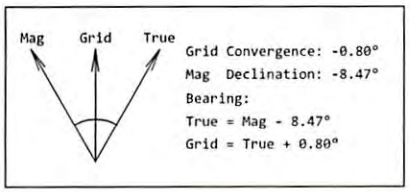
CNX GAS

Weatherford

CONSOL ENERGY
OXF13IHS
DODDRIDGE COUNTY, WV
PLAN 1



Plan Data for IHS

Plan Point Information:

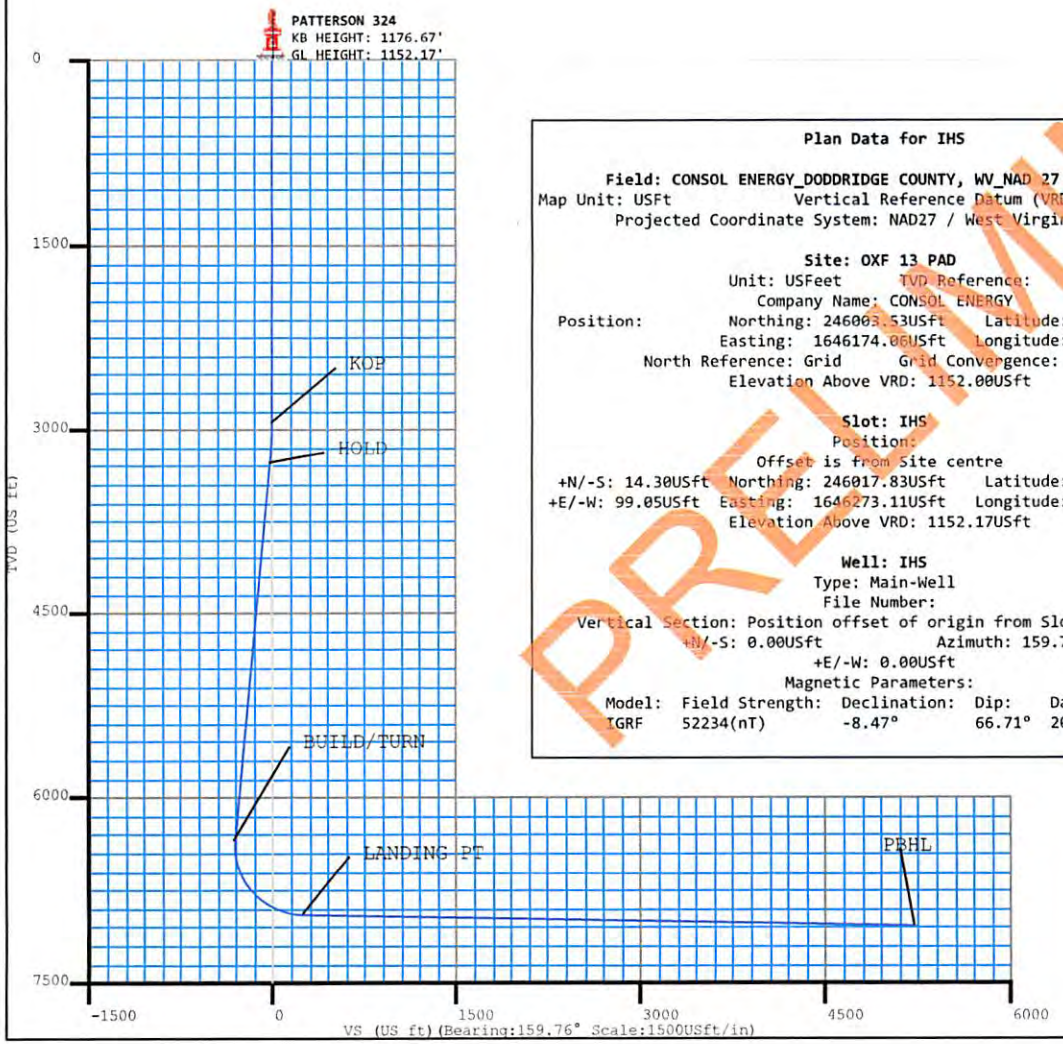
DogLeg Severity Unit: °/100.00ft — Position offsets from Slot centre

MD (USft)	Inc (°)	Az (°)	TVD (USft)	+N/-S (USft)	+E/-W (USft)	VSec (USft)	DLS (DLSU)	Build (DLSU)	Turn (DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2950.00	0.00	0.00	2950.00	0.00	0.00	0.00	0.00	0.00	0.00
3278.02	16.40	51.24	3273.56	29.19	36.36	-14.81	5.00	5.00	0.00
6482.80	16.40	51.24	6347.93	595.69	742.00	-302.21	0.00	0.00	0.00
7424.63	89.00	159.76	6950.00	126.40	1090.90	258.81	10.00	7.71	11.52
12395.66	89.00	159.76	7036.75	-4537.09	2810.07	5229.08	0.00	0.00	0.00

