Relative to the L-F-H horizon, Layer 1 exhibits the same general Pb patterns but with higher contrast (Table 10) and better anomaly definition. This trend continues in Layer 2 where the northern Pb anomaly is best defined, showing high contrast and a clear association with mineralized outcrop west of Banana Lake. However, definition of the southern Pb anomaly in Layer 2 is unclear because samples were not collected at key sites[1]. It can nevertheless, generally be concluded that, relative to the southern Pb anomaly, the northern anomaly is significantly better developed with higher contrast and extensive, but narrow down ice dispersion. Consequently, the presence of a strong, well developed gossan associated with the northern anomalous zone is expected.

Comparing Ag (Figs. 26 to 28) and Fe (Figs. 33 to 35) distributions in the three soil layers with the relevant Pb patterns reveals that these two elements display good correlation with Pb. Although Fe is not generally considered to be an immobile element, its behavior and general correlation with immobile elements (Ag and Pb) rather than mobile elements (Cu, Mn and Zn) at Camp Lake suggests that it can be considered relatively immobile. At depth, all three elements display well developed, westward broadening northern anomalies which are clearly associated with the gossan zone. Ag and Pb values within the northern anomalous

1: Site numbers 8, 9, 10, 46, 48, 64, 106, 120 and 174.

Table 10. Average contrast[1] for Ag, Cd, Cu, Fe, Mn, Pb and Zn in each of the three soil layers.

Soil Layer	Ag	Cd	Cu	Fe	Mn	Pb	Zn
L-F-H	7.5	5.0	14.1	4.1	4.5	16.8	5.2
Layer 1	16.7	4.1	10.1	3.1	2.4	26.2	3.9
Layer 2	11.2	6.3	9.8	3.5	2.3	44.0	3.7

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[1] Contrast is defined here as $\overline{X} + 2\sigma \div \overline{X}$. Statistics based on $N = 270$ (L-F-H); 281 (Layer 1) and 156 (Layer 2) except for Ag and Cd where $N = 77$, 56 and 29 for Ag, and 115, 22 and 13 for Cd respectively.

zone increase down ice (westward) with the highest values occurring approximately 1500 feet west of mineralized outcrop. Conversely, in the southern anomalous zone Ag, Fe and Pb patterns appear to decrease in size and intensity with respect to depth.

In contrast to Pb, Ag and Fe distributions in the mineral soil, patterns of the relatively mobile elements Cu and Zn are not as directly relatable to mineralized outcrop (see Figs. 30 to 32 and 42 to 44). In general, patterns for Cu and, in particular, Zn are relatively irregular and diffuse with contrast between anomalous zones and peripheral background areas markedly lower than for Pb (Table 10). Nevertheless, in the L-F-H horizon Cu (Fig. 30) can be successfully related to mineralized outcrop; however, Zn patterns - although developed best in the L-F-H horizon - remain nebulous even though contrast is higher relative to the mineral soil (Table 10).

Although Cu and Zn patterns are similar in some respects, there are certain features which make the Cu patterns unique. They are: 1) a well developed east-west zone of low Cu values ($\leq$60 ppm) which becomes better defined with depth and 2) a strong north-south belt of high Cu values ($\geq$200 ppm) near the northwest corner of Camp Lake. The latter trend, which is absent from the L-F-H horizon but well developed in Layer 2, abruptly truncates the east-west zone of low Cu values (Figs. 31 and 32). Relative to the L-F-H horizon and Layer

1, Cu patterns in Layer 2 are characterized by abrupt and well defined boundaries, although this is not reflected in contrast as defined in Table 10.

In the L-F-H horizon, two areas of high (≥200 ppm) Cu values can be seen (Fig. 30). The area northwest of B-C stream is closely associated with several mineralized outcrops; while the second area, centered on the B-C stream is closely associated with the distribution of gleyed soils (cf. Figs. 30 and 16). Both areas become more restricted with depth, particularly the area centered on B-C stream and, for this area, it appears fortuitous that mineralization is outlined because Cu appears to be reflecting environmental conditions (such as Eh and pH) rather than the underlying mineralization. This is well documented at sites 279 and 280 which provide an example of hydromorphic accumulation of Cu, Fe and, to a lesser extent, Zn in near-surface swampy or gleyed soils (Table 11). Further evidence of hydromorphic accumulation can be found in the area just southeast of Banana Lake where a large area of anomalous Fe (≥1.8%) in the L-F-H horizon is absent from Layers 1 and 2 (Figs. 33 to 35).

