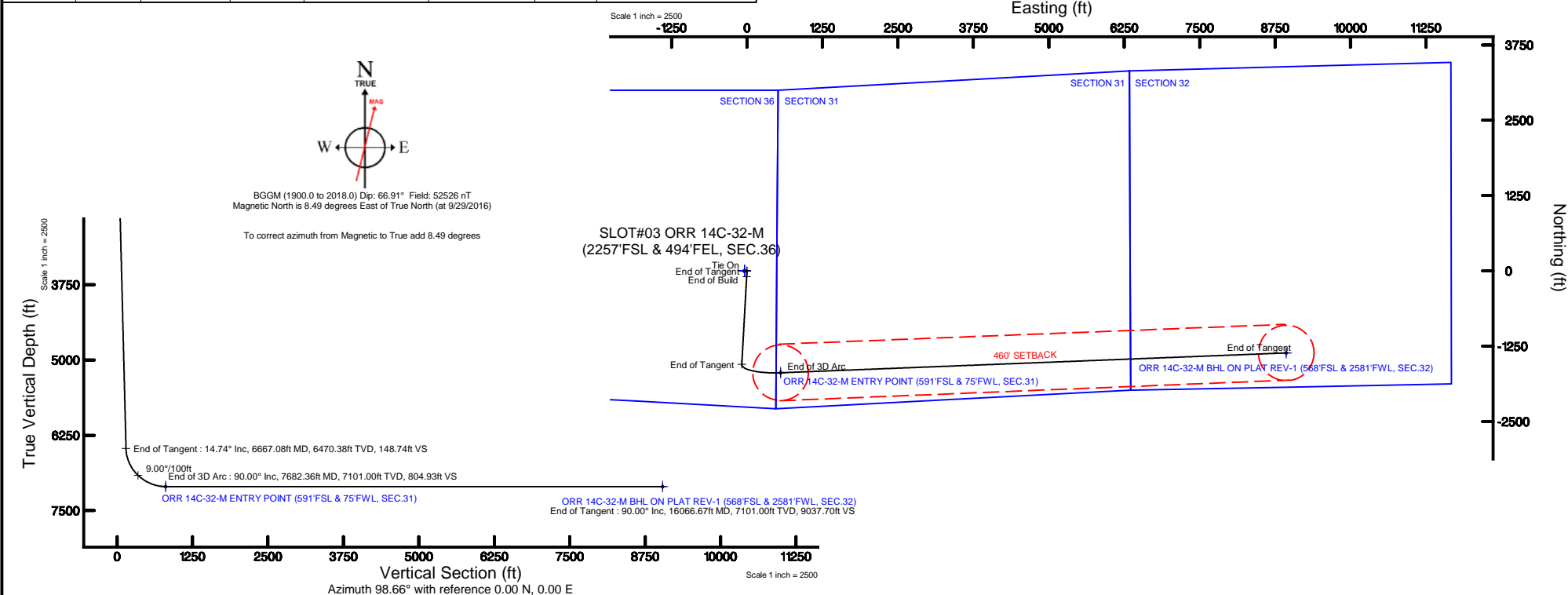


Location:	COLORADO	Slot:	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	ORR 14C-32-M
Facility:	SEC.36-T06N-R67W	Wellbore:	ORR 14C-32-M PWB
<b>Plot reference wellpath is ORR 14C-32-M PWP (REV-A.1)</b>		Grid System: NAD83 / Lambert Colorado SP. Northern Zone (501), US feet	
True vertical depths are referenced to PRECISION 462 (20KB) (RKB)		* = Wellpath was transformed from a different geodetic datum	
Measured depths are referenced to PRECISION 462 (20KB) (RKB)		North Reference: True north	
PRECISION 462 (20KB) (RKB) to Mean Sea Level: 4744 feet		Scale: True distance	
Mean Sea Level to Mud line (At Slot: SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)): 0 feet		Depths are in feet	
Coordinates are in feet referenced to Slot		Created by: wagnerj on 2016-10-13	
		Database: WA_DEN_Denver_Defn	

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T06N-R67W			3185242.222	1404728.428	40°26'32.903"N	104°50'04.052"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 ORR 14C-32-M (2257FSL & 494FEL, SEC.36)	-4.40	40.05	3185262.274	1404728.324	40°26'32.899"N	104°50'03.534"W
PRECISION 462 (20XB) (RKB) to Mud line (At Slot: SLOT#03 ORR 14C-32-M (2257FSL & 494FEL, SEC.36))					4744ft	
Mean Sea Level to Mud line (At Slot: SLOT#03 ORR 14C-32-M (2257FSL & 494FEL, SEC.36))					0ft	
PRECISION 462 (20XB) (RKB) to Mean Sea Level					4744ft	

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
20.00	0.000	183.165	20.00	0.00	0.00	3185282.27	1404728.32	40°26'32.899"N	104°50'03.534"W

MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
6966.51	-20.67	-1620.94	6751.00	29.239	115.653	223.71	SHARON SPRINGS
7010.83	0.21	-1630.08	6789.00	32.709	111.824	245.73	NIO-A
7169.87	96.24	-1658.56	6912.00	45.788	102.516	344.96	NIO-B
7285.21	183.94	-1674.25	6985.00	55.591	98.088	434.02	NIO-C
7515.63	391.81	-1691.00	7080.00	75.495	91.638	642.04	FORT HAYS



Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	20.00	0.000	183.165	20.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	183.165	200.00	0.00	0.00	0.00	0.00
End of Build	937.05	14.741	183.165	928.94	-94.15	-5.21	2.00	9.03
End of Tangent	6667.08	14.741	183.165	6470.38	-1549.93	-85.69	0.00	148.74
End of 3D Arc	7682.36	90.000	87.753	7101.00	-1690.03	556.73	9.00	804.93
End of Tangent	16066.67	90.000	87.753	7101.00	-1361.26	8934.59	0.00	9037.70

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.31-TOWN-R66W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.31-TOWN-R67W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.32-TOWN-R66W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.32-TOWN-R67W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.35-TOWN-R67W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.36-TOWN-R67W		0.00	0.40	-40.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
ORR 14C-32-M BHL ON PLAT REV 1 (568'FSL & 2581'FWL, SEC.32)	16066.67	7101.00	-1361.26	8934.59	3194226.48	1403434.22	40°26'18.432"N	104°48'07.986"W
ORR 14C-32-M ENTRY POINT (591'FSL & 75'FWL, SEC.31)	7982.36	7101.00	-1690.03	556.73	3186951.65	1403042.59	40°26'16.199"N	104°49'56.334"W
SEC.31/21-TOWN-R66W 460' SETBACK		7112.00	0.40	-55.05	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W



