

Location:	COLORADO	Slot:	SLOT#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983FSL & 294FEL, SEC.01)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	GREELEY-ROTHER FEDERAL 13N-2C-L
Facility:	SEC.01-T05N-R67W	Wellbore:	GREELEY-ROTHER FEDERAL 13N-2C-L PWB

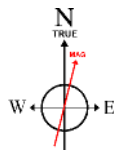
Plot reference wellpath is GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to PRECISION 462 (207) (RKB)	* = Wellpath was transformed from a different geoidic datum
Measured depths are referenced to PRECISION 462 (207) (RKB)	North Reference: True north
PRECISION 462 (207) (RKB) to Mean Sea Level: 4893 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLO7K22 GREELEY-ROTHE FEDERAL 13N-2C-L (R3FSLS & 294FEL, SEC.01)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: doddanna on 2017-10-04
	Database: WellArchitectDB

Facility Name				Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SEC.01-TOSH R67W				3185545.499	1399477.355	40°25'40.991"N	104°50'00.540"W
Shot	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude	
SLOTX22 GREELEY-ROTHE FEDERAL 13N-2C-L (9837SL & 294TSL, SEC.01)	-1384.80	2.24	3185558.149	1398802.670	40°25'27.307"N	104°50'00.611"W	
PRECISION 462 (20) (R08) to Mud line (At Slot: SLOTX22 GREELEY-ROTHE FEDERAL 13N-2C-L (9837SL & 294TSL, SEC.01))						4893N1	
Mean Sea Level to Mud line (At Slot: SLOTX22 GREELEY-ROTHE FEDERAL 13N-2C-L (9837SL & 294TSL, SEC.01))						01	
PRECISION 462 (20) (R08) to Mean Sea Level						4893N1	

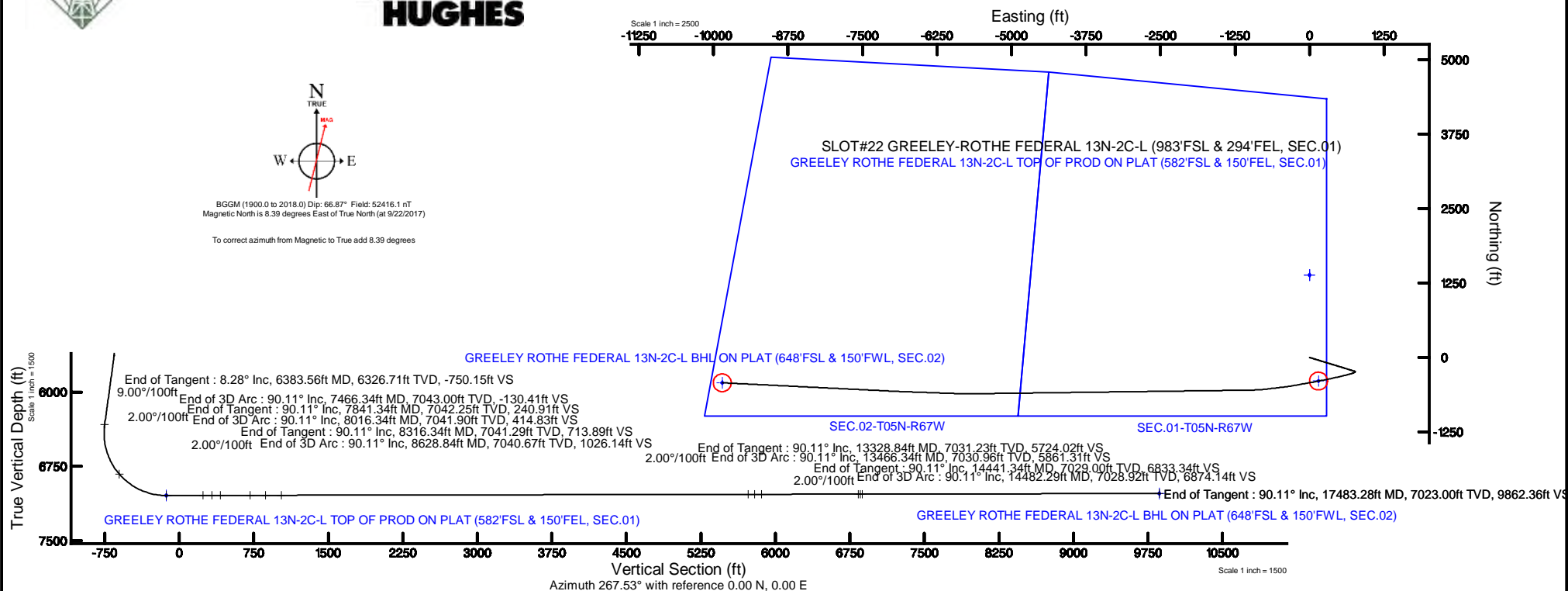
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
20.00	1750.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotations+Laser) (Rockies 0.03Gr model)		GREELEY-ROTHE FEDERAL 13N-2C-L-PWB
1750.00	17483.28	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (FR1, Short) (Rockies 0.03Gr model)		GREELEY-ROTHE FEDERAL 13N-2C-L-PWB



**BAKER  
HUGHES**



To correct azimuth from Magnetic to True add 8.39 degrees



GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

~VERSION INFORMATION

VERS. 2.0 : CWLS LOG ASCII STANDARD-VERSION 2.0

WRAP. NO : ASCII DATA SECTION CONTAINS ONE ROW PER WELLPATH STATION

~WELL INFORMATION

#MNEM	.UNITS	DATA	:DESCRIPTION
#----	.-----	----	:-----
STRT	.ft	0.00	:START MD
STOP	.ft	17483.28	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	SRC ENERGY	:OPERATOR
WELL	.	GREELEY-ROTHE FEDERAL 13N-2C-L	:WELL
FLD	.	WELD COUNTY (NAD83,TRUE NORTH)	:FIELD
LOC	.	COLORADO	:AREA (aka: Location)
CNTY	.	N/A	:COUNTY
STAT	.	N/A	:STATE
CTRY	.	N/A	:COUNTRY
SRVC	.	Baker Hughes	:CONTRACTOR
DATE	.	10/04/2017	:LOG REV DATE
API	.		:API NUMBER

~OTHER INFORMATION

#Software: WellArchitect(R) Version 5.0

#MNEM	.UNITS	DATA	:DESCRIPTION
#----	.-----	----	:-----
WPTYPE	.	PLANNED WELLPATH	:WELLPATH TYPE
FACILITY	.	SEC.01-T05N-R67W	:FACILITY
SLOT	.	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)	:SLOT
WELLBORE	.	GREELEY-ROTHE FEDERAL 13N-2C-L PWB	:WELLBORE
WELLPATH	.	GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)	:WELLPATH
MDREFPT	.	PRECISION 462 (20') (RKB)	:MD REFERENCE POINT
TVDREFPT	.	PRECISION 462 (20') (RKB)	:TVD REFERENCE POINT
LCLREFPT	.	Slot	:LOCAL COORDINATE REFERENCE PT

