Grain Size and Trace Metal Concentrations on the Scotian Shelf: Results from the Thebaud Offshore Gas Production Platform and Gully MPA

Vanessa S. Zions, Brent A. Law and Timothy G. Milligan

Fisheries and Oceans Canada
Science Branch, Maritimes Region
Coastal Ecosystems Science Division
Bedford Institute of Oceanography
Dartmouth, Nova Scotia
B2Y 4A2

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Core samples were collected for sediment grain size and trace metal analysis from the Scotian Shelf in the summers of 2006 and 2007 from the vicinity of Thebaud gas production platform and the Gully Marine Protected Area (MPA). At Thebaud samples were collected along transects radiating from the platform in east, west, north-east and south-east directions. In the Gully, transects followed the canyon axis in a north-west to south-east orientation. All bottom sediment core samples were collected using a slow-corer which preserved the sediment-water interface. Cores were sectioned into 2 cm layers for sediment grain size and trace metal analysis. Sediment analysis from Thebaud revealed a median diameter (d50) that ranged from 158.14-385.03 µm with 0.20-6.04% of material residing in the mud fraction (<63 µm). The Gully had median diameters between 131.06-408.10 µm where mud made up 0.11-5.50% of material. For metals of interest (Zn, Fe, Mn, Ba, and Sr) concentrations were plotted against aluminum for grain size normalization and compared to background concentrations collected from sandy sediments throughout the Scotian and Newfoundland Shelf's. Elevated metal concentrations were measured at Thebaud throughout the sampling program, which may be indicative of drilling waste and produced water impacts. Elevated levels of metals were not detected in the Gully suggesting there was little evidence of hydrocarbon activities in the MPA.

RÉSUMÉ

Zions, V.S., Law, B.A. and Milligan, T.G. 2020. Grain Size and Trace Metal Concentrations on the Scotian Shelf: Results from the Thebaud Offshore Gas Production Platform and Gully MPA. Can. Tech. Rep. Fish. Aquat. Sci. 3415: viii + 124 p.

Des échantillons de carotte ont été prélevés en prévision de l'analyse de la taille des grains de sédiments et du métal en traces du plateau néo-écossais durant les étés 2006 et 2007, à proximité de la plate-forme de production gazière Thebaud et de la zone de protection marine (ZPM) du Gully. À Thebaud, des échantillons ont été prélevés le long de transects radiant de la plate-forme dans les directions est, ouest, nord-est et sud-est. Dans le Gully, les transects suivaient l'axe du canyon orienté du nord-ouest au sud-est. Tous les échantillons de carotte du fond de sédiments ont été prélevés à l'aide d'un carottier lent, qui a préservé l'interface sédiments-eau. Les carottes ont été sectionnées en couches de 2 cm pour permettre l'analyse de la taille des grains de sédiments et du métal en traces. L'analyse des sédiments de Thebaud a révélé un diamètre médian (d50) qui variait entre 158,14 et 385,03 µm, avec 0,20 à 6,04 % de matières résidant dans la fraction de boue (< 63 µm). Les diamètres médians du Gully se situaient entre 131,06 et 408,10 µm, alors que la boue représentait 0,11 à 5,50 % de la matière. Dans le cas des métaux d'intérêt (Zn, Fe, Mn, Ba et Sr), les concentrations ont été tracées par rapport à l'aluminium pour normaliser la taille des grains et comparées aux concentrations de fond recueillies dans les sédiments sablonneux du plateau néo-écossais et de Terre-Neuve. Des concentrations élevées de métal ont été mesurées à Thebaud tout au long du programme d'échantillonnage, ce qui peut indiquer que les déchets de forage et l'eau produite ont des effets. On n'a pas détecté de concentrations élevées de métaux dans le Gully, ce qui laisse supposer qu'il y avait peu de preuves d'activités d'hydrocarbures dans la ZPM.

INTRODUCTION

Hydrocarbon production was active on the Scotian Shelf at the Thebaud gas production platform from 1999 until 2018 when decommissioning began (www.soep.com). Monitoring of the Sable Offshore Energy Project (SOEP), which consisted of multiple hydrocarbon fields and platforms in the vicinity of Sable Island that converged at Thebaud platform, was carried out throughout the project's lifetime. A baseline annual report was published in 2000 by Jacques Whitford Environment Ltd. covering the years up to oil development at Thebaud in 1999. Bottom sediment samples were collected along transects radiating away from oil platforms on Sable Bank, as well as several locations along the western edge of the Gully Marine Protected Area (MPA). Sediment was collected with a Pouliot box corer or Smith-McIntyre grab and analysed for a suite of trace metals, grain size and other parameters. At Thebaud measurements of zinc, iron, manganese, barium and strontium ranged from 5-26 $mg \cdot kg^{-1}$, 1000-16700 $mg \cdot kg^{-1}$, 11-520 $mg \cdot kg^{-1}$, 85-300 $mg \cdot kg^{-1}$, and 21-80 $mg \cdot kg^{-1}$respectively. In the Gully measurements of Zn, Fe, Mn, Ba and Sr ranged from 5-6 mg kg^{-1}, 610-1300 $mg \cdot kg^{-1}$, 6-19 $mg \cdot kg^{-1}$, 78-150 $mg \cdot kg^{-1}$, and 19-34 $mg \cdot kg^{-1}$ respectively, with sand making up 95-99% of sample material collected from the Thebaud and Gully stations.

Studies carried out by the Department of Fisheries and Oceans Canada have also been focused on the Sable Island hydrocarbon fields. Muschenheim *et al*. (2010) sampled bottom sediments on Sable bank in 2002 to investigate the use of slow-coring methods in these sandy sediments. Samples were collected around Thebaud platform and analysed down core for concentrations of metals that are associated with oil and gas production. Drill muds are primarily composed of barite grains (27 µm modal diameter) and bentonite clays (<2 µm) making them possible tracers of drilling activity (Hannah & Drozdowski 2005). Most metals were within background levels however Ba and Sr showed clear elevations. Barium concentrations ranged from 112-2660 $mg \cdot kg^{-1}$ and Sr ranged from 22-127 $mg \cdot kg^{-1}$ at sites sampled. All three samples with increased Ba concentration were replicate samples from a station located 500 m east of Thebaud platform. In one of the triplicates Ba distribution showed mostly background levels with a spike of Ba at depth (18-20 cm), and the other two cores had elevated levels throughout that increased with depth.

The benthic boundary layer transport (bblt) model was developed at the Bedford Institute of Oceanography to predict the near bed dispersion of drill mud discharges from offshore oil and gas operations (Hannah *et al*. 1995; Hannah *et al.* 2006). Earlier work by Cranford et. al. (1999) had shown that drill mud can negatively impact filtration feeding benthic organisms such as scallops and work by Milligan and Hill (1998) and Muschenheim and Milligan (1996) had demonstrated that drill mud readily flocculates and can accumulate in the vicinity of drilling platforms. The benthic boundary layer (bbl) is the deepest layer of water that flows directly over the benthos. Due to its proximity to the seabed, flow velocities logarithmically decrease to zero at the sediment water interface. Turbulence within the bbl is determined by the shear stress exerted on the benthos from the free stream velocity and the roughness of the sediment surface. Using these basic assumptions, the bblt model determines the vertical distribution of drill mud as a balance of the shear velocity in the bbl and the settling velocity of drill waste particles (Muschenheim *et al*. 2010). The model is able to use different settling rates that are characteristic of different types of drill wastes as the behaviour of drill mud depends on differences in particle shape, particle size, degree of flocculation, and type, whether water-based or synthetic based muds (Niu *et al*. 2009). Particle settling velocity is set using the assumption that particles are flocculated at low stress (high settling velocity) and dispersed at high stress (low settling velocity). Based on the estimates of drill waste dispersion, the bblt model can then model growth days lost for filter feeders (ie. scallops) in the bbl (Gordon *et al*. 2000).

Since the bblt model is focused on the dispersion and distribution of suspended sediments there is no loss term for particles buried at depth within the sediments. The presence of barium at depth in the sediments suggests that drill wastes can become incorporated into the sandy interstitial spaces of bottom sediments (Muschenheim *et al.* 2010). If sandy sediments can store drill wastes, resuspension events could reintroduce drilling wastes to the bbl and overlying water column on longer time scales than predicted. To investigate the long term residence of drilling waste on the Scotian Shelf a repeat sampling program was carried out.

This study follows the work completed on the Newfoundland Shelf at Hibernia GBS and Terra Nova FPSO production platforms (Zions *et al.* 2014) and focuses on the sediment and chemical analysis from bottom sediment samples collected on the Scotian Self around the Thebaud gas production platform (43.891 N, 60.200 W) and throughout the Gully MPA (44.23065 N, 59.26426 W). Core samples were collected and analyzed for disaggregated inorganic grain size (DIGS) and trace metal concentrations to determine the extent of drilling wastes incorporated into bottom sediments. This may help contribute to a loss term being included into the bblt model. A full suite of trace metal analysis are also provided to lend support to the produced water studies that had been carried out at Bedford Institute of Oceanography that focuses on tracking produced water plume dispersal and to provide an inventory of trace metal contaminants that exist in Scotian Shelf and Gully bottom sediments.

METHODS

Study Site

Thebaud platform (Fig. 1) is located 225 km of the east coast of Nova Scotia on the Scotian Shelf, just south of Sable Island. Hydrocarbon exploration on Sable Bank has been ongoing since 1959, with the first exploratory well drilled on Sable Island in 1967 (Breeze & Horsman 2005; www.soep.com). Potential oil reserves in the Sable sub-basin have been estimated at 18 trillion cubic feet of natural gas and one billion barrels of oil and gas liquids. Gas production from the Thebaud platform started on 31 December 1999 and produced a total of 2.1 trillion cubic feet of natural gas from five offshore fields until 31 December 2018 when production was ended (www.soep.com).

Thebaud was part of the SOEP and connected other active processing platforms by a submarine pipeline. Unprocessed gas from Venture, North Triumph, Alma, and South Venture platforms was separated and dehydrated at Thebaud platform and then transported 200 km by submarine pipelines to the onshore processing plant in Goldboro, Guysborough County, Nova Scotia (Breeze & Horsman 2005, www.soep.com).

At Thebaud sample transects radiated from the platform in east, west, north-east and south-east directions and cores were collected at 250 m, 500 m, and 1000 m distances from the platform (Table 1; Fig. 1). In 2006 six cores were collected from six different stations: stations T1, T2, T3, T4, T5 and T6. In 2007 15 cores were collected from eight different stations: station T1, T2, T3, T5, T6, THE250, THE500 and THE1000.

The Sable Gully (Fig. 2) is the largest submarine canyon in eastern North America located 200 km east of Nova Scotia on the Scotian Shelf, and further east of Sable Island and the SOEP oil fields. The Gully is a highly diverse marine habitat that has gained national and international recognition. In 1998 the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) designated the Gully an Area of Interest (AOI), which ceased all hydrocarbon exploration and development activities in the area. Later in May 2004 the Sable Gully was named a Marine Protected Area (MPA) by Fisheries and Oceans Canada under the Oceans Act (www.dfo-mpo.gc.ca; www.cnsopb.ns.ca). This designation is for conservation of the Gully to protect its natural diversity and maintain a healthy environment.

In the Gully, sample transects followed the canyon axis in a north-west to south-east orientation, cores were collected throughout the canyon as well as its outer banks (Table 1; Fig. 2). In 2006 eight cores were collected from stations Loc1, Loc2, Loc3, Loc4, Loc5, Loc6, Loc7 and Loc8. In 2007 cores were collected from four stations: G1, G2, G3, and G4.

Sample Collection

Sediment core samples were collected using a slow-corer (Bothner 1998; Law *et al.* 2008; Milligan & Law 2013). The slow-corer uses approximately 350 kg of weight and a hydraulically damped system to gradually drive a polycarbonate core barrel into the bottom sediments. Since sediment penetration occurs gradually there is little disruption of the sediment-water interface. The sediment is further protected from disruption during recovery; the top of the core barrel is sealed with an o-ring and the bottom is sealed by a gasketed spade plate that swings into position once the core has cleared the bottom. This ensures no sediment is lost during recovery of the core. The ability of the slow-corer to collect coarse sandy sediment cores undisturbed has made its use essential on the Scotian Shelf where previous use of gravity cores was not as effective (Muschenheim *et al.* 2010; Milligan & Law 2013). Cores were split into 2 cm layers for sediment grain size and metals analysis.

Grain Size Analysis

Sediment samples were analysed using a Coulter Counter Multisizer IIe to determine disaggregated inorganic grain size (DIGS). Bottom sediments were dried (<60 ^{o}C) and digested with 35% hydrogen peroxide (H_2O_2) to remove organic material. The 30 µm, 200 µm, and 1000 µm tubes were used for analysis, which measures particle diameters ranging from 0.8 µm to 600 µm. The DIGS distributions were plotted down-core as equivalent weight percent versus the log of particle diameter (µm). For more information on grain size analysis and a complete description of protocols, see Kranck and Milligan (1979) and Milligan and Kranck (1991).

Trace Metal Analysis

Sediment samples were dried (<60 ^{o}C) and sieved through a 1 mm screen to remove large particles and possible shell fragments. Approximately 30 g of each sediment sample was subsampled and shipped to RPC (Research and Productivity Council) in Fredericton, New Brunswick for metals analysis. Sediment samples were digested with nitric acid (3 ml), hydrofluoric acid (3 ml) and heated until dry. Hydrochloric acid (0.5 ml) and nitric acid (3 ml) were added and then the solution was diluted with ~30 ml of deionized water. This solution was heated until the residue was dissolved and then diluted for analysis. Trace elements were analyzed by inductively coupled plasma mass spectrometry (ICP-MS) and high concentration elements were analysed by inductively coupled plasma emission spectrometry (ICP-ES).

All trace metals concentrations ($mg \cdot kg^{-1}$) were plotted against Al (Muschenheim *et al*. 2010). This removed grain size effects allowing for determination of anthropogenic inputs into the bottom sediments (Loring 1991; Loring & Rantala 1992). Background levels for trace metals analysis were determined from the analysis of a collection of sandy sediment samples from the Newfoundland Shelf and Scotian Shelf (Yeats *et al.* 2010). Metals of particular interest were aluminum, zinc, iron, manganese, barium, and strontium due to their association with oil production discharges.

Barium is an indicator of drill mud, and Sr can be associated with increases of Ba (Muschenheim *et al.* 2010). Zinc, Fe, and Mn have been linked to produced water discharges from production platforms (Azetsu-Scott *et al.* 2007).

RESULTS

Thebaud Platform

Sediment samples collected from Thebaud in 2006 and 2007 consist of medium to coarse sand grains with little fine material (Fig. 3-19). The parameter d50 ranged from 158.14-385.03 µm and the modal peak ranged from 168.89-512 µm (Table 2-17). The percentage of fines <64 µm in diameter ranged from 0.20-6.04% of the samples (Table 2-17). Cores collected from Thebaud were 10 cm to 32 cm in length.

Metals concentrations from Thebaud platform in 2006 are listed in Table 18. Of the six cores collected only one sample was found in excess of background concentrations for Zn; station T4 had a sample at 2-4 cm depth that had 147 $mg \cdot kg^{-1}$ (Fig. 20). All other samples analysed from station T4 were within background levels of Zn ranging from 3-22 $mg \cdot kg^{-1}$. Iron was higher than background concentrations at four of the six sites sampled: station T2 (0-6 cm), T3 (2-4, 6-8 cm), T4 (4-6 cm), and T6 (2-4, 6-8 cm) (Fig. 21). Iron ranged from 1640-17500 $mg \cdot kg^{-1}$. Manganese ranged from 16-624 $mg \cdot kg^{-1}$ and was higher than background levels at four stations (Fig. 22). Stations with increased concentrations included T2 (0-10 cm), T3 (0-2, 4-10 cm), T4 (2-8 cm) and T6 (0-8 cm). Barium concentrations ranged from 105-3780 $mg \cdot kg^{-1}$ and were higher than background concentrations at 5 stations; station T1 (0-2 cm), T3 (0-2, 6-10 cm), T4 (0-20 cm), T5 (18-28 cm) and T6 (2-12 cm) (Fig. 23). Strontium concentrations ranged from 25-153 $mg \cdot kg^{-1}$ (Fig. 24). Two samples were in excess of Sr background concentrations, both located at station T2 from 8-12 cm depth.

Table 19 provides results of chemical analysis from Thebaud stations sampled in 2007. Zinc concentrations ranged from 4-35 $mg \cdot kg^{-1}$ and was in excess of background levels in three samples: stations T2 (4-6 cm), THE250 (4-6 cm) and THE500 (2-4 cm) (Fig. 25). Iron concentrations ranged from 1760-21900 $mg \cdot kg^{-1}$ and was higher than background concentrations at three stations; T2 (16-18, 20-22 cm), THE250 (6-12, 14-18, 20-26 cm) and THE500 (0-4, 6-8, 20-22 cm) (Fig. 26). Manganese concentrations ranged from 14-731 $mg \cdot kg^{-1}$ and were in excess of background levels at stations T2 (0-2, 4-6, 8-10, 16-18, 20-22 cm), THE250 (2-12, 14-26 cm) and THE500 (0-4, 6-10, 12-14 cm) (Fig. 27). Barium concentrations ranged from 131-8450 $mg \cdot kg^{-1}$ (Fig. 28) and was found in excess of background concentrations at four stations. All subsamples from station THE250 were elevated, as well as 30 of 35 subsamples taken from the cores at station THE500. Station T5 was in excess from 6-8, 18-20 and 24-26 cm and station T6 was found in excess for one subsample, 0-2 cm. Strontium was measured in the range of 26-73 $mg \cdot kg^{-1}$ with concentrations higher than background levels at station T5 (24-26 cm) and station THE250 (24-26, 28-30 cm) (Fig. 29).

The Gully

Sediment samples collected from the Gully in 2006 and 2007 comprised mostly of medium to coarse sand grains with 0.11-5.50% of material in the fine fraction (<64 µm) (Table 20-27; Fig. 30-37). The median diameter ranged from 131.06-408.10 µm and the modal peak ranged from 147.03-445.72 µm. Cores collected in the Gully were 4 cm to 28 cm in length.

Table 28 provides results of the chemical analysis for the eight cores collected in the Gully in 2006. Zinc concentrations ranged from 2-15 $mg \cdot kg^{-1}$ with all samples collected remaining within background levels (Fig. 38). Iron concentrations ranged from 730-5780 $mg \cdot kg^{-1}$ with all samples within background levels (Fig. 39). Manganese concentrations ranged from 9-163 $mg \cdot kg^{-1}$ and were also within background concentrations (Fig. 40). Barium concentrations ranged from 109-362 $mg \cdot kg^{-1}$ with two subsamples elevated above background levels at station Loc8 (8-12 cm) (Fig. 41). Strontium concentrations ranged between 25-98 $mg \cdot kg^{-1}$ with three subsamples from station Loc5 (0-8, 12-14, 20-22 cm) that measured above background (Fig. 42).

Table 29 shows the results of the chemical analysis for the four cores collected from the Gully in 2007 (Fig. 2). In all but one subsample the concentration of the metals associated with hydrocarbon development were within background levels. At station G4 the layer from 20-22 cm was above background limits for Zn (Fig. 43). Metals concentrations throughout the Gully ranged from 1-20 $mg \cdot kg^{-1}$ for Zn, Fe ranged from 500-3800 $mg \cdot kg^{-1}$ (Fig. 44), Mn from 5-87 $mg \cdot kg^{-1}$ (Fig. 45), Ba from 76-199 $mg \cdot kg^{-1}$ (Fig. 46) and Sr ranged from 17-54 $mg \cdot kg^{-1}$ (Fig. 47).

Discussion

Trace metal analysis of sandy sediments has indicated that drill wastes were present in the bottom sediments around the Thebaud platform. Stations located in the neighbouring Gully MPA show little evidence of impact from hydrocarbon production.

Thebaud Platform

The area around the Thebaud platform is dominated by sand as indicated by the modal peak that ranged from 168.89-512 µm and modal diameter that ranged from 158.14-385.03 µm. Very little fine material was measured, with only 0.08-4.24% being <16µm and 0.11-6.04% being <64 µm at

Thebaud throughout 2006 and 2007. This small fraction of fine sediment may play a significant roll in the process of sequestering contaminants on the Shelf. Zwolsman *et al*. (1996) and Milligan and Loring (1997) showed that trace metal contaminants readily associate with the floc fraction of sediments, <64 µm. In these sediments on average 1% of sediment resides in this fraction.

Trace metal analysis indicates that drilling components are indeed being incorporated into bottom sediments. Drilling muds are primarily composed of barite (modal diameter 27 µm) and bentonite clays (<2 µm) and are identified by the presence of Ba which does not have a local source. Drill wastes can be present in the environment in the form of single grains or flocculated material. During times of low current stress drilling wastes that are incorporated into flocs can become part of the bottom sediments and then be redistributed when stress is high (Curran *et al.* 2002). The presence of Ba in the sediment cores suggests that it is being incorporated into the interstitial spaces of the larger sand grains. It is hypothesized that during storm events several centimeters of the seabed on the Scotian Shelf is resuspended, thus releasing barite from the interstitial spaces of sand, yet due to it's high density 4500 $kg \cdot m^{-3}$ compared to that of silica 2650 $kg \cdot m^{-3}$ once stresses wane it can fall out of suspension faster and be incorporated into the seabed with depth. Four of six stations sampled in the vicinity of Thebaud platform showed elevations above background, with the highest values occurring in 2007. In 2007 station THE250, situated 250km east of the platform, the Ba concentration reached 8450 $mg \cdot kg^{-1}$ at 28-30 cm depth in the core, the highest amount measured in the study. At THE250 all three replicate cores had elevated concentrations throughout. In 2006 the highest concentration of Ba was 3780 $mg \cdot kg^{-1}$ at station T4 east of Thebaud at 10-12 cm depth. Slight elevations of Ba were found north-east (station T6) and south-east (station T5) of Thebaud in 2006. The observed pattern of metals in sediment follows the predominate direction of sediment transport on the Scotian Shelf which is to the northeast and east (Amos & Judge 1991). Sediment transport models run by Amos and Judge (1991) suggest sand transport and bed reworking at depths less than 100 m. The deepest station sampled at Thebaud was T5 in 2006 at 35 m, well within the depth where sand resuspension would occur. Storms are the predominant forcing for sand mobilization, Li *et al.* (1997) measured 822 $kg \cdot m^{-1} \cdot day^{-1}$ net sediment transport during storm events, which is 2-3 orders of magnitude higher than non-storm transport on the Scotian Shelf.

Strontium has also been shown to be associated with drill wastes. Muschenheim *et al*. (2010) found elevated concentrations of Sr in samples on Sable Island Bank. In this study, Sr was above background at Thebaud in 2006 and 2007 however in only a few samples from each year. The highest Sr concentration was measured 250 m east of Thebaud in 2007 at station THE250 (28-30 cm) with 247 $mg \cdot kg^{-1}$. Since Sr is also associated with exoskeleton material of crustaceans, the sparse occurrences around Thebaud could be related to this biological material.

Produced water is a by product of hydrocarbon extraction that may have an impact on the natural environment around production platforms. Metals associated with produced water discharges include Zn, Fe and Mn, and can be present in concentrations 1000 times greater than the ambient seawater (Azetsu-Scott *et al.* 2007). All these metals were measured in excess of background levels at Thebaud in 2006 and 2007 at multiple stations and at varying depths. This suggests that produced water discharges are also being incorporated into the sediments.

The Gully

Sediment grain size characteristics in the Gully are similar to those found around the Thebaud platform. The Gully is comprised of medium to coarse sand with only 0.11-5.50% of material in the fine fraction (<64 μm). the percentage of fines in the Gully is slightly lower than at Thebaud (0.20-6.04% <64 μm). Median diameter had a slightly wider spread in the Gully (131.06-408.10 μm) compared to Thebaud (158.14-385.03 μm).

Concentrations of trace metals in the Gully were within predicted background levels with only two exceptions. Barium was slightly elevated at one station in 2006, Loc8 (8-12 cm), located towards the mouth of the Gully. Strontium was also seen at slightly elevated concentrations at one station in 2006, Loc5 (0-8, 12-14, 20-22 cm) located towards the head of the Gully. Metals associated with produced water (Zn, Fe, and Mn) were within background levels at all sites sampled in 2006 and 2007. The lack of enrichment in metals associated with hydrocarbon exploration and extraction suggests that the Gully is not a sink for these contaminants.

CONCLUSION

Elevated trace metal concentrations associated with hydrocarbon production discharges were observed at Thebaud in cores collected in 2006 and 2007. Barium was persisting at depth at Thebaud, and metals associated with produced water were also present. With the exception of two stations with levels slightly elevated above predicted background, metals associated with hydrocarbon production were not present in the Gully sediment in either 2006 or 2007. This data set will contribute to an inventory of buried metals on the Scotian Shelf which may be used for future monitoring activities. The data may also contribute to the expansion of the bblt model to include a loss term for material incorporated into the bottom sediment. Continued environmental effects monitoring will give insight to how elevated metals concentrations in sediment around platforms persist once production has ended.

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References

Amos, C. and Judge, T. 1991. Sediment transport on the Eastern Canadian Continental Shelf. Cont. Shelf Res. 11: 1037-1068.

Azetsu-Scott, K., Yeats, P., Wohlgeschaffen, G., Dalziel, J., Niven, S. and Lee, K. 2007. Precipitation of heavy metals in produced water: influence on contaminant transport and toxicity. Mar. Environ. Res. 63: 146-167.

Bothner, M.H., Buchholtz ten Brink, M. and Manheim, F.T. 1998. Metal concentrations in surficial sediments of Boston Harbor – changes with time. Environ. Res. 45(2): 127-155.

Breeze, H. and Horsman, T. (*Editors*). 2005. The Scotian Shelf: an atlas of human activities [online]. Available from www.dfo-mpo.gc.ca [accessed August 2020].

Cranford, P.J., Gordon, D.C., Lee, K., Armsworthy, S.L. and Tremblay, G.-H. 1999. Chronic toxicity and physical disturbance effects of water- and oil-based drilling fluids and some major constituents on adult sea scallops (*Placopecten magellanicus*). Mar. Environ. Res. 48: 225-256.

Curran, K.J., Hill, P.S. and Milligan, T.G. 2002. The role of particle aggregation in size-dependent deposition of drill mud. Cont. Shelf Res. 22: 405-416.

Gordon, D.C., Cranford, P.J., Hannah, C.G., Loder, J.W., Milligan, T.G., Muschenheim, D.K. and Shen, Y. 2000. Modelling the transport and effects on scallops of water-based drilling mud from potential hydrocarbon exploration on Georges Bank. Can. Data Rep. Fish. Aquat. Sci. 2317: 116 p.

Hannah, C.G. and Drozdowski, A. 2005. Characterizing the near-bottom dispersion of drilling mud on three Canadian offshore banks. Mar. Pollut. Bull. 50: 1433-1456.

Hannah, C.G., Drozdowski, A., Loder, J., Muschenheim, K. and Milligan, T. 2006. An assessment for the fate and environmental effects of offshore drilling mud discharges. Estuarine, Coastal Shelf Sci. 70: 577-588.

Hannah, C.G., Shen, Y., Loder, J.W. and Muschenheim, D.K. 1995. Formulation and exploratory applications of a benthic boundary layer transport model. Can. Data Rep. Fish. Aquat. Sci. 166: vi +52 p.

Kranck, K. and Milligan, T. 1979. The use of the Coulter Counter in studies of particle-size distributions in aquatic environments. Bedford Inst. Rep. Ser. BI-R-79-7.

Li, M.Z., Amos, C.L. and Heffler, D.E. 1997. Boundary layer dynamics and sediment transport under storm and non-storm conditions on the Scotian Shelf. Mar. Geol. 141: 157-181.

Loring, D.H. 1991. Normalization of heavy-metal data from estuarine and coastal sediments. J. Mar. Sci. 48: 101-115.

Loring, D.H. and Rantala, R.T.T. 1992. Manual for the geochemical analysis of marine sediments and suspended particulate matter. Earth-Sci. Rev. 32: 235-283.

Milligan, T.G. and Hill, P.S. 1998. A laboratory assessment of the relative importance of turbulence, particle composition, and concentration in limiting maximal floc size and settling behavior. J. Sea Res. 39: 227–241.

Milligan, T.G. and Kranck, K. 1991. Electroresistance particle size analyzers. *In* Principles, methods, and application of particle size analysis. *Edited by* J.P.M. Syvitski. Cambridge University Press, New York, pp. 109-118.

Milligan, T.G. and Law, B.A. 2013. Contaminants at the sediment-water interface: Implications for environmental impact assessment and effects monitoring. Environ. Sci. Technol. 47(11): 5828–5834.

Muschenheim, D.K., Law, B.A., Milligan, T.G., Morton, G. and Yeats, P.A. 2010. Application of slo-coring to drilling waste deposition studies on Sable Island Bank. Can. Tech. Rep. Fish. Aquat. Sci. 2478: viii + 33.

Muschenheim, D.K. and Milligan, T.G. 1996. Flocculation and accumulation of fine drilling waste particulates on the Scotian Shelf (Canada). Mar. Pollut. Bull. 32(10): 740-745.

Niu, H., Drozdowski, A., Husain, T., Veitch, B., Bose, N. and Lee, K. 2009. Modeling the dispersion of drilling muds using the bblt model: the effects of settling velocity. Environ. Model. Assess. 14: 585-594. doi: 10.1007/s10666-008-9162-6

Yeats, P.A., Law, B.A. and Milligan, T.G. 2010. The distribution of dissolved and particulate metals and nutrients in the vicinity of the Hibernia offshore oil and gas platform. *In* Produced water: environmental risks and advances in mitigation technologies. *Edited by* K. Lee and J. Neff. Springer New York, New York, pp.147-161.

Zions, V.S., Law, B.A., Milligan, T.G., MacPherson, P., Hannah, C.G., Lee, K and Amirault, B. 2014. Grain size and trace metal concentrations on the Newfoundland Shelf: results from the Hibernia GBS and Terra Nova FPSO oil production platforms. Can. Tech. Rep. Fish. Aquat. Sci. 3077: vii + 98 p.

2000. 1999 Annual Report: Offshore environmental effects monitoring program. Volume 1: Report. Jacques Whitford Environment Ltd., Dartmouth, NS.

2011. Canada-Nova Scotia Offshore Petroleum Board [online]. Available from http://www.cnsopb.ns.ca/sable_offshore_energy_project.php [accessed October 2010].

2011. The Gully Marine Protected Area (MPA) [online]. Available from http://dfo-mpo.gc.ca/oceans/mpa-zpm/gully/index-eng.html [accessed October 2010].