To correct azimuth from Magnetic to True add 8.49 degrees

# ORR\_14C-32-M\_PWP\_\_REV-A.1\_.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	16066.67	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	SYNERGY RESOURCES CORPORATION	:OPERATOR
WELL	.	ORR 14C-32-M	: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	.	10/25/2016	: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.36-T06N-R67W	:FACILITY
SLOT	.	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)	:SLOT
WELLBORE	.	ORR 14C-32-M PWB	:WELLBORE
WELLPATH	.	ORR 14C-32-M PWP (REV-A.1)	:WELLPATH
MDREFPT	.	PRECISION 462 (20'KB) (RKB)	:MD REFERENCE POINT
TVDREFPT	.	PRECISION 462 (20'KB) (RKB)	:TVD REFERENCE POINT
LCLREFPT	.	SLOT	:LOCAL COORDINATE REFERENCE PT
VSAZIMUTH	.deg	98.66	: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

# ORR\_14C-32-M\_PWP\_\_REV-A.1\_.las

LAT .deg :LATITUDE  
 LONG .deg :LONGITUDE  
 DLS .deg/100ft :DOGLEG SEVERITY

## ~ASCII DATA

0.00	0.00	183.17	0.00	0.00	0.00	0.00	40.4424719	-104.8343150	0.00
20.00	0.00	183.17	20.00	0.00	0.00	0.00	40.4424719	-104.8343150	0.00
120.00	0.00	183.17	120.00	0.00	0.00	0.00	40.4424719	-104.8343150	0.00
200.00	0.00	183.17	200.00	0.00	0.00	0.00	40.4424719	-104.8343150	0.00
220.00	0.40	183.17	220.00	0.01	-0.07	0.00	40.4424718	-104.8343150	2.00
320.00	2.40	183.17	319.96	0.24	-2.51	-0.14	40.4424651	-104.8343155	2.00
420.00	4.40	183.17	419.78	0.81	-8.43	-0.47	40.4424488	-104.8343167	2.00
520.00	6.40	183.17	519.33	1.71	-17.83	-0.99	40.4424230	-104.8343185	2.00
620.00	8.40	183.17	618.50	2.94	-30.69	-1.70	40.4423877	-104.8343211	2.00
720.00	10.40	183.17	717.15	4.51	-46.99	-2.60	40.4423430	-104.8343243	2.00
820.00	12.40	183.17	815.17	6.40	-66.73	-3.69	40.4422888	-104.8343283	2.00
920.00	14.40	183.17	912.44	8.62	-89.87	-4.97	40.4422253	-104.8343328	2.00
937.05	14.74	183.17	928.94	9.03	-94.15	-5.21	40.4422135	-104.8343337	2.00
1020.00	14.74	183.17	1009.17	11.06	-115.22	-6.37	40.4421557	-104.8343379	0.00
1120.00	14.74	183.17	1105.87	13.50	-140.63	-7.78	40.4420859	-104.8343429	0.00
1220.00	14.74	183.17	1202.58	15.93	-166.03	-9.18	40.4420162	-104.8343480	0.00
1320.00	14.74	183.17	1299.29	18.37	-191.44	-10.58	40.4419465	-104.8343530	0.00
1420.00	14.74	183.17	1396.00	20.81	-216.85	-11.99	40.4418767	-104.8343581	0.00
1520.00	14.74	183.17	1492.71	23.25	-242.25	-13.39	40.4418070	-104.8343631	0.00
1620.00	14.74	183.17	1589.42	25.69	-267.66	-14.80	40.4417373	-104.8343682	0.00
1720.00	14.74	183.17	1686.13	28.12	-293.07	-16.20	40.4416675	-104.8343732	0.00
1820.00	14.74	183.17	1782.83	30.56	-318.47	-17.61	40.4415978	-104.8343783	0.00
1920.00	14.74	183.17	1879.54	33.00	-343.88	-19.01	40.4415280	-104.8343833	0.00
2020.00	14.74	183.17	1976.25	35.44	-369.28	-20.42	40.4414583	-104.8343883	0.00
2120.00	14.74	183.17	2072.96	37.88	-394.69	-21.82	40.4413886	-104.8343934	0.00
2220.00	14.74	183.17	2169.67	40.31	-420.10	-23.23	40.4413188	-104.8343984	0.00
2320.00	14.74	183.17	2266.38	42.75	-445.50	-24.63	40.4412491	-104.8344035	0.00
2420.00	14.74	183.17	2363.09	45.19	-470.91	-26.04	40.4411794	-104.8344085	0.00
2520.00	14.74	183.17	2459.79	47.63	-496.31	-27.44	40.4411096	-104.8344136	0.00
2620.00	14.74	183.17	2556.50	50.07	-521.72	-28.84	40.4410399	-104.8344186	0.00
2720.00	14.74	183.17	2653.21	52.50	-547.13	-30.25	40.4409701	-104.8344237	0.00
2820.00	14.74	183.17	2749.92	54.94	-572.53	-31.65	40.4409004	-104.8344287	0.00
2920.00	14.74	183.17	2846.63	57.38	-597.94	-33.06	40.4408307	-104.8344338	0.00
3020.00	14.74	183.17	2943.34	59.82	-623.35	-34.46	40.4407609	-104.8344388	0.00
3120.00	14.74	183.17	3040.05	62.26	-648.75	-35.87	40.4406912	-104.8344439	0.00
3220.00	14.74	183.17	3136.75	64.69	-674.16	-37.27	40.4406215	-104.8344489	0.00
3320.00	14.74	183.17	3233.46	67.13	-699.56	-38.68	40.4405517	-104.8344540	0.00
3420.00	14.74	183.17	3330.17	69.57	-724.97	-40.08	40.4404820	-104.8344590	0.00
3520.00	14.74	183.17	3426.88	72.01	-750.38	-41.49	40.4404123	-104.8344640	0.00
3620.00	14.74	183.17	3523.59	74.45	-775.78	-42.89	40.4403425	-104.8344691	0.00
3720.00	14.74	183.17	3620.30	76.88	-801.19	-44.30	40.4402728	-104.8344741	0.00
3820.00	14.74	183.17	3717.01	79.32	-826.59	-45.70	40.4402030	-104.8344792	0.00
3920.00	14.74	183.17	3813.71	81.76	-852.00	-47.11	40.4401333	-104.8344842	0.00

