Magnetic Survey of the Hydrofluoric Acid Spill Area

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MASTER

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Magnetic Survey of the Hydrofluoric Acid Spill Area

EXECUTIVE SUMMARY

A magnetic survey was conducted at the Hydrofluoric Acid Spill Area to evaluate the possibility of buried metal containers or other ferric objects. A proton precession gradiometer with the bottom sensor 2 ft and the top sensor 4 ft from the ground surface was used to sample the survey area on a grid defined by 1 meter grid nodes in a square array.

The survey area was surrounded on three sides by a metal fence and metal recycling facility. The fence and metal objects adjacent to the fence, in addition to metal associated with hydrologic monitoring well heads, waste unit marker balls and metal signs caused significant magnetic field and gradient anomalies that extended throughout most of the survey area. In addition to these easily explained anomalies, several anomalies were detected which probably result from buried ferric objects. Some of these anomalies are of limited aerial extent and magnitude and probably represent small shallow objects. However, at least one of the anomalies is of sufficient magnitude and extent that it may represent a large metal container such as a metal drum.

INTRODUCTION AND SCOPE

The Hydrofluoric Acid Spill Area is located in the southwest portion of the Central Shops facility on Savannah River Site (Fig. 1). The disposal mode and history of this site are not well known, and it is uncertain if acid was only spilled, or if acid contaminated soil or acid filled containers were buried at the site.. In order to evaluate the presence of buried metallic containers a magnetic survey was conducted at the Hydrofluoric Acid Spill Area by the Site Geotechnical Services Department during September, 1994, at the

request of the Environmental Restoration Department. The magnetic survey consists of a grid over the site defined by a 1 meter square grid node pattern.

Magnetic Survey Concepts

The magnitude of the magnetic field measured near the earth's surface is influenced by several factors. The main contribution to the total intensity is due to the internal magnetic field of the earth produced in the vicinity of the earth's core. However, this field is modified by the solar wind of charged particles produced by electromagnetic activity on the sun. This solar wind distorts the magnetic field produced by the earth into a tear drop shape with the blunt end pointing toward the sun. More importantly, the effect of the solar wind is to produce time variations in the total field. The earth's rotation, in effect, introduces a diurnal variation with a twenty four hour period. Also, superimposed on this well defined twenty four hour cycle are variations with no well defined period produced by the chaotic nature of the sun's electromagnetic activity. Typically these variations manifest themselves as micropulsations on the order of less than 10 nT, but significantly larger variations can be produced by magnetic storms on the sun (i.e. sunspots). The net result of these variations is illustrated in figure 2.

The earth's magnetic field is also modified by features near the surface that produce localized spatial variations, or anomalies, in the field intensity. The use of magnetic techniques in searching for buried metallic objects is a consequence of the ability of iron and iron alloys to cause relatively large amplitude anomalies. These anomalies are produced by two effects. Some materials have properties that allow them to become magnetized in the presence of an external magnetic field. This process is called induction. The external magnetic field is the inducing field and the field produced by the material the induced field. The total field ($\vec{B}$) now becomes the sum of the inducing external field ($\vec{H}$) and the field produced by the material ($\vec{H}'$). This relationship can be expressed:

$$\vec{B} = \vec{H} + \vec{H}'$$

In addition some materials possess a magnetic field independent from any external source. This field is typically acquired at some time in the past history of the material and is called remnant magnetization. For most magnetic survey applications the magnitude of the induced field is assumed to be much greater than the remnant magnetization and this assumption has been shown to be valid in the specific case of standard 55 gallon metal drums (Gilkeson and others, 1992).

In reality magnetic fields always manifest as dipoles. That is north and south magnetic poles occur in pairs to produce dipole fields. A field line representation of a dipole and monopole field are illustrated in figure 3. In this type of representation the density of the field lines is proportional to the field magnitude. To a first approximation, the magnetic field produced near the core of the earth can be considered a single dipole with the magnetic field lines impinging the surface of the earth at 90 degrees at the north and south magnetic poles and parallel to the surface of the earth at the magnetic equators.

The geometric relationship of the magnetic field lines to the geographic poles is expressed by magnetic inclination and declination. Declination describes the angular relationship of the component of the field line parallel to the surface of the earth, to geographic north. The magnetic inclination expresses the angular relationship between the magnetic field lines and the horizontal (Fig. 4). Although, these angular relationships change slowly due to poorly understood long term variations, the declination in the vicinity of SRS is about 4 degrees to the west and the inclination about 65 degrees.

Although inducing bodies usually possess highly irregular shapes and sizes they can be usefully modeled as dipoles or arrays of dipoles. In some instances, if the area of consideration is near one end of a dipole relative to the dipole separation, the local field can be considered to be produced by a single pole and approximates monopole behavior. The anomalous fields produced by a dipole and monopole for a magnetic inclination of 60

degrees in the northern hemisphere (i.e. conditions very similar to SRS) and their resultant effect on the total magnetic field measured near the body are illustrated in figure 3. Notice that the anomalous field lines on the north side of the dipole are opposite in sense to the ambient field therefore reducing the field strength in this location. In contrast the anomalous field lines on the south side are in the same sense resulting in an increased field strength. The monopole exhibits similar behavior although not as extreme. This phenomena is the explanation for the asymmetrical shaped magnetic highs and lows produced by inducing bodies at mid-latitudes on the earth. Figure 5 illustrates typical magnetic profiles that would be observed at the latitude of SRS over monopoles and dipoles in addition to a generalized contour representation of a dipole, with illustrative profiles across the contours.

Generalized magnetic field intensity profiles across more complicated shapes for an inclination of 60 degrees are illustrated in figure 6. These profiles all exhibit the typical asymmetrical signatures along the north - south profiles with magnetic highs occurring over southern portions of the bodies.

The previous discussion has been presented in the context of the intensity of the total magnetic field. However, another measurement which can be very useful in interpreting magnetic anomalies is the vertical magnetic gradient, which changes much more rapidly with distance than the total field. This effect results in edge enhancement of anomalies and more effective anomaly separation (Fig. 7). The vertical magnetic gradient can be determined by making measurements of the total magnetic intensity at two known elevations. The vertical gradient is then determined by the difference between the two measurements divided by their separation. The two measurements can be made by a single sensor instrument by moving the sensor between the two measurements or by an instrument with two separated sensors.

In order to conduct a magnetic survey magnetic data are collected at discrete intervals either along a traverse or over a 2 dimensional grid. In practice, data for 2-D

grids are usually collected as multiple traverses. Traverse data can be conveniently displayed as magnetic intensity profiles. 2-D gridded data are usually contoured and displayed as contour diagrams. Displayed in this fashion these data can be qualitatively interpreted by comparing them with profiles or contours that would be predicted from bodies of known shape and size as presented earlier.

In addition to qualitative information, profiles and contour diagrams may also be used for quantitative analysis if the magnetic response of specific objects is known. Due to their widespread use in the past as containers for industrial materials 55 gallon steel drums are commonly targeted during characterization of waste sites. Gilkeson and others (1992) have evaluated the magnetic response from single and multiple drums buried at different depths. The magnetic response is provided by a model calibrated from actual measurements on a 55 gallon drum. These anomalies were calculated for a total field intensity of 53220 nT and inclination of 70 degrees. Conditions very similar to SRS.

Figure 8 illustrates model total field and vertical gradient profiles over a single drum, in vertical position, with the drum top at different depths below the sensor. If single, deeply buried drums are the target, these profiles make clear the need to locate the sensor near the ground surface in order to minimize the distance between the sensor and drum. For sensor - drum distances greater than about 20 ft the anomaly amplitude has decreased to values that may not be discernible from noise.

Figure 9 illustrates the contour representation of an anomaly for a single drum with its top located 10 ft below the sensor. Also shown in figure 9 are the station locations of a typical 5 ft by 5 ft grid over the anomaly. Note that a misfortunate placement of a 20 ft by 20 ft grid may fail to detect the anomaly at all and that a badly placed 10 ft by 10 ft grid would only reveal a maximum amplitude on the order of 25 nT which may also not be discernible from noise and at best would offer poor resolution concerning the drum location.

Hydrofluoric Acid Spill Magnetic Survey

Figure 10 illustrates the contour representation of a total field magnetic anomaly for a cache of 5 drums located in a 12 ft by 12 ft area with the drum tops 10 ft below the sensor. Note again the a 20 ft by 20 ft grid may fail to detect the anomaly. A 10 ft by 10 ft grid would crudely resolve the anomaly. However, Gilkeson and other's (1992) modeling demonstrated that at a depth of 10 ft if the center drum were removed the drums on the corners would be resolved into individual anomalies. If this type of information is required from the magnetic survey then 5 ft grid node separations would be needed to fully resolve the individual anomalies associated with each drum.

In addition to the above considerations other factors enter into the design of an effective magnetic survey. Although smaller grid spacings allow better resolution of anomalies they are also labor intensive. Placing the sensor near the ground makes it much more sensitive to small, shallow sources such as metallic trash or magnetite variations in the soil. This is especially a problem for gradiometer surveys because these effects are amplified. In addition gradiometers are most effective when the sensor separation is $1/5$ or less the distance to the target. If the sensors are placed near the ground this condition may not be met for shallow targets. A careful consideration of what information is needed from the magnetic survey and the resources available will determine which of the aspects discussed above are most important.

Description of Survey Site

A planimetric map of the Hydrofluoric Acid Spill Area is presented in Figure 11. The survey area occurs in a recess in a chain-link fence that surrounds a metal recycling facility in the Central Shops Area. Several large metal objects, including dumpsters, metal tanks, a pile of aluminum cans, and various other types of metal debris and office furniture, were located adjacent to the fence in the metal recycling facility at the time of the survey. The facility uses an electromagnetic crane to move the scrap metal so that it was necessary to perform the survey at times when the crane was not operating.

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Southwest of the survey area several abandoned metal storage tanks were located approximately 100 ft away.

The most prominent objects in the survey area are 4 hydrologic monitoring well heads (CSA1-4) with their associated metal signs and posts. Also, four orange HP waste unit marker balls occur in a square pattern in the center of the survey area. This area is also marked by a large metal sign. In addition to these prominent objects a metal object can be seen on the surface at coordinates (50172, 61690).

MAGNETIC SURVEY

Survey and Analytical Techniques

The grid established for the magnetic survey of the Hydrofluoric Acid Spill Area (fig. 12) was defined by a 1 meter grid node spacing in a square array. The grid was established to give coverage to the majority of the area enclosed by the recess in the fence and surrounding the orange waste unit marker balls. The survey lines were oriented perpendicular to the northern fence for convenience. The grid station locations were established with a transit to mark 90 degree angles and a cord marked at 1 meter intervals to determine distances.

Magnetic data were collected with an EG&G Geometrics G-856 Gradiometer with the top sensor at 1.22 meters (4 ft) from ground level and the bottom sensor 0.61 meters (2 ft) from ground level. This configuration places the sensors near the ground to maximize the sensitivity to small near surface or deeply buried objects. This instrument has a nominal accuracy of 0.1 nT. However, high magnetic gradients (> 600 nT/m) will cause the signal to be sharply degraded. In most cases this will cause the accuracy to deteriorate to 1 nT. More severe degradation can result in significant accuracy losses resulting in poor data very near large metallic objects. As a QA/QC check and in order to account for

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diurnal variation a single station (grid node 0,25) was occupied several times during the survey.

The data were downloaded from the magnetometer through a RS-232 port to an IBM PC Model 80. After downloading, the data were assigned coordinates and diurnally corrected with MAGLOC, software provided by EG&G. Further data display and processing, including gridding and contouring were accomplished with software provided by GEOSOFT Inc. Gridding of the data was accomplished with RANGRID, which fits a minimal curvature surface to the gridded data. Magnetic gradients were calculated by subtracting the top sensor reading from the bottom sensor and dividing by their separation. Since the top and bottom sensor readings are taken at a relatively short time scale (approximately 3 seconds) relative to diurnal variations the gradient is calculated from the data before diurnal correction. The data for the survey along with daily diurnal variations are tabulated in the Appendix.

Magnetic Data Set

Several anomalies are present in the magnetic data (Figs. 13-15). The most prominent magnetic anomaly occurs parallel to the metal fence that surrounds the survey area on three sides. This anomaly exhibits a positive gradient away from the fence lines and can be seen to influence almost the entire survey area. Although the effects of the fence anomaly can be seen throughout the survey area other prominent isolated anomalies occur in the locations of the hydrologic monitoring well heads and the HP waste unit marker balls and sign. The influence of these anomalies are broad compared to the separation of these features so that in many places the anomalies coalesce in the total field data for the top and bottom sensors. However, as expected these anomalies are better resolved and separated by their vertical gradients.

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Other anomalies not associated with prominent features on the waste unit occur approximately centered on coordinates: (50170, 61690); (50205, 61740), (50205, 61760) and (51220, 61775) as illustrated in figure 16.

DISCUSSION

Because of its extent, the large magnetic anomaly associated with the fence causes interference with other anomalies throughout the survey area. This can be attributed to the metallic composition of the fence and the presence of several large ferric metal objects located immediately adjacent to the fence in the Central Shops Metal Recycling Facility. The more isolated anomalies in the locations of the hydrologic monitoring well heads and HP waste unit marker balls and sign can be attributed to the ferric compositions of the metallic parts of these features. These anomalies also cause interference throughout the survey area. In addition to these anomalies, the isolated dipole anomaly located at coordinates (50170, 61690) occurs in the location of a metal object that can be seen on the surface (Figure 16). The presence of the anomalies caused by these metal objects on the surface complicate the detection potential of anomalies caused by ferric objects.

The isolated dipole anomalies that cannot be explained by features seen on the surface probably represent buried ferric metal objects. The relatively small anomalies at (51220, 61775), and (50205, 61740), are of extremely localized extent and must represent relatively small, callously buried objects. The other anomaly (50205, 61665) probably represents a ferric object of significant depth and extent.

CONCLUSIONS

Several anomalies are present in the magnetic field and gradient data from the Hydrofluoric Acid Spill Area. The largest of these anomalies can be attributed to metallic features on the surface of the survey area or immediately adjacent to the survey area. Most

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of the smaller anomalies identified in the area probably result from relatively small shallow, ferric objects that are not large enough to represent a metallic container of any significant volume. However, at least one anomaly was identified that could represent a buried metallic container such as a drum.

REFERENCES

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Hydroflouric Acid Spill Magnetic Survey Data

APPENDIX: Hydroflouric Acid Spill Magnetic Survey Data

DAY 261 Diurnal Variation

TOP			BOTTOM		
Sta.	Time	Field (nT)	Sta.	Time	Field (nT)
1	11:28:30	51395.2	0	11:28:27	51408.4
3	11:28:39	51394.8	2	11:28:35	51408.0
5	11:28:47	51394.8	4	11:28:44	51407.8
7	11:28:55	51394.8	6	11:28:52	51406.8
9	11:29:03	51394.4	8	11:29:00	51406.8
221	11:54:03	51390.8	220	11:53:59	51402.0
223	11:54:11	51391.4	222	11:54:08	51402.6
225	11:54:19	51391.6	224	11:54:16	51401.8
227	11:54:28	51391.8	226	11:54:24	51401.4
229	11:54:36	51392.0	228	11:54:33	51402.0
443	12:20:54	51396.2	442	12:20:50	51409.3
445	12:21:02	51396.7	444	12:20:59	51410.3
447	12:21:10	51397.2	446	12:21:07	51410.6
449	12:21:18	51397.0	448	12:21:15	51410.5
451	12:21:26	51396.6	450	12:21:23	51411.0
559	12:35:03	51398.1	558	12:34:59	51416.0
561	12:35:11	51398.2	560	12:35:07	51415.5
563	12:35:19	51398.2	562	12:35:15	51415.2
565	12:35:27	51398.1	564	12:35:23	51415.5
567	12:35:35	51398.1	566	12:35:32	51415.2
672	12:53:30	51400.5	673	12:53:33	51413.4
674	12:53:38	51401.7	675	12:53:41	51413.8
676	12:53:46	51401.6	677	12:53:49	51413.6
678	12:53:55	51401.7	679	12:53:58	51413.5
680	12:54:03	51401.9	681	12:54:06	51412.1
781	13:04:55	51404.0	780	13:04:51	51416.2
783	13:05:02	51404.8	782	13:04:58	51416.1
784	13:05:05	51403.3	785	13:05:14	51414.7
786	13:05:18	51403.1	787	13:05:22	51414.9
788	13:05:26	51402.9	892	13:17:14	51414.1
891	13:17:11	51406.2	894	13:17:22	51413.8
893	13:17:19	51405.8	896	13:17:30	51413.7
895	13:17:27	51405.7	898	13:17:39	51413.8
897	13:17:35	51405.9	900	13:17:47	51413.6
899	13:17:43	51406.0	1001	13:29:34	51419.0
1002	13:29:37	51406.0	1003	13:29:46	51418.3
1004	13:29:49	51407.1	1005	13:29:55	51417.7
1006	13:29:58	51406.7	1007	13:30:04	51417.4
1008	13:30:07	51406.3	1009	13:30:13	51418.1
1010	13:30:16	51406.1	1107	13:42:13	51416.2
1108	13:42:16	51404.5	1109	13:42:20	51416.1
1110	13:42:23	51404.4	1111	13:42:27	51416.0
1112	13:42:30	51404.3	1113	13:42:36	51415.9
1114	13:42:39	51404.4	1115	13:42:44	51416.1
1116	13:42:47	51404.7	1211	13:54:41	51421.7
1212	13:54:44	51406.2	1213	13:54:48	51421.4

Hydroflouric Acid Spill Magnetic Survey Data

1214	13:54:52	51406.0	1215	13:54:56	51421.3
1216	13:54:59	51406.1	1217	13:55:02	51421.5
1220	13:55:14	51405.9	1219	13:55:10	51421.7
1314	14:07:06	51405.9	1313	14:07:03	51424.6
1315	14:07:10	51407.9	1316	14:07:17	51423.3
1317	14:07:20	51407.4	1318	14:07:26	51422.7
1319	14:07:29	51409.0	1320	14:07:36	51422.9
1321	14:07:39	51408.7	1410	14:24:00	51417.8
1411	14:24:03	51407.0	1412	14:24:09	51417.6
1413	14:24:12	51407.2	1414	14:24:17	51417.3
1415	14:24:20	51406.9	1416	14:24:26	51417.5
1417	14:24:30	51407.1	1418	14:24:35	51418.2
1419	14:24:38	51407.1	1420	14:34:26	51412.6
1421	14:34:30	51410.6	1422	14:34:35	51412.7
1423	14:34:38	51410.0	1424	14:34:44	51413.3
1425	14:34:48	51409.8	1426	14:34:53	51413.1
1427	14:34:56	51409.9	1428	14:35:02	51413.5
1429	14:35:05	51409.7	1514	14:45:25	51419.7
1515	14:45:29	51407.5	1516	14:45:34	51419.7
1517	14:45:37	51407.6	1518	14:45:43	51418.5
1519	14:45:46	51407.2	1520	14:45:51	51418.5
1521	14:45:55	51407.2	1522	14:46:00	51418.5
1523	14:46:03	51407.0

Hydroflouric Acid Spill Magnetic Survey Data

DAY 262 Diurnal Variation

TOP			BOTTOM		
Sta.	Time	Field (nT)	Sta.	Time	Field (nT)
1555	12:12:17	51398.0	1554	12:12:13	51399.8
1557	12:12:27	51397.7	1556	12:12:23	51399.4
1559	12:12:38	51397.5	1558	12:12:34	51399.3
1561	12:12:49	51396.6	1560	12:12:44	51401.3
1646	12:24:29	51392.6	1645	12:24:25	51416.0
1648	12:24:40	51393.0	1647	12:24:36	51415.8
1650	12:24:51	51392.0	1649	12:24:46	51415.0
1652	12:25:02	51392.3	1651	12:24:57	51415.3
1654	12:25:12	51392.4	1653	12:25:08	51415.8
1734	12:37:17	51394.8	1733	12:37:13	51419.2
1736	12:37:28	51395.5	1735	12:37:23	51418.9
1738	12:37:38	51395.1	1737	12:37:34	51419.3
1740	12:37:49	51395.0	1739	12:37:45	51419.2
1742	12:38:00	51395.0	1741	12:37:56	51420.0
1818	12:50:42	51399.7	1817	12:50:37	51404.9
1820	12:50:54	51399.2	1819	12:50:49	51405.0
1822	12:51:04	51398.9	1821	12:51:00	51405.1
1824	12:51:16	51398.7	1823	12:51:12	51405.5
1826	12:51:28	51398.5	1825	12:51:23	51405.2
1898	13:01:27	51400.4	1897	13:01:23	51413.2
1900	13:01:39	51400.6	1899	13:01:34	51414.1
1902	13:01:50	51400.0	1901	13:01:46	51414.2
1904	13:02:02	51399.9	1903	13:01:57	51414.0
1906	13:02:13	51399.9	1905	13:02:09	51414.0
1978	13:12:39	51406.9	1977	13:12:35	51426.3
1980	13:12:50	51406.7	1979	13:12:45	51426.8
1982	13:13:01	51406.7	1981	13:12:56	51427.5
1984	13:13:11	51406.9	1983	13:13:07	51427.9
1986	13:13:22	51406.8	1985	13:13:18	51428.0
2056	13:23:52	51406.3	2055	13:23:48	51426.1
2058	13:24:03	51406.3	2057	13:23:58	51425.7
2060	13:24:13	51406.1	2059	13:24:09	51425.8
2062	13:24:24	51406.0	2061	13:24:20	51425.6
2064	13:24:35	51406.0	2063	13:24:31	51426.1
2130	13:35:12	51407.4	2129	13:35:08	51422.2
2132	13:35:24	51407.6	2131	13:35:20	51422.7
2134	13:35:36	51407.3	2133	13:35:31	51423.2
2136	13:35:48	51403.7	2135	13:35:44	51426.3
2138	13:36:01	51401.1	2137	13:35:57	51426.4
2204	13:45:42	51408.3	2203	13:45:38	51414.7
2206	13:45:53	51408.6	2205	13:45:49	51413.5
2208	13:46:04	51408.5	2207	13:46:00	51413.7
2210	13:46:15	51408.9	2209	13:46:10	51413.8
2212	13:46:25	51409.2	2211	13:46:21	51414.1

Hydroflouric Acid Spill Magnetic Survey Data

DAY 264 Diurnal Variation

TOP			BOTTOM		
Sta.	Time	Field (nT)	Sta.	Time	Field (nT)
1	8:38:40	51381.0	0	8:38:38	51395.0
3	8:38:47	51381.0	2	8:38:45	51394.8
5	8:38:53	51381.0	4	8:38:51	51395.2
7	8:39:00	51380.4	6	8:38:58	51394.6
9	8:39:06	51379.4	8	8:39:04	51393.8
131	8:51:53	51377.4	130	8:51:51	51383.8
133	8:52:00	51377.8	132	8:51:58	51384.4
135	8:52:07	51377.8	134	8:52:04	51385.0
137	8:52:15	51378.0	136	8:52:13	51385.2
139	8:52:21	51377.6	138	8:52:19	51384.8
405	9:34:39	51384.6	404	9:34:37	51397.6
407	9:34:46	51384.2	406	9:34:43	51396.2
409	9:34:52	51384.8	408	9:34:50	51396.4
411	9:34:58	51384.8	410	9:34:56	51394.8
413	9:35:04	51385.0	412	9:35:02	51394.2