2015. Exxon Mobile: Sable Project [online]. Available from https://www.soep.com/ [accessed August 2020].

APPENDIX

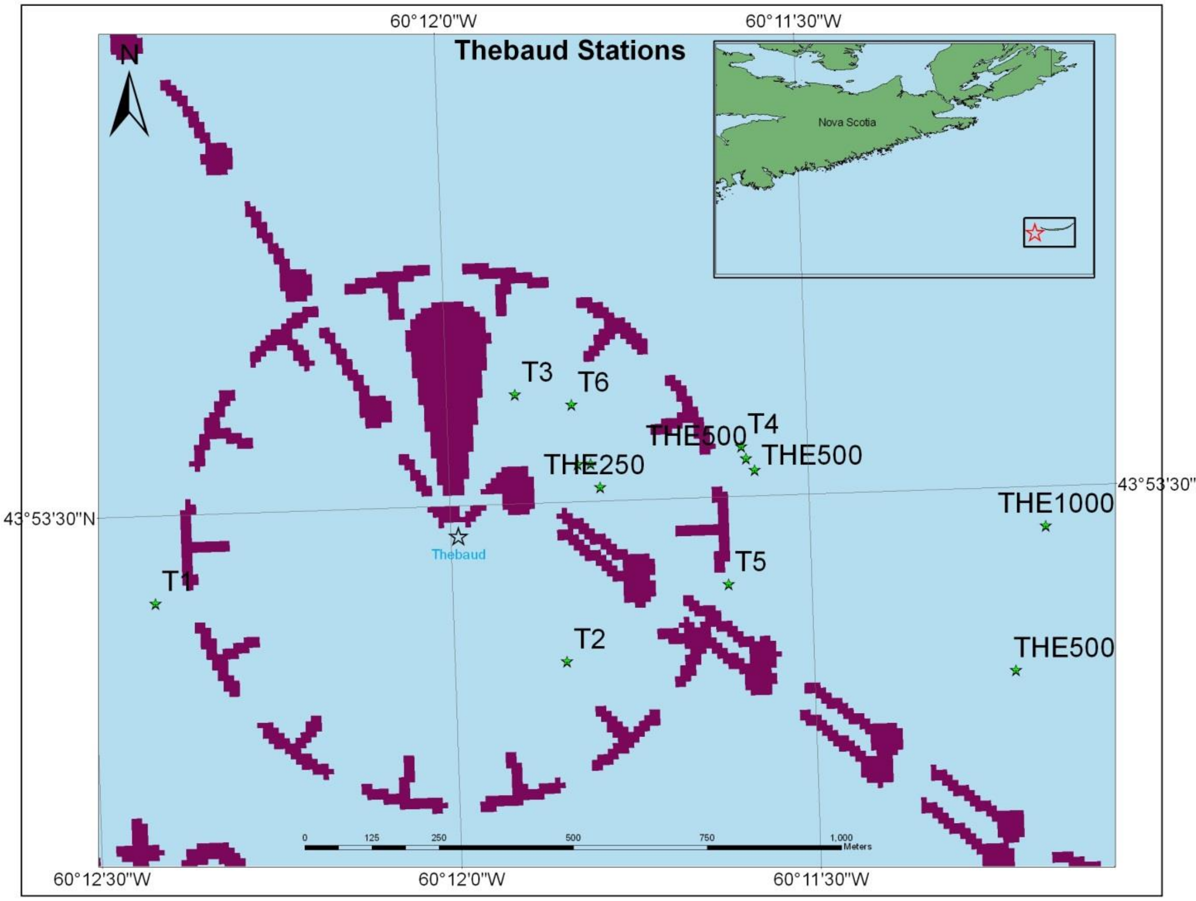

Figure 1. Station location map of Thebaud gas production platform located on the Scotian Shelf.

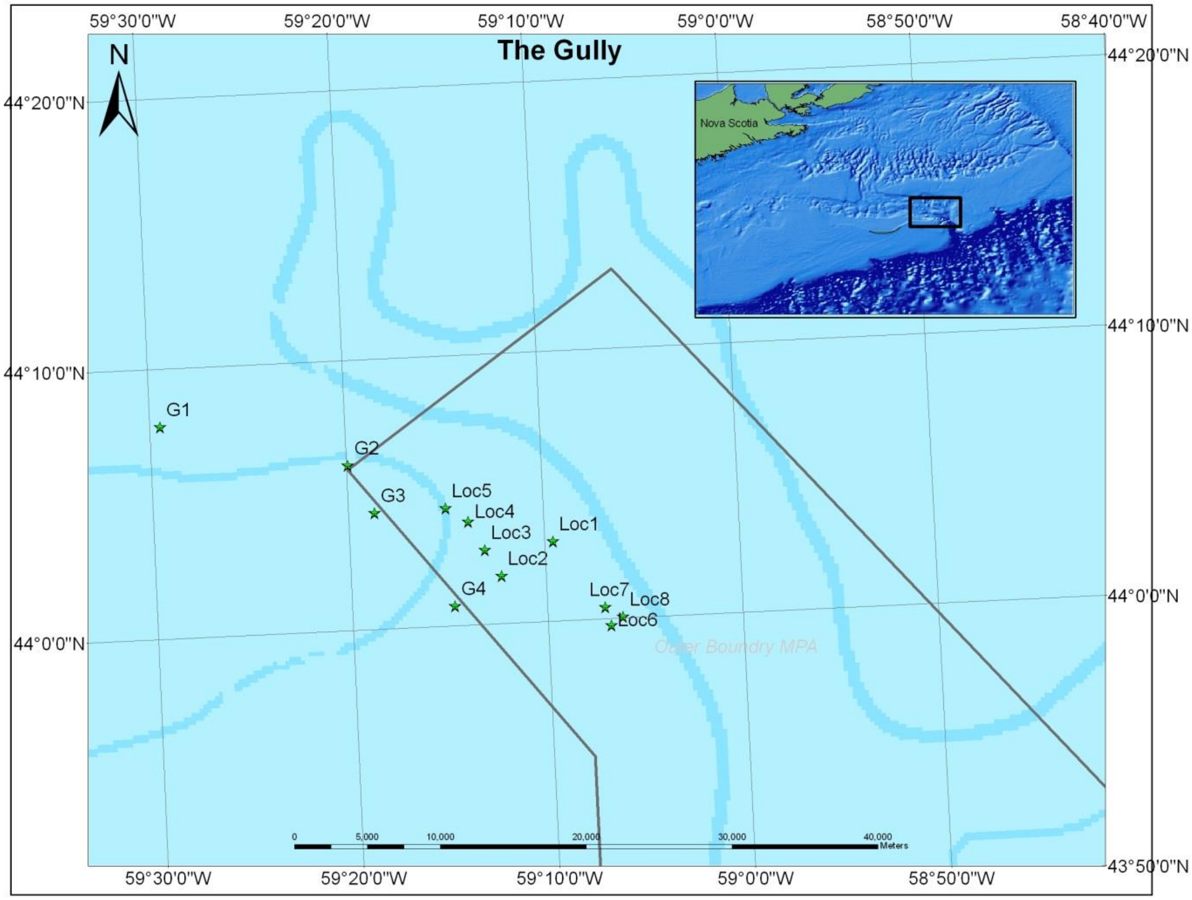

Figure 2. Station location map of the Gully MPA located on the Scotian Shelf.

Table 1. Station locations of slow-cores collected from C.C.G.S. Hudson during 2006 and 2007.

Location	Year	Station	Water Depth (m)	Latitude	Longitude	Core ID	Core Length (cm)
Thebaud	2006	T1	28	43.8902	-60.2070	300305	10
Thebaud	2006	T2	33	43.8890	-60.1975	300303	16
Thebaud	2006	T3	20	43.8935	-60.1985	300301	10
Thebaud	2006	T4	33	43.8925	-60.1933	300300	20
Thebaud	2006	T5	35	43.8902	-60.1937	300304	28
Thebaud	2006	T6	30	43.8933	-60.1972	300302	12
Thebaud	2007	THE250	29.8	43.8923	-60.1971	314520	26
Thebaud	2007	THE250	29.8	43.8923	-60.1968	314521	24
Thebaud	2007	THE250	31	43.8919	-60.1966	314523	32
Thebaud	2007	THE500	32.8	43.8921	-60.1930	314516	24
Thebaud	2007	THE500	31.9	43.8886	-60.1871	314517	22
Thebaud	2007	THE500	31.9	43.8923	-60.1932	314518	24
Thebaud	2007	THE1000	31.9	43.8910	-60.1863	314514	24
Thebaud	2007	T1	29	43.8909	-60.2075	314528	12
Thebaud	2007	T2	31.9	43.8896	-60.1978	314524	22
Thebaud	2007	T3	27	43.8944	-60.1986	314527	14
Thebaud	2007	T5	34	43.8908	-60.1936	314525	28
Thebaud	2007	T6	28	43.8941	-60.1974	314526	24
Gully	2006	Loc1	126	44.0500	-59.1600	300991	4
Gully	2006	Loc2	81	44.0302	-59.2052	300504	10
Gully	2006	Loc3	73	44.0466	-59.2185	300503	16
Gully	2006	Loc4	90	44.0647	-59.2315	300502	24
Gully	2006	Loc5	73	44.0735	-59.2504	300501	24
Gully	2006	Loc6	94	43.9968	-59.1134	300994	14
Gully	2006	Loc7	68	44.0082	-59.1180	300992	22
Gully	2006	Loc8	119	44.0017	-59.1030	300993	24
Gully	2007	G1	66	44.1313	-59.4915	314811	22
Gully	2007	G2	100	44.1027	-59.3322	314810	16
Gully	2007	G3	42	44.0726	-59.3112	314807	28
Gully	2007	G4	40.7	44.0130	-59.2461	314805	24

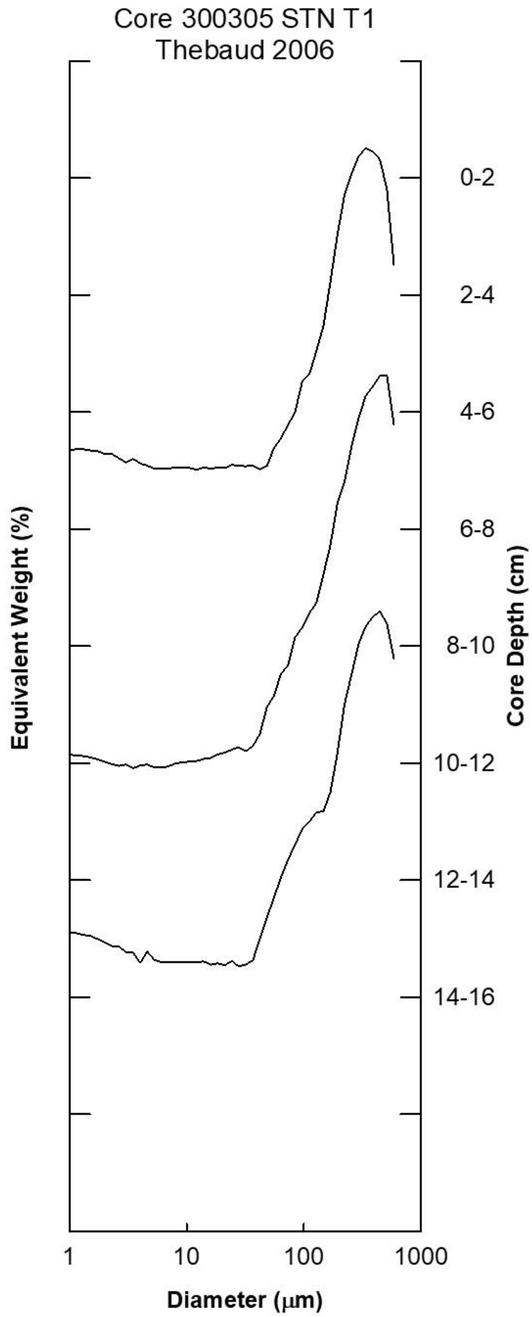

Figure 3. Disaggregated inorganic grain size of Core 300305 (Station T1) collected from Thebaud, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

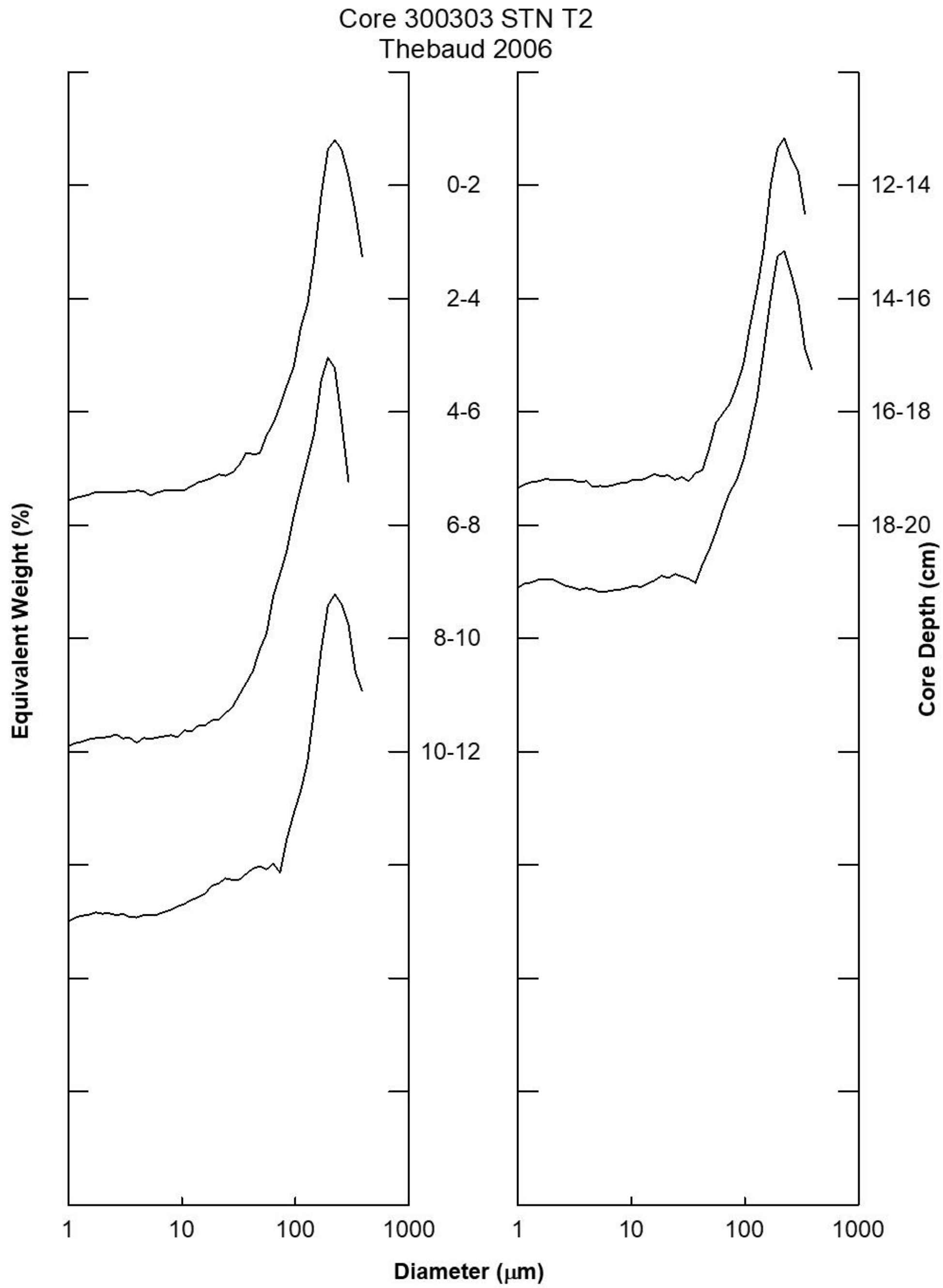

Figure 4. Disaggregated inorganic grain size of Core 300303 (Station T2) collected from the Thebaud, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

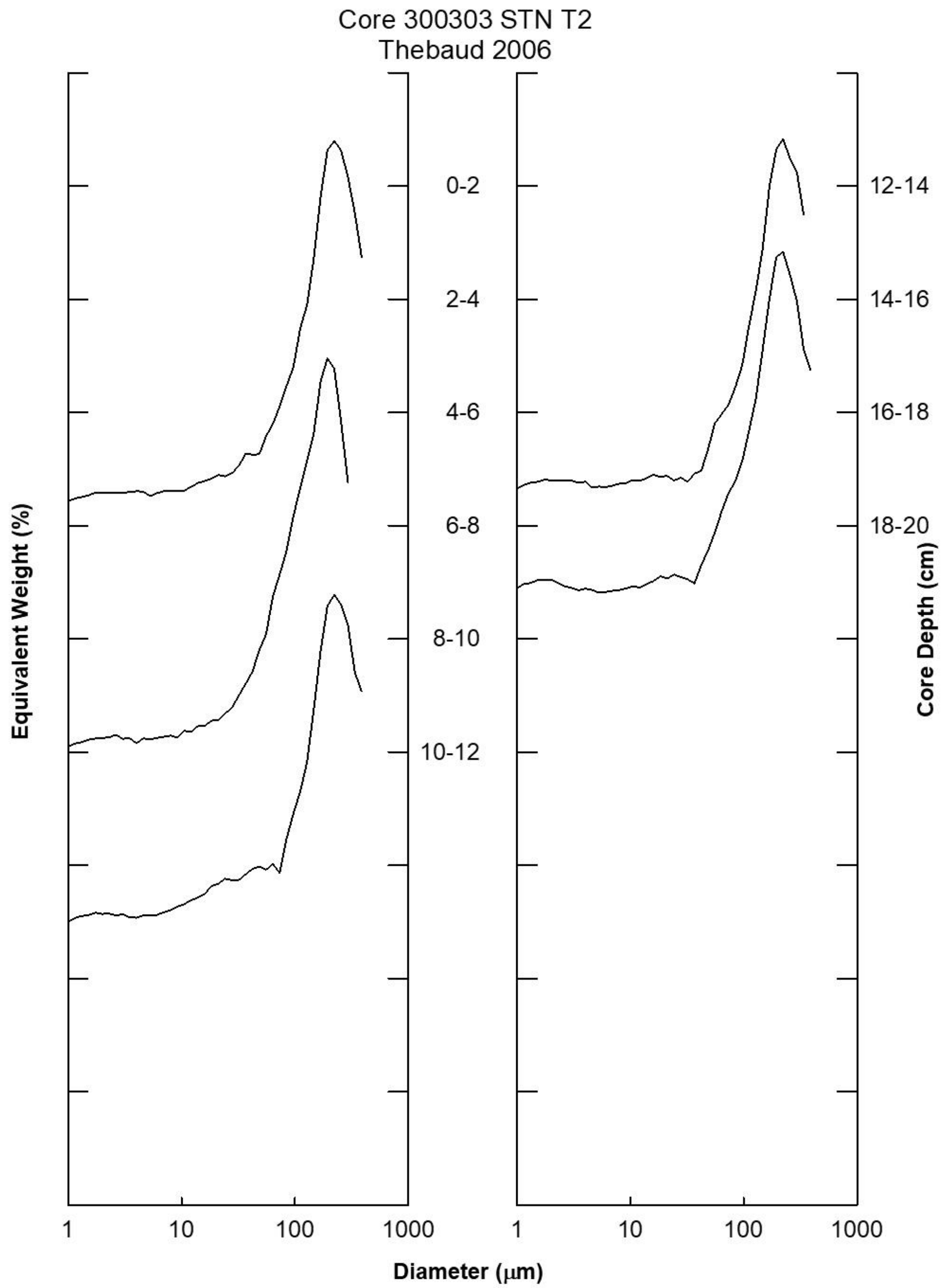

Figure 5. Disaggregated inorganic grain size of Core 300300 (Station T4) collected from Thebaud, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

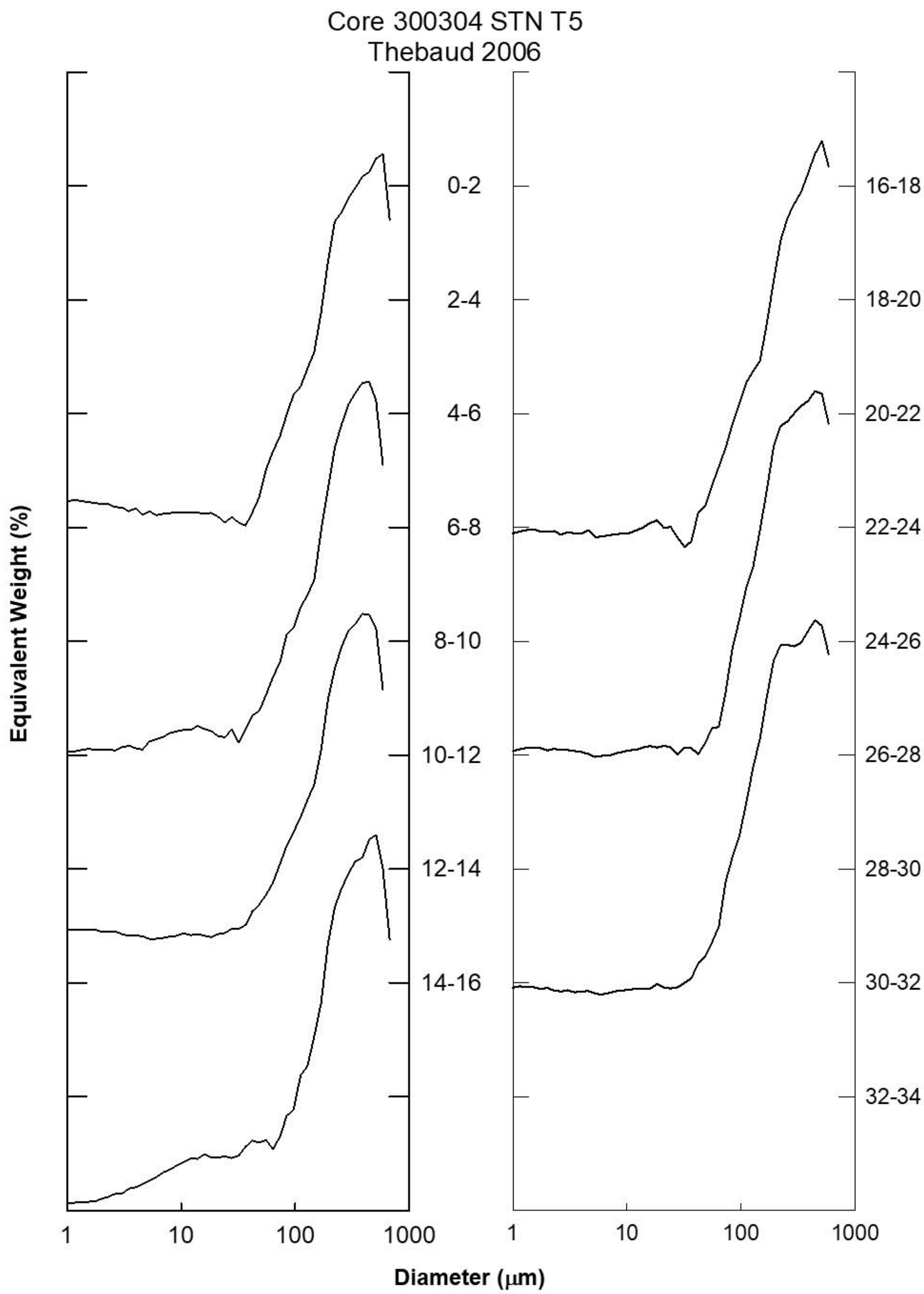

Figure 6. Disaggregated inorganic grain size of Core 300304 (Station T5) collected from the Thebaud, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

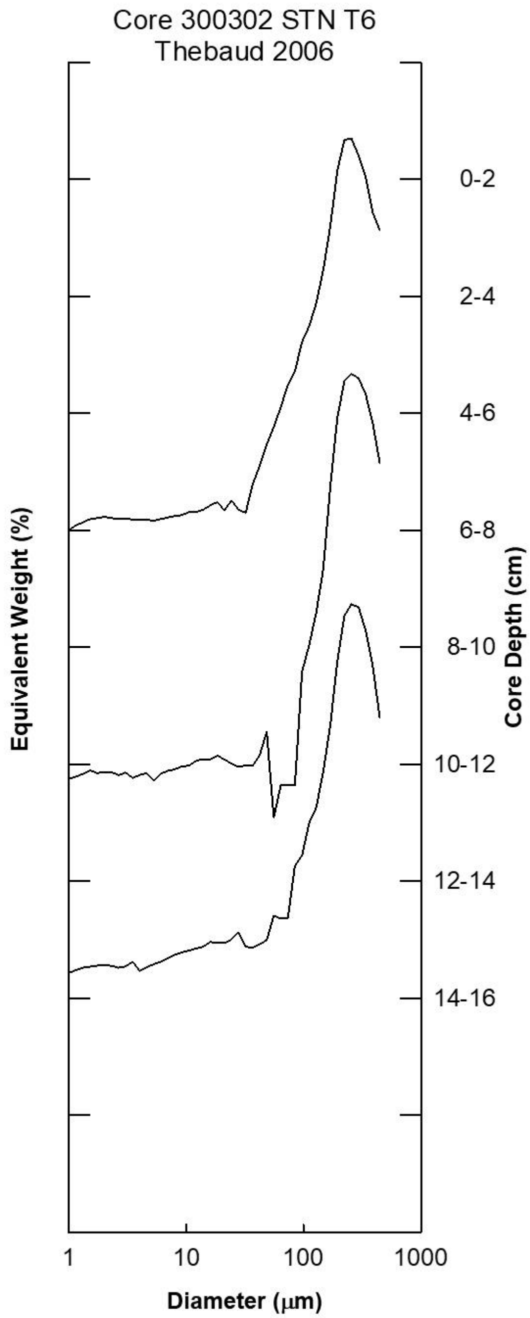

Figure 7. Disaggregated inorganic grain size of Core 300302 (Station T6) collected from Thebaud, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

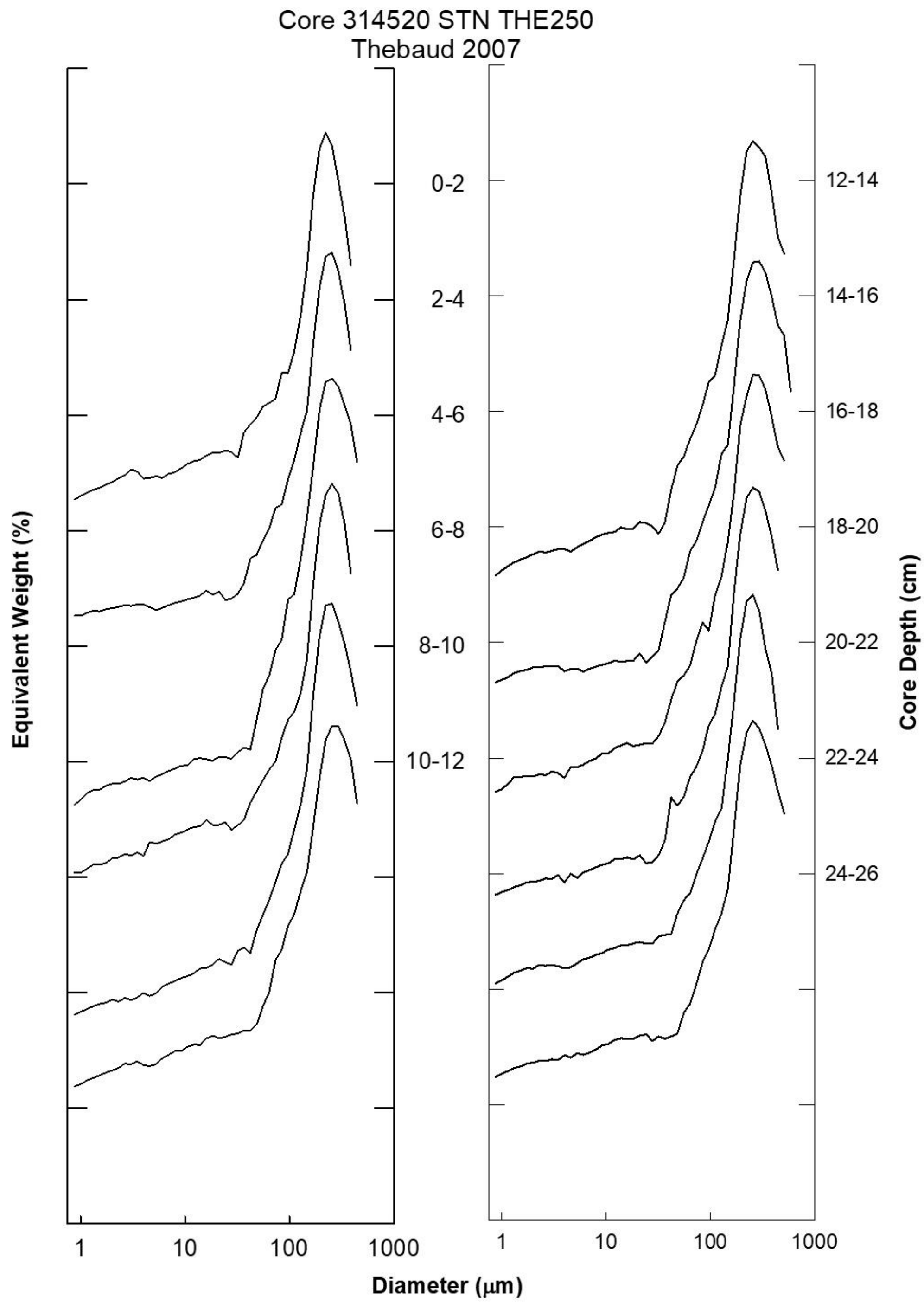

Figure 8. Disaggregated inorganic grain size of Core 314520 (Station THE250) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

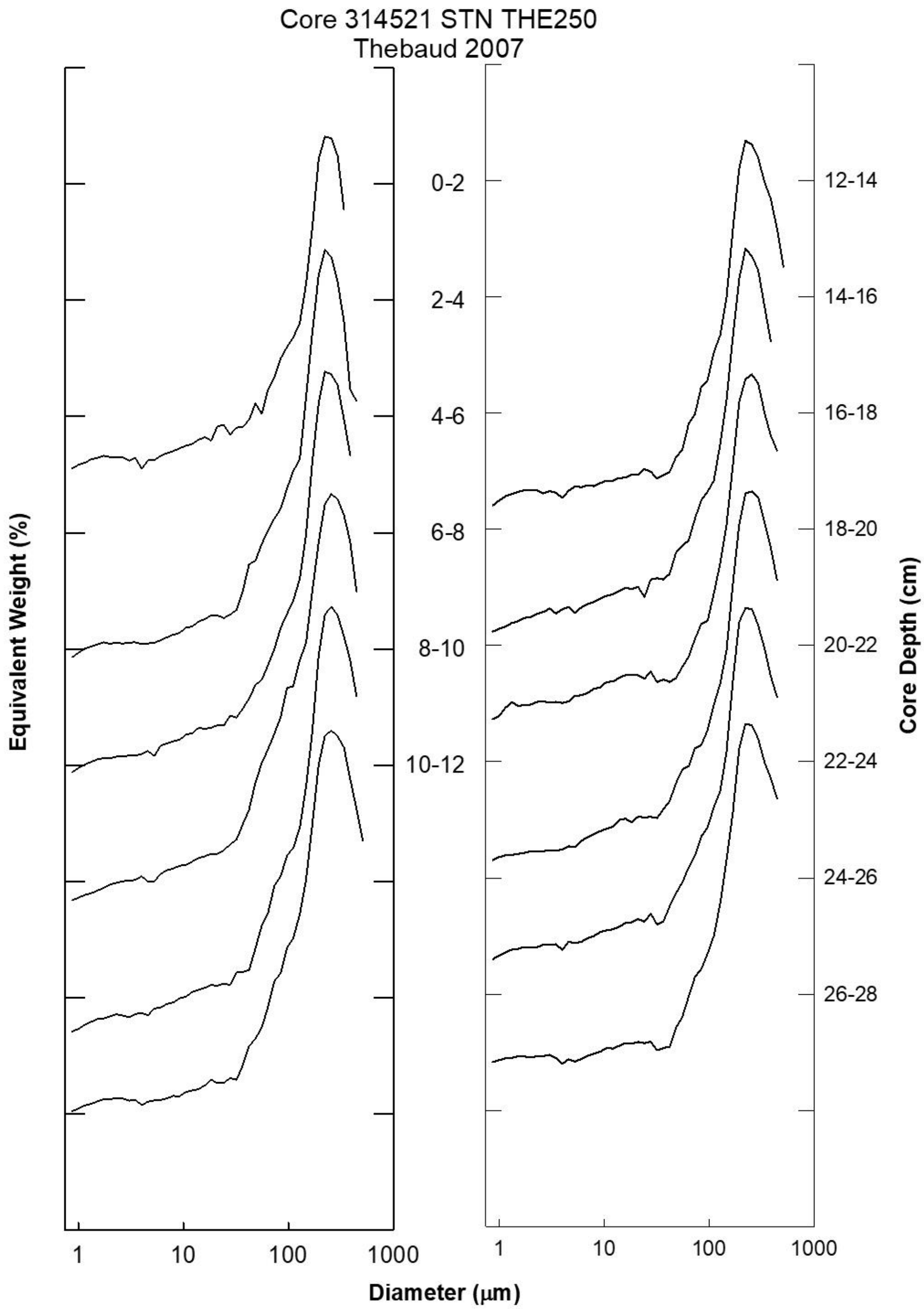

Figure 9. Disaggregated inorganic grain size of Core 314521 (Station THE250) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