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4020.00	14.74	183.17	3910.42	84.20	-877.41	-48.51	40.4400636	-104.8344893	0.00
4120.00	14.74	183.17	4007.13	86.64	-902.81	-49.91	40.4399938	-104.8344943	0.00
4220.00	14.74	183.17	4103.84	89.08	-928.22	-51.32	40.4399241	-104.8344994	0.00
4320.00	14.74	183.17	4200.55	91.51	-953.63	-52.72	40.4398544	-104.8345044	0.00
4420.00	14.74	183.17	4297.26	93.95	-979.03	-54.13	40.4397846	-104.8345095	0.00
4520.00	14.74	183.17	4393.97	96.39	-1004.44	-55.53	40.4397149	-104.8345145	0.00
4620.00	14.74	183.17	4490.68	98.83	-1029.84	-56.94	40.4396451	-104.8345195	0.00
4720.00	14.74	183.17	4587.38	101.27	-1055.25	-58.34	40.4395754	-104.8345246	0.00
4820.00	14.74	183.17	4684.09	103.70	-1080.66	-59.75	40.4395057	-104.8345296	0.00
4920.00	14.74	183.17	4780.80	106.14	-1106.06	-61.15	40.4394359	-104.8345347	0.00
5020.00	14.74	183.17	4877.51	108.58	-1131.47	-62.56	40.4393662	-104.8345397	0.00
5120.00	14.74	183.17	4974.22	111.02	-1156.88	-63.96	40.4392965	-104.8345448	0.00
5220.00	14.74	183.17	5070.93	113.46	-1182.28	-65.37	40.4392267	-104.8345498	0.00
5320.00	14.74	183.17	5167.64	115.89	-1207.69	-66.77	40.4391570	-104.8345549	0.00
5420.00	14.74	183.17	5264.34	118.33	-1233.09	-68.18	40.4390873	-104.8345599	0.00
5520.00	14.74	183.17	5361.05	120.77	-1258.50	-69.58	40.4390175	-104.8345650	0.00
5620.00	14.74	183.17	5457.76	123.21	-1283.91	-70.98	40.4389478	-104.8345700	0.00
5720.00	14.74	183.17	5554.47	125.65	-1309.31	-72.39	40.4388780	-104.8345751	0.00
5820.00	14.74	183.17	5651.18	128.08	-1334.72	-73.79	40.4388083	-104.8345801	0.00
5920.00	14.74	183.17	5747.89	130.52	-1360.12	-75.20	40.4387386	-104.8345851	0.00
6020.00	14.74	183.17	5844.60	132.96	-1385.53	-76.60	40.4386688	-104.8345902	0.00
6120.00	14.74	183.17	5941.30	135.40	-1410.94	-78.01	40.4385991	-104.8345952	0.00
6220.00	14.74	183.17	6038.01	137.84	-1436.34	-79.41	40.4385294	-104.8346003	0.00
6320.00	14.74	183.17	6134.72	140.27	-1461.75	-80.82	40.4384596	-104.8346053	0.00
6420.00	14.74	183.17	6231.43	142.71	-1487.16	-82.22	40.4383899	-104.8346104	0.00
6520.00	14.74	183.17	6328.14	145.15	-1512.56	-83.63	40.4383201	-104.8346154	0.00
6620.00	14.74	183.17	6424.85	147.59	-1537.97	-85.03	40.4382504	-104.8346205	0.00
6667.08	14.74	183.17	6470.38	148.74	-1549.93	-85.69	40.4382176	-104.8346228	0.00
6720.00	15.06	164.60	6521.55	152.19	-1563.29	-84.24	40.4381809	-104.8346176	9.00
6820.00	19.12	136.83	6617.27	170.39	-1587.80	-69.56	40.4381136	-104.8345649	9.00
6920.00	25.74	120.66	6709.74	203.47	-1610.87	-39.61	40.4380503	-104.8344573	9.00
7020.00	33.44	111.12	6796.68	250.61	-1631.91	4.87	40.4379925	-104.8342975	9.00
7120.00	41.61	104.90	6875.95	310.65	-1650.42	62.77	40.4379417	-104.8340895	9.00
7220.00	50.03	100.44	6945.60	382.10	-1665.93	132.69	40.4378992	-104.8338383	9.00
7320.00	58.58	96.96	7003.90	463.21	-1678.07	212.89	40.4378658	-104.8335502	9.00
7420.00	67.20	94.07	7049.44	551.99	-1686.53	301.40	40.4378426	-104.8332322	9.00
7520.00	75.88	91.53	7081.08	646.24	-1691.11	396.05	40.4378300	-104.8328922	9.00
7620.00	84.57	89.18	7098.05	743.65	-1691.70	494.49	40.4378284	-104.8325386	9.00
7682.36	90.00	87.75	7101.00	804.93	-1690.03	556.73	40.4378330	-104.8323150	9.00
7720.00	90.00	87.75	7101.00	841.89	-1688.55	594.34	40.4378370	-104.8321799	0.00
7820.00	90.00	87.75	7101.00	940.09	-1684.63	694.27	40.4378478	-104.8318209	0.00
7920.00	90.00	87.75	7101.00	1038.28	-1680.71	794.19	40.4378586	-104.8314620	0.00
8020.00	90.00	87.75	7101.00	1136.47	-1676.79	894.11	40.4378693	-104.8311030	0.00
8120.00	90.00	87.75	7101.00	1234.66	-1672.87	994.04	40.4378801	-104.8307440	0.00
8220.00	90.00	87.75	7101.00	1332.86	-1668.95	1093.96	40.4378908	-104.8303851	0.00
8320.00	90.00	87.75	7101.00	1431.05	-1665.03	1193.88	40.4379016	-104.8300261	0.00
8420.00	90.00	87.75	7101.00	1529.24	-1661.10	1293.81	40.4379123	-104.8296671	0.00
8520.00	90.00	87.75	7101.00	1627.43	-1657.18	1393.73	40.4379231	-104.8293082	0.00