Plan Data for IHS

Target Set Information:
Name: OXF 13 IHS TARGETS
Position offsets from Slot centre

Name	TVD (USft)	+N/-S (USft)	+E/-W (USft)	Northing (USft)	Easting (USft)
IHS LP	6950.00	126.40	1090.90	246144.23	1647364.01
IHS PBHL	6950.00	-4537.80	2810.34	241480.04	1649083.45



Plan Data for IHS

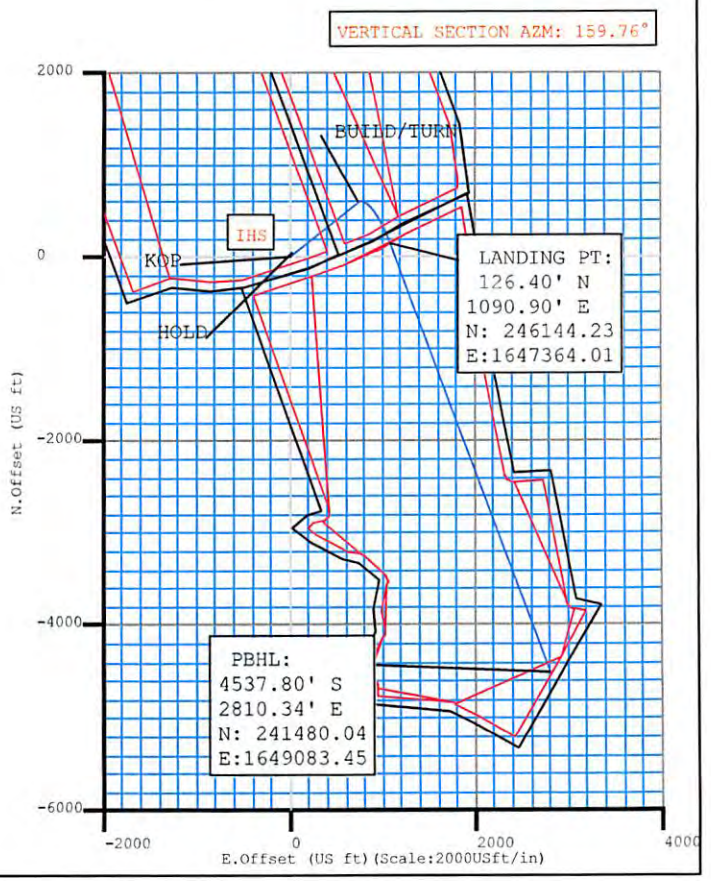
Field: CONSOL ENERGY_DODDRIDGE COUNTY, WV_NAD 27 (WV NORTH)
Map Unit: USFt — Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD27 / West Virginia North

Site: OXF 13 PAD
Unit: USFeet — TVD Reference:
Company Name: CONSOL ENERGY
Position: Northing: 246003.53USft — Latitude: 39°10'7.237"
Easting: 1646174.06USft — Longitude: -80°44'52.693"
North Reference: Grid — Grid Convergence: -0.80°
Elevation Above VRD: 1152.00USft

Slot: IHS
Position:
Offset is from Site centre
+N/-S: 14.30USft — Northing: 246017.83USft — Latitude: 39°10'7.392"
+E/-W: 99.05USft — Easting: 1646273.11USft — Longitude: -80°44'51.438"
Elevation Above VRD: 1152.17USft

Well: IHS
Type: Main-Well
File Number:
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft — Azimuth: 159.76°
+E/-W: 0.00USft
Magnetic Parameters:

Model:	Field Strength:	Declination:	Dip:	Date:
IGRF	52234(nT)	-8.47°	66.71°	2014-06-25



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-13 Pad
Slot Slot I
Well OXF-13I-HS
Wellbore OXF-13I-HS AWB
Wellpath OXF-13I-HS AWP Proj: 11935'
Sidetrack (none)

REPORT SETUP INFORMATION
Projection NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
North Refe Grid
Scale 0.999972
Convergen 0.80° West
Software S WellArchitect® 4.0.1
User Edsaryar
Report Ger 03/Jul/2015 at 14:12
DataBase/S WellArchitectEasternDB/ev3738.xml

WELLPATH	Local North [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Locatic	14.32	99.07	1646273	246017.8	39°10'07.3	80°44'51.438"W
Facility Ref			1646174	246003.5	39°10'07.2	80°44'52.693"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 805 (RKB)
MD Refere Patterson 805 (RKB)
Field Vertic Mean Sea Level
Patterson ł 1180.67ft
Patterson ł 1180.67ft
Patterson ł 28.50ft
Section Ori N 0.00, E 0.00 ft
Section Azi 160.00°

