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## APPENDICES

### Appendix A Well A Information

**Table A1** Definitive survey of Well A

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
Tie-In	0.00	0.00	100.00	0.00	0.00	0.00
Marker MudLine	6.00	0.00	25.07	6.00	0.00	0.00
20" Conductor	18.67	0.01	25.07	18.67	0.00	0.00
13 3/8" Casing	101.46	0.06	25.07	101.46	0.05	0.02
	118.89	0.07	25.07	118.89	0.07	0.03
	138.63	0.28	57.24	138.63	0.10	0.08
	156.60	2.39	100.40	156.59	0.06	0.48
	175.28	5.85	103.16	175.22	-0.23	1.79
	194.22	8.86	102.65	194.01	-0.77	4.16
	212.05	11.81	102.48	211.54	-1.46	7.28
	232.69	15.80	102.58	231.58	-2.53	12.08
	250.65	20.27	103.16	248.66	-3.77	17.50
	269.96	24.76	103.95	266.49	-5.51	24.69
Top of 7" Liner	274.35	25.44	103.91	270.47	-5.96	26.50
	289.20	27.75	103.80	283.74	-7.55	32.95
	308.37	30.36	102.49	300.50	-9.66	42.02
	327.50	33.08	102.87	316.77	-11.87	51.83
	346.73	36.47	102.86	332.56	-14.31	62.52
	365.86	40.03	102.84	347.58	-16.95	74.06
	385.09	42.71	102.47	362.01	-19.73	86.46
	404.06	45.35	101.92	375.65	-22.51	99.35
	423.46	47.66	100.57	389.00	-25.25	113.15
	442.49	50.16	100.02	401.51	-27.82	127.26
	461.88	52.30	99.62	413.65	-30.39	142.16
	480.34	55.11	99.14	424.58	-32.82	156.84
	500.73	58.60	97.86	435.73	-35.34	173.72
	519.49	61.22	97.23	445.13	-37.47	189.81
	538.15	63.64	96.87	453.77	-39.50	206.22
	557.15	64.73	94.59	462.04	-41.20	223.24

**Table A1 (Cont.)** Definitive survey of Well A

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	576.45	65.46	91.89	470.17	-42.19	240.71
	595.51	67.55	89.90	477.77	-42.46	258.19
	614.54	69.80	88.54	484.69	-42.22	275.91
	633.71	71.10	86.76	491.10	-41.48	293.96
	653.08	72.46	84.81	497.16	-40.12	312.31
	670.21	74.24	82.89	502.07	-38.36	328.63
	691.45	75.83	80.27	507.55	-35.36	348.92
	710.67	75.67	77.34	512.29	-31.74	367.19
	729.68	74.49	74.57	517.18	-27.28	385.01
	748.99	73.53	71.96	522.50	-21.94	402.79
	768.35	72.85	69.19	528.10	-15.78	420.26
9 5/8" Casing	779.25	72.73	68.35	531.33	-12.01	429.97
	796.39	72.55	67.02	536.44	-5.80	445.10
	816.15	74.41	66.72	542.06	1.64	462.52
	835.54	76.01	66.52	547.01	9.08	479.73
	854.68	76.41	66.48	551.57	16.50	496.78
	873.13	76.34	66.75	555.92	23.61	513.23
	885.61	76.05	66.48	558.90	28.42	524.36
	904.83	74.73	65.58	563.74	35.98	541.35
	924.09	75.09	64.19	568.76	43.87	558.19
	943.22	71.63	61.58	574.24	52.22	574.50
	962.49	68.53	58.49	580.80	61.26	590.19
	981.63	65.90	56.42	588.21	70.75	605.07
	1000.87	64.35	53.98	596.31	80.71	619.40
	1020.38	62.91	52.80	604.97	91.13	633.43
	1039.30	62.30	51.27	613.68	101.47	646.68
	1058.65	62.84	49.52	622.59	112.41	659.91
	1077.94	62.72	47.67	631.42	123.76	672.77
	1097.17	61.53	45.38	640.41	135.45	685.11
	1123.50	61.91	41.55	652.89	152.28	701.05
	1142.34	61.71	40.54	661.79	164.80	711.96
Top of 4 1/2" Liner	1159.17	61.54	37.51	669.79	176.30	721.28
	1161.63	61.52	37.07	670.96	178.02	722.59
	1180.75	61.42	35.94	680.09	191.52	732.58