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

VSAZIMUTH.deg      267.53      :VERTICAL SECTION AZIMUTH  
 VSORIGN .ft      0.00      :VERTICAL SECTION ORIGIN NORTH  
 VSORIGE .ft      0.00      :VERTICAL SECTION ORIGIN EAST

~CURVE (WELLPATH) INFORMATION

#MNEM .UNITS :DESCRIPTION  
 #---- .----- :-----  
 DEPT .ft :MEASURED DEPTH  
 INC .deg :INCLINATION  
 AZI .deg :AZIMUTH  
 TVD .ft :TRUE VERTICAL DEPTH  
 SECT .ft :CROSS SECTION (CURTAIN/VERTICAL)  
 LOCALN .ft :LOCAL NORTH  
 LOCALE .ft :LOCAL EAST  
 LAT .deg :LATITUDE  
 LONG .deg :LONGITUDE  
 DLS .deg/100ft :DOGLEG SEVERITY

~ASCII DATA

0.00	0.00	107.00	0.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
20.00	0.00	107.00	20.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
120.00	0.00	107.00	120.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
220.00	0.00	107.00	220.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
320.00	0.00	107.00	320.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
420.00	0.00	107.00	420.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
520.00	0.00	107.00	520.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
620.00	0.00	107.00	620.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
650.00	0.00	107.00	650.00	0.00	0.00	0.00	40.4242519	-104.8335031	0.00
720.00	1.40	107.00	719.99	-0.81	-0.25	0.82	40.4242513	-104.8335001	2.00
820.00	3.40	107.00	819.90	-4.75	-1.47	4.82	40.4242479	-104.8334857	2.00
920.00	5.40	107.00	919.60	-11.99	-3.72	12.16	40.4242417	-104.8334594	2.00
1020.00	7.40	107.00	1018.97	-22.50	-6.98	22.82	40.4242328	-104.8334211	2.00
1063.83	8.28	107.00	1062.39	-28.13	-8.72	28.53	40.4242280	-104.8334006	2.00
1120.00	8.28	107.00	1117.98	-35.76	-11.09	36.27	40.4242215	-104.8333728	0.00

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

1220.00	8.28	107.00	1216.94	-49.33	-15.29	50.03	40.4242100	-104.8333234	0.00
1320.00	8.28	107.00	1315.89	-62.90	-19.50	63.80	40.4241984	-104.8332739	0.00
1420.00	8.28	107.00	1414.85	-76.47	-23.71	77.57	40.4241869	-104.8332245	0.00
1520.00	8.28	107.00	1513.81	-90.05	-27.92	91.33	40.4241753	-104.8331750	0.00
1620.00	8.28	107.00	1612.77	-103.62	-32.13	105.10	40.4241638	-104.8331256	0.00
1720.00	8.28	107.00	1711.73	-117.19	-36.33	118.87	40.4241522	-104.8330761	0.00
1820.00	8.28	107.00	1810.69	-130.76	-40.54	132.63	40.4241407	-104.8330267	0.00
1920.00	8.28	107.00	1909.64	-144.34	-44.75	146.40	40.4241291	-104.8329772	0.00
2020.00	8.28	107.00	2008.60	-157.91	-48.96	160.16	40.4241176	-104.8329278	0.00
2120.00	8.28	107.00	2107.56	-171.48	-53.17	173.93	40.4241060	-104.8328784	0.00
2220.00	8.28	107.00	2206.52	-185.05	-57.38	187.70	40.4240945	-104.8328289	0.00
2320.00	8.28	107.00	2305.48	-198.63	-61.58	201.46	40.4240829	-104.8327795	0.00
2420.00	8.28	107.00	2404.44	-212.20	-65.79	215.23	40.4240714	-104.8327300	0.00
2520.00	8.28	107.00	2503.40	-225.77	-70.00	229.00	40.4240598	-104.8326806	0.00
2620.00	8.28	107.00	2602.35	-239.34	-74.21	242.76	40.4240482	-104.8326311	0.00
2720.00	8.28	107.00	2701.31	-252.92	-78.42	256.53	40.4240367	-104.8325817	0.00
2820.00	8.28	107.00	2800.27	-266.49	-82.62	270.30	40.4240251	-104.8325322	0.00
2920.00	8.28	107.00	2899.23	-280.06	-86.83	284.06	40.4240136	-104.8324828	0.00
3020.00	8.28	107.00	2998.19	-293.63	-91.04	297.83	40.4240020	-104.8324334	0.00
3120.00	8.28	107.00	3097.15	-307.21	-95.25	311.60	40.4239905	-104.8323839	0.00
3220.00	8.28	107.00	3196.10	-320.78	-99.46	325.36	40.4239789	-104.8323345	0.00
3320.00	8.28	107.00	3295.06	-334.35	-103.66	339.13	40.4239674	-104.8322850	0.00
3420.00	8.28	107.00	3394.02	-347.92	-107.87	352.89	40.4239558	-104.8322356	0.00
3520.00	8.28	107.00	3492.98	-361.50	-112.08	366.66	40.4239443	-104.8321861	0.00
3620.00	8.28	107.00	3591.94	-375.07	-116.29	380.43	40.4239327	-104.8321367	0.00
3720.00	8.28	107.00	3690.90	-388.64	-120.50	394.19	40.4239212	-104.8320872	0.00
3820.00	8.28	107.00	3789.86	-402.21	-124.71	407.96	40.4239096	-104.8320378	0.00
3920.00	8.28	107.00	3888.81	-415.79	-128.91	421.73	40.4238981	-104.8319884	0.00
4020.00	8.28	107.00	3987.77	-429.36	-133.12	435.49	40.4238865	-104.8319389	0.00
4120.00	8.28	107.00	4086.73	-442.93	-137.33	449.26	40.4238750	-104.8318895	0.00
4220.00	8.28	107.00	4185.69	-456.50	-141.54	463.03	40.4238634	-104.8318400	0.00
4320.00	8.28	107.00	4284.65	-470.08	-145.75	476.79	40.4238519	-104.8317906	0.00
4420.00	8.28	107.00	4383.61	-483.65	-149.95	490.56	40.4238403	-104.8317411	0.00
4520.00	8.28	107.00	4482.56	-497.22	-154.16	504.33	40.4238288	-104.8316917	0.00

