

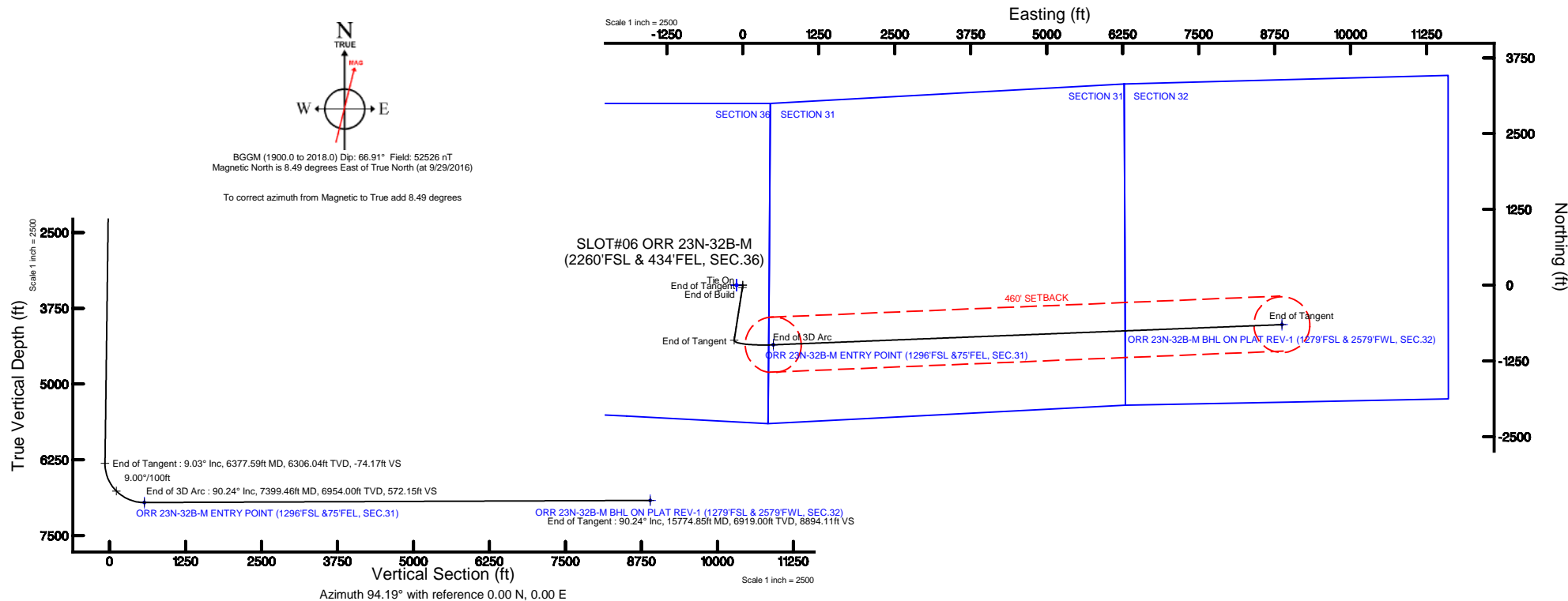
Location:	COLORADO	Slot:	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Field:	WELD COUNTY (NAD83,TRUE NORTH)	Well:	ORR 23N-32B-M
Facility:	SEC.36-T06N-R67W	Wellbore:	ORR 23N-32B-M PWB

Plot reference wellpath is ORR 23N-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 (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#06 ORR 23N-32B-M (2260'FSL & 434'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#06 ORR 23N-32B-M (2260'FSL & 434'TEL, SEC.36)	-0.71	100.20	3185342.426	1404728.472	40°26'32.896"N	104°50'02.756"W
PRECISION 462 (20"K) (RKB) to Mud line (At Slot: SLOT#06 ORR 23N-32B-M (2260'FSL & 434'TEL, SEC.36))					4744ft	
Mean Sea Level to Mud line (At Slot: SLOT#06 ORR 23N-32B-M (2260'FSL & 434'TEL, SEC.36))					0ft	
PRECISION 462 (20"K) (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	188.828	20.00	0.00	0.00	3185342.43	1404728.47	40°26'32.896"N	104°50'02.756"W

MD (ft)	X (ft)	Y (ft)	TVD (ft)	Inclination (°)	Azimuth (°)	VS (ft)	Comment
6880.13	36.28	-970.94	6758.00	44.219	96.980	107.20	SHARON SPRINGS
6935.51	76.30	-975.30	6796.00	49.090	95.525	147.43	NIO-A



To correct azimuth from Magnetic to True add 8.49 degrees

ORR_23N-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	15774.85	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	SYNERGY RESOURCES CORPORATION	:OPERATOR
WELL	.	ORR 23N-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#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)	:SLOT
WELLBORE	.	ORR 23N-32B-M PWB	:WELLBORE
WELLPATH	.	ORR 23N-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	94.19	: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_23N-32B-M_PWP__REV-A.1_.1as

