

H WELLPLANNING DETAILED DIRECTIONAL SURVEY REPORT SURVEY_DATE 9/2/2014

H HEADER INFORMATION -----

H COMPANY : Chevron Appalachia, LLC
 H FIELD : Marshall County, WV
 H SITE : Francis Pad
 H WELL : Francis 8H
 H WELLPATH : Francis 8H
 H DEPTH UNIT: ft

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H WELL & MAP INFORMATION

H Geodetic System: US State Plane 1983
 H GeodeticDatum: North American Datum 1983
 H Map Zone: West Virginia Northern Zone
 H WELL EW MAP : 1633867.19
 H WELL NS MAP : 502398.02
 H DATUM ELEVN (KB-MSL) : 1292.00
 H VSECT ANGLE : 318.34
 H Azimuth Reference: True
 H Magnetic Declination: -8.669
 H Grid Convergence: -0.760

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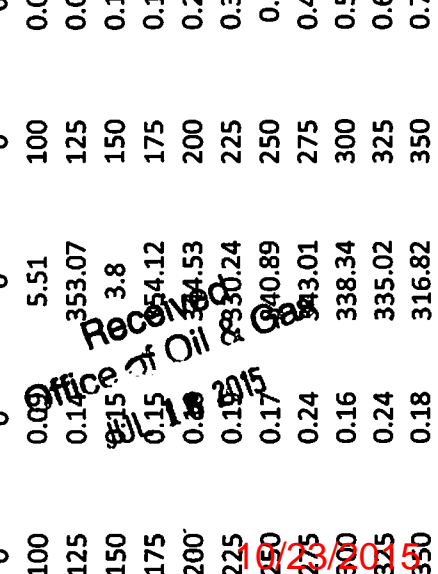
H SURVEY TYPE INFORMATION

H 100.00 - 1119.00 SURVEY #1 - 9-5/8" CASING SDI GYRO SURVEYS : STANDARD KEEPER 103
 H 1220.00 - 13679.00 SURVEY #2 - 8-1/2" HOLE SDI MWD : SDI MWD

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H SURVEY LIST

MD	INC	AZI	TVD	V.Sec.	DLS	N/S	E/W	EASTING(X)	NORTHING(Y)	TOOL
0	0	0	0	0	0	0	0	1633867.19	502398.023	UNDEFINED
100	0.09	5.51	100	0.05	0.09	0.08	0.01	1633867.2	502398.103	Standard Keeper 103 (1)
125	0.14	353.07	125	0.09	0.22	0.13	0.01	1633867.2	502398.153	Standard Keeper 103 (1)
150	0.15	3.8	150	0.14	0.12	0.19	0	1633867.2	502398.213	Standard Keeper 103 (1)
175	0.15	54.12	175	0.19	0.1	0.26	0	1633867.2	502398.283	Standard Keeper 103 (1)
200	0.15	34.53	200	0.25	0.16	0.33	-0.01	1633867.19	502398.353	Standard Keeper 103 (1)
225	0.15	30.24	225	0.33	0.19	0.4	-0.04	1633867.16	502398.423	Standard Keeper 103 (1)
250	0.17	40.89	250	0.4	0.16	0.47	-0.07	1633867.12	502398.493	Standard Keeper 103 (1)
275	0.24	43.01	275	0.48	0.28	0.56	-0.1	1633867.1	502398.583	Standard Keeper 103 (1)
300	0.16	338.34	300	0.56	0.33	0.64	-0.13	1633867.07	502398.663	Standard Keeper 103 (1)
325	0.24	335.02	325	0.65	0.32	0.72	-0.17	1633867.04	502398.743	Standard Keeper 103 (1)
350	0.18	316.82	350	0.74	0.36	0.8	-0.21	1633866.99	502398.823	Standard Keeper 103 (1)



