value=1.00 † = interpolated/extrapolated				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	Z St
14120.00†	6949.83	-674.82	-6540.47	14088.22	6949.79	-161.30	-6540.58	90.00	513.52	671.62	0.76	F
14220.00†	6949.41	-673.86	-6640.47	14188.22	6949.37	-161.32	-6640.57	90.00	512.54	680.83	0.75	F
14320.00†	6948.98	-672.89	-6740.46	14288.21	6948.95	-161.34	-6740.57	90.00	511.55	690.04	0.74	F
14420.00†	6948.56	-671.93	-6840.45	14388.21	6948.53	-161.36	-6840.56	90.00	510.57	699.25	0.73	F
14520.00†	6948.14	-670.96	-6940.45	14488.20	6948.10	-161.38	-6940.55	90.00	509.59	708.46	0.72	F
14620.00†	6947.72	-670.00	-7040.44	14588.20	6947.68	-161.40	-7040.55	90.00	508.60	717.67	0.71	F
14720.00†	6947.30	-669.04	-7140.44	14688.19	6947.26	-161.42	-7140.54	90.00	507.62	726.88	0.70	F
14820.00†	6946.87	-668.07	-7240.43	14788.19	6946.84	-161.44	-7240.54	90.00	506.63	736.09	0.69	F
14920.00†	6946.45	-667.11	-7340.43	14888.19	6946.42	-161.46	-7340.53	90.00	505.65	745.31	0.68	F
15020.00†	6946.03	-666.15	-7440.42	14988.18	6945.99	-161.48	-7440.53	90.00	504.66	754.52	0.67	F
15120.00†	6945.61	-665.18	-7540.42	15088.18	6945.57	-161.50	-7540.52	90.00	503.68	763.74	0.66	F
15220.00†	6945.19	-664.22	-7640.41	15188.17	6945.15	-161.52	-7640.51	90.00	502.69	772.96	0.65	F
15320.00†	6944.77	-663.25	-7740.40	15288.17	6944.73	-161.54	-7740.51	90.00	501.71	782.17	0.64	F
15420.00†	6944.34	-662.29	-7840.40	15388.16	6944.31	-161.57	-7840.50	90.00	500.73	791.39	0.63	F
15520.00†	6943.92	-661.33	-7940.39	15488.16	6943.88	-161.59	-7940.50	90.00	499.74	800.61	0.62	F
15620.00†	6943.50	-660.36	-8040.39	15588.15	6943.46	-161.61	-8040.49	90.00	498.76	809.83	0.62	F
15720.00†	6943.08	-659.40	-8140.38	15688.15	6943.04	-161.63	-8140.49	90.00	497.77	819.05	0.61	F
15820.00†	6942.66	-658.44	-8240.38	15788.14	6942.62	-161.65	-8240.48	90.00	496.79	828.27	0.60	F
15920.00†	6942.24	-657.47	-8340.37	15888.14	6942.20	-161.67	-8340.47	90.00	495.80	837.50	0.59	F
16020.00†	6941.81	-656.51	-8440.37	15988.13	6941.77	-161.69	-8440.47	90.00	494.82	846.72	0.58	F
16120.00†	6941.39	-655.54	-8540.36	16088.13	6941.35	-161.71	-8540.46	90.00	493.83	855.94	0.58	F
16220.00†	6940.97	-654.58	-8640.35	16188.12	6940.93	-161.73	-8640.46	90.00	492.85	865.17	0.57	F
16320.00†	6940.55	-653.62	-8740.35	16288.12	6940.51	-161.75	-8740.45	90.00	491.87	874.39	0.56	F
16420.00†	6940.13	-652.65	-8840.34	16388.11	6940.09	-161.77	-8840.45	90.00	490.88	883.62	0.56	F
16520.00†	6939.71	-651.69	-8940.34	16488.11	6939.67	-161.79	-8940.44	90.00	489.90	892.84	0.55	F
16620.00†	6939.28	-650.72	-9040.33	16588.10	6939.24	-161.81	-9040.43	90.00	488.91	902.07	0.54	F
16720.00†	6938.86	-649.76	-9140.33	16688.10	6938.82	-161.83	-9140.43	90.00	487.93	911.30	0.54	F
16820.00†	6938.44	-648.80	-9240.32	16788.09	6938.40	-161.85	-9240.42	90.00	486.94	920.53	0.53	F
16920.00†	6938.02	-647.83	-9340.32	16888.09	6937.98	-161.88	-9340.42	90.00	485.96	929.75	0.52	F
17020.00†	6937.60	-646.87	-9440.31	16988.08	6937.56	-161.90	-9440.41	90.00	484.97	938.98	0.52	F

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 53 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#21 GREELEY-ROTH FEDERAL 13N-2B-L (1003'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	Z St
17120.00†	6937.18	-645.91	-9540.31	17088.08	6937.13	-161.92	-9540.41	90.00	483.99	948.21	0.51	F
17161.54	6937.00	-645.51	-9581.84	17129.62	6936.96	-161.93	-9581.94	90.00	483.58	952.05	0.51	F

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	20.00	1740.77	24.43	-0.14	15.23	40.48
9.625in Casing Surface	20.00	1750.00	1730.00	20.00	1740.77	24.43	-0.14	15.23	40.48
8.5in Open Hole	1750.00	17356.82	15606.82	1740.77	N/A	15.23	40.48	N/A	N/A

## SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13N-2B-L PWB
1750.00	17356.82	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13N-2B-L PWB



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 54 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 13N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13N-2B-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20') (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 55 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI) Well: EX. HERTZKE 1-34 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	24.00	20.00	-332.79	-2905.64	-96.53	2924.63	2.26	2253.39	PASS	
120.00†	120.00	0.00	0.00	124.00	120.00	-332.79	-2905.64	-96.53	2924.63	5.17	695.05	PASS	
220.00†	220.00	0.00	0.00	224.00	220.00	-332.79	-2905.64	-96.53	2924.63	10.37	310.86	PASS	
320.00†	320.00	0.00	0.00	324.00	320.00	-332.79	-2905.64	-96.53	2924.63	15.14	206.24	PASS	
420.00†	420.00	0.00	0.00	424.00	420.00	-332.79	-2905.64	-96.53	2924.63	19.93	154.15	PASS	
520.00†	520.00	0.00	0.00	524.00	520.00	-332.79	-2905.64	-96.53	2924.63	24.73	123.03	PASS	
620.00†	620.00	0.00	0.00	624.00	620.00	-332.79	-2905.64	-96.53	2924.63	29.53	102.35	PASS	
700.00	700.00	0.00	0.00	704.00	700.00	-332.79	-2905.64	-96.53	2924.63	33.37	90.22	PASS	
720.00†	720.00	-0.04	0.06	724.00	720.00	-332.79	-2905.64	140.17	2924.69	34.33	87.63	PASS	
820.00†	819.96	-1.38	2.10	823.96	819.96	-332.79	-2905.64	140.17	2926.56	39.22	76.47	PASS	
920.00†	919.78	-4.64	7.06	923.78	919.78	-332.79	-2905.64	140.19	2931.12	44.30	67.61	PASS	
1020.00†	1019.33	-9.80	14.92	1023.33	1019.33	-332.79	-2905.64	140.21	2938.37	49.31	60.75	PASS	
1120.00†	1118.50	-16.87	25.69	1122.50	1118.50	-332.79	-2905.64	140.24	2948.30	54.27	55.29	PASS	
1200.18	1197.64	-23.91	36.40	1201.64	1197.64	-332.79	-2905.64	140.27	2958.21	58.19	51.68	PASS	
1220.00†	1217.16	-25.80	39.28	1221.16	1217.16	-332.79	-2905.64	140.32	2960.88	59.13	50.89	PASS	
1320.00†	1315.64	-35.34	53.80	1319.64	1315.64	-332.79	-2905.64	140.53	2974.35	63.84	47.29	PASS	
1420.00†	1414.12	-44.88	68.32	1418.12	1414.12	-332.79	-2905.64	140.74	2987.86	68.56	44.19	PASS	
1520.00†	1512.60	-54.42	82.84	1516.60	1512.60	-332.79	-2905.64	140.95	3001.41	73.29	41.48	PASS	
1620.00†	1611.08	-63.95	97.35	1615.08	1611.08	-332.79	-2905.64	141.16	3015.00	78.03	39.11	PASS	
1720.00†	1709.56	-73.49	111.87	1713.56	1709.56	-332.79	-2905.64	141.38	3028.63	82.77	37.01	PASS	
1820.00†	1808.04	-83.03	126.39	1812.04	1808.04	-332.79	-2905.64	141.56	3042.30	87.14	35.19	PASS	
1920.00†	1906.52	-92.56	140.91	1910.52	1906.52	-332.79	-2905.64	141.76	3056.00	91.64	33.60	PASS	
2020.00†	2005.00	-102.10	155.43	2009.00	2005.00	-332.79	-2905.64	141.96	3069.75	96.19	32.14	PASS	
2120.00†	2103.48	-111.64	169.95	2107.48	2103.48	-332.79	-2905.64	142.16	3083.52	100.78	30.81	PASS	
2220.00†	2201.96	-121.18	184.46	2205.96	2201.96	-332.79	-2905.64	142.36	3097.34	105.42	29.57	PASS	
2320.00†	2300.44	-130.71	198.98	2304.44	2300.44	-332.79	-2905.64	142.55	3111.19	110.09	28.44	PASS	
2420.00†	2398.92	-140.25	213.50	2402.92	2398.92	-332.79	-2905.64	142.74	3125.08	114.80	27.39	PASS	
2520.00†	2497.40	-149.79	228.02	2501.40	2497.40	-332.79	-2905.64	142.94	3139.00	119.53	26.41	PASS	
2620.00†	2595.88	-159.33	242.54	2599.88	2595.88	-332.79	-2905.64	143.12	3152.95	124.29	25.51	PASS	
2720.00†	2694.36	-168.86	257.06	2698.36	2694.36	-332.79	-2905.64	143.31	3166.94	129.08	24.66	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 56 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI) Well: EX. HERTZKE 1-34 Threshold Value=1.00 † = Interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2796.84	2792.84	-332.79	-2905.64	143.50	3180.96	133.89	23.88	PASS
2920.00†	2891.32	-187.94	286.09	2895.32	2891.32	-332.79	-2905.64	143.68	3195.02	138.71	23.15	PASS
3020.00†	2989.80	-197.48	300.61	2993.80	2989.80	-332.79	-2905.64	143.87	3209.10	143.55	22.46	PASS
3120.00†	3088.28	-207.01	315.13	3092.28	3088.28	-332.79	-2905.64	144.05	3223.22	148.41	21.82	PASS
3220.00†	3186.76	-216.55	329.65	3190.76	3186.76	-332.79	-2905.64	144.23	3237.37	153.27	21.22	PASS
3320.00†	3285.24	-226.09	344.17	3289.24	3285.24	-332.79	-2905.64	144.40	3251.56	158.15	20.65	PASS
3420.00†	3383.71	-235.62	358.69	3387.71	3383.71	-332.79	-2905.64	144.58	3265.77	163.04	20.11	PASS
3520.00†	3482.19	-245.16	373.20	3486.19	3482.19	-332.79	-2905.64	144.76	3280.01	167.93	19.61	PASS
3620.00†	3580.67	-254.70	387.72	3584.67	3580.67	-332.79	-2905.64	144.93	3294.29	172.83	19.13	PASS
3720.00†	3679.15	-264.24	402.24	3683.15	3679.15	-332.79	-2905.64	145.10	3308.59	177.74	18.69	PASS
3820.00†	3777.63	-273.77	416.76	3781.63	3777.63	-332.79	-2905.64	145.27	3322.92	182.66	18.26	PASS
3920.00†	3876.11	-283.31	431.28	3880.11	3876.11	-332.79	-2905.64	145.44	3337.28	187.57	17.86	PASS
4020.00†	3974.59	-292.85	445.80	3978.59	3974.59	-332.79	-2905.64	145.61	3351.67	192.50	17.47	PASS
4120.00†	4073.07	-302.39	460.32	4077.07	4073.07	-332.79	-2905.64	145.77	3366.09	197.43	17.11	PASS
4220.00†	4171.55	-311.92	474.83	4175.55	4171.55	-332.79	-2905.64	145.94	3380.54	202.36	16.76	PASS
4320.00†	4270.03	-321.46	489.35	4274.03	4270.03	-332.79	-2905.64	146.10	3395.01	207.30	16.43	PASS
4420.00†	4368.51	-331.00	503.87	4372.51	4368.51	-332.79	-2905.64	146.26	3409.51	212.23	16.12	PASS
4520.00†	4466.99	-340.53	518.39	4470.99	4466.99	-332.79	-2905.64	146.43	3424.04	217.18	15.81	PASS
4620.00†	4565.47	-350.07	532.91	4569.47	4565.47	-332.79	-2905.64	146.58	3438.59	222.12	15.53	PASS
4720.00†	4663.95	-359.61	547.43	4667.95	4663.95	-332.79	-2905.64	146.74	3453.17	227.07	15.25	PASS
4820.00†	4762.43	-369.15	561.94	4766.43	4762.43	-332.79	-2905.64	146.90	3467.77	232.01	14.99	PASS
4920.00†	4860.91	-378.68	576.46	4864.91	4860.91	-332.79	-2905.64	147.05	3482.40	236.97	14.74	PASS
5020.00†	4959.39	-388.22	590.98	4963.39	4959.39	-332.79	-2905.64	147.21	3497.06	241.92	14.50	PASS
5120.00†	5057.87	-397.76	605.50	5061.87	5057.87	-332.79	-2905.64	147.36	3511.74	246.87	14.26	PASS
5220.00†	5156.35	-407.30	620.02	5160.35	5156.35	-332.79	-2905.64	147.51	3526.44	251.83	14.04	PASS
5320.00†	5254.83	-416.83	634.54	5258.83	5254.83	-332.79	-2905.64	147.66	3541.17	256.78	13.83	PASS
5420.00†	5353.31	-426.37	649.06	5357.31	5353.31	-332.79	-2905.64	147.81	3555.92	261.74	13.62	PASS
5520.00†	5451.79	-435.91	663.57	5455.79	5451.79	-332.79	-2905.64	147.96	3570.70	266.70	13.42	PASS
5620.00†	5550.27	-445.45	678.09	5554.27	5550.27	-332.79	-2905.64	148.11	3585.50	271.66	13.23	PASS
5720.00†	5648.75	-454.98	692.61	5652.75	5648.75	-332.79	-2905.64	148.25	3600.32	276.62	13.05	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 57 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI) Well: EX. HERTZKE 1-34 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
5820.00†	5747.23	-464.52	707.13	5751.23	5747.23	-332.79	-2905.64	148.40	3615.17	281.58	12.87	PASS		
5920.00†	5845.71	-474.06	721.65	5849.71	5845.71	-332.79	-2905.64	148.54	3630.04	286.55	12.70	PASS		
6020.00†	5944.19	-483.59	736.17	5948.19	5944.19	-332.79	-2905.64	148.68	3644.93	291.51	12.53	PASS		
6120.00†	6042.67	-493.13	750.68	6046.67	6042.67	-332.79	-2905.64	148.82	3659.84	296.48	12.37	PASS		
6220.00†	6141.15	-502.67	765.20	6145.15	6141.15	-332.79	-2905.64	148.96	3674.77	301.44	12.22	PASS		
6320.00†	6239.63	-512.21	779.72	6243.63	6239.63	-332.79	-2905.64	149.10	3689.72	306.41	12.07	PASS		
6333.38	6252.80	-513.48	781.66	6256.80	6252.80	-332.79	-2905.64	149.12	3691.73	307.07	12.05	PASS		
6420.00†	6338.69	-521.84	788.38	6342.69	6338.69	-332.79	-2905.64	98.55	3698.85	311.46	11.90	PASS		
6520.00†	6437.87	-531.58	781.50	6441.87	6437.87	-332.79	-2905.64	37.00	3692.49	317.00	11.67	PASS		
6620.00†	6534.75	-541.19	759.12	6538.75	6534.75	-332.79	-2905.64	21.79	3670.68	322.99	11.39	PASS		
6720.00†	6626.95	-550.44	721.78	6630.95	6626.95	-332.79	-2905.64	16.57	3633.94	328.38	11.09	PASS		
6820.00†	6712.19	-559.10	670.41	6716.19	6712.19	-332.79	-2905.64	14.40	3583.20	333.18	10.78	PASS		
6920.00†	6788.37	-566.95	606.27	6792.37	6788.37	-332.79	-2905.64	13.72	3519.70	337.33	10.45	PASS		
7020.00†	6853.62	-573.80	530.93	6857.62	6853.62	-332.79	-2905.64	14.15	3445.01	340.79	10.13	PASS		
7120.00†	6906.33	-579.49	446.27	6910.33	6906.33	-332.79	-2905.64	15.92	3360.97	343.51	9.80	PASS		
7220.00†	6945.20	-583.87	354.35	6949.20	6945.20	-332.79	-2905.64	20.19	3269.64	345.46	9.48	PASS		
7320.00†	6969.29	-586.83	257.44	6973.29	6969.29	-332.79	-2905.64	32.07	3173.27	346.64	9.17	PASS		
7420.00†	6977.98	-588.31	157.94	6981.98	6977.98	-332.79	-2905.64	84.34	3074.21	347.08	8.87	PASS		
7428.43	6978.00	-588.37	149.50	6982.00	6978.00	-332.79	-2905.64	92.69	3065.81	347.08	8.85	PASS		
7478.43	6977.79	-588.66	99.50	6981.79	6977.79	-332.79	-2905.64	92.64	3016.01	347.09	8.71	PASS		
7520.00†	6977.61	-589.21	57.94	6981.61	6977.61	-332.79	-2905.64	92.25	2974.65	347.10	8.59	PASS		
7536.58	6977.55	-589.59	41.36	6981.55	6977.55	-332.79	-2905.64	92.12	2958.17	347.11	8.54	PASS		
7620.00†	6977.19	-591.78	-42.02	6981.19	6977.19	-332.79	-2905.64	92.06	2875.30	347.14	8.30	PASS		
7720.00†	6976.77	-594.39	-141.99	6980.77	6976.77	-332.79	-2905.64	91.99	2776.00	347.21	8.01	PASS		
7820.00†	6976.35	-597.01	-241.95	6980.35	6976.35	-332.79	-2905.64	91.92	2676.76	347.29	7.72	PASS		
7920.00†	6975.93	-599.63	-341.92	6979.93	6975.93	-332.79	-2905.64	91.84	2577.57	347.40	7.43	PASS		
8020.00†	6975.51	-602.25	-441.88	6979.51	6975.51	-332.79	-2905.64	91.77	2478.45	347.55	7.14	PASS		
8120.00†	6975.09	-604.86	-541.85	6979.09	6975.09	-332.79	-2905.64	91.70	2379.40	347.73	6.85	PASS		
8220.00†	6974.67	-607.48	-641.81	6978.67	6974.67	-332.79	-2905.64	91.63	2280.43	347.96	6.57	PASS		
8320.00†	6974.25	-610.10	-741.78	6978.25	6974.25	-332.79	-2905.64	91.56	2181.56	348.24	6.28	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 58 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Facility: SEC.01-T05N-R67W				Slot: SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI)		Well: EX. HERTZKE 1-34		Threshold Value=1.00 † = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8420.00†	6973.83	-612.72	-841.74	6977.83	6973.83	-332.79	-2905.64	91.48	2082.79	348.59	5.99	PASS
8520.00†	6973.41	-615.33	-941.71	6977.41	6973.41	-332.79	-2905.64	91.41	1984.15	349.01	5.69	PASS
8620.00†	6972.99	-617.95	-1041.67	6976.99	6972.99	-332.79	-2905.64	91.34	1885.65	349.53	5.40	PASS
8720.00†	6972.57	-620.57	-1141.64	6976.57	6972.57	-332.79	-2905.64	91.27	1787.32	350.17	5.11	PASS
8820.00†	6972.15	-623.19	-1241.60	6976.15	6972.15	-332.79	-2905.64	91.20	1689.18	350.96	4.82	PASS
8920.00†	6971.73	-625.81	-1341.57	6975.73	6971.73	-332.79	-2905.64	91.12	1591.28	351.92	4.53	PASS
9020.00†	6971.31	-628.42	-1441.53	6975.31	6971.31	-332.79	-2905.64	91.05	1493.65	353.11	4.24	PASS
9120.00†	6970.88	-631.04	-1541.50	6974.88	6970.88	-332.79	-2905.64	90.98	1396.36	354.57	3.94	PASS
9220.00†	6970.46	-633.66	-1641.46	6974.46	6970.46	-332.79	-2905.64	90.91	1299.49	356.38	3.65	PASS
9320.00†	6970.04	-636.28	-1741.43	6974.04	6970.04	-332.79	-2905.64	90.83	1203.12	358.63	3.36	PASS
9420.00†	6969.62	-638.89	-1841.39	6973.62	6969.62	-332.79	-2905.64	90.76	1107.39	361.44	3.07	PASS
9520.00†	6969.20	-641.51	-1941.36	6973.20	6969.20	-332.79	-2905.64	90.69	1012.50	364.98	2.78	PASS
9620.00†	6968.78	-644.13	-2041.32	6972.78	6968.78	-332.79	-2905.64	90.62	918.68	369.45	2.49	PASS
9720.00†	6968.36	-646.75	-2141.29	6972.36	6968.36	-332.79	-2905.64	90.55	826.32	375.15	2.20	PASS
9820.00†	6967.94	-649.36	-2241.25	6971.94	6967.94	-332.79	-2905.64	90.47	735.95	382.45	1.93	PASS
9920.00†	6967.52	-651.98	-2341.22	6971.52	6967.52	-332.79	-2905.64	90.40	648.43	391.88	1.66	PASS
10020.00†	6967.10	-654.60	-2441.18	6971.10	6967.10	-332.79	-2905.64	90.33	565.05	404.07	1.40	PASS
10120.00†	6966.68	-657.22	-2541.15	6970.68	6966.68	-332.79	-2905.64	90.26	487.96	419.65	1.16	PASS
10220.00†	6966.26	-659.84	-2641.11	6970.26	6966.26	-332.79	-2905.64	90.19	420.63	438.71	0.96	FAIL
10320.00†	6965.84	-662.45	-2741.08	6969.84	6965.84	-332.79	-2905.64	90.11	368.45	459.47	0.80	FAIL
10420.00†	6965.42	-665.07	-2841.04	6969.42	6965.42	-332.79	-2905.64	90.04	338.50	476.31	0.71	FAIL
10475.89†	6965.18	-666.53	-2896.91	6969.13	6965.13	-332.79	-2905.64	89.99	333.86	481.06	0.69	FAIL
10483.86†	6965.15	-666.74	-2904.88	6969.15	6965.15	-332.79	-2905.64	89.99	333.95	481.39	0.69	FAIL
10520.00†	6965.00	-667.69	-2941.01	6969.00	6965.00	-332.79	-2905.64	89.97	336.76	481.69	0.70	FAIL
10620.00†	6964.58	-670.31	-3040.97	6968.58	6964.58	-332.79	-2905.64	89.90	363.64	473.95	0.77	FAIL
10720.00†	6964.15	-672.92	-3140.93	6968.15	6964.15	-332.79	-2905.64	89.82	413.59	459.09	0.90	FAIL
10820.00†	6963.73	-675.54	-3240.90	6967.73	6963.73	-332.79	-2905.64	89.75	479.46	443.32	1.08	PASS
10920.00†	6963.31	-678.16	-3340.86	6967.31	6963.31	-332.79	-2905.64	89.68	555.61	429.43	1.29	PASS
11020.00†	6962.89	-680.78	-3440.83	6966.89	6962.89	-332.79	-2905.64	89.61	638.38	418.02	1.53	PASS
11120.00†	6962.47	-683.39	-3540.79	6966.47	6962.47	-332.79	-2905.64	89.54	725.50	408.82	1.78	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 59 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI) Well: EX. HERTZKE 1-34 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11220.00†	6962.05	-686.01	-3640.76	6966.05	6962.05	-332.79	-2905.64	89.46	815.58	401.42	2.03	PASS
11320.00†	6961.63	-688.63	-3740.72	6965.63	6961.63	-332.79	-2905.64	89.39	907.74	395.41	2.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7342.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7342>	EX. HERTZKE 1-34 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HERTZKE 1-34 AWB Offset Wellpath: EX. HERTZKE 1-34 AWP

MD Reference: Rig on SLOT#26 EX. HERTZKE1-34 (766'FSL & 1975'FWL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 60 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#01 EX. GENESIS 3 (660'FSL & 660'FEL, PR/CODL) Well: EX. GENESIS 3 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	6.00	20.00	-310.37	-347.46	-131.77	465.90	50.18	9.45	PASS	
120.00†	120.00	0.00	0.00	106.00	120.00	-310.37	-347.46	-131.77	465.90	50.43	9.40	PASS	
220.00†	220.00	0.00	0.00	206.00	220.00	-310.37	-347.46	-131.77	465.90	51.42	9.22	PASS	
320.00†	320.00	0.00	0.00	306.00	320.00	-310.37	-347.46	-131.77	465.90	53.11	8.92	PASS	
420.00†	420.00	0.00	0.00	406.00	420.00	-310.37	-347.46	-131.77	465.90	55.40	8.54	PASS	
520.00†	520.00	0.00	0.00	506.00	520.00	-310.37	-347.46	-131.77	465.90	58.16	8.13	PASS	
620.00†	620.00	0.00	0.00	606.00	620.00	-310.37	-347.46	-131.77	465.90	61.28	7.71	PASS	
700.00	700.00	0.00	0.00	686.00	700.00	-310.37	-347.46	-131.77	465.90	63.99	7.38	PASS	
720.00†	720.00	-0.04	0.06	706.00	720.00	-310.37	-347.46	104.93	465.91	64.68	7.30	PASS	
820.00†	819.96	-1.38	2.10	805.96	819.96	-310.37	-347.46	105.21	466.55	68.29	6.92	PASS	
920.00†	919.78	-4.64	7.06	905.78	919.78	-310.37	-347.46	105.88	468.14	72.06	6.57	PASS	
1020.00†	1019.33	-9.80	14.92	1005.33	1019.33	-310.37	-347.46	106.93	470.81	75.95	6.27	PASS	
1120.00†	1118.50	-16.87	25.69	1104.50	1118.50	-310.37	-347.46	108.33	474.74	79.93	6.00	PASS	
1200.18	1197.64	-23.91	36.40	1183.64	1197.64	-310.37	-347.46	109.69	478.97	83.17	5.81	PASS	
1220.00†	1217.16	-25.80	39.28	1203.16	1217.16	-310.37	-347.46	110.07	480.15	83.97	5.77	PASS	
1320.00†	1315.64	-35.34	53.80	1301.64	1315.64	-310.37	-347.46	111.97	486.47	88.07	5.57	PASS	
1420.00†	1414.12	-44.88	68.32	1400.12	1414.12	-310.37	-347.46	113.81	493.31	92.22	5.40	PASS	
1520.00†	1512.60	-54.42	82.84	1498.60	1512.60	-310.37	-347.46	115.61	500.67	96.42	5.23	PASS	
1620.00†	1611.08	-63.95	97.35	1597.08	1611.08	-310.37	-347.46	117.35	508.51	100.66	5.09	PASS	
1720.00†	1709.56	-73.49	111.87	1695.56	1709.56	-310.37	-347.46	119.04	516.82	104.94	4.96	PASS	
1820.00†	1808.04	-83.03	126.39	1794.04	1808.04	-310.37	-347.46	120.68	525.57	108.95	4.85	PASS	
1920.00†	1906.52	-92.56	140.91	1892.52	1906.52	-310.37	-347.46	122.27	534.74	113.22	4.75	PASS	
2020.00†	2005.00	-102.10	155.43	1991.00	2005.00	-310.37	-347.46	123.80	544.31	117.52	4.65	PASS	
2120.00†	2103.48	-111.64	169.95	2089.48	2103.48	-310.37	-347.46	125.27	554.26	121.84	4.57	PASS	
2220.00†	2201.96	-121.18	184.46	2187.96	2201.96	-310.37	-347.46	126.70	564.57	126.19	4.49	PASS	
2320.00†	2300.44	-130.71	198.98	2286.44	2300.44	-310.37	-347.46	128.07	575.22	130.56	4.42	PASS	
2420.00†	2398.92	-140.25	213.50	2384.92	2398.92	-310.37	-347.46	129.40	586.19	134.96	4.36	PASS	
2520.00†	2497.40	-149.79	228.02	2483.40	2497.40	-310.37	-347.46	130.67	597.46	139.37	4.30	PASS	
2620.00†	2595.88	-159.33	242.54	2581.88	2595.88	-310.37	-347.46	131.90	609.03	143.81	4.25	PASS	
2720.00†	2694.36	-168.86	257.06	2680.36	2694.36	-310.37	-347.46	133.09	620.86	148.26	4.20	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 61 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#01 EX. GENESIS 3 (660'FSL & 660'FEL, PR/CODL) Well: EX. GENESIS 3 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	2778.84	2792.84	-310.37	-347.46	134.23	632.95	152.73	4.16	PASS	
2920.00†	2891.32	-187.94	286.09	2877.32	2891.32	-310.37	-347.46	135.32	645.28	157.22	4.12	PASS	
3020.00†	2989.80	-197.48	300.61	2975.80	2989.80	-310.37	-347.46	136.38	657.83	161.72	4.08	PASS	
3120.00†	3088.28	-207.01	315.13	3074.28	3088.28	-310.37	-347.46	137.40	670.60	166.24	4.05	PASS	
3220.00†	3186.76	-216.55	329.65	3172.76	3186.76	-310.37	-347.46	138.37	683.58	170.77	4.02	PASS	
3320.00†	3285.24	-226.09	344.17	3271.24	3285.24	-310.37	-347.46	139.32	696.74	175.32	3.99	PASS	
3420.00†	3383.71	-235.62	358.69	3369.71	3383.71	-310.37	-347.46	140.23	710.09	179.87	3.96	PASS	
3520.00†	3482.19	-245.16	373.20	3468.19	3482.19	-310.37	-347.46	141.10	723.61	184.45	3.93	PASS	
3620.00†	3580.67	-254.70	387.72	3566.67	3580.67	-310.37	-347.46	141.94	737.29	189.03	3.91	PASS	
3720.00†	3679.15	-264.24	402.24	3665.15	3679.15	-310.37	-347.46	142.76	751.12	193.63	3.89	PASS	
3820.00†	3777.63	-273.77	416.76	3763.63	3777.63	-310.37	-347.46	143.54	765.10	198.23	3.87	PASS	
3920.00†	3876.11	-283.31	431.28	3862.11	3876.11	-310.37	-347.46	144.29	779.21	202.85	3.85	PASS	
4020.00†	3974.59	-292.85	445.80	3960.59	3974.59	-310.37	-347.46	145.02	793.45	207.48	3.83	PASS	
4120.00†	4073.07	-302.39	460.32	4059.07	4073.07	-310.37	-347.46	145.73	807.81	212.12	3.82	PASS	
4220.00†	4171.55	-311.92	474.83	4157.55	4171.55	-310.37	-347.46	146.40	822.29	216.77	3.80	PASS	
4320.00†	4270.03	-321.46	489.35	4256.03	4270.03	-310.37	-347.46	147.06	836.89	221.43	3.79	PASS	
4420.00†	4368.51	-331.00	503.87	4354.51	4368.51	-310.37	-347.46	147.69	851.58	226.10	3.78	PASS	
4520.00†	4466.99	-340.53	518.39	4452.99	4466.99	-310.37	-347.46	148.30	866.37	230.77	3.76	PASS	
4620.00†	4565.47	-350.07	532.91	4551.47	4565.47	-310.37	-347.46	148.89	881.26	235.46	3.75	PASS	
4720.00†	4663.95	-359.61	547.43	4649.95	4663.95	-310.37	-347.46	149.47	896.24	240.15	3.74	PASS	
4820.00†	4762.43	-369.15	561.94	4748.43	4762.43	-310.37	-347.46	150.02	911.30	244.85	3.73	PASS	
4920.00†	4860.91	-378.68	576.46	4846.91	4860.91	-310.37	-347.46	150.55	926.44	249.56	3.72	PASS	
5020.00†	4959.39	-388.22	590.98	4945.39	4959.39	-310.37	-347.46	151.07	941.66	254.28	3.71	PASS	
5120.00†	5057.87	-397.76	605.50	5043.87	5057.87	-310.37	-347.46	151.57	956.96	259.01	3.70	PASS	
5220.00†	5156.35	-407.30	620.02	5142.35	5156.35	-310.37	-347.46	152.06	972.32	263.74	3.69	PASS	
5320.00†	5254.83	-416.83	634.54	5240.83	5254.83	-310.37	-347.46	152.53	987.75	268.48	3.69	PASS	
5420.00†	5353.31	-426.37	649.06	5339.31	5353.31	-310.37	-347.46	152.99	1003.24	273.22	3.68	PASS	
5520.00†	5451.79	-435.91	663.57	5437.79	5451.79	-310.37	-347.46	153.43	1018.80	277.97	3.67	PASS	
5620.00†	5550.27	-445.45	678.09	5536.27	5550.27	-310.37	-347.46	153.86	1034.41	282.73	3.67	PASS	
5720.00†	5648.75	-454.98	692.61	5634.75	5648.75	-310.37	-347.46	154.27	1050.08	287.49	3.66	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 62 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#01 EX. GENESIS 3 (660'FSL & 660'FEL, PR/CODL) Well: EX. GENESIS 3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5820.00†	5747.23	-464.52	707.13	5733.23	5747.23	-310.37	-347.46	154.68	1065.80	292.26	3.65	PASS
5920.00†	5845.71	-474.06	721.65	5831.71	5845.71	-310.37	-347.46	155.07	1081.57	297.04	3.65	PASS
6020.00†	5944.19	-483.59	736.17	5930.19	5944.19	-310.37	-347.46	155.45	1097.38	301.82	3.64	PASS
6120.00†	6042.67	-493.13	750.68	6028.67	6042.67	-310.37	-347.46	155.82	1113.25	306.60	3.64	PASS
6220.00†	6141.15	-502.67	765.20	6127.15	6141.15	-310.37	-347.46	156.18	1129.16	311.39	3.63	PASS
6320.00†	6239.63	-512.21	779.72	6225.63	6239.63	-310.37	-347.46	156.53	1145.11	316.19	3.63	PASS
6333.38	6252.80	-513.48	781.66	6238.80	6252.80	-310.37	-347.46	156.58	1147.25	316.83	3.63	PASS
6420.00†	6338.69	-521.84	788.38	6324.69	6338.69	-310.37	-347.46	106.13	1155.36	321.07	3.60	PASS
6520.00†	6437.87	-531.58	781.50	6423.87	6437.87	-310.37	-347.46	45.02	1150.43	326.40	3.53	PASS
6620.00†	6534.75	-541.19	759.12	6520.75	6534.75	-310.37	-347.46	30.60	1130.40	332.11	3.41	PASS
6720.00†	6626.95	-550.44	721.78	6612.95	6626.95	-310.37	-347.46	26.63	1095.86	337.24	3.25	PASS
6820.00†	6712.19	-559.10	670.41	6698.19	6712.19	-310.37	-347.46	26.34	1047.82	341.83	3.07	PASS
6920.00†	6788.37	-566.95	606.27	6774.37	6788.37	-310.37	-347.46	28.49	987.64	345.84	2.86	PASS
7020.00†	6853.62	-573.80	530.93	6839.62	6853.62	-310.37	-347.46	33.19	917.05	349.24	2.63	PASS
7120.00†	6906.33	-579.49	446.27	6892.33	6906.33	-310.37	-347.46	41.29	838.11	352.01	2.38	PASS
7220.00†	6945.20	-583.87	354.35	6931.20	6945.20	-310.37	-347.46	54.01	753.22	354.19	2.13	PASS
7320.00†	6969.29	-586.83	257.44	6955.29	6969.29	-310.37	-347.46	71.25	665.09	355.85	1.87	PASS
7420.00†	6977.98	-588.31	157.94	6963.98	6977.98	-310.37	-347.46	89.08	576.78	357.16	1.62	PASS
7428.43	6978.00	-588.37	149.50	6964.00	6978.00	-310.37	-347.46	90.43	569.43	357.26	1.60	PASS
7478.43	6977.79	-588.66	99.50	6963.79	6977.79	-310.37	-347.46	90.38	526.52	357.95	1.47	PASS
7520.00†	6977.61	-589.21	57.94	6963.61	6977.61	-310.37	-347.46	90.34	492.03	358.71	1.37	PASS
7536.58	6977.55	-589.59	41.36	6963.55	6977.55	-310.37	-347.46	90.32	478.69	359.06	1.33	PASS
7620.00†	6977.19	-591.78	-42.02	6963.19	6977.19	-310.37	-347.46	90.25	415.31	361.45	1.15	PASS
7720.00†	6976.77	-594.39	-141.99	6962.77	6976.77	-310.37	-347.46	90.17	350.55	365.88	0.96	FAIL
7820.00†	6976.35	-597.01	-241.95	6962.35	6976.35	-310.37	-347.46	90.08	305.44	371.70	0.82	FAIL
7918.67†	6975.94	-599.59	-340.59	6962.27	6976.27	-310.37	-347.46	90.06	289.30	376.57	0.77	FAIL
7920.00†	6975.93	-599.63	-341.92	6961.93	6975.93	-310.37	-347.46	90.00	289.31	376.60	0.77	FAIL
8020.00†	6975.51	-602.25	-441.88	6961.51	6975.51	-310.37	-347.46	89.92	306.77	377.77	0.81	FAIL
8120.00†	6975.09	-604.86	-541.85	6961.09	6975.09	-310.37	-347.46	89.83	352.86	375.73	0.94	FAIL
8220.00†	6974.67	-607.48	-641.81	6960.67	6974.67	-310.37	-347.46	89.75	418.23	372.74	1.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 63 of 184



REFERENCE WELLPATH IDENTIFICATION		
Operator	SRC ENERGY	Slot
Area	COLORADO	Well
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore
Facility	SEC.01-T05N-R67W	

CLEARANCE DATA - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP													
Facility: SEC.01-T05N-R67W Slot: SLOT#01 EX. GENESIS 3 (660°FSL & 660°FEL, PR/CODL) Well: EX. GENESIS 3 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8320.00†	6974.25	-610.10	-741.78	6960.25	6974.25	-310.37	-347.46	89.67	495.30	370.01	1.34	PASS	
8420.00†	6973.83	-612.72	-841.74	6959.83	6973.83	-310.37	-347.46	89.58	579.42	367.83	1.58	PASS	
8520.00†	6973.41	-615.33	-941.71	6959.41	6973.41	-310.37	-347.46	89.50	667.93	366.15	1.83	PASS	
8620.00†	6972.99	-617.95	-1041.67	6958.99	6972.99	-310.37	-347.46	89.42	759.30	364.86	2.08	PASS	
8720.00†	6972.57	-620.57	-1141.64	6958.57	6972.57	-310.37	-347.46	89.33	852.61	363.84	2.35	PASS	
8820.00†	6972.15	-623.19	-1241.60	6958.15	6972.15	-310.37	-347.46	89.25	947.28	363.04	2.61	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7268.00	Drift Indicator - Inclination Only (Actual Survey)	ASSSUMED VERTICAL TO TD FROM COGCC <7268>	EX. GENESIS 3 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. GENESIS 3 AWB Offset Wellpath: EX. GENESIS 3 AWP	
MD Reference: Rig on SLOT#01 EX. GENESIS 3 (660°FSL & 660°FEL, PR/CODL) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 64 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
20.00	20.00	0.00	0.00	19.00	20.00	60.11	-0.54	-0.52	60.11	1.26	197.17	PAS	
120.00†	120.00	0.00	0.00	119.00	120.00	60.11	-0.54	-0.52	60.11	1.88	64.56	PAS	
220.00†	220.00	0.00	0.00	219.00	220.00	60.11	-0.54	-0.52	60.11	2.44	39.93	PAS	
320.00†	320.00	0.00	0.00	319.00	320.00	60.11	-0.54	-0.52	60.11	3.05	28.39	PAS	
420.00†	420.00	0.00	0.00	419.00	420.00	60.11	-0.54	-0.52	60.11	3.66	21.93	PAS	
520.00†	520.00	0.00	0.00	519.00	520.00	60.11	-0.54	-0.52	60.11	4.28	17.83	PAS	
620.00†	620.00	0.00	0.00	619.01	620.00	60.11	0.29	0.28	60.11	4.90	15.03	PAS	
700.00	700.00	0.00	0.00	698.92	699.85	60.08	3.33	3.17	60.18	5.40	13.35	PAS	
720.00†	720.00	-0.04	0.06	718.87	719.77	60.08	4.43	-119.14	60.27	5.52	13.00	PAS	
820.00†	819.96	-1.38	2.10	818.47	819.07	60.02	12.03	-114.07	62.20	6.22	11.66	PAS	
920.00†	919.78	-4.64	7.06	917.79	917.78	59.94	23.03	-109.23	66.55	7.00	10.86	PAS	
1020.00†	1019.33	-9.80	14.92	1017.38	1016.46	59.84	36.44	-105.79	72.95	7.77	10.57	PAS	
1120.00†	1118.50	-16.87	25.69	1117.09	1115.26	59.74	49.94	-105.25	80.43	8.55	10.48	PAS	
1200.18	1197.64	-23.91	36.40	1196.96	1194.39	59.66	60.75	-106.46	87.11	9.20	10.47	PAS	
1220.00†	1217.16	-25.80	39.28	1216.70	1213.95	59.64	63.43	-106.93	88.85	9.35	10.47	PAS	
1320.00†	1315.64	-35.34	53.80	1316.25	1312.58	59.54	76.90	-109.04	97.71	10.17	10.51	PAS	
1420.00†	1414.12	-44.88	68.32	1415.79	1411.21	59.45	90.38	-110.81	106.67	11.01	10.53	PAS	
1520.00†	1512.60	-54.42	82.84	1515.34	1509.84	59.35	103.86	-112.30	115.72	11.84	10.55	PAS	
1620.00†	1611.08	-63.95	97.35	1614.89	1608.47	59.25	117.34	-113.57	124.84	12.69	10.57	PAS	
1720.00†	1709.56	-73.49	111.87	1714.44	1707.10	59.15	130.82	-114.67	134.01	13.54	10.58	PAS	
1820.00†	1808.04	-83.03	126.39	1813.98	1805.74	59.05	144.29	-115.63	143.22	13.78	10.90	PAS	
1920.00†	1906.52	-92.56	140.91	1913.53	1904.37	58.95	157.77	-116.47	152.47	13.96	11.45	PAS	
2020.00†	2005.00	-102.10	155.43	2013.08	2003.00	58.85	171.25	-117.22	161.74	14.21	11.93	PAS	
2120.00†	2103.48	-111.64	169.95	2112.63	2101.63	58.75	184.73	-117.88	171.04	14.55	12.31	PAS	
2220.00†	2201.96	-121.18	184.46	2212.18	2200.26	58.65	198.21	-118.48	180.36	14.97	12.60	PAS	
2320.00†	2300.44	-130.71	198.98	2311.73	2298.89	58.56	211.69	-119.02	189.70	15.46	12.82	PAS	
2420.00†	2398.92	-140.25	213.50	2411.28	2397.52	58.46	225.16	-119.50	199.06	16.01	12.96	PAS	
2520.00†	2497.40	-149.79	228.02	2510.82	2496.15	58.36	238.64	-119.95	208.42	16.63	13.05	PAS	
2620.00†	2595.88	-159.33	242.54	2610.37	2594.79	58.26	252.12	-120.35	217.80	17.29	13.08	PAS	
2720.00†	2694.36	-168.86	257.06	2709.92	2693.42	58.16	265.60	-120.72	227.19	18.01	13.09	PAS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 65 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
2820.00†	2792.84	-178.40	271.58	2809.47	2792.05	58.06	279.08	-121.07	236.58	18.76	13.07	PASS	
2920.00†	2891.32	-187.94	286.09	2909.02	2890.68	57.96	292.55	-121.38	245.99	19.55	13.02	PASS	
3020.00†	2989.80	-197.48	300.61	3008.56	2989.31	57.86	306.03	-121.68	255.40	20.37	12.95	PASS	
3120.00†	3088.28	-207.01	315.13	3108.11	3087.94	57.77	319.51	-121.95	264.81	21.22	12.87	PASS	
3220.00†	3186.76	-216.55	329.65	3207.66	3186.57	57.67	332.99	-122.20	274.24	22.10	12.79	PASS	
3320.00†	3285.24	-226.09	344.17	3307.21	3285.21	57.57	346.47	-122.44	283.66	22.99	12.70	PASS	
3420.00†	3383.71	-235.62	358.69	3406.76	3383.84	57.47	359.94	-122.66	293.10	23.91	12.60	PASS	
3520.00†	3482.19	-245.16	373.20	3506.30	3482.47	57.37	373.42	-122.87	302.53	24.84	12.51	PASS	
3620.00†	3580.67	-254.70	387.72	3605.85	3581.10	57.27	386.90	-123.06	311.97	25.79	12.41	PASS	
3720.00†	3679.15	-264.24	402.24	3705.40	3679.73	57.17	400.38	-123.25	321.42	26.75	12.31	PASS	
3820.00†	3777.63	-273.77	416.76	3804.95	3778.36	57.07	413.86	-123.42	330.86	27.73	12.22	PASS	
3920.00†	3876.11	-283.31	431.28	3904.50	3876.99	56.98	427.33	-123.58	340.31	28.71	12.13	PASS	
4020.00†	3974.59	-292.85	445.80	4004.04	3975.62	56.88	440.81	-123.74	349.76	29.71	12.04	PASS	
4120.00†	4073.07	-302.39	460.32	4103.59	4074.26	56.78	454.29	-123.88	359.22	30.71	11.95	PASS	
4220.00†	4171.55	-311.92	474.83	4203.14	4172.89	56.68	467.77	-124.02	368.67	31.73	11.86	PASS	
4320.00†	4270.03	-321.46	489.35	4302.69	4271.52	56.58	481.25	-124.15	378.13	32.75	11.78	PASS	
4420.00†	4368.51	-331.00	503.87	4402.24	4370.15	56.48	494.73	-124.28	387.59	33.77	11.70	PASS	
4520.00†	4466.99	-340.53	518.39	4501.78	4468.78	56.38	508.20	-124.40	397.05	34.80	11.62	PASS	
4620.00†	4565.47	-350.07	532.91	4601.33	4567.41	56.28	521.68	-124.51	406.52	35.84	11.55	PASS	
4720.00†	4663.95	-359.61	547.43	4700.88	4666.04	56.18	535.16	-124.62	415.98	36.88	11.48	PASS	
4820.00†	4762.43	-369.15	561.94	4800.43	4764.68	56.09	548.64	-124.73	425.45	37.93	11.41	PASS	
4920.00†	4860.91	-378.68	576.46	4899.98	4863.31	55.99	562.12	-124.83	434.91	38.98	11.34	PASS	
5020.00†	4959.39	-388.22	590.98	4999.52	4961.94	55.89	575.59	-124.92	444.38	40.04	11.28	PASS	
5120.00†	5057.87	-397.76	605.50	5099.07	5060.57	55.79	589.07	-125.01	453.85	41.10	11.22	PASS	
5220.00†	5156.35	-407.30	620.02	5198.62	5159.20	55.69	602.55	-125.10	463.33	42.16	11.16	PASS	
5320.00†	5254.83	-416.83	634.54	5298.17	5257.83	55.59	616.03	-125.18	472.80	43.23	11.10	PASS	
5420.00†	5353.31	-426.37	649.06	5397.72	5356.46	55.49	629.51	-125.26	482.27	44.29	11.05	PASS	
5520.00†	5451.79	-435.91	663.57	5497.26	5455.09	55.39	642.98	-125.34	491.74	45.37	11.00	PASS	
5620.00†	5550.27	-445.45	678.09	5596.81	5553.73	55.30	656.46	-125.42	501.22	46.44	10.94	PASS	
5720.00†	5648.75	-454.98	692.61	5696.36	5652.36	55.20	669.94	-125.49	510.70	47.51	10.90	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 66 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13C-2-L Threshold Value=1.00 † = interpolated/extrapolated stat												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu
5820.00†	5747.23	-464.52	707.13	5795.91	5750.99	55.10	683.42	-125.56	520.17	48.59	10.85	PAS!
5920.00†	5845.71	-474.06	721.65	5895.46	5849.62	55.00	696.90	-125.62	529.65	49.67	10.80	PAS!
6020.00†	5944.19	-483.59	736.17	5995.00	5948.25	54.90	710.37	-125.69	539.13	50.75	10.76	PAS!
6120.00†	6042.67	-493.13	750.68	6094.55	6046.88	54.80	723.85	-125.75	548.61	51.84	10.72	PAS!
6220.00†	6141.15	-502.67	765.20	6194.10	6145.51	54.70	737.33	-125.81	558.09	52.92	10.67	PAS!
6320.00†	6239.63	-512.21	779.72	6293.65	6244.15	54.60	750.81	-125.87	567.57	54.01	10.63	PAS!
6333.38	6252.80	-513.48	781.66	6306.96	6257.34	54.59	752.61	-125.88	568.83	54.16	10.63	PAS!
6420.00†	6338.69	-521.84	788.38	6392.98	6342.56	54.51	764.26	-176.73	576.86	55.12	10.59	PAS!
6520.00†	6437.87	-531.58	781.50	6490.23	6438.93	54.41	777.33	-122.68	586.00	56.44	10.50	PAS!
6620.00†	6534.75	-541.19	759.12	6587.35	6535.87	54.33	781.46	-108.78	595.95	58.34	10.33	PAS!
6720.00†	6626.95	-550.44	721.78	6688.75	6636.51	54.29	770.00	-104.70	606.73	61.07	10.04	PAS!
6820.00†	6712.19	-559.10	670.41	6795.04	6738.64	54.29	741.01	-103.42	618.00	62.93	9.92	PAS!
6920.00†	6788.37	-566.95	606.27	6906.76	6839.22	54.33	692.71	-103.23	629.33	64.49	9.86	PAS!
7020.00†	6853.62	-573.80	530.93	7024.29	6934.21	54.43	623.77	-103.52	640.15	66.69	9.69	PAS!
7120.00†	6906.33	-579.49	446.27	7147.71	7018.54	54.58	533.93	-103.99	649.86	69.78	9.40	PAS!
7220.00†	6945.20	-583.87	354.35	7276.62	7086.42	54.79	424.59	-104.47	657.84	73.85	8.98	PAS!
7320.00†	6969.29	-586.83	257.44	7410.04	7132.03	55.05	299.47	-104.84	663.52	78.86	8.48	PAS!
7420.00†	6977.98	-588.31	157.94	7546.34	7150.70	55.35	164.72	-105.03	666.46	84.58	7.94	PAS!
7428.43	6978.00	-588.37	149.50	7557.91	7150.95	55.37	153.15	-105.04	666.58	85.08	7.89	PAS!
7478.43	6977.79	-588.66	99.50	7610.55	7150.88	55.50	100.51	-105.04	667.01	87.75	7.66	PAS!
7520.00†	6977.61	-589.21	57.94	7652.11	7150.76	55.59	58.95	-105.03	667.64	90.04	7.47	PAS!
7536.58	6977.55	-589.59	41.36	7668.69	7150.71	55.63	42.37	-105.02	668.06	90.98	7.39	PAS!
7620.00†	6977.19	-591.78	-42.02	7752.07	7150.48	55.83	-41.01	-104.98	670.38	95.87	7.04	PAS!
7720.00†	6976.77	-594.39	-141.99	7852.03	7150.20	56.06	-140.97	-104.93	673.17	102.15	6.63	PAS!
7820.00†	6976.35	-597.01	-241.95	7951.99	7149.91	56.29	-240.92	-104.88	675.96	108.82	6.25	PAS!
7920.00†	6975.93	-599.63	-341.92	8051.95	7149.63	56.52	-340.88	-104.83	678.75	115.80	5.89	PAS!
8020.00†	6975.51	-602.25	-441.88	8151.91	7149.35	56.76	-440.84	-104.78	681.55	123.04	5.57	PAS!
8120.00†	6975.09	-604.86	-541.85	8251.87	7149.07	56.99	-540.80	-104.73	684.34	130.49	5.27	PAS!
8220.00†	6974.67	-607.48	-641.81	8351.83	7148.78	57.22	-640.76	-104.68	687.13	138.13	4.99	PAS!
8320.00†	6974.25	-610.10	-741.78	8451.79	7148.50	57.45	-740.72	-104.63	689.92	145.93	4.75	PAS!