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

~ASCII DATA

0.00	0.00	188.83	0.00	0.00	0.00	0.00	40.4424711	-104.8340989	0.00
20.00	0.00	188.83	20.00	0.00	0.00	0.00	40.4424711	-104.8340989	0.00
120.00	0.00	188.83	120.00	0.00	0.00	0.00	40.4424711	-104.8340989	0.00
220.00	0.00	188.83	220.00	0.00	0.00	0.00	40.4424711	-104.8340989	0.00
300.00	0.00	188.83	300.00	0.00	0.00	0.00	40.4424711	-104.8340989	0.00
320.00	0.40	188.83	320.00	-0.01	-0.07	-0.01	40.4424709	-104.8340989	2.00
420.00	2.40	188.83	419.96	-0.20	-2.48	-0.39	40.4424643	-104.8341003	2.00
520.00	4.40	188.83	519.78	-0.68	-8.34	-1.30	40.4424482	-104.8341035	2.00
620.00	6.40	188.83	619.33	-1.44	-17.64	-2.74	40.4424227	-104.8341087	2.00
720.00	8.40	188.83	718.50	-2.48	-30.37	-4.72	40.4423878	-104.8341158	2.00
751.34	9.03	188.83	749.48	-2.87	-35.06	-5.44	40.4423749	-104.8341185	2.00
820.00	9.03	188.83	817.28	-3.74	-45.70	-7.10	40.4423457	-104.8341244	0.00
920.00	9.03	188.83	916.05	-5.00	-61.21	-9.51	40.4423031	-104.8341330	0.00
1020.00	9.03	188.83	1014.81	-6.27	-76.71	-11.91	40.4422605	-104.8341417	0.00
1120.00	9.03	188.83	1113.57	-7.54	-92.22	-14.32	40.4422180	-104.8341503	0.00
1220.00	9.03	188.83	1212.33	-8.81	-107.72	-16.73	40.4421754	-104.8341590	0.00
1320.00	9.03	188.83	1311.09	-10.07	-123.22	-19.14	40.4421329	-104.8341676	0.00
1420.00	9.03	188.83	1409.85	-11.34	-138.73	-21.54	40.4420903	-104.8341763	0.00
1520.00	9.03	188.83	1508.62	-12.61	-154.23	-23.95	40.4420478	-104.8341849	0.00
1620.00	9.03	188.83	1607.38	-13.87	-169.74	-26.36	40.4420052	-104.8341936	0.00
1720.00	9.03	188.83	1706.14	-15.14	-185.24	-28.77	40.4419627	-104.8342022	0.00
1820.00	9.03	188.83	1804.90	-16.41	-200.74	-31.18	40.4419201	-104.8342109	0.00
1920.00	9.03	188.83	1903.66	-17.68	-216.25	-33.58	40.4418775	-104.8342195	0.00
2020.00	9.03	188.83	2002.42	-18.94	-231.75	-35.99	40.4418350	-104.8342282	0.00
2120.00	9.03	188.83	2101.18	-20.21	-247.26	-38.40	40.4417924	-104.8342368	0.00
2220.00	9.03	188.83	2199.95	-21.48	-262.76	-40.81	40.4417499	-104.8342455	0.00
2320.00	9.03	188.83	2298.71	-22.75	-278.26	-43.21	40.4417073	-104.8342541	0.00
2420.00	9.03	188.83	2397.47	-24.01	-293.77	-45.62	40.4416648	-104.8342628	0.00
2520.00	9.03	188.83	2496.23	-25.28	-309.27	-48.03	40.4416222	-104.8342714	0.00
2620.00	9.03	188.83	2594.99	-26.55	-324.77	-50.44	40.4415796	-104.8342801	0.00
2720.00	9.03	188.83	2693.75	-27.81	-340.28	-52.85	40.4415371	-104.8342887	0.00
2820.00	9.03	188.83	2792.51	-29.08	-355.78	-55.25	40.4414945	-104.8342974	0.00
2920.00	9.03	188.83	2891.28	-30.35	-371.29	-57.66	40.4414520	-104.8343060	0.00
3020.00	9.03	188.83	2990.04	-31.62	-386.79	-60.07	40.4414094	-104.8343147	0.00
3120.00	9.03	188.83	3088.80	-32.88	-402.29	-62.48	40.4413669	-104.8343233	0.00
3220.00	9.03	188.83	3187.56	-34.15	-417.80	-64.89	40.4413243	-104.8343320	0.00
3320.00	9.03	188.83	3286.32	-35.42	-433.30	-67.29	40.4412817	-104.8343406	0.00
3420.00	9.03	188.83	3385.08	-36.69	-448.81	-69.70	40.4412392	-104.8343493	0.00
3520.00	9.03	188.83	3483.85	-37.95	-464.31	-72.11	40.4411966	-104.8343579	0.00
3620.00	9.03	188.83	3582.61	-39.22	-479.81	-74.52	40.4411541	-104.8343666	0.00
3720.00	9.03	188.83	3681.37	-40.49	-495.32	-76.92	40.4411115	-104.8343752	0.00
3820.00	9.03	188.83	3780.13	-41.75	-510.82	-79.33	40.4410690	-104.8343839	0.00
3920.00	9.03	188.83	3878.89	-43.02	-526.33	-81.74	40.4410264	-104.8343925	0.00