Hydrofluoric Acid Spill Magnetic Survey Data

* represents missing data due to high magnetic gradients

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
0	261	112946	10	0	0	49775.6	49776.5	-0.9	48818.6	48820.3	-1.7	-1568.9
0	261	112957	12	0	-1	50534.4	50535.3	-0.9	50025.0	50026.8	-1.8	-835.1
0	261	113009	14	0	-2	50971.6	50972.6	-1.0	50807.2	50809.0	-1.8	-269.5
0	261	113021	16	0	-3	51164.4	51165.4	-1.0	51094.2	51096.0	-1.8	-115.1
0	261	113044	18	0	-4	51252.4	51253.4	-1.0	51211.4	51213.3	-1.9	-67.2
0	261	113054	20	0	-5	51298.8	51299.9	-1.1	51267.6	51269.6	-2.0	-51.1
0	261	113105	22	0	-6	51320.2	51321.3	-1.1	51296.6	51298.6	-2.0	-38.7
0	261	113115	24	0	-7	51321.6	51322.7	-1.1	51298.2	51300.2	-2.0	-38.4
0	261	113124	26	0	-8	51307.0	51308.1	-1.1	51267.4	51269.5	-2.1	-64.9
0	261	113134	28	0	-9	51256.8	51258.0	-1.2	51174.0	51176.1	-2.1	-135.7
0	261	113146	30	0	-10	51213.0	51214.2	-1.2	50968.4	50970.5	-2.1	-401.0
0	261	113156	32	0	-11	51304.8	51306.0	-1.2	50567.8	50570.0	-2.2	-1208.2
0	261	113208	34	0	-12	51791.8	51793.0	-1.2	50467.0	50469.2	-2.2	-2171.8
0	261	113219	36	0	-13	51640.0	51641.3	-1.3	50698.2	50700.4	-2.2	-1543.9
0	261	113229	38	0	-14	51454.8	51456.1	-1.3	51044.6	51046.9	-2.3	-672.5
0	261	113238	40	0	-15	51388.6	51389.9	-1.3	51253.8	51256.1	-2.3	-221.0
0	261	113248	42	0	-16	51385.2	51386.5	-1.3	51327.4	51329.7	-2.3	-94.7
0	261	113258	44	0	-17	51390.8	51392.2	-1.4	51362.6	51364.9	-2.3	-46.2
0	261	113307	46	0	-18	51401.2	51402.6	-1.4	51385.2	51387.6	-2.4	-26.2
0	261	113317	48	0	-19	51405.4	51406.8	-1.4	51396.0	51398.4	-2.4	-15.4
0	261	113326	50	0	-20	51407.4	51408.8	-1.4	51395.6	51398.0	-2.4	-19.3
0	261	113335	52	0	-21	51407.4	51408.9	-1.5	51392.6	51395.1	-2.5	-24.3
0	261	113344	54	0	-22	51406.4	51407.9	-1.5	51395.8	51398.3	-2.5	-17.4
0	261	113354	56	0	-23	51406.2	51407.7	-1.5	51396.0	51398.5	-2.5	-16.7
0	261	113404	58	0	-24	51403.6	51405.1	-1.5	51393.2	51395.8	-2.6	-17.1
0	261	113412	60	0	-25	51400.6	51402.1	-1.5	51391.8	51394.4	-2.6	-14.4
0	261	113641	62	0	-26	51400.0	51401.9	-1.9	51391.2	51394.3	-3.1	-14.4
0	261	113651	64	0	-27	51398.2	51400.1	-1.9	51389.8	51392.9	-3.1	-13.8
0	261	113701	66	0	-28	51394.6	51396.5	-1.9	51385.8	51388.9	-3.1	-14.4
0	261	113711	68	0	-29	51389.0	51391.0	-2.0	51380.8	51384.0	-3.2	-13.4
0	261	113719	70	0	-30	51384.6	51386.6	-2.0	51373.6	51376.8	-3.2	-18.0
0	261	113729	72	0	-31	51381.2	51383.2	-2.0	51373.8	51377.0	-3.2	-12.1
0	261	113739	74	0	-32	51379.2	51381.2	-2.0	51370.6	51373.8	-3.2	-14.1
0	261	113749	76	0	-33	51377.4	51379.5	-2.1	51366.6	51369.9	-3.3	-17.7
0	261	113759	78	0	-34	51369.2	51371.3	-2.1	51357.2	51360.5	-3.3	-19.7
0	261	113809	80	0	-35	51367.0	51369.1	-2.1	51359.8	51363.1	-3.3	-11.8
0	261	113819	82	0	-36	51366.8	51368.9	-2.1	51362.2	51365.6	-3.4	-7.5
0	261	113829	84	0	-37	51358.0	51360.2	-2.2	51354.4	51357.8	-3.4	-5.9
0	261	113838	86	0	-38	51350.6	51352.8	-2.2	51349.4	51352.8	-3.4	-2.0
0	261	113847	88	0	-39	51345.0	51347.2	-2.2	51340.6	51344.1	-3.5	-7.2
0	261	113858	90	0	-40	51336.4	51338.6	-2.2	51335.0	51338.5	-3.5	-2.3
0	261	113908	92	0	-41	51326.8	51329.1	-2.3	51315.0	51318.5	-3.5	-19.3
0	261	113918	94	0	-42	51314.6	51316.9	-2.3	51307.0	51310.6	-3.6	-12.5
0	261	113929	96	0	-43	51308.8	51311.1	-2.3	51295.8	51299.4	-3.6	-21.3
0	261	113940	98	0	-44	51301.2	51303.5	-2.3	51292.0	51295.6	-3.6	-15.1
0	261	113950	100	0	-45	51295.0	51297.4	-2.4	51288.4	51292.1	-3.7	-10.8
0	261	114000	102	0	-46	51296.4	51298.8	-2.4	51284.4	51288.1	-3.7	-19.7
0	261	114011	104	0	-47	51300.0	51302.4	-2.4	51286.6	51290.3	-3.7	-22.0

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LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
0	261	114021	106	0	-48	51306.8	51309.2	-2.4	51299.0	51302.8	-3.8	-12.8
0	261	114033	108	0	-49	51324.2	51326.7	-2.5	51307.6	51311.4	-3.8	-27.2
0	261	114043	110	0	-50	51348.8	51351.3	-2.5	51323.4	51327.2	-3.8	-41.6
0	261	114052	112	0	-51	51417.4	51419.9	-2.5	51422.6	51426.5	-3.9	8.5
1	261	114305	114	1	0	50697.8	50700.6	-2.8	*	*	*	*
1	261	114316	116	1	-1	50376.8	50379.6	-2.8	49672.4	49676.7	-4.3	-1154.8
1	261	114326	118	1	-2	50912.0	50914.9	-2.9	50711.4	50715.8	-4.4	-328.8
1	261	114335	120	1	-3	51154.4	51157.3	-2.9	51071.0	51075.4	-4.4	-136.7
1	261	114347	122	1	-4	51249.2	51252.1	-2.9	51208.0	51212.4	-4.4	-67.5
1	261	114357	124	1	-5	51296.8	51299.7	-2.9	51268.0	51272.5	-4.5	-47.2
1	261	114407	126	1	-6	51320.2	51323.2	-3.0	51296.2	51300.7	-4.5	-39.3
1	261	114416	128	1	-7	51317.4	51320.4	-3.0	51294.0	51298.5	-4.5	-38.4
1	261	114426	130	1	-8	51286.0	51289.0	-3.0	51247.6	51252.2	-4.6	-62.9
1	261	114437	132	1	-9	51206.8	51209.8	-3.0	51111.0	51115.6	-4.6	-157.1
1	261	114447	134	1	-10	51088.6	51091.7	-3.1	50654.0	50658.6	-4.6	-712.5
1	261	114457	136	1	-11	51969.6	51972.7	-3.1	*	*	*	*
1	261	114508	138	1	-12	52408.4	52411.5	-3.1	*	*	*	*
1	261	114518	140	1	-13	58643.8	58646.9	-3.1	58611.0	58615.7	-4.7	-53.8
1	261	114528	142	1	-14	51763.6	51766.8	-3.2	51550.8	51555.6	-4.8	-348.9
1	261	114537	144	1	-15	51414.0	51417.2	-3.2	51219.8	51224.6	-4.8	-318.4
1	261	114546	146	1	-16	51375.8	51379.0	-3.2	51298.2	51303.0	-4.8	-127.2
1	261	114555	148	1	-17	51381.0	51384.2	-3.2	51342.8	51347.6	-4.8	-62.6
1	261	114605	150	1	-18	51390.6	51393.9	-3.3	51372.2	51377.1	-4.9	-30.2
1	261	114614	152	1	-19	51405.6	51408.9	-3.3	51392.2	51397.1	-4.9	-22.0
1	261	114625	154	1	-20	51407.8	51411.1	-3.3	51394.2	51399.1	-4.9	-22.3
1	261	114635	156	1	-21	51406.4	51409.7	-3.3	51390.6	51395.6	-5.0	-25.9
1	261	114644	158	1	-22	51407.4	51410.7	-3.3	51390.2	51395.2	-5.0	-28.2
1	261	114654	160	1	-23	51404.2	51407.6	-3.4	51389.4	51394.4	-5.0	-24.3
1	261	114704	162	1	-24	51401.4	51404.8	-3.4	51389.6	51394.7	-5.1	-19.3
1	261	114714	164	1	-25	51398.0	51401.4	-3.4	51387.2	51392.3	-5.1	-17.7
1	261	114900	166	1	-26	51400.4	51404.1	-3.7	51388.2	51393.6	-5.4	-20.0
1	261	114910	168	1	-27	51396.2	51399.9	-3.7	51389.0	51394.5	-5.5	-11.8
1	261	114920	170	1	-28	51390.0	51393.7	-3.7	51385.8	51391.3	-5.5	-6.9
1	261	114930	172	1	-29	51390.2	51393.9	-3.7	51380.8	51386.3	-5.5	-15.4
1	261	114940	174	1	-30	51385.8	51389.6	-3.8	51378.8	51384.4	-5.6	-11.5
1	261	114951	176	1	-31	51382.8	51386.6	-3.8	51378.4	51384.0	-5.6	-7.2
1	261	115001	178	1	-32	51376.6	51380.4	-3.8	51371.0	51376.6	-5.6	-9.2
1	261	115011	180	1	-33	51370.8	51374.6	-3.8	51365.0	51370.7	-5.7	-9.5
1	261	115021	182	1	-34	51365.4	51369.3	-3.9	51348.0	51353.7	-5.7	-28.5
1	261	115031	184	1	-35	51364.8	51368.7	-3.9	51380.0	51385.7	-5.7	24.9
1	261	115041	186	1	-36	51362.0	51365.9	-3.9	51365.0	51370.8	-5.8	4.9
1	261	115050	188	1	-37	51355.2	51359.1	-3.9	51351.6	51357.4	-5.8	-5.9
1	261	115100	190	1	-38	51344.0	51348.0	-4.0	51344.8	51350.6	-5.8	1.3
1	261	115111	192	1	-39	51338.6	51342.6	-4.0	51333.0	51338.8	-5.8	-9.2
1	261	115121	194	1	-40	51328.4	51332.4	-4.0	51325.6	51331.5	-5.9	-4.6
1	261	115131	196	1	-41	51317.4	51321.4	-4.0	51309.2	51315.1	-5.9	-13.4
1	261	115143	198	1	-42	51302.4	51306.5	-4.1	51296.6	51302.6	-6.0	-9.5
1	261	115153	200	1	-43	51295.0	51299.1	-4.1	51283.0	51289.0	-6.0	-19.7
1	261	115203	202	1	-44	51284.0	51288.1	-4.1	51274.2	51280.2	-6.0	-16.1

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
1	261	115212	204	1	-45	51271.0	51275.1	-4.1	51266.6	51272.6	-6.0	-7.2
1	261	115223	206	1	-46	51266.6	51270.8	-4.2	51258.6	51264.7	-6.1	-13.1
1	261	115233	208	1	-47	51267.4	51271.6	-4.2	51256.8	51262.9	-6.1	-17.4
1	261	115244	210	1	-48	51270.0	51274.2	-4.2	51256.6	51262.7	-6.1	-22.0
1	261	115254	212	1	-49	51287.2	51291.4	-4.2	51275.8	51282.0	-6.2	-18.7
1	261	115304	214	1	-50	51332.0	51336.3	-4.3	51319.0	51325.2	-6.2	-21.3
1	261	115314	216	1	-51	51394.4	51398.7	-4.3	51405.2	51411.4	-6.2	17.7
1	261	115325	218	1	-52	51484.8	51489.1	-4.3	51556.4	51562.7	-6.3	117.4
2	261	115634	230	2	0	49648.8	49651.7	-2.9	*	*	*	*
2	261	115647	232	2	-1	50207.6	50210.5	-2.9	49367.1	49372.9	-5.8	-1377.9
2	261	115659	234	2	-2	50850.8	50853.6	-2.8	50616.9	50622.6	-5.7	-383.4
2	261	115710	236	2	-3	51115.2	51118.0	-2.8	51015.8	51021.5	-5.7	-162.9
2	261	115721	238	2	-4	51246.1	51248.9	-2.8	51195.9	51201.5	-5.6	-82.3
2	261	115732	240	2	-5	51298.8	51301.5	-2.7	51262.9	51268.5	-5.6	-58.9
2	261	115742	242	2	-6	51323.0	51325.7	-2.7	51292.9	51298.4	-5.5	-49.3
2	261	115752	244	2	-7	51321.1	51323.8	-2.7	51296.9	51302.4	-5.5	-39.7
2	261	115804	246	2	-8	51291.7	51294.3	-2.6	51255.5	51260.9	-5.4	-59.3
2	261	115814	248	2	-9	51204.1	51206.7	-2.6	51123.2	51128.6	-5.4	-132.6
2	261	115825	250	2	-10	50986.9	50989.5	-2.6	50608.6	50613.9	-5.3	-620.2
2	261	115836	252	2	-11	51045.2	51047.8	-2.6	*	*	*	*
2	261	115848	254	2	-12	*	*	*	*	*	*	*
2	261	115902	256	2	-13	*	*	*	46929.2	46934.4	-5.2	*
2	261	115913	258	2	-14	45616.6	45619.1	-2.5	*	*	*	*
2	261	115925	260	2	-15	51143.1	51145.5	-2.4	51605.7	51610.8	-5.1	758.4
2	261	115936	262	2	-16	51362.2	51364.6	-2.4	51265.9	51270.9	-5.0	-157.9
2	261	115948	264	2	-17	51366.4	51368.8	-2.4	51305.7	51310.7	-5.0	-99.5
2	261	115957	266	2	-18	51385.2	51387.5	-2.3	51345.3	51350.2	-4.9	-65.4
2	261	120008	268	2	-19	51400.5	51402.8	-2.3	51378.7	51383.6	-4.9	-35.7
2	261	120018	270	2	-20	51409.4	51411.7	-2.3	51393.4	51398.2	-4.8	-26.2
2	261	120027	272	2	-21	51409.3	51411.6	-2.3	51386.1	51390.9	-4.8	-38.0
2	261	120037	274	2	-22	51407.9	51410.1	-2.2	51388.2	51392.9	-4.7	-32.3
2	261	120046	276	2	-23	51406.6	51408.8	-2.2	51386.0	51390.7	-4.7	-33.8
2	261	120057	278	2	-24	51403.5	51405.7	-2.2	51385.1	51389.7	-4.6	-30.2
2	261	120107	280	2	-25	51400.2	51402.4	-2.2	51384.5	51389.1	-4.6	-25.7
2	261	120313	282	2	-26	51399.9	51401.7	-1.8	51378.7	51382.7	-4.0	-34.8
2	261	120324	284	2	-27	51396.3	51398.1	-1.8	51378.7	51382.7	-4.0	-28.9
2	261	120335	286	2	-28	51393.8	51395.6	-1.8	51381.3	51385.2	-3.9	-20.5
2	261	120347	288	2	-29	51394.5	51396.2	-1.7	51378.9	51382.8	-3.9	-25.6
2	261	120357	290	2	-30	51390.1	51391.8	-1.7	51373.6	51377.4	-3.8	-27.0
2	261	120407	292	2	-31	51385.2	51386.9	-1.7	51365.8	51369.6	-3.8	-31.8
2	261	120417	294	2	-32	51377.3	51379.0	-1.7	51364.0	51367.7	-3.7	-21.8
2	261	120428	296	2	-33	51375.4	51377.0	-1.6	51361.6	51365.3	-3.7	-22.6
2	261	120438	298	2	-34	51367.1	51368.7	-1.6	51349.3	51352.9	-3.6	-29.2
2	261	120449	300	2	-35	51366.0	51367.6	-1.6	51344.5	51348.1	-3.6	-35.2
2	261	120500	302	2	-36	51357.2	51358.7	-1.5	51338.4	51341.9	-3.5	-30.8
2	261	120510	304	2	-37	51348.1	51349.6	-1.5	51329.2	51332.7	-3.5	-31.0
2	261	120520	306	2	-38	51342.1	51343.6	-1.5	51322.1	51325.5	-3.4	-32.8
2	261	120530	308	2	-39	51326.8	51328.3	-1.5	51310.2	51313.6	-3.4	-27.2
2	261	120541	310	2	-40	51311.9	51313.3	-1.4	51298.3	51301.6	-3.3	-22.3

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
2	261	120551	312	2	-41	51299.8	51301.2	-1.4	51284.9	51288.2	-3.3	-24.4
2	261	120601	314	2	-42	51286.2	51287.6	-1.4	51269.7	51272.9	-3.2	-27.0
2	261	120612	316	2	-43	51267.8	51269.1	-1.3	51252.2	51255.4	-3.2	-25.6
2	261	120623	318	2	-44	51243.4	51244.7	-1.3	51232.8	51235.9	-3.1	-17.4
2	261	120634	320	2	-45	51235.8	51237.1	-1.3	51218.3	51221.4	-3.1	-28.7
2	261	120645	322	2	-46	51216.8	51218.1	-1.3	51200.8	51203.8	-3.0	-26.2
2	261	120656	324	2	-47	51198.5	51199.7	-1.2	51186.8	51189.8	-3.0	-19.2
2	261	120706	326	2	-48	51190.8	51192.0	-1.2	51172.8	51175.7	-2.9	-29.5
2	261	120717	328	2	-49	51206.6	51207.8	-1.2	51182.9	51185.8	-2.9	-38.9
2	261	120727	330	2	-50	51255.4	51256.5	-1.1	51228.1	51230.9	-2.8	-44.8
2	261	120737	332	2	-51	51412.8	51413.9	-1.1	51411.3	51414.1	-2.8	-2.5
2	261	120749	334	2	-52	51593.2	51594.3	-1.1	51757.2	51759.9	-2.7	268.9
3	261	120858	336	3	0	45576.5	45577.4	-0.9	*	*	*	*
3	261	121017	338	3	-1	50231.5	50232.2	-0.7	49825.3	49827.3	-2.0	-665.9
3	261	121028	340	3	-2	50882.9	50883.6	-0.7	50739.7	50741.7	-2.0	-234.8
3	261	121039	342	3	-3	51132.2	51132.8	-0.6	51059.7	51061.6	-1.9	-118.9
3	261	121049	344	3	-4	51247.7	51248.3	-0.6	51197.5	51199.4	-1.9	-82.3
3	261	121059	346	3	-5	51301.7	51302.3	-0.6	51263.7	51265.6	-1.9	-62.3
3	261	121109	348	3	-6	51325.6	51326.2	-0.6	51294.9	51296.7	-1.8	-50.3
3	261	121120	350	3	-7	51326.9	51327.4	-0.5	51303.8	51305.6	-1.8	-37.9
3	261	121129	352	3	-8	51305.6	51306.1	-0.5	51278.0	51279.7	-1.7	-45.2
3	261	121139	354	3	-9	51233.2	51233.7	-0.5	51182.9	51184.6	-1.7	-82.5
3	261	121149	356	3	-10	51079.3	51079.8	-0.5	50898.6	50900.2	-1.6	-296.2
3	261	121200	358	3	-11	50834.0	50834.4	-0.4	49897.4	49899.0	-1.6	-1535.4
3	261	121211	360	3	-12	51156.7	51157.1	-0.4	*	*	*	*
3	261	121222	362	3	-13	51343.7	51344.1	-0.4	49788.6	49790.1	-1.5	-2549.3
3	261	121233	364	3	-14	51539.8	51540.1	-0.3	50812.4	50813.8	-1.4	-1192.5
3	261	121243	366	3	-15	51361.6	51361.9	-0.3	51210.1	51211.5	-1.4	-248.4
3	261	121253	368	3	-16	51345.7	51346.0	-0.3	51234.8	51236.1	-1.3	-181.8
3	261	121303	370	3	-17	51355.9	51356.2	-0.3	51284.6	51285.9	-1.3	-116.9
3	261	121313	372	3	-18	51375.6	51375.8	-0.2	51328.1	51329.3	-1.2	-77.9
3	261	121324	374	3	-19	51395.2	51395.4	-0.2	51371.9	51373.1	-1.2	-38.2
3	261	121335	376	3	-20	51404.2	51404.4	-0.2	51383.9	51385.0	-1.1	-33.3
3	261	121345	378	3	-21	51409.3	51409.4	-0.1	51388.0	51389.1	-1.1	-34.9
3	261	121356	380	3	-22	51407.7	51407.8	-0.1	51394.6	51395.6	-1.0	-21.5
3	261	121407	382	3	-23	51403.8	51403.9	-0.1	51385.8	51386.8	-1.0	-29.5
3	261	121417	384	3	-24	51401.5	51401.6	-0.1	51380.8	51381.7	-0.9	-33.9
3	261	121428	386	3	-25	51400.8	51400.8	0.0	51375.5	51376.4	-0.9	-41.5
3	261	121538	388	3	-26	51395.2	51395.0	0.2	51377.9	51378.5	-0.6	-28.4
3	261	121559	390	3	-27	51398.3	51398.1	0.2	51375.2	51375.7	-0.5	-37.9
3	261	121609	392	3	-28	51396.4	51396.2	0.2	51373.5	51373.9	-0.4	-37.5
3	261	121620	394	3	-29	51394.2	51393.9	0.3	51376.9	51377.3	-0.4	-28.4
3	261	121631	396	3	-30	51395.8	51395.5	0.3	51378.0	51378.3	-0.3	-29.2
3	261	121641	398	3	-31	51390.1	51389.8	0.3	51368.7	51369.0	-0.3	-35.1
3	261	121652	400	3	-32	51383.0	51382.6	0.4	51360.0	51360.2	-0.2	-37.7
3	261	121702	402	3	-33	51380.6	51380.2	0.4	51360.3	51360.5	-0.2	-33.3
3	261	121713	404	3	-34	51376.0	51375.6	0.4	51354.5	51354.6	-0.1	-35.2
3	261	121724	406	3	-35	51366.2	51365.8	0.4	51344.7	51344.8	-0.1	-35.2
3	261	121734	408	3	-36	51356.0	51355.5	0.5	51335.5	51335.5	0.0	-33.6

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LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
3	261	121744	410	3	-37	51344.2	51343.7	0.5	51326.3	51326.3	0.0	-29.3
3	261	121753	412	3	-38	51332.7	51332.2	0.5	51318.1	51318.0	0.1	-23.9
3	261	121803	414	3	-39	51322.6	51322.1	0.5	51308.2	51308.1	0.1	-23.6
3	261	121813	416	3	-40	51307.6	51307.0	0.6	51294.5	51294.3	0.2	-21.5
3	261	121823	418	3	-41	51294.4	51293.8	0.6	51278.5	51278.3	0.2	-26.1
3	261	121833	420	3	-42	51272.4	51271.8	0.6	51261.6	51261.3	0.3	-17.7
3	261	121844	422	3	-43	51257.2	51256.5	0.7	51238.8	51238.5	0.3	-30.2
3	261	121854	424	3	-44	51230.2	51229.5	0.7	51214.8	51214.5	0.3	-25.2
3	261	121905	426	3	-45	51200.8	51200.1	0.7	51187.9	51187.5	0.4	-21.1
3	261	121915	428	3	-46	51172.2	51171.5	0.7	51160.3	51159.9	0.4	-19.5
3	261	121925	430	3	-47	51136.5	51135.7	0.8	51127.0	51126.5	0.5	-15.6
3	261	121935	432	3	-48	51102.7	51101.9	0.8	51095.1	51094.6	0.5	-12.5
3	261	121945	434	3	-49	51083.5	51082.7	0.8	51070.8	51070.2	0.6	-20.8
3	261	121956	436	3	-50	51122.2	51121.4	0.8	51087.7	51087.1	0.6	-56.6
3	261	122005	438	3	-51	51220.6	51219.7	0.9	51164.1	51163.4	0.7	-92.6
3	261	122016	440	3	-52	51559.4	51558.5	0.9	51566.2	51565.5	0.7	11.1
4	261	122222	452	4	0	48933.8	48932.3	1.5	48614.6	48611.7	2.9	-523.3
4	261	122235	454	4	-1	50350.5	50349.0	1.5	50052.1	50049.1	3.0	-489.2
4	261	122245	456	4	-2	50897.7	50896.2	1.5	50773.6	50770.5	3.1	-203.4
4	261	122254	458	4	-3	51142.5	51140.9	1.6	51070.5	51067.4	3.1	-118.0
4	261	122305	460	4	-4	51247.1	51245.5	1.6	51200.2	51197.0	3.2	-76.9
4	261	122315	462	4	-5	51303.6	51302.0	1.6	51265.4	51262.1	3.3	-62.6
4	261	122326	464	4	-6	51331.7	51330.1	1.6	51300.4	51297.1	3.3	-51.3
4	261	122336	466	4	-7	51337.9	51336.3	1.6	51312.4	51309.0	3.4	-41.8
4	261	122347	468	4	-8	51323.6	51321.9	1.7	51305.9	51302.4	3.5	-29.0
4	261	122357	470	4	-9	51297.3	51295.6	1.7	51264.8	51261.3	3.5	-53.3
4	261	122407	472	4	-10	51214.5	51212.8	1.7	51158.3	51154.7	3.6	-92.1
4	261	122418	474	4	-11	51125.0	51123.3	1.7	50993.4	50989.8	3.6	-215.7
4	261	122429	476	4	-12	51087.3	51085.6	1.7	50853.4	50849.7	3.7	-383.4
4	261	122439	478	4	-13	51151.2	51149.4	1.8	50890.5	50886.7	3.8	-427.4
4	261	122449	480	4	-14	51277.2	51275.4	1.8	51097.3	51093.5	3.8	-294.9
4	261	122458	482	4	-15	51327.9	51326.1	1.8	51222.4	51218.5	3.9	-173.0
4	261	122508	484	4	-16	51349.3	51347.5	1.8	51291.9	51287.9	4.0	-94.1
4	261	122519	486	4	-17	51364.4	51362.6	1.8	51307.7	51303.7	4.0	-93.0
4	261	122529	488	4	-18	51381.1	51379.3	1.8	51333.1	51329.0	4.1	-78.7
4	261	122538	490	4	-19	51396.2	51394.3	1.9	51364.1	51360.0	4.1	-52.6
4	261	122548	492	4	-20	51401.7	51399.8	1.9	51372.2	51368.0	4.2	-48.4
4	261	122558	494	4	-21	51401.9	51400.0	1.9	51382.0	51377.7	4.3	-32.6
4	261	122607	496	4	-22	51402.4	51400.5	1.9	51386.4	51382.1	4.3	-26.2
4	261	122617	498	4	-23	51395.9	51394.0	1.9	51379.5	51375.1	4.4	-26.9
4	261	122627	500	4	-24	51395.1	51393.1	2.0	51379.6	51375.2	4.4	-25.4
4	261	122638	502	4	-25	51394.4	51392.4	2.0	51378.0	51373.5	4.5	-26.9
4	261	122739	504	4	-26	51394.2	51392.1	2.1	51372.5	51367.6	4.9	-35.6
4	261	122749	506	4	-27	51392.4	51390.3	2.1	51372.7	51367.8	4.9	-32.3
4	261	122758	508	4	-28	51395.9	51393.8	2.1	51374.5	51369.5	5.0	-35.1
4	261	122809	510	4	-29	51388.6	51386.5	2.1	51374.6	51369.5	5.1	-23.0
4	261	122819	512	4	-30	51390.1	51387.9	2.2	51369.3	51364.2	5.1	-34.1
4	261	122829	514	4	-31	51382.0	51379.8	2.2	51368.2	51363.0	5.2	-22.6
4	261	122840	516	4	-32	51378.3	51376.1	2.2	51361.2	51355.9	5.3	-28.0