Although Cu and Fe are highly concentrated in the L-F-H horizon relative to the mineral soil (Table 11), Zn and Mn - the most mobile elements of the group - display a low degree of hydromorphic concentration. This is presumably due to their higher mobility which results in rapid flushing of Zn and Mn from the acidic soils. As a result, contrast is relatively

Table 11. Distribution of elements under swampy (gleyed) conditions at sites 279 and 280.

Element	Site 279			Site 280		
	L-F-H	Layer 1	Layer 2	L-F-H	Layer 1	Layer 2
Cu	2976	126	115	546	47	62
Zn	84	35	37	73	29	32
Fe%	25.1	1.1	1.1	1.6	1.3	1.6
Pb	82	d.l.	d.l.	d.l.	d.l.	d.l.
Mn	51	86	101	116	105	103

All values in ppm except where noted.

d.l. = sample with concentration below detection limit.

low and the highest concentrations of these two elements are usually found where pH's are more moderate and leaching, therefore, less intense. Adjacent to mineralized outcrop Zn values commonly approximate background (≤50 ppm) in the three soil layers and only rarely do they exceed 200 ppm. This is in contrast to the average grade of Zn mineralization (≈7.5%) when compared with geochemical values for Cu and, in particular, Pb and the average ore grade of these elements (0.4% and 1.5% respectively).

Comparison of the Cu patterns with Ag, Fe, Pb and pH patterns, as well as the geologic map (Fig. 18) reveals many similarities. For example, Ag, Fe and Pb patterns display, in at least one of the three soil layers, two well developed east-west belts of high metal concentrations separated by a narrow to moderately wide zone of low, near-background values. These zones of low values correspond very closely with one another. Consequently, it is not surprising that the zone of low Cu values also closely corresponds with Ag, Fe and Pb zones of low concentration, all of which directly overlie the sub-outcrop of the "mineral horizon". However, unlike Ag, Fe and Pb, Cu does not display well developed east-west belts of high values. Instead, areas of high Cu concentrations (≥200 ppm) occur as sporadic patches which are, in some cases, difficult to relate directly to mineralized outcrop. Nevertheless, it can be seen that in all cases high Cu values lie either down ice or down slope of mineralized outcrops.

Cd patterns are poorly developed, due in part to low contrast (Table 10), but mainly because concentrations are very low (<3 ppm) in the L-F-H horizon (Fig. 29) and, in the mineral soil, rarely above the detection limit. There is some correlation between detectable concentrations of Cd and high Zn values in the L-F-H horizon (compare Figs. 29 and 42).

Mn patterns display low contrast (Table 10) and are poorly developed, particularly in the mineral soil (Figs. 37 and 38). In the L-F-H horizon (Fig. 36) high Mn values (≥200 ppm) are somewhat related to high levels of Zn (≥200 ppm) near the northwest corner and eastern shore of Camp Lake.

C. Partial Extractions and Ratios

1. Introduction

Partial extractions of Cu, Fe, Pb and Zn utilizing cold 1.0M hydrochloric acid and 0.05M EDTA (ethylenediamine tetraacetate) on the minus 80-mesh fraction of Layer 1 were undertaken to try to: 1) improve anomaly contrast, 2) distinguish mechanical (glacial) dispersion trains from hydromorphic anomalies and 3) characterize the mode of metal occurrence. In general, EDTA removes all loosely bonded metal adsorbed on organic matter, colloidal phases and clay particles or other minerals with large surface areas.

1.0M HCl, a slightly stronger extractant, removes metal associated with all of the above phases plus metal associated with acid soluble secondary minerals and, to a large extent, Fe and Mn oxides.

These two reagents were chosen primarily because they are two of the most commonly employed partial extractants, although various other partial extractants may be more effective in selectively removing metal associated with various sample phases (e.g. organic, Mn oxides, Fe oxides, etc.). The theory and use of many partial extractants are adequately described elsewhere (Ellis et al., 1967; Chester and Hughes, 1967; Chao, 1972; Maynard and Fletcher, 1973; Bradshaw et al., 1974; Gatehouse et al., 1977; Peachy and Allen, 1977).