**Table A1 (Cont.)** Definitive survey of Well A

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
7" Liner	1181.31	61.42	35.94	680.36	191.92	732.87
	1199.90	61.37	35.98	689.26	205.13	742.46
	1218.89	60.96	35.94	698.42	218.60	752.22
	1238.32	59.53	36.33	708.06	232.22	762.17
	1257.55	59.61	36.38	717.80	245.57	772.00
	1276.59	59.47	36.89	727.45	258.74	781.79
	1295.81	59.25	36.56	737.25	272.00	791.68
	1315.11	58.89	37.01	747.17	285.26	801.60
	1333.44	59.03	36.89	756.62	297.81	811.04
	1353.24	58.84	37.07	766.84	311.36	821.24
	1372.48	58.82	37.20	776.80	324.48	831.18
	1391.40	58.96	37.71	786.57	337.34	841.03
	1410.79	58.74	37.86	796.60	350.46	851.20
	1429.84	58.72	38.27	806.49	363.28	861.23
	1449.69	58.78	38.25	816.79	376.60	871.74
	1468.12	58.67	38.79	826.36	388.92	881.55
	1487.48	58.63	38.85	836.43	401.81	891.92
	1506.71	58.40	39.07	846.47	414.56	902.23
	1526.07	57.12	39.33	856.80	427.25	912.58
	1545.55	55.64	39.44	867.59	439.78	922.87
	1564.23	55.27	39.20	878.18	451.69	932.62
	1583.40	55.41	39.52	889.08	463.88	942.62
	1602.47	54.10	40.05	900.08	475.85	952.59
	1621.59	54.05	40.49	911.30	487.66	962.59
	1640.25	54.32	40.61	922.22	499.16	972.43
4 1/2" Liner	1660.13	54.61	40.71	933.78	511.43	982.97
Projected to TD	1661.13	54.62	40.72	934.36	512.05	983.50

**Table A2** Mud property of Well A

Hole Section (inch)	26"	17 1/2"	12 1/4"	8 1/2"
Casing Size (inch)	20"	13 3/8"	9 5/8"	7"
MD (m)	18.67	101.46	802.00	1661.00
MW (ppg)	9.1-9.5	9.1-9.5	9.5-10.5	10-10.5
PV (cP)	9-10	9-10	9-14	11-15
YP (lb/100 ft <sup>2</sup> )	15-19	15-19	15-19	16-19



## Appendix B Well B Information

**Table B1** Definitive survey of Well B

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
Tie-In	0.00	0.00	290.00	0.00	-0.37	72.14
Marker MudLine	6.00	0.02	253.17	6.00	-0.37	72.14
13 3/8" Casing	97.74	0.26	253.17	97.74	-0.43	71.93
	113.41	0.30	253.17	113.41	-0.45	71.86
	132.07	0.39	275.45	132.07	-0.46	71.75
	150.70	1.78	300.43	150.70	-0.31	71.44
	169.56	4.71	293.15	169.52	0.14	70.47
	188.30	8.02	291.45	188.15	0.92	68.55
	207.26	11.89	291.54	206.82	2.12	65.50
	226.02	16.79	292.12	224.98	3.86	61.19
	244.89	22.69	291.89	242.74	6.24	55.28
	263.89	28.51	291.16	259.87	9.25	47.64
	282.97	33.48	289.72	276.22	12.67	38.44
	302.33	37.85	287.59	291.94	16.27	27.74
	322.51	42.35	286.54	307.38	20.07	15.32
	341.39	47.07	285.58	320.79	23.74	2.56
	360.51	51.85	284.30	333.21	27.48	-11.48
	379.90	53.92	283.03	344.92	31.13	-26.50
	399.13	50.59	280.92	356.69	34.29	-41.37
	418.35	46.97	278.27	369.35	36.71	-55.62
	437.51	43.12	276.11	382.89	38.42	-69.07
	454.52	39.57	275.18	395.65	39.52	-80.25
7" Liner Top	457.31	38.99	275.26	397.81	39.68	-82.01
9 5/8" Casing	478.50	34.61	275.93	414.78	40.92	-94.64
	493.08	31.59	276.48	426.99	41.78	-102.55
	511.85	27.11	277.87	443.35	42.92	-111.68
	530.56	22.02	277.51	460.36	43.96	-119.38
	549.32	16.90	276.99	478.04	44.75	-125.58
	568.71	13.20	281.76	496.76	45.54	-130.54
	587.53	9.62	285.90	515.21	46.41	-134.16
	606.63	5.41	281.16	534.14	47.02	-136.58