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375	0.13	344.76	375	0.8	0.36	0.85	-0.25	1633866.96	502398.883	Standard Keeper 103 (1)
400	0.09	305.11	400	0.85	0.33	0.89	-0.27	1633866.93	502398.923	Standard Keeper 103 (1)
425	0.05	323.98	425	0.88	0.18	0.91	-0.29	1633866.91	502398.943	Standard Keeper 103 (1)
450	0.05	97.94	450	0.88	0.37	0.92	-0.29	1633866.92	502398.943	Standard Keeper 103 (1)
475	0.09	43.38	475	0.87	0.29	0.93	-0.27	1633866.94	502398.963	Standard Keeper 103 (1)
500	0.1	83.03	500	0.86	0.26	0.95	-0.23	1633866.97	502398.973	Standard Keeper 103 (1)
525	0.07	30.15	525	0.85	0.32	0.96	-0.2	1633867	502398.993	Standard Keeper 103 (1)
550	0.06	42.68	550	0.86	0.07	0.99	-0.18	1633867.02	502399.013	Standard Keeper 103 (1)
575	0.1	41.15	575	0.86	0.16	1.01	-0.16	1633867.04	502399.043	Standard Keeper 103 (1)
600	0.17	10.41	600	0.89	0.39	1.06	-0.14	1633867.07	502399.093	Standard Keeper 103 (1)
625	0.17	7.15	625	0.94	0.04	1.14	-0.13	1633867.08	502399.163	Standard Keeper 103 (1)
650	0.17	42.89	650	0.96	0.42	1.2	-0.1	1633867.11	502399.223	Standard Keeper 103 (1)
675.4	0.12	14.48	675.4	0.98	0.34	1.26	-0.07	1633867.14	502399.283	Standard Keeper 103 (1)
700	0.17	354.79	700	1.03	0.28	1.32	-0.06	1633867.15	502399.343	Standard Keeper 103 (1)
725.2	0.14	351.61	725.2	1.08	0.12	1.38	-0.07	1633867.14	502399.413	Standard Keeper 103 (1)
750.5	0.16	355.52	750.5	1.14	0.09	1.45	-0.08	1633867.13	502399.473	Standard Keeper 103 (1)
775.7	0.13	325.93	775.7	1.19	0.32	1.51	-0.1	1633867.12	502399.533	Standard Keeper 103 (1)
800.1	0.13	347.46	800.1	1.24	0.2	1.56	-0.12	1633867.09	502399.583	Standard Keeper 103 (1)
825.3	0.1	321.94	825.3	1.29	0.23	1.6	-0.14	1633867.08	502399.633	Standard Keeper 103 (1)
850.4	0.04	2.15	850.4	1.32	0.29	1.63	-0.15	1633867.06	502399.653	Standard Keeper 103 (1)
875.1	0.26	9.7	875.1	1.36	0.89	1.69	-0.14	1633867.07	502399.723	Standard Keeper 103 (1)
900.1	0.38	355.88	900.1	1.46	0.57	1.83	-0.14	1633867.08	502399.863	Standard Keeper 103 (1)
925.4	0.39	330.52	925.4	1.61	0.67	1.99	-0.19	1633867.03	502400.023	Standard Keeper 103 (1)
950.3	0.43	322.58	950.3	1.79	0.28	2.14	-0.29	1633866.94	502400.163	Standard Keeper 103 (1)
975.3	0.48	311.75	975.3	1.99	0.4	2.28	-0.42	1633866.8	502400.313	Standard Keeper 103 (1)
1000.2	0.6	326.45	1000.2	2.22	0.73	2.46	-0.57	1633866.66	502400.493	Standard Keeper 103 (1)
1025.2	0.74	327.66	1025.2	2.51	0.56	2.71	-0.73	1633866.5	502400.743	Standard Keeper 103 (1)
1050.2	0.91	328.22	1050.1	2.86	0.68	3.01	-0.92	1633866.31	502401.053	Standard Keeper 103 (1)
1075.2	1.11	327.57	1075.2	3.29	0.76	3.38	-1.15	1633866.08	502401.423	Standard Keeper 103 (1)
1100.4	1.24	320.48	1100.4	3.81	0.8	3.8	-1.46	1633865.79	502401.843	Standard Keeper 103 (1)
1119	1.26	307.25	1119	4.21	0.39	4.1	-1.72	1633865.52	502402.153	Standard Keeper 103 (1)
1220	1.19	309.49	1220	6.34	0.26	5.53	-3.33	1633863.94	502403.593	SDI MWD (2)
1315	1.42	340.3	1314.9	8.47	0.27	6.86	-5.03	1633862.25	502404.953	SDI MWD (2)
1409	1.69	303.47	1408.9	10.96	0.35	8.37	-7.08	1633860.22	502406.493	SDI MWD (2)
1503	1.74	308.69	1502.9	13.71	0.17	10.03	-9.35	1633857.98	502408.183	SDI MWD (2)
1597	1.85	271.47	1596.8	16.15	1.22	10.96	-11.98	1633855.36	502409.143	SDI MWD (2)
1691	1.86	262.46	1690.8	18.05	0.31	10.8	-15.01	1633852.33	502409.023	SDI MWD (2)
1786	1.78	246.96	1785.7	19.38	0.52	10.02	-17.9	1633849.43	502408.283	SDI MWD (2)
1881	1.49	235.38	1880.7	20.01	0.46	8.74	-20.27	1633847.04	502407.033	SDI MWD (2)

