

Location:	COLORADO	Slot:	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	ORR 36N-32B-M
Facility:	SEC.36-T06N-R67W	Wellbore:	ORR 36N-32B-M PWB

Plot reference wellpath is ORR 36N-32B-M PWP (REV-A.1)		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to PRECISION 462 (20'KB) (RKB)		" = Wellpath was transformed from a different geoidetic datum
Measured depths are referenced to PRECISION 462 (20'KB) (RKB)		North Reference: True north
PRECISION 462 (20'KB) (RKB) to Mean Sea Level: 4744 feet		Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 ORR 36N-32B-M (2256FSL & 514FEL SEC.36)): 0 feet		Depths are in feet
Coordinates are in feet referenced to Slot		Created by: wjagrwm on 2016-10-13
		Database: WA_DEN_Deriver_Defn

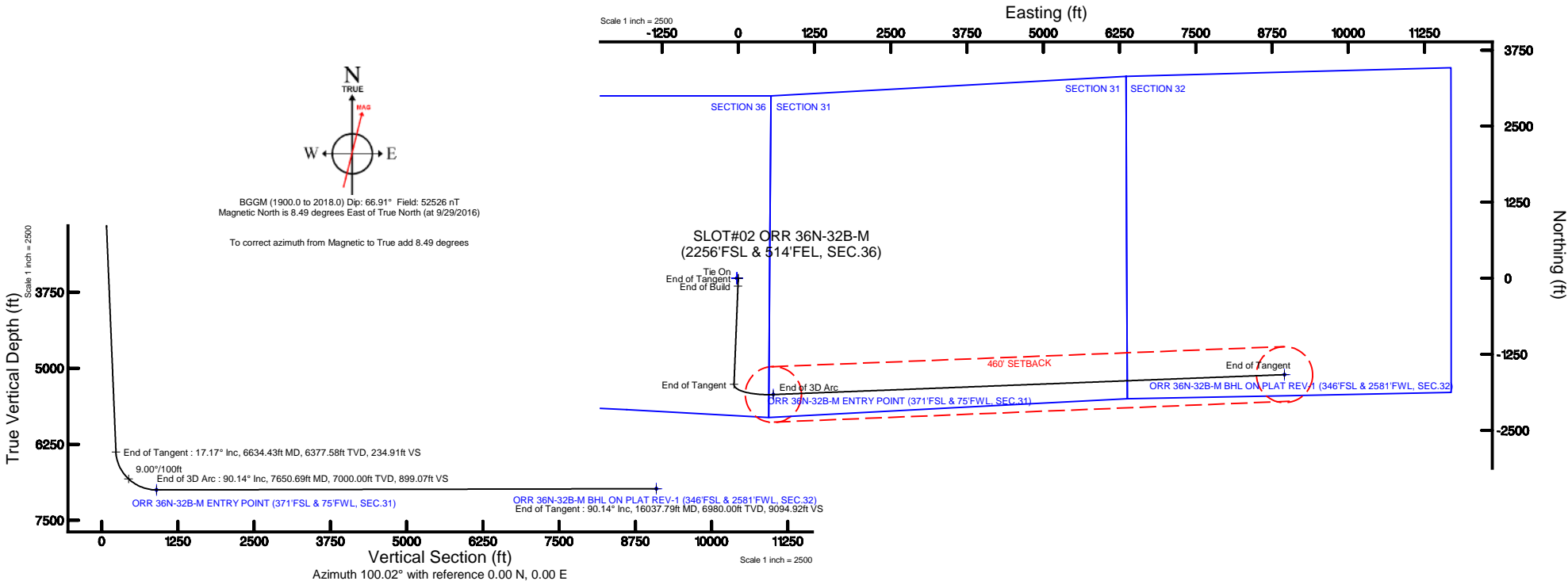
Facility Name				Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC. 36-T06N-R67W				3185242.222	1404728.428	40°26'32.903"N	104°50'04.052"W
Slot	Local N (R)	Local E (R)	Grid East (US R)	Grid North (US R)	Latitude	Longitude	
SLOT#02 ORR 36N-32B-M (Z256FSL & 514FEL, SEC.36)	-0.40	20.03	3185262.249	1404728.174	40°26'32.899"N	104°50'03.793"W	
PRECISION 462 (20XK) (RKB) to Mud line (At Slot: SLOT#02 ORR 36N-32B-M (Z256FSL & 514FEL, SEC.36))						4744ft	
Mean Sea Level to Mud line (At Slot: SLOT#02 ORR 36N-32B-M (Z256FSL & 514FEL, SEC.36))						0ft	
PRECISION 462 (20XK) (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	182.285	20.00	0.00	0.00	3185262.25	1404728.17	40°26'32.899"N	104°50'03.793"W

MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
7044.96	53.71	-1851.74	6746.00	39.031	110.141	375.22	SHARON SPRINGS
7095.36	85.09	-1862.25	6784.00	43.085	107.038	407.95	NIO-A
7292.45	234.65	-1894.45	6907.00	59.481	98.271	560.84	NIO-B

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	20.00	0.000	182.285	20.00	0.00	0.00	0.00	0.00
End of Tangent	300.00	0.000	182.285	300.00	0.00	0.00	0.00	0.00
End of Build	1158.53	17.171	182.285	1145.74	-127.58	-5.09	2.00	17.20
End of Tangent	6634.43	17.171	182.285	6377.58	-1742.88	-69.53	0.00	234.91
End of 3D Arc	7650.69	90.137	87.766	7000.00	-1910.07	575.37	9.00	899.07
End of Tangent	16037.79	90.137	87.766	6980.00	-1583.14	8956.08	0.00	9094.92

Name	MO (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.31-T06N-R66W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.31-T06N-R67W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.32-T06N-R66W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.32-T06N-R67W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.35-T06N-R67W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC.36-T06N-R67W		0.00	0.40	-20.03	318542.22	1404728.43	40°26'32.903"N	104°50'04.052"W
ORR 30N-32B-M BHL ON PLAT REV-1 (346FSL & 2581FWL, SEC.32)	16037.79	6880.00	-1583.14	8956.08	319429.60	140212.36	40°26'17.239"N	104°48'07.987"W
ORR 30N-32B-M ENTRY POINT (217FSL & 75FWL, SEC.31)	7650.69	7030.00	-1910.07	575.37	3185651.92	1402822.55	40°26'14.024"N	104°49'56.352"W
SEC.31/21-T06N-R67W 460 SETBACK		7112.00		0.00	318562.22	1404728.43	40°26'32.903"N	104°49'56.052"W



To correct azimuth from Magnetic to True add 8.49 degrees

ORR_36N-32B-M_PWP__REV-A.1_.1as

~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	16037.79	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	SYNERGY RESOURCES CORPORATION	:OPERATOR
WELL	.	ORR 36N-32B-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#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)	:SLOT
WELLBORE	.	ORR 36N-32B-M PWB	:WELLBORE
WELLPATH	.	ORR 36N-32B-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	100.02	: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_36N-32B-M_PWP__REV-A.1_.1as

