

Location:	COLORADO	Slot:	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	ORR 36C-32-M
Facility:	SEC.36-T06N-R67W	Wellbore:	ORR 36C-32-M PWB

Location:	COLORADO	Slot:	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	ORR 36C-32-M
Facility:	SEC.36-T06N-R67W	Wellbore:	ORR 36C-32-M PWB

Plot reference wellpath is ORR 36C-32-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 geodetic 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#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)): 0 feet

Depths are in feet

Coordinates are in feet referenced to Slot

Created by: wagnjam on 2016-10-13

Database: WA_DEN_Denver_Defn

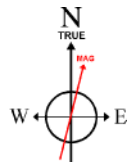
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T06N-R67W			3185242.222	1404728.428	40°26'32.903"N	104°5'04.052"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 ORR 36C-32-M (2255FSL & 534FEL, SEC.36)	0.00	0.00	3185242.222	1404728.428	40°26'32.903"N	104°5'04.052"W
PRECISION 462 (20KB) (RKB) to Mud line (At Slot: SLOT#01 ORR 36C-32-M (2255FSL & 534FEL, SEC.36))					4744ft	
Mean Sea Level to Mud line (At Slot: SLOT#01 ORR 36C-32-M (2255FSL & 534FEL, SEC.36))					0ft	
PRECISION 462 (20KB) (RKB) to Mean Sea Level					4744ft	

Tie-On Position									
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	181.503	20.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W

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	181.503	20.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W

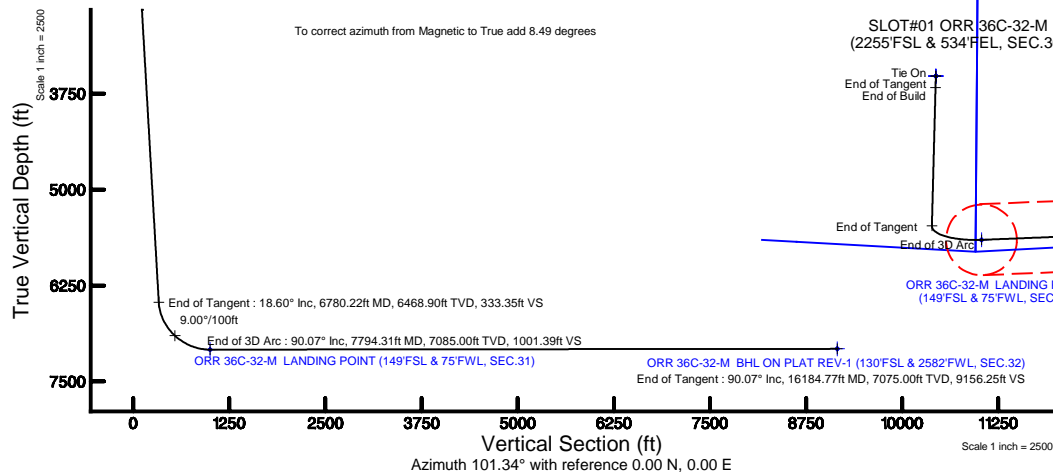
MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
7057.91	6.14	-2034.82	6725.00	29.843	123.574	406.02	SHARON SPRINGS
7102.44	26.00	-2046.81	6763.00	33.014	118.867	427.86	NIO-A
7261.14	118.22	-2084.52	6886.00	45.290	107.165	525.69	NIO-B
7374.62	202.26	-2105.75	6959.00	54.569	101.572	612.26	NIO-C
7588.58	391.27	-2130.25	7054.00	72.547	93.810	802.39	FORT HAYS

MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
7057.91	6.14	-2034.82	6725.00	29.843	123.574	406.02	SHARON SPRINGS
7102.44	26.00	-2046.81	6763.00	33.014	118.867	427.86	NIO-A
7261.14	118.22	-2084.52	6886.00	45.290	107.165	525.69	NIO-B
7374.62	202.26	-2105.75	6959.00	54.569	101.572	612.26	NIO-C
7588.58	391.27	-2130.25	7054.00	72.547	93.810	802.39	FORT HAYS



BGGM (1900.0 to 2018.0) Dip: 66.91° Field: 52526 nT
Magnetic North is 8.49 degrees East of True North (at 9/29/2016)

To correct azimuth from Magnetic to True add 8.49 degrees



Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	20.00	0.000	181.503	20.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	181.503	200.00	0.00	0.00	0.00	0.00
End of Build	1129.93	18.599	181.503	1113.68	-149.56	-3.92	2.00	25.55
End of Tangent	6780.22	18.599	181.503	6468.90	-1951.01	-51.18	0.00	333.35
End of 3D Arc	7794.31	90.068	87.727	7085.00	-2132.71	593.73	9.00	1001.39
End of Tangent	16184.77	90.068	87.727	7075.00	-1799.92	8977.59	0.00	9156.25

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	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC 32-TOWN-R66W		0.00	0.00		3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC 35-TOWN-RE7W		0.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W
SEC 36-TOWN-RE7W		0.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W
ORR 36C-32-M BKH ON PLAT REV-1 (130'FSL & 2582'FWL SEC 32)	16184.77	7075.00	-1799.92	8977.59	314232.71	1402996.00	40°26'15.101"N	104°48'56.948"W
ORR 36C-32-M LANDING POINT (149FSL & 75FWL SEC 31)	7794.31	7085.00	-2132.71	593.73	3185851.92	1402600.32	40°26'11.628"N	104°49'56.374"W
SEC 31/21-TOWN-RE7W 460' SETBACK		7112.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W



To correct azimuth from Magnetic to True add 8.49 degrees

ORR_36C-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	16184.77	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	SYNERGY RESOURCES CORPORATION	:OPERATOR
WELL	.	ORR 36C-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#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)	:SLOT
WELLBORE	.	ORR 36C-32-M PWB	:WELLBORE
WELLPATH	.	ORR 36C-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	101.34	: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