WELLPATH DATA † = interpolated/extrapolated station

	MD [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]	Build Rate [°/100ft]	Turn Rate [°/100ft]
†	0	0	328.01	0	0	0	0	1646273	246017.8	39°10'07.3	80°44'51.4	0	0	0	0	0
	28.5	0	328.01	28.5	0	0	0	1646273	246017.8	39°10'07.3	80°44'51.4	0	0	0	0	0
	100	0.47	328.01	100	-0.29	0.25	-0.16	1646273	246018.1	39°10'07.3	80°44'51.4	0.29	328.01	0.66	0.66	0
	200	0.6	319.66	199.99	-1.18	1	-0.71	1646272	246018.8	39°10'07.4	80°44'51.4	1.22	324.448	0.15	0.13	-8.35
	300	0.21	321.84	299.99	-1.84	1.54	-1.16	1646272	246019.4	39°10'07.4	80°44'51.4	1.93	322.902	0.39	-0.39	2.18
	400	0.3	329.42	399.99	-2.28	1.91	-1.41	1646272	246019.7	39°10'07.4	80°44'51.4	2.37	323.538	0.1	0.09	7.58
	500	0.35	302.26	499.99	-2.77	2.3	-1.8	1646271	246020.1	39°10'07.4	80°44'51.4	2.92	321.889	0.16	0.05	-27.16
	600	0.43	308.02	599.99	-3.33	2.69	-2.36	1646271	246020.5	39°10'07.4	80°44'51.4	3.58	318.802	0.09	0.08	5.76
	700	0.52	312.1	699.98	-4.05	3.23	-2.99	1646270	246021.1	39°10'07.4	80°44'51.4	4.4	317.197	0.1	0.09	4.08
	800	0.28	293.58	799.98	-4.62	3.63	-3.55	1646270	246021.5	39°10'07.4	80°44'51.4	5.08	315.637	0.27	-0.24	-18.52
	900	0.3	307.76	899.98	-5.01	3.89	-3.98	1646269	246021.7	39°10'07.4	80°44'51.4	5.56	314.322	0.07	0.02	14.18
	1000	0.33	272.49	999.98	-5.34	4.06	-4.47	1646269	246021.9	39°10'07.4	80°44'51.4	6.04	312.216	0.19	0.03	-35.27
	1100	0.2	251.75	1099.98	-5.46	4.02	-4.93	1646268	246021.9	39°10'07.4	80°44'51.5	6.36	309.187	0.16	-0.13	-20.74
	1200	0.22	244.14	1199.98	-5.45	3.88	-5.27	1646268	246021.7	39°10'07.4	80°44'51.5	6.54	306.373	0.03	0.02	-7.61
	1300	0.22	254.59	1299.98	-5.44	3.74	-5.62	1646267	246021.6	39°10'07.4	80°44'51.5	6.76	303.652	0.04	0	10.45
	1400	0.22	257.24	1399.98	-5.48	3.65	-6	1646267	246021.5	39°10'07.4	80°44'51.5	7.02	301.332	0.01	0	2.65
	1500	0.27	273.29	1499.97	-5.6	3.62	-6.42	1646267	246021.5	39°10'07.4	80°44'51.5	7.37	299.432	0.08	0.05	16.05
	1600	0.29	275.29	1599.97	-5.8	3.66	-6.91	1646266	246021.5	39°10'07.4	80°44'51.5	7.82	297.912	0.02	0.02	2
	1700	0.21	278.57	1699.97	-6	3.71	-7.34	1646266	246021.5	39°10'07.4	80°44'51.5	8.22	296.811	0.08	-0.08	3.28
	1800	0.25	239.01	1799.97	-6.04	3.62	-7.71	1646265	246021.5	39°10'07.4	80°44'51.5	8.52	295.183	0.16	0.04	-39.56
	1900	0.44	253.48	1899.97	-6.02	3.4	-8.26	1646265	246021.2	39°10'07.4	80°44'51.5	8.94	292.382	0.21	0.19	14.47
	2000	0.25	254.82	1999.97	-6.06	3.24	-8.84	1646264	246021.1	39°10'07.4	80°44'51.5	9.41	290.104	0.19	-0.19	1.34
	2100	0.21	262.38	2099.97	-6.12	3.15	-9.23	1646264	246021	39°10'07.4	80°44'51.5	9.76	288.864	0.05	-0.04	7.56
	2200	0.18	260.42	2199.97	-6.19	3.1	-9.57	1646264	246020.9	39°10'07.4	80°44'51.5	10.06	287.972	0.03	-0.03	-1.96
	2300	0.13	232.41	2299.97	-6.18	3.01	-9.81	1646263	246020.8	39°10'07.4	80°44'51.5	10.27	287.044	0.09	-0.05	-28.01
	2400	0.1	239.77	2399.97	-6.13	2.9	-9.98	1646263	246020.7	39°10'07.4	80°44'51.5	10.39	286.181	0.03	-0.03	7.36
	2500	0.16	288.11	2499.97	-6.21	2.9	-10.19	1646263	246020.7	39°10'07.4	80°44'51.5	10.59	285.864	0.12	0.06	48.34
	2600	0.35	287.6	2599.96	-6.48	3.03	-10.61	1646263	246020.9	39°10'07.4	80°44'51.5	11.04	285.941	0.19	0.19	-0.51
	2700	0.43	289.73	2699.96	-6.9	3.25	-11.26	1646262	246021.1	39°10'07.4	80°44'51.5	11.72	286.105	0.08	0.08	2.13
	2800	0.5	279.4	2799.96	-7.36	3.45	-12.04	1646261	246021.3	39°10'07.4	80°44'51.5	12.52	285.981	0.11	0.07	-10.33
	2823	1.03	274.04	2822.96	-7.49	3.48	-12.35	1646261	246021.3	39°10'07.4	80°44'51.5	12.83	285.738	2.32	2.3	-23.3
	2909	0.74	292.59	2908.95	-8.18	3.75	-13.63	1646259	246021.6	39°10'07.4	80°44'51.6	14.13	285.372	0.47	-0.34	21.57
	3002	0.69	15.24	3001.94	-9.05	4.52	-14.04	1646259	246022.4	39°10'07.4	80°44'51.6	14.75	287.841	1.02	-0.05	88.87
	3096	6.65	70.86	3095.72	-9.43	6.85	-8.74	1646264	246024.7	39°10'07.4	80°44'51.5	11.11	308.09	6.69	6.34	59.17