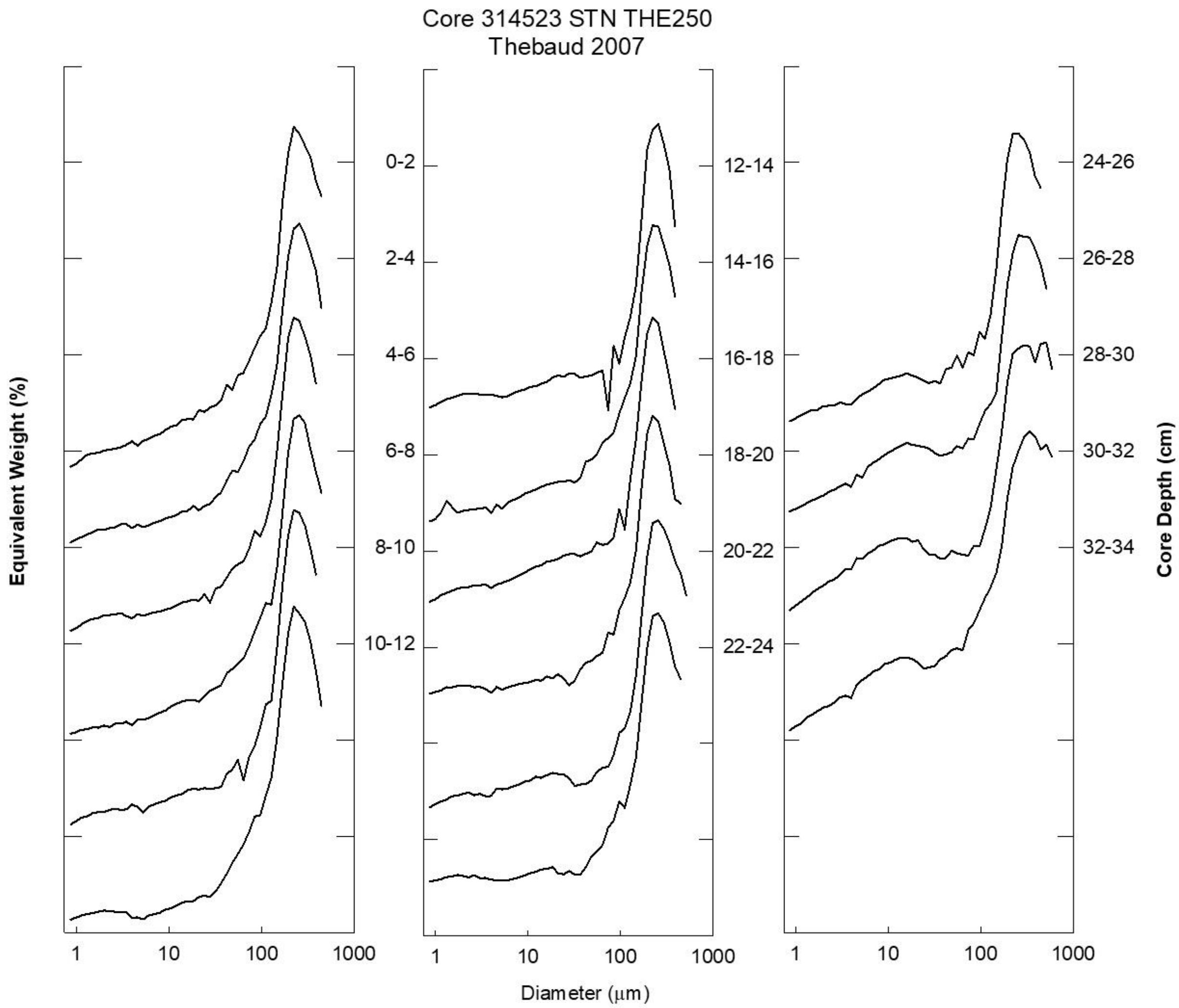

Figure 10. Disaggregated inorganic grain size of Core 314523 (Station THE250) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

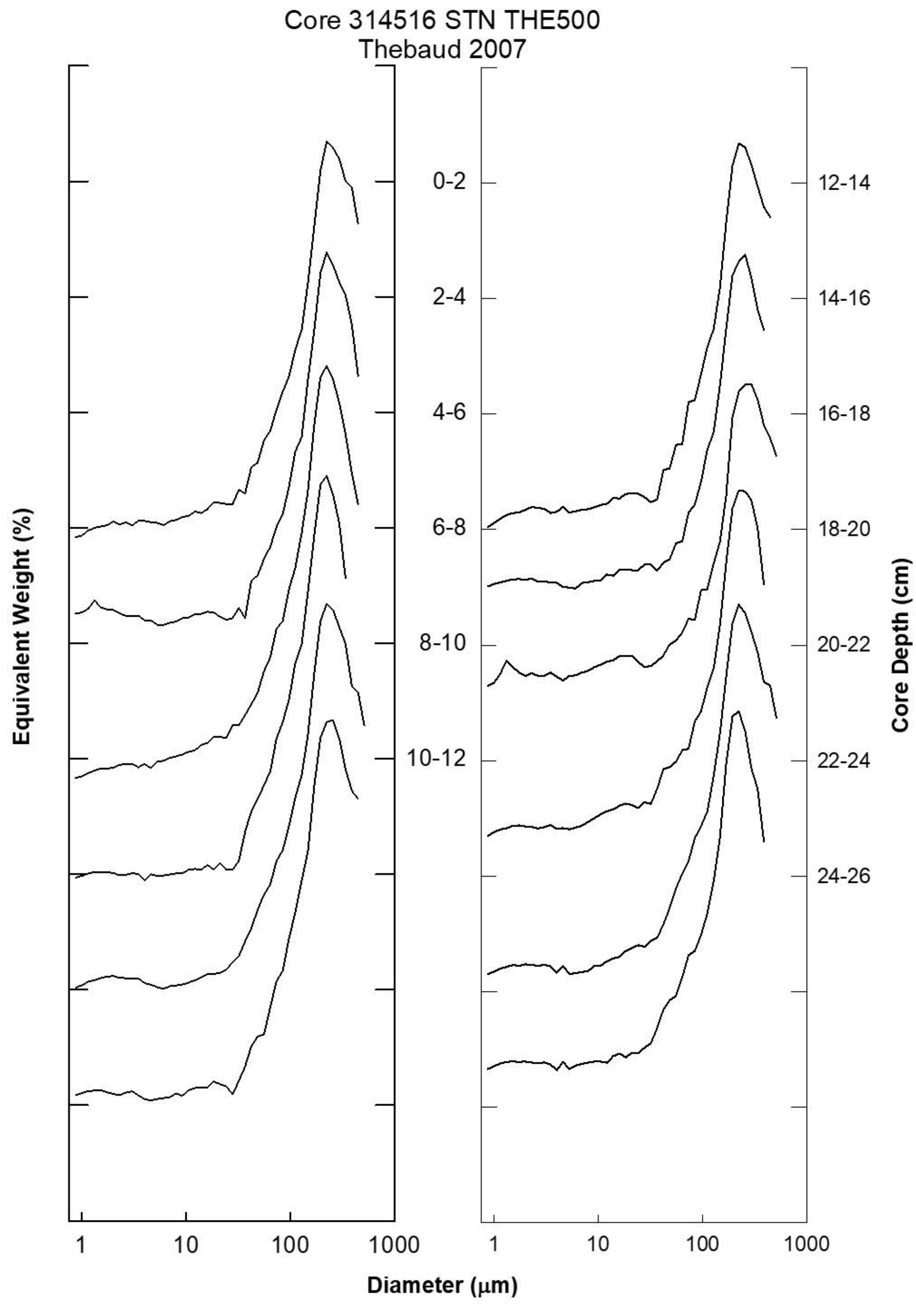

Figure 11. Disaggregated inorganic grain size of Core 314516 (Station THE500) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

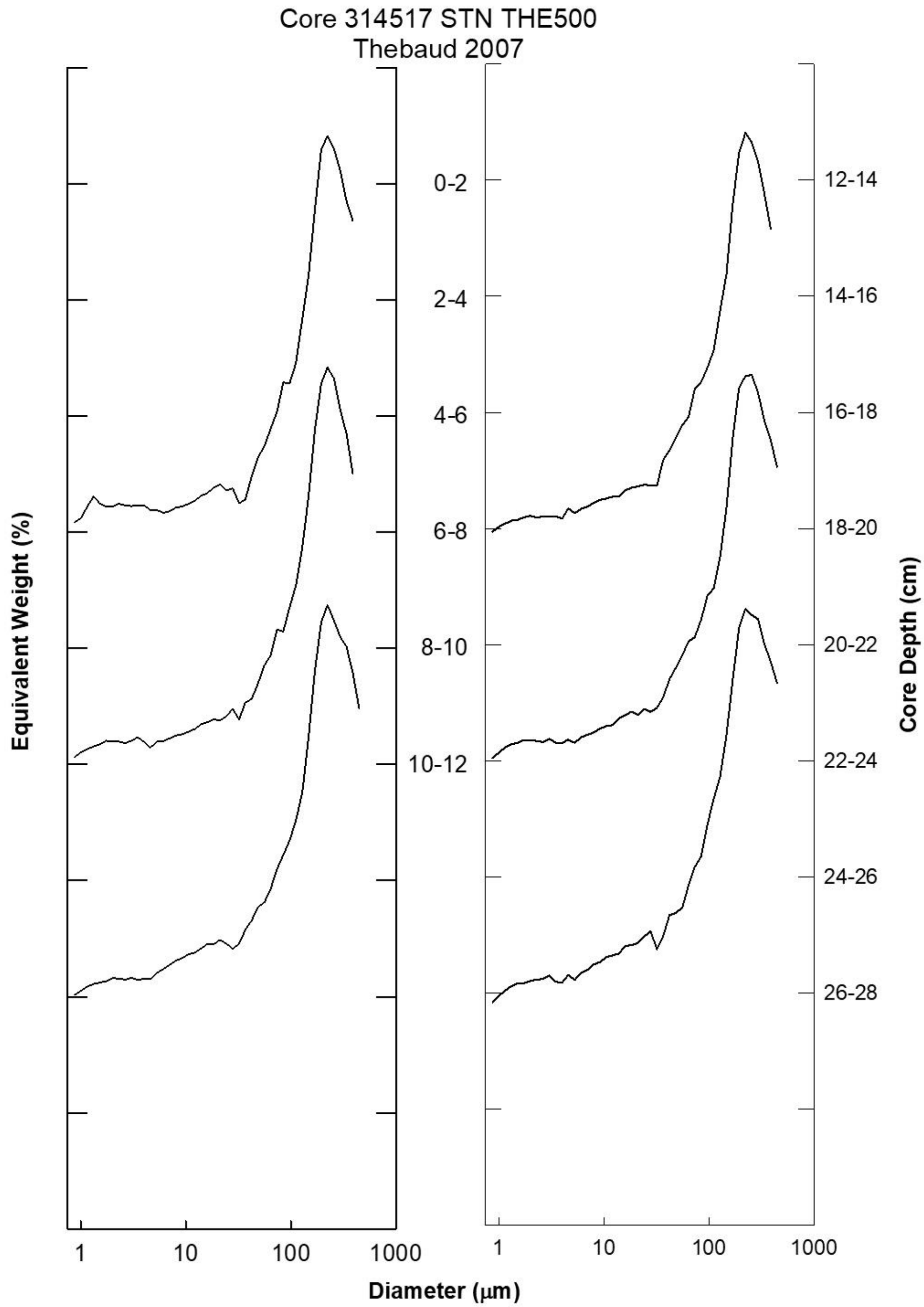

Figure 12. Disaggregated inorganic grain size of Core 314517 (Station THE500) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

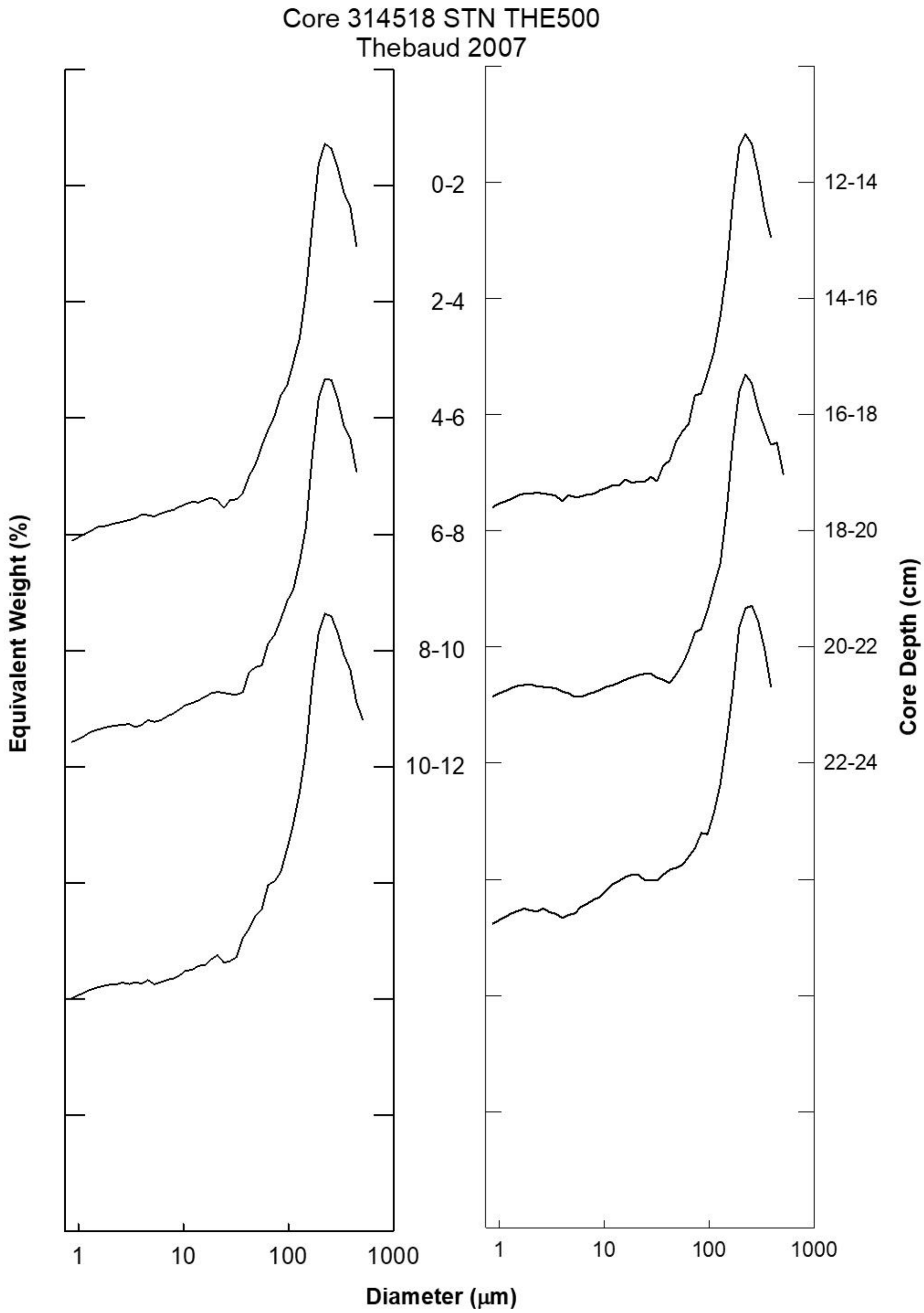

Figure 13. Disaggregated inorganic grain size of Core 314518 (Station THE500) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

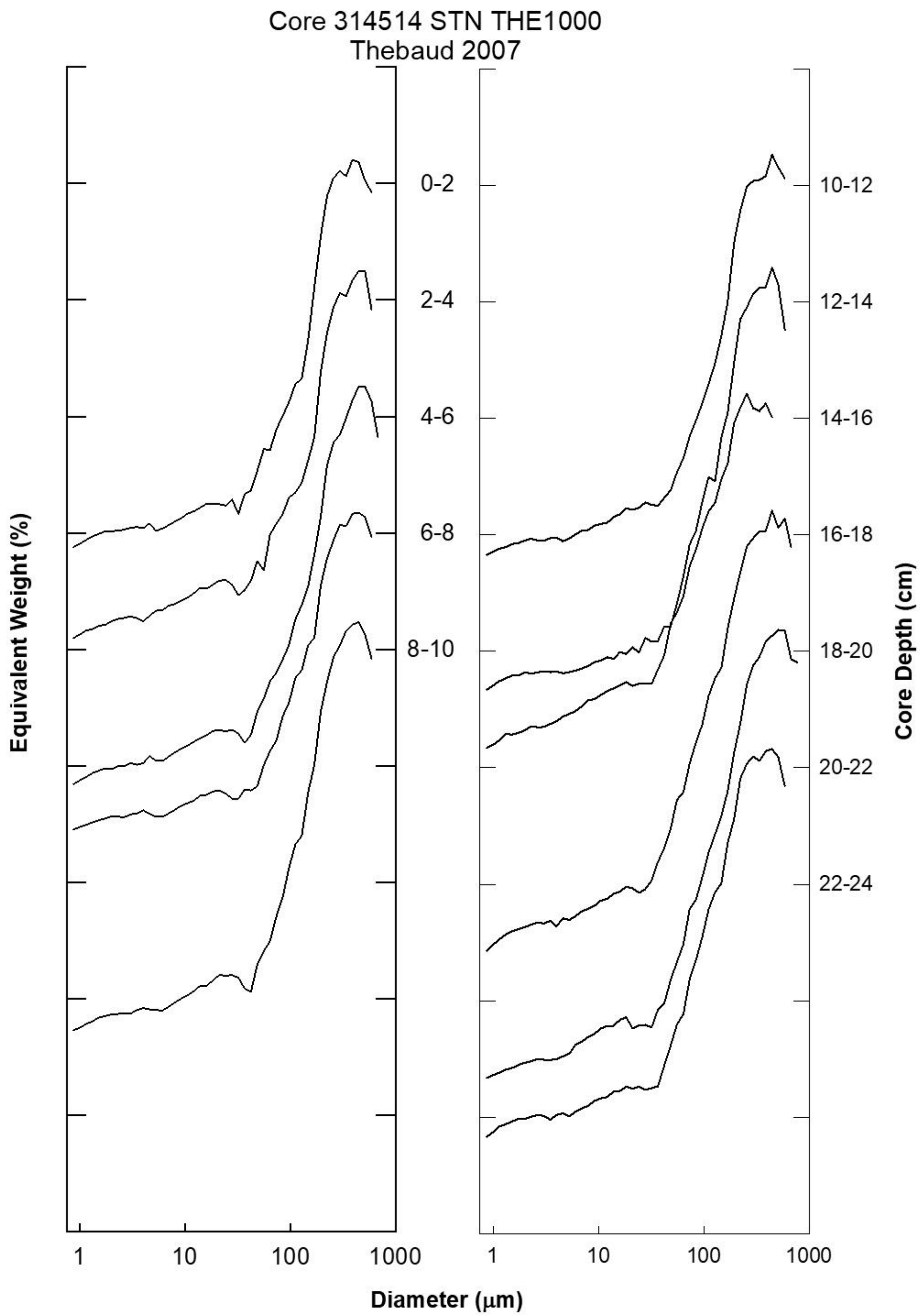

Figure 14. Disaggregated inorganic grain size of Core 314514 (Station THE1000) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

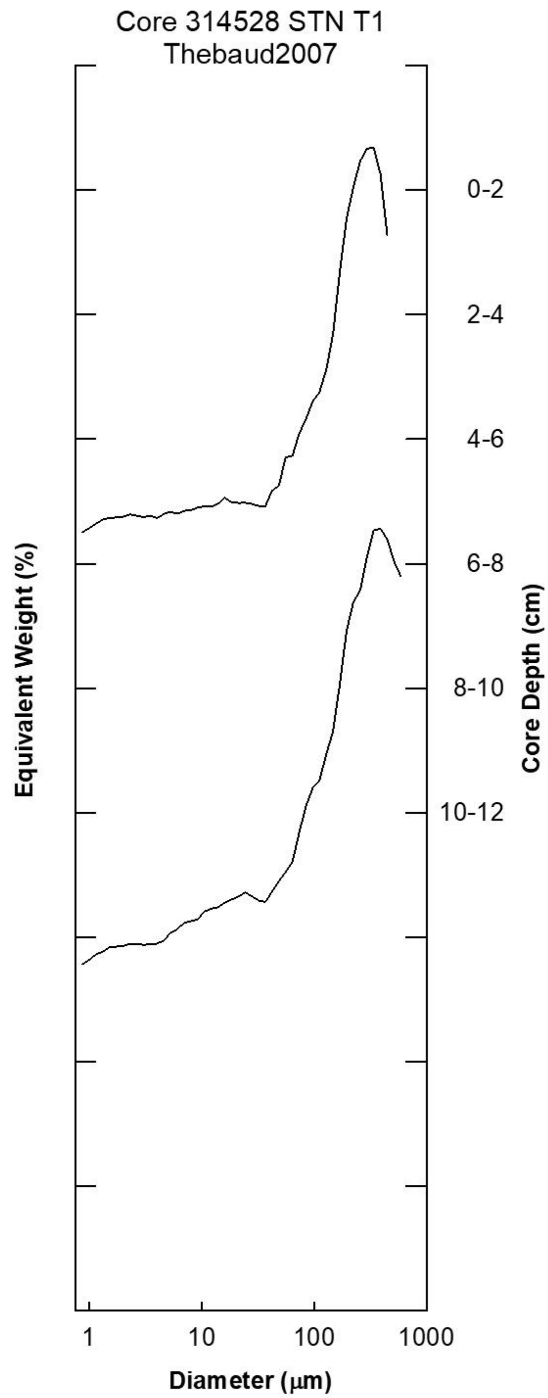

Figure 15. Disaggregated inorganic grain size of Core 314528 (Station T1) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by three decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

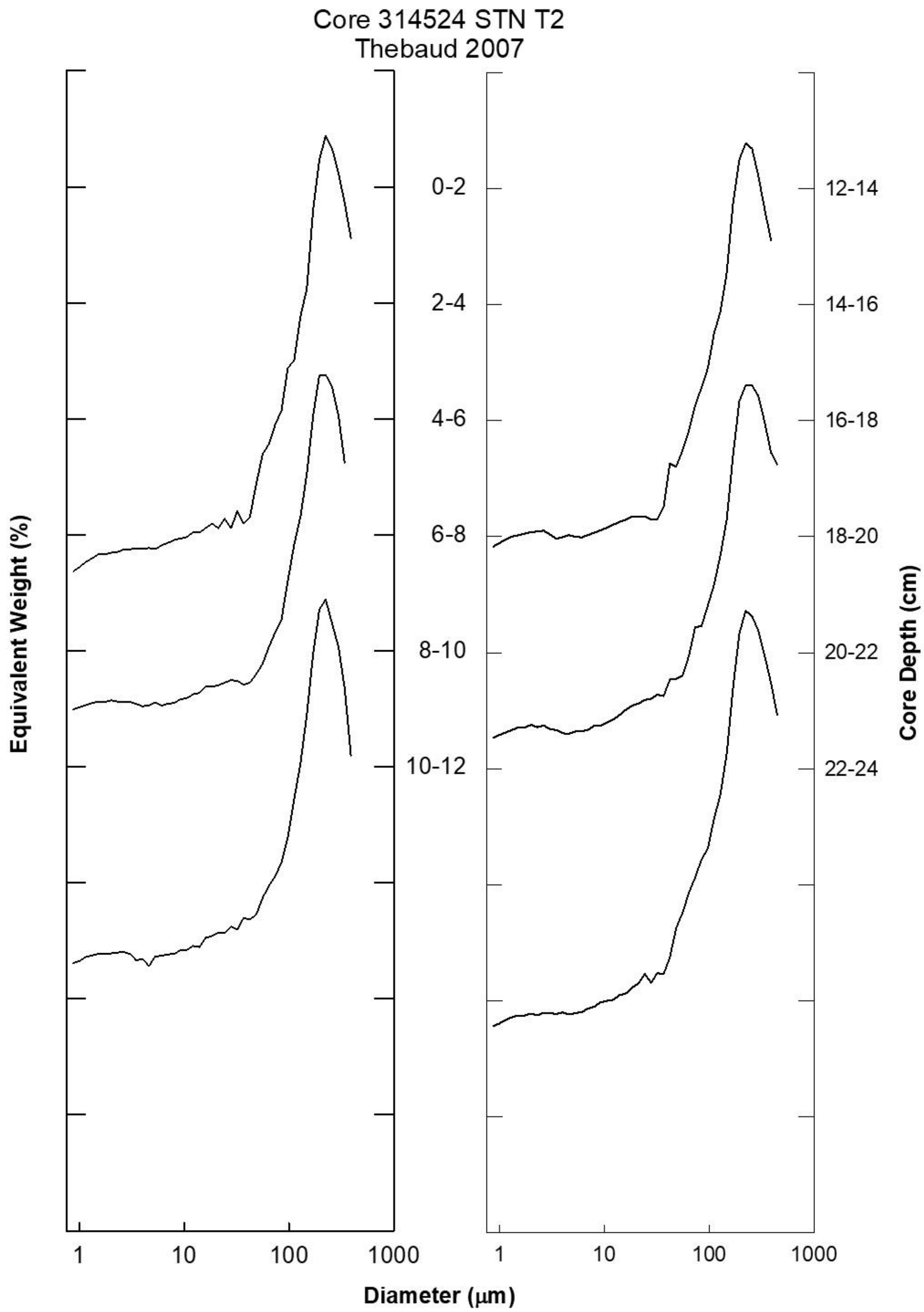

Figure 16. Disaggregated inorganic grain size of Core 314524 (Station T2) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

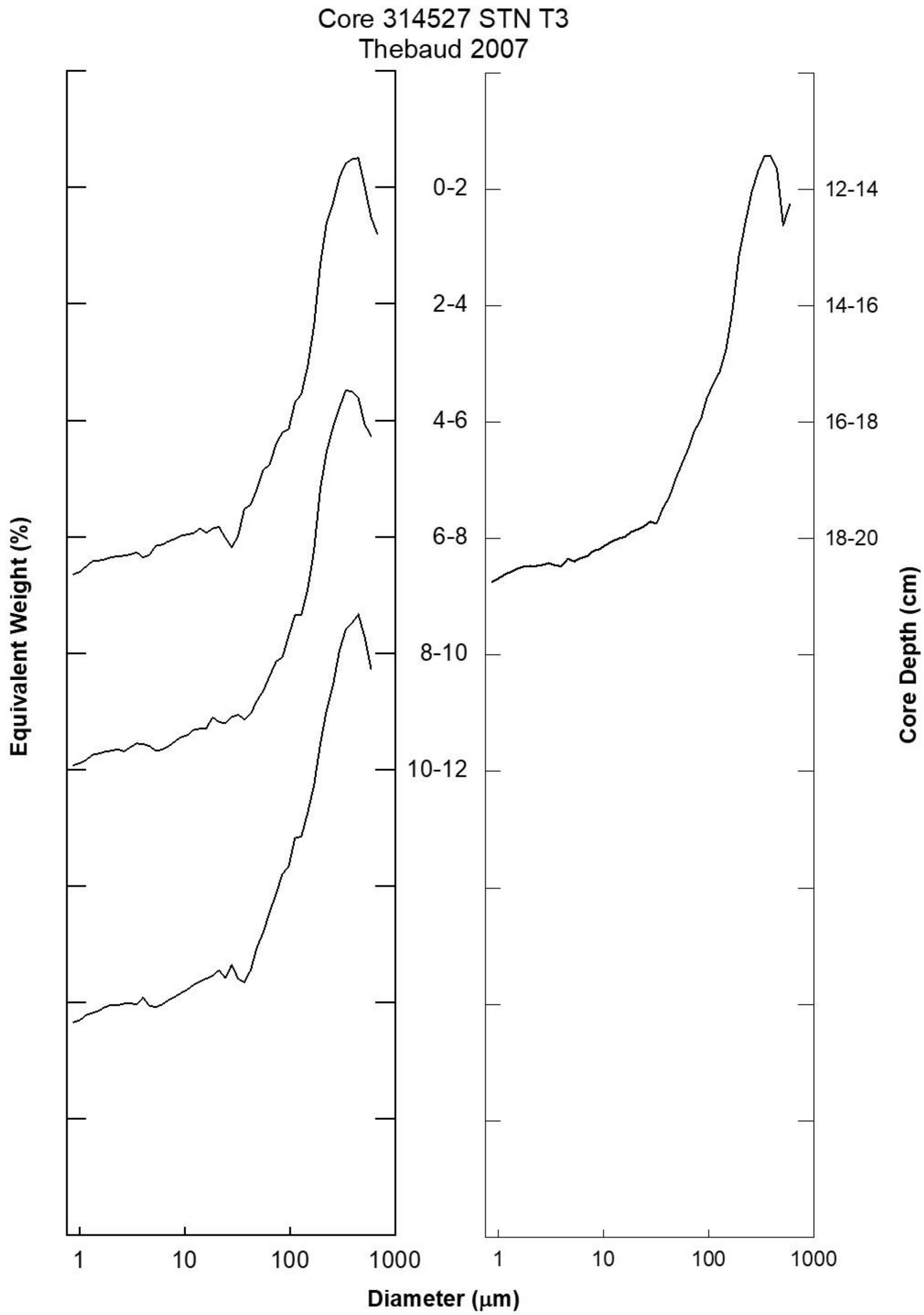

Figure 17. Disaggregated inorganic grain size of Core 314527 (Station T3) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