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1975	1.54	226.53	1974.6	20.12	0.25	7.18	-22.19	1633845.1	502405.493	SDI MWD (2)
2070	1.5	227.83	2069.6	20.06	0.06	5.47	-24.04	1633843.23	502403.813	SDI MWD (2)
2165	1.43	222.46	2164.6	19.93	0.16	3.76	-25.76	1633841.48	502402.123	SDI MWD (2)
2258	1.41	219.9	2257.5	19.64	0.07	2.02	-27.28	1633839.94	502400.413	SDI MWD (2)
2353	1.09	222.6	2352.5	19.38	0.34	0.46	-28.64	1633838.56	502398.863	SDI MWD (2)
2448	1.01	221.4	2447.5	19.19	0.09	-0.83	-29.81	1633837.38	502397.583	SDI MWD (2)
2518	1.04	242.56	2517.5	19.27	0.54	-1.59	-30.78	1633836.39	502396.843	SDI MWD (2)
2587	0.82	231.84	2586.5	19.46	0.41	-2.18	-31.72	1633835.44	502396.263	SDI MWD (2)
2682	1.48	144.53	2681.5	18.28	1.75	-3.6	-31.55	1633835.6	502394.843	SDI MWD (2)
2777	1.43	127.54	2776.4	15.89	0.46	-5.32	-29.89	1633837.23	502393.103	SDI MWD (2)
2871	0.67	78.11	2870.4	14.47	1.19	-5.92	-28.43	1633838.69	502392.483	SDI MWD (2)
2965.5	0.48	3	2964.9	14.48	0.76	-5.42	-27.87	1633839.26	502392.983	SDI MWD (2)
3060	0.73	53.81	3059.4	14.7	0.6	-4.66	-27.36	1633839.77	502393.723	SDI MWD (2)
3155	1.6	81.77	3154.4	13.91	1.07	-4.12	-25.56	1633841.58	502394.243	SDI MWD (2)
3249	1.16	58.72	3248.4	13.02	0.74	-3.44	-23.45	1633843.7	502394.903	SDI MWD (2)
3344	1.76	103.15	3343.3	11.65	1.3	-3.27	-21.2	1633845.95	502395.043	SDI MWD (2)
3438	2.68	127.29	3437.3	8.32	1.38	-4.93	-18.05	1633849.08	502393.333	SDI MWD (2)
3532	3.93	141.51	3531.1	2.94	1.58	-8.78	-14.3	1633852.78	502389.433	SDI MWD (2)
3627	4.3	145.9	3625.9	-3.84	0.51	-14.28	-10.27	1633856.73	502383.883	SDI MWD (2)
3721	6.08	130.84	3719.5	-12.27	2.37	-20.45	-4.53	1633862.39	502377.633	SDI MWD (2)
3816	6.92	138.44	3813.9	-22.98	1.26	-28.02	3.07	1633869.89	502369.963	SDI MWD (2)
3911	7.17	155.09	3908.2	-34.38	2.16	-37.69	9.37	1633876.06	502360.223	SDI MWD (2)
3958	7.71	165.8	3954.8	-39.99	3.16	-43.4	11.38	1633877.99	502354.473	SDI MWD (2)
4005	8.19	165.89	4001.3	-45.75	1.02	-49.71	12.97	1633879.5	502348.153	SDI MWD (2)
4100	9.28	156.72	4095.2	-59.02	1.86	-63.31	17.64	1633883.99	502334.493	SDI MWD (2)
4195	8.28	154.88	4189.1	-72.85	1.09	-76.54	23.57	1633889.75	502321.183	SDI MWD (2)
4289	4.53	147.25	4282.5	-83.01	4.08	-85.79	28.46	1633894.51	502311.863	SDI MWD (2)
4411	5.79	167.67	4404	-93.14	1.81	-95.85	32.38	1633898.3	502301.753	SDI MWD (2)
4505	14.61	164.61	4496.5	-107.93	9.4	-111.95	36.55	1633902.25	502285.603	SDI MWD (2)
4600	10.87	158.68	4589.1	-127.08	4.17	-131.85	42.98	1633908.42	502265.613	SDI MWD (2)
4695	10.19	150.92	4682.5	-143.68	1.65	-147.54	50.33	1633915.56	502249.833	SDI MWD (2)
4789	11.42	148.83	4774.8	-160.95	1.37	-162.77	59.18	1633924.21	502234.483	SDI MWD (2)
4884	18.39	150.53	4866.6	-184.87	7.35	-183.89	71.44	1633936.19	502213.203	SDI MWD (2)
4978	24.01	154.19	4954.2	-217.79	6.14	-214.04	87.07	1633951.42	502182.843	SDI MWD (2)
5073	24.36	159.37	5040.9	-254.68	2.26	-249.78	102.39	1633966.26	502146.903	SDI MWD (2)
5168	30.43	168.95	5125.2	-293.72	7.88	-291.79	113.92	1633977.23	502104.753	SDI MWD (2)
5262	34.47	168.07	5204.5	-337.33	4.33	-341.2	123.99	1633986.64	502055.213	SDI MWD (2)
5357	34.29	166.58	5282.9	-384.25	0.91	-393.53	135.76	1633997.72	502002.723	SDI MWD (2)
5451	31.83	164.12	5361.7	-429.91	2.98	-443.14	148.69	1634009.99	501952.953	SDI MWD (2)