3190	9.27	70.34	3188.8	-9.3	11.18	3.53	1646277	246029	39°10'07.5	80°44'51.3	11.73	17.535	2.79	2.79	-0.55
3283	14.48	70.1	3279.78	-9.24	17.67	21.53	1646295	246035.5	39°10'07.5	80°44'51.1	27.85	50.634	5.6	5.6	-0.26
3377	17.66	76.23	3370.1	-7.67	25.06	46.44	1646320	246042.9	39°10'07.6	80°44'50.8	52.77	61.646	3.83	3.38	6.52
3467	16.09	79.31	3456.23	-4.17	30.63	71.96	1646345	246048.5	39°10'07.7	80°44'50.5	78.2	66.945	2.01	-1.74	3.42
3562	14.96	77.81	3547.76	-0.37	35.66	96.88	1646370	246053.5	39°10'07.7	80°44'50.2	103.23	69.794	1.26	-1.19	-1.58
3656	14.84	84.45	3638.6	4.28	39.38	120.72	1646394	246057.2	39°10'07.7	80°44'49.9	126.98	71.932	1.82	-0.13	7.06
3750	15.19	81.45	3729.4	9.73	42.38	144.88	1646418	246060.2	39°10'07.8	80°44'49.6	150.95	73.696	0.91	0.37	-3.19
3844	15.55	82.34	3820.03	14.87	45.89	169.55	1646443	246063.7	39°10'07.8	80°44'49.2	175.65	74.855	0.46	0.38	0.95
3937	15.43	84.2	3909.66	20.57	48.8	194.21	1646467	246066.6	39°10'07.9	80°44'48.9	200.25	75.895	0.55	-0.13	2
4031	15.95	83.63	4000.15	26.68	51.5	219.49	1646493	246069.3	39°10'07.9	80°44'48.6	225.45	76.796	0.58	0.55	-0.61
4124	15.82	77.27	4089.61	31.29	55.71	244.55	1646518	246073.5	39°10'07.9	80°44'48.3	250.82	77.167	1.88	-0.14	-6.84
4218	16.56	75.63	4179.88	34.23	61.86	270.03	1646543	246079.7	39°10'08.0	80°44'48.0	277.02	77.098	0.93	0.79	-1.74
4311	18.77	81.49	4268.5	38.51	67.36	297.67	1646571	246085.2	39°10'08.0	80°44'47.6	305.2	77.249	3.05	2.38	6.3
4405	19.45	79.1	4357.32	44	72.56	327.99	1646601	246090.4	39°10'08.1	80°44'47.2	335.92	77.526	1.1	0.72	-2.54
4499	19.22	81.76	4446.02	49.63	77.74	358.68	1646632	246095.6	39°10'08.2	80°44'46.8	367	77.771	0.97	-0.24	2.83
4592	19.3	80.9	4533.81	55.65	82.36	389	1646662	246100.2	39°10'08.2	80°44'46.5	397.62	78.046	0.32	0.09	-0.92
4686	20.32	78.71	4622.25	61.06	88.01	420.35	1646693	246105.8	39°10'08.3	80°44'46.1	429.46	78.174	1.34	1.09	-2.33
4779	19.04	82.83	4709.82	66.88	93.07	451.24	1646724	246110.9	39°10'08.3	80°44'45.7	460.73	78.346	2.03	-1.38	4.43
4873	17.11	87.63	4799.18	74.47	95.55	480.27	1646753	246113.4	39°10'08.4	80°44'45.3	489.68	78.747	2.59	-2.05	5.11
4967	17.13	86.65	4889.02	82.62	96.93	507.9	1646781	246114.8	39°10'08.4	80°44'45.0	517.07	79.195	0.31	0.02	-1.04
5061	18.98	82.18	4978.39	89.82	99.82	536.87	1646810	246117.7	39°10'08.4	80°44'44.6	546.07	79.467	2.46	1.97	-4.76
5154	18.23	76.82	5066.54	94.74	105.2	566.02	1646839	246123	39°10'08.5	80°44'44.2	575.71	79.471	2.01	-0.81	-5.76
5248	17.54	78.37	5155.99	98.54	111.41	594.21	1646867	246129.2	39°10'08.5	80°44'43.9	604.56	79.381	0.89	-0.73	1.65
5341	17.42	80.81	5244.7	103.2	116.45	621.68	1646895	246134.3	39°10'08.6	80°44'43.5	632.49	79.39	0.8	-0.13	2.62
5435	19.51	85.11	5333.86	109.93	120.04	651.21	1646924	246137.9	39°10'08.6	80°44'43.1	662.19	79.556	2.65	2.22	4.57
5554	17.83	85.84	5446.59	120.08	123.06	689.19	1646962	246140.9	39°10'08.7	80°44'42.7	700.09	79.876	1.43	-1.41	0.61
5642	16.27	85.82	5530.72	127.12	124.93	714.92	1646988	246142.8	39°10'08.7	80°44'42.3	725.75	80.088	1.77	-1.77	-0.02
5735	14.25	84.52	5620.44	133.54	126.98	739.31	1647012	246144.8	39°10'08.7	80°44'42.0	750.13	80.255	2.2	-2.17	-1.4