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

~ASCII DATA

0.00	0.00	181.50	0.00	0.00	0.00	0.00	40.4424731	-104.8344589	0.00
20.00	0.00	181.50	20.00	0.00	0.00	0.00	40.4424731	-104.8344589	0.00
120.00	0.00	181.50	120.00	0.00	0.00	0.00	40.4424731	-104.8344589	0.00
200.00	0.00	181.50	200.00	0.00	0.00	0.00	40.4424731	-104.8344589	0.00
220.00	0.40	181.50	220.00	0.01	-0.07	0.00	40.4424729	-104.8344589	2.00
320.00	2.40	181.50	319.96	0.43	-2.51	-0.07	40.4424662	-104.8344591	2.00
420.00	4.40	181.50	419.78	1.44	-8.44	-0.22	40.4424499	-104.8344597	2.00
520.00	6.40	181.50	519.33	3.05	-17.85	-0.47	40.4424241	-104.8344606	2.00
620.00	8.40	181.50	618.50	5.25	-30.72	-0.81	40.4423887	-104.8344618	2.00
720.00	10.40	181.50	717.15	8.04	-47.05	-1.23	40.4423439	-104.8344633	2.00
820.00	12.40	181.50	815.17	11.41	-66.81	-1.75	40.4422897	-104.8344652	2.00
920.00	14.40	181.50	912.44	15.37	-89.97	-2.36	40.4422261	-104.8344674	2.00
1020.00	16.40	181.50	1008.85	19.91	-116.52	-3.06	40.4421532	-104.8344699	2.00
1120.00	18.40	181.50	1104.27	25.02	-146.41	-3.84	40.4420712	-104.8344727	2.00
1129.93	18.60	181.50	1113.68	25.55	-149.56	-3.92	40.4420625	-104.8344730	2.00
1220.00	18.60	181.50	1199.05	30.46	-178.28	-4.68	40.4419837	-104.8344757	0.00
1320.00	18.60	181.50	1293.83	35.91	-210.16	-5.51	40.4418962	-104.8344787	0.00
1420.00	18.60	181.50	1388.61	41.35	-242.04	-6.35	40.4418087	-104.8344817	0.00
1520.00	18.60	181.50	1483.38	46.80	-273.92	-7.19	40.4417212	-104.8344847	0.00
1620.00	18.60	181.50	1578.16	52.25	-305.81	-8.02	40.4416337	-104.8344877	0.00
1720.00	18.60	181.50	1672.94	57.70	-337.69	-8.86	40.4415461	-104.8344907	0.00
1820.00	18.60	181.50	1767.72	63.14	-369.57	-9.69	40.4414586	-104.8344937	0.00
1920.00	18.60	181.50	1862.49	68.59	-401.45	-10.53	40.4413711	-104.8344967	0.00
2020.00	18.60	181.50	1957.27	74.04	-433.34	-11.37	40.4412836	-104.8344997	0.00
2120.00	18.60	181.50	2052.05	79.49	-465.22	-12.20	40.4411961	-104.8345027	0.00
2220.00	18.60	181.50	2146.83	84.93	-497.10	-13.04	40.4411086	-104.8345057	0.00
2320.00	18.60	181.50	2241.61	90.38	-528.98	-13.88	40.4410211	-104.8345087	0.00
2420.00	18.60	181.50	2336.38	95.83	-560.87	-14.71	40.4409335	-104.8345117	0.00
2520.00	18.60	181.50	2431.16	101.28	-592.75	-15.55	40.4408460	-104.8345147	0.00
2620.00	18.60	181.50	2525.94	106.72	-624.63	-16.39	40.4407585	-104.8345178	0.00
2720.00	18.60	181.50	2620.72	112.17	-656.51	-17.22	40.4406710	-104.8345208	0.00
2820.00	18.60	181.50	2715.49	117.62	-688.40	-18.06	40.4405835	-104.8345238	0.00
2920.00	18.60	181.50	2810.27	123.07	-720.28	-18.89	40.4404960	-104.8345268	0.00
3020.00	18.60	181.50	2905.05	128.51	-752.16	-19.73	40.4404085	-104.8345298	0.00
3120.00	18.60	181.50	2999.83	133.96	-784.04	-20.57	40.4403210	-104.8345328	0.00
3220.00	18.60	181.50	3094.60	139.41	-815.93	-21.40	40.4402334	-104.8345358	0.00
3320.00	18.60	181.50	3189.38	144.86	-847.81	-22.24	40.4401459	-104.8345388	0.00
3420.00	18.60	181.50	3284.16	150.30	-879.69	-23.08	40.4400584	-104.8345418	0.00
3520.00	18.60	181.50	3378.94	155.75	-911.57	-23.91	40.4399709	-104.8345448	0.00
3620.00	18.60	181.50	3473.72	161.20	-943.46	-24.75	40.4398834	-104.8345478	0.00
3720.00	18.60	181.50	3568.49	166.65	-975.34	-25.58	40.4397959	-104.8345508	0.00
3820.00	18.60	181.50	3663.27	172.09	-1007.22	-26.42	40.4397084	-104.8345538	0.00
3920.00	18.60	181.50	3758.05	177.54	-1039.10	-27.26	40.4396208	-104.8345568	0.00