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5546	27.26	163.42	5444.3	-472.19	4.82	-488.11	161.76	1634022.46	501907.813	SDI MWD (2)
5641	20.93	162.71	5531	-507.39	6.67	-525.21	173.02	1634033.23	501870.573	SDI MWD (2)
5735	13.28	164.91	5620.8	-532.38	8.17	-551.7	180.83	1634040.69	501843.973	SDI MWD (2)
5830	9.76	164.03	5713.9	-549.4	3.71	-569.98	185.89	1634045.5	501825.623	SDI MWD (2)
5925	6.61	184.36	5807.9	-560.46	4.45	-583.18	187.69	1634047.13	501812.403	SDI MWD (2)
5972	6.47	239.47	5854.6	-561.83	12.85	-587.23	185.2	1634044.59	501808.393	SDI MWD (2)
6020	9.32	276.67	5902.2	-558.4	11.88	-588.15	179.01	1634038.38	501807.553	SDI MWD (2)
6067	13.37	296.39	5948.3	-550.51	11.82	-585.29	170.35	1634029.76	501810.523	SDI MWD (2)
6114	16.14	299.32	5993.7	-539.29	6.1	-579.68	159.79	1634019.27	501816.283	SDI MWD (2)
6161	18.17	296.96	6038.6	-526.29	4.57	-573.15	147.56	1634007.13	501822.963	SDI MWD (2)
6208	20.68	294.88	6083	-511.85	5.54	-566.34	133.5	1633993.16	501829.963	SDI MWD (2)
6255	26.44	294.87	6126	-494.62	12.26	-558.44	116.46	1633976.23	501838.093	SDI MWD (2)
6303	32.44	296.35	6167.8	-472.86	12.59	-548.22	95.21	1633955.12	501848.593	SDI MWD (2)
6350	34.57	298.57	6207	-448.62	5.23	-536.25	72.2	1633932.27	501860.863	SDI MWD (2)
6397	33.75	298.71	6245.9	-423.78	1.75	-523.6	49.04	1633909.28	501873.823	SDI MWD (2)
6444	35.59	301.7	6284.5	-398.37	5.33	-510.14	25.95	1633886.37	501887.583	SDI MWD (2)
6492	40.55	307.31	6322.3	-369.65	12.59	-493.33	1.63	1633862.28	501904.723	SDI MWD (2)
6539	44.51	311.5	6357	-338.28	10.36	-473.14	-22.87	1633838.04	501925.233	SDI MWD (2)
6586	48.7	313.19	6389.3	-304.32	9.29	-450.13	-48.1	1633813.13	501948.573	SDI MWD (2)
6633	49.51	316.33	6420	-268.87	5.34	-425.11	-73.31	1633788.24	501973.923	SDI MWD (2)
6681	53.89	319.68	6449.8	-231.22	10.64	-397.11	-98.48	1633763.45	502002.263	SDI MWD (2)
6728	62.31	319.58	6474.6	-191.36	17.92	-366.74	-124.3	1633738.03	502032.973	SDI MWD (2)
6775	67.24	318.82	6494.6	-148.86	10.59	-334.56	-152.08	1633710.69	502065.513	SDI MWD (2)
6822	75.26	320.18	6509.7	-104.41	17.28	-300.74	-180.95	1633682.27	502099.713	SDI MWD (2)
6870	78.24	320.86	6520.7	-57.72	6.36	-264.68	-210.65	1633653.05	502136.163	SDI MWD (2)
6917	78.85	320.48	6530	-11.7	1.52	-229.05	-239.85	1633624.33	502172.173	SDI MWD (2)
6965	79.95	320.26	6538.9	35.45	2.34	-192.72	-269.94	1633594.72	502208.913	SDI MWD (2)
7012	83.17	319.56	6545.8	81.92	7.01	-157.15	-299.88	1633565.26	502244.863	SDI MWD (2)
7060	85.73	316.96	6550.4	129.69	7.58	-121.51	-331.68	1633533.93	502280.923	SDI MWD (2)
7155	87.18	317.05	6556.3	224.48	1.53	-52.16	-396.34	1633470.2	502351.123	SDI MWD (2)
7250	88.64	318.54	6559.8	319.4	2.2	18.16	-460.11	1633407.36	502422.283	SDI MWD (2)
7344	88.36	318.4	6562.2	413.37	0.33	88.5	-522.41	1633346	502493.453	SDI MWD (2)
7438	92.38	320.29	6561.6	507.33	4.73	159.79	-583.64	1633285.73	502565.553	SDI MWD (2)
7533	92.92	322.11	6557.2	602.11	2	233.75	-643.1	1633227.25	502640.283	SDI MWD (2)
7628	90.74	321.14	6554.2	696.9	2.51	308.18	-702.04	1633169.31	502715.493	SDI MWD (2)
7723	91.18	321.08	6552.6	791.77	0.47	382.11	-761.68	1633110.66	502790.213	SDI MWD (2)
7817	90.03	321.25	6551.6	885.65	1.24	455.33	-820.62	1633052.69	502864.203	SDI MWD (2)
7912	89.73	321.72	6551.8	980.51	0.59	529.66	-879.78	1632994.53	502939.313	SDI MWD (2)
8007	90.17	321.7	6551.9	1075.34	0.46	604.23	-938.64	1632936.66	503014.653	SDI MWD (2)