ORR_23N-32B-M_PWP__REV-A.1_.las									
4020.00	9.03	188.83	3977.65	-44.29	-541.83	-84.15	40.4409839	-104.8344012	0.00
4120.00	9.03	188.83	4076.41	-45.56	-557.33	-86.56	40.4409413	-104.8344098	0.00
4220.00	9.03	188.83	4175.18	-46.82	-572.84	-88.96	40.4408987	-104.8344185	0.00
4320.00	9.03	188.83	4273.94	-48.09	-588.34	-91.37	40.4408562	-104.8344271	0.00
4420.00	9.03	188.83	4372.70	-49.36	-603.84	-93.78	40.4408136	-104.8344358	0.00
4520.00	9.03	188.83	4471.46	-50.63	-619.35	-96.19	40.4407711	-104.8344444	0.00
4620.00	9.03	188.83	4570.22	-51.89	-634.85	-98.59	40.4407285	-104.8344531	0.00
4720.00	9.03	188.83	4668.98	-53.16	-650.36	-101.00	40.4406860	-104.8344617	0.00
4820.00	9.03	188.83	4767.74	-54.43	-665.86	-103.41	40.4406434	-104.8344704	0.00
4920.00	9.03	188.83	4866.51	-55.69	-681.36	-105.82	40.4406008	-104.8344790	0.00
5020.00	9.03	188.83	4965.27	-56.96	-696.87	-108.23	40.4405583	-104.8344877	0.00
5120.00	9.03	188.83	5064.03	-58.23	-712.37	-110.63	40.4405157	-104.8344963	0.00
5220.00	9.03	188.83	5162.79	-59.50	-727.88	-113.04	40.4404732	-104.8345050	0.00
5320.00	9.03	188.83	5261.55	-60.76	-743.38	-115.45	40.4404306	-104.8345136	0.00
5420.00	9.03	188.83	5360.31	-62.03	-758.88	-117.86	40.4403881	-104.8345223	0.00
5520.00	9.03	188.83	5459.07	-63.30	-774.39	-120.26	40.4403455	-104.8345309	0.00
5620.00	9.03	188.83	5557.84	-64.57	-789.89	-122.67	40.4403030	-104.8345396	0.00
5720.00	9.03	188.83	5656.60	-65.83	-805.40	-125.08	40.4402604	-104.8345482	0.00
5820.00	9.03	188.83	5755.36	-67.10	-820.90	-127.49	40.4402178	-104.8345569	0.00
5920.00	9.03	188.83	5854.12	-68.37	-836.40	-129.90	40.4401753	-104.8345655	0.00
6020.00	9.03	188.83	5952.88	-69.64	-851.91	-132.30	40.4401327	-104.8345742	0.00
6120.00	9.03	188.83	6051.64	-70.90	-867.41	-134.71	40.4400902	-104.8345828	0.00
6220.00	9.03	188.83	6150.41	-72.17	-882.91	-137.12	40.4400476	-104.8345915	0.00
6320.00	9.03	188.83	6249.17	-73.44	-898.42	-139.53	40.4400051	-104.8346001	0.00
6377.59	9.03	188.83	6306.04	-74.17	-907.35	-140.91	40.4399806	-104.8346051	0.00
6420.00	9.10	164.43	6347.94	-73.30	-913.87	-140.52	40.4399627	-104.8346037	9.00
6520.00	14.16	125.92	6445.99	-60.19	-928.70	-128.47	40.4399220	-104.8345604	9.00
6620.00	21.89	110.60	6541.06	-31.85	-942.46	-101.06	40.4398842	-104.8344619	9.00
6720.00	30.30	103.24	6630.82	11.03	-954.82	-58.97	40.4398503	-104.8343107	9.00
6820.00	38.96	98.88	6713.04	67.39	-965.47	-3.24	40.4398210	-104.8341105	9.00
6920.00	47.72	95.91	6785.70	135.84	-974.14	64.75	40.4397972	-104.8338663	9.00
7020.00	56.55	93.67	6847.03	214.69	-980.64	143.35	40.4397794	-104.8335839	9.00
7120.00	65.41	91.85	6895.49	302.02	-984.79	230.60	40.4397680	-104.8332705	9.00
7220.00	74.29	90.27	6929.91	395.65	-986.49	324.37	40.4397633	-104.8329336	9.00
7320.00	83.17	88.83	6949.44	493.30	-985.71	422.33	40.4397655	-104.8325817	9.00
7399.46	90.24	87.72	6954.00	572.15	-983.32	501.57	40.4397720	-104.8322970	9.00
7420.00	90.24	87.72	6953.91	592.57	-982.50	522.10	40.4397742	-104.8322233	0.00
7520.00	90.24	87.72	6953.50	691.93	-978.53	622.02	40.4397851	-104.8318643	0.00
7620.00	90.24	87.72	6953.08	791.29	-974.56	721.94	40.4397960	-104.8315053	0.00
7720.00	90.24	87.72	6952.66	890.65	-970.59	821.86	40.4398069	-104.8311464	0.00
7820.00	90.24	87.72	6952.24	990.01	-966.61	921.78	40.4398178	-104.8307874	0.00
7920.00	90.24	87.72	6951.82	1089.38	-962.64	1021.70	40.4398287	-104.8304284	0.00
8020.00	90.24	87.72	6951.41	1188.74	-958.67	1121.62	40.4398396	-104.8300695	0.00
8120.00	90.24	87.72	6950.99	1288.10	-954.69	1221.54	40.4398505	-104.8297105	0.00
8220.00	90.24	87.72	6950.57	1387.46	-950.72	1321.46	40.4398614	-104.8293515	0.00
8320.00	90.24	87.72	6950.15	1486.82	-946.75	1421.38	40.4398723	-104.8289926	0.00
8420.00	90.24	87.72	6949.74	1586.18	-942.77	1521.30	40.4398832	-104.8286336	0.00
8520.00	90.24	87.72	6949.32	1685.55	-938.80	1621.22	40.4398941	-104.8282747	0.00

ORR_23N-32B-M_PWP__REV-A.1_.las									
8620.00	90.24	87.72	6948.90	1784.91	-934.83	1721.14	40.4399050	-104.8279157	0.00
8720.00	90.24	87.72	6948.48	1884.27	-930.86	1821.06	40.4399158	-104.8275567	0.00
8820.00	90.24	87.72	6948.06	1983.63	-926.88	1920.98	40.4399267	-104.8271978	0.00
8920.00	90.24	87.72	6947.65	2082.99	-922.91	2020.90	40.4399376	-104.8268388	0.00
9020.00	90.24	87.72	6947.23	2182.36	-918.94	2120.82	40.4399485	-104.8264798	0.00
9120.00	90.24	87.72	6946.81	2281.72	-914.96	2220.74	40.4399594	-104.8261209	0.00
9220.00	90.24	87.72	6946.39	2381.08	-910.99	2320.66	40.4399703	-104.8257619	0.00
9320.00	90.24	87.72	6945.97	2480.44	-907.02	2420.58	40.4399811	-104.8254029	0.00
9420.00	90.24	87.72	6945.56	2579.80	-903.05	2520.50	40.4399920	-104.8250440	0.00
9520.00	90.24	87.72	6945.14	2679.17	-899.07	2620.42	40.4400029	-104.8246850	0.00
9620.00	90.24	87.72	6944.72	2778.53	-895.10	2720.34	40.4400138	-104.8243260	0.00
9720.00	90.24	87.72	6944.30	2877.89	-891.13	2820.26	40.4400246	-104.8239671	0.00
9820.00	90.24	87.72	6943.88	2977.25	-887.15	2920.18	40.4400355	-104.8236081	0.00
9920.00	90.24	87.72	6943.47	3076.61	-883.18	3020.10	40.4400464	-104.8232491	0.00
10020.00	90.24	87.72	6943.05	3175.98	-879.21	3120.02	40.4400573	-104.8228902	0.00
10120.00	90.24	87.72	6942.63	3275.34	-875.23	3219.94	40.4400681	-104.8225312	0.00
10220.00	90.24	87.72	6942.21	3374.70	-871.26	3319.86	40.4400790	-104.8221722	0.00
10320.00	90.24	87.72	6941.80	3474.06	-867.29	3419.78	40.4400899	-104.8218133	0.00
10420.00	90.24	87.72	6941.38	3573.42	-863.32	3519.70	40.4401007	-104.8214543	0.00
10520.00	90.24	87.72	6940.96	3672.78	-859.34	3619.62	40.4401116	-104.8210953	0.00
10620.00	90.24	87.72	6940.54	3772.15	-855.37	3719.54	40.4401225	-104.8207364	0.00
10720.00	90.24	87.72	6940.12	3871.51	-851.40	3819.46	40.4401333	-104.8203774	0.00
10820.00	90.24	87.72	6939.71	3970.87	-847.42	3919.38	40.4401442	-104.8200184	0.00
10920.00	90.24	87.72	6939.29	4070.23	-843.45	4019.30	40.4401550	-104.8196595	0.00
11020.00	90.24	87.72	6938.87	4169.59	-839.48	4119.22	40.4401659	-104.8193005	0.00
11120.00	90.24	87.72	6938.45	4268.96	-835.51	4219.14	40.4401768	-104.8189415	0.00
11220.00	90.24	87.72	6938.03	4368.32	-831.53	4319.06	40.4401876	-104.8185826	0.00
11320.00	90.24	87.72	6937.62	4467.68	-827.56	4418.98	40.4401985	-104.8182236	0.00
11420.00	90.24	87.72	6937.20	4567.04	-823.59	4518.90	40.4402093	-104.8178646	0.00
11520.00	90.24	87.72	6936.78	4666.40	-819.61	4618.83	40.4402202	-104.8175057	0.00
11620.00	90.24	87.72	6936.36	4765.77	-815.64	4718.75	40.4402310	-104.8171467	0.00
11720.00	90.24	87.72	6935.94	4865.13	-811.67	4818.67	40.4402419	-104.8167877	0.00
11820.00	90.24	87.72	6935.53	4964.49	-807.69	4918.59	40.4402527	-104.8164288	0.00
11920.00	90.24	87.72	6935.11	5063.85	-803.72	5018.51	40.4402636	-104.8160698	0.00
12020.00	90.24	87.72	6934.69	5163.21	-799.75	5118.43	40.4402744	-104.8157108	0.00
12120.00	90.24	87.72	6934.27	5262.58	-795.78	5218.35	40.4402853	-104.8153519	0.00
12220.00	90.24	87.72	6933.86	5361.94	-791.80	5318.27	40.4402961	-104.8149929	0.00
12320.00	90.24	87.72	6933.44	5461.30	-787.83	5418.19	40.4403070	-104.8146339	0.00
12420.00	90.24	87.72	6933.02	5560.66	-783.86	5518.11	40.4403178	-104.8142750	0.00
12520.00	90.24	87.72	6932.60	5660.02	-779.88	5618.03	40.4403287	-104.8139160	0.00
12620.00	90.24	87.72	6932.18	5759.38	-775.91	5717.95	40.4403395	-104.8135570	0.00
12720.00	90.24	87.72	6931.77	5858.75	-771.94	5817.87	40.4403504	-104.8131980	0.00
12820.00	90.24	87.72	6931.35	5958.11	-767.96	5917.79	40.4403612	-104.8128391	0.00
12920.00	90.24	87.72	6930.93	6057.47	-763.99	6017.71	40.4403720	-104.8124801	0.00
13020.00	90.24	87.72	6930.51	6156.83	-760.02	6117.63	40.4403829	-104.8121211	0.00
13120.00	90.24	87.72	6930.09	6256.19	-756.05	6217.55	40.4403937	-104.8117622	0.00
13220.00	90.24	87.72	6929.68	6355.56	-752.07	6317.47	40.4404045	-104.8114032	0.00
13320.00	90.24	87.72	6929.26	6454.92	-748.10	6417.39	40.4404154	-104.8110442	0.00