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
4	261	122855	518	4	-33	51371.7	51369.5	2.2	51363.4	51358.0	5.4	-13.6
4	261	122905	520	4	-34	51362.5	51360.3	2.2	51353.4	51348.0	5.4	-14.9
4	261	122915	522	4	-35	51353.6	51351.3	2.3	51340.0	51334.5	5.5	-22.3
4	261	122925	524	4	-36	51343.8	51341.5	2.3	51326.4	51320.9	5.5	-28.5
4	261	122935	526	4	-37	51328.7	51326.4	2.3	51317.4	51311.8	5.6	-18.5
4	261	122946	528	4	-38	51321.3	51319.0	2.3	51305.8	51300.1	5.7	-25.4
4	261	122957	530	4	-39	51305.5	51303.2	2.3	51288.1	51282.4	5.7	-28.5
4	261	123007	532	4	-40	51284.8	51282.4	2.4	51266.3	51260.5	5.8	-30.3
4	261	123017	534	4	-41	51262.8	51260.4	2.4	51248.1	51242.2	5.9	-24.1
4	261	123028	536	4	-42	51236.4	51234.0	2.4	51222.5	51216.6	5.9	-22.8
4	261	123039	538	4	-43	51202.8	51200.4	2.4	51192.9	51186.9	6.0	-16.2
4	261	123050	540	4	-44	51169.9	51167.5	2.4	51159.7	51153.6	6.1	-16.7
4	261	123101	542	4	-45	51118.8	51116.3	2.5	51118.6	51112.5	6.1	-0.3
4	261	123110	544	4	-46	51050.7	51048.2	2.5	51058.5	51052.3	6.2	12.8
4	261	123121	546	4	-47	50956.6	50954.1	2.5	50982.6	50976.4	6.2	42.6
4	261	123132	548	4	-48	50847.5	50845.0	2.5	50883.3	50877.0	6.3	58.7
4	261	123142	550	4	-49	50768.2	50765.7	2.5	50767.6	50761.2	6.4	-1.0
4	261	123155	552	4	-50	50714.6	50712.0	2.6	50644.2	50637.8	6.4	-115.4
4	261	123206	554	4	-51	51131.0	51128.4	2.6	50719.8	50713.3	6.5	-674.1
4	261	123216	556	4	-52	52276.3	52273.7	2.6	52076.4	52069.8	6.6	-327.7
5	261	123617	568	5	0	50014.6	50011.6	3.0	58577.9	58571.2	6.7	14038.2
5	261	123629	570	5	-1	50527.4	50524.4	3.0	50260.6	50253.9	6.7	-437.4
5	261	123641	572	5	-2	50964.9	50961.9	3.0	50862.7	50856.0	6.7	-167.5
5	261	123652	574	5	-3	51165.1	51162.0	3.1	51102.8	51096.1	6.7	-102.1
5	261	123703	576	5	-4	51256.4	51253.3	3.1	51217.1	51210.4	6.7	-64.4
5	261	123719	578	5	-5	51311.8	51308.7	3.1	51277.5	51270.9	6.6	-56.2
5	261	123731	580	5	-6	51331.1	51327.9	3.2	51308.0	51301.4	6.6	-37.9
5	261	123742	582	5	-7	51343.1	51339.9	3.2	51322.3	51315.7	6.6	-34.1
5	261	123755	584	5	-8	51327.7	51324.5	3.2	51327.0	51320.4	6.6	-1.1
5	261	123809	586	5	-9	51304.0	51300.8	3.2	51296.1	51289.6	6.5	-12.9
5	261	123818	588	5	-10	51263.5	51260.2	3.3	51235.5	51229.0	6.5	-45.9
5	261	123829	590	5	-11	51223.6	51220.3	3.3	51178.3	51171.8	6.5	-74.3
5	261	123839	592	5	-12	51207.7	51204.4	3.3	51140.7	51134.2	6.5	-109.8
5	261	123849	594	5	-13	51239.4	51236.1	3.3	51158.0	51151.5	6.5	-133.4
5	261	123901	596	5	-14	51293.0	51289.6	3.4	51226.3	51219.8	6.5	-109.3
5	261	123911	598	5	-15	51326.5	51323.1	3.4	51291.0	51284.6	6.4	-58.2
5	261	123922	600	5	-16	51345.9	51342.5	3.4	51329.9	51323.5	6.4	-26.2
5	261	123933	602	5	-17	51368.5	51365.1	3.4	51340.0	51333.6	6.4	-46.7
5	261	123944	604	5	-18	51384.3	51380.8	3.5	51386.7	51380.3	6.4	3.9
5	261	123956	606	5	-19	51392.5	51389.0	3.5	51401.4	51395.0	6.4	14.6
5	261	124007	608	5	-20	51391.4	51387.9	3.5	51382.7	51376.4	6.3	-14.3
5	261	124019	610	5	-21	51388.0	51384.5	3.5	51392.8	51386.5	6.3	7.9
5	261	124030	612	5	-22	51386.3	51382.7	3.6	51373.3	51367.0	6.3	-21.3
5	261	124040	614	5	-23	51385.9	51382.3	3.6	51381.8	51375.5	6.3	-6.7
5	261	124052	616	5	-24	51389.6	51386.0	3.6	51388.4	51382.1	6.3	-2.0
5	261	124104	618	5	-25	51388.4	51384.8	3.6	51389.2	51382.9	6.3	1.3
5	261	124217	620	5	-26	51375.8	51372.0	3.8	51380.8	51374.7	6.1	8.2
5	261	124227	622	5	-27	51376.4	51372.6	3.8	51376.1	51370.0	6.1	-0.5
5	261	124238	624	5	-28	51375.3	51371.5	3.8	51374.8	51368.7	6.1	-0.8

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LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
5	261	124248	626	5	-29	51372.8	51368.9	3.9	51378.8	51372.7	6.1	9.8
5	261	124259	628	5	-30	51372.1	51368.2	3.9	51379.7	51373.6	6.1	12.5
5	261	124310	630	5	-31	51366.0	51362.1	3.9	51373.5	51367.5	6.0	12.3
5	261	124320	632	5	-32	51360.2	51356.3	3.9	51366.5	51360.5	6.0	10.3
5	261	124330	634	5	-33	51354.4	51350.4	4.0	51357.0	51351.0	6.0	4.3
5	261	124340	636	5	-34	51347.4	51343.4	4.0	51352.5	51346.5	6.0	8.4
5	261	124351	638	5	-35	51336.9	51332.9	4.0	51337.6	51331.6	6.0	1.1
5	261	124401	640	5	-36	51323.3	51319.3	4.0	51321.9	51315.9	6.0	-2.3
5	261	124411	642	5	-37	51308.7	51304.6	4.1	51312.4	51306.5	5.9	6.1
5	261	124422	644	5	-38	51291.7	51287.6	4.1	51292.6	51286.7	5.9	1.5
5	261	124432	646	5	-39	51270.2	51266.1	4.1	51273.1	51267.2	5.9	4.8
5	261	124443	648	5	-40	51241.3	51237.2	4.1	51251.3	51245.4	5.9	16.4
5	261	124453	650	5	-41	51211.7	51207.6	4.1	51217.4	51211.5	5.9	9.3
5	261	124504	652	5	-42	51179.5	51175.3	4.2	51184.1	51178.2	5.9	7.5
5	261	124513	654	5	-43	51134.9	51130.7	4.2	51137.8	51132.0	5.8	4.8
5	261	124523	656	5	-44	51061.7	51057.5	4.2	51074.1	51068.3	5.8	20.3
5	261	124533	658	5	-45	50972.5	50968.3	4.2	51010.6	51004.8	5.8	62.5
5	261	124544	660	5	-46	50876.0	50871.7	4.3	50943.2	50937.4	5.8	110.2
5	261	124554	662	5	-47	50695.3	50691.0	4.3	50812.5	50806.7	5.8	192.1
5	261	124605	664	5	-48	50249.6	50245.3	4.3	50497.1	50491.3	5.8	405.7
5	261	124616	666	5	-49	49768.2	49763.9	4.3	50102.9	50097.2	5.7	548.7
5	261	124626	668	5	-50	48922.8	48918.4	4.4	49311.7	49306.0	5.7	637.5
5	261	124636	670	5	-51	52231.9	52227.5	4.4	58525.6	58519.9	5.7	10317.5
6	261	125447	682	6	0	49940.6	49933.8	6.8	58589.4	58585.5	3.9	14178.4
6	261	125459	684	6	-1	50338.8	50331.9	6.9	49790.2	49786.2	4.0	-899.3
6	261	125510	686	6	-2	50887.8	50880.9	6.9	50710.2	50706.1	4.1	-291.2
6	261	125520	688	6	-3	51130.7	51123.8	6.9	51047.9	51043.8	4.1	-135.7
6	261	125529	690	6	-4	51245.4	51238.4	7.0	51185.7	51181.5	4.2	-97.9
6	261	125540	692	6	-5	51305.7	51298.7	7.0	51259.4	51255.1	4.3	-75.9
6	261	125553	694	6	-6	51336.2	51329.1	7.1	51298.2	51293.8	4.4	-62.3
6	261	125603	696	6	-7	51345.1	51338.0	7.1	51321.4	51317.0	4.4	-38.9
6	261	125614	698	6	-8	51350.5	51343.4	7.1	51326.9	51322.4	4.5	-38.7
6	261	125625	700	6	-9	51339.8	51332.6	7.2	51314.8	51310.2	4.6	-41.0
6	261	125635	702	6	-10	51326.3	51319.1	7.2	51283.7	51279.1	4.6	-69.8
6	261	125646	704	6	-11	51314.8	51307.6	7.2	51261.7	51257.0	4.7	-87.1
6	261	125657	706	6	-12	51310.3	51303.0	7.3	51253.6	51248.8	4.8	-93.0
6	261	125707	708	6	-13	51317.8	51310.5	7.3	51254.6	51249.8	4.8	-103.6
6	261	125717	710	6	-14	51334.6	51327.3	7.3	51268.2	51263.3	4.9	-108.9
6	261	125727	712	6	-15	51356.8	51349.4	7.4	51292.9	51287.9	5.0	-104.8
6	261	125738	714	6	-16	51375.7	51368.3	7.4	51334.0	51329.0	5.0	-68.4
6	261	125748	716	6	-17	51390.0	51382.6	7.4	51371.8	51366.7	5.1	-29.8
6	261	125759	718	6	-18	51405.6	51398.1	7.5	51386.2	51381.0	5.2	-31.8
6	261	125808	720	6	-19	51410.9	51403.4	7.5	51388.1	51382.9	5.2	-37.4
6	261	125819	722	6	-20	51416.3	51408.8	7.5	51415.4	51410.1	5.3	-1.5
6	261	125830	724	6	-21	51407.7	51400.1	7.6	51370.5	51365.1	5.4	-61.0
6	261	125840	726	6	-22	51394.0	51386.4	7.6	51333.8	51328.4	5.4	-98.7
6	261	125849	728	6	-23	51388.5	51380.9	7.6	51351.0	51345.5	5.5	-61.5
6	261	125900	730	6	-24	51387.0	51379.3	7.7	51359.5	51354.0	5.5	-45.1
6	261	125911	732	6	-25	51388.0	51380.3	7.7	51369.8	51364.2	5.6	-29.8

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
6	261	130024	734	6	-26	51390.1	51382.2	7.9	51366.3	51360.2	6.1	-39.0
6	261	130034	736	6	-27	51379.8	51371.8	8.0	51364.8	51358.7	6.1	-24.6
6	261	130043	738	6	-28	51384.4	51376.4	8.0	51361.1	51354.9	6.2	-38.2
6	261	130054	740	6	-29	51379.7	51371.7	8.0	51358.1	51351.8	6.3	-35.4
6	261	130104	742	6	-30	51377.5	51369.4	8.1	51359.2	51352.9	6.3	-30.0
6	261	130113	744	6	-31	51371.2	51363.1	8.1	51349.1	51342.7	6.4	-36.2
6	261	130124	746	6	-32	51323.6	51315.5	8.1	51340.6	51334.1	6.5	27.9
6	261	130135	748	6	-33	51352.8	51344.6	8.2	51331.2	51324.7	6.5	-35.4
6	261	130146	750	6	-34	51339.2	51331.0	8.2	51323.0	51316.4	6.6	-26.6
6	261	130157	752	6	-35	51321.2	51313.0	8.2	51306.9	51300.2	6.7	-23.4
6	261	130207	754	6	-36	51304.6	51296.3	8.3	51290.4	51283.7	6.7	-23.3
6	261	130219	756	6	-37	51292.1	51283.8	8.3	51271.2	51264.4	6.8	-34.3
6	261	130229	758	6	-38	51268.3	51260.0	8.3	51251.7	51244.8	6.9	-27.2
6	261	130239	760	6	-39	51241.8	51233.4	8.4	51226.9	51220.0	6.9	-24.4
6	261	130249	762	6	-40	51206.9	51198.5	8.4	51189.5	51182.5	7.0	-28.5
6	261	130300	764	6	-41	51155.7	51147.3	8.4	51141.0	51133.9	7.1	-24.1
6	261	130310	766	6	-42	51094.8	51086.3	8.5	51088.2	51081.1	7.1	-10.8
6	261	130320	768	6	-43	51010.8	51002.3	8.5	51013.8	51006.6	7.2	4.9
6	261	130330	770	6	-44	50909.2	50900.7	8.5	50934.5	50927.2	7.3	41.5
6	261	130341	772	6	-45	50740.4	50731.8	8.6	50818.8	50811.5	7.3	128.5
6	261	130352	774	6	-46	50445.2	50436.6	8.6	50653.0	50645.6	7.4	340.7
6	261	130404	776	6	-47	49825.3	49816.7	8.6	50506.4	50498.9	7.5	1116.6
6	261	130415	778	6	-48	58595.0	58586.3	8.7	*	*	*	*
7	261	130618	789	7	0	48758.8	48750.9	7.9	58553.4	58547.0	6.4	16056.7
7	261	130629	791	7	-1	52041.8	52033.8	8.0	49404.5	49398.1	6.4	-4323.4
7	261	130642	793	7	-2	50825.2	50817.1	8.1	50634.8	50628.4	6.4	-312.1
7	261	130652	795	7	-3	51104.5	51096.4	8.1	51036.9	51030.5	6.4	-110.8
7	261	130703	797	7	-4	51223.3	51215.1	8.2	51189.3	51182.9	6.4	-55.7
7	261	130713	799	7	-5	51293.4	51285.2	8.2	51269.5	51263.1	6.4	-39.2
7	261	130723	801	7	-6	51322.0	51313.8	8.2	51309.2	51302.8	6.4	-21.0
7	261	130734	803	7	-7	51335.1	51326.8	8.3	51327.0	51320.6	6.4	-13.3
7	261	130744	805	7	-8	51337.2	51328.9	8.3	51327.4	51321.1	6.3	-16.1
7	261	130754	807	7	-9	51332.2	51323.8	8.4	51308.1	51301.8	6.3	-39.5
7	261	130804	809	7	-10	51332.2	51323.8	8.4	51297.9	51291.6	6.3	-56.2
7	261	130814	811	7	-11	51330.8	51322.3	8.5	51293.9	51287.6	6.3	-60.5
7	261	130825	813	7	-12	51329.5	51321.0	8.5	51303.0	51296.7	6.3	-43.4
7	261	130835	815	7	-13	51336.7	51328.1	8.6	51316.9	51310.6	6.3	-32.5
7	261	130845	817	7	-14	51345.5	51336.9	8.6	51330.4	51324.1	6.3	-24.8
7	261	130856	819	7	-15	51361.2	51352.5	8.7	51342.1	51335.8	6.3	-31.3
7	261	130906	821	7	-16	51375.8	51367.1	8.7	51376.5	51370.2	6.3	1.1
7	261	130917	823	7	-17	51389.1	51380.3	8.8	51377.7	51371.5	6.2	-18.7
7	261	130928	825	7	-18	51393.7	51384.9	8.8	51380.5	51374.3	6.2	-21.6
7	261	130940	827	7	-19	51395.4	51386.5	8.9	51406.2	51400.0	6.2	17.7
7	261	130950	829	7	-20	51395.3	51386.4	8.9	51412.8	51406.6	6.2	28.7
7	261	131001	831	7	-21	51394.2	51385.2	9.0	51389.5	51383.3	6.2	-7.7
7	261	131012	833	7	-22	51386.4	51377.4	9.0	51393.9	51387.7	6.2	12.3
7	261	131023	835	7	-23	51370.1	51361.0	9.1	51349.8	51343.6	6.2	-33.3
7	261	131034	837	7	-24	51363.9	51354.8	9.1	51352.5	51346.3	6.2	-18.7
7	261	131045	839	7	-25	51367.5	51358.3	9.2	51357.5	51351.4	6.1	-16.4

Hydroflouric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
7	261	131226	841	7	-26	51376.2	51366.5	9.7	51360.4	51354.4	6.0	-25.9
7	261	131237	843	7	-27	51380.4	51370.7	9.7	51363.9	51357.9	6.0	-27.0
7	261	131248	845	7	-28	51371.7	51361.9	9.8	51363.3	51357.3	6.0	-13.8
7	261	131258	847	7	-29	51363.8	51354.0	9.8	51362.2	51356.2	6.0	-2.6
7	261	131309	849	7	-30	51360.7	51350.8	9.9	51364.6	51358.6	6.0	6.4
7	261	131319	851	7	-31	51352.6	51342.7	9.9	51351.0	51345.0	6.0	-2.6
7	261	131330	853	7	-32	51345.9	51335.9	10.0	51344.1	51338.1	6.0	-3.0
7	261	131340	855	7	-33	51334.0	51324.0	10.0	51331.4	51325.5	5.9	-4.3
7	261	131349	857	7	-34	51324.9	51314.8	10.1	51322.2	51316.3	5.9	-4.4
7	261	131359	859	7	-35	51309.7	51299.6	10.1	51308.7	51302.8	5.9	-1.6
7	261	131409	861	7	-36	51290.3	51280.2	10.1	51289.8	51283.9	5.9	-0.8
7	261	131418	863	7	-37	51277.6	51267.4	10.2	51276.5	51270.6	5.9	-1.8
7	261	131428	865	7	-38	51257.4	51247.2	10.2	51260.4	51254.5	5.9	4.9
7	261	131439	867	7	-39	51230.6	51220.3	10.3	51230.4	51224.5	5.9	-0.3
7	261	131450	869	7	-40	51190.7	51180.4	10.3	51196.1	51190.2	5.9	8.9
7	261	131500	871	7	-41	51138.9	51128.5	10.4	51143.4	51137.5	5.9	7.4
7	261	131512	873	7	-42	51068.8	51058.4	10.4	51080.3	51074.5	5.8	18.9
7	261	131522	875	7	-43	50991.6	50981.1	10.5	51013.2	51007.4	5.8	35.4
7	261	131532	877	7	-44	50885.7	50875.2	10.5	50938.1	50932.3	5.8	85.9
7	261	131543	879	7	-45	50717.4	50706.8	10.6	50834.8	50829.0	5.8	192.5
7	261	131553	881	7	-46	50435.8	50425.2	10.6	50670.2	50664.4	5.8	384.3
7	261	131603	883	7	-47	49864.7	49854.0	10.7	50622.3	50616.5	5.8	1242.0
7	261	131613	885	7	-48	52138.3	52127.6	10.7	50032.5	50026.7	5.8	-3452.1
7	261	131623	887	7	-49	52031.4	52020.6	10.8	58572.9	58567.1	5.8	10723.8
7	261	131634	889	7	-50	51982.2	51971.4	10.8	58628.4	58622.7	5.7	10895.4
8	261	131858	901	8	0	58586.8	58576.0	10.8	58528.1	58522.4	5.7	-96.2
8	261	131909	903	8	-1	52180.2	52169.4	10.8	49017.3	49011.5	5.8	-5185.1
8	261	131920	905	8	-2	50736.9	50726.1	10.8	50563.0	50557.1	5.9	-285.1
8	261	131930	907	8	-3	51065.2	51054.4	10.8	50992.6	50986.6	6.0	-119.0
8	261	131940	909	8	-4	51211.8	51201.0	10.8	51174.3	51168.3	6.0	-61.5
8	261	131952	911	8	-5	51273.9	51263.1	10.8	51253.9	51247.8	6.1	-32.8
8	261	132003	913	8	-6	51309.8	51299.0	10.8	51294.6	51288.4	6.2	-24.9
8	261	132013	915	8	-7	51324.7	51313.9	10.8	51305.1	51298.8	6.3	-32.1
8	261	132024	917	8	-8	51327.6	51316.8	10.8	51299.2	51292.8	6.4	-46.6
8	261	132035	919	8	-9	51333.4	51322.6	10.8	51297.5	51291.0	6.5	-58.9
8	261	132045	921	8	-10	51339.8	51329.0	10.8	51312.9	51306.4	6.5	-44.1
8	261	132055	923	8	-11	51349.1	51338.3	10.8	51342.2	51335.6	6.6	-11.3
8	261	132105	925	8	-12	51353.6	51342.8	10.8	51337.1	51330.4	6.7	-27.0
8	261	132115	927	8	-13	51363.5	51352.7	10.8	51350.7	51343.9	6.8	-21.0
8	261	132126	929	8	-14	51370.3	51359.5	10.8	51364.6	51357.8	6.8	-9.3
8	261	132137	931	8	-15	51374.4	51363.6	10.8	51348.1	51341.2	6.9	-43.1
8	261	132149	933	8	-16	51381.5	51370.7	10.8	51357.6	51350.6	7.0	-39.2
8	261	132159	935	8	-17	51387.3	51376.5	10.8	51405.7	51398.6	7.1	30.2
8	261	132210	937	8	-18	51387.9	51377.1	10.8	51402.4	51395.2	7.2	23.8
8	261	132222	939	8	-19	51378.3	51367.5	10.8	51375.5	51368.2	7.3	-4.6
8	261	132232	941	8	-20	51374.4	51363.6	10.8	51342.6	51335.2	7.4	-52.1
8	261	132243	943	8	-21	51383.9	51373.1	10.8	51388.1	51380.7	7.4	6.9
8	261	132253	945	8	-22	51385.1	51374.3	10.8	51408.4	51400.9	7.5	38.2
8	261	132303	947	8	-23	51358.3	51347.5	10.8	51335.1	51327.5	7.6	-38.0

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
8	261	132314	949	8	-24	51333.6	51322.8	10.8	51281.2	51273.5	7.7	-85.9
8	261	132326	951	8	-25	51339.3	51328.5	10.8	51328.4	51320.6	7.8	-17.9
8	261	132455	953	8	-26	51368.4	51357.6	10.8	51337.1	51328.7	8.4	-51.3
8	261	132505	955	8	-27	51376.2	51365.4	10.8	51353.2	51344.7	8.5	-37.7
8	261	132516	957	8	-28	51373.5	51362.7	10.8	51351.2	51342.6	8.6	-36.6
8	261	132527	959	8	-29	51369.0	51358.2	10.8	51346.8	51338.1	8.7	-36.4
8	261	132538	961	8	-30	51363.6	51352.8	10.8	51343.7	51334.9	8.8	-32.6
8	261	132548	963	8	-31	51358.6	51347.8	10.8	51334.7	51325.9	8.8	-39.2
8	261	132558	965	8	-32	51345.8	51335.0	10.8	51324.4	51315.5	8.9	-35.1
8	261	132610	967	8	-33	51332.9	51322.1	10.8	51311.1	51302.1	9.0	-35.7
8	261	132620	969	8	-34	51318.4	51307.6	10.8	51295.3	51286.2	9.1	-37.9
8	261	132630	971	8	-35	51301.6	51290.8	10.8	51279.4	51270.2	9.2	-36.4
8	261	132640	973	8	-36	51289.3	51278.5	10.8	51265.4	51256.2	9.2	-39.2
8	261	132651	975	8	-37	51268.4	51257.6	10.8	51245.3	51236.0	9.3	-37.9
8	261	132702	977	8	-38	51247.9	51237.1	10.8	51227.5	51218.1	9.4	-33.4
8	261	132713	979	8	-39	51207.5	51196.7	10.8	51190.6	51181.1	9.5	-27.7
8	261	132724	981	8	-40	51163.8	51153.0	10.8	51147.6	51138.0	9.6	-26.6
8	261	132734	983	8	-41	51102.7	51091.9	10.8	51094.3	51084.6	9.7	-13.8
8	261	132744	985	8	-42	51013.7	51002.9	10.8	51013.6	51003.9	9.7	-0.2
8	261	132754	987	8	-43	50914.8	50904.0	10.8	50923.1	50913.3	9.8	13.6
8	261	132806	989	8	-44	50758.0	50747.2	10.8	50797.3	50787.4	9.9	64.4
8	261	132816	991	8	-45	50561.5	50550.7	10.8	50652.2	50642.2	10.0	148.7
8	261	132827	993	8	-46	50175.1	50164.3	10.8	50544.4	50534.3	10.1	605.4
8	261	132837	995	8	-47	49406.9	49396.1	10.8	50730.5	50720.4	10.1	2169.8
8	261	132849	997	8	-48	58606.2	58595.4	10.8	58568.4	58558.2	10.2	-62.0
8	261	132858	999	8	-49	58607.3	58596.5	10.8	58520.8	58510.5	10.3	-141.8
9	261	133122	1011	9	0	49014.6	49003.8	10.8	*	*	*	•
9	261	133134	1013	9	-1	50126.3	50115.6	10.7	49552.9	49543.4	9.5	-940.0
9	261	133147	1015	9	-2	50754.7	50744.0	10.7	50563.7	50554.2	9.5	-313.1
9	261	133201	1017	9	-3	51080.4	51069.7	10.7	50984.9	50975.5	9.4	-156.6
9	261	133213	1019	9	-4	51216.4	51205.8	10.6	51156.6	51147.2	9.4	-98.0
9	261	133225	1021	9	-5	51284.2	51273.6	10.6	51240.5	51231.1	9.4	-71.6
9	261	133241	1023	9	-6	51320.1	51309.5	10.6	51277.9	51268.6	9.3	-69.2
9	261	133251	1025	9	-7	51334.3	51323.7	10.6	51284.4	51275.1	9.3	-81.8
9	261	133303	1027	9	-8	51341.6	51331.1	10.5	51297.6	51288.3	9.3	-72.1
9	261	133313	1029	9	-9	51349.9	51339.4	10.5	51305.5	51296.3	9.2	-72.8
9	261	133324	1031	9	-10	51360.5	51350.0	10.5	51326.1	51316.9	9.2	-56.4
9	261	133335	1033	9	-11	51371.6	51361.1	10.5	51343.7	51334.5	9.2	-45.7
9	261	133346	1035	9	-12	51377.4	51367.0	10.4	51334.4	51325.3	9.1	-70.5
9	261	133358	1037	9	-13	51387.0	51376.6	10.4	51328.6	51319.5	9.1	-95.7
9	261	133408	1039	9	-14	51394.3	51383.9	10.4	51348.8	51339.7	9.1	-74.6
9	261	133418	1041	9	-15	51397.0	51386.6	10.4	51357.9	51348.8	9.1	-64.1
9	261	133429	1043	9	-16	51393.0	51382.7	10.3	51358.9	51349.9	9.0	-55.9
9	261	133441	1045	9	-17	51394.2	51383.9	10.3	51380.3	51371.3	9.0	-22.8
9	261	133452	1047	9	-18	51386.2	51375.9	10.3	51374.1	51365.1	9.0	-19.8
9	261	133503	1049	9	-19	51372.4	51362.1	10.3	51319.8	51310.9	8.9	-86.2
9	261	133515	1051	9	-20	51361.9	51351.7	10.2	51291.9	51283.0	8.9	-114.8
9	261	133526	1053	9	-21	51374.1	51363.9	10.2	51318.1	51309.2	8.9	-91.8
9	261	133537	1055	9	-22	51382.3	51372.1	10.2	51310.4	51301.5	8.9	-117.9