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8620.00	90.00	87.75	7101.00	1725.63	-1653.26	1493.65	40.4379338	-104.8289492	0.00
8720.00	90.00	87.75	7101.00	1823.82	-1649.34	1593.57	40.4379446	-104.8285902	0.00
8820.00	90.00	87.75	7101.00	1922.01	-1645.42	1693.50	40.4379553	-104.8282313	0.00
8920.00	90.00	87.75	7101.00	2020.20	-1641.50	1793.42	40.4379660	-104.8278723	0.00
9020.00	90.00	87.75	7101.00	2118.40	-1637.58	1893.34	40.4379768	-104.8275133	0.00
9120.00	90.00	87.75	7101.00	2216.59	-1633.66	1993.27	40.4379875	-104.8271544	0.00
9220.00	90.00	87.75	7101.00	2314.78	-1629.73	2093.19	40.4379983	-104.8267954	0.00
9320.00	90.00	87.75	7101.00	2412.97	-1625.81	2193.11	40.4380090	-104.8264365	0.00
9420.00	90.00	87.75	7101.00	2511.17	-1621.89	2293.04	40.4380198	-104.8260775	0.00
9520.00	90.00	87.75	7101.00	2609.36	-1617.97	2392.96	40.4380305	-104.8257185	0.00
9620.00	90.00	87.75	7101.00	2707.55	-1614.05	2492.88	40.4380412	-104.8253596	0.00
9720.00	90.00	87.75	7101.00	2805.74	-1610.13	2592.81	40.4380520	-104.8250006	0.00
9820.00	90.00	87.75	7101.00	2903.94	-1606.21	2692.73	40.4380627	-104.8246416	0.00
9920.00	90.00	87.75	7101.00	3002.13	-1602.29	2792.65	40.4380734	-104.8242827	0.00
10020.00	90.00	87.75	7101.00	3100.32	-1598.37	2892.58	40.4380842	-104.8239237	0.00
10120.00	90.00	87.75	7101.00	3198.51	-1594.44	2992.50	40.4380949	-104.8235647	0.00
10220.00	90.00	87.75	7101.00	3296.71	-1590.52	3092.42	40.4381056	-104.8232058	0.00
10320.00	90.00	87.75	7101.00	3394.90	-1586.60	3192.34	40.4381163	-104.8228468	0.00
10420.00	90.00	87.75	7101.00	3493.09	-1582.68	3292.27	40.4381271	-104.8224878	0.00
10520.00	90.00	87.75	7101.00	3591.28	-1578.76	3392.19	40.4381378	-104.8221289	0.00
10620.00	90.00	87.75	7101.00	3689.48	-1574.84	3492.11	40.4381485	-104.8217699	0.00
10720.00	90.00	87.75	7101.00	3787.67	-1570.92	3592.04	40.4381592	-104.8214109	0.00
10820.00	90.00	87.75	7101.00	3885.86	-1567.00	3691.96	40.4381700	-104.8210520	0.00
10920.00	90.00	87.75	7101.00	3984.06	-1563.07	3791.88	40.4381807	-104.8206930	0.00
11020.00	90.00	87.75	7101.00	4082.25	-1559.15	3891.81	40.4381914	-104.8203340	0.00
11120.00	90.00	87.75	7101.00	4180.44	-1555.23	3991.73	40.4382021	-104.8199751	0.00
11220.00	90.00	87.75	7101.00	4278.63	-1551.31	4091.65	40.4382129	-104.8196161	0.00
11320.00	90.00	87.75	7101.00	4376.83	-1547.39	4191.58	40.4382236	-104.8192571	0.00
11420.00	90.00	87.75	7101.00	4475.02	-1543.47	4291.50	40.4382343	-104.8188982	0.00
11520.00	90.00	87.75	7101.00	4573.21	-1539.55	4391.42	40.4382450	-104.8185392	0.00
11620.00	90.00	87.75	7101.00	4671.40	-1535.63	4491.34	40.4382557	-104.8181802	0.00
11720.00	90.00	87.75	7101.00	4769.60	-1531.71	4591.27	40.4382664	-104.8178213	0.00
11820.00	90.00	87.75	7101.00	4867.79	-1527.78	4691.19	40.4382771	-104.8174623	0.00
11920.00	90.00	87.75	7101.00	4965.98	-1523.86	4791.11	40.4382878	-104.8171033	0.00
12020.00	90.00	87.75	7101.00	5064.17	-1519.94	4891.04	40.4382986	-104.8167443	0.00
12120.00	90.00	87.75	7101.00	5162.37	-1516.02	4990.96	40.4383093	-104.8163854	0.00
12220.00	90.00	87.75	7101.00	5260.56	-1512.10	5090.88	40.4383200	-104.8160264	0.00
12320.00	90.00	87.75	7101.00	5358.75	-1508.18	5190.81	40.4383307	-104.8156674	0.00
12420.00	90.00	87.75	7101.00	5456.94	-1504.26	5290.73	40.4383414	-104.8153085	0.00
12520.00	90.00	87.75	7101.00	5555.14	-1500.34	5390.65	40.4383521	-104.8149495	0.00
12620.00	90.00	87.75	7101.00	5653.33	-1496.41	5490.58	40.4383628	-104.8145905	0.00
12720.00	90.00	87.75	7101.00	5751.52	-1492.49	5590.50	40.4383735	-104.8142316	0.00
12820.00	90.00	87.75	7101.00	5849.71	-1488.57	5690.42	40.4383842	-104.8138726	0.00
12920.00	90.00	87.75	7101.00	5947.91	-1484.65	5790.34	40.4383949	-104.8135136	0.00
13020.00	90.00	87.75	7101.00	6046.10	-1480.73	5890.27	40.4384056	-104.8131547	0.00
13120.00	90.00	87.75	7101.00	6144.29	-1476.81	5990.19	40.4384163	-104.8127957	0.00
13220.00	90.00	87.75	7101.00	6242.48	-1472.89	6090.11	40.4384270	-104.8124367	0.00
13320.00	90.00	87.75	7101.00	6340.68	-1468.97	6190.04	40.4384377	-104.8120778	0.00

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13420.00	90.00	87.75	7101.00	6438.87	-1465.04	6289.96	40.4384484	-104.8117188	0.00
13520.00	90.00	87.75	7101.00	6537.06	-1461.12	6389.88	40.4384591	-104.8113598	0.00
13620.00	90.00	87.75	7101.00	6635.25	-1457.20	6489.81	40.4384698	-104.8110008	0.00
13720.00	90.00	87.75	7101.00	6733.45	-1453.28	6589.73	40.4384804	-104.8106419	0.00
13820.00	90.00	87.75	7101.00	6831.64	-1449.36	6689.65	40.4384911	-104.8102829	0.00
13920.00	90.00	87.75	7101.00	6929.83	-1445.44	6789.58	40.4385018	-104.8099239	0.00
14020.00	90.00	87.75	7101.00	7028.02	-1441.52	6889.50	40.4385125	-104.8095650	0.00
14120.00	90.00	87.75	7101.00	7126.22	-1437.60	6989.42	40.4385232	-104.8092060	0.00
14220.00	90.00	87.75	7101.00	7224.41	-1433.68	7089.34	40.4385339	-104.8088470	0.00
14320.00	90.00	87.75	7101.00	7322.60	-1429.75	7189.27	40.4385446	-104.8084880	0.00
14420.00	90.00	87.75	7101.00	7420.79	-1425.83	7289.19	40.4385552	-104.8081291	0.00
14520.00	90.00	87.75	7101.00	7518.99	-1421.91	7389.11	40.4385659	-104.8077701	0.00
14620.00	90.00	87.75	7101.00	7617.18	-1417.99	7489.04	40.4385766	-104.8074111	0.00
14720.00	90.00	87.75	7101.00	7715.37	-1414.07	7588.96	40.4385873	-104.8070522	0.00
14820.00	90.00	87.75	7101.00	7813.56	-1410.15	7688.88	40.4385980	-104.8066932	0.00
14920.00	90.00	87.75	7101.00	7911.76	-1406.23	7788.81	40.4386086	-104.8063342	0.00
15020.00	90.00	87.75	7101.00	8009.95	-1402.31	7888.73	40.4386193	-104.8059752	0.00
15120.00	90.00	87.75	7101.00	8108.14	-1398.38	7988.65	40.4386300	-104.8056163	0.00
15220.00	90.00	87.75	7101.00	8206.33	-1394.46	8088.58	40.4386407	-104.8052573	0.00
15320.00	90.00	87.75	7101.00	8304.53	-1390.54	8188.50	40.4386513	-104.8048983	0.00
15420.00	90.00	87.75	7101.00	8402.72	-1386.62	8288.42	40.4386620	-104.8045394	0.00
15520.00	90.00	87.75	7101.00	8500.91	-1382.70	8388.35	40.4386727	-104.8041804	0.00
15620.00	90.00	87.75	7101.00	8599.10	-1378.78	8488.27	40.4386834	-104.8038214	0.00
15720.00	90.00	87.75	7101.00	8697.30	-1374.86	8588.19	40.4386940	-104.8034624	0.00
15820.00	90.00	87.75	7101.00	8795.49	-1370.94	8688.11	40.4387047	-104.8031035	0.00
15920.00	90.00	87.75	7101.00	8893.68	-1367.01	8788.04	40.4387154	-104.8027445	0.00
16020.00	90.00	87.75	7101.00	8991.87	-1363.09	8887.96	40.4387260	-104.8023855	0.00
16066.67	90.00	87.75	7101.00	9037.70	-1361.26	8934.59	40.4387310	-104.8022180	0.00