**Table B1** (Cont.) Definitive survey of Well B

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	625.92	1.78	222.66	553.40	46.98	-137.67
	645.37	3.82	146.69	572.83	46.22	-137.52
	664.55	5.81	181.30	591.94	44.71	-137.19
	685.81	8.96	137.82	613.04	42.41	-136.11
	704.37	12.77	128.91	631.26	40.05	-133.54
	723.14	17.48	125.61	649.38	37.10	-129.63
	742.11	23.75	122.08	667.12	33.41	-124.07
	760.93	27.51	114.85	684.09	29.57	-116.91
	780.44	31.48	103.45	701.09	26.49	-107.86
	799.25	31.79	101.72	717.10	24.34	-98.23
	818.66	29.94	100.81	733.77	22.39	-88.47
	837.93	28.54	98.86	750.58	20.78	-79.20
	857.20	28.31	98.55	767.53	19.39	-70.13
	870.10	28.48	98.45	778.88	18.48	-64.06
7" Liner Shoe	889.00	28.73	98.31	795.47	17.17	-55.11
Proj. to Bit	890.00	28.74	98.30	796.34	17.10	-54.64

**Table B2** Mud property of Well B

Hole Section (inch)	26"	17 1/2"	12 1/4"	8 1/2"
Casing Size (inch)	20"	13 3/8"	9 5/8"	7"
MD (m)	18.12	97.74	480.00	890.00
MW (ppg)	9-9.6	9-9.6	9.6-9.9	9.9-10
PV (cP)	10-11	10-11	11-12	12-15
YP (lb/100 ft <sup>2</sup> )	16.00	16.00	16-17	16-18

## Appendix C Well C Information

Table C1 Definitive survey of Well C

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	0.00	0.00	0.00	0.00	0.00	0.00
Marker MudLine	6.00	0.02	31.15	6.00	0.00	0.00
	73.13	0.25	31.15	73.13	0.14	0.08
13 3/8" Casing	77.42	0.23	17.81	77.42	0.15	0.09
	92.10	0.28	333.01	92.10	0.21	0.08
	110.62	0.40	330.73	110.62	0.31	0.03
	129.51	0.55	157.48	129.51	0.28	0.03
	148.90	2.45	148.08	148.89	-0.15	0.29
	167.34	4.77	143.24	167.29	-1.10	0.96
	186.28	7.54	143.19	186.12	-2.73	2.17
	205.04	10.19	143.43	204.66	-5.05	3.90
	223.86	12.61	145.83	223.10	-8.08	6.04
	242.43	14.87	150.99	241.14	-11.85	8.34
	261.63	17.52	153.57	259.58	-16.59	10.82
	280.83	20.56	154.25	277.73	-22.22	13.57
	299.91	23.58	153.50	295.41	-28.65	16.73
	319.15	26.27	150.26	312.85	-35.79	20.56
	338.21	28.80	148.92	329.75	-43.39	25.02
	357.51	31.11	148.25	346.47	-51.61	30.05
	376.81	33.50	147.93	362.79	-60.37	35.50
	396.11	35.65	148.49	378.68	-69.68	41.27
	415.14	38.04	148.78	393.90	-79.42	47.21
	434.27	41.11	149.89	408.65	-89.90	53.42
	453.61	44.45	150.95	422.84	-101.33	59.90
	472.65	47.18	152.20	436.11	-113.33	66.39
	491.49	49.67	152.09	448.61	-125.79	72.98
	510.76	52.34	151.70	460.74	-139.00	80.03
	529.97	55.18	151.29	472.09	-152.62	87.43
	550.49	57.23	151.64	483.50	-167.60	95.57
	569.81	58.52	151.82	493.78	-182.01	103.32
	588.69	60.11	151.90	503.41	-196.32	110.98
	607.73	59.51	152.51	512.99	-210.88	118.65