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
9	261	133548	1057	9	-23	51373.1	51362.9	10.2	51317.1	51308.3	8.8	-91.8
9	261	133559	1059	9	-24	51324.3	51314.2	10.1	51140.5	51131.7	8.8	-301.3
9	261	133614	1061	9	-25	51314.9	51304.8	10.1	51193.2	51184.4	8.8	-199.5
9	261	133743	1063	9	-26	51337.3	51327.4	9.9	51301.6	51293.1	8.5	-58.5
9	261	133755	1065	9	-27	51355.3	51345.4	9.9	51341.7	51333.2	8.5	-22.3
9	261	133806	1067	9	-28	51354.0	51344.1	9.9	51330.0	51321.5	8.5	-39.3
9	261	133817	1069	9	-29	51344.8	51335.0	9.8	51322.9	51314.5	8.4	-35.9
9	261	133828	1071	9	-30	51335.7	51325.9	9.8	51319.1	51310.7	8.4	-27.2
9	261	133839	1073	9	-31	51324.8	51315.0	9.8	51300.3	51291.9	8.4	-40.2
9	261	133850	1075	9	-32	51310.7	51300.9	9.8	51282.1	51273.8	8.3	-46.9
9	261	133900	1077	9	-33	51299.0	51289.3	9.7	51272.8	51264.5	8.3	-43.0
9	261	133911	1079	9	-34	51282.7	51273.0	9.7	51257.2	51248.9	8.3	-41.8
9	261	133921	1081	9	-35	51263.7	51254.0	9.7	51235.4	51227.1	8.3	-46.4
9	261	133933	1083	9	-36	51240.9	51231.2	9.7	51212.9	51204.7	8.2	-45.9
9	261	133944	1085	9	-37	51219.5	51209.9	9.6	51191.9	51183.7	8.2	-45.2
9	261	133955	1087	9	-38	51192.1	51182.5	9.6	51158.3	51150.1	8.2	-55.4
9	261	134006	1089	9	-39	51153.4	51143.8	9.6	51131.2	51123.1	8.1	-36.4
9	261	134017	1091	9	-40	51090.2	51080.6	9.6	51073.1	51065.0	8.1	-28.0
9	261	134029	1093	9	-41	50978.7	50969.2	9.5	50977.0	50968.9	8.1	-2.8
9	261	134040	1095	9	-42	50844.2	50834.7	9.5	50850.6	50842.5	8.1	10.5
9	261	134051	1097	9	-43	50622.2	50612.7	9.5	50647.8	50639.8	8.0	42.0
9	261	134103	1099	9	-44	50295.8	50286.3	9.5	50375.9	50367.9	8.0	131.3
9	261	134114	1101	9	-45	49864.1	49854.7	9.4	50094.0	50086.0	8.0	376.9
9	261	134126	1103	9	-46	49260.7	49251.3	9.4	50234.9	50227.0	7.9	1597.1
9	261	134138	1105	9	-47	58608.9	58599.5	9.4	58573.8	58565.9	7.9	-57.5
10	261	134348	1117	10	0	*	*	*	58586.1	58577.9	8.2	*
10	261	134400	1119	10	-1	49956.4	49946.7	9.7	49119.0	49110.7	8.3	-1372.8
10	261	134413	1121	10	-2	50720.5	50710.8	9.7	50445.7	50437.3	8.4	-450.5
10	261	134425	1123	10	-3	51072.3	51062.6	9.7	50967.3	50958.8	8.5	-172.1
10	261	134436	1125	10	-4	51213.7	51204.0	9.7	51148.4	51139.8	8.6	-107.0
10	261	134448	1127	10	-5	51275.6	51265.8	9.8	51228.2	51219.6	8.6	-77.7
10	261	134500	1129	10	-6	51309.2	51299.4	9.8	51259.9	51251.2	8.7	-80.8
10	261	134509	1131	10	-7	51324.9	51315.1	9.8	51260.4	51251.6	8.8	-105.7
10	261	134520	1133	10	-8	51339.1	51329.3	9.8	51298.7	51289.8	8.9	-66.2
10	261	134531	1135	10	-9	51339.6	51329.8	9.8	51307.2	51298.2	9.0	-53.1
10	261	134544	1137	10	-10	51335.3	51325.4	9.9	51286.8	51277.7	9.1	-79.5
10	261	134555	1139	10	-11	51345.5	51335.6	9.9	51263.6	51254.4	9.2	-134.3
10	261	134607	1141	10	-12	51363.5	51353.6	9.9	51254.3	51245.0	9.3	-179.0
10	261	134619	1143	10	-13	51388.7	51378.8	9.9	51280.2	51270.8	9.4	-177.9
10	261	134630	1145	10	-14	51397.2	51387.2	10.0	51329.6	51320.2	9.4	-110.8
10	261	134642	1147	10	-15	51397.6	51387.6	10.0	51366.8	51357.3	9.5	-50.5
10	261	134655	1149	10	-16	51384.3	51374.3	10.0	51354.4	51344.8	9.6	-49.0
10	261	134707	1151	10	-17	51360.5	51350.5	10.0	51307.6	51297.9	9.7	-86.7
10	261	134719	1153	10	-18	51339.0	51328.9	10.1	51294.3	51284.5	9.8	-73.3
10	261	134730	1155	10	-19	51313.5	51303.4	10.1	51264.8	51254.9	9.9	-79.8
10	261	134743	1157	10	-20	51288.8	51278.7	10.1	51168.0	51158.0	10.0	-198.0
10	261	134756	1159	10	-21	51317.3	51307.2	10.1	51090.8	51080.7	10.1	-371.3
10	261	134809	1161	10	-22	51365.5	51355.3	10.2	51203.2	51193.0	10.2	-266.1
10	261	134824	1163	10	-23	51379.8	51369.6	10.2	51333.1	51322.8	10.3	-76.6

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
10	261	134836	1165	10	-24	51349.9	51339.7	10.2	51275.4	51265.0	10.4	-122.1
10	261	134849	1167	10	-25	51308.8	51298.5	10.3	51175.8	51165.3	10.5	-218.0
10	261	135015	1169	10	-26	51322.7	51312.3	10.4	51260.0	51248.8	11.2	-102.8
10	261	135026	1171	10	-27	51333.6	51323.1	10.5	51307.1	51295.8	11.3	-43.4
10	261	135036	1173	10	-28	51331.2	51320.7	10.5	51292.7	51281.3	11.4	-63.1
10	261	135048	1175	10	-29	51325.0	51314.5	10.5	51287.6	51276.1	11.5	-61.3
10	261	135059	1177	10	-30	51311.5	51301.0	10.5	51281.7	51270.2	11.5	-48.9
10	261	135111	1179	10	-31	51304.0	51293.4	10.6	51260.9	51249.3	11.6	-70.7
10	261	135122	1181	10	-32	51289.2	51278.6	10.6	51238.6	51226.9	11.7	-82.9
10	261	135132	1183	10	-33	51270.2	51259.6	10.6	51227.0	51215.2	11.8	-70.8
10	261	135143	1185	10	-34	51251.1	51240.5	10.6	51212.0	51200.1	11.9	-64.1
10	261	135154	1187	10	-35	51229.7	51219.1	10.6	51190.8	51178.8	12.0	-63.8
10	261	135204	1189	10	-36	51202.3	51191.6	10.7	51167.6	51155.5	12.1	-56.9
10	261	135216	1191	10	-37	51173.1	51162.4	10.7	51131.9	51119.8	12.1	-67.5
10	261	135226	1193	10	-38	51142.8	51132.1	10.7	51097.4	51085.2	12.2	-74.4
10	261	135238	1195	10	-39	51124.5	51113.8	10.7	51128.2	51115.9	12.3	6.1
10	261	135250	1197	10	-40	51056.4	51045.6	10.8	51087.7	51075.3	12.4	51.3
10	261	135302	1199	10	-41	50905.6	50894.8	10.8	50883.6	50871.1	12.5	-36.1
10	261	135313	1201	10	-42	50685.0	50674.2	10.8	50702.1	50689.5	12.6	28.0
10	261	135325	1203	10	-43	50456.7	50445.9	10.8	50466.5	50453.8	12.7	16.1
10	261	135337	1205	10	-44	50016.9	50006.0	10.9	50146.8	50134.0	12.8	212.9
10	261	135348	1207	10	-45	49227.9	49217.0	10.9	49682.5	49669.6	12.9	745.2
10	261	135400	1209	10	-46	48466.1	48455.2	10.9	51461.3	51448.4	12.9	4910.2
11	261	135614	1221	11	0	48498.6	48487.9	10.7	*	*	*	*
11	261	135626	1223	11	-1	49819.8	49809.2	10.6	49058.3	49044.7	13.6	-1248.4
11	261	135638	1225	11	-2	50680.1	50669.5	10.6	50472.9	50459.3	13.6	-339.7
11	261	135651	1227	11	-3	51042.5	51031.9	10.6	50934.2	50920.5	13.7	-177.5
11	261	135703	1229	11	-4	51204.8	51194.2	10.6	51136.0	51122.3	13.7	-112.8
11	261	135714	1231	11	-5	51263.2	51252.6	10.6	51217.6	51203.8	13.8	-74.8
11	261	135724	1233	11	-6	51299.2	51288.6	10.6	51252.6	51238.8	13.8	-76.4
11	261	135736	1235	11	-7	51319.7	51309.1	10.6	51277.8	51263.9	13.9	-68.7
11	261	135747	1237	11	-8	51325.6	51315.0	10.6	51331.3	51317.4	13.9	9.3
11	261	135759	1239	11	-9	51298.9	51288.3	10.6	51252.2	51238.2	14.0	-76.6
11	261	135811	1241	11	-10	51256.6	51246.0	10.6	51144.3	51130.3	14.0	-184.1
11	261	135823	1243	11	-11	51245.6	51235.0	10.6	50962.0	50947.9	14.1	-464.9
11	261	135836	1245	11	-12	51356.2	51345.6	10.6	50866.5	50852.4	14.1	-802.8
11	261	135850	1247	11	-13	51442.0	51431.5	10.5	51004.9	50990.7	14.2	-716.6
11	261	135902	1249	11	-14	51422.3	51411.8	10.5	51207.0	51192.8	14.2	-353.0
11	261	135915	1251	11	-15	51389.9	51379.4	10.5	51309.2	51294.9	14.3	-132.3
11	261	135926	1253	11	-16	51367.8	51357.3	10.5	51311.2	51296.9	14.3	-92.8
11	261	135939	1255	11	-17	51332.2	51321.7	10.5	51301.0	51286.6	14.4	-51.1
11	261	135951	1257	11	-18	51274.2	51263.7	10.5	51207.0	51192.6	14.4	-110.2
11	261	140002	1259	11	-19	51188.5	51178.0	10.5	51042.5	51028.0	14.5	-239.3
11	261	140014	1261	11	-20	51096.2	51085.7	10.5	50706.3	50691.8	14.5	-639.2
11	261	140025	1263	11	-21	51390.2	51379.7	10.5	50353.3	50338.7	14.6	-1699.8
11	261	140037	1265	11	-22	51583.9	51573.4	10.5	50507.9	50493.3	14.6	-1763.9
11	261	140047	1267	11	-23	51440.2	51429.7	10.5	51026.5	51011.8	14.7	-678.2
11	261	140057	1269	11	-24	51364.7	51354.2	10.5	51245.0	51230.3	14.7	-196.2
11	261	140109	1271	11	-25	51319.4	51308.9	10.5	51254.8	51240.1	14.7	-105.9

Hydroflouric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
11	261	140242	1273	11	-26	51311.5	51301.1	10.4	51192.1	51177.0	15.1	-195.7
11	261	140253	1275	11	-27	51314.6	51304.2	10.4	51230.0	51214.8	15.2	-138.7
11	261	140304	1277	11	-28	51304.5	51294.1	10.4	51231.2	51216.0	15.2	-120.2
11	261	140315	1279	11	-29	51295.9	51285.5	10.4	51232.8	51217.5	15.3	-103.4
11	261	140327	1281	11	-30	51286.6	51276.2	10.4	51225.4	51210.1	15.3	-100.3
11	261	140340	1283	11	-31	51274.6	51264.3	10.3	51206.8	51191.4	15.4	-111.1
11	261	140352	1285	11	-32	51260.1	51249.8	10.3	51193.6	51178.2	15.4	-109.0
11	261	140403	1287	11	-33	51240.8	51230.5	10.3	51182.2	51166.7	15.5	-96.1
11	261	140415	1289	11	-34	51217.7	51207.4	10.3	51170.7	51155.2	15.5	-77.0
11	261	140426	1291	11	-35	51191.0	51180.7	10.3	51147.4	51131.9	15.5	-71.5
11	261	140437	1293	11	-36	51160.9	51150.6	10.3	51115.8	51100.2	15.6	-73.9
11	261	140448	1295	11	-37	51125.3	51115.0	10.3	51078.4	51062.8	15.6	-76.9
11	261	140500	1297	11	-38	51090.2	51079.9	10.3	51023.6	51007.9	15.7	-109.2
11	261	140511	1299	11	-39	51091.3	51081.0	10.3	51127.0	51111.3	15.7	58.5
11	261	140522	1301	11	-40	51029.2	51018.9	10.3	51402.3	51386.5	15.8	611.6
11	261	140534	1303	11	-41	50796.1	50785.8	10.3	50767.3	50751.5	15.8	-47.2
11	261	140547	1305	11	-42	50541.0	50530.7	10.3	50482.4	50466.5	15.9	-96.1
11	261	140604	1307	11	-43	50113.1	50102.9	10.2	50147.7	50131.8	15.9	56.7
11	261	140616	1309	11	-44	49189.3	49179.1	10.2	49804.1	49788.1	16.0	1007.9
11	261	140628	1311	11	-45	52097.7	52087.5	10.2	48837.9	48821.9	16.0	-5343.9
12	261	140846	1322	12	0	48631.6	48618.2	13.4	*	*	*	*
12	261	140902	1324	12	-1	49995.3	49981.9	13.4	49320.6	49306.5	14.1	-1106.1
12	261	140914	1326	12	-2	50663.6	50650.3	13.3	50439.1	50425.1	14.0	-368.0
12	261	140925	1328	12	-3	51029.2	51015.9	13.3	50926.8	50912.8	14.0	-167.9
12	261	140936	1330	12	-4	51178.0	51164.7	13.3	51115.3	51101.4	13.9	-102.8
12	261	140946	1332	12	-5	51251.3	51238.0	13.3	51202.9	51189.1	13.8	-79.3
12	261	140957	1334	12	-6	51288.8	51275.5	13.3	51242.1	51228.3	13.8	-76.6
12	261	141008	1336	12	-7	51309.7	51296.5	13.2	51284.0	51270.3	13.7	-42.1
12	261	141019	1338	12	-8	51301.1	51287.9	13.2	51283.2	51269.5	13.7	-29.3
12	261	141032	1340	12	-9	51249.0	51235.8	13.2	51201.6	51188.0	13.6	-77.7
12	261	141044	1342	12	-10	51138.1	51124.9	13.2	50955.4	50941.9	13.5	-299.5
12	261	141056	1344	12	-11	51066.9	51053.7	13.2	50352.5	50339.0	13.5	-1171.2
12	261	141109	1346	12	-12	58622.9	58609.8	13.1	58560.7	58547.3	13.4	-102.0
12	261	141121	1348	12	-13	51938.0	51924.9	13.1	58570.4	58557.0	13.4	10872.8
12	261	141134	1350	12	-14	51534.9	51521.8	13.1	50985.6	50972.3	13.3	-900.5
12	261	141146	1352	12	-15	51401.0	51387.9	13.1	51235.7	51222.5	13.2	-271.0
12	261	141157	1354	12	-16	51349.5	51336.4	13.1	51248.5	51235.3	13.2	-165.6
12	261	141208	1356	12	-17	51301.7	51288.7	13.0	51237.1	51224.0	13.1	-105.9
12	261	141219	1358	12	-18	51218.5	51205.5	13.0	51134.3	51121.3	13.0	-138.0
12	261	141230	1360	12	-19	51054.0	51041.0	13.0	50830.3	50817.3	13.0	-366.7
12	261	141242	1362	12	-20	50753.9	50740.9	13.0	49958.4	49945.5	12.9	-1304.1
12	261	141256	1364	12	-21	54640.7	54627.7	13.0	58560.7	58547.8	12.9	6426.2
12	261	141308	1366	12	-22	54816.0	54803.1	12.9	58576.1	58563.3	12.8	6164.1
12	261	141320	1368	12	-23	51721.2	51708.3	12.9	50645.5	50632.8	12.7	-1763.4
12	261	141333	1370	12	-24	51352.7	51339.8	12.9	51024.6	51011.9	12.7	-537.9
12	261	141348	1372	12	-25	51289.8	51276.9	12.9	51014.8	51002.2	12.6	-450.8
12	261	142013	1374	12	-26	51520.6	51508.4	12.2	50943.4	50932.8	10.6	-946.2
12	261	142023	1376	12	-27	51362.3	51350.1	12.2	51208.6	51198.1	10.5	-252.0
12	261	142033	1378	12	-28	51266.8	51254.6	12.2	51152.3	51141.8	10.5	-187.7

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
12	261	142044	1380	12	-29	51248.9	51236.8	12.1	51148.3	51137.9	10.4	-164.9
12	261	142056	1382	12	-30	51250.2	51238.1	12.1	51088.6	51078.2	10.4	-264.9
12	261	142107	1384	12	-31	51252.0	51239.9	12.1	51023.9	51013.6	10.3	-373.9
12	261	142119	1386	12	-32	51236.9	51224.8	12.1	51029.6	51019.3	10.3	-339.8
12	261	142129	1388	12	-33	51190.9	51178.8	12.1	51055.2	51045.0	10.2	-222.5
12	261	142140	1390	12	-34	51146.2	51134.2	12.0	51047.4	51037.3	10.1	-162.0
12	261	142150	1392	12	-35	51101.9	51089.9	12.0	51020.3	51010.2	10.1	-133.8
12	261	142203	1394	12	-36	51049.8	51037.8	12.0	50976.5	50966.5	10.0	-120.2
12	261	142214	1396	12	-37	50995.1	50983.1	12.0	50916.6	50906.6	10.0	-128.7
12	261	142226	1398	12	-38	50919.7	50907.7	12.0	50820.7	50810.8	9.9	-162.3
12	261	142237	1400	12	-39	50852.8	50840.9	11.9	50709.1	50699.2	9.9	-235.6
12	261	142248	1402	12	-40	50750.1	50738.2	11.9	50513.0	50503.2	9.8	-388.7
12	261	142259	1404	12	-41	50476.6	50464.7	11.9	50298.3	50288.6	9.7	-292.3
12	261	142310	1406	12	-42	50020.5	50008.6	11.9	49908.3	49898.6	9.7	-183.9
12	261	142322	1408	12	-43	49547.8	49535.9	11.9	49122.1	49112.5	9.6	-697.9
13	261	143546	1430	13	0	58609.8	58595.4	14.4	58566.3	58560.8	5.5	-71.3
13	261	143559	1432	13	-1	49843.1	49828.8	14.3	48440.3	48434.7	5.6	-2299.7
13	261	143611	1434	13	-2	50658.1	50643.8	14.3	50349.2	50343.5	5.7	-506.4
13	261	143623	1436	13	-3	51020.4	51006.2	14.2	50911.9	50906.0	5.9	-177.9
13	261	143633	1438	13	-4	51180.4	51166.2	14.2	51117.0	51111.0	6.0	-103.9
13	261	143643	1440	13	-5	51246.9	51232.7	14.2	51202.1	51196.0	6.1	-73.4
13	261	143654	1442	13	-6	51283.9	51269.8	14.1	51240.7	51234.5	6.2	-70.8
13	261	143706	1444	13	-7	51295.5	51281.4	14.1	51273.2	51266.9	6.3	-36.6
13	261	143718	1446	13	-8	51269.5	51255.5	14.0	51262.1	51255.7	6.4	-12.1
13	261	143728	1448	13	-9	51182.2	51168.2	14.0	51135.1	51128.6	6.5	-77.2
13	261	143740	1450	13	-10	50930.3	50916.3	14.0	50898.4	50891.8	6.6	-380.2
13	261	143751	1452	13	-11	50285.8	50271.9	13.9	49204.3	49197.5	6.8	-1773.0
13	261	143803	1454	13	-12	58613.1	58599.2	13.9	58558.2	58551.3	6.9	-90.0
13	261	143815	1456	13	-13	58648.5	58634.7	13.8	*	*	*	*
13	261	143826	1458	13	-14	51657.1	51643.3	13.8	50840.5	50833.4	7.1	-1338.7
13	261	143837	1460	13	-15	51365.5	51351.7	13.8	51127.0	51119.8	7.2	-391.0
13	261	143849	1462	13	-16	51318.4	51304.7	13.7	51222.9	51215.6	7.3	-156.6
13	261	143859	1464	13	-17	51274.8	51261.1	13.7	51214.9	51207.5	7.4	-98.2
13	261	143909	1466	13	-18	51191.7	51178.1	13.6	51124.9	51117.4	7.5	-109.5
13	261	143921	1468	13	-19	50949.8	50936.2	13.6	50773.7	50766.1	7.6	-288.7
13	261	143932	1470	13	-20	50404.8	50391.2	13.6	49639.5	49631.8	7.7	-1254.6
13	261	143943	1472	13	-21	58573.7	58560.2	13.5	58611.5	58603.6	7.9	62.0
13	261	143953	1474	13	-22	52164.8	52151.3	13.5	58610.1	58602.1	8.0	10566.1
13	261	144003	1476	13	-23	51556.7	51543.3	13.4	50553.3	50545.2	8.1	-1644.9
13	261	144014	1478	13	-24	51292.0	51278.6	13.4	51000.5	50992.3	8.2	-477.9
13	261	144026	1480	13	-25	51165.0	51151.6	13.4	50783.1	50774.8	8.3	-626.1
13	261	144155	1482	13	-26	52022.2	52009.1	13.1	*	*	*	*
13	261	144207	1484	13	-27	51291.6	51278.6	13.0	51070.7	51061.4	9.3	-362.1
13	261	144214	1486	13	-28	51217.7	51204.7	13.0	51081.5	51072.1	9.4	-223.3
13	261	144226	1488	13	-29	51188.9	51176.0	12.9	50987.9	50978.4	9.5	-329.5
13	261	144239	1490	13	-30	51294.1	51281.2	12.9	50671.7	50662.1	9.6	-1020.3
13	261	144250	1492	13	-31	51528.1	51515.2	12.9	50758.8	50749.1	9.7	-1261.1
13	261	144301	1494	13	-32	51503.3	51490.5	12.8	50835.6	50825.8	9.8	-1094.6
13	261	144313	1496	13	-33	51215.4	51202.6	12.8	50835.7	50825.8	9.9	-622.5