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

~ASCII DATA

0.00	0.00	182.29	0.00	0.00	0.00	0.00	40.4424719	-104.8343869	0.00
20.00	0.00	182.29	20.00	0.00	0.00	0.00	40.4424719	-104.8343869	0.00
120.00	0.00	182.29	120.00	0.00	0.00	0.00	40.4424719	-104.8343869	0.00
220.00	0.00	182.29	220.00	0.00	0.00	0.00	40.4424719	-104.8343869	0.00
300.00	0.00	182.29	300.00	0.00	0.00	0.00	40.4424719	-104.8343869	0.00
320.00	0.40	182.29	320.00	0.01	-0.07	0.00	40.4424718	-104.8343870	2.00
420.00	2.40	182.29	419.96	0.34	-2.51	-0.10	40.4424651	-104.8343873	2.00
520.00	4.40	182.29	519.78	1.14	-8.44	-0.34	40.4424488	-104.8343882	2.00
620.00	6.40	182.29	619.33	2.40	-17.84	-0.71	40.4424230	-104.8343895	2.00
720.00	8.40	182.29	718.50	4.14	-30.71	-1.23	40.4423877	-104.8343913	2.00
820.00	10.40	182.29	817.15	6.34	-47.03	-1.88	40.4423429	-104.8343937	2.00
920.00	12.40	182.29	915.17	9.00	-66.78	-2.66	40.4422887	-104.8343965	2.00
1020.00	14.40	182.29	1012.44	12.12	-89.93	-3.59	40.4422251	-104.8343998	2.00
1120.00	16.40	182.29	1108.85	15.70	-116.46	-4.65	40.4421523	-104.8344036	2.00
1158.53	17.17	182.29	1145.74	17.20	-127.58	-5.09	40.4421217	-104.8344052	2.00
1220.00	17.17	182.29	1204.47	19.64	-145.71	-5.81	40.4420720	-104.8344078	0.00
1320.00	17.17	182.29	1300.01	23.62	-175.21	-6.99	40.4419910	-104.8344121	0.00
1420.00	17.17	182.29	1395.55	27.59	-204.71	-8.17	40.4419100	-104.8344163	0.00
1520.00	17.17	182.29	1491.10	31.57	-234.21	-9.34	40.4418291	-104.8344205	0.00
1620.00	17.17	182.29	1586.64	35.54	-263.71	-10.52	40.4417481	-104.8344247	0.00
1720.00	17.17	182.29	1682.18	39.52	-293.21	-11.70	40.4416671	-104.8344290	0.00
1820.00	17.17	182.29	1777.73	43.49	-322.70	-12.87	40.4415862	-104.8344332	0.00
1920.00	17.17	182.29	1873.27	47.47	-352.20	-14.05	40.4415052	-104.8344374	0.00
2020.00	17.17	182.29	1968.81	51.45	-381.70	-15.23	40.4414242	-104.8344417	0.00
2120.00	17.17	182.29	2064.35	55.42	-411.20	-16.41	40.4413433	-104.8344459	0.00
2220.00	17.17	182.29	2159.90	59.40	-440.70	-17.58	40.4412623	-104.8344501	0.00
2320.00	17.17	182.29	2255.44	63.37	-470.20	-18.76	40.4411813	-104.8344543	0.00
2420.00	17.17	182.29	2350.98	67.35	-499.69	-19.94	40.4411003	-104.8344586	0.00
2520.00	17.17	182.29	2446.53	71.33	-529.19	-21.11	40.4410194	-104.8344628	0.00
2620.00	17.17	182.29	2542.07	75.30	-558.69	-22.29	40.4409384	-104.8344670	0.00
2720.00	17.17	182.29	2637.61	79.28	-588.19	-23.47	40.4408574	-104.8344712	0.00
2820.00	17.17	182.29	2733.15	83.25	-617.69	-24.64	40.4407765	-104.8344755	0.00
2920.00	17.17	182.29	2828.70	87.23	-647.19	-25.82	40.4406955	-104.8344797	0.00
3020.00	17.17	182.29	2924.24	91.21	-676.68	-27.00	40.4406145	-104.8344839	0.00
3120.00	17.17	182.29	3019.78	95.18	-706.18	-28.17	40.4405336	-104.8344882	0.00
3220.00	17.17	182.29	3115.33	99.16	-735.68	-29.35	40.4404526	-104.8344924	0.00
3320.00	17.17	182.29	3210.87	103.13	-765.18	-30.53	40.4403716	-104.8344966	0.00
3420.00	17.17	182.29	3306.41	107.11	-794.68	-31.70	40.4402906	-104.8345008	0.00
3520.00	17.17	182.29	3401.96	111.08	-824.18	-32.88	40.4402097	-104.8345051	0.00
3620.00	17.17	182.29	3497.50	115.06	-853.67	-34.06	40.4401287	-104.8345093	0.00
3720.00	17.17	182.29	3593.04	119.04	-883.17	-35.23	40.4400477	-104.8345135	0.00
3820.00	17.17	182.29	3688.58	123.01	-912.67	-36.41	40.4399668	-104.8345178	0.00
3920.00	17.17	182.29	3784.13	126.99	-942.17	-37.59	40.4398858	-104.8345220	0.00