5828	14.69	87.65	5710.49	139.99	128.55	762.48	1647036	246146.4	39°10'08.7	80°44'41.7	773.25	80.43	0.96	0.47	3.37
5922	14.91	87.62	5801.37	147.26	129.54	786.48	1647060	246147.4	39°10'08.7	80°44'41.4	797.07	80.647	0.23	0.23	-0.03
6016	15.21	80.29	5892.15	153.12	132.13	810.72	1647084	246150	39°10'08.8	80°44'41.1	821.41	80.744	2.05	0.32	-7.8
6109	15.43	71.89	5981.86	155.71	138.03	834.5	1647108	246155.9	39°10'08.8	80°44'40.8	845.84	80.608	2.4	0.24	-9.03
6203	15.64	75.22	6072.43	157.28	145.15	858.64	1647132	246163	39°10'08.9	80°44'40.5	870.82	80.405	0.97	0.22	3.54
6297	15.51	81.15	6162.98	160.86	150.32	883.31	1647156	246168.1	39°10'08.9	80°44'40.2	896.01	80.342	1.7	-0.14	6.31
6390	15.53	83.98	6252.59	166.27	153.53	907.98	1647181	246171.4	39°10'09.0	80°44'39.9	920.87	80.402	0.81	0.02	3.04
6484	15.4	84.64	6343.19	172.47	156.02	932.92	1647206	246173.8	39°10'09.0	80°44'39.6	945.88	80.506	0.23	-0.14	0.7
6532	15.48	85.38	6389.46	175.78	157.13	945.65	1647219	246175	39°10'09.0	80°44'39.4	958.62	80.566	0.44	0.17	1.54
6578	14.49	94.33	6433.9	179.78	157.19	957.51	1647231	246175	39°10'09.0	80°44'39.3	970.33	80.677	5.46	-2.15	19.46
6628	13.47	111.44	6482.44	186.21	154.59	969.17	1647242	246172.4	39°10'09.0	80°44'39.1	981.42	80.937	8.48	-2.04	34.22
6671	16.04	125.04	6524.03	194.4	149.34	978.7	1647252	246167.2	39°10'09.0	80°44'39.0	990.03	81.324	9.99	5.98	31.63
6721	19.3	130.09	6571.66	207.23	140.05	990.68	1647264	246157.9	39°10'08.9	80°44'38.8	1000.53	81.953	7.2	6.52	10.1
6765	23.24	130.59	6612.66	221.1	129.72	1002.84	1647276	246147.6	39°10'08.8	80°44'38.7	1011.2	82.63	8.96	8.95	1.14
6816	28.87	130.77	6658.46	240.62	115.12	1019.82	1647293	246133	39°10'08.6	80°44'38.5	1026.3	83.56	11.04	11.04	0.35
6859	34.14	134.21	6695.11	260.56	99.92	1036.35	1647309	246117.7	39°10'08.5	80°44'38.2	1041.15	84.493	12.94	12.26	8
6911	39.55	138.47	6736.71	289.12	77.33	1057.8	1647331	246095.2	39°10'08.3	80°44'38.0	1060.62	85.819	11.5	10.4	8.19
6952	43.86	140.7	6767.32	314.69	56.55	1075.46	1647349	246074.4	39°10'08.0	80°44'37.7	1076.95	86.99	11.12	10.51	5.44
7004	49.16	142.48	6803.1	350.47	26.99	1098.87	1647372	246044.8	39°10'07.8	80°44'37.4	1099.2	88.593	10.49	10.19	3.42
7046	53.26	144.32	6829.4	381.84	0.71	1118.37	1647391	246018.5	39°10'07.5	80°44'37.2	1118.37	89.964	10.34	9.76	4.38
7098	57.78	147.13	6858.84	423.37	-34.72	1142.48	1647416	245983.1	39°10'07.2	80°44'36.9	1143	91.741	9.77	8.69	5.4
7140	62.01	148.87	6879.9	458.91	-65.53	1161.72	1647435	245952.3	39°10'06.9	80°44'36.6	1163.56	93.228	10.69	10.07	4.14
7193	68.59	152.9	6902.04	506.42	-107.58	1185.09	1647458	245910.3	39°10'06.4	80°44'36.3	1189.96	95.187	14.2	12.42	7.6
7234	70.25	152.49	6916.45	544.49	-141.69	1202.69	1647476	245876.2	39°10'06.1	80°44'36.1	1211.01	96.719	4.16	4.05	-1
7281	71.2	155.62	6931.97	588.61	-181.58	1222.1	1647495	245836.3	39°10'05.7	80°44'35.8	1235.51	98.451	6.6	2.02	6.66
7327	74.23	156.94	6945.64	632.43	-221.78	1239.76	1647513	245796.1	39°10'05.3	80°44'35.6	1259.44	100.142	7.13	6.59	2.87
7375	79.42	157.37	6956.58	679.09	-264.84	1257.9	1647531	245753	39°10'04.9	80°44'35.4	1285.47	101.889	10.85	10.81	0.9