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 67 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W		Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01)		Well: GREELEY-ROTH FEDERAL 13C-2-L		Threshold Value=1.00		† = interpolated/extrapolated stat				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8420.00†	6973.83	-612.72	-841.74	8551.75	7148.22	57.69	-840.68	104.58	692.71	153.85	4.52	PAS!
8520.00†	6973.41	-615.33	-941.71	8651.70	7147.94	57.92	-940.63	104.53	695.51	161.89	4.31	PAS!
8620.00†	6972.99	-617.95	-1041.67	8751.66	7147.65	58.15	-1040.59	104.48	698.30	170.03	4.12	PAS!
8720.00†	6972.57	-620.57	-1141.64	8851.62	7147.37	58.38	-1140.55	104.44	701.10	178.24	3.95	PAS!
8820.00†	6972.15	-623.19	-1241.60	8951.58	7147.09	58.62	-1240.51	104.39	703.89	186.54	3.78	PAS!
8920.00†	6971.73	-625.81	-1341.57	9051.54	7146.81	58.85	-1340.47	104.34	706.69	194.89	3.64	PAS!
9020.00†	6971.31	-628.42	-1441.53	9151.50	7146.52	59.08	-1440.43	104.30	709.48	203.31	3.50	PAS!
9120.00†	6970.88	-631.04	-1541.50	9251.46	7146.24	59.31	-1540.39	104.25	712.28	211.77	3.37	PAS!
9220.00†	6970.46	-633.66	-1641.46	9351.42	7145.96	59.55	-1640.34	104.21	715.08	220.28	3.25	PAS!
9320.00†	6970.04	-636.28	-1741.43	9451.38	7145.68	59.78	-1740.30	104.16	717.87	228.83	3.14	PAS!
9420.00†	6969.62	-638.89	-1841.39	9551.34	7145.39	60.01	-1840.26	104.12	720.67	237.41	3.04	PAS!
9520.00†	6969.20	-641.51	-1941.36	9651.30	7145.11	60.25	-1940.22	104.07	723.47	246.03	2.95	PAS!
9620.00†	6968.78	-644.13	-2041.32	9751.26	7144.83	60.48	-2040.18	104.03	726.27	254.68	2.86	PAS!
9720.00†	6968.36	-646.75	-2141.29	9851.22	7144.55	60.71	-2140.14	103.98	729.07	263.35	2.77	PAS!
9820.00†	6967.94	-649.36	-2241.25	9951.18	7144.27	60.94	-2240.10	103.94	731.87	272.05	2.69	PAS!
9920.00†	6967.52	-651.98	-2341.22	10051.13	7143.98	61.18	-2340.06	103.90	734.67	280.77	2.62	PAS!
10020.00†	6967.10	-654.60	-2441.18	10151.09	7143.70	61.41	-2440.01	103.85	737.47	289.51	2.55	PAS!
10120.00†	6966.68	-657.22	-2541.15	10251.05	7143.42	61.64	-2539.97	103.81	740.27	298.27	2.49	PAS!
10220.00†	6966.26	-659.84	-2641.11	10351.01	7143.14	61.87	-2639.93	103.77	743.07	307.05	2.42	PAS!
10320.00†	6965.84	-662.45	-2741.08	10450.97	7142.85	62.11	-2739.89	103.73	745.87	315.85	2.36	PAS!
10420.00†	6965.42	-665.07	-2841.04	10550.93	7142.57	62.34	-2839.85	103.69	748.67	324.65	2.31	PAS!
10520.00†	6965.00	-667.69	-2941.01	10650.89	7142.29	62.57	-2939.81	103.65	751.47	333.48	2.26	PAS!
10620.00†	6964.58	-670.31	-3040.97	10750.85	7142.01	62.80	-3039.77	103.60	754.28	342.32	2.21	PAS!
10720.00†	6964.15	-672.92	-3140.93	10850.81	7141.72	63.04	-3139.72	103.56	757.08	351.16	2.16	PAS!
10820.00†	6963.73	-675.54	-3240.90	10950.77	7141.44	63.27	-3239.68	103.52	759.88	360.02	2.11	PAS!
10920.00†	6963.31	-678.16	-3340.86	11050.73	7141.16	63.50	-3339.64	103.48	762.69	368.90	2.07	PAS!
11020.00†	6962.89	-680.78	-3440.83	11150.69	7140.88	63.73	-3439.60	103.44	765.49	377.78	2.03	PAS!
11120.00†	6962.47	-683.39	-3540.79	11250.65	7140.59	63.97	-3539.56	103.40	768.30	386.67	1.99	PAS!
11220.00†	6962.05	-686.01	-3640.76	11350.61	7140.31	64.20	-3639.52	103.37	771.10	395.57	1.95	PAS!
11320.00†	6961.63	-688.63	-3740.72	11450.56	7140.03	64.43	-3739.48	103.33	773.91	404.48	1.91	PAS!

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 68 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W		Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01)				Well: GREELEY-ROTH FEDERAL 13C-2-L		Threshold Value=1.00		† = interpolated/extrapolated stat		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11420.00†	6961.21	-691.25	-3840.69	11550.52	7139.75	64.67	-3839.43	103.29	776.71	413.40	1.88	PAS!
11520.00†	6960.79	-693.86	-3940.65	11650.48	7139.46	64.90	-3939.39	103.25	779.52	422.32	1.85	PAS!
11620.00†	6960.37	-696.48	-4040.62	11750.44	7139.18	65.13	-4039.35	103.21	782.32	431.25	1.82	PAS!
11636.58	6960.30	-696.92	-4057.20	11767.02	7139.13	65.17	-4055.93	103.21	782.79	432.74	1.81	PAS!
11720.00†	6959.95	-697.89	-4140.60	11850.42	7138.90	65.36	-4139.33	103.20	783.95	440.17	1.78	PAS!
11739.19	6959.87	-697.77	-4159.80	11869.62	7138.84	65.41	-4158.53	103.20	783.88	441.87	1.78	PAS!
11820.00†	6959.53	-696.99	-4240.60	11950.42	7138.62	65.60	-4239.33	103.22	783.33	449.04	1.75	PAS!
11920.00†	6959.10	-696.02	-4340.59	12050.42	7138.33	65.83	-4339.33	103.24	782.65	457.91	1.71	PAS!
12020.00†	6958.68	-695.06	-4440.59	12150.42	7138.05	66.06	-4439.32	103.26	781.97	466.79	1.68	PAS!
12120.00†	6958.26	-694.10	-4540.58	12250.41	7137.77	66.29	-4539.32	103.29	781.29	475.66	1.64	PAS!
12220.00†	6957.84	-693.13	-4640.58	12350.41	7137.49	66.53	-4639.32	103.31	780.61	484.54	1.61	PAS!
12320.00†	6957.42	-692.17	-4740.57	12450.41	7137.20	66.76	-4739.31	103.33	779.93	493.42	1.58	PAS!
12420.00†	6957.00	-691.20	-4840.57	12550.41	7136.92	66.99	-4839.31	103.35	779.25	502.30	1.55	PAS!
12520.00†	6956.57	-690.24	-4940.56	12650.40	7136.64	67.22	-4939.31	103.37	778.57	511.19	1.52	PAS!
12620.00†	6956.15	-689.28	-5040.55	12750.40	7136.36	67.46	-5039.30	103.40	777.90	520.07	1.50	PAS!
12720.00†	6955.73	-688.31	-5140.55	12850.40	7136.07	67.69	-5139.30	103.42	777.22	528.96	1.47	PAS!
12820.00†	6955.31	-687.35	-5240.54	12950.39	7135.79	67.92	-5239.30	103.44	776.54	537.84	1.44	PAS!
12920.00†	6954.89	-686.38	-5340.54	13050.39	7135.51	68.16	-5339.29	103.46	775.86	546.73	1.42	PAS!
13020.00†	6954.47	-685.42	-5440.53	13150.39	7135.23	68.39	-5439.29	103.49	775.18	555.62	1.40	PAS!
13120.00†	6954.04	-684.46	-5540.53	13250.39	7134.94	68.62	-5539.29	103.51	774.50	564.51	1.37	PAS!
13220.00†	6953.62	-683.49	-5640.52	13350.38	7134.66	68.85	-5639.28	103.53	773.82	573.39	1.35	PAS!
13320.00†	6953.20	-682.53	-5740.52	13450.38	7134.38	69.09	-5739.28	103.56	773.15	582.28	1.33	PAS!
13420.00†	6952.78	-681.57	-5840.51	13550.38	7134.10	69.32	-5839.27	103.58	772.47	591.17	1.31	PAS!
13520.00†	6952.36	-680.60	-5940.50	13650.38	7133.81	69.55	-5939.27	103.60	771.79	600.06	1.29	PAS!
13620.00†	6951.94	-679.64	-6040.50	13750.37	7133.53	69.78	-6039.27	103.62	771.11	608.95	1.27	PAS!
13720.00†	6951.51	-678.67	-6140.49	13850.37	7133.25	70.02	-6139.26	103.65	770.43	617.84	1.25	PAS!
13820.00†	6951.09	-677.71	-6240.49	13950.37	7132.96	70.25	-6239.26	103.67	769.76	626.73	1.23	PAS!
13920.00†	6950.67	-676.75	-6340.48	14050.36	7132.68	70.48	-6339.26	103.69	769.08	635.61	1.21	PAS!
14020.00†	6950.25	-675.78	-6440.48	14150.36	7132.40	70.72	-6439.25	103.72	768.40	644.50	1.19	PAS!
14120.00†	6949.83	-674.82	-6540.47	14250.36	7132.12	70.95	-6539.25	103.74	767.72	653.39	1.18	PAS!

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 69 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)													
Facility: SEC.01-T05N-R67W Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13C-2-L				Threshold Value=1.00 † = Interpolated/extrapolated stat									
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
14220.00†	6949.41	-673.86	-6640.47	14350.36	7131.83	71.18	-6639.25	103.76	767.05	662.28	1.16	PAS!	
14320.00†	6948.98	-672.89	-6740.46	14450.35	7131.55	71.41	-6739.24	103.78	766.37	671.16	1.14	PAS!	
14420.00†	6948.56	-671.93	-6840.45	14550.35	7131.27	71.65	-6839.24	103.81	765.69	680.05	1.13	PAS!	
14520.00†	6948.14	-670.96	-6940.45	14650.35	7130.99	71.88	-6939.24	103.83	765.02	688.93	1.11	PAS!	
14620.00†	6947.72	-670.00	-7040.44	14750.34	7130.70	72.11	-7039.23	103.85	764.34	697.82	1.10	PAS!	
14720.00†	6947.30	-669.04	-7140.44	14850.34	7130.42	72.34	-7139.23	103.88	763.66	706.70	1.08	PAS!	
14820.00†	6946.87	-668.07	-7240.43	14950.34	7130.14	72.58	-7239.23	103.90	762.99	715.58	1.07	PAS!	
14920.00†	6946.45	-667.11	-7340.43	15050.34	7129.86	72.81	-7339.22	103.92	762.31	724.46	1.05	PAS!	
15020.00†	6946.03	-666.15	-7440.42	15150.33	7129.57	73.04	-7439.22	103.95	761.64	733.34	1.04	PAS!	
15120.00†	6945.61	-665.18	-7540.42	15250.33	7129.29	73.28	-7539.22	103.97	760.96	742.22	1.03	PAS!	
15220.00†	6945.19	-664.22	-7640.41	15350.33	7129.01	73.51	-7639.21	103.99	760.28	751.10	1.01	PAS!	
15320.00†	6944.77	-663.25	-7740.40	15450.33	7128.73	73.74	-7739.21	104.02	759.61	759.98	1.00	FAIL	
15420.00†	6944.34	-662.29	-7840.40	15550.32	7128.44	73.97	-7839.21	104.04	758.93	768.86	0.99	FAIL	
15520.00†	6943.92	-661.33	-7940.39	15650.32	7128.16	74.21	-7939.20	104.06	758.26	777.73	0.97	FAIL	
15620.00†	6943.50	-660.36	-8040.39	15750.32	7127.88	74.44	-8039.20	104.09	757.58	786.61	0.96	FAIL	
15720.00†	6943.08	-659.40	-8140.38	15850.31	7127.60	74.67	-8139.20	104.11	756.91	795.48	0.95	FAIL	
15820.00†	6942.66	-658.44	-8240.38	15950.31	7127.31	74.90	-8239.19	104.14	756.23	804.35	0.94	FAIL	
15920.00†	6942.24	-657.47	-8340.37	16050.31	7127.03	75.14	-8339.19	104.16	755.56	813.22	0.93	FAIL	
16020.00†	6941.81	-656.51	-8440.37	16150.31	7126.75	75.37	-8439.19	104.18	754.88	822.09	0.92	FAIL	
16120.00†	6941.39	-655.54	-8540.36	16250.30	7126.47	75.60	-8539.18	104.21	754.21	830.96	0.91	FAIL	
16220.00†	6940.97	-654.58	-8640.35	16350.30	7126.18	75.84	-8639.18	104.23	753.53	839.82	0.90	FAIL	
16320.00†	6940.55	-653.62	-8740.35	16450.30	7125.90	76.07	-8739.17	104.26	752.86	848.69	0.89	FAIL	
16420.00†	6940.13	-652.65	-8840.34	16550.29	7125.62	76.30	-8839.17	104.28	752.18	857.55	0.88	FAIL	
16520.00†	6939.71	-651.69	-8940.34	16650.29	7125.34	76.53	-8939.17	104.30	751.51	866.41	0.87	FAIL	
16620.00†	6939.28	-650.72	-9040.33	16750.29	7125.05	76.77	-9039.16	104.33	750.84	875.27	0.86	FAIL	
16720.00†	6938.86	-649.76	-9140.33	16850.29	7124.77	77.00	-9139.16	104.35	750.16	884.13	0.85	FAIL	
16820.00†	6938.44	-648.80	-9240.32	16950.28	7124.49	77.23	-9239.16	104.38	749.49	892.99	0.84	FAIL	
16920.00†	6938.02	-647.83	-9340.32	17050.28	7124.21	77.46	-9339.15	104.40	748.82	901.84	0.83	FAIL	
17020.00†	6937.60	-646.87	-9440.31	17150.28	7123.92	77.70	-9439.15	104.42	748.14	910.70	0.82	FAIL	
17120.00†	6937.18	-645.91	-9540.31	17250.28	7123.64	77.93	-9539.15	104.45	747.47	919.55	0.81	FAIL	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 70 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#20 GREELEY-ROTH FEDERAL 13C-2-L (1023'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 13C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
17161.54	6937.00	-645.51	-9581.84	17291.81	7123.52	78.03	-9580.69	104.46	747.19	923.22	0.81	FAIL	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	21.00	1742.34	36.64	-0.33	36.34	41.18
9.625in Casing Surface	20.00	1750.00	1730.00	21.00	1742.34	36.64	-0.33	36.34	41.18
8.5in Open Hole	1750.00	17477.02	15727.02	1742.34	7123.00	36.34	41.18	42.24	-2976.81

## SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13C-2-L PWB
1750.00	17477.02	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 13C-2-L PWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 13C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 13C-2-L PWP (REV-A.0)

MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 71 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. BRANDONDI 1 AWP Offset Wellpath: EX. BRANDONDI 1 AWP

Facility: SEC.06-T05N-R66W Slot: SLOT#01 EX. BRANDONDI 1 (682'FSL & 666'FWL, NB-CD/SI) Well: EX. BRANDONDI 1 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	-2.00	20.00	-314.73	975.34	107.88	1024.86	25.57	41.62	PASS	
120.00†	120.00	0.00	0.00	98.00	120.00	-314.73	975.34	107.88	1024.86	50.37	20.72	PASS	
220.00†	220.00	0.00	0.00	198.00	220.00	-314.73	975.34	107.88	1024.86	51.30	20.34	PASS	
320.00†	320.00	0.00	0.00	298.00	320.00	-314.73	975.34	107.88	1024.86	52.95	19.70	PASS	
420.00†	420.00	0.00	0.00	398.00	420.00	-314.73	975.34	107.88	1024.86	55.19	18.88	PASS	
520.00†	520.00	0.00	0.00	498.00	520.00	-314.73	975.34	107.88	1024.86	57.92	17.98	PASS	
620.00†	620.00	0.00	0.00	598.00	620.00	-314.73	975.34	107.88	1024.86	61.02	17.05	PASS	
700.00	700.00	0.00	0.00	678.00	700.00	-314.73	975.34	107.88	1024.86	63.72	16.32	PASS	
720.00†	720.00	-0.04	0.06	698.00	720.00	-314.73	975.34	-15.42	1024.80	64.40	16.14	PASS	
820.00†	819.96	-1.38	2.10	797.96	819.96	-314.73	975.34	-15.47	1022.44	68.01	15.24	PASS	
920.00†	919.78	-4.64	7.06	897.78	919.78	-314.73	975.34	-15.59	1016.73	71.82	14.34	PASS	
1020.00†	1019.33	-9.80	14.92	997.33	1019.33	-314.73	975.34	-15.78	1007.66	75.76	13.46	PASS	
1120.00†	1118.50	-16.87	25.69	1096.50	1118.50	-314.73	975.34	-16.05	995.27	79.78	12.62	PASS	
1200.18	1197.64	-23.91	36.40	1175.64	1197.64	-314.73	975.34	-16.33	982.95	83.05	11.96	PASS	
1220.00†	1217.16	-25.80	39.28	1195.16	1217.16	-314.73	975.34	-16.38	979.64	83.85	11.81	PASS	
1320.00†	1315.64	-35.34	53.80	1293.64	1315.64	-314.73	975.34	-16.68	962.96	87.93	11.06	PASS	
1420.00†	1414.12	-44.88	68.32	1392.12	1414.12	-314.73	975.34	-16.98	946.32	92.07	10.38	PASS	
1520.00†	1512.60	-54.42	82.84	1490.60	1512.60	-314.73	975.34	-17.29	929.69	96.26	9.75	PASS	
1620.00†	1611.08	-63.95	97.35	1589.08	1611.08	-314.73	975.34	-17.61	913.10	100.49	9.16	PASS	
1720.00†	1709.58	-73.49	111.87	1687.58	1709.58	-314.73	975.34	-17.95	896.53	104.75	8.63	PASS	
1820.00†	1808.04	-83.03	126.39	1786.04	1808.04	-314.73	975.34	-18.30	880.00	108.76	8.14	PASS	
1920.00†	1906.52	-92.56	140.91	1884.52	1906.52	-314.73	975.34	-18.66	863.50	113.01	7.68	PASS	
2020.00†	2005.00	-102.10	155.43	1983.00	2005.00	-314.73	975.34	-19.03	847.03	117.29	7.26	PASS	
2120.00†	2103.48	-111.64	169.95	2081.48	2103.48	-314.73	975.34	-19.42	830.61	121.59	6.87	PASS	
2220.00†	2201.96	-121.18	184.46	2179.96	2201.96	-314.73	975.34	-19.83	814.22	125.93	6.50	PASS	
2320.00†	2300.44	-130.71	198.98	2278.44	2300.44	-314.73	975.34	-20.25	797.87	130.28	6.15	PASS	
2420.00†	2398.92	-140.25	213.50	2376.92	2398.92	-314.73	975.34	-20.69	781.56	134.66	5.83	PASS	
2520.00†	2497.40	-149.79	228.02	2475.40	2497.40	-314.73	975.34	-21.15	765.31	139.06	5.53	PASS	
2620.00†	2595.88	-159.33	242.54	2573.88	2595.88	-314.73	975.34	-21.63	749.10	143.48	5.24	PASS	
2720.00†	2694.36	-168.86	257.06	2672.36	2694.36	-314.73	975.34	-22.13	732.95	147.93	4.97	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 72 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. BRANDONDI 1 AWB Offset Wellpath: EX. BRANDONDI 1 AWB												
Facility: SEC.06-T05N-R66W Slot: SLOT#01 EX. BRANDONDI 1 (682'FSL & 666'FWL, NB-CD/SI) Well: EX. BRANDONDI 1 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2820.00†	2792.84	-178.40	271.58	2770.84	2792.84	-314.73	975.34	-22.65	716.85	152.38	4.72	PASS
2920.00†	2891.32	-187.94	286.09	2869.32	2891.32	-314.73	975.34	-23.19	700.81	156.86	4.48	PASS
3020.00†	2989.80	-197.48	300.61	2967.80	2989.80	-314.73	975.34	-23.77	684.84	161.35	4.26	PASS
3120.00†	3088.28	-207.01	315.13	3066.28	3088.28	-314.73	975.34	-24.36	668.94	165.86	4.05	PASS
3220.00†	3186.76	-216.55	329.65	3164.76	3186.76	-314.73	975.34	-24.99	653.11	170.39	3.84	PASS
3320.00†	3285.24	-226.09	344.17	3263.24	3285.24	-314.73	975.34	-25.65	637.37	174.93	3.65	PASS
3420.00†	3383.71	-235.62	358.69	3361.71	3383.71	-314.73	975.34	-26.34	621.71	179.48	3.47	PASS
3520.00†	3482.19	-245.16	373.20	3460.19	3482.19	-314.73	975.34	-27.07	606.14	184.05	3.30	PASS
3620.00†	3580.67	-254.70	387.72	3558.67	3580.67	-314.73	975.34	-27.83	590.68	188.64	3.14	PASS
3720.00†	3679.15	-264.24	402.24	3657.15	3679.15	-314.73	975.34	-28.63	575.32	193.23	2.98	PASS
3820.00†	3777.63	-273.77	416.76	3755.63	3777.63	-314.73	975.34	-29.48	560.08	197.84	2.84	PASS
3920.00†	3876.11	-283.31	431.28	3854.11	3876.11	-314.73	975.34	-30.38	544.97	202.47	2.70	PASS
4020.00†	3974.59	-292.85	445.80	3952.59	3974.59	-314.73	975.34	-31.32	530.00	207.10	2.56	PASS
4120.00†	4073.07	-302.39	460.32	4051.07	4073.07	-314.73	975.34	-32.32	515.17	211.75	2.44	PASS
4220.00†	4171.55	-311.92	474.83	4149.55	4171.55	-314.73	975.34	-33.38	500.52	216.41	2.32	PASS
4320.00†	4270.03	-321.46	489.35	4248.03	4270.03	-314.73	975.34	-34.50	486.04	221.08	2.20	PASS
4420.00†	4368.51	-331.00	503.87	4346.51	4368.51	-314.73	975.34	-35.69	471.75	225.77	2.09	PASS
4520.00†	4466.99	-340.53	518.39	4444.99	4466.99	-314.73	975.34	-36.96	457.68	230.46	1.99	PASS
4620.00†	4565.47	-350.07	532.91	4543.47	4565.47	-314.73	975.34	-38.30	443.84	235.17	1.89	PASS
4720.00†	4663.95	-359.61	547.43	4641.95	4663.95	-314.73	975.34	-39.72	430.26	239.89	1.80	PASS
4820.00†	4762.43	-369.15	561.94	4740.43	4762.43	-314.73	975.34	-41.24	416.96	244.62	1.71	PASS
4920.00†	4860.91	-378.68	576.46	4838.91	4860.91	-314.73	975.34	-42.85	403.97	249.37	1.62	PASS
5020.00†	4959.39	-388.22	590.98	4937.39	4959.39	-314.73	975.34	-44.57	391.32	254.12	1.54	PASS
5120.00†	5057.87	-397.76	605.50	5035.87	5057.87	-314.73	975.34	-46.39	379.05	258.89	1.47	PASS
5220.00†	5156.35	-407.30	620.02	5134.35	5156.35	-314.73	975.34	-48.34	367.18	263.66	1.39	PASS
5320.00†	5254.83	-416.83	634.54	5232.83	5254.83	-314.73	975.34	-50.41	355.77	268.45	1.33	PASS
5420.00†	5353.31	-426.37	649.06	5331.31	5353.31	-314.73	975.34	-52.62	344.86	273.25	1.26	PASS
5520.00†	5451.79	-435.91	663.57	5429.79	5451.79	-314.73	975.34	-54.96	334.49	278.06	1.20	PASS
5620.00†	5550.27	-445.45	678.09	5528.27	5550.27	-314.73	975.34	-57.44	324.72	282.88	1.15	PASS
5720.00†	5648.75	-454.98	692.61	5626.75	5648.75	-314.73	975.34	-60.07	315.61	287.71	1.10	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 73 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. BRANDONDI 1 AWB Offset Wellpath: EX. BRANDONDI 1 AWB

Facility: SEC.06-T05N-R66W Slot: SLOT#01 EX. BRANDONDI 1 (682'FSL & 666'FWL, NB-CD/SI) Well: EX. BRANDONDI 1 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5820.00†	5747.23	-464.52	707.13	5725.23	5747.23	-314.73	975.34	-62.84	307.21	292.55	1.05	PASS
5920.00†	5845.71	-474.06	721.65	5823.71	5845.71	-314.73	975.34	-65.76	299.58	297.39	1.01	PASS
6020.00†	5944.19	-483.59	736.17	5922.19	5944.19	-314.73	975.34	-68.82	292.78	302.25	0.97	FAIL
6120.00†	6042.67	-493.13	750.68	6020.67	6042.67	-314.73	975.34	-72.02	286.88	307.10	0.93	FAIL
6220.00†	6141.15	-502.67	765.20	6119.15	6141.15	-314.73	975.34	-75.33	281.92	311.96	0.90	FAIL
6320.00†	6239.63	-512.21	779.72	6217.63	6239.63	-314.73	975.34	-78.74	277.97	316.82	0.88	FAIL
6333.38	6252.80	-513.48	781.66	6230.80	6252.80	-314.73	975.34	-79.21	277.52	317.47	0.87	FAIL
6362.17†	6281.24	-516.24	785.20	6259.59	6281.59	-314.73	975.34	-90.47	277.06	318.88	0.87	FAIL
6398.32†	6317.12	-519.73	787.80	6295.12	6317.12	-314.73	975.34	-113.17	277.85	320.61	0.87	FAIL
6420.00†	6338.69	-521.84	788.38	6316.69	6338.69	-314.73	975.34	-132.13	279.02	321.67	0.87	FAIL
6520.00†	6437.87	-531.58	781.50	6415.87	6437.87	-314.73	975.34	165.05	290.86	326.46	0.89	FAIL
6620.00†	6534.75	-541.19	759.12	6512.75	6534.75	-314.73	975.34	149.93	313.11	331.19	0.95	FAIL
6720.00†	6626.95	-550.44	721.78	6604.95	6626.95	-314.73	975.34	145.48	346.20	335.91	1.03	PASS
6820.00†	6712.19	-559.10	670.41	6690.19	6712.19	-314.73	975.34	143.91	390.77	340.45	1.15	PASS
6920.00†	6788.37	-566.95	606.27	6766.37	6788.37	-314.73	975.34	142.79	447.03	344.61	1.30	PASS
7020.00†	6853.62	-573.80	530.93	6831.62	6853.62	-314.73	975.34	140.83	514.41	348.22	1.48	PASS
7120.00†	6906.33	-579.49	446.27	6884.33	6906.33	-314.73	975.34	136.85	591.62	351.14	1.69	PASS
7220.00†	6945.20	-583.87	354.35	6923.20	6945.20	-314.73	975.34	129.17	676.81	353.29	1.92	PASS
7320.00†	6969.29	-586.83	257.44	6947.29	6969.29	-314.73	975.34	114.97	767.74	354.64	2.17	PASS
7420.00†	6977.98	-588.31	157.94	6955.98	6977.98	-314.73	975.34	91.57	861.97	355.20	2.43	PASS
7428.43	6978.00	-588.37	149.50	6956.00	6978.00	-314.73	975.34	89.26	869.99	355.21	2.45	PASS
7478.43	6977.79	-588.66	99.50	6955.79	6977.79	-314.73	975.34	89.21	917.68	355.26	2.59	PASS
7520.00†	6977.61	-589.21	57.94	6955.61	6977.61	-314.73	975.34	89.13	957.58	355.29	2.70	PASS
7536.58	6977.55	-589.59	41.36	6955.55	6977.55	-314.73	975.34	89.09	973.59	355.31	2.74	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 74 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. BRANDONDI 1 AWB Offset Wellpath: EX. BRANDONDI 1 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. BRANDONDI 1 AWB Offset Wellpath: EX. BRANDONDI 1 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7254.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7254>	EX. BRANDONDI 1 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. BRANDONDI 1 AWB Offset Wellpath: EX. BRANDONDI 1 AWP		
MD Reference: Rig on SLOT#01 EX. BRANDONDI 1 (682'FSL & 666'FWL, NB-CD/SI) (RT)		Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD		0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 75 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
20.00	20.00	0.00	0.00	19.00	20.00	80.15	-0.85	-0.61	80.15	1.26	263.97	P	
120.00†	120.00	0.00	0.00	119.00	120.00	80.15	-0.85	-0.61	80.15	1.88	86.35	P	
220.00†	220.00	0.00	0.00	219.00	220.00	80.15	-0.85	-0.61	80.15	2.45	53.41	P	
320.00†	320.00	0.00	0.00	319.00	320.00	80.15	-0.85	-0.61	80.15	3.05	37.98	P	
420.00†	420.00	0.00	0.00	419.00	420.00	80.15	-0.85	-0.61	80.15	3.66	29.34	P	
520.00†	520.00	0.00	0.00	518.85	519.85	80.17	-0.79	-0.57	80.17	4.28	23.89	P	
620.00†	620.00	0.00	0.00	617.97	618.94	80.88	1.46	1.04	80.90	4.92	20.22	P	
700.00	700.00	0.00	0.00	697.08	697.92	82.19	5.61	3.90	82.41	5.50	17.97	P	
720.00†	720.00	-0.04	0.06	716.82	717.61	82.62	6.97	-118.51	82.98	5.65	17.51	P	
820.00†	819.96	-1.38	2.10	815.28	815.64	85.38	15.67	-114.28	87.92	6.47	15.80	P	
920.00†	919.78	-4.64	7.06	913.27	912.84	89.13	27.52	-110.64	96.22	7.36	14.90	P	
1020.00†	1019.33	-9.80	14.92	1012.59	1011.11	93.46	41.22	-108.44	106.88	8.12	14.81	P	
1120.00†	1118.50	-16.87	25.69	1111.88	1109.36	97.80	54.92	-108.20	118.69	8.87	14.89	P	
1200.18	1197.64	-23.91	36.40	1191.36	1188.01	101.27	65.88	-109.06	128.96	9.50	15.00	P	
1220.00†	1217.16	-25.80	39.28	1211.00	1207.43	102.12	68.59	-109.42	131.60	9.65	15.04	P	
1320.00†	1315.64	-35.34	53.80	1310.03	1305.42	106.45	82.25	-110.99	144.98	10.43	15.22	P	
1420.00†	1414.12	-44.88	68.32	1409.06	1403.41	110.77	95.91	-112.31	158.44	11.23	15.35	P	
1520.00†	1512.60	-54.42	82.84	1508.08	1501.39	115.09	109.57	-113.41	171.97	12.05	15.43	P	
1620.00†	1611.08	-63.95	97.35	1607.11	1599.38	119.42	123.23	-114.36	185.56	12.86	15.52	P	
1720.00†	1709.56	-73.49	111.87	1706.14	1697.37	123.74	136.89	-115.17	199.19	13.69	15.57	P	
1820.00†	1808.04	-83.03	126.39	1805.17	1795.36	128.07	150.55	-115.88	212.85	13.95	16.02	P	
1920.00†	1906.52	-92.56	140.91	1904.20	1893.34	132.39	164.22	-116.51	226.54	14.14	16.81	P	
2020.00†	2005.00	-102.10	155.43	2003.23	1991.33	136.71	177.88	-117.06	240.26	14.39	17.51	P	
2120.00†	2103.48	-111.64	169.95	2102.26	2089.32	141.04	191.54	-117.56	253.99	14.72	18.07	P	
2220.00†	2201.96	-121.18	184.46	2201.29	2187.31	145.36	205.20	-118.00	267.74	15.13	18.51	P	
2320.00†	2300.44	-130.71	198.98	2300.32	2285.30	149.68	218.86	-118.40	281.51	15.62	18.84	P	
2420.00†	2398.92	-140.25	213.50	2398.35	2383.28	154.01	232.52	-118.76	295.28	16.16	19.06	P	
2520.00†	2497.40	-149.79	228.02	2498.38	2481.27	158.33	246.18	-119.09	309.07	16.77	19.20	P	
2620.00†	2595.88	-159.33	242.54	2597.41	2579.26	162.65	259.84	-119.40	322.87	17.43	19.27	P	
2720.00†	2694.36	-168.86	257.06	2696.44	2677.25	166.98	273.50	-119.67	336.68	18.13	19.28	P	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 76 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)													
Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01)				Well: GREELEY-ROTH FEDERAL 33N-2B-L				Threshold Value=1.00		† = interpolated/extrapolated			
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2820.00†	2792.84	-178.40	271.58	2795.47	2775.23	171.30	287.16	-119.93	350.49	18.88	19.25	P/	
2920.00†	2891.32	-187.94	286.09	2894.50	2873.22	175.62	300.83	-120.17	364.31	19.66	19.19	P/	
3020.00†	2989.80	-197.48	300.61	2993.53	2971.21	179.95	314.49	-120.38	378.13	20.48	19.09	P/	
3120.00†	3088.28	-207.01	315.13	3092.56	3069.20	184.27	328.15	-120.59	391.96	21.32	18.98	P/	
3220.00†	3186.76	-216.55	329.65	3191.59	3167.18	188.59	341.81	-120.78	405.80	22.19	18.86	P/	
3320.00†	3285.24	-226.09	344.17	3290.62	3265.17	192.92	355.47	-120.95	419.63	23.08	18.73	P/	
3420.00†	3383.71	-235.62	358.69	3389.65	3363.16	197.24	369.13	-121.12	433.48	23.99	18.59	P/	
3520.00†	3482.19	-245.16	373.20	3488.68	3461.15	201.56	382.79	-121.28	447.32	24.91	18.45	P/	
3620.00†	3580.67	-254.70	387.72	3587.71	3559.14	205.89	396.45	-121.42	461.17	25.86	18.31	P/	
3720.00†	3679.15	-264.24	402.24	3686.74	3657.12	210.21	410.11	-121.56	475.02	26.81	18.17	P/	
3820.00†	3777.63	-273.77	416.76	3785.77	3755.11	214.53	423.77	-121.69	488.88	27.78	18.03	P/	
3920.00†	3876.11	-283.31	431.28	3884.80	3853.10	218.86	437.44	-121.81	502.73	28.77	17.89	P/	
4020.00†	3974.59	-292.85	445.80	3983.83	3951.09	223.18	451.10	-121.93	516.59	29.76	17.76	P/	
4120.00†	4073.07	-302.39	460.32	4082.86	4049.07	227.50	464.76	-122.04	530.45	30.76	17.63	P/	
4220.00†	4171.55	-311.92	474.83	4181.89	4147.06	231.83	478.42	-122.14	544.31	31.76	17.50	P/	
4320.00†	4270.03	-321.46	489.35	4280.92	4245.05	236.15	492.08	-122.24	558.18	32.78	17.38	P/	
4420.00†	4368.51	-331.00	503.87	4379.95	4343.04	240.47	505.74	-122.34	572.04	33.80	17.26	P/	
4520.00†	4466.99	-340.53	518.39	4478.98	4441.03	244.80	519.40	-122.43	585.91	34.83	17.15	P/	
4620.00†	4565.47	-350.07	532.91	4578.01	4539.01	249.12	533.06	-122.51	599.77	35.87	17.04	P/	
4720.00†	4663.95	-359.61	547.43	4677.04	4637.00	253.44	546.72	-122.60	613.64	36.91	16.93	P/	
4820.00†	4762.43	-369.15	561.94	4776.07	4734.99	257.77	560.38	-122.67	627.51	37.95	16.83	P/	
4920.00†	4860.91	-378.68	576.46	4875.10	4832.98	262.09	574.05	-122.75	641.39	39.00	16.73	P/	
5020.00†	4959.39	-388.22	590.98	4974.13	4930.96	266.41	587.71	-122.82	655.26	40.05	16.64	P/	
5120.00†	5057.87	-397.76	605.50	5073.16	5028.95	270.74	601.37	-122.89	669.13	41.11	16.54	P/	
5220.00†	5156.35	-407.30	620.02	5172.19	5126.94	275.06	615.03	-122.96	683.01	42.17	16.46	P/	
5320.00†	5254.83	-416.83	634.54	5271.22	5224.93	279.38	628.69	-123.02	696.88	43.23	16.37	P/	
5420.00†	5353.31	-426.37	649.06	5370.25	5322.91	283.71	642.35	-123.08	710.76	44.30	16.29	P/	
5520.00†	5451.79	-435.91	663.57	5469.28	5420.90	288.03	656.01	-123.14	724.64	45.37	16.21	P/	
5620.00†	5550.27	-445.45	678.09	5568.31	5518.89	292.35	669.67	-123.19	738.51	46.44	16.13	P/	
5720.00†	5648.75	-454.98	692.61	5667.34	5616.88	296.68	683.33	-123.25	752.39	47.52	16.06	P/	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 77 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													‡
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	‡	St
5820.00†	5747.23	-464.52	707.13	5766.37	5714.87	301.00	696.99	-123.30	766.27	48.59	15.99	P	
5920.00†	5845.71	-474.06	721.65	5865.40	5812.85	305.32	710.65	-123.35	780.15	49.67	15.92	P	
6020.00†	5944.19	-483.59	736.17	5964.43	5910.84	309.65	724.32	-123.40	794.03	50.76	15.85	P	
6120.00†	6042.67	-493.13	750.68	6063.46	6008.83	313.97	737.98	-123.45	807.91	51.83	15.79	P	
6220.00†	6141.15	-502.67	765.20	6162.49	6106.82	318.29	751.64	-123.49	821.79	52.92	15.73	P	
6320.00†	6239.63	-512.21	779.72	6261.52	6204.80	322.62	765.30	-123.54	835.67	54.00	15.67	P	
6333.38	6252.80	-513.48	781.66	6274.76	6217.91	323.19	767.13	-123.54	837.53	54.15	15.66	P	
6420.00†	6338.69	-521.84	788.38	6368.01	6310.45	327.00	777.68	-175.02	849.37	55.23	15.57	P	
6520.00†	6437.87	-531.58	781.50	6483.92	6426.08	329.69	773.38	122.41	861.39	57.09	15.26	P	
6620.00†	6534.75	-541.19	759.12	6600.90	6540.11	329.84	748.04	106.10	871.12	59.26	14.86	P	
6720.00†	6626.93	-550.44	721.78	6718.24	6647.95	327.41	702.23	99.67	878.32	60.59	14.65	P	
6820.00†	6712.19	-559.10	670.41	6835.21	6745.29	322.49	637.87	96.14	882.81	62.19	14.35	P	
6920.00†	6788.37	-566.95	606.27	6951.05	6828.46	315.32	557.81	93.87	884.51	64.59	13.83	P	
7020.00†	6853.62	-573.80	530.93	7065.07	6894.82	306.27	465.70	92.30	883.45	67.76	13.16	P	
7120.00†	6906.33	-579.49	446.27	7176.76	6942.82	295.76	365.57	91.19	879.72	71.78	12.37	P	
7220.00†	6945.20	-583.87	354.35	7285.74	6972.02	284.24	261.35	90.44	873.49	76.48	11.52	P	
7320.00†	6969.29	-586.83	257.44	7391.84	6982.89	272.16	156.62	90.00	865.00	81.50	10.70	P	
7420.00†	6977.98	-588.31	157.94	7491.70	6982.58	260.43	57.46	90.25	854.68	86.78	9.92	P	
7428.43	6978.00	-588.37	149.50	7500.08	6982.54	259.45	49.13	90.33	853.75	87.24	9.86	P	
7478.43	6977.79	-588.66	99.50	7549.77	6982.29	253.61	-0.21	90.33	848.16	90.05	9.49	P	
7520.00†	6977.61	-589.21	57.94	7591.10	6982.09	248.75	-41.26	90.33	843.82	92.49	9.19	P	
7536.58	6977.55	-589.59	41.36	7607.62	6982.00	246.81	-57.66	90.33	842.25	93.47	9.07	P	
7620.00†	6977.19	-591.78	-42.02	7690.68	6981.59	237.05	-140.14	90.33	834.62	98.70	8.51	P	
7720.00†	6976.77	-594.39	-141.99	7790.26	6981.10	225.34	-239.03	90.32	825.47	105.35	7.88	P	
7820.00†	6976.35	-597.01	-241.95	7889.84	6980.60	213.64	-337.92	90.32	816.32	112.34	7.31	P	
7920.00†	6975.93	-599.63	-341.92	7989.42	6980.10	201.93	-436.81	90.32	807.17	119.62	6.78	P	
8020.00†	6975.51	-602.25	-441.88	8089.00	6979.61	190.23	-535.70	90.32	798.02	127.15	6.31	P	
8120.00†	6975.09	-604.86	-541.85	8181.85	6979.15	179.42	-627.91	90.32	789.00	134.64	5.89	P	
8220.00†	6974.67	-607.48	-641.81	8260.14	6978.76	171.95	-705.85	90.31	782.06	141.80	5.54	P	
8320.00†	6974.25	-610.10	-741.78	8338.68	6978.37	166.59	-784.19	90.31	777.86	149.03	5.24	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 78 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													z
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		St
8420.00†	6973.83	-612.72	-841.74	8417.33	6977.97	163.38	-862.78	90.31	776.40	156.31	4.99	P	
8520.00†	6973.41	-615.33	-941.71	8495.99	6977.58	162.33	-941.43	90.30	777.68	163.61	4.77	P	
8620.00†	6972.99	-617.95	-1041.67	8574.54	6977.19	163.44	-1019.96	90.30	781.70	170.87	4.59	P	
8720.00†	6972.57	-620.57	-1141.64	8655.04	6976.79	166.79	-1100.40	90.29	788.45	178.21	4.44	P	
8820.00†	6972.15	-623.19	-1241.60	8754.73	6976.29	172.01	-1199.95	90.28	796.30	186.78	4.28	P	
8920.00†	6971.73	-625.81	-1341.57	8854.43	6975.80	177.22	-1299.50	90.27	804.14	195.42	4.13	P	
9020.00†	6971.31	-628.42	-1441.53	8954.12	6975.30	182.44	-1399.06	90.26	811.99	204.09	3.99	P	
9120.00†	6970.88	-631.04	-1541.50	9053.81	6974.80	187.66	-1498.61	90.26	819.83	212.82	3.86	P	
9220.00†	6970.46	-633.66	-1641.46	9153.50	6974.31	192.88	-1598.16	90.25	827.68	221.59	3.74	P	
9320.00†	6970.04	-636.28	-1741.43	9253.19	6973.81	198.09	-1697.72	90.24	835.52	230.39	3.63	P	
9420.00†	6969.62	-638.89	-1841.39	9352.88	6973.32	203.31	-1797.27	90.23	843.37	239.23	3.53	P	
9520.00†	6969.20	-641.51	-1941.36	9452.58	6972.82	208.53	-1896.83	90.23	851.21	248.09	3.44	P	
9620.00†	6968.78	-644.13	-2041.32	9552.27	6972.33	213.75	-1996.38	90.22	859.06	256.98	3.35	P	
9720.00†	6968.36	-646.75	-2141.29	9651.96	6971.83	218.96	-2095.93	90.21	866.90	265.90	3.27	P	
9820.00†	6967.94	-649.36	-2241.25	9751.65	6971.33	224.18	-2195.49	90.20	874.75	274.83	3.19	P	
9920.00†	6967.52	-651.98	-2341.22	9851.34	6970.84	229.40	-2295.04	90.20	882.60	283.79	3.12	P	
10020.00†	6967.10	-654.60	-2441.18	9951.03	6970.34	234.62	-2394.60	90.19	890.44	292.76	3.05	P	
10120.00†	6966.68	-657.22	-2541.15	10050.73	6969.85	239.83	-2494.15	90.18	898.29	301.74	2.98	P	
10220.00†	6966.26	-659.84	-2641.11	10150.42	6969.35	245.05	-2593.70	90.18	906.13	310.74	2.92	P	
10320.00†	6965.84	-662.45	-2741.08	10250.11	6968.85	250.27	-2693.26	90.17	913.98	319.75	2.86	P	
10420.00†	6965.42	-665.07	-2841.04	10349.80	6968.36	255.49	-2792.81	90.16	921.82	328.78	2.81	P	
10520.00†	6965.00	-667.69	-2941.01	10449.49	6967.86	260.70	-2892.36	90.16	929.67	337.82	2.76	P	
10620.00†	6964.58	-670.31	-3040.97	10549.18	6967.37	265.92	-2991.92	90.15	937.51	346.86	2.71	P	
10720.00†	6964.15	-672.92	-3140.93	10648.88	6966.87	271.14	-3091.47	90.15	945.36	355.92	2.66	P	
10820.00†	6963.73	-675.54	-3240.90	10748.57	6966.37	276.36	-3191.03	90.14	953.21	364.98	2.61	P	
10920.00†	6963.31	-678.16	-3340.86	10848.26	6965.88	281.57	-3290.58	90.13	961.05	374.05	2.57	P	
11020.00†	6962.89	-680.78	-3440.83	10947.95	6965.38	286.79	-3390.13	90.13	968.90	383.13	2.53	P	
11120.00†	6962.47	-683.39	-3540.79	11047.64	6964.89	292.01	-3489.69	90.12	976.74	392.22	2.49	P	
11220.00†	6962.05	-686.01	-3640.76	11147.33	6964.39	297.22	-3589.24	90.12	984.59	401.31	2.46	P	
11320.00†	6961.63	-688.63	-3740.72	11247.03	6963.90	302.44	-3688.80	90.11	992.43	410.41	2.42	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 79 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													z
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		St
11420.00†	6961.21	-691.25	-3840.69	11346.72	6963.40	307.66	-3788.35	90.11	1000.28	419.52	2.39		P
11520.00†	6960.79	-693.86	-3940.65	11446.41	6962.90	312.88	-3887.90	90.10	1008.13	428.63	2.35		P
11620.00†	6960.37	-696.48	-4040.62	11546.10	6962.41	318.09	-3987.46	90.10	1015.97	437.74	2.32		P
11636.58	6960.30	-696.92	-4057.20	11562.63	6962.33	318.96	-4003.97	90.10	1017.27	439.25	2.32		P
11720.00†	6959.95	-697.89	-4140.60	11645.88	6961.91	323.32	-4087.09	90.10	1022.61	446.87	2.29		P
11739.19	6959.87	-697.77	-4159.80	11665.05	6961.82	324.32	-4106.24	90.10	1023.49	448.63	2.28		P
11820.00†	6959.53	-696.99	-4240.60	11745.78	6961.41	328.54	-4186.86	90.10	1026.94	456.04	2.25		P
11920.00†	6959.10	-696.02	-4340.59	11845.69	6960.92	333.77	-4286.63	90.09	1031.21	465.21	2.22		P
12020.00†	6958.68	-695.06	-4440.59	11945.60	6960.42	339.00	-4386.40	90.09	1035.48	474.38	2.18		P
12120.00†	6958.26	-694.10	-4540.58	12045.51	6959.92	344.23	-4486.17	90.08	1039.75	483.56	2.15		P
12220.00†	6957.84	-693.13	-4640.58	12145.42	6959.43	349.46	-4585.94	90.08	1044.02	492.74	2.12		P
12320.00†	6957.42	-692.17	-4740.57	12245.33	6958.93	354.69	-4685.71	90.07	1048.29	501.93	2.09		P
12420.00†	6957.00	-691.20	-4840.57	12345.23	6958.43	359.92	-4785.49	90.07	1052.56	511.11	2.06		P
12520.00†	6956.57	-690.24	-4940.56	12445.14	6957.94	365.15	-4885.26	90.06	1056.84	520.30	2.03		P
12620.00†	6956.15	-689.28	-5040.55	12545.05	6957.44	370.37	-4985.03	90.06	1061.11	529.49	2.01		P
12720.00†	6955.73	-688.31	-5140.55	12644.96	6956.94	375.60	-5084.80	90.06	1065.38	538.69	1.98		P
12820.00†	6955.31	-687.35	-5240.54	12744.87	6956.44	380.83	-5184.57	90.05	1069.65	547.89	1.95		P
12920.00†	6954.89	-686.38	-5340.54	12844.78	6955.95	386.06	-5284.34	90.05	1073.92	557.09	1.93		P
13020.00†	6954.47	-685.42	-5440.53	12944.69	6955.45	391.29	-5384.11	90.04	1078.19	566.29	1.91		P
13120.00†	6954.04	-684.46	-5540.53	13044.60	6954.95	396.52	-5483.88	90.04	1082.46	575.49	1.88		P
13220.00†	6953.62	-683.49	-5640.52	13144.50	6954.46	401.75	-5583.65	90.03	1086.73	584.70	1.86		P
13320.00†	6953.20	-682.53	-5740.52	13244.41	6953.96	406.98	-5683.42	90.03	1091.00	593.90	1.84		P
13420.00†	6952.78	-681.57	-5840.51	13344.32	6953.46	412.20	-5783.19	90.03	1095.27	603.11	1.82		P
13520.00†	6952.36	-680.60	-5940.50	13444.23	6952.97	417.43	-5882.96	90.02	1099.54	612.32	1.80		P
13620.00†	6951.94	-679.64	-6040.50	13544.14	6952.47	422.66	-5982.73	90.02	1103.81	621.54	1.78		P
13720.00†	6951.51	-678.67	-6140.49	13706.42	6951.68	426.60	-6144.95	90.01	1105.29	634.44	1.74		P
13820.00†	6951.09	-677.71	-6240.49	13835.48	6951.03	423.68	-6273.96	90.01	1101.90	644.66	1.71		P
13920.00†	6950.67	-676.75	-6340.48	13935.40	6950.53	420.64	-6373.83	90.00	1097.90	653.83	1.68		P
14020.00†	6950.25	-675.78	-6440.48	14035.32	6950.04	417.61	-6473.70	90.00	1093.90	663.01	1.65		P
14120.00†	6949.83	-674.82	-6540.47	14135.23	6949.55	414.57	-6573.57	90.00	1089.90	672.19	1.62		P