Table C1 (Cont.) Definitive survey of Well C

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	626.12	58.87	152.75	522.41	-224.91	125.92
	645.47	60.53	152.50	532.17	-239.74	133.60
	664.67	62.20	151.02	541.37	-254.59	141.57
	683.92	62.40	150.57	550.32	-269.46	149.89
	702.97	64.07	148.57	558.90	-284.13	158.50
	722.33	64.10	148.37	567.36	-298.97	167.61
	742.56	63.51	148.37	576.29	-314.43	177.13
	761.32	62.89	148.80	584.75	-328.72	185.86
	780.54	62.48	149.63	593.57	-343.39	194.60
	799.22	61.90	149.49	602.28	-357.63	202.97
	817.97	61.46	150.10	611.18	-371.90	211.27
	837.37	63.36	150.50	620.16	-386.83	219.79
	856.27	63.52	150.86	628.61	-401.57	228.07
9 5/8" Casing	920.00	63.38	153.20	657.10	-451.91	254.81
Tie-In	925.51	63.37	153.40	659.57	-456.32	257.02
	944.45	59.55	153.63	668.62	-471.20	264.44
	963.12	56.64	154.17	678.48	-485.44	271.41
	981.86	53.60	153.55	689.20	-499.24	278.18
	1000.49	50.91	151.47	700.60	-512.30	284.98
	1019.58	47.56	151.33	713.07	-525.00	291.90
	1038.43	44.57	150.21	726.14	-536.84	298.52
	1057.03	42.78	147.68	739.60	-547.85	305.14
	1076.11	39.75	145.53	753.94	-558.35	312.06
	1095.29	35.83	145.01	769.09	-568.01	318.75
	1114.30	33.00	143.31	784.77	-576.72	325.04
	1133.70	30.58	139.81	801.26	-584.73	331.38
	1152.62	28.03	137.13	817.76	-591.67	337.51
	1171.63	24.61	134.04	834.80	-597.70	343.40
	1190.99	21.83	129.04	852.59	-602.77	349.09
	1210.14	19.34	124.79	870.52	-606.82	354.47
	1229.53	16.40	122.75	888.97	-610.13	359.41
	1248.62	14.16	117.91	907.39	-612.68	363.74
	1267.84	12.71	111.53	926.08	-614.56	367.78
	1287.11	11.74	101.90	944.92	-615.74	371.67
	1307.49	11.23	92.23	964.89	-616.25	375.68
	1325.86	10.85	79.23	982.92	-615.99	379.17

**Table C1 (Cont.)** Definitive survey of Well C

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1344.84	11.14	63.92	1001.56	-614.85	382.57
	1363.78	11.58	49.81	1020.13	-612.82	385.67
	1382.89	12.08	34.74	1038.84	-609.94	388.27
	1401.86	13.04	18.75	1057.36	-606.28	390.09
	1424.15	16.45	11.95	1078.91	-600.81	391.56
	1443.11	19.80	6.39	1096.93	-594.99	392.47
	1461.93	23.79	4.96	1114.40	-588.04	393.15
	1480.36	27.64	1.24	1131.01	-580.06	393.57
	1499.16	30.79	356.52	1147.42	-570.89	393.37
	1518.04	33.56	353.30	1163.40	-560.88	392.47
	1536.59	37.60	350.60	1178.48	-550.20	390.94
	1558.79	42.56	347.19	1195.46	-536.19	388.17
	1577.53	46.13	343.57	1208.86	-523.52	384.85
	1596.24	48.83	347.34	1221.51	-510.18	381.40
	1615.15	53.02	347.43	1233.43	-495.86	378.20
	1633.01	56.76	345.64	1243.70	-481.65	374.79
Projection at bit	1651.08	58.20	346.00	1253.41	-466.88	371.06

**Table C2** Mud property of Well C

Hole Section (inch)	26"	17 1/2"	12 1/4"	8 1/2"
Casing Size (inch)	20"	13 3/8"	9 5/8"	7"
MD (m)	18.10	77.42	921.74	2035.16
MW (ppg)	9-9.4	9-9.4	9.4-9.7	9.8-10.3
PV (cP)	10-11	10-11	10-14	13-16
YP (lb/100 ft <sup>2</sup> )	15-16	15-16	15-18	15-18