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4020.00	18.60	181.50	3852.83	182.99	-1070.99	-28.09	40.4395333	-104.8345598	0.00
4120.00	18.60	181.50	3947.60	188.43	-1102.87	-28.93	40.4394458	-104.8345628	0.00
4220.00	18.60	181.50	4042.38	193.88	-1134.75	-29.77	40.4393583	-104.8345658	0.00
4320.00	18.60	181.50	4137.16	199.33	-1166.63	-30.60	40.4392708	-104.8345688	0.00
4420.00	18.60	181.50	4231.94	204.78	-1198.52	-31.44	40.4391833	-104.8345718	0.00
4520.00	18.60	181.50	4326.71	210.22	-1230.40	-32.28	40.4390958	-104.8345748	0.00
4620.00	18.60	181.50	4421.49	215.67	-1262.28	-33.11	40.4390082	-104.8345778	0.00
4720.00	18.60	181.50	4516.27	221.12	-1294.16	-33.95	40.4389207	-104.8345808	0.00
4820.00	18.60	181.50	4611.05	226.57	-1326.05	-34.78	40.4388332	-104.8345839	0.00
4920.00	18.60	181.50	4705.82	232.01	-1357.93	-35.62	40.4387457	-104.8345869	0.00
5020.00	18.60	181.50	4800.60	237.46	-1389.81	-36.46	40.4386582	-104.8345899	0.00
5120.00	18.60	181.50	4895.38	242.91	-1421.69	-37.29	40.4385707	-104.8345929	0.00
5220.00	18.60	181.50	4990.16	248.36	-1453.58	-38.13	40.4384832	-104.8345959	0.00
5320.00	18.60	181.50	5084.94	253.80	-1485.46	-38.97	40.4383957	-104.8345989	0.00
5420.00	18.60	181.50	5179.71	259.25	-1517.34	-39.80	40.4383081	-104.8346019	0.00
5520.00	18.60	181.50	5274.49	264.70	-1549.22	-40.64	40.4382206	-104.8346049	0.00
5620.00	18.60	181.50	5369.27	270.15	-1581.11	-41.48	40.4381331	-104.8346079	0.00
5720.00	18.60	181.50	5464.05	275.59	-1612.99	-42.31	40.4380456	-104.8346109	0.00
5820.00	18.60	181.50	5558.82	281.04	-1644.87	-43.15	40.4379581	-104.8346139	0.00
5920.00	18.60	181.50	5653.60	286.49	-1676.75	-43.98	40.4378706	-104.8346169	0.00
6020.00	18.60	181.50	5748.38	291.94	-1708.64	-44.82	40.4377831	-104.8346199	0.00
6120.00	18.60	181.50	5843.16	297.38	-1740.52	-45.66	40.4376955	-104.8346229	0.00
6220.00	18.60	181.50	5937.93	302.83	-1772.40	-46.49	40.4376080	-104.8346259	0.00
6320.00	18.60	181.50	6032.71	308.28	-1804.28	-47.33	40.4375205	-104.8346289	0.00
6420.00	18.60	181.50	6127.49	313.73	-1836.17	-48.17	40.4374330	-104.8346319	0.00
6520.00	18.60	181.50	6222.27	319.17	-1868.05	-49.00	40.4373455	-104.8346349	0.00
6620.00	18.60	181.50	6317.05	324.62	-1899.93	-49.84	40.4372580	-104.8346379	0.00
6720.00	18.60	181.50	6411.82	330.07	-1931.81	-50.67	40.4371705	-104.8346409	0.00
6780.22	18.60	181.50	6468.90	333.35	-1951.01	-51.18	40.4371178	-104.8346427	0.00
6820.00	18.71	170.30	6506.60	336.72	-1963.65	-50.27	40.4370831	-104.8346395	9.00
6920.00	21.67	145.44	6600.62	355.78	-1994.72	-37.07	40.4369978	-104.8345920	9.00
7020.00	27.30	128.34	6691.70	389.54	-2024.21	-8.54	40.4369168	-104.8344896	9.00
7120.00	34.31	117.23	6777.61	437.17	-2051.38	34.59	40.4368422	-104.8343346	9.00
7220.00	42.01	109.64	6856.23	497.51	-2075.58	91.28	40.4367758	-104.8341310	9.00
7320.00	50.07	104.07	6925.62	569.07	-2096.19	160.12	40.4367193	-104.8338837	9.00
7420.00	58.34	99.70	6984.08	650.07	-2112.72	239.43	40.4366739	-104.8335988	9.00
7520.00	66.74	96.05	7030.15	738.54	-2124.75	327.24	40.4366409	-104.8332833	9.00
7620.00	75.22	92.83	7062.72	832.29	-2132.00	421.40	40.4366210	-104.8329451	9.00
7720.00	83.73	89.86	7080.98	929.01	-2134.27	519.59	40.4366147	-104.8325923	9.00
7794.31	90.07	87.73	7085.00	1001.39	-2132.71	593.73	40.4366190	-104.8323260	9.00
7820.00	90.07	87.73	7084.97	1026.36	-2131.69	619.40	40.4366218	-104.8322338	0.00
7920.00	90.07	87.73	7084.85	1123.56	-2127.73	719.33	40.4366327	-104.8318748	0.00
8020.00	90.07	87.73	7084.73	1220.75	-2123.76	819.25	40.4366436	-104.8315159	0.00
8120.00	90.07	87.73	7084.61	1317.94	-2119.79	919.17	40.4366544	-104.8311569	0.00
8220.00	90.07	87.73	7084.49	1415.13	-2115.83	1019.09	40.4366653	-104.8307980	0.00
8320.00	90.07	87.73	7084.37	1512.32	-2111.86	1119.01	40.4366762	-104.8304390	0.00
8420.00	90.07	87.73	7084.25	1609.51	-2107.89	1218.93	40.4366871	-104.8300801	0.00
8520.00	90.07	87.73	7084.14	1706.71	-2103.93	1318.85	40.4366979	-104.8297211	0.00

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8620.00	90.07	87.73	7084.02	1803.90	-2099.96	1418.77	40.4367088	-104.8293622	0.00
8720.00	90.07	87.73	7083.90	1901.09	-2096.00	1518.70	40.4367197	-104.8290032	0.00
8820.00	90.07	87.73	7083.78	1998.28	-2092.03	1618.62	40.4367305	-104.8286443	0.00
8920.00	90.07	87.73	7083.66	2095.47	-2088.06	1718.54	40.4367414	-104.8282853	0.00
9020.00	90.07	87.73	7083.54	2192.67	-2084.10	1818.46	40.4367523	-104.8279264	0.00
9120.00	90.07	87.73	7083.42	2289.86	-2080.13	1918.38	40.4367631	-104.8275674	0.00
9220.00	90.07	87.73	7083.30	2387.05	-2076.16	2018.30	40.4367740	-104.8272085	0.00
9320.00	90.07	87.73	7083.18	2484.24	-2072.20	2118.22	40.4367849	-104.8268495	0.00
9420.00	90.07	87.73	7083.06	2581.43	-2068.23	2218.14	40.4367957	-104.8264906	0.00
9520.00	90.07	87.73	7082.94	2678.63	-2064.27	2318.06	40.4368066	-104.8261316	0.00
9620.00	90.07	87.73	7082.82	2775.82	-2060.30	2417.99	40.4368175	-104.8257727	0.00
9720.00	90.07	87.73	7082.70	2873.01	-2056.33	2517.91	40.4368283	-104.8254137	0.00
9820.00	90.07	87.73	7082.59	2970.20	-2052.37	2617.83	40.4368392	-104.8250548	0.00
9920.00	90.07	87.73	7082.47	3067.39	-2048.40	2717.75	40.4368500	-104.8246958	0.00
10020.00	90.07	87.73	7082.35	3164.59	-2044.43	2817.67	40.4368609	-104.8243369	0.00
10120.00	90.07	87.73	7082.23	3261.78	-2040.47	2917.59	40.4368717	-104.8239779	0.00
10220.00	90.07	87.73	7082.11	3358.97	-2036.50	3017.51	40.4368826	-104.8236189	0.00
10320.00	90.07	87.73	7081.99	3456.16	-2032.54	3117.43	40.4368934	-104.8232600	0.00
10420.00	90.07	87.73	7081.87	3553.35	-2028.57	3217.36	40.4369043	-104.8229010	0.00
10520.00	90.07	87.73	7081.75	3650.54	-2024.60	3317.28	40.4369152	-104.8225421	0.00
10620.00	90.07	87.73	7081.63	3747.74	-2020.64	3417.20	40.4369260	-104.8221831	0.00
10720.00	90.07	87.73	7081.51	3844.93	-2016.67	3517.12	40.4369368	-104.8218242	0.00
10820.00	90.07	87.73	7081.39	3942.12	-2012.70	3617.04	40.4369477	-104.8214652	0.00
10920.00	90.07	87.73	7081.27	4039.31	-2008.74	3716.96	40.4369585	-104.8211063	0.00
11020.00	90.07	87.73	7081.16	4136.50	-2004.77	3816.88	40.4369694	-104.8207473	0.00
11120.00	90.07	87.73	7081.04	4233.70	-2000.81	3916.80	40.4369802	-104.8203884	0.00
11220.00	90.07	87.73	7080.92	4330.89	-1996.84	4016.73	40.4369911	-104.8200294	0.00
11320.00	90.07	87.73	7080.80	4428.08	-1992.87	4116.65	40.4370019	-104.8196705	0.00
11420.00	90.07	87.73	7080.68	4525.27	-1988.91	4216.57	40.4370128	-104.8193115	0.00
11520.00	90.07	87.73	7080.56	4622.46	-1984.94	4316.49	40.4370236	-104.8189525	0.00
11620.00	90.07	87.73	7080.44	4719.66	-1980.97	4416.41	40.4370344	-104.8185936	0.00
11720.00	90.07	87.73	7080.32	4816.85	-1977.01	4516.33	40.4370453	-104.8182346	0.00
11820.00	90.07	87.73	7080.20	4914.04	-1973.04	4616.25	40.4370561	-104.8178757	0.00
11920.00	90.07	87.73	7080.08	5011.23	-1969.08	4716.17	40.4370669	-104.8175167	0.00
12020.00	90.07	87.73	7079.96	5108.42	-1965.11	4816.10	40.4370778	-104.8171578	0.00
12120.00	90.07	87.73	7079.84	5205.62	-1961.14	4916.02	40.4370886	-104.8167988	0.00
12220.00	90.07	87.73	7079.73	5302.81	-1957.18	5015.94	40.4370994	-104.8164399	0.00
12320.00	90.07	87.73	7079.61	5400.00	-1953.21	5115.86	40.4371103	-104.8160809	0.00
12420.00	90.07	87.73	7079.49	5497.19	-1949.24	5215.78	40.4371211	-104.8157219	0.00
12520.00	90.07	87.73	7079.37	5594.38	-1945.28	5315.70	40.4371319	-104.8153630	0.00
12620.00	90.07	87.73	7079.25	5691.57	-1941.31	5415.62	40.4371428	-104.8150040	0.00
12720.00	90.07	87.73	7079.13	5788.77	-1937.35	5515.54	40.4371536	-104.8146451	0.00
12820.00	90.07	87.73	7079.01	5885.96	-1933.38	5615.47	40.4371644	-104.8142861	0.00
12920.00	90.07	87.73	7078.89	5983.15	-1929.41	5715.39	40.4371752	-104.8139272	0.00
13020.00	90.07	87.73	7078.77	6080.34	-1925.45	5815.31	40.4371861	-104.8135682	0.00
13120.00	90.07	87.73	7078.65	6177.53	-1921.48	5915.23	40.4371969	-104.8132093	0.00
13220.00	90.07	87.73	7078.53	6274.73	-1917.51	6015.15	40.4372077	-104.8128503	0.00
13320.00	90.07	87.73	7078.41	6371.92	-1913.55	6115.07	40.4372185	-104.8124913	0.00