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 80 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated													z
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio		St
14220.00†	6949.41	-673.86	-6640.47	14235.15	6949.05	411.54	-6673.45	89.99	1085.90	681.36	1.59		P
14320.00†	6948.98	-672.89	-6740.46	14335.07	6948.56	408.50	-6773.32	89.99	1081.90	690.54	1.57		P
14420.00†	6948.56	-671.93	-6840.45	14434.99	6948.07	405.47	-6873.19	89.98	1077.89	699.72	1.54		P
14520.00†	6948.14	-670.96	-6940.45	14534.91	6947.57	402.43	-6973.07	89.98	1073.89	708.91	1.52		P
14620.00†	6947.72	-670.00	-7040.44	14634.83	6947.08	399.40	-7072.94	89.98	1069.89	718.09	1.49		P
14720.00†	6947.30	-669.04	-7140.44	14734.75	6946.59	396.36	-7172.81	89.97	1065.89	727.28	1.47		P
14820.00†	6946.87	-668.07	-7240.43	14834.67	6946.09	393.33	-7272.68	89.97	1061.89	736.46	1.44		P
14920.00†	6946.45	-667.11	-7340.43	14934.59	6945.60	390.29	-7372.56	89.96	1057.89	745.65	1.42		P
15020.00†	6946.03	-666.15	-7440.42	15034.51	6945.11	387.26	-7472.43	89.96	1053.89	754.84	1.40		P
15120.00†	6945.61	-665.18	-7540.42	15134.43	6944.62	384.22	-7572.30	89.96	1049.89	764.03	1.37		P
15220.00†	6945.19	-664.22	-7640.41	15234.35	6944.12	381.19	-7672.17	89.95	1045.89	773.22	1.35		P
15320.00†	6944.77	-663.25	-7740.40	15334.27	6943.63	378.15	-7772.05	89.95	1041.89	782.41	1.33		P
15420.00†	6944.34	-662.29	-7840.40	15434.19	6943.14	375.12	-7871.92	89.94	1037.89	791.60	1.31		P
15520.00†	6943.92	-661.33	-7940.39	15534.11	6942.64	372.08	-7971.79	89.94	1033.89	800.79	1.29		P
15620.00†	6943.50	-660.36	-8040.39	15634.03	6942.15	369.05	-8071.66	89.93	1029.89	809.99	1.27		P
15720.00†	6943.08	-659.40	-8140.38	15733.95	6941.66	366.01	-8171.54	89.93	1025.89	819.18	1.25		P
15820.00†	6942.66	-658.44	-8240.38	15833.87	6941.16	362.98	-8271.41	89.93	1021.89	828.38	1.23		P
15920.00†	6942.24	-657.47	-8340.37	15933.79	6940.67	359.94	-8371.28	89.92	1017.89	837.57	1.22		P
16020.00†	6941.81	-656.51	-8440.37	16033.71	6940.18	356.91	-8471.15	89.92	1013.89	846.77	1.20		P
16120.00†	6941.39	-655.54	-8540.36	16133.63	6939.68	353.87	-8571.03	89.91	1009.89	855.97	1.18		P
16220.00†	6940.97	-654.58	-8640.35	16233.55	6939.19	350.84	-8670.90	89.91	1005.89	865.16	1.16		P
16320.00†	6940.55	-653.62	-8740.35	16333.47	6938.70	347.80	-8770.77	89.90	1001.88	874.36	1.15		P
16420.00†	6940.13	-652.65	-8840.34	16433.39	6938.21	344.77	-8870.64	89.90	997.88	883.56	1.13		P
16520.00†	6939.71	-651.69	-8940.34	16533.31	6937.71	341.73	-8970.52	89.90	993.88	892.76	1.11		P
16620.00†	6939.28	-650.72	-9040.33	16633.23	6937.22	338.70	-9070.39	89.89	989.88	901.96	1.10		P
16720.00†	6938.86	-649.76	-9140.33	16733.15	6936.73	335.66	-9170.26	89.89	985.88	911.16	1.08		P
16820.00†	6938.44	-648.80	-9240.32	16833.07	6936.23	332.63	-9270.13	89.88	981.88	920.37	1.07		P
16920.00†	6938.02	-647.83	-9340.32	16932.99	6935.74	329.60	-9370.01	89.88	977.88	929.57	1.05		P
17020.00†	6937.60	-646.87	-9440.31	17032.91	6935.25	326.56	-9469.88	89.87	973.88	938.77	1.04		P
17120.00†	6937.18	-645.91	-9540.31	17132.83	6934.75	323.53	-9569.75	89.87	969.88	947.98	1.02		P

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 81 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)												
Facility: SEC.01-T05N-R67W Slot: SLOT#19 GREELEY-ROTH FEDERAL 33N-2B-L (1043'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2B-L Threshold Value=1.00 † = interpolated/extrapolated												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	Z [ft]
17161.54	6937.00	-645.51	-9581.84	17174.34	6934.55	322.26	-9611.24	89.86	968.22	951.80	1.02	P
C-C Clearance Distance Cutoff: 1000.00 ft												

POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	21.00	1740.76	48.86	-0.52	62.73	43.31
9.625in Casing Surface	20.00	1750.00	1730.00	21.00	1740.76	48.86	-0.52	62.73	43.31
8.5in Open Hole	1750.00	17285.52	15535.52	1740.76	6934.00	62.73	43.31	121.63	-2963.64

SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 33N-2B-L PWB
1750.00	17285.52	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 33N-2B-L PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2B-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 82 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWB

Facility: SEC.11-T05N-R67W				Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD)				Well: EX. SKYWAY 4-11		Threshold Value=1.00 † = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status			
20.00	20.00	0.00	0.00	47.00	20.00	-1527.17	-9522.89	-99.11	9644.57	50.26	195.61	PASS			
120.00†	120.00	0.00	0.00	147.00	120.00	-1527.17	-9522.89	-99.11	9644.57	50.82	193.45	PASS			
220.00†	220.00	0.00	0.00	247.00	220.00	-1527.17	-9522.89	-99.11	9644.57	52.09	188.61	PASS			
320.00†	320.00	0.00	0.00	347.00	320.00	-1527.17	-9522.89	-99.11	9644.57	54.03	181.71	PASS			
420.00†	420.00	0.00	0.00	447.00	420.00	-1527.17	-9522.89	-99.11	9644.57	56.52	173.59	PASS			
520.00†	520.00	0.00	0.00	547.00	520.00	-1527.17	-9522.89	-99.11	9644.57	59.42	164.96	PASS			
620.00†	620.00	0.00	0.00	647.00	620.00	-1527.17	-9522.89	-99.11	9644.57	62.66	156.31	PASS			
700.00	700.00	0.00	0.00	727.00	700.00	-1527.17	-9522.89	-99.11	9644.57	65.42	149.61	PASS			
720.00†	720.00	-0.04	0.06	747.00	720.00	-1527.17	-9522.89	137.59	9644.62	66.14	147.96	PASS			
820.00†	819.96	-1.38	2.10	846.96	819.96	-1527.17	-9522.89	137.57	9646.43	69.83	140.07	PASS			
920.00†	919.78	-4.64	7.06	946.78	919.78	-1527.17	-9522.89	137.54	9650.81	73.68	132.71	PASS			
1020.00†	1019.33	-9.80	14.92	1046.33	1019.33	-1527.17	-9522.89	137.48	9657.76	77.64	125.94	PASS			
1120.00†	1118.50	-16.87	25.69	1145.50	1118.50	-1527.17	-9522.89	137.40	9667.28	81.68	119.76	PASS			
1200.18	1197.64	-23.91	36.40	1224.64	1197.64	-1527.17	-9522.89	137.32	9676.77	84.95	115.21	PASS			
1220.00†	1217.16	-25.80	39.28	1244.16	1217.16	-1527.17	-9522.89	137.34	9679.32	85.76	114.14	PASS			
1320.00†	1315.64	-35.34	53.80	1342.64	1315.64	-1527.17	-9522.89	137.41	9692.19	89.87	109.00	PASS			
1420.00†	1414.12	-44.88	68.32	1441.12	1414.12	-1527.17	-9522.89	137.48	9705.08	94.04	104.26	PASS			
1520.00†	1512.60	-54.42	82.84	1539.60	1512.60	-1527.17	-9522.89	137.54	9717.97	98.24	99.89	PASS			
1620.00†	1611.08	-63.95	97.35	1638.08	1611.08	-1527.17	-9522.89	137.61	9730.89	102.49	95.84	PASS			
1720.00†	1709.56	-73.49	111.87	1736.56	1709.56	-1527.17	-9522.89	137.68	9743.81	106.77	92.08	PASS			
1820.00†	1808.04	-83.03	126.39	1835.04	1808.04	-1527.17	-9522.89	137.75	9756.75	110.78	88.63	PASS			
1920.00†	1906.52	-92.56	140.91	1933.52	1906.52	-1527.17	-9522.89	137.82	9769.71	115.05	85.44	PASS			
2020.00†	2005.00	-102.10	155.43	2032.00	2005.00	-1527.17	-9522.89	137.89	9782.67	119.34	82.46	PASS			
2120.00†	2103.48	-111.64	169.95	2130.48	2103.48	-1527.17	-9522.89	137.95	9795.65	123.66	79.66	PASS			
2220.00†	2201.96	-121.18	184.46	2228.96	2201.96	-1527.17	-9522.89	138.02	9808.65	128.01	77.05	PASS			
2320.00†	2300.44	-130.71	198.98	2327.44	2300.44	-1527.17	-9522.89	138.09	9821.66	132.38	74.59	PASS			
2420.00†	2398.92	-140.25	213.50	2425.92	2398.92	-1527.17	-9522.89	138.16	9834.68	136.77	72.28	PASS			
2520.00†	2497.40	-149.79	228.02	2524.40	2497.40	-1527.17	-9522.89	138.22	9847.71	141.18	70.10	PASS			
2620.00†	2595.88	-159.33	242.54	2622.88	2595.88	-1527.17	-9522.89	138.29	9860.76	145.62	68.04	PASS			
2720.00†	2694.36	-168.86	257.06	2721.36	2694.36	-1527.17	-9522.89	138.36	9873.82	150.07	66.10	PASS			

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 83 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWB

Facility: SEC.11-T05N-R67W Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) Well: EX. SKYWAY 4-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	2819.84	2792.84	-1527.17	-9522.89	138.42	9886.90	154.54	64.27	PASS	
2920.00†	2891.32	-187.94	286.09	2918.32	2891.32	-1527.17	-9522.89	138.49	9899.99	159.03	62.53	PASS	
3020.00†	2989.80	-197.48	300.61	3016.80	2989.80	-1527.17	-9522.89	138.56	9913.09	163.53	60.88	PASS	
3120.00†	3088.28	-207.01	315.13	3115.28	3088.28	-1527.17	-9522.89	138.62	9926.20	168.05	59.31	PASS	
3220.00†	3186.76	-216.55	329.65	3213.76	3186.76	-1527.17	-9522.89	138.69	9939.33	172.58	57.82	PASS	
3320.00†	3285.24	-226.09	344.17	3312.24	3285.24	-1527.17	-9522.89	138.75	9952.47	177.13	56.41	PASS	
3420.00†	3383.71	-235.62	358.69	3410.71	3383.71	-1527.17	-9522.89	138.82	9965.63	181.70	55.06	PASS	
3520.00†	3482.19	-245.16	373.20	3509.19	3482.19	-1527.17	-9522.89	138.88	9978.79	186.27	53.77	PASS	
3620.00†	3580.67	-254.70	387.72	3607.67	3580.67	-1527.17	-9522.89	138.95	9991.97	190.86	52.54	PASS	
3720.00†	3679.15	-264.24	402.24	3706.15	3679.15	-1527.17	-9522.89	139.01	10005.16	195.47	51.37	PASS	
3820.00†	3777.63	-273.77	416.76	3804.63	3777.63	-1527.17	-9522.89	139.08	10018.37	200.08	50.25	PASS	
3920.00†	3876.11	-283.31	431.28	3903.11	3876.11	-1527.17	-9522.89	139.14	10031.59	204.71	49.17	PASS	
4020.00†	3974.59	-292.85	445.80	4001.59	3974.59	-1527.17	-9522.89	139.21	10044.82	209.34	48.14	PASS	
4120.00†	4073.07	-302.39	460.32	4100.07	4073.07	-1527.17	-9522.89	139.27	10058.06	213.99	47.16	PASS	
4220.00†	4171.55	-311.92	474.83	4198.55	4171.55	-1527.17	-9522.89	139.34	10071.31	218.65	46.21	PASS	
4320.00†	4270.03	-321.46	489.35	4297.03	4270.03	-1527.17	-9522.89	139.40	10084.58	223.32	45.30	PASS	
4420.00†	4368.51	-331.00	503.87	4395.51	4368.51	-1527.17	-9522.89	139.46	10097.86	228.00	44.42	PASS	
4520.00†	4466.99	-340.53	518.39	4493.99	4466.99	-1527.17	-9522.89	139.53	10111.15	232.68	43.58	PASS	
4620.00†	4565.47	-350.07	532.91	4592.47	4565.47	-1527.17	-9522.89	139.59	10124.46	237.38	42.78	PASS	
4720.00†	4663.95	-359.61	547.43	4690.95	4663.95	-1527.17	-9522.89	139.65	10137.78	242.09	42.00	PASS	
4820.00†	4762.43	-369.15	561.94	4789.43	4762.43	-1527.17	-9522.89	139.72	10151.11	246.80	41.25	PASS	
4920.00†	4860.91	-378.68	576.46	4887.91	4860.91	-1527.17	-9522.89	139.78	10164.45	251.52	40.52	PASS	
5020.00†	4959.39	-388.22	590.98	4986.39	4959.39	-1527.17	-9522.89	139.84	10177.80	256.25	39.83	PASS	
5120.00†	5057.87	-397.76	605.50	5084.87	5057.87	-1527.17	-9522.89	139.90	10191.17	260.99	39.15	PASS	
5220.00†	5156.35	-407.30	620.02	5183.35	5156.35	-1527.17	-9522.89	139.97	10204.55	265.73	38.50	PASS	
5320.00†	5254.83	-416.83	634.54	5281.83	5254.83	-1527.17	-9522.89	140.03	10217.94	270.49	37.87	PASS	
5420.00†	5353.31	-426.37	649.06	5380.31	5353.31	-1527.17	-9522.89	140.09	10231.34	275.24	37.27	PASS	
5520.00†	5451.79	-435.91	663.57	5478.79	5451.79	-1527.17	-9522.89	140.15	10244.75	280.01	36.68	PASS	
5620.00†	5550.27	-445.45	678.09	5577.27	5550.27	-1527.17	-9522.89	140.22	10258.18	284.78	36.11	PASS	
5720.00†	5648.75	-454.98	692.61	5675.75	5648.75	-1527.17	-9522.89	140.28	10271.62	289.56	35.56	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 84 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) Well: EX. SKYWAY 4-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5820.00†	5747.23	-464.52	707.13	5774.23	5747.23	-1527.17	-9522.89	140.34	10285.07	294.34	35.02	PASS	
5920.00†	5845.71	-474.06	721.65	5872.71	5845.71	-1527.17	-9522.89	140.40	10298.53	299.13	34.51	PASS	
6020.00†	5944.19	-483.59	736.17	5971.19	5944.19	-1527.17	-9522.89	140.46	10312.00	303.93	34.01	PASS	
6120.00†	6042.67	-493.13	750.68	6069.67	6042.67	-1527.17	-9522.89	140.52	10325.48	308.73	33.52	PASS	
6220.00†	6141.15	-502.67	765.20	6168.15	6141.15	-1527.17	-9522.89	140.58	10338.98	313.53	33.05	PASS	
6320.00†	6239.63	-512.21	779.72	6266.63	6239.63	-1527.17	-9522.89	140.64	10352.49	318.34	32.59	PASS	
6333.38	6252.80	-513.48	781.66	6279.80	6252.80	-1527.17	-9522.89	140.65	10354.30	318.99	32.53	PASS	
6420.00†	6338.69	-521.84	788.38	6365.69	6338.69	-1527.17	-9522.89	90.09	10360.17	323.21	32.12	PASS	
6520.00†	6437.87	-531.58	781.50	6464.87	6437.87	-1527.17	-9522.89	28.34	10352.38	328.37	31.59	PASS	
6620.00†	6534.75	-541.19	759.12	6561.75	6534.75	-1527.17	-9522.89	12.68	10329.18	333.79	31.01	PASS	
6720.00†	6626.95	-550.44	721.78	6653.95	6626.95	-1527.17	-9522.89	6.69	10291.13	338.84	30.43	PASS	
6820.00†	6712.19	-559.10	670.41	6739.19	6712.19	-1527.17	-9522.89	3.34	10239.17	343.40	29.88	PASS	
6920.00†	6788.37	-566.95	606.27	6815.37	6788.37	-1527.17	-9522.89	0.85	10174.57	347.40	29.35	PASS	
7020.00†	6853.62	-573.80	530.93	6880.62	6853.62	-1527.17	-9522.89	-1.58	10098.93	350.75	28.85	PASS	
7120.00†	6906.33	-579.49	446.27	6933.33	6906.33	-1527.17	-9522.89	-4.71	10014.10	353.40	28.39	PASS	
7220.00†	6945.20	-583.87	354.35	6972.20	6945.20	-1527.17	-9522.89	-10.12	9922.18	355.31	27.98	PASS	
7320.00†	6969.29	-586.83	257.44	6996.29	6969.29	-1527.17	-9522.89	-24.03	9825.44	356.46	27.62	PASS	
7420.00†	6977.98	-588.31	157.94	7004.98	6977.98	-1527.17	-9522.89	-84.29	9726.25	356.89	27.30	PASS	
7428.43	6978.00	-588.37	149.50	7005.00	6978.00	-1527.17	-9522.89	-92.64	9717.85	356.89	27.28	PASS	
7478.43	6977.79	-588.66	99.50	7004.79	6977.79	-1527.17	-9522.89	-92.63	9668.06	356.90	27.14	PASS	
7520.00†	6977.61	-589.21	57.94	7004.61	6977.61	-1527.17	-9522.89	-93.11	9626.64	356.90	27.02	PASS	
7536.58	6977.55	-589.59	41.36	7004.55	6977.55	-1527.17	-9522.89	-93.36	9610.10	356.90	26.98	PASS	
7620.00†	6977.19	-591.78	-42.02	7004.19	6977.19	-1527.17	-9522.89	-93.33	9526.90	356.91	26.74	PASS	
7720.00†	6976.77	-594.39	-141.99	7003.77	6976.77	-1527.17	-9522.89	-93.30	9427.16	356.92	26.46	PASS	
7820.00†	6976.35	-597.01	-241.95	7003.35	6976.35	-1527.17	-9522.89	-93.26	9327.43	356.93	26.18	PASS	
7920.00†	6975.93	-599.63	-341.92	7002.93	6975.93	-1527.17	-9522.89	-93.23	9227.71	356.95	25.90	PASS	
8020.00†	6975.51	-602.25	-441.88	7002.51	6975.51	-1527.17	-9522.89	-93.19	9127.99	356.98	25.62	PASS	
8120.00†	6975.09	-604.86	-541.85	7002.09	6975.09	-1527.17	-9522.89	-93.16	9028.28	357.01	25.34	PASS	
8220.00†	6974.67	-607.48	-641.81	7001.67	6974.67	-1527.17	-9522.89	-93.12	8928.57	357.05	25.05	PASS	
8320.00†	6974.25	-610.10	-741.78	7001.25	6974.25	-1527.17	-9522.89	-93.09	8828.87	357.09	24.77	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 85 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) Well: EX. SKYWAY 4-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7000.83	6973.83	-1527.17	-9522.89	-93.05	8729.18	357.14	24.49	PASS	
8520.00†	6973.41	-615.33	-941.71	7000.41	6973.41	-1527.17	-9522.89	-93.02	8629.49	357.20	24.20	PASS	
8620.00†	6972.99	-617.95	-1041.67	6999.99	6972.99	-1527.17	-9522.89	-92.98	8529.82	357.27	23.92	PASS	
8720.00†	6972.57	-620.57	-1141.64	6999.57	6972.57	-1527.17	-9522.89	-92.95	8430.15	357.34	23.64	PASS	
8820.00†	6972.15	-623.19	-1241.60	6999.15	6972.15	-1527.17	-9522.89	-92.91	8330.48	357.42	23.35	PASS	
8920.00†	6971.73	-625.81	-1341.57	6998.73	6971.73	-1527.17	-9522.89	-92.88	8230.83	357.51	23.07	PASS	
9020.00†	6971.31	-628.42	-1441.53	6998.31	6971.31	-1527.17	-9522.89	-92.84	8131.18	357.60	22.78	PASS	
9120.00†	6970.88	-631.04	-1541.50	6997.88	6970.88	-1527.17	-9522.89	-92.81	8031.55	357.71	22.50	PASS	
9220.00†	6970.46	-633.66	-1641.46	6997.46	6970.46	-1527.17	-9522.89	-92.77	7931.92	357.82	22.21	PASS	
9320.00†	6970.04	-636.28	-1741.43	6997.04	6970.04	-1527.17	-9522.89	-92.74	7832.30	357.95	21.92	PASS	
9420.00†	6969.62	-638.89	-1841.39	6996.62	6969.62	-1527.17	-9522.89	-92.70	7732.69	358.08	21.64	PASS	
9520.00†	6969.20	-641.51	-1941.36	6996.20	6969.20	-1527.17	-9522.89	-92.67	7633.09	358.23	21.35	PASS	
9620.00†	6968.78	-644.13	-2041.32	6995.78	6968.78	-1527.17	-9522.89	-92.63	7533.50	358.39	21.06	PASS	
9720.00†	6968.36	-646.75	-2141.29	6995.36	6968.36	-1527.17	-9522.89	-92.60	7433.93	358.56	20.77	PASS	
9820.00†	6967.94	-649.36	-2241.25	6994.94	6967.94	-1527.17	-9522.89	-92.56	7334.36	358.74	20.48	PASS	
9920.00†	6967.52	-651.98	-2341.22	6994.52	6967.52	-1527.17	-9522.89	-92.53	7234.81	358.94	20.19	PASS	
10020.00†	6967.10	-654.60	-2441.18	6994.10	6967.10	-1527.17	-9522.89	-92.49	7135.27	359.15	19.90	PASS	
10120.00†	6966.68	-657.22	-2541.15	6993.68	6966.68	-1527.17	-9522.89	-92.46	7035.74	359.37	19.61	PASS	
10220.00†	6966.26	-659.84	-2641.11	6993.26	6966.26	-1527.17	-9522.89	-92.42	6936.22	359.61	19.32	PASS	
10320.00†	6965.84	-662.45	-2741.08	6992.84	6965.84	-1527.17	-9522.89	-92.39	6836.72	359.87	19.03	PASS	
10420.00†	6965.42	-665.07	-2841.04	6992.42	6965.42	-1527.17	-9522.89	-92.35	6737.24	360.14	18.74	PASS	
10520.00†	6965.00	-667.69	-2941.01	6992.00	6965.00	-1527.17	-9522.89	-92.32	6637.77	360.43	18.45	PASS	
10620.00†	6964.58	-670.31	-3040.97	6991.58	6964.58	-1527.17	-9522.89	-92.28	6538.31	360.74	18.16	PASS	
10720.00†	6964.15	-672.92	-3140.93	6991.15	6964.15	-1527.17	-9522.89	-92.25	6438.88	361.07	17.87	PASS	
10820.00†	6963.73	-675.54	-3240.90	6990.73	6963.73	-1527.17	-9522.89	-92.21	6339.46	361.43	17.57	PASS	
10920.00†	6963.31	-678.16	-3340.86	6990.31	6963.31	-1527.17	-9522.89	-92.18	6240.06	361.80	17.28	PASS	
11020.00†	6962.89	-680.78	-3440.83	6989.89	6962.89	-1527.17	-9522.89	-92.14	6140.67	362.20	16.99	PASS	
11120.00†	6962.47	-683.39	-3540.79	6989.47	6962.47	-1527.17	-9522.89	-92.11	6041.31	362.63	16.69	PASS	
11220.00†	6962.05	-686.01	-3640.76	6989.05	6962.05	-1527.17	-9522.89	-92.07	5941.97	363.08	16.40	PASS	
11320.00†	6961.63	-688.63	-3740.72	6988.63	6961.63	-1527.17	-9522.89	-92.04	5842.66	363.56	16.10	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 86 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) Well: EX. SKYWAY 4-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	6988.21	6961.21	-1527.17	-9522.89	-92.00	5743.36	364.07	15.80	PASS	
11520.00†	6960.79	-693.86	-3940.65	6987.79	6960.79	-1527.17	-9522.89	-91.97	5644.09	364.61	15.51	PASS	
11620.00†	6960.37	-696.48	-4040.62	6987.37	6960.37	-1527.17	-9522.89	-91.93	5544.85	365.18	15.21	PASS	
11636.58	6960.30	-696.92	-4057.20	6987.30	6960.30	-1527.17	-9522.89	-91.92	5528.39	365.28	15.16	PASS	
11720.00†	6959.95	-697.89	-4140.60	6986.95	6959.95	-1527.17	-9522.89	-91.54	5445.80	365.85	14.91	PASS	
11739.19	6959.87	-697.77	-4159.80	6986.87	6959.87	-1527.17	-9522.89	-91.47	5426.85	366.00	14.85	PASS	
11820.00†	6959.53	-696.99	-4240.60	6986.53	6959.53	-1527.17	-9522.89	-91.45	5347.13	366.68	14.61	PASS	
11920.00†	6959.10	-696.02	-4340.59	6986.10	6959.10	-1527.17	-9522.89	-91.42	5248.53	367.57	14.30	PASS	
12020.00†	6958.68	-695.06	-4440.59	6985.68	6958.68	-1527.17	-9522.89	-91.39	5149.97	368.52	14.00	PASS	
12120.00†	6958.26	-694.10	-4540.58	6985.26	6958.26	-1527.17	-9522.89	-91.36	5051.48	369.53	13.69	PASS	
12220.00†	6957.84	-693.13	-4640.58	6984.84	6957.84	-1527.17	-9522.89	-91.34	4953.04	370.62	13.39	PASS	
12320.00†	6957.42	-692.17	-4740.57	6984.42	6957.42	-1527.17	-9522.89	-91.31	4854.67	371.77	13.08	PASS	
12420.00†	6957.00	-691.20	-4840.57	6984.00	6957.00	-1527.17	-9522.89	-91.28	4756.37	373.00	12.77	PASS	
12520.00†	6956.57	-690.24	-4940.56	6983.57	6956.57	-1527.17	-9522.89	-91.25	4658.14	374.31	12.47	PASS	
12620.00†	6956.15	-689.28	-5040.55	6983.15	6956.15	-1527.17	-9522.89	-91.23	4559.98	375.71	12.16	PASS	
12720.00†	6955.73	-688.31	-5140.55	6982.73	6955.73	-1527.17	-9522.89	-91.20	4461.91	377.20	11.85	PASS	
12820.00†	6955.31	-687.35	-5240.54	6982.31	6955.31	-1527.17	-9522.89	-91.17	4363.92	378.78	11.54	PASS	
12920.00†	6954.89	-686.38	-5340.54	6981.89	6954.89	-1527.17	-9522.89	-91.15	4266.03	380.47	11.23	PASS	
13020.00†	6954.47	-685.42	-5440.53	6981.47	6954.47	-1527.17	-9522.89	-91.12	4168.24	382.27	10.92	PASS	
13120.00†	6954.04	-684.46	-5540.53	6981.04	6954.04	-1527.17	-9522.89	-91.09	4070.55	384.19	10.61	PASS	
13220.00†	6953.62	-683.49	-5640.52	6980.62	6953.62	-1527.17	-9522.89	-91.06	3972.98	386.23	10.30	PASS	
13320.00†	6953.20	-682.53	-5740.52	6980.20	6953.20	-1527.17	-9522.89	-91.04	3875.54	388.41	9.99	PASS	
13420.00†	6952.78	-681.57	-5840.51	6979.78	6952.78	-1527.17	-9522.89	-91.01	3778.23	390.73	9.69	PASS	
13520.00†	6952.36	-680.60	-5940.50	6979.36	6952.36	-1527.17	-9522.89	-90.98	3681.06	393.20	9.38	PASS	
13620.00†	6951.94	-679.64	-6040.50	6978.94	6951.94	-1527.17	-9522.89	-90.95	3584.04	395.84	9.07	PASS	
13720.00†	6951.51	-678.67	-6140.49	6978.51	6951.51	-1527.17	-9522.89	-90.93	3487.20	398.66	8.76	PASS	
13820.00†	6951.09	-677.71	-6240.49	6978.09	6951.09	-1527.17	-9522.89	-90.90	3390.54	401.67	8.45	PASS	
13920.00†	6950.67	-676.75	-6340.48	6977.67	6950.67	-1527.17	-9522.89	-90.87	3294.08	404.89	8.15	PASS	
14020.00†	6950.25	-675.78	-6440.48	6977.25	6950.25	-1527.17	-9522.89	-90.84	3197.83	408.33	7.84	PASS	
14120.00†	6949.83	-674.82	-6540.47	6976.83	6949.83	-1527.17	-9522.89	-90.82	3101.83	412.01	7.54	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 87 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Facility: SEC.11-T05N-R67W				Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD)				Well: EX. SKYWAY 4-11		Threshold Value=1.00 † = interpolated/extrapolated station			
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14220.00†	6949.41	-673.86	-6640.47	6976.41	6949.41	-1527.17	-9522.89	-90.79	3006.08	415.96	7.24	PASS	
14320.00†	6948.98	-672.89	-6740.46	6975.98	6948.98	-1527.17	-9522.89	-90.76	2910.62	420.20	6.94	PASS	
14420.00†	6948.56	-671.93	-6840.45	6975.56	6948.56	-1527.17	-9522.89	-90.73	2815.48	424.75	6.64	PASS	
14520.00†	6948.14	-670.96	-6940.45	6975.14	6948.14	-1527.17	-9522.89	-90.71	2720.68	429.64	6.34	PASS	
14620.00†	6947.72	-670.00	-7040.44	6974.72	6947.72	-1527.17	-9522.89	-90.68	2626.27	434.90	6.05	PASS	
14720.00†	6947.30	-669.04	-7140.44	6974.30	6947.30	-1527.17	-9522.89	-90.65	2532.29	440.58	5.76	PASS	
14820.00†	6946.87	-668.07	-7240.43	6973.87	6946.87	-1527.17	-9522.89	-90.62	2438.78	446.71	5.47	PASS	
14920.00†	6946.45	-667.11	-7340.43	6973.45	6946.45	-1527.17	-9522.89	-90.60	2345.82	453.33	5.18	PASS	
15020.00†	6946.03	-666.15	-7440.42	6973.03	6946.03	-1527.17	-9522.89	-90.57	2253.45	460.51	4.90	PASS	
15120.00†	6945.61	-665.18	-7540.42	6972.61	6945.61	-1527.17	-9522.89	-90.54	2161.77	468.29	4.62	PASS	
15220.00†	6945.19	-664.22	-7640.41	6972.19	6945.19	-1527.17	-9522.89	-90.51	2070.85	476.75	4.35	PASS	
15320.00†	6944.77	-663.25	-7740.40	6971.77	6944.77	-1527.17	-9522.89	-90.49	1980.81	485.95	4.08	PASS	
15420.00†	6944.34	-662.29	-7840.40	6971.34	6944.34	-1527.17	-9522.89	-90.46	1891.77	495.97	3.82	PASS	
15520.00†	6943.92	-661.33	-7940.39	6970.92	6943.92	-1527.17	-9522.89	-90.43	1803.88	506.91	3.56	PASS	
15620.00†	6943.50	-660.36	-8040.39	6970.50	6943.50	-1527.17	-9522.89	-90.40	1717.32	518.86	3.31	PASS	
15720.00†	6943.08	-659.40	-8140.38	6970.08	6943.08	-1527.17	-9522.89	-90.38	1632.29	531.92	3.07	PASS	
15820.00†	6942.66	-658.44	-8240.38	6969.66	6942.66	-1527.17	-9522.89	-90.35	1549.05	546.19	2.84	PASS	
15920.00†	6942.24	-657.47	-8340.37	6969.24	6942.24	-1527.17	-9522.89	-90.32	1467.90	561.79	2.61	PASS	
16020.00†	6941.81	-656.51	-8440.37	6968.81	6941.81	-1527.17	-9522.89	-90.30	1389.21	578.79	2.40	PASS	
16120.00†	6941.39	-655.54	-8540.36	6968.39	6941.39	-1527.17	-9522.89	-90.27	1313.43	597.26	2.20	PASS	
16220.00†	6940.97	-654.58	-8640.35	6967.97	6940.97	-1527.17	-9522.89	-90.24	1241.08	617.20	2.01	PASS	
16320.00†	6940.55	-653.62	-8740.35	6967.55	6940.55	-1527.17	-9522.89	-90.21	1172.80	638.54	1.84	PASS	
16420.00†	6940.13	-652.65	-8840.34	6967.13	6940.13	-1527.17	-9522.89	-90.19	1109.35	661.06	1.68	PASS	
16520.00†	6939.71	-651.69	-8940.34	6966.71	6939.71	-1527.17	-9522.89	-90.16	1051.59	684.36	1.54	PASS	
16620.00†	6939.28	-650.72	-9040.33	6966.28	6939.28	-1527.17	-9522.89	-90.13	1000.51	707.77	1.41	PASS	
16720.00†	6938.86	-649.76	-9140.33	6965.86	6938.86	-1527.17	-9522.89	-90.10	957.18	730.37	1.31	PASS	
16820.00†	6938.44	-648.80	-9240.32	6965.44	6938.44	-1527.17	-9522.89	-90.08	922.70	750.93	1.23	PASS	
16920.00†	6938.02	-647.83	-9340.32	6965.02	6938.02	-1527.17	-9522.89	-90.05	898.09	768.11	1.17	PASS	
17020.00†	6937.60	-646.87	-9440.31	6964.60	6937.60	-1527.17	-9522.89	-90.02	884.16	780.60	1.13	PASS	
17095.00†	6937.28	-646.15	-9515.31	6962.50	6935.50	-1527.17	-9522.89	-89.88	881.05	786.21	1.12	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 88 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) Well: EX. SKYWAY 4-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17120.00†	6937.18	-645.91	-9540.31	6964.18	6937.18	-1527.17	-9522.89	-89.99	881.43	787.45	1.12	PASS
17161.54	6937.00	-645.51	-9581.84	6964.00	6937.00	-1527.17	-9522.89	-89.98	883.63	788.53	1.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7794.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7794>	EX. SKYWAY 4-11 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SKYWAY 4-11 AWB Offset Wellpath: EX. SKYWAY 4-11 AWP