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Guenaler
Scale	0.999962	Report Generated	10/25/2016 at 6:59:59 PM
Convergence at slot	0.44° East	Database/Source file	WA_DEN_Denver_Defn/ORR_14C-32-M_PWP__REV-A.1_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.40	40.05	3185282.27	1404728.32	40°26'32.899"N	104°50'03.534"W
Facility Reference Pt			3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"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'KB) (RKB) to Facility Vertical Datum	4744.00ft
Horizontal Reference Pt	Slot	PRECISION 462 (20'KB) (RKB) to Mean Sea Level	4744.00ft
Vertical Reference Pt	PRECISION 462 (20'KB) (RKB)	PRECISION 462 (20'KB) (RKB) to Mud Line at Slot (SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36))	4744.00ft
MD Reference Pt	PRECISION 462 (20'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	98.66°





# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	183.165	0.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.534"W	0.00	
20.00	0.000	183.165	20.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.534"W	0.00	Tie On
120.00†	0.000	183.165	120.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.534"W	0.00	
200.00	0.000	183.165	200.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.534"W	0.00	End of Tangent
220.00†	0.400	183.165	220.00	0.01	-0.07	0.00	40°26'32.898"N	104°50'03.534"W	2.00	
320.00†	2.400	183.165	319.96	0.24	-2.51	-0.14	40°26'32.874"N	104°50'03.536"W	2.00	
420.00†	4.400	183.165	419.78	0.81	-8.43	-0.47	40°26'32.816"N	104°50'03.540"W	2.00	
520.00†	6.400	183.165	519.33	1.71	-17.83	-0.99	40°26'32.723"N	104°50'03.547"W	2.00	
620.00†	8.400	183.165	618.50	2.94	-30.69	-1.70	40°26'32.596"N	104°50'03.556"W	2.00	
720.00†	10.400	183.165	717.15	4.51	-46.99	-2.60	40°26'32.435"N	104°50'03.568"W	2.00	
820.00†	12.400	183.165	815.17	6.40	-66.73	-3.69	40°26'32.240"N	104°50'03.582"W	2.00	
920.00†	14.400	183.165	912.44	8.62	-89.87	-4.97	40°26'32.011"N	104°50'03.598"W	2.00	
937.05	14.741	183.165	928.94	9.03	-94.15	-5.21	40°26'31.969"N	104°50'03.601"W	2.00	End of Build
1020.00†	14.741	183.165	1009.17	11.06	-115.22	-6.37	40°26'31.760"N	104°50'03.616"W	0.00	
1120.00†	14.741	183.165	1105.87	13.50	-140.63	-7.78	40°26'31.509"N	104°50'03.635"W	0.00	
1220.00†	14.741	183.165	1202.58	15.93	-166.03	-9.18	40°26'31.258"N	104°50'03.653"W	0.00	
1320.00†	14.741	183.165	1299.29	18.37	-191.44	-10.58	40°26'31.007"N	104°50'03.671"W	0.00	
1420.00†	14.741	183.165	1396.00	20.81	-216.85	-11.99	40°26'30.756"N	104°50'03.689"W	0.00	
1520.00†	14.741	183.165	1492.71	23.25	-242.25	-13.39	40°26'30.505"N	104°50'03.707"W	0.00	
1620.00†	14.741	183.165	1589.42	25.69	-267.66	-14.80	40°26'30.254"N	104°50'03.725"W	0.00	
1720.00†	14.741	183.165	1686.13	28.12	-293.07	-16.20	40°26'30.003"N	104°50'03.744"W	0.00	
1820.00†	14.741	183.165	1782.83	30.56	-318.47	-17.61	40°26'29.752"N	104°50'03.762"W	0.00	
1920.00†	14.741	183.165	1879.54	33.00	-343.88	-19.01	40°26'29.501"N	104°50'03.780"W	0.00	
2020.00†	14.741	183.165	1976.25	35.44	-369.28	-20.42	40°26'29.250"N	104°50'03.798"W	0.00	
2120.00†	14.741	183.165	2072.96	37.88	-394.69	-21.82	40°26'28.999"N	104°50'03.816"W	0.00	
2220.00†	14.741	183.165	2169.67	40.31	-420.10	-23.23	40°26'28.748"N	104°50'03.834"W	0.00	
2320.00†	14.741	183.165	2266.38	42.75	-445.50	-24.63	40°26'28.497"N	104°50'03.853"W	0.00	
2420.00†	14.741	183.165	2363.09	45.19	-470.91	-26.04	40°26'28.246"N	104°50'03.871"W	0.00	
2520.00†	14.741	183.165	2459.79	47.63	-496.31	-27.44	40°26'27.995"N	104°50'03.889"W	0.00	
2620.00†	14.741	183.165	2556.50	50.07	-521.72	-28.84	40°26'27.744"N	104°50'03.907"W	0.00	



