

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)  
Field: WELD COUNTY Well: STATE NORTH PLATTE K21-O24-36HNB  
Facility: SEC.36-T5N-R63W Wellbore: STATE NORTH PLATTE K21-O24-36HNB PWB

Prior reference wellpath is STATE NORTH PLATTE K21-O24-36HNB (REV-A) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)	North Reference: True north
Measured depths are referenced to RIG (17) (RKB)	Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4560 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)): 0 feet	Created by: doddanna on 2018-09-12
Coordinates are in feet referenced to Slot	Database: Well/ArchedDB2

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T5N-R63W			3308733.906	1376726.942	40°21'43.992"N	104°23'31.452"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358FNL & 640FWL, SEC.36)	-5.06	116.50	3308850.458	1376722.438	40°21'43.942"N	104°23'29.947"W
RIG (17) (RKB) to Ground level (At Slot: SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358FNL & 640FWL, SEC.36))					4560ft	
Mean Sea Level to Ground level (At Slot: SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358FNL & 640FWL, SEC.36))					0ft	
RIG (17) (RKB) to Mean Sea Level					4560ft	

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	72.283	17.00	0.00	0.00	0.00	0.00
End of Tangent	1550.00	0.000	72.283	1550.00	0.00	0.00	0.00	0.00
End of Build	2560.25	20.205	72.283	2539.44	53.65	167.93	2.00	3.05
End of Tangent	5932.00	20.205	72.283	5703.71	408.04	1277.23	0.00	23.19
End of 3D Arc	6893.07	90.000	180.222	6302.00	-162.48	1484.51	10.00	630.04
End of Tangent	11066.67	90.000	180.222	6302.00	-4336.05	1468.35	0.00	4577.92