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8102	90.84	321.01	6551	1170.21	1.01	678.42	-997.96	1632878.32	503089.633	SDI MWD (2)
8196	92.25	320.39	6548.5	1264.09	1.64	751.13	-1057.48	1632819.78	503163.123	SDI MWD (2)
8291	91.71	320.3	6545.2	1358.97	0.58	824.23	-1118.07	1632760.16	503237.023	SDI MWD (2)
8386	92.18	320.28	6542	1453.86	0.5	897.27	-1178.73	1632700.48	503310.853	SDI MWD (2)
8480	88.52	317.89	6541.4	1547.83	4.65	968.29	-1240.28	1632639.88	503382.683	SDI MWD (2)
8575	88.69	318.22	6543.7	1642.8	0.39	1038.92	-1303.76	1632577.34	503454.163	SDI MWD (2)
8670	88.9	318.37	6545.7	1737.78	0.27	1109.83	-1366.95	1632515.1	503525.903	SDI MWD (2)
8764	89.16	318.16	6547.3	1831.77	0.36	1179.97	-1429.51	1632453.47	503596.863	SDI MWD (2)
8859	92.85	321.81	6545.7	1926.68	5.46	1252.69	-1490.57	1632393.39	503670.383	SDI MWD (2)
8954	94.64	321.45	6539.5	2021.32	1.92	1327.01	-1549.41	1632335.54	503745.483	SDI MWD (2)
9049	93.09	322.61	6533.1	2115.9	2.04	1401.73	-1607.72	1632278.22	503820.963	SDI MWD (2)
9144	90.84	322.38	6529.8	2210.59	2.38	1477.04	-1665.52	1632221.42	503897.043	SDI MWD (2)
9238	88.42	321.76	6530.4	2304.38	2.66	1551.18	-1723.3	1632164.64	503971.933	SDI MWD (2)
9333	87.38	321.4	6533.9	2399.16	1.16	1625.56	-1782.29	1632106.63	504047.093	SDI MWD (2)
9427	89.63	321.33	6536.3	2492.99	2.39	1698.96	-1840.96	1632048.95	504121.263	SDI MWD (2)
9521	92.76	323.17	6534.4	2586.74	3.86	1773.25	-1898.49	1631992.41	504196.313	SDI MWD (2)
9616	92.52	322.24	6530	2681.36	1.01	1848.74	-1955.99	1631935.92	504272.563	SDI MWD (2)
9711	89.26	321.36	6528.5	2776.16	3.55	1923.38	-2014.72	1631878.18	504347.973	SDI MWD (2)
9805	88.96	320.88	6530	2870.04	0.6	1996.55	-2073.71	1631820.16	504421.913	SDI MWD (2)