## Appendix D Well D Information

**Table D1** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
Tie-In	0.00	0.00	0.00	0.00	10.41	25.61
Marker MudLine	6.00	0.06	194.09	6.00	10.41	25.61
13-3/8" Casing Shoe	106.89	1.10	194.09	106.88	9.42	25.36
	108.67	1.12	194.09	108.66	9.38	25.35
	124.97	3.90	202.47	124.95	8.72	25.10
	184.77	15.48	200.58	183.79	-0.67	21.50
	212.77	18.73	194.99	210.55	-8.51	19.03
	232.17	21.17	190.34	228.79	-14.97	17.59
	249.53	24.77	188.09	244.77	-21.65	16.52
	269.93	27.63	187.17	263.07	-30.58	15.32
	288.73	30.52	183.39	279.50	-39.67	14.50
	307.73	33.00	179.64	295.66	-49.66	14.24
	326.53	36.63	177.27	311.09	-60.39	14.54
	346.45	41.22	174.94	326.58	-72.87	15.41
	367.30	46.60	173.14	341.60	-87.25	16.92
	386.53	51.47	172.42	354.20	-101.65	18.75
	405.63	54.17	172.89	365.74	-116.74	20.69
	422.13	57.17	173.49	375.05	-130.27	22.30
	442.03	60.35	174.09	385.37	-147.18	24.14
	462.53	60.08	174.39	395.55	-164.88	25.93
	482.13	59.78	174.62	405.37	-181.76	27.55
	501.33	56.67	174.82	415.48	-198.02	29.06
	520.43	53.33	173.22	426.44	-213.57	30.68
	539.83	50.08	171.02	438.46	-228.65	32.76
	558.83	46.97	168.47	451.04	-242.66	35.29
	578.33	43.25	167.07	464.80	-256.16	38.21
	597.13	39.63	168.72	478.89	-268.32	40.82
	616.43	36.22	170.89	494.12	-279.99	42.93
Top of 7" Liner	629.72	34.90	174.34	504.93	-287.65	43.93
	635.53	34.35	175.92	509.71	-290.94	44.21
9-5/8" Casing Shoe	655.31	32.88	184.51	526.19	-301.87	44.18

**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	674.37	32.05	193.31	542.28	-311.95	42.61
	695.57	28.90	203.61	560.56	-322.13	39.26
	713.77	24.06	207.38	576.85	-329.46	35.79
	734.91	17.94	211.25	596.58	-336.07	32.12
	754.50	12.70	213.77	615.46	-340.45	29.35
	770.77	8.71	216.20	631.45	-342.93	27.63
	788.97	6.05	222.83	649.50	-344.74	26.16
	808.47	1.82	218.04	668.95	-345.74	25.27
	829.87	3.56	35.96	690.34	-345.47	25.46
	868.17	13.32	33.93	728.17	-340.84	28.62
	886.67	13.76	35.14	746.16	-337.27	31.08
	905.07	11.57	33.84	764.11	-333.95	33.37
	924.97	8.99	30.29	783.69	-330.95	35.26
	944.07	7.06	26.72	802.60	-328.61	36.54
	963.67	4.37	32.10	822.10	-326.90	37.48
	1002.67	3.13	20.04	861.02	-324.64	38.64
	1021.87	3.24	344.55	880.19	-323.62	38.67
	1060.07	2.81	265.15	918.35	-322.66	37.45
	1079.67	5.17	230.72	937.91	-323.26	36.29
Last MWD survey	1098.57	5.93	231.35	956.72	-324.41	34.87
First WL survey	1099.00	5.70	233.19	957.15	-324.44	34.83
	1104.00	5.75	233.99	962.12	-324.73	34.43
	1109.00	5.67	235.16	967.10	-325.02	34.03
	1114.00	5.59	236.07	972.07	-325.30	33.62
	1119.00	5.48	236.59	977.05	-325.57	33.22
	1124.00	5.30	237.02	982.03	-325.82	32.83
	1129.00	5.16	237.32	987.01	-326.07	32.44
	1134.00	4.92	238.18	991.99	-326.31	32.07
	1139.00	4.81	238.80	996.97	-326.53	31.71
	1144.00	4.61	239.17	1001.95	-326.74	31.36
	1149.00	4.46	239.20	1006.94	-326.94	31.02
	1154.00	4.40	240.33	1011.92	-327.14	30.69
	1159.00	4.32	240.29	1016.91	-327.32	30.36
	1164.00	4.16	240.65	1021.89	-327.51	30.03
	1169.00	4.12	240.89	1026.88	-327.68	29.72
	1174.00	4.02	241.66	1031.87	-327.85	29.41