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4020.00	17.17	182.29	3879.67	130.96	-971.67	-38.77	40.4398048	-104.8345262	0.00
4120.00	17.17	182.29	3975.21	134.94	-1001.17	-39.94	40.4397239	-104.8345304	0.00
4220.00	17.17	182.29	4070.76	138.92	-1030.66	-41.12	40.4396429	-104.8345347	0.00
4320.00	17.17	182.29	4166.30	142.89	-1060.16	-42.30	40.4395619	-104.8345389	0.00
4420.00	17.17	182.29	4261.84	146.87	-1089.66	-43.47	40.4394810	-104.8345431	0.00
4520.00	17.17	182.29	4357.39	150.84	-1119.16	-44.65	40.4394000	-104.8345473	0.00
4620.00	17.17	182.29	4452.93	154.82	-1148.66	-45.83	40.4393190	-104.8345516	0.00
4720.00	17.17	182.29	4548.47	158.79	-1178.16	-47.00	40.4392380	-104.8345558	0.00
4820.00	17.17	182.29	4644.01	162.77	-1207.65	-48.18	40.4391571	-104.8345600	0.00
4920.00	17.17	182.29	4739.56	166.75	-1237.15	-49.36	40.4390761	-104.8345643	0.00
5020.00	17.17	182.29	4835.10	170.72	-1266.65	-50.53	40.4389951	-104.8345685	0.00
5120.00	17.17	182.29	4930.64	174.70	-1296.15	-51.71	40.4389142	-104.8345727	0.00
5220.00	17.17	182.29	5026.19	178.67	-1325.65	-52.89	40.4388332	-104.8345769	0.00
5320.00	17.17	182.29	5121.73	182.65	-1355.15	-54.06	40.4387522	-104.8345812	0.00
5420.00	17.17	182.29	5217.27	186.63	-1384.64	-55.24	40.4386713	-104.8345854	0.00
5520.00	17.17	182.29	5312.82	190.60	-1414.14	-56.42	40.4385903	-104.8345896	0.00
5620.00	17.17	182.29	5408.36	194.58	-1443.64	-57.60	40.4385093	-104.8345939	0.00
5720.00	17.17	182.29	5503.90	198.55	-1473.14	-58.77	40.4384284	-104.8345981	0.00
5820.00	17.17	182.29	5599.44	202.53	-1502.64	-59.95	40.4383474	-104.8346023	0.00
5920.00	17.17	182.29	5694.99	206.50	-1532.14	-61.13	40.4382664	-104.8346065	0.00
6020.00	17.17	182.29	5790.53	210.48	-1561.63	-62.30	40.4381854	-104.8346108	0.00
6120.00	17.17	182.29	5886.07	214.46	-1591.13	-63.48	40.4381045	-104.8346150	0.00
6220.00	17.17	182.29	5981.62	218.43	-1620.63	-64.66	40.4380235	-104.8346192	0.00
6320.00	17.17	182.29	6077.16	222.41	-1650.13	-65.83	40.4379425	-104.8346234	0.00
6420.00	17.17	182.29	6172.70	226.38	-1679.63	-67.01	40.4378616	-104.8346277	0.00
6520.00	17.17	182.29	6268.25	230.36	-1709.13	-68.19	40.4377806	-104.8346319	0.00
6620.00	17.17	182.29	6363.79	234.34	-1738.62	-69.36	40.4376996	-104.8346361	0.00
6634.43	17.17	182.29	6377.58	234.91	-1742.88	-69.53	40.4376879	-104.8346367	0.00
6720.00	18.24	157.01	6459.21	243.92	-1767.87	-64.80	40.4376194	-104.8346197	9.00
6820.00	22.86	134.75	6552.97	268.46	-1796.00	-44.85	40.4375421	-104.8345481	9.00
6920.00	29.49	120.81	6642.75	307.52	-1822.34	-9.85	40.4374698	-104.8344223	9.00
7020.00	37.06	111.88	6726.34	360.12	-1846.23	39.35	40.4374043	-104.8342456	9.00
7120.00	45.09	105.69	6801.70	424.98	-1867.08	101.53	40.4373470	-104.8340222	9.00
7220.00	53.38	101.04	6866.95	500.51	-1884.38	175.17	40.4372996	-104.8337577	9.00
7320.00	61.81	97.31	6920.50	584.83	-1897.70	258.44	40.4372630	-104.8334585	9.00
7420.00	70.33	94.13	6961.03	675.87	-1906.71	349.30	40.4372382	-104.8331321	9.00
7520.00	78.90	91.27	6987.53	771.39	-1911.20	445.51	40.4372259	-104.8327865	9.00
7620.00	87.50	88.58	6999.37	869.05	-1911.05	544.71	40.4372263	-104.8324302	9.00
7650.69	90.14	87.77	7000.00	899.07	-1910.07	575.37	40.4372290	-104.8323200	9.00
7720.00	90.14	87.77	6999.83	966.80	-1907.37	644.63	40.4372364	-104.8320712	0.00
7820.00	90.14	87.77	6999.60	1064.52	-1903.47	744.55	40.4372471	-104.8317122	0.00
7920.00	90.14	87.77	6999.36	1162.24	-1899.58	844.48	40.4372578	-104.8313533	0.00
8020.00	90.14	87.77	6999.12	1259.96	-1895.68	944.40	40.4372685	-104.8309943	0.00
8120.00	90.14	87.77	6998.88	1357.68	-1891.78	1044.32	40.4372792	-104.8306353	0.00
8220.00	90.14	87.77	6998.64	1455.40	-1887.88	1144.25	40.4372899	-104.8302764	0.00
8320.00	90.14	87.77	6998.40	1553.12	-1883.98	1244.17	40.4373005	-104.8299174	0.00
8420.00	90.14	87.77	6998.17	1650.84	-1880.09	1344.10	40.4373112	-104.8295585	0.00
8520.00	90.14	87.77	6997.93	1748.56	-1876.19	1444.02	40.4373219	-104.8291995	0.00