## Hole and Casing Sections

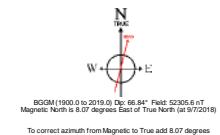
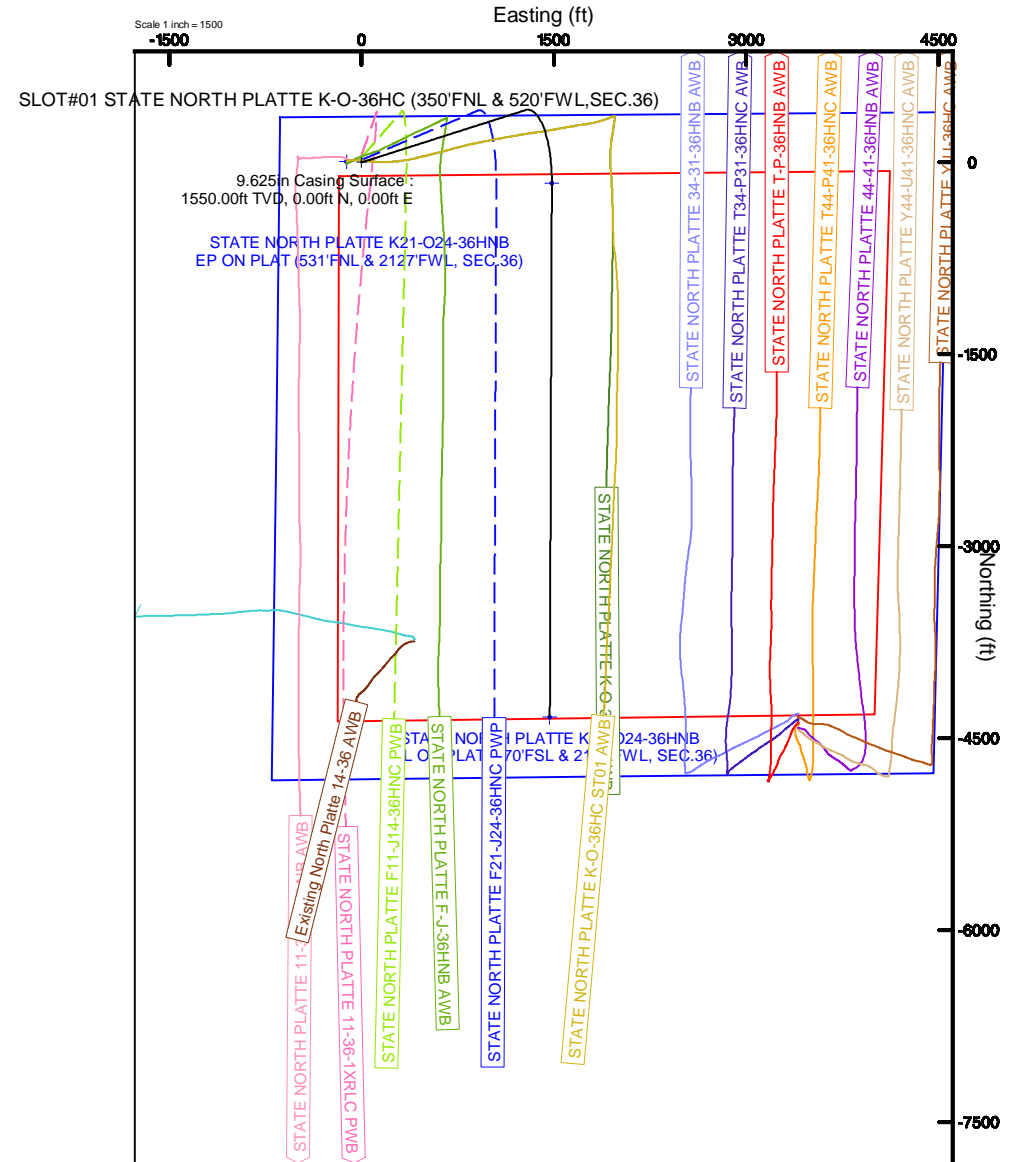
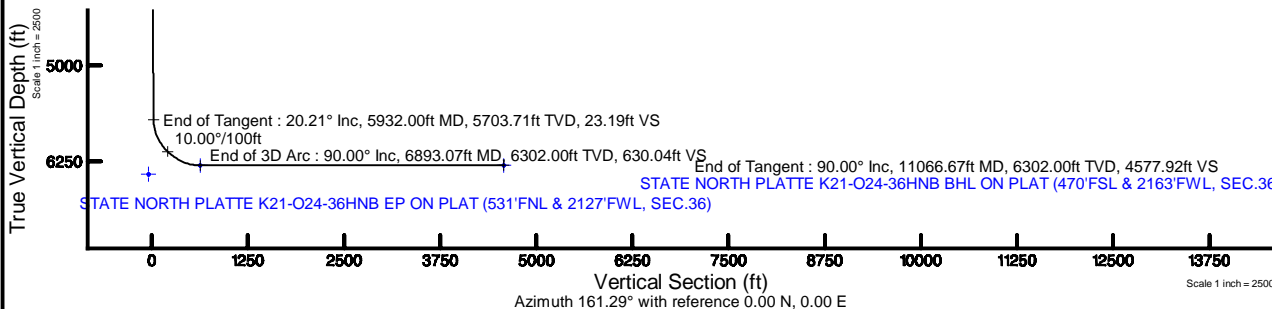
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	STATE NORTH PLATTE K21-O24-36HNB PWB
8.5in Open Hole	1550.00	11066.67	9516.67	1550.00	N/A	0.00	0.00	N/A	N/A	STATE NORTH PLATTE K21-O24-36HNB PWB

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	BHI NavTrak (Rotating+Axial Corr)		STATE NORTH PLATTE K21-O24-36HNB PWB
1550.00	11066.67	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		STATE NORTH PLATTE K21-O24-36HNB PWB

## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
11066.67	90.000	180.222	6302.00	-4336.05	1468.35	3310372.82	1372405.27	40°21'01.094"N	104°23'10.982"W



# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Doddanna
Scale	0.999959	Report Generated	9/12/2018 at 9:45:52 AM
Convergence at slot	0.72° East	Database/Source file	WellArchitectDB2/STATE_NORTH_PLATTE_K21-O24-36HNB_REV-A.0_PWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-5.06	116.50	3308850.46	1376722.44	40°21'43.942"N	104°23'29.947"W
Facility Reference Pt			3308733.91	1376726.04	40°21'43.992"N	104°23'31.452"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	RIG (17') (RKB) to Facility Vertical Datum	4560.00ft
Horizontal Reference Pt	Slot	RIG (17') (RKB) to Mean Sea Level	4560.00ft
Vertical Reference Pt	RIG (17') (RKB)	RIG (17') (RKB) to Ground Level at Slot (SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36))	4560.00ft
MD Reference Pt	RIG (17') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.29°

# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (117 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	72.283	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	72.283	17.00	0.00	0.00	0.00	0.00	Tie On
117.00†	0.000	72.283	117.00	0.00	0.00	0.00	0.00	
217.00†	0.000	72.283	217.00	0.00	0.00	0.00	0.00	
317.00†	0.000	72.283	317.00	0.00	0.00	0.00	0.00	
417.00†	0.000	72.283	417.00	0.00	0.00	0.00	0.00	
517.00†	0.000	72.283	517.00	0.00	0.00	0.00	0.00	
617.00†	0.000	72.283	617.00	0.00	0.00	0.00	0.00	
717.00†	0.000	72.283	717.00	0.00	0.00	0.00	0.00	
817.00†	0.000	72.283	817.00	0.00	0.00	0.00	0.00	
917.00†	0.000	72.283	917.00	0.00	0.00	0.00	0.00	
1017.00†	0.000	72.283	1017.00	0.00	0.00	0.00	0.00	
1117.00†	0.000	72.283	1117.00	0.00	0.00	0.00	0.00	
1217.00†	0.000	72.283	1217.00	0.00	0.00	0.00	0.00	
1317.00†	0.000	72.283	1317.00	0.00	0.00	0.00	0.00	
1417.00†	0.000	72.283	1417.00	0.00	0.00	0.00	0.00	
1517.00†	0.000	72.283	1517.00	0.00	0.00	0.00	0.00	
1550.00	0.000	72.283	1550.00	0.00	0.00	0.00	0.00	End of Tangent
1617.00†	1.340	72.283	1616.99	0.01	0.24	0.75	2.00	
1717.00†	3.340	72.283	1716.91	0.08	1.48	4.64	2.00	
1817.00†	5.340	72.283	1816.61	0.22	3.78	11.84	2.00	
1917.00†	7.340	72.283	1916.00	0.41	7.14	22.36	2.00	
2017.00†	9.340	72.283	2014.93	0.66	11.56	36.18	2.00	
2117.00†	11.340	72.283	2113.31	0.97	17.02	53.27	2.00	
2217.00†	13.340	72.283	2210.99	1.34	23.52	73.63	2.00	
2317.00†	15.340	72.283	2307.87	1.77	31.06	97.22	2.00	
2417.00†	17.340	72.283	2403.83	2.25	39.62	124.02	2.00	
2517.00†	19.340	72.283	2498.74	2.80	49.20	153.99	2.00	
2560.25	20.205	72.283	2539.44	3.05	53.65	167.93	2.00	End of Build
2617.00†	20.205	72.283	2592.70	3.39	59.61	186.60	0.00	

# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

## WELLPATH DATA (117 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2717.00†	20.205	72.283	2686.55	3.99	70.12	219.50	0.00	
2817.00†	20.205	72.283	2780.39	4.58	80.63	252.40	0.00	
2917.00†	20.205	72.283	2874.24	5.18	91.14	285.30	0.00	
3017.00†	20.205	72.283	2968.08	5.78	101.65	318.20	0.00	
3117.00†	20.205	72.283	3061.93	6.37	112.17	351.10	0.00	
3217.00†	20.205	72.283	3155.78	6.97	122.68	384.00	0.00	
3317.00†	20.205	72.283	3249.62	7.57	133.19	416.90	0.00	
3417.00†	20.205	72.283	3343.47	8.17	143.70	449.80	0.00	
3517.00†	20.205	72.283	3437.32	8.76	154.21	482.70	0.00	
3617.00†	20.205	72.283	3531.16	9.36	164.72	515.60	0.00	
3717.00†	20.205	72.283	3625.01	9.96	175.23	548.50	0.00	
3817.00†	20.205	72.283	3718.85	10.56	185.74	581.40	0.00	
3917.00†	20.205	72.283	3812.70	11.15	196.25	614.30	0.00	
4017.00†	20.205	72.283	3906.55	11.75	206.76	647.20	0.00	
4117.00†	20.205	72.283	4000.39	12.35	217.27	680.10	0.00	
4217.00†	20.205	72.283	4094.24	12.95	227.78	713.00	0.00	
4317.00†	20.205	72.283	4188.09	13.54	238.29	745.90	0.00	
4417.00†	20.205	72.283	4281.93	14.14	248.80	778.80	0.00	
4517.00†	20.205	72.283	4375.78	14.74	259.31	811.70	0.00	
4617.00†	20.205	72.283	4469.62	15.33	269.82	844.60	0.00	
4717.00†	20.205	72.283	4563.47	15.93	280.33	877.50	0.00	
4817.00†	20.205	72.283	4657.32	16.53	290.84	910.40	0.00	
4917.00†	20.205	72.283	4751.16	17.13	301.35	943.30	0.00	
5017.00†	20.205	72.283	4845.01	17.72	311.86	976.20	0.00	
5117.00†	20.205	72.283	4938.86	18.32	322.37	1009.10	0.00	
5217.00†	20.205	72.283	5032.70	18.92	332.89	1042.00	0.00	
5317.00†	20.205	72.283	5126.55	19.52	343.40	1074.90	0.00	
5417.00†	20.205	72.283	5220.39	20.11	353.91	1107.80	0.00	
5517.00†	20.205	72.283	5314.24	20.71	364.42	1140.70	0.00	
5617.00†	20.205	72.283	5408.09	21.31	374.93	1173.60	0.00	

# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

## WELLPATH DATA (117 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5717.00†	20.205	72.283	5501.93	21.91	385.44	1206.50	0.00	
5817.00†	20.205	72.283	5595.78	22.50	395.95	1239.40	0.00	
5917.00†	20.205	72.283	5689.63	23.10	406.46	1272.30	0.00	
5932.00	20.205	72.283	5703.71	23.19	408.04	1277.23	0.00	End of Tangent
6017.00†	19.439	97.429	5783.81	29.69	410.68	1305.29	10.00	
6117.00†	22.806	123.843	5877.29	52.46	397.70	1337.97	10.00	
6217.00†	29.232	141.491	5967.24	90.92	367.72	1369.35	10.00	
6317.00†	37.160	152.708	6050.94	143.89	321.66	1398.48	10.00	
6417.00†	45.810	160.322	6125.83	209.77	260.91	1424.46	10.00	
6517.00†	54.833	165.940	6189.64	286.55	187.31	1446.52	10.00	
6617.00†	64.064	170.417	6240.43	371.90	103.11	1463.98	10.00	
6717.00†	73.412	174.235	6276.67	463.23	10.87	1476.31	10.00	
6817.00†	82.823	177.695	6297.24	557.76	-86.63	1483.14	10.00	
6893.07	90.000	180.222	6302.00 <sup>†</sup>	630.04	-162.48	1484.51	10.00	End of 3D Arc
6917.00†	90.000	180.222	6302.00	652.68	-186.41	1484.42	0.00	
7017.00†	90.000	180.222	6302.00	747.27	-286.41	1484.03	0.00	
7117.00†	90.000	180.222	6302.00	841.86	-386.41	1483.64	0.00	
7217.00†	90.000	180.222	6302.00	936.46	-486.41	1483.26	0.00	
7317.00†	90.000	180.222	6302.00	1031.05	-586.41	1482.87	0.00	
7417.00†	90.000	180.222	6302.00	1125.64	-686.41	1482.48	0.00	
7517.00†	90.000	180.222	6302.00	1220.23	-786.40	1482.09	0.00	
7617.00†	90.000	180.222	6302.00	1314.82	-886.40	1481.71	0.00	
7717.00†	90.000	180.222	6302.00	1409.41	-986.40	1481.32	0.00	
7817.00†	90.000	180.222	6302.00	1504.00	-1086.40	1480.93	0.00	
7917.00†	90.000	180.222	6302.00	1598.60	-1186.40	1480.54	0.00	
8017.00†	90.000	180.222	6302.00	1693.19	-1286.40	1480.16	0.00	
8117.00†	90.000	180.222	6302.00	1787.78	-1386.40	1479.77	0.00	
8217.00†	90.000	180.222	6302.00	1882.37	-1486.40	1479.38	0.00	
8317.00†	90.000	180.222	6302.00	1976.96	-1586.40	1479.00	0.00	
8417.00†	90.000	180.222	6302.00	2071.55	-1686.40	1478.61	0.00	

# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (117 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8517.00†	90.000	180.222	6302.00	2166.15	-1786.40	1478.22	0.00	
8617.00†	90.000	180.222	6302.00	2260.74	-1886.40	1477.83	0.00	
8717.00†	90.000	180.222	6302.00	2355.33	-1986.40	1477.45	0.00	
8817.00†	90.000	180.222	6302.00	2449.92	-2086.39	1477.06	0.00	
8917.00†	90.000	180.222	6302.00	2544.51	-2186.39	1476.67	0.00	
9017.00†	90.000	180.222	6302.00	2639.10	-2286.39	1476.28	0.00	
9117.00†	90.000	180.222	6302.00	2733.70	-2386.39	1475.90	0.00	
9217.00†	90.000	180.222	6302.00	2828.29	-2486.39	1475.51	0.00	
9317.00†	90.000	180.222	6302.00	2922.88	-2586.39	1475.12	0.00	
9417.00†	90.000	180.222	6302.00	3017.47	-2686.39	1474.74	0.00	
9517.00†	90.000	180.222	6302.00	3112.06	-2786.39	1474.35	0.00	
9617.00†	90.000	180.222	6302.00	3206.65	-2886.39	1473.96	0.00	
9717.00†	90.000	180.222	6302.00	3301.25	-2986.39	1473.57	0.00	
9817.00†	90.000	180.222	6302.00	3395.84	-3086.39	1473.19	0.00	
9917.00†	90.000	180.222	6302.00	3490.43	-3186.39	1472.80	0.00	
10017.00†	90.000	180.222	6302.00	3585.02	-3286.39	1472.41	0.00	
10117.00†	90.000	180.222	6302.00	3679.61	-3386.38	1472.02	0.00	
10217.00†	90.000	180.222	6302.00	3774.20	-3486.38	1471.64	0.00	
10317.00†	90.000	180.222	6302.00	3868.80	-3586.38	1471.25	0.00	
10417.00†	90.000	180.222	6302.00	3963.39	-3686.38	1470.86	0.00	
10517.00†	90.000	180.222	6302.00	4057.98	-3786.38	1470.48	0.00	
10617.00†	90.000	180.222	6302.00	4152.57	-3886.38	1470.09	0.00	
10717.00†	90.000	180.222	6302.00	4247.16	-3986.38	1469.70	0.00	
10817.00†	90.000	180.222	6302.00	4341.75	-4086.38	1469.31	0.00	
10917.00†	90.000	180.222	6302.00	4436.35	-4186.38	1468.93	0.00	
11017.00†	90.000	180.222	6302.00	4530.94	-4286.38	1468.54	0.00	
11066.67	90.000	180.222	6302.00 <sup>2</sup>	4577.92	-4336.05	1468.35	0.00	End of Tangent

# Planned Wellpath Report

STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#16 STATE NORTH PLATTE K21-O24-36HNB (358'FNL & 640'FWL, SEC.36)
Area	COLORADO	Well	STATE NORTH PLATTE K21-O24-36HNB
Field	WELD COUNTY	Wellbore	STATE NORTH PLATTE K21-O24-36HNB PWB
Facility	SEC.36-T5N-R63W		

HOLE & CASING SECTIONS									
- Ref Wellbore: STATE NORTH PLATTE K21-O24-36HNB PWB					Ref Wellpath: STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP				
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]
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1550.00	11066.67	9516.67	1550.00	N/A	0.00	0.00	N/A	N/A

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.36-T5N-R63W		-7.00	889.42	-3178.51	3305661.21	1377572.03	40°21'52.729"N	104°24'11.009"W	polygon
2) STATE NORTH PLATTE K21-O24-36HNB BHL ON PLAT (470'FSL & 2163'FWL, SEC.36)	11066.67	6302.00	-4336.05	1468.35	3310372.82	1372405.27	40°21'01.094"N	104°23'10.982"W	point
1) STATE NORTH PLATTE K21-O24-36HNB EP ON PLAT (531'FNL & 2127'FWL, SEC.36)	6893.07	6302.00	-162.48	1484.51	3310336.82	1376578.53	40°21'42.336"N	104°23'10.770"W	point
STATE NORTH PLATTE K-O-36HC HARDLINES (460' SETBACKS)		6417.72	5.06	-116.50	3308733.91	1376726.04	40°21'43.992"N	104°23'31.452"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: STATE NORTH PLATTE K21-O24-36HNB PWB			Ref Wellpath: STATE NORTH PLATTE K21-O24-36HNB (REV-A.0) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		STATE NORTH PLATTE K21-O24-36HNB PWB
1550.00	11066.67	BHI AutoTrak Curve (Axial Corr, Short spacing)		STATE NORTH PLATTE K21-O24-36HNB PWB