Most of the soil grid lying east of Camp Lake was excluded from these procedures due to the presence of glacio-fluvial material characterized by low total metal values. In addition, the two westernmost grid lines were not included because they were added to the grid as follow up, after initial studies were completed. As expected, the 1.0M hydrochloric acid extraction was found to remove more metal than the 0.05M EDTA attack with both extractions removing a greater percentage of Pb followed by Cu, Zn and Fe relative to total values (Table 12).

Table 12. Comparison of total and partial attacks on Layer 1, minus 80-mesh fraction.

Extractant	N[1]	Average Metal Content[2]				% Total Metal Extracted[3]			
		Cu	Fe%	Pb	Zn	Cu	Fe	Pb	Zn
				Camp Lake					
Total[4]	168	60	1.51	24	59				
1.0M HCl	168	39	0.48	18	32	72.2	33.7	82.8	59.5
0.05M EDTA	166	14	0.06	55[5]	6	27.4	4.8	38.9	11.4
				Anne Lake					
Total	135	79	2.34	76	184				
1.0M HCl	135	38	0.61	31	76	51.0	29.2	75.1	47.3
0.05M EDTA	127	11	0.04	24	10	17.2	2.2	43.5	6.2

1: N = total number of samples.

2: Geometric means (samples below detection limit omitted from calculation) in ppm except where noted.

3: Average percent extracted based on geometric mean of partial to total ratios.

4: 1 to 4 $HNO_3/HClO_4$ attack.

5: Only 40 of 168 samples were above the detection limit.

2. 1.0M hydrochloric acid

Hydrochloric acid extractable patterns of the relatively immobile elements Fe and Pb (Fe_H and Pb_H) very closely resemble their respective total patterns (compare Figs. 52 and 54 with 34 and 40), although contrast is somewhat lower (Table 13). For the more mobile elements the hydrochloric acid attack provided more useful information. In the case of Zn, slightly improved contrast (Table 13) has allowed a northern Zn_H anomaly ($\geq$50 ppm), which extends westwards from the northernmost mineralized outcrops, to be clearly defined relative to the total Zn (Zn_T) pattern (compare Figs. 56 and 43). The highest Zn_H values display a negative correlation with zones of intense Fe staining (Fig. 45) and low ($<$4.4) pH (Fig. 47). This relationship is not well developed in the Zn_T patterns. Conversely, for Cu_H (Fig. 50) there is neither a negative or positive correlation with areas of intense Fe staining and low pH presumably because Cu is not as mobile as Zn, nor as immobile as Pb. The highest Cu_H values occur towards the outer portion of the grid in close association with weakly (Cu) mineralized outcrop of altered footwall pyroclastics (Fig. 18) or along the north shore of Camp Lake.

3. 0.05M EDTA

Except for the poorly developed Fe (Fe_E) pattern (Fig. 53), EDTA extractable patterns (Figs. 51, 55 and 57) are similar

Table 13. Comparison of the average contrast[1] for total, 1.0M HCl and 0.05M EDTA extractable Cu, Fe, Pb and Zn in Layer 1.

Extractant	N[2]	Cu	Fe	Pb	Zn
		Camp Lake			
Total	168	8.5	3.4	32.5	3.6
1.0M HCl	168	7.6	2.4	29.6	4.6
0.05M EDTA	166	6.6	4.0	13.8	4.4
		Anne Lake			
Total	125	6.5	3.0	33.1	6.3
1.0M HCl	135	5.2	2.5	13.4	7.4
0.05M EDTA	127	5.2	4.6	9.2	7.2

1: Contrast is defined here as $\bar{X} + 2\sigma \div \bar{X}$.

2: N = total number of samples.

to hydrochloric acid extractable patterns; even though contrast and the percentage of metal extracted is consistently lower (Tables 12 and 13). Although 0.05M EDTA removes a higher percentage of Pb than Cu, Fe, or Zn, contrast is markedly reduced resulting in a significantly less informative Pb_E pattern relative to Pb_T and Pb_H. Occasional high Pb values ($\geq$100 ppm) are obtained with 0.05M EDTA but their scattered distribution effectively prevents contouring.

4. Partial to total metal ratios

Partial to total metal ratios (Me_{HR} or Me_{ER}) were determined by ratioing partial metal values with the corresponding total metal value for each sample in Layer 1. Ratios (0.01 to 1.00) were plotted and histograms prepared by computer. Where either Me_H, Me_E or Me_T values are below the detection limit, the undefined ratios have been omitted. A plot of Fe_{ER} ratios resulted in very low uninterpretable values and hence is not presented here.