**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1179.00	3.95	242.17	1036.86	-328.02	29.10
	1184.00	3.83	243.55	1041.84	-328.17	28.80
	1189.00	3.76	244.74	1046.83	-328.32	28.50
	1194.00	3.67	244.81	1051.82	-328.45	28.21
	1199.00	3.53	246.04	1056.81	-328.58	27.92
	1204.00	3.46	246.76	1061.80	-328.71	27.64
	1209.00	3.36	246.93	1066.79	-328.82	27.37
	1214.00	3.32	248.01	1071.79	-328.94	27.10
	1219.00	3.21	248.56	1076.78	-329.04	26.84
	1224.00	3.11	247.91	1081.77	-329.14	26.58
	1229.00	2.98	248.27	1086.76	-329.24	26.33
	1234.00	2.94	249.38	1091.76	-329.34	26.09
	1239.00	2.95	250.51	1096.75	-329.42	25.85
	1244.00	2.97	250.70	1101.74	-329.51	25.61
7" Liner Shoe	1245.00	1.68	298.80	1102.74	-329.51	25.57
	1246.00	2.60	357.00	1103.74	-329.48	25.56
	1248.00	2.40	350.30	1105.74	-329.39	25.55
	1250.00	2.40	252.70	1107.74	-329.37	25.50
	1252.00	2.40	252.50	1109.74	-329.39	25.42
	1254.00	2.50	253.10	1111.74	-329.42	25.34
Top of Igneous Intrusive	1255.00	2.50	253.95	1112.73	-329.43	25.30
	1256.00	2.50	254.80	1113.73	-329.44	25.25
	1258.00	2.50	255.90	1115.73	-329.46	25.17
	1260.00	2.50	256.70	1117.73	-329.48	25.09
	1262.00	2.40	259.40	1119.73	-329.50	25.00
	1264.00	2.20	263.10	1121.73	-329.51	24.92
	1266.00	2.10	266.20	1123.72	-329.52	24.85
	1268.00	2.00	269.20	1125.72	-329.52	24.78
	1270.00	1.80	271.90	1127.72	-329.52	24.71
	1272.00	1.70	274.20	1129.72	-329.52	24.65
	1274.00	1.60	277.90	1131.72	-329.51	24.59
	1276.00	1.60	282.80	1133.72	-329.50	24.54
	1278.00	1.60	289.30	1135.72	-329.49	24.48
Bottom of Igneous Intrusive	1280.00	1.50	293.70	1137.72	-329.47	24.43



**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1282.00	1.60	296.40	1139.72	-329.45	24.38
	1284.00	1.60	301.40	1141.72	-329.42	24.33
	1286.00	1.60	304.40	1143.72	-329.39	24.29
	1288.00	1.70	310.20	1145.72	-329.35	24.24
	1290.00	1.70	313.50	1147.71	-329.31	24.20
	1292.00	1.70	318.90	1149.71	-329.27	24.16
	1294.00	1.80	324.00	1151.71	-329.22	24.12
	1296.00	1.90	329.00	1153.71	-329.17	24.08
	1298.00	1.90	332.40	1155.71	-329.11	24.05
	1300.00	1.90	334.80	1157.71	-329.05	24.02
	1302.00	1.80	337.50	1159.71	-328.99	24.00
	1304.00	1.80	342.10	1161.71	-328.93	23.97
	1306.00	1.80	347.70	1163.71	-328.87	23.96
	1308.00	2.00	350.30	1165.71	-328.81	23.95
	1310.00	2.10	353.60	1167.70	-328.74	23.94
	1312.00	2.20	356.90	1169.70	-328.66	23.93
	1314.00	2.30	359.30	1171.70	-328.58	23.93
	1316.00	2.50	1.70	1173.70	-328.50	23.93
	1318.00	2.60	4.40	1175.70	-328.41	23.93
	1320.00	2.70	5.40	1177.70	-328.32	23.94
	1322.00	2.80	6.80	1179.69	-328.22	23.95
	1324.00	2.80	9.00	1181.69	-328.13	23.96
	1326.00	2.70	11.40	1183.69	-328.03	23.98
	1328.00	2.80	13.80	1185.69	-327.94	24.00
	1330.00	2.80	13.20	1187.68	-327.84	24.02
	1332.00	3.00	14.30	1189.68	-327.75	24.05
	1334.00	3.10	15.10	1191.68	-327.64	24.08
	1336.00	3.20	15.10	1193.68	-327.54	24.10
	1338.00	3.30	14.30	1195.67	-327.43	24.13
	1340.00	3.40	13.90	1197.67	-327.31	24.16
	1342.00	3.50	14.20	1199.66	-327.20	24.19
	1344.00	3.60	15.00	1201.66	-327.08	24.22
	1346.00	3.70	16.80	1203.66	-326.95	24.26
	1348.00	3.90	18.70	1205.65	-326.83	24.30
	1350.00	4.10	20.80	1207.65	-326.70	24.34
	1352.00	4.20	23.10	1209.64	-326.56	24.40
	1354.00	4.30	24.30	1211.64	-326.43	24.46