7421	85.35	158.14	6962.67	724.63	-307.02	1275.15	1647548	245710.8	39°10'04.5	80°44'35.1	1311.59	103.538	13	12.89	1.67
7515	89.94	160.93	6966.53	818.52	-394.98	1307.97	1647581	245622.9	39°10'03.6	80°44'34.7	1366.31	106.803	5.71	4.88	2.97
7608	90.06	166.69	6966.53	911.27	-484.26	1333.89	1647607	245533.6	39°10'02.7	80°44'34.4	1419.07	109.953	6.19	0.13	6.19
7702	89.94	170.23	6966.53	1004.23	-576.34	1352.69	1647626	245441.5	39°10'01.8	80°44'34.1	1470.36	113.077	3.77	-0.13	3.77
7795	90.25	168.53	6966.38	1095.99	-667.75	1369.83	1647643	245350.1	39°10'00.9	80°44'33.9	1523.92	115.988	1.86	0.33	-1.83
7889	90.37	159.95	6965.87	1189.64	-758.13	1395.34	1647668	245259.7	39°10'00.0	80°44'33.5	1587.99	118.517	9.13	0.13	-9.13
7983	90.34	157.7	6965.29	1283.61	-845.77	1429.29	1647702	245172.1	39°09'59.2	80°44'33.1	1660.78	120.615	2.39	-0.03	-2.39
8077	90.34	158.38	6964.73	1377.56	-932.95	1464.44	1647738	245084.9	39°09'58.3	80°44'32.6	1736.37	122.5	0.72	0	0.72
8171	90.31	153.87	6964.19	1471.31	-1018.88	1502.48	1647776	244999	39°09'57.5	80°44'32.1	1815.37	124.143	4.8	-0.03	-4.8
8264	90.28	150.76	6963.71	1563.47	-1101.23	1545.68	1647819	244916.6	39°09'56.7	80°44'31.6	1897.85	125.468	3.34	-0.03	-3.34
8358	89.94	153.04	6963.53	1656.52	-1184.14	1589.95	1647863	244833.7	39°09'55.9	80°44'31.0	1982.46	126.677	2.45	-0.36	2.43
8451	89.94	157.08	6963.63	1749.16	-1268.45	1629.16	1647902	244749.4	39°09'55.0	80°44'30.5	2064.73	127.904	4.34	0	4.34
8545	89.75	156.63	6963.89	1843.02	-1354.88	1666.1	1647939	244663	39°09'54.2	80°44'30.0	2147.47	129.118	0.52	-0.2	-0.48
8639	89.54	158.21	6964.47	1936.92	-1441.67	1702.2	1647975	244576.2	39°09'53.3	80°44'29.5	2230.67	130.263	1.7	-0.22	1.68
8732	89.51	156.49	6965.24	2029.81	-1527.49	1738.01	1648011	244490.4	39°09'52.5	80°44'29.1	2313.85	131.311	1.85	-0.03	-1.85
8826	89.66	159.83	6965.92	2123.75	-1614.73	1772.97	1648046	244403.1	39°09'51.6	80°44'28.6	2398.08	132.326	3.56	0.16	3.55
8919	89.6	160.21	6966.52	2216.74	-1702.13	1804.75	1648078	244315.8	39°09'50.8	80°44'28.2	2480.8	133.324	0.41	-0.06	0.41
9013	89.63	160.45	6967.15	2310.74	-1790.65	1836.39	1648109	244227.2	39°09'49.9	80°44'27.8	2564.9	134.277	0.26	0.03	0.26
9107	89.63	161.55	6967.76	2404.72	-1879.52	1866.99	1648140	244138.4	39°09'49.0	80°44'27.4	2649.2	135.192	1.17	0	1.17
9200	89.6	164.14	6968.38	2497.6	-1968.38	1894.42	1648167	244049.5	39°09'48.1	80°44'27.0	2731.91	136.097	2.79	-0.03	2.78
9294	89.6	165.17	6969.04	2591.28	-2059.02	1919.29	1648192	243958.9	39°09'47.3	80°44'26.7	2814.83	137.012	1.1	0	1.1
9387	89.75	161.34	6969.57	2684.11	-2148.06	1946.08	1648219	243869.8	39°09'46.4	80°44'26.3	2898.52	137.824	4.12	0.16	-4.12
9481	89.91	162.49	6969.85	2778.06	-2237.41	1975.26	1648248	243780.5	39°09'45.5	80°44'25.9	2984.57	138.561	1.24	0.17	1.22
9575	89.85	164.62	6970.04	2871.87	-2327.56	2001.87	1648275	243690.3	39°09'44.6	80°44'25.6	3070.02	139.302	2.27	-0.06	2.27
9668	90.03	162.87	6970.14	2964.67	-2416.84	2027.9	1648301	243601.1	39°09'43.7	80°44'25.2	3154.92	140.001	1.89	0.19	-1.88
9762	89.63	164.22	6970.42	3058.49	-2506.99	2054.53	1648328	243510.9	39°09'42.8	80°44'24.9	3241.31	140.665	1.5	-0.43	1.44