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2720.00†	14.741	183.165	2653.21	52.50	-547.13	-30.25	40°26'27.493"N	104°50'03.925"W	0.00	
2820.00†	14.741	183.165	2749.92	54.94	-572.53	-31.65	40°26'27.241"N	104°50'03.943"W	0.00	
2920.00†	14.741	183.165	2846.63	57.38	-597.94	-33.06	40°26'26.990"N	104°50'03.962"W	0.00	
3020.00†	14.741	183.165	2943.34	59.82	-623.35	-34.46	40°26'26.739"N	104°50'03.980"W	0.00	
3120.00†	14.741	183.165	3040.05	62.26	-648.75	-35.87	40°26'26.488"N	104°50'03.998"W	0.00	
3220.00†	14.741	183.165	3136.75	64.69	-674.16	-37.27	40°26'26.237"N	104°50'04.016"W	0.00	
3320.00†	14.741	183.165	3233.46	67.13	-699.56	-38.68	40°26'25.986"N	104°50'04.034"W	0.00	
3420.00†	14.741	183.165	3330.17	69.57	-724.97	-40.08	40°26'25.735"N	104°50'04.052"W	0.00	
3520.00†	14.741	183.165	3426.88	72.01	-750.38	-41.49	40°26'25.484"N	104°50'04.071"W	0.00	
3620.00†	14.741	183.165	3523.59	74.45	-775.78	-42.89	40°26'25.233"N	104°50'04.089"W	0.00	
3720.00†	14.741	183.165	3620.30	76.88	-801.19	-44.30	40°26'24.982"N	104°50'04.107"W	0.00	
3820.00†	14.741	183.165	3717.01	79.32	-826.59	-45.70	40°26'24.731"N	104°50'04.125"W	0.00	
3920.00†	14.741	183.165	3813.71	81.76	-852.00	-47.11	40°26'24.480"N	104°50'04.143"W	0.00	
4020.00†	14.741	183.165	3910.42	84.20	-877.41	-48.51	40°26'24.229"N	104°50'04.161"W	0.00	
4120.00†	14.741	183.165	4007.13	86.64	-902.81	-49.91	40°26'23.978"N	104°50'04.180"W	0.00	
4220.00†	14.741	183.165	4103.84	89.08	-928.22	-51.32	40°26'23.727"N	104°50'04.198"W	0.00	
4320.00†	14.741	183.165	4200.55	91.51	-953.63	-52.72	40°26'23.476"N	104°50'04.216"W	0.00	
4420.00†	14.741	183.165	4297.26	93.95	-979.03	-54.13	40°26'23.225"N	104°50'04.234"W	0.00	
4520.00†	14.741	183.165	4393.97	96.39	-1004.44	-55.53	40°26'22.974"N	104°50'04.252"W	0.00	
4620.00†	14.741	183.165	4490.68	98.83	-1029.84	-56.94	40°26'22.723"N	104°50'04.270"W	0.00	
4720.00†	14.741	183.165	4587.38	101.27	-1055.25	-58.34	40°26'22.471"N	104°50'04.289"W	0.00	
4820.00†	14.741	183.165	4684.09	103.70	-1080.66	-59.75	40°26'22.220"N	104°50'04.307"W	0.00	
4920.00†	14.741	183.165	4780.80	106.14	-1106.06	-61.15	40°26'21.969"N	104°50'04.325"W	0.00	
5020.00†	14.741	183.165	4877.51	108.58	-1131.47	-62.56	40°26'21.718"N	104°50'04.343"W	0.00	
5120.00†	14.741	183.165	4974.22	111.02	-1156.88	-63.96	40°26'21.467"N	104°50'04.361"W	0.00	
5220.00†	14.741	183.165	5070.93	113.46	-1182.28	-65.37	40°26'21.216"N	104°50'04.379"W	0.00	
5320.00†	14.741	183.165	5167.64	115.89	-1207.69	-66.77	40°26'20.965"N	104°50'04.398"W	0.00	
5420.00†	14.741	183.165	5264.34	118.33	-1233.09	-68.18	40°26'20.714"N	104°50'04.416"W	0.00	
5520.00†	14.741	183.165	5361.05	120.77	-1258.50	-69.58	40°26'20.463"N	104°50'04.434"W	0.00	
5620.00†	14.741	183.165	5457.76	123.21	-1283.91	-70.98	40°26'20.212"N	104°50'04.452"W	0.00	



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5720.00†	14.741	183.165	5554.47	125.65	-1309.31	-72.39	40°26'19.961"N	104°50'04.470"W	0.00	
5820.00†	14.741	183.165	5651.18	128.08	-1334.72	-73.79	40°26'19.710"N	104°50'04.488"W	0.00	
5920.00†	14.741	183.165	5747.89	130.52	-1360.12	-75.20	40°26'19.459"N	104°50'04.507"W	0.00	
6020.00†	14.741	183.165	5844.60	132.96	-1385.53	-76.60	40°26'19.208"N	104°50'04.525"W	0.00	
6120.00†	14.741	183.165	5941.30	135.40	-1410.94	-78.01	40°26'18.957"N	104°50'04.543"W	0.00	
6220.00†	14.741	183.165	6038.01	137.84	-1436.34	-79.41	40°26'18.706"N	104°50'04.561"W	0.00	
6320.00†	14.741	183.165	6134.72	140.27	-1461.75	-80.82	40°26'18.455"N	104°50'04.579"W	0.00	
6420.00†	14.741	183.165	6231.43	142.71	-1487.16	-82.22	40°26'18.204"N	104°50'04.597"W	0.00	
6520.00†	14.741	183.165	6328.14	145.15	-1512.56	-83.63	40°26'17.953"N	104°50'04.616"W	0.00	
6620.00†	14.741	183.165	6424.85	147.59	-1537.97	-85.03	40°26'17.701"N	104°50'04.634"W	0.00	
6667.08	14.741	183.165	6470.38	148.74	-1549.93	-85.69	40°26'17.583"N	104°50'04.642"W	0.00	End of Tangent
6720.00†	15.056	164.603	6521.55	152.19	-1563.29	-84.24	40°26'17.451"N	104°50'04.623"W	9.00	
6820.00†	19.119	136.834	6617.27	170.39	-1587.80	-69.56	40°26'17.209"N	104°50'04.434"W	9.00	
6920.00†	25.744	120.655	6709.74	203.47	-1610.87	-39.61	40°26'16.981"N	104°50'04.046"W	9.00	
6966.51†	29.239	115.653	6751.00	223.71	-1620.94	-20.67	40°26'16.882"N	104°50'03.801"W	9.00	SHARON SPRINGS
7010.83†	32.709	111.824	6789.00	245.73	-1630.08	0.21	40°26'16.791"N	104°50'03.531"W	9.00	NIO-A
7020.00†	33.439	111.122	6796.68	250.61	-1631.91	4.87	40°26'16.773"N	104°50'03.471"W	9.00	
7120.00†	41.613	104.904	6875.95	310.65	-1650.42	62.77	40°26'16.590"N	104°50'02.722"W	9.00	
7169.87†	45.788	102.516	6912.00	344.96	-1658.56	96.24	40°26'16.510"N	104°50'02.289"W	9.00	NIO-B
7220.00†	50.028	100.437	6945.60	382.10	-1665.93	132.69	40°26'16.437"N	104°50'01.818"W	9.00	
7285.21†	55.591	98.088	6985.00	434.02	-1674.25	183.94	40°26'16.355"N	104°50'01.155"W	9.00	NIO-C
7320.00†	58.576	96.962	7003.90	463.21	-1678.07	212.89	40°26'16.317"N	104°50'00.781"W	9.00	
7420.00†	67.203	94.073	7049.44	551.99	-1686.53	301.40	40°26'16.233"N	104°49'59.636"W	9.00	
7515.63†	75.495	91.638	7080.00	642.04	-1691.00	391.81	40°26'16.189"N	104°49'58.467"W	9.00	FORT HAYS
7520.00†	75.875	91.532	7081.08	646.24	-1691.11	396.05	40°26'16.188"N	104°49'58.412"W	9.00	
7620.00†	84.571	89.179	7098.05	743.65	-1691.70	494.49	40°26'16.182"N	104°49'57.139"W	9.00	
7682.36	90.000	87.753	7101.00 <sup>†</sup>	804.93	-1690.03	556.73	40°26'16.199"N	104°49'56.334"W	9.00	End of 3D Arc
7720.00†	90.000	87.753	7101.00	841.89	-1688.55	594.34	40°26'16.213"N	104°49'55.848"W	0.00	
7820.00†	90.000	87.753	7101.00	940.09	-1684.63	694.27	40°26'16.252"N	104°49'54.555"W	0.00	
7920.00†	90.000	87.753	7101.00	1038.28	-1680.71	794.19	40°26'16.291"N	104°49'53.263"W	0.00	