**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1356.00	4.30	25.10	1213.63	-326.29	24.52
	1358.00	4.20	24.50	1215.63	-326.16	24.58
	1360.00	4.00	21.50	1217.62	-326.03	24.64
	1362.00	3.80	18.10	1219.62	-325.90	24.68
	1364.00	3.50	13.40	1221.61	-325.77	24.72
	1366.00	3.20	4.70	1223.61	-325.66	24.74
	1368.00	2.90	354.30	1225.61	-325.55	24.74
	1370.00	2.80	347.10	1227.60	-325.46	24.72
	1372.00	2.80	341.00	1229.60	-325.36	24.70
	1374.00	3.00	334.60	1231.60	-325.27	24.66
	1376.00	3.00	327.40	1233.60	-325.18	24.61
	1378.00	3.10	322.40	1235.59	-325.09	24.54
	1380.00	3.30	318.70	1237.59	-325.00	24.47
	1382.00	3.40	310.60	1239.59	-324.92	24.39
	1384.00	3.60	303.50	1241.58	-324.85	24.29
	1386.00	3.90	296.30	1243.58	-324.78	24.18
	1388.00	4.30	291.10	1245.57	-324.73	24.05
	1390.00	4.80	289.00	1247.57	-324.67	23.90
	1392.00	5.30	286.80	1249.56	-324.62	23.73
	1394.00	6.00	284.10	1251.55	-324.57	23.54
	1396.00	6.60	281.60	1253.54	-324.52	23.33
	1398.00	7.00	280.10	1255.52	-324.47	23.10
	1400.00	7.40	278.90	1257.51	-324.43	22.85
	1402.00	7.80	278.30	1259.49	-324.39	22.59
	1404.00	8.00	278.20	1261.47	-324.35	22.32
	1406.00	8.20	278.20	1263.45	-324.31	22.04
	1408.00	8.30	278.10	1265.43	-324.27	21.75
	1410.00	8.30	278.00	1267.41	-324.23	21.47
	1412.00	8.20	278.40	1269.39	-324.19	21.18
	1414.00	8.20	278.50	1271.37	-324.15	20.90
	1416.00	8.20	278.40	1273.35	-324.11	20.62
	1418.00	8.20	278.70	1275.33	-324.07	20.34
	1420.00	8.20	279.30	1277.31	-324.02	20.05
	1422.00	8.20	279.80	1279.29	-323.97	19.77
	1424.00	8.20	279.90	1281.27	-323.92	19.49
	1426.00	8.10	280.20	1283.25	-323.87	19.21
	1428.00	8.10	280.60	1285.23	-323.82	18.94

**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1430.00	8.20	281.00	1287.21	-323.77	18.66
	1432.00	8.10	280.90	1289.19	-323.72	18.38
	1434.00	8.00	280.80	1291.17	-323.66	18.10
	1436.00	8.00	281.60	1293.15	-323.61	17.83
	1438.00	7.90	282.60	1295.13	-323.55	17.56
	1440.00	7.90	283.60	1297.11	-323.49	17.29
	1442.00	7.70	284.10	1299.09	-323.43	17.03
	1444.00	7.60	284.30	1301.07	-323.36	16.77
	1446.00	7.40	284.90	1303.05	-323.29	16.52
	1448.00	7.20	286.30	1305.04	-323.23	16.27
	1450.00	7.20	286.90	1307.02	-323.15	16.03
	1452.00	7.20	287.60	1309.01	-323.08	15.79
	1454.00	7.10	288.70	1310.99	-323.00	15.56
	1456.00	7.00	290.50	1312.98	-322.92	15.33
	1458.00	6.90	291.70	1314.96	-322.83	15.10
	1460.00	6.90	292.30	1316.95	-322.74	14.88
	1462.00	6.80	293.20	1318.93	-322.65	14.66
	1464.00	6.70	293.90	1320.92	-322.56	14.44
	1466.00	6.70	294.80	1322.91	-322.46	14.23
	1468.00	6.80	295.30	1324.89	-322.36	14.02
	1470.00	6.90	295.70	1326.88	-322.26	13.80
	1472.00	6.90	296.20	1328.86	-322.15	13.59
	1474.00	6.90	296.50	1330.85	-322.05	13.37
	1476.00	6.90	296.80	1332.83	-321.94	13.16
	1478.00	6.90	296.50	1334.82	-321.83	12.94
	1480.00	6.90	296.70	1336.80	-321.72	12.73
	1482.00	6.90	296.90	1338.79	-321.61	12.51
	1484.00	6.90	296.70	1340.78	-321.51	12.30
	1486.00	6.80	296.60	1342.76	-321.40	12.08
	1488.00	6.80	296.30	1344.75	-321.29	11.87
	1490.00	6.60	296.50	1346.73	-321.19	11.66
	1492.00	6.50	296.80	1348.72	-321.09	11.46
	1494.00	6.60	296.70	1350.71	-320.99	11.25
	1496.00	6.60	297.10	1352.69	-320.88	11.05
	1498.00	6.40	296.60	1354.68	-320.78	10.85
	1500.00	6.20	296.60	1356.67	-320.68	10.65
	1502.00	6.10	297.00	1358.66	-320.58	10.46