Examination of Me_{HR} plots (Figs. 58, 60, 61 and 63) reveals that, with the exception of Pb, well developed patterns relatable to mineralized outcrops and consistent with previously established glacial direction(s) are characterized by the lower ratio values. Although Cu, Fe, Pb and Zn are primarily dispersed in a west to northwest direction, there are indications, particularly in the mineral soil, for some anomalies (positive or negative) to be oriented in a southwest to west-southwest direction (e.g. Figs. 34, 41 and 50). Partial to total ratios reveal the west-southwest orientation of anomalies more often than either total or partial extraction data. Possible explanations for this occurrence are considered in Chapter 5.

5. Total to total metal ratios

Ratios of Me_T values (Pb to Zn and Pb to Cu) were plotted for the L-F-H and Layer 1 (Figs. 65 to 68). Except for a somewhat nebulous Pb/Cu pattern in the L-F-H horizon, these patterns are well defined and possess linear east-west to west-northwest trends with excellent correlation to glacial direction(s), the assumed dispersive mode, and the source(s) of geochemically anomalous Cu, Pb and Zn at Camp Lake. In general, ratios decrease towards the outer grid margin reflecting the sharper decrease in Pb values relative to Cu and Zn.

D. Conductivity and pH

Except for several small areas of disconnected relatively high values (>100 μohms/cm^2) centered on the B-C stream in Layer 1, conductivity patterns are poorly developed (Fig. 49). Outside the B-C stream area, conductivity values are randomly distributed with values usually displaying a narrow range of 70 to 85 μohms/cm^2 at 0 to 14 inch depths. Conductivity values in the L-F-H horizon and in Layer 2 approximate a random distribution and consequently are not presented.

Unlike conductivity, pH patterns (Figs. 46 to 48) are well developed, particularly in the deeper mineral soil and are reasoned to become better defined with depth. Well developed zones of low pH (<5.0 and <4.3 in Layer 1 and Layer 2 respectively) are spatially related to both the gossan zone and the northern Pb, Fe and Ag anomalies in Layers 1 and 2.

III SOIL PITS: GEOCHEMICAL PROFILES

A. Introduction

Detailed information on metal distribution with respect to depth was provided by digging 13 deep pits (plus 3 at Anne Lake, see Appendix B) ranging in depth from 32 to 54 inches with samples collected every two inches. The pit locations (Fig. 69) were chosen to provide reasonable cross sections of geochemical anomalies, including 'background' areas, at both distal and proximal localities with respect to the proposed anomaly sources (i.e. mineralized outcrops). Seven of the 13 pits were selected for more detailed studies involving size fraction analysis (plus partial and total attacks on various size fractions) as well as partial : total ratios, heavy mineral separates, pH and conductivity. Data for the seven detailed pits are presented in Figures 70 to 90. Data for the remaining pits are in Appendix A.

B. Metal, pH, Conductivity and Size Fraction Distributions

In general, metal values are constant or increase with depth, except in areas adjacent to mineralized outcrops where post glacial weathering processes have enriched the upper portion of the soil (e.g. pit sites 121 and 123, Figs. 83 and 86). With these exceptions, metal value fluctuation with respect to depth is moderate (2 to 5x) for all elements except Pb which, within a few inches, can increase or decrease dramatically (up to 10x). Most metals, with the possible exception of Ca, display a positive correlation with each other and Fe is more sympathetic with Cu, Pb and Zn than is Mn. Good correlation exists between pH, conductivity and metal levels (e.g. Figs. 74 and 75) and it is puzzling therefore, that, except in the most intense gossan zones, conductivity measurements over the soil grid produce only vague and diffuse patterns.

Percent silt-clay show little if any correlation to metal values (compare Fig. 86 with 87). However, in the field, percentage and angularity of pebbles and cobbles increases with depth; this change generally beginning at 18 to 20 inches depth, apparently corresponds to a commonly encountered abberation or break in metal trends for some of the pits (e.g. Figs. 71 and 80).

Examination of metal profiles at pits 121, 123 and 125 yields some insight upon the distribution of trace elements as affected by glacial and post glacial weathering processes. Pits 121 and 123 are down slope from mineralized footwall and "mineral horizon" outcrops approximately 350 and 150 feet respectively, while pit 125 is 60 feet up slope from the same outcrops. The till thickness is thin to moderate (5 to 10 feet) with the pits penetrating 3.6 to 4.3 feet into it. Because pH's are low (2.6 to 4.0) only the relatively immobile element Pb will be considered, as Cu and Zn have been largely removed in solution.