Hydroflouric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
13	261	144324	1498	13	-34	51057.2	51044.5	12.7	50886.9	50876.8	10.1	-279.2
13	261	144336	1500	13	-35	50953.5	50940.8	12.7	50792.5	50782.3	10.2	-263.9
13	261	144347	1502	13	-36	50882.4	50869.7	12.7	50826.9	50816.6	10.3	-91.0
13	261	144358	1504	13	-37	50778.0	50765.4	12.6	50643.5	50633.1	10.4	-220.5
13	261	144408	1506	13	-38	50613.7	50601.1	12.6	50295.0	50284.5	10.5	-522.5
13	261	144420	1508	13	-39	50451.0	50438.5	12.5	50127.9	50117.3	10.6	-529.7
13	261	144430	1510	13	-40	50319.1	50306.6	12.5	49964.9	49954.2	10.7	-580.7
13	261	144440	1512	13	-41	49952.8	49940.3	12.5	49636.6	49625.8	10.8	-518.4
14	262	121340	1563	14	0	•	*	•	52059.2	52056.6	2.6	*
14	262	121353	1565	14	-1	49770.3	49772.1	-1.8	48957.9	48955.1	2.8	-1331.8
14	262	121406	1567	14	-2	50637.8	50639.6	-1.8	50379.5	50376.4	3.1	-423.4
14	262	121418	1569	14	-3	51014.4	51016.3	-1.9	50904.3	50900.9	3.4	-180.5
14	262	121430	1571	14	-4	51159.3	51161.3	-2.0	51097.6	51094.0	3.6	-101.1
14	262	121442	1573	14	-5	51228.6	51230.6	-2.0	51181.9	51178.0	3.9	-76.6
14	262	121454	1575	14	-6	51257.5	51259.6	-2.1	51219.5	51215.4	4.1	-62.3
14	262	121507	1577	14	-7	51263.3	51265.5	-2.2	51221.9	51217.5	4.4	-67.9
14	262	121519	1579	14	-8	51242.9	51245.2	-2.3	51180.9	51176.3	4.6	-101.6
14	262	121531	1581	14	-9	51182.8	51185.1	-2.3	51151.2	51146.3	4.9	-51.8
14	262	121542	1583	14	-10	51005.0	51007.4	-2.4	50888.3	50883.2	5.1	-191.3
14	262	121555	1585	14	-11	50513.0	50515.5	-2.5	49912.7	49907.3	5.4	-984.1
14	262	121607	1587	14	-12	49997.9	50000.4	-2.5	52055.5	52049.8	5.7	3373.1
14	262	121618	1589	14	-13	51123.5	51126.1	-2.6	52112.4	52106.5	5.9	1621.2
14	262	121630	1591	14	-14	51394.9	51397.6	-2.7	50554.9	50548.8	6.1	-1377.0
14	262	121642	1593	14	-15	51308.1	51310.8	-2.7	51071.4	51065.0	6.4	-388.0
14	262	121652	1595	14	-16	51301.3	51304.1	-2.8	51207.9	51201.3	6.6	-153.1
14	262	121704	1597	14	-17	51283.9	51286.8	-2.9	51239.5	51232.6	6.9	-72.8
14	262	121717	1599	14	-18	51226.0	51228.9	-2.9	51202.2	51195.1	7.1	-39.0
14	262	121731	1601	14	-19	51118.4	51121.4	-3.0	51045.9	51038.5	7.4	-118.9
14	262	121743	1603	14	-20	50892.9	50896.0	-3.1	50667.2	50659.5	7.7	-370.0
14	262	121757	1605	14	-21	50437.9	50441.1	-3.2	50036.8	50028.8	8.0	-657.5
14	262	121808	1607	14	-22	50857.9	50861.1	-3.2	49821.7	49813.5	8.2	-1698.7
14	262	121829	1609	14	-23	51296.9	51300.2	-3.3	50491.0	50482.4	8.6	-1321.2
14	262	121840	1611	14	-24	51244.8	51248.2	-3.4	51073.2	51064.3	8.9	-281.3
14	262	121853	1613	14	-25	51218.6	51222.1	-3.5	51077.6	51068.5	9.1	-231.1
14	262	122047	1615	14	-26	51197.0	51201.1	-4.1	51005.2	50993.7	11.5	-314.4
14	262	122103	1617	14	-27	51217.3	51221.5	-4.2	51071.9	51060.0	11.9	-238.4
14	262	122116	1619	14	-28	51158.5	51162.8	-4.3	51025.7	51013.6	12.1	-217.7
14	262	122129	1621	14	-29	51099.1	51103.5	-4.4	50722.1	50709.7	12.4	-618.0
14	262	122143	1623	14	-30	51465.3	51469.8	-4.5	49943.7	49931.0	12.7	-2494.4
14	262	122155	1625	14	-31	52263.6	52268.1	-4.5	•	•	•	*
14	262	122207	1627	14	-32	53087.1	53091.7	-4.6	52074.9	52061.7	13.2	-1659.3
14	262	122219	1629	14	-33	51620.9	51625.6	-4.7	50819.9	50806.4	13.5	-1313.1
14	262	122232	1631	14	-34	51028.1	51032.8	-4.7	50717.9	50704.2	13.7	-508.5
14	262	122245	1633	14	-35	50840.7	50845.5	-4.8	50618.0	50604.0	14.0	-365.1
14	262	122258	1635	14	-36	50719.0	50723.9	-4.9	50328.0	50313.7	14.3	-641.0
14	262	122311	1637	14	-37	50573.3	50578.3	-5.0	50248.6	50234.1	14.5	-532.3
14	262	122323	1639	14	-38	50554.2	50559.2	-5.0	49694.3	49679.5	14.8	-1409.7
14	262	122337	1641	14	-39	50129.6	50134.7	-5.1	48848.7	48833.6	15.1	-2099.8
14	262	122350	1643	14	-40	49844.8	49850.0	-5.2	48369.4	48354.0	15.4	-2418.7

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
15	262	122638	1655	15	0	49025.8	49031.1	-5.3	*	*	*	*
15	262	122652	1657	15	-1	49934.8	49940.1	-5.3	49505.7	49489.2	16.5	-703.4
15	262	122708	1659	15	-2	50683.2	50688.4	-5.2	50504.2	50487.7	16.5	-293.4
15	262	122723	1661	15	-3	51014.1	51019.3	-5.2	50922.3	50905.7	16.6	-150.5
15	262	122737	1663	15	-4	51164.3	51169.4	-5.1	51101.2	51084.5	16.7	-103.4
15	262	122751	1665	15	-5	51227.4	51232.5	-5.1	51180.5	51163.8	16.7	-76.9
15	262	122805	1667	15	-6	51256.8	51261.8	-5.0	51213.6	51196.8	16.8	-70.8
15	262	122818	1669	15	-7	51261.1	51266.1	-5.0	51220.3	51203.4	16.9	-66.9
15	262	122831	1671	15	-8	51246.8	51251.7	-4.9	51187.4	51170.5	16.9	-97.4
15	262	122844	1673	15	-9	51213.9	51218.8	-4.9	51243.1	51226.1	17.0	47.9
15	262	122858	1675	15	-10	51092.1	51097.0	-4.9	51015.5	50998.4	17.1	-125.6
15	262	122912	1677	15	-11	50910.0	50914.8	-4.8	50687.3	50670.2	17.1	-365.1
15	262	122924	1679	15	-12	50829.1	50833.9	-4.8	50351.2	50334.0	17.2	-783.4
15	262	122936	1681	15	-13	51057.7	51062.4	-4.7	50534.5	50517.3	17.2	-857.7
15	262	122948	1683	15	-14	51220.6	51225.3	-4.7	50946.5	50929.2	17.3	-449.3
15	262	123000	1685	15	-15	51281.4	51286.0	-4.6	51171.5	51154.2	17.3	-180.2
15	262	123013	1687	15	-16	51294.4	51299.0	-4.6	51239.1	51221.7	17.4	-90.7
15	262	123026	1689	15	-17	51280.1	51284.7	-4.6	51251.6	51234.1	17.5	-46.7
15	262	123039	1691	15	-18	51243.1	51247.6	-4.5	51206.3	51188.8	17.5	-60.3
15	262	123053	1693	15	-19	51167.8	51172.3	-4.5	51104.8	51087.2	17.6	-103.3
15	262	123106	1695	15	-20	51070.2	51074.6	-4.4	50954.4	50936.7	17.7	-189.8
15	262	123120	1697	15	-21	51002.7	51007.1	-4.4	50787.7	50770.0	17.7	-352.5
15	262	123134	1699	15	-22	51076.2	51080.5	-4.3	50826.4	50808.6	17.8	-409.5
15	262	123147	1701	15	-23	51167.4	51171.7	-4.3	50830.0	50812.1	17.9	-553.1
15	262	123159	1703	15	-24	51213.6	51217.9	-4.3	51019.7	51001.8	17.9	-317.9
15	262	123213	1705	15	-25	51230.0	51234.2	-4.2	51155.4	51137.4	18.0	-122.3
15	262	123351	1707	15	-26	51212.7	51216.6	-3.9	51142.1	51123.7	18.4	-115.7
15	262	123405	1709	15	-27	51174.8	51178.6	-3.8	51090.4	51071.9	18.5	-138.4
15	262	123418	1711	15	-28	51104.3	51108.1	-3.8	50949.5	50930.9	18.6	-253.8
15	262	123432	1713	15	-29	50997.1	51000.8	-3.7	50506.2	50487.6	18.6	-804.8
15	262	123445	1715	15	-30	51157.9	51161.6	-3.7	52114.1	52095.4	18.7	1567.5
15	262	123501	1717	15	-31	52936.6	52940.3	-3.7	51802.7	51783.9	18.8	-1858.9
15	262	123513	1719	15	-32	54066.4	54070.0	-3.6	*	*	*	*
15	262	123527	1721	15	-33	51573.9	51577.5	-3.6	50507.1	50488.2	18.9	-1748.9
15	262	123540	1723	15	-34	50837.8	50841.3	-3.5	50439.9	50421.0	18.9	-652.3
15	262	123553	1725	15	-35	50579.7	50583.2	-3.5	50257.7	50238.7	19.0	-527.9
15	262	123607	1727	15	-36	50448.3	50451.7	-3.4	49719.2	49700.1	19.1	-1195.2
15	262	123621	1729	15	-37	50258.3	50261.7	-3.4	48952.0	48932.9	19.1	-2141.5
15	262	123635	1731	15	-38	50217.6	50220.9	-3.3	*	*	*	*
16	262	124117	1743	16	0	52088.0	52089.8	-1.8	*	*	*	*
16	262	124132	1745	16	-1	50030.6	50032.3	-1.7	49401.7	49385.7	16.0	-1031.0
16	262	124149	1747	16	-2	50691.6	50693.2	-1.6	50511.7	50496.0	15.7	-294.9
16	262	124203	1749	16	-3	51042.0	51043.5	-1.5	50934.6	50919.2	15.4	-176.1
16	262	124218	1751	16	-4	51164.8	51166.2	-1.4	51088.9	51073.8	15.1	-124.4
16	262	124231	1753	16	-5	51228.4	51229.7	-1.3	51174.0	51159.2	14.8	-89.2
16	262	124244	1755	16	-6	51262.4	51263.6	-1.2	51204.6	51190.0	14.6	-94.8
16	262	124257	1757	16	-7	51267.4	51268.6	-1.2	51214.7	51200.4	14.3	-86.4
16	262	124310	1759	16	-8	51259.5	51260.6	-1.1	51205.8	51191.8	14.0	-88.0
16	262	124323	1761	16	-9	51229.9	51230.9	-1.0	51190.8	51177.0	13.8	-64.1

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
16	262	124337	1763	16	-10	51160.0	51160.9	-0.9	51079.2	51065.7	13.5	-132.5
16	262	124350	1765	16	-11	51083.3	51084.1	-0.8	50976.9	50963.6	13.3	-174.4
16	262	124403	1767	16	-12	51042.8	51043.6	-0.8	50868.7	50855.7	13.0	-285.4
16	262	124417	1769	16	-13	51109.4	51110.1	-0.7	50935.0	50922.3	12.7	-285.9
16	262	124431	1771	16	-14	51209.9	51210.5	-0.6	51039.4	51027.0	12.4	-279.5
16	262	124445	1773	16	-15	51272.4	51272.9	-0.5	51179.6	51167.4	12.2	-152.1
16	262	124458	1775	16	-16	51280.8	51281.2	-0.4	51218.0	51206.1	11.9	-103.0
16	262	124511	1777	16	-17	51273.5	51273.8	-0.3	51197.8	51186.2	11.6	-124.1
16	262	124524	1779	16	-18	51253.0	51253.3	-0.3	51179.4	51168.0	11.4	-120.7
16	262	124537	1781	16	-19	51222.1	51222.3	-0.2	51151.5	51140.4	11.1	-115.7
16	262	124551	1783	16	-20	51179.5	51179.6	-0.1	51113.7	51102.8	10.9	-107.9
16	262	124603	1785	16	-21	51156.4	51156.4	0.0	51069.9	51059.3	10.6	-141.8
16	262	124616	1787	16	-22	51173.2	51173.1	0.1	51074.7	51064.3	10.4	-161.5
16	262	124631	1789	16	-23	51202.6	51202.4	0.2	51090.7	51080.6	10.1	-183.4
16	262	124645	1791	16	-24	51226.8	51226.6	0.2	51119.1	51109.3	9.8	-176.6
16	262	124659	1793	16	-25	51238.9	51238.6	0.3	51166.1	51156.6	9.5	-119.3
16	262	124756	1795	16	-26	51227.6	51226.9	0.7	51165.6	51157.2	8.4	-101.6
16	262	124809	1797	16	-27	51189.7	51188.9	0.8	51121.9	51113.8	8.1	-111.1
16	262	124822	1799	16	-28	51117.2	51116.4	0.8	51017.0	51009.1	7.9	-164.3
16	262	124835	1801	16	-29	51008.9	51008.0	0.9	50791.8	50784.2	7.6	-355.9
16	262	124848	1803	16	-30	50922.4	50921.4	1.0	50159.3	50151.9	7.4	-1251.0
16	262	124901	1805	16	-31	51240.7	51239.6	1.1	49748.8	49741.7	7.1	-2445.7
16	262	124913	1807	16	-32	51258.8	51257.6	1.2	49716.7	49709.9	6.8	-2528.0
16	262	124927	1809	16	-33	50850.9	50849.7	1.2	50082.3	50075.7	6.6	-1260.0
16	262	124939	1811	16	-34	50469.5	50468.2	1.3	50077.1	50070.8	6.3	-643.3
16	262	124952	1813	16	-35	49988.4	49987.0	1.4	49254.6	49248.5	6.1	-1203.0
16	262	125006	1815	16	-36	49887.9	49886.4	1.5	45573.2	45567.4	5.8	-7073.3
17	262	125243	1827	17	0	50009.8	50009.1	0.7	52058.6	52052.2	6.4	3358.7
17	262	125257	1829	17	-1	50061.4	50060.6	0.8	49501.2	49494.6	6.6	-918.4
17	262	125309	1831	17	-2	50715.9	50715.1	0.8	50479.6	50472.9	6.7	-387.4
17	262	125321	1833	17	-3	51037.7	51036.8	0.9	50921.3	50914.4	6.9	-190.8
17	262	125333	1835	17	-4	51176.9	51176.0	0.9	51070.5	51063.4	7.1	-174.4
17	262	125346	1837	17	-5	51241.9	51241.0	0.9	51161.6	51154.4	7.2	-131.6
17	262	125359	1839	17	-6	51262.4	51261.4	1.0	51205.1	51197.7	7.4	-93.9
17	262	125414	1841	17	-7	51270.3	51269.3	1.0	51218.7	51211.1	7.6	-84.6
17	262	125427	1843	17	-8	51266.6	51265.5	1.1	51226.3	51218.5	7.8	-66.1
17	262	125441	1845	17	-9	51245.1	51244.0	1.1	51209.9	51201.9	8.0	-57.7
17	262	125454	1847	17	-10	51212.1	51210.9	1.2	51148.4	51140.3	8.1	-104.4
17	262	125507	1849	17	-11	51172.1	51170.9	1.2	51106.1	51097.8	8.3	-108.2
17	262	125520	1851	17	-12	51162.1	51160.9	1.2	51071.3	51062.8	8.5	-148.9
17	262	125533	1853	17	-13	51185.4	51184.1	1.3	51065.2	51056.5	8.7	-197.1
17	262	125547	1855	17	-14	51223.9	51222.6	1.3	51096.5	51087.6	8.9	-208.9
17	262	125601	1857	17	-15	51263.4	51262.0	1.4	51187.2	51178.2	9.0	-124.9
17	262	125614	1859	17	-16	51280.8	51279.4	1.4	51208.1	51198.9	9.2	-119.2
17	262	125626	1861	17	-17	51276.6	51275.2	1.4	51207.3	51197.9	9.4	-113.6
17	262	125639	1863	17	-18	51270.6	51269.1	1.5	51216.1	51206.5	9.6	-89.3
17	262	125653	1865	17	-19	51257.3	51255.8	1.5	51195.9	51186.2	9.7	-100.7
17	262	125705	1867	17	-20	51243.1	51241.5	1.6	51177.5	51167.6	9.9	-107.5
17	262	125719	1869	17	-21	51237.8	51236.2	1.6	51177.6	51167.5	10.1	-98.7

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
17	262	125732	1871	17	-22	51244.0	51242.3	1.7	51175.5	51165.2	10.3	-112.3
17	262	125745	1873	17	-23	51253.4	51251.7	1.7	51191.7	51181.3	10.4	-101.2
17	262	125757	1875	17	-24	51266.1	51264.4	1.7	51211.5	51200.9	10.6	-89.5
17	262	125810	1877	17	-25	51265.9	51264.1	1.8	51220.6	51209.8	10.8	-74.3
17	262	125903	1879	17	-26	51236.9	51235.0	1.9	51174.0	51162.5	11.5	-103.1
17	262	125916	1881	17	-27	51188.0	51186.0	2.0	51141.6	51129.9	11.7	-76.1
17	262	125930	1883	17	-28	51116.2	51114.2	2.0	51050.0	51038.2	11.8	-108.5
17	262	125943	1885	17	-29	51017.4	51015.3	2.1	50889.5	50877.5	12.0	-209.7
17	262	125958	1887	17	-30	50912.8	50910.7	2.1	50687.2	50675.0	12.2	-369.8
17	262	130009	1889	17	-31	50770.3	50768.1	2.2	50454.0	50441.6	12.4	-518.5
17	262	130022	1891	17	-32	50679.6	50677.4	2.2	50338.1	50325.6	12.5	-559.8
17	262	130036	1893	17	-33	50458.1	50455.9	2.2	50173.2	50160.5	12.7	-467.1
17	262	130048	1895	17	-34	49650.5	49648.2	2.3	49150.2	49137.3	12.9	-820.2
18	262	130336	1907	18	0	48620.3	48617.5	2.8	48499.8	48484.0	15.8	-197.5
18	262	130350	1909	18	-1	50039.4	50036.4	3.0	49753.0	49736.9	16.1	-469.5
18	262	130403	1911	18	-2	50811.1	50808.0	3.1	50611.5	50595.1	16.4	-327.2
18	262	130415	1913	18	-3	51057.9	51054.6	3.3	50874.2	50857.6	16.6	-301.2
18	262	130427	1915	18	-4	51208.6	51205.2	3.4	51039.5	51022.7	16.8	-277.2
18	262	130440	1917	18	-5	51272.8	51269.3	3.5	51147.4	51130.3	17.1	-205.6
18	262	130453	1919	18	-6	51282.4	51278.7	3.7	51190.6	51173.3	17.3	-150.5
18	262	130506	1921	18	-7	51276.0	51272.2	3.8	51218.7	51201.1	17.6	-93.9
18	262	130518	1923	18	-8	51272.0	51268.0	4.0	51197.1	51179.3	17.8	-122.8
18	262	130530	1925	18	-9	51255.5	51251.4	4.1	51206.3	51188.2	18.1	-80.7
18	262	130543	1927	18	-10	51229.6	51225.4	4.2	51180.9	51162.6	18.3	-79.8
18	262	130556	1929	18	-11	51206.3	51201.9	4.4	51142.3	51123.7	18.6	-104.9
18	262	130608	1931	18	-12	51196.7	51192.2	4.5	51114.3	51095.5	18.8	-135.1
18	262	130621	1933	18	-13	51205.4	51200.7	4.7	51121.8	51102.7	19.1	-137.1
18	262	130634	1935	18	-14	51233.4	51228.6	4.8	51141.6	51122.3	19.3	-150.5
18	262	130647	1937	18	-15	51270.5	51265.5	5.0	51207.2	51187.6	19.6	-103.8
18	262	130701	1939	18	-16	51287.3	51282.2	5.1	51217.5	51197.6	19.9	-114.4
18	262	130715	1941	18	-17	51285.7	51280.4	5.3	51216.8	51196.7	20.1	-112.9
18	262	130728	1943	18	-18	51285.9	51280.5	5.4	51233.5	51213.1	20.4	-85.9
18	262	130743	1945	18	-19	51276.9	51271.3	5.6	51226.9	51206.2	20.7	-82.0
18	262	130757	1947	18	-20	51259.2	51253.5	5.7	51193.6	51172.7	20.9	-107.5
18	262	130810	1949	18	-21	51260.1	51254.2	5.9	51189.6	51168.4	21.2	-115.6
18	262	130823	1951	18	-22	51271.2	51265.2	6.0	51199.2	51177.7	21.5	-118.0
18	262	130836	1953	18	-23	51285.1	51278.9	6.2	51204.5	51182.8	21.7	-132.1
18	262	130850	1955	18	-24	51302.7	51296.4	6.3	51208.1	51186.1	22.0	-155.1
18	262	130903	1957	18	-25	51304.4	51297.9	6.5	51252.1	51229.8	22.3	-85.7
18	262	131017	1959	18	-26	51280.0	51272.7	7.3	51232.9	51209.2	23.7	-77.2
18	262	131031	1961	18	-27	51225.6	51218.1	7.5	51191.8	51167.8	24.0	-55.4
18	262	131044	1963	18	-28	51149.0	51141.4	7.6	51105.4	51081.2	24.2	-71.5
18	262	131057	1965	18	-29	51034.5	51026.7	7.8	50952.6	50928.1	24.5	-134.3
18	262	131110	1967	18	-30	50890.2	50882.3	7.9	50764.4	50739.6	24.8	-206.2
18	262	131124	1969	18	-31	50727.5	50719.4	8.1	50578.0	50553.0	25.0	-245.1
18	262	131136	1971	18	-32	50592.9	50584.7	8.2	50409.4	50384.1	25.3	-300.8
18	262	131149	1973	18	-33	50262.2	50253.9	8.3	50046.0	50020.5	25.5	-354.4
18	262	131202	1975	18	-34	49646.1	49637.6	8.5	49285.8	49260.0	25.8	-590.7
19	262	131450	1987	19	0	*	*	*	47797.7	47769.8	27.9	*

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
19	262	131504	1989	19	-1	50245.5	50236.8	8.7	49403.2	49375.3	27.9	-1380.8
19	262	131515	1991	19	-2	50764.1	50755.4	8.7	50396.2	50368.3	27.9	-603.1
19	262	131527	1993	19	-3	51076.3	51067.6	8.7	50709.7	50681.9	27.8	-601.0
19	262	131540	1995	19	-4	51449.3	51440.6	8.7	51078.7	51050.9	27.8	-607.5
19	262	131552	1997	19	-5	51478.1	51469.4	8.7	51232.7	51204.9	27.8	-402.3
19	262	131603	1999	19	-6	51367.1	51358.4	8.7	51192.2	51164.5	27.7	-286.7
19	262	131616	2001	19	-7	51291.6	51282.9	8.7	51197.4	51169.7	27.7	-154.4
19	262	131629	2003	19	-8	51275.3	51266.6	8.7	51197.2	51169.6	27.6	-128.0
19	262	131642	2005	19	-9	51252.0	51243.4	8.6	51199.1	51171.5	27.6	-86.7
19	262	131658	2007	19	-10	51225.1	51216.5	8.6	51171.8	51144.2	27.6	-87.4
19	262	131713	2009	19	-11	51199.1	51190.5	8.6	51127.2	51099.7	27.5	-117.9
19	262	131726	2011	19	-12	51189.6	51181.0	8.6	51087.6	51060.1	27.5	-167.2
19	262	131738	2013	19	-13	51208.0	51199.4	8.6	51085.1	51057.7	27.4	-201.5
19	262	131755	2015	19	-14	51243.0	51234.4	8.6	51118.1	51090.7	27.4	-204.8
19	262	131810	2017	19	-15	51273.1	51264.5	8.6	51165.5	51138.2	27.3	-176.4
19	262	131824	2019	19	-16	51298.8	51290.2	8.6	51225.0	51197.7	27.3	-121.0
19	262	131840	2021	19	-17	51303.7	51295.2	8.5	51246.5	51219.3	27.2	-93.8
19	262	131854	2023	19	-18	51304.5	51296.0	8.5	51250.3	51223.1	27.2	-88.9
19	262	131908	2025	19	-19	51291.8	51283.3	8.5	51233.5	51206.3	27.2	-95.6
19	262	131922	2027	19	-20	51262.9	51254.4	8.5	51189.6	51162.5	27.1	-120.2
19	262	131936	2029	19	-21	51247.8	51239.3	8.5	51124.5	51097.4	27.1	-202.1
19	262	131949	2031	19	-22	51260.9	51252.4	8.5	51070.9	51043.9	27.0	-311.5
19	262	132004	2033	19	-23	51304.1	51295.6	8.5	51130.4	51103.4	27.0	-284.8
19	262	132020	2035	19	-24	51331.4	51322.9	8.5	51193.2	51166.3	26.9	-226.6
19	262	132033	2037	19	-25	51341.0	51332.5	8.5	51268.2	51241.3	26.9	-119.3
19	262	132145	2039	19	-26	51318.9	51310.5	8.4	51282.2	51255.5	26.7	-60.2
19	262	132158	2041	19	-27	51254.0	51245.6	8.4	51236.2	51209.6	26.6	-29.2
19	262	132212	2043	19	-28	51136.1	51127.7	8.4	51115.1	51088.5	26.6	-34.4
19	262	132227	2045	19	-29	50972.2	50963.8	8.4	50893.7	50867.1	26.6	-128.7
19	262	132240	2047	19	-30	50774.4	50766.0	8.4	50644.1	50617.6	26.5	-213.6
19	262	132253	2049	19	-31	50567.4	50559.1	8.3	50367.0	50340.5	26.5	-328.5
19	262	132305	2051	19	-32	50271.3	50263.0	8.3	50015.5	49989.1	26.4	-419.3
19	262	132317	2053	19	-33	49867.8	49859.5	8.3	49414.3	49387.9	26.4	-743.4
20	262	132708	2065	20	0	*	*	*	*	*	*	*
20	262	132723	2067	20	-1	50597.6	50589.2	8.4	49437.1	49411.8	25.3	-1902.5
20	262	132737	2069	20	-2	50799.1	50790.7	8.4	50329.5	50304.3	25.2	-769.8
20	262	132750	2071	20	-3	51164.3	51155.9	8.4	50318.8	50293.7	25.1	-1386.1
20	262	132802	2073	20	-4	52141.4	52132.9	8.5	*	*	*	*
20	262	132816	2075	20	-5	51491.4	51482.9	8.5	*	*	*	*
20	262	132828	2077	20	-6	51517.2	51508.7	8.5	51282.9	51258.0	24.9	-384.1
20	262	132843	2079	20	-7	51314.1	51305.6	8.5	51163.7	51138.9	24.8	-246.6
20	262	132856	2081	20	-8	51256.4	51247.8	8.6	51188.0	51163.3	24.7	-112.1
20	262	132907	2083	20	-9	51231.8	51223.2	8.6	51182.4	51157.8	24.6	-81.0
20	262	132918	2085	20	-10	51181.9	51173.3	8.6	51115.7	51091.1	24.6	-108.5
20	262	132932	2087	20	-11	51119.1	51110.4	8.7	50994.2	50969.7	24.5	-204.8
20	262	132944	2089	20	-12	51078.7	51070.0	8.7	50827.7	50803.3	24.4	-411.5
20	262	132956	2091	20	-13	51166.5	51157.8	8.7	50747.6	50723.3	24.3	-686.7
20	262	133008	2093	20	-14	51273.4	51264.7	8.7	50857.9	50833.6	24.3	-681.1
20	262	133020	2095	20	-15	51306.3	51297.5	8.8	51065.1	51040.9	24.2	-395.4