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

4620.00	8.28	107.00	4581.52	-510.79	-158.37	518.09	40.4238172	-104.8316423	0.00
4720.00	8.28	107.00	4680.48	-524.37	-162.58	531.86	40.4238057	-104.8315928	0.00
4820.00	8.28	107.00	4779.44	-537.94	-166.79	545.62	40.4237941	-104.8315434	0.00
4920.00	8.28	107.00	4878.40	-551.51	-171.00	559.39	40.4237826	-104.8314939	0.00
5020.00	8.28	107.00	4977.36	-565.08	-175.20	573.16	40.4237710	-104.8314445	0.00
5120.00	8.28	107.00	5076.32	-578.66	-179.41	586.92	40.4237595	-104.8313950	0.00
5220.00	8.28	107.00	5175.27	-592.23	-183.62	600.69	40.4237479	-104.8313456	0.00
5320.00	8.28	107.00	5274.23	-605.80	-187.83	614.46	40.4237364	-104.8312961	0.00
5420.00	8.28	107.00	5373.19	-619.37	-192.04	628.22	40.4237248	-104.8312467	0.00
5520.00	8.28	107.00	5472.15	-632.95	-196.24	641.99	40.4237133	-104.8311973	0.00
5620.00	8.28	107.00	5571.11	-646.52	-200.45	655.76	40.4237017	-104.8311478	0.00
5720.00	8.28	107.00	5670.07	-660.09	-204.66	669.52	40.4236902	-104.8310984	0.00
5820.00	8.28	107.00	5769.02	-673.66	-208.87	683.29	40.4236786	-104.8310489	0.00
5920.00	8.28	107.00	5867.98	-687.24	-213.08	697.06	40.4236670	-104.8309995	0.00
6020.00	8.28	107.00	5966.94	-700.81	-217.28	710.82	40.4236555	-104.8309500	0.00
6120.00	8.28	107.00	6065.90	-714.38	-221.49	724.59	40.4236439	-104.8309006	0.00
6220.00	8.28	107.00	6164.86	-727.95	-225.70	738.35	40.4236324	-104.8308512	0.00
6320.00	8.28	107.00	6263.82	-741.53	-229.91	752.12	40.4236208	-104.8308017	0.00
6383.56	8.28	107.00	6326.71	-750.15	-232.58	760.87	40.4236135	-104.8307703	0.00
6420.00	5.59	122.88	6362.89	-754.07	-234.31	764.87	40.4236087	-104.8307559	9.00
6520.00	6.26	221.72	6462.56	-754.24	-241.04	765.33	40.4235903	-104.8307543	9.00
6620.00	14.45	244.39	6560.88	-738.94	-250.52	750.42	40.4235643	-104.8308078	9.00
6720.00	23.25	250.50	6655.43	-708.53	-262.53	720.50	40.4235313	-104.8309153	9.00
6820.00	32.15	253.36	6743.89	-663.77	-276.77	676.31	40.4234922	-104.8310740	9.00
6920.00	41.09	255.07	6824.07	-605.76	-292.89	618.95	40.4234480	-104.8312800	9.00
7020.00	50.05	256.27	6894.00	-535.94	-310.49	549.81	40.4233997	-104.8315283	9.00
7120.00	59.02	257.18	6951.96	-456.01	-329.14	470.62	40.4233485	-104.8318128	9.00
7220.00	68.00	257.94	6996.52	-367.95	-348.38	383.30	40.4232957	-104.8321264	9.00
7320.00	76.97	258.60	7026.58	-273.92	-367.74	290.02	40.4232425	-104.8324614	9.00
7420.00	85.95	259.22	7041.41	-176.25	-386.73	193.08	40.4231904	-104.8328096	9.00
7466.34	90.12	259.50	7043.00	-130.41	-395.28	147.57	40.4231669	-104.8329731	9.00
7520.00	90.12	259.50	7042.89	-77.28	-405.06	94.81	40.4231401	-104.8331625	0.00
7620.00	90.12	259.50	7042.69	21.74	-423.28	-3.52	40.4230901	-104.8335157	0.00
7720.00	90.12	259.50	7042.49	120.75	-441.50	-101.84	40.4230401	-104.8338688	0.00

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

7820.00	90.12	259.50	7042.29	219.77	-459.73	-200.17	40.4229900	-104.8342220	0.00
7841.34	90.12	259.50	7042.25	240.91	-463.62	-221.15	40.4229794	-104.8342974	0.00
7920.00	90.12	261.07	7042.09	318.93	-476.89	-298.68	40.4229429	-104.8345758	2.00
8016.34	90.12	263.00	7041.90	414.83	-490.24	-394.09	40.4229063	-104.8349185	2.00
8020.00	90.12	263.00	7041.89	418.47	-490.68	-397.72	40.4229051	-104.8349315	0.00
8120.00	90.12	263.00	7041.69	518.16	-502.87	-496.97	40.4228716	-104.8352880	0.00
8220.00	90.12	263.00	7041.49	617.85	-515.05	-596.23	40.4228382	-104.8356445	0.00
8316.34	90.12	263.00	7041.29	713.89	-526.80	-691.85	40.4228059	-104.8359879	0.00
8320.00	90.12	263.07	7041.29	717.54	-527.24	-695.48	40.4228047	-104.8360009	2.00
8420.00	90.12	265.07	7041.09	817.35	-537.56	-794.94	40.4227764	-104.8363582	2.00
8520.00	90.12	267.07	7040.88	917.31	-544.41	-894.70	40.4227575	-104.8367165	2.00
8620.00	90.12	269.07	7040.68	1017.30	-547.77	-994.64	40.4227483	-104.8370754	2.00
8628.84	90.12	269.25	7040.67	1026.14	-547.90	-1003.48	40.4227480	-104.8371072	2.00
8720.00	90.12	269.25	7040.48	1117.26	-549.10	-1094.63	40.4227447	-104.8374345	0.00
8820.00	90.12	269.25	7040.28	1217.21	-550.41	-1194.62	40.4227411	-104.8377937	0.00
8920.00	90.12	269.25	7040.08	1317.17	-551.72	-1294.61	40.4227375	-104.8381528	0.00
9020.00	90.12	269.25	7039.88	1417.12	-553.02	-1394.61	40.4227338	-104.8385119	0.00
9120.00	90.12	269.25	7039.68	1517.08	-554.33	-1494.60	40.4227302	-104.8388710	0.00
9220.00	90.12	269.25	7039.48	1617.03	-555.64	-1594.59	40.4227266	-104.8392302	0.00
9320.00	90.12	269.25	7039.28	1716.99	-556.95	-1694.58	40.4227230	-104.8395893	0.00
9420.00	90.12	269.25	7039.08	1816.94	-558.26	-1794.57	40.4227194	-104.8399484	0.00
9520.00	90.12	269.25	7038.88	1916.89	-559.57	-1894.56	40.4227158	-104.8403075	0.00
9620.00	90.12	269.25	7038.68	2016.85	-560.88	-1994.55	40.4227122	-104.8406667	0.00
9720.00	90.12	269.25	7038.48	2116.80	-562.19	-2094.54	40.4227086	-104.8410258	0.00
9820.00	90.12	269.25	7038.28	2216.76	-563.50	-2194.54	40.4227049	-104.8413849	0.00
9920.00	90.12	269.25	7038.07	2316.71	-564.80	-2294.53	40.4227013	-104.8417440	0.00
10020.00	90.12	269.25	7037.87	2416.67	-566.11	-2394.52	40.4226977	-104.8421032	0.00
10120.00	90.12	269.25	7037.67	2516.62	-567.42	-2494.51	40.4226941	-104.8424623	0.00
10220.00	90.12	269.25	7037.47	2616.58	-568.73	-2594.50	40.4226905	-104.8428214	0.00
10320.00	90.12	269.25	7037.27	2716.53	-570.04	-2694.49	40.4226868	-104.8431806	0.00
10420.00	90.12	269.25	7037.07	2816.49	-571.35	-2794.48	40.4226832	-104.8435397	0.00
10520.00	90.12	269.25	7036.87	2916.44	-572.66	-2894.47	40.4226796	-104.8438988	0.00
10620.00	90.12	269.25	7036.67	3016.40	-573.97	-2994.46	40.4226760	-104.8442579	0.00
10720.00	90.12	269.25	7036.47	3116.35	-575.28	-3094.46	40.4226723	-104.8446171	0.00