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13420.00	90.24	87.72	6928.84	6554.28	-744.13	6517.31	40.4404262	-104.8106853	0.00
13520.00	90.24	87.72	6928.42	6653.64	-740.15	6617.23	40.4404370	-104.8103263	0.00
13620.00	90.24	87.72	6928.00	6753.00	-736.18	6717.15	40.4404479	-104.8099673	0.00
13720.00	90.24	87.72	6927.59	6852.37	-732.21	6817.07	40.4404587	-104.8096083	0.00
13820.00	90.24	87.72	6927.17	6951.73	-728.24	6916.99	40.4404695	-104.8092494	0.00
13920.00	90.24	87.72	6926.75	7051.09	-724.26	7016.91	40.4404804	-104.8088904	0.00
14020.00	90.24	87.72	6926.33	7150.45	-720.29	7116.83	40.4404912	-104.8085314	0.00
14120.00	90.24	87.72	6925.92	7249.81	-716.32	7216.75	40.4405020	-104.8081725	0.00
14220.00	90.24	87.72	6925.50	7349.18	-712.34	7316.67	40.4405128	-104.8078135	0.00
14320.00	90.24	87.72	6925.08	7448.54	-708.37	7416.59	40.4405237	-104.8074545	0.00
14420.00	90.24	87.72	6924.66	7547.90	-704.40	7516.51	40.4405345	-104.8070955	0.00
14520.00	90.24	87.72	6924.24	7647.26	-700.42	7616.43	40.4405453	-104.8067366	0.00
14620.00	90.24	87.72	6923.83	7746.62	-696.45	7716.35	40.4405561	-104.8063776	0.00
14720.00	90.24	87.72	6923.41	7845.98	-692.48	7816.27	40.4405669	-104.8060186	0.00
14820.00	90.24	87.72	6922.99	7945.35	-688.51	7916.19	40.4405778	-104.8056597	0.00
14920.00	90.24	87.72	6922.57	8044.71	-684.53	8016.11	40.4405886	-104.8053007	0.00
15020.00	90.24	87.72	6922.15	8144.07	-680.56	8116.03	40.4405994	-104.8049417	0.00
15120.00	90.24	87.72	6921.74	8243.43	-676.59	8215.95	40.4406102	-104.8045827	0.00
15220.00	90.24	87.72	6921.32	8342.79	-672.61	8315.87	40.4406210	-104.8042238	0.00
15320.00	90.24	87.72	6920.90	8442.16	-668.64	8415.79	40.4406318	-104.8038648	0.00
15420.00	90.24	87.72	6920.48	8541.52	-664.67	8515.71	40.4406426	-104.8035058	0.00
15520.00	90.24	87.72	6920.07	8640.88	-660.70	8615.63	40.4406535	-104.8031469	0.00
15620.00	90.24	87.72	6919.65	8740.24	-656.72	8715.55	40.4406643	-104.8027879	0.00
15720.00	90.24	87.72	6919.23	8839.60	-652.75	8815.47	40.4406751	-104.8024289	0.00
15774.85	90.24	87.72	6919.00	8894.11	-650.57	8870.28	40.4406810	-104.8022320	0.00



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-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 7:03:43 PM
Convergence at slot	0.44° East	Database/Source file	WA_DEN_Denver_Defn/ORR_23N-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	-0.71	100.20	3185342.43	1404728.47	40°26'32.896"N	104°50'02.756"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#06 ORR 23N-32B-M (2260'FSL & 434'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	94.19°