MD Reference: Rig on SLOT#03 EX. SKYWAY 4-11 (470'FNL & 6041'FWL, PR/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 89 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) Well: EX. SWAFFORD 11-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	72.00	20.00	-1425.21	-5860.55	-103.67	6031.36	50.32	122.19	PASS
120.00†	120.00	0.00	0.00	172.00	120.00	-1425.21	-5860.55	-103.67	6031.36	51.05	120.40	PASS
220.00†	220.00	0.00	0.00	272.00	220.00	-1425.21	-5860.55	-103.67	6031.36	52.51	117.00	PASS
320.00†	320.00	0.00	0.00	372.00	320.00	-1425.21	-5860.55	-103.67	6031.36	54.60	112.44	PASS
420.00†	420.00	0.00	0.00	472.00	420.00	-1425.21	-5860.55	-103.67	6031.36	57.20	107.24	PASS
520.00†	520.00	0.00	0.00	572.00	520.00	-1425.21	-5860.55	-103.67	6031.36	60.19	101.81	PASS
620.00†	620.00	0.00	0.00	672.00	620.00	-1425.21	-5860.55	-103.67	6031.36	63.50	96.43	PASS
700.00	700.00	0.00	0.00	752.00	700.00	-1425.21	-5860.55	-103.67	6031.36	66.31	92.28	PASS
720.00†	720.00	-0.04	0.06	772.00	720.00	-1425.21	-5860.55	133.03	6031.41	67.03	91.27	PASS
820.00†	819.96	-1.38	2.10	871.96	819.96	-1425.21	-5860.55	133.02	6033.08	70.76	86.43	PASS
920.00†	919.78	-4.64	7.06	971.78	919.78	-1425.21	-5860.55	133.01	6037.13	74.64	81.93	PASS
1020.00†	1019.33	-9.80	14.92	1071.33	1019.33	-1425.21	-5860.55	132.98	6043.56	78.62	77.82	PASS
1120.00†	1118.50	-16.87	25.69	1170.50	1118.50	-1425.21	-5860.55	132.94	6052.37	82.67	74.06	PASS
1200.18	1197.64	-23.91	36.40	1249.64	1197.64	-1425.21	-5860.55	132.89	6061.16	85.95	71.31	PASS
1220.00†	1217.16	-25.80	39.28	1269.16	1217.16	-1425.21	-5860.55	132.92	6063.53	86.76	70.66	PASS
1320.00†	1315.64	-35.34	53.80	1367.64	1315.64	-1425.21	-5860.55	133.04	6075.47	90.89	67.55	PASS
1420.00†	1414.12	-44.88	68.32	1466.12	1414.12	-1425.21	-5860.55	133.16	6087.43	95.07	64.68	PASS
1520.00†	1512.60	-54.42	82.84	1564.60	1512.60	-1425.21	-5860.55	133.27	6099.42	99.28	62.03	PASS
1620.00†	1611.08	-63.95	97.35	1663.08	1611.08	-1425.21	-5860.55	133.39	6111.44	103.54	59.57	PASS
1720.00†	1709.56	-73.49	111.87	1761.56	1709.56	-1425.21	-5860.55	133.51	6123.48	107.82	57.30	PASS
1820.00†	1808.04	-83.03	126.39	1860.04	1808.04	-1425.21	-5860.55	133.62	6135.55	111.84	55.20	PASS
1920.00†	1906.52	-92.56	140.91	1958.52	1906.52	-1425.21	-5860.55	133.74	6147.64	116.11	53.26	PASS
2020.00†	2005.00	-102.10	155.43	2057.00	2005.00	-1425.21	-5860.55	133.86	6159.76	120.41	51.45	PASS
2120.00†	2103.48	-111.64	169.95	2155.48	2103.48	-1425.21	-5860.55	133.97	6171.90	124.74	49.76	PASS
2220.00†	2201.96	-121.18	184.46	2253.96	2201.96	-1425.21	-5860.55	134.09	6184.07	129.09	48.16	PASS
2320.00†	2300.44	-130.71	198.98	2352.44	2300.44	-1425.21	-5860.55	134.20	6196.27	133.46	46.67	PASS
2420.00†	2398.92	-140.25	213.50	2450.92	2398.92	-1425.21	-5860.55	134.32	6208.48	137.86	45.26	PASS
2520.00†	2497.40	-149.79	228.02	2549.40	2497.40	-1425.21	-5860.55	134.43	6220.73	142.28	43.94	PASS
2620.00†	2595.88	-159.33	242.54	2647.88	2595.88	-1425.21	-5860.55	134.54	6232.99	146.71	42.69	PASS
2720.00†	2694.36	-168.86	257.06	2746.36	2694.36	-1425.21	-5860.55	134.66	6245.28	151.17	41.50	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 90 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWP Offset Wellpath: EX. SWAFFORD 11-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) Well: EX. SWAFFORD 11-11 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
2820.00†	2792.84	-178.40	271.58	2844.84	2792.84	-1425.21	-5860.55	134.77	6257.60	155.64	40.38	PASS		
2920.00†	2891.32	-187.94	286.09	2943.32	2891.32	-1425.21	-5860.55	134.88	6269.94	160.13	39.32	PASS		
3020.00†	2989.80	-197.48	300.61	3041.80	2989.80	-1425.21	-5860.55	134.99	6282.30	164.64	38.32	PASS		
3120.00†	3088.28	-207.01	315.13	3140.28	3088.28	-1425.21	-5860.55	135.10	6294.69	169.16	37.36	PASS		
3220.00†	3186.76	-216.55	329.65	3238.76	3186.76	-1425.21	-5860.55	135.21	6307.10	173.70	36.46	PASS		
3320.00†	3285.24	-226.09	344.17	3337.24	3285.24	-1425.21	-5860.55	135.32	6319.53	178.25	35.59	PASS		
3420.00†	3383.71	-235.62	358.69	3435.71	3383.71	-1425.21	-5860.55	135.43	6331.99	182.82	34.77	PASS		
3520.00†	3482.19	-245.16	373.20	3534.19	3482.19	-1425.21	-5860.55	135.54	6344.47	187.39	33.98	PASS		
3620.00†	3580.67	-254.70	387.72	3632.67	3580.67	-1425.21	-5860.55	135.65	6356.97	191.99	33.23	PASS		
3720.00†	3679.15	-264.24	402.24	3731.15	3679.15	-1425.21	-5860.55	135.76	6369.49	196.59	32.51	PASS		
3820.00†	3777.63	-273.77	416.76	3829.63	3777.63	-1425.21	-5860.55	135.87	6382.04	201.21	31.83	PASS		
3920.00†	3876.11	-283.31	431.28	3928.11	3876.11	-1425.21	-5860.55	135.97	6394.61	205.84	31.17	PASS		
4020.00†	3974.59	-292.85	445.80	4026.59	3974.59	-1425.21	-5860.55	136.08	6407.21	210.48	30.54	PASS		
4120.00†	4073.07	-302.39	460.32	4125.07	4073.07	-1425.21	-5860.55	136.19	6419.82	215.13	29.94	PASS		
4220.00†	4171.55	-311.92	474.83	4223.55	4171.55	-1425.21	-5860.55	136.29	6432.46	219.79	29.36	PASS		
4320.00†	4270.03	-321.46	489.35	4322.03	4270.03	-1425.21	-5860.55	136.40	6445.12	224.46	28.80	PASS		
4420.00†	4368.51	-331.00	503.87	4420.51	4368.51	-1425.21	-5860.55	136.51	6457.80	229.14	28.27	PASS		
4520.00†	4466.99	-340.53	518.39	4518.99	4466.99	-1425.21	-5860.55	136.61	6470.50	233.83	27.75	PASS		
4620.00†	4565.47	-350.07	532.91	4617.47	4565.47	-1425.21	-5860.55	136.72	6483.23	238.53	27.26	PASS		
4720.00†	4663.95	-359.61	547.43	4715.95	4663.95	-1425.21	-5860.55	136.82	6495.98	243.23	26.78	PASS		
4820.00†	4762.43	-369.15	561.94	4814.43	4762.43	-1425.21	-5860.55	136.92	6508.74	247.95	26.32	PASS		
4920.00†	4860.91	-378.68	576.46	4912.91	4860.91	-1425.21	-5860.55	137.03	6521.53	252.67	25.88	PASS		
5020.00†	4959.39	-388.22	590.98	5011.39	4959.39	-1425.21	-5860.55	137.13	6534.34	257.40	25.45	PASS		
5120.00†	5057.87	-397.76	605.50	5109.87	5057.87	-1425.21	-5860.55	137.23	6547.18	262.14	25.04	PASS		
5220.00†	5156.35	-407.30	620.02	5208.35	5156.35	-1425.21	-5860.55	137.34	6560.03	266.89	24.64	PASS		
5320.00†	5254.83	-416.83	634.54	5306.83	5254.83	-1425.21	-5860.55	137.44	6572.90	271.64	24.26	PASS		
5420.00†	5353.31	-426.37	649.06	5405.31	5353.31	-1425.21	-5860.55	137.54	6585.79	276.40	23.89	PASS		
5520.00†	5451.79	-435.91	663.57	5503.79	5451.79	-1425.21	-5860.55	137.64	6598.71	281.17	23.53	PASS		
5620.00†	5550.27	-445.45	678.09	5602.27	5550.27	-1425.21	-5860.55	137.74	6611.64	285.94	23.18	PASS		
5720.00†	5648.75	-454.98	692.61	5700.75	5648.75	-1425.21	-5860.55	137.84	6624.60	290.72	22.84	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 91 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) Well: EX. SWAFFORD 11-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5820.00†	5747.23	-464.52	707.13	5799.23	5747.23	-1425.21	-5860.55	137.94	6637.57	295.50	22.51	PASS	
5920.00†	5845.71	-474.06	721.65	5897.71	5845.71	-1425.21	-5860.55	138.04	6650.57	300.30	22.20	PASS	
6020.00†	5944.19	-483.59	736.17	5996.19	5944.19	-1425.21	-5860.55	138.14	6663.58	305.09	21.89	PASS	
6120.00†	6042.67	-493.13	750.68	6094.67	6042.67	-1425.21	-5860.55	138.24	6676.62	309.89	21.59	PASS	
6220.00†	6141.15	-502.67	765.20	6193.15	6141.15	-1425.21	-5860.55	138.34	6689.67	314.70	21.30	PASS	
6320.00†	6239.63	-512.21	779.72	6291.63	6239.63	-1425.21	-5860.55	138.44	6702.75	319.51	21.02	PASS	
6333.38	6252.80	-513.48	781.66	6304.80	6252.80	-1425.21	-5860.55	138.45	6704.50	320.15	20.99	PASS	
6420.00†	6338.69	-521.84	788.38	6390.69	6338.69	-1425.21	-5860.55	87.93	6710.02	324.37	20.73	PASS	
6520.00†	6437.87	-531.58	781.50	6489.87	6437.87	-1425.21	-5860.55	26.18	6701.90	329.51	20.38	PASS	
6620.00†	6534.75	-541.19	759.12	6586.75	6534.75	-1425.21	-5860.55	10.44	6678.44	334.89	19.98	PASS	
6720.00†	6626.95	-550.44	721.78	6678.95	6626.95	-1425.21	-5860.55	4.31	6640.21	339.92	19.57	PASS	
6820.00†	6712.19	-559.10	670.41	6764.19	6712.19	-1425.21	-5860.55	0.72	6588.14	344.48	19.16	PASS	
6920.00†	6788.37	-566.95	606.27	6840.37	6788.37	-1425.21	-5860.55	-2.17	6523.53	348.48	18.76	PASS	
7020.00†	6853.62	-573.80	530.93	6905.62	6853.62	-1425.21	-5860.55	-5.24	6447.95	351.84	18.36	PASS	
7120.00†	6906.33	-579.49	446.27	6958.33	6906.33	-1425.21	-5860.55	-9.45	6363.27	354.49	17.98	PASS	
7220.00†	6945.20	-583.87	354.35	6997.20	6945.20	-1425.21	-5860.55	-16.89	6271.59	356.42	17.63	PASS	
7320.00†	6969.29	-586.83	257.44	7021.29	6969.29	-1425.21	-5860.55	-34.73	6175.17	357.60	17.30	PASS	
7420.00†	6977.98	-588.31	157.94	7029.98	6977.98	-1425.21	-5860.55	-86.10	6076.40	358.05	17.00	PASS	
7428.43	6978.00	-588.37	149.50	7030.00	6978.00	-1425.21	-5860.55	-91.81	6068.04	358.05	16.98	PASS	
7478.43	6977.79	-588.66	99.50	7029.79	6977.79	-1425.21	-5860.55	-91.79	6018.48	358.07	16.84	PASS	
7520.00†	6977.61	-589.21	57.94	7029.61	6977.61	-1425.21	-5860.55	-92.00	5977.25	358.09	16.72	PASS	
7536.58	6977.55	-589.59	41.36	7029.55	6977.55	-1425.21	-5860.55	-92.10	5960.78	358.09	16.68	PASS	
7620.00†	6977.19	-591.78	-42.02	7029.19	6977.19	-1425.21	-5860.55	-92.07	5877.92	358.13	16.44	PASS	
7720.00†	6976.77	-594.39	-141.99	7028.77	6976.77	-1425.21	-5860.55	-92.03	5778.60	358.18	16.16	PASS	
7820.00†	6976.35	-597.01	-241.95	7028.35	6976.35	-1425.21	-5860.55	-92.00	5679.31	358.24	15.88	PASS	
7920.00†	6975.93	-599.63	-341.92	7027.93	6975.93	-1425.21	-5860.55	-91.96	5580.05	358.32	15.60	PASS	
8020.00†	6975.51	-602.25	-441.88	7027.51	6975.51	-1425.21	-5860.55	-91.92	5480.81	358.41	15.32	PASS	
8120.00†	6975.09	-604.86	-541.85	7027.09	6975.09	-1425.21	-5860.55	-91.89	5381.60	358.52	15.04	PASS	
8220.00†	6974.67	-607.48	-641.81	7026.67	6974.67	-1425.21	-5860.55	-91.85	5282.42	358.65	14.76	PASS	
8320.00†	6974.25	-610.10	-741.78	7026.25	6974.25	-1425.21	-5860.55	-91.82	5183.27	358.79	14.47	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 92 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) Well: EX. SWAFFORD 11-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7025.83	6973.83	-1425.21	-5860.55	-91.78	5084.15	358.96	14.19	PASS	
8520.00†	6973.41	-615.33	-941.71	7025.41	6973.41	-1425.21	-5860.55	-91.75	4985.07	359.15	13.91	PASS	
8620.00†	6972.99	-617.95	-1041.67	7024.99	6972.99	-1425.21	-5860.55	-91.71	4886.03	359.36	13.62	PASS	
8720.00†	6972.57	-620.57	-1141.64	7024.57	6972.57	-1425.21	-5860.55	-91.68	4787.03	359.60	13.34	PASS	
8820.00†	6972.15	-623.19	-1241.60	7024.15	6972.15	-1425.21	-5860.55	-91.64	4688.06	359.87	13.05	PASS	
8920.00†	6971.73	-625.81	-1341.57	7023.73	6971.73	-1425.21	-5860.55	-91.61	4589.15	360.17	12.76	PASS	
9020.00†	6971.31	-628.42	-1441.53	7023.31	6971.31	-1425.21	-5860.55	-91.57	4490.28	360.50	12.48	PASS	
9120.00†	6970.88	-631.04	-1541.50	7022.88	6970.88	-1425.21	-5860.55	-91.54	4391.46	360.87	12.19	PASS	
9220.00†	6970.46	-633.66	-1641.46	7022.46	6970.46	-1425.21	-5860.55	-91.50	4292.70	361.29	11.90	PASS	
9320.00†	6970.04	-636.28	-1741.43	7022.04	6970.04	-1425.21	-5860.55	-91.47	4194.00	361.74	11.61	PASS	
9420.00†	6969.62	-638.89	-1841.39	7021.62	6969.62	-1425.21	-5860.55	-91.43	4095.36	362.24	11.33	PASS	
9520.00†	6969.20	-641.51	-1941.36	7021.20	6969.20	-1425.21	-5860.55	-91.39	3996.78	362.80	11.04	PASS	
9620.00†	6968.78	-644.13	-2041.32	7020.78	6968.78	-1425.21	-5860.55	-91.36	3898.28	363.41	10.75	PASS	
9720.00†	6968.36	-646.75	-2141.29	7020.36	6968.36	-1425.21	-5860.55	-91.32	3799.86	364.09	10.46	PASS	
9820.00†	6967.94	-649.36	-2241.25	7019.94	6967.94	-1425.21	-5860.55	-91.29	3701.52	364.83	10.16	PASS	
9920.00†	6967.52	-651.98	-2341.22	7019.52	6967.52	-1425.21	-5860.55	-91.25	3603.28	365.65	9.87	PASS	
10020.00†	6967.10	-654.60	-2441.18	7019.10	6967.10	-1425.21	-5860.55	-91.22	3505.13	366.55	9.58	PASS	
10120.00†	6966.68	-657.22	-2541.15	7018.68	6966.68	-1425.21	-5860.55	-91.18	3407.09	367.55	9.29	PASS	
10220.00†	6966.26	-659.84	-2641.11	7018.26	6966.26	-1425.21	-5860.55	-91.15	3309.17	368.64	8.99	PASS	
10320.00†	6965.84	-662.45	-2741.08	7017.84	6965.84	-1425.21	-5860.55	-91.11	3211.38	369.84	8.70	PASS	
10420.00†	6965.42	-665.07	-2841.04	7017.42	6965.42	-1425.21	-5860.55	-91.08	3113.72	371.15	8.40	PASS	
10520.00†	6965.00	-667.69	-2941.01	7017.00	6965.00	-1425.21	-5860.55	-91.04	3016.22	372.60	8.11	PASS	
10620.00†	6964.58	-670.31	-3040.97	7016.58	6964.58	-1425.21	-5860.55	-91.01	2918.89	374.20	7.81	PASS	
10720.00†	6964.15	-672.92	-3140.93	7016.15	6964.15	-1425.21	-5860.55	-90.97	2821.75	375.95	7.52	PASS	
10820.00†	6963.73	-675.54	-3240.90	7015.73	6963.73	-1425.21	-5860.55	-90.93	2724.81	377.88	7.22	PASS	
10920.00†	6963.31	-678.16	-3340.86	7015.31	6963.31	-1425.21	-5860.55	-90.90	2628.10	380.01	6.93	PASS	
11020.00†	6962.89	-680.78	-3440.83	7014.89	6962.89	-1425.21	-5860.55	-90.86	2531.65	382.36	6.63	PASS	
11120.00†	6962.47	-683.39	-3540.79	7014.47	6962.47	-1425.21	-5860.55	-90.83	2435.48	384.95	6.34	PASS	
11220.00†	6962.05	-686.01	-3640.76	7014.05	6962.05	-1425.21	-5860.55	-90.79	2339.64	387.81	6.04	PASS	
11320.00†	6961.63	-688.63	-3740.72	7013.63	6961.63	-1425.21	-5860.55	-90.76	2244.15	390.97	5.75	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 93 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) Well: EX. SWAFFORD 11-11 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	7013.21	6961.21	-1425.21	-5860.55	-90.72	2149.08	394.47	5.46	PASS	
11520.00†	6960.79	-693.86	-3940.65	7012.79	6960.79	-1425.21	-5860.55	-90.69	2054.48	398.35	5.16	PASS	
11620.00†	6960.37	-696.48	-4040.62	7012.37	6960.37	-1425.21	-5860.55	-90.65	1960.41	402.66	4.88	PASS	
11636.58	6960.30	-696.92	-4057.20	7012.30	6960.30	-1425.21	-5860.55	-90.65	1944.87	403.43	4.83	PASS	
11720.00†	6959.95	-697.89	-4140.60	7011.95	6959.95	-1425.21	-5860.55	-90.57	1867.41	407.62	4.59	PASS	
11739.19	6959.87	-697.77	-4159.80	7011.87	6959.87	-1425.21	-5860.55	-90.55	1849.80	408.69	4.53	PASS	
11820.00†	6959.53	-696.99	-4240.60	7011.53	6959.53	-1425.21	-5860.55	-90.52	1776.11	413.47	4.30	PASS	
11920.00†	6959.10	-696.02	-4340.59	7011.10	6959.10	-1425.21	-5860.55	-90.49	1685.82	420.00	4.02	PASS	
12020.00†	6958.68	-695.06	-4440.59	7010.68	6958.68	-1425.21	-5860.55	-90.46	1596.69	427.30	3.74	PASS	
12120.00†	6958.26	-694.10	-4540.58	7010.26	6958.26	-1425.21	-5860.55	-90.43	1508.92	435.45	3.47	PASS	
12220.00†	6957.84	-693.13	-4640.58	7009.84	6957.84	-1425.21	-5860.55	-90.39	1422.77	444.59	3.20	PASS	
12320.00†	6957.42	-692.17	-4740.57	7009.42	6957.42	-1425.21	-5860.55	-90.36	1338.55	454.81	2.95	PASS	
12420.00†	6957.00	-691.20	-4840.57	7009.00	6957.00	-1425.21	-5860.55	-90.33	1256.64	466.24	2.70	PASS	
12520.00†	6956.57	-690.24	-4940.56	7008.57	6956.57	-1425.21	-5860.55	-90.30	1177.53	479.00	2.46	PASS	
12620.00†	6956.15	-689.28	-5040.55	7008.15	6956.15	-1425.21	-5860.55	-90.26	1101.81	493.16	2.24	PASS	
12720.00†	6955.73	-688.31	-5140.55	7007.73	6955.73	-1425.21	-5860.55	-90.23	1030.25	508.76	2.03	PASS	
12820.00†	6955.31	-687.35	-5240.54	7007.31	6955.31	-1425.21	-5860.55	-90.20	963.77	525.70	1.83	PASS	
12920.00†	6954.89	-686.38	-5340.54	7006.89	6954.89	-1425.21	-5860.55	-90.17	903.48	543.70	1.66	PASS	
13020.00†	6954.47	-685.42	-5440.53	7006.47	6954.47	-1425.21	-5860.55	-90.13	850.71	562.21	1.51	PASS	
13120.00†	6954.04	-684.46	-5540.53	7006.04	6954.04	-1425.21	-5860.55	-90.10	806.93	580.31	1.39	PASS	
13220.00†	6953.62	-683.49	-5640.52	7005.62	6953.62	-1425.21	-5860.55	-90.07	773.66	596.74	1.30	PASS	
13320.00†	6953.20	-682.53	-5740.52	7005.20	6953.20	-1425.21	-5860.55	-90.04	752.32	610.02	1.23	PASS	
13420.00†	6952.78	-681.57	-5840.51	7004.78	6952.78	-1425.21	-5860.55	-90.00	743.91	618.83	1.20	PASS	
13432.50†	6952.73	-681.45	-5853.01	7005.00	6953.00	-1425.21	-5860.55	-90.02	743.80	619.58	1.20	PASS	
13466.28†	6952.58	-681.12	-5886.78	7004.58	6952.58	-1425.21	-5860.55	-89.99	744.55	621.15	1.20	PASS	
13520.00†	6952.36	-680.60	-5940.50	7004.36	6952.36	-1425.21	-5860.55	-89.97	748.88	622.37	1.20	PASS	
13620.00†	6951.94	-679.64	-6040.50	7003.94	6951.94	-1425.21	-5860.55	-89.94	766.98	620.66	1.24	PASS	
13720.00†	6951.51	-678.67	-6140.49	7003.51	6951.51	-1425.21	-5860.55	-89.91	797.29	614.46	1.30	PASS	
13820.00†	6951.09	-677.71	-6240.49	7003.09	6951.09	-1425.21	-5860.55	-89.87	838.51	604.98	1.39	PASS	
13920.00†	6950.67	-676.75	-6340.48	7002.67	6950.67	-1425.21	-5860.55	-89.84	889.11	593.51	1.50	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 94 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP													
Facility: SEC.11-T05N-R67W Slot: SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD)				Well: EX. SWAFFORD 11-11		Threshold Value=1.00 † = interpolated/extrapolated station							
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14020.00†	6950.25	-675.78	-6440.48	7002.25	6950.25	-1425.21	-5860.55	-89.81	947.60	581.10	1.63	PASS	
C-C Clearance Distance Cutoff: 1000.00 ft													

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SWAFFORD 11-11 AWB    Offset Wellpath: EX. SWAFFORD 11-11 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7356.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7356>	EX. SWAFFORD 11-11 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SWAFFORD 11-11 AWB Offset Wellpath: EX. SWAFFORD 11-11 AWP		
MD Reference: Rig on SLOT#05 EX. SWAFFORD 11-11 (307'FNL & 993'FEL, PR/NB-CD) (RT)		Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD		0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 95 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#18 GREELEY-ROTH FEDERAL 33N-2C-L (1063'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2C-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
20.00	20.00	0.00	0.00	19.00	20.00	100.19	-1.08	-0.62	100.19	1.26	330.76	P	
120.00†	120.00	0.00	0.00	119.00	120.00	100.19	-1.08	-0.62	100.19	1.88	108.21	P	
220.00†	220.00	0.00	0.00	219.00	220.00	100.19	-1.08	-0.62	100.19	2.45	66.93	P	
320.00†	320.00	0.00	0.00	319.00	320.00	100.19	-1.08	-0.62	100.19	3.05	47.60	P	
420.00†	420.00	0.00	0.00	419.00	420.00	100.19	-1.08	-0.62	100.19	3.66	36.77	P	
520.00†	520.00	0.00	0.00	518.30	519.30	100.43	-0.31	-0.17	100.43	4.28	30.00	P	
620.00†	620.00	0.00	0.00	617.13	618.04	101.63	3.57	2.01	101.71	4.95	25.28	P	
700.00	700.00	0.00	0.00	695.93	696.62	103.32	8.99	4.97	103.76	5.55	22.44	P	
720.00†	720.00	-0.04	0.06	715.57	716.19	103.83	10.66	-117.46	104.48	5.70	21.85	P	
820.00†	819.96	-1.38	2.10	813.54	813.57	107.02	20.92	-113.31	110.21	6.54	19.58	P	
920.00†	919.78	-4.64	7.06	912.33	911.43	111.01	33.77	-109.95	118.99	7.36	18.45	P	
1020.00†	1019.33	-9.80	14.92	1011.75	1009.90	115.09	46.90	-108.39	129.27	8.12	17.93	P	
1120.00†	1118.50	-16.87	25.69	1111.09	1108.29	119.16	60.02	-108.37	140.67	8.88	17.65	P	
1200.18	1197.64	-23.91	36.40	1190.60	1187.03	122.43	70.52	-109.23	150.64	9.51	17.51	P	
1220.00†	1217.16	-25.80	39.28	1210.24	1206.48	123.23	73.11	-109.57	153.20	9.67	17.50	P	
1320.00†	1315.64	-35.34	53.80	1309.30	1304.59	127.29	86.19	-111.11	166.20	10.45	17.41	P	
1420.00†	1414.12	-44.88	68.32	1408.36	1402.69	131.36	99.27	-112.43	179.30	11.27	17.30	P	
1520.00†	1512.60	-54.42	82.84	1507.42	1500.80	135.42	112.36	-113.57	192.48	12.06	17.26	P	
1620.00†	1611.08	-63.95	97.35	1606.48	1598.91	139.48	125.44	-114.57	205.72	12.88	17.18	P	
1720.00†	1709.56	-73.49	111.87	1705.54	1697.02	143.55	138.52	-115.44	219.02	13.71	17.10	P	
1820.00†	1808.04	-83.03	126.39	1804.60	1795.13	147.61	151.60	-116.21	232.37	13.97	17.47	P	
1920.00†	1906.52	-92.56	140.91	1903.66	1893.24	151.67	164.68	-116.90	245.75	14.16	18.21	P	
2020.00†	2005.00	-102.10	155.43	2002.71	1991.34	155.73	177.76	-117.52	259.16	14.41	18.86	P	
2120.00†	2103.48	-111.64	169.95	2101.77	2089.45	159.80	190.84	-118.08	272.60	14.74	19.37	P	
2220.00†	2201.96	-121.18	184.46	2200.83	2187.56	163.86	203.92	-118.58	286.06	15.15	19.76	P	
2320.00†	2300.44	-130.71	198.98	2299.89	2285.67	167.92	217.00	-119.04	299.55	15.63	20.03	P	
2420.00†	2398.92	-140.25	213.50	2398.95	2383.78	171.99	230.09	-119.46	313.04	16.17	20.20	P	
2520.00†	2497.40	-149.79	228.02	2498.01	2481.88	176.05	243.17	-119.84	326.56	16.78	20.28	P	
2620.00†	2595.88	-159.33	242.54	2597.07	2579.99	180.11	256.25	-120.20	340.09	17.43	20.30	P	
2720.00†	2694.36	-168.86	257.06	2696.13	2678.10	184.18	269.33	-120.53	353.63	18.13	20.26	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 96 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#18 GREELEY-ROTH FEDERAL 33N-2C-L (1063'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2C-L Threshold Value=1.00 † = interpolated/extrapolated													s
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2820.00†	2792.84	-178.40	271.58	2795.19	2776.21	188.24	282.41	-120.83	367.18	18.87	20.18	P	
2920.00†	2891.32	-187.94	286.09	2894.25	2874.32	192.30	295.49	-121.11	380.74	19.65	20.06	P	
3020.00†	2989.80	-197.48	300.61	2993.31	2972.42	196.36	308.57	-121.37	394.30	20.46	19.93	P	
3120.00†	3088.28	-207.01	315.13	3092.37	3070.53	200.43	321.65	-121.62	407.88	21.30	19.78	P	
3220.00†	3186.76	-216.55	329.65	3191.43	3168.64	204.49	334.73	-121.85	421.46	22.16	19.62	P	
3320.00†	3285.24	-226.09	344.17	3290.49	3266.75	208.55	347.82	-122.06	435.05	23.04	19.45	P	
3420.00†	3383.71	-235.62	358.69	3389.55	3364.86	212.62	360.90	-122.26	448.64	23.95	19.28	P	
3520.00†	3482.19	-245.16	373.20	3488.61	3462.97	216.68	373.98	-122.45	462.24	24.87	19.10	P	
3620.00†	3580.67	-254.70	387.72	3587.67	3561.07	220.74	387.06	-122.63	475.85	25.81	18.93	P	
3720.00†	3679.15	-264.24	402.24	3686.73	3659.18	224.81	400.14	-122.80	489.45	26.76	18.76	P	
3820.00†	3777.63	-273.77	416.76	3785.79	3757.29	228.87	413.22	-122.96	503.07	27.72	18.60	P	
3920.00†	3876.11	-283.31	431.28	3884.85	3855.40	232.93	426.30	-123.11	516.68	28.70	18.43	P	
4020.00†	3974.59	-292.85	445.80	3983.91	3953.51	236.99	439.38	-123.26	530.30	29.68	18.28	P	
4120.00†	4073.07	-302.39	460.32	4082.97	4051.61	241.06	452.46	-123.39	543.92	30.68	18.13	P	
4220.00†	4171.55	-311.92	474.83	4182.03	4149.72	245.12	465.55	-123.52	557.55	31.68	17.98	P	
4320.00†	4270.03	-321.46	489.35	4281.09	4247.83	249.18	478.63	-123.65	571.18	32.69	17.84	P	
4420.00†	4368.51	-331.00	503.87	4380.15	4345.94	253.25	491.71	-123.76	584.81	33.71	17.70	P	
4520.00†	4466.99	-340.53	518.39	4479.21	4444.05	257.31	504.79	-123.88	598.44	34.73	17.57	P	
4620.00†	4565.47	-350.07	532.91	4578.27	4542.15	261.37	517.87	-123.98	612.07	35.76	17.44	P	
4720.00†	4663.95	-359.61	547.43	4677.33	4640.26	265.44	530.95	-124.09	625.71	36.80	17.32	P	
4820.00†	4762.43	-369.15	561.94	4776.39	4738.37	269.50	544.03	-124.19	639.35	37.84	17.20	P	
4920.00†	4860.91	-378.68	576.46	4875.45	4836.48	273.56	557.11	-124.28	652.99	38.88	17.09	P	
5020.00†	4959.39	-388.22	590.98	4974.51	4934.59	277.62	570.20	-124.37	666.63	39.93	16.98	P	
5120.00†	5057.87	-397.76	605.50	5073.57	5032.69	281.69	583.28	-124.46	680.28	40.98	16.88	P	
5220.00†	5156.35	-407.30	620.02	5172.63	5130.80	285.75	596.38	-124.54	693.92	42.03	16.77	P	
5320.00†	5254.83	-416.83	634.54	5271.69	5228.91	289.81	609.44	-124.62	707.57	43.09	16.68	P	
5420.00†	5353.31	-426.37	649.06	5370.75	5327.02	293.88	622.52	-124.70	721.22	44.15	16.58	P	
5520.00†	5451.79	-435.91	663.57	5469.80	5425.13	297.94	635.60	-124.77	734.86	45.22	16.49	P	
5620.00†	5550.27	-445.45	678.09	5568.86	5523.24	302.00	648.68	-124.84	748.51	46.28	16.41	P	
5720.00†	5648.75	-454.98	692.61	5667.92	5621.34	306.07	661.76	-124.91	762.17	47.35	16.32	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 97 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#18 GREELEY-ROTH FEDERAL 33N-2C-L (1063'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 33N-2C-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
5820.00†	5747.23	-464.52	707.13	5766.98	5719.45	310.13	674.84	-124.98	775.82	48.42	16.24	P/	
5920.00†	5845.71	-474.06	721.65	5866.04	5817.56	314.19	687.93	-125.04	789.47	49.50	16.17	P/	
6020.00†	5944.19	-483.59	736.17	5965.10	5915.67	318.25	701.01	-125.11	803.13	50.57	16.09	P/	
6120.00†	6042.67	-493.13	750.68	6064.16	6013.78	322.32	714.09	-125.17	816.78	51.65	16.02	P/	
6220.00†	6141.15	-502.67	765.20	6163.22	6111.88	326.38	727.17	-125.22	830.44	52.73	15.95	P/	
6320.00†	6239.63	-512.21	779.72	6262.28	6209.99	330.44	740.25	-125.28	844.09	53.81	15.88	P/	
6333.38	6252.80	-513.48	781.66	6275.53	6223.12	330.99	742.00	-125.29	845.92	53.95	15.87	P/	
6420.00†	6338.69	-521.84	788.38	6361.14	6307.90	334.50	753.30	-176.66	857.61	54.90	15.81	P/	
6520.00†	6437.87	-531.58	781.50	6441.68	6387.96	338.35	760.77	121.22	871.61	56.11	15.72	P/	
6620.00†	6534.75	-541.19	759.12	6519.32	6465.34	343.63	758.68	105.29	887.54	57.49	15.62	P/	
6720.00†	6626.95	-550.44	721.78	6597.98	6542.78	350.51	747.08	99.23	905.23	58.99	15.52	P/	
6820.00†	6712.19	-559.10	670.41	6678.03	6619.40	358.98	725.67	96.03	924.41	60.16	15.54	P/	
6920.00†	6788.37	-566.95	606.27	6759.97	6694.26	369.04	694.07	94.06	944.80	61.68	15.48	P/	
7020.00†	6853.62	-573.80	530.93	6844.39	6766.34	380.71	651.82	92.75	966.08	63.74	15.32	P/	
7120.00†	6906.33	-579.49	446.27	6932.05	6834.41	394.00	598.32	91.87	987.92	66.38	15.03	P/	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	21.00	1741.06	61.07	-0.66	74.85	43.68
9.625in Casing Surface	20.00	1750.00	1730.00	21.00	1741.06	61.07	-0.66	74.85	43.68
8.5in Open Hole	1750.00	17278.45	15528.45	1741.06	7029.00	74.85	43.68	202.46	-2950.18