9900	88.52	320.51	6532.1	2964.94	0.61	2070.04	-2133.88	1631760.98	504496.193	SDI MWD (2)
9995	90.54	320.94	6532.9	3059.85	2.17	2143.57	-2194.01	1631701.83	504570.523	SDI MWD (2)
10089	92.39	322.12	6530.5	3153.67	2.33	2217.14	-2252.47	1631644.35	504644.863	SDI MWD (2)
10184	91.81	321.76	6527	3248.41	0.72	2291.89	-2310.99	1631586.82	504720.383	SDI MWD (2)
10278	90.77	321.41	6524.9	3342.24	1.17	2365.52	-2369.38	1631529.42	504794.783	SDI MWD (2)
10373	90.03	320.91	6524.2	3437.12	0.94	2439.51	-2428.96	1631470.83	504869.553	SDI MWD (2)
10468	89.56	320.75	6524.5	3532.03	0.52	2513.17	-2488.97	1631411.81	504943.993	SDI MWD (2)
10563	90.07	321.04	6524.8	3626.93	0.62	2586.88	-2548.89	1631352.87	505018.503	SDI MWD (2)
10657	89.87	321.32	6524.9	3720.82	0.37	2660.12	-2607.81	1631294.92	505092.513	SDI MWD (2)
10752	90.5	322	6524.6	3815.66	0.98	2734.63	-2666.74	1631236.98	505167.803	SDI MWD (2)
10847	90.81	322.9	6523.5	3910.41	1	2809.94	-2724.64	1631180.1	505243.873	SDI MWD (2)
10941	90.5	322.89	6522.4	4004.1	0.33	2884.91	-2781.34	1631124.39	505319.583	SDI MWD (2)
11036	91.44	323.11	6520.8	4098.77	1.02	2960.77	-2838.5	1631068.24	505396.193	SDI MWD (2)
11131	90.6	321.67	6519.1	4193.52	1.75	3036.01	-2896.47	1631011.28	505472.203	SDI MWD (2)
11225	91.28	320.07	6517.6	4287.41	1.85	3108.91	-2955.78	1630952.94	505545.883	SDI MWD (2)
11320	90.57	319.19	6516	4382.37	1.19	3181.28	-3017.31	1630892.38	505619.063	SDI MWD (2)
11415	90.27	319.6	6515.3	4477.35	0.53	3253.4	-3079.13	1630831.51	505692.003	SDI MWD (2)
11509	89.83	319.91	6515.3	4571.32	0.57	3325.15	-3139.86	1630771.74	505764.553	SDI MWD (2)
11603	89.96	320.65	6515.4	4665.27	0.8	3397.46	-3199.93	1630712.64	505837.643	SDI MWD (2)
11698	91.98	325.66	6513.8	4759.89	5.69	3473.44	-3256.87	1630656.71	505914.373	SDI MWD (2)