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 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	188.828	0.00	0.00	0.00	0.00	40°26'32.896"N	104°50'02.756"W	0.00	
20.00	0.000	188.828	20.00	0.00	0.00	0.00	40°26'32.896"N	104°50'02.756"W	0.00	Tie On
120.00†	0.000	188.828	120.00	0.00	0.00	0.00	40°26'32.896"N	104°50'02.756"W	0.00	
220.00†	0.000	188.828	220.00	0.00	0.00	0.00	40°26'32.896"N	104°50'02.756"W	0.00	
300.00	0.000	188.828	300.00	0.00	0.00	0.00	40°26'32.896"N	104°50'02.756"W	0.00	End of Tangent
320.00†	0.400	188.828	320.00	-0.01	-0.07	-0.01	40°26'32.895"N	104°50'02.756"W	2.00	
420.00†	2.400	188.828	419.96	-0.20	-2.48	-0.39	40°26'32.871"N	104°50'02.761"W	2.00	
520.00†	4.400	188.828	519.78	-0.68	-8.34	-1.30	40°26'32.814"N	104°50'02.773"W	2.00	
620.00†	6.400	188.828	619.33	-1.44	-17.64	-2.74	40°26'32.722"N	104°50'02.791"W	2.00	
720.00†	8.400	188.828	718.50	-2.48	-30.37	-4.72	40°26'32.596"N	104°50'02.817"W	2.00	
751.34	9.027	188.828	749.48	-2.87	-35.06	-5.44	40°26'32.550"N	104°50'02.826"W	2.00	End of Build
820.00†	9.027	188.828	817.28	-3.74	-45.70	-7.10	40°26'32.444"N	104°50'02.848"W	0.00	
920.00†	9.027	188.828	916.05	-5.00	-61.21	-9.51	40°26'32.291"N	104°50'02.879"W	0.00	
1020.00†	9.027	188.828	1014.81	-6.27	-76.71	-11.91	40°26'32.138"N	104°50'02.910"W	0.00	
1120.00†	9.027	188.828	1113.57	-7.54	-92.22	-14.32	40°26'31.985"N	104°50'02.941"W	0.00	
1220.00†	9.027	188.828	1212.33	-8.81	-107.72	-16.73	40°26'31.832"N	104°50'02.972"W	0.00	
1320.00†	9.027	188.828	1311.09	-10.07	-123.22	-19.14	40°26'31.678"N	104°50'03.004"W	0.00	
1420.00†	9.027	188.828	1409.85	-11.34	-138.73	-21.54	40°26'31.525"N	104°50'03.035"W	0.00	
1520.00†	9.027	188.828	1508.62	-12.61	-154.23	-23.95	40°26'31.372"N	104°50'03.066"W	0.00	
1620.00†	9.027	188.828	1607.38	-13.87	-169.74	-26.36	40°26'31.219"N	104°50'03.097"W	0.00	
1720.00†	9.027	188.828	1706.14	-15.14	-185.24	-28.77	40°26'31.066"N	104°50'03.128"W	0.00	
1820.00†	9.027	188.828	1804.90	-16.41	-200.74	-31.18	40°26'30.912"N	104°50'03.159"W	0.00	
1920.00†	9.027	188.828	1903.66	-17.68	-216.25	-33.58	40°26'30.759"N	104°50'03.190"W	0.00	
2020.00†	9.027	188.828	2002.42	-18.94	-231.75	-35.99	40°26'30.606"N	104°50'03.221"W	0.00	
2120.00†	9.027	188.828	2101.18	-20.21	-247.26	-38.40	40°26'30.453"N	104°50'03.253"W	0.00	
2220.00†	9.027	188.828	2199.95	-21.48	-262.76	-40.81	40°26'30.300"N	104°50'03.284"W	0.00	
2320.00†	9.027	188.828	2298.71	-22.75	-278.26	-43.21	40°26'30.146"N	104°50'03.315"W	0.00	
2420.00†	9.027	188.828	2397.47	-24.01	-293.77	-45.62	40°26'29.993"N	104°50'03.346"W	0.00	
2520.00†	9.027	188.828	2496.23	-25.28	-309.27	-48.03	40°26'29.840"N	104°50'03.377"W	0.00	
2620.00†	9.027	188.828	2594.99	-26.55	-324.77	-50.44	40°26'29.687"N	104°50'03.408"W	0.00	



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2720.00†	9.027	188.828	2693.75	-27.81	-340.28	-52.85	40°26'29.534"N	104°50'03.439"W	0.00	
2820.00†	9.027	188.828	2792.51	-29.08	-355.78	-55.25	40°26'29.380"N	104°50'03.471"W	0.00	
2920.00†	9.027	188.828	2891.28	-30.35	-371.29	-57.66	40°26'29.227"N	104°50'03.502"W	0.00	
3020.00†	9.027	188.828	2990.04	-31.62	-386.79	-60.07	40°26'29.074"N	104°50'03.533"W	0.00	
3120.00†	9.027	188.828	3088.80	-32.88	-402.29	-62.48	40°26'28.921"N	104°50'03.564"W	0.00	
3220.00†	9.027	188.828	3187.56	-34.15	-417.80	-64.89	40°26'28.768"N	104°50'03.595"W	0.00	
3320.00†	9.027	188.828	3286.32	-35.42	-433.30	-67.29	40°26'28.614"N	104°50'03.626"W	0.00	
3420.00†	9.027	188.828	3385.08	-36.69	-448.81	-69.70	40°26'28.461"N	104°50'03.657"W	0.00	
3520.00†	9.027	188.828	3483.85	-37.95	-464.31	-72.11	40°26'28.308"N	104°50'03.689"W	0.00	
3620.00†	9.027	188.828	3582.61	-39.22	-479.81	-74.52	40°26'28.155"N	104°50'03.720"W	0.00	
3720.00†	9.027	188.828	3681.37	-40.49	-495.32	-76.92	40°26'28.001"N	104°50'03.751"W	0.00	
3820.00†	9.027	188.828	3780.13	-41.75	-510.82	-79.33	40°26'27.848"N	104°50'03.782"W	0.00	
3920.00†	9.027	188.828	3878.89	-43.02	-526.33	-81.74	40°26'27.695"N	104°50'03.813"W	0.00	
4020.00†	9.027	188.828	3977.65	-44.29	-541.83	-84.15	40°26'27.542"N	104°50'03.844"W	0.00	
4120.00†	9.027	188.828	4076.41	-45.56	-557.33	-86.56	40°26'27.389"N	104°50'03.875"W	0.00	
4220.00†	9.027	188.828	4175.18	-46.82	-572.84	-88.96	40°26'27.235"N	104°50'03.907"W	0.00	
4320.00†	9.027	188.828	4273.94	-48.09	-588.34	-91.37	40°26'27.082"N	104°50'03.938"W	0.00	
4420.00†	9.027	188.828	4372.70	-49.36	-603.84	-93.78	40°26'26.929"N	104°50'03.969"W	0.00	
4520.00†	9.027	188.828	4471.46	-50.63	-619.35	-96.19	40°26'26.776"N	104°50'04.000"W	0.00	
4620.00†	9.027	188.828	4570.22	-51.89	-634.85	-98.59	40°26'26.623"N	104°50'04.031"W	0.00	
4720.00†	9.027	188.828	4668.98	-53.16	-650.36	-101.00	40°26'26.469"N	104°50'04.062"W	0.00	
4820.00†	9.027	188.828	4767.74	-54.43	-665.86	-103.41	40°26'26.316"N	104°50'04.093"W	0.00	
4920.00†	9.027	188.828	4866.51	-55.69	-681.36	-105.82	40°26'26.163"N	104°50'04.125"W	0.00	
5020.00†	9.027	188.828	4965.27	-56.96	-696.87	-108.23	40°26'26.010"N	104°50'04.156"W	0.00	
5120.00†	9.027	188.828	5064.03	-58.23	-712.37	-110.63	40°26'25.857"N	104°50'04.187"W	0.00	
5220.00†	9.027	188.828	5162.79	-59.50	-727.88	-113.04	40°26'25.703"N	104°50'04.218"W	0.00	
5320.00†	9.027	188.828	5261.55	-60.76	-743.38	-115.45	40°26'25.550"N	104°50'04.249"W	0.00	
5420.00†	9.027	188.828	5360.31	-62.03	-758.88	-117.86	40°26'25.397"N	104°50'04.280"W	0.00	
5520.00†	9.027	188.828	5459.07	-63.30	-774.39	-120.26	40°26'25.244"N	104°50'04.311"W	0.00	
5620.00†	9.027	188.828	5557.84	-64.57	-789.89	-122.67	40°26'25.091"N	104°50'04.343"W	0.00	