9855	89.63	164.33	6971.02	3151.23	-2596.51	2079.73	1648353	243421.4	39°09'42.0	80°44'24.5	3326.73	141.306	0.12	0	0.12
9949	89.6	163	6971.65	3245.03	-2686.71	2106.17	1648379	243331.2	39°09'41.1	80°44'24.2	3413.85	141.906	1.42	-0.03	-1.41
10043	89.6	161.33	6972.31	3338.96	-2776.18	2134.96	1648408	243241.7	39°09'40.2	80°44'23.8	3502.18	142.439	1.78	0	-1.78
10137	89.69	158.72	6972.89	3432.95	-2864.52	2167.06	1648440	243153.4	39°09'39.3	80°44'23.4	3591.89	142.892	2.78	0.1	-2.78
10230	89.35	159.31	6973.67	3525.93	-2951.35	2200.37	1648473	243066.6	39°09'38.5	80°44'22.9	3681.32	143.294	0.73	-0.37	0.63
10324	89.45	157.71	6974.66	3619.89	-3038.81	2234.8	1648508	242979.1	39°09'37.6	80°44'22.5	3772.09	143.668	1.71	0.11	-1.7
10418	89.51	155.82	6975.51	3713.73	-3125.18	2271.88	1648545	242892.8	39°09'36.8	80°44'22.0	3863.7	143.984	2.01	0.06	-2.01
10511	89.48	156.26	6976.33	3806.51	-3210.16	2309.65	1648583	242807.8	39°09'35.9	80°44'21.5	3954.69	144.266	0.47	-0.03	0.47
10605	89.26	162.11	6977.36	3900.45	-3297.98	2343.03	1648616	242720	39°09'35.1	80°44'21.1	4045.55	144.608	6.23	-0.23	6.22
10698	89.17	161.2	6978.64	3993.4	-3386.24	2372.3	1648645	242631.7	39°09'34.2	80°44'20.7	4134.54	144.986	0.98	-0.1	-0.98
10792	89.11	157.77	6980.05	4087.37	-3474.26	2405.24	1648678	242543.7	39°09'33.3	80°44'20.2	4225.59	145.305	3.65	-0.06	-3.65
10885	89.23	154.42	6981.4	4180.14	-3559.26	2442.91	1648716	242458.7	39°09'32.5	80°44'19.8	4316.96	145.536	3.6	0.13	-3.6
10979	89.14	150.09	6982.73	4273.25	-3642.42	2486.66	1648760	242375.5	39°09'31.7	80°44'19.2	4410.3	145.679	4.61	-0.1	-4.61
11073	89.14	151.86	6984.14	4366.07	-3724.61	2532.26	1648805	242293.3	39°09'30.9	80°44'18.6	4503.89	145.789	1.88	0	1.88
11166	89.14	154.6	6985.54	4458.4	-3807.62	2574.14	1648847	242210.3	39°09'30.1	80°44'18.0	4596.1	145.939	2.95	0	2.95
11260	89.17	157.18	6986.93	4552.14	-3893.4	2612.53	1648886	242124.5	39°09'29.2	80°44'17.5	4688.7	146.138	2.74	0.03	2.74
11354	89.57	156.61	6987.96	4646	-3979.86	2649.41	1648922	242038.1	39°09'28.4	80°44'17.1	4781.07	146.348	0.74	0.43	-0.61
11447	89.54	161.91	6988.68	4738.95	-4066.8	2682.33	1648955	241951.2	39°09'27.5	80°44'16.6	4871.73	146.592	5.7	-0.03	5.7
11541	89.57	166.77	6989.41	4832.65	-4157.28	2707.7	1648981	241860.7	39°09'26.6	80°44'16.3	4961.31	146.923	5.17	0.03	5.17
11635	89.54	166.76	6990.14	4926	-4248.78	2729.22	1649002	241769.2	39°09'25.7	80°44'16.0	5049.83	147.285	0.03	-0.03	-0.01
11728	90.18	166.85	6990.37	5018.34	-4339.32	2750.45	1649023	241678.6	39°09'24.8	80°44'15.7	5137.58	147.632	0.69	0.69	0.1
11822	90.22	160.01	6990.04	5112.11	-4429.37	2777.24	1649050	241588.6	39°09'23.9	80°44'15.4	5228.03	147.912	7.28	0.04	-7.28
11910	90.12	156.79	6989.78	5200.07	-4511.18	2809.63	1649083	241506.8	39°09'23.1	80°44'14.9	5314.58	148.085	3.66	-0.11	-3.66
11935	90.12	156.79	6989.73	5225.03	-4534.15	2819.48	1649093	241483.8	39°09'22.9	80°44'14.8	5339.29	148.125	0	0	0