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 98 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 33N-2C-L PWB
1750.00	17278.45	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 33N-2C-L PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 33N-2C-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 33N-2C-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 99 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	89.00	20.00	-1562.36	-6632.98	-103.25	6814.50	50.35	137.96	PASS	
120.00†	120.00	0.00	0.00	189.00	120.00	-1562.36	-6632.98	-103.25	6814.50	51.21	135.61	PASS	
220.00†	220.00	0.00	0.00	289.00	220.00	-1562.36	-6632.98	-103.25	6814.50	52.79	131.48	PASS	
320.00†	320.00	0.00	0.00	389.00	320.00	-1562.36	-6632.98	-103.25	6814.50	54.98	126.15	PASS	
420.00†	420.00	0.00	0.00	489.00	420.00	-1562.36	-6632.98	-103.25	6814.50	57.66	120.18	PASS	
520.00†	520.00	0.00	0.00	589.00	520.00	-1562.36	-6632.98	-103.25	6814.50	60.72	114.03	PASS	
620.00†	620.00	0.00	0.00	689.00	620.00	-1562.36	-6632.98	-103.25	6814.50	64.07	107.97	PASS	
700.00	700.00	0.00	0.00	769.00	700.00	-1562.36	-6632.98	-103.25	6814.50	66.92	103.30	PASS	
720.00†	720.00	-0.04	0.06	789.00	720.00	-1562.36	-6632.98	-133.44	6814.55	67.64	102.19	PASS	
820.00†	819.96	-1.38	2.10	888.96	819.96	-1562.36	-6632.98	-133.44	6816.23	71.39	96.77	PASS	
920.00†	919.78	-4.64	7.06	988.78	919.78	-1562.36	-6632.98	-133.41	6820.31	75.29	91.74	PASS	
1020.00†	1019.33	-9.80	14.92	1088.33	1019.33	-1562.36	-6632.98	-133.38	6826.79	79.29	87.15	PASS	
1120.00†	1118.50	-16.87	25.69	1187.50	1118.50	-1562.36	-6632.98	-133.32	6835.67	83.36	82.95	PASS	
1200.18	1197.64	-23.91	36.40	1266.64	1197.64	-1562.36	-6632.98	-133.27	6844.52	86.65	79.87	PASS	
1220.00†	1217.16	-25.80	39.28	1286.16	1217.16	-1562.36	-6632.98	-133.29	6846.90	87.46	79.14	PASS	
1320.00†	1315.64	-35.34	53.80	1384.64	1315.64	-1562.36	-6632.98	-133.40	6858.92	91.60	75.67	PASS	
1420.00†	1414.12	-44.88	68.32	1483.12	1414.12	-1562.36	-6632.98	-133.50	6870.96	95.78	72.46	PASS	
1520.00†	1512.60	-54.42	82.84	1581.60	1512.60	-1562.36	-6632.98	-133.60	6883.03	100.00	69.49	PASS	
1620.00†	1611.08	-63.95	97.35	1680.08	1611.08	-1562.36	-6632.98	-133.71	6895.11	104.26	66.74	PASS	
1720.00†	1709.56	-73.49	111.87	1778.56	1709.56	-1562.36	-6632.98	-133.81	6907.22	108.55	64.19	PASS	
1820.00†	1808.04	-83.03	126.39	1877.04	1808.04	-1562.36	-6632.98	-133.92	6919.36	112.58	61.85	PASS	
1920.00†	1906.52	-92.56	140.91	1975.52	1906.52	-1562.36	-6632.98	-134.02	6931.51	116.85	59.68	PASS	
2020.00†	2005.00	-102.10	155.43	2074.00	2005.00	-1562.36	-6632.98	-134.12	6943.69	121.15	57.65	PASS	
2120.00†	2103.48	-111.64	169.95	2172.48	2103.48	-1562.36	-6632.98	-134.22	6955.89	125.48	55.74	PASS	
2220.00†	2201.96	-121.18	184.46	2270.96	2201.96	-1562.36	-6632.98	-134.32	6968.11	129.83	53.96	PASS	
2320.00†	2300.44	-130.71	198.98	2369.44	2300.44	-1562.36	-6632.98	-134.43	6980.35	134.21	52.28	PASS	
2420.00†	2398.92	-140.25	213.50	2467.92	2398.92	-1562.36	-6632.98	-134.53	6992.62	138.60	50.70	PASS	
2520.00†	2497.40	-149.79	228.02	2566.40	2497.40	-1562.36	-6632.98	-134.63	7004.90	143.02	49.22	PASS	
2620.00†	2595.88	-159.33	242.54	2664.88	2595.88	-1562.36	-6632.98	-134.73	7017.21	147.46	47.81	PASS	
2720.00†	2694.36	-168.86	257.06	2763.36	2694.36	-1562.36	-6632.98	-134.83	7029.54	151.92	46.48	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 100 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	2861.84	2792.84	-1562.36	-6632.98	134.93	7041.89	156.39	45.23	PASS	
2920.00†	2891.32	-187.94	286.09	2960.32	2891.32	-1562.36	-6632.98	135.03	7054.26	160.88	44.04	PASS	
3020.00†	2989.80	-197.48	300.61	3058.80	2989.80	-1562.36	-6632.98	135.12	7066.65	165.39	42.91	PASS	
3120.00†	3088.28	-207.01	315.13	3157.28	3088.28	-1562.36	-6632.98	135.22	7079.07	169.91	41.83	PASS	
3220.00†	3186.76	-216.55	329.65	3255.76	3186.76	-1562.36	-6632.98	135.32	7091.50	174.45	40.81	PASS	
3320.00†	3285.24	-226.09	344.17	3354.24	3285.24	-1562.36	-6632.98	135.42	7103.96	179.00	39.84	PASS	
3420.00†	3383.71	-235.62	358.69	3452.71	3383.71	-1562.36	-6632.98	135.51	7116.43	183.57	38.91	PASS	
3520.00†	3482.19	-245.16	373.20	3551.19	3482.19	-1562.36	-6632.98	135.61	7128.93	188.15	38.03	PASS	
3620.00†	3580.67	-254.70	387.72	3649.67	3580.67	-1562.36	-6632.98	135.71	7141.44	192.74	37.18	PASS	
3720.00†	3679.15	-264.24	402.24	3748.15	3679.15	-1562.36	-6632.98	135.81	7153.98	197.35	36.38	PASS	
3820.00†	3777.63	-273.77	416.76	3846.63	3777.63	-1562.36	-6632.98	135.90	7166.54	201.96	35.61	PASS	
3920.00†	3876.11	-283.31	431.28	3945.11	3876.11	-1562.36	-6632.98	136.00	7179.12	206.59	34.87	PASS	
4020.00†	3974.59	-292.85	445.80	4043.59	3974.59	-1562.36	-6632.98	136.09	7191.71	211.23	34.16	PASS	
4120.00†	4073.07	-302.39	460.32	4142.07	4073.07	-1562.36	-6632.98	136.19	7204.33	215.88	33.48	PASS	
4220.00†	4171.55	-311.92	474.83	4240.55	4171.55	-1562.36	-6632.98	136.28	7216.97	220.54	32.83	PASS	
4320.00†	4270.03	-321.46	489.35	4339.03	4270.03	-1562.36	-6632.98	136.38	7229.62	225.22	32.20	PASS	
4420.00†	4368.51	-331.00	503.87	4437.51	4368.51	-1562.36	-6632.98	136.47	7242.30	229.90	31.60	PASS	
4520.00†	4466.99	-340.53	518.39	4535.99	4466.99	-1562.36	-6632.98	136.57	7254.99	234.59	31.02	PASS	
4620.00†	4565.47	-350.07	532.91	4634.47	4565.47	-1562.36	-6632.98	136.66	7267.71	239.28	30.46	PASS	
4720.00†	4663.95	-359.61	547.43	4732.95	4663.95	-1562.36	-6632.98	136.75	7280.44	243.99	29.92	PASS	
4820.00†	4762.43	-369.15	561.94	4831.43	4762.43	-1562.36	-6632.98	136.85	7293.19	248.71	29.41	PASS	
4920.00†	4860.91	-378.68	576.46	4929.91	4860.91	-1562.36	-6632.98	136.94	7305.97	253.43	28.91	PASS	
5020.00†	4959.39	-388.22	590.98	5028.39	4959.39	-1562.36	-6632.98	137.03	7318.76	258.16	28.42	PASS	
5120.00†	5057.87	-397.76	605.50	5126.87	5057.87	-1562.36	-6632.98	137.12	7331.57	262.90	27.96	PASS	
5220.00†	5156.35	-407.30	620.02	5225.35	5156.35	-1562.36	-6632.98	137.21	7344.39	267.65	27.51	PASS	
5320.00†	5254.83	-416.83	634.54	5323.83	5254.83	-1562.36	-6632.98	137.30	7357.24	272.40	27.08	PASS	
5420.00†	5353.31	-426.37	649.06	5422.31	5353.31	-1562.36	-6632.98	137.40	7370.11	277.16	26.66	PASS	
5520.00†	5451.79	-435.91	663.57	5520.79	5451.79	-1562.36	-6632.98	137.49	7382.99	281.93	26.25	PASS	
5620.00†	5550.27	-445.45	678.09	5619.27	5550.27	-1562.36	-6632.98	137.58	7395.89	286.70	25.86	PASS	
5720.00†	5648.75	-454.98	692.61	5717.75	5648.75	-1562.36	-6632.98	137.67	7408.82	291.48	25.48	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 101 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
5820.00†	5747.23	-464.52	707.13	5816.23	5747.23	-1562.36	-6632.98	137.76	7421.75	296.27	25.11	PASS		
5920.00†	5845.71	-474.06	721.65	5914.71	5845.71	-1562.36	-6632.98	137.85	7434.71	301.06	24.75	PASS		
6020.00†	5944.19	-483.59	736.17	6013.19	5944.19	-1562.36	-6632.98	137.93	7447.69	305.86	24.40	PASS		
6120.00†	6042.67	-493.13	750.68	6111.67	6042.67	-1562.36	-6632.98	138.02	7460.68	310.66	24.07	PASS		
6220.00†	6141.15	-502.67	765.20	6210.15	6141.15	-1562.36	-6632.98	138.11	7473.69	315.46	23.74	PASS		
6320.00†	6239.63	-512.21	779.72	6308.63	6239.63	-1562.36	-6632.98	138.20	7486.72	320.28	23.43	PASS		
6333.38	6252.80	-513.48	781.66	6321.80	6252.80	-1562.36	-6632.98	138.21	7488.46	320.92	23.38	PASS		
6420.00†	6338.69	-521.84	788.38	6407.69	6338.69	-1562.36	-6632.98	87.69	7493.95	325.14	23.10	PASS		
6520.00†	6437.87	-531.58	781.50	6506.87	6437.87	-1562.36	-6632.98	25.92	7485.79	330.27	22.71	PASS		
6620.00†	6534.75	-541.19	759.12	6603.75	6534.75	-1562.36	-6632.98	10.17	7462.30	335.64	22.28	PASS		
6720.00†	6626.95	-550.44	721.78	6695.95	6626.95	-1562.36	-6632.98	4.01	7424.05	340.68	21.84	PASS		
6820.00†	6712.19	-559.10	670.41	6781.19	6712.19	-1562.36	-6632.98	0.39	7371.97	345.24	21.40	PASS		
6920.00†	6788.37	-566.95	606.27	6857.37	6788.37	-1562.36	-6632.98	-2.55	7307.36	349.24	20.96	PASS		
7020.00†	6853.62	-573.80	530.93	6922.62	6853.62	-1562.36	-6632.98	-5.69	7231.80	352.59	20.55	PASS		
7120.00†	6906.33	-579.49	446.27	6975.33	6906.33	-1562.36	-6632.98	-10.01	7147.15	355.25	20.16	PASS		
7220.00†	6945.20	-583.87	354.35	7014.20	6945.20	-1562.36	-6632.98	-17.66	7055.51	357.18	19.79	PASS		
7320.00†	6969.29	-586.83	257.44	7038.29	6969.29	-1562.36	-6632.98	-35.78	6959.13	358.36	19.46	PASS		
7420.00†	6977.98	-588.31	157.94	7046.98	6977.98	-1562.36	-6632.98	-86.23	6860.41	358.81	19.16	PASS		
7428.43	6978.00	-588.37	149.50	7047.00	6978.00	-1562.36	-6632.98	-91.75	6852.06	358.82	19.13	PASS		
7478.43	6977.79	-588.66	99.50	7046.79	6977.79	-1562.36	-6632.98	-91.74	6802.53	358.84	18.99	PASS		
7520.00†	6977.61	-589.21	57.94	7046.61	6977.61	-1562.36	-6632.98	-91.93	6761.32	358.86	18.88	PASS		
7536.58	6977.55	-589.59	41.36	7046.55	6977.55	-1562.36	-6632.98	-92.02	6744.86	358.86	18.83	PASS		
7620.00†	6977.19	-591.78	-42.02	7046.19	6977.19	-1562.36	-6632.98	-92.00	6662.04	358.90	18.60	PASS		
7720.00†	6976.77	-594.39	-141.99	7045.77	6976.77	-1562.36	-6632.98	-91.97	6562.77	358.95	18.32	PASS		
7820.00†	6976.35	-597.01	-241.95	7045.35	6976.35	-1562.36	-6632.98	-91.94	6463.52	359.02	18.04	PASS		
7920.00†	6975.93	-599.63	-341.92	7044.93	6975.93	-1562.36	-6632.98	-91.91	6364.30	359.10	17.76	PASS		
8020.00†	6975.51	-602.25	-441.88	7044.51	6975.51	-1562.36	-6632.98	-91.88	6265.10	359.20	17.47	PASS		
8120.00†	6975.09	-604.86	-541.85	7044.09	6975.09	-1562.36	-6632.98	-91.85	6165.93	359.31	17.19	PASS		
8220.00†	6974.67	-607.48	-641.81	7043.67	6974.67	-1562.36	-6632.98	-91.82	6066.78	359.44	16.91	PASS		
8320.00†	6974.25	-610.10	-741.78	7043.25	6974.25	-1562.36	-6632.98	-91.79	5967.67	359.59	16.63	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 102 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7042.83	6973.83	-1562.36	-6632.98	-91.76	5868.58	359.75	16.34	PASS	
8520.00†	6973.41	-615.33	-941.71	7042.41	6973.41	-1562.36	-6632.98	-91.73	5769.52	359.94	16.06	PASS	
8620.00†	6972.99	-617.95	-1041.67	7041.99	6972.99	-1562.36	-6632.98	-91.70	5670.50	360.15	15.77	PASS	
8720.00†	6972.57	-620.57	-1141.64	7041.57	6972.57	-1562.36	-6632.98	-91.67	5571.52	360.39	15.49	PASS	
8820.00†	6972.15	-623.19	-1241.60	7041.15	6972.15	-1562.36	-6632.98	-91.64	5472.57	360.65	15.20	PASS	
8920.00†	6971.73	-625.81	-1341.57	7040.73	6971.73	-1562.36	-6632.98	-91.61	5373.65	360.93	14.92	PASS	
9020.00†	6971.31	-628.42	-1441.53	7040.31	6971.31	-1562.36	-6632.98	-91.58	5274.78	361.25	14.63	PASS	
9120.00†	6970.88	-631.04	-1541.50	7039.88	6970.88	-1562.36	-6632.98	-91.55	5175.96	361.60	14.34	PASS	
9220.00†	6970.46	-633.66	-1641.46	7039.46	6970.46	-1562.36	-6632.98	-91.51	5077.18	361.99	14.05	PASS	
9320.00†	6970.04	-636.28	-1741.43	7039.04	6970.04	-1562.36	-6632.98	-91.48	4978.44	362.41	13.76	PASS	
9420.00†	6969.62	-638.89	-1841.39	7038.62	6969.62	-1562.36	-6632.98	-91.45	4879.76	362.87	13.47	PASS	
9520.00†	6969.20	-641.51	-1941.36	7038.20	6969.20	-1562.36	-6632.98	-91.42	4781.14	363.37	13.18	PASS	
9620.00†	6968.78	-644.13	-2041.32	7037.78	6968.78	-1562.36	-6632.98	-91.39	4682.57	363.93	12.89	PASS	
9720.00†	6968.36	-646.75	-2141.29	7037.36	6968.36	-1562.36	-6632.98	-91.36	4584.06	364.53	12.60	PASS	
9820.00†	6967.94	-649.36	-2241.25	7036.94	6967.94	-1562.36	-6632.98	-91.33	4485.62	365.18	12.31	PASS	
9920.00†	6967.52	-651.98	-2341.22	7036.52	6967.52	-1562.36	-6632.98	-91.30	4387.26	365.89	12.01	PASS	
10020.00†	6967.10	-654.60	-2441.18	7036.10	6967.10	-1562.36	-6632.98	-91.27	4288.96	366.66	11.72	PASS	
10120.00†	6966.68	-657.22	-2541.15	7035.68	6966.68	-1562.36	-6632.98	-91.24	4190.75	367.50	11.42	PASS	
10220.00†	6966.26	-659.84	-2641.11	7035.26	6966.26	-1562.36	-6632.98	-91.21	4092.62	368.42	11.13	PASS	
10320.00†	6965.84	-662.45	-2741.08	7034.84	6965.84	-1562.36	-6632.98	-91.18	3994.59	369.41	10.83	PASS	
10420.00†	6965.42	-665.07	-2841.04	7034.42	6965.42	-1562.36	-6632.98	-91.15	3896.66	370.48	10.54	PASS	
10520.00†	6965.00	-667.69	-2941.01	7034.00	6965.00	-1562.36	-6632.98	-91.12	3798.83	371.65	10.24	PASS	
10620.00†	6964.58	-670.31	-3040.97	7033.58	6964.58	-1562.36	-6632.98	-91.09	3701.12	372.91	9.94	PASS	
10720.00†	6964.15	-672.92	-3140.93	7033.15	6964.15	-1562.36	-6632.98	-91.06	3603.54	374.28	9.64	PASS	
10820.00†	6963.73	-675.54	-3240.90	7032.73	6963.73	-1562.36	-6632.98	-91.03	3506.09	375.76	9.35	PASS	
10920.00†	6963.31	-678.16	-3340.86	7032.31	6963.31	-1562.36	-6632.98	-91.00	3408.79	377.37	9.05	PASS	
11020.00†	6962.89	-680.78	-3440.83	7031.89	6962.89	-1562.36	-6632.98	-90.97	3311.65	379.11	8.75	PASS	
11120.00†	6962.47	-683.39	-3540.79	7031.47	6962.47	-1562.36	-6632.98	-90.94	3214.68	381.00	8.45	PASS	
11220.00†	6962.05	-686.01	-3640.76	7031.05	6962.05	-1562.36	-6632.98	-90.91	3117.91	383.05	8.15	PASS	
11320.00†	6961.63	-688.63	-3740.72	7030.63	6961.63	-1562.36	-6632.98	-90.88	3021.35	385.27	7.85	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 103 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11420.00†	6961.21	-691.25	-3840.69	7030.21	6961.21	-1562.36	-6632.98	-90.85	2925.02	387.68	7.56	PASS
11520.00†	6960.79	-693.86	-3940.65	7029.79	6960.79	-1562.36	-6632.98	-90.82	2828.94	390.31	7.26	PASS
11620.00†	6960.37	-696.48	-4040.62	7029.37	6960.37	-1562.36	-6632.98	-90.79	2733.14	393.16	6.96	PASS
11636.58	6960.30	-696.92	-4057.20	7029.30	6960.30	-1562.36	-6632.98	-90.79	2717.29	393.65	6.91	PASS
11720.00†	6959.95	-697.89	-4140.60	7028.95	6959.95	-1562.36	-6632.98	-90.69	2638.04	396.38	6.67	PASS
11739.19	6959.87	-697.77	-4159.80	7028.87	6959.87	-1562.36	-6632.98	-90.67	2619.95	397.08	6.61	PASS
11820.00†	6959.53	-696.99	-4240.60	7028.53	6959.53	-1562.36	-6632.98	-90.65	2544.08	400.15	6.37	PASS
11920.00†	6959.10	-696.02	-4340.59	7028.10	6959.10	-1562.36	-6632.98	-90.62	2450.63	404.26	6.07	PASS
12020.00†	6958.68	-695.06	-4440.59	7027.68	6958.68	-1562.36	-6632.98	-90.59	2357.71	408.74	5.78	PASS
12120.00†	6958.26	-694.10	-4540.58	7027.26	6958.26	-1562.36	-6632.98	-90.57	2265.39	413.64	5.48	PASS
12220.00†	6957.84	-693.13	-4640.58	7026.84	6957.84	-1562.36	-6632.98	-90.54	2173.76	418.99	5.20	PASS
12320.00†	6957.42	-692.17	-4740.57	7026.42	6957.42	-1562.36	-6632.98	-90.51	2082.89	424.85	4.91	PASS
12420.00†	6957.00	-691.20	-4840.57	7026.00	6957.00	-1562.36	-6632.98	-90.49	1992.90	431.26	4.63	PASS
12520.00†	6956.57	-690.24	-4940.56	7025.57	6956.57	-1562.36	-6632.98	-90.46	1903.91	438.28	4.35	PASS
12620.00†	6956.15	-689.28	-5040.55	7025.15	6956.15	-1562.36	-6632.98	-90.43	1816.06	445.99	4.08	PASS
12720.00†	6955.73	-688.31	-5140.55	7024.73	6955.73	-1562.36	-6632.98	-90.40	1729.54	454.45	3.81	PASS
12820.00†	6955.31	-687.35	-5240.54	7024.31	6955.31	-1562.36	-6632.98	-90.38	1644.54	463.73	3.55	PASS
12920.00†	6954.89	-686.38	-5340.54	7023.89	6954.89	-1562.36	-6632.98	-90.35	1561.32	473.93	3.30	PASS
13020.00†	6954.47	-685.42	-5440.53	7023.47	6954.47	-1562.36	-6632.98	-90.32	1480.19	485.11	3.05	PASS
13120.00†	6954.04	-684.46	-5540.53	7023.04	6954.04	-1562.36	-6632.98	-90.30	1401.49	497.35	2.82	PASS
13220.00†	6953.62	-683.49	-5640.52	7022.62	6953.62	-1562.36	-6632.98	-90.27	1325.66	510.70	2.60	PASS
13320.00†	6953.20	-682.53	-5740.52	7022.20	6953.20	-1562.36	-6632.98	-90.24	1253.23	525.18	2.39	PASS
13420.00†	6952.78	-681.57	-5840.51	7021.78	6952.78	-1562.36	-6632.98	-90.21	1184.82	540.76	2.19	PASS
13520.00†	6952.36	-680.60	-5940.50	7021.36	6952.36	-1562.36	-6632.98	-90.19	1121.17	557.30	2.01	PASS
13620.00†	6951.94	-679.64	-6040.50	7020.94	6951.94	-1562.36	-6632.98	-90.16	1063.12	574.55	1.85	PASS
13720.00†	6951.51	-678.67	-6140.49	7020.51	6951.51	-1562.36	-6632.98	-90.13	1011.65	592.07	1.71	PASS
13820.00†	6951.09	-677.71	-6240.49	7020.09	6951.09	-1562.36	-6632.98	-90.10	967.81	609.22	1.59	PASS
13920.00†	6950.67	-676.75	-6340.48	7019.67	6950.67	-1562.36	-6632.98	-90.08	932.66	625.16	1.49	PASS
14020.00†	6950.25	-675.78	-6440.48	7019.25	6950.25	-1562.36	-6632.98	-90.05	907.23	638.94	1.42	PASS
14120.00†	6949.83	-674.82	-6540.47	7018.83	6949.83	-1562.36	-6632.98	-90.02	892.35	649.61	1.37	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 104 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP													
Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) Well: EX. ARTIST 11-12 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14202.50†	6949.48	-674.02	-6622.97	7020.00	6951.00	-1562.36	-6632.98	-90.10	888.39	655.59	1.36	PASS	
14220.00†	6949.41	-673.86	-6640.47	7018.41	6949.41	-1562.36	-6632.98	-90.00	888.53	656.42	1.35	PASS	
14246.91†	6949.29	-673.60	-6667.38	7018.29	6949.29	-1562.36	-6632.98	-89.99	889.43	657.53	1.35	PASS	
14320.00†	6948.98	-672.89	-6740.46	7017.98	6948.98	-1562.36	-6632.98	-89.97	895.94	659.01	1.36	PASS	
14420.00†	6948.56	-671.93	-6840.45	7017.56	6948.56	-1562.36	-6632.98	-89.94	914.28	657.48	1.39	PASS	
14520.00†	6948.14	-670.96	-6940.45	7017.14	6948.14	-1562.36	-6632.98	-89.91	942.93	652.36	1.45	PASS	
14620.00†	6947.72	-670.00	-7040.44	7016.72	6947.72	-1562.36	-6632.98	-89.89	980.98	644.42	1.52	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment Wellbore
0.00	7358.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7358> EX. ARTIST 11-12 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. ARTIST 11-12 AWB Offset Wellpath: EX. ARTIST 11-12 AWP	
MD Reference: Rig on SLOT#01 EX. ARTIST 11-12 (458'FNL & 1774'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 105 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) Well: EX. AUFRECHT 2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	72.00	20.00	240.18	-6298.11	-87.82	6302.69	50.32	127.69	PASS	
120.00†	120.00	0.00	0.00	172.00	120.00	240.18	-6298.11	-87.82	6302.69	51.05	125.82	PASS	
220.00†	220.00	0.00	0.00	272.00	220.00	240.18	-6298.11	-87.82	6302.69	52.51	122.26	PASS	
320.00†	320.00	0.00	0.00	372.00	320.00	240.18	-6298.11	-87.82	6302.69	54.60	117.50	PASS	
420.00†	420.00	0.00	0.00	472.00	420.00	240.18	-6298.11	-87.82	6302.69	57.20	112.07	PASS	
520.00†	520.00	0.00	0.00	572.00	520.00	240.18	-6298.11	-87.82	6302.69	60.19	106.39	PASS	
620.00†	620.00	0.00	0.00	672.00	620.00	240.18	-6298.11	-87.82	6302.69	63.50	100.77	PASS	
700.00	700.00	0.00	0.00	752.00	700.00	240.18	-6298.11	-87.82	6302.69	66.32	96.43	PASS	
720.00†	720.00	-0.04	0.06	772.00	720.00	240.18	-6298.11	148.88	6302.75	67.03	95.38	PASS	
820.00†	819.98	-1.38	2.10	871.96	819.96	240.18	-6298.11	148.87	6304.84	70.76	90.32	PASS	
920.00†	919.78	-4.64	7.06	971.78	919.78	240.18	-6298.11	148.85	6309.92	74.66	85.61	PASS	
1020.00†	1019.33	-9.80	14.92	1071.33	1019.33	240.18	-6298.11	148.81	6317.98	78.65	81.31	PASS	
1120.00†	1118.50	-16.87	25.69	1170.50	1118.50	240.18	-6298.11	148.75	6329.02	82.72	77.40	PASS	
1200.18	1197.64	-23.91	36.40	1249.64	1197.64	240.18	-6298.11	148.70	6340.02	86.02	74.53	PASS	
1220.00†	1217.16	-25.80	39.28	1269.16	1217.16	240.18	-6298.11	148.71	6342.97	86.83	73.86	PASS	
1320.00†	1315.64	-35.34	53.80	1367.64	1315.64	240.18	-6298.11	148.79	6357.88	90.96	70.64	PASS	
1420.00†	1414.12	-44.88	68.32	1466.12	1414.12	240.18	-6298.11	148.88	6372.81	95.13	67.67	PASS	
1520.00†	1512.60	-54.42	82.84	1564.60	1512.60	240.18	-6298.11	148.96	6387.74	99.35	64.92	PASS	
1620.00†	1611.08	-63.95	97.35	1663.08	1611.08	240.18	-6298.11	149.04	6402.69	103.60	62.37	PASS	
1720.00†	1709.56	-73.49	111.87	1761.56	1709.56	240.18	-6298.11	149.12	6417.65	107.88	60.02	PASS	
1820.00†	1808.04	-83.03	126.39	1860.04	1808.04	240.18	-6298.11	149.19	6432.63	111.90	57.84	PASS	
1920.00†	1906.52	-92.56	140.91	1958.52	1906.52	240.18	-6298.11	149.27	6447.61	116.17	55.84	PASS	
2020.00†	2005.00	-102.10	155.43	2057.00	2005.00	240.18	-6298.11	149.35	6462.61	120.46	53.96	PASS	
2120.00†	2103.48	-111.64	169.95	2155.48	2103.48	240.18	-6298.11	149.43	6477.62	124.78	52.20	PASS	
2220.00†	2201.96	-121.18	184.46	2253.96	2201.96	240.18	-6298.11	149.51	6492.64	129.13	50.55	PASS	
2320.00†	2300.44	-130.71	198.98	2352.44	2300.44	240.18	-6298.11	149.58	6507.67	133.50	49.00	PASS	
2420.00†	2398.92	-140.25	213.50	2450.92	2398.92	240.18	-6298.11	149.66	6522.72	137.89	47.54	PASS	
2520.00†	2497.40	-149.79	228.02	2549.40	2497.40	240.18	-6298.11	149.74	6537.77	142.30	46.17	PASS	
2620.00†	2595.88	-159.33	242.54	2647.88	2595.88	240.18	-6298.11	149.81	6552.84	146.73	44.87	PASS	
2720.00†	2694.36	-168.86	257.06	2746.36	2694.36	240.18	-6298.11	149.89	6567.92	151.18	43.64	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 106 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) Well: EX. AUFRECHT 2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	2844.84	2792.84	240.18	-6298.11	149.97	6583.01	155.65	42.48	PASS	
2920.00†	2891.32	-187.94	286.09	2943.32	2891.32	240.18	-6298.11	150.04	6598.11	160.13	41.38	PASS	
3020.00†	2989.80	-197.48	300.61	3041.80	2989.80	240.18	-6298.11	150.12	6613.22	164.63	40.34	PASS	
3120.00†	3088.28	-207.01	315.13	3140.28	3088.28	240.18	-6298.11	150.19	6628.35	169.14	39.35	PASS	
3220.00†	3186.76	-216.55	329.65	3238.76	3186.76	240.18	-6298.11	150.26	6643.48	173.67	38.41	PASS	
3320.00†	3285.24	-226.09	344.17	3337.24	3285.24	240.18	-6298.11	150.34	6658.63	178.22	37.51	PASS	
3420.00†	3383.71	-235.62	358.69	3435.71	3383.71	240.18	-6298.11	150.41	6673.78	182.77	36.65	PASS	
3520.00†	3482.19	-245.16	373.20	3534.19	3482.19	240.18	-6298.11	150.49	6688.95	187.35	35.84	PASS	
3620.00†	3580.67	-254.70	387.72	3632.67	3580.67	240.18	-6298.11	150.56	6704.13	191.93	35.06	PASS	
3720.00†	3679.15	-264.24	402.24	3731.15	3679.15	240.18	-6298.11	150.63	6719.31	196.53	34.31	PASS	
3820.00†	3777.63	-273.77	416.76	3829.63	3777.63	240.18	-6298.11	150.70	6734.51	201.13	33.60	PASS	
3920.00†	3876.11	-283.31	431.28	3928.11	3876.11	240.18	-6298.11	150.77	6749.72	205.75	32.91	PASS	
4020.00†	3974.59	-292.85	445.80	4026.59	3974.59	240.18	-6298.11	150.85	6764.94	210.38	32.26	PASS	
4120.00†	4073.07	-302.39	460.32	4125.07	4073.07	240.18	-6298.11	150.92	6780.17	215.03	31.63	PASS	
4220.00†	4171.55	-311.92	474.83	4223.55	4171.55	240.18	-6298.11	150.99	6795.41	219.68	31.03	PASS	
4320.00†	4270.03	-321.46	489.35	4322.03	4270.03	240.18	-6298.11	151.06	6810.66	224.34	30.45	PASS	
4420.00†	4368.51	-331.00	503.87	4420.51	4368.51	240.18	-6298.11	151.13	6825.92	229.01	29.90	PASS	
4520.00†	4466.99	-340.53	518.39	4518.99	4466.99	240.18	-6298.11	151.20	6841.19	233.69	29.36	PASS	
4620.00†	4565.47	-350.07	532.91	4617.47	4565.47	240.18	-6298.11	151.27	6856.47	238.38	28.85	PASS	
4720.00†	4663.95	-359.61	547.43	4715.95	4663.95	240.18	-6298.11	151.34	6871.76	243.08	28.35	PASS	
4820.00†	4762.43	-369.15	561.94	4814.43	4762.43	240.18	-6298.11	151.41	6887.06	247.79	27.87	PASS	
4920.00†	4860.91	-378.68	576.46	4912.91	4860.91	240.18	-6298.11	151.48	6902.38	252.50	27.41	PASS	
5020.00†	4959.39	-388.22	590.98	5011.39	4959.39	240.18	-6298.11	151.54	6917.70	257.22	26.97	PASS	
5120.00†	5057.87	-397.76	605.50	5109.87	5057.87	240.18	-6298.11	151.61	6933.02	261.95	26.54	PASS	
5220.00†	5156.35	-407.30	620.02	5208.35	5156.35	240.18	-6298.11	151.68	6948.36	266.69	26.12	PASS	
5320.00†	5254.83	-416.83	634.54	5306.83	5254.83	240.18	-6298.11	151.75	6963.71	271.44	25.72	PASS	
5420.00†	5353.31	-426.37	649.06	5405.31	5353.31	240.18	-6298.11	151.82	6979.07	276.19	25.33	PASS	
5520.00†	5451.79	-435.91	663.57	5503.79	5451.79	240.18	-6298.11	151.88	6994.44	280.95	24.96	PASS	
5620.00†	5550.27	-445.45	678.09	5602.27	5550.27	240.18	-6298.11	151.95	7009.82	285.71	24.59	PASS	
5720.00†	5648.75	-454.98	692.61	5700.75	5648.75	240.18	-6298.11	152.01	7025.20	290.48	24.24	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 107 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) Well: EX. AUFRECHT 2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5820.00†	5747.23	-464.52	707.13	5799.23	5747.23	240.18	-6298.11	152.08	7040.60	295.26	23.90	PASS	
5920.00†	5845.71	-474.08	721.65	5897.71	5845.71	240.18	-6298.11	152.15	7056.00	300.04	23.57	PASS	
6020.00†	5944.19	-483.59	736.17	5996.19	5944.19	240.18	-6298.11	152.21	7071.42	304.83	23.25	PASS	
6120.00†	6042.67	-493.13	750.68	6094.67	6042.67	240.18	-6298.11	152.28	7086.84	309.62	22.94	PASS	
6220.00†	6141.15	-502.67	765.20	6193.15	6141.15	240.18	-6298.11	152.34	7102.27	314.42	22.64	PASS	
6320.00†	6239.63	-512.21	779.72	6291.63	6239.63	240.18	-6298.11	152.41	7117.71	319.22	22.34	PASS	
6333.38	6252.80	-513.48	781.66	6304.80	6252.80	240.18	-6298.11	152.42	7119.78	319.86	22.31	PASS	
6420.00†	6338.69	-521.84	788.38	6390.69	6338.69	240.18	-6298.11	101.74	7127.34	324.10	22.04	PASS	
6520.00†	6437.87	-531.58	781.50	6489.87	6437.87	240.18	-6298.11	40.15	7121.56	329.39	21.67	PASS	
6620.00†	6534.75	-541.19	759.12	6586.75	6534.75	240.18	-6298.11	24.97	7100.36	335.03	21.24	PASS	
6720.00†	6626.95	-550.44	721.78	6678.95	6626.95	240.18	-6298.11	19.86	7064.28	340.14	20.81	PASS	
6820.00†	6712.19	-559.10	670.41	6764.19	6712.19	240.18	-6298.11	17.91	7014.21	344.72	20.39	PASS	
6920.00†	6788.37	-566.95	606.27	6840.37	6788.37	240.18	-6298.11	17.59	6951.40	348.71	19.97	PASS	
7020.00†	6853.62	-573.80	530.93	6905.62	6853.62	240.18	-6298.11	18.61	6877.39	352.06	19.57	PASS	
7120.00†	6906.33	-579.49	446.27	6958.33	6906.33	240.18	-6298.11	21.36	6794.01	354.71	19.19	PASS	
7220.00†	6945.20	-583.87	354.35	6997.20	6945.20	240.18	-6298.11	27.36	6703.31	356.63	18.83	PASS	
7320.00†	6969.29	-586.83	257.44	7021.29	6969.29	240.18	-6298.11	42.20	6607.52	357.81	18.50	PASS	
7420.00†	6977.98	-588.31	157.94	7029.98	6977.98	240.18	-6298.11	86.21	6508.99	358.26	18.20	PASS	
7428.43	6978.00	-588.37	149.50	7030.00	6978.00	240.18	-6298.11	91.79	6500.63	358.27	18.18	PASS	
7478.43	6977.79	-588.66	99.50	7029.79	6977.79	240.18	-6298.11	91.78	6451.08	358.29	18.04	PASS	
7520.00†	6977.61	-589.21	57.94	7029.61	6977.61	240.18	-6298.11	91.59	6409.94	358.31	17.92	PASS	
7536.58	6977.55	-589.59	41.36	7029.55	6977.55	240.18	-6298.11	91.53	6393.55	358.32	17.88	PASS	
7620.00†	6977.19	-591.78	-42.02	7029.19	6977.19	240.18	-6298.11	91.51	6311.16	358.37	17.64	PASS	
7720.00†	6976.77	-594.39	-141.99	7028.77	6976.77	240.18	-6298.11	91.48	6212.44	358.46	17.36	PASS	
7820.00†	6976.35	-597.01	-241.95	7028.35	6976.35	240.18	-6298.11	91.46	6113.75	358.56	17.08	PASS	
7920.00†	6975.93	-599.63	-341.92	7027.93	6975.93	240.18	-6298.11	91.44	6015.11	358.69	16.80	PASS	
8020.00†	6975.51	-602.25	-441.88	7027.51	6975.51	240.18	-6298.11	91.41	5916.51	358.85	16.52	PASS	
8120.00†	6975.09	-604.86	-541.85	7027.09	6975.09	240.18	-6298.11	91.39	5817.96	359.02	16.23	PASS	
8220.00†	6974.67	-607.48	-641.81	7026.67	6974.67	240.18	-6298.11	91.36	5719.46	359.23	15.95	PASS	
8320.00†	6974.25	-610.10	-741.78	7026.25	6974.25	240.18	-6298.11	91.34	5621.02	359.47	15.67	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 108 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) Well: EX. AUFRECHT 2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	7025.83	6973.83	240.18	-6298.11	91.32	5522.63	359.74	15.38	PASS	
8520.00†	6973.41	-615.33	-941.71	7025.41	6973.41	240.18	-6298.11	91.29	5424.29	360.04	15.09	PASS	
8620.00†	6972.99	-617.95	-1041.67	7024.99	6972.99	240.18	-6298.11	91.27	5326.03	360.39	14.81	PASS	
8720.00†	6972.57	-620.57	-1141.64	7024.57	6972.57	240.18	-6298.11	91.24	5227.82	360.77	14.52	PASS	
8820.00†	6972.15	-623.19	-1241.60	7024.15	6972.15	240.18	-6298.11	91.22	5129.69	361.19	14.23	PASS	
8920.00†	6971.73	-625.81	-1341.57	7023.73	6971.73	240.18	-6298.11	91.19	5031.63	361.67	13.94	PASS	
9020.00†	6971.31	-628.42	-1441.53	7023.31	6971.31	240.18	-6298.11	91.17	4933.64	362.19	13.65	PASS	
9120.00†	6970.88	-631.04	-1541.50	7022.88	6970.88	240.18	-6298.11	91.15	4835.74	362.77	13.35	PASS	
9220.00†	6970.46	-633.66	-1641.46	7022.46	6970.46	240.18	-6298.11	91.12	4737.93	363.40	13.06	PASS	
9320.00†	6970.04	-636.28	-1741.43	7022.04	6970.04	240.18	-6298.11	91.10	4640.21	364.10	12.77	PASS	
9420.00†	6969.62	-638.89	-1841.39	7021.62	6969.62	240.18	-6298.11	91.07	4542.59	364.86	12.47	PASS	
9520.00†	6969.20	-641.51	-1941.36	7021.20	6969.20	240.18	-6298.11	91.05	4445.08	365.69	12.18	PASS	
9620.00†	6968.78	-644.13	-2041.32	7020.78	6968.78	240.18	-6298.11	91.03	4347.67	366.60	11.88	PASS	
9720.00†	6968.36	-646.75	-2141.29	7020.36	6968.36	240.18	-6298.11	91.00	4250.39	367.59	11.58	PASS	
9820.00†	6967.94	-649.36	-2241.25	7019.94	6967.94	240.18	-6298.11	90.98	4153.24	368.66	11.29	PASS	
9920.00†	6967.52	-651.98	-2341.22	7019.52	6967.52	240.18	-6298.11	90.95	4056.23	369.83	10.99	PASS	
10020.00†	6967.10	-654.60	-2441.18	7019.10	6967.10	240.18	-6298.11	90.93	3959.36	371.10	10.69	PASS	
10120.00†	6966.68	-657.22	-2541.15	7018.68	6966.68	240.18	-6298.11	90.90	3862.66	372.48	10.39	PASS	
10220.00†	6966.26	-659.84	-2641.11	7018.26	6966.26	240.18	-6298.11	90.88	3766.12	373.97	10.09	PASS	
10320.00†	6965.84	-662.45	-2741.08	7017.84	6965.84	240.18	-6298.11	90.86	3669.78	375.59	9.79	PASS	
10420.00†	6965.42	-665.07	-2841.04	7017.42	6965.42	240.18	-6298.11	90.83	3573.63	377.34	9.49	PASS	
10520.00†	6965.00	-667.69	-2941.01	7017.00	6965.00	240.18	-6298.11	90.81	3477.70	379.23	9.19	PASS	
10620.00†	6964.58	-670.31	-3040.97	7016.58	6964.58	240.18	-6298.11	90.78	3382.01	381.27	8.88	PASS	
10720.00†	6964.15	-672.92	-3140.93	7016.15	6964.15	240.18	-6298.11	90.76	3286.57	383.49	8.58	PASS	
10820.00†	6963.73	-675.54	-3240.90	7015.73	6963.73	240.18	-6298.11	90.73	3191.41	385.88	8.28	PASS	
10920.00†	6963.31	-678.16	-3340.86	7015.31	6963.31	240.18	-6298.11	90.71	3096.56	388.46	7.98	PASS	
11020.00†	6962.89	-680.78	-3440.83	7014.89	6962.89	240.18	-6298.11	90.69	3002.04	391.25	7.69	PASS	
11120.00†	6962.47	-683.39	-3540.79	7014.47	6962.47	240.18	-6298.11	90.66	2907.88	394.27	7.39	PASS	
11220.00†	6962.05	-686.01	-3640.76	7014.05	6962.05	240.18	-6298.11	90.64	2814.14	397.53	7.09	PASS	
11320.00†	6961.63	-688.63	-3740.72	7013.63	6961.63	240.18	-6298.11	90.61	2720.83	401.06	6.79	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 109 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) Well: EX. AUFRECHT 2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	7013.21	6961.21	240.18	-6298.11	90.59	2628.02	404.88	6.50	PASS	
11520.00†	6960.79	-693.86	-3940.65	7012.79	6960.79	240.18	-6298.11	90.57	2535.75	409.02	6.21	PASS	
11620.00†	6960.37	-696.48	-4040.62	7012.37	6960.37	240.18	-6298.11	90.54	2444.10	413.51	5.92	PASS	
11636.58	6960.30	-696.92	-4057.20	7012.30	6960.30	240.18	-6298.11	90.54	2428.96	414.29	5.87	PASS	
11720.00†	6959.95	-697.89	-4140.60	7011.95	6959.95	240.18	-6298.11	90.56	2352.62	418.24	5.63	PASS	
11739.19	6959.87	-697.77	-4159.80	7011.87	6959.87	240.18	-6298.11	90.57	2334.98	419.15	5.58	PASS	
11820.00†	6959.53	-696.99	-4240.60	7011.53	6959.53	240.18	-6298.11	90.54	2260.89	423.12	5.35	PASS	
11920.00†	6959.10	-696.02	-4340.59	7011.10	6959.10	240.18	-6298.11	90.52	2169.87	428.42	5.07	PASS	
12020.00†	6958.68	-695.06	-4440.59	7010.68	6958.68	240.18	-6298.11	90.49	2079.68	434.19	4.80	PASS	
12120.00†	6958.26	-694.10	-4540.58	7010.26	6958.26	240.18	-6298.11	90.47	1990.42	440.48	4.52	PASS	
12220.00†	6957.84	-693.13	-4640.58	7009.84	6957.84	240.18	-6298.11	90.44	1902.23	447.34	4.26	PASS	
12320.00†	6957.42	-692.17	-4740.57	7009.42	6957.42	240.18	-6298.11	90.41	1815.27	454.83	4.00	PASS	
12420.00†	6957.00	-691.20	-4840.57	7009.00	6957.00	240.18	-6298.11	90.39	1729.72	463.01	3.74	PASS	
12520.00†	6956.57	-690.24	-4940.56	7008.57	6956.57	240.18	-6298.11	90.36	1645.79	471.95	3.49	PASS	
12620.00†	6956.15	-689.28	-5040.55	7008.15	6956.15	240.18	-6298.11	90.33	1563.76	481.71	3.25	PASS	
12720.00†	6955.73	-688.31	-5140.55	7007.73	6955.73	240.18	-6298.11	90.31	1483.93	492.35	3.02	PASS	
12820.00†	6955.31	-687.35	-5240.54	7007.31	6955.31	240.18	-6298.11	90.28	1406.68	503.92	2.79	PASS	
12920.00†	6954.89	-686.38	-5340.54	7006.89	6954.89	240.18	-6298.11	90.26	1332.47	516.44	2.58	PASS	
13020.00†	6954.47	-685.42	-5440.53	7006.47	6954.47	240.18	-6298.11	90.23	1261.82	529.91	2.38	PASS	
13120.00†	6954.04	-684.46	-5540.53	7006.04	6954.04	240.18	-6298.11	90.20	1195.36	544.23	2.20	PASS	
13220.00†	6953.62	-683.49	-5640.52	7005.62	6953.62	240.18	-6298.11	90.18	1133.84	559.25	2.03	PASS	
13320.00†	6953.20	-682.53	-5740.52	7005.20	6953.20	240.18	-6298.11	90.15	1078.10	574.66	1.88	PASS	
13420.00†	6952.78	-681.57	-5840.51	7004.78	6952.78	240.18	-6298.11	90.12	1029.08	590.03	1.75	PASS	
13520.00†	6952.36	-680.60	-5940.50	7004.36	6952.36	240.18	-6298.11	90.10	987.79	604.73	1.63	PASS	
13620.00†	6951.94	-679.64	-6040.50	7003.94	6951.94	240.18	-6298.11	90.07	955.21	618.01	1.55	PASS	
13720.00†	6951.51	-678.67	-6140.49	7003.51	6951.51	240.18	-6298.11	90.04	932.27	629.01	1.48	PASS	
13820.00†	6951.09	-677.71	-6240.49	7003.09	6951.09	240.18	-6298.11	90.02	919.70	638.99	1.44	PASS	
13886.09†	6950.81	-677.07	-6306.58	7004.22	6952.22	240.18	-6298.11	90.09	917.29	640.37	1.43	PASS	
13920.00†	6950.67	-676.75	-6340.48	7002.67	6950.67	240.18	-6298.11	89.99	917.90	641.37	1.43	PASS	
14020.00†	6950.25	-675.78	-6440.48	7002.25	6950.25	240.18	-6298.11	89.97	926.96	641.98	1.44	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 110 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP													
Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB)				Well: EX. AUFRECHT 2				Threshold Value=1.00 † = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14120.00†	6949.83	-674.82	-6540.47	7001.83	6949.83	240.18	-6298.11	89.94	946.55	638.99	1.48	PASS	
14220.00†	6949.41	-673.86	-6640.47	7001.41	6949.41	240.18	-6298.11	89.91	976.04	632.93	1.54	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical

WELLPATH COMPOSITION - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
0.00	7840.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7840>

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. AUFRECHT 2 AWB Offset Wellpath: EX. AUFRECHT 2 AWP	
MD Reference: Rig on SLOT#01 EX. AUFRECHT 2 (1374'FSL & 1370'FEL, CODL/AB) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 111 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#17 GREELEY-ROTH FEDERAL 12C-2-L (1083'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 12C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
20.00	20.00	0.00	0.00	19.00	20.00	120.22	-1.39	-0.66	120.23	1.26	397.56	PAS	
120.00†	120.00	0.00	0.00	119.00	120.00	120.22	-1.39	-0.66	120.23	1.88	129.82	PAS	
220.00†	220.00	0.00	0.00	219.00	220.00	120.22	-1.39	-0.66	120.23	2.45	80.27	PAS	
320.00†	320.00	0.00	0.00	319.00	320.00	120.22	-1.39	-0.66	120.23	3.05	57.11	PAS	
420.00†	420.00	0.00	0.00	418.58	419.58	120.26	-1.34	-0.64	120.26	3.66	44.20	PAS	
520.00†	520.00	0.00	0.00	516.30	517.26	121.52	0.58	0.27	121.55	4.35	35.65	PAS	
620.00†	620.00	0.00	0.00	613.74	614.55	124.61	5.26	2.42	124.84	5.21	29.20	PAS	
700.00	700.00	0.00	0.00	691.36	691.86	128.37	10.97	4.88	129.09	5.90	25.94	PAS	
720.00†	720.00	-0.04	0.06	710.70	711.09	129.48	12.66	-117.72	130.44	6.08	25.30	PAS	
820.00†	819.96	-1.38	2.10	807.05	806.68	136.11	22.72	-114.55	139.66	6.95	23.01	PAS	
920.00†	919.78	-4.64	7.06	904.55	903.02	144.34	35.21	-112.09	152.53	7.81	22.13	PAS	
1020.00†	1019.33	-9.80	14.92	1003.45	1000.70	152.88	48.17	-110.96	167.09	8.53	21.94	PAS	
1120.00†	1118.50	-16.87	25.69	1102.18	1098.21	161.40	61.11	-110.98	182.89	9.27	21.91	PAS	
1200.18	1197.64	-23.91	36.40	1181.14	1176.19	168.22	71.45	-111.63	196.48	9.88	21.92	PAS	
1220.00†	1217.16	-25.80	39.28	1200.64	1195.44	169.90	74.01	-111.91	199.95	10.03	21.94	PAS	
1320.00†	1315.64	-35.34	53.80	1298.97	1292.56	178.40	86.90	-113.19	217.51	10.79	22.04	PAS	
1420.00†	1414.12	-44.88	68.32	1397.31	1389.68	186.89	99.78	-114.28	235.16	11.55	22.11	PAS	
1520.00†	1512.60	-54.42	82.84	1495.65	1486.80	195.38	112.67	-115.22	252.89	12.30	22.22	PAS	
1620.00†	1611.08	-63.95	97.35	1593.99	1583.92	203.87	125.56	-116.03	270.67	13.10	22.23	PAS	
1720.00†	1709.56	-73.49	111.87	1692.33	1681.04	212.36	138.44	-116.74	288.49	13.91	22.21	PAS	
1820.00†	1808.04	-83.03	126.39	1790.67	1778.16	220.85	151.33	-117.37	306.36	14.18	22.68	PAS	
1920.00†	1906.52	-92.56	140.91	1889.01	1875.28	229.34	164.22	-117.93	324.26	14.41	23.62	PAS	
2020.00†	2005.00	-102.10	155.43	1987.34	1972.40	237.83	177.10	-118.44	342.18	14.65	24.50	PAS	
2120.00†	2103.48	-111.64	169.95	2085.68	2069.52	246.32	189.99	-118.89	360.13	14.97	25.21	PAS	
2220.00†	2201.96	-121.18	184.46	2184.02	2166.64	254.81	202.88	-119.30	378.09	15.37	25.75	PAS	
2320.00†	2300.44	-130.71	198.98	2282.36	2263.76	263.31	215.76	-119.67	396.08	15.83	26.14	PAS	
2420.00†	2398.92	-140.25	213.50	2380.70	2360.88	271.80	228.65	-120.01	414.08	16.36	26.40	PAS	
2520.00†	2497.40	-149.79	228.02	2479.04	2458.00	280.29	241.54	-120.32	432.09	16.95	26.55	PAS	
2620.00†	2595.88	-159.33	242.54	2577.38	2555.12	288.78	254.42	-120.61	450.11	17.60	26.61	PAS	
2720.00†	2694.36	-168.86	257.06	2675.71	2652.24	297.27	267.31	-120.87	468.14	18.28	26.60	PAS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 112 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#17 GREELEY-ROTH FEDERAL 12C-2-L (1083'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 12C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu	
2820.00†	2792.84	-178.40	271.58	2774.05	2749.36	305.76	280.20	-121.12	486.18	19.01	26.52	PASS	
2920.00†	2891.32	-187.94	286.09	2872.39	2846.48	314.25	293.08	-121.35	504.23	19.78	26.40	PASS	
3020.00†	2989.80	-197.48	300.61	2970.73	2943.60	322.74	305.97	-121.56	522.29	20.58	26.25	PASS	
3120.00†	3088.28	-207.01	315.13	3069.07	3040.72	331.23	318.86	-121.76	540.35	21.40	26.08	PASS	
3220.00†	3186.76	-216.55	329.65	3167.41	3137.84	339.72	331.74	-121.94	558.42	22.26	25.88	PASS	
3320.00†	3285.24	-226.09	344.17	3265.75	3234.96	348.21	344.63	-122.11	576.50	23.13	25.68	PASS	
3420.00†	3383.71	-235.62	358.69	3364.08	3332.08	356.71	357.52	-122.28	594.58	24.03	25.47	PASS	
3520.00†	3482.19	-245.16	373.20	3462.42	3429.20	365.20	370.40	-122.43	612.66	24.94	25.26	PASS	
3620.00†	3580.67	-254.70	387.72	3560.76	3526.32	373.69	383.29	-122.57	630.75	25.87	25.04	PASS	
3720.00†	3679.15	-264.24	402.24	3659.10	3623.44	382.18	396.18	-122.71	648.84	26.81	24.83	PASS	
3820.00†	3777.63	-273.77	416.76	3757.44	3720.56	390.67	409.06	-122.84	666.93	27.77	24.62	PASS	
3920.00†	3876.11	-283.31	431.28	3855.78	3817.68	399.16	421.95	-122.96	685.03	28.74	24.42	PASS	
4020.00†	3974.59	-292.85	445.80	3954.12	3914.80	407.65	434.84	-123.08	703.13	29.71	24.22	PASS	
4120.00†	4073.07	-302.39	460.32	4052.45	4011.92	416.14	447.72	-123.19	721.24	30.70	24.02	PASS	
4220.00†	4171.55	-311.92	474.83	4150.79	4109.04	424.63	460.61	-123.29	739.34	31.70	23.83	PASS	
4320.00†	4270.03	-321.46	489.35	4249.13	4206.16	433.12	473.50	-123.39	757.45	32.70	23.65	PASS	
4420.00†	4368.51	-331.00	503.87	4347.47	4303.28	441.62	486.38	-123.49	775.56	33.71	23.48	PASS	
4520.00†	4466.99	-340.53	518.39	4445.81	4400.40	450.11	499.27	-123.58	793.67	34.73	23.31	PASS	
4620.00†	4565.47	-350.07	532.91	4544.15	4497.52	458.60	512.16	-123.66	811.78	35.76	23.14	PASS	
4720.00†	4663.95	-359.61	547.43	4642.48	4594.64	467.09	525.04	-123.75	829.90	36.79	22.98	PASS	
4820.00†	4762.43	-369.15	561.94	4740.82	4691.77	475.58	537.93	-123.82	848.02	37.82	22.83	PASS	
4920.00†	4860.91	-378.68	576.46	4839.16	4788.89	484.07	550.82	-123.90	866.14	38.86	22.68	PASS	
5020.00†	4959.39	-388.22	590.98	4937.50	4886.01	492.56	563.70	-123.97	884.26	39.90	22.54	PASS	
5120.00†	5057.87	-397.76	605.50	5035.84	4983.13	501.05	576.59	-124.04	902.38	40.95	22.41	PASS	
5220.00†	5156.35	-407.30	620.02	5134.18	5080.25	509.54	589.48	-124.11	920.50	42.00	22.27	PASS	
5320.00†	5254.83	-416.83	634.54	5232.52	5177.37	518.03	602.36	-124.17	938.62	43.06	22.15	PASS	
5420.00†	5353.31	-426.37	649.06	5330.85	5274.49	526.53	615.25	-124.24	956.75	44.11	22.03	PASS	
5520.00†	5451.79	-435.91	663.57	5429.19	5371.61	535.02	628.14	-124.30	974.87	45.17	21.91	PASS	
5620.00†	5550.27	-445.45	678.09	5527.53	5468.73	543.51	641.02	-124.35	993.00	46.24	21.79	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 113 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	21.00	1738.00	73.29	-0.85	102.89	44.08
9.625in Casing Surface	20.00	1750.00	1730.00	21.00	1738.00	73.29	-0.85	102.89	44.08
8.5in Open Hole	1750.00	17366.21	15616.21	1738.00	N/A	102.89	44.08	N/A	N/A

SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12C-2-L PWB
1750.00	17366.21	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12C-2-L PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 12C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12C-2-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 114 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#16 GREELEY-ROTH FEDERAL 12N-2A-L (1103'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 12N-2A-L Threshold Value=1.00 † = interpolated/extrapolated s												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St
20.00	20.00	0.00	0.00	19.00	20.00	139.96	-1.62	-0.67	139.97	1.26	463.34	P
120.00†	120.00	0.00	0.00	119.00	120.00	139.96	-1.62	-0.67	139.97	1.88	151.09	P
220.00†	220.00	0.00	0.00	219.00	220.00	139.96	-1.62	-0.67	139.97	2.45	93.40	P
320.00†	320.00	0.00	0.00	319.00	320.00	139.96	-1.62	-0.67	139.97	3.05	66.46	P
420.00†	420.00	0.00	0.00	416.80	417.79	140.49	-1.05	-0.43	140.51	3.69	51.23	P
520.00†	520.00	0.00	0.00	513.46	514.37	143.13	1.79	0.72	143.25	4.51	40.09	P
620.00†	620.00	0.00	0.00	609.74	610.39	147.96	7.01	2.71	148.43	5.45	32.90	P
700.00	700.00	0.00	0.00	686.36	686.59	153.37	12.84	4.79	154.48	6.18	29.44	P
720.00†	720.00	-0.04	0.06	705.45	705.54	154.93	14.53	-117.93	156.31	6.36	28.77	P
820.00†	819.96	-1.38	2.10	800.42	799.56	163.98	24.29	-115.37	168.08	7.29	26.42	P
920.00†	919.78	-4.64	7.06	894.63	892.36	175.04	36.23	-113.41	184.09	8.20	25.31	P
1020.00†	1019.33	-9.80	14.92	992.84	988.82	187.57	49.75	-112.26	202.73	8.92	25.36	P
1120.00†	1118.50	-16.87	25.69	1090.82	1085.06	200.07	63.23	-112.08	222.69	9.65	25.53	P
1200.18	1197.64	-23.91	36.40	1169.13	1161.98	210.06	74.01	-112.46	239.65	10.28	25.61	P
1220.00†	1217.16	-25.80	39.28	1188.46	1180.97	212.53	76.67	-112.68	243.95	10.40	25.74	P
1320.00†	1315.64	-35.34	53.80	1285.97	1276.75	224.97	90.09	-113.67	265.69	11.12	26.06	P
1420.00†	1414.12	-44.88	68.32	1383.48	1372.52	237.41	103.51	-114.52	287.50	11.83	26.38	P
1520.00†	1512.60	-54.42	82.84	1481.00	1468.30	249.85	116.94	-115.25	309.36	12.59	26.52	P
1620.00†	1611.08	-63.95	97.35	1578.51	1564.08	262.29	130.36	-115.88	331.26	13.38	26.60	P
1720.00†	1709.56	-73.49	111.87	1676.02	1659.86	274.73	143.78	-116.43	353.19	14.19	26.64	P
1820.00†	1808.04	-83.03	126.39	1773.53	1755.64	287.17	157.20	-116.92	375.15	14.50	27.15	P
1920.00†	1906.52	-92.56	140.91	1871.04	1851.42	299.61	170.62	-117.36	397.14	14.76	28.21	P
2020.00†	2005.00	-102.10	155.43	1968.55	1947.20	312.05	184.04	-117.74	419.14	14.99	29.30	P
2120.00†	2103.48	-111.64	169.95	2066.06	2042.98	324.49	197.47	-118.09	441.16	15.30	30.18	P
2220.00†	2201.96	-121.18	184.46	2163.58	2138.76	336.93	210.89	-118.41	463.20	15.69	30.87	P
2320.00†	2300.44	-130.71	198.98	2261.09	2234.53	349.37	224.31	-118.70	485.25	16.15	31.38	P
2420.00†	2398.92	-140.25	213.50	2358.60	2330.31	361.81	237.73	-118.96	507.30	16.67	31.74	P
2520.00†	2497.40	-149.79	228.02	2456.11	2426.09	374.25	251.15	-119.20	529.37	17.25	31.96	P
2620.00†	2595.88	-159.33	242.54	2553.62	2521.87	386.69	264.57	-119.43	551.45	17.88	32.07	P
2720.00†	2694.36	-168.86	257.06	2651.13	2617.65	399.13	277.99	-119.63	573.53	18.56	32.09	P

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 115 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)													
Facility: SEC.01-T05N-R67W Slot: SLOT#16 GREELEY-ROTH FEDERAL 12N-2A-L (1103'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 12N-2A-L				Threshold Value=1.00				† = interpolated/extrapolated					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2820.00†	2792.84	-178.40	271.58	2748.65	2713.43	411.57	291.42	-119.82	595.62	19.28	32.03	P/	
2920.00†	2891.32	-187.94	286.09	2846.16	2809.21	424.01	304.84	-120.00	617.72	20.04	31.92	P/	
3020.00†	2989.80	-197.48	300.61	2943.67	2904.99	436.45	318.26	-120.16	639.82	20.83	31.76	P/	
3120.00†	3088.28	-207.01	315.13	3041.18	3000.77	448.89	331.68	-120.31	661.92	21.65	31.58	P/	
3220.00†	3186.76	-216.55	329.65	3138.69	3096.54	461.33	345.10	-120.46	684.03	22.49	31.37	P/	
3320.00†	3285.24	-226.09	344.17	3236.20	3192.32	473.77	358.52	-120.59	706.14	23.36	31.14	P/	
3420.00†	3383.71	-235.62	358.69	3333.71	3288.10	486.21	371.95	-120.72	728.26	24.25	30.90	P/	
3520.00†	3482.19	-245.16	373.20	3431.23	3383.88	498.65	385.37	-120.84	750.38	25.16	30.66	P/	
3620.00†	3580.67	-254.70	387.72	3528.74	3479.66	511.09	398.79	-120.95	772.50	26.09	30.41	P/	
3720.00†	3679.15	-264.24	402.24	3626.25	3575.44	523.53	412.21	-121.05	794.63	27.03	30.16	P/	
3820.00†	3777.63	-273.77	416.76	3723.76	3671.22	535.97	425.63	-121.15	816.76	27.98	29.92	P/	
3920.00†	3876.11	-283.31	431.28	3821.27	3767.00	548.41	439.05	-121.25	838.89	28.95	29.68	P/	
4020.00†	3974.59	-292.85	445.80	3918.78	3862.78	560.85	452.47	-121.34	861.02	29.92	29.45	P/	
4120.00†	4073.07	-302.39	460.32	4016.30	3958.55	573.29	465.90	-121.42	883.15	30.91	29.22	P/	
4220.00†	4171.55	-311.92	474.83	4113.81	4054.33	585.73	479.32	-121.50	905.29	31.91	28.99	P/	
4320.00†	4270.03	-321.46	489.35	4211.32	4150.11	598.17	492.74	-121.58	927.42	32.91	28.78	P/	
4420.00†	4368.51	-331.00	503.87	4308.83	4245.89	610.61	506.16	-121.65	949.56	33.92	28.57	P/	
4520.00†	4466.99	-340.53	518.39	4406.34	4341.67	623.05	519.58	-121.72	971.70	34.94	28.37	P/	
4620.00†	4565.47	-350.07	532.91	4503.85	4437.45	635.49	533.00	-121.79	993.84	35.96	28.17	P/	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft





**Clearance Report**  
**GREELEY-ROTH 34N-2B-L PWP (REV-B.1)**  
**Closest Approach**  
Page 116 of 184



**REFERENCE WELLPATH IDENTIFICATION**

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

**HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	21.00	1732.53	85.32	-0.99	129.27	46.43
9.625in Casing Surface	20.00	1750.00	1730.00	21.00	1732.53	85.32	-0.99	129.27	46.43
8.5in Open Hole	1750.00	17059.49	15309.49	1732.53	6820.00	129.27	46.43	361.04	-2923.82

**SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12N-2A-L PWB
1750.00	17059.49	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12N-2A-L PWB

**OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2A-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2A-L PWP (REV-A.0)**

MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 117 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W						Slot: SLOT#15 GREELEY-ROTH FEDERAL 12N-2C-L (1123'FSL & 294'FEL, SEC.01)		Well: GREELEY-ROTH FEDERAL 12N-2C-L		Threshold Value=1.00		† = interpolated/extrapolated	
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
20.00	20.00	0.00	0.00	18.00	20.00	159.99	-1.93	-0.69	160.01	1.26	530.14	P	
120.00†	120.00	0.00	0.00	118.00	120.00	159.99	-1.93	-0.69	160.01	1.88	173.05	P	
220.00†	220.00	0.00	0.00	218.00	220.00	159.99	-1.93	-0.69	160.01	2.45	107.01	P	
320.00†	320.00	0.00	0.00	317.31	319.31	160.03	-1.90	-0.68	160.04	3.05	76.34	P	
420.00†	420.00	0.00	0.00	413.41	415.38	161.62	-0.38	-0.14	161.68	3.79	56.82	P	
520.00†	520.00	0.00	0.00	509.26	511.08	165.52	3.35	1.16	165.79	4.78	43.13	P	
620.00†	620.00	0.00	0.00	604.64	606.07	171.69	9.25	3.08	172.50	5.72	36.04	P	
700.00	700.00	0.00	0.00	680.47	681.36	178.23	15.50	4.97	179.87	6.45	32.60	P	
720.00†	720.00	-0.04	0.06	699.35	700.06	180.08	17.27	-117.80	182.04	6.63	31.94	P	
820.00†	819.96	-1.38	2.10	793.23	792.80	190.61	27.33	-115.49	195.54	7.55	29.55	P	
920.00†	919.78	-4.64	7.06	889.38	887.34	203.26	39.42	-113.77	212.89	8.34	28.71	P	
1020.00†	1019.33	-9.80	14.92	987.53	983.80	216.36	51.95	-112.96	231.91	9.04	28.61	P	
1120.00†	1118.50	-16.87	25.69	1085.42	1080.01	229.43	64.44	-112.94	252.29	9.78	28.50	P	
1200.18	1197.64	-23.91	36.40	1163.63	1156.87	239.87	74.42	-113.36	269.61	10.39	28.51	P	
1220.00†	1217.16	-25.80	39.28	1182.93	1175.84	242.45	76.89	-113.59	274.01	10.51	28.61	P	
1320.00†	1315.64	-35.34	53.80	1280.29	1271.53	255.45	89.31	-114.62	296.25	11.24	28.72	P	
1420.00†	1414.12	-44.88	68.32	1377.66	1367.22	268.45	101.74	-115.52	318.57	11.90	29.04	P	
1520.00†	1512.60	-54.42	82.84	1475.02	1462.91	281.45	114.16	-116.29	340.96	12.66	29.08	P	
1620.00†	1611.08	-63.95	97.35	1572.39	1558.60	294.44	126.59	-116.97	363.40	13.43	29.07	P	
1720.00†	1709.56	-73.49	111.87	1669.75	1654.29	307.44	139.02	-117.57	385.88	14.22	29.03	P	
1820.00†	1808.04	-83.03	126.39	1767.12	1749.98	320.44	151.44	-118.11	408.39	14.54	29.47	P	
1920.00†	1906.52	-92.56	140.91	1864.48	1845.67	333.44	163.87	-118.59	430.94	14.81	30.51	P	
2020.00†	2005.00	-102.10	155.43	1961.85	1941.36	346.44	176.29	-119.02	453.51	15.04	31.60	P	
2120.00†	2103.48	-111.64	169.95	2059.21	2037.05	359.44	188.72	-119.41	476.11	15.34	32.48	P	
2220.00†	2201.96	-121.18	184.46	2156.58	2132.74	372.44	201.14	-119.76	498.72	15.73	33.16	P	
2320.00†	2300.44	-130.71	198.98	2253.94	2228.43	385.44	213.57	-120.09	521.35	16.18	33.66	P	
2420.00†	2398.92	-140.25	213.50	2351.31	2324.12	398.43	226.00	-120.38	544.00	16.69	33.99	P	
2520.00†	2497.40	-149.79	228.02	2448.67	2419.81	411.43	238.42	-120.66	566.65	17.26	34.18	P	
2620.00†	2595.88	-159.33	242.54	2546.04	2515.50	424.43	250.85	-120.91	589.32	17.89	34.26	P	
2720.00†	2694.36	-168.86	257.06	2643.40	2611.19	437.43	263.27	-121.14	612.00	18.56	34.25	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 118 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#15 GREELEY-ROTH FEDERAL 12N-2C-L (1123'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 12N-2C-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2820.00†	2792.84	-178.40	271.58	2740.77	2706.88	450.43	275.70	-121.36	634.69	19.27	34.16	P/	
2920.00†	2891.32	-187.94	286.09	2838.13	2802.57	463.43	288.12	-121.56	657.39	20.02	34.01	P/	
3020.00†	2989.80	-197.48	300.61	2935.50	2898.26	476.43	300.55	-121.75	680.09	20.80	33.81	P/	
3120.00†	3088.28	-207.01	315.13	3032.86	2993.95	489.42	312.98	-121.93	702.80	21.61	33.59	P/	
3220.00†	3186.76	-216.55	329.65	3130.23	3089.64	502.42	325.40	-122.09	725.51	22.45	33.34	P/	
3320.00†	3285.24	-226.09	344.17	3227.59	3185.33	515.42	337.83	-122.25	748.24	23.31	33.08	P/	
3420.00†	3383.71	-235.62	358.69	3324.96	3281.02	528.42	350.25	-122.39	770.96	24.19	32.80	P/	
3520.00†	3482.19	-245.16	373.20	3422.33	3376.71	541.42	362.68	-122.53	793.69	25.09	32.52	P/	
3620.00†	3580.67	-254.70	387.72	3519.69	3472.40	554.42	375.10	-122.66	816.43	26.01	32.24	P/	
3720.00†	3679.15	-264.24	402.24	3617.06	3568.09	567.42	387.53	-122.78	839.17	26.94	31.96	P/	
3820.00†	3777.63	-273.77	416.76	3714.42	3663.78	580.42	399.96	-122.90	861.91	27.88	31.69	P/	
3920.00†	3876.11	-283.31	431.28	3811.79	3759.47	593.41	412.38	-123.01	884.65	28.84	31.42	P/	
4020.00†	3974.59	-292.85	445.80	3909.15	3855.16	606.41	424.81	-123.12	907.40	29.81	31.16	P/	
4120.00†	4073.07	-302.39	460.32	4006.52	3950.85	619.41	437.23	-123.22	930.15	30.79	30.90	P/	
4220.00†	4171.55	-311.92	474.83	4103.88	4046.54	632.41	449.66	-123.31	952.90	31.78	30.65	P/	
4320.00†	4270.03	-321.46	489.35	4201.25	4142.23	645.41	462.08	-123.40	975.66	32.77	30.41	P/	
4420.00†	4368.51	-331.00	503.87	4298.61	4237.92	658.41	474.51	-123.49	998.42	33.78	30.17	P/	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