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8020.00†	90.000	87.753	7101.00	1136.47	-1676.79	894.11	40°26'16.330"N	104°49'51.971"W	0.00	
8120.00†	90.000	87.753	7101.00	1234.66	-1672.87	994.04	40°26'16.368"N	104°49'50.678"W	0.00	
8220.00†	90.000	87.753	7101.00	1332.86	-1668.95	1093.96	40°26'16.407"N	104°49'49.386"W	0.00	
8320.00†	90.000	87.753	7101.00	1431.05	-1665.03	1193.88	40°26'16.446"N	104°49'48.094"W	0.00	
8420.00†	90.000	87.753	7101.00	1529.24	-1661.10	1293.81	40°26'16.484"N	104°49'46.802"W	0.00	
8520.00†	90.000	87.753	7101.00	1627.43	-1657.18	1393.73	40°26'16.523"N	104°49'45.509"W	0.00	
8620.00†	90.000	87.753	7101.00	1725.63	-1653.26	1493.65	40°26'16.562"N	104°49'44.217"W	0.00	
8720.00†	90.000	87.753	7101.00	1823.82	-1649.34	1593.57	40°26'16.600"N	104°49'42.925"W	0.00	
8820.00†	90.000	87.753	7101.00	1922.01	-1645.42	1693.50	40°26'16.639"N	104°49'41.633"W	0.00	
8920.00†	90.000	87.753	7101.00	2020.20	-1641.50	1793.42	40°26'16.678"N	104°49'40.340"W	0.00	
9020.00†	90.000	87.753	7101.00	2118.40	-1637.58	1893.34	40°26'16.716"N	104°49'39.048"W	0.00	
9120.00†	90.000	87.753	7101.00	2216.59	-1633.66	1993.27	40°26'16.755"N	104°49'37.756"W	0.00	
9220.00†	90.000	87.753	7101.00	2314.78	-1629.73	2093.19	40°26'16.794"N	104°49'36.464"W	0.00	
9320.00†	90.000	87.753	7101.00	2412.97	-1625.81	2193.11	40°26'16.832"N	104°49'35.171"W	0.00	
9420.00†	90.000	87.753	7101.00	2511.17	-1621.89	2293.04	40°26'16.871"N	104°49'33.879"W	0.00	
9520.00†	90.000	87.753	7101.00	2609.36	-1617.97	2392.96	40°26'16.910"N	104°49'32.587"W	0.00	
9620.00†	90.000	87.753	7101.00	2707.55	-1614.05	2492.88	40°26'16.948"N	104°49'31.294"W	0.00	
9720.00†	90.000	87.753	7101.00	2805.74	-1610.13	2592.81	40°26'16.987"N	104°49'30.002"W	0.00	
9820.00†	90.000	87.753	7101.00	2903.94	-1606.21	2692.73	40°26'17.026"N	104°49'28.710"W	0.00	
9920.00†	90.000	87.753	7101.00	3002.13	-1602.29	2792.65	40°26'17.064"N	104°49'27.418"W	0.00	
10020.00†	90.000	87.753	7101.00	3100.32	-1598.37	2892.58	40°26'17.103"N	104°49'26.125"W	0.00	
10120.00†	90.000	87.753	7101.00	3198.51	-1594.44	2992.50	40°26'17.142"N	104°49'24.833"W	0.00	
10220.00†	90.000	87.753	7101.00	3296.71	-1590.52	3092.42	40°26'17.180"N	104°49'23.541"W	0.00	
10320.00†	90.000	87.753	7101.00	3394.90	-1586.60	3192.34	40°26'17.219"N	104°49'22.248"W	0.00	
10420.00†	90.000	87.753	7101.00	3493.09	-1582.68	3292.27	40°26'17.257"N	104°49'20.956"W	0.00	
10520.00†	90.000	87.753	7101.00	3591.28	-1578.76	3392.19	40°26'17.296"N	104°49'19.664"W	0.00	
10620.00†	90.000	87.753	7101.00	3689.48	-1574.84	3492.11	40°26'17.335"N	104°49'18.372"W	0.00	
10720.00†	90.000	87.753	7101.00	3787.67	-1570.92	3592.04	40°26'17.373"N	104°49'17.079"W	0.00	
10820.00†	90.000	87.753	7101.00	3885.86	-1567.00	3691.96	40°26'17.412"N	104°49'15.787"W	0.00	
10920.00†	90.000	87.753	7101.00	3984.06	-1563.07	3791.88	40°26'17.450"N	104°49'14.495"W	0.00	



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11020.00†	90.000	87.753	7101.00	4082.25	-1559.15	3891.81	40°26'17.489"N	104°49'13.202"W	0.00	
11120.00†	90.000	87.753	7101.00	4180.44	-1555.23	3991.73	40°26'17.528"N	104°49'11.910"W	0.00	
11220.00†	90.000	87.753	7101.00	4278.63	-1551.31	4091.65	40°26'17.566"N	104°49'10.618"W	0.00	
11320.00†	90.000	87.753	7101.00	4376.83	-1547.39	4191.58	40°26'17.605"N	104°49'09.326"W	0.00	
11420.00†	90.000	87.753	7101.00	4475.02	-1543.47	4291.50	40°26'17.643"N	104°49'08.033"W	0.00	
11520.00†	90.000	87.753	7101.00	4573.21	-1539.55	4391.42	40°26'17.682"N	104°49'06.741"W	0.00	
11620.00†	90.000	87.753	7101.00	4671.40	-1535.63	4491.34	40°26'17.721"N	104°49'05.449"W	0.00	
11720.00†	90.000	87.753	7101.00	4769.60	-1531.71	4591.27	40°26'17.759"N	104°49'04.157"W	0.00	
11820.00†	90.000	87.753	7101.00	4867.79	-1527.78	4691.19	40°26'17.798"N	104°49'02.864"W	0.00	
11920.00†	90.000	87.753	7101.00	4965.98	-1523.86	4791.11	40°26'17.836"N	104°49'01.572"W	0.00	
12020.00†	90.000	87.753	7101.00	5064.17	-1519.94	4891.04	40°26'17.875"N	104°49'00.280"W	0.00	
12120.00†	90.000	87.753	7101.00	5162.37	-1516.02	4990.96	40°26'17.913"N	104°48'58.987"W	0.00	
12220.00†	90.000	87.753	7101.00	5260.56	-1512.10	5090.88	40°26'17.952"N	104°48'57.695"W	0.00	
12320.00†	90.000	87.753	7101.00	5358.75	-1508.18	5190.81	40°26'17.990"N	104°48'56.403"W	0.00	
12420.00†	90.000	87.753	7101.00	5456.94	-1504.26	5290.73	40°26'18.029"N	104°48'55.111"W	0.00	
12520.00†	90.000	87.753	7101.00	5555.14	-1500.34	5390.65	40°26'18.068"N	104°48'53.818"W	0.00	
12620.00†	90.000	87.753	7101.00	5653.33	-1496.41	5490.58	40°26'18.106"N	104°48'52.526"W	0.00	
12720.00†	90.000	87.753	7101.00	5751.52	-1492.49	5590.50	40°26'18.145"N	104°48'51.234"W	0.00	
12820.00†	90.000	87.753	7101.00	5849.71	-1488.57	5690.42	40°26'18.183"N	104°48'49.941"W	0.00	
12920.00†	90.000	87.753	7101.00	5947.91	-1484.65	5790.34	40°26'18.222"N	104°48'48.649"W	0.00	
13020.00†	90.000	87.753	7101.00	6046.10	-1480.73	5890.27	40°26'18.260"N	104°48'47.357"W	0.00	
13120.00†	90.000	87.753	7101.00	6144.29	-1476.81	5990.19	40°26'18.299"N	104°48'46.064"W	0.00	
13220.00†	90.000	87.753	7101.00	6242.48	-1472.89	6090.11	40°26'18.337"N	104°48'44.772"W	0.00	
13320.00†	90.000	87.753	7101.00	6340.68	-1468.97	6190.04	40°26'18.376"N	104°48'43.480"W	0.00	
13420.00†	90.000	87.753	7101.00	6438.87	-1465.04	6289.96	40°26'18.414"N	104°48'42.188"W	0.00	
13520.00†	90.000	87.753	7101.00	6537.06	-1461.12	6389.88	40°26'18.453"N	104°48'40.895"W	0.00	
13620.00†	90.000	87.753	7101.00	6635.25	-1457.20	6489.81	40°26'18.491"N	104°48'39.603"W	0.00	
13720.00†	90.000	87.753	7101.00	6733.45	-1453.28	6589.73	40°26'18.530"N	104°48'38.311"W	0.00	
13820.00†	90.000	87.753	7101.00	6831.64	-1449.36	6689.65	40°26'18.568"N	104°48'37.018"W	0.00	
13920.00†	90.000	87.753	7101.00	6929.83	-1445.44	6789.58	40°26'18.607"N	104°48'35.726"W	0.00	





# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14020.00†	90.000	87.753	7101.00	7028.02	-1441.52	6889.50	40°26'18.645"N	104°48'34.434"W	0.00	
14120.00†	90.000	87.753	7101.00	7126.22	-1437.60	6989.42	40°26'18.684"N	104°48'33.142"W	0.00	
14220.00†	90.000	87.753	7101.00	7224.41	-1433.68	7089.34	40°26'18.722"N	104°48'31.849"W	0.00	
14320.00†	90.000	87.753	7101.00	7322.60	-1429.75	7189.27	40°26'18.760"N	104°48'30.557"W	0.00	
14420.00†	90.000	87.753	7101.00	7420.79	-1425.83	7289.19	40°26'18.799"N	104°48'29.265"W	0.00	
14520.00†	90.000	87.753	7101.00	7518.99	-1421.91	7389.11	40°26'18.837"N	104°48'27.972"W	0.00	
14620.00†	90.000	87.753	7101.00	7617.18	-1417.99	7489.04	40°26'18.876"N	104°48'26.680"W	0.00	
14720.00†	90.000	87.753	7101.00	7715.37	-1414.07	7588.96	40°26'18.914"N	104°48'25.388"W	0.00	
14820.00†	90.000	87.753	7101.00	7813.56	-1410.15	7688.88	40°26'18.953"N	104°48'24.095"W	0.00	
14920.00†	90.000	87.753	7101.00	7911.76	-1406.23	7788.81	40°26'18.991"N	104°48'22.803"W	0.00	
15020.00†	90.000	87.753	7101.00	8009.95	-1402.31	7888.73	40°26'19.030"N	104°48'21.511"W	0.00	
15120.00†	90.000	87.753	7101.00	8108.14	-1398.38	7988.65	40°26'19.068"N	104°48'20.219"W	0.00	
15220.00†	90.000	87.753	7101.00	8206.33	-1394.46	8088.58	40°26'19.106"N	104°48'18.926"W	0.00	
15320.00†	90.000	87.753	7101.00	8304.53	-1390.54	8188.50	40°26'19.145"N	104°48'17.634"W	0.00	
15420.00†	90.000	87.753	7101.00	8402.72	-1386.62	8288.42	40°26'19.183"N	104°48'16.342"W	0.00	
15520.00†	90.000	87.753	7101.00	8500.91	-1382.70	8388.35	40°26'19.222"N	104°48'15.049"W	0.00	
15620.00†	90.000	87.753	7101.00	8599.10	-1378.78	8488.27	40°26'19.260"N	104°48'13.757"W	0.00	
15720.00†	90.000	87.753	7101.00	8697.30	-1374.86	8588.19	40°26'19.298"N	104°48'12.465"W	0.00	
15820.00†	90.000	87.753	7101.00	8795.49	-1370.94	8688.11	40°26'19.337"N	104°48'11.172"W	0.00	
15920.00†	90.000	87.753	7101.00	8893.68	-1367.01	8788.04	40°26'19.375"N	104°48'09.880"W	0.00	
16020.00†	90.000	87.753	7101.00	8991.87	-1363.09	8887.96	40°26'19.414"N	104°48'08.588"W	0.00	
16066.67	90.000	87.753	7101.00 <sup>2</sup>	9037.70	-1361.26	8934.59	40°26'19.432"N	104°48'07.985"W	0.00	End of Tangent



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## HOLE & CASING SECTIONS

- Ref Wellbore: ORR 14C-32-M PWB Ref Wellpath: ORR 14C-32-M 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	1800.00	1780.00	20.00	1763.49	0.00	0.00	-313.39	-17.33
8.5in Open Hole	1800.00	16100.00	14300.00	1763.49	N/A	-313.39	-17.33	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.31-T06N-R66W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.31-T06N-R67W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.32-T06N-R66W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.32-T06N-R67W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.35-T06N-R67W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.36-T06N-R67W		0.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
2) ORR 14C-32-L BHL ON PLAT REV-1 (568'FSL & 2581'FWL, SEC.32)	16066.67	7101.00	-1361.26	8934.59	3194226.48	1403434.22	40°26'19.432"N	104°48'07.985"W	circle
1) ORR 14C-32-L ENTRY POINT (591'FSL & 75'FWL, SEC.31)	7682.36	7101.00	-1690.03	556.73	3185851.65	1403042.59	40°26'16.199"N	104°49'56.334"W	circle
SEC.31/21-T06N-R67W 460' SETBACK		7112.00	0.40	-40.05	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point



# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## SURVEY PROGRAM - Ref Wellbore: ORR 14C-32-M PWB Ref Wellpath: ORR 14C-32-M PWP (REV-A.1)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	16066.67	BHI NaviTrak (Standard)		ORR 14C-32-M PWB





# Planned Wellpath Report

ORR 14C-32-M PWP (REV-A.1)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#03 ORR 14C-32-M (2257'FSL & 494'FEL, SEC.36)
Area	COLORADO	Well	ORR 14C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 14C-32-M PWB
Facility	SEC.36-T06N-R67W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
6966.51	29.239	115.653	6751.00	SHARON SPRINGS
7010.83	32.709	111.824	6789.00	NIO-A
7169.87	45.788	102.516	6912.00	NIO-B
7285.21	55.591	98.088	6985.00	NIO-C
7515.63	75.495	91.638	7080.00	FORT HAYS

## DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
20.00	0.000	183.165	20.00	Tie On
200.00	0.000	183.165	200.00	End of Tangent
937.05	14.741	183.165	928.94	End of Build
6667.08	14.741	183.165	6470.38	End of Tangent
7682.36	90.000	87.753	7101.00	End of 3D Arc
16066.67	90.000	87.753	7101.00	End of Tangent