HOLE AND CASING SECTIONS Ref Wellbore: OXF-13I-HS AWB Ref Wellpath: OXF-13I-HS AWP Proj: 11935'

String/Diar	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]
9.625in Ca:	28.5	2847	2818.5	28.5	2846.95	0	0	3.52	-12.76

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	Comment
OXF-13I-HS LP Rev3	6962		-329.86	1278.81	1647552	245688	39°10'04.3	80°44'35.1	point	
OXFD-13 Pad LL	6972.17		-14.32	-99.07	1646174	246003.5	39°10'07.2	80°44'52.6	polygon	
OXF-13I-HS BHL Rev3	7001.08		-4537.92	2810.42	1649083	241480	39°09'22.9	80°44'14.9	point	

WELLPATH COMPOSITION Ref Wellbore: OXF-13I-HS AWB Ref Wellpath: OXF-13I-HS AWP Proj: 11935'

Log Name/	Start MD [ft]	End MD [ft]	Pos Unc Model
01_VES Gy	28.5	2823	Generic gyro - northseeking (Standard)
02_SDI EM	2823	5435	ISCWSA MWD, Rev. 2 (Standard)
03_BHI AT	5435	11910	NaviTrak (AT Curve Short Spaced)
Projection	11910	11935	Blind Drilling (std)