**Clearance Report**  
**GREELEY-ROTH 34N-2B-L PWP (REV-B.1)**  
**Closest Approach**  
Page 119 of 184



**REFERENCE WELLPATH IDENTIFICATION**

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

**HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	22.00	1733.16	97.53	-1.18	145.74	44.90
9.625in Casing Surface	20.00	1750.00	1730.00	22.00	1733.16	97.53	-1.18	145.74	44.90
8.5in Open Hole	1750.00	17192.80	15442.80	1733.16	7031.00	145.74	44.90	444.20	-2909.96

**SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12N-2C-L PWB
1750.00	17192.80	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 12N-2C-L PWB

**OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 12N-2C-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 12N-2C-L PWP (REV-A.0)**

MD Reference: PRECISION 462 (20') (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 120 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	15.00	20.00	965.34	-10969.10	-84.97	11011.49	50.17	223.77	PASS	
120.00†	120.00	0.00	0.00	128.93	133.93	965.36	-10969.00	-84.97	11011.40	50.17	223.74	PASS	
220.00†	220.00	0.00	0.00	201.59	206.59	965.38	-10968.99	-84.97	11011.40	50.19	223.69	PASS	
320.00†	320.00	0.00	0.00	344.33	349.33	965.44	-10968.81	-84.97	11011.25	50.21	223.58	PASS	
420.00†	420.00	0.00	0.00	410.63	415.63	965.65	-10968.72	-84.97	11011.14	50.23	223.47	PASS	
520.00†	520.00	0.00	0.00	518.53	523.53	966.08	-10968.70	-84.97	11011.16	50.27	223.31	PASS	
620.00†	620.00	0.00	0.00	582.82	587.82	966.24	-10968.77	-84.97	11011.29	50.30	223.17	PASS	
700.00	700.00	0.00	0.00	694.10	699.09	966.27	-10969.08	-84.97	11011.55	50.34	222.99	PASS	
720.00†	720.00	-0.04	0.06	729.62	734.62	966.20	-10969.05	151.73	11011.59	50.35	222.94	PASS	
820.00†	819.96	-1.38	2.10	833.46	838.46	966.07	-10968.90	151.72	11013.59	50.42	222.66	PASS	
920.00†	919.78	-4.64	7.06	927.70	932.70	966.05	-10968.75	151.69	11018.66	50.54	222.25	PASS	
1020.00†	1019.33	-9.80	14.92	4039.69	3936.59	442.69	-10584.48	149.87	11002.84	58.45	191.39	PASS	
1120.00†	1118.50	-16.87	25.69	4054.64	3950.78	439.77	-10580.76	150.02	10987.59	58.72	190.23	PASS	
1200.18	1197.64	-23.91	36.40	4069.35	3964.78	437.00	-10577.19	150.10	10978.06	58.94	189.33	PASS	
1220.00†	1217.16	-25.80	39.28	4073.01	3968.26	436.32	-10576.31	150.10	10976.01	58.99	189.13	PASS	
1320.00†	1315.64	-35.34	53.80	4091.45	3985.87	432.99	-10571.96	150.10	10966.14	59.24	188.16	PASS	
1420.00†	1414.12	-44.88	68.32	4109.94	4003.58	429.80	-10567.72	150.09	10957.01	59.49	187.20	PASS	
1520.00†	1512.60	-54.42	82.84	4128.48	4021.39	426.74	-10563.60	150.08	10948.61	59.74	186.25	PASS	
1620.00†	1611.08	-63.95	97.35	4156.79	4048.68	422.28	-10557.48	150.07	10940.92	60.03	185.21	PASS	
1720.00†	1709.56	-73.49	111.87	4189.29	4080.05	417.36	-10550.62	150.06	10933.85	60.34	184.12	PASS	
1820.00†	1808.04	-83.03	126.39	4223.75	4113.41	412.36	-10543.55	150.06	10927.39	60.37	183.16	PASS	
1920.00†	1906.52	-92.56	140.91	4412.22	4295.56	382.78	-10505.27	150.00	10921.29	61.32	180.17	PASS	
2020.00†	2005.00	-102.10	155.43	4930.32	4790.75	285.07	-10388.91	149.75	10912.99	64.22	171.80	PASS	
2120.00†	2103.48	-111.64	169.95	4962.35	4821.31	279.44	-10381.14	149.74	10902.52	64.54	170.80	PASS	
2220.00†	2201.96	-121.18	184.46	4993.98	4851.56	274.04	-10373.65	149.73	10892.68	64.86	169.79	PASS	
2320.00†	2300.44	-130.71	198.98	5024.14	4880.47	268.99	-10366.68	149.71	10883.46	65.18	168.81	PASS	
2420.00†	2398.92	-140.25	213.50	5054.35	4909.49	264.03	-10359.88	149.70	10874.87	65.51	167.81	PASS	
2520.00†	2497.40	-149.79	228.02	5173.47	5023.94	244.23	-10333.44	149.66	10866.61	66.33	165.59	PASS	
2620.00†	2595.88	-159.33	242.54	5213.11	5062.01	237.50	-10324.70	149.65	10858.44	66.74	164.44	PASS	
2720.00†	2694.36	-168.86	257.06	5510.38	5347.37	188.54	-10257.37	149.54	10849.86	68.55	159.91	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 121 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	5817.96	5641.18	139.47	-10181.10	149.44	10838.47	70.53	155.21	PASS	
2920.00†	2891.32	-187.94	286.09	5835.45	5657.91	136.93	-10176.69	149.44	10827.25	70.88	154.30	PASS	
3020.00†	2989.80	-197.48	300.61	5848.67	5670.59	135.09	-10173.44	149.43	10816.79	71.20	153.44	PASS	
3120.00†	3088.28	-207.01	315.13	5860.39	5681.87	133.52	-10170.65	149.43	10807.14	71.52	152.61	PASS	
3220.00†	3186.76	-216.55	329.65	5872.14	5693.20	132.02	-10167.95	149.43	10798.30	71.85	151.78	PASS	
3320.00†	3285.24	-226.09	344.17	5883.91	5704.59	130.57	-10165.33	149.43	10790.27	72.18	150.96	PASS	
3420.00†	3383.71	-235.62	358.69	5895.70	5716.01	129.18	-10162.79	149.43	10783.05	72.52	150.14	PASS	
3520.00†	3482.19	-245.16	373.20	5907.50	5727.48	127.86	-10160.34	149.43	10776.65	72.87	149.33	PASS	
3620.00†	3580.67	-254.70	387.72	5919.31	5738.99	126.60	-10157.98	149.43	10771.06	73.22	148.53	PASS	
3720.00†	3679.15	-264.24	402.24	5944.16	5763.25	124.12	-10153.23	149.43	10766.25	73.64	147.61	PASS	
3820.00†	3777.63	-273.77	416.76	5981.10	5799.38	120.67	-10146.33	149.43	10762.06	74.13	146.57	PASS	
3920.00†	3876.11	-283.31	431.28	6016.36	5833.92	117.63	-10139.94	149.43	10758.45	74.61	145.57	PASS	
4020.00†	3974.59	-292.85	445.80	6044.45	5861.48	115.34	-10135.01	149.43	10755.49	75.04	144.69	PASS	
4120.00†	4073.07	-302.39	460.32	6072.54	5889.08	113.16	-10130.27	149.43	10753.19	75.47	143.82	PASS	
4220.00†	4171.55	-311.92	474.83	6100.15	5916.25	111.10	-10125.79	149.44	10751.56	75.91	142.96	PASS	
4320.00†	4270.03	-321.46	489.35	6125.28	5941.00	109.38	-10121.87	149.44	10750.62	76.33	142.15	PASS	
4420.00†	4368.51	-331.00	503.87	6150.39	5965.79	107.84	-10118.12	149.45	10750.37	76.76	141.34	PASS	
4520.00†	4466.99	-340.53	518.39	6175.50	5990.60	106.47	-10114.53	149.45	10750.82	77.20	140.55	PASS	
4620.00†	4565.47	-350.07	532.91	6208.17	6022.93	104.89	-10110.08	149.46	10751.94	77.66	139.72	PASS	
4720.00†	4663.95	-359.61	547.43	6242.96	6057.38	103.28	-10105.53	149.47	10753.67	78.13	138.89	PASS	
4820.00†	4762.43	-369.15	561.94	6274.87	6089.01	101.87	-10101.55	149.48	10756.01	78.59	138.10	PASS	
4920.00†	4860.91	-378.68	576.46	6301.15	6115.08	100.71	-10098.45	149.48	10759.02	79.03	137.35	PASS	
5020.00†	4959.39	-388.22	590.98	6327.41	6141.16	99.55	-10095.53	149.49	10762.71	79.48	136.62	PASS	
5120.00†	5057.87	-397.76	605.50	6353.21	6166.79	98.41	-10092.83	149.50	10767.09	79.93	135.90	PASS	
5220.00†	5156.35	-407.30	620.02	6372.32	6185.79	97.58	-10090.97	149.50	10772.19	80.35	135.24	PASS	
5320.00†	5254.83	-416.83	634.54	6391.41	6204.79	96.80	-10089.26	149.51	10778.03	80.78	134.60	PASS	
5420.00†	5353.31	-426.37	649.06	6410.48	6223.78	96.08	-10087.69	149.51	10784.63	81.21	133.97	PASS	
5520.00†	5451.79	-435.91	663.57	6429.53	6242.76	95.39	-10086.25	149.52	10791.97	81.63	133.35	PASS	
5620.00†	5550.27	-445.45	678.09	6447.58	6260.76	94.79	-10085.02	149.52	10800.05	82.06	132.76	PASS	
5720.00†	5648.75	-454.98	692.61	6464.99	6278.13	94.25	-10083.96	149.53	10808.90	82.48	132.18	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 122 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5820.00†	5747.23	-464.52	707.13	6482.37	6295.48	93.76	-10083.04	149.54	10818.50	82.90	131.62	PASS	
5920.00†	5845.71	-474.06	721.65	6499.72	6312.80	93.31	-10082.25	149.54	10828.86	83.32	131.08	PASS	
6020.00†	5944.19	-483.59	736.17	6517.03	6330.10	92.90	-10081.59	149.55	10839.98	83.74	130.54	PASS	
6120.00†	6042.67	-493.13	750.68	6555.22	6368.26	92.08	-10080.41	149.56	10851.78	84.24	129.90	PASS	
6220.00†	6141.15	-502.67	765.20	6601.77	6414.78	91.13	-10079.17	149.58	10864.07	84.78	129.22	PASS	
6320.00†	6239.63	-512.21	779.72	6640.95	6453.94	90.43	-10078.33	149.59	10876.87	85.28	128.60	PASS	
6333.38	6252.80	-513.48	781.66	6652.72	6465.71	90.25	-10078.11	149.60	10878.62	85.37	128.48	PASS	
6420.00†	6338.69	-521.84	788.38	6696.57	6509.55	89.54	-10077.26	98.92	10884.17	85.88	127.78	PASS	
6520.00†	6437.87	-531.58	781.50	6702.32	6515.30	89.45	-10077.20	37.23	10876.72	86.67	126.53	PASS	
6620.00†	6534.75	-541.19	759.12	6707.96	6520.93	89.35	-10077.19	21.86	10854.65	87.88	124.52	PASS	
6720.00†	6626.95	-550.44	721.78	6713.35	6526.32	89.26	-10077.23	16.45	10818.41	88.81	122.79	PASS	
6820.00†	6712.19	-559.10	670.41	6718.38	6531.35	89.17	-10077.30	14.03	10768.76	89.53	121.23	PASS	
6920.00†	6788.37	-566.95	606.27	6722.94	6535.91	89.10	-10077.39	13.01	10706.76	90.09	119.77	PASS	
7020.00†	6853.62	-573.80	530.93	6726.93	6539.90	89.03	-10077.50	12.94	10633.75	90.50	118.42	PASS	
7120.00†	6906.33	-579.49	446.27	6730.23	6543.20	88.97	-10077.61	13.85	10551.34	90.77	117.15	PASS	
7220.00†	6945.20	-583.87	354.35	6732.77	6545.74	88.93	-10077.71	16.38	10461.36	90.93	115.95	PASS	
7320.00†	6969.29	-586.83	257.44	6734.47	6547.44	88.90	-10077.78	23.27	10365.87	90.99	114.80	PASS	
7420.00†	6977.98	-588.31	157.94	6735.26	6548.22	88.88	-10077.81	55.20	10267.12	91.01	113.69	PASS	
7428.43	6978.00	-588.37	149.50	6735.28	6548.25	88.88	-10077.81	62.32	10258.72	91.02	113.59	PASS	
7478.43	6977.79	-588.66	99.50	6735.40	6548.37	88.88	-10077.82	62.33	10208.88	91.01	113.04	PASS	
7520.00†	6977.61	-589.21	57.94	6735.50	6548.47	88.88	-10077.82	66.40	10167.48	91.01	112.59	PASS	
7536.58	6977.55	-589.59	41.36	6735.55	6548.51	88.88	-10077.82	67.71	10150.98	91.01	112.40	PASS	
7620.00†	6977.19	-591.78	-42.02	6735.75	6548.72	88.88	-10077.83	67.72	10067.98	91.01	111.48	PASS	
7720.00†	6976.77	-594.39	-141.99	6736.00	6548.97	88.87	-10077.84	67.74	9968.50	91.02	110.37	PASS	
7820.00†	6976.35	-597.01	-241.95	6736.22	6549.18	88.87	-10077.85	67.75	9869.03	91.04	109.25	PASS	
7920.00†	6975.93	-599.63	-341.92	6736.44	6549.40	88.86	-10077.86	67.76	9769.57	91.06	108.12	PASS	
8020.00†	6975.51	-602.25	-441.88	6736.66	6549.62	88.86	-10077.87	67.77	9670.12	91.09	106.98	PASS	
8120.00†	6975.09	-604.86	-541.85	6736.89	6549.85	88.86	-10077.88	67.78	9570.69	91.13	105.84	PASS	
8220.00†	6974.67	-607.48	-641.81	6737.12	6550.08	88.85	-10077.89	67.79	9471.26	91.18	104.68	PASS	
8320.00†	6974.25	-610.10	-741.78	6737.36	6550.32	88.85	-10077.91	67.81	9371.85	91.23	103.52	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 123 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = Interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	6737.60	6550.56	88.84	-10077.92	67.82	9272.44	91.30	102.35	PASS	
8520.00†	6973.41	-615.33	-941.71	6737.85	6550.81	88.84	-10077.93	67.83	9173.06	91.37	101.17	PASS	
8620.00†	6972.99	-617.95	-1041.67	6738.10	6551.06	88.83	-10077.94	67.85	9073.68	91.45	99.98	PASS	
8720.00†	6972.57	-620.57	-1141.64	6738.35	6551.31	88.83	-10077.95	67.86	8974.32	91.55	98.79	PASS	
8820.00†	6972.15	-623.19	-1241.60	6738.62	6551.58	88.83	-10077.97	67.87	8874.97	91.65	97.58	PASS	
8920.00†	6971.73	-625.81	-1341.57	6738.88	6551.84	88.82	-10077.98	67.89	8775.64	91.77	96.37	PASS	
9020.00†	6971.31	-628.42	-1441.53	6739.16	6552.12	88.82	-10077.99	67.90	8676.32	91.89	95.14	PASS	
9120.00†	6970.88	-631.04	-1541.50	6739.44	6552.40	88.81	-10078.01	67.91	8577.02	92.03	93.91	PASS	
9220.00†	6970.46	-633.66	-1641.46	6739.72	6552.68	88.81	-10078.02	67.93	8477.74	92.19	92.67	PASS	
9320.00†	6970.04	-636.28	-1741.43	6740.02	6552.97	88.80	-10078.04	67.94	8378.47	92.35	91.42	PASS	
9420.00†	6969.62	-638.89	-1841.39	6740.31	6553.27	88.80	-10078.05	67.96	8279.22	92.53	90.15	PASS	
9520.00†	6969.20	-641.51	-1941.36	6740.62	6553.58	88.79	-10078.07	67.97	8179.98	92.73	88.88	PASS	
9620.00†	6968.78	-644.13	-2041.32	6740.93	6553.89	88.79	-10078.08	67.99	8080.77	92.94	87.61	PASS	
9720.00†	6968.36	-646.75	-2141.29	6741.25	6554.21	88.78	-10078.10	68.01	7981.57	93.17	86.32	PASS	
9820.00†	6967.94	-649.36	-2241.25	6741.58	6554.54	88.78	-10078.12	68.03	7882.40	93.41	85.02	PASS	
9920.00†	6967.52	-651.98	-2341.22	6741.92	6554.87	88.77	-10078.14	68.04	7783.25	93.67	83.71	PASS	
10020.00†	6967.10	-654.60	-2441.18	6742.26	6555.22	88.77	-10078.16	68.06	7684.11	93.96	82.40	PASS	
10120.00†	6966.68	-657.22	-2541.15	6742.61	6555.57	88.76	-10078.17	68.08	7585.01	94.26	81.07	PASS	
10220.00†	6966.26	-659.84	-2641.11	6742.97	6555.93	88.75	-10078.20	68.10	7485.92	94.58	79.74	PASS	
10320.00†	6965.84	-662.43	-2741.08	6743.34	6556.30	88.75	-10078.22	68.12	7386.86	94.92	78.40	PASS	
10420.00†	6965.42	-665.07	-2841.04	6743.72	6556.67	88.74	-10078.24	68.14	7287.82	95.29	77.05	PASS	
10520.00†	6965.00	-667.69	-2941.01	6744.11	6557.06	88.74	-10078.26	68.16	7188.81	95.67	75.69	PASS	
10620.00†	6964.58	-670.31	-3040.97	6744.51	6557.46	88.73	-10078.28	68.18	7089.83	96.09	74.33	PASS	
10720.00†	6964.15	-672.92	-3140.93	6744.92	6557.87	88.72	-10078.31	68.20	6990.87	96.53	72.95	PASS	
10820.00†	6963.73	-675.54	-3240.90	6745.34	6558.29	88.72	-10078.33	68.22	6891.95	96.99	71.57	PASS	
10920.00†	6963.31	-678.16	-3340.86	6745.77	6558.72	88.71	-10078.36	68.24	6793.06	97.49	70.18	PASS	
11020.00†	6962.89	-680.78	-3440.83	6746.21	6559.16	88.70	-10078.39	68.27	6694.20	98.01	68.79	PASS	
11120.00†	6962.47	-683.39	-3540.79	6746.67	6559.61	88.69	-10078.42	68.29	6595.37	98.57	67.39	PASS	
11220.00†	6962.05	-686.01	-3640.76	6747.13	6560.08	88.69	-10078.45	68.31	6496.58	99.16	65.98	PASS	
11320.00†	6961.63	-688.63	-3740.72	6747.62	6560.56	88.68	-10078.48	68.34	6397.83	99.78	64.57	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 124 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	6748.11	6561.06	88.67	-10078.51	68.36	6299.11	100.44	63.15	PASS	
11520.00†	6960.79	-693.86	-3940.65	6748.62	6561.56	88.66	-10078.54	68.39	6200.44	101.14	61.73	PASS	
11620.00†	6960.37	-696.48	-4040.62	6749.15	6562.09	88.66	-10078.58	68.42	6101.81	101.87	60.31	PASS	
11636.58	6960.30	-696.92	-4057.20	6749.24	6562.18	88.65	-10078.59	68.42	6085.45	102.00	60.07	PASS	
11720.00†	6959.95	-697.89	-4140.60	6749.69	6562.63	88.65	-10078.62	64.17	6003.04	102.59	58.91	PASS	
11739.19	6959.87	-697.77	-4159.80	6749.79	6562.73	88.65	-10078.62	62.97	5984.03	102.72	58.65	PASS	
11820.00†	6959.53	-696.99	-4240.60	6750.24	6563.18	88.64	-10078.66	63.00	5904.00	103.24	57.58	PASS	
11920.00†	6959.10	-696.02	-4340.59	6750.81	6563.75	88.63	-10078.70	63.03	5804.98	103.91	56.24	PASS	
12020.00†	6958.68	-695.06	-4440.59	6751.40	6564.34	88.62	-10078.74	63.07	5706.00	104.62	54.91	PASS	
12120.00†	6958.26	-694.10	-4540.58	6752.01	6564.94	88.61	-10078.78	63.10	5607.05	105.36	53.57	PASS	
12220.00†	6957.84	-693.13	-4640.58	6752.64	6565.57	88.60	-10078.83	63.14	5508.14	106.14	52.24	PASS	
12320.00†	6957.42	-692.17	-4740.57	6753.29	6566.22	88.59	-10078.88	63.18	5409.26	106.96	50.90	PASS	
12420.00†	6957.00	-691.20	-4840.57	6753.96	6566.89	88.58	-10078.93	63.23	5310.43	107.83	49.57	PASS	
12520.00†	6956.57	-690.24	-4940.56	6754.65	6567.58	88.57	-10078.98	63.27	5211.64	108.74	48.24	PASS	
12620.00†	6956.15	-689.28	-5040.55	6755.37	6568.30	88.56	-10079.04	63.31	5112.90	109.70	46.91	PASS	
12720.00†	6955.73	-688.31	-5140.55	6756.12	6569.04	88.55	-10079.10	63.36	5014.21	110.71	45.58	PASS	
12820.00†	6955.31	-687.35	-5240.54	6756.89	6569.81	88.54	-10079.16	63.41	4915.57	111.77	44.25	PASS	
12920.00†	6954.89	-686.38	-5340.54	6757.69	6570.60	88.53	-10079.22	63.46	4816.98	112.89	42.93	PASS	
13020.00†	6954.47	-685.42	-5440.53	6758.52	6571.43	88.52	-10079.29	63.51	4718.45	114.07	41.62	PASS	
13120.00†	6954.04	-684.46	-5540.53	6759.38	6572.29	88.51	-10079.37	63.56	4619.99	115.31	40.31	PASS	
13220.00†	6953.62	-683.49	-5640.52	6760.28	6573.18	88.49	-10079.45	63.62	4521.59	116.63	39.00	PASS	
13320.00†	6953.20	-682.53	-5740.52	6761.21	6574.11	88.48	-10079.53	63.68	4423.26	118.02	37.70	PASS	
13420.00†	6952.78	-681.57	-5840.51	6762.18	6575.08	88.47	-10079.62	63.74	4325.00	119.48	36.41	PASS	
13520.00†	6952.36	-680.60	-5940.50	6763.19	6576.08	88.45	-10079.71	63.80	4226.82	121.03	35.12	PASS	
13620.00†	6951.94	-679.64	-6040.50	6764.25	6577.13	88.44	-10079.81	63.87	4128.73	122.67	33.85	PASS	
13720.00†	6951.51	-678.67	-6140.49	6765.35	6578.23	88.43	-10079.91	63.93	4030.73	124.41	32.58	PASS	
13820.00†	6951.09	-677.71	-6240.49	6766.49	6579.37	88.41	-10080.03	64.01	3932.83	126.25	31.32	PASS	
13920.00†	6950.67	-676.75	-6340.48	6767.70	6580.57	88.40	-10080.15	64.08	3835.04	128.20	30.08	PASS	
14020.00†	6950.25	-675.78	-6440.48	6768.95	6581.82	88.38	-10080.27	64.16	3737.35	130.27	28.84	PASS	
14120.00†	6949.83	-674.82	-6540.47	6770.27	6583.13	88.36	-10080.41	64.24	3639.79	132.46	27.62	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 125 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14220.00†	6949.41	-673.86	-6640.47	6771.65	6584.50	88.35	-10080.56	64.33	3542.37	134.80	26.41	PASS	
14320.00†	6948.98	-672.89	-6740.46	6773.10	6585.94	88.33	-10080.72	64.42	3445.08	137.28	25.22	PASS	
14420.00†	6948.56	-671.93	-6840.45	6774.63	6587.46	88.31	-10080.89	64.52	3347.95	139.93	24.04	PASS	
14520.00†	6948.14	-670.96	-6940.45	6776.24	6589.06	88.29	-10081.07	64.62	3250.99	142.76	22.88	PASS	
14620.00†	6947.72	-670.00	-7040.44	6777.93	6590.73	88.28	-10081.27	64.73	3154.21	145.77	21.74	PASS	
14720.00†	6947.30	-669.04	-7140.44	6780.26	6593.05	88.25	-10081.55	64.88	3057.64	149.00	20.61	PASS	
14820.00†	6946.87	-668.07	-7240.43	6782.73	6595.50	88.23	-10081.86	65.03	2961.28	152.45	19.51	PASS	
14920.00†	6946.45	-667.11	-7340.43	6785.32	6598.07	88.21	-10082.19	65.20	2865.16	156.16	18.43	PASS	
15020.00†	6946.03	-666.15	-7440.42	6788.05	6600.78	88.19	-10082.54	65.38	2769.30	160.13	17.37	PASS	
15120.00†	6945.61	-665.18	-7540.42	6790.92	6603.62	88.18	-10082.92	65.56	2673.73	164.41	16.33	PASS	
15220.00†	6945.19	-664.22	-7640.41	6793.94	6606.62	88.17	-10083.33	65.76	2578.49	169.02	15.32	PASS	
15320.00†	6944.77	-663.25	-7740.40	6797.14	6609.78	88.17	-10083.78	65.96	2483.60	173.99	14.33	PASS	
15420.00†	6944.34	-662.29	-7840.40	6800.51	6613.12	88.17	-10084.26	66.18	2389.11	179.38	13.37	PASS	
15520.00†	6943.92	-661.33	-7940.39	6804.08	6616.65	88.18	-10084.79	66.41	2295.06	185.21	12.44	PASS	
15620.00†	6943.50	-660.36	-8040.39	6807.87	6620.39	88.20	-10085.36	66.66	2201.52	191.54	11.53	PASS	
15720.00†	6943.08	-659.40	-8140.38	6811.89	6624.36	88.23	-10085.99	66.93	2108.54	198.44	10.66	PASS	
15820.00†	6942.66	-658.44	-8240.38	6816.17	6628.59	88.27	-10086.68	67.21	2016.20	205.96	9.82	PASS	
15920.00†	6942.24	-657.47	-8340.37	6820.73	6633.08	88.32	-10087.44	67.51	1924.59	214.18	9.01	PASS	
16020.00†	6941.81	-656.51	-8440.37	6828.08	6640.33	88.42	-10088.70	68.00	1833.80	223.22	8.24	PASS	
16120.00†	6941.39	-655.54	-8540.36	6836.16	6648.27	88.51	-10090.14	68.54	1743.94	233.14	7.50	PASS	
16220.00†	6940.97	-654.58	-8640.35	6844.87	6656.84	88.58	-10091.75	69.13	1655.16	244.07	6.80	PASS	
16320.00†	6940.55	-653.62	-8740.35	6854.30	6666.09	88.65	-10093.56	69.77	1567.63	256.13	6.13	PASS	
16420.00†	6940.13	-652.65	-8840.34	6864.46	6676.04	88.69	-10095.59	70.46	1481.54	269.47	5.51	PASS	
16520.00†	6939.71	-651.69	-8940.34	6873.94	6685.32	88.72	-10097.57	71.11	1397.17	284.22	4.93	PASS	
16620.00†	6939.28	-650.72	-9040.33	6884.35	6695.47	88.74	-10099.84	71.83	1314.84	300.56	4.38	PASS	
16720.00†	6938.86	-649.76	-9140.33	6895.82	6706.64	88.74	-10102.47	72.63	1234.92	318.67	3.88	PASS	
16820.00†	6938.44	-648.80	-9240.32	6908.26	6718.71	88.73	-10105.47	73.50	1157.89	338.68	3.42	PASS	
16920.00†	6938.02	-647.83	-9340.32	6920.28	6730.32	88.67	-10108.57	74.34	1084.34	360.67	3.01	PASS	
17020.00†	6937.60	-646.87	-9440.31	6934.47	6743.95	88.51	-10112.54	75.33	1014.97	384.61	2.64	PASS	
17120.00†	6937.18	-645.91	-9540.31	6951.50	6760.16	88.18	-10117.76	76.53	950.61	410.32	2.32	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 126 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) Well: EX. SHURVIEW 33C-3HZ Threshold Value=1.00 † = Interpolated/extrapolated station											
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	ACR Status
17161.54	6937.00	-645.51	-9581.84	6959.67	6767.88	87.97	-10120.42	77.10	925.56	421.41	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1217.00	BHI Generic gyro - continuous (Standard)	MS GYRODATA SURVEYS <17-1217>	EX. SHURVIEW 33C-3HZ AWB
1217.00	7632.00	BHI NaviTrak (Standard)	8 3/4" NAVIGAMMA VERTICAL & CURVE <1360'-7632'>	EX. SHURVIEW 33C-3HZ AWB
7632.00	11623.00	BHI OnTrak (Standard)	6 1/8" ONTRAK CODELL LATERAL <7724-11623>	EX. SHURVIEW 33C-3HZ AWB
11623.00	11689.00	Blind Drilling (std)	Projection to bit	EX. SHURVIEW 33C-3HZ AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHURVIEW 33C-3HZ AWB Offset Wellpath: EX. SHURVIEW 33C-3HZ AWP

MD Reference: Rig on SLOT#04 EX. SHURVIEW 33C-3HZ (2016'FSL & 1191'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 127 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 3-11 AWB Offset Wellpath: EX. SKYWAY 3-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#02 EX. SKYWAY 3-11 (489'FNL & 627'FWL, PR/NB-CD) Well: EX. SKYWAY 3-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	59.00	20.00	-1549.04	-9496.73	-99.26	9622.23	50.18	195.49	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SKYWAY 3-11 AWB Offset Wellpath: EX. SKYWAY 3-11 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SKYWAY 3-11 AWB Offset Wellpath: EX. SKYWAY 3-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	8003.00	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <500'-8003'>	EX. SKYWAY 3-11 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SKYWAY 3-11 AWB Offset Wellpath: EX. SKYWAY 3-11 AWP

MD Reference: Rig on SLOT#02 EX. SKYWAY 3-11 (489'FNL & 627'FWL, PR/NB-CD) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 128 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#14 GREELEY-ROTH FEDERAL 32N-2B-L (1143'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 32N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
20.00	20.00	0.00	0.00	18.00	20.00	180.03	-2.24	-0.71	180.05	1.26	596.94	P	
120.00†	120.00	0.00	0.00	118.00	120.00	180.03	-2.24	-0.71	180.05	1.88	194.66	P	
220.00†	220.00	0.00	0.00	218.00	220.00	180.03	-2.24	-0.71	180.05	2.45	120.33	P	
320.00†	320.00	0.00	0.00	314.75	316.75	180.62	-1.81	-0.57	180.66	3.09	84.48	P	
420.00†	420.00	0.00	0.00	409.84	411.76	183.61	0.42	0.13	183.79	4.01	59.99	P	
520.00†	520.00	0.00	0.00	504.57	506.24	189.10	4.50	1.36	189.66	5.03	46.45	P	
620.00†	620.00	0.00	0.00	598.75	599.89	197.05	10.41	3.02	198.34	5.98	39.37	P	
700.00	700.00	0.00	0.00	673.57	674.03	205.12	16.40	4.57	207.40	6.70	35.96	P	
720.00†	720.00	-0.04	0.06	692.18	692.43	207.36	18.08	-118.29	210.00	6.88	35.31	P	
820.00†	819.96	-1.38	2.10	784.67	783.57	219.96	27.44	-116.40	225.74	7.79	32.93	P	
920.00†	919.78	-4.64	7.06	875.95	872.98	234.69	38.39	-115.00	245.87	8.69	31.71	P	
1020.00†	1019.33	-9.80	14.92	972.69	967.38	251.70	51.03	-114.13	269.05	9.40	31.77	P	
1120.00†	1118.50	-16.87	25.69	1069.61	1061.94	268.74	63.70	-113.98	293.63	10.12	31.98	P	
1200.18	1197.64	-23.91	36.40	1146.99	1137.44	282.34	73.82	-114.21	314.35	10.70	32.18	P	
1220.00†	1217.16	-25.80	39.28	1166.08	1156.07	285.70	76.31	-114.40	319.59	10.85	32.24	P	
1320.00†	1315.64	-35.34	53.80	1262.39	1250.04	302.63	88.90	-115.27	346.06	11.47	32.85	P	
1420.00†	1414.12	-44.88	68.32	1358.70	1344.01	319.56	101.49	-116.02	372.60	12.18	33.12	P	
1520.00†	1512.60	-54.42	82.84	1455.01	1437.98	336.50	114.07	-116.67	399.20	12.93	33.28	P	
1620.00†	1611.08	-63.95	97.35	1551.32	1531.94	353.43	126.66	-117.23	425.83	13.69	33.38	P	
1720.00†	1709.56	-73.49	111.87	1647.63	1625.91	370.36	139.25	-117.73	452.49	14.48	33.42	P	
1820.00†	1808.04	-83.03	126.39	1743.93	1719.88	387.30	151.84	-118.18	479.19	14.89	33.84	P	
1920.00†	1906.52	-92.56	140.91	1840.24	1813.85	404.23	164.43	-118.57	505.91	15.16	34.95	P	
2020.00†	2005.00	-102.10	155.43	1936.55	1907.82	421.16	177.01	-118.93	532.65	15.38	36.26	P	
2120.00†	2103.48	-111.64	169.95	2032.86	2001.79	438.09	189.60	-119.25	559.40	15.67	37.33	P	
2220.00†	2201.96	-121.18	184.46	2129.17	2095.76	455.03	202.19	-119.55	586.18	16.04	38.18	P	
2320.00†	2300.44	-130.71	198.98	2225.47	2189.72	471.96	214.78	-119.82	612.96	16.48	38.81	P	
2420.00†	2398.92	-140.25	213.50	2321.78	2283.63	488.89	227.36	-120.06	639.76	16.98	39.26	P	
2520.00†	2497.40	-149.79	228.02	2418.09	2377.66	505.82	239.95	-120.29	666.56	17.54	39.55	P	
2620.00†	2595.88	-159.33	242.54	2514.40	2471.63	522.76	252.54	-120.50	693.38	18.16	39.70	P	
2720.00†	2694.36	-168.86	257.06	2610.71	2565.60	539.69	265.13	-120.69	720.20	18.82	39.74	P	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 129 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#14 GREELEY-ROTH FEDERAL 32N-2B-L (1143'FSL & 294'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 32N-2B-L Threshold Value=1.00 † = interpolated/extrapolated s													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	A St	
2820.00†	2792.84	-178.40	271.58	2707.02	2659.57	556.62	277.72	-120.87	747.03	19.52	39.68	P/	
2920.00†	2891.32	-187.94	286.09	2803.32	2753.54	573.55	290.30	-121.04	773.87	20.25	39.56	P/	
3020.00†	2989.80	-197.48	300.61	2899.63	2847.50	590.49	302.89	-121.19	800.71	21.03	39.37	P/	
3120.00†	3088.28	-207.01	315.13	2995.94	2941.47	607.42	315.48	-121.34	827.56	21.83	39.15	P/	
3220.00†	3186.76	-216.55	329.65	3092.25	3035.44	624.35	328.07	-121.47	854.41	22.66	38.90	P/	
3320.00†	3285.24	-226.09	344.17	3188.56	3129.41	641.29	340.65	-121.60	881.27	23.51	38.62	P/	
3420.00†	3383.71	-235.62	358.69	3284.86	3223.38	658.22	353.24	-121.72	908.13	24.38	38.33	P/	
3520.00†	3482.19	-245.16	373.20	3381.17	3317.35	675.15	365.83	-121.83	934.99	25.28	38.03	P/	
3620.00†	3580.67	-254.70	387.72	3477.48	3411.32	692.08	378.42	-121.94	961.86	26.19	37.72	P/	
3720.00†	3679.15	-264.24	402.24	3573.79	3505.28	709.02	391.01	-122.04	988.72	27.12	37.41	P/	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	22.00	1725.80	109.75	-1.37	173.25	45.84
9.625in Casing Surface	20.00	1750.00	1730.00	22.00	1725.80	109.75	-1.37	173.25	45.84
8.5in Open Hole	1750.00	17135.08	15385.08	1725.80	N/A	173.25	45.84	N/A	N/A



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 130 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 32N-2B-L PWB
1750.00	17135.08	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 32N-2B-L PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 32N-2B-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 32N-2B-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20") (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 131 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. RUDOLPH 2-32 AWB Offset Wellpath: EX. RUDOLPH 2-32 AWP												
Facility: SEC.02-T5N-R67W		Slot: SLOT#06 EX. RUDOLPH 2-32 (2335'FSL & 740'FWL, CODL/PR)				Well: EX. RUDOLPH 2-32		Threshold Value=1.00 † = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	10.00	20.00	1272.39	-8995.90	-81.95	9085.44	50.19	184.55	PASS
C-C Clearance Distance Cutoff: 1000.00 ft												

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. RUDOLPH 2-32 AWB Offset Wellpath: EX. RUDOLPH 2-32 AWP				
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. RUDOLPH 2-32 AWB Offset Wellpath: EX. RUDOLPH 2-32 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7299.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7299>	EX. RUDOLPH 2-32 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. RUDOLPH 2-32 AWB Offset Wellpath: EX. RUDOLPH 2-32 AWP	
MD Reference: Rig on SLOT#06 EX. RUDOLPH 2-32 (2335'FSL & 740'FWL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 132 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)													
Facility: SEC.01-T05N-R67W		Slot: SLOT#13 GREELEY-ROTH FEDERAL 32C-2-L (1163'FSL & 295'FEL, SEC.01)				Well: GREELEY-ROTH FEDERAL 32C-2-L			Threshold Value=1.00		† = interpolated/extrapolated stat		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	18.00	20.00	200.07	-2.47	-0.71	200.08	1.28	663.74	PASS	
120.00†	120.00	0.00	0.00	118.00	120.00	200.07	-2.47	-0.71	200.08	1.88	216.31	PASS	
220.00†	220.00	0.00	0.00	217.00	219.00	200.11	-2.45	-0.70	200.13	2.44	134.46	PASS	
320.00†	320.00	0.00	0.00	311.42	313.39	201.90	-1.32	-0.37	202.01	3.26	87.40	PASS	
420.00†	420.00	0.00	0.00	405.59	407.41	206.30	1.47	0.41	206.69	4.38	60.25	PASS	
520.00†	520.00	0.00	0.00	499.32	500.78	213.27	5.88	1.58	214.21	5.37	48.43	PASS	
620.00†	620.00	0.00	0.00	592.41	593.19	222.74	11.88	3.05	224.66	6.27	42.13	PASS	
700.00	700.00	0.00	0.00	666.30	666.24	232.06	17.79	4.38	235.17	6.97	39.01	PASS	
720.00†	720.00	-0.04	0.06	684.68	684.37	234.62	19.41	-118.53	238.14	7.14	38.41	PASS	
820.00†	819.96	-1.38	2.10	775.90	774.03	248.81	28.39	-116.89	255.72	8.10	35.71	PASS	
920.00†	919.78	-4.64	7.06	865.81	861.83	265.14	38.74	-115.69	277.74	8.84	35.12	PASS	
1020.00†	1019.33	-9.80	14.92	961.71	955.08	284.05	50.72	-114.96	302.92	9.48	35.45	PASS	
1120.00†	1118.50	-16.87	25.69	1058.07	1048.78	303.08	62.77	-114.80	329.55	10.09	36.02	PASS	
1200.18	1197.64	-23.91	36.40	1134.97	1123.55	318.25	72.38	-114.99	351.94	10.57	36.52	PASS	
1220.00†	1217.16	-25.80	39.28	1153.94	1141.99	322.00	74.75	-115.18	357.60	10.69	36.65	PASS	
1320.00†	1315.64	-35.34	53.80	1249.63	1235.03	340.89	86.71	-116.02	386.17	11.26	37.41	PASS	
1420.00†	1414.12	-44.88	68.32	1345.32	1328.07	359.77	98.68	-116.75	414.81	11.85	38.01	PASS	
1520.00†	1512.60	-54.42	82.84	1441.00	1421.11	378.66	110.64	-117.38	443.51	12.46	38.48	PASS	
1620.00†	1611.08	-63.95	97.35	1536.69	1514.15	397.55	122.60	-117.94	472.25	13.09	38.88	PASS	
1720.00†	1709.56	-73.49	111.87	1632.38	1607.18	416.44	134.57	-118.43	501.02	13.72	39.20	PASS	
1820.00†	1808.04	-83.03	126.39	1728.06	1700.22	435.32	146.53	-118.87	529.83	14.04	39.84	PASS	
1920.00†	1906.52	-92.56	140.91	1823.75	1793.26	454.21	158.49	-119.27	558.66	14.27	41.15	PASS	
2020.00†	2005.00	-102.10	155.43	1919.43	1886.30	473.10	170.45	-119.62	587.51	14.48	42.60	PASS	
2120.00†	2103.48	-111.64	169.95	2015.12	1979.34	491.99	182.42	-119.94	616.38	14.79	43.73	PASS	
2220.00†	2201.96	-121.18	184.46	2110.81	2072.37	510.87	194.38	-120.24	645.27	15.17	44.56	PASS	
2320.00†	2300.44	-130.71	198.98	2206.49	2165.41	529.76	206.34	-120.50	674.17	15.63	45.14	PASS	
2420.00†	2398.92	-140.25	213.50	2302.18	2258.45	548.65	218.30	-120.75	703.09	16.15	45.47	PASS	
2520.00†	2497.40	-149.79	228.02	2397.87	2351.49	567.53	230.27	-120.98	732.02	16.74	45.62	PASS	
2620.00†	2595.88	-159.33	242.54	2493.55	2444.52	586.42	242.23	-121.19	760.95	17.38	45.61	PASS	
2720.00†	2694.36	-168.86	257.06	2589.24	2537.56	605.31	254.19	-121.38	789.90	18.07	45.47	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 133 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)

Facility: SEC.01-T05N-R67W Slot: SLOT#13 GREELEY-ROTH FEDERAL 32C-2-L (1163'FSL & 295'FEL, SEC.01) Well: GREELEY-ROTH FEDERAL 32C-2-L Threshold Value=1.00 † = Interpolated/extrapolated stat												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Statu
2820.00†	2792.84	-178.40	271.58	2684.93	2630.60	624.20	266.16	-121.56	818.85	18.80	45.23	PASS
2920.00†	2891.32	-187.94	286.09	2780.61	2723.64	643.08	278.12	-121.73	847.81	19.57	44.92	PASS
3020.00†	2989.80	-197.48	300.61	2876.30	2816.68	661.97	290.08	-121.89	876.77	20.37	44.56	PASS
3120.00†	3088.28	-207.01	315.13	2971.99	2909.71	680.86	302.04	-122.03	905.74	21.20	44.17	PASS
3220.00†	3186.76	-216.55	329.65	3067.67	3002.75	699.75	314.01	-122.17	934.72	22.05	43.76	PASS
3320.00†	3285.24	-226.09	344.17	3163.36	3095.79	718.63	325.97	-122.30	963.70	22.93	43.33	PASS
3420.00†	3383.71	-235.62	358.69	3259.04	3188.83	737.52	337.93	-122.42	992.68	23.83	42.90	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.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]
13.5in Open Hole	20.00	1750.00	1730.00	22.00	1721.55	121.96	-1.51	194.99	44.74
9.625in Casing Surface	20.00	1750.00	1730.00	22.00	1721.55	121.96	-1.51	194.99	44.74
8.5in Open Hole	1750.00	17292.80	15542.80	1721.55	7138.00	194.99	44.74	605.21	-2883.26

## SURVEY PROGRAM - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	1750.00	Custom BHI NaviTrak (IFR1, Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 32C-2-L PWB
1750.00	17292.80	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTH FEDERAL 32C-2-L PWB



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 134 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: GREELEY-ROTH FEDERAL 32C-2-L PWB    Offset Wellpath: GREELEY-ROTH FEDERAL 32C-2-L PWP (REV-A.0)	
MD Reference: PRECISION 462 (20') (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	20.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 135 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. PHILLIPS 1 AWB Offset Wellpath: EX. PHILLIPS 1 AWP

Facility: SEC.10-T05N-R67W Slot: SLOT#02 EX. PHILLIPS 1 (650'FNL & 643'FEL, CODL/PR) Well: EX. PHILLIPS 1 Threshold Value=1.00 † = interpolated/extrapolated station															
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status			
20.00	20.00	0.00	0.00	22.00	20.00	-1730.64	-10827.75	-99.08	10965.19	50.21	222.63	PASS			

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. PHILLIPS 1 AWB Offset Wellpath: EX. PHILLIPS 1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. PHILLIPS 1 AWB Offset Wellpath: EX. PHILLIPS 1 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7272.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7272>	EX. PHILLIPS 1 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. PHILLIPS 1 AWB Offset Wellpath: EX. PHILLIPS 1 AWP

MD Reference: Rig on SLOT#02 EX. PHILLIPS 1 (650'FNL & 643'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 136 of 184



**REFERENCE WELLPATH IDENTIFICATION**

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

**CLEARANCE DATA** - Offset Wellbore: **EX. RUDOLPH 2-31 AWB** Offset Wellpath: **EX. RUDOLPH 2-31 AWP**

Facility: SEC.02-T5N-R67W		Slot: SLOT#05 EX. RUDOLPH 2-31 (2387'FSL & 2058'FWL, NB-CD/PR)				Well: EX. RUDOLPH 2-31		Threshold Value=1.00 † = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	42.00	20.00	1276.29	-7673.46	-80.56	7778.88	50.25	157.80	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

**POSITIONAL UNCERTAINTY** - Offset Wellbore: **EX. RUDOLPH 2-31 AWB** Offset Wellpath: **EX. RUDOLPH 2-31 AWP**

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

**WELLPATH COMPOSITION** - Offset Wellbore: **EX. RUDOLPH 2-31 AWB** Offset Wellpath: **EX. RUDOLPH 2-31 AWP**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7361.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7361>	EX. RUDOLPH 2-31 AWB

**OFFSET WELLPATH REFERENCE** - Offset Wellbore: **EX. RUDOLPH 2-31 AWB** Offset Wellpath: **EX. RUDOLPH 2-31 AWP**

MD Reference: Rig on SLOT#05 EX. RUDOLPH 2-31 (2387'FSL & 2058'FWL, NB-CD/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 137 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT N 02-10 AWB Offset Wellpath: EX. AUFRECHT N 02-10 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#02 EX. AUFRECHT N 02-10 (2252'FSL & 1849'FEL, CODL/PR) Well: EX. AUFRECHT N 02-10 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	77.00	20.00	1145.92	-6535.35	-80.06	6635.05	50.33	134.40	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. AUFRECHT N 02-10 AWB Offset Wellpath: EX. AUFRECHT N 02-10 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. AUFRECHT N 02-10 AWB Offset Wellpath: EX. AUFRECHT N 02-10 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7840.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7840>	EX. AUFRECHT N 02-10 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. AUFRECHT N 02-10 AWB Offset Wellpath: EX. AUFRECHT N 02-10 AWP

MD Reference: Rig on SLOT#02 EX. AUFRECHT N 02-10 (2252'FSL & 1849'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 138 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT N02-09 AWB Offset Wellpath: EX. AUFRECHT N02-09 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#03 EX. AUFRECHT N02-09 (2217'FSL & 660'FEL, CODL/SI) Well: EX. AUFRECHT N02-09 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	67.00	20.00	1090.99	-5344.62	-78.46	5454.84	50.31	110.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. AUFRECHT N02-09 AWB Offset Wellpath: EX. AUFRECHT N02-09 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. AUFRECHT N02-09 AWB Offset Wellpath: EX. AUFRECHT N02-09 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7361.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7361>	EX. AUFRECHT N02-09 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. AUFRECHT N02-09 AWB Offset Wellpath: EX. AUFRECHT N02-09 AWP