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13420.00	90.07	87.73	7078.30	6469.11	-1909.58	6214.99	40.4372293	-104.8121324	0.00
13520.00	90.07	87.73	7078.18	6566.30	-1905.61	6314.91	40.4372402	-104.8117734	0.00
13620.00	90.07	87.73	7078.06	6663.49	-1901.65	6414.84	40.4372510	-104.8114145	0.00
13720.00	90.07	87.73	7077.94	6760.69	-1897.68	6514.76	40.4372618	-104.8110555	0.00
13820.00	90.07	87.73	7077.82	6857.88	-1893.72	6614.68	40.4372726	-104.8106966	0.00
13920.00	90.07	87.73	7077.70	6955.07	-1889.75	6714.60	40.4372834	-104.8103376	0.00
14020.00	90.07	87.73	7077.58	7052.26	-1885.78	6814.52	40.4372942	-104.8099786	0.00
14120.00	90.07	87.73	7077.46	7149.45	-1881.82	6914.44	40.4373050	-104.8096197	0.00
14220.00	90.07	87.73	7077.34	7246.64	-1877.85	7014.36	40.4373158	-104.8092607	0.00
14320.00	90.07	87.73	7077.22	7343.84	-1873.88	7114.28	40.4373267	-104.8089018	0.00
14420.00	90.07	87.73	7077.10	7441.03	-1869.92	7214.21	40.4373375	-104.8085428	0.00
14520.00	90.07	87.73	7076.98	7538.22	-1865.95	7314.13	40.4373483	-104.8081839	0.00
14620.00	90.07	87.73	7076.86	7635.41	-1861.99	7414.05	40.4373591	-104.8078249	0.00
14720.00	90.07	87.73	7076.75	7732.60	-1858.02	7513.97	40.4373699	-104.8074659	0.00
14820.00	90.07	87.73	7076.63	7829.80	-1854.05	7613.89	40.4373807	-104.8071070	0.00
14920.00	90.07	87.73	7076.51	7926.99	-1850.09	7713.81	40.4373915	-104.8067480	0.00
15020.00	90.07	87.73	7076.39	8024.18	-1846.12	7813.73	40.4374023	-104.8063891	0.00
15120.00	90.07	87.73	7076.27	8121.37	-1842.15	7913.65	40.4374131	-104.8060301	0.00
15220.00	90.07	87.73	7076.15	8218.56	-1838.19	8013.58	40.4374239	-104.8056711	0.00
15320.00	90.07	87.73	7076.03	8315.76	-1834.22	8113.50	40.4374347	-104.8053122	0.00
15420.00	90.07	87.73	7075.91	8412.95	-1830.26	8213.42	40.4374455	-104.8049532	0.00
15520.00	90.07	87.73	7075.79	8510.14	-1826.29	8313.34	40.4374563	-104.8045943	0.00
15620.00	90.07	87.73	7075.67	8607.33	-1822.32	8413.26	40.4374671	-104.8042353	0.00
15720.00	90.07	87.73	7075.55	8704.52	-1818.36	8513.18	40.4374779	-104.8038763	0.00
15820.00	90.07	87.73	7075.43	8801.72	-1814.39	8613.10	40.4374886	-104.8035174	0.00
15920.00	90.07	87.73	7075.32	8898.91	-1810.42	8713.02	40.4374994	-104.8031584	0.00
16020.00	90.07	87.73	7075.20	8996.10	-1806.46	8812.95	40.4375102	-104.8027995	0.00
16120.00	90.07	87.73	7075.08	9093.29	-1802.49	8912.87	40.4375210	-104.8024405	0.00
16184.77	90.07	87.73	7075.00	9156.25	-1799.92	8977.59	40.4375280	-104.8022080	0.00



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-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 6:56:39 PM
Convergence at slot	0.44° East	Database/Source file	WA_DEN_Denver_Defn/ORR_36C-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	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"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#01 ORR 36C-32-M (2255'FSL & 534'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	101.34°