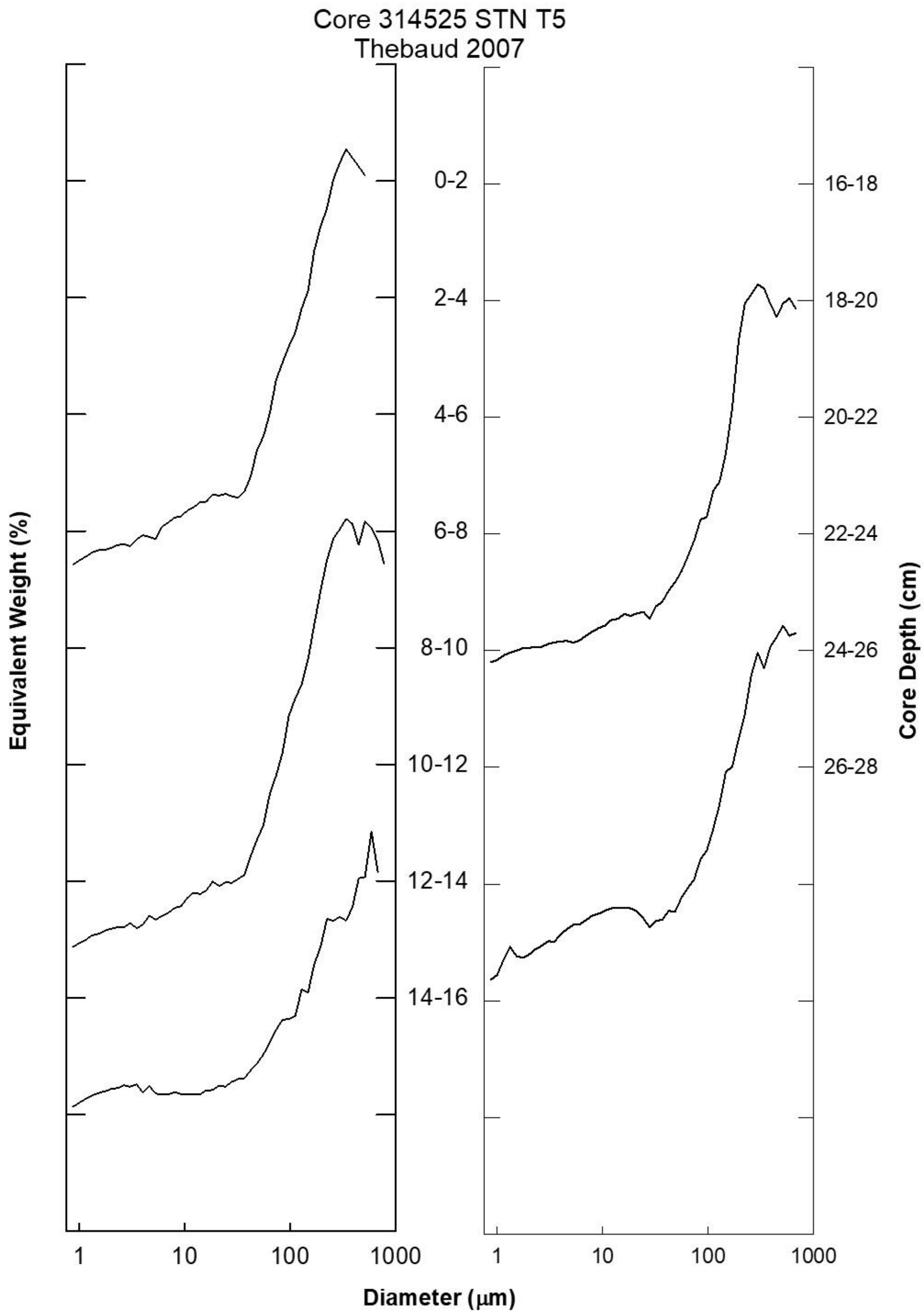

Figure 18. Disaggregated inorganic grain size of Core 314525 (Station T5) collected from Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by three decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

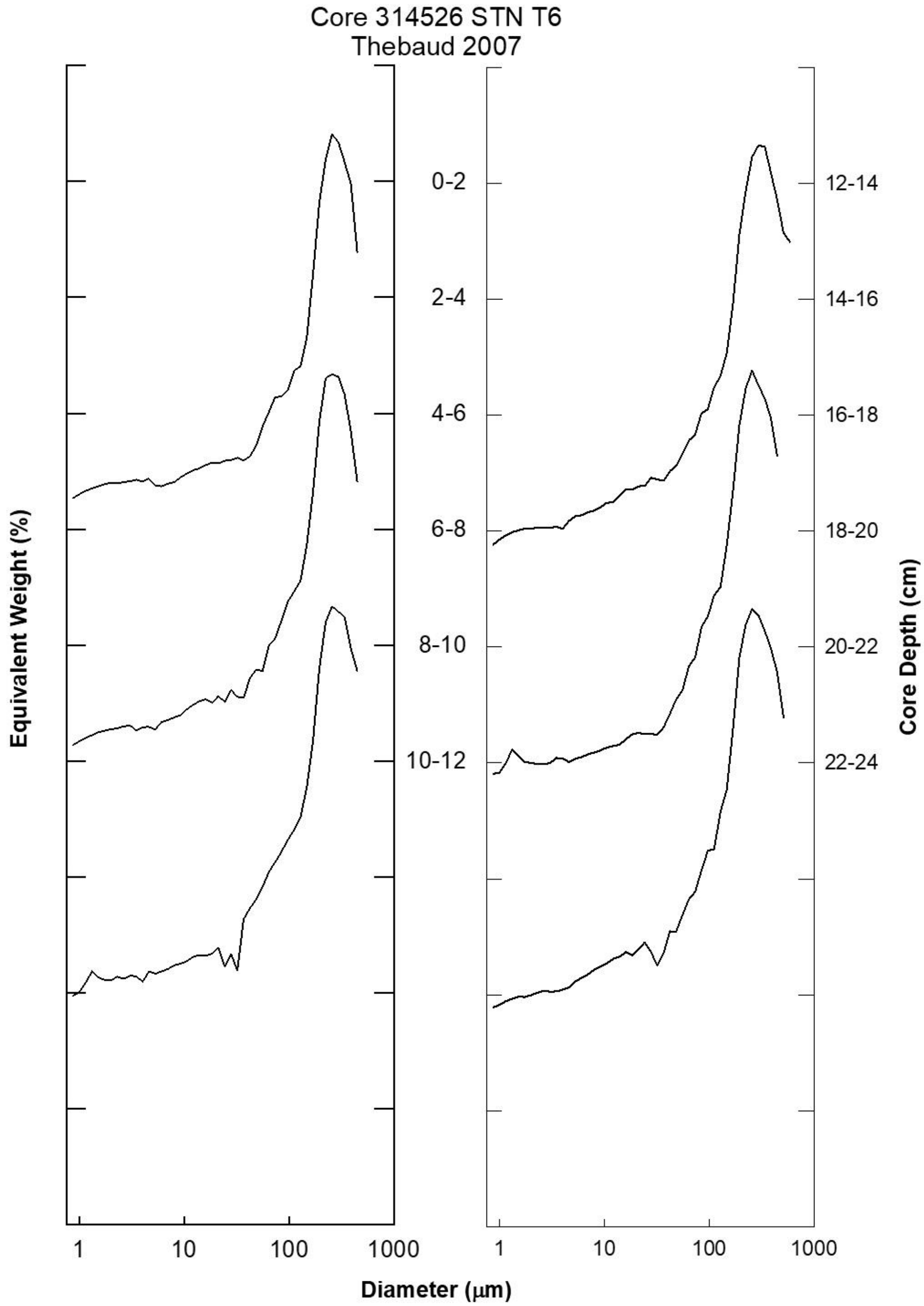

Figure 19. Disaggregated inorganic grain size of Core 314526 (Station T6) collected from the Thebaud, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

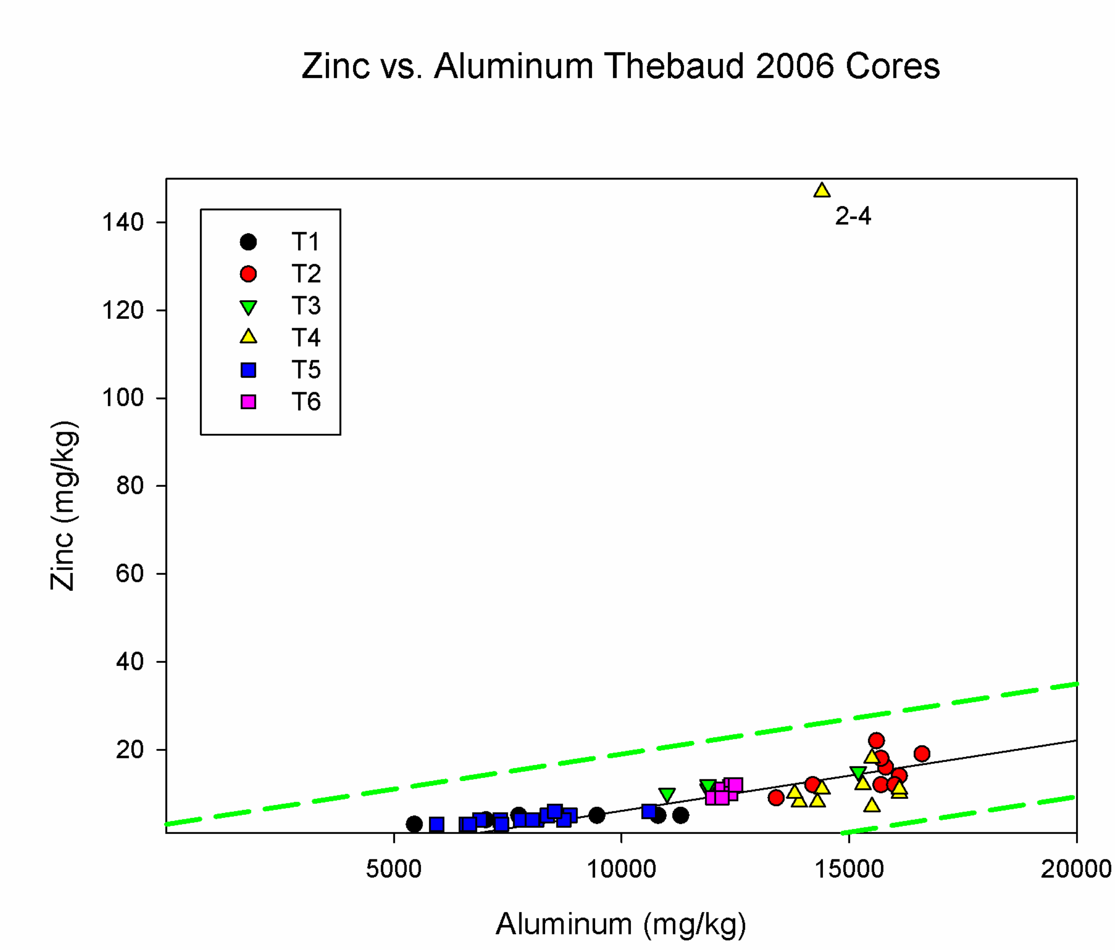

Figure 20. Zinc vs. aluminum plotted by core. Cores collected from Thebaud, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

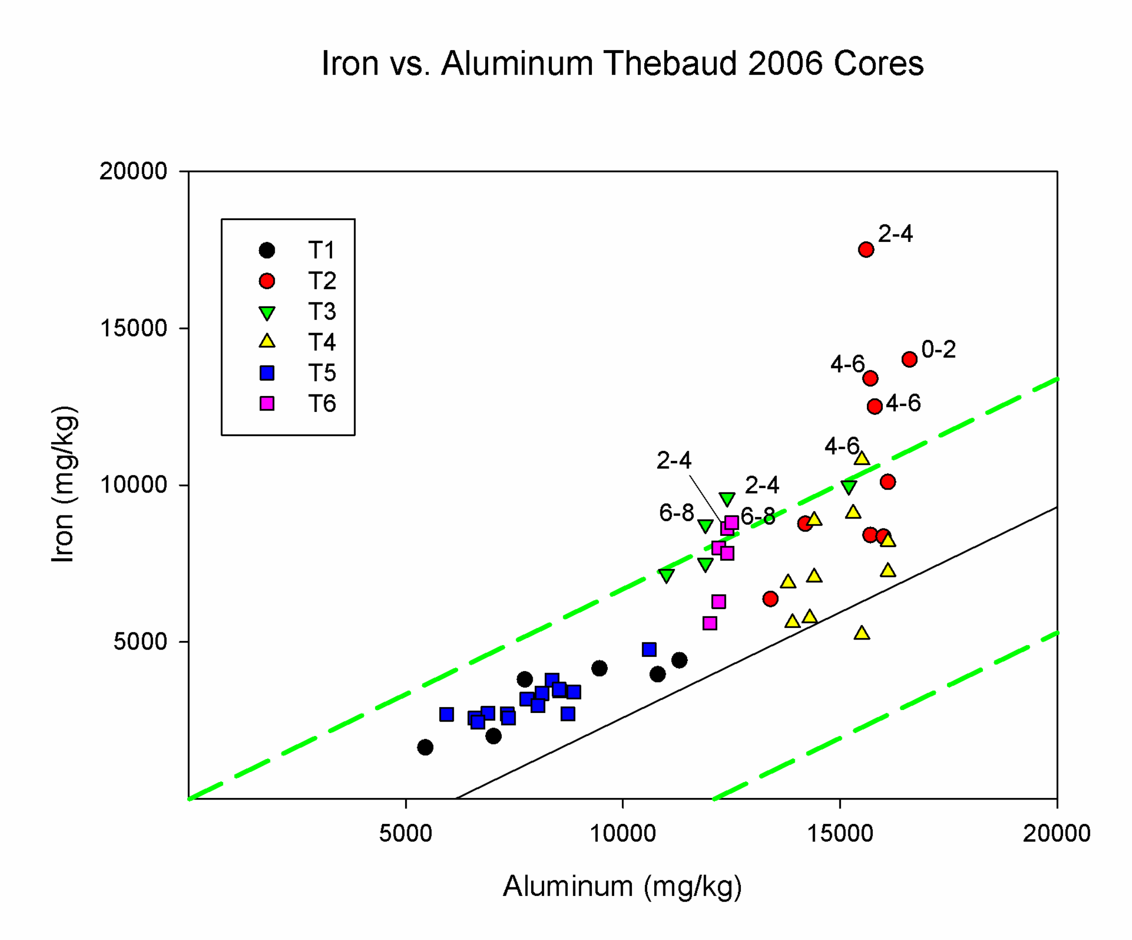

Figure 21. Iron vs. aluminum plotted by core. Cores collected from Thebaud, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

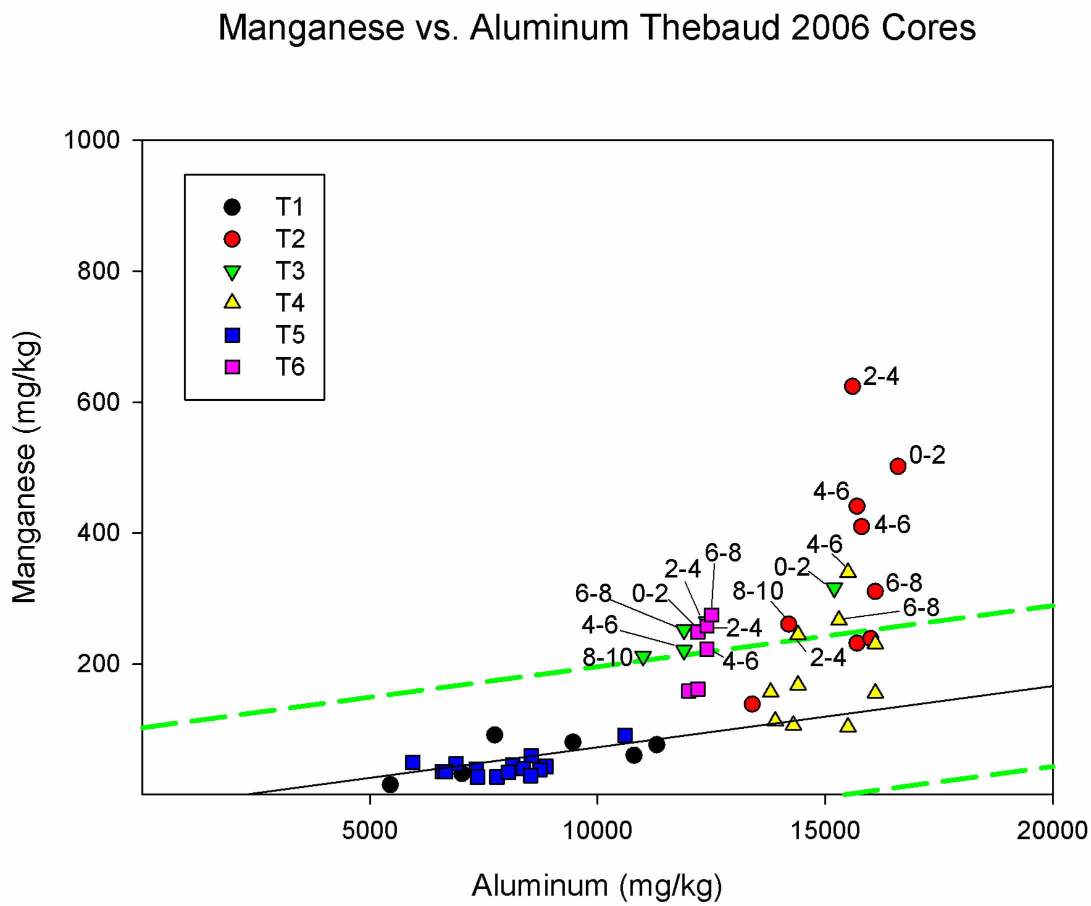

Figure 22. Manganese vs. aluminum plotted by core. Cores collected from Thebaud, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

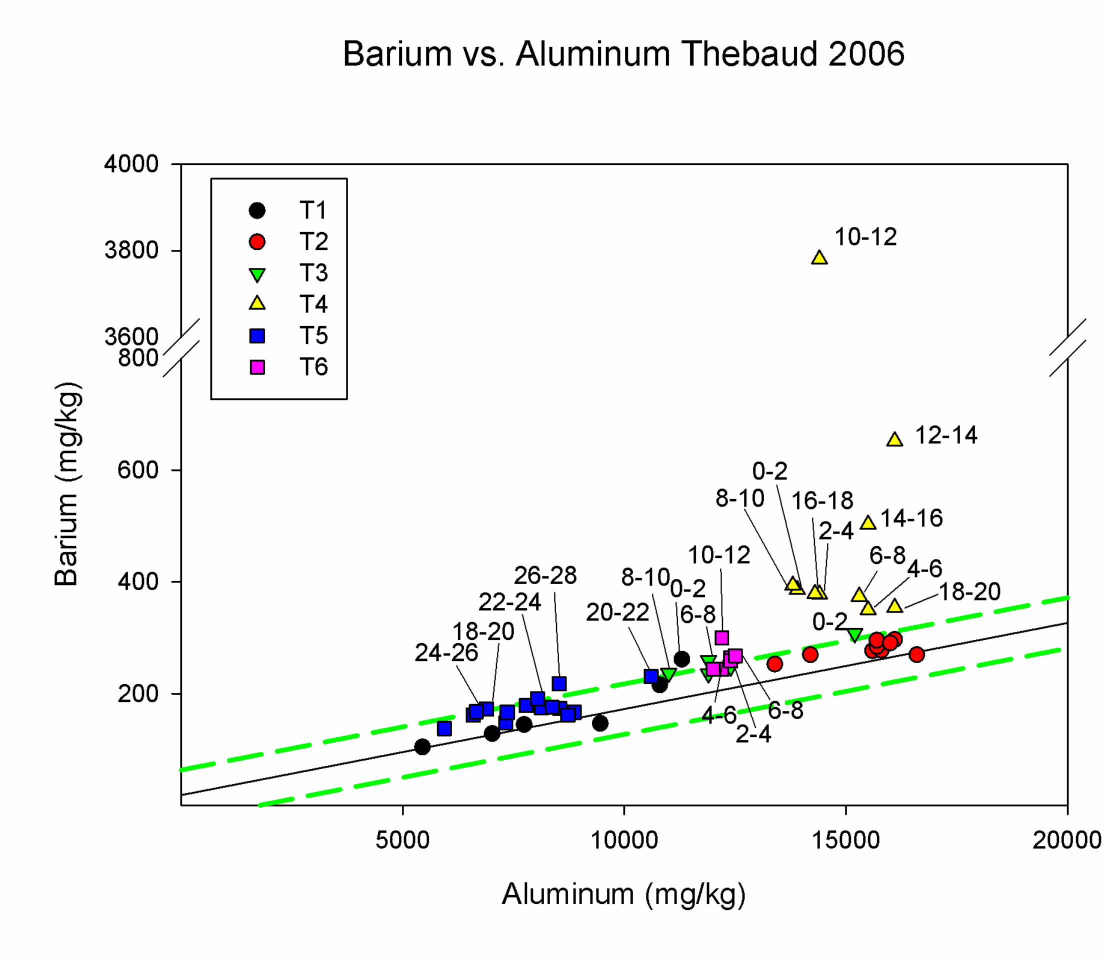

Figure 23. Barium vs. aluminum plotted by core. Cores collected from Thebaud, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

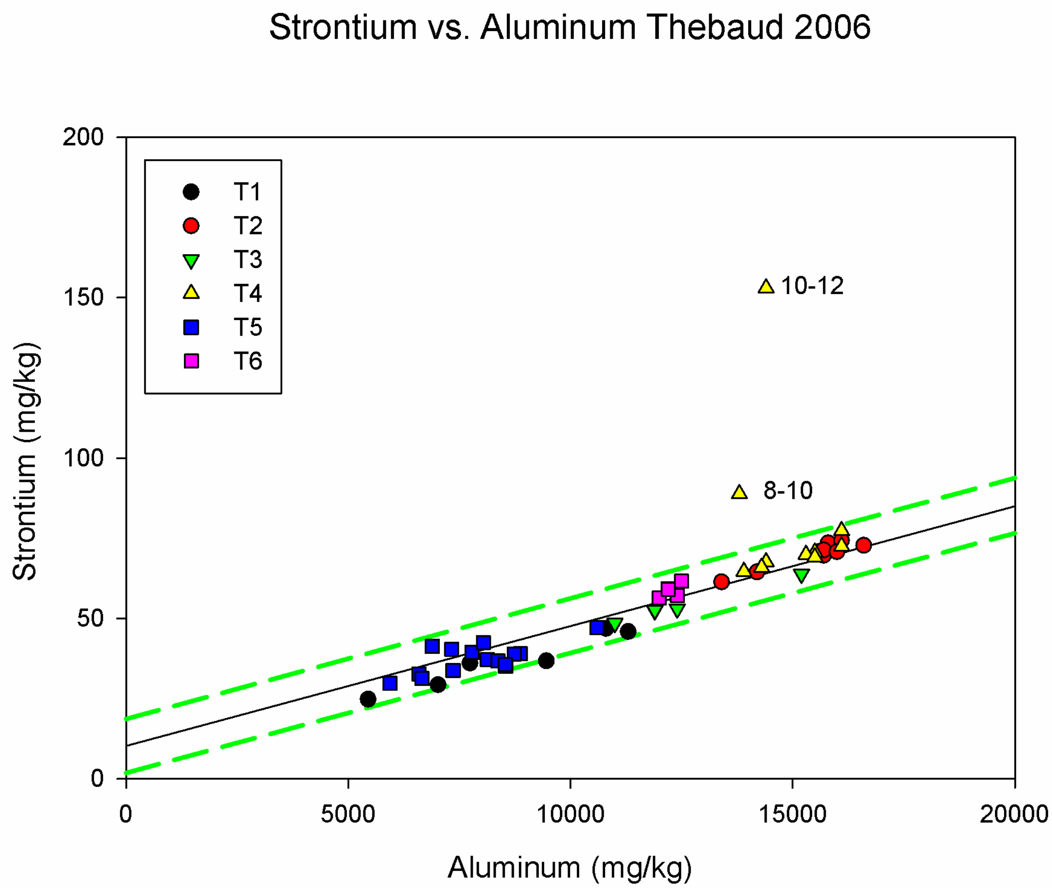

Figure 24. Strontium vs. aluminum plotted by core. Cores collected from Thebaud, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

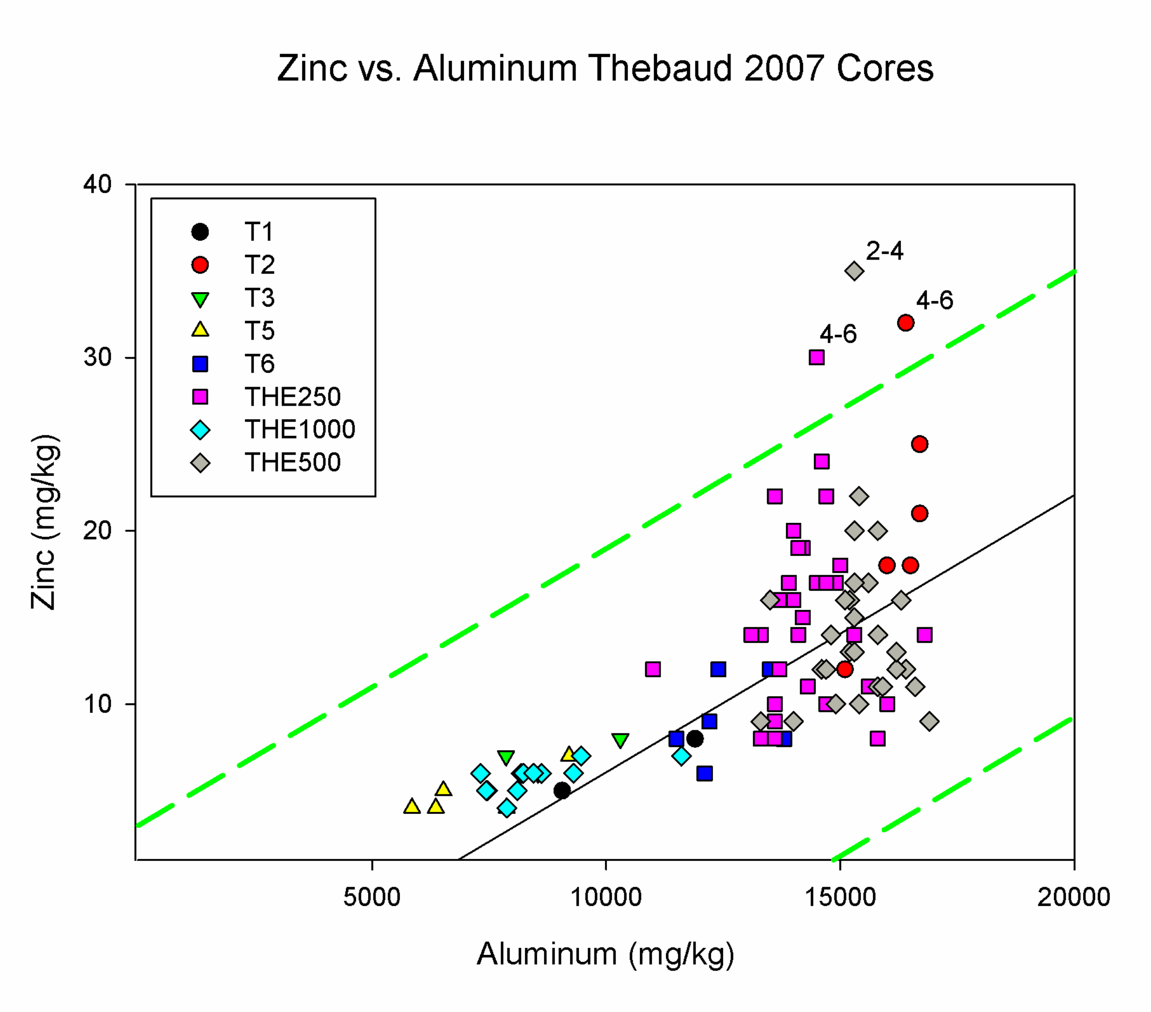

Figure 25. Zinc vs. aluminum plotted by core. Cores collected from Thebaud, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

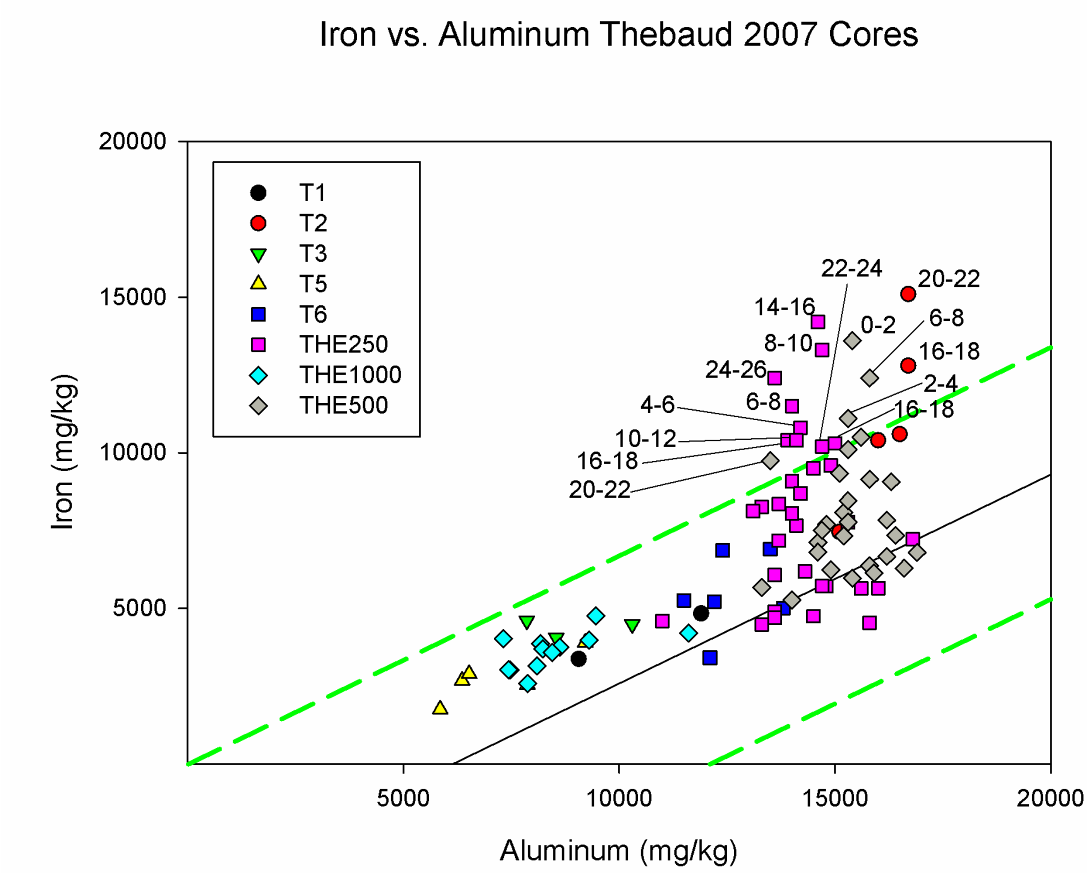

Figure 26. Iron vs. aluminum plotted by core. Cores collected from Thebaud, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

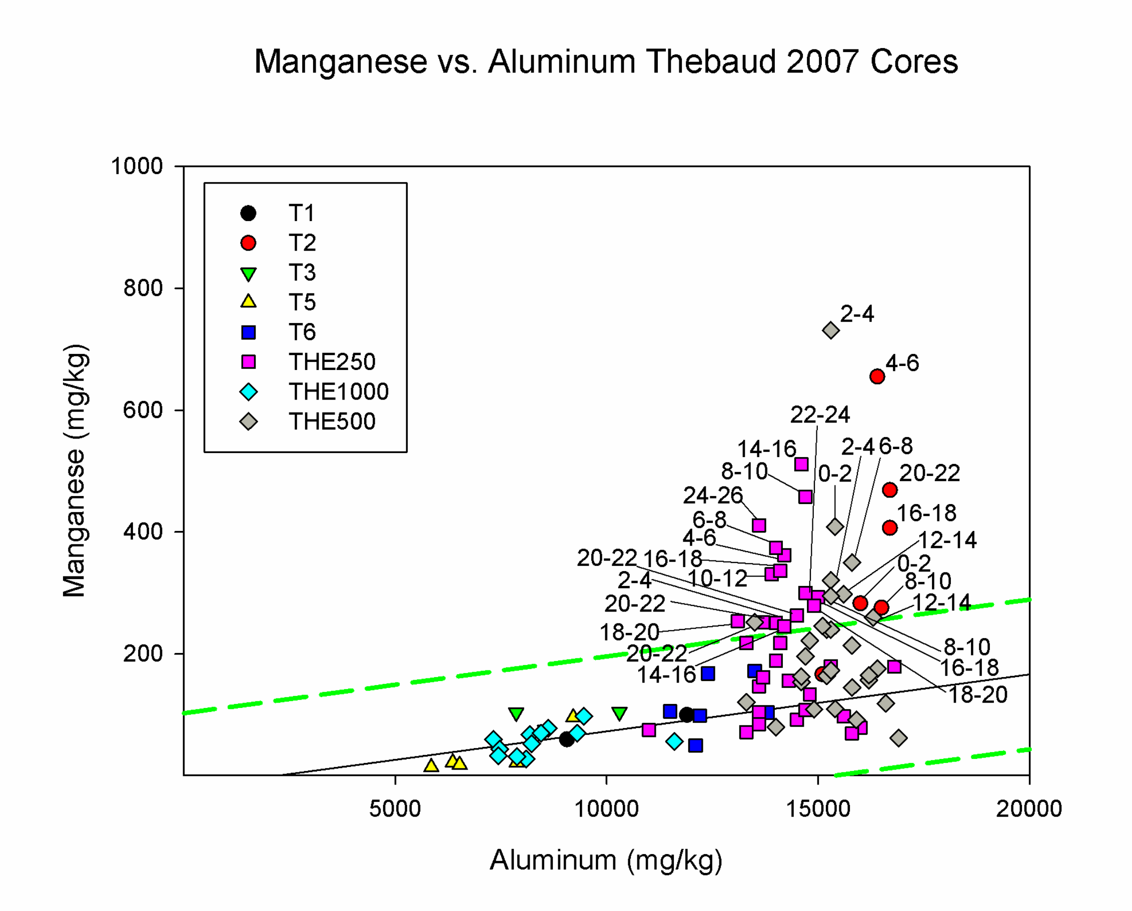

Figure 27. Manganese vs. aluminum plotted by core. Cores collected from Thebaud, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