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8620.00	90.14	87.77	6997.69	1846.28	-1872.29	1543.94	40.4373326	-104.8288405	0.00
8720.00	90.14	87.77	6997.45	1944.00	-1868.39	1643.87	40.4373433	-104.8284816	0.00
8820.00	90.14	87.77	6997.21	2041.72	-1864.49	1743.79	40.4373540	-104.8281226	0.00
8920.00	90.14	87.77	6996.97	2139.44	-1860.60	1843.71	40.4373646	-104.8277636	0.00
9020.00	90.14	87.77	6996.73	2237.16	-1856.70	1943.64	40.4373753	-104.8274047	0.00
9120.00	90.14	87.77	6996.50	2334.88	-1852.80	2043.56	40.4373860	-104.8270457	0.00
9220.00	90.14	87.77	6996.26	2432.60	-1848.90	2143.49	40.4373967	-104.8266867	0.00
9320.00	90.14	87.77	6996.02	2530.32	-1845.00	2243.41	40.4374073	-104.8263278	0.00
9420.00	90.14	87.77	6995.78	2628.04	-1841.11	2343.33	40.4374180	-104.8259688	0.00
9520.00	90.14	87.77	6995.54	2725.76	-1837.21	2443.26	40.4374287	-104.8256099	0.00
9620.00	90.14	87.77	6995.30	2823.48	-1833.31	2543.18	40.4374394	-104.8252509	0.00
9720.00	90.14	87.77	6995.07	2921.20	-1829.41	2643.10	40.4374500	-104.8248919	0.00
9820.00	90.14	87.77	6994.83	3018.92	-1825.51	2743.03	40.4374607	-104.8245330	0.00
9920.00	90.14	87.77	6994.59	3116.64	-1821.62	2842.95	40.4374714	-104.8241740	0.00
10020.00	90.14	87.77	6994.35	3214.36	-1817.72	2942.88	40.4374820	-104.8238150	0.00
10120.00	90.14	87.77	6994.11	3312.08	-1813.82	3042.80	40.4374927	-104.8234561	0.00
10220.00	90.14	87.77	6993.87	3409.80	-1809.92	3142.72	40.4375034	-104.8230971	0.00
10320.00	90.14	87.77	6993.63	3507.52	-1806.02	3242.65	40.4375140	-104.8227381	0.00
10420.00	90.14	87.77	6993.40	3605.24	-1802.13	3342.57	40.4375247	-104.8223792	0.00
10520.00	90.14	87.77	6993.16	3702.95	-1798.23	3442.49	40.4375354	-104.8220202	0.00
10620.00	90.14	87.77	6992.92	3800.67	-1794.33	3542.42	40.4375460	-104.8216612	0.00
10720.00	90.14	87.77	6992.68	3898.39	-1790.43	3642.34	40.4375567	-104.8213023	0.00
10820.00	90.14	87.77	6992.44	3996.11	-1786.53	3742.27	40.4375673	-104.8209433	0.00
10920.00	90.14	87.77	6992.20	4093.83	-1782.64	3842.19	40.4375780	-104.8205843	0.00
11020.00	90.14	87.77	6991.97	4191.55	-1778.74	3942.11	40.4375887	-104.8202254	0.00
11120.00	90.14	87.77	6991.73	4289.27	-1774.84	4042.04	40.4375993	-104.8198664	0.00
11220.00	90.14	87.77	6991.49	4386.99	-1770.94	4141.96	40.4376100	-104.8195074	0.00
11320.00	90.14	87.77	6991.25	4484.71	-1767.04	4241.88	40.4376206	-104.8191485	0.00
11420.00	90.14	87.77	6991.01	4582.43	-1763.15	4341.81	40.4376313	-104.8187895	0.00
11520.00	90.14	87.77	6990.77	4680.15	-1759.25	4441.73	40.4376419	-104.8184305	0.00
11620.00	90.14	87.77	6990.53	4777.87	-1755.35	4541.65	40.4376526	-104.8180716	0.00
11720.00	90.14	87.77	6990.30	4875.59	-1751.45	4641.58	40.4376632	-104.8177126	0.00
11820.00	90.14	87.77	6990.06	4973.31	-1747.55	4741.50	40.4376739	-104.8173536	0.00
11920.00	90.14	87.77	6989.82	5071.03	-1743.66	4841.43	40.4376845	-104.8169947	0.00
12020.00	90.14	87.77	6989.58	5168.75	-1739.76	4941.35	40.4376952	-104.8166357	0.00
12120.00	90.14	87.77	6989.34	5266.47	-1735.86	5041.27	40.4377058	-104.8162767	0.00
12220.00	90.14	87.77	6989.10	5364.19	-1731.96	5141.20	40.4377164	-104.8159178	0.00
12320.00	90.14	87.77	6988.87	5461.91	-1728.06	5241.12	40.4377271	-104.8155588	0.00
12420.00	90.14	87.77	6988.63	5559.63	-1724.17	5341.04	40.4377377	-104.8151998	0.00
12520.00	90.14	87.77	6988.39	5657.35	-1720.27	5440.97	40.4377484	-104.8148409	0.00
12620.00	90.14	87.77	6988.15	5755.07	-1716.37	5540.89	40.4377590	-104.8144819	0.00
12720.00	90.14	87.77	6987.91	5852.79	-1712.47	5640.82	40.4377696	-104.8141229	0.00
12820.00	90.14	87.77	6987.67	5950.51	-1708.57	5740.74	40.4377803	-104.8137640	0.00
12920.00	90.14	87.77	6987.43	6048.23	-1704.68	5840.66	40.4377909	-104.8134050	0.00
13020.00	90.14	87.77	6987.20	6145.95	-1700.78	5940.59	40.4378016	-104.8130460	0.00
13120.00	90.14	87.77	6986.96	6243.67	-1696.88	6040.51	40.4378122	-104.8126871	0.00
13220.00	90.14	87.77	6986.72	6341.39	-1692.98	6140.43	40.4378228	-104.8123281	0.00
13320.00	90.14	87.77	6986.48	6439.11	-1689.08	6240.36	40.4378334	-104.8119691	0.00

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13420.00	90.14	87.77	6986.24	6536.83	-1685.19	6340.28	40.4378441	-104.8116102	0.00
13520.00	90.14	87.77	6986.00	6634.55	-1681.29	6440.21	40.4378547	-104.8112512	0.00
13620.00	90.14	87.77	6985.77	6732.27	-1677.39	6540.13	40.4378653	-104.8108922	0.00
13720.00	90.14	87.77	6985.53	6829.99	-1673.49	6640.05	40.4378760	-104.8105332	0.00
13820.00	90.14	87.77	6985.29	6927.70	-1669.59	6739.98	40.4378866	-104.8101743	0.00
13920.00	90.14	87.77	6985.05	7025.42	-1665.70	6839.90	40.4378972	-104.8098153	0.00
14020.00	90.14	87.77	6984.81	7123.14	-1661.80	6939.82	40.4379078	-104.8094563	0.00
14120.00	90.14	87.77	6984.57	7220.86	-1657.90	7039.75	40.4379185	-104.8090974	0.00
14220.00	90.14	87.77	6984.33	7318.58	-1654.00	7139.67	40.4379291	-104.8087384	0.00
14320.00	90.14	87.77	6984.10	7416.30	-1650.10	7239.60	40.4379397	-104.8083794	0.00
14420.00	90.14	87.77	6983.86	7514.02	-1646.21	7339.52	40.4379503	-104.8080205	0.00
14520.00	90.14	87.77	6983.62	7611.74	-1642.31	7439.44	40.4379609	-104.8076615	0.00
14620.00	90.14	87.77	6983.38	7709.46	-1638.41	7539.37	40.4379715	-104.8073025	0.00
14720.00	90.14	87.77	6983.14	7807.18	-1634.51	7639.29	40.4379822	-104.8069435	0.00
14820.00	90.14	87.77	6982.90	7904.90	-1630.61	7739.21	40.4379928	-104.8065846	0.00
14920.00	90.14	87.77	6982.67	8002.62	-1626.72	7839.14	40.4380034	-104.8062256	0.00
15020.00	90.14	87.77	6982.43	8100.34	-1622.82	7939.06	40.4380140	-104.8058666	0.00
15120.00	90.14	87.77	6982.19	8198.06	-1618.92	8038.98	40.4380246	-104.8055077	0.00
15220.00	90.14	87.77	6981.95	8295.78	-1615.02	8138.91	40.4380352	-104.8051487	0.00
15320.00	90.14	87.77	6981.71	8393.50	-1611.12	8238.83	40.4380458	-104.8047897	0.00
15420.00	90.14	87.77	6981.47	8491.22	-1607.23	8338.76	40.4380564	-104.8044308	0.00
15520.00	90.14	87.77	6981.23	8588.94	-1603.33	8438.68	40.4380670	-104.8040718	0.00
15620.00	90.14	87.77	6981.00	8686.66	-1599.43	8538.60	40.4380776	-104.8037128	0.00
15720.00	90.14	87.77	6980.76	8784.38	-1595.53	8638.53	40.4380883	-104.8033538	0.00
15820.00	90.14	87.77	6980.52	8882.10	-1591.63	8738.45	40.4380989	-104.8029949	0.00
15920.00	90.14	87.77	6980.28	8979.82	-1587.74	8838.37	40.4381095	-104.8026359	0.00
16020.00	90.14	87.77	6980.04	9077.54	-1583.84	8938.30	40.4381201	-104.8022769	0.00
16037.79	90.14	87.77	6980.00	9094.92	-1583.14	8956.08	40.4381219	-104.8022131	0.00