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

10820.00	90.12	269.25	7036.27	3216.31	-576.59	-3194.45	40.4226687	-104.8449762	0.00
10920.00	90.12	269.25	7036.07	3316.26	-577.89	-3294.44	40.4226651	-104.8453353	0.00
11020.00	90.12	269.25	7035.87	3416.22	-579.20	-3394.43	40.4226615	-104.8456944	0.00
11120.00	90.12	269.25	7035.67	3516.17	-580.51	-3494.42	40.4226578	-104.8460536	0.00
11220.00	90.12	269.25	7035.47	3616.13	-581.82	-3594.41	40.4226542	-104.8464127	0.00
11320.00	90.12	269.25	7035.26	3716.08	-583.13	-3694.40	40.4226506	-104.8467718	0.00
11420.00	90.12	269.25	7035.06	3816.04	-584.44	-3794.39	40.4226469	-104.8471309	0.00
11520.00	90.12	269.25	7034.86	3915.99	-585.75	-3894.39	40.4226433	-104.8474901	0.00
11620.00	90.12	269.25	7034.66	4015.95	-587.06	-3994.38	40.4226397	-104.8478492	0.00
11720.00	90.12	269.25	7034.46	4115.90	-588.37	-4094.37	40.4226360	-104.8482083	0.00
11820.00	90.12	269.25	7034.26	4215.86	-589.68	-4194.36	40.4226324	-104.8485675	0.00
11920.00	90.12	269.25	7034.06	4315.81	-590.98	-4294.35	40.4226287	-104.8489266	0.00
12020.00	90.12	269.25	7033.86	4415.77	-592.29	-4394.34	40.4226251	-104.8492857	0.00
12120.00	90.12	269.25	7033.66	4515.72	-593.60	-4494.33	40.4226215	-104.8496448	0.00
12220.00	90.12	269.25	7033.46	4615.68	-594.91	-4594.32	40.4226178	-104.8500040	0.00
12320.00	90.12	269.25	7033.26	4715.63	-596.22	-4694.32	40.4226142	-104.8503631	0.00
12420.00	90.12	269.25	7033.06	4815.59	-597.53	-4794.31	40.4226105	-104.8507222	0.00
12520.00	90.12	269.25	7032.86	4915.54	-598.84	-4894.30	40.4226069	-104.8510813	0.00
12620.00	90.12	269.25	7032.66	5015.50	-600.15	-4994.29	40.4226032	-104.8514405	0.00
12720.00	90.12	269.25	7032.45	5115.45	-601.46	-5094.28	40.4225996	-104.8517996	0.00
12820.00	90.12	269.25	7032.25	5215.41	-602.76	-5194.27	40.4225959	-104.8521587	0.00
12920.00	90.12	269.25	7032.05	5315.36	-604.07	-5294.26	40.4225923	-104.8525178	0.00
13020.00	90.12	269.25	7031.85	5415.32	-605.38	-5394.25	40.4225886	-104.8528770	0.00
13120.00	90.12	269.25	7031.65	5515.27	-606.69	-5494.25	40.4225850	-104.8532361	0.00
13220.00	90.12	269.25	7031.45	5615.23	-608.00	-5594.24	40.4225813	-104.8535952	0.00
13320.00	90.12	269.25	7031.25	5715.18	-609.31	-5694.23	40.4225777	-104.8539543	0.00
13328.84	90.12	269.25	7031.23	5724.02	-609.43	-5703.07	40.4225773	-104.8539861	0.00
13420.00	90.12	271.07	7031.05	5815.08	-609.17	-5794.22	40.4225780	-104.8543135	2.00
13466.34	90.12	272.00	7030.96	5861.31	-607.93	-5840.55	40.4225814	-104.8544799	2.00
13520.00	90.12	272.00	7030.85	5914.80	-606.05	-5894.17	40.4225865	-104.8546725	0.00
13620.00	90.12	272.00	7030.65	6014.50	-602.56	-5994.11	40.4225960	-104.8550314	0.00
13720.00	90.12	272.00	7030.45	6114.19	-599.07	-6094.05	40.4226055	-104.8553903	0.00
13820.00	90.12	272.00	7030.25	6213.89	-595.58	-6193.99	40.4226150	-104.8557493	0.00
13920.00	90.12	272.00	7030.05	6313.58	-592.09	-6293.93	40.4226245	-104.8561082	0.00