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
20	262	133033	2097	20	-16	51326.3	51317.5	8.8	51216.1	51192.0	24.1	-180.7
20	262	133045	2099	20	-17	51330.9	51322.1	8.8	51276.6	51252.6	24.0	-89.0
20	262	133058	2101	20	-18	51331.7	51322.9	8.8	51284.4	51260.4	24.0	-77.5
20	262	133112	2103	20	-19	51295.4	51286.5	8.9	51242.1	51218.2	23.9	-87.4
20	262	133125	2105	20	-20	51237.9	51229.0	8.9	51133.0	51109.2	23.8	-172.0
20	262	133138	2107	20	-21	51166.3	51157.4	8.9	50914.8	50891.1	23.7	-412.3
20	262	133152	2109	20	-22	51249.1	51240.1	9.0	50612.4	50588.8	23.6	-1043.8
20	262	133205	2111	20	-23	51429.3	51420.3	9.0	50616.5	50592.9	23.6	-1332.5
20	262	133219	2113	20	-24	51442.9	51433.9	9.0	50983.3	50959.8	23.5	-753.4
20	262	133231	2115	20	-25	51429.3	51420.3	9.0	51306.8	51283.4	23.4	-200.8
20	262	133330	2117	20	-26	51413.3	51404.1	9.2	51373.0	51350.0	23.0	-66.1
20	262	133343	2119	20	-27	51334.8	51325.6	9.2	51310.9	51287.9	23.0	-39.2
20	262	133355	2121	20	-28	51172.6	51163.4	9.2	51133.0	51110.1	22.9	-64.9
20	262	133408	2123	20	-29	50933.1	50923.8	9.3	50841.5	50818.7	22.8	-150.2
20	262	133420	2125	20	-30	50542.8	50533.5	9.3	50351.7	50329.0	22.7	-313.3
20	262	133432	2127	20	-31	50023.1	50013.8	9.3	49614.1	49591.4	22.7	-670.5
21	262	133814	2141	21	0	*	*	*	*	*	*	*
21	262	133826	2143	21	-1	50825.8	50820.9	4.9	50069.2	50045.5	23.7	-1240.3
21	262	133837	2145	21	-2	50809.2	50804.2	5.0	50294.7	50271.2	23.5	-843.4
21	262	133849	2147	21	-3	51200.5	51195.3	5.2	51933.7	51910.5	23.2	1202.0
21	262	133900	2149	21	-4	*	*	*	*	*	*	*
21	262	133913	2151	21	-5	52397.1	52391.6	5.5	51053.2	51030.7	22.5	-603.1
21	262	133925	2153	21	-6	51421.1	51415.5	5.6	51112.2	51089.9	22.3	-214.1
21	262	133937	2155	21	-7	51242.8	51237.0	5.8	51172.9	51150.9	22.0	-73.1
21	262	133948	2157	21	-8	51217.5	51211.6	5.9	51137.1	51115.3	21.8	-61.6
21	262	134000	2159	21	-9	51174.7	51168.6	6.1	50979.8	50958.3	21.5	-164.8
21	262	134013	2161	21	-10	51080.3	51074.1	6.2	50646.3	50625.0	21.3	-471.6
21	262	134025	2163	21	-11	50934.0	50927.6	6.4	49904.8	49883.7	21.1	-1613.8
21	262	134037	2165	21	-12	50889.2	50882.7	6.5	49839.5	49818.7	20.8	-2892.6
21	262	134049	2167	21	-13	51604.0	51597.3	6.7	50510.4	50489.8	20.6	-1349.2
21	262	134101	2169	21	-14	51333.4	51326.6	6.8	50999.9	50979.5	20.4	-631.3
21	262	134112	2171	21	-15	51385.0	51378.0	7.0	51242.8	51222.7	20.1	-209.2
21	262	134124	2173	21	-16	51370.4	51363.3	7.1	51344.9	51325.0	19.9	-49.7
21	262	134136	2175	21	-17	51375.2	51367.9	7.3	51334.2	51314.6	19.6	-33.9
21	262	134149	2177	21	-18	51354.9	51347.5	7.4	51243.9	51224.5	19.4	-65.7
21	262	134201	2179	21	-19	51284.0	51276.4	7.6	50931.9	50912.9	19.0	-313.6
21	262	134217	2181	21	-20	51123.2	51115.4	7.8	50155.0	50136.2	18.8	-1217.2
21	262	134229	2183	21	-21	50897.5	50889.6	7.9	*	*	*	*
21	262	134241	2185	21	-22	52199.7	52191.6	8.1	*	*	*	*
21	262	134253	2187	21	-23	52926.3	52918.1	8.2	49959.7	49941.4	18.3	-4863.3
21	262	134304	2189	21	-24	51906.4	51898.1	8.3	50914.7	50896.6	18.1	-1625.7
21	262	134316	2191	21	-25	51616.2	51607.7	8.5	51423.9	51406.1	17.8	-315.2
21	262	134415	2193	21	-26	51609.0	51599.8	9.2	51589.0	51572.3	16.7	-32.8
21	262	134426	2195	21	-27	51477.5	51468.1	9.4	51486.3	51469.9	16.4	14.4
21	262	134439	2197	21	-28	51168.7	51159.2	9.5	51133.9	51117.7	16.2	-57.0
21	262	134450	2199	21	-29	50652.6	50642.9	9.7	50498.1	50482.1	16.0	-253.3
21	262	134502	2201	21	-30	49924.6	49914.8	9.8	49600.7	49585.0	15.7	-531.0
22	264	84005	10	22	0	52069.0	52070.8	-1.8	58598.0	58600.0	-2.0	10703.3
22	264	84014	12	22	-1	50984.4	50986.2	-1.8	49571.8	49573.9	-2.1	-2315.7

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LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
22	264	84023	14	22	-2	50649.8	50651.6	-1.8	50222.2	50224.4	-2.2	-701.0
22	264	84032	16	22	-3	50607.4	50609.2	-1.8	49886.8	49889.1	-2.3	-1181.3
22	264	84041	18	22	-4	50997.4	50999.2	-1.8	49615.6	49618.0	-2.4	-2265.2
22	264	84050	20	22	-5	51234.8	51236.7	-1.9	50404.0	50406.5	-2.5	-1362.0
22	264	84059	22	22	-6	51068.2	51070.1	-1.9	50683.8	50686.5	-2.7	-630.2
22	264	84108	24	22	-7	51033.4	51035.3	-1.9	50842.2	50845.0	-2.8	-313.4
22	264	84116	26	22	-8	51057.4	51059.3	-1.9	50975.2	50978.1	-2.9	-134.8
22	264	84124	28	22	-9	51056.6	51058.6	-2.0	51013.0	51016.0	-3.0	-71.5
22	264	84132	30	22	-10	50960.4	50962.4	-2.0	50873.0	50876.1	-3.1	-143.3
22	264	84142	32	22	-11	50642.6	50644.6	-2.0	50315.6	50318.8	-3.2	-536.1
22	264	84151	34	22	-12	49588.0	49590.0	-2.0	*	*	*	*
22	264	84159	36	22	-13	*	*	*	*	*	*	*
22	264	84208	38	22	-14	*	*	*	49444.0	49447.6	-3.6	*
22	264	84216	40	22	-15	51545.6	51547.7	-2.1	50671.4	50675.1	-3.7	-1433.1
22	264	84229	42	22	-16	51334.2	51336.3	-2.1	51197.8	51201.6	-3.8	-223.6
22	264	84239	44	22	-17	51361.2	51363.4	-2.2	51375.2	51379.2	-4.0	23.0
22	264	84248	46	22	-18	51357.4	51359.6	-2.2	51384.4	51388.5	-4.1	44.3
22	264	84255	48	22	-19	51294.2	51296.4	-2.2	51295.0	51299.2	-4.2	1.3
22	264	84303	50	22	-20	51126.6	51128.8	-2.2	51043.8	51048.1	-4.3	-135.7
22	264	84313	52	22	-21	50507.4	50509.6	-2.2	49892.8	49897.2	-4.4	-1007.5
22	264	84324	54	22	-22	*	*	*	*	*	*	*
22	264	84332	56	22	-23	*	*	*	*	*	*	*
22	264	84340	58	22	-24	52143.4	52145.7	-2.3	50894.8	50899.6	-4.8	-2046.9
22	264	84348	60	22	-25	51886.6	51888.9	-2.3	51690.0	51694.9	-4.9	-322.3
22	264	84419	62	22	-26	51908.0	51910.4	-2.4	51940.4	51945.7	-5.3	53.1
22	264	84427	64	22	-27	51698.6	51701.0	-2.4	51759.6	51765.0	-5.4	100.0
22	264	84436	66	22	-28	51203.6	51206.1	-2.5	51213.4	51218.9	-5.5	16.1
22	264	84444	68	22	-29	50398.4	50400.9	-2.5	50276.6	50282.2	-5.6	-199.7
22	264	84454	70	22	-30	49359.0	49361.5	-2.5	48881.4	48887.1	-5.7	-782.9
22	264	84501	72	22	-31	*	*	*	45548.6	45554.4	-5.8	*
23	264	84639	74	23	-1	50613.6	50616.4	-2.8	49514.0	49521.1	-7.1	-1802.6
23	264	84648	76	23	-2	50223.8	50226.6	-2.8	49743.0	49750.2	-7.2	-788.2
23	264	84657	78	23	-3	50180.4	50183.2	-2.8	49780.6	49787.9	-7.3	-655.4
23	264	84704	80	23	-4	50405.0	50407.8	-2.8	49946.6	49954.0	-7.4	-751.5
23	264	84713	82	23	-5	50641.2	50644.1	-2.9	50283.2	50290.7	-7.5	-586.9
23	264	84722	84	23	-6	50763.8	50766.7	-2.9	50508.2	50515.9	-7.7	-419.0
23	264	84730	86	23	-7	50865.2	50868.1	-2.9	50671.2	50679.0	-7.8	-318.0
23	264	84738	88	23	-8	50917.8	50920.7	-2.9	50815.0	50822.9	-7.9	-168.5
23	264	84748	90	23	-9	50986.8	50989.8	-3.0	50883.0	50891.0	-8.0	-170.2
23	264	84756	92	23	-10	50852.0	50855.0	-3.0	50700.6	50708.7	-8.1	-248.2
23	264	84807	94	23	-11	50514.2	50517.2	-3.0	50049.8	50058.0	-8.2	-761.3
23	264	84816	96	23	-12	*	*	*	48411.0	48419.4	-8.4	*
23	264	84825	98	23	-13	50792.2	50795.3	-3.1	*	*	*	*
23	264	84832	100	23	-14	51247.2	51250.3	-3.1	50333.6	50342.2	-8.6	-1497.7
23	264	84840	102	23	-15	51227.2	51230.3	-3.1	50989.8	50998.5	-8.7	-389.2
23	264	84912	104	23	-16	51285.0	51288.2	-3.2	51266.4	51275.5	-9.1	-30.5
23	264	84926	106	23	-17	51326.4	51329.6	-3.2	51385.8	51395.1	-9.3	97.4
23	264	84934	108	23	-18	51319.8	51323.0	-3.2	51363.0	51372.4	-9.4	70.8
23	264	84942	110	23	-19	51244.6	51247.9	-3.3	51264.2	51273.7	-9.5	32.1

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
23	264	84951	112	23	-20	51030.4	51033.7	-3.3	50941.6	50951.2	-9.6	-145.6
23	264	85000	114	23	-21	50706.4	50709.7	-3.3	50111.6	50121.3	-9.7	-975.1
23	264	85014	116	23	-22	51090.8	51094.1	-3.3	49726.6	49736.5	-9.9	-2236.4
23	264	85023	118	23	-23	52003.6	52007.0	-3.4	51085.4	51095.4	-10.0	-1505.2
23	264	85030	120	23	-24	52431.6	52435.0	-3.4	51907.8	51917.9	-10.1	-858.7
23	264	85054	122	23	-25	53523.0	53526.4	-3.4	53257.4	53267.8	-10.4	-435.4
23	264	85106	124	23	-26	53767.8	53771.3	-3.5	54011.8	54022.4	-10.6	400.0
23	264	85114	126	23	-27	52198.4	52201.9	-3.5	52469.2	52479.9	-10.7	443.9
23	264	85124	128	23	-28	*	*	*	58536.8	58547.6	-10.8	*
24	264	85847	140	24	-1	50895.6	50897.9	-2.3	58594.2	58602.5	-8.3	12620.7
24	264	85859	142	24	-2	50074.4	50076.7	-2.3	48995.8	49004.0	-8.2	-1768.2
24	264	85910	144	24	-3	49477.6	49479.9	-2.3	48873.2	48881.3	-8.1	-990.8
24	264	85920	146	24	-4	49890.0	49892.2	-2.2	49132.4	49140.5	-8.1	-1242.0
24	264	85928	148	24	-5	50248.2	50250.4	-2.2	49675.2	49683.3	-8.1	-939.3
24	264	85937	150	24	-6	50542.4	50544.6	-2.2	50183.4	50191.4	-8.0	-588.5
24	264	85946	152	24	-7	50743.8	50746.0	-2.2	50488.8	50496.8	-8.0	-418.0
24	264	85954	154	24	-8	50859.0	50861.2	-2.2	50670.8	50678.7	-7.9	-308.5
24	264	90003	156	24	-9	50933.2	50935.3	-2.1	50783.6	50791.5	-7.9	-245.2
24	264	90011	158	24	-10	50917.8	50919.9	-2.1	50760.2	50768.0	-7.8	-258.4
24	264	90020	160	24	-11	50748.8	50750.9	-2.1	50532.6	50540.4	-7.8	-354.4
24	264	90029	162	24	-12	50562.4	50564.5	-2.1	50154.6	50162.3	-7.7	-668.5
24	264	90038	164	24	-13	50849.4	50851.4	-2.0	50060.4	50068.1	-7.7	-1293.4
24	264	90048	166	24	-14	50941.6	50943.6	-2.0	50511.8	50519.4	-7.6	-704.6
24	264	90056	168	24	-15	51068.6	51070.6	-2.0	50806.6	50814.2	-7.6	-429.5
24	264	90103	170	24	-16	51182.2	51184.2	-2.0	51078.6	51086.2	-7.6	-169.8
24	264	90112	172	24	-17	51260.0	51261.9	-1.9	51233.2	51240.7	-7.5	-43.9
24	264	90120	174	24	-18	51289.2	51291.1	-1.9	51269.0	51276.5	-7.5	-33.1
24	264	90128	176	24	-19	51292.0	51293.9	-1.9	51272.4	51279.8	-7.4	-32.1
24	264	90135	178	24	-20	51258.8	51260.7	-1.9	51240.8	51248.2	-7.4	-29.5
24	264	90143	180	24	-21	51248.8	51250.6	-1.8	51124.0	51131.4	-7.4	-204.6
24	264	90152	182	24	-22	51471.0	51472.8	-1.8	51188.6	51195.9	-7.3	-462.9
24	264	90202	184	24	-23	51973.6	51975.4	-1.8	51491.6	51498.9	-7.3	-790.2
24	264	90210	186	24	-24	52860.0	52861.8	-1.8	52371.8	52379.0	-7.2	-800.3
24	264	90218	188	24	-25	58625.2	58627.0	-1.8	58651.6	58658.8	-7.2	43.3
24	264	90239	190	24	-26	58603.0	58604.7	-1.7	58637.4	58644.5	-7.1	56.4
24	264	90251	192	24	-27	*	*	*	*	*	*	*
24	264	90300	194	24	-28	*	*	*	*	*	*	*
25	264	90626	196	25	-4	52010.8	52011.9	-1.1	58590.8	58596.7	-5.9	10786.9
25	264	90634	198	25	-5	58620.6	58621.6	-1.0	58614.4	58620.3	-5.9	-10.2
25	264	90642	200	25	-6	49630.6	49631.6	-1.0	47661.2	47667.1	-5.9	-3228.5
25	264	90651	202	25	-7	50132.2	50133.2	-1.0	49447.6	49453.4	-5.8	-1122.3
25	264	90700	204	25	-8	50458.0	50459.0	-1.0	50087.0	50092.8	-5.8	-608.2
25	264	90708	206	25	-9	50748.8	50749.8	-1.0	50446.2	50451.9	-5.7	-496.1
25	264	90716	208	25	-10	50957.4	50958.3	-0.9	50728.8	50734.5	-5.7	-374.8
25	264	90724	210	25	-11	51015.4	51016.3	-0.9	50821.0	50826.7	-5.7	-318.7
25	264	90734	212	25	-12	50978.4	50979.3	-0.9	50790.4	50796.0	-5.6	-308.2
25	264	90742	214	25	-13	50924.6	50925.5	-0.9	50716.6	50722.2	-5.6	-341.0
25	264	90751	216	25	-14	50935.6	50936.4	-0.8	50720.2	50725.7	-5.5	-353.1
25	264	90759	218	25	-15	50996.6	50997.4	-0.8	50785.2	50790.7	-5.5	-346.6

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LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
25	264	90808	220	25	-16	51039.0	51039.8	-0.8	50842.2	50847.6	-5.4	-322.6
25	264	90815	222	25	-17	51080.2	51081.0	-0.8	50885.4	50890.8	-5.4	-319.3
25	264	90822	224	25	-18	51157.8	51158.5	-0.7	50948.4	50953.8	-5.4	-343.3
25	264	90833	226	25	-19	51228.2	51228.9	-0.7	51017.4	51022.7	-5.3	-345.6
25	264	90841	228	25	-20	51287.8	51288.5	-0.7	51122.6	51127.9	-5.3	-270.8
25	264	90850	230	25	-21	51392.0	51392.7	-0.7	51172.2	51177.4	-5.2	-360.3
25	264	90858	232	25	-22	51410.4	51411.1	-0.7	51241.6	51246.8	-5.2	-276.7
25	264	90907	234	25	-23	52568.0	52568.6	-0.6	51666.4	51671.5	-5.1	-1478.0
25	264	90950	236	25	-24	52821.4	52821.9	-0.5	52184.8	52189.7	-4.9	-1043.6
25	264	90959	238	25	-25	58628.4	58628.9	-0.5	53928.8	53933.7	-4.9	-7704.3
25	264	91023	240	25	-26	58613.6	58614.0	-0.4	58582.6	58587.3	-4.7	-50.8
25	264	91031	242	25	-27	58643.2	58643.6	-0.4	58661.2	58665.9	-4.7	29.5
25	264	91042	244	25	-28	58595.0	58595.4	-0.4	58560.0	58564.6	-4.6	-57.4
26	264	91518	246	26	-5.5	*	*	*	*	*	*	*
26	264	91528	248	26	-6.5	*	*	*	47548.4	47551.6	-3.2	*
26	264	91536	250	26	-7.5	49652.0	49651.6	0.4	48545.2	48548.4	-3.2	-1814.4
26	264	91544	252	26	-8.5	50420.8	50420.3	0.5	49636.6	49639.7	-3.1	-1285.6
26	264	91554	254	26	-9.5	50963.6	50963.1	0.5	50452.2	50455.3	-3.1	-838.4
26	264	91603	256	26	-10.5	51136.6	51136.1	0.5	50794.6	50797.6	-3.0	-560.7
26	264	91612	258	26	-11.5	51109.4	51108.9	0.5	50862.6	50865.6	-3.0	-404.6
26	264	91621	260	26	-12.5	51053.4	51052.8	0.6	50875.0	50877.9	-2.9	-292.5
26	264	91629	262	26	-13.5	51000.4	50999.8	0.6	50836.8	50839.7	-2.9	-268.2
26	264	91636	264	26	-14.5	50958.8	50958.2	0.6	50808.2	50811.1	-2.9	-246.9
26	264	91647	266	26	-15.5	50942.4	50941.8	0.6	50746.2	50749.0	-2.8	-321.6
26	264	91658	268	26	-16.5	50948.6	50947.9	0.7	50599.2	50602.0	-2.8	-572.8
26	264	91705	270	26	-17.5	51138.8	51138.1	0.7	50628.8	50631.5	-2.7	-836.1
26	264	91714	272	26	-18.5	51296.2	51295.5	0.7	50632.8	50635.5	-2.7	-1087.5
26	264	91722	274	26	-19.5	51242.2	51241.5	0.7	50793.8	50796.4	-2.6	-735.1
26	264	91730	276	26	-20.5	51213.6	51212.8	0.8	50928.0	50930.6	-2.6	-468.2
26	264	91738	278	26	-21.5	51328.6	51327.8	0.8	51019.4	51021.9	-2.5	-506.9
26	264	91746	280	26	-22.5	51743.4	51742.6	0.8	51217.8	51220.3	-2.5	-861.6
26	264	91754	282	26	-23.5	52967.0	52966.2	0.8	51873.4	51875.9	-2.5	-1792.8
26	264	91802	284	26	-24.5	58612.6	58611.7	0.9	58619.4	58621.8	-2.4	11.1
26	264	91810	286	26	-25.5	58625.6	58624.7	0.9	58604.2	58606.6	-2.4	-35.1
26	264	91818	288	26	-26.5	58594.6	58593.7	0.9	58641.0	58643.4	-2.4	76.1
27	264	92103	290	27	-6.5	58589.6	58588.3	1.3	58549.6	58551.1	-1.5	-65.6
27	264	92111	292	27	-7.5	52122.6	52121.2	1.4	58636.0	58637.5	-1.5	10677.7
27	264	92120	294	27	-8.5	58562.2	58560.8	1.4	58556.8	58558.2	-1.4	-8.9
27	264	92128	296	27	-9.5	51379.6	51378.2	1.4	51542.4	51543.8	-1.4	266.9
27	264	92136	298	27	-10.5	51473.4	51472.0	1.4	50782.2	50783.6	-1.4	-1133.1
27	264	92143	300	27	-11.5	51192.2	51190.7	1.5	50785.2	50786.5	-1.3	-667.2
27	264	92150	302	27	-12.5	51028.0	51026.5	1.5	50806.2	50807.5	-1.3	-363.6
27	264	92157	304	27	-13.5	51079.0	51077.5	1.5	50803.2	50804.4	-1.2	-452.1
27	264	92204	306	27	-14.5	50797.0	50795.5	1.5	50897.2	50898.4	-1.2	164.3
27	264	92213	308	27	-15.5	50741.2	50739.7	1.5	50514.0	50515.2	-1.2	-372.5
27	264	92221	310	27	-16.5	50670.4	50668.8	1.6	49989.6	49990.7	-1.1	-1116.1
27	264	92228	312	27	-17.5	54282.8	54281.2	1.6	58624.4	58625.5	-1.1	7117.4
27	264	92235	314	27	-18.5	52116.2	52114.6	1.6	58558.2	58559.3	-1.1	10560.7
27	264	92244	316	27	-19.5	51230.0	51228.4	1.6	50364.6	50365.6	-1.0	-1418.7