At pit 121 (Fig. 83) there is a slight enrichment of Pb (40 to 70 ppm) at 0 to 6 inches depth overlying relatively low ($\leq$20 ppm) values characteristic of background. Closer to the outcrop, at pit 123 (Fig. 86), the surface enrichment of Pb increases to 100 to 700 ppm and extends to a depth of 26 inches where Pb concentrations drop sharply to moderate - but highly erratic - levels of 10 to 60 ppm before tending to increase (?) near the pit bottom. Conversely up slope of the outcrop at pit 125 one finds low levels of Pb in the upper soil overlying sharply increasing concentrations in the deeper soil (Fig. 89).

Although these sites lie directly over the projection of the massive sulphide sub-outcrop (Fig. 18), there is little indication of underlying mineralization in the soil. For example, at 50 inches depth Pb concentrations are only 20 to 40 ppm in pits 121 and 123 and 60 to 80 ppm in pit 125 - only slightly anomalous. However, pits 123 and 125 display increasing Pb values with depth, beneath the surface enrichment, and this is perhaps a weak indication of the concealed mineralization below (cf. Hawkes and Webb, 1962).

Proceeding down ice approximately 300 feet to sites 107 and 109 (Figs. 80 and A8 respectively) one finds very high values (>400 ppm) the entire depth of pit 107 while in pit 109 high Pb concentrations (>100 ppm) do not begin to appear until a depth of 20 inches is obtained at which point Pb values sharply increase. The overall higher Pb values in pit 107 versus 109 reflects the glacially in line position of pit 107 with mineralized outcrops east of B-C stream while pit 109 is situated 'outside' the main mechanical dispersion path. However, mineralization is moderately reflected in the upper 20 inches of soil in pit 109 but, it is not until depths greater than this are sampled that the underlying mineralization is strongly reflected. Based on the Pb patterns (Figs. 39 to 41) pit 121 is close to but not glacially in line with the same mineralized outcrop as pit 107 and consequently Pb values are low throughout the pit, although there is a slight tendency for Pb values to increase as the pit bottom is approached. Speculation on these trends and the manner in which glacial dispersion occurred are discussed in Chapter 5.

C. Heavy Mineral Separates

Over 60 heavy mineral separates utilizing bromoform (S.G. 2.89) were made and examined under a binocular microscope. Of these, ten samples were selected and polished thin sections prepared. Examination of the polished sections with a reflecting microscope revealed that, apart from occasional grains of pyrite, no other sulphides could be detected. Limonite commonly coats mineral grains and occasional reddish hematite coatings were also noted. A few grains were found which consisted of whitish to reddish-brown encrusting layers of some unidentified secondary (?) mineral(s). Consequently, except near weathering mineralized outcrops, sulphides are completely destroyed within the active layer by intensive post-glacial weathering (cf. Shilts, 1972 and Cameron and Durham, 1975).

Correlation of percent heavy minerals with Cu, Pb and Zn values is erratic because bromoform is not sulphide selective. Many minerals common to the area such as amphiboles, micas and garnets have specific gravities greater than 2.89. However, in some cases, particularly in areas adjacent to mineralized outcrops, high concentrations of heavy minerals can be related to high levels of Fe in the form of pyrite and pyrrhotite which are relatively more stable in the surface environment than Cu, Pb or Zn sulphides.

D. Distribution of Elements between Size Fractions

The distribution of Ag, Cu, Fe, Mn, Pb and Zn between size fractions[1] with respect to depth was examined for seven

[1] U.S. standard mesh size -10+40; -40+80; -80+270 and -270 mesh.

pits[2] selected to represent a wide range in metal values and environmental conditions. Based on previous soil pit data (Parts B and C this Section), four to five samples were selected from each pit and sieved into four size fractions as described in Chapter 3 Section VI. After finely grinding the two coarsest size fractions, digestion and analysis were as described in Chapter 3.

Two partial extractants, 1.0M HCl and 1.0M $NH_2OH \cdot HCl/CH_3COOH$, were utilized on selected unground samples. Because size fractions were not ground for the partial extractions, tightly bonded and/or metal as sulphide inclusions is unaffected by these attacks. Whereas, by grinding the two coarsest fractions of the samples subjected to the total attack, virtually all possible metal is released. An assessment of the relative importance of Fe/Mn oxide scavenging relative to metal tightly bonded and/or as sulphide inclusions is then possible. Typical total and partial extractable metal distributions as well as partial to total ratios covering a wide range of values are shown in Figures 91 to 96. Variation with respect to depth in the distribution of metal between size fractions with regards to partial and total attacks was not noticeable.