GREELEY-ROTHE\_FEDERAL\_13N-2C-L\_PWP\_\_REV-A.0\_.las

14020.00	90.12	272.00	7029.85	6413.28	-588.60	-6393.87	40.4226340	-104.8564672	0.00
14120.00	90.12	272.00	7029.64	6512.98	-585.11	-6493.81	40.4226435	-104.8568261	0.00
14220.00	90.12	272.00	7029.44	6612.67	-581.62	-6593.75	40.4226530	-104.8571851	0.00
14320.00	90.12	272.00	7029.24	6712.37	-578.13	-6693.68	40.4226625	-104.8575440	0.00
14420.00	90.12	272.00	7029.04	6812.06	-574.64	-6793.62	40.4226720	-104.8579029	0.00
14441.34	90.12	272.00	7029.00	6833.34	-573.90	-6814.95	40.4226741	-104.8579795	0.00
14482.29	90.11	272.82	7028.92	6874.14	-572.18	-6855.87	40.4226788	-104.8581265	2.00
14520.00	90.11	272.82	7028.84	6911.69	-570.32	-6893.53	40.4226838	-104.8582618	0.00
14620.00	90.11	272.82	7028.65	7011.26	-565.40	-6993.41	40.4226973	-104.8586205	0.00
14720.00	90.11	272.82	7028.45	7110.84	-560.49	-7093.29	40.4227107	-104.8589792	0.00
14820.00	90.11	272.82	7028.25	7210.41	-555.57	-7193.16	40.4227241	-104.8593379	0.00
14920.00	90.11	272.82	7028.05	7309.99	-550.65	-7293.04	40.4227375	-104.8596967	0.00
15020.00	90.11	272.82	7027.86	7409.56	-545.73	-7392.92	40.4227509	-104.8600554	0.00
15120.00	90.11	272.82	7027.66	7509.14	-540.81	-7492.80	40.4227644	-104.8604141	0.00
15220.00	90.11	272.82	7027.46	7608.71	-535.90	-7592.68	40.4227778	-104.8607729	0.00
15320.00	90.11	272.82	7027.27	7708.29	-530.98	-7692.56	40.4227912	-104.8611316	0.00
15420.00	90.11	272.82	7027.07	7807.86	-526.06	-7792.44	40.4228046	-104.8614903	0.00
15520.00	90.11	272.82	7026.87	7907.43	-521.14	-7892.32	40.4228180	-104.8618490	0.00
15620.00	90.11	272.82	7026.67	8007.01	-516.22	-7992.19	40.4228314	-104.8622078	0.00
15720.00	90.11	272.82	7026.48	8106.58	-511.30	-8092.07	40.4228448	-104.8625665	0.00
15820.00	90.11	272.82	7026.28	8206.16	-506.39	-8191.95	40.4228582	-104.8629252	0.00
15920.00	90.11	272.82	7026.08	8305.73	-501.47	-8291.83	40.4228716	-104.8632840	0.00
16020.00	90.11	272.82	7025.89	8405.31	-496.55	-8391.71	40.4228851	-104.8636427	0.00
16120.00	90.11	272.82	7025.69	8504.88	-491.63	-8491.59	40.4228985	-104.8640014	0.00
16220.00	90.11	272.82	7025.49	8604.46	-486.71	-8591.47	40.4229119	-104.8643602	0.00
16320.00	90.11	272.82	7025.29	8704.03	-481.80	-8691.35	40.4229253	-104.8647189	0.00
16420.00	90.11	272.82	7025.10	8803.60	-476.88	-8791.22	40.4229387	-104.8650776	0.00
16520.00	90.11	272.82	7024.90	8903.18	-471.96	-8891.10	40.4229521	-104.8654364	0.00
16620.00	90.11	272.82	7024.70	9002.75	-467.04	-8990.98	40.4229655	-104.8657951	0.00
16720.00	90.11	272.82	7024.51	9102.33	-462.12	-9090.86	40.4229789	-104.8661538	0.00
16820.00	90.11	272.82	7024.31	9201.90	-457.21	-9190.74	40.4229923	-104.8665125	0.00
16920.00	90.11	272.82	7024.11	9301.48	-452.29	-9290.62	40.4230057	-104.8668713	0.00
17020.00	90.11	272.82	7023.91	9401.05	-447.37	-9390.50	40.4230191	-104.8672300	0.00
17120.00	90.11	272.82	7023.72	9500.63	-442.45	-9490.38	40.4230325	-104.8675887	0.00



GREELEY-ROTHE_FEDERAL_13N-2C-L_PWP__REV-A.0_.las									
17220.00	90.11	272.82	7023.52	9600.20	-437.53	-9590.25	40.4230459	-104.8679475	0.00
17320.00	90.11	272.82	7023.32	9699.77	-432.61	-9690.13	40.4230592	-104.8683062	0.00
17420.00	90.11	272.82	7023.12	9799.35	-427.70	-9790.01	40.4230726	-104.8686649	0.00
17483.28	90.11	272.82	7023.00	9862.36	-424.58	-9853.22	40.4230811	-104.8688919	0.00



# Planned Wellpath Report

## GREELEY-ROTHER FEDERAL 13N-2C-L PWP (REV-A.0)

Page 1 of 9



### REFERENCE WELLPATH IDENTIFICATION

Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHER FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHER FEDERAL 13N-2C-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	10/4/2017 at 2:50:56 PM
Convergence at slot	0.43° East	Database/Source file	WellArchitectDB/GREELEY-ROTHER FEDERAL_13N-2C-L_PWP__REV-A.0_.xml

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1384.80	2.24	3185558.15	1398092.67	40°25'27.307"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#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01))	4893.00ft
MD Reference Pt	PRECISION 462 (20') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	267.53°



# Planned Wellpath Report

## GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)

Page 2 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHE FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHE FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	106.997	0.00	0.00	0.00	0.00	0.00	
20.00	0.000	106.997	20.00	0.00	0.00	0.00	0.00	Tie On
120.00†	0.000	106.997	120.00	0.00	0.00	0.00	0.00	
220.00†	0.000	106.997	220.00	0.00	0.00	0.00	0.00	
320.00†	0.000	106.997	320.00	0.00	0.00	0.00	0.00	
420.00†	0.000	106.997	420.00	0.00	0.00	0.00	0.00	
520.00†	0.000	106.997	520.00	0.00	0.00	0.00	0.00	
620.00†	0.000	106.997	620.00	0.00	0.00	0.00	0.00	
650.00	0.000	106.997	650.00	0.00	0.00	0.00	0.00	End of Tangent
720.00†	1.400	106.997	719.99	-0.81	-0.25	0.82	2.00	
820.00†	3.400	106.997	819.90	-4.75	-1.47	4.82	2.00	
920.00†	5.400	106.997	919.60	-11.99	-3.72	12.16	2.00	
1020.00†	7.400	106.997	1018.97	-22.50	-6.98	22.82	2.00	
1063.83	8.277	106.997	1062.39	-28.13	-8.72	28.53	2.00	End of Build
1120.00†	8.277	106.997	1117.98	-35.76	-11.09	36.27	0.00	
1220.00†	8.277	106.997	1216.94	-49.33	-15.29	50.03	0.00	
1320.00†	8.277	106.997	1315.89	-62.90	-19.50	63.80	0.00	
1420.00†	8.277	106.997	1414.85	-76.47	-23.71	77.57	0.00	
1520.00†	8.277	106.997	1513.81	-90.05	-27.92	91.33	0.00	
1620.00†	8.277	106.997	1612.77	-103.62	-32.13	105.10	0.00	
1720.00†	8.277	106.997	1711.73	-117.19	-36.33	118.87	0.00	
1820.00†	8.277	106.997	1810.69	-130.76	-40.54	132.63	0.00	
1920.00†	8.277	106.997	1909.64	-144.34	-44.75	146.40	0.00	
2020.00†	8.277	106.997	2008.60	-157.91	-48.96	160.16	0.00	
2120.00†	8.277	106.997	2107.56	-171.48	-53.17	173.93	0.00	
2220.00†	8.277	106.997	2206.52	-185.05	-57.38	187.70	0.00	
2320.00†	8.277	106.997	2305.48	-198.63	-61.58	201.46	0.00	
2420.00†	8.277	106.997	2404.44	-212.20	-65.79	215.23	0.00	
2520.00†	8.277	106.997	2503.40	-225.77	-70.00	229.00	0.00	
2620.00†	8.277	106.997	2602.35	-239.34	-74.21	242.76	0.00	