Hydrofluoric Acid Spill Magnetic Survey Data

LINE	DAY	TIME	STA.	X	Y	TOP			BOTTOM			VERT. GRAD.(nT/m)
						uncorr.	corr.	dif.	uncorr.	corr.	dif.	
27	264	92251	318	27	-20.5	50664.0	50662.4	1.6	50129.4	50130.4	-1.0	-876.4
27	264	92300	320	27	-21.5	50556.8	50555.1	1.7	49955.0	49955.9	-0.9	-986.6
27	264	92308	322	27	-22.5	51905.4	51903.7	1.7	49527.0	49527.9	-0.9	-3899.0
27	264	92316	324	27	-23.5	52200.8	52199.1	1.7	58608.8	58609.6	-0.8	10504.9
27	264	92324	326	27	-24.5	58627.8	58626.1	1.7	58612.2	58613.0	-0.8	-25.6
27	264	92332	328	27	-25.5	58583.2	58581.4	1.8	58609.2	58610.0	-0.8	42.6
28	264	92602	330	28	-8.25	58645.8	58643.6	2.2	58587.6	58587.6	0.0	-95.4
28	264	92614	332	28	-9.25	21690.4	21688.2	2.2	58592.2	58592.2	0.0	60494.8
28	264	92624	334	28	-10.25	52849.8	52847.6	2.2	50504.8	50504.7	0.1	-3844.3
28	264	92633	336	28	-11.25	51586.0	51583.7	2.3	50581.2	50581.1	0.1	-1647.2
28	264	92642	338	28	-12.25	51071.4	51069.1	2.3	50648.6	50648.4	0.2	-693.1
28	264	92651	340	28	-13.25	50913.6	50911.3	2.3	50679.6	50679.4	0.2	-383.6
28	264	92659	342	28	-14.25	50793.8	50791.5	2.3	50631.4	50631.1	0.3	-266.2
28	264	92709	344	28	-15.25	50648.2	50645.8	2.4	50459.4	50459.1	0.3	-309.5
28	264	92718	346	28	-16.25	50471.4	50469.0	2.4	49933.4	49933.0	0.4	-882.0
28	264	92726	348	28	-17.25	50844.4	50842.0	2.4	58571.2	58570.8	0.4	12666.9
28	264	92734	350	28	-18.25	52699.8	52697.4	2.4	58579.0	58578.5	0.5	9638.0
28	264	92745	352	28	-19.25	52676.8	52674.3	2.5	58604.6	58604.1	0.5	9717.7
28	264	92754	354	28	-20.25	50191.2	50188.7	2.5	49356.2	49355.6	0.6	-1368.9
28	264	92802	356	28	-21.25	49379.6	49377.1	2.5	48601.8	48601.2	0.6	-1275.1
28	264	92810	358	28	-22.25	42393.6	42391.1	2.5	58592.6	58592.0	0.6	26555.7
28	264	92818	360	28	-23.25	52356.2	52353.7	2.5	*	*	*	*
28	264	92826	362	28	-24.25	58618.4	58615.8	2.6	58551.4	58550.7	0.7	-109.8
29	264	93038	364	29	-10	58684.4	58681.5	2.9	58606.6	58605.2	1.4	-127.5
29	264	93046	366	29	-11	52171.2	52168.2	3.0	49671.8	49670.4	1.4	-4097.4
29	264	93053	368	29	-12	50884.0	50881.0	3.0	50083.8	50082.3	1.5	-1311.8
29	264	93101	370	29	-13	50717.2	50714.2	3.0	50285.0	50283.5	1.5	-708.5
29	264	93108	372	29	-14	50644.4	50641.4	3.0	50373.0	50371.5	1.5	-444.9
29	264	93116	374	29	-15	50516.4	50513.4	3.0	50293.4	50291.8	1.6	-365.6
29	264	93124	376	29	-16	50295.2	50292.1	3.1	50020.8	50019.2	1.6	-449.8
29	264	93132	378	29	-17	50094.8	50091.7	3.1	49192.8	49191.1	1.7	-1478.7
29	264	93140	380	29	-18	51514.0	51510.9	3.1	58597.6	58595.9	1.7	11612.5
29	264	93147	382	29	-19	50716.8	50713.7	3.1	52219.8	52218.1	1.7	2463.9
29	264	93155	384	29	-20	49515.0	49511.9	3.1	48583.8	48582.0	1.8	-1526.6
29	264	93202	386	29	-21	52195.2	52192.0	3.2	47317.6	47315.8	1.8	-7996.1
29	264	93210	388	29	-22	58600.2	58597.0	3.2	58605.6	58603.8	1.8	8.9
29	264	93217	390	29	-23	58604.2	58601.0	3.2	58639.4	58637.5	1.9	57.7
30	264	93234	392	30	-15	50080.0	50076.7	3.3	49705.8	49703.8	2.0	-613.4
30	264	93241	394	31	-15	52089.4	52086.1	3.3	58539.0	58537.0	2.0	10573.1
30	264	93249	396	32	-15	58594.2	58590.9	3.3	58648.8	58646.8	2.0	89.5
31	264	93349	398	30	-19	48401.6	48398.1	3.5	47940.4	47938.1	2.3	-756.1
31	264	93357	400	31	-19	58674.4	58670.9	3.5	*	*	*	*
31	264	93404	402	32	-19	58620.2	58616.7	3.5	58563.8	58561.4	2.4	-92.5

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

Grid to Site Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
0	0	50127.11	61821.69	11	-25	50163.19	61739.69
0	-1	50127.11	61818.41	11	-26	50163.19	61736.41
0	-2	50127.11	61815.13	11	-27	50163.19	61733.13
0	-3	50127.11	61811.85	11	-28	50163.19	61729.85
0	-4	50127.11	61808.57	11	-29	50163.19	61726.57
0	-5	50127.11	61805.29	11	-30	50163.19	61723.29
0	-6	50127.11	61802.01	11	-31	50163.19	61720.01
0	-7	50127.11	61798.73	11	-32	50163.19	61716.73
0	-8	50127.11	61795.45	11	-33	50163.19	61713.45
0	-9	50127.11	61792.17	11	-34	50163.19	61710.17
0	-10	50127.11	61788.89	11	-35	50163.19	61706.89
0	-11	50127.11	61785.61	11	-36	50163.19	61703.61
0	-12	50127.11	61782.33	11	-37	50163.19	61700.33
0	-13	50127.11	61779.05	11	-38	50163.19	61697.05
0	-14	50127.11	61775.77	11	-39	50163.19	61693.77
0	-15	50127.11	61772.49	11	-40	50163.19	61690.49
0	-16	50127.11	61769.21	11	-41	50163.19	61687.21
0	-17	50127.11	61765.93	11	-42	50163.19	61683.93
0	-18	50127.11	61762.65	11	-43	50163.19	61680.65
0	-19	50127.11	61759.37	11	-44	50163.19	61677.37
0	-20	50127.11	61756.09	11	-45	50163.19	61674.09
0	-21	50127.11	61752.81	12	0	50166.47	61821.69
0	-22	50127.11	61749.53	12	-1	50166.47	61818.41
0	-23	50127.11	61746.25	12	-2	50166.47	61815.13
0	-24	50127.11	61742.97	12	-3	50166.47	61811.85
0	-25	50127.11	61739.69	12	-4	50166.47	61808.57
0	-26	50127.11	61736.41	12	-5	50166.47	61805.29
0	-27	50127.11	61733.13	12	-6	50166.47	61802.01
0	-28	50127.11	61729.85	12	-7	50166.47	61798.73
0	-29	50127.11	61726.57	12	-8	50166.47	61795.45
0	-30	50127.11	61723.29	12	-9	50166.47	61792.17
0	-31	50127.11	61720.01	12	-10	50166.47	61788.89
0	-32	50127.11	61716.73	12	-11	50166.47	61785.61
0	-33	50127.11	61713.45	12	-12	50166.47	61782.33
0	-34	50127.11	61710.17	12	-13	50166.47	61779.05
0	-35	50127.11	61706.89	12	-14	50166.47	61775.77
0	-36	50127.11	61703.61	12	-15	50166.47	61772.49
0	-37	50127.11	61700.33	12	-16	50166.47	61769.21
0	-38	50127.11	61697.05	12	-17	50166.47	61765.93
0	-39	50127.11	61693.77	12	-18	50166.47	61762.65
0	-40	50127.11	61690.49	12	-19	50166.47	61759.37
0	-41	50127.11	61687.21	12	-20	50166.47	61756.09
0	-42	50127.11	61683.93	12	-21	50166.47	61752.81
0	-43	50127.11	61680.65	12	-22	50166.47	61749.53
0	-44	50127.11	61677.37	12	-23	50166.47	61746.25
0	-45	50127.11	61674.09	12	-24	50166.47	61742.97
0	-46	50127.11	61670.81	12	-25	50166.47	61739.69
0	-47	50127.11	61667.53	12	-26	50166.47	61736.41

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
0	-48	50127.11	61664.25	12	-27	50166.47	61733.13
0	-49	50127.11	61660.97	12	-28	50166.47	61729.85
0	-50	50127.11	61657.69	12	-29	50166.47	61726.57
0	-51	50127.11	61654.41	12	-30	50166.47	61723.29
1	0	50130.39	61821.69	12	-31	50166.47	61720.01
1	-1	50130.39	61818.41	12	-32	50166.47	61716.73
1	-2	50130.39	61815.13	12	-33	50166.47	61713.45
1	-3	50130.39	61811.85	12	-34	50166.47	61710.17
1	-4	50130.39	61808.57	12	-35	50166.47	61706.89
1	-5	50130.39	61805.29	12	-36	50166.47	61703.61
1	-6	50130.39	61802.01	12	-37	50166.47	61700.33
1	-7	50130.39	61798.73	12	-38	50166.47	61697.05
1	-8	50130.39	61795.45	12	-39	50166.47	61693.77
1	-9	50130.39	61792.17	12	-40	50166.47	61690.49
1	-10	50130.39	61788.89	12	-41	50166.47	61687.21
1	-11	50130.39	61785.61	12	-42	50166.47	61683.93
1	-12	50130.39	61782.33	12	-43	50166.47	61680.65
1	-13	50130.39	61779.05	13	0	50169.75	61821.69
1	-14	50130.39	61775.77	13	-1	50169.75	61818.41
1	-15	50130.39	61772.49	13	-2	50169.75	61815.13
1	-16	50130.39	61769.21	13	-3	50169.75	61811.85
1	-17	50130.39	61765.93	13	-4	50169.75	61808.57
1	-18	50130.39	61762.65	13	-5	50169.75	61805.29
1	-19	50130.39	61759.37	13	-6	50169.75	61802.01
1	-20	50130.39	61756.09	13	-7	50169.75	61798.73
1	-21	50130.39	61752.81	13	-8	50169.75	61795.45
1	-22	50130.39	61749.53	13	-9	50169.75	61792.17
1	-23	50130.39	61746.25	13	-10	50169.75	61788.89
1	-24	50130.39	61742.97	13	-11	50169.75	61785.61
1	-25	50130.39	61739.69	13	-12	50169.75	61782.33
1	-26	50130.39	61736.41	13	-13	50169.75	61779.05
1	-27	50130.39	61733.13	13	-14	50169.75	61775.77
1	-28	50130.39	61729.85	13	-15	50169.75	61772.49
1	-29	50130.39	61726.57	13	-16	50169.75	61769.21
1	-30	50130.39	61723.29	13	-17	50169.75	61765.93
1	-31	50130.39	61720.01	13	-18	50169.75	61762.65
1	-32	50130.39	61716.73	13	-19	50169.75	61759.37
1	-33	50130.39	61713.45	13	-20	50169.75	61756.09
1	-34	50130.39	61710.17	13	-21	50169.75	61752.81
1	-35	50130.39	61706.89	13	-22	50169.75	61749.53
1	-36	50130.39	61703.61	13	-23	50169.75	61746.25
1	-37	50130.39	61700.33	13	-24	50169.75	61742.97
1	-38	50130.39	61697.05	13	-25	50169.75	61739.69
1	-39	50130.39	61693.77	13	-26	50169.75	61736.41
1	-40	50130.39	61690.49	13	-27	50169.75	61733.13
1	-41	50130.39	61687.21	13	-28	50169.75	61729.85
1	-42	50130.39	61683.93	13	-29	50169.75	61726.57
1	-43	50130.39	61680.65	13	-30	50169.75	61723.29
1	-44	50130.39	61677.37	13	-31	50169.75	61720.01

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
1	-45	50130.39	61674.09	13	-32	50169.75	61716.73
1	-46	50130.39	61670.81	13	-33	50169.75	61713.45
1	-47	50130.39	61667.53	13	-34	50169.75	61710.17
1	-48	50130.39	61664.25	13	-35	50169.75	61706.89
1	-49	50130.39	61660.97	13	-36	50169.75	61703.61
1	-50	50130.39	61657.69	13	-37	50169.75	61700.33
1	-51	50130.39	61654.41	13	-38	50169.75	61697.05
1	-52	50130.39	61651.13	13	-39	50169.75	61693.77
2	0	50133.67	61821.69	13	-40	50169.75	61690.49
2	-1	50133.67	61818.41	13	-41	50169.75	61687.21
2	-2	50133.67	61815.13	14	0	50173.03	61821.69
2	-3	50133.67	61811.85	14	-1	50173.03	61818.41
2	-4	50133.67	61808.57	14	-2	50173.03	61815.13
2	-5	50133.67	61805.29	14	-3	50173.03	61811.85
2	-6	50133.67	61802.01	14	-4	50173.03	61808.57
2	-7	50133.67	61798.73	14	-5	50173.03	61805.29
2	-8	50133.67	61795.45	14	-6	50173.03	61802.01
2	-9	50133.67	61792.17	14	-7	50173.03	61798.73
2	-10	50133.67	61788.89	14	-8	50173.03	61795.45
2	-11	50133.67	61785.61	14	-9	50173.03	61792.17
2	-12	50133.67	61782.33	14	-10	50173.03	61788.89
2	-13	50133.67	61779.05	14	-11	50173.03	61785.61
2	-14	50133.67	61775.77	14	-12	50173.03	61782.33
2	-15	50133.67	61772.49	14	-13	50173.03	61779.05
2	-16	50133.67	61769.21	14	-14	50173.03	61775.77
2	-17	50133.67	61765.93	14	-15	50173.03	61772.49
2	-18	50133.67	61762.65	14	-16	50173.03	61769.21
2	-19	50133.67	61759.37	14	-17	50173.03	61765.93
2	-20	50133.67	61756.09	14	-18	50173.03	61762.65
2	-21	50133.67	61752.81	14	-19	50173.03	61759.37
2	-22	50133.67	61749.53	14	-20	50173.03	61756.09
2	-23	50133.67	61746.25	14	-21	50173.03	61752.81
2	-24	50133.67	61742.97	14	-22	50173.03	61749.53
2	-25	50133.67	61739.69	14	-23	50173.03	61746.25
2	-26	50133.67	61736.41	14	-24	50173.03	61742.97
2	-27	50133.67	61733.13	14	-25	50173.03	61739.69
2	-28	50133.67	61729.85	14	-26	50173.03	61736.41
2	-29	50133.67	61726.57	14	-27	50173.03	61733.13
2	-30	50133.67	61723.29	14	-28	50173.03	61729.85
2	-31	50133.67	61720.01	14	-29	50173.03	61726.57
2	-32	50133.67	61716.73	14	-30	50173.03	61723.29
2	-33	50133.67	61713.45	14	-31	50173.03	61720.01
2	-34	50133.67	61710.17	14	-32	50173.03	61716.73
2	-35	50133.67	61706.89	14	-33	50173.03	61713.45
2	-36	50133.67	61703.61	14	-34	50173.03	61710.17
2	-37	50133.67	61700.33	14	-35	50173.03	61706.89
2	-38	50133.67	61697.05	14	-36	50173.03	61703.61
2	-39	50133.67	61693.77	14	-37	50173.03	61700.33
2	-40	50133.67	61690.49	14	-38	50173.03	61697.05

Hydrofluoric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
2	-41	50133.67	61687.21	14	-39	50173.03	61693.77
2	-42	50133.67	61683.93	14	-40	50173.03	61690.49
2	-43	50133.67	61680.65	15	0	50176.31	61821.69
2	-44	50133.67	61677.37	15	-1	50176.31	61818.41
2	-45	50133.67	61674.09	15	-2	50176.31	61815.13
2	-46	50133.67	61670.81	15	-3	50176.31	61811.85
2	-47	50133.67	61667.53	15	-4	50176.31	61808.57
2	-48	50133.67	61664.25	15	-5	50176.31	61805.29
2	-49	50133.67	61660.97	15	-6	50176.31	61802.01
2	-50	50133.67	61657.69	15	-7	50176.31	61798.73
2	-51	50133.67	61654.41	15	-8	50176.31	61795.45
2	-52	50133.67	61651.13	15	-9	50176.31	61792.17
3	0	50136.95	61821.69	15	-10	50176.31	61788.89
3	-1	50136.95	61818.41	15	-11	50176.31	61785.61
3	-2	50136.95	61815.13	15	-12	50176.31	61782.33
3	-3	50136.95	61811.85	15	-13	50176.31	61779.05
3	-4	50136.95	61808.57	15	-14	50176.31	61775.77
3	-5	50136.95	61805.29	15	-15	50176.31	61772.49
3	-6	50136.95	61802.01	15	-16	50176.31	61769.21
3	-7	50136.95	61798.73	15	-17	50176.31	61765.93
3	-8	50136.95	61795.45	15	-18	50176.31	61762.65
3	-9	50136.95	61792.17	15	-19	50176.31	61759.37
3	-10	50136.95	61788.89	15	-20	50176.31	61756.09
3	-11	50136.95	61785.61	15	-21	50176.31	61752.81
3	-12	50136.95	61782.33	15	-22	50176.31	61749.53
3	-13	50136.95	61779.05	15	-23	50176.31	61746.25
3	-14	50136.95	61775.77	15	-24	50176.31	61742.97
3	-15	50136.95	61772.49	15	-25	50176.31	61739.69
3	-16	50136.95	61769.21	15	-26	50176.31	61736.41
3	-17	50136.95	61765.93	15	-27	50176.31	61733.13
3	-18	50136.95	61762.65	15	-28	50176.31	61729.85
3	-19	50136.95	61759.37	15	-29	50176.31	61726.57
3	-20	50136.95	61756.09	15	-30	50176.31	61723.29
3	-21	50136.95	61752.81	15	-31	50176.31	61720.01
3	-22	50136.95	61749.53	15	-32	50176.31	61716.73
3	-23	50136.95	61746.25	15	-33	50176.31	61713.45
3	-24	50136.95	61742.97	15	-34	50176.31	61710.17
3	-25	50136.95	61739.69	15	-35	50176.31	61706.89
3	-26	50136.95	61736.41	15	-36	50176.31	61703.61
3	-27	50136.95	61733.13	15	-37	50176.31	61700.33
3	-28	50136.95	61729.85	15	-38	50176.31	61697.05
3	-29	50136.95	61726.57	16	0	50179.59	61821.69
3	-30	50136.95	61723.29	16	-1	50179.59	61818.41
3	-31	50136.95	61720.01	16	-2	50179.59	61815.13
3	-32	50136.95	61716.73	16	-3	50179.59	61811.85
3	-33	50136.95	61713.45	16	-4	50179.59	61808.57
3	-34	50136.95	61710.17	16	-5	50179.59	61805.29
3	-35	50136.95	61706.89	16	-6	50179.59	61802.01
3	-36	50136.95	61703.61	16	-7	50179.59	61798.73

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
3	-37	50136.95	61700.33	16	-8	50179.59	61795.45
3	-38	50136.95	61697.05	16	-9	50179.59	61792.17
3	-39	50136.95	61693.77	16	-10	50179.59	61788.89
3	-40	50136.95	61690.49	16	-11	50179.59	61785.61
3	-41	50136.95	61687.21	16	-12	50179.59	61782.33
3	-42	50136.95	61683.93	16	-13	50179.59	61779.05
3	-43	50136.95	61680.65	16	-14	50179.59	61775.77
3	-44	50136.95	61677.37	16	-15	50179.59	61772.49
3	-45	50136.95	61674.09	16	-16	50179.59	61769.21
3	-46	50136.95	61670.81	16	-17	50179.59	61765.93
3	-47	50136.95	61667.53	16	-18	50179.59	61762.65
3	-48	50136.95	61664.25	16	-19	50179.59	61759.37
3	-49	50136.95	61660.97	16	-20	50179.59	61756.09
3	-50	50136.95	61657.69	16	-21	50179.59	61752.81
3	-51	50136.95	61654.41	16	-22	50179.59	61749.53
3	-52	50136.95	61651.13	16	-23	50179.59	61746.25
4	0	50140.23	61821.69	16	-24	50179.59	61742.97
4	-1	50140.23	61818.41	16	-25	50179.59	61739.69
4	-2	50140.23	61815.13	16	-26	50179.59	61736.41
4	-3	50140.23	61811.85	16	-27	50179.59	61733.13
4	-4	50140.23	61808.57	16	-28	50179.59	61729.85
4	-5	50140.23	61805.29	16	-29	50179.59	61726.57
4	-6	50140.23	61802.01	16	-30	50179.59	61723.29
4	-7	50140.23	61798.73	16	-31	50179.59	61720.01
4	-8	50140.23	61795.45	16	-32	50179.59	61716.73
4	-9	50140.23	61792.17	16	-33	50179.59	61713.45
4	-10	50140.23	61788.89	16	-34	50179.59	61710.17
4	-11	50140.23	61785.61	16	-35	50179.59	61706.89
4	-12	50140.23	61782.33	16	-36	50179.59	61703.61
4	-13	50140.23	61779.05	17	0	50182.87	61821.69
4	-14	50140.23	61775.77	17	-1	50182.87	61818.41
4	-15	50140.23	61772.49	17	-2	50182.87	61815.13
4	-16	50140.23	61769.21	17	-3	50182.87	61811.85
4	-17	50140.23	61765.93	17	-4	50182.87	61808.57
4	-18	50140.23	61762.65	17	-5	50182.87	61805.29
4	-19	50140.23	61759.37	17	-6	50182.87	61802.01
4	-20	50140.23	61756.09	17	-7	50182.87	61798.73
4	-21	50140.23	61752.81	17	-8	50182.87	61795.45
4	-22	50140.23	61749.53	17	-9	50182.87	61792.17
4	-23	50140.23	61746.25	17	-10	50182.87	61788.89
4	-24	50140.23	61742.97	17	-11	50182.87	61785.61
4	-25	50140.23	61739.69	17	-12	50182.87	61782.33
4	-26	50140.23	61736.41	17	-13	50182.87	61779.05
4	-27	50140.23	61733.13	17	-14	50182.87	61775.77
4	-28	50140.23	61729.85	17	-15	50182.87	61772.49
4	-29	50140.23	61726.57	17	-16	50182.87	61769.21
4	-30	50140.23	61723.29	17	-17	50182.87	61765.93
4	-31	50140.23	61720.01	17	-18	50182.87	61762.65
4	-32	50140.23	61716.73	17	-19	50182.87	61759.37

Hydrofluoric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
4	-33	50140.23	61713.45	17	-20	50182.87	61756.09
4	-34	50140.23	61710.17	17	-21	50182.87	61752.81
4	-35	50140.23	61706.89	17	-22	50182.87	61749.53
4	-36	50140.23	61703.61	17	-23	50182.87	61746.25
4	-37	50140.23	61700.33	17	-24	50182.87	61742.97
4	-38	50140.23	61697.05	17	-25	50182.87	61739.69
4	-39	50140.23	61693.77	17	-26	50182.87	61736.41
4	-40	50140.23	61690.49	17	-27	50182.87	61733.13
4	-41	50140.23	61687.21	17	-28	50182.87	61729.85
4	-42	50140.23	61683.93	17	-29	50182.87	61726.57
4	-43	50140.23	61680.65	17	-30	50182.87	61723.29
4	-44	50140.23	61677.37	17	-31	50182.87	61720.01
4	-45	50140.23	61674.09	17	-32	50182.87	61716.73
4	-46	50140.23	61670.81	17	-33	50182.87	61713.45
4	-47	50140.23	61667.53	17	-34	50182.87	61710.17
4	-48	50140.23	61664.25	18	0	50186.15	61821.69
4	-49	50140.23	61660.97	18	-1	50186.15	61818.41
4	-50	50140.23	61657.69	18	-2	50186.15	61815.13
4	-51	50140.23	61654.41	18	-3	50186.15	61811.85
4	-52	50140.23	61651.13	18	-4	50186.15	61808.57
5	0	50143.51	61821.69	18	-5	50186.15	61805.29
5	-1	50143.51	61818.41	18	-6	50186.15	61802.01
5	-2	50143.51	61815.13	18	-7	50186.15	61798.73
5	-3	50143.51	61811.85	18	-8	50186.15	61795.45
5	-4	50143.51	61808.57	18	-9	50186.15	61792.17
5	-5	50143.51	61805.29	18	-10	50186.15	61788.89
5	-6	50143.51	61802.01	18	-11	50186.15	61785.61
5	-7	50143.51	61798.73	18	-12	50186.15	61782.33
5	-8	50143.51	61795.45	18	-13	50186.15	61779.05
5	-9	50143.51	61792.17	18	-14	50186.15	61775.77
5	-10	50143.51	61788.89	18	-15	50186.15	61772.49
5	-11	50143.51	61785.61	18	-16	50186.15	61769.21
5	-12	50143.51	61782.33	18	-17	50186.15	61765.93
5	-13	50143.51	61779.05	18	-18	50186.15	61762.65
5	-14	50143.51	61775.77	18	-19	50186.15	61759.37
5	-15	50143.51	61772.49	18	-20	50186.15	61756.09
5	-16	50143.51	61769.21	18	-21	50186.15	61752.81
5	-17	50143.51	61765.93	18	-22	50186.15	61749.53
5	-18	50143.51	61762.65	18	-23	50186.15	61746.25
5	-19	50143.51	61759.37	18	-24	50186.15	61742.97
5	-20	50143.51	61756.09	18	-25	50186.15	61739.69
5	-21	50143.51	61752.81	18	-26	50186.15	61736.41
5	-22	50143.51	61749.53	18	-27	50186.15	61733.13
5	-23	50143.51	61746.25	18	-28	50186.15	61729.85
5	-24	50143.51	61742.97	18	-29	50186.15	61726.57
5	-25	50143.51	61739.69	18	-30	50186.15	61723.29
5	-26	50143.51	61736.41	18	-31	50186.15	61720.01
5	-27	50143.51	61733.13	18	-32	50186.15	61716.73
5	-28	50143.51	61729.85	18	-33	50186.15	61713.45