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-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 6:58:30 PM
Convergence at slot	0.44° East	Database/Source file	WA_DEN_Denver_Defn/ORR_36N-32B-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	20.03	3185262.25	1404728.17	40°26'32.899"N	104°50'03.793"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#02 ORR 36N-32B-M (2256'FSL & 514'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	100.02°



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 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	182.285	0.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.793"W	0.00	
20.00	0.000	182.285	20.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.793"W	0.00	Tie On
120.00†	0.000	182.285	120.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.793"W	0.00	
220.00†	0.000	182.285	220.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.793"W	0.00	
300.00	0.000	182.285	300.00	0.00	0.00	0.00	40°26'32.899"N	104°50'03.793"W	0.00	End of Tangent
320.00†	0.400	182.285	320.00	0.01	-0.07	0.00	40°26'32.898"N	104°50'03.793"W	2.00	
420.00†	2.400	182.285	419.96	0.34	-2.51	-0.10	40°26'32.874"N	104°50'03.794"W	2.00	
520.00†	4.400	182.285	519.78	1.14	-8.44	-0.34	40°26'32.816"N	104°50'03.797"W	2.00	
620.00†	6.400	182.285	619.33	2.40	-17.84	-0.71	40°26'32.723"N	104°50'03.802"W	2.00	
720.00†	8.400	182.285	718.50	4.14	-30.71	-1.23	40°26'32.596"N	104°50'03.809"W	2.00	
820.00†	10.400	182.285	817.15	6.34	-47.03	-1.88	40°26'32.434"N	104°50'03.817"W	2.00	
920.00†	12.400	182.285	915.17	9.00	-66.78	-2.66	40°26'32.239"N	104°50'03.827"W	2.00	
1020.00†	14.400	182.285	1012.44	12.12	-89.93	-3.59	40°26'32.010"N	104°50'03.839"W	2.00	
1120.00†	16.400	182.285	1108.85	15.70	-116.46	-4.65	40°26'31.748"N	104°50'03.853"W	2.00	
1158.53	17.171	182.285	1145.74	17.20	-127.58	-5.09	40°26'31.638"N	104°50'03.859"W	2.00	End of Build
1220.00†	17.171	182.285	1204.47	19.64	-145.71	-5.81	40°26'31.459"N	104°50'03.868"W	0.00	
1320.00†	17.171	182.285	1300.01	23.62	-175.21	-6.99	40°26'31.168"N	104°50'03.883"W	0.00	
1420.00†	17.171	182.285	1395.55	27.59	-204.71	-8.17	40°26'30.876"N	104°50'03.899"W	0.00	
1520.00†	17.171	182.285	1491.10	31.57	-234.21	-9.34	40°26'30.585"N	104°50'03.914"W	0.00	
1620.00†	17.171	182.285	1586.64	35.54	-263.71	-10.52	40°26'30.293"N	104°50'03.929"W	0.00	
1720.00†	17.171	182.285	1682.18	39.52	-293.21	-11.70	40°26'30.002"N	104°50'03.944"W	0.00	
1820.00†	17.171	182.285	1777.73	43.49	-322.70	-12.87	40°26'29.710"N	104°50'03.960"W	0.00	
1920.00†	17.171	182.285	1873.27	47.47	-352.20	-14.05	40°26'29.419"N	104°50'03.975"W	0.00	
2020.00†	17.171	182.285	1968.81	51.45	-381.70	-15.23	40°26'29.127"N	104°50'03.990"W	0.00	
2120.00†	17.171	182.285	2064.35	55.42	-411.20	-16.41	40°26'28.836"N	104°50'04.005"W	0.00	
2220.00†	17.171	182.285	2159.90	59.40	-440.70	-17.58	40°26'28.544"N	104°50'04.020"W	0.00	
2320.00†	17.171	182.285	2255.44	63.37	-470.20	-18.76	40°26'28.253"N	104°50'04.036"W	0.00	
2420.00†	17.171	182.285	2350.98	67.35	-499.69	-19.94	40°26'27.961"N	104°50'04.051"W	0.00	
2520.00†	17.171	182.285	2446.53	71.33	-529.19	-21.11	40°26'27.670"N	104°50'04.066"W	0.00	
2620.00†	17.171	182.285	2542.07	75.30	-558.69	-22.29	40°26'27.378"N	104°50'04.081"W	0.00	