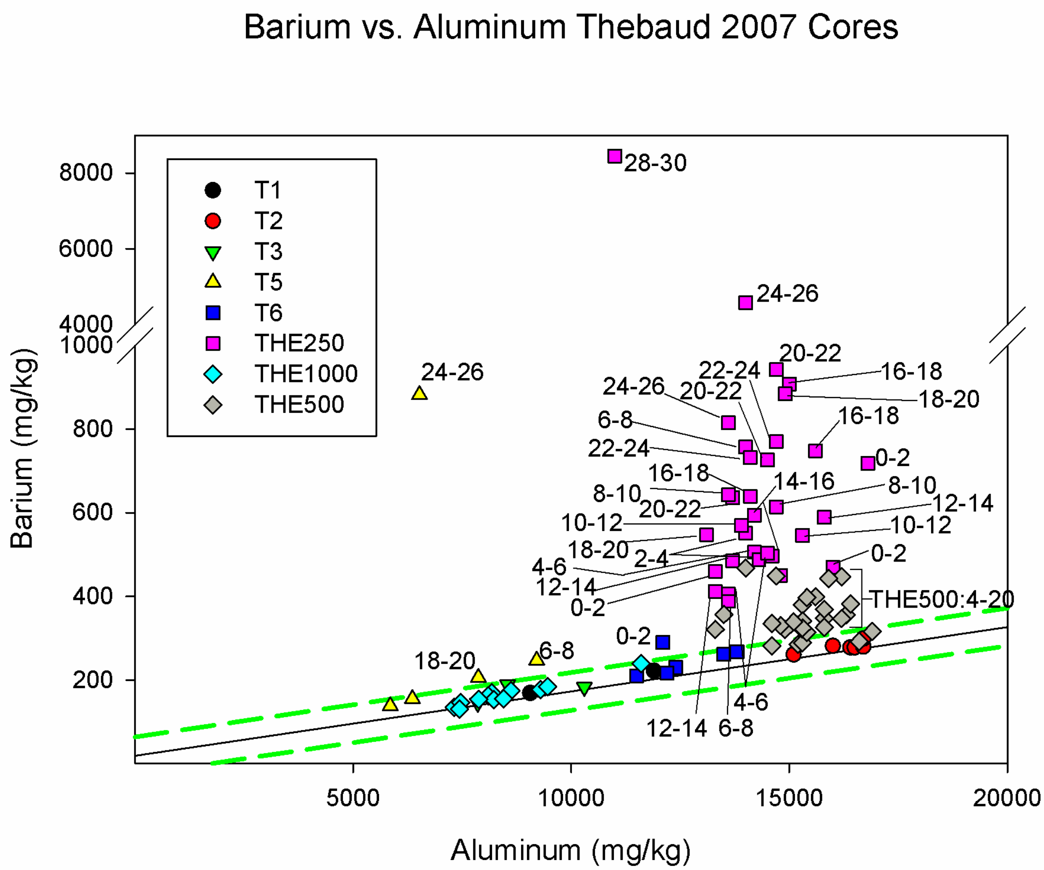

Figure 28. Barium vs. aluminum plotted by core. Cores collected from Thebaud, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

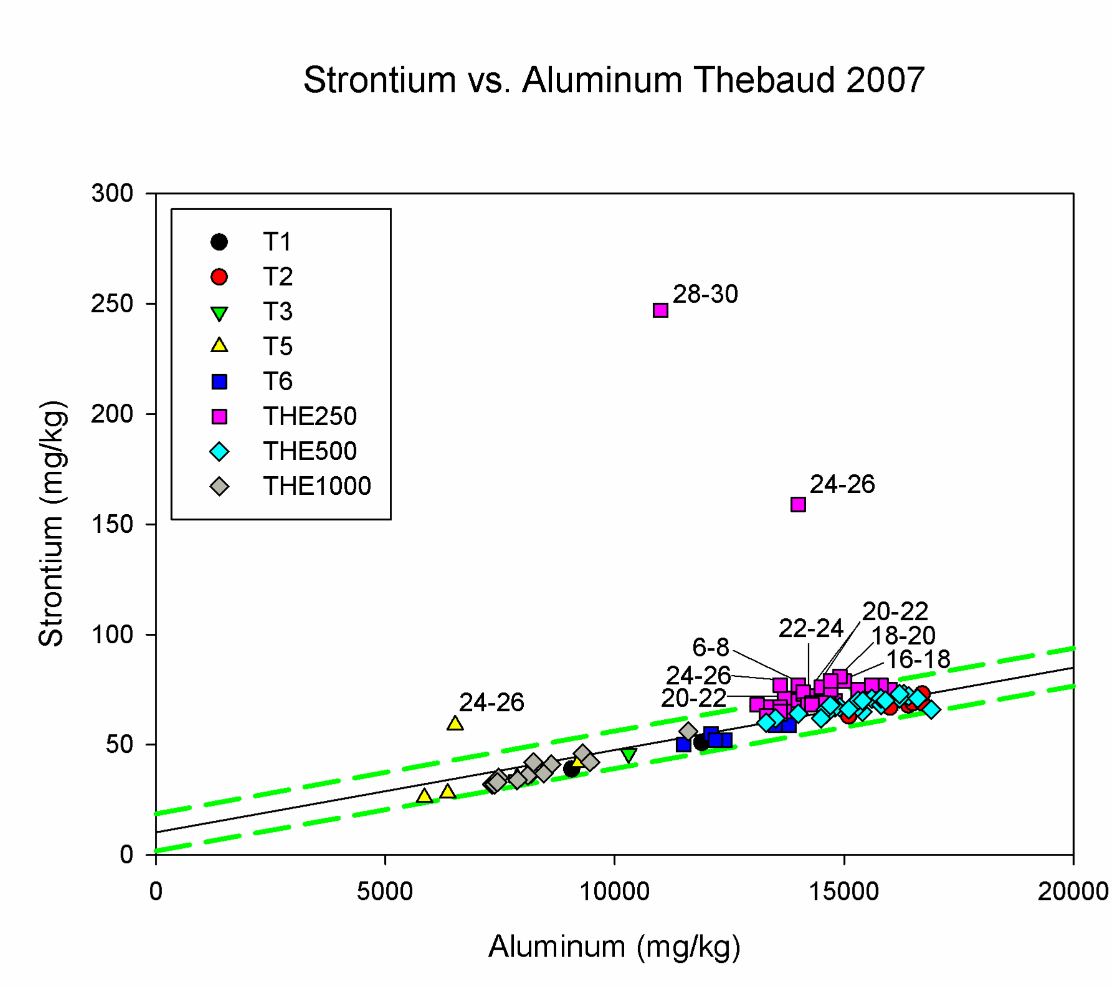

Figure 29. Strontium vs. aluminum plotted by core. Cores collected from Thebaud, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

Table 2. Inorganic grain size spectra: Station T1, core 300305, collected from Thebaud, 2006.

ID		2699677	2699682	2699684
Station		T1	T1	T1
Depth (cm)		0-2	4-6	8-10
Channel	Diameter			
4	0.7579	0.04653	0.01219	0.03778
5	0.8705506	0.04739	0.01186	0.03586
6	1	0.04839	0.01160	0.03520
7	1.1486984	0.04818	0.01149	0.03415
8	1.3195079	0.04696	0.01122	0.03331
9	1.5157166	0.04642	0.01076	0.03144
10	1.7411011	0.04383	0.01028	0.02931
11	2	0.04394	0.00982	0.02736
12	2.2973967	0.04032	0.00947	0.02724
13	2.6390158	0.03728	0.00973	0.02422
14	3.0314331	0.03990	0.00905	0.02410
15	3.4822023	0.03651	0.00956	0.01965
16	4	0.03492	0.00978	0.02465
17	4.5947934	0.03277	0.00916	0.02084
18	5.2780316	0.03291	0.00916	0.01996
19	6.0628663	0.03300	0.00938	0.02006
20	6.9644045	0.03371	0.00993	0.01998
21	8	0.03399	0.01019	0.02009
22	9.1895868	0.03348	0.01031	0.02013
23	10.556063	0.03213	0.01044	0.01999
24	12.125733	0.03374	0.01090	0.02024
25	13.928809	0.03288	0.01105	0.01895
26	16	0.03366	0.01189	0.01953
27	18.379174	0.03340	0.01231	0.01882
28	21.112127	0.03544	0.01308	0.02043
29	24.251465	0.03481	0.01365	0.01830
30	27.857618	0.03454	0.01266	0.01906
31	32	0.03502	0.01401	0.02061
32	36.758347	0.03250	0.01781	0.03198
33	42.224253	0.03470	0.03011	0.04822
34	48.50293	0.04954	0.03774	0.07110
35	55.715236	0.05990	0.05828	0.10634
36	64	0.07816	0.06844	0.14965
37	73.516695	0.09971	0.11837	0.20134
38	84.448506	0.18374	0.14489	0.27394
39	97.00586	0.21011	0.19198	0.31511
40	111.43047	0.33341	0.23511	0.38129
41	128	0.54285	0.41008	0.38606
42	147.03339	1.29715	0.73342	0.56433
43	168.89701	3.28624	1.67184	1.21887
44	194.01172	7.14401	2.54469	3.17379
45	222.86094	10.88096	5.07190	5.72515

46	**256**	15.38261	8.98756	10.50256
47	**294.06678**	18.01866	13.83275	14.82012
48	**337.79403**	16.86892	16.51909	17.89461
49	**388.02344**	14.49636	20.48922	19.92326
50	**445.72189**	8.12633	20.63026	15.70737
51	**512**	1.80808	7.90154	7.82368
52	**588.13356**			
53	**675.58805**			
	% <16µm	0.85919	0.22731	0.56450
	% <64µm	1.32087	0.51729	1.08854
	d50	275.686	335.203	321.799
	modal	294.06	445.72	388.02

Table 3. Inorganic grain size spectra: Station T2, core 300303, collected from Thebaud, 2006.

ID		2699644	2699646	2699651	2699653	2699654
Station		T2	T2	T2	T2	T2
Depth (cm)		0-2	4-6	8-10	12-14	14-16
Channel	**Diameter**					
4	**0.7579**	0.01569	0.01049	0.02888	0.01974	0.02636
5	**0.8705506**	0.01656	0.01112	0.03198	0.02156	0.02818
6	**1**	0.01749	0.01191	0.03439	0.02293	0.03069
7	**1.1486984**	0.01804	0.01229	0.03573	0.02410	0.03121
8	**1.3195079**	0.01867	0.01291	0.03646	0.02452	0.03316
9	**1.5157166**	0.01970	0.01322	0.03818	0.02550	0.03307
10	**1.7411011**	0.01960	0.01331	0.03733	0.02536	0.03347
11	**2**	0.01984	0.01357	0.03765	0.02547	0.03142
12	**2.2973967**	0.01959	0.01423	0.03600	0.02535	0.02939
13	**2.6390158**	0.01944	0.01314	0.03708	0.02509	0.02833
14	**3.0314331**	0.02002	0.01332	0.03481	0.02406	0.02702
15	**3.4822023**	0.02022	0.01197	0.03455	0.02461	0.02792
16	**4**	0.02014	0.01326	0.03629	0.02184	0.02715
17	**4.5947934**	0.01833	0.01304	0.03618	0.02227	0.02574
18	**5.2780316**	0.01947	0.01335	0.03654	0.02204	0.02615
19	**6.0628663**	0.02020	0.01368	0.03847	0.02270	0.02672
20	**6.9644045**	0.02037	0.01406	0.04016	0.02360	0.02703
21	**8**	0.02043	0.01342	0.04323	0.02390	0.02808
22	**9.1895868**	0.02053	0.01548	0.04557	0.02545	0.02925
23	**10.556063**	0.02209	0.01512	0.04926	0.02497	0.02858
24	**12.125733**	0.02393	0.01699	0.05207	0.02640	0.03074
25	**13.928809**	0.02497	0.01711	0.05590	0.02842	0.03267
26	**16**	0.02621	0.01901	0.06584	0.02713	0.03587
27	**18.379174**	0.02812	0.01919	0.06877	0.02778	0.03424
28	**21.112127**	0.02744	0.02203	0.07620	0.02523	0.03730
29	**24.251465**	0.02927	0.02458	0.07406	0.02668	0.03536
30	**27.857618**	0.03378	0.03172	0.07424	0.02452	0.03382
31	**32**	0.04357	0.04016	0.08347	0.02898	0.03109
32	**36.758347**	0.04253	0.05138	0.09337	0.03057	0.04516

33	**42.224253**	0.04297	0.08000	0.09807	0.04782	0.06059
34	**48.50293**	0.06180	0.10934	0.09179	0.08048	0.08759
35	**55.715236**	0.07945	0.23833	0.10279	0.09728	0.13471
36	**64**	0.11326	0.37204	0.08582	0.11764	0.19438
37	**73.516695**	0.17106	0.59699	0.17130	0.16738	0.24882
38	**84.448506**	0.25348	1.22243	0.28746	0.26292	0.37473
39	**97.00586**	0.55494	2.17863	0.45043	0.58937	0.69821
40	**111.43047**	0.89453	3.76006	0.81955	1.18738	1.33050
41	**128**	2.30397	6.60464	2.40533	2.83256	3.60149
42	**147.03339**	8.13427	18.95040	7.88485	9.98003	10.15180
43	**168.89701**	20.80837	30.27908	19.65651	21.27950	23.82003
44	**194.01172**	25.09028	24.42547	24.63992	26.18954	26.21372
45	**222.86094**	20.70449	8.27660	20.18696	17.52478	16.50614
46	**256**	11.93757	2.40091	13.18784	13.31745	9.68108
47	**294.06678**	5.81791		5.09058	5.60510	3.62262
48	**337.79403**	2.36541		3.44815		2.37840
	% <16µm	0.43532	0.29699	0.85671	0.52988	0.64233
	% <64µm	0.96373	1.30479	1.77111	1.06399	1.37246
	d50	184.8282	158.1403	185.7694	181.0153	176.9467
	modal	194.01	168.89	194.01	194.01	194.01

Table 4. Inorganic grain size spectra: Station T4, core 300300, collected from Thebaud, 2006.

ID		2699631	2699632	2699633	2699634	2699635
Station		T4	T4	T4	T4	T4
Depth (cm)		0-2	2-4	4-6	6-8	8-10
Channel	**Diameter**					
4	**0.7579**	0.06084	0.29481	0.22047	0.05337	0.07158
5	**0.8705506**	0.05908	0.28623	0.21375	0.05330	0.07008
6	**1**	0.05902	0.27697	0.21430	0.05223	0.07047
7	**1.1486984**	0.05764	0.26607	0.20880	0.05089	0.06926
8	**1.3195079**	0.05605	0.25703	0.20490	0.04864	0.06718
9	**1.5157166**	0.05298	0.24645	0.19434	0.04540	0.06737
10	**1.7411011**	0.05182	0.22990	0.19241	0.04331	0.06217
11	**2**	0.05068	0.21036	0.18423	0.03978	0.06193
12	**2.2973967**	0.04859	0.19425	0.16350	0.03782	0.05851
13	**2.6390158**	0.04609	0.18744	0.16664	0.03486	0.05719
14	**3.0314331**	0.04705	0.17218	0.16368	0.03528	0.05256
15	**3.4822023**	0.03859	0.15380	0.15026	0.03227	0.04435
16	**4**	0.04693	0.17120	0.15401	0.03036	0.05821
17	**4.5947934**	0.04250	0.13429	0.12668	0.02701	0.05132
18	**5.2780316**	0.04250	0.15817	0.14076	0.02507	0.05280
19	**6.0628663**	0.04475	0.15702	0.13877	0.02453	0.05477
20	**6.9644045**	0.04462	0.15623	0.14093	0.02385	0.05674
21	**8**	0.04419	0.15390	0.13740	0.02365	0.05889
22	**9.1895868**	0.04178	0.14517	0.13540	0.02210	0.05919
23	**10.556063**	0.04238	0.13385	0.12502	0.02169	0.06111
24	**12.125733**	0.04540	0.12626	0.12152	0.01945	0.06060

25	**13.928809**	0.04501	0.12647	0.10958	0.01853	0.06521
26	**16**	0.04765	0.13096	0.10189	0.02036	0.05878
27	**18.379174**	0.04532	0.12169	0.10842	0.01856	0.05857
28	**21.112127**	0.04458	0.12032	0.10666	0.01927	0.06049
29	**24.251465**	0.04365	0.13879	0.08319	0.01853	0.05824
30	**27.857618**	0.05305	0.07989	0.10598	0.02120	0.06441
31	**32**	0.06064	0.11761	0.09897	0.02350	0.05748
32	**36.758347**	0.08013	0.16442	0.12367	0.02751	0.06044
33	**42.224253**	0.10606	0.12531	0.08907	0.03052	0.06753
34	**48.50293**	0.12094	0.13720	0.10699	0.03896	0.08633
35	**55.715236**	0.19213	0.26394	0.15467	0.06764	0.15346
36	**64**	0.26273	0.40550	0.23572	0.09873	0.19551
37	**73.516695**	0.34914	0.48250	0.31547	0.15851	0.37099
38	**84.448506**	0.45944	0.65198	0.47732	0.26637	0.59099
39	**97.00586**	0.65647	0.75654	0.66715	0.46030	0.91549
40	**111.43047**	1.13011	1.08790	0.99803	0.74048	1.53724
41	**128**	1.97493	1.94283	1.98680	1.59805	2.92161
42	**147.03339**	5.31170	5.53171	6.60105	4.86433	7.26358
43	**168.89701**	14.99505	15.16222	15.29762	13.21338	17.36177
44	**194.01172**	21.08023	22.45869	23.59579	20.91068	24.15298
45	**222.86094**	18.12857	19.56433	18.10681	18.60906	17.09111
46	**256**	14.03682	14.42749	12.91583	14.26020	10.26585
47	**294.06678**	9.39120	6.14049	6.59909	10.33810	7.03168
48	**337.79403**	5.43497	3.13440	4.00920	7.29890	4.57952
49	**388.02344**	2.99960	2.61521	2.07699	3.86587	3.66446
50	**445.72189**	1.92642		1.43028	2.26759	
	% <16µm	1.06849	4.23806	3.60736	0.76340	1.33151
	% <64µm	2.12537	6.04370	4.92258	1.14817	2.25274
	d50	197.0633	189.4066	188.837	204.3051	186.351
	modal	194.01	194.01	194.01	194.01	194.01

Table 4. Continued.

ID		2699636	2699637	2699641	2699642	2699643
Station		T4	T4	T4	T4	T4
Depth (cm)		10-12	12-14	14-16	16-18	18-20
Channel	**Diameter**					
4	**0.7579**	0.03037	0.03618	0.04906	0.08804	0.02205
5	**0.8705506**	0.02993	0.03517	0.04821	0.08483	0.02119
6	**1**	0.03015	0.03508	0.04779	0.08521	0.02070
7	**1.1486984**	0.03026	0.03386	0.04738	0.08363	0.01980
8	**1.3195079**	0.02959	0.03314	0.04591	0.08025	0.01924
9	**1.5157166**	0.02881	0.03214	0.04470	0.08050	0.01814
10	**1.7411011**	0.02772	0.03064	0.04365	0.07675	0.01658
11	**2**	0.02745	0.02957	0.04202	0.07166	0.01538
12	**2.2973967**	0.02656	0.02802	0.03915	0.06534	0.01532
13	**2.6390158**	0.02375	0.02665	0.03571	0.06951	0.01422
14	**3.0314331**	0.02458	0.02448	0.03463	0.06349	0.01215
15	**3.4822023**	0.02096	0.02526	0.03360	0.05754	0.01334

16	**4**	0.02248	0.02475	0.03153	0.06367	0.01133
17	**4.5947934**	0.02434	0.02393	0.03543	0.05637	0.01119
18	**5.2780316**	0.02347	0.02661	0.03196	0.05359	0.01058
19	**6.0628663**	0.02413	0.02921	0.03208	0.05366	0.01016
20	**6.9644045**	0.02586	0.03108	0.03206	0.05316	0.01015
21	**8**	0.02669	0.03286	0.03165	0.05519	0.00971
22	**9.1895868**	0.02766	0.03381	0.03167	0.05152	0.00984
23	**10.556063**	0.02800	0.03444	0.02841	0.05040	0.01003
24	**12.125733**	0.02963	0.03528	0.02795	0.04909	0.00973
25	**13.928809**	0.03070	0.03329	0.02610	0.04463	0.00917
26	**16**	0.02957	0.03575	0.02501	0.04363	0.01019
27	**18.379174**	0.03163	0.03431	0.02457	0.04269	0.01038
28	**21.112127**	0.03347	0.03534	0.02466	0.03954	0.00970
29	**24.251465**	0.03161	0.03612	0.02185	0.03625	0.01088
30	**27.857618**	0.03250	0.03699	0.02003	0.04014	0.01190
31	**32**	0.03780	0.04055	0.02257	0.03828	0.01605
32	**36.758347**	0.05167	0.03995	0.02944	0.03198	0.02329
33	**42.224253**	0.07450	0.04386	0.03163	0.04596	0.02645
34	**48.50293**	0.10089	0.05326	0.04929	0.06671	0.03979
35	**55.715236**	0.13791	0.07780	0.06362	0.08712	0.04677
36	**64**	0.21795	0.12306	0.10638	0.12569	0.06529
37	**73.516695**	0.27620	0.19136	0.16037	0.18252	0.12438
38	**84.448506**	0.45913	0.27832	0.22730	0.23880	0.21014
39	**97.00586**	0.71419	0.42144	0.43365	0.37445	0.31837
40	**111.43047**	1.12460	0.78661	0.65875	0.62131	0.55126
41	**128**	2.63757	1.75663	1.73711	1.53479	1.47676
42	**147.03339**	7.40356	5.44819	5.05764	4.65073	4.91627
43	**168.89701**	17.52541	13.79033	14.32896	13.43996	13.65141
44	**194.01172**	23.70290	20.34516	21.43420	18.58909	19.55900
45	**222.86094**	17.95522	18.57254	18.34015	17.23431	16.27948
46	**256**	13.05221	14.37496	13.07505	14.20663	14.37339
47	**294.06678**	6.00898	8.94310	8.70290	9.66370	9.59478
48	**337.79403**	4.12788	6.71625	6.74467	7.86213	5.49316
49	**388.02344**	1.98346	4.84195	3.51656	4.27388	5.29993
50	**445.72189**	1.65609	2.30070	2.50926	2.71178	4.58632
51	**512**			1.83373	2.37990	2.98467
	% <16µm	0.59308	0.67544	0.82064	1.43803	0.30999
	% <64µm	1.37259	1.23244	1.23970	2.03603	0.58068
	d50	188.4849	202.9426	201.44	207.9596	209.2728
	modal	194.01	194.01	194.01	194.01	194.01

Table 5. Inorganic grain size spectra: Station T5, core 300304, collected from Thebaud, 2006.

ID		2699611	2699613	2699615	2699617	2699622	2699624	2699626
Station		T5	T5	T5	T5	T5	T5	T5
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22	24-26
Channel	**Diameter**							
4	**0.7579**	0.01731	0.01072	0.02948	0.01177	0.00902	0.01074	0.00909
5	**0.8705506**	0.01707	0.01068	0.02943	0.01157	0.00892	0.01090	0.00913

6	**1**	0.01751	0.01078	0.02967	0.01174	0.00927	0.01128	0.00934
7	**1.1486984**	0.01727	0.01111	0.02950	0.01194	0.00954	0.01165	0.00926
8	**1.3195079**	0.01678	0.01134	0.02909	0.01198	0.00970	0.01169	0.00920
9	**1.5157166**	0.01652	0.01125	0.02936	0.01203	0.00928	0.01158	0.00886
10	**1.7411011**	0.01615	0.01107	0.02827	0.01272	0.00927	0.01101	0.00906
11	**2**	0.01621	0.01129	0.02795	0.01324	0.00934	0.01142	0.00861
12	**2.2973967**	0.01517	0.01102	0.02834	0.01402	0.00870	0.01108	0.00842
13	**2.6390158**	0.01505	0.01178	0.02687	0.01413	0.00914	0.01111	0.00865
14	**3.0314331**	0.01394	0.01212	0.02588	0.01565	0.00893	0.01091	0.00828
15	**3.4822023**	0.01486	0.01154	0.02611	0.01607	0.00889	0.01070	0.00841
16	**4**	0.01299	0.01120	0.02575	0.01724	0.00947	0.01024	0.00852
17	**4.5947934**	0.01399	0.01327	0.02433	0.01840	0.00825	0.00968	0.00805
18	**5.2780316**	0.01288	0.01382	0.02440	0.01974	0.00840	0.00987	0.00792
19	**6.0628663**	0.01326	0.01448	0.02496	0.02167	0.00859	0.00995	0.00818
20	**6.9644045**	0.01343	0.01568	0.02550	0.02298	0.00873	0.01037	0.00847
21	**8**	0.01372	0.01621	0.02595	0.02495	0.00892	0.01074	0.00858
22	**9.1895868**	0.01367	0.01669	0.02733	0.02665	0.00897	0.01104	0.00877
23	**10.556063**	0.01374	0.01673	0.02628	0.02880	0.00948	0.01119	0.00885
24	**12.125733**	0.01361	0.01807	0.02687	0.02850	0.01005	0.01169	0.00894
25	**13.928809**	0.01321	0.01701	0.02596	0.03141	0.01104	0.01204	0.00894
26	**16**	0.01351	0.01628	0.02532	0.02938	0.01159	0.01166	0.00978
27	**18.379174**	0.01249	0.01478	0.02688	0.02919	0.00994	0.01214	0.00911
28	**21.112127**	0.01109	0.01432	0.02749	0.03012	0.01015	0.01169	0.00894
29	**24.251465**	0.01242	0.01698	0.03006	0.02895	0.00820	0.01023	0.00914
30	**27.857618**	0.01108	0.01289	0.02989	0.03052	0.00678	0.01169	0.00999
31	**32**	0.01041	0.01693	0.03233	0.03658	0.00759	0.01152	0.01102
32	**36.758347**	0.01369	0.02238	0.04271	0.04121	0.01368	0.01022	0.01494
33	**42.224253**	0.01858	0.02457	0.04890	0.03954	0.01548	0.01275	0.01712
34	**48.50293**	0.03294	0.03423	0.05982	0.04170	0.02337	0.01732	0.02261
35	**55.715236**	0.04684	0.04902	0.07616	0.03464	0.03429	0.01773	0.03117
36	**64**	0.06319	0.06500	0.11018	0.04466	0.05021	0.03581	0.07731
37	**73.516695**	0.09847	0.11610	0.16145	0.06802	0.08110	0.08683	0.12723
38	**84.448506**	0.14882	0.13264	0.21326	0.07756	0.12480	0.15772	0.19716
39	**97.00586**	0.17342	0.19946	0.28653	0.15473	0.18923	0.30015	0.38698
40	**111.43047**	0.24995	0.25654	0.40521	0.18565	0.23685	0.45379	0.78108
41	**128**	0.35032	0.34872	0.55559	0.34126	0.29258	0.95776	1.40177
42	**147.03339**	0.77720	0.95053	1.11387	0.66609	0.62365	2.14353	3.26855
43	**168.89701**	2.17688	2.19538	3.08137	2.20683	1.48916	5.18837	6.83199
44	**194.01172**	4.90085	5.06796	5.74297	4.63799	3.32858	7.83236	9.23129
45	**222.86094**	5.91650	8.10394	9.01685	6.76691	5.25946	8.59504	9.30696
46	**256**	7.86351	12.20272	12.52356	9.25360	7.03243	10.15333	9.01537
47	**294.06678**	9.68165	15.33497	14.30410	11.73940	8.90019	11.74819	9.77601
48	**337.79403**	12.07598	18.71406	17.50526	12.60862	12.98395	12.98854	12.34497
49	**388.02344**	13.31302	19.14617	17.17766	18.14540	19.16266	15.81561	15.43937
50	**445.72189**	17.53017	13.10920	13.06412	19.95737	25.00117	15.00348	13.75819
51	**512**	19.10458	3.54637	3.74119	10.00452	14.90101	8.17168	7.72044
52	**588.13356**	5.06410			2.40236			
53	**675.58805**							
	% <16µm	0.32833	0.28784	0.59728	0.39720	0.20190	0.24087	0.19152
	% <64µm	0.57457	0.57522	1.10701	0.78370	0.39318	0.40361	0.41263
	d50	356.70	304.62	297.78	339.20	361.55	300.73	291.20
	modal	388.02	388.02	337.79	445.72	445.72	338.02	388.02

Table 6. Inorganic grain size spectra: Station T6, core 300302, collected from Thebaud, 2006.

ID		2699655	2699657	2699662
Station		T6	T6	T6
Depth (cm)		0-2	4-6	8-10
Channel	**Diameter**			
4	**0.7579**	0.00925	0.00727	0.01589
5	**0.8705506**	0.01013	0.00752	0.01653
6	**1**	0.01105	0.00784	0.01746
7	**1.1486984**	0.01177	0.00832	0.01833
8	**1.3195079**	0.01250	0.00886	0.01871
9	**1.5157166**	0.01275	0.00842	0.01902
10	**1.7411011**	0.01309	0.00859	0.01943
11	**2**	0.01277	0.00860	0.01897
12	**2.2973967**	0.01251	0.00807	0.01825
13	**2.6390158**	0.01271	0.00850	0.01876
14	**3.0314331**	0.01236	0.00764	0.02054
15	**3.4822023**	0.01234	0.00812	0.01720
16	**4**	0.01237	0.00839	0.01838
17	**4.5947934**	0.01206	0.00723	0.01965
18	**5.2780316**	0.01253	0.00835	0.02061
19	**6.0628663**	0.01290	0.00880	0.02211
20	**6.9644045**	0.01332	0.00909	0.02358
21	**8**	0.01355	0.00961	0.02470
22	**9.1895868**	0.01436	0.00972	0.02558
23	**10.556063**	0.01440	0.01071	0.02663
24	**12.125733**	0.01505	0.01108	0.02768
25	**13.928809**	0.01640	0.01103	0.03029
26	**16**	0.01750	0.01183	0.02992
27	**18.379174**	0.01487	0.01102	0.02962
28	**21.112127**	0.01807	0.01011	0.03184
29	**24.251465**	0.01503	0.00954	0.03664
30	**27.857618**	0.01418	0.00977	0.02757
31	**32**	0.02477	0.00976	0.02712
32	**36.758347**	0.03596	0.01206	0.02906
33	**42.224253**	0.05410	0.01902	0.03139
34	**48.50293**	0.07675	0.00351	0.05084
35	**55.715236**	0.11346	0.00662	0.04821
36	**64**	0.17579	0.00662	0.04838
37	**73.516695**	0.22843	0.00662	0.13551
38	**84.448506**	0.40987	0.06176	0.16588
39	**97.00586**	0.55641	0.10453	0.31522
40	**111.43047**	0.87286	0.19785	0.42607
41	**128**	1.67863	0.46628	0.87103
42	**147.03339**	3.97875	2.36948	2.15291
43	**168.89701**	11.85801	9.17959	7.55511
44	**194.01172**	21.78847	18.95719	18.67992
45	**222.86094**	22.37714	21.70906	23.41480
46	**256**	15.94249	20.05417	22.02946
47	**294.06678**	10.56099	14.57469	13.93128
48	**337.79403**	5.21403	8.26620	6.97028
49	**388.02344**	3.69327	3.76424	2.50363
50	**445.72189**			
51	**512**			
52	**588.13356**			

53	**675.58805**			
	% <16µm	0.2802	0.1917	0.4583
	% <64µm	0.8407	0.3016	0.8489
	d50	204.05	218.40	217.24
	modal	222.86	222.86	222.86

Table 7. Inorganic grain size spectra: Station THE250, core 314520, collected from Thebaud, 2007.