In general, all elements display total metal values which increase as the size fraction decreases with the sharpest in-

[2] Pit numbers 11, 14, 20, 107, 121, 123 and 125.

crease occurring between minus 80+270 and minus 270-mesh fractions. In many cases - particularly for Mn - a double peak in metal values is evident (e.g. Fe and Pb Fig. 91; Cu, Zn and Mn Fig. 96). The highest metal values are nearly always associated with the finest soil fraction while a second peak commonly occurs in the coarser fractions (-10+40 or -40+80 mesh). The fine sand fraction (-80+270-mesh) often contains the lowest metal values.

Examination of the partial extraction and partial to total ratio data reveals that in most cases values consistently decrease or tend to remain constant with increasing size fraction. However, in a few instances the values display an increase towards the coarser fractions.

Differences in ground and unground total metal values were examined by selecting 50 samples and grinding all four size fractions. Except for the two coarse fractions (-10+40 and -40+80), there is no difference in metal values between ground and unground samples. Values for the ground minus 10+40 mesh fraction are generally 10 to 20 percent higher than the corresponding unground fraction with Fe and Mn showing the largest increases. The minus 40+80-mesh fraction displays a similar trend but with a relative increase in metal levels of less than 10 percent in the ground versus the unground sample.

Trial studies utilizing 1.0M hydroxylamine-hydrochloride/ acetic acid, which selectively dissolves amorphous Fe/Mn oxide coatings and associated trace elements (Chester and Hughes, 1967; Chao, 1972), are shown in Figures 95 and 96. The highest 1.0M, hydroxylamine-hydrochloride/acetic acid extractable Cu, Pb and Zn values, as with $HNO_3/HClO_4$ and 1.0M HCl extractions, are in the finest size fraction. However, there is virtually no correlation between percent extractable Fe and Mn with Cu, Pb and Zn. Nevertheless, Cu and Zn often display a secondary peak in the coarser size fractions which, although unrelated to amorphous Fe and Mn oxides, may be relatable to crystalline Fe and Mn oxides.

Relative to total values, the percentage of 1.0M hydroxylamine-hydrochloride/acetic acid extractable Fe is low (1 to 7%) suggesting that Fe is generally not present in the soil as amorphous oxides. Conversely, Mn displays a wide range of values (<1 to 35%) with the percentage of 1.0M hydroxylamine-hydrochloride/acetic acid extractable Mn related to pH/Eh conditions (Table 14). In general, Eh appears to be more important than pH, except where pH's are extremely low (<3.5), in which case, the percentage of 1.0M hydroxylamine-hydrochloride/acetic acid extractable Mn rarely exceeds three percent (e.g. Fig. 96; pH is less than 3.0).

IV WATERS

A. Introduction

Water data may be divided into regional data and local

Table 14. Relative concentrations of $HNO_3/HClO_4$, 1.0M HCl and 1.0M hydroxylamine-hydrochloride/acetic acid extractable Mn (minus 80-mesh) in relation to soil drainage.

Site[1]	Sample Number	Depth (inches)	pH	Mn(ppm)				
				A[2]	B[3]	C[4]	D[5]	E[6]
20	1096	4	5.4	252	109	79	43	31
20	1105	22	5.0	269	102	71	38	26
20	1112	36	4.4	218	84	54	39	25
20	1481	40	4.2	121	34	24	28	20
20	1484	46	4.2	128	46	24	36	19
107	1212	8	4.3	215	170	1.6	79	0.7
107	1215	14	4.3	129	N.A.	1.6	N.A.	1.2
107	1222	28	4.2	384	N.A.	4.2	N.A.	1.1
107	1226	36	4.3	203	174	2.1	86	1.0

1: Site 20 is relatively well drained (oxidizing) while site 107 is near B-C Stream and Camp Lake and is poorly drained (reducing).

2: A = $HNO_3/HClO_4$.

3: B = 1.0M HCl.

4: C = $NH_2OH.HCl/CH_3COOH$.

5: D = % extract. 1.0M HCl (B÷A).

6: E = % extract. $NH_2OH \cdot HCl/CH_3COOH$ (C÷A).

N.A. = Not available.