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2720.00†	17.171	182.285	2637.61	79.28	-588.19	-23.47	40°26'27.087"N	104°50'04.096"W	0.00	
2820.00†	17.171	182.285	2733.15	83.25	-617.69	-24.64	40°26'26.795"N	104°50'04.112"W	0.00	
2920.00†	17.171	182.285	2828.70	87.23	-647.19	-25.82	40°26'26.504"N	104°50'04.127"W	0.00	
3020.00†	17.171	182.285	2924.24	91.21	-676.68	-27.00	40°26'26.212"N	104°50'04.142"W	0.00	
3120.00†	17.171	182.285	3019.78	95.18	-706.18	-28.17	40°26'25.921"N	104°50'04.157"W	0.00	
3220.00†	17.171	182.285	3115.33	99.16	-735.68	-29.35	40°26'25.629"N	104°50'04.173"W	0.00	
3320.00†	17.171	182.285	3210.87	103.13	-765.18	-30.53	40°26'25.338"N	104°50'04.188"W	0.00	
3420.00†	17.171	182.285	3306.41	107.11	-794.68	-31.70	40°26'25.046"N	104°50'04.203"W	0.00	
3520.00†	17.171	182.285	3401.96	111.08	-824.18	-32.88	40°26'24.755"N	104°50'04.218"W	0.00	
3620.00†	17.171	182.285	3497.50	115.06	-853.67	-34.06	40°26'24.463"N	104°50'04.233"W	0.00	
3720.00†	17.171	182.285	3593.04	119.04	-883.17	-35.23	40°26'24.172"N	104°50'04.249"W	0.00	
3820.00†	17.171	182.285	3688.58	123.01	-912.67	-36.41	40°26'23.880"N	104°50'04.264"W	0.00	
3920.00†	17.171	182.285	3784.13	126.99	-942.17	-37.59	40°26'23.589"N	104°50'04.279"W	0.00	
4020.00†	17.171	182.285	3879.67	130.96	-971.67	-38.77	40°26'23.297"N	104°50'04.294"W	0.00	
4120.00†	17.171	182.285	3975.21	134.94	-1001.17	-39.94	40°26'23.006"N	104°50'04.310"W	0.00	
4220.00†	17.171	182.285	4070.76	138.92	-1030.66	-41.12	40°26'22.714"N	104°50'04.325"W	0.00	
4320.00†	17.171	182.285	4166.30	142.89	-1060.16	-42.30	40°26'22.423"N	104°50'04.340"W	0.00	
4420.00†	17.171	182.285	4261.84	146.87	-1089.66	-43.47	40°26'22.131"N	104°50'04.355"W	0.00	
4520.00†	17.171	182.285	4357.39	150.84	-1119.16	-44.65	40°26'21.840"N	104°50'04.370"W	0.00	
4620.00†	17.171	182.285	4452.93	154.82	-1148.66	-45.83	40°26'21.548"N	104°50'04.386"W	0.00	
4720.00†	17.171	182.285	4548.47	158.79	-1178.16	-47.00	40°26'21.257"N	104°50'04.401"W	0.00	
4820.00†	17.171	182.285	4644.01	162.77	-1207.65	-48.18	40°26'20.965"N	104°50'04.416"W	0.00	
4920.00†	17.171	182.285	4739.56	166.75	-1237.15	-49.36	40°26'20.674"N	104°50'04.431"W	0.00	
5020.00†	17.171	182.285	4835.10	170.72	-1266.65	-50.53	40°26'20.382"N	104°50'04.447"W	0.00	
5120.00†	17.171	182.285	4930.64	174.70	-1296.15	-51.71	40°26'20.091"N	104°50'04.462"W	0.00	
5220.00†	17.171	182.285	5026.19	178.67	-1325.65	-52.89	40°26'19.800"N	104°50'04.477"W	0.00	
5320.00†	17.171	182.285	5121.73	182.65	-1355.15	-54.06	40°26'19.508"N	104°50'04.492"W	0.00	
5420.00†	17.171	182.285	5217.27	186.63	-1384.64	-55.24	40°26'19.217"N	104°50'04.507"W	0.00	
5520.00†	17.171	182.285	5312.82	190.60	-1414.14	-56.42	40°26'18.925"N	104°50'04.523"W	0.00	
5620.00†	17.171	182.285	5408.36	194.58	-1443.64	-57.60	40°26'18.634"N	104°50'04.538"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5720.00†	17.171	182.285	5503.90	198.55	-1473.14	-58.77	40°26'18.342"N	104°50'04.553"W	0.00	
5820.00†	17.171	182.285	5599.44	202.53	-1502.64	-59.95	40°26'18.051"N	104°50'04.568"W	0.00	
5920.00†	17.171	182.285	5694.99	206.50	-1532.14	-61.13	40°26'17.759"N	104°50'04.584"W	0.00	
6020.00†	17.171	182.285	5790.53	210.48	-1561.63	-62.30	40°26'17.468"N	104°50'04.599"W	0.00	
6120.00†	17.171	182.285	5886.07	214.46	-1591.13	-63.48	40°26'17.176"N	104°50'04.614"W	0.00	
6220.00†	17.171	182.285	5981.62	218.43	-1620.63	-64.66	40°26'16.885"N	104°50'04.629"W	0.00	
6320.00†	17.171	182.285	6077.16	222.41	-1650.13	-65.83	40°26'16.593"N	104°50'04.644"W	0.00	
6420.00†	17.171	182.285	6172.70	226.38	-1679.63	-67.01	40°26'16.302"N	104°50'04.660"W	0.00	
6520.00†	17.171	182.285	6268.25	230.36	-1709.13	-68.19	40°26'16.010"N	104°50'04.675"W	0.00	
6620.00†	17.171	182.285	6363.79	234.34	-1738.62	-69.36	40°26'15.719"N	104°50'04.690"W	0.00	
6634.43	17.171	182.285	6377.58	234.91	-1742.88	-69.53	40°26'15.677"N	104°50'04.692"W	0.00	End of Tangent
6720.00†	18.238	157.008	6459.21	243.92	-1767.87	-64.80	40°26'15.430"N	104°50'04.631"W	9.00	
6820.00†	22.860	134.750	6552.97	268.46	-1796.00	-44.85	40°26'15.152"N	104°50'04.373"W	9.00	
6920.00†	29.488	120.814	6642.75	307.52	-1822.34	-9.85	40°26'14.891"N	104°50'03.920"W	9.00	
7020.00†	37.058	111.883	6726.34	360.12	-1846.23	39.35	40°26'14.655"N	104°50'03.284"W	9.00	
7044.96†	39.031	110.141	6746.00	375.22	-1851.74	53.71	40°26'14.601"N	104°50'03.098"W	9.00	SHARON SPRINGS
7095.36†	43.085	107.038	6784.00	407.95	-1862.25	85.09	40°26'14.497"N	104°50'02.693"W	9.00	NIO-A
7120.00†	45.094	105.689	6801.70	424.98	-1867.08	101.53	40°26'14.449"N	104°50'02.480"W	9.00	
7220.00†	53.382	101.042	6866.95	500.51	-1884.38	175.17	40°26'14.278"N	104°50'01.528"W	9.00	
7292.45†	59.481	98.271	6907.00	560.84	-1894.45	234.65	40°26'14.179"N	104°50'00.758"W	9.00	NIO-B
7320.00†	61.814	97.310	6920.50	584.83	-1897.70	258.44	40°26'14.147"N	104°50'00.451"W	9.00	
7420.00†	70.333	94.129	6961.03	675.87	-1906.71	349.30	40°26'14.058"N	104°49'59.276"W	9.00	
7520.00†	78.903	91.272	6987.53	771.39	-1911.20	445.51	40°26'14.013"N	104°49'58.031"W	9.00	
7620.00†	87.497	88.580	6999.37	869.05	-1911.05	544.71	40°26'14.015"N	104°49'56.749"W	9.00	
7650.69	90.137	87.766	7000.00 [†]	899.07	-1910.07	575.37	40°26'14.024"N	104°49'56.352"W	9.00	End of 3D Arc
7720.00†	90.137	87.766	6999.83	966.80	-1907.37	644.63	40°26'14.051"N	104°49'55.456"W	0.00	
7820.00†	90.137	87.766	6999.60	1064.52	-1903.47	744.55	40°26'14.090"N	104°49'54.164"W	0.00	
7920.00†	90.137	87.766	6999.36	1162.24	-1899.58	844.48	40°26'14.128"N	104°49'52.872"W	0.00	
8020.00†	90.137	87.766	6999.12	1259.96	-1895.68	944.40	40°26'14.167"N	104°49'51.580"W	0.00	
8120.00†	90.137	87.766	6998.88	1357.68	-1891.78	1044.32	40°26'14.205"N	104°49'50.287"W	0.00	