ID#		**3130631**	**3130632**	**3130633**	**3130634**	**3130635**	**3130636**	**3130637**
Core ID#		314520	314520	314520	314520	314520	314520	314520
Station		THE250	THE250	THE250	THE250	THE250	THE250	THE250
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12	12-14
Channel	**Diameter**							
4	**0.7579**	0.01858	0.01837	0.00423	0.01098	0.00640	0.01538	0.00381
5	**0.8705506**	0.01998	0.01838	0.00465	0.01094	0.00681	0.01611	0.00419
6	**1**	0.02128	0.01940	0.00532	0.01179	0.00723	0.01744	0.00459
7	**1.1486984**	0.02266	0.02028	0.00566	0.01280	0.00765	0.01826	0.00496
8	**1.3195079**	0.02335	0.02005	0.00572	0.01279	0.00797	0.01921	0.00523
9	**1.5157166**	0.02511	0.02090	0.00615	0.01329	0.00821	0.02029	0.00547
10	**1.7411011**	0.02623	0.02129	0.00645	0.01452	0.00875	0.02127	0.00581
11	**2**	0.02831	0.02183	0.00642	0.01474	0.00836	0.02221	0.00615
12	**2.2973967**	0.03013	0.02261	0.00672	0.01588	0.00901	0.02438	0.00601
13	**2.6390158**	0.03380	0.02232	0.00722	0.01531	0.00861	0.02394	0.00624
14	**3.0314331**	0.03244	0.02303	0.00699	0.01636	0.00907	0.02542	0.00645
15	**3.4822023**	0.02816	0.02290	0.00723	0.01520	0.00995	0.02356	0.00644
16	**4**	0.02857	0.02176	0.00677	0.02017	0.00935	0.02314	0.00615
17	**4.5947934**	0.02961	0.02053	0.00742	0.01946	0.00993	0.02406	0.00670
18	**5.2780316**	0.02858	0.02147	0.00777	0.02042	0.01121	0.02706	0.00712
19	**6.0628663**	0.03109	0.02261	0.00830	0.02135	0.01197	0.02897	0.00760
20	**6.9644045**	0.03207	0.02367	0.00869	0.02324	0.01260	0.03126	0.00817
21	**8**	0.03463	0.02439	0.00918	0.02429	0.01340	0.03134	0.00862
22	**9.1895868**	0.03776	0.02549	0.00922	0.02577	0.01389	0.03385	0.00889
23	**10.556063**	0.03988	0.02622	0.01045	0.02713	0.01471	0.03553	0.00911
24	**12.125733**	0.04096	0.02744	0.01072	0.02756	0.01619	0.03521	0.00993
25	**13.928809**	0.04477	0.03031	0.01048	0.03124	0.01638	0.04013	0.00960
26	**16**	0.04720	0.02785	0.01016	0.02836	0.01738	0.04245	0.00968
27	**18.379174**	0.04720	0.02978	0.01100	0.02830	0.01954	0.04028	0.01105
28	**21.112127**	0.04928	0.02516	0.01093	0.02986	0.01832	0.04144	0.01086
29	**24.251465**	0.04814	0.02584	0.01054	0.02565	0.01750	0.04352	0.01013
30	**27.857618**	0.04266	0.02844	0.01203	0.02801	0.02312	0.04437	0.00876
31	**32**	0.07115	0.03509	0.01323	0.03151	0.02451	0.04686	0.01099
32	**36.758347**	0.08277	0.05724	0.01266	0.04408	0.02194	0.04664	0.02097
33	**42.224253**	0.09513	0.06168	0.02287	0.05513	0.03466	0.05273	0.03401
34	**48.50293**	0.11894	0.08222	0.04222	0.06886	0.04719	0.07628	0.04080
35	**55.715236**	0.12697	0.10494	0.05569	0.08538	0.06350	0.10060	0.05780
36	**64**	0.13809	0.15711	0.09220	0.09948	0.09000	0.19058	0.07716
37	**73.516695**	0.23375	0.16898	0.11349	0.16064	0.13139	0.23623	0.11341
38	**84.448506**	0.23042	0.27759	0.25335	0.22990	0.15888	0.37945	0.18183
39	**97.00586**	0.35447	0.40543	0.28010	0.26932	0.25856	0.47668	0.20632
40	**111.43047**	0.73158	0.69839	0.56814	0.39289	0.42572	0.75462	0.37528
41	**128**	1.87628	1.08929	1.29214	0.76244	0.85349	1.09698	0.62378
42	**147.03339**	7.86524	4.04267	3.53165	3.36354	3.62174	2.68793	2.09142
43	**168.89701**	20.16011	12.56489	11.03022	11.09268	12.09538	7.07446	7.37140

44	**194.01172**	27.75303	23.68459	19.41368	20.54783	22.48602	15.31545	17.76166
45	**222.86094**	21.32721	25.45662	20.72447	25.43024	23.53522	20.47954	22.09978
46	**256**	10.69787	17.58349	17.75543	21.03463	16.25198	20.09344	19.33393
47	**294.06678**	5.26550	9.26495	12.31563	11.52228	10.54076	15.30876	16.08176
48	**337.79403**	1.97905	3.63251	8.33635	4.26374	5.98215	10.47825	7.78723
49	**388.02344**			3.93004		3.05343	4.33444	3.21279
50	**445.72189**							2.31992
51	**512**							
	% <16µm	0.65796	0.49523	0.16176	0.40523	0.22764	0.55803	0.14724
	% <64µm	1.38740	0.97347	0.36311	0.83038	0.51529	1.09319	0.36230
	d50	184.30	200.74	212.19	207.91	205.49	223.22	221.21
	modal	194.01	222.86	222.86	222.86	222.86	222.86	222.86

Table 7. Continued.

ID#		**3130641**	**3130642**	**3130643**	**3130644**	**3130645**	**3130646**
Core ID#		314520	314520	314520	314520	314520	314520
Station		THE250	THE250	THE250	THE250	THE250	THE250
Depth (cm)		14-16	16-18	18-20	20-22	22-24	24-26
Channel	**Diameter**						
4	**0.7579**	0.00452	0.00511	0.00652	0.01120	0.01738	0.00960
5	**0.8705506**	0.00474	0.00536	0.00692	0.01192	0.01854	0.01008
6	**1**	0.00502	0.00599	0.00719	0.01280	0.01954	0.01106
7	**1.1486984**	0.00545	0.00684	0.00766	0.01385	0.02083	0.01190
8	**1.3195079**	0.00568	0.00686	0.00791	0.01448	0.02140	0.01210
9	**1.5157166**	0.00578	0.00699	0.00841	0.01515	0.02274	0.01221
10	**1.7411011**	0.00608	0.00694	0.00847	0.01508	0.02304	0.01258
11	**2**	0.00610	0.00721	0.00869	0.01611	0.02402	0.01283
12	**2.2973967**	0.00624	0.00713	0.00908	0.01592	0.02382	0.01297
13	**2.6390158**	0.00626	0.00765	0.00903	0.01616	0.02472	0.01377
14	**3.0314331**	0.00625	0.00741	0.00967	0.01580	0.02427	0.01313
15	**3.4822023**	0.00564	0.00674	0.00838	0.01513	0.02679	0.01295
16	**4**	0.00587	0.00833	0.00993	0.01544	0.02560	0.01539
17	**4.5947934**	0.00593	0.00832	0.00917	0.01673	0.02790	0.01264
18	**5.2780316**	0.00561	0.00877	0.01023	0.01814	0.02701	0.01336
19	**6.0628663**	0.00592	0.00944	0.01075	0.01870	0.02829	0.01459
20	**6.9644045**	0.00616	0.00991	0.01130	0.01979	0.03010	0.01524
21	**8**	0.00640	0.01091	0.01192	0.02051	0.03250	0.01563
22	**9.1895868**	0.00662	0.01098	0.01226	0.02194	0.03356	0.01655
23	**10.556063**	0.00695	0.01217	0.01329	0.02269	0.03643	0.01780
24	**12.125733**	0.00682	0.01287	0.01339	0.02391	0.03758	0.01895
25	**13.928809**	0.00690	0.01348	0.01381	0.02388	0.03695	0.01925
26	**16**	0.00698	0.01269	0.01326	0.02491	0.03727	0.02027
27	**18.379174**	0.00801	0.01301	0.01439	0.02559	0.03955	0.01991
28	**21.112127**	0.00671	0.01347	0.01227	0.02477	0.04058	0.02213
29	**24.251465**	0.00752	0.01333	0.01255	0.02475	0.03554	0.01838
30	**27.857618**	0.00860	0.01547	0.01444	0.02872	0.03894	0.01887
31	**32**	0.01516	0.02031	0.01928	0.02945	0.03717	0.02432
32	**36.758347**	0.02586	0.03211	0.04549	0.02997	0.03891	0.03931
33	**42.224253**	0.02944	0.04591	0.03881	0.04501	0.04125	0.04446
34	**48.50293**	0.03657	0.05172	0.04610	0.05883	0.06250	0.05367
35	**55.715236**	0.06186	0.06331	0.06850	0.06763	0.07463	0.08254
36	**64**	0.07595	0.10278	0.08424	0.09883	0.11018	0.09197
37	**73.516695**	0.11097	0.14923	0.11598	0.13475	0.17128	0.13327
38	**84.448506**	0.15523	0.12712	0.19255	0.18967	0.22019	0.20416

39	**97.00586**	0.21901	0.25746	0.24121	0.28280	0.33101	0.29127
40	**111.43047**	0.42853	0.37344	0.41754	0.36354	0.45022	0.67094
41	**128**	0.51432	0.74192	0.61701	0.98094	0.73592	1.35140
42	**147.03339**	1.68804	1.98454	2.73343	3.08991	2.44760	3.75563
43	**168.89701**	6.18710	7.59151	8.67366	10.82297	8.84796	12.63002
44	**194.01172**	13.35869	13.55706	17.85126	22.59433	16.50394	17.47637
45	**222.86094**	19.53289	20.84447	21.94088	25.93169	21.16725	20.66416
46	**256**	19.98174	20.54247	20.32199	18.79296	17.93080	16.46043
47	**294.06678**	15.92270	15.59907	13.82643	8.84560	13.00103	11.81568
48	**337.79403**	9.87552	8.99254	8.25766	5.34384	8.58330	7.39073
49	**388.02344**	5.56806	4.89705	4.22709	1.79320	5.16357	3.42209
50	**445.72189**	4.54854	3.77258			3.30637	2.99345
51	**512**	1.49506					
52	**588.13356**						
53	**675.58805**						
	% <16µm	0.13094	0.18541	0.21398	0.37534	0.58303	0.30459
	% <64µm	0.33764	0.46675	0.49908	0.73496	1.02936	0.64844
	d50	235.12	229.00	218.43	205.92	220.11	211.81
	modal	256.00	222.86	222.86	222.86	222.86	337.79

Table 8. Inorganic grain size spectra: Station THE250, core 314521, collected from Thebaud, 2007.

ID#		**3130691**	**3130692**	**3130693**	**3130694**	**3130695**	**3130696**
Core ID#		314521	314521	314521	314521	314521	314521
Station		THE250	THE250	THE250	THE250	THE250	THE250
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.03593	0.00850	0.00869	0.00685	0.00511	0.01055
5	**0.8705506**	0.03846	0.00925	0.00948	0.00727	0.00539	0.01116
6	**1**	0.04012	0.01015	0.01015	0.00766	0.00588	0.01182
7	**1.1486984**	0.04294	0.01052	0.01070	0.00793	0.00620	0.01225
8	**1.3195079**	0.04425	0.01097	0.01121	0.00835	0.00654	0.01280
9	**1.5157166**	0.04607	0.01144	0.01156	0.00883	0.00664	0.01340
10	**1.7411011**	0.04491	0.01110	0.01143	0.00940	0.00694	0.01341
11	**2**	0.04516	0.01138	0.01185	0.00973	0.00720	0.01369
12	**2.2973967**	0.04445	0.01114	0.01191	0.01005	0.00701	0.01360
13	**2.6390158**	0.04189	0.01141	0.01210	0.01015	0.00680	0.01302
14	**3.0314331**	0.04404	0.01143	0.01210	0.01032	0.00726	0.01324
15	**3.4822023**	0.03554	0.01102	0.01252	0.01109	0.00742	0.01188
16	**4**	0.04194	0.01118	0.01322	0.00994	0.00707	0.01277
17	**4.5947934**	0.04210	0.01137	0.01199	0.01007	0.00806	0.01306
18	**5.2780316**	0.04603	0.01188	0.01475	0.01158	0.00826	0.01320
19	**6.0628663**	0.04855	0.01265	0.01536	0.01251	0.00885	0.01359
20	**6.9644045**	0.05053	0.01331	0.01609	0.01290	0.00911	0.01429
21	**8**	0.05331	0.01377	0.01654	0.01366	0.00988	0.01422
22	**9.1895868**	0.05621	0.01534	0.01826	0.01386	0.01022	0.01541
23	**10.556063**	0.05813	0.01566	0.01886	0.01484	0.01122	0.01591
24	**12.125733**	0.06319	0.01727	0.02099	0.01591	0.01169	0.01637
25	**13.928809**	0.06655	0.01815	0.02061	0.01646	0.01218	0.01762
26	**16**	0.06209	0.01949	0.02096	0.01737	0.01284	0.01969
27	**18.379174**	0.08253	0.01943	0.02212	0.01730	0.01271	0.01842
28	**21.112127**	0.08455	0.01851	0.02195	0.01857	0.01321	0.01847
29	**24.251465**	0.06976	0.01985	0.02678	0.02087	0.01287	0.02040
30	**27.857618**	0.08042	0.02162	0.02566	0.02290	0.01644	0.01966

31	**32**	0.08168	0.03153	0.03075	0.03110	0.01666	0.02624
32	**36.758347**	0.09367	0.05376	0.03723	0.04145	0.01726	0.03830
33	**42.224253**	0.13019	0.05749	0.04907	0.07087	0.02650	0.04430
34	**48.50293**	0.10563	0.08045	0.05429	0.10468	0.04176	0.05565
35	**55.715236**	0.17183	0.10507	0.07307	0.13779	0.05387	0.08391
36	**64**	0.21828	0.13300	0.09974	0.18735	0.09207	0.13848
37	**73.516695**	0.31697	0.16082	0.15275	0.25951	0.11071	0.16242
38	**84.448506**	0.39755	0.24045	0.20098	0.46451	0.16725	0.26855
39	**97.00586**	0.47977	0.34084	0.25992	0.47824	0.19442	0.32587
40	**111.43047**	0.63854	0.42869	0.40376	0.80264	0.28785	0.52006
41	**128**	1.38167	1.44698	0.95802	1.12509	0.65125	1.02980
42	**147.03339**	4.18822	5.26393	4.06099	3.14193	1.93966	3.07671
43	**168.89701**	16.38140	16.38433	12.93876	8.26978	8.75539	10.01322
44	**194.01172**	25.61089	27.17483	24.47246	17.80137	19.84656	17.97001
45	**222.86094**	24.78212	23.62865	23.05468	21.61300	23.16228	19.93432
46	**256**	17.51943	14.41443	18.60127	19.39460	19.59082	17.62922
47	**294.06678**	6.09250	6.62050	9.50392	14.25257	12.89794	14.26183
48	**337.79403**		1.70224	4.63049	8.35918	7.97884	7.58248
49	**388.02344**		1.36424		3.12795	3.92592	4.20291
50	**445.72189**						2.24183
51	**512**						
	% <16µm	1.03031	0.26888	0.30037	0.23938	0.17491	0.29725
	% <64µm	1.99266	0.69607	0.66226	0.72227	0.39904	0.64229
	d50	192.44	191.91	201.26	216.37	215.88	216.95
	modal	194.01	194.01	194.01	222.86	222.86	222.86

Table 8. Continued.

ID#		**3130697**	**3130701**	**3130702**	**3130703**	**3130704**	**3130705**
Core ID#		314521	314521	314521	314521	314521	314521
Station		THE250	THE250	THE250	THE250	THE250	THE250
Depth (cm)		12-14	14-16	16-18	18-20	20-22	22-24
Channel	**Diameter**						
4	**0.7579**	0.01602	0.01315	0.02319	0.01415	0.01998	0.02609
5	**0.8705506**	0.01768	0.01390	0.02471	0.01507	0.02142	0.02705
6	**1**	0.01922	0.01458	0.02901	0.01568	0.02273	0.02802
7	**1.1486984**	0.02016	0.01560	0.03258	0.01575	0.02414	0.02837
8	**1.3195079**	0.02096	0.01617	0.03022	0.01610	0.02455	0.02916
9	**1.5157166**	0.02165	0.01725	0.03061	0.01641	0.02542	0.02911
10	**1.7411011**	0.02183	0.01762	0.03100	0.01699	0.02513	0.02853
11	**2**	0.02169	0.01870	0.03265	0.01705	0.02529	0.02919
12	**2.2973967**	0.02035	0.01942	0.03307	0.01699	0.02669	0.02936
13	**2.6390158**	0.02136	0.02083	0.03223	0.01733	0.02654	0.03008
14	**3.0314331**	0.02065	0.01885	0.03268	0.01715	0.02693	0.02816
15	**3.4822023**	0.01861	0.02055	0.03200	0.01758	0.02401	0.02514
16	**4**	0.02140	0.02141	0.03287	0.01870	0.02820	0.02752
17	**4.5947934**	0.02342	0.01912	0.03680	0.01841	0.02752	0.02628
18	**5.2780316**	0.02302	0.02125	0.03724	0.02080	0.02809	0.02767
19	**6.0628663**	0.02393	0.02273	0.03913	0.02236	0.03039	0.02959
20	**6.9644045**	0.02348	0.02368	0.04233	0.02389	0.03170	0.03075
21	**8**	0.02496	0.02523	0.04345	0.02522	0.03415	0.03190
22	**9.1895868**	0.02618	0.02674	0.04845	0.02640	0.03539	0.03436
23	**10.556063**	0.02620	0.02760	0.04902	0.02748	0.03620	0.03410
24	**12.125733**	0.02767	0.02961	0.05248	0.03154	0.03799	0.03595
25	**13.928809**	0.02778	0.03132	0.05558	0.03236	0.04080	0.03783
26	**16**	0.02952	0.03061	0.05563	0.03003	0.04150	0.03732
27	**18.379174**	0.02936	0.03198	0.05544	0.03361	0.04416	0.03877

28	**21.112127**	0.03297	0.02609	0.05167	0.03312	0.04210	0.03788
29	**24.251465**	0.03134	0.03704	0.05967	0.03353	0.04925	0.03896
30	**27.857618**	0.02727	0.03800	0.04823	0.03269	0.03981	0.03290
31	**32**	0.02932	0.03699	0.05107	0.03888	0.04194	0.03438
32	**36.758347**	0.03119	0.04138	0.04846	0.04575	0.05698	0.03540
33	**42.224253**	0.04182	0.06278	0.05227	0.06519	0.07343	0.05124
34	**48.50293**	0.04818	0.07198	0.06542	0.08588	0.09186	0.06387
35	**55.715236**	0.08116	0.08059	0.08003	0.09137	0.12308	0.09511
36	**64**	0.09756	0.12353	0.11419	0.13074	0.15510	0.14101
37	**73.516695**	0.16791	0.17828	0.15303	0.13844	0.22712	0.16394
38	**84.448506**	0.19148	0.21083	0.16254	0.18667	0.27041	0.22275
39	**97.00586**	0.33362	0.26144	0.27966	0.30790	0.40712	0.31714
40	**111.43047**	0.47032	0.54388	0.51585	0.47026	0.55896	0.60432
41	**128**	0.99023	1.31456	1.09358	0.91104	1.22719	1.42371
42	**147.03339**	3.81916	4.53476	3.56642	3.41851	4.99105	3.67898
43	**168.89701**	12.66744	14.25033	12.47142	10.94492	15.96163	12.90383
44	**194.01172**	21.96174	25.95732	19.57435	20.36704	20.98478	21.16570
45	**222.86094**	20.46931	22.31275	21.50773	21.16062	20.64595	20.61114
46	**256**	15.69611	16.97977	17.97119	18.94945	14.91222	15.73534
47	**294.06678**	9.67118	8.28452	10.06388	11.50668	9.41541	9.89209
48	**337.79403**	6.94237	4.13529	6.39384	6.91786	5.42651	7.20156
49	**388.02344**	3.83378		4.76315	3.65639	3.58921	4.81845
50	**445.72189**	1.81746					
51	**512**						
	% <16µm	0.48823	0.45531	0.80129	0.44342	0.62324	0.65419
	% <64µm	0.87034	0.91276	1.36917	0.93349	1.22735	1.12003
	d50	205.89	196.23	208.36	210.63	199.59	205.57
	modal	194.01	194.01	222.86	222.86	194.01	194.01

Table 9. Inorganic grain size spectra: Station THE250, core 314523, collected from Thebaud, 2007.

ID#		**3130771**	**3130772**	**3130773**	**3130774**	**3130775**	**3130776**
Core ID#		314523	314523	314523	314523	314523	314523
Station		THE250	THE250	THE250	THE250	THE250	THE250
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.00696	0.01137	0.01374	0.01166	0.01331	0.01366
5	**0.8705506**	0.00746	0.01224	0.01459	0.01211	0.01444	0.01433
6	**1**	0.00832	0.01291	0.01609	0.01283	0.01573	0.01508
7	**1.1486984**	0.00928	0.01387	0.01739	0.01292	0.01620	0.01569
8	**1.3195079**	0.00950	0.01447	0.01824	0.01360	0.01743	0.01592
9	**1.5157166**	0.00971	0.01545	0.01872	0.01350	0.01786	0.01657
10	**1.7411011**	0.01019	0.01534	0.01981	0.01418	0.01791	0.01697
11	**2**	0.01047	0.01598	0.02000	0.01367	0.01887	0.01676
12	**2.2973967**	0.01067	0.01634	0.02035	0.01484	0.01943	0.01649
13	**2.6390158**	0.01103	0.01750	0.02093	0.01478	0.01881	0.01637
14	**3.0314331**	0.01170	0.01765	0.01958	0.01551	0.01908	0.01625
15	**3.4822023**	0.01279	0.01593	0.01836	0.01430	0.02151	0.01431
16	**4**	0.01150	0.01738	0.02053	0.01641	0.02025	0.01443
17	**4.5947934**	0.01284	0.01645	0.01961	0.01621	0.01767	0.01376
18	**5.2780316**	0.01361	0.01696	0.02060	0.01699	0.02042	0.01508
19	**6.0628663**	0.01454	0.01819	0.02136	0.01808	0.02156	0.01554
20	**6.9644045**	0.01516	0.01895	0.02174	0.01926	0.02269	0.01614
21	**8**	0.01675	0.02006	0.02268	0.02029	0.02350	0.01735

22	**9.1895868**	0.01813	0.02098	0.02361	0.02241	0.02542	0.01801
23	**10.556063**	0.01879	0.02183	0.02534	0.02394	0.02659	0.01910
24	**12.125733**	0.02109	0.02393	0.02701	0.02522	0.02770	0.02060
25	**13.928809**	0.02174	0.02410	0.02778	0.02628	0.03017	0.02111
26	**16**	0.02156	0.02735	0.02899	0.02635	0.03139	0.02128
27	**18.379174**	0.02689	0.02456	0.02807	0.02518	0.03070	0.02340
28	**21.112127**	0.02587	0.02727	0.03305	0.02885	0.03172	0.02433
29	**24.251465**	0.02858	0.02839	0.02697	0.03283	0.03128	0.02345
30	**27.857618**	0.03031	0.03365	0.03780	0.03497	0.03170	0.02694
31	**32**	0.03376	0.03742	0.03934	0.03721	0.03255	0.03257
32	**36.758347**	0.04950	0.05002	0.04915	0.04978	0.04480	0.04091
33	**42.224253**	0.04385	0.06337	0.06047	0.05512	0.04955	0.05358
34	**48.50293**	0.06210	0.06133	0.06733	0.06258	0.06221	0.06560
35	**55.715236**	0.06551	0.07890	0.07184	0.07069	0.03808	0.08265
36	**64**	0.08791	0.11248	0.09752	0.09593	0.06748	0.11145
37	**73.516695**	0.11856	0.13231	0.14868	0.13329	0.08648	0.16008
38	**84.448506**	0.15869	0.19322	0.13078	0.18764	0.13563	0.16664
39	**97.00586**	0.18864	0.23106	0.18329	0.26697	0.23475	0.26400
40	**111.43047**	0.35301	0.39098	0.31959	0.25771	0.25696	0.40651
41	**128**	0.81412	0.79209	1.00075	0.62378	0.91661	1.06380
42	**147.03339**	3.96792	3.00225	3.93025	2.32160	4.10553	3.91909
43	**168.89701**	12.37191	10.54372	15.18079	9.70722	13.47610	12.92160
44	**194.01172**	23.62966	20.58063	24.63774	21.64473	24.57785	24.43444
45	**222.86094**	20.15583	23.19916	22.79898	23.78327	23.15351	20.81192
46	**256**	15.06463	17.66693	15.65244	19.74254	16.97083	16.89525
47	**294.06678**	11.50148	11.79330	9.96553	10.62106	9.91008	10.64503
48	**337.79403**	6.45406	7.46246	5.06257	6.11775	5.27765	5.18596
49	**388.02344**	4.46341	3.08929		3.70393		2.25999
50	**445.72189**						
	% <16µm	0.28223	0.37786	0.44807	0.36901	0.44655	0.35952
	% <64µm	0.67017	0.81013	0.89109	0.79259	0.83054	0.75423
	d50	204.95	210.44	198.41	210.96	200.63	202.05
	modal	194.01	222.86	194.01	222.86	194.01	194.01

Table 9. Continued.

ID#		**3130777**	**3130781**	**3130782**	**3130783**	**3130784**
Core ID#		314523	314523	314523	314523	314523
Station		THE250	THE250	THE250	THE250	THE250
Depth (cm)		12-14	14-16	16-18	18-20	20-22
Channel	**Diameter**					
4	**0.7579**	0.03097	0.02032	0.02974	0.03300	0.02170
5	**0.8705506**	0.03281	0.02151	0.03155	0.03437	0.02356
6	**1**	0.03541	0.02516	0.03473	0.03559	0.02498
7	**1.1486984**	0.03773	0.03305	0.03658	0.03857	0.02615
8	**1.3195079**	0.03913	0.02875	0.03868	0.03830	0.02832
9	**1.5157166**	0.04096	0.02512	0.04069	0.03993	0.02880
10	**1.7411011**	0.04278	0.02609	0.04234	0.03987	0.02997
11	**2**	0.04278	0.02675	0.04220	0.04018	0.03088
12	**2.2973967**	0.04314	0.02729	0.04406	0.03843	0.02906
13	**2.6390158**	0.04230	0.02749	0.04411	0.03892	0.02993
14	**3.0314331**	0.04155	0.02836	0.04516	0.03682	0.02831
15	**3.4822023**	0.04232	0.02476	0.04122	0.03358	0.02846
16	**4**	0.04109	0.03054	0.04484	0.03886	0.03398
17	**4.5947934**	0.03948	0.02745	0.04670	0.03623	0.03334
18	**5.2780316**	0.04056	0.03181	0.04932	0.03838	0.03419
19	**6.0628663**	0.04358	0.03393	0.05207	0.03996	0.03585

20	**6.9644045**	0.04594	0.03599	0.05598	0.04178	0.03762
21	**8**	0.04766	0.03933	0.05936	0.04244	0.04008
22	**9.1895868**	0.05089	0.04141	0.06458	0.04346	0.04114
23	**10.556063**	0.05135	0.04346	0.06903	0.04604	0.04521
24	**12.125733**	0.05501	0.04639	0.07085	0.04508	0.04386
25	**13.928809**	0.05737	0.04899	0.07781	0.04991	0.04699
26	**16**	0.06327	0.05037	0.07948	0.04775	0.04944
27	**18.379174**	0.06666	0.05235	0.08248	0.05284	0.04820
28	**21.112127**	0.06438	0.05262	0.08988	0.04763	0.04750
29	**24.251465**	0.07037	0.05444	0.09274	0.04013	0.04340
30	**27.857618**	0.06908	0.05156	0.09300	0.04513	0.03622
31	**32**	0.06289	0.05773	0.08818	0.05896	0.03742
32	**36.758347**	0.06505	0.08464	0.09336	0.06955	0.03800
33	**42.224253**	0.06672	0.08956	0.09936	0.07236	0.04137
34	**48.50293**	0.07146	0.10145	0.12326	0.08130	0.05066
35	**55.715236**	0.07485	0.13397	0.11523	0.08798	0.05621
36	**64**	0.02904	0.14941	0.12031	0.14197	0.05712
37	**73.516695**	0.13502	0.16956	0.13843	0.13534	0.07564
38	**84.448506**	0.08866	0.26881	0.27300	0.24277	0.12876
39	**97.00586**	0.16637	0.38971	0.16798	0.32723	0.14498
40	**111.43047**	0.27202	0.55701	0.57014	0.47515	0.21442
41	**128**	0.57335	1.07208	1.46972	1.03204	0.51591
42	**147.03339**	2.76468	4.88339	5.85275	4.51581	2.08191
43	**168.89701**	14.81019	14.68174	18.29143	16.60353	8.72541
44	**194.01172**	23.73276	24.21214	26.54975	25.44269	19.54871
45	**222.86094**	27.51859	23.55005	23.30823	22.19456	20.89904
46	**256**	16.72759	14.94672	11.96675	12.99260	17.05326
47	**294.06678**	9.21332	9.33909	6.27088	7.83793	12.14969
48	**337.79403**	2.34884	4.35767	3.00208	3.47509	7.82250
49	**388.02344**				3.10996	5.95732
50	**445.72189**					3.45453
51	**512**					
	% <16µm	0.94483	0.69395	1.06159	0.86970	0.72238
	% <64µm	1.61956	1.42262	2.01855	1.47332	1.17080
	d50	200.10	196.70	188.85	193.63	217.94
	modal	222.86	194.01	194.01	194.01	222.86

Table 9. Continued.