MD Reference: Rig on SLOT#03 EX. AUFRECHT N02-09 (2217'FSL & 660'FEL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 139 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HSR KNOX 9-3 AWB Offset Wellpath: EX. HSR KNOX 9-3 AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#02 EX. HSR-KNOX 9-3 (1981'FSL & 701'FEL, JNBCE/SI) Well: EX. HSR KNOX 9-3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	17.00	20.00	932.53	-10918.46	-85.12	10958.21	50.20	222.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HSR KNOX 9-3 AWB Offset Wellpath: EX. HSR KNOX 9-3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. HSR KNOX 9-3 AWB Offset Wellpath: EX. HSR KNOX 9-3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7795.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7795>	EX. HSR KNOX 9-3 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HSR KNOX 9-3 AWB Offset Wellpath: EX. HSR KNOX 9-3 AWP

MD Reference: Rig on SLOT#02 EX. HRS-KNOX 9-3 (1981'FSL & 701'FEL, JNBCE/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 140 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE N 1-12 AWB Offset Wellpath: EX. HERTZKE N 1-12 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#03 EX. HERTZKE N 1-12 (2116'FSL & 619'FWL, CODL/PR) Well: EX. HERTZKE N 1-12 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	45.00	20.00	1008.07	-4068.12	-76.08	4191.16	50.26	85.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HERTZKE N 1-12 AWB Offset Wellpath: EX. HERTZKE N 1-12 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. HERTZKE N 1-12 AWB Offset Wellpath: EX. HERTZKE N 1-12 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7329.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7329>	EX. HERTZKE N 1-12 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HERTZKE N 1-12 AWB Offset Wellpath: EX. HERTZKE N 1-12 AWP

MD Reference: Rig on SLOT#03 EX. HERTZKE N 1-12 (2116'FSL & 619'FWL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 141 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SKYWAY FEDERAL 31-11 AWB Offset Wellpath: EX. SKYWAY FEDERAL 31-11 AWP												
Facility: SEC.11-T05N-R67W		Slot: SLOT#04 EX. SKYWAY FEDERAL 31-11 (450'FNL & 582'FWL, PR/NB-CD)			Well: EX. SKYWAY FEDERAL 31-11		Threshold Value=1.00		↑ = interpolated/extrapolated station			
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	92.40	63.40	-1508.99	-9541.07	-98.99	9659.76	50.17	196.27	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SKYWAY FEDERAL 31-11 AWB    Offset Wellpath: EX. SKYWAY FEDERAL 31-11 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SKYWAY FEDERAL 31-11 AWB Offset Wellpath: EX. SKYWAY FEDERAL 31-11 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7442.00	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <185-7442>	EX. SKYWAY FEDERAL 31-11 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SKYWAY FEDERAL 31-11 AWB Offset Wellpath: EX. SKYWAY FEDERAL 31-11 AWP	
MD Reference: Rig on SLOT#04 EX. SKYWAY FEDERAL 31-11 (450'FNL & 582'FWL, PR/NB-CD) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 142 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HERTZKE N 1-11 AWB Offset Wellpath: EX. HERTZKE N 1-11 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#02 EX. HERTZKE N 1-11 (2012'FSL & 1864'FWL, CODL/SI) Well: EX. HERTZKE N 1-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	22.00	20.00	948.90	-2824.49	-71.43	2979.62	50.21	60.48	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HERTZKE N 1-11 AWB Offset Wellpath: EX. HERTZKE N 1-11 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. HERTZKE N 1-11 AWB Offset Wellpath: EX. HERTZKE N 1-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7304.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7304>	EX. HERTZKE N 1-11 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HERTZKE N 1-11 AWB Offset Wellpath: EX. HERTZKE N 1-11 AWP

MD Reference: Rig on SLOT#02 EX. HERTZKE N 1-11 (2012'FSL & 1864'FWL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 143 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SKYWAY 18-11 AWB Offset Wellpath: EX. SKYWAY 18-11 AWP

Facility: SEC.11-T05N-R67W Slot: SLOT#01 EX. SKYWAY 18-11 (507'FNL & 650'FWL, PR/NB-CD) Well: EX. SKYWAY 18-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	52.61	13.61	-1567.28	-9474.47	-99.39	9603.23	50.17	195.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SKYWAY 18-11 AWB Offset Wellpath: EX. SKYWAY 18-11 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SKYWAY 18-11 AWB Offset Wellpath: EX. SKYWAY 18-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7919.00	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <179°-7919°>	EX. SKYWAY 18-11 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SKYWAY 18-11 AWB Offset Wellpath: EX. SKYWAY 18-11 AWP

MD Reference: Rig on SLOT#01 EX. SKYWAY 18-11 (507'FNL & 650'FWL, PR/NB-CD) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 144 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1 PWB Offset Wellpath: EX. GENESIS 9-1 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#02 EX. GENESIS 9-1 (750'FSL & 377'FEL, AL/PWP) Well: EX. GENESIS 9-1 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	3.00	20.00	-213.83	-71.54	-161.50	225.48	50.17	4.56	PASS	
120.00†	120.00	0.00	0.00	103.00	120.00	-213.83	-71.54	-161.50	225.48	50.22	4.56	PASS	
220.00†	220.00	0.00	0.00	203.00	220.00	-213.83	-71.54	-161.50	225.48	50.27	4.55	PASS	
320.00†	320.00	0.00	0.00	303.00	320.00	-213.83	-71.54	-161.50	225.48	50.33	4.55	PASS	
420.00†	420.00	0.00	0.00	403.00	420.00	-213.83	-71.54	-161.50	225.48	50.39	4.54	PASS	
520.00†	520.00	0.00	0.00	503.00	520.00	-213.83	-71.54	-161.50	225.48	50.46	4.54	PASS	
620.00†	620.00	0.00	0.00	603.00	620.00	-213.83	-71.54	-161.50	225.48	50.53	4.53	PASS	
700.00	700.00	0.00	0.00	683.00	700.00	-213.83	-71.54	-161.50	225.48	50.58	4.52	PASS	
720.00†	720.00	-0.04	0.06	703.00	720.00	-213.83	-71.54	75.21	225.46	50.60	4.52	PASS	
820.00†	819.96	-1.38	2.10	803.18	820.18	-213.83	-71.54	75.83	224.85	50.68	4.50	PASS	
920.00†	919.78	-4.64	7.06	909.99	926.96	-211.76	-71.97	77.76	221.81	50.80	4.43	PASS	
1020.00†	1019.33	-9.80	14.92	1015.68	1032.48	-205.88	-73.18	81.34	215.37	50.90	4.29	PASS	
1120.00†	1118.50	-16.87	25.69	1119.57	1135.91	-196.39	-75.14	86.77	206.63	51.00	4.11	PASS	
1200.18	1197.64	-23.91	36.40	1201.13	1216.82	-186.37	-77.21	92.60	199.17	51.10	3.95	PASS	
1220.00†	1217.16	-25.80	39.28	1221.04	1236.53	-183.59	-77.79	94.20	197.42	51.13	3.92	PASS	
1320.00†	1315.64	-35.34	53.80	1320.29	1334.43	-167.69	-81.07	103.02	189.89	51.35	3.75	PASS	
1420.00†	1414.12	-44.88	68.32	1417.41	1429.64	-148.93	-84.95	112.99	185.90	51.67	3.65	PASS	
1447.57†	1441.27	-47.51	72.32	1443.71	1455.31	-143.30	-86.11	115.88	185.67	51.77	3.64	PASS	
1471.07†	1464.42	-49.75	75.73	1466.14	1477.15	-138.33	-87.14	118.40	185.84	51.86	3.63	PASS	
1520.00†	1512.60	-54.42	82.84	1512.26	1521.94	-127.57	-89.36	123.69	187.32	52.06	3.65	PASS	
1620.00†	1611.08	-63.95	97.35	1604.72	1611.17	-103.87	-94.26	134.49	195.72	52.44	3.78	PASS	
1720.00†	1709.56	-73.49	111.87	1695.80	1698.61	-78.87	-99.42	144.53	211.65	52.72	4.07	PASS	
1820.00†	1808.04	-83.03	126.39	1786.88	1786.03	-53.85	-104.59	153.12	233.86	52.65	4.49	PASS	
1920.00†	1906.52	-92.56	140.91	1877.96	1873.46	-28.83	-109.76	160.26	260.75	52.77	5.00	PASS	
2020.00†	2005.00	-102.10	155.43	1969.05	1960.88	-3.81	-114.93	166.11	291.03	52.90	5.56	PASS	
2120.00†	2103.48	-111.64	169.95	2060.14	2048.32	21.21	-120.10	170.90	323.76	53.06	6.17	PASS	
2220.00†	2201.96	-121.18	184.46	2151.23	2135.75	46.23	-125.27	174.84	358.25	53.26	6.80	PASS	
2320.00†	2300.44	-130.71	198.98	2242.31	2223.18	71.25	-130.43	178.12	394.05	53.49	7.45	PASS	
2420.00†	2398.92	-140.25	213.50	2333.40	2310.61	96.26	-135.60	-179.14	430.82	53.75	8.11	PASS	
2520.00†	2497.40	-149.79	228.02	2424.48	2398.04	121.28	-140.77	-176.82	468.35	54.05	8.77	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 145 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1 PWB Offset Wellpath: EX. GENESIS 9-1 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#02 EX. GENESIS 9-1 (750'FSL & 377'FEL, AL/PWP) Well: EX. GENESIS 9-1 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2620.00†	2595.88	-159.33	242.54	2515.57	2485.47	146.29	-145.94	-174.83	506.46	54.37	9.42	PASS	
2720.00†	2694.36	-168.86	257.06	2606.65	2572.90	171.31	-151.11	-173.12	545.03	54.72	10.08	PASS	
2820.00†	2792.84	-178.40	271.58	2697.74	2660.33	196.32	-156.27	-171.63	583.98	55.10	10.72	PASS	
2920.00†	2891.32	-187.94	286.09	2788.82	2747.76	221.34	-161.44	-170.32	623.22	55.50	11.36	PASS	
3020.00†	2989.80	-197.48	300.61	2879.91	2835.19	246.35	-166.61	-169.16	662.71	55.93	11.99	PASS	
3120.00†	3088.28	-207.01	315.13	2970.99	2922.62	271.37	-171.78	-168.14	702.40	56.38	12.60	PASS	
3220.00†	3186.76	-216.55	329.65	3062.08	3010.05	296.38	-176.95	-167.22	742.27	56.84	13.21	PASS	
3320.00†	3285.24	-226.09	344.17	3153.16	3097.49	321.39	-182.11	-166.39	782.28	57.33	13.80	PASS	
3420.00†	3383.71	-235.62	358.69	3244.25	3184.92	346.41	-187.28	-165.65	822.42	57.84	14.38	PASS	
3520.00†	3482.19	-245.16	373.20	3335.33	3272.35	371.42	-192.45	-164.97	862.68	58.36	14.95	PASS	
3620.00†	3580.67	-254.70	387.72	3426.42	3359.78	396.44	-197.62	-164.35	903.00	58.90	15.51	PASS	
3720.00†	3679.15	-264.24	402.24	3517.50	3447.21	421.45	-202.79	-163.79	943.41	59.46	16.05	PASS	
3820.00†	3777.63	-273.77	416.76	3608.59	3534.64	446.47	-207.95	-163.27	983.90	60.03	16.57	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. GENESIS 9-1 PWB Offset Wellpath: EX. GENESIS 9-1 PWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. GENESIS 9-1 PWB Offset Wellpath: EX. GENESIS 9-1 PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8177.06	ISOWSA MWD, Rev. 4 (Standard)	DIRECTIONAL PLAN PROVIDED BY SRC <800'-8177.06'>	EX. GENESIS 9-1 PWB



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 146 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. GENESIS 9-1 PWB Offset Wellpath: EX. GENESIS 9-1 PWP	
MD Reference: Rig on SLOT#02 EX. GENESIS 9-1 (750'FSL & 377'FEL, AL/PWP) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 147 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. HIGH POINTE LLC 10E-402 PWB Offset Wellpath: EX. HIGH POINTE LLC 10E-402 PWP

Facility: SEC.10-T05N-R67W Slot: SLOT#01 EX. HIGH POINTE LLC 10E-402 (739'FNL & 425'FWL, XX) Well: EX. HIGH POINTE LLC 10E-402 Threshold Value=1.00 † = Interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	11542.31	7156.01	-1217.09	-10621.48	-96.54	12853.78	67.43	193.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HIGH POINTE LLC 10E-402 PWB Offset Wellpath: EX. HIGH POINTE LLC 10E-402 PWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. HIGH POINTE LLC 10E-402 PWB Offset Wellpath: EX. HIGH POINTE LLC 10E-402 PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	11542.31	ISCWSA MWD, Rev. 4 (SAG)	MWD PWP SURVEYS PROVIDED BY SRC <800-11542.31>	EX. HIGH POINTE LLC 10E-402 PWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HIGH POINTE LLC 10E-402 PWB Offset Wellpath: EX. HIGH POINTE LLC 10E-402 PWP

MD Reference: Rig on SLOT#01 EX. HIGH POINTE LLC 10E-402 (739'FNL & 425'FWL, XX) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 148 of 184



REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. HSR-KNOX 16-3 AWB Offset Wellpath: EX. HSR-KNOX 16-3 AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#07 EX. HSR-KNOX 16-3 (527' FSL & 831'FEL, AB/NB-CD) Well: EX. HSR-KNOX 16-3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	-5.00	20.00	-524.70	-10988.71	-92.73	11001.23	25.57	447.13	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. HSR-KNOX 16-3 AWB Offset Wellpath: EX. HSR-KNOX 16-3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. HSR-KNOX 16-3 AWB Offset Wellpath: EX. HSR-KNOX 16-3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7301.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7301'>	EX. HSR-KNOX 16-3 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. HSR-KNOX 16-3 AWB Offset Wellpath: EX. HSR-KNOX 16-3 AWP

MD Reference: Rig on SLOT#07 EX. HSR-KNOX 16-3 (527' FSL & 831'FEL, AB/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 149 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	15.00	20.00	948.53	-10944.36	-85.05	10985.39	50.17	223.24	PASS	
120.00†	120.00	0.00	0.00	134.56	139.56	948.83	-10944.22	-85.05	10985.29	50.17	223.22	PASS	
220.00†	220.00	0.00	0.00	234.67	239.67	949.12	-10943.98	-85.04	10985.08	50.19	223.15	PASS	
320.00†	320.00	0.00	0.00	307.64	312.64	949.05	-10943.95	-85.04	10985.03	50.20	223.07	PASS	
420.00†	420.00	0.00	0.00	401.73	406.73	948.74	-10944.08	-85.05	10985.13	50.23	222.94	PASS	
520.00†	520.00	0.00	0.00	540.71	545.71	948.35	-10943.90	-85.05	10984.95	50.27	222.76	PASS	
620.00†	620.00	0.00	0.00	594.27	599.26	948.33	-10943.89	-85.05	10984.92	50.30	222.62	PASS	
700.00	700.00	0.00	0.00	657.05	662.04	948.43	-10944.09	-85.05	10985.18	50.34	222.47	PASS	
720.00†	720.00	-0.04	0.06	678.38	683.38	948.44	-10944.16	151.65	10985.31	50.35	222.43	PASS	
820.00†	819.96	-1.38	2.10	796.34	801.33	948.28	-10944.49	151.63	10987.73	50.41	222.17	PASS	
920.00†	919.78	-4.64	7.06	935.71	940.70	947.98	-10944.50	151.60	10992.93	50.53	221.75	PASS	
1020.00†	1019.33	-9.80	14.92	1037.95	1042.94	948.24	-10944.24	151.55	11000.99	50.65	221.39	PASS	
1120.00†	1118.50	-16.87	25.69	1251.36	1256.35	948.24	-10773.38	150.04	11007.01	56.07	199.72	PASS	
1200.18	1197.64	-23.91	36.40	1329.97	1334.96	948.24	-10768.78	150.04	11003.23	56.37	198.56	PASS	
1220.00†	1217.16	-25.80	39.28	1327.07	1332.06	948.24	-10767.65	150.04	11002.59	56.44	198.30	PASS	
1320.00†	1315.64	-35.34	53.80	1330.25	1335.24	948.24	-10760.91	149.99	10999.71	56.83	196.87	PASS	
1420.00†	1414.12	-44.88	68.32	1382.81	1387.80	948.24	-10752.85	149.94	10997.30	57.28	195.27	PASS	
1520.00†	1512.60	-54.42	82.84	1507.13	1512.12	948.24	-10733.49	149.81	10994.70	58.17	192.18	PASS	
1620.00†	1611.08	-63.95	97.35	1639.64	1644.63	948.24	-10728.59	149.78	10992.62	58.52	190.98	PASS	
1720.00†	1709.56	-73.49	111.87	1795.10	1800.09	948.24	-10671.95	149.27	10990.76	61.69	180.98	PASS	
1820.00†	1808.04	-83.03	126.39	1904.91	1909.90	948.24	-10651.58	149.12	10986.36	62.56	177.61	PASS	
1920.00†	1906.52	-92.56	140.91	2014.63	2019.62	948.24	-10642.98	149.06	10982.24	63.06	176.13	PASS	
2020.00†	2005.00	-102.10	155.43	2114.26	2119.25	948.24	-10638.64	149.03	10978.73	63.37	175.21	PASS	
2120.00†	2103.48	-111.64	169.95	2213.48	2218.47	948.24	-10634.43	149.00	10975.90	63.69	174.27	PASS	
2220.00†	2201.96	-121.18	184.46	2312.69	2317.68	948.24	-10628.13	148.96	10973.74	64.13	173.01	PASS	
2320.00†	2300.44	-130.71	198.98	2411.90	2416.89	948.24	-10613.84	148.87	10971.75	65.01	170.61	PASS	
2420.00†	2398.92	-140.25	213.50	2511.11	2516.10	948.24	-10605.38	148.81	10970.08	65.61	169.01	PASS	
2520.00†	2497.40	-149.79	228.02	2610.32	2615.31	948.24	-10578.30	148.61	10968.13	67.30	164.71	PASS	
2620.00†	2595.88	-159.33	242.54	2709.53	2714.52	948.24	-10572.31	148.56	10966.26	67.82	163.39	PASS	
2720.00†	2694.36	-168.86	257.06	2808.74	2813.73	948.24	-10566.31	148.52	10964.95	68.37	162.05	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 150 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2820.00†	2792.84	-178.40	271.58	4673.93	4512.00	63.92	-10554.05	148.42	10963.96	69.31	159.81	PASS	
2920.00†	2891.32	-187.94	286.09	4711.37	4547.39	52.88	-10548.79	148.38	10963.36	69.84	158.58	PASS	
3020.00†	2989.80	-197.48	300.61	4748.85	4582.87	41.93	-10543.71	148.34	10963.33	70.38	157.35	PASS	
3120.00†	3088.28	-207.01	315.13	4816.15	4646.59	22.15	-10534.91	148.27	10963.77	71.19	155.54	PASS	
3220.00†	3186.76	-216.55	329.65	4959.72	4781.65	-22.73	-10516.05	148.11	10964.06	72.75	152.19	PASS	
3320.00†	3285.24	-226.09	344.17	5017.89	4836.26	-41.28	-10508.47	148.04	10964.47	73.57	150.48	PASS	
3420.00†	3383.71	-235.62	358.69	5109.02	4922.18	-69.23	-10496.62	147.94	10965.04	74.68	148.23	PASS	
3520.00†	3482.19	-245.16	373.20	5469.45	5265.20	-167.58	-10446.16	147.60	10965.57	78.08	141.72	PASS	
3620.00†	3580.67	-254.70	387.72	5508.14	5302.16	-177.34	-10440.25	147.56	10964.24	78.68	140.60	PASS	
3720.00†	3679.15	-264.24	402.24	5544.23	5336.78	-186.02	-10434.91	147.54	10963.47	79.26	139.55	PASS	
3820.00†	3777.63	-273.77	416.76	5578.36	5369.67	-193.73	-10430.03	147.51	10963.30	79.82	138.56	PASS	
3920.00†	3876.11	-283.31	431.28	5612.40	5402.61	-200.91	-10425.35	147.49	10963.73	80.39	137.59	PASS	
4020.00†	3974.59	-292.85	445.80	5643.96	5433.25	-207.22	-10421.19	147.48	10964.78	80.92	136.69	PASS	
4120.00†	4073.07	-302.39	460.32	5675.56	5464.01	-213.28	-10417.21	147.46	10966.46	81.45	135.81	PASS	
4220.00†	4171.55	-311.92	474.83	5708.91	5496.55	-219.42	-10413.21	147.44	10968.75	82.00	134.91	PASS	
4320.00†	4270.03	-321.46	489.35	5745.36	5532.12	-226.19	-10409.04	147.43	10971.64	82.58	134.00	PASS	
4420.00†	4368.51	-331.00	503.87	5782.09	5567.96	-233.14	-10405.06	147.41	10975.11	83.16	133.10	PASS	
4520.00†	4466.99	-340.53	518.39	5833.95	5618.64	-242.73	-10399.68	147.38	10979.08	83.85	132.04	PASS	
4620.00†	4565.47	-350.07	532.91	5884.61	5668.29	-251.48	-10394.64	147.36	10983.49	84.52	131.04	PASS	
4720.00†	4663.95	-359.61	547.43	5933.30	5716.13	-259.25	-10389.99	147.35	10988.37	85.17	130.09	PASS	
4820.00†	4762.43	-369.15	561.94	5976.06	5758.24	-265.56	-10386.10	147.33	10993.73	85.78	129.23	PASS	
4920.00†	4860.91	-378.68	576.46	6015.43	5797.08	-271.00	-10382.73	147.32	10999.63	86.35	128.42	PASS	
5020.00†	4959.39	-388.22	590.98	6057.03	5838.20	-276.36	-10379.38	147.32	11006.08	86.94	127.63	PASS	
5120.00†	5057.87	-397.76	605.50	6101.34	5882.07	-281.57	-10376.03	147.31	11013.03	87.53	126.84	PASS	
5220.00†	5156.35	-407.30	620.02	6163.71	5943.94	-288.10	-10371.60	147.31	11020.45	88.20	125.95	PASS	
5320.00†	5254.83	-416.83	634.54	6219.21	5999.06	-293.36	-10367.76	147.31	11028.13	88.83	125.13	PASS	
5420.00†	5353.31	-426.37	649.06	6245.07	6024.77	-295.58	-10366.14	147.31	11036.41	89.31	124.55	PASS	
5520.00†	5451.79	-435.91	663.57	6270.88	6050.46	-297.61	-10364.68	147.31	11045.36	89.79	123.98	PASS	
5620.00†	5550.27	-445.45	678.09	6296.16	6075.64	-299.41	-10363.42	147.32	11054.97	90.27	123.43	PASS	
5720.00†	5648.75	-454.98	692.61	6318.35	6097.77	-300.87	-10362.46	147.32	11065.26	90.72	122.92	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 151 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5820.00†	5747.23	-464.52	707.13	6340.51	6119.88	-302.19	-10361.66	147.32	11076.25	91.17	122.43	PASS	
5920.00†	5845.71	-474.06	721.65	6362.63	6141.95	-303.40	-10361.01	147.33	11087.93	91.63	121.95	PASS	
6020.00†	5944.19	-483.59	736.17	6388.41	6167.69	-304.64	-10360.44	147.33	11100.30	92.09	121.46	PASS	
6120.00†	6042.67	-493.13	750.68	6422.64	6201.90	-305.93	-10359.87	147.34	11113.27	92.58	120.96	PASS	
6220.00†	6141.15	-502.67	765.20	6456.76	6236.00	-306.78	-10359.50	147.36	11126.83	93.06	120.47	PASS	
6320.00†	6239.63	-512.21	779.72	6484.17	6263.41	-307.18	-10359.35	147.37	11140.99	93.50	120.05	PASS	
6333.38	6252.80	-513.48	781.66	6487.63	6266.87	-307.21	-10359.35	147.37	11142.93	93.56	120.00	PASS	
6420.00†	6338.69	-521.84	788.38	6510.17	6289.41	-307.36	-10359.39	96.70	11149.94	93.97	119.54	PASS	
6520.00†	6437.87	-531.58	781.50	6536.19	6315.43	-307.37	-10359.59	34.99	11144.02	94.80	118.44	PASS	
6620.00†	6534.75	-541.19	759.12	6552.34	6331.58	-307.29	-10359.80	19.54	11123.24	96.00	116.72	PASS	
6720.00†	6626.95	-550.44	721.78	6560.11	6339.34	-307.24	-10359.97	13.98	11088.15	96.94	115.22	PASS	
6820.00†	6712.19	-559.10	670.41	6567.37	6346.60	-307.20	-10360.19	11.33	11039.53	97.68	113.83	PASS	
6920.00†	6788.37	-566.95	606.27	6573.98	6353.20	-307.17	-10360.43	9.95	10978.40	98.26	112.53	PASS	
7020.00†	6853.62	-573.80	530.93	6579.77	6358.99	-307.14	-10360.67	9.31	10906.09	98.69	111.30	PASS	
7120.00†	6906.33	-579.49	446.27	6584.60	6363.81	-307.12	-10360.90	9.27	10824.20	98.97	110.15	PASS	
7220.00†	6945.20	-583.87	354.35	6588.34	6367.55	-307.10	-10361.10	10.00	10734.57	99.14	109.05	PASS	
7320.00†	6969.29	-586.83	257.44	6590.88	6370.08	-307.09	-10361.24	12.54	10639.25	99.21	108.00	PASS	
7420.00†	6977.98	-588.31	157.94	6592.11	6371.31	-307.08	-10361.31	26.96	10540.47	99.23	106.98	PASS	
7428.43	6978.00	-588.37	149.50	6592.15	6371.35	-307.08	-10361.31	31.38	10532.06	99.23	106.89	PASS	
7478.43	6977.79	-588.66	99.50	6592.38	6371.58	-307.08	-10361.32	31.40	10482.16	99.22	106.39	PASS	
7520.00†	6977.61	-589.21	57.94	6592.57	6371.78	-307.08	-10361.33	41.34	10440.68	99.22	105.98	PASS	
7536.58	6977.55	-589.59	41.36	6592.65	6371.85	-307.08	-10361.34	44.63	10424.15	99.22	105.81	PASS	
7620.00†	6977.19	-591.78	-42.02	6593.04	6372.24	-307.08	-10361.36	44.65	10340.97	99.21	104.98	PASS	
7720.00†	6976.77	-594.39	-141.99	6593.52	6372.72	-307.08	-10361.39	44.67	10241.27	99.20	103.97	PASS	
7820.00†	6976.35	-597.01	-241.95	6594.01	6373.21	-307.08	-10361.42	44.70	10141.57	99.20	102.97	PASS	
7920.00†	6975.93	-599.63	-341.92	6594.50	6373.70	-307.07	-10361.45	44.72	10041.87	99.19	101.96	PASS	
8020.00†	6975.51	-602.25	-441.88	6595.01	6374.20	-307.07	-10361.48	44.75	9942.18	99.19	100.94	PASS	
8120.00†	6975.09	-604.86	-541.85	6595.52	6374.72	-307.07	-10361.51	44.78	9842.50	99.20	99.93	PASS	
8220.00†	6974.67	-607.48	-641.81	6596.04	6375.24	-307.07	-10361.54	44.80	9742.82	99.21	98.91	PASS	
8320.00†	6974.25	-610.10	-741.78	6596.58	6375.77	-307.07	-10361.57	44.83	9643.15	99.22	97.88	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 152 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8420.00†	6973.83	-612.72	-841.74	6597.12	6376.31	-307.07	-10361.61	44.86	9543.49	99.23	96.86	PASS	
8520.00†	6973.41	-615.33	-941.71	6597.68	6376.87	-307.07	-10361.64	44.89	9443.84	99.25	95.83	PASS	
8620.00†	6972.99	-617.95	-1041.67	6598.24	6377.43	-307.06	-10361.68	44.92	9344.19	99.28	94.79	PASS	
8720.00†	6972.57	-620.57	-1141.64	6598.82	6378.01	-307.06	-10361.71	44.95	9244.54	99.30	93.76	PASS	
8820.00†	6972.15	-623.19	-1241.60	6599.41	6378.60	-307.06	-10361.75	44.98	9144.91	99.33	92.72	PASS	
8920.00†	6971.73	-625.81	-1341.57	6600.01	6379.20	-307.06	-10361.79	45.01	9045.28	99.37	91.67	PASS	
9020.00†	6971.31	-628.42	-1441.53	6600.62	6379.81	-307.06	-10361.83	45.04	8945.66	99.41	90.63	PASS	
9120.00†	6970.88	-631.04	-1541.50	6601.25	6380.43	-307.06	-10361.87	45.07	8846.05	99.45	89.58	PASS	
9220.00†	6970.46	-633.66	-1641.46	6601.89	6381.07	-307.06	-10361.92	45.10	8746.45	99.51	88.52	PASS	
9320.00†	6970.04	-636.28	-1741.43	6602.54	6381.72	-307.06	-10361.96	45.14	8646.85	99.56	87.47	PASS	
9420.00†	6969.62	-638.89	-1841.39	6603.20	6382.39	-307.06	-10362.01	45.17	8547.27	99.62	86.40	PASS	
9520.00†	6969.20	-641.51	-1941.36	6603.89	6383.07	-307.06	-10362.05	45.21	8447.69	99.69	85.34	PASS	
9620.00†	6968.78	-644.13	-2041.32	6604.58	6383.76	-307.06	-10362.10	45.24	8348.13	99.76	84.27	PASS	
9720.00†	6968.36	-646.75	-2141.29	6605.30	6384.47	-307.06	-10362.15	45.28	8248.57	99.84	83.20	PASS	
9820.00†	6967.94	-649.36	-2241.25	6606.02	6385.20	-307.06	-10362.20	45.32	8149.03	99.93	82.13	PASS	
9920.00†	6967.52	-651.98	-2341.22	6606.77	6385.94	-307.07	-10362.26	45.36	8049.49	100.02	81.05	PASS	
10020.00†	6967.10	-654.60	-2441.18	6607.53	6386.70	-307.07	-10362.31	45.40	7949.97	100.12	79.96	PASS	
10120.00†	6966.68	-657.22	-2541.15	6608.31	6387.47	-307.07	-10362.37	45.44	7850.45	100.23	78.88	PASS	
10220.00†	6966.26	-659.84	-2641.11	6609.10	6388.27	-307.07	-10362.43	45.48	7750.95	100.34	77.79	PASS	
10320.00†	6965.84	-662.45	-2741.08	6609.92	6389.08	-307.07	-10362.49	45.52	7651.46	100.47	76.69	PASS	
10420.00†	6965.42	-665.07	-2841.04	6610.75	6389.91	-307.08	-10362.55	45.57	7551.99	100.60	75.59	PASS	
10520.00†	6965.00	-667.69	-2941.01	6611.61	6390.77	-307.08	-10362.62	45.61	7452.53	100.74	74.49	PASS	
10620.00†	6964.58	-670.31	-3040.97	6612.48	6391.64	-307.08	-10362.69	45.66	7353.08	100.89	73.39	PASS	
10720.00†	6964.15	-672.92	-3140.93	6613.38	6392.54	-307.09	-10362.76	45.70	7253.64	101.06	72.28	PASS	
10820.00†	6963.73	-675.54	-3240.90	6614.30	6393.45	-307.09	-10362.83	45.75	7154.22	101.23	71.16	PASS	
10920.00†	6963.31	-678.16	-3340.86	6615.25	6394.40	-307.10	-10362.91	45.80	7054.82	101.41	70.05	PASS	
11020.00†	6962.89	-680.78	-3440.83	6616.22	6395.36	-307.10	-10362.99	45.85	6955.43	101.61	68.93	PASS	
11120.00†	6962.47	-683.39	-3540.79	6617.21	6396.35	-307.11	-10363.07	45.91	6856.06	101.82	67.80	PASS	
11220.00†	6962.05	-686.01	-3640.76	6618.23	6397.37	-307.11	-10363.15	45.96	6756.70	102.04	66.67	PASS	
11320.00†	6961.63	-688.63	-3740.72	6619.28	6398.42	-307.12	-10363.24	46.02	6657.37	102.28	65.54	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 153 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = Interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
11420.00†	6961.21	-691.25	-3840.69	6620.36	6399.49	-307.13	-10363.34	46.07	6558.05	102.53	64.40	PASS	
11520.00†	6960.79	-693.86	-3940.65	6621.47	6400.59	-307.14	-10363.43	46.13	6458.75	102.80	63.26	PASS	
11620.00†	6960.37	-696.48	-4040.62	6622.61	6401.73	-307.14	-10363.53	46.19	6359.47	103.08	62.11	PASS	
11636.58	6960.30	-696.92	-4057.20	6622.80	6401.92	-307.15	-10363.55	46.20	6343.01	103.13	61.92	PASS	
11720.00†	6959.95	-697.89	-4140.60	6623.77	6402.89	-307.15	-10363.64	35.06	6260.12	103.35	60.98	PASS	
11739.19	6959.87	-697.77	-4159.80	6624.00	6403.12	-307.16	-10363.66	31.94	6241.03	103.39	60.77	PASS	
11820.00†	6959.53	-696.99	-4240.60	6624.97	6404.09	-307.17	-10363.74	31.99	6160.63	103.55	59.90	PASS	
11920.00†	6959.10	-696.02	-4340.59	6626.21	6405.31	-307.18	-10363.86	32.05	6061.15	103.77	58.81	PASS	
12020.00†	6958.68	-695.06	-4440.59	6627.48	6406.58	-307.19	-10363.97	32.11	5961.69	103.99	57.72	PASS	
12120.00†	6958.26	-694.10	-4540.58	6628.79	6407.88	-307.20	-10364.10	32.17	5862.25	104.23	56.62	PASS	
12220.00†	6957.84	-693.13	-4640.58	6630.14	6409.22	-307.22	-10364.23	32.24	5762.82	104.47	55.53	PASS	
12320.00†	6957.42	-692.17	-4740.57	6631.52	6410.61	-307.23	-10364.36	32.30	5663.41	104.73	54.44	PASS	
12420.00†	6957.00	-691.20	-4840.57	6632.96	6412.03	-307.25	-10364.50	32.37	5564.02	105.01	53.34	PASS	
12520.00†	6956.57	-690.24	-4940.56	6634.38	6413.45	-307.27	-10364.64	32.44	5464.64	105.29	52.24	PASS	
12620.00†	6956.15	-689.28	-5040.55	6635.73	6414.79	-307.29	-10364.78	32.51	5365.29	105.59	51.15	PASS	
12720.00†	6955.73	-688.31	-5140.55	6637.12	6416.17	-307.30	-10364.92	32.58	5265.96	105.91	50.05	PASS	
12820.00†	6955.31	-687.35	-5240.54	6638.55	6417.60	-307.32	-10365.07	32.65	5166.66	106.25	48.95	PASS	
12920.00†	6954.89	-686.38	-5340.54	6640.04	6419.07	-307.34	-10365.23	32.72	5067.38	106.60	47.85	PASS	
13020.00†	6954.47	-685.42	-5440.53	6641.57	6420.60	-307.37	-10365.40	32.79	4968.12	106.97	46.75	PASS	
13120.00†	6954.04	-684.46	-5540.53	6643.16	6422.18	-307.39	-10365.57	32.87	4868.89	107.36	45.64	PASS	
13220.00†	6953.62	-683.49	-5640.52	6644.81	6423.82	-307.41	-10365.76	32.95	4769.69	107.78	44.54	PASS	
13320.00†	6953.20	-682.53	-5740.52	6646.52	6425.51	-307.44	-10365.95	33.04	4670.52	108.22	43.44	PASS	
13420.00†	6952.78	-681.57	-5840.51	6648.29	6427.27	-307.47	-10366.15	33.13	4571.39	108.68	42.33	PASS	
13520.00†	6952.36	-680.60	-5940.50	6650.12	6429.10	-307.50	-10366.37	33.22	4472.28	109.17	41.23	PASS	
13620.00†	6951.94	-679.64	-6040.50	6652.03	6430.99	-307.53	-10366.60	33.32	4373.21	109.69	40.12	PASS	
13720.00†	6951.51	-678.67	-6140.49	6654.01	6432.96	-307.56	-10366.84	33.42	4274.18	110.25	39.01	PASS	
13820.00†	6951.09	-677.71	-6240.49	6656.08	6435.00	-307.60	-10367.10	33.52	4175.19	110.83	37.91	PASS	
13920.00†	6950.67	-676.75	-6340.48	6658.22	6437.13	-307.64	-10367.37	33.63	4076.25	111.46	36.80	PASS	
14020.00†	6950.25	-675.78	-6440.48	6660.46	6439.35	-307.68	-10367.66	33.74	3977.35	112.12	35.69	PASS	
14120.00†	6949.83	-674.82	-6540.47	6662.79	6441.66	-307.72	-10367.97	33.87	3878.49	112.83	34.58	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 154 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
14220.00†	6949.41	-673.86	-6640.47	6665.22	6444.07	-307.77	-10368.29	33.99	3779.70	113.59	33.48	PASS	
14320.00†	6948.98	-672.89	-6740.46	6667.76	6446.58	-307.82	-10368.64	34.13	3680.95	114.40	32.37	PASS	
14420.00†	6948.56	-671.93	-6840.45	6670.42	6449.21	-307.87	-10369.02	34.27	3582.27	115.26	31.27	PASS	
14520.00†	6948.14	-670.96	-6940.45	6673.20	6451.96	-307.93	-10369.42	34.41	3483.65	116.18	30.16	PASS	
14620.00†	6947.72	-670.00	-7040.44	6676.14	6454.87	-307.99	-10369.85	34.57	3385.10	117.18	29.06	PASS	
14720.00†	6947.30	-669.04	-7140.44	6680.01	6458.69	-308.08	-10370.43	34.78	3286.62	118.24	27.96	PASS	
14820.00†	6946.87	-668.07	-7240.43	6684.05	6462.69	-308.18	-10371.05	34.99	3188.22	119.39	26.86	PASS	
14920.00†	6946.45	-667.11	-7340.43	6688.29	6466.87	-308.28	-10371.72	35.23	3089.90	120.62	25.76	PASS	
15020.00†	6946.03	-666.15	-7440.42	6692.74	6471.26	-308.39	-10372.44	35.47	2991.67	121.95	24.67	PASS	
15120.00†	6945.61	-665.18	-7540.42	6697.40	6475.86	-308.51	-10373.20	35.73	2893.54	123.39	23.58	PASS	
15220.00†	6945.19	-664.22	-7640.41	6702.31	6480.69	-308.64	-10374.03	36.01	2795.51	124.95	22.49	PASS	
15320.00†	6944.77	-663.25	-7740.40	6707.47	6485.78	-308.79	-10374.93	36.31	2697.60	126.64	21.42	PASS	
15420.00†	6944.34	-662.29	-7840.40	6712.91	6491.13	-308.95	-10375.89	36.62	2599.80	128.47	20.34	PASS	
15520.00†	6943.92	-661.33	-7940.39	6718.66	6496.77	-309.13	-10376.94	36.96	2502.15	130.47	19.28	PASS	
15620.00†	6943.50	-660.36	-8040.39	6725.38	6503.38	-309.34	-10378.20	37.36	2404.64	132.64	18.22	PASS	
15720.00†	6943.08	-659.40	-8140.38	6732.52	6510.38	-309.58	-10379.57	37.79	2307.29	135.03	17.17	PASS	
15820.00†	6942.66	-658.44	-8240.38	6740.06	6517.76	-309.83	-10381.06	38.26	2210.11	137.64	16.14	PASS	
15920.00†	6942.24	-657.47	-8340.37	6748.03	6525.56	-310.11	-10382.67	38.77	2113.12	140.51	15.11	PASS	
16020.00†	6941.81	-656.51	-8440.37	6756.47	6533.81	-310.41	-10384.44	39.31	2016.35	143.68	14.10	PASS	
16120.00†	6941.39	-655.54	-8540.36	6764.95	6542.09	-310.73	-10386.25	39.87	1919.81	147.20	13.10	PASS	
16220.00†	6940.97	-654.58	-8640.35	6773.17	6550.10	-311.04	-10388.08	40.43	1823.55	151.11	12.12	PASS	
16320.00†	6940.55	-653.62	-8740.35	6781.96	6558.65	-311.38	-10390.09	41.04	1727.61	155.47	11.16	PASS	
16420.00†	6940.13	-652.65	-8840.34	6790.45	6566.89	-311.72	-10392.10	41.64	1632.02	160.38	10.22	PASS	
16520.00†	6939.71	-651.69	-8940.34	6798.89	6575.06	-312.07	-10394.19	42.25	1536.88	165.91	9.30	PASS	
16620.00†	6939.28	-650.72	-9040.33	6808.10	6583.95	-312.47	-10396.57	42.93	1442.24	172.17	8.41	PASS	
16720.00†	6938.86	-649.76	-9140.33	6818.19	6593.66	-312.94	-10399.29	43.69	1348.19	179.29	7.55	PASS	
16820.00†	6938.44	-648.80	-9240.32	6829.04	6604.05	-313.48	-10402.36	44.53	1254.83	187.45	6.72	PASS	
16920.00†	6938.02	-647.83	-9340.32	6839.00	6613.54	-314.01	-10405.33	45.32	1162.32	196.89	5.92	PASS	
17020.00†	6937.60	-646.87	-9440.31	6850.21	6624.15	-314.64	-10408.87	46.23	1070.86	207.84	5.17	PASS	
17120.00†	6937.18	-645.91	-9540.31	6862.89	6636.07	-315.40	-10413.13	47.28	980.67	220.65	4.46	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 155 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) Well: EX. SHURVIEW 13N-3HZ Threshold Value=1.00 † = interpolated/extrapolated station											
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	ACR Status
17161.54	6937.00	-645.51	-9581.84	6868.65	6641.46	-315.76	-10415.15	47.77	943.65	226.62	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1217.00	BHI Generic gyro - continuous (Standard)	MS GYRODATA SURVEYS <17-1217>	EX. SHURVIEW 13N-3HZ AWB
1217.00	7455.00	BHI NaviTrak (Standard)	8 3/4" VERTICAL CURVE SECTION <1333-7455>	EX. SHURVIEW 13N-3HZ AWB
7455.00	11258.00	BHI OnTrak (Standard)	6 1/8" LATERAL SECTION <7553-11325>	EX. SHURVIEW 13N-3HZ AWB
11258.00	11325.00	Blind Drilling (std)	Projection to bit	EX. SHURVIEW 13N-3HZ AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHURVIEW 13N-3HZ AWB Offset Wellpath: EX. SHURVIEW 13N-3HZ AWP

MD Reference: Rig on SLOT#03 EX. SHURVIEW 13N-3HZ (1999'FSL & 1164'FEL, NBRR/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 156 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. E JOHNSON FEDERAL 2-23 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-23 AWP

Facility: SEC.02-T05N-R67W						Slot: SLOT#04 EX. E. JOHNSON FEDERAL 2-23 (2129'FNL & 498'FWL, CODL/SI)		Well: EX. E JOHNSON FEDERAL 2-23		Threshold Value=1.00		† = interpolated/extrapolated station	
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	41.00	20.00	2705.96	-8985.63	-73.24	9384.23	50.25	190.38	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. E JOHNSON FEDERAL 2-23 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-23 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. E JOHNSON FEDERAL 2-23 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-23 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7347.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7347>	EX. E JOHNSON FEDERAL 2-23 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. E JOHNSON FEDERAL 2-23 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-23 AWP

MD Reference: Rig on SLOT#04 EX. E. JOHNSON FEDERAL 2-23 (2129'FNL & 498'FWL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 157 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. E JOHNSON FEDERAL 2-24 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-24 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#05 EX. E. JOHNSON FEDERAL 2-24 (2074'FNL & 1707'FWL, CODL/PR) Well: EX. E JOHNSON FEDERAL 2-24 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	36.00	20.00	2734.67	-7699.46	-70.45	8170.68	50.24	165.79	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. E JOHNSON FEDERAL 2-24 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-24 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. E JOHNSON FEDERAL 2-24 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-24 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7386.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7386>	EX. E JOHNSON FEDERAL 2-24 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. E JOHNSON FEDERAL 2-24 AWB Offset Wellpath: EX. E JOHNSON FEDERAL 2-24 AWP