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8220.00†	90.137	87.766	6998.64	1455.40	-1887.88	1144.25	40°26'14.243"N	104°49'48.995"W	0.00	
8320.00†	90.137	87.766	6998.40	1553.12	-1883.98	1244.17	40°26'14.282"N	104°49'47.703"W	0.00	
8420.00†	90.137	87.766	6998.17	1650.84	-1880.09	1344.10	40°26'14.320"N	104°49'46.410"W	0.00	
8520.00†	90.137	87.766	6997.93	1748.56	-1876.19	1444.02	40°26'14.359"N	104°49'45.118"W	0.00	
8620.00†	90.137	87.766	6997.69	1846.28	-1872.29	1543.94	40°26'14.397"N	104°49'43.826"W	0.00	
8720.00†	90.137	87.766	6997.45	1944.00	-1868.39	1643.87	40°26'14.436"N	104°49'42.534"W	0.00	
8820.00†	90.137	87.766	6997.21	2041.72	-1864.49	1743.79	40°26'14.474"N	104°49'41.241"W	0.00	
8920.00†	90.137	87.766	6996.97	2139.44	-1860.60	1843.71	40°26'14.513"N	104°49'39.949"W	0.00	
9020.00†	90.137	87.766	6996.73	2237.16	-1856.70	1943.64	40°26'14.551"N	104°49'38.657"W	0.00	
9120.00†	90.137	87.766	6996.50	2334.88	-1852.80	2043.56	40°26'14.590"N	104°49'37.365"W	0.00	
9220.00†	90.137	87.766	6996.26	2432.60	-1848.90	2143.49	40°26'14.628"N	104°49'36.072"W	0.00	
9320.00†	90.137	87.766	6996.02	2530.32	-1845.00	2243.41	40°26'14.666"N	104°49'34.780"W	0.00	
9420.00†	90.137	87.766	6995.78	2628.04	-1841.11	2343.33	40°26'14.705"N	104°49'33.488"W	0.00	
9520.00†	90.137	87.766	6995.54	2725.76	-1837.21	2443.26	40°26'14.743"N	104°49'32.195"W	0.00	
9620.00†	90.137	87.766	6995.30	2823.48	-1833.31	2543.18	40°26'14.782"N	104°49'30.903"W	0.00	
9720.00†	90.137	87.766	6995.07	2921.20	-1829.41	2643.10	40°26'14.820"N	104°49'29.611"W	0.00	
9820.00†	90.137	87.766	6994.83	3018.92	-1825.51	2743.03	40°26'14.859"N	104°49'28.319"W	0.00	
9920.00†	90.137	87.766	6994.59	3116.64	-1821.62	2842.95	40°26'14.897"N	104°49'27.026"W	0.00	
10020.00†	90.137	87.766	6994.35	3214.36	-1817.72	2942.88	40°26'14.935"N	104°49'25.734"W	0.00	
10120.00†	90.137	87.766	6994.11	3312.08	-1813.82	3042.80	40°26'14.974"N	104°49'24.442"W	0.00	
10220.00†	90.137	87.766	6993.87	3409.80	-1809.92	3142.72	40°26'15.012"N	104°49'23.150"W	0.00	
10320.00†	90.137	87.766	6993.63	3507.52	-1806.02	3242.65	40°26'15.051"N	104°49'21.857"W	0.00	
10420.00†	90.137	87.766	6993.40	3605.24	-1802.13	3342.57	40°26'15.089"N	104°49'20.565"W	0.00	
10520.00†	90.137	87.766	6993.16	3702.95	-1798.23	3442.49	40°26'15.127"N	104°49'19.273"W	0.00	
10620.00†	90.137	87.766	6992.92	3800.67	-1794.33	3542.42	40°26'15.166"N	104°49'17.980"W	0.00	
10720.00†	90.137	87.766	6992.68	3898.39	-1790.43	3642.34	40°26'15.204"N	104°49'16.688"W	0.00	
10820.00†	90.137	87.766	6992.44	3996.11	-1786.53	3742.27	40°26'15.242"N	104°49'15.396"W	0.00	
10920.00†	90.137	87.766	6992.20	4093.83	-1782.64	3842.19	40°26'15.281"N	104°49'14.104"W	0.00	
11020.00†	90.137	87.766	6991.97	4191.55	-1778.74	3942.11	40°26'15.319"N	104°49'12.811"W	0.00	
11120.00†	90.137	87.766	6991.73	4289.27	-1774.84	4042.04	40°26'15.358"N	104°49'11.519"W	0.00	



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11220.00†	90.137	87.766	6991.49	4386.99	-1770.94	4141.96	40°26'15.396"N	104°49'10.227"W	0.00	
11320.00†	90.137	87.766	6991.25	4484.71	-1767.04	4241.88	40°26'15.434"N	104°49'08.935"W	0.00	
11420.00†	90.137	87.766	6991.01	4582.43	-1763.15	4341.81	40°26'15.473"N	104°49'07.642"W	0.00	
11520.00†	90.137	87.766	6990.77	4680.15	-1759.25	4441.73	40°26'15.511"N	104°49'06.350"W	0.00	
11620.00†	90.137	87.766	6990.53	4777.87	-1755.35	4541.65	40°26'15.549"N	104°49'05.058"W	0.00	
11720.00†	90.137	87.766	6990.30	4875.59	-1751.45	4641.58	40°26'15.588"N	104°49'03.765"W	0.00	
11820.00†	90.137	87.766	6990.06	4973.31	-1747.55	4741.50	40°26'15.626"N	104°49'02.473"W	0.00	
11920.00†	90.137	87.766	6989.82	5071.03	-1743.66	4841.43	40°26'15.664"N	104°49'01.181"W	0.00	
12020.00†	90.137	87.766	6989.58	5168.75	-1739.76	4941.35	40°26'15.703"N	104°48'59.889"W	0.00	
12120.00†	90.137	87.766	6989.34	5266.47	-1735.86	5041.27	40°26'15.741"N	104°48'58.596"W	0.00	
12220.00†	90.137	87.766	6989.10	5364.19	-1731.96	5141.20	40°26'15.779"N	104°48'57.304"W	0.00	
12320.00†	90.137	87.766	6988.87	5461.91	-1728.06	5241.12	40°26'15.818"N	104°48'56.012"W	0.00	
12420.00†	90.137	87.766	6988.63	5559.63	-1724.17	5341.04	40°26'15.856"N	104°48'54.719"W	0.00	
12520.00†	90.137	87.766	6988.39	5657.35	-1720.27	5440.97	40°26'15.894"N	104°48'53.427"W	0.00	
12620.00†	90.137	87.766	6988.15	5755.07	-1716.37	5540.89	40°26'15.932"N	104°48'52.135"W	0.00	
12720.00†	90.137	87.766	6987.91	5852.79	-1712.47	5640.82	40°26'15.971"N	104°48'50.843"W	0.00	
12820.00†	90.137	87.766	6987.67	5950.51	-1708.57	5740.74	40°26'16.009"N	104°48'49.550"W	0.00	
12920.00†	90.137	87.766	6987.43	6048.23	-1704.68	5840.66	40°26'16.047"N	104°48'48.258"W	0.00	
13020.00†	90.137	87.766	6987.20	6145.95	-1700.78	5940.59	40°26'16.086"N	104°48'46.966"W	0.00	
13120.00†	90.137	87.766	6986.96	6243.67	-1696.88	6040.51	40°26'16.124"N	104°48'45.673"W	0.00	
13220.00†	90.137	87.766	6986.72	6341.39	-1692.98	6140.43	40°26'16.162"N	104°48'44.381"W	0.00	
13320.00†	90.137	87.766	6986.48	6439.11	-1689.08	6240.36	40°26'16.200"N	104°48'43.089"W	0.00	
13420.00†	90.137	87.766	6986.24	6536.83	-1685.19	6340.28	40°26'16.239"N	104°48'41.797"W	0.00	
13520.00†	90.137	87.766	6986.00	6634.55	-1681.29	6440.21	40°26'16.277"N	104°48'40.504"W	0.00	
13620.00†	90.137	87.766	6985.77	6732.27	-1677.39	6540.13	40°26'16.315"N	104°48'39.212"W	0.00	
13720.00†	90.137	87.766	6985.53	6829.99	-1673.49	6640.05	40°26'16.353"N	104°48'37.920"W	0.00	
13820.00†	90.137	87.766	6985.29	6927.70	-1669.59	6739.98	40°26'16.392"N	104°48'36.627"W	0.00	
13920.00†	90.137	87.766	6985.05	7025.42	-1665.70	6839.90	40°26'16.430"N	104°48'35.335"W	0.00	
14020.00†	90.137	87.766	6984.81	7123.14	-1661.80	6939.82	40°26'16.468"N	104°48'34.043"W	0.00	
14120.00†	90.137	87.766	6984.57	7220.86	-1657.90	7039.75	40°26'16.506"N	104°48'32.751"W	0.00	