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
5	-29	50143.51	61726.57	18	-34	50186.15	61710.17
5	-30	50143.51	61723.29	19	0	50189.43	61821.69
5	-31	50143.51	61720.01	19	-1	50189.43	61818.41
5	-32	50143.51	61716.73	19	-2	50189.43	61815.13
5	-33	50143.51	61713.45	19	-3	50189.43	61811.85
5	-34	50143.51	61710.17	19	-4	50189.43	61808.57
5	-35	50143.51	61706.89	19	-5	50189.43	61805.29
5	-36	50143.51	61703.61	19	-6	50189.43	61802.01
5	-37	50143.51	61700.33	19	-7	50189.43	61798.73
5	-38	50143.51	61697.05	19	-8	50189.43	61795.45
5	-39	50143.51	61693.77	19	-9	50189.43	61792.17
5	-40	50143.51	61690.49	19	-10	50189.43	61788.89
5	-41	50143.51	61687.21	19	-11	50189.43	61785.61
5	-42	50143.51	61683.93	19	-12	50189.43	61782.33
5	-43	50143.51	61680.65	19	-13	50189.43	61779.05
5	-44	50143.51	61677.37	19	-14	50189.43	61775.77
5	-45	50143.51	61674.09	19	-15	50189.43	61772.49
5	-46	50143.51	61670.81	19	-16	50189.43	61769.21
5	-47	50143.51	61667.53	19	-17	50189.43	61765.93
5	-48	50143.51	61664.25	19	-18	50189.43	61762.65
5	-49	50143.51	61660.97	19	-19	50189.43	61759.37
5	-50	50143.51	61657.69	19	-20	50189.43	61756.09
5	-51	50143.51	61654.41	19	-21	50189.43	61752.81
6	0	50146.79	61821.69	19	-22	50189.43	61749.53
6	-1	50146.79	61818.41	19	-23	50189.43	61746.25
6	-2	50146.79	61815.13	19	-24	50189.43	61742.97
6	-3	50146.79	61811.85	19	-25	50189.43	61739.69
6	-4	50146.79	61808.57	19	-26	50189.43	61736.41
6	-5	50146.79	61805.29	19	-27	50189.43	61733.13
6	-6	50146.79	61802.01	19	-28	50189.43	61729.85
6	-7	50146.79	61798.73	19	-29	50189.43	61726.57
6	-8	50146.79	61795.45	19	-30	50189.43	61723.29
6	-9	50146.79	61792.17	19	-31	50189.43	61720.01
6	-10	50146.79	61788.89	19	-32	50189.43	61716.73
6	-11	50146.79	61785.61	19	-33	50189.43	61713.45
6	-12	50146.79	61782.33	20	0	50192.71	61821.69
6	-13	50146.79	61779.05	20	-1	50192.71	61818.41
6	-14	50146.79	61775.77	20	-2	50192.71	61815.13
6	-15	50146.79	61772.49	20	-3	50192.71	61811.85
6	-16	50146.79	61769.21	20	-4	50192.71	61808.57
6	-17	50146.79	61765.93	20	-5	50192.71	61805.29
6	-18	50146.79	61762.65	20	-6	50192.71	61802.01
6	-19	50146.79	61759.37	20	-7	50192.71	61798.73
6	-20	50146.79	61756.09	20	-8	50192.71	61795.45
6	-21	50146.79	61752.81	20	-9	50192.71	61792.17
6	-22	50146.79	61749.53	20	-10	50192.71	61788.89
6	-23	50146.79	61746.25	20	-11	50192.71	61785.61
6	-24	50146.79	61742.97	20	-12	50192.71	61782.33
6	-25	50146.79	61739.69	20	-13	50192.71	61779.05

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
6	-26	50146.79	61736.41	20	-14	50192.71	61775.77
6	-27	50146.79	61733.13	20	-15	50192.71	61772.49
6	-28	50146.79	61729.85	20	-16	50192.71	61769.21
6	-29	50146.79	61726.57	20	-17	50192.71	61765.93
6	-30	50146.79	61723.29	20	-18	50192.71	61762.65
6	-31	50146.79	61720.01	20	-19	50192.71	61759.37
6	-32	50146.79	61716.73	20	-20	50192.71	61756.09
6	-33	50146.79	61713.45	20	-21	50192.71	61752.81
6	-34	50146.79	61710.17	20	-22	50192.71	61749.53
6	-35	50146.79	61706.89	20	-23	50192.71	61746.25
6	-36	50146.79	61703.61	20	-24	50192.71	61742.97
6	-37	50146.79	61700.33	20	-25	50192.71	61739.69
6	-38	50146.79	61697.05	20	-26	50192.71	61736.41
6	-39	50146.79	61693.77	20	-27	50192.71	61733.13
6	-40	50146.79	61690.49	20	-28	50192.71	61729.85
6	-41	50146.79	61687.21	20	-29	50192.71	61726.57
6	-42	50146.79	61683.93	20	-30	50192.71	61723.29
6	-43	50146.79	61680.65	20	-31	50192.71	61720.01
6	-44	50146.79	61677.37	21	0	50195.99	61821.69
6	-45	50146.79	61674.09	21	-1	50195.99	61818.41
6	-46	50146.79	61670.81	21	-2	50195.99	61815.13
6	-47	50146.79	61667.53	21	-3	50195.99	61811.85
6	-48	50146.79	61664.25	21	-4	50195.99	61808.57
7	0	50150.07	61821.69	21	-5	50195.99	61805.29
7	-1	50150.07	61818.41	21	-6	50195.99	61802.01
7	-2	50150.07	61815.13	21	-7	50195.99	61798.73
7	-3	50150.07	61811.85	21	-8	50195.99	61795.45
7	-4	50150.07	61808.57	21	-9	50195.99	61792.17
7	-5	50150.07	61805.29	21	-10	50195.99	61788.89
7	-6	50150.07	61802.01	21	-11	50195.99	61785.61
7	-7	50150.07	61798.73	21	-12	50195.99	61782.33
7	-8	50150.07	61795.45	21	-13	50195.99	61779.05
7	-9	50150.07	61792.17	21	-14	50195.99	61775.77
7	-10	50150.07	61788.89	21	-15	50195.99	61772.49
7	-11	50150.07	61785.61	21	-16	50195.99	61769.21
7	-12	50150.07	61782.33	21	-17	50195.99	61765.93
7	-13	50150.07	61779.05	21	-18	50195.99	61762.65
7	-14	50150.07	61775.77	21	-19	50195.99	61759.37
7	-15	50150.07	61772.49	21	-20	50195.99	61756.09
7	-16	50150.07	61769.21	21	-21	50195.99	61752.81
7	-17	50150.07	61765.93	21	-22	50195.99	61749.53
7	-18	50150.07	61762.65	21	-23	50195.99	61746.25
7	-19	50150.07	61759.37	21	-24	50195.99	61742.97
7	-20	50150.07	61756.09	21	-25	50195.99	61739.69
7	-21	50150.07	61752.81	21	-26	50195.99	61736.41
7	-22	50150.07	61749.53	21	-27	50195.99	61733.13
7	-23	50150.07	61746.25	21	-28	50195.99	61729.85
7	-24	50150.07	61742.97	21	-29	50195.99	61726.57
7	-25	50150.07	61739.69	21	-30	50195.99	61723.29

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
7	-26	50150.07	61736.41	22	0	50199.27	61821.69
7	-27	50150.07	61733.13	22	-1	50199.27	61818.41
7	-28	50150.07	61729.85	22	-2	50199.27	61815.13
7	-29	50150.07	61726.57	22	-3	50199.27	61811.85
7	-30	50150.07	61723.29	22	-4	50199.27	61808.57
7	-31	50150.07	61720.01	22	-5	50199.27	61805.29
7	-32	50150.07	61716.73	22	-6	50199.27	61802.01
7	-33	50150.07	61713.45	22	-7	50199.27	61798.73
7	-34	50150.07	61710.17	22	-8	50199.27	61795.45
7	-35	50150.07	61706.89	22	-9	50199.27	61792.17
7	-36	50150.07	61703.61	22	-10	50199.27	61788.89
7	-37	50150.07	61700.33	22	-11	50199.27	61785.61
7	-38	50150.07	61697.05	22	-12	50199.27	61782.33
7	-39	50150.07	61693.77	22	-13	50199.27	61779.05
7	-40	50150.07	61690.49	22	-14	50199.27	61775.77
7	-41	50150.07	61687.21	22	-15	50199.27	61772.49
7	-42	50150.07	61683.93	22	-16	50199.27	61769.21
7	-43	50150.07	61680.65	22	-17	50199.27	61765.93
7	-44	50150.07	61677.37	22	-18	50199.27	61762.65
7	-45	50150.07	61674.09	22	-19	50199.27	61759.37
7	-46	50150.07	61670.81	22	-20	50199.27	61756.09
7	-47	50150.07	61667.53	22	-21	50199.27	61752.81
7	-48	50150.07	61664.25	22	-22	50199.27	61749.53
7	-49	50150.07	61660.97	22	-23	50199.27	61746.25
7	-50	50150.07	61657.69	22	-24	50199.27	61742.97
8	0	50153.35	61821.69	22	-25	50199.27	61739.69
8	-1	50153.35	61818.41	22	-26	50199.27	61736.41
8	-2	50153.35	61815.13	22	-27	50199.27	61733.13
8	-3	50153.35	61811.85	22	-28	50199.27	61729.85
8	-4	50153.35	61808.57	22	-29	50199.27	61726.57
8	-5	50153.35	61805.29	22	-30	50199.27	61723.29
8	-6	50153.35	61802.01	22	-31	50199.27	61720.01
8	-7	50153.35	61798.73	23	-1	50202.55	61818.41
8	-8	50153.35	61795.45	23	-2	50202.55	61815.13
8	-9	50153.35	61792.17	23	-3	50202.55	61811.85
8	-10	50153.35	61788.89	23	-4	50202.55	61808.57
8	-11	50153.35	61785.61	23	-5	50202.55	61805.29
8	-12	50153.35	61782.33	23	-6	50202.55	61802.01
8	-13	50153.35	61779.05	23	-7	50202.55	61798.73
8	-14	50153.35	61775.77	23	-8	50202.55	61795.45
8	-15	50153.35	61772.49	23	-9	50202.55	61792.17
8	-16	50153.35	61769.21	23	-10	50202.55	61788.89
8	-17	50153.35	61765.93	23	-11	50202.55	61785.61
8	-18	50153.35	61762.65	23	-12	50202.55	61782.33
8	-19	50153.35	61759.37	23	-13	50202.55	61779.05
8	-20	50153.35	61756.09	23	-14	50202.55	61775.77
8	-21	50153.35	61752.81	23	-15	50202.55	61772.49
8	-22	50153.35	61749.53	23	-16	50202.55	61769.21
8	-23	50153.35	61746.25	23	-17	50202.55	61765.93

Hydrofluoric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
8	-24	50153.35	61742.97	23	-18	50202.55	61762.65
8	-25	50153.35	61739.69	23	-19	50202.55	61759.37
8	-26	50153.35	61736.41	23	-20	50202.55	61756.09
8	-27	50153.35	61733.13	23	-21	50202.55	61752.81
8	-28	50153.35	61729.85	23	-22	50202.55	61749.53
8	-29	50153.35	61726.57	23	-23	50202.55	61746.25
8	-30	50153.35	61723.29	23	-24	50202.55	61742.97
8	-31	50153.35	61720.01	23	-25	50202.55	61739.69
8	-32	50153.35	61716.73	23	-26	50202.55	61736.41
8	-33	50153.35	61713.45	23	-27	50202.55	61733.13
8	-34	50153.35	61710.17	23	-28	50202.55	61729.85
8	-35	50153.35	61706.89	24	-1	50205.83	61818.41
8	-36	50153.35	61703.61	24	-2	50205.83	61815.13
8	-37	50153.35	61700.33	24	-3	50205.83	61811.85
8	-38	50153.35	61697.05	24	-4	50205.83	61808.57
8	-39	50153.35	61693.77	24	-5	50205.83	61805.29
8	-40	50153.35	61690.49	24	-6	50205.83	61802.01
8	-41	50153.35	61687.21	24	-7	50205.83	61798.73
8	-42	50153.35	61683.93	24	-8	50205.83	61795.45
8	-43	50153.35	61680.65	24	-9	50205.83	61792.17
8	-44	50153.35	61677.37	24	-10	50205.83	61788.89
8	-45	50153.35	61674.09	24	-11	50205.83	61785.61
8	-46	50153.35	61670.81	24	-12	50205.83	61782.33
8	-47	50153.35	61667.53	24	-13	50205.83	61779.05
8	-48	50153.35	61664.25	24	-14	50205.83	61775.77
8	-49	50153.35	61660.97	24	-15	50205.83	61772.49
9	0	50156.63	61821.69	24	-16	50205.83	61769.21
9	-1	50156.63	61818.41	24	-17	50205.83	61765.93
9	-2	50156.63	61815.13	24	-18	50205.83	61762.65
9	-3	50156.63	61811.85	24	-19	50205.83	61759.37
9	-4	50156.63	61808.57	24	-20	50205.83	61756.09
9	-5	50156.63	61805.29	24	-21	50205.83	61752.81
9	-6	50156.63	61802.01	24	-22	50205.83	61749.53
9	-7	50156.63	61798.73	24	-23	50205.83	61746.25
9	-8	50156.63	61795.45	24	-24	50205.83	61742.97
9	-9	50156.63	61792.17	24	-25	50205.83	61739.69
9	-10	50156.63	61788.89	24	-26	50205.83	61736.41
9	-11	50156.63	61785.61	24	-27	50205.83	61733.13
9	-12	50156.63	61782.33	24	-28	50205.83	61729.85
9	-13	50156.63	61779.05	25	-4	50209.11	61808.57
9	-14	50156.63	61775.77	25	-5	50209.11	61805.29
9	-15	50156.63	61772.49	25	-6	50209.11	61802.01
9	-16	50156.63	61769.21	25	-7	50209.11	61798.73
9	-17	50156.63	61765.93	25	-8	50209.11	61795.45
9	-18	50156.63	61762.65	25	-9	50209.11	61792.17
9	-19	50156.63	61759.37	25	-10	50209.11	61788.89
9	-20	50156.63	61756.09	25	-11	50209.11	61785.61
9	-21	50156.63	61752.81	25	-12	50209.11	61782.33
9	-22	50156.63	61749.53	25	-13	50209.11	61779.05

Hydroflouric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
9	-23	50156.63	61746.25	25	-14	50209.11	61775.77
9	-24	50156.63	61742.97	25	-15	50209.11	61772.49
9	-25	50156.63	61739.69	25	-16	50209.11	61769.21
9	-26	50156.63	61736.41	25	-17	50209.11	61765.93
9	-27	50156.63	61733.13	25	-18	50209.11	61762.65
9	-28	50156.63	61729.85	25	-19	50209.11	61759.37
9	-29	50156.63	61726.57	25	-20	50209.11	61756.09
9	-30	50156.63	61723.29	25	-21	50209.11	61752.81
9	-31	50156.63	61720.01	25	-22	50209.11	61749.53
9	-32	50156.63	61716.73	25	-23	50209.11	61746.25
9	-33	50156.63	61713.45	25	-24	50209.11	61742.97
9	-34	50156.63	61710.17	25	-25	50209.11	61739.69
9	-35	50156.63	61706.89	25	-26	50209.11	61736.41
9	-36	50156.63	61703.61	25	-27	50209.11	61733.13
9	-37	50156.63	61700.33	25	-28	50209.11	61729.85
9	-38	50156.63	61697.05	26	-5.5	50212.39	61803.65
9	-39	50156.63	61693.77	26	-6.5	50212.39	61800.37
9	-40	50156.63	61690.49	26	-7.5	50212.39	61797.09
9	-41	50156.63	61687.21	26	-8.5	50212.39	61793.81
9	-42	50156.63	61683.93	26	-9.5	50212.39	61790.53
9	-43	50156.63	61680.65	26	-10.5	50212.39	61787.25
9	-44	50156.63	61677.37	26	-11.5	50212.39	61783.97
9	-45	50156.63	61674.09	26	-12.5	50212.39	61780.69
9	-46	50156.63	61670.81	26	-13.5	50212.39	61777.41
9	-47	50156.63	61667.53	26	-14.5	50212.39	61774.13
10	0	50159.91	61821.69	26	-15.5	50212.39	61770.85
10	-1	50159.91	61818.41	26	-16.5	50212.39	61767.57
10	-2	50159.91	61815.13	26	-17.5	50212.39	61764.29
10	-3	50159.91	61811.85	26	-18.5	50212.39	61761.01
10	-4	50159.91	61808.57	26	-19.5	50212.39	61757.73
10	-5	50159.91	61805.29	26	-20.5	50212.39	61754.45
10	-6	50159.91	61802.01	26	-21.5	50212.39	61751.17
10	-7	50159.91	61798.73	26	-22.5	50212.39	61747.89
10	-8	50159.91	61795.45	26	-23.5	50212.39	61744.61
10	-9	50159.91	61792.17	26	-24.5	50212.39	61741.33
10	-10	50159.91	61788.89	26	-25.5	50212.39	61738.05
10	-11	50159.91	61785.61	26	-26.5	50212.39	61734.77
10	-12	50159.91	61782.33	27	-6.5	50215.67	61800.37
10	-13	50159.91	61779.05	27	-7.5	50215.67	61797.09
10	-14	50159.91	61775.77	27	-8.5	50215.67	61793.81
10	-15	50159.91	61772.49	27	-9.5	50215.67	61790.53
10	-16	50159.91	61769.21	27	-10.5	50215.67	61787.25
10	-17	50159.91	61765.93	27	-11.5	50215.67	61783.97
10	-18	50159.91	61762.65	27	-12.5	50215.67	61780.69
10	-19	50159.91	61759.37	27	-13.5	50215.67	61777.41
10	-20	50159.91	61756.09	27	-14.5	50215.67	61774.13
10	-21	50159.91	61752.81	27	-15.5	50215.67	61770.85
10	-22	50159.91	61749.53	27	-16.5	50215.67	61767.57
10	-23	50159.91	61746.25	27	-17.5	50215.67	61764.29

Hydrofluoric Acid Spill Magnetic Survey Coordinate Transformation

GRID		SITE		GRID		SITE	
X	Y	EASTING	NORTHING	X	Y	EASTING	NORTHING
10	-24	50159.91	61742.97	27	-18.5	50215.67	61761.01
10	-25	50159.91	61739.69	27	-19.5	50215.67	61757.73
10	-26	50159.91	61736.41	27	-20.5	50215.67	61754.45
10	-27	50159.91	61733.13	27	-21.5	50215.67	61751.17
10	-28	50159.91	61729.85	27	-22.5	50215.67	61747.89
10	-29	50159.91	61726.57	27	-23.5	50215.67	61744.61
10	-30	50159.91	61723.29	27	-24.5	50215.67	61741.33
10	-31	50159.91	61720.01	27	-25.5	50215.67	61738.05
10	-32	50159.91	61716.73	28	-8.25	50218.95	61794.63
10	-33	50159.91	61713.45	28	-9.25	50218.95	61791.35
10	-34	50159.91	61710.17	28	-10.25	50218.95	61788.07
10	-35	50159.91	61706.89	28	-11.25	50218.95	61784.79
10	-36	50159.91	61703.61	28	-12.25	50218.95	61781.51
10	-37	50159.91	61700.33	28	-13.25	50218.95	61778.23
10	-38	50159.91	61697.05	28	-14.25	50218.95	61774.95
10	-39	50159.91	61693.77	28	-15.25	50218.95	61771.67
10	-40	50159.91	61690.49	28	-16.25	50218.95	61768.39
10	-41	50159.91	61687.21	28	-17.25	50218.95	61765.11
10	-42	50159.91	61683.93	28	-18.25	50218.95	61761.83
10	-43	50159.91	61680.65	28	-19.25	50218.95	61758.55
10	-44	50159.91	61677.37	28	-20.25	50218.95	61755.27
10	-45	50159.91	61674.09	28	-21.25	50218.95	61751.99
10	-46	50159.91	61670.81	28	-22.25	50218.95	61748.71
11	0	50163.19	61821.69	28	-23.25	50218.95	61745.43
11	-1	50163.19	61818.41	28	-24.25	50218.95	61742.15
11	-2	50163.19	61815.13	29	-10	50222.23	61788.89
11	-3	50163.19	61811.85	29	-11	50222.23	61785.61
11	-4	50163.19	61808.57	29	-12	50222.23	61782.33
11	-5	50163.19	61805.29	29	-13	50222.23	61779.05
11	-6	50163.19	61802.01	29	-14	50222.23	61775.77
11	-7	50163.19	61798.73	29	-15	50222.23	61772.49
11	-8	50163.19	61795.45	29	-16	50222.23	61769.21
11	-9	50163.19	61792.17	29	-17	50222.23	61765.93
11	-10	50163.19	61788.89	29	-18	50222.23	61762.65
11	-11	50163.19	61785.61	29	-19	50222.23	61759.37
11	-12	50163.19	61782.33	29	-20	50222.23	61756.09
11	-13	50163.19	61779.05	29	-21	50222.23	61752.81
11	-14	50163.19	61775.77	29	-22	50222.23	61749.53
11	-15	50163.19	61772.49	29	-23	50222.23	61746.25
11	-16	50163.19	61769.21	30	-15	50225.51	61772.49
11	-17	50163.19	61765.93	31	-15	50225.51	61759.37
11	-18	50163.19	61762.65	32	-15	50228.79	61772.49
11	-19	50163.19	61759.37	30	-19	50228.79	61759.37
11	-20	50163.19	61756.09	31	-19	50232.07	61772.49
11	-21	50163.19	61752.81	32	-19	50232.07	61759.37
11	-22	50163.19	61749.53				
11	-23	50163.19	61746.25				
11	-24	50163.19	61742.97				

FIGURE CAPTIONS

Figure 1. Location of Hydroflouric Acid Spill Area on SRS.

Figure 2. Typical temporal variations exhibited by the total magnetic field due to diurnal variation, micropulsations, and magnetic storms on the sun (adapted from Breiner, 1973).

Figure 3. Superposition of the earth's ambient magnetic field and anomalous fields produced by induced monopoles and dipoles to produce anomalies in the total field (adapted from Breiner, 1973).

Figure 4. The relationship of magnetic inclination and declination to geographic directions on the earth (adapted from Telford and others, 1976).

Figure 5. Typical profiles of magnetic field intensity across a monopole and dipole for conditions similar to SRS. Also shown is a contour representation of magnetic field intensity over a dipole with accompanying representative profiles (adapted from Breiner, 1973).

Figure 6. Magnetic intensity profiles across several geometric shapes of interest for magnetic field inclination similar to that of SRS (i.e. 60 degrees) (adapted from Breiner, 1973).

Figure 7. The intensity of the total magnetic field compared with the vertical gradient over a prismatic body (adapted from Breiner, 1973).

Figure 8. Model total field and vertical gradient magnetic profiles for single 55 gallon steel drums in vertical position with the top at various distances below the sensor. Profiles calculated for a total field intensity of 53220 nT and northern hemisphere inclination of 70 degrees (adapted from Gilkeson and others, 1990).

Figure 9. Contour representation of total field anomaly calculated for a single 55 gallon steel drum in vertical position with the top 10 ft below the sensor. Calculation based on a total field intensity of 53220 nT and northern hemisphere inclination of 70 degrees (adapted from Gilkeson and others, 1990).

Figure 10. Contour representation of a cache of 5 steel 55 gallon drums in a 12 ft by 12 ft area with the top of the drums 10 ft below the sensor. Calculation based on a total field intensity of 53220 nT and northern hemisphere inclination of 70 degrees (adapted from Gilkeson and others, 1990).

Figure 11. Planimetric map of the Hydroflouric Acid Spill Area.

Hydrofluoric Acid Spill Magnetic Survey

Figure 12. Station locations for the Hydrofluoric Acid Spill Magnetic Survey. Station locations marked by "+"

Figure 13. Color contoured Hydrofluoric Acid Spill Area magnetic survey diurnally corrected top sensor data.

Figure 14. Color contoured Hydrofluoric Acid Spill Area magnetic survey diurnally corrected bottom sensor data.

Figure 15. Color contoured Hydrofluoric Acid Spill magnetic survey vertical gradient.

Figure 16. Locations of magnetic anomaly sources not associated with prominent features on the surface of the Hydrofluoric Acid Spill Area.

Fig. 1 HF ACIO Spill
Burma Road Magnetic Survey

DIURNAL VARIATION

MICROPULSATIONS

MAGNETIC STORM

FIG. 2. HF ACID Spill
 S. K. B. Brown and Magnetic Survey

Figure #3
 A. D. and B. and Magnetic Surveys

FIG. 4

255 Burman Road Magnetic Survey

Fig. 5. HF ACID SPILL
 n. 810 Burma Road Magnetic Survey

M93X2091.05.AIL

FIG. 6

Magnetic intensity profiles across several geometric shapes of interest for magnetic field inclination similar to that of SRS (i.e., 60 degrees) (adapted from Breiner, 1973).

M93X2091.04.AIL

FIG. 7

The intensity of the total magnetic field compared with the vertical gradient over a prismatic body (adapted from Breiner, 1973).

~~XXXXXXXXXX~~
SINGLE DRUM
 (6 ft)

TOTAL FIELD
SINGLE DRUM
 (10 - 30 ft)

GRADIENT
SINGLE DRUM
 (10 - 30 ft)

Contour Values in nT

● Drum Location

+ 5 Ft Grid Nodes

▲ 10 Ft Grid Nodes

■ 20 Ft Grid Nodes

FIG. 9 HF ACID BPILL
 970 Burns Road Magnetic Survey

● Drum Location

▲ 10 Ft Grid Nodes

■ 20 Ft Grid Nodes

FIG. 10 HF ACID SPILL
 10-11 Burma Road Magnetic Survey

Fig. 13