# Planned Wellpath Report

## GREELEY-ROTHER FEDERAL 13N-2C-L PWP (REV-A.0)

Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHER FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHER FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

### WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2720.00†	8.277	106.997	2701.31	-252.92	-78.42	256.53	0.00	
2820.00†	8.277	106.997	2800.27	-266.49	-82.62	270.30	0.00	
2920.00†	8.277	106.997	2899.23	-280.06	-86.83	284.06	0.00	
3020.00†	8.277	106.997	2998.19	-293.63	-91.04	297.83	0.00	
3120.00†	8.277	106.997	3097.15	-307.21	-95.25	311.60	0.00	
3220.00†	8.277	106.997	3196.10	-320.78	-99.46	325.36	0.00	
3320.00†	8.277	106.997	3295.06	-334.35	-103.66	339.13	0.00	
3420.00†	8.277	106.997	3394.02	-347.92	-107.87	352.89	0.00	
3520.00†	8.277	106.997	3492.98	-361.50	-112.08	366.66	0.00	
3620.00†	8.277	106.997	3591.94	-375.07	-116.29	380.43	0.00	
3720.00†	8.277	106.997	3690.90	-388.64	-120.50	394.19	0.00	
3820.00†	8.277	106.997	3789.86	-402.21	-124.71	407.96	0.00	
3920.00†	8.277	106.997	3888.81	-415.79	-128.91	421.73	0.00	
4020.00†	8.277	106.997	3987.77	-429.36	-133.12	435.49	0.00	
4120.00†	8.277	106.997	4086.73	-442.93	-137.33	449.26	0.00	
4220.00†	8.277	106.997	4185.69	-456.50	-141.54	463.03	0.00	
4320.00†	8.277	106.997	4284.65	-470.08	-145.75	476.79	0.00	
4420.00†	8.277	106.997	4383.61	-483.65	-149.95	490.56	0.00	
4520.00†	8.277	106.997	4482.56	-497.22	-154.16	504.33	0.00	
4620.00†	8.277	106.997	4581.52	-510.79	-158.37	518.09	0.00	
4720.00†	8.277	106.997	4680.48	-524.37	-162.58	531.86	0.00	
4820.00†	8.277	106.997	4779.44	-537.94	-166.79	545.62	0.00	
4920.00†	8.277	106.997	4878.40	-551.51	-171.00	559.39	0.00	
5020.00†	8.277	106.997	4977.36	-565.08	-175.20	573.16	0.00	
5120.00†	8.277	106.997	5076.32	-578.66	-179.41	586.92	0.00	
5220.00†	8.277	106.997	5175.27	-592.23	-183.62	600.69	0.00	
5320.00†	8.277	106.997	5274.23	-605.80	-187.83	614.46	0.00	
5420.00†	8.277	106.997	5373.19	-619.37	-192.04	628.22	0.00	
5520.00†	8.277	106.997	5472.15	-632.95	-196.24	641.99	0.00	
5620.00†	8.277	106.997	5571.11	-646.52	-200.45	655.76	0.00	



# Planned Wellpath Report

## GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)

Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHE FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHE FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5720.00†	8.277	106.997	5670.07	-660.09	-204.66	669.52	0.00	
5820.00†	8.277	106.997	5769.02	-673.66	-208.87	683.29	0.00	
5920.00†	8.277	106.997	5867.98	-687.24	-213.08	697.06	0.00	
6020.00†	8.277	106.997	5966.94	-700.81	-217.28	710.82	0.00	
6120.00†	8.277	106.997	6065.90	-714.38	-221.49	724.59	0.00	
6220.00†	8.277	106.997	6164.86	-727.95	-225.70	738.35	0.00	
6320.00†	8.277	106.997	6263.82	-741.53	-229.91	752.12	0.00	
6383.56	8.277	106.997	6326.71	-750.15	-232.58	760.87	0.00	End of Tangent
6420.00†	5.585	122.884	6362.89	-754.07	-234.31	764.87	9.00	
6520.00†	6.259	221.723	6462.56	-754.24	-241.04	765.33	9.00	
6620.00†	14.454	244.385	6560.88	-738.94	-250.52	750.42	9.00	
6720.00†	23.247	250.495	6655.43	-708.53	-262.53	720.50	9.00	
6820.00†	32.150	253.356	6743.89	-663.77	-276.77	676.31	9.00	
6920.00†	41.093	255.074	6824.07	-605.76	-292.89	618.95	9.00	
7020.00†	50.053	256.267	6894.00	-535.94	-310.49	549.81	9.00	
7120.00†	59.022	257.181	6951.96	-456.01	-329.14	470.62	9.00	
7220.00†	67.997	257.937	6996.52	-367.95	-348.38	383.30	9.00	
7320.00†	76.974	258.602	7026.58	-273.92	-367.74	290.02	9.00	
7420.00†	85.953	259.220	7041.41	-176.25	-386.73	193.08	9.00	
7466.34	90.115	259.500	7043.00 <sup>1</sup>	-130.41	-395.28	147.57	9.00	End of 3D Arc
7520.00†	90.115	259.500	7042.89	-77.28	-405.06	94.81	0.00	
7620.00†	90.115	259.500	7042.69	21.74	-423.28	-3.52	0.00	
7720.00†	90.115	259.500	7042.49	120.75	-441.50	-101.84	0.00	
7820.00†	90.115	259.500	7042.29	219.77	-459.73	-200.17	0.00	
7841.34	90.115	259.500	7042.25	240.91	-463.62	-221.15	0.00	End of Tangent
7920.00†	90.115	261.073	7042.09	318.93	-476.89	-298.68	2.00	
8016.34	90.115	263.000	7041.90	414.83	-490.24	-394.09	2.00	End of 3D Arc
8020.00†	90.115	263.000	7041.89	418.47	-490.68	-397.72	0.00	
8120.00†	90.115	263.000	7041.69	518.16	-502.87	-496.97	0.00	
8220.00†	90.115	263.000	7041.49	617.85	-515.05	-596.23	0.00	