MD Reference: Rig on SLOT#05 E. JOHNSON FEDERAL 2-24 (2074'FNL & 1707'FWL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 158 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#03 EX. GENESIS 9-1-20 (725'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-20 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	3.00	20.00	-239.33	-82.68	-160.94	253.21	50.17	5.13	PASS	
120.00†	120.00	0.00	0.00	103.00	120.00	-239.33	-82.68	-160.94	253.21	50.23	5.12	PASS	
220.00†	220.00	0.00	0.00	203.00	220.00	-239.33	-82.68	-160.94	253.21	50.29	5.11	PASS	
320.00†	320.00	0.00	0.00	303.00	320.00	-239.33	-82.68	-160.94	253.21	50.36	5.11	PASS	
420.00†	420.00	0.00	0.00	403.00	420.00	-239.33	-82.68	-160.94	253.21	50.43	5.10	PASS	
520.00†	520.00	0.00	0.00	503.00	520.00	-239.33	-82.68	-160.94	253.21	50.51	5.09	PASS	
620.00†	620.00	0.00	0.00	603.00	620.00	-239.33	-82.68	-160.94	253.21	50.59	5.08	PASS	
700.00	700.00	0.00	0.00	683.00	700.00	-239.33	-82.68	-160.94	253.21	50.66	5.08	PASS	
720.00†	720.00	-0.04	0.06	703.00	720.00	-239.33	-82.68	75.77	253.19	50.67	5.07	PASS	
820.00†	819.96	-1.38	2.10	802.96	819.96	-239.33	-82.68	76.32	252.60	50.76	5.05	PASS	
920.00†	919.78	-4.64	7.06	902.78	919.78	-239.33	-82.68	77.66	251.27	50.86	5.02	PASS	
1020.00†	1019.33	-9.80	14.92	1002.37	1019.37	-239.33	-82.68	79.80	249.42	50.96	4.97	PASS	
1120.00†	1118.50	-16.87	25.69	1102.37	1119.35	-238.37	-84.23	83.19	247.27	51.12	4.91	PASS	
1200.18	1197.64	-23.91	36.40	1181.21	1198.09	-236.31	-87.54	87.03	245.91	51.26	4.87	PASS	
1220.00†	1217.16	-25.80	39.28	1200.49	1217.32	-235.63	-88.63	88.10	245.74	51.29	4.86	PASS	
1247.25†	1243.99	-28.40	43.24	1226.68	1243.44	-234.60	-90.29	89.61	245.65	51.35	4.86	PASS	
1279.56†	1275.81	-31.48	47.93	1258.02	1274.67	-233.20	-92.53	91.48	245.80	51.41	4.85	PASS	
1320.00†	1315.64	-35.34	53.80	1296.74	1313.21	-231.22	-95.71	93.89	246.43	51.48	4.86	PASS	
1420.00†	1414.12	-44.88	68.32	1391.18	1406.97	-225.24	-105.31	100.17	250.46	51.68	4.92	PASS	
1520.00†	1512.60	-54.42	82.84	1483.66	1498.37	-217.81	-117.25	106.69	258.72	51.87	5.06	PASS	
1620.00†	1611.08	-63.95	97.35	1574.06	1587.22	-209.04	-131.34	113.17	271.88	52.03	5.31	PASS	
1720.00†	1709.56	-73.49	111.87	1662.26	1673.38	-199.06	-147.37	119.38	290.32	52.13	5.65	PASS	
1820.00†	1808.04	-83.03	126.39	1750.95	1759.46	-187.77	-165.49	125.26	313.89	51.95	6.11	PASS	
1920.00†	1906.52	-92.56	140.91	1842.18	1847.91	-175.97	-184.45	130.56	340.96	52.07	6.62	PASS	
2020.00†	2005.00	-102.10	155.43	1933.41	1936.37	-164.17	-203.41	135.11	370.58	52.23	7.18	PASS	
2120.00†	2103.48	-111.64	169.95	2024.64	2024.82	-152.36	-222.37	139.03	402.19	52.41	7.77	PASS	
2220.00†	2201.96	-121.18	184.46	2115.88	2113.28	-140.56	-241.33	142.40	435.36	52.63	8.37	PASS	
2320.00†	2300.44	-130.71	198.98	2207.11	2201.74	-128.75	-260.29	145.31	469.76	52.87	8.99	PASS	
2420.00†	2398.92	-140.25	213.50	2298.38	2290.23	-116.95	-279.26	147.84	505.14	53.14	9.62	PASS	
2520.00†	2497.40	-149.79	228.02	2389.61	2378.69	-105.15	-298.21	150.05	541.30	53.43	10.25	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 159 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#03 EX. GENESIS 9-1-20 (725'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-20 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2620.00†	2595.88	-159.33	242.54	2480.85	2467.16	-93.35	-317.16	151.99	578.09	53.75	10.88	PASS	
2720.00†	2694.36	-168.86	257.06	2572.09	2555.62	-81.55	-336.12	153.70	615.41	54.09	11.51	PASS	
2820.00†	2792.84	-178.40	271.58	2663.32	2644.08	-69.75	-355.07	155.23	653.16	54.45	12.14	PASS	
2920.00†	2891.32	-187.94	286.09	2754.56	2732.54	-57.95	-374.02	156.59	691.28	54.83	12.76	PASS	
3020.00†	2989.80	-197.48	300.61	2845.79	2821.00	-46.15	-392.98	157.81	729.70	55.23	13.37	PASS	
3120.00†	3088.28	-207.01	315.13	2937.03	2909.46	-34.35	-411.93	158.91	768.38	55.65	13.97	PASS	
3220.00†	3186.76	-216.55	329.65	3028.27	2997.93	-22.55	-430.89	159.90	807.28	56.09	14.56	PASS	
3320.00†	3285.24	-226.09	344.17	3119.50	3086.39	-10.75	-449.84	160.81	846.38	56.54	15.15	PASS	
3420.00†	3383.71	-235.62	358.69	3210.74	3174.85	1.05	-468.79	161.64	885.64	57.01	15.72	PASS	
3520.00†	3482.19	-245.16	373.20	3301.97	3263.31	12.85	-487.75	162.40	925.05	57.50	16.28	PASS	
3620.00†	3580.67	-254.70	387.72	3393.21	3351.77	24.65	-506.70	163.09	964.59	58.00	16.82	PASS	
3720.00†	3679.15	-264.24	402.24	3484.44	3440.23	36.45	-525.65	163.74	1004.23	58.52	17.36	PASS	
3820.00†	3777.63	-273.77	416.76	3575.68	3528.70	48.25	-544.61	164.33	1043.98	59.06	17.88	PASS	
3920.00†	3876.11	-283.31	431.28	3666.92	3617.16	60.05	-563.56	164.88	1083.82	59.60	18.39	PASS	
4020.00†	3974.59	-292.85	445.80	3758.15	3705.62	71.85	-582.52	165.39	1123.73	60.17	18.89	PASS	
4120.00†	4073.07	-302.39	460.32	3849.39	3794.08	83.65	-601.47	165.87	1163.72	60.74	19.37	PASS	
4220.00†	4171.55	-311.92	474.83	3940.62	3882.54	95.45	-620.42	166.32	1203.77	61.33	19.84	PASS	
4320.00†	4270.03	-321.46	489.35	4031.86	3971.01	107.25	-639.38	166.74	1243.88	61.94	20.30	PASS	
4420.00†	4368.51	-331.00	503.87	4123.09	4059.47	119.05	-658.33	167.13	1284.04	62.55	20.75	PASS	
4520.00†	4466.99	-340.53	518.39	4214.33	4147.93	130.85	-677.28	167.50	1324.25	63.18	21.19	PASS	
4620.00†	4565.47	-350.07	532.91	4305.57	4236.39	142.65	-696.24	167.84	1364.50	63.82	21.61	PASS	
4720.00†	4663.95	-359.61	547.43	4396.80	4324.85	154.45	-715.19	168.17	1404.80	64.47	22.02	PASS	
4820.00†	4762.43	-369.15	561.94	4488.04	4413.31	166.25	-734.15	168.48	1445.12	65.14	22.42	PASS	
4920.00†	4860.91	-378.68	576.46	4579.27	4501.78	178.05	-753.10	168.77	1485.49	65.81	22.81	PASS	
5020.00†	4959.39	-388.22	590.98	4670.51	4590.24	189.85	-772.05	169.05	1525.88	66.50	23.18	PASS	
5120.00†	5057.87	-397.76	605.50	4761.75	4678.70	201.65	-791.01	169.31	1566.30	67.19	23.55	PASS	
5220.00†	5156.35	-407.30	620.02	4852.98	4767.16	213.45	-809.96	169.56	1606.75	67.90	23.90	PASS	
5320.00†	5254.83	-416.83	634.54	4944.22	4855.62	225.25	-828.91	169.80	1647.22	68.61	24.25	PASS	
5420.00†	5353.31	-426.37	649.06	5035.45	4944.08	237.05	-847.87	170.02	1687.71	69.33	24.58	PASS	
5520.00†	5451.79	-435.91	663.57	5126.69	5032.55	248.85	-866.82	170.24	1728.23	70.07	24.91	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 160 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#03 EX. GENESIS 9-1-20 (725'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-20 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
5620.00†	5550.27	-445.45	678.09	5217.92	5121.01	260.65	-885.78	170.44	1768.76	70.81	25.22	PASS		
5720.00†	5648.75	-454.98	692.61	5309.16	5209.47	272.45	-904.73	170.64	1809.32	71.56	25.53	PASS		
5820.00†	5747.23	-464.52	707.13	5400.40	5297.93	284.25	-923.68	170.83	1849.89	72.32	25.82	PASS		
5920.00†	5845.71	-474.06	721.65	5629.35	5521.63	309.88	-964.85	171.23	1887.82	74.47	25.58	PASS		
6020.00†	5944.19	-483.59	736.17	5910.00	5799.98	328.34	-994.50	171.60	1917.09	76.57	25.26	PASS		
6120.00†	6042.67	-493.13	750.68	6152.89	6042.67	332.69	-1001.48	171.81	1937.03	77.95	25.07	PASS		
6220.00†	6141.15	-502.67	765.20	6251.37	6141.15	332.69	-1001.48	171.88	1954.23	78.74	25.04	PASS		
6320.00†	6239.63	-512.21	779.72	6349.85	6239.63	332.69	-1001.48	171.96	1971.43	79.52	25.00	PASS		
6333.38	6252.80	-513.48	781.66	6363.02	6252.80	332.69	-1001.48	171.96	1973.73	79.63	25.00	PASS		
6420.00†	6338.69	-521.84	788.38	6448.91	6338.69	332.69	-1001.48	121.06	1983.39	80.39	24.88	PASS		
6520.00†	6437.87	-531.58	781.50	6548.09	6437.87	332.69	-1001.48	59.74	1981.41	81.78	24.43	PASS		
6620.00†	6534.75	-541.19	759.12	6644.98	6534.75	332.69	-1001.48	45.42	1965.55	83.68	23.68	PASS		
6720.00†	6626.95	-550.44	721.78	6737.17	6626.95	332.69	-1001.48	41.81	1936.38	85.03	22.96	PASS		
6820.00†	6712.19	-559.10	670.41	6822.41	6712.19	332.69	-1001.48	42.10	1894.86	86.11	22.18	PASS		
6920.00†	6788.37	-566.95	606.27	6898.59	6788.37	332.69	-1001.48	44.86	1842.34	87.03	21.33	PASS		
7020.00†	6853.62	-573.80	530.93	6963.84	6853.62	332.69	-1001.48	49.87	1780.46	87.88	20.42	PASS		
7120.00†	6906.33	-579.49	446.27	7016.55	6906.33	332.69	-1001.48	57.17	1711.15	88.71	19.44	PASS		
7220.00†	6945.20	-583.87	354.35	7055.42	6945.20	332.69	-1001.48	66.71	1636.57	89.61	18.40	PASS		
7320.00†	6969.29	-586.83	257.44	7079.51	6969.29	332.69	-1001.48	77.87	1558.98	90.67	17.32	PASS		
7420.00†	6977.98	-588.31	157.94	7088.20	6977.98	332.69	-1001.48	89.36	1480.71	91.93	16.22	PASS		
7428.43	6978.00	-588.37	149.50	7088.22	6978.00	332.69	-1001.48	90.30	1474.15	92.05	16.13	PASS		
7478.43	6977.79	-588.66	99.50	7088.01	6977.79	332.69	-1001.48	90.29	1435.64	92.81	15.58	PASS		
7520.00†	6977.61	-589.21	57.94	7087.84	6977.61	332.69	-1001.48	90.27	1404.37	93.53	15.12	PASS		
7536.58	6977.55	-589.59	41.36	7087.77	6977.55	332.69	-1001.48	90.26	1392.17	93.84	14.94	PASS		
7620.00†	6977.19	-591.78	-42.02	7087.42	6977.19	332.69	-1001.48	90.24	1332.36	95.66	14.02	PASS		
7720.00†	6976.77	-594.39	-141.99	7086.99	6976.77	332.69	-1001.48	90.21	1264.20	98.37	12.94	PASS		
7820.00†	6976.35	-597.01	-241.95	7086.57	6976.35	332.69	-1001.48	90.19	1200.51	101.72	11.88	PASS		
7920.00†	6975.93	-599.63	-341.92	7086.15	6975.93	332.69	-1001.48	90.16	1142.03	105.73	10.87	PASS		
8020.00†	6975.51	-602.25	-441.88	7085.73	6975.51	332.69	-1001.48	90.14	1089.61	110.36	9.93	PASS		
8120.00†	6975.09	-604.86	-541.85	7085.31	6975.09	332.69	-1001.48	90.11	1044.16	115.55	9.09	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 161 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP													
Facility: SEC.01-T05N-R67W Slot: SLOT#03 EX. GENESIS 9-1-20 (725'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-20 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
8220.00†	6974.67	-607.48	-641.81	7084.89	6974.67	332.69	-1001.48	90.09	1006.62	121.13	8.35	PASS	
8320.00†	6974.25	-610.10	-741.78	7084.47	6974.25	332.69	-1001.48	90.06	977.90	126.89	7.74	PASS	
8420.00†	6973.83	-612.72	-841.74	7084.05	6973.83	332.69	-1001.48	90.03	958.81	132.55	7.27	PASS	
8520.00†	6973.41	-615.33	-941.71	7083.63	6973.41	332.69	-1001.48	90.01	949.91	137.80	6.92	PASS	
8620.00†	6972.99	-617.95	-1041.67	7083.21	6972.99	332.69	-1001.48	89.98	951.49	142.37	6.71	PASS	
8720.00†	6972.57	-620.57	-1141.64	7082.79	6972.57	332.69	-1001.48	89.96	963.51	146.07	6.62	PASS	
8820.00†	6972.15	-623.19	-1241.60	7082.37	6972.15	332.69	-1001.48	89.93	985.58	148.80	6.65	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment Wellbore
0.00	7251.21	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL PLAN PROVIDED BY SRC <1000'-7251.21'> EX. GENESIS 9-1-20 PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. GENESIS 9-1-20 PWB Offset Wellpath: EX. GENESIS 9-1-20 PWP	
MD Reference: Rig on SLOT#03 EX. GENESIS 9-1-20 (725'FSL & 378'FEL, AL/PWP) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 162 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. KNOX 32-3 AWB Offset Wellpath: EX. KNOX 32-3 AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#02 EX. KNOX 32-3 (2270'FNL & 1839'FEL, JSND/SI) Well: EX. KNOX 32-3 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
20.00	20.00	0.00	0.00	-3.00	20.00	2583.08	-11382.64	-77.21	11672.06	25.57	474.40	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. KNOX 32-3 AWB Offset Wellpath: EX. KNOX 32-3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. KNOX 32-3 AWB Offset Wellpath: EX. KNOX 32-3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7878.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7878>	EX. KNOX 32-3 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. KNOX 32-3 AWB Offset Wellpath: EX. KNOX 32-3 AWP

MD Reference: Rig on SLOT#02 EX. KNOX 32-3 (2270'FNL & 1839'FEL, JSND/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 163 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#04 EX. GENESIS 9-1-39 (700'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-39 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	3.00	20.00	-264.84	-82.68	-162.66	277.44	50.17	5.62	PASS
120.00†	120.00	0.00	0.00	103.00	120.00	-264.84	-82.68	-162.66	277.44	50.30	5.60	PASS
220.00†	220.00	0.00	0.00	203.00	220.00	-264.84	-82.68	-162.66	277.44	50.43	5.59	PASS
320.00†	320.00	0.00	0.00	303.00	320.00	-264.84	-82.68	-162.66	277.44	50.56	5.57	PASS
420.00†	420.00	0.00	0.00	403.00	420.00	-264.84	-82.68	-162.66	277.44	50.70	5.56	PASS
520.00†	520.00	0.00	0.00	503.00	520.00	-264.84	-82.68	-162.66	277.44	50.84	5.54	PASS
620.00†	620.00	0.00	0.00	603.00	620.00	-264.84	-82.68	-162.66	277.44	50.98	5.53	PASS
700.00	700.00	0.00	0.00	683.00	700.00	-264.84	-82.68	-162.66	277.44	51.10	5.51	PASS
720.00†	720.00	-0.04	0.06	703.00	720.00	-264.84	-82.68	74.05	277.42	51.13	5.51	PASS
820.00†	819.96	-1.38	2.10	802.96	819.96	-264.84	-82.68	74.55	276.76	51.29	5.48	PASS
920.00†	919.78	-4.64	7.06	902.78	919.78	-264.84	-82.68	75.77	275.24	51.45	5.43	PASS
1020.00†	1019.33	-9.80	14.92	1002.33	1019.33	-264.84	-82.68	77.72	273.07	51.61	5.37	PASS
1120.00†	1118.50	-16.87	25.69	1101.50	1118.50	-264.84	-82.68	80.41	270.61	51.77	5.31	PASS
1200.18	1197.64	-23.91	36.40	1180.64	1197.64	-264.84	-82.68	83.11	268.74	51.91	5.26	PASS
1220.00†	1217.16	-25.80	39.28	1200.16	1217.16	-264.84	-82.68	83.82	268.35	51.94	5.25	PASS
1320.00†	1315.64	-35.34	53.80	1298.64	1315.64	-264.84	-82.68	87.48	267.01	52.12	5.20	PASS
1387.72†	1382.33	-41.80	63.63	1365.16	1382.16	-264.84	-82.68	89.96	266.74	52.24	5.18	PASS
1420.00†	1414.12	-44.88	68.32	1397.12	1414.12	-264.84	-82.68	91.15	266.80	52.30	5.18	PASS
1475.35†	1468.63	-50.18	76.35	1451.64	1468.64	-264.84	-82.68	93.18	267.17	52.40	5.18	PASS
1520.00†	1512.60	-54.42	82.84	1495.60	1512.60	-264.84	-82.68	94.81	267.71	52.49	5.18	PASS
1620.00†	1611.08	-63.95	97.35	1594.08	1611.08	-264.84	-82.68	98.44	269.75	52.68	5.20	PASS
1720.00†	1709.56	-73.49	111.87	1692.56	1709.56	-264.84	-82.68	102.00	272.88	52.89	5.24	PASS
1820.00†	1808.04	-83.03	126.39	1791.04	1808.04	-264.84	-82.68	105.46	277.06	52.81	5.30	PASS
1920.00†	1906.52	-92.56	140.91	1889.52	1906.52	-264.84	-82.68	108.82	282.26	52.96	5.39	PASS
2020.00†	2005.00	-102.10	155.43	1988.00	2005.00	-264.84	-82.68	112.04	288.40	53.13	5.49	PASS
2120.00†	2103.48	-111.64	169.95	2086.48	2103.48	-264.84	-82.68	115.13	295.44	53.31	5.60	PASS
2220.00†	2201.96	-121.18	184.46	2184.96	2201.96	-264.84	-82.68	118.06	303.32	53.50	5.73	PASS
2320.00†	2300.44	-130.71	198.98	2289.76	2306.74	-263.48	-82.31	121.22	311.12	53.81	5.85	PASS
2420.00†	2398.92	-140.25	213.50	2395.06	2411.91	-258.42	-80.95	124.76	317.55	54.13	5.93	PASS
2520.00†	2497.40	-149.79	228.02	2499.41	2515.87	-249.74	-78.62	128.67	323.05	54.47	6.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 164 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#04 EX. GENESIS 9-1-39 (700'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-39 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
2620.00†	2595.88	-159.33	242.54	2602.55	2618.23	-237.57	-75.35	132.94	328.14	54.83	6.05	PASS	
2720.00†	2694.36	-168.86	257.06	2704.24	2718.65	-222.09	-71.19	137.55	333.42	55.21	6.10	PASS	
2820.00†	2792.84	-178.40	271.58	2804.26	2816.79	-203.52	-66.20	142.45	339.56	55.64	6.17	PASS	
2920.00†	2891.32	-187.94	286.09	2902.42	2912.40	-182.09	-60.45	147.60	347.23	56.11	6.25	PASS	
3020.00†	2989.80	-197.48	300.61	2996.96	3003.99	-159.46	-54.37	152.64	357.29	56.61	6.38	PASS	
3120.00†	3088.28	-207.01	315.13	3091.00	3095.09	-136.90	-48.31	157.38	370.20	57.11	6.55	PASS	
3220.00†	3186.76	-216.55	329.65	3185.04	3186.19	-114.34	-42.25	161.80	385.69	57.62	6.76	PASS	
3320.00†	3285.24	-226.09	344.17	3279.09	3277.28	-91.79	-36.19	165.89	403.45	58.13	7.01	PASS	
3420.00†	3383.71	-235.62	358.69	3373.13	3368.38	-69.23	-30.13	169.65	423.20	58.64	7.29	PASS	
3520.00†	3482.19	-245.16	373.20	3467.17	3459.47	-46.68	-24.07	173.08	444.68	59.17	7.59	PASS	
3620.00†	3580.67	-254.70	387.72	3561.21	3550.57	-24.12	-18.01	176.21	467.65	59.71	7.91	PASS	
3720.00†	3679.15	-264.24	402.24	3655.26	3641.66	-1.56	-11.95	179.03	491.89	60.26	8.25	PASS	
3820.00†	3777.63	-273.77	416.76	3749.30	3732.76	20.99	-5.90	-178.36	517.24	60.83	8.59	PASS	
3920.00†	3876.11	-283.31	431.28	3843.34	3823.86	43.55	0.16	-176.01	543.53	61.42	8.94	PASS	
4020.00†	3974.59	-292.85	445.80	3937.38	3914.95	66.10	6.22	-173.86	570.64	62.02	9.30	PASS	
4120.00†	4073.07	-302.39	460.32	4031.43	4006.05	88.66	12.28	-171.91	598.45	62.63	9.65	PASS	
4220.00†	4171.55	-311.92	474.83	4125.47	4097.14	111.21	18.34	-170.12	626.87	63.27	10.01	PASS	
4320.00†	4270.03	-321.46	489.35	4219.51	4188.24	133.77	24.40	-168.49	655.82	63.92	10.36	PASS	
4420.00†	4368.51	-331.00	503.87	4313.55	4279.34	156.33	30.46	-166.99	685.24	64.58	10.72	PASS	
4520.00†	4466.99	-340.53	518.39	4407.59	4370.43	178.88	36.52	-165.61	715.06	65.26	11.07	PASS	
4620.00†	4565.47	-350.07	532.91	4501.64	4461.53	201.44	42.58	-164.34	745.25	65.96	11.41	PASS	
4720.00†	4663.95	-359.61	547.43	4595.68	4552.62	223.99	48.64	-163.16	775.74	66.67	11.75	PASS	
4820.00†	4762.43	-369.15	561.94	4689.72	4643.72	246.55	54.70	-162.07	806.52	67.39	12.08	PASS	
4920.00†	4860.91	-378.68	576.46	4783.76	4734.82	269.11	60.75	-161.06	837.55	68.13	12.41	PASS	
5020.00†	4959.39	-388.22	590.98	4882.67	4830.65	292.72	67.10	-160.09	868.74	68.95	12.72	PASS	
5120.00†	5057.87	-397.76	605.50	5000.14	4945.25	317.63	73.79	-159.19	898.43	70.02	12.95	PASS	
5220.00†	5156.35	-407.30	620.02	5120.19	5063.35	338.39	79.36	-158.58	925.74	71.07	13.15	PASS	
5320.00†	5254.83	-416.83	634.54	5242.47	5184.46	354.59	83.72	-158.25	950.50	72.09	13.31	PASS	
5420.00†	5353.31	-426.37	649.06	5366.59	5308.01	365.92	86.76	-158.19	972.60	73.08	13.43	PASS	
5520.00†	5451.79	-435.91	663.57	5492.10	5433.36	372.11	88.43	-158.38	991.99	74.01	13.52	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 165 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP

Facility: SEC.01-T05N-R67W Slot: SLOT#04 EX. GENESIS 9-1-39 (700'FSL & 378'FEL, AL/PWP) Well: EX. GENESIS 9-1-39 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
5620.00†	5550.27	-445.45	678.09	5609.03	5550.27	373.29	88.74	-158.75	1008.79	74.85	13.60	PASS	
5720.00†	5648.75	-454.98	692.61	5707.51	5648.75	373.29	88.74	-159.10	1025.04	75.63	13.67	PASS	
5820.00†	5747.23	-464.52	707.13	5805.99	5747.23	373.29	88.74	-159.45	1041.31	76.41	13.75	PASS	
5920.00†	5845.71	-474.06	721.65	5904.47	5845.71	373.29	88.74	-159.78	1057.63	77.19	13.82	PASS	
6020.00†	5944.19	-483.59	736.17	6002.95	5944.19	373.29	88.74	-160.10	1073.97	77.98	13.89	PASS	
6120.00†	6042.67	-493.13	750.68	6101.43	6042.67	373.29	88.74	-160.41	1090.35	78.78	13.96	PASS	
6220.00†	6141.15	-502.67	765.20	6199.91	6141.15	373.29	88.74	-160.71	1106.76	79.57	14.02	PASS	
6320.00†	6239.63	-512.21	779.72	6298.39	6239.63	373.29	88.74	-161.00	1123.19	80.37	14.09	PASS	
6333.38	6252.80	-513.48	781.66	6311.56	6252.80	373.29	88.74	-161.04	1125.39	80.48	14.10	PASS	
6420.00†	6338.69	-521.84	788.38	6397.45	6338.69	373.29	88.74	147.52	1136.11	81.24	14.10	PASS	
6520.00†	6437.87	-531.58	781.50	6496.63	6437.87	373.29	88.74	86.11	1139.61	82.58	13.91	PASS	
6620.00†	6534.75	-541.19	759.12	6593.51	6534.75	373.29	88.74	72.17	1133.88	84.32	13.55	PASS	
6720.00†	6626.95	-550.44	721.78	6685.71	6626.95	373.29	88.74	69.28	1119.83	85.36	13.22	PASS	
6820.00†	6712.19	-559.10	670.41	6770.95	6712.19	373.29	88.74	70.31	1098.95	86.21	12.84	PASS	
6920.00†	6788.37	-566.95	606.27	6847.13	6788.37	373.29	88.74	73.37	1073.26	87.06	12.42	PASS	
7020.00†	6853.62	-573.80	530.93	6912.38	6853.62	373.29	88.74	77.49	1045.24	88.05	11.96	PASS	
7120.00†	6906.33	-579.49	446.27	6965.09	6906.33	373.29	88.74	81.85	1017.66	89.32	11.48	PASS	
7220.00†	6945.20	-583.87	354.35	7003.96	6945.20	373.29	88.74	85.73	993.33	90.95	11.00	PASS	
7320.00†	6969.29	-586.83	257.44	7028.04	6969.29	373.29	88.74	88.56	974.84	92.90	10.57	PASS	
7420.00†	6977.98	-588.31	157.94	7036.74	6977.98	373.29	88.74	89.97	964.09	95.04	10.21	PASS	
7428.43	6978.00	-588.37	149.50	7036.76	6978.00	373.29	88.74	90.01	963.58	95.22	10.19	PASS	
7478.43	6977.79	-588.66	99.50	7036.55	6977.79	373.29	88.74	90.00	962.01	96.32	10.05	PASS	
7520.00†	6977.61	-589.21	57.94	7036.37	6977.61	373.29	88.74	89.99	962.99	97.28	9.96	PASS	
7536.58	6977.55	-589.59	41.36	7036.30	6977.55	373.29	88.74	89.98	964.05	97.66	9.94	PASS	
7620.00†	6977.19	-591.78	-42.02	7035.95	6977.19	373.29	88.74	89.96	973.89	99.62	9.84	PASS	
7720.00†	6976.77	-594.39	-141.99	7035.53	6976.77	373.29	88.74	89.94	994.81	101.93	9.82	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 166 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP				
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7210.76	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL PLAN PROVIDED BY SRC <2200'-7210.76'>	EX. GENESIS 9-1-39 PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. GENESIS 9-1-39 PWB Offset Wellpath: EX. GENESIS 9-1-39 PWP		
MD Reference: Rig on SLOT#04 EX. GENESIS 9-1-39 (700'FSL & 378'FEL, AL/PWP) (RT)		Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD		0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 167 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. AUFRECHT 1 AWB Offset Wellpath: EX. AUFRECHT 1 AWP

Facility: SEC.02-T05N-R67W Slot: SLOT#01 EX. AUFRECHT 1 (1368'FNL & 1287'FEL, J-CDL/PR) Well: EX. AUFRECHT 1 Threshold Value=1.00 † = interpolated/extrapolated station														
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status		
20.00	20.00	0.00	0.00	36.00	20.00	2901.85	-6287.97	-65.23	6925.27	50.24	140.52	PASS		

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. AUFRECHT 1 AWB Offset Wellpath: EX. AUFRECHT 1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. AUFRECHT 1 AWB Offset Wellpath: EX. AUFRECHT 1 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8033.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <8033>	EX. AUFRECHT 1 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. AUFRECHT 1 AWB Offset Wellpath: EX. AUFRECHT 1 AWP

MD Reference: Rig on SLOT#01 EX. AUFRECHT 1 (1368'FNL & 1287'FEL, J-CDL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 168 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW USX N 03-08D AWB Offset Wellpath: EX. SHURVIEW USX N 03-08D AWP												
Facility: SEC.03-T05N-R67W				Slot: SLOT#05 EX. SHURVIEW USX N 03-08D (2130'FNL & 1940'FEL, NB-CD/SI)			Well: EX. SHURVIEW USX N 03-08D		Threshold Value=1.00		† = interpolated/extrapolated station	
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	3046.06	2977.99	2570.11	-10808.00	-76.62	11496.44	54.83	213.41	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHURVIEW USX N 03-08D AWB    Offset Wellpath: EX. SHURVIEW USX N 03-08D AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SHURVIEW USX N 03-08D AWB Offset Wellpath: EX. SHURVIEW USX N 03-08D AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7523.00	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <374-7523>	EX. SHURVIEW USX N 03-08D AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHURVIEW USX N 03-08D AWB Offset Wellpath: EX. SHURVIEW USX N 03-08D AWP	
MD Reference: Rig on SLOT#05 EX. SHURVIEW USX N 03-08D (2130'FNL & 1940'FEL, NB-CD/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 169 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: BOOMERANG 34N-6C-M PWB Offset Wellpath: BOOMERANG 34N-6C-M PWP													
Facility: SEC.05-T05N-R66W		Slot: SLOT#12 BOOMERANG 34N-6C-M (1511'FNL & 2327'FWL, SEC.05)				Well: BOOMERANG 34N-6C-M		Threshold Value=1.00 † = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	15521.99	7050.74	1869.05	425.97	12.84	7287.39	146.51	50.06	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: BOOMERANG 34N-6C-M PWB Offset Wellpath: BOOMERANG 34N-6C-M PWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: BOOMERANG 34N-6C-M PWB Offset Wellpath: BOOMERANG 34N-6C-M PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15521.99	ISCWSA MWD, Rev. 4 (Standard)	MWD PWP SURVEYS FROM COGCC <100-15521.99>	BOOMERANG 34N-6C-M PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: BOOMERANG 34N-6C-M PWB Offset Wellpath: BOOMERANG 34N-6C-M PWP		
MD Reference: Rig on SLOT#12 BOOMERANG 34N-6C-M (1511'FNL & 2327'FWL, SEC.05) (RT)		Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD		0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 170 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SHEEP 2-12 AWB Offset Wellpath: EX. SHEEP 2-12 AWP												
Facility: SEC.12-T05N-R67W		Slot: SLOT#02 EX. SHEEP 2-12 (2297'FSL & 1448'FEL, PR/NB-CD)		Well: EX. SHEEP 2-12		Threshold Value=1.00 † = interpolated/extrapolated station						
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	18.07	21.07	-4045.65	-1133.07	-164.35	4201.32	50.18	85.35	PASS
C-C Clearance Distance Cutoff: 1000.00 ft												

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHEEP 2-12 AWB Offset Wellpath: EX. SHEEP 2-12 AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SHEEP 2-12 AWB Offset Wellpath: EX. SHEEP 2-12 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7830.00	ISCWSA MWD, Rev. 4 (Standard)	MULTI SHOT SURVEYS PROVIDED BY SRC <805'-7830'>	EX. SHEEP 2-12 AWB
7830.00	7880.00	Blind Drilling (std)	Projection to bit	EX. SHEEP 2-12 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHEEP 2-12 AWB Offset Wellpath: EX. SHEEP 2-12 AWP	
MD Reference: Rig on SLOT#02 EX. SHEEP 2-12 (2297'FSL & 1448'FEL, PR/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



**Clearance Report**  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 171 of 184



**REFERENCE WELLPATH IDENTIFICATION**

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

**CLEARANCE DATA** - Offset Wellbore: **EX. HERTZKE N 1-7 AWB** Offset Wellpath: **EX. HERTZKE N 1-7 AWP**

Facility: SEC.01-T05N-R67W Slot: SLOT#04 EX. HERTZKE N 1-7 (2072'FNL & 1816'FEL, CODL/SI) Well: EX. HERTZKE N 1-7 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	-6.00	20.00	2396.93	-1543.39	-32.78	2850.85	25.57	115.84	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

**POSITIONAL UNCERTAINTY** - Offset Wellbore: **EX. HERTZKE N 1-7 AWB** Offset Wellpath: **EX. HERTZKE N 1-7 AWP**

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

**WELLPATH COMPOSITION** - Offset Wellbore: **EX. HERTZKE N 1-7 AWB** Offset Wellpath: **EX. HERTZKE N 1-7 AWP**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7301.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7301>	EX. HERTZKE N 1-7 AWB

**OFFSET WELLPATH REFERENCE** - Offset Wellbore: **EX. HERTZKE N 1-7 AWB** Offset Wellpath: **EX. HERTZKE N 1-7 AWP**

MD Reference: Rig on SLOT#04 EX. HERTZKE N 1-7 (2072'FNL & 1816'FEL, CODL/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 172 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: BOOMERANG 34C-6-M PWB Offset Wellpath: BOOMERANG 34C-6-M PWP

Facility: SEC.05-T05N-R66W Slot: SLOT#10 BOOMERANG 34C-6-M (1496'FNL & 2327'FWL, SEC.05) Well: BOOMERANG 34C-6-M Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	15647.29	7178.16	2221.61	422.65	10.77	7506.89	155.35	48.62	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: BOOMERANG 34C-6-M PWB Offset Wellpath: BOOMERANG 34C-6-M PWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: BOOMERANG 34C-6-M PWB Offset Wellpath: BOOMERANG 34C-6-M PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15647.29	ISCSWA MWD, Rev. 4 (Standard)	MWD PWP SURVEYS FROM COGCC <100-15647.29>	BOOMERANG 34C-6-M PWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: BOOMERANG 34C-6-M PWB Offset Wellpath: BOOMERANG 34C-6-M PWP

MD Reference: Rig on SLOT#10 BOOMERANG 34C-6-M (1496'FNL & 2327'FWL, SEC.05) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 173 of 184



REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. ROTH 1-14 AWB Offset Wellpath: EX. ROTH 1-14 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#06 EX. ROTH 1-14 (2257'FNL & 505'FEL, NB-CD/PR) Well: EX. ROTH 1-14 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	-20.00	50.00	2219.79	-249.40	-6.41	2233.95	25.56	90.77	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. ROTH 1-14 AWB Offset Wellpath: EX. ROTH 1-14 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. ROTH 1-14 AWB Offset Wellpath: EX. ROTH 1-14 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7250.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7250>	EX. ROTH 1-14 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. ROTH 1-14 AWB Offset Wellpath: EX. ROTH 1-14 AWP

MD Reference: Rig on SLOT#06 EX. ROTH 1-14 (2257'FNL & 505'FEL, NB-CD/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 174 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: Aufrecht N2-7 AWB Offset Wellpath: Aufrecht N2-7 AWP

Facility: SEC.02-T5N-R67W Slot: Slot #3 Aufrecht N 2-7 Well: Aufrecht N 2-7 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	32.32	17.32	3801.75	-6421.37	-59.37	7462.39	50.14	151.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: Aufrecht N2-7 AWB Offset Wellpath: Aufrecht N2-7 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: Aufrecht N2-7 AWB Offset Wellpath: Aufrecht N2-7 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]
12.25in Open Hole	12.00	635.00	623.00	-11.00	611.99	2318.05	-3914.16	2318.37	-3915.19
8.625in Casing Surface	12.00	635.00	623.00	-11.00	611.99	2318.05	-3914.16	2318.37	-3915.19
7.875in Open Hole	12.00	7573.00	7561.00	-11.00	7321.77	2318.05	-3914.16	1898.63	-3939.06

## WELLPATH COMPOSITION - Offset Wellbore: Aufrecht N2-7 AWB Offset Wellpath: Aufrecht N2-7 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7573.00	BHI MTC (Collar, pre-2000) (Standard)	Log #1 <683-7573>	Aufrecht N2-7 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: Aufrecht N2-7 AWB Offset Wellpath: Aufrecht N2-7 AWP

MD Reference: Patterson 188 (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 175 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW USX N 03-17D AWB Offset Wellpath: EX. SHURVIEW USX N 03-17D AWP													
Facility: SEC.03-T05N-R67W		Slot: SLOT#06 EX. SHURVIEW USX N 03-17D (2085'FNL & 1928'FEL, NB-CD/SI)				Well: EX. SHURVIEW USX N 03-17D			Threshold Value=1.00		† = interpolated/extrapolated station		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	0.68	19.68	2561.24	-11427.20	-77.37	11710.71	50.17	237.98	PASS	
C-C Clearance Distance Cutoff: 1000.00 ft													

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHURVIEW USX N 03-17D AWB    Offset Wellpath: EX. SHURVIEW USX N 03-17D AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SHURVIEW USX N 03-17D AWB Offset Wellpath: EX. SHURVIEW USX N 03-17D AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7425.00	ISCWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <343-7425>	EX. SHURVIEW USX N 03-17D AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHURVIEW USX N 03-17D AWB Offset Wellpath: EX. SHURVIEW USX N 03-17D AWP	
MD Reference: Rig on SLOT#06 EX. SHURVIEW USX N 03-17D (2085'FNL & 1928'FEL, NB-CD/SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 176 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. SHUR VIEW 20-3 AWB Offset Wellpath: EX. SHUR VIEW 20-3 AWP

Facility: SEC.03-T05N-R67W Slot: SLOT#08 EX. SHUR VIEW 20-3 (1317'FSL & 1498'FEL, SI/NB-CD) Well: EX. SHUR VIEW 20-3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	-13.00	20.00	262.41	-11405.99	-88.68	11409.01	25.57	463.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHUR VIEW 20-3 AWB Offset Wellpath: EX. SHUR VIEW 20-3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. SHUR VIEW 20-3 AWB Offset Wellpath: EX. SHUR VIEW 20-3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7305.00	ISCWSA MWD, Rev. 4 (Standard)	MWD SURVEYS PROVIDED BY SRC <14'-7305'>	EX. SHUR VIEW 20-3 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHUR VIEW 20-3 AWB Offset Wellpath: EX. SHUR VIEW 20-3 AWP

MD Reference: Rig on SLOT#08 EX. SHUR VIEW 20-3 (1317'FSL & 1498'FEL, SI/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 177 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: Aufrecht N 2-8 AWB Offset Wellpath: Aufrecht N 2-8 AWP

Facility: SEC.02-T5N-R67W Slot: Slot #4 Aufrecht N 2-8 Well: Aufrecht N 2-8 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	2834.71	2723.97	3396.45	-6022.81	-60.58	7424.39	53.37	141.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: Aufrecht N 2-8 AWB Offset Wellpath: Aufrecht N 2-8 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: Aufrecht N 2-8 AWB Offset Wellpath: Aufrecht N 2-8 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]
12.25in Open Hole	12.00	634.00	622.00	-11.00	610.99	2326.94	-3914.16	2327.85	-3913.85
8.625in Casing Surface	12.00	634.00	622.00	-11.00	610.99	2326.94	-3914.16	2327.85	-3913.85
7.875in Open Hole	12.00	7660.00	7648.00	-11.00	7307.20	2326.94	-3914.16	1886.85	-3504.77

## WELLPATH COMPOSITION - Offset Wellbore: Aufrecht N 2-8 AWB Offset Wellpath: Aufrecht N 2-8 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7660.00	BHI MTC (Collar, pre-2000) (Standard)	Log #1 <634-7660>	Aufrecht N 2-8 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: Aufrecht N 2-8 AWB Offset Wellpath: Aufrecht N 2-8 AWP

MD Reference: Patterson 188 (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 178 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. GENESIS 9-2 AWB Offset Wellpath: EX. GENESIS 9-2 AWP

Facility: SEC.01-T05N-R67W Slot: SLOT#05 EX. GENESIS 9-2 (656'FSL & 673'FEL, PR/JNBCD) Well: EX. GENESIS 9-2 Threshold Value=1.00 † = interpolated/extrapolated station													
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	7.06	20.06	-315.84	-388.94	-129.08	501.03	50.17	10.16	PASS	
120.00†	120.00	0.00	0.00	108.20	121.19	-316.34	-388.39	-129.16	500.92	50.18	10.16	PASS	
220.00†	220.00	0.00	0.00	209.79	222.78	-315.54	-388.52	-129.08	500.52	50.20	10.15	PASS	
320.00†	320.00	0.00	0.00	307.91	320.82	-312.29	-390.49	-128.63	500.01	50.24	10.13	PASS	
344.38†	344.38	0.00	0.00	330.04	342.92	-311.31	-391.26	-128.51	500.00	50.25	10.12	PASS	
420.00†	420.00	0.00	0.00	404.46	417.15	-307.33	-394.75	-127.90	500.29	50.30	10.12	PASS	
520.00†	520.00	0.00	0.00	502.85	515.00	-299.71	-401.48	-126.74	501.03	50.37	10.12	PASS	
620.00†	620.00	0.00	0.00	600.61	612.02	-290.86	-409.64	-125.38	502.46	50.46	10.13	PASS	
700.00	700.00	0.00	0.00	686.39	697.06	-282.27	-416.92	-124.10	503.50	50.56	10.13	PASS	
720.00†	720.00	-0.04	0.06	708.85	719.27	-279.58	-418.83	-112.98	503.60	50.59	10.13	PASS	
820.00†	819.96	-1.38	2.10	811.92	820.86	-264.70	-427.77	-115.19	504.11	50.73	10.11	PASS	
920.00†	919.78	-4.64	7.06	902.30	909.31	-249.05	-437.73	-117.76	507.63	50.89	10.15	PASS	
1020.00†	1019.33	-9.80	14.92	982.20	986.97	-234.07	-449.08	-120.40	516.37	51.01	10.30	PASS	
1120.00†	1118.50	-16.87	25.69	1065.69	1067.56	-217.87	-463.66	-123.41	531.47	51.12	10.58	PASS	
1200.18	1197.64	-23.91	36.40	1137.57	1136.65	-203.17	-476.94	-126.12	547.15	51.25	10.86	PASS	
1220.00†	1217.16	-25.80	39.28	1155.10	1153.48	-199.47	-480.23	-126.86	551.46	51.28	10.94	PASS	
1320.00†	1315.64	-35.34	53.80	1247.10	1241.78	-180.15	-497.34	-130.55	574.61	51.49	11.35	PASS	
1420.00†	1414.12	-44.88	68.32	1332.39	1323.76	-162.65	-513.05	-133.70	600.02	51.62	11.82	PASS	
1520.00†	1512.60	-54.42	82.84	1412.41	1400.53	-146.60	-528.90	-136.44	628.71	51.69	12.38	PASS	
1620.00†	1611.08	-63.95	97.35	1506.89	1491.20	-128.06	-547.95	-139.39	659.46	51.98	12.91	PASS	
1720.00†	1709.56	-73.49	111.87	1599.46	1580.24	-110.32	-566.01	-141.99	691.09	52.25	13.46	PASS	
1820.00†	1808.04	-83.03	126.39	1692.25	1669.63	-92.99	-583.90	-144.34	723.72	52.26	14.03	PASS	
1920.00†	1906.52	-92.56	140.91	1789.36	1763.30	-74.88	-601.97	-146.60	756.76	52.56	14.58	PASS	
2020.00†	2005.00	-102.10	155.43	1873.90	1844.81	-58.73	-617.56	-148.44	790.60	52.71	15.19	PASS	
2120.00†	2103.48	-111.64	169.95	1961.86	1929.34	-41.19	-634.39	-150.26	825.98	52.93	15.80	PASS	
2220.00†	2201.96	-121.18	184.46	2059.24	2023.01	-21.73	-652.56	-152.12	861.70	53.30	16.37	PASS	
2320.00†	2300.44	-130.71	198.98	2164.10	2124.07	-0.52	-670.76	-153.99	896.94	53.78	16.89	PASS	
2420.00†	2398.92	-140.25	213.50	2249.12	2206.09	16.89	-684.88	-155.41	932.19	54.03	17.47	PASS	
2520.00†	2497.40	-149.79	228.02	2333.11	2287.01	33.80	-699.71	-156.70	968.84	54.28	18.07	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 179 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. GENESIS 9-2 AWB Offset Wellpath: EX. GENESIS 9-2 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. GENESIS 9-2 AWB Offset Wellpath: EX. GENESIS 9-2 AWP				
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8015.00	ISWWSA MWD, Rev. 4 (Standard)	DIRECTIONAL SURVEYS PROVIDED BY SRC <78'-8015'>	EX. GENESIS 9-2 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. GENESIS 9-2 AWB Offset Wellpath: EX. GENESIS 9-2 AWP	
MD Reference: Rig on SLOT#05 EX. GENESIS 9-2 (656'FSL & 673'FEL, PR/JNBCD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft





# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 180 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. DETIENNE 1-12AWB Offset Wellpath: EX. DETIENNE 1-12AWP

Facility: SEC.12-T05N-R67W Slot: SLOT#01 EX. DETIENNE 1-12 (1960'FNL & 604'FEL, PR/NB-CD) Well: EX. DETIENNE 1-12 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	25.94	18.94	-2924.32	-285.96	-174.42	2938.27	50.17	59.69	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. DETIENNE 1-12AWB Offset Wellpath: EX. DETIENNE 1-12AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. DETIENNE 1-12AWB Offset Wellpath: EX. DETIENNE 1-12AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7439.00	ISCWSA MWD, Rev. 4 (Standard)	STRATA DIRECTIONAL TECHNOLOGY, LLC SURVEYS PROVIDED BY SRC <214'-7439'>	EX. DETIENNE 1-12AWB
7439.00	7484.00	Blind Drilling (std)	Projection to bit	EX. DETIENNE 1-12AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. DETIENNE 1-12AWB Offset Wellpath: EX. DETIENNE 1-12AWP

MD Reference: Rig on SLOT#01 EX. DETIENNE 1-12 (1960'FNL & 604'FEL, PR/NB-CD) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



Clearance Report  
GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 181 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. SHURVIEW USX N 03-02D AWB Offset Wellpath: EX. SHURVIEW USX N 03-02D AWP												
Facility: SEC.03-T05N-R67W		Slot: SLOT#09 EX. SHURVIEW USX N 03-02D (2108'FNL & 1934'FEL, SI/NB-CD)			Well: EX. SHURVIEW USX N 03-02D			Threshold Value=1.00		† = interpolated/extrapolated station		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	2.19	20.19	2539.39	-11438.34	-77.48	11716.83	50.17	238.11	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. SHURVIEW USX N 03-02D AWB Offset Wellpath: EX. SHURVIEW USX N 03-02D AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. SHURVIEW USX N 03-02D AWB Offset Wellpath: EX. SHURVIEW USX N 03-02D AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
0.00	7530.00	ISWWSA MWD, Rev. 4 (Standard)	ENSIGN DIRECTIONAL SURVEYS PROVIDED BY SRC <333'-7530'>
			Wellbore
			EX. SHURVIEW USX N 03-02D AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. SHURVIEW USX N 03-02D AWB Offset Wellpath: EX. SHURVIEW USX N 03-02D AWP	
MD Reference: Rig on SLOT#09 EX. SHURVIEW USX N 03-02D (2108'FNL & 1934'FEL, SI/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 182 of 184



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

CLEARANCE DATA - Offset Wellbore: EX. ROTH 1-15 AWB Offset Wellpath: EX. ROTH 1-15 AWP													
Facility: SEC.01-T05N-R67W		Slot: SLOT#07 EX. ROTH 1-15 (963'FNL & 978'FEL, CODL/PR)				Well: EX. ROTH 1-15		Threshold Value=1.00 † = interpolated/extrapolated station					
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status	
20.00	20.00	0.00	0.00	-20.00	22.00	3458.46	-720.16	-11.76	3532.65	25.57	143.55	PASS	

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: EX. ROTH 1-15 AWB Offset Wellpath: EX. ROTH 1-15 AWP				
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: EX. ROTH 1-15 AWB Offset Wellpath: EX. ROTH 1-15 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7336.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7336>	EX. ROTH 1-15 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. ROTH 1-15 AWB Offset Wellpath: EX. ROTH 1-15 AWP	
MD Reference: Rig on SLOT#07 EX. ROTH 1-15 (963'FNL & 978'FEL, CODL/PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 183 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: Aufrecht N 2-1 AWB Offset Wellpath: Aufrecht N 2-1 AWP

Facility: SEC.02-T5N-R67W Slot: Slot #1 Aufrecht N 2-1 Well: Aufrecht N 2-1 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	35.32	20.32	3845.47	-6421.35	-59.08	7484.74	50.14	152.06	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: Aufrecht N 2-1 AWB Offset Wellpath: Aufrecht N 2-1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## HOLE & CASING SECTIONS - Offset Wellbore: Aufrecht N 2-1 AWB Offset Wellpath: Aufrecht N 2-1 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]
12.25in Open Hole	12.00	595.00	583.00	-11.00	571.99	2344.70	-3914.15	2345.42	-3913.61
8.625in Casing Surface	12.00	595.00	583.00	-11.00	571.99	2344.70	-3914.15	2345.42	-3913.61
7.875in Open Hole	12.00	7577.00	7565.00	-11.00	7327.65	2344.70	-3914.15	2356.97	-3512.84

## WELLPATH COMPOSITION - Offset Wellbore: Aufrecht N 2-1 AWB Offset Wellpath: Aufrecht N 2-1 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7577.00	BHI MTC (Collar, pre-2000) (Standard)	Log #1 MWD	Aufrecht N 2-1 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: Aufrecht N 2-1 AWB Offset Wellpath: Aufrecht N 2-1 AWP

MD Reference: Patterson 188 (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	12.00ft



# Clearance Report

GREELEY-ROTH 34N-2B-L PWP (REV-B.1)  
Closest Approach  
Page 184 of 184



## REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#23 GREELEY-ROTH 34N-2B-L (963'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTH 34N-2B-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTH 34N-2B-L PWB
Facility	SEC.01-T05N-R67W		

## CLEARANCE DATA - Offset Wellbore: EX. UPRC 7-4H6 AWB Offset Wellpath: EX. UPRC 7-4H6 AWP

Facility: SEC.07-T5N-R66W Slot: SLOT#02 EX. UPRC 7-4H6 (671'FNL & 646'FWL, PR/NB-CD) Well: EX. UPRC 7-4H6 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
20.00	20.00	0.00	0.00	11.57	20.57	-1824.08	886.30	154.09	2028.00	50.17	41.20	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: EX. UPRC 7-4H6 AWB Offset Wellpath: EX. UPRC 7-4H6 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: EX. UPRC 7-4H6 AWB Offset Wellpath: EX. UPRC 7-4H6 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7100.00	BHI Generic gyro - continuous (Standard)	VES GYRO SURVEYS PROVIDED BY SRC <100'-7100'>	EX. UPRC 7-4H6 AWB
7100.00	7342.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL TO TD FROM COGCC <7342'>	EX. UPRC 7-4H6 AWB

## OFFSET WELLPATH REFERENCE - Offset Wellbore: EX. UPRC 7-4H6 AWB Offset Wellpath: EX. UPRC 7-4H6 AWP

MD Reference: Rig on SLOT#02 EX. UPRC 7-4H6 (671'FNL & 646'FWL, PR/NB-CD) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft