CONSOL ENERGY

CNX GAS COMPANY, LLC

Location: Doddridge Co., WV
Field: Doddridge
Facility: OXFD-11 Pad

Slot: Slot D
Well: OXFD-11D-HS
Wellbore: OXFD-11D-HS PWB

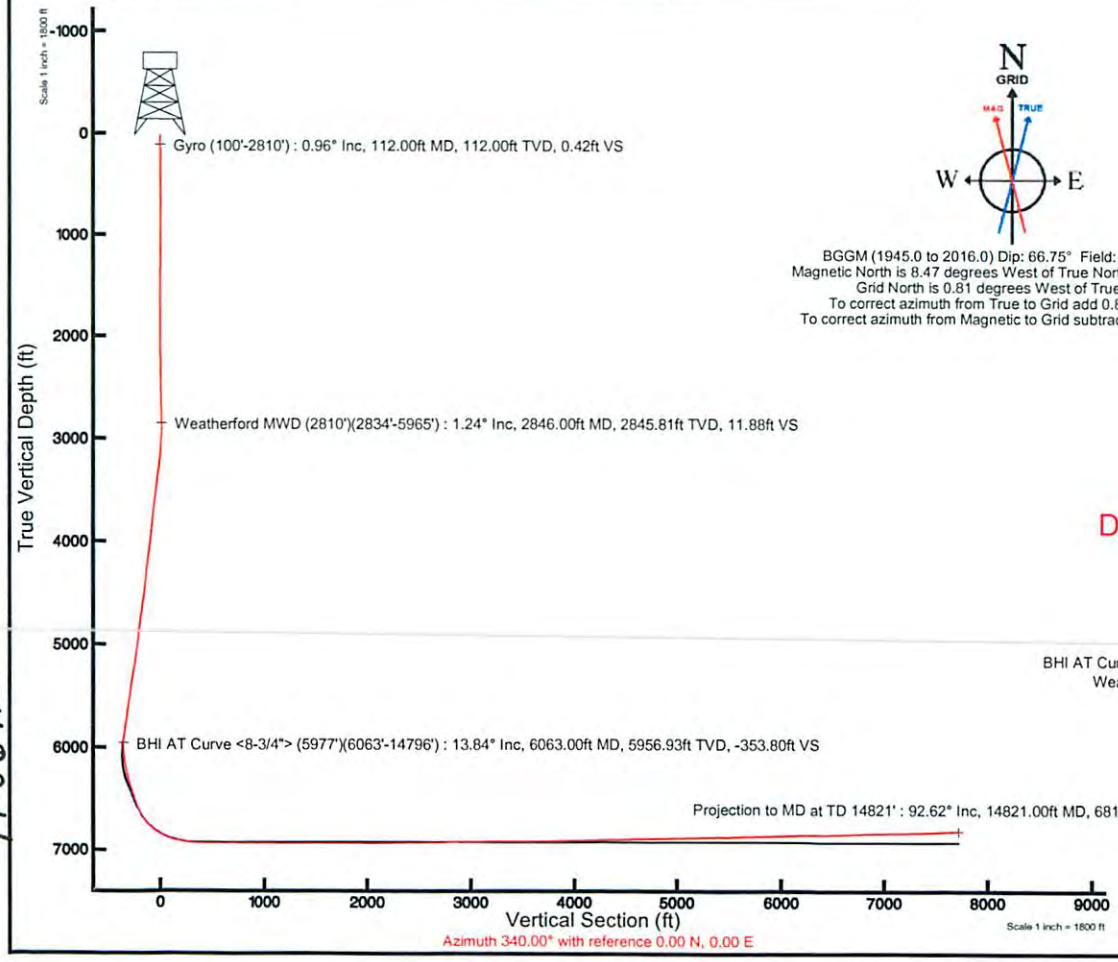
BAKER HUGHES

Plot reference wellpath is OXFD-11D-HS PWP Rev-B.0	
True vertical depths are referenced to Patterson 324 (RKB)	Grid System: NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
Measured depths are referenced to Patterson 324 (RKB)	North Reference: Grid north
Patterson 324 (RKB) to Mean Sea Level: 1332.49 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot D): -1307.99 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: fulmjes on 10/9/2014

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
OXFD-11 Pad			1641688.000	246757.000	39°10'14.064"N	80°45'49.782"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot D	45.00	40.00	1641728.000	246802.000	39°10'14.514"N	80°45'49.282"W

Patterson 324 (RKB) to Mud line (At Slot: Slot D)	24.5ft
Mean Sea Level to Mud line (At Slot: Slot D)	-1307.99ft
Patterson 324 (RKB) to Mean Sea Level	1332.49ft



BGGM (1945.0 to 2016.0) Dip: 66.75° Field: 52158.4 nT
Magnetic North is 8.47 degrees West of True North (at 9/30/2014)
Grid North is 0.81 degrees West of True North
To correct azimuth from True to Grid add 0.81 degrees
To correct azimuth from Magnetic to Grid subtract 7.66 degrees

API: 47-017-06412-0000
Rig: Patterson 324
Job#: 6616612
Duration: 10.03.2014-10.09.2014

17-06412

17.06412

ACTUAL WELLPATH REPORT (CSV version)
Prepared by Baker Hughes
Software System: WellArchitect® 4.0.1

REFERENCE WELLPATH IDENTIFICATION
Operator CNX GAS COMPANY, LLC
Area Doddridge Co., WV
Field Doddridge
Facility OXFD-11 Pad
Slot Slot D
Well OXFD-11D-HS
Wellbore OXFD-11D-HS AWB
Wellpath OXFD-11D-HS AWP Proj: 14821'
Sidetrack (none)

REPORT SETUP INFORMATION
Projection NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
North Refe Grid
Scale 0.999972
Convergen 0.81° West
Software S WellArchitect® 4.0.1
User Hareluk
Report Ger 13/Oct/2014 at 10:57:22 AM
DataBase/S WellArchitectEasternDB/ev1415.xml

WELLPATH	Local Nortl [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Locatl	45	40	1641728	246802	39°10'14.5	80°45'49.282"W
Facility Ref			1641688	246757	39°10'14.0	80°45'49.782"W
Field Refer			1640277	240427.6	39°09'11.3	80°46'06.561"W

WELLPATH DATUM
Calculation Minimum curvature
Horizontal Slot
Vertical Re Patterson 324 (RKB)
MD Refere Patterson 324 (RKB)
Field Vertic Mean Sea Level
Patterson : 1332.49ft
Patterson : 1332.49ft
Patterson : 24.50ft
Section Ori N 0.00, E 0.00 ft
Section Azi 340.00°

WELLPATH DATA † = interpolated/extrapolated station

	MD [ft]	Course Len [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dis [ft]	Closure Dir [°]	DLS [°/100ft]
†	0	0	0	285.07	0	0	0	0	1641728	246802	39°10'14.5	80°45'49.2	0	0	0
	24.5	24.5	0	285.07	24.5	0	0	0	1641728	246802	39°10'14.5	80°45'49.2	0	0	0
	112	87.5	0.96	285.07	112	0.42	0.19	-0.71	1641727	246802.2	39°10'14.5	80°45'49.2	0.73	285.07	1.1
	212	100	0.64	273.79	211.99	1.13	0.45	-2.07	1641726	246802.5	39°10'14.5	80°45'49.3	2.12	282.118	0.36
	312	100	0.31	262.45	311.98	1.41	0.45	-2.9	1641725	246802.5	39°10'14.5	80°45'49.3	2.93	278.758	0.34
	412	100	0.23	264.11	411.98	1.52	0.39	-3.37	1641725	246802.4	39°10'14.5	80°45'49.3	3.39	276.616	0.08
	512	100	0.59	267.63	511.98	1.72	0.35	-4.08	1641724	246802.4	39°10'14.5	80°45'49.3	4.1	274.883	0.36
	612	100	0.54	266.04	611.97	2.01	0.29	-5.07	1641723	246802.3	39°10'14.5	80°45'49.3	5.07	273.331	0.05
	712	100	0.28	254.98	711.97	2.16	0.2	-5.77	1641722	246802.2	39°10'14.5	80°45'49.3	5.78	271.974	0.27
	812	100	0.28	251.62	811.97	2.19	0.06	-6.24	1641722	246802.1	39°10'14.5	80°45'49.3	6.24	270.538	0.02
	912	100	0.51	239.88	911.97	2.12	-0.24	-6.86	1641721	246801.8	39°10'14.5	80°45'49.3	6.86	267.98	0.24
	1012	100	0.48	224.59	1011.96	1.86	-0.76	-7.54	1641720	246801.2	39°10'14.5	80°45'49.3	7.57	264.215	0.14
	1112	100	0.19	206.24	1111.96	1.57	-1.21	-7.9	1641720	246800.8	39°10'14.5	80°45'49.3	8	261.292	0.31
	1212	100	0.4	120.84	1211.96	1.18	-1.54	-7.68	1641720	246800.5	39°10'14.4	80°45'49.3	7.83	258.67	0.43
	1312	100	0.43	118.32	1311.96	0.63	-1.9	-7.05	1641721	246800.1	39°10'14.4	80°45'49.3	7.3	254.947	0.04
	1412	100	0.27	110.36	1411.96	0.2	-2.16	-6.5	1641722	246799.8	39°10'14.4	80°45'49.3	6.84	251.645	0.17
	1512	100	0.11	108.81	1511.96	-0.02	-2.27	-6.18	1641722	246799.7	39°10'14.4	80°45'49.3	6.59	249.858	0.16
	1612	100	0.59	95.33	1611.95	-0.3	-2.35	-5.58	1641722	246799.7	39°10'14.4	80°45'49.3	6.05	247.191	0.48
	1712	100	0.48	61.7	1711.95	-0.46	-2.2	-4.7	1641723	246799.8	39°10'14.4	80°45'49.3	5.19	244.85	0.83
	1812	100	0.41	60.83	1811.95	-0.34	-1.82	-4.02	1641724	246800.2	39°10'14.4	80°45'49.3	4.41	245.593	0.07
	1912	100	0.46	59.69	1911.94	-0.21	-1.45	-3.36	1641725	246800.6	39°10'14.4	80°45'49.3	3.66	246.705	0.05
	2012	100	0.44	57.26	2011.94	-0.05	-1.04	-2.69	1641725	246801	39°10'14.5	80°45'49.3	2.88	248.933	0.03
	2112	100	0.69	56.56	2111.94	0.17	-0.5	-1.86	1641726	246801.5	39°10'14.5	80°45'49.3	1.93	255.086	0.25
	2212	100	1.05	41.49	2211.92	0.75	0.52	-0.75	1641727	246802.5	39°10'14.5	80°45'49.2	0.92	304.68	0.42
	2312	100	1.15	12.53	2311.91	2.03	2.19	0.07	1641728	246804.2	39°10'14.5	80°45'49.2	2.19	1.848	0.56
	2412	100	1.16	357.65	2411.89	3.84	4.18	0.25	1641728	246806.2	39°10'14.5	80°45'49.2	4.19	3.38	0.3
	2512	100	1.14	345.26	2511.87	5.8	6.15	-0.05	1641728	246808.2	39°10'14.5	80°45'49.2	6.15	359.555	0.25
	2612	100	1.1	333.04	2611.85	7.74	7.97	-0.74	1641727	246810	39°10'14.5	80°45'49.2	8	354.723	0.24
	2712	100	1.01	327.29	2711.83	9.55	9.57	-1.65	1641726	246811.6	39°10'14.6	80°45'49.3	9.71	350.229	0.14
	2812	100	1	327.66	2811.82	11.27	11.05	-2.59	1641725	246813.1	39°10'14.6	80°45'49.3	11.35	346.801	0.01
	2822	10	0.95	326.23	2821.81	11.43	11.19	-2.68	1641725	246813.2	39°10'14.6	80°45'49.3	11.51	346.513	0.56
	2846	24	1.24	343.54	2845.81	11.88	11.6	-2.87	1641725	246813.6	39°10'14.6	80°45'49.3	11.95	346.118	1.82
	2878	32	1.16	337.64	2877.8	12.55	12.23	-3.09	1641725	246814.2	39°10'14.6	80°45'49.3	12.62	345.83	0.46
	2909	31	0.84	53.63	2908.8	12.93	12.66	-3.03	1641725	246814.7	39°10'14.6	80°45'49.3	13.02	346.56	4.05
	2941	32	2.76	97.11	2940.78	12.65	12.7	-2.07	1641726	246814.7	39°10'14.6	80°45'49.3	12.87	350.737	6.96
	2972	31	5.44	104.06	2971.7	11.48	12.25	0.09	1641728	246814.3	39°10'14.6	80°45'49.2	12.25	0.443	8.78
	3004	32	7.95	104.97	3003.48	9.36	11.31	3.7	1641732	246813.3	39°10'14.6	80°45'49.2	11.9	18.131	7.85
	3036	32	9.59	97.94	3035.11	6.85	10.37	8.48	1641736	246812.4	39°10'14.6	80°45'49.1	13.4	39.274	6.11
	3067	31	10.61	89.83	3065.63	4.67	10.03	13.89	1641742	246812	39°10'14.6	80°45'49.1	17.13	54.189	5.64
	3102	35	12.14	83.72	3099.94	2.7	10.44	20.78	1641749	246812.4	39°10'14.6	80°45'49.0	23.25	63.326	5.56
	3133	31	14.65	82.1	3130.09	1.11	11.33	27.9	1641756	246813.3	39°10'14.6	80°45'48.9	30.11	67.893	8.19
	3165	32	16.84	82.91	3160.89	-0.78	12.46	36.51	1641765	246814.5	39°10'14.6	80°45'48.8	38.58	71.154	6.88
	3196	31	18.17	86.53	3190.46	-3.16	13.31	45.79	1641774	246815.3	39°10'14.6	80°45'48.7	47.68	73.794	5.54
	3228	32	18.02	92.75	3220.88	-6.49	13.37	55.72	1641784	246815.4	39°10'14.6	80°45'48.5	57.3	76.303	3.02
	3260	32	16.8	97.52	3251.41	-10.54	12.53	65.24	1641793	246814.5	39°10'14.6	80°45'48.4	66.44	79.129	5.86
	3291	31	15.26	101.18	3281.21	-14.72	11.15	73.69	1641802	246813.2	39°10'14.6	80°45'48.3	74.53	81.394	5.94
	3323	32	14.67	102.58	3312.12	-19.09	9.45	81.78	1641810	246811.5	39°10'14.6	80°45'48.2	82.32	83.406	2.16
	3354	31	13.25	100.64	3342.2	-23.01	7.94	89.1	1641817	246809.9	39°10'14.6	80°45'48.1	89.45	84.906	4.82
	3386	32	12.68	100.85	3373.39	-26.68	6.6	96.15	1641824	246808.6	39°10'14.5	80°45'48.0	96.38	86.071	1.79
	3417	31	12.95	96.43	3403.62	-29.97	5.57	102.95	1641831	246807.6	39°10'14.5	80°45'47.9	103.1	86.9	3.28
	3449	32	13.51	93.46	3434.77	-33.05	4.95	110.24	1641838	246807	39°10'14.5	80°45'47.8	110.35	87.43	2.75
	3480	31	14.79	92.52	3464.83	-36.01	4.56	117.81	1641846	246806.6	39°10'14.5	80°45'47.7	117.9	87.786	4.19
	3512	32	15.21	93.04	3495.74	-39.22	4.15	126.08	1641854	246806.2	39°10'14.5	80°45'47.6	126.15	88.113	1.38
	3543	31	15.54	96.3	3525.63	-42.65	3.48	134.27	1641862	246805.5	39°10'14.5	80°45'47.5	134.31	88.515	2.98

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3575	32	15.83	98.38	3556.44	-46.62	2.37	142.85	1641871	246804.4	39°10'14.5	80°45'47.4	142.87	89.047	1.98
3606	31	15.6	97.92	3586.28	-50.59	1.18	151.16	1641879	246803.2	39°10'14.5	80°45'47.3	151.16	89.551	0.84
3669	63	14.95	97.39	3647.05	-58.29	-1.03	167.61	1641896	246801	39°10'14.5	80°45'47.1	167.61	90.351	1.06
3732	63	14.49	95.15	3707.98	-65.38	-2.78	183.52	1641912	246799.2	39°10'14.5	80°45'46.9	183.54	90.868	1.16
3795	63	13.61	94.6	3769.1	-71.81	-4.08	198.75	1641927	246797.9	39°10'14.5	80°45'46.7	198.8	91.177	1.41
3858	63	14.52	93.32	3830.21	-78.03	-5.13	214.03	1641942	246796.9	39°10'14.4	80°45'46.5	214.09	91.374	1.53
3921	63	14.5	93.84	3891.2	-84.34	-6.12	229.78	1641958	246795.9	39°10'14.4	80°45'46.3	229.86	91.526	0.21
3985	64	14.19	94.8	3953.2	-90.87	-7.31	245.59	1641974	246794.7	39°10'14.4	80°45'46.1	245.7	91.706	0.61
4048	63	14.04	96.39	4014.3	-97.51	-8.81	260.88	1641989	246793.2	39°10'14.4	80°45'45.9	261.03	91.934	0.66
4114	66	15.43	99.21	4078.13	-105.35	-11.11	277.51	1642006	246790.9	39°10'14.4	80°45'45.7	277.73	92.292	2.37
4177	63	15.57	98.63	4138.84	-113.49	-13.72	294.14	1642022	246788.3	39°10'14.4	80°45'45.5	294.46	92.67	0.33
4240	63	14.69	99.83	4199.66	-121.52	-16.35	310.37	1642038	246785.7	39°10'14.3	80°45'45.3	310.8	93.015	1.48
4303	63	13.9	98.32	4260.7	-129.08	-18.81	325.73	1642054	246783.2	39°10'14.3	80°45'45.1	326.27	93.305	1.39
4366	63	13.82	95.91	4321.87	-135.96	-20.68	340.7	1642069	246781.3	39°10'14.3	80°45'44.9	341.33	93.473	0.93
4429	63	14.04	92.42	4383.02	-142.16	-21.77	355.82	1642084	246780.2	39°10'14.3	80°45'44.7	356.48	93.502	1.38
4492	63	14.01	95.58	4444.14	-148.37	-22.84	371.04	1642099	246779.2	39°10'14.3	80°45'44.5	371.75	93.522	1.22
4556	64	15.42	102.07	4506.05	-156.23	-25.37	387.08	1642115	246776.6	39°10'14.3	80°45'44.3	387.91	93.75	3.39
4619	63	14.86	101.53	4566.86	-164.9	-28.74	403.18	1642131	246773.3	39°10'14.2	80°45'44.1	404.21	94.077	0.92
4681	62	14.44	100.44	4626.84	-172.98	-31.73	418.58	1642147	246770.3	39°10'14.2	80°45'43.9	419.78	94.335	0.81
4776	95	15.74	98.33	4718.57	-185.09	-35.74	442.97	1642171	246766.3	39°10'14.2	80°45'43.6	444.41	94.613	1.49
4839	63	15.27	96.97	4779.27	-192.91	-37.99	459.66	1642188	246764	39°10'14.2	80°45'43.4	461.23	94.724	0.94
4902	63	14.62	96.9	4840.14	-200.27	-39.95	475.79	1642204	246762.1	39°10'14.1	80°45'43.2	477.47	94.799	1.03
4965	63	14.19	95.96	4901.16	-207.25	-41.7	491.37	1642219	246760.3	39°10'14.1	80°45'43.0	493.13	94.851	0.78
5028	63	14.87	96.85	4962.15	-214.28	-43.47	507.07	1642235	246758.5	39°10'14.1	80°45'42.8	508.93	94.9	1.14
5126	98	15.83	97.62	5056.65	-226.15	-46.74	532.81	1642261	246755.3	39°10'14.1	80°45'42.5	534.85	95.014	1
5220	94	17.86	96.73	5146.61	-238.58	-50.13	559.83	1642288	246751.9	39°10'14.0	80°45'42.1	562.07	95.117	2.18
5315	95	17.82	102.11	5237.05	-252.86	-54.89	588.51	1642317	246747.1	39°10'14.0	80°45'41.8	591.07	95.328	1.73
5409	94	17.42	101.5	5326.64	-267.86	-60.71	616.37	1642344	246741.3	39°10'14.0	80°45'41.4	619.35	95.626	0.47
5504	95	16.38	98.15	5417.54	-281.61	-65.45	643.56	1642372	246736.6	39°10'13.9	80°45'41.1	646.88	95.807	1.5
5599	95	16.02	101.43	5508.77	-294.77	-69.94	669.67	1642398	246732.1	39°10'13.9	80°45'40.7	673.31	95.963	1.03
5693	94	15.26	101.55	5599.29	-308	-74.99	694.51	1642422	246727	39°10'13.8	80°45'40.4	698.54	96.163	0.81
5788	95	14.05	100.28	5691.19	-320.36	-79.55	718.1	1642446	246722.5	39°10'13.8	80°45'40.1	722.49	96.322	1.32
5882	94	15.44	99.13	5782.1	-332.2	-83.57	741.68	1642470	246718.4	39°10'13.7	80°45'39.8	746.38	96.429	1.51
5977	95	15.35	101.03	5873.69	-344.84	-87.99	766.51	1642494	246714	39°10'13.7	80°45'39.5	771.54	96.548	0.54
6063	86	13.84	87.46	5956.93	-353.8	-89.71	787.97	1642516	246712.3	39°10'13.7	80°45'39.2	793.06	96.495	4.33
6112	49	13.2	59.8	6004.63	-354.57	-86.63	798.67	1642527	246715.4	39°10'13.7	80°45'39.1	803.35	96.191	13.14
6157	45	12.51	40.78	6048.52	-351.28	-80.35	806.3	1642534	246721.7	39°10'13.8	80°45'39.0	810.29	95.691	9.48
6206	49	12.93	41.16	6096.32	-346.04	-72.21	813.37	1642541	246729.8	39°10'13.9	80°45'38.9	816.57	95.073	0.87
6252	46	13.95	37.6	6141.06	-340.59	-63.94	820.14	1642548	246738.1	39°10'13.9	80°45'38.8	822.63	94.458	2.85
6301	49	14.83	23	6188.53	-332.84	-53.48	826.2	1642554	246748.5	39°10'14.1	80°45'38.7	827.93	93.704	7.6
6346	45	15.51	16	6231.97	-323.75	-42.4	830.11	1642558	246759.6	39°10'14.2	80°45'38.7	831.19	92.924	4.34
6395	49	16.48	16	6279.07	-312.83	-29.42	833.83	1642562	246772.6	39°10'14.3	80°45'38.6	834.35	92.021	1.98
6439	44	17.66	12.31	6321.13	-302.14	-16.9	836.97	1642565	246785.1	39°10'14.4	80°45'38.6	837.14	91.157	3.64
6489	50	20.4	5.37	6368.4	-287.85	-0.81	839.4	1642567	246801.2	39°10'14.6	80°45'38.6	839.4	90.055	7.1
6531	42	20.42	2.43	6407.77	-274.47	13.8	840.4	1642568	246815.8	39°10'14.7	80°45'38.6	840.51	89.059	2.44
6582	51	19.94	3.04	6455.64	-258.24	31.37	841.24	1642569	246833.4	39°10'14.9	80°45'38.6	841.82	87.864	1.03
6633	51	19.36	4.55	6503.67	-242.55	48.48	842.37	1642570	246850.5	39°10'15.1	80°45'38.5	843.76	86.706	1.51
6677	44	20.33	4.29	6545.05	-228.95	63.38	843.52	1642572	246865.4	39°10'15.2	80°45'38.5	845.9	85.703	2.21
6727	50	24.91	2.68	6591.19	-211.3	82.57	844.66	1642573	246884.6	39°10'15.4	80°45'38.5	848.69	84.417	9.24
6771	44	29.05	0.45	6630.4	-192.74	102.51	845.18	1642573	246904.5	39°10'15.6	80°45'38.5	851.38	83.084	9.68
6821	50	34.38	358.41	6672.92	-167.95	128.78	844.88	1642573	246930.8	39°10'15.9	80°45'38.5	854.64	81.333	10.87
6865	44	39.49	357.91	6708.08	-142.83	155.2	844.03	1642572	246957.2	39°10'16.1	80°45'38.5	858.18	79.581	11.63
6916	51	42.96	356.08	6746.43	-110.69	188.76	842.25	1642570	246990.8	39°10'16.4	80°45'38.6	863.14	77.368	7.2
6960	44	47.34	353.25	6777.46	-80.52	219.8	839.32	1642567	247021.8	39°10'16.8	80°45'38.6	867.62	75.325	10.95
7011	51	53.81	350.98	6809.83	-42.02	258.79	833.88	1642562	247060.8	39°10'17.1	80°45'38.7	873.12	72.759	13.14
7055	44	58.03	350.16	6834.48	-6.2	294.73	827.91	1642556	247096.7	39°10'17.5	80°45'38.8	878.81	70.404	9.71
7106	51	63.04	349.95	6859.56	37.5	338.45	820.24	1642548	247140.4	39°10'17.9	80°45'38.9	887.32	67.578	9.83
7150	44	66.15	349.01	6878.43	76.7	377.53	812.98	1642541	247179.5	39°10'18.3	80°45'39.0	896.36	65.091	7.33
7196	46	72.08	348.38	6894.83	119.17	419.65	804.55	1642533	247221.6	39°10'18.7	80°45'39.1	907.42	62.454	12.95
7244	48	76.71	346.69	6907.74	164.99	464.77	794.57	1642523	247266.8	39°10'19.2	80°45'39.2	920.52	59.675	10.22
7287	43	80.51	344.94	6916.23	206.91	505.63	784.24	1642512	247307.6	39°10'19.6	80°45'39.4	933.11	57.188	9.7
7339	52	82.81	344.22	6923.77	258.2	555.23	770.56	1642499	247357.2	39°10'20.1	80°45'39.5	949.76	54.225	4.63
7385	46	83.86	343.25	6929.11	303.79	599.09	757.76	1642486	247401.1	39°10'20.5	80°45'39.7	965.98	51.67	3.1
7434	49	89.01	342.78	6932.15	352.61	645.84	743.48	1642471	247447.8	39°10'21.0	80°45'39.9	984.82	49.02	10.55
7530	96	90.52	345.16	6932.55	448.37	738.1	716.97	1642445	247540.1	39°10'21.9	80°45'40.3	1029	44.168	2.94
7625	95	91.2	346.95	6931.12	542.82	830.28	694.08	1642422	247632.3	39°10'22.8	80°45'40.6	1082.18	39.691	1.64
7719	94	90.46	344.02	6929.76	636.37	921.26	670.53	1642399	247723.2	39°10'23.7	80°45'40.9	1139.45	36.048	3.21
7815	96	89.63	343.9	6929.68	732.14	1013.53	644	1642372	247815.5	39°10'24.6	80°45'41.2	1200.82	32.432	0.87
7910	95	88.86	340.09	6930.94	827.06	1103.85	614.65	1642343	247905.8	39°10'25.5	80°45'41.6	1263.44	29.11	4.09
8005	95	88.89	341.22	6932.8	922.03	1193.47	583.19	1642311	247995.4	39°10'26.3	80°45'42.0	1328.33	26.042	1.19
8100	95	88.98	336.61	6934.57	1016.97	1282.07	549.02	1642277	248084	39°10'27.2	80°45'42.5	1394.68	23.382	4.85
8194	94	89.6	332.44	6935.73	1110.51	1366.9	508.6	1642237	248168.9	39°10'28.0	80°45'43.0	1458.46	20.41	4.48
8289	95	89.48	332.11	6936.5	1204.65	1450.99	464.41	1642192	248253	39°10'28.9	80°45'43.6	1523.5	17.748	0.37
8384	95	89.54	330.51	6937.31	1298.55	1534.32	418.81	1642147	248336.3	39°10'29.7	80°45'44.2	1590.45	15.26	1.68
8479	95	90.25	331.13	6937.48	1392.33	1617.26	372.49	1642100	248419.2	39°10'30.5	80°45'44.8	1659.61	12.97	0.99
8574	95	90.34	336.24	6936.99	1486.72	1702.39	330.39	1642058	248504.3	39°10'31.3	80°45'45.3	1734.15	10.985	3.38
8669	95	90.43	339.92	6936.35	1581.65	1790.51	294.93	1642023	248592.5	39°10'32.2	80°45'45.8	1814.63	9.354	3.87
8764	95	89.97	341.34	6936.02	1676.64	1880.13	263.42	1641991	248682.1	39°10'33.1	80°45'46.2	1898.49	7.976	1.57
8858	94	89.48	344.27	6936.47	1770.52	1969.91	235.64	1641964	248771.9	39°10'34.0	80°45'46.6	1983.96	6.821	3.16
8953	95	89.6	342.46	6937.24	1865.35	2060.93	208.44	1641936	248862.9	39°10'34.9	80°45'47.0	2071.44	5.775	1.91
9047	94	88.86	342.5	6938.5	1959.25	2150.56	180.15	1641908	248952.5	39°10'35.7	80°45'47.3	2158.09	4.788	0.79
9142	95	90.52	346.45	6939.01	2053.94	2242.07	154.73	1641883	249044	39°10'36.6	80°45'47.7	2247.4	3.948	4.51
9237	95	90.09	341.45	6938.51	2148.68	2333.34	128.47	1641856	249135.3	39°10'37.5	80°45'48.0	2336.87	3.151	5.28
9332	95	92.15	337.48	6936.65	2243.63	2422.26	95.16	1641823	249224.2	39°10'38.4	80°45'48.5	2424.13	2.25	4.71
9427	95	91.75	336.54	6933.42	2338.45	2509.67	58.08	1641786	249311.6	39°10'39.3	80°45'48.9	2510.34	1.326	1.07
9522	95	90.92	336.79	6931.2	2433.26	2596.87	20.46	1641748	249398.8	39°10'40.1	80°45'49.4	2596.95	0.451	0.91
9618	96	90.55	332.58	6929.97	2528.82	2683.62	-20.57	1641707	249485.5	39°10'41.0	80°45'50.0	2683.7	359.561	4.4
9713	95	90.34	328.89	6929.23	2622.56	2766.48	-67.01	1641661	249568.4	39°10'41.8	80°45'50.6	2767.29	358.613	3.89
9808	95	91.23	332.07	6927.93	2716.23	2849.13	-113.8	1641614	249651.1	39°10'42.6	80°45'51.2	2851.4	357.713	3.48
9903	95	91.75	340.82	6925.46	2810.92	2936.1	-151.72	1641576	249738	39°10'43.5	80°45'51.7	2940.02	357.042	9.22
9998	95	90.89	343.8	6923.27	2905.81	3026.57	-180.58	1641547	249828.5	39°10'44.4	80°45'52.1	3031.96	356.586	3.26
10092	94	90.74	345.76	6921.93	2999.47	3117.26	-205.25	1641523	249919.2	39°10'45.2	80°45'52.4	3124.01	356.233	2.09
10187	95	90.43	348.16	6920.96	3093.76	3209.8	-226.68	1641501	250011.7	39°10'46.2	80°45'52.7	3217.8	355.96	2.55
10281	94	90.46	346.51	6920.23	3186.98	3301.51	-247.29	1641481	250103.4	39°10'47.1	80°45'53.0	3310.76	355.716	1.76
10376	95	90	342.67	6919.85	3281.66	3393.07	-272.53	1641455	250195	39°10'48.0	80°45'53.3	3404	355.408	4.07
10471	95	89.82	338.93	6920	3376.63	3482.77	-303.76	1641424	250284.7	39°10'48.8	80°45'53.7	3496	355.015	3.94
10566	95	90.62	337.49	6919.63	3471.58	3570.98	-339.03	1641389	250372.9	39°10'49.7	80°45'54.2	3587.04	354.577	1.73
10662	96	90.74	333.4	6918.49	3567.25	3658.28	-378.91	1641349	250460.2	39°10'50.6	80°45'54.7	3677.85	354.087	4.26
10757	95	90.95	334.74	6917.09	3661.73	3743.7	-420.45	1641308	250545.6	39°10'51.4	80°45'55.2	3767.24	353.592	1.43
10853	96	91.17	341.62	6915.32	3757.61	3832.75	-456.1	1641272	250634.6	39°10'52.3	80°45'55.7	3859.8	353.214	7.17
10948	95	91.11	344.42	6913.43	3852.45	3923.59	-483.84	1641244	250725.5	39°10'53.2	80°45'56.1	3953.31	352.97	2.95