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5720.00†	9.027	188.828	5656.60	-65.83	-805.40	-125.08	40°26'24.937"N	104°50'04.374"W	0.00	
5820.00†	9.027	188.828	5755.36	-67.10	-820.90	-127.49	40°26'24.784"N	104°50'04.405"W	0.00	
5920.00†	9.027	188.828	5854.12	-68.37	-836.40	-129.90	40°26'24.631"N	104°50'04.436"W	0.00	
6020.00†	9.027	188.828	5952.88	-69.64	-851.91	-132.30	40°26'24.478"N	104°50'04.467"W	0.00	
6120.00†	9.027	188.828	6051.64	-70.90	-867.41	-134.71	40°26'24.325"N	104°50'04.498"W	0.00	
6220.00†	9.027	188.828	6150.41	-72.17	-882.91	-137.12	40°26'24.171"N	104°50'04.529"W	0.00	
6320.00†	9.027	188.828	6249.17	-73.44	-898.42	-139.53	40°26'24.018"N	104°50'04.561"W	0.00	
6377.59	9.027	188.828	6306.04	-74.17	-907.35	-140.91	40°26'23.930"N	104°50'04.578"W	0.00	End of Tangent
6420.00†	9.103	164.425	6347.94	-73.30	-913.87	-140.52	40°26'23.866"N	104°50'04.573"W	9.00	
6520.00†	14.162	125.922	6445.99	-60.19	-928.70	-128.47	40°26'23.719"N	104°50'04.417"W	9.00	
6620.00†	21.885	110.599	6541.06	-31.85	-942.46	-101.06	40°26'23.583"N	104°50'04.063"W	9.00	
6720.00†	30.298	103.236	6630.82	11.03	-954.82	-58.97	40°26'23.461"N	104°50'03.519"W	9.00	
6820.00†	38.956	98.879	6713.04	67.39	-965.47	-3.24	40°26'23.356"N	104°50'02.798"W	9.00	
6880.13†	44.219	96.980	6758.00	107.20	-970.94	36.28	40°26'23.302"N	104°50'02.287"W	9.00	SHARON SPRINGS
6920.00†	47.724	95.909	6785.70	135.84	-974.14	64.75	40°26'23.270"N	104°50'01.919"W	9.00	
6935.51†	49.090	95.525	6796.00	147.43	-975.30	76.30	40°26'23.259"N	104°50'01.769"W	9.00	NIO-A
7020.00†	56.550	93.672	6847.03	214.69	-980.64	143.35	40°26'23.206"N	104°50'00.902"W	9.00	
7120.00†	65.409	91.852	6895.49	302.02	-984.79	230.60	40°26'23.165"N	104°49'59.774"W	9.00	
7220.00†	74.286	90.274	6929.91	395.65	-986.49	324.37	40°26'23.148"N	104°49'58.561"W	9.00	
7320.00†	83.174	88.830	6949.44	493.30	-985.71	422.33	40°26'23.156"N	104°49'57.294"W	9.00	
7399.46	90.239	87.723	6954.00 [†]	572.15	-983.32	501.57	40°26'23.179"N	104°49'56.269"W	9.00	End of 3D Arc
7420.00†	90.239	87.723	6953.91	592.57	-982.50	522.10	40°26'23.187"N	104°49'56.004"W	0.00	
7520.00†	90.239	87.723	6953.50	691.93	-978.53	622.02	40°26'23.226"N	104°49'54.711"W	0.00	
7620.00†	90.239	87.723	6953.08	791.29	-974.56	721.94	40°26'23.266"N	104°49'53.419"W	0.00	
7720.00†	90.239	87.723	6952.66	890.65	-970.59	821.86	40°26'23.305"N	104°49'52.127"W	0.00	
7820.00†	90.239	87.723	6952.24	990.01	-966.61	921.78	40°26'23.344"N	104°49'50.835"W	0.00	
7920.00†	90.239	87.723	6951.82	1089.38	-962.64	1021.70	40°26'23.383"N	104°49'49.542"W	0.00	
8020.00†	90.239	87.723	6951.41	1188.74	-958.67	1121.62	40°26'23.423"N	104°49'48.250"W	0.00	
8120.00†	90.239	87.723	6950.99	1288.10	-954.69	1221.54	40°26'23.462"N	104°49'46.958"W	0.00	
8220.00†	90.239	87.723	6950.57	1387.46	-950.72	1321.46	40°26'23.501"N	104°49'45.666"W	0.00	



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8320.00†	90.239	87.723	6950.15	1486.82	-946.75	1421.38	40°26'23.540"N	104°49'44.373"W	0.00	
8420.00†	90.239	87.723	6949.74	1586.18	-942.77	1521.30	40°26'23.579"N	104°49'43.081"W	0.00	
8520.00†	90.239	87.723	6949.32	1685.55	-938.80	1621.22	40°26'23.619"N	104°49'41.789"W	0.00	
8620.00†	90.239	87.723	6948.90	1784.91	-934.83	1721.14	40°26'23.658"N	104°49'40.496"W	0.00	
8720.00†	90.239	87.723	6948.48	1884.27	-930.86	1821.06	40°26'23.697"N	104°49'39.204"W	0.00	
8820.00†	90.239	87.723	6948.06	1983.63	-926.88	1920.98	40°26'23.736"N	104°49'37.912"W	0.00	
8920.00†	90.239	87.723	6947.65	2082.99	-922.91	2020.90	40°26'23.775"N	104°49'36.620"W	0.00	
9020.00†	90.239	87.723	6947.23	2182.36	-918.94	2120.82	40°26'23.815"N	104°49'35.327"W	0.00	
9120.00†	90.239	87.723	6946.81	2281.72	-914.96	2220.74	40°26'23.854"N	104°49'34.035"W	0.00	
9220.00†	90.239	87.723	6946.39	2381.08	-910.99	2320.66	40°26'23.893"N	104°49'32.743"W	0.00	
9320.00†	90.239	87.723	6945.97	2480.44	-907.02	2420.58	40°26'23.932"N	104°49'31.451"W	0.00	
9420.00†	90.239	87.723	6945.56	2579.80	-903.05	2520.50	40°26'23.971"N	104°49'30.158"W	0.00	
9520.00†	90.239	87.723	6945.14	2679.17	-899.07	2620.42	40°26'24.010"N	104°49'28.866"W	0.00	
9620.00†	90.239	87.723	6944.72	2778.53	-895.10	2720.34	40°26'24.050"N	104°49'27.574"W	0.00	
9720.00†	90.239	87.723	6944.30	2877.89	-891.13	2820.26	40°26'24.089"N	104°49'26.281"W	0.00	
9820.00†	90.239	87.723	6943.88	2977.25	-887.15	2920.18	40°26'24.128"N	104°49'24.989"W	0.00	
9920.00†	90.239	87.723	6943.47	3076.61	-883.18	3020.10	40°26'24.167"N	104°49'23.697"W	0.00	
10020.00†	90.239	87.723	6943.05	3175.98	-879.21	3120.02	40°26'24.206"N	104°49'22.405"W	0.00	
10120.00†	90.239	87.723	6942.63	3275.34	-875.23	3219.94	40°26'24.245"N	104°49'21.112"W	0.00	
10220.00†	90.239	87.723	6942.21	3374.70	-871.26	3319.86	40°26'24.284"N	104°49'19.820"W	0.00	
10320.00†	90.239	87.723	6941.80	3474.06	-867.29	3419.78	40°26'24.323"N	104°49'18.528"W	0.00	
10420.00†	90.239	87.723	6941.38	3573.42	-863.32	3519.70	40°26'24.363"N	104°49'17.236"W	0.00	
10520.00†	90.239	87.723	6940.96	3672.78	-859.34	3619.62	40°26'24.402"N	104°49'15.943"W	0.00	
10620.00†	90.239	87.723	6940.54	3772.15	-855.37	3719.54	40°26'24.441"N	104°49'14.651"W	0.00	
10720.00†	90.239	87.723	6940.12	3871.51	-851.40	3819.46	40°26'24.480"N	104°49'13.359"W	0.00	
10820.00†	90.239	87.723	6939.71	3970.87	-847.42	3919.38	40°26'24.519"N	104°49'12.066"W	0.00	
10920.00†	90.239	87.723	6939.29	4070.23	-843.45	4019.30	40°26'24.558"N	104°49'10.774"W	0.00	
11020.00†	90.239	87.723	6938.87	4169.59	-839.48	4119.22	40°26'24.597"N	104°49'09.482"W	0.00	
11120.00†	90.239	87.723	6938.45	4268.96	-835.51	4219.14	40°26'24.636"N	104°49'08.190"W	0.00	
11220.00†	90.239	87.723	6938.03	4368.32	-831.53	4319.06	40°26'24.675"N	104°49'06.897"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11320.00†	90.239	87.723	6937.62	4467.68	-827.56	4418.98	40°26'24.715"N	104°49'05.605"W	0.00	
11420.00†	90.239	87.723	6937.20	4567.04	-823.59	4518.90	40°26'24.754"N	104°49'04.313"W	0.00	
11520.00†	90.239	87.723	6936.78	4666.40	-819.61	4618.83	40°26'24.793"N	104°49'03.020"W	0.00	
11620.00†	90.239	87.723	6936.36	4765.77	-815.64	4718.75	40°26'24.832"N	104°49'01.728"W	0.00	
11720.00†	90.239	87.723	6935.94	4865.13	-811.67	4818.67	40°26'24.871"N	104°49'00.436"W	0.00	
11820.00†	90.239	87.723	6935.53	4964.49	-807.69	4918.59	40°26'24.910"N	104°48'59.144"W	0.00	
11920.00†	90.239	87.723	6935.11	5063.85	-803.72	5018.51	40°26'24.949"N	104°48'57.851"W	0.00	
12020.00†	90.239	87.723	6934.69	5163.21	-799.75	5118.43	40°26'24.988"N	104°48'56.559"W	0.00	
12120.00†	90.239	87.723	6934.27	5262.58	-795.78	5218.35	40°26'25.027"N	104°48'55.267"W	0.00	
12220.00†	90.239	87.723	6933.86	5361.94	-791.80	5318.27	40°26'25.066"N	104°48'53.974"W	0.00	
12320.00†	90.239	87.723	6933.44	5461.30	-787.83	5418.19	40°26'25.105"N	104°48'52.682"W	0.00	
12420.00†	90.239	87.723	6933.02	5560.66	-783.86	5518.11	40°26'25.144"N	104°48'51.390"W	0.00	
12520.00†	90.239	87.723	6932.60	5660.02	-779.88	5618.03	40°26'25.183"N	104°48'50.098"W	0.00	
12620.00†	90.239	87.723	6932.18	5759.38	-775.91	5717.95	40°26'25.222"N	104°48'48.805"W	0.00	
12720.00†	90.239	87.723	6931.77	5858.75	-771.94	5817.87	40°26'25.261"N	104°48'47.513"W	0.00	
12820.00†	90.239	87.723	6931.35	5958.11	-767.96	5917.79	40°26'25.300"N	104°48'46.221"W	0.00	
12920.00†	90.239	87.723	6930.93	6057.47	-763.99	6017.71	40°26'25.339"N	104°48'44.928"W	0.00	
13020.00†	90.239	87.723	6930.51	6156.83	-760.02	6117.63	40°26'25.378"N	104°48'43.636"W	0.00	
13120.00†	90.239	87.723	6930.09	6256.19	-756.05	6217.55	40°26'25.417"N	104°48'42.344"W	0.00	
13220.00†	90.239	87.723	6929.68	6355.56	-752.07	6317.47	40°26'25.456"N	104°48'41.052"W	0.00	
13320.00†	90.239	87.723	6929.26	6454.92	-748.10	6417.39	40°26'25.495"N	104°48'39.759"W	0.00	
13420.00†	90.239	87.723	6928.84	6554.28	-744.13	6517.31	40°26'25.534"N	104°48'38.467"W	0.00	
13520.00†	90.239	87.723	6928.42	6653.64	-740.15	6617.23	40°26'25.573"N	104°48'37.175"W	0.00	
13620.00†	90.239	87.723	6928.00	6753.00	-736.18	6717.15	40°26'25.612"N	104°48'35.882"W	0.00	
13720.00†	90.239	87.723	6927.59	6852.37	-732.21	6817.07	40°26'25.651"N	104°48'34.590"W	0.00	
13820.00†	90.239	87.723	6927.17	6951.73	-728.24	6916.99	40°26'25.690"N	104°48'33.298"W	0.00	
13920.00†	90.239	87.723	6926.75	7051.09	-724.26	7016.91	40°26'25.729"N	104°48'32.005"W	0.00	
14020.00†	90.239	87.723	6926.33	7150.45	-720.29	7116.83	40°26'25.768"N	104°48'30.713"W	0.00	
14120.00†	90.239	87.723	6925.92	7249.81	-716.32	7216.75	40°26'25.807"N	104°48'29.421"W	0.00	
14220.00†	90.239	87.723	6925.50	7349.18	-712.34	7316.67	40°26'25.846"N	104°48'28.129"W	0.00	