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 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	181.503	0.00	0.00	0.00	0.00	40°26'32.903"N	104°50'04.052"W	0.00	
20.00	0.000	181.503	20.00	0.00	0.00	0.00	40°26'32.903"N	104°50'04.052"W	0.00	Tie On
120.00†	0.000	181.503	120.00	0.00	0.00	0.00	40°26'32.903"N	104°50'04.052"W	0.00	
200.00	0.000	181.503	200.00	0.00	0.00	0.00	40°26'32.903"N	104°50'04.052"W	0.00	End of Tangent
220.00†	0.400	181.503	220.00	0.01	-0.07	0.00	40°26'32.902"N	104°50'04.052"W	2.00	
320.00†	2.400	181.503	319.96	0.43	-2.51	-0.07	40°26'32.878"N	104°50'04.053"W	2.00	
420.00†	4.400	181.503	419.78	1.44	-8.44	-0.22	40°26'32.820"N	104°50'04.055"W	2.00	
520.00†	6.400	181.503	519.33	3.05	-17.85	-0.47	40°26'32.727"N	104°50'04.058"W	2.00	
620.00†	8.400	181.503	618.50	5.25	-30.72	-0.81	40°26'32.599"N	104°50'04.062"W	2.00	
720.00†	10.400	181.503	717.15	8.04	-47.05	-1.23	40°26'32.438"N	104°50'04.068"W	2.00	
820.00†	12.400	181.503	815.17	11.41	-66.81	-1.75	40°26'32.243"N	104°50'04.075"W	2.00	
920.00†	14.400	181.503	912.44	15.37	-89.97	-2.36	40°26'32.014"N	104°50'04.083"W	2.00	
1020.00†	16.400	181.503	1008.85	19.91	-116.52	-3.06	40°26'31.752"N	104°50'04.092"W	2.00	
1120.00†	18.400	181.503	1104.27	25.02	-146.41	-3.84	40°26'31.456"N	104°50'04.102"W	2.00	
1129.93	18.599	181.503	1113.68	25.55	-149.56	-3.92	40°26'31.425"N	104°50'04.103"W	2.00	End of Build
1220.00†	18.599	181.503	1199.05	30.46	-178.28	-4.68	40°26'31.141"N	104°50'04.112"W	0.00	
1320.00†	18.599	181.503	1293.83	35.91	-210.16	-5.51	40°26'30.826"N	104°50'04.123"W	0.00	
1420.00†	18.599	181.503	1388.61	41.35	-242.04	-6.35	40°26'30.511"N	104°50'04.134"W	0.00	
1520.00†	18.599	181.503	1483.38	46.80	-273.92	-7.19	40°26'30.196"N	104°50'04.145"W	0.00	
1620.00†	18.599	181.503	1578.16	52.25	-305.81	-8.02	40°26'29.881"N	104°50'04.156"W	0.00	
1720.00†	18.599	181.503	1672.94	57.70	-337.69	-8.86	40°26'29.566"N	104°50'04.167"W	0.00	
1820.00†	18.599	181.503	1767.72	63.14	-369.57	-9.69	40°26'29.251"N	104°50'04.177"W	0.00	
1920.00†	18.599	181.503	1862.49	68.59	-401.45	-10.53	40°26'28.936"N	104°50'04.188"W	0.00	
2020.00†	18.599	181.503	1957.27	74.04	-433.34	-11.37	40°26'28.621"N	104°50'04.199"W	0.00	
2120.00†	18.599	181.503	2052.05	79.49	-465.22	-12.20	40°26'28.306"N	104°50'04.210"W	0.00	
2220.00†	18.599	181.503	2146.83	84.93	-497.10	-13.04	40°26'27.991"N	104°50'04.221"W	0.00	
2320.00†	18.599	181.503	2241.61	90.38	-528.98	-13.88	40°26'27.676"N	104°50'04.231"W	0.00	
2420.00†	18.599	181.503	2336.38	95.83	-560.87	-14.71	40°26'27.361"N	104°50'04.242"W	0.00	
2520.00†	18.599	181.503	2431.16	101.28	-592.75	-15.55	40°26'27.046"N	104°50'04.253"W	0.00	
2620.00†	18.599	181.503	2525.94	106.72	-624.63	-16.39	40°26'26.731"N	104°50'04.264"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2720.00†	18.599	181.503	2620.72	112.17	-656.51	-17.22	40°26'26.416"N	104°50'04.275"W	0.00	
2820.00†	18.599	181.503	2715.49	117.62	-688.40	-18.06	40°26'26.101"N	104°50'04.286"W	0.00	
2920.00†	18.599	181.503	2810.27	123.07	-720.28	-18.89	40°26'25.786"N	104°50'04.296"W	0.00	
3020.00†	18.599	181.503	2905.05	128.51	-752.16	-19.73	40°26'25.470"N	104°50'04.307"W	0.00	
3120.00†	18.599	181.503	2999.83	133.96	-784.04	-20.57	40°26'25.155"N	104°50'04.318"W	0.00	
3220.00†	18.599	181.503	3094.60	139.41	-815.93	-21.40	40°26'24.840"N	104°50'04.329"W	0.00	
3320.00†	18.599	181.503	3189.38	144.86	-847.81	-22.24	40°26'24.525"N	104°50'04.340"W	0.00	
3420.00†	18.599	181.503	3284.16	150.30	-879.69	-23.08	40°26'24.210"N	104°50'04.350"W	0.00	
3520.00†	18.599	181.503	3378.94	155.75	-911.57	-23.91	40°26'23.895"N	104°50'04.361"W	0.00	
3620.00†	18.599	181.503	3473.72	161.20	-943.46	-24.75	40°26'23.580"N	104°50'04.372"W	0.00	
3720.00†	18.599	181.503	3568.49	166.65	-975.34	-25.58	40°26'23.265"N	104°50'04.383"W	0.00	
3820.00†	18.599	181.503	3663.27	172.09	-1007.22	-26.42	40°26'22.950"N	104°50'04.394"W	0.00	
3920.00†	18.599	181.503	3758.05	177.54	-1039.10	-27.26	40°26'22.635"N	104°50'04.405"W	0.00	
4020.00†	18.599	181.503	3852.83	182.99	-1070.99	-28.09	40°26'22.320"N	104°50'04.415"W	0.00	
4120.00†	18.599	181.503	3947.60	188.43	-1102.87	-28.93	40°26'22.005"N	104°50'04.426"W	0.00	
4220.00†	18.599	181.503	4042.38	193.88	-1134.75	-29.77	40°26'21.690"N	104°50'04.437"W	0.00	
4320.00†	18.599	181.503	4137.16	199.33	-1166.63	-30.60	40°26'21.375"N	104°50'04.448"W	0.00	
4420.00†	18.599	181.503	4231.94	204.78	-1198.52	-31.44	40°26'21.060"N	104°50'04.459"W	0.00	
4520.00†	18.599	181.503	4326.71	210.22	-1230.40	-32.28	40°26'20.745"N	104°50'04.469"W	0.00	
4620.00†	18.599	181.503	4421.49	215.67	-1262.28	-33.11	40°26'20.430"N	104°50'04.480"W	0.00	
4720.00†	18.599	181.503	4516.27	221.12	-1294.16	-33.95	40°26'20.115"N	104°50'04.491"W	0.00	
4820.00†	18.599	181.503	4611.05	226.57	-1326.05	-34.78	40°26'19.800"N	104°50'04.502"W	0.00	
4920.00†	18.599	181.503	4705.82	232.01	-1357.93	-35.62	40°26'19.485"N	104°50'04.513"W	0.00	
5020.00†	18.599	181.503	4800.60	237.46	-1389.81	-36.46	40°26'19.169"N	104°50'04.523"W	0.00	
5120.00†	18.599	181.503	4895.38	242.91	-1421.69	-37.29	40°26'18.854"N	104°50'04.534"W	0.00	
5220.00†	18.599	181.503	4990.16	248.36	-1453.58	-38.13	40°26'18.539"N	104°50'04.545"W	0.00	
5320.00†	18.599	181.503	5084.94	253.80	-1485.46	-38.97	40°26'18.224"N	104°50'04.556"W	0.00	
5420.00†	18.599	181.503	5179.71	259.25	-1517.34	-39.80	40°26'17.909"N	104°50'04.567"W	0.00	
5520.00†	18.599	181.503	5274.49	264.70	-1549.22	-40.64	40°26'17.594"N	104°50'04.578"W	0.00	