51.01715

11793	91.54	325.14	6510.9	4854.12	0.72	3551.6	-3310.79	1630603.84	505993.243	SDI MWD (2)
11887	91.01	324.96	6508.8	4947.45	0.6	3628.63	-3364.62	1630551.03	506070.983	SDI MWD (2)
11982	90.4	322.67	6507.6	5042.01	2.49	3705.29	-3420.7	1630495.97	506148.383	SDI MWD (2)
12077	90.22	323.38	6507.1	5136.69	0.77	3781.19	-3477.84	1630439.85	506225.023	SDI MWD (2)
12171	89.69	323.64	6507.2	5230.3	0.63	3856.76	-3533.74	1630384.95	506301.333	SDI MWD (2)
12266	91.36	329.71	6506.3	5324.25	6.63	3936.09	-3585.91	1630333.85	506381.353	SDI MWD (2)
12361	93.12	327.95	6502.6	5417.58	2.62	4017.31	-3635.03	1630285.8	506463.213	SDI MWD (2)
12456	92.86	324.08	6497.7	5511.59	4.08	4095.96	-3688.05	1630233.83	506542.563	SDI MWD (2)
12550	92.07	320.74	6493.6	5605.25	3.65	4170.37	-3745.33	1630177.54	506617.723	SDI MWD (2)
12644	91.8	319.86	6490.4	5699.14	0.98	4242.65	-3805.34	1630118.5	506690.793	SDI MWD (2)
12739	91.19	320.04	6488	5794.07	0.67	4315.34	-3866.45	1630058.36	506764.293	SDI MWD (2)
12834	90.57	319.86	6486.5	5889.02	0.68	4388.06	-3927.57	1629998.21	506837.813	SDI MWD (2)
12928	90.04	320.48	6486	5982.97	0.87	4460.24	-3987.78	1629938.97	506910.793	SDI MWD (2)
13023	90.4	321	6485.6	6077.88	0.67	4533.8	-4047.9	1629879.83	506985.133	SDI MWD (2)
13117	90.44	321.03	6485	6171.78	0.05	4606.86	-4107.03	1629821.67	507058.983	SDI MWD (2)
13212	90.22	320.3	6484.4	6266.7	0.8	4680.34	-4167.25	1629762.44	507133.243	SDI MWD (2)
13306	90.22	320.21	6484	6360.65	0.1	4752.61	-4227.35	1629703.3	507206.313	SDI MWD (2)
13400	90.92	320.57	6483.1	6454.58	0.84	4825.03	-4287.27	1629644.34	507279.513	SDI MWD (2)
13495	91.1	320.57	6481.4	6549.49	0.19	4898.39	-4347.6	1629584.99	507353.673	SDI MWD (2)
13589	90.66	320.3	6480	6643.42	0.55	4970.85	-4407.47	1629526.09	507426.923	SDI MWD (2)
13607	90.57	320.04	6479.8	6661.41	1.53	4984.67	-4419	1629514.75	507440.893	SDI MWD (2)
13679	90.57	320.04	6479.1	6733.37	0	5039.86	-4465.24	1629469.24	507496.693	SDI MWD (2)