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ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH DATA (166 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14320.00†	90.239	87.723	6925.08	7448.54	-708.37	7416.59	40°26'25.885"N	104°48'26.836"W	0.00	
14420.00†	90.239	87.723	6924.66	7547.90	-704.40	7516.51	40°26'25.924"N	104°48'25.544"W	0.00	
14520.00†	90.239	87.723	6924.24	7647.26	-700.42	7616.43	40°26'25.963"N	104°48'24.252"W	0.00	
14620.00†	90.239	87.723	6923.83	7746.62	-696.45	7716.35	40°26'26.002"N	104°48'22.959"W	0.00	
14720.00†	90.239	87.723	6923.41	7845.98	-692.48	7816.27	40°26'26.041"N	104°48'21.667"W	0.00	
14820.00†	90.239	87.723	6922.99	7945.35	-688.51	7916.19	40°26'26.080"N	104°48'20.375"W	0.00	
14920.00†	90.239	87.723	6922.57	8044.71	-684.53	8016.11	40°26'26.119"N	104°48'19.082"W	0.00	
15020.00†	90.239	87.723	6922.15	8144.07	-680.56	8116.03	40°26'26.158"N	104°48'17.790"W	0.00	
15120.00†	90.239	87.723	6921.74	8243.43	-676.59	8215.95	40°26'26.197"N	104°48'16.498"W	0.00	
15220.00†	90.239	87.723	6921.32	8342.79	-672.61	8315.87	40°26'26.236"N	104°48'15.206"W	0.00	
15320.00†	90.239	87.723	6920.90	8442.16	-668.64	8415.79	40°26'26.275"N	104°48'13.913"W	0.00	
15420.00†	90.239	87.723	6920.48	8541.52	-664.67	8515.71	40°26'26.314"N	104°48'12.621"W	0.00	
15520.00†	90.239	87.723	6920.07	8640.88	-660.70	8615.63	40°26'26.352"N	104°48'11.329"W	0.00	
15620.00†	90.239	87.723	6919.65	8740.24	-656.72	8715.55	40°26'26.391"N	104°48'10.036"W	0.00	
15720.00†	90.239	87.723	6919.23	8839.60	-652.75	8815.47	40°26'26.430"N	104°48'08.744"W	0.00	
15774.85	90.239	87.723	6919.00 ²	8894.11	-650.57	8870.28	40°26'26.452"N	104°48'08.035"W	0.00	End of Tangent

HOLE & CASING SECTIONS

- Ref Wellbore: ORR 23N-32B-M PWB Ref Wellpath: ORR 23N-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	1785.15	0.00	0.00	-197.64	-30.69
8.5in Open Hole	1800.00	16000.00	14200.00	1785.15	N/A	-197.64	-30.69	N/A	N/A



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-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	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.31-T06N-R67W		0.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.32-T06N-R66W		0.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.32-T06N-R67W		0.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point
SEC.35-T06N-R67W		0.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
SEC.36-T06N-R67W		0.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	polygon
2) ORR 23N-32B-L BHL ON PLAT REV-1 (1279'FSL & 2579'FWL, SEC.32)	15774.85	6919.00	-650.57	8870.28	3194216.99	1404144.55	40°26'26.452"N	104°48'08.035"W	circle
1) ORR 23N-32B-L ENTRY POINT (1296'FSL &75'FEL, SEC.31)	7399.46	6954.00	-983.32	501.57	3185851.35	1403748.98	40°26'23.179"N	104°49'56.269"W	circle
SEC.31/21-T06N-R67W 460' SETBACK		7112.00	0.71	-100.20	3185242.22	1404728.43	40°26'32.903"N	104°50'04.052"W	point

SURVEY PROGRAM - Ref Wellbore: ORR 23N-32B-M PWB Ref Wellpath: ORR 23N-32B-M PWP (REV-A.1)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	15774.85	BHI NaviTrak (Standard)		ORR 23N-32B-M PWB



Planned Wellpath Report

ORR 23N-32B-M PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION

Operator	SYNERGY RESOURCES CORPORATION	Slot	SLOT#06 ORR 23N-32B-M (2260'FSL & 434'FEL, SEC.36)
Area	COLORADO	Well	ORR 23N-32B-M
Field	WELD COUNTY (NAD83,TRUE NORTH)	Wellbore	ORR 23N-32B-M PWB
Facility	SEC.36-T06N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
6880.13	44.219	96.980	6758.00	SHARON SPRINGS
6935.51	49.090	95.525	6796.00	NIO-A

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
20.00	0.000	188.828	20.00	Tie On
300.00	0.000	188.828	300.00	End of Tangent
751.34	9.027	188.828	749.48	End of Build
6377.59	9.027	188.828	6306.04	End of Tangent
7399.46	90.239	87.723	6954.00	End of 3D Arc
15774.85	90.239	87.723	6919.00	End of Tangent