5620.00†	18.599	181.503	5369.27	270.15	-1581.11	-41.48	40°26'17.279"N	104°50'04.588"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5720.00†	18.599	181.503	5464.05	275.59	-1612.99	-42.31	40°26'16.964"N	104°50'04.599"W	0.00	
5820.00†	18.599	181.503	5558.82	281.04	-1644.87	-43.15	40°26'16.649"N	104°50'04.610"W	0.00	
5920.00†	18.599	181.503	5653.60	286.49	-1676.75	-43.98	40°26'16.334"N	104°50'04.621"W	0.00	
6020.00†	18.599	181.503	5748.38	291.94	-1708.64	-44.82	40°26'16.019"N	104°50'04.632"W	0.00	
6120.00†	18.599	181.503	5843.16	297.38	-1740.52	-45.66	40°26'15.704"N	104°50'04.642"W	0.00	
6220.00†	18.599	181.503	5937.93	302.83	-1772.40	-46.49	40°26'15.389"N	104°50'04.653"W	0.00	
6320.00†	18.599	181.503	6032.71	308.28	-1804.28	-47.33	40°26'15.074"N	104°50'04.664"W	0.00	
6420.00†	18.599	181.503	6127.49	313.73	-1836.17	-48.17	40°26'14.759"N	104°50'04.675"W	0.00	
6520.00†	18.599	181.503	6222.27	319.17	-1868.05	-49.00	40°26'14.444"N	104°50'04.686"W	0.00	
6620.00†	18.599	181.503	6317.05	324.62	-1899.93	-49.84	40°26'14.129"N	104°50'04.697"W	0.00	
6720.00†	18.599	181.503	6411.82	330.07	-1931.81	-50.67	40°26'13.814"N	104°50'04.707"W	0.00	
6780.22	18.599	181.503	6468.90	333.35	-1951.01	-51.18	40°26'13.624"N	104°50'04.714"W	0.00	End of Tangent
6820.00†	18.709	170.298	6506.60	336.72	-1963.65	-50.27	40°26'13.499"N	104°50'04.702"W	9.00	
6920.00†	21.669	145.435	6600.62	355.78	-1994.72	-37.07	40°26'13.192"N	104°50'04.531"W	9.00	
7020.00†	27.300	128.335	6691.70	389.54	-2024.21	-8.54	40°26'12.901"N	104°50'04.162"W	9.00	
7057.91†	29.843	123.574	6725.00	406.02	-2034.82	6.14	40°26'12.796"N	104°50'03.973"W	9.00	SHARON SPRINGS
7102.44†	33.014	118.867	6763.00	427.86	-2046.81	26.00	40°26'12.677"N	104°50'03.716"W	9.00	NIO-A
7120.00†	34.307	117.229	6777.61	437.17	-2051.38	34.59	40°26'12.632"N	104°50'03.605"W	9.00	
7220.00†	42.005	109.643	6856.23	497.51	-2075.58	91.28	40°26'12.393"N	104°50'02.872"W	9.00	
7261.14†	45.290	107.165	6886.00	525.69	-2084.52	118.22	40°26'12.305"N	104°50'02.523"W	9.00	NIO-B
7320.00†	50.069	104.074	6925.62	569.07	-2096.19	160.12	40°26'12.189"N	104°50'01.981"W	9.00	
7374.62†	54.569	101.572	6959.00	612.26	-2105.75	202.26	40°26'12.095"N	104°50'01.436"W	9.00	NIO-C
7420.00†	58.344	99.698	6984.08	650.07	-2112.72	239.43	40°26'12.026"N	104°50'00.956"W	9.00	
7520.00†	66.742	96.048	7030.15	738.54	-2124.75	327.24	40°26'11.907"N	104°49'59.820"W	9.00	
7588.58†	72.547	93.810	7054.00	802.39	-2130.25	391.27	40°26'11.853"N	104°49'58.992"W	9.00	FORT HAYS
7620.00†	75.215	92.834	7062.72	832.29	-2132.00	421.40	40°26'11.835"N	104°49'58.602"W	9.00	
7720.00†	83.730	89.864	7080.98	929.01	-2134.27	519.59	40°26'11.813"N	104°49'57.332"W	9.00	
7794.31	90.068	87.727	7085.00†	1001.39	-2132.71	593.73	40°26'11.828"N	104°49'56.374"W	9.00	End of 3D Arc
7820.00†	90.068	87.727	7084.97	1026.36	-2131.69	619.40	40°26'11.838"N	104°49'56.042"W	0.00	
7920.00†	90.068	87.727	7084.85	1123.56	-2127.73	719.33	40°26'11.878"N	104°49'54.749"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8020.00†	90.068	87.727	7084.73	1220.75	-2123.76	819.25	40°26'11.917"N	104°49'53.457"W	0.00	
8120.00†	90.068	87.727	7084.61	1317.94	-2119.79	919.17	40°26'11.956"N	104°49'52.165"W	0.00	
8220.00†	90.068	87.727	7084.49	1415.13	-2115.83	1019.09	40°26'11.995"N	104°49'50.873"W	0.00	
8320.00†	90.068	87.727	7084.37	1512.32	-2111.86	1119.01	40°26'12.034"N	104°49'49.581"W	0.00	
8420.00†	90.068	87.727	7084.25	1609.51	-2107.89	1218.93	40°26'12.073"N	104°49'48.288"W	0.00	
8520.00†	90.068	87.727	7084.14	1706.71	-2103.93	1318.85	40°26'12.113"N	104°49'46.996"W	0.00	
8620.00†	90.068	87.727	7084.02	1803.90	-2099.96	1418.77	40°26'12.152"N	104°49'45.704"W	0.00	
8720.00†	90.068	87.727	7083.90	1901.09	-2096.00	1518.70	40°26'12.191"N	104°49'44.412"W	0.00	
8820.00†	90.068	87.727	7083.78	1998.28	-2092.03	1618.62	40°26'12.230"N	104°49'43.119"W	0.00	
8920.00†	90.068	87.727	7083.66	2095.47	-2088.06	1718.54	40°26'12.269"N	104°49'41.827"W	0.00	
9020.00†	90.068	87.727	7083.54	2192.67	-2084.10	1818.46	40°26'12.308"N	104°49'40.535"W	0.00	
9120.00†	90.068	87.727	7083.42	2289.86	-2080.13	1918.38	40°26'12.347"N	104°49'39.243"W	0.00	
9220.00†	90.068	87.727	7083.30	2387.05	-2076.16	2018.30	40°26'12.386"N	104°49'37.950"W	0.00	
9320.00†	90.068	87.727	7083.18	2484.24	-2072.20	2118.22	40°26'12.426"N	104°49'36.658"W	0.00	
9420.00†	90.068	87.727	7083.06	2581.43	-2068.23	2218.14	40°26'12.465"N	104°49'35.366"W	0.00	
9520.00†	90.068	87.727	7082.94	2678.63	-2064.27	2318.06	40°26'12.504"N	104°49'34.074"W	0.00	
9620.00†	90.068	87.727	7082.82	2775.82	-2060.30	2417.99	40°26'12.543"N	104°49'32.782"W	0.00	
9720.00†	90.068	87.727	7082.70	2873.01	-2056.33	2517.91	40°26'12.582"N	104°49'31.489"W	0.00	
9820.00†	90.068	87.727	7082.59	2970.20	-2052.37	2617.83	40°26'12.621"N	104°49'30.197"W	0.00	
9920.00†	90.068	87.727	7082.47	3067.39	-2048.40	2717.75	40°26'12.660"N	104°49'28.905"W	0.00	
10020.00†	90.068	87.727	7082.35	3164.59	-2044.43	2817.67	40°26'12.699"N	104°49'27.613"W	0.00	
10120.00†	90.068	87.727	7082.23	3261.78	-2040.47	2917.59	40°26'12.738"N	104°49'26.320"W	0.00	
10220.00†	90.068	87.727	7082.11	3358.97	-2036.50	3017.51	40°26'12.777"N	104°49'25.028"W	0.00	
10320.00†	90.068	87.727	7081.99	3456.16	-2032.54	3117.43	40°26'12.816"N	104°49'23.736"W	0.00	
10420.00†	90.068	87.727	7081.87	3553.35	-2028.57	3217.36	40°26'12.855"N	104°49'22.444"W	0.00	
10520.00†	90.068	87.727	7081.75	3650.54	-2024.60	3317.28	40°26'12.895"N	104°49'21.152"W	0.00	