# Planned Wellpath Report

## GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)

Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHE FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHE FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

### WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8316.34	90.115	263.000	7041.29	713.89	-526.80	-691.85	0.00	End of Tangent
8320.00†	90.115	263.073	7041.29	717.54	-527.24	-695.48	2.00	
8420.00†	90.115	265.073	7041.09	817.35	-537.56	-794.94	2.00	
8520.00†	90.115	267.073	7040.88	917.31	-544.41	-894.70	2.00	
8620.00†	90.115	269.073	7040.68	1017.30	-547.77	-994.64	2.00	
8628.84	90.115	269.250	7040.67	1026.14	-547.90	-1003.48	2.00	End of 3D Arc
8720.00†	90.115	269.250	7040.48	1117.26	-549.10	-1094.63	0.00	
8820.00†	90.115	269.250	7040.28	1217.21	-550.41	-1194.62	0.00	
8920.00†	90.115	269.250	7040.08	1317.17	-551.72	-1294.61	0.00	
9020.00†	90.115	269.250	7039.88	1417.12	-553.02	-1394.61	0.00	
9120.00†	90.115	269.250	7039.68	1517.08	-554.33	-1494.60	0.00	
9220.00†	90.115	269.250	7039.48	1617.03	-555.64	-1594.59	0.00	
9320.00†	90.115	269.250	7039.28	1716.99	-556.95	-1694.58	0.00	
9420.00†	90.115	269.250	7039.08	1816.94	-558.26	-1794.57	0.00	
9520.00†	90.115	269.250	7038.88	1916.89	-559.57	-1894.56	0.00	
9620.00†	90.115	269.250	7038.68	2016.85	-560.88	-1994.55	0.00	
9720.00†	90.115	269.250	7038.48	2116.80	-562.19	-2094.54	0.00	
9820.00†	90.115	269.250	7038.28	2216.76	-563.50	-2194.54	0.00	
9920.00†	90.115	269.250	7038.07	2316.71	-564.80	-2294.53	0.00	
10020.00†	90.115	269.250	7037.87	2416.67	-566.11	-2394.52	0.00	
10120.00†	90.115	269.250	7037.67	2516.62	-567.42	-2494.51	0.00	
10220.00†	90.115	269.250	7037.47	2616.58	-568.73	-2594.50	0.00	
10320.00†	90.115	269.250	7037.27	2716.53	-570.04	-2694.49	0.00	
10420.00†	90.115	269.250	7037.07	2816.49	-571.35	-2794.48	0.00	
10520.00†	90.115	269.250	7036.87	2916.44	-572.66	-2894.47	0.00	
10620.00†	90.115	269.250	7036.67	3016.40	-573.97	-2994.46	0.00	
10720.00†	90.115	269.250	7036.47	3116.35	-575.28	-3094.46	0.00	
10820.00†	90.115	269.250	7036.27	3216.31	-576.59	-3194.45	0.00	
10920.00†	90.115	269.250	7036.07	3316.26	-577.89	-3294.44	0.00	
11020.00†	90.115	269.250	7035.87	3416.22	-579.20	-3394.43	0.00	



# Planned Wellpath Report

## GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)

Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHE FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHE FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11120.00†	90.115	269.250	7035.67	3516.17	-580.51	-3494.42	0.00	
11220.00†	90.115	269.250	7035.47	3616.13	-581.82	-3594.41	0.00	
11320.00†	90.115	269.250	7035.26	3716.08	-583.13	-3694.40	0.00	
11420.00†	90.115	269.250	7035.06	3816.04	-584.44	-3794.39	0.00	
11520.00†	90.115	269.250	7034.86	3915.99	-585.75	-3894.39	0.00	
11620.00†	90.115	269.250	7034.66	4015.95	-587.06	-3994.38	0.00	
11720.00†	90.115	269.250	7034.46	4115.90	-588.37	-4094.37	0.00	
11820.00†	90.115	269.250	7034.26	4215.86	-589.68	-4194.36	0.00	
11920.00†	90.115	269.250	7034.06	4315.81	-590.98	-4294.35	0.00	
12020.00†	90.115	269.250	7033.86	4415.77	-592.29	-4394.34	0.00	
12120.00†	90.115	269.250	7033.66	4515.72	-593.60	-4494.33	0.00	
12220.00†	90.115	269.250	7033.46	4615.68	-594.91	-4594.32	0.00	
12320.00†	90.115	269.250	7033.26	4715.63	-596.22	-4694.32	0.00	
12420.00†	90.115	269.250	7033.06	4815.59	-597.53	-4794.31	0.00	
12520.00†	90.115	269.250	7032.86	4915.54	-598.84	-4894.30	0.00	
12620.00†	90.115	269.250	7032.66	5015.50	-600.15	-4994.29	0.00	
12720.00†	90.115	269.250	7032.45	5115.45	-601.46	-5094.28	0.00	
12820.00†	90.115	269.250	7032.25	5215.41	-602.76	-5194.27	0.00	
12920.00†	90.115	269.250	7032.05	5315.36	-604.07	-5294.26	0.00	
13020.00†	90.115	269.250	7031.85	5415.32	-605.38	-5394.25	0.00	
13120.00†	90.115	269.250	7031.65	5515.27	-606.69	-5494.25	0.00	
13220.00†	90.115	269.250	7031.45	5615.23	-608.00	-5594.24	0.00	
13320.00†	90.115	269.250	7031.25	5715.18	-609.31	-5694.23	0.00	
13328.84	90.115	269.250	7031.23	5724.02	-609.43	-5703.07	0.00	End of Tangent
13420.00†	90.115	271.073	7031.05	5815.08	-609.17	-5794.22	2.00	
13466.34	90.115	272.000	7030.96	5861.31	-607.93	-5840.55	2.00	End of 3D Arc
13520.00†	90.115	272.000	7030.85	5914.80	-606.05	-5894.17	0.00	
13620.00†	90.115	272.000	7030.65	6014.50	-602.56	-5994.11	0.00	
13720.00†	90.115	272.000	7030.45	6114.19	-599.07	-6094.05	0.00	
13820.00†	90.115	272.000	7030.25	6213.89	-595.58	-6193.99	0.00	