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14220.00†	90.137	87.766	6984.33	7318.58	-1654.00	7139.67	40°26'16.545"N	104°48'31.458"W	0.00	
14320.00†	90.137	87.766	6984.10	7416.30	-1650.10	7239.60	40°26'16.583"N	104°48'30.166"W	0.00	
14420.00†	90.137	87.766	6983.86	7514.02	-1646.21	7339.52	40°26'16.621"N	104°48'28.874"W	0.00	
14520.00†	90.137	87.766	6983.62	7611.74	-1642.31	7439.44	40°26'16.659"N	104°48'27.581"W	0.00	
14620.00†	90.137	87.766	6983.38	7709.46	-1638.41	7539.37	40°26'16.698"N	104°48'26.289"W	0.00	
14720.00†	90.137	87.766	6983.14	7807.18	-1634.51	7639.29	40°26'16.736"N	104°48'24.997"W	0.00	
14820.00†	90.137	87.766	6982.90	7904.90	-1630.61	7739.21	40°26'16.774"N	104°48'23.704"W	0.00	
14920.00†	90.137	87.766	6982.67	8002.62	-1626.72	7839.14	40°26'16.812"N	104°48'22.412"W	0.00	
15020.00†	90.137	87.766	6982.43	8100.34	-1622.82	7939.06	40°26'16.850"N	104°48'21.120"W	0.00	
15120.00†	90.137	87.766	6982.19	8198.06	-1618.92	8038.98	40°26'16.889"N	104°48'19.828"W	0.00	
15220.00†	90.137	87.766	6981.95	8295.78	-1615.02	8138.91	40°26'16.927"N	104°48'18.535"W	0.00	
15320.00†	90.137	87.766	6981.71	8393.50	-1611.12	8238.83	40°26'16.965"N	104°48'17.243"W	0.00	
15420.00†	90.137	87.766	6981.47	8491.22	-1607.23	8338.76	40°26'17.003"N	104°48'15.951"W	0.00	
15520.00†	90.137	87.766	6981.23	8588.94	-1603.33	8438.68	40°26'17.041"N	104°48'14.658"W	0.00	
15620.00†	90.137	87.766	6981.00	8686.66	-1599.43	8538.60	40°26'17.080"N	104°48'13.366"W	0.00	
15720.00†	90.137	87.766	6980.76	8784.38	-1595.53	8638.53	40°26'17.118"N	104°48'12.074"W	0.00	
15820.00†	90.137	87.766	6980.52	8882.10	-1591.63	8738.45	40°26'17.156"N	104°48'10.782"W	0.00	
15920.00†	90.137	87.766	6980.28	8979.82	-1587.74	8838.37	40°26'17.194"N	104°48'09.489"W	0.00	
16020.00†	90.137	87.766	6980.04	9077.54	-1583.84	8938.30	40°26'17.232"N	104°48'08.197"W	0.00	
16037.79	90.137	87.766	6980.00 ²	9094.92	-1583.14	8956.08	40°26'17.239"N	104°48'07.967"W	0.00	End of Tangent

HOLE & CASING SECTIONS

- Ref Wellbore: ORR 36N-32B-M PWB Ref Wellpath: ORR 36N-32B-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	1758.62	0.00	0.00	-316.81	-12.64
8.5in Open Hole	1800.00	16100.00	14300.00	1758.62	N/A	-316.81	-12.64	N/A	N/A



Planned Wellpath Report

ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

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	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.31-T06N-R67W		0.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.32-T06N-R66W		0.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.32-T06N-R67W		0.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.35-T06N-R67W		0.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.36-T06N-R67W		0.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
2) ORR 36N-32B-L BHL ON PLAT REV-1 (346'FSL & 2581'FWL, SEC.32)	16037.79	6980.00	-1583.14	8956.08	3194229.60	1403212.36	40°26'17.239"N	104°48'07.967"W	circle
1) ORR 36N-32B-L ENTRY POINT (371'FSL & 75'FWL, SEC.31)	7650.69	7000.00	-1910.07	575.37	3185851.92	1402822.55	40°26'14.024"N	104°49'56.352"W	circle
SEC.31/21-T06N-R67W 460' SETBACK		7112.00	0.40	-20.03	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point

SURVEY PROGRAM - Ref Wellbore: ORR 36N-32B-M PWB Ref Wellpath: ORR 36N-32B-M PWP (REV-A.1)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	16037.79	BHI NaviTrak (Standard)		ORR 36N-32B-M PWB



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ORR 36N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#02 ORR 36N-32B-M (2256'FSL & 514'FEL, SEC.36)
Area	COLORADO	Well	ORR 36N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7044.96	39.031	110.141	6746.00	SHARON SPRINGS
7095.36	43.085	107.038	6784.00	NIO-A
7292.45	59.481	98.271	6907.00	NIO-B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
20.00	0.000	182.285	20.00	Tie On
300.00	0.000	182.285	300.00	End of Tangent
1158.53	17.171	182.285	1145.74	End of Build
6634.43	17.171	182.285	6377.58	End of Tangent
7650.69	90.137	87.766	7000.00	End of 3D Arc
16037.79	90.137	87.766	6980.00	End of Tangent