10620.00†	90.068	87.727	7081.63	3747.74	-2020.64	3417.20	40°26'12.934"N	104°49'19.859"W	0.00	
10720.00†	90.068	87.727	7081.51	3844.93	-2016.67	3517.12	40°26'12.973"N	104°49'18.567"W	0.00	
10820.00†	90.068	87.727	7081.39	3942.12	-2012.70	3617.04	40°26'13.012"N	104°49'17.275"W	0.00	
10920.00†	90.068	87.727	7081.27	4039.31	-2008.74	3716.96	40°26'13.051"N	104°49'15.983"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11020.00†	90.068	87.727	7081.16	4136.50	-2004.77	3816.88	40°26'13.090"N	104°49'14.690"W	0.00	
11120.00†	90.068	87.727	7081.04	4233.70	-2000.81	3916.80	40°26'13.129"N	104°49'13.398"W	0.00	
11220.00†	90.068	87.727	7080.92	4330.89	-1996.84	4016.73	40°26'13.168"N	104°49'12.106"W	0.00	
11320.00†	90.068	87.727	7080.80	4428.08	-1992.87	4116.65	40°26'13.207"N	104°49'10.814"W	0.00	
11420.00†	90.068	87.727	7080.68	4525.27	-1988.91	4216.57	40°26'13.246"N	104°49'09.521"W	0.00	
11520.00†	90.068	87.727	7080.56	4622.46	-1984.94	4316.49	40°26'13.285"N	104°49'08.229"W	0.00	
11620.00†	90.068	87.727	7080.44	4719.66	-1980.97	4416.41	40°26'13.324"N	104°49'06.937"W	0.00	
11720.00†	90.068	87.727	7080.32	4816.85	-1977.01	4516.33	40°26'13.363"N	104°49'05.645"W	0.00	
11820.00†	90.068	87.727	7080.20	4914.04	-1973.04	4616.25	40°26'13.402"N	104°49'04.352"W	0.00	
11920.00†	90.068	87.727	7080.08	5011.23	-1969.08	4716.17	40°26'13.441"N	104°49'03.060"W	0.00	
12020.00†	90.068	87.727	7079.96	5108.42	-1965.11	4816.10	40°26'13.480"N	104°49'01.768"W	0.00	
12120.00†	90.068	87.727	7079.84	5205.62	-1961.14	4916.02	40°26'13.519"N	104°49'00.476"W	0.00	
12220.00†	90.068	87.727	7079.73	5302.81	-1957.18	5015.94	40°26'13.558"N	104°48'59.183"W	0.00	
12320.00†	90.068	87.727	7079.61	5400.00	-1953.21	5115.86	40°26'13.597"N	104°48'57.891"W	0.00	
12420.00†	90.068	87.727	7079.49	5497.19	-1949.24	5215.78	40°26'13.636"N	104°48'56.599"W	0.00	
12520.00†	90.068	87.727	7079.37	5594.38	-1945.28	5315.70	40°26'13.675"N	104°48'55.307"W	0.00	
12620.00†	90.068	87.727	7079.25	5691.57	-1941.31	5415.62	40°26'13.714"N	104°48'54.015"W	0.00	
12720.00†	90.068	87.727	7079.13	5788.77	-1937.35	5515.54	40°26'13.753"N	104°48'52.722"W	0.00	
12820.00†	90.068	87.727	7079.01	5885.96	-1933.38	5615.47	40°26'13.792"N	104°48'51.430"W	0.00	
12920.00†	90.068	87.727	7078.89	5983.15	-1929.41	5715.39	40°26'13.831"N	104°48'50.138"W	0.00	
13020.00†	90.068	87.727	7078.77	6080.34	-1925.45	5815.31	40°26'13.870"N	104°48'48.846"W	0.00	
13120.00†	90.068	87.727	7078.65	6177.53	-1921.48	5915.23	40°26'13.909"N	104°48'47.553"W	0.00	
13220.00†	90.068	87.727	7078.53	6274.73	-1917.51	6015.15	40°26'13.948"N	104°48'46.261"W	0.00	
13320.00†	90.068	87.727	7078.41	6371.92	-1913.55	6115.07	40°26'13.987"N	104°48'44.969"W	0.00	
13420.00†	90.068	87.727	7078.30	6469.11	-1909.58	6214.99	40°26'14.026"N	104°48'43.677"W	0.00	
13520.00†	90.068	87.727	7078.18	6566.30	-1905.61	6314.91	40°26'14.065"N	104°48'42.384"W	0.00	
13620.00†	90.068	87.727	7078.06	6663.49	-1901.65	6414.84	40°26'14.103"N	104°48'41.092"W	0.00	
13720.00†	90.068	87.727	7077.94	6760.69	-1897.68	6514.76	40°26'14.142"N	104°48'39.800"W	0.00	
13820.00†	90.068	87.727	7077.82	6857.88	-1893.72	6614.68	40°26'14.181"N	104°48'38.508"W	0.00	
13920.00†	90.068	87.727	7077.70	6955.07	-1889.75	6714.60	40°26'14.220"N	104°48'37.215"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14020.00†	90.068	87.727	7077.58	7052.26	-1885.78	6814.52	40°26'14.259"N	104°48'35.923"W	0.00	
14120.00†	90.068	87.727	7077.46	7149.45	-1881.82	6914.44	40°26'14.298"N	104°48'34.631"W	0.00	
14220.00†	90.068	87.727	7077.34	7246.64	-1877.85	7014.36	40°26'14.337"N	104°48'33.339"W	0.00	
14320.00†	90.068	87.727	7077.22	7343.84	-1873.88	7114.28	40°26'14.376"N	104°48'32.046"W	0.00	
14420.00†	90.068	87.727	7077.10	7441.03	-1869.92	7214.21	40°26'14.415"N	104°48'30.754"W	0.00	
14520.00†	90.068	87.727	7076.98	7538.22	-1865.95	7314.13	40°26'14.454"N	104°48'29.462"W	0.00	
14620.00†	90.068	87.727	7076.86	7635.41	-1861.99	7414.05	40°26'14.493"N	104°48'28.170"W	0.00	
14720.00†	90.068	87.727	7076.75	7732.60	-1858.02	7513.97	40°26'14.532"N	104°48'26.877"W	0.00	
14820.00†	90.068	87.727	7076.63	7829.80	-1854.05	7613.89	40°26'14.570"N	104°48'25.585"W	0.00	
14920.00†	90.068	87.727	7076.51	7926.99	-1850.09	7713.81	40°26'14.609"N	104°48'24.293"W	0.00	
15020.00†	90.068	87.727	7076.39	8024.18	-1846.12	7813.73	40°26'14.648"N	104°48'23.001"W	0.00	
15120.00†	90.068	87.727	7076.27	8121.37	-1842.15	7913.65	40°26'14.687"N	104°48'21.708"W	0.00	
15220.00†	90.068	87.727	7076.15	8218.56	-1838.19	8013.58	40°26'14.726"N	104°48'20.416"W	0.00	
15320.00†	90.068	87.727	7076.03	8315.76	-1834.22	8113.50	40°26'14.765"N	104°48'19.124"W	0.00	
15420.00†	90.068	87.727	7075.91	8412.95	-1830.26	8213.42	40°26'14.804"N	104°48'17.832"W	0.00	
15520.00†	90.068	87.727	7075.79	8510.14	-1826.29	8313.34	40°26'14.843"N	104°48'16.539"W	0.00	
15620.00†	90.068	87.727	7075.67	8607.33	-1822.32	8413.26	40°26'14.881"N	104°48'15.247"W	0.00	
15720.00†	90.068	87.727	7075.55	8704.52	-1818.36	8513.18	40°26'14.920"N	104°48'13.955"W	0.00	
15820.00†	90.068	87.727	7075.43	8801.72	-1814.39	8613.10	40°26'14.959"N	104°48'12.663"W	0.00	
15920.00†	90.068	87.727	7075.32	8898.91	-1810.42	8713.02	40°26'14.998"N	104°48'11.370"W	0.00	
16020.00†	90.068	87.727	7075.20	8996.10	-1806.46	8812.95	40°26'15.037"N	104°48'10.078"W	0.00	
16120.00†	90.068	87.727	7075.08	9093.29	-1802.49	8912.87	40°26'15.076"N	104°48'08.786"W	0.00	
16184.77	90.068	87.727	7075.00 ²	9156.25	-1799.92	8977.59	40°26'15.101"N	104°48'07.949"W	0.00	End of Tangent