ID#		**3130785**	**3130786**	**3130787**	**3130791**	**3130792**
Core ID#		314523	314523	314523	314523	314523
Station		THE250	THE250	THE250	THE250	THE250
Depth (cm)		22-24	24-26	26-28	28-30	30-32
Channel	**Diameter**					
4	**0.7579**	0.03710	0.02065	0.02387	0.02243	0.01264
5	**0.8705506**	0.03765	0.02209	0.02529	0.02489	0.01400
6	**1**	0.03889	0.02391	0.02677	0.02759	0.01479
7	**1.1486984**	0.04086	0.02551	0.02891	0.03026	0.01720
8	**1.3195079**	0.04172	0.02712	0.03104	0.03410	0.01836
9	**1.5157166**	0.04320	0.02713	0.03283	0.03733	0.02012
10	**1.7411011**	0.04202	0.02958	0.03494	0.04063	0.02181
11	**2**	0.04073	0.02984	0.03822	0.04440	0.02257
12	**2.2973967**	0.04277	0.02993	0.04019	0.04688	0.02464
13	**2.6390158**	0.03990	0.03250	0.04335	0.05220	0.02790
14	**3.0314331**	0.04023	0.03109	0.04636	0.05950	0.02914
15	**3.4822023**	0.03836	0.03103	0.04288	0.05949	0.02747
16	**4**	0.03820	0.03543	0.05727	0.07819	0.03791

17	**4.5947934**	0.03786	0.03904	0.05339	0.07662	0.04238
18	**5.2780316**	0.03804	0.04205	0.06949	0.08761	0.04666
19	**6.0628663**	0.03923	0.04553	0.07645	0.09420	0.05174
20	**6.9644045**	0.04071	0.05032	0.08334	0.10512	0.05502
21	**8**	0.04261	0.05568	0.09198	0.10834	0.06227
22	**9.1895868**	0.04487	0.05727	0.09992	0.11700	0.06401
23	**10.556063**	0.04667	0.05941	0.10733	0.12326	0.06899
24	**12.125733**	0.04904	0.06142	0.11527	0.12632	0.07257
25	**13.928809**	0.04986	0.06505	0.12259	0.12520	0.07264
26	**16**	0.05180	0.06124	0.11714	0.11534	0.06975
27	**18.379174**	0.04499	0.05852	0.11456	0.11965	0.06404
28	**21.112127**	0.04369	0.05423	0.11160	0.09615	0.05552
29	**24.251465**	0.04744	0.05135	0.10692	0.08535	0.05712
30	**27.857618**	0.04350	0.05362	0.09630	0.08439	0.05942
31	**32**	0.04311	0.05120	0.08997	0.07651	0.06943
32	**36.758347**	0.05243	0.07175	0.09356	0.07839	0.07470
33	**42.224253**	0.06707	0.07461	0.09839	0.09299	0.08629
34	**48.50293**	0.07535	0.09944	0.11354	0.08799	0.09074
35	**55.715236**	0.08812	0.07424	0.10776	0.08451	0.08571
36	**64**	0.13380	0.10776	0.13599	0.08285	0.13989
37	**73.516695**	0.15799	0.10050	0.13517	0.10495	0.16420
38	**84.448506**	0.25176	0.17410	0.19328	0.10282	0.22360
39	**97.00586**	0.21417	0.14822	0.26396	0.15571	0.29999
40	**111.43047**	0.37379	0.26373	0.31124	0.26051	0.38956
41	**128**	0.72290	0.77476	0.40937	0.64190	0.54404
42	**147.03339**	2.62348	3.19115	1.50463	1.56623	1.02517
43	**168.89701**	9.70087	10.72977	5.34351	5.19349	3.23526
44	**194.01172**	21.14658	20.19442	11.61623	10.43310	6.88804
45	**222.86094**	22.69539	20.08398	17.77730	11.78741	10.14577
46	**256**	18.14465	17.23619	17.03595	12.67494	14.09718
47	**294.06678**	11.36552	12.95529	16.72198	12.34033	15.99288
48	**337.79403**	6.27133	7.09839	12.53242	8.39175	14.27821
49	**388.02344**	4.72975	5.44995	8.78683	13.16535	10.49883
50	**445.72189**			4.89067	13.47303	11.70789
51	**512**				7.18281	8.83197
52	**588.13356**					
	% <16µm	0.91051	0.84159	1.29170	1.52154	0.82481
	% <64µm	1.46801	1.49178	2.34146	2.44282	1.53753
	d50	210.80	212.43	242.25	270.05	282.92

Table 10. Inorganic grain size spectra: Station THE500, core 314516, collected from Thebaud, 2007.

ID#		**3130731**	**3130732**	**3130733**	**3130734**	**3130735**	**3130736**
Core ID#		314516	314516	314516	314516	314516	314516
Station		THE500	THE500	THE500	THE500	THE500	THE500
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.00827	0.01807	0.00681	0.00935	0.01039	0.01229
5	**0.8705506**	0.00858	0.01850	0.00704	0.00967	0.01091	0.01268
6	**1**	0.00949	0.01995	0.00750	0.01012	0.01176	0.01326
7	**1.1486984**	0.00998	0.02359	0.00791	0.01045	0.01211	0.01339
8	**1.3195079**	0.01030	0.02053	0.00819	0.01033	0.01263	0.01351
9	**1.5157166**	0.01050	0.01965	0.00823	0.01038	0.01298	0.01297

10	**1.7411011**	0.01137	0.01949	0.00832	0.01025	0.01313	0.01250
11	**2**	0.01066	0.01816	0.00886	0.00979	0.01271	0.01223
12	**2.2973967**	0.01118	0.01734	0.00902	0.00988	0.01259	0.01283
13	**2.6390158**	0.01048	0.01738	0.00903	0.01023	0.01248	0.01317
14	**3.0314331**	0.01156	0.01737	0.00842	0.00998	0.01249	0.01218
15	**3.4822023**	0.01146	0.01581	0.00901	0.00886	0.01141	0.01126
16	**4**	0.01120	0.01573	0.00829	0.00997	0.01108	0.01102
17	**4.5947934**	0.01103	0.01452	0.00940	0.00969	0.01048	0.01132
18	**5.2780316**	0.01058	0.01443	0.00958	0.00975	0.01020	0.01152
19	**6.0628663**	0.01139	0.01513	0.01017	0.00996	0.01071	0.01176
20	**6.9644045**	0.01171	0.01545	0.01049	0.01016	0.01088	0.01263
21	**8**	0.01244	0.01648	0.01086	0.01018	0.01107	0.01207
22	**9.1895868**	0.01269	0.01673	0.01151	0.01093	0.01153	0.01354
23	**10.556063**	0.01386	0.01793	0.01185	0.01109	0.01207	0.01409
24	**12.125733**	0.01345	0.01802	0.01311	0.01097	0.01273	0.01428
25	**13.928809**	0.01451	0.01878	0.01376	0.01205	0.01369	0.01415
26	**16**	0.01665	0.01854	0.01552	0.01099	0.01370	0.01606
27	**18.379174**	0.01643	0.01698	0.01538	0.01253	0.01398	0.01520
28	**21.112127**	0.01609	0.01598	0.01528	0.01090	0.01487	0.01455
29	**24.251465**	0.01598	0.01657	0.01938	0.01094	0.01731	0.01241
30	**27.857618**	0.02147	0.02024	0.01945	0.01306	0.01952	0.01628
31	**32**	0.01980	0.01659	0.02391	0.02322	0.02621	0.02164
32	**36.758347**	0.03354	0.03472	0.02968	0.03505	0.03399	0.03251
33	**42.224253**	0.03670	0.03884	0.03726	0.04495	0.04931	0.03933
34	**48.50293**	0.05730	0.05383	0.05731	0.05904	0.06667	0.04092
35	**55.715236**	0.06941	0.06853	0.07543	0.07753	0.08156	0.07049
36	**64**	0.10533	0.10204	0.13421	0.14939	0.13010	0.11864
37	**73.516695**	0.15118	0.13180	0.15611	0.20752	0.16149	0.14559
38	**84.448506**	0.20550	0.22783	0.29465	0.32631	0.26230	0.27907
39	**97.00586**	0.34908	0.45825	0.45168	0.67018	0.45796	0.46626
40	**111.43047**	0.51894	0.61065	0.90410	0.97686	0.71986	0.87924
41	**128**	1.31107	1.90427	2.07419	2.77223	1.59933	1.56727
42	**147.03339**	4.02377	5.04631	7.68560	8.43450	5.37690	5.69098
43	**168.89701**	12.41084	16.15156	20.21860	23.75838	15.61138	15.13855
44	**194.01172**	22.11293	24.26810	25.16799	28.19543	21.93474	20.71555
45	**222.86094**	19.38570	18.83597	19.31219	19.41453	19.50606	21.63959
46	**256**	15.68517	13.34626	12.06302	10.92712	13.83283	14.90566
47	**294.06678**	10.00760	10.40537	6.44322	3.64531	9.85348	8.12202
48	**337.79403**	8.87824	5.76207	2.97902		4.27218	5.26886
49	**388.02344**	4.30459	2.05968	1.59945		3.74309	4.50468
50	**445.72189**					1.94114	
51	**512**						
52	**588.13356**						
53	**675.58805**						
	% <16µm	0.24669	0.38903	0.20737	0.22403	0.26003	0.27864
	% <64µm	0.55006	0.68984	0.51596	0.52225	0.59715	0.55803
	d50	206.31	194.64	186.42	179.75	198.67	199.93
	modal	194.01	194.01	194.01	194.01	194.01	222.86

Table 10. Continued.

ID#		**3130737**	**3130741**	**3130742**	**3130743**	**3130744**	**3130745**
Core ID#		314516	314516	314516	314516	314516	314516
Station		THE500	THE500	THE500	THE500	THE500	THE500
Depth (cm)		12-14	14-16	16-18	18-20	20-22	22-24
Channel	**Diameter**						

4	**0.7579**	0.01052	0.03230	0.04439	0.02230	0.01419	0.02130
5	**0.8705506**	0.01141	0.03384	0.04727	0.02392	0.01483	0.02260
6	**1**	0.01248	0.03513	0.05625	0.02533	0.01582	0.02390
7	**1.1486984**	0.01347	0.03604	0.07371	0.02597	0.01637	0.02467
8	**1.3195079**	0.01393	0.03726	0.06481	0.02730	0.01697	0.02480
9	**1.5157166**	0.01413	0.03731	0.05794	0.02750	0.01674	0.02465
10	**1.7411011**	0.01488	0.03710	0.05394	0.02690	0.01720	0.02483
11	**2**	0.01569	0.03767	0.05698	0.02664	0.01708	0.02436
12	**2.2973967**	0.01551	0.03550	0.05444	0.02590	0.01666	0.02395
13	**2.6390158**	0.01520	0.03564	0.05440	0.02657	0.01713	0.02435
14	**3.0314331**	0.01397	0.03505	0.05774	0.02768	0.01652	0.02352
15	**3.4822023**	0.01432	0.03469	0.05334	0.02573	0.01450	0.02082
16	**4**	0.01574	0.03202	0.04932	0.02605	0.01673	0.02467
17	**4.5947934**	0.01409	0.03160	0.05400	0.02543	0.01420	0.02134
18	**5.2780316**	0.01446	0.03102	0.05469	0.02632	0.01448	0.02293
19	**6.0628663**	0.01493	0.03467	0.05778	0.02728	0.01480	0.02365
20	**6.9644045**	0.01507	0.03510	0.05988	0.02940	0.01503	0.02427
21	**8**	0.01571	0.03612	0.06438	0.03169	0.01665	0.02483
22	**9.1895868**	0.01636	0.03638	0.06778	0.03438	0.01677	0.02481
23	**10.556063**	0.01686	0.04095	0.07207	0.03653	0.01832	0.02425
24	**12.125733**	0.01883	0.03995	0.07392	0.03785	0.01938	0.02762
25	**13.928809**	0.01867	0.04521	0.08042	0.04058	0.02005	0.02907
26	**16**	0.02037	0.04530	0.08103	0.04248	0.02250	0.02701
27	**18.379174**	0.02081	0.04473	0.08072	0.04128	0.02394	0.02958
28	**21.112127**	0.02052	0.04464	0.07131	0.03876	0.02519	0.02931
29	**24.251465**	0.01910	0.05031	0.06448	0.04376	0.02440	0.03284
30	**27.857618**	0.01733	0.04990	0.06592	0.04214	0.02753	0.03554
31	**32**	0.01832	0.04413	0.07242	0.05724	0.02937	0.04852
32	**36.758347**	0.03290	0.05204	0.08144	0.08430	0.03810	0.06986
33	**42.224253**	0.03399	0.05558	0.10137	0.08801	0.05304	0.08411
34	**48.50293**	0.05422	0.07667	0.10947	0.09772	0.07891	0.09161
35	**55.715236**	0.05555	0.07924	0.12917	0.12348	0.10478	0.13322
36	**64**	0.12769	0.14133	0.16983	0.12641	0.13559	0.20707
37	**73.516695**	0.13217	0.16547	0.16603	0.21925	0.21312	0.22453
38	**84.448506**	0.22234	0.26021	0.29885	0.26637	0.27073	0.30927
39	**97.00586**	0.38420	0.49361	0.30666	0.43728	0.36255	0.47638
40	**111.43047**	0.54768	0.70110	0.50827	0.62896	0.74163	0.90250
41	**128**	1.25457	1.78435	0.78599	1.49802	1.72047	2.15894
42	**147.03339**	4.60982	5.51948	1.99182	5.22924	5.40135	9.47370
43	**168.89701**	14.21357	15.98935	9.43200	15.30130	15.52749	24.13252
44	**194.01172**	22.04995	20.90668	15.75422	21.81869	22.49372	26.66772
45	**222.86094**	20.62872	24.08473	18.10830	21.55459	19.02624	18.05356
46	**256**	14.47489	15.19627	18.26665	17.97922	13.04281	8.55814
47	**294.06678**	9.42491	8.03863	13.40387	10.29573	8.66522	5.72172
48	**337.79403**	6.20973	5.38571	8.06643	3.35855	4.82488	2.00116
49	**388.02344**	5.10043		6.20087		4.45497	
50	**445.72189**			4.37343		2.33105	
51	**512**						
	% <16µm	0.32622	0.79054	1.30946	0.62723	0.36043	0.53118
	% <64µm	0.61933	1.33307	2.16678	1.28640	0.78816	1.11278
	d50	202.18	197.25	223.43	198.28	197.57	179.26
	modal	194.01	222.86	256.00	194.01	194.01	194.01

Table 11. Inorganic grain size spectra: Station THE500, core 314517, collected from Thebaud, 2007.

ID#		3130671	3130673	3130675	3130677	3130682	3130684
Core ID#		314517	314517	314517	314517	314517	314517
Station		THE500	THE500	THE500	THE500	THE500	THE500
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22
Channel	Diameter						
4	0.7579	0.01213	0.01153	0.01033	0.00938	0.01059	0.00829
5	0.8705506	0.01316	0.01271	0.01120	0.01034	0.01171	0.00946
6	1	0.01663	0.01357	0.01225	0.01105	0.01305	0.01052
7	1.1486984	0.02038	0.01429	0.01285	0.01173	0.01387	0.01149
8	1.3195079	0.01761	0.01486	0.01322	0.01195	0.01427	0.01209
9	1.5157166	0.01663	0.01594	0.01358	0.01254	0.01513	0.01213
10	1.7411011	0.01662	0.01564	0.01441	0.01288	0.01497	0.01274
11	2	0.01761	0.01569	0.01431	0.01251	0.01485	0.01302
12	2.2973967	0.01700	0.01525	0.01400	0.01270	0.01447	0.01328
13	2.6390158	0.01677	0.01599	0.01453	0.01280	0.01545	0.01418
14	3.0314331	0.01708	0.01713	0.01395	0.01283	0.01429	0.01249
15	3.4822023	0.01693	0.01555	0.01420	0.01219	0.01424	0.01226
16	4	0.01554	0.01394	0.01418	0.01491	0.01521	0.01432
17	4.5947934	0.01553	0.01570	0.01603	0.01358	0.01427	0.01300
18	5.2780316	0.01468	0.01575	0.01723	0.01479	0.01589	0.01490
19	6.0628663	0.01513	0.01672	0.01868	0.01543	0.01673	0.01583
20	6.9644045	0.01628	0.01767	0.02037	0.01669	0.01756	0.01763
21	8	0.01666	0.01812	0.02146	0.01763	0.01889	0.01850
22	9.1895868	0.01755	0.01906	0.02314	0.01817	0.01991	0.02036
23	10.556063	0.01872	0.02012	0.02396	0.01884	0.02027	0.02113
24	12.125733	0.02050	0.02208	0.02599	0.01890	0.02315	0.02191
25	13.928809	0.02178	0.02304	0.02840	0.02137	0.02465	0.02550
26	16	0.02417	0.02449	0.02820	0.02250	0.02646	0.02584
27	18.379174	0.02570	0.02375	0.03081	0.02312	0.02490	0.02708
28	21.112127	0.02284	0.02609	0.02854	0.02392	0.02790	0.03070
29	24.251465	0.02391	0.02996	0.02582	0.02353	0.02642	0.03421
30	27.857618	0.01775	0.02438	0.02852	0.02344	0.02855	0.02385
31	32	0.01909	0.03406	0.03753	0.03906	0.03530	0.03090
32	36.758347	0.03013	0.03642	0.04515	0.04730	0.05041	0.04703
33	42.224253	0.04416	0.04952	0.05895	0.06077	0.06311	0.04893
34	48.50293	0.05484	0.07124	0.06467	0.07751	0.08120	0.05422
35	55.715236	0.07774	0.08645	0.08459	0.09169	0.10651	0.08474
36	64	0.10795	0.14521	0.12540	0.16093	0.11648	0.12237
37	73.516695	0.19504	0.13942	0.16538	0.18273	0.16419	0.14940
38	84.448506	0.19042	0.22529	0.22113	0.24303	0.26315	0.28153
39	97.00586	0.28474	0.34493	0.32682	0.34457	0.30628	0.47216
40	111.43047	0.68458	0.74026	0.57189	0.75433	0.57111	0.73289
41	128	1.61531	2.04474	1.71534	1.55877	1.52398	1.66599
42	147.03339	5.96727	7.55466	6.32409	6.26747	5.98778	5.03040
43	168.89701	19.61660	19.09211	16.74029	17.11718	16.24075	13.90345
44	194.01172	25.78509	26.25717	23.62673	25.57258	20.50810	20.28387
45	222.86094	20.02270	21.06252	17.39303	21.15622	21.09538	18.09039
46	256	12.93566	11.41066	12.51209	14.42343	14.67980	16.59153
47	294.06678	7.08939	7.01616	10.30438	7.64731	8.48731	10.13967
48	337.79403	4.79399	3.20016	6.13961	3.82539	5.83241	7.12716
49	388.02344			3.03274		3.39909	4.67663
50	445.72189						
	% <16µm	0.37094	0.36034	0.36829	0.31321	0.35343	0.32506
	% <64µm	0.71128	0.76671	0.80107	0.74606	0.82419	0.73256

	d50	188.99	187.02	193.35	191.12	198.79	204.58
	modal	194.01	194.01	194.01	194.01	222.86	194.01

Table 12. Inorganic grain size spectra: Station THE500, core 314518, collected from Thebaud, 2007.

ID#		3130711	3130713	3130715	3130717	3130722	3130724
Core ID#		314518	314518	314518	314518	314518	314518
Station		THE500	THE500	THE500	THE500	THE500	THE500
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22
Channel	Diameter						
4	0.7579	0.00884	0.01630	0.01021	0.01600	0.03736	0.04131
5	0.8705506	0.00943	0.01729	0.01078	0.01716	0.03984	0.04441
6	1	0.01014	0.01847	0.01145	0.01796	0.04191	0.04748
7	1.1486984	0.01071	0.02004	0.01208	0.01890	0.04457	0.05102
8	1.3195079	0.01159	0.02077	0.01258	0.02024	0.04624	0.05338
9	1.5157166	0.01169	0.02162	0.01294	0.02088	0.04698	0.05594
10	1.7411011	0.01213	0.02214	0.01334	0.02099	0.04771	0.05405
11	2	0.01254	0.02263	0.01340	0.02131	0.04583	0.05284
12	2.2973967	0.01289	0.02298	0.01387	0.02095	0.04522	0.05615
13	2.6390158	0.01327	0.02324	0.01344	0.02059	0.04487	0.05206
14	3.0314331	0.01382	0.02199	0.01395	0.02000	0.04388	0.05044
15	3.4822023	0.01478	0.02289	0.01355	0.01808	0.04130	0.04641
16	4	0.01466	0.02523	0.01461	0.02019	0.03985	0.04919
17	4.5947934	0.01430	0.02421	0.01337	0.01954	0.03720	0.05085
18	5.2780316	0.01515	0.02509	0.01392	0.01971	0.03712	0.05832
19	6.0628663	0.01577	0.02709	0.01458	0.02066	0.03916	0.06193
20	6.9644045	0.01622	0.02876	0.01504	0.02082	0.04060	0.06661
21	8	0.01729	0.03110	0.01598	0.02234	0.04254	0.07087
22	9.1895868	0.01827	0.03411	0.01758	0.02333	0.04536	0.07977
23	10.556063	0.01916	0.03531	0.01780	0.02473	0.04679	0.09104
24	12.125733	0.01881	0.03711	0.01933	0.02464	0.04927	0.09690
25	13.928809	0.01986	0.03993	0.01952	0.02769	0.05221	0.10457
26	16	0.02075	0.04275	0.02196	0.02607	0.05488	0.10915
27	18.379174	0.01961	0.04403	0.02389	0.02639	0.05706	0.10979
28	21.112127	0.01688	0.04311	0.02059	0.02634	0.05874	0.09862
29	24.251465	0.01981	0.04207	0.02123	0.02909	0.05865	0.09742
30	27.857618	0.02002	0.04176	0.02295	0.02674	0.05444	0.09786
31	32	0.02268	0.04374	0.03339	0.03633	0.05223	0.10956
32	36.758347	0.03174	0.06459	0.04038	0.04046	0.04890	0.12086
33	42.224253	0.03985	0.07197	0.05153	0.05837	0.05755	0.12547
34	48.50293	0.05771	0.07404	0.05938	0.07166	0.07056	0.13302
35	55.715236	0.07964	0.11536	0.09595	0.08330	0.09282	0.15595
36	64	0.10346	0.13557	0.10294	0.14649	0.13449	0.18518
37	73.516695	0.15648	0.18402	0.12310	0.15205	0.14187	0.25024
38	84.448506	0.19102	0.26480	0.19430	0.22556	0.20747	0.24434
39	97.00586	0.29783	0.33522	0.31927	0.34387	0.33179	0.36975
40	111.43047	0.49514	0.58515	0.61038	0.70314	0.52180	0.65423
41	128	1.22377	1.15761	1.39691	1.72742	1.46186	1.57066
42	147.03339	4.64620	4.80435	5.34642	7.07390	5.90187	4.31384
43	168.89701	15.43800	14.88609	14.21882	20.20500	15.92843	14.79277
44	194.01172	23.05352	21.59580	20.88759	25.99546	22.08082	21.55987
45	222.86094	20.96230	21.39451	19.68434	21.35125	18.55209	22.60330
46	256	14.50038	14.73107	14.31411	12.05457	11.13613	16.67068

47	**294.06678**	8.69722	8.61214	9.15642	5.73793	7.72726	9.71218
48	**337.79403**	6.57284	6.70898	6.83184	3.40191	5.52709	4.57971
49	**388.02344**	3.02186	3.46298	3.56519		5.72411	
50	**445.72189**			2.54380		3.06129	
51	**512**						
	% <16µm	0.31130	0.55829	0.31331	0.45669	0.95581	1.33555
	% <64µm	0.63999	1.14171	0.70457	0.88146	1.56163	2.49325
	d50	199.18	200.63	202.95	186.81	196.70	198.56
	modal	194.01	194.01	194.01	194.01	194.01	222.86

Table 13. Inorganic grain size spectra: Station THE1000, core 314514, collected from Thebaud, 2007.

ID#		**3130651**	**3130652**	**3130653**	**3130654**	**3130655**	**3130656**
Core ID#		314514	314514	314514	314514	314514	314514
Station		THE1000	THE1000	THE1000	THE1000	THE1000	THE1000
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.00755	0.01253	0.00694	0.02843	0.00538	0.00672
5	**0.8705506**	0.00805	0.01346	0.00749	0.02981	0.00564	0.00714
6	**1**	0.00873	0.01454	0.00805	0.03116	0.00609	0.00764
7	**1.1486984**	0.00932	0.01497	0.00867	0.03277	0.00642	0.00785
8	**1.3195079**	0.00982	0.01598	0.00908	0.03405	0.00690	0.00836
9	**1.5157166**	0.01034	0.01622	0.00951	0.03524	0.00712	0.00853
10	**1.7411011**	0.01037	0.01754	0.00938	0.03677	0.00732	0.00895
11	**2**	0.01047	0.01828	0.00988	0.03666	0.00741	0.00929
12	**2.2973967**	0.01069	0.01866	0.00997	0.03613	0.00753	0.00899
13	**2.6390158**	0.01111	0.01925	0.01061	0.03834	0.00746	0.00891
14	**3.0314331**	0.01126	0.01861	0.01022	0.03900	0.00802	0.00935
15	**3.4822023**	0.01097	0.01743	0.01051	0.04155	0.00832	0.00946
16	**4**	0.01212	0.01946	0.01214	0.03884	0.00810	0.00881
17	**4.5947934**	0.01039	0.02148	0.01104	0.03647	0.00802	0.00930
18	**5.2780316**	0.01091	0.02169	0.01102	0.03654	0.00793	0.01010
19	**6.0628663**	0.01164	0.02383	0.01198	0.03904	0.00856	0.01093
20	**6.9644045**	0.01255	0.02458	0.01301	0.04192	0.00933	0.01101
21	**8**	0.01337	0.02611	0.01405	0.04539	0.01003	0.01199
22	**9.1895868**	0.01466	0.02782	0.01493	0.04779	0.01068	0.01244
23	**10.556063**	0.01537	0.03047	0.01615	0.05015	0.01167	0.01272
24	**12.125733**	0.01652	0.03390	0.01721	0.05590	0.01300	0.01429
25	**13.928809**	0.01786	0.03332	0.01837	0.05639	0.01299	0.01499
26	**16**	0.01771	0.03601	0.01992	0.06021	0.01434	0.01690
27	**18.379174**	0.01770	0.03905	0.02024	0.06167	0.01602	0.01641
28	**21.112127**	0.01723	0.03946	0.01979	0.05775	0.01577	0.01713
29	**24.251465**	0.01950	0.03604	0.02040	0.05222	0.01596	0.01899
30	**27.857618**	0.01459	0.02922	0.01893	0.05215	0.01515	0.01813
31	**32**	0.02157	0.03230	0.01570	0.06251	0.01228	0.01779
32	**36.758347**	0.02311	0.03896	0.01849	0.06143	0.01153	0.02073
33	**42.224253**	0.03420	0.05750	0.02903	0.06662	0.01960	0.02413
34	**48.50293**	0.05255	0.04760	0.03745	0.10118	0.02561	0.03450
35	**55.715236**	0.05130	0.09726	0.05324	0.13389	0.03131	0.04546
36	**64**	0.07787	0.12034	0.06323	0.16516	0.05099	0.07008
37	**73.516695**	0.10087	0.14543	0.08221	0.26561	0.07443	0.09553
38	**84.448506**	0.13301	0.20170	0.10917	0.34945	0.13339	0.13594
39	**97.00586**	0.18942	0.22184	0.18051	0.56875	0.21089	0.19801
40	**111.43047**	0.21200	0.27027	0.24056	0.66290	0.24983	0.29842

41	**128**	0.45387	0.41848	0.34844	1.08438	0.59091	0.51268
42	**147.03339**	1.28680	0.66640	0.65805	1.26783	1.02238	0.99989
43	**168.89701**	3.52177	2.40449	1.39133	3.54184	2.91690	3.21338
44	**194.01172**	7.82936	5.26202	3.80224	6.06328	5.26310	6.06142
45	**222.86094**	11.17982	8.69567	5.96954	8.65917	8.57360	9.77290
46	**256**	12.74252	11.48297	6.98149	11.75006	10.81575	10.92200
47	**294.06678**	11.55250	10.79503	9.69437	11.46807	14.42590	11.11803
48	**337.79403**	15.99749	14.71833	13.85502	14.61907	16.36782	12.00266
49	**388.02344**	15.22861	17.82847	18.01788	14.95672	17.20375	18.44257
50	**445.72189**	10.58418	17.64785	18.01751	13.66685	13.39205	14.20862
51	**512**	8.38642	8.20719	13.41164	9.33288	8.34680	11.49993
52	**588.13356**			6.67340			
53	**675.58805**						
	% <16µm	0.25406	0.46012	0.25020	0.86835	0.18394	0.21777
	% <64µm	0.52350	0.91352	0.50340	1.57799	0.36150	0.44795
	d50	294.60	319.03	354.86	301.77	308.25	316.49
	modal	337.79	388.02	388.02	388.02	388.02	388.02

Table 13. Continued.

ID#		**3130657**	**3130661**	**3130662**	**3130663**	**3130664**	**3130665**
Core ID#		314514	314514	314514	314514	314514	314514
Station		THE1000	THE1000	THE1000	THE1000	THE1000	THE1000
Depth (cm)		12-14	14-16	16-18	18-20	20-22	22-24
Channel	**Diameter**						
4	**0.7579**	0.00468	0.01481	0.00268	0.00217	0.00680	0.01688
5	**0.8705506**	0.00509	0.01575	0.00302	0.00230	0.00744	0.01785
6	**1**	0.00554	0.01725	0.00337	0.00242	0.00834	0.01907
7	**1.1486984**	0.00586	0.01948	0.00370	0.00256	0.00872	0.01989
8	**1.3195079**	0.00618	0.01922	0.00396	0.00265	0.00918	0.02053
9	**1.5157166**	0.00617	0.01995	0.00410	0.00281	0.00976	0.02126
10	**1.7411011**	0.00659	0.02094	0.00429	0.00293	0.00970	0.02231
11	**2**	0.00642	0.02262	0.00449	0.00302	0.01008	0.02327
12	**2.2973967**	0.00660	0.02229	0.00471	0.00316	0.01044	0.02288
13	**2.6390158**	0.00672	0.02239	0.00461	0.00312	0.01028	0.02327
14	**3.0314331**	0.00661	0.02367	0.00485	0.00311	0.00950	0.02344
15	**3.4822023**	0.00669	0.02502	0.00434	0.00315	0.01047	0.02459
16	**4**	0.00648	0.02751	0.00510	0.00333	0.01078	0.02600
17	**4.5947934**	0.00661	0.02893	0.00493	0.00351	0.01015	0.02643
18	**5.2780316**	0.00682	0.03063	0.00533	0.00418	0.01119	0.02580
19	**6.0628663**	0.00711	0.03379	0.00585	0.00444	0.01188	0.02758
20	**6.9644045**	0.00747	0.03797	0.00616	0.00490	0.01257	0.02958
21	**8**	0.00806	0.03868	0.00655	0.00520	0.01382	0.03067
22	**9.1895868**	0.00832	0.04204	0.00722	0.00576	0.01454	0.03240
23	**10.556063**	0.00890	0.04549	0.00749	0.00607	0.01490	0.03646
24	**12.125733**	0.00860	0.04795	0.00826	0.00609	0.01657	0.03915
25	**13.928809**	0.00986	0.05102	0.00862	0.00685	0.01673	0.03750
26	**16**	0.00951	0.05440	0.00954	0.00724	0.01838	0.04200
27	**18.379174**	0.01082	0.05051	0.00922	0.00578	0.01758	0.03829
28	**21.112127**	0.00977	0.05264	0.00842	0.00614	0.01832	0.04074
29	**24.251465**	0.01298	0.05321	0.00908	0.00620	0.01720	0.03829
30	**27.857618**	0.01212	0.05238	0.01077	0.00591	0.01777	0.03511
31	**32**	0.01229	0.06984	0.01557	0.00837	0.01843	0.03559
32	**36.758347**	0.01625	0.09201	0.02044	0.00946	0.02765	0.04539
33	**42.224253**	0.01626	0.17359	0.02985	0.01501	0.04115	0.06845
34	**48.50293**	0.02600	0.21695	0.05310	0.02161	0.06279	0.08164

35	**55.715236**	0.04363	0.29873	0.06155	0.03044	0.07636	0.11830
36	**64**	0.08284	0.54050	0.10886	0.06135	0.15322	0.16350
37	**73.516695**	0.10839	0.74840	0.16420	0.07344	0.22316	0.21564
38	**84.448506**	0.19275	1.13786	0.23576	0.11535	0.35281	0.28450
39	**97.00586**	0.31320	1.59040	0.41453	0.18739	0.60893	0.41680
40	**111.43047**	0.29038	1.89229	0.58705	0.26945	0.85358	0.54765
41	**128**	0.68953	3.01357	0.72093	0.38375	1.01661	0.85548
42	**147.03339**	1.11646	4.07131	1.57487	0.62805	2.25981	1.56412
43	**168.89701**	2.97009	9.14213	2.83142	1.33706	3.61548	3.59998
44	**194.01172**	7.13639	12.31979	4.80248	2.39813	8.05710	6.00171
45	**222.86094**	8.98184	16.34591	7.97998	5.14633	10.82527	11.17546
46	**256**	11.68626	12.24122	9.32403	7.55617	12.47337	14.60013
47	**294.06678**	13.30350	11.57473	10.81162	8.94641	11.42829	19.45130
48	**337.79403**	13.37959	13.41895	10.79651	12.16723	13.84434	14.44593
49	**388.02344**	19.67994	10.22128	16.12517	13.64173	14.47797	13.86299
50	**445.72189**	14.01369		11.48321	15.26513	12.29968	11.70420
51	**512**	5.73412		13.84738	15.04877	6.95089	
52	**588.13356**			7.85086	8.58459		
53	**675.58805**				7.98976		
	% <16µm	0.15140	0.62739	0.11361	0.08373	0.24385	0.56681
	% <64µm	0.32104	1.74166	0.34114	0.19989	0.55948	1.11062
	d50	303.24	218.37	334.99	376.57	285.98	274.52
	modal	388.02	222.86	388.02	445.26	388.02	294.06

Table 14. Inorganic grain size spectra: Station T1, core 314528, collected from Thebaud, 2007.