# Planned Wellpath Report

## GREELEY-ROTHE FEDERAL 13N-2C-L PWP (REV-A.0)

Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHE FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHE FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHE FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13920.00†	90.115	272.000	7030.05	6313.58	-592.09	-6293.93	0.00	
14020.00†	90.115	272.000	7029.85	6413.28	-588.60	-6393.87	0.00	
14120.00†	90.115	272.000	7029.64	6512.98	-585.11	-6493.81	0.00	
14220.00†	90.115	272.000	7029.44	6612.67	-581.62	-6593.75	0.00	
14320.00†	90.115	272.000	7029.24	6712.37	-578.13	-6693.68	0.00	
14420.00†	90.115	272.000	7029.04	6812.06	-574.64	-6793.62	0.00	
14441.34	90.115	272.000	7029.00	6833.34	-573.90	-6814.95	0.00	End of Tangent
14482.29	90.113	272.819	7028.92	6874.14	-572.18	-6855.87	2.00	End of 3D Arc
14520.00†	90.113	272.819	7028.84	6911.69	-570.32	-6893.53	0.00	
14620.00†	90.113	272.819	7028.65	7011.26	-565.40	-6993.41	0.00	
14720.00†	90.113	272.819	7028.45	7110.84	-560.49	-7093.29	0.00	
14820.00†	90.113	272.819	7028.25	7210.41	-555.57	-7193.16	0.00	
14920.00†	90.113	272.819	7028.05	7309.99	-550.65	-7293.04	0.00	
15020.00†	90.113	272.819	7027.86	7409.56	-545.73	-7392.92	0.00	
15120.00†	90.113	272.819	7027.66	7509.14	-540.81	-7492.80	0.00	
15220.00†	90.113	272.819	7027.46	7608.71	-535.90	-7592.68	0.00	
15320.00†	90.113	272.819	7027.27	7708.29	-530.98	-7692.56	0.00	
15420.00†	90.113	272.819	7027.07	7807.86	-526.06	-7792.44	0.00	
15520.00†	90.113	272.819	7026.87	7907.43	-521.14	-7892.32	0.00	
15620.00†	90.113	272.819	7026.67	8007.01	-516.22	-7992.19	0.00	
15720.00†	90.113	272.819	7026.48	8106.58	-511.30	-8092.07	0.00	
15820.00†	90.113	272.819	7026.28	8206.16	-506.39	-8191.95	0.00	
15920.00†	90.113	272.819	7026.08	8305.73	-501.47	-8291.83	0.00	
16020.00†	90.113	272.819	7025.89	8405.31	-496.55	-8391.71	0.00	
16120.00†	90.113	272.819	7025.69	8504.88	-491.63	-8491.59	0.00	
16220.00†	90.113	272.819	7025.49	8604.46	-486.71	-8591.47	0.00	
16320.00†	90.113	272.819	7025.29	8704.03	-481.80	-8691.35	0.00	
16420.00†	90.113	272.819	7025.10	8803.60	-476.88	-8791.22	0.00	
16520.00†	90.113	272.819	7024.90	8903.18	-471.96	-8891.10	0.00	
16620.00†	90.113	272.819	7024.70	9002.75	-467.04	-8990.98	0.00	





# Planned Wellpath Report

## GREELEY-ROTHER FEDERAL 13N-2C-L PWP (REV-A.0)

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)
Area	COLORADO	Well	GREELEY-ROTHER FEDERAL 13N-2C-L
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHER FEDERAL 13N-2C-L PWB
Facility	SEC.01-T05N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
16720.00†	90.113	272.819	7024.51	9102.33	-462.12	-9090.86	0.00	
16820.00†	90.113	272.819	7024.31	9201.90	-457.21	-9190.74	0.00	
16920.00†	90.113	272.819	7024.11	9301.48	-452.29	-9290.62	0.00	
17020.00†	90.113	272.819	7023.91	9401.05	-447.37	-9390.50	0.00	
17120.00†	90.113	272.819	7023.72	9500.63	-442.45	-9490.38	0.00	
17220.00†	90.113	272.819	7023.52	9600.20	-437.53	-9590.25	0.00	
17320.00†	90.113	272.819	7023.32	9699.77	-432.61	-9690.13	0.00	
17420.00†	90.113	272.819	7023.12	9799.35	-427.70	-9790.01	0.00	
17483.28	90.113	272.819	7023.00 <sup>2</sup>	9862.36	-424.58	-9853.22	0.00	End of Tangent

HOLE & CASING SECTIONS									
- Ref Wellbore: GREELEY-ROTHER FEDERAL 13N-2C-L PWB				Ref Wellpath: GREELEY-ROTHER 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	0.00	0.00	-37.60	123.00
9.625in Casing Surface	20.00	1750.00	1730.00	20.00	1741.42	0.00	0.00	-37.60	123.00
8.5in Open Hole	20.00	17483.28	17463.28	20.00	7023.00	0.00	0.00	-424.58	-9853.22



# Planned Wellpath Report

## GREELEY-ROTHER FEDERAL 13N-2C-L PWP (REV-A.0)

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION				
Operator	SRC ENERGY	Slot	SLOT#22 GREELEY-ROTHER FEDERAL 13N-2C-L (983'FSL & 294'FEL, SEC.01)	
Area	COLORADO	Well	GREELEY-ROTHER FEDERAL 13N-2C-L	
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	GREELEY-ROTHER FEDERAL 13N-2C-L PWB	
Facility	SEC.01-T05N-R67W			

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.01-T05N-R67W		23.00	1384.80	-2.24	3185545.50	1399477.36	40°25'40.991"N	104°50'00.640"W	polygon
SEC.02-T05N-R67W		23.00	1384.80	-2.24	3185545.50	1399477.36	40°25'40.991"N	104°50'00.640"W	polygon
2) GREELEY ROTHE FEDERAL 13N-2C-L BHL ON PLAT (648'FSL & 150'FWL, SEC.02)	17483.28	7023.00	-424.58	-9853.22	3175708.80	1397594.06	40°25'23.092"N	104°52'08.011"W	circle
1) GREELEY ROTHE FEDERAL 13N-2C-L TOP OF PROD ON PLAT (582'FSL & 150'FEL, SEC.01)	7466.34	7043.00	-395.28	147.57	3185708.68	1397698.53	40°25'23.401"N	104°49'58.703"W	circle

SURVEY PROGRAM -				
Ref Wellbore: GREELEY-ROTHER FEDERAL 13N-2C-L PWB		Ref Wellpath: GREELEY-ROTHER 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-ROTHER FEDERAL 13N-2C-L PWB
1750.00	17483.28	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)		GREELEY-ROTHER FEDERAL 13N-2C-L PWB