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

HOLE & CASING SECTIONS

- Ref Wellbore: ORR 36C-32-M PWB Ref Wellpath: ORR 36C-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	1748.76	0.00	0.00	-363.19	-9.53
8.5in Open Hole	1800.00	17200.00	15400.00	1748.76	N/A	-363.19	-9.53	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	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.32-T06N-R66W		0.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.35-T06N-R67W		0.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.36-T06N-R67W		0.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
2) ORR 36C-32-L BHL ON PLAT REV-1 (130'FSL & 2582'FWL, SEC.32)	16184.77	7075.00	-1799.92	8977.59	3194232.71	1402996.00	40°26'15.101"N	104°48'07.949"W	circle
1) ORR 36C-32-L LANDING POINT (149'FSL & 75'FWL, SEC.31)	7794.31	7085.00	-2132.71	593.73	3185851.92	1402600.32	40°26'11.828"N	104°49'56.374"W	circle
SEC.31/21-T06N-R67W 460' SETBACK		7112.00	0.00	0.00	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	16184.77	BHI NaviTrak (Standard)		ORR 36C-32-M PWB



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#01 ORR 36C-32-M (2255'FSL & 534'FEL, SEC.36)
Area	COLORADO	Well	ORR 36C-32-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 36C-32-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7057.91	29.843	123.574	6725.00	SHARON SPRINGS
7102.44	33.014	118.867	6763.00	NIO-A
7261.14	45.290	107.165	6886.00	NIO-B
7374.62	54.569	101.572	6959.00	NIO-C
7588.58	72.547	93.810	7054.00	FORT HAYS

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
20.00	0.000	181.503	20.00	Tie On
200.00	0.000	181.503	200.00	End of Tangent
1129.93	18.599	181.503	1113.68	End of Build
6780.22	18.599	181.503	6468.90	End of Tangent
7794.31	90.068	87.727	7085.00	End of 3D Arc
16184.77	90.068	87.727	7075.00	End of Tangent