**Table D1 (Cont.)** Definitive survey of Well D

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	NS (m)	EW (m)
	1504.00	6.10	297.10	1360.65	-320.49	10.27
	1506.00	5.90	297.20	1362.64	-320.39	10.08
	1508.00	5.80	297.50	1364.63	-320.30	9.90
	1510.00	5.70	297.90	1366.62	-320.21	9.73
	1512.00	5.70	297.90	1368.61	-320.11	9.55
	1514.00	5.60	298.20	1370.60	-320.02	9.38
	1516.00	5.50	297.90	1372.59	-319.93	9.21
	1518.00	5.50	298.40	1374.58	-319.84	9.04
	1520.00	5.50	298.70	1376.57	-319.75	8.87
	1522.00	5.40	298.90	1378.56	-319.66	8.70
	1524.00	5.40	299.10	1380.55	-319.56	8.54
	1526.00	5.30	299.20	1382.54	-319.47	8.38
	1528.00	5.30	299.40	1384.53	-319.38	8.21
	1530.00	5.40	299.40	1386.52	-319.29	8.05
	1532.00	5.40	299.70	1388.51	-319.20	7.89
	1534.00	5.50	302.10	1390.51	-319.10	7.72
	1536.00	5.50	301.40	1392.50	-319.00	7.56
	1538.00	5.60	301.40	1394.49	-318.90	7.40
	1540.00	5.60	301.40	1396.48	-318.80	7.23
4 1/2" Liner	1540.60	5.60	301.40	1397.07	-318.77	7.18
Projected to TD	1551.63	5.60	301.40	1408.05	-318.21	6.26

**Table D2** Mud property of Well D

Hole Section (inch)	26"	17 1/2"	12 1/4"	8 1/2"	6 1/8"
Casing Size (inch)	20"	13 3/8"	9 5/8"	7"	4 1/2"
MD (m)	20.00	108.00	656.00	1258.33	1551.63
MW (ppg)	8.5-9.2	8.5-9.2	9.2-9.5	9.3-9.6	9.5-9.8
PV (cP)	10-12	10-12	11-12	10-12	9-13
YP (lb/100 ft <sup>2</sup> )	15-18	15-18	14-17	17-20	12-18

## CURRICULUM VITAE

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**University Education:**

2009–2013 Bachelor Degree of Chemical Engineering, Faculty of Engineering, Mahidol University, Bangkok, Thailand

**Work Experience:**

2014-2015	Position:	Junior Engineer
	Company name:	Energy Thai Trading Hub Co., Ltd.
2012	Position:	Process Engineer (Internship)
	Company name:	Thai Polyethylene Co., Ltd
2011	Position:	Technician (Internship)
	Company name:	MMSVS Group Holding Co., Ltd

**Publication:**

1. Weerapong, P.; Prurapark, R.; and Siemanond, K. (2015) Simulation of Drilling Pressure Profile in Directional Drilling and User Program Development. International Journal of Materials, Mechanics and Manufacturing.

**Proceedings:**

1. Panichaporn, W.; Siemanond, K., and Prurapark, R. (2015, April 21) Predictive Model of Downhole Pressure while Circulating Power-law Fluid in Directional Drilling. Proceedings of the 6<sup>th</sup> Research Symposium on Petrochemical and Materials Technology and the 20<sup>th</sup> PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.

**Presentations:**

1. Panichaporn, W.; Siemanond, K., and Prurapark, R. (2015, May 23-24) Simulation of Drilling Pressure Profile in Directional Drilling and User Program Development. Paper presented at 2015 4<sup>th</sup> International Conference on Petroleum Industry and Energy (ICPIE 2015), Singapore.