17.06412

11043	95	91.14	345.25	6911.56	3947.09	4015.26	-508.68	1641219	250817.1	39°10'54.1	80°45'56.4	4047.35	352.78	0.87
11137	94	90.99	342.81	6909.81	4040.83	4105.61	-534.54	1641193	250907.5	39°10'55.0	80°45'56.8	4140.26	352.582	2.6
11232	95	91.11	339.92	6908.07	4135.78	4195.6	-564.89	1641163	250997.5	39°10'55.9	80°45'57.2	4233.46	352.332	3.04
11327	95	91.69	338.6	6905.75	4230.74	4284.42	-598.52	1641130	251086.3	39°10'56.7	80°45'57.6	4326.02	352.047	1.52
11423	96	91.57	337.71	6903.02	4326.65	4373.49	-634.23	1641094	251175.4	39°10'57.6	80°45'58.1	4419.24	351.749	0.94
11518	95	91.48	337.95	6900.49	4421.55	4461.43	-670.06	1641058	251263.3	39°10'58.5	80°45'58.5	4511.47	351.459	0.27
11613	95	91.63	337.57	6897.91	4516.44	4549.33	-706	1641022	251351.2	39°10'59.3	80°45'59.0	4603.79	351.179	0.43
11708	95	91.05	337.62	6895.69	4611.33	4637.14	-742.2	1640986	251439	39°11'00.2	80°45'59.5	4696.16	350.907	0.61
11803	95	90.99	337.83	6894	4706.24	4725.03	-778.21	1640950	251526.9	39°11'01.1	80°46'00.0	4788.69	350.647	0.23
11898	95	90.83	337.22	6892.49	4801.14	4812.81	-814.52	1640914	251614.7	39°11'01.9	80°46'00.4	4881.25	350.394	0.66
11993	95	90.68	337.67	6891.24	4896.04	4900.53	-850.96	1640877	251702.4	39°11'02.8	80°46'00.9	4973.87	350.149	0.5
12089	96	91.23	338.09	6889.64	4991.96	4989.45	-887.1	1640841	251791.3	39°11'03.7	80°46'01.4	5067.7	349.918	0.72
12184	95	91.29	340.06	6887.55	5086.92	5078.16	-921.02	1640807	251880	39°11'04.5	80°46'01.8	5161.01	349.72	2.07
12279	95	91.11	341.68	6885.56	5181.88	5167.89	-952.14	1640776	251969.7	39°11'05.4	80°46'02.2	5254.87	349.561	1.72
12375	96	91.35	344.54	6883.5	5277.71	5259.72	-980.02	1640748	252061.6	39°11'06.3	80°46'02.6	5350.25	349.445	2.99
12469	94	91.11	345.3	6881.48	5371.34	5350.46	-1004.47	1640724	252152.3	39°11'07.2	80°46'02.9	5443.94	349.367	0.85
12564	95	91.17	338.43	6879.59	5466.22	5440.67	-1034.02	1640694	252242.5	39°11'08.1	80°46'03.3	5538.06	349.239	7.23
12659	95	91.51	335.26	6877.37	5561.03	5527.99	-1071.36	1640657	252329.8	39°11'08.9	80°46'03.8	5630.85	349.032	3.36
12754	95	91.54	334.72	6874.84	5655.64	5614.05	-1111.51	1640617	252415.9	39°11'09.8	80°46'04.4	5723.02	348.801	0.57
12849	95	91.54	337.77	6872.29	5750.39	5700.96	-1149.76	1640578	252502.8	39°11'10.6	80°46'04.9	5815.74	348.598	3.21
12944	95	91.82	343.41	6869.5	5845.3	5790.48	-1181.31	1640547	252592.3	39°11'11.5	80°46'05.3	5909.75	348.469	5.94
13039	95	91.66	343.71	6866.61	5940.08	5881.56	-1208.18	1640520	252683.4	39°11'12.4	80°46'05.6	6004.36	348.392	0.36
13134	95	91.57	342.57	6863.94	6034.89	5972.43	-1235.72	1640492	252774.3	39°11'13.3	80°46'06.0	6098.93	348.31	1.2
13229	95	91.51	341.67	6861.38	6129.79	6062.81	-1264.88	1640463	252864.6	39°11'14.2	80°46'06.4	6193.35	348.215	0.95
13324	95	91.63	339.95	6858.78	6224.75	6152.5	-1296.09	1640432	252954.3	39°11'15.1	80°46'06.8	6287.53	348.104	1.81
13419	95	91.6	337.57	6856.1	6319.68	6241	-1330.49	1640398	253042.8	39°11'16.0	80°46'07.2	6381.25	347.966	2.5
13513	94	91.54	336.62	6853.53	6413.52	6327.56	-1367.06	1640361	253129.4	39°11'16.8	80°46'07.7	6473.55	347.809	1.01
13608	95	91.6	340.4	6850.92	6508.44	6415.9	-1401.85	1640326	253217.7	39°11'17.7	80°46'08.2	6567.27	347.675	3.98
13702	94	91.82	345.73	6848.12	6602.23	6505.75	-1429.2	1640299	253307.6	39°11'18.6	80°46'08.5	6660.89	347.61	5.67
13797	95	91.66	346.07	6845.23	6696.68	6597.85	-1452.34	1640276	253399.7	39°11'19.5	80°46'08.9	6755.81	347.586	0.4
13892	95	91.48	338.37	6842.62	6791.5	6688.21	-1481.31	1640247	253490	39°11'20.4	80°46'09.2	6850.29	347.512	8.1
13986	94	91.6	334.19	6840.1	6885.25	6774.22	-1519.11	1640209	253576	39°11'21.2	80°46'09.7	6942.46	347.361	4.45
14081	95	91.23	338.23	6837.75	6979.99	6861.1	-1557.41	1640171	253662.9	39°11'22.1	80°46'10.2	7035.64	347.211	4.27
14176	95	91.2	345.02	6835.73	7074.88	6951.19	-1587.33	1640141	253753	39°11'22.9	80°46'10.6	7130.12	347.137	7.15
14271	95	91.32	344.9	6833.64	7169.5	7042.91	-1611.98	1640116	253844.7	39°11'23.8	80°46'11.0	7225.03	347.108	0.18
14366	95	91.45	346.43	6831.35	7264	7134.92	-1635.49	1640093	253936.7	39°11'24.8	80°46'11.3	7319.97	347.09	1.62
14460	94	91.6	345.06	6828.85	7357.5	7225.99	-1658.63	1640069	254027.8	39°11'25.6	80°46'11.6	7413.91	347.072	1.47
14555	95	91.75	339.06	6826.07	7452.35	7316.29	-1687.86	1640040	254118.1	39°11'26.5	80°46'12.0	7508.46	347.009	6.32
14650	95	92.12	337.19	6822.86	7547.24	7404.4	-1723.24	1640005	254206.2	39°11'27.4	80°46'12.4	7602.28	346.899	2.01
14745	95	92.65	336.55	6818.91	7642.02	7491.69	-1760.52	1639968	254293.5	39°11'28.3	80°46'12.9	7695.77	346.776	0.87
14796	51	92.62	337.18	6816.56	7692.89	7538.54	-1780.54	1639948	254340.3	39°11'28.7	80°46'13.2	7745.96	346.711	1.24
14821	25	92.62	337.18	6815.42	7717.83	7561.55	-1790.22	1639938	254363.3	39°11'28.9	80°46'13.3	7770.59	346.68	0

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	Comment
OXFD-11D-HS LP Plat	6870	897.03	629.02	1642357	247699	39°10'23.4	80°45'41.4	point		
OXFD-11D-HS BHL Rev	6925	7560.23	-1796.05	1639932	254362	39°11'28.9	80°46'13.4	point		
OXFD-11D-HS LP Rev-2	6925	597.1	738.32	1642466	247399.1	39°10'20.5	80°45'40.0	point		
OXFD-11-HS POINT TO	7000.07	3192.55	978.81	1642707	249994.5	39°10'46.2	80°45'37.4	point		

WELLPATH COMPOSITION Ref Wellbore: OXFD-11D-HS AWB Ref Wellpath: OXFD-11D-HS AWP Proj: 14821'

Log Name/	Start MD [ft]	End MD [ft]	Pos Unc Model
01_Gyro (1	24.5	2822	Generic gyro - northseeking (Standard)
02_Weath	2822	5977	ISCWSA MWD, Rev. 2 (Standard)
03_BHI AT	5977	14796	NaviTrak (AT Curve Short Spaced)
Projection	14796	14821	Blind Drilling (std)

COMMENTS

Wellpath general comments
API: 47-017-06412-0000
Rig: Patterson 324
Job#: 6616612
Duration: 10.03.2014-10.09.2014
Gyro (100'-2810')
Weatherford MWD (2810')(2834'-5965')
BHI AT Curve <8-3/4> (5977')(6063'-14796')"
Projection to MD AT TD 14821'

10/09/2015