ID#		**3130861**	**3130864**
Core ID#		314528	314528
Station		T1	T1
Depth (cm)		0-2	6-8
Channel	**Diameter**		
4	**0.7579**	0.01796	0.00605
5	**0.8705506**	0.01930	0.00658
6	**1**	0.02098	0.00729
7	**1.1486984**	0.02266	0.00766
8	**1.3195079**	0.02331	0.00829
9	**1.5157166**	0.02356	0.00841
10	**1.7411011**	0.02384	0.00848
11	**2**	0.02493	0.00881
12	**2.2973967**	0.02434	0.00886
13	**2.6390158**	0.02365	0.00864
14	**3.0314331**	0.02437	0.00880
15	**3.4822023**	0.02327	0.00886
16	**4**	0.02507	0.00940
17	**4.5947934**	0.02621	0.01086
18	**5.2780316**	0.02525	0.01158
19	**6.0628663**	0.02663	0.01307
20	**6.9644045**	0.02698	0.01343
21	**8**	0.02824	0.01393
22	**9.1895868**	0.02905	0.01603
23	**10.556063**	0.02873	0.01692
24	**12.125733**	0.03031	0.01742
25	**13.928809**	0.03394	0.01889
26	**16**	0.03117	0.02007
27	**18.379174**	0.03085	0.02117

28	**21.112127**	0.03092	0.02285
29	**24.251465**	0.03022	0.02129
30	**27.857618**	0.02923	0.01973
31	**32**	0.02886	0.01912
32	**36.758347**	0.03857	0.02316
33	**42.224253**	0.04228	0.02808
34	**48.50293**	0.07152	0.03344
35	**55.715236**	0.07378	0.04006
36	**64**	0.11098	0.06915
37	**73.516695**	0.14535	0.11260
38	**84.448506**	0.20108	0.15733
39	**97.00586**	0.23858	0.18101
40	**111.43047**	0.36249	0.29429
41	**128**	0.70078	0.45081
42	**147.03339**	2.21447	1.07767
43	**168.89701**	5.92112	2.89668
44	**194.01172**	10.52125	4.90353
45	**222.86094**	17.15435	6.12527
46	**256**	21.54004	11.31667
47	**294.06678**	22.01454	18.63873
48	**337.79403**	13.52401	19.06185
49	**388.02344**	4.39097	15.77876
50	**445.72189**		10.52467
51	**512**		7.92374
52	**588.13356**		
	% <16µm	0.55258	0.23828
	% <64µm	0.95999	0.48725
	d50	240.51	301.61
	modal	294.06	337.79

Table15. Inorganic grain size spectra: Station T3, core 314527, collected from Thebaud, 2007.

ID#		**3130821**	**3130823**	**3130825**
Core ID#		314527	314527	314527
Station		T3	T3	T3
Depth (cm)		0-2	4-6	8-10
Channel	**Diameter**			
4	**0.7579**	0.00475	0.01087	0.00675
5	**0.8705506**	0.00501	0.01130	0.00701
6	**1**	0.00555	0.01208	0.00777
7	**1.1486984**	0.00617	0.01338	0.00813
8	**1.3195079**	0.00623	0.01374	0.00850
9	**1.5157166**	0.00641	0.01421	0.00912
10	**1.7411011**	0.00670	0.01455	0.00954
11	**2**	0.00679	0.01489	0.00946
12	**2.2973967**	0.00689	0.01432	0.00977
13	**2.6390158**	0.00707	0.01559	0.00986
14	**3.0314331**	0.00735	0.01673	0.00954
15	**3.4822023**	0.00663	0.01661	0.01102
16	**4**	0.00698	0.01592	0.00934
17	**4.5947934**	0.00835	0.01454	0.00912
18	**5.2780316**	0.00856	0.01477	0.00958
19	**6.0628663**	0.00913	0.01583	0.01046
20	**6.9644045**	0.00954	0.01737	0.01117
21	**8**	0.01021	0.01898	0.01204

22	**9.1895868**	0.01045	0.01968	0.01290
23	**10.556063**	0.01076	0.02191	0.01417
24	**12.125733**	0.01179	0.02246	0.01514
25	**13.928809**	0.01082	0.02267	0.01601
26	**16**	0.01174	0.02810	0.01688
27	**18.379174**	0.01216	0.02558	0.01891
28	**21.112127**	0.00974	0.02500	0.01618
29	**24.251465**	0.00808	0.02834	0.02103
30	**27.857618**	0.01018	0.02947	0.01595
31	**32**	0.01738	0.02702	0.01484
32	**36.758347**	0.01884	0.03016	0.01893
33	**42.224253**	0.02578	0.03888	0.02987
34	**48.50293**	0.03773	0.04778	0.04031
35	**55.715236**	0.04154	0.06357	0.05965
36	**64**	0.06250	0.08444	0.08534
37	**73.516695**	0.07860	0.09210	0.12636
38	**84.448506**	0.08370	0.14115	0.14663
39	**97.00586**	0.14319	0.21242	0.25777
40	**111.43047**	0.16801	0.21280	0.26596
41	**128**	0.29358	0.35613	0.42820
42	**147.03339**	0.64912	0.76317	0.73225
43	**168.89701**	2.19150	2.58948	1.65986
44	**194.01172**	5.01295	5.39653	3.24781
45	**222.86094**	7.35489	8.73340	5.30628
46	**256**	12.28366	12.85255	10.49501
47	**294.06678**	16.10906	18.04526	15.93621
48	**337.79403**	17.47082	17.74162	18.18399
49	**388.02344**	17.92094	15.49124	21.56440
50	**445.72189**	10.30189	9.29932	13.82161
51	**512**	5.52545	7.29207	7.26340
52	**588.13356**	3.98484		
53	**675.58805**			
	% <16µm	0.17212	0.35241	0.22640
	% <64µm	0.36530	0.69630	0.47893
	d50	307.09	293.70	320.12
	modal	388.02	294.06	388.02

Table 16. Inorganic grain size spectra: Station T5, core 314527, collected from Thebaud, 2007.

ID#		**3130827**	**3130841**	**3130844**	**3130847**	**3130853**	**3130856**
Core ID#		314527	314525	314525	314525	314525	314525
Station		T3	T5	T5	T5	T5	T5
Depth (cm)		12-14	0-2	6-8	12-14	18-20	24-26
Channel	**Diameter**						
4	**0.7579**	0.00423	0.00519	0.00273	0.11691	0.00796	0.01513
5	**0.8705506**	0.00454	0.00561	0.00294	0.12614	0.00832	0.01665
6	**1**	0.00493	0.00606	0.00315	0.13668	0.00911	0.02267
7	**1.1486984**	0.00520	0.00658	0.00344	0.14574	0.00963	0.02901
8	**1.3195079**	0.00552	0.00688	0.00353	0.15292	0.01001	0.02416
9	**1.5157166**	0.00577	0.00690	0.00376	0.15837	0.01052	0.02330
10	**1.7411011**	0.00584	0.00716	0.00391	0.16512	0.01059	0.02478
11	**2**	0.00582	0.00759	0.00403	0.16848	0.01080	0.02769
12	**2.2973967**	0.00596	0.00774	0.00399	0.17760	0.01084	0.02959
13	**2.6390158**	0.00617	0.00744	0.00438	0.17293	0.01140	0.03225
14	**3.0314331**	0.00589	0.00850	0.00395	0.18141	0.01179	0.03218

15	**3.4822023**	0.00580	0.00921	0.00424	0.15419	0.01205	0.03713
16	**4**	0.00673	0.00895	0.00506	0.17573	0.01213	0.04123
17	**4.5947934**	0.00637	0.00857	0.00467	0.15153	0.01173	0.04474
18	**5.2780316**	0.00682	0.01090	0.00502	0.14775	0.01234	0.04539
19	**6.0628663**	0.00707	0.01190	0.00536	0.14901	0.01350	0.04920
20	**6.9644045**	0.00783	0.01308	0.00588	0.15523	0.01461	0.05386
21	**8**	0.00815	0.01337	0.00608	0.15038	0.01567	0.05574
22	**9.1895868**	0.00884	0.01499	0.00720	0.15031	0.01649	0.05930
23	**10.556063**	0.00950	0.01599	0.00798	0.15002	0.01843	0.06206
24	**12.125733**	0.01003	0.01767	0.00774	0.14892	0.01877	0.06217
25	**13.928809**	0.01033	0.01794	0.00835	0.16127	0.02067	0.06265
26	**16**	0.01143	0.02051	0.00990	0.16231	0.01991	0.06183
27	**18.379174**	0.01199	0.02027	0.00909	0.17635	0.02084	0.05842
28	**21.112127**	0.01277	0.02087	0.00974	0.17373	0.02157	0.05053
29	**24.251465**	0.01403	0.01993	0.00971	0.19069	0.01888	0.04268
30	**27.857618**	0.01345	0.01933	0.01046	0.20138	0.02406	0.04823
31	**32**	0.01829	0.02177	0.01127	0.20438	0.02630	0.04948
32	**36.758347**	0.02264	0.02947	0.01648	0.23966	0.03285	0.05891
33	**42.224253**	0.03226	0.04979	0.02275	0.27326	0.03872	0.05758
34	**48.50293**	0.04417	0.06515	0.03032	0.32896	0.04804	0.07663
35	**55.715236**	0.05904	0.10369	0.05641	0.41727	0.06453	0.09258
36	**64**	0.08473	0.19946	0.08054	0.53425	0.08766	0.10960
37	**73.516695**	0.10602	0.27793	0.12579	0.65020	0.13318	0.16318
38	**84.448506**	0.16490	0.38382	0.26147	0.65660	0.13962	0.19414
39	**97.00586**	0.21434	0.50171	0.36681	0.69584	0.23283	0.29384
40	**111.43047**	0.27393	0.81021	0.48416	1.17856	0.28080	0.48296
41	**128**	0.42771	1.13681	0.78801	1.10598	0.49581	0.91948
42	**147.03339**	0.92665	2.53895	1.58615	1.95228	1.20035	1.00942
43	**168.89701**	2.64615	4.09438	3.10646	2.73293	4.44951	1.74960
44	**194.01172**	5.07972	5.81742	5.63714	4.75115	9.47513	2.87407
45	**222.86094**	9.41577	10.36765	8.66685	4.54758	11.35354	6.16214
46	**256**	14.25032	14.29836	10.35030	4.95379	13.79357	9.63431
47	**294.06678**	19.20581	18.74813	12.79177	4.57545	12.73578	7.04968
48	**337.79403**	19.40755	15.77957	11.55971	5.95954	9.37845	10.80149
49	**388.02344**	15.11934	13.31212	7.60954	10.57219	7.24164	13.10782
50	**445.72189**	4.91385	11.14449	12.05738	10.83230	9.42843	16.38575
51	**512**	7.37581		10.70005	26.51213	10.45694	13.46395
52	**588.13356**			8.27469	12.02459	8.52368	14.15080
53	**675.58805**			5.25967			
	% <16μm	0.14734	0.21821	0.10740	3.39665	0.27736	0.85089
	% <64μm	0.38740	0.58899	0.29351	5.76464	0.59306	1.44778
	d50	287.76	274.24	314.72	385.03	279.21	365.03
	modal	377.79	294.06	294.06	512.00	256.00	445.72

Table 17. Inorganic grain size spectra: Station T6, core 314525, collected from Thebaud, 2007.

ID#		**3130801**	**3130803**	**3130805**	**3130807**	**3130812**	**3130814**
Core ID#		314526	314526	314526	314526	314526	314526
Station		T6	T6	T6	T6	T6	T6
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22
Channel	**Diameter**						
4	**0.7579**	0.01856	0.01371	0.00941	0.00765	0.00804	0.00776
5	**0.8705506**	0.02011	0.01485	0.01018	0.00850	0.00825	0.00821
6	**1**	0.02142	0.01578	0.01227	0.00919	0.00995	0.00878
7	**1.1486984**	0.02253	0.01675	0.01543	0.00979	0.01304	0.00923

8	**1.3195079**	0.02343	0.01775	0.01359	0.01014	0.01145	0.00963
9	**1.5157166**	0.02450	0.01821	0.01296	0.01055	0.01014	0.00956
10	**1.7411011**	0.02514	0.01883	0.01286	0.01048	0.01005	0.00993
11	**2**	0.02494	0.01913	0.01377	0.01079	0.00978	0.01039
12	**2.2973967**	0.02558	0.01991	0.01326	0.01074	0.00983	0.01084
13	**2.6390158**	0.02600	0.02023	0.01406	0.01075	0.00994	0.01067
14	**3.0314331**	0.02680	0.01838	0.01394	0.01090	0.01103	0.01069
15	**3.4822023**	0.02586	0.01960	0.01248	0.01048	0.01093	0.01106
16	**4**	0.02736	0.01973	0.01530	0.01224	0.01016	0.01156
17	**4.5947934**	0.02389	0.01872	0.01463	0.01341	0.01089	0.01304
18	**5.2780316**	0.02342	0.02175	0.01530	0.01373	0.01124	0.01398
19	**6.0628663**	0.02478	0.02256	0.01604	0.01457	0.01185	0.01500
20	**6.9644045**	0.02544	0.02373	0.01729	0.01507	0.01231	0.01642
21	**8**	0.02805	0.02484	0.01782	0.01606	0.01281	0.01758
22	**9.1895868**	0.03021	0.02778	0.01870	0.01760	0.01356	0.01875
23	**10.556063**	0.03232	0.03055	0.02045	0.01771	0.01399	0.02043
24	**12.125733**	0.03348	0.03284	0.02121	0.02015	0.01435	0.02128
25	**13.928809**	0.03567	0.03419	0.02098	0.02279	0.01596	0.02329
26	**16**	0.03758	0.03172	0.02181	0.02278	0.01759	0.02194
27	**18.379174**	0.03697	0.03627	0.02457	0.02443	0.01819	0.02465
28	**21.112127**	0.03904	0.03236	0.01682	0.02456	0.01774	0.02832
29	**24.251465**	0.03943	0.04092	0.02167	0.02888	0.01779	0.02343
30	**27.857618**	0.04137	0.03577	0.01565	0.02798	0.01748	0.01780
31	**32**	0.03910	0.03514	0.04337	0.02731	0.02024	0.02282
32	**36.758347**	0.04259	0.05178	0.05354	0.03288	0.02650	0.03525
33	**42.224253**	0.05276	0.06156	0.06416	0.03662	0.03527	0.03505
34	**48.50293**	0.07748	0.05962	0.08210	0.04684	0.04275	0.04926
35	**55.715236**	0.10272	0.09934	0.11067	0.06060	0.06837	0.06666
36	**64**	0.13863	0.11454	0.13431	0.06828	0.08128	0.07740
37	**73.516695**	0.13909	0.16338	0.16521	0.10393	0.14906	0.11802
38	**84.448506**	0.15802	0.23673	0.20874	0.11276	0.18335	0.17434
39	**97.00586**	0.23224	0.29070	0.25505	0.17394	0.27908	0.18036
40	**111.43047**	0.25449	0.35896	0.32650	0.21817	0.32854	0.37794
41	**128**	0.45045	0.72859	0.59347	0.34551	0.75799	0.58808
42	**147.03339**	1.60407	2.11244	1.51298	0.93124	2.25982	2.00282
43	**168.89701**	6.55327	8.49195	6.29526	3.60918	8.18989	8.06156
44	**194.01172**	15.59347	20.10143	15.80306	8.49410	16.98514	15.57870
45	**222.86094**	25.47125	21.80722	21.61931	16.93449	24.25344	21.26180
46	**256**	21.80004	20.65650	19.50461	21.14191	18.12488	18.88990
47	**294.06678**	14.57885	14.51997	17.49409	20.86751	13.99729	13.83516
48	**337.79403**	9.47701	6.88801	9.33460	12.30815	9.41966	9.76606
49	**388.02344**	2.47057	2.57526	5.96653	7.19891	4.45909	6.00167
50	**445.72189**				3.74595		2.47291
51	**512**				3.12983		
52	**588.13356**						
	% <16μm	0.56950	0.46984	0.33192	0.28329	0.24956	0.28809
	% <64μm	1.07855	0.95433	0.78629	0.61616	0.53149	0.61327
	d50	220.97	215.77	226.77	251.69	218.10	224.56
	modal	222.86	222.86	222.86	256.00	222.86	222.86

Table 18. Metals analysis measured as mg kg^{-1}: Thebaud 2006.

Station	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Cadmium
T1	0-2	11300	0.12	2	262	0.25	< 0.1	0.01
T1	0-2	10800	0.11	2	216	0.25	< 0.1	0.01
T1	2-4	9460	0.11	1	147	0.24	< 0.1	0.01
T1	4-6	7740	0.09	1	145	0.20	< 0.1	< 0.01
T1	6-8	7020	0.09	1	129	0.18	< 0.1	< 0.01
T1	8-10	5450	0.06	1	105	0.13	< 0.1	< 0.01
T2	0-2	16600	0.21	2	270	0.42	< 0.1	0.03
T2	2-4	15600	0.20	2	277	0.39	< 0.1	0.03
T2	4-6	15800	0.19	2	278	0.38	< 0.1	0.02
T2	4-6	15700	0.18	2	285	0.37	< 0.1	0.02
T2	6-8	16100	0.17	2	297	0.38	< 0.1	0.02
T2	8-10	14200	0.18	2	270	0.37	< 0.1	0.01
T2	10-12	13400	0.22	2	253	0.32	< 0.1	0.02
T2	12-14	15700	0.17	1	296	0.37	< 0.1	0.01
T2	14-16	16000	0.17	2	291	0.39	< 0.1	0.02
T3	0-2	15200	0.18	2	308	0.35	< 0.1	0.02
T3	2-4	12400	0.15	2	248	0.28	< 0.1	0.02
T3	4-6	11900	0.15	1	236	0.30	< 0.1	0.02
T3	6-8	11900	0.20	2	260	0.27	< 0.1	0.02
T3	8-10	11000	0.12	1	237	0.26	< 0.1	0.02
T4	0-2	13900	0.19	1	386	0.34	< 0.1	0.02
T4	2-4	14400	0.18	2	378	0.33	< 0.1	0.05
T4	4-6	15500	0.17	2	350	0.37	< 0.1	0.05
T4	6-8	15300	0.16	2	374	0.36	< 0.1	0.02
T4	8-10	13800	0.16	2	394	0.34	< 0.1	0.02
T4	10-12	14400	0.18	1	3780	0.35	< 0.1	0.02
T4	12-14	16100	0.18	2	652	0.37	< 0.1	0.02
T4	14-16	15500	0.14	1	503	0.35	< 0.1	0.02
T4	16-18	14300	0.15	1	379	0.37	< 0.1	0.02
T4	18-20	16100	0.16	2	354	0.36	< 0.1	0.02
T5	0-2	7790	0.10	1	179	0.19	< 0.1	< 0.01
T5	2-4	8540	0.08	1	174	0.44	< 0.1	< 0.01
T5	4-6	8130	0.09	1	175	0.21	< 0.1	< 0.01
T5	6-8	8870	0.16	1	167	0.24	< 0.1	< 0.01
T5	8-10	7330	0.08	< 1	148	0.20	< 0.1	< 0.01
T5	10-12	5940	0.09	1	138	0.17	< 0.1	< 0.01
T5	12-14	6590	0.07	1	162	0.17	< 0.1	< 0.01
T5	14-16	8370	0.10	1	176	0.22	< 0.1	< 0.01
T5	16-18	7360	0.09	1	167	0.16	< 0.1	< 0.01
T5	18-20	6890	0.09	< 1	173	0.18	< 0.1	< 0.01
T5	20-22	10600	0.11	1	231	0.28	< 0.1	0.01
T5	22-24	8040	0.09	1	191	0.19	< 0.1	0.01
T5	22-24	8730	0.11	1	162	0.21	< 0.1	< 0.01
T5	24-26	6660	0.09	< 1	168	0.19	< 0.1	< 0.01
T5	26-28	8530	0.10	1	218	0.23	< 0.1	< 0.01
T6	0-2	12200	0.16	2	244	0.34	< 0.1	0.02
T6	2-4	12400	0.15	2	264	0.35	< 0.1	0.02
T6	4-6	12400	0.15	1	259	0.29	< 0.1	0.02
T6	6-8	12500	0.18	2	268	0.32	< 0.1	0.02
T6	8-10	12000	0.15	1	244	0.30	< 0.1	0.02
T6	10-12	12200	0.14	2	300	0.33	< 0.1	0.02

Table 18. Continued.

Station	Depth	Calcium	Chromium	Cobalt	Copper	Iron	Lanthanum	Lead	Lithium
T1	0-2	1550	7	0.8	2	4420	4.4	4.2	4.5
T1	0-2	1310	6	0.8	2	3970	3.8	4.3	4.5
T1	2-4	1460	6	0.8	2	4160	4.5	3.5	4.5
T1	4-6	1280	5	0.8	1	3810	4.5	3.4	4.6
T1	6-8	1210	3	0.5	1	2000	2.8	3.0	4.8
T1	8-10	780	2	0.4	< 1	1640	2.1	2.3	4.8
T2	0-2	4130	19	2.9	4	14000	9.8	8.1	5.1
T2	2-4	4120	24	3.3	5	17500	13.1	8.0	4.9
T2	4-6	3610	17	2.6	4	12500	10.0	7.8	4.8
T2	4-6	3690	19	2.7	4	13400	10.9	7.5	5.0
T2	6-8	3260	15	2.2	3	10100	9.3	7.2	4.9
T2	8-10	2800	13	1.8	3	8770	7.2	6.4	4.8
T2	10-12	2280	10	1.4	2	6370	7.4	5.6	4.8
T2	12-14	3000	12	1.8	2	8410	7.1	6.6	4.8
T2	14-16	2870	14	1.8	3	8360	8.6	6.6	5.2
T3	0-2	3310	14	2.0	4	9980	8.3	6.7	4.6
T3	2-4	2640	12	1.8	3	9600	11.0	6.1	4.1
T3	4-6	2400	12	1.6	3	7510	8.2	5.1	4.3
T3	6-8	2400	12	1.7	3	8750	11.7	6.0	4.5
T3	8-10	2060	9	1.4	3	7160	6.6	5.1	4.4
T4	0-2	2580	10	1.2	2	5610	6.1	5.5	4.6
T4	2-4	2770	13	1.7	3	8870	7.7	8.4	4.7
T4	4-6	3190	14	2.0	4	10800	12.2	6.8	4.6
T4	6-8	2860	13	1.8	3	9100	11.5	6.8	4.9
T4	8-10	6440	10	1.4	3	6880	6.3	6.0	4.6
T4	10-12	2630	14	1.4	4	7060	9.0	7.1	4.8
T4	12-14	2720	12	1.4	2	7240	8.0	6.3	4.8
T4	14-16	2330	9	1.1	2	5240	5.8	5.8	4.5
T4	16-18	2350	10	1.1	2	5760	5.8	5.4	4.6
T4	18-20	3140	12	1.6	3	8200	7.5	6.4	4.6
T5	0-2	1680	4	0.7	< 1	3180	3.2	3.2	4.4
T5	2-4	1820	5	0.8	1	3440	5.8	3.7	4.7
T5	4-6	1310	5	0.7	< 1	3360	3.4	3.3	4.6
T5	6-8	1060	5	0.8	< 1	3400	3.9	3.6	5.3
T5	8-10	1590	4	0.6	< 1	2710	3.8	3.0	4.8
T5	10-12	910	4	0.7	< 1	2700	3.0	2.6	5.4
T5	12-14	980	4	0.7	< 1	2580	3.6	2.7	5.0
T5	14-16	1080	6	0.8	< 1	3790	3.2	3.8	5.0
T5	16-18	920	4	0.6	< 1	2580	3.6	2.9	4.2
T5	18-20	2190	5	0.7	< 1	2730	3.0	3.0	4.6
T5	20-22	2170	7	1.0	1	4760	5.4	4.3	4.6
T5	22-24	1440	4	0.7	1	2980	3.0	3.2	4.8
T5	22-24	1320	4	0.8	< 1	2710	2.9	3.3	4.8
T5	24-26	1690	5	0.6	< 1	2450	3.4	2.8	4.5
T5	26-28	1210	6	0.9	< 1	3490	4.3	3.3	6.2
T6	0-2	2440	13	1.7	3	8000	7.4	6.0	4.6
T6	2-4	2580	13	1.8	3	8620	8.2	6.1	4.6
T6	4-6	2450	12	1.7	2	7820	8.2	6.5	4.6
T6	6-8	2750	13	1.8	3	8800	6.2	6.1	4.6
T6	8-10	2210	10	1.3	2	5600	5.4	5.5	4.5
T6	10-12	2290	12	1.4	2	6290	6.2	5.4	4.6

Table 18. Continued.

Station	Depth	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Rubidium	Selenium
T1	0-2	710	77	0.1	2	8180	22.8	< 1
T1	0-2	630	61	0.1	2	8100	23.7	< 1
T1	2-4	670	81	0.1	2	5920	17.4	< 1
T1	4-6	450	92	0.1	2	5380	16.7	< 1
T1	6-8	400	33	0.2	1	5720	15.2	< 1
T1	8-10	320	16	< 0.1	< 1	4050	12.3	< 1
T2	0-2	2090	502	0.4	4	9580	28.5	< 1
T2	2-4	2100	624	0.4	4	8830	26.5	< 1
T2	4-6	1770	410	0.3	4	9600	27.0	< 1
T2	4-6	1820	441	0.4	4	9510	28.2	< 1
T2	6-8	1410	311	0.3	4	10200	30.1	< 1
T2	8-10	1340	261	0.2	3	9130	27.6	< 1
T2	10-12	1000	139	0.2	3	8930	26.4	< 1
T2	12-14	1320	232	0.2	3	9930	28.7	< 1
T2	14-16	1350	239	0.2	3	10500	30.1	< 1
T3	0-2	1480	316	0.3	3	9660	27.9	< 1
T3	2-4	1270	265	0.3	2	7920	22.5	< 1
T3	4-6	1120	221	0.2	2	7490	21.7	< 1
T3	6-8	1100	252	0.2	2	7580	22.0	< 1
T3	8-10	970	212	0.2	2	7380	21.6	< 1
T4	0-2	1120	113	0.2	2	9530	28.2	< 1
T4	2-4	1370	245	0.2	3	9290	26.6	< 1
T4	4-6	1510	340	0.3	3	9770	27.8	< 1
T4	6-8	1340	267	0.2	3	9810	29.7	< 1
T4	8-10	1280	157	0.2	2	9290	27.7	< 1
T4	10-12	1120	168	0.2	2	9400	27.3	< 1
T4	12-14	1210	156	0.3	3	10800	30.1	< 1
T4	14-16	990	104	0.2	2	10900	31.4	< 1
T4	16-18	1100	107	0.2	2	9330	26.6	< 1
T4	18-20	1360	231	0.3	3	9980	28.8	< 1
T5	0-2	610	28	< 0.1	1	5690	16.1	< 1
T5	2-4	620	60	< 0.1	2	6530	18.0	< 1
T5	4-6	700	46	< 0.1	2	5920	17.8	< 1
T5	6-8	570	44	< 0.1	2	6100	19.0	< 1
T5	8-10	470	40	< 0.1	1	5400	15.8	< 1
T5	10-12	540	50	< 0.1	1	4020	12.8	< 1
T5	12-14	500	36	0.1	2	4530	14.0	< 1
T5	14-16	650	41	< 0.1	2	6090	18.4	< 1
T5	16-18	440	28	< 0.1	2	5600	16.3	< 1
T5	18-20	500	48	< 0.1	2	4950	14.2	< 1
T5	20-22	770	91	0.1	2	7290	21.9	< 1
T5	22-24	780	35	0.5	2	6000	17.0	< 1
T5	22-24	730	39	< 0.1	2	6200	17.6	< 1
T5	24-26	440	36	< 0.1	2	4650	12.8	< 1
T5	26-28	870	30	< 0.1	4	5670	16.8	< 1
T6	0-2	1190	249	0.2	3	7450	22.1	< 1
T6	2-4	1240	258	0.3	3	7690	23.1	< 1
T6	4-6	1130	223	0.3	3	7860	23.8	< 1
T6	6-8	1340	275	0.2	3	7560	22.1	< 1
T6	8-10	950	159	0.2	2	7920	22.6	< 1
T6	10-12	1040	162	0.2	3	7730	23.3	< 1

Table 18. Continued.

Station	Depth	Silver	Sodium	Strontium	Sulfur	Tellurium	Thallium	Tin	Uranium	Vanadium	Zinc
T1	0-2	0.04	3370	45.9	< 200	< 0.1	0.12	0.1	0.27	8	5
T1	0-2	0.04	3190	46.9	< 200	< 0.1	0.13	0.1	0.23	8	5
T1	2-4	0.04	2990	36.8	< 200	< 0.1	0.09	0.2	0.28	8	5
T1	4-6	0.04	2400	36.1	< 200	< 0.1	0.09	0.1	0.27	8	5
T1	6-8	0.03	2290	29.3	< 200	< 0.1	0.09	0.2	0.25	4	4
T1	8-10	< 0.02	1720	24.8	< 200	< 0.1	0.07	< 0.1	0.16	3	3
T2	0-2	0.10	5270	72.8	< 200	< 0.1	0.16	0.7	0.69	29	19
T2	2-4	0.14	4860	70.8	< 200	< 0.1	0.15	0.8	0.81	36	22
T2	4-6	0.09	5560	73.5	< 200	< 0.1	0.16	0.6	0.66	26	16
T2	4-6	0.10	4880	69.7	< 200	< 0.1	0.16	0.6	0.66	28	18
T2	6-8	0.08	4850	74.3	< 200	< 0.1	0.17	0.5	0.55	21	14
T2	8-10	0.06	4450	64.5	< 200	< 0.1	0.15	0.4	0.48	18	12
T2	10-12	0.05	4310	61.4	< 200	< 0.1	0.15	0.2	0.42	13	9
T2	12-14	0.07	4780	71.3	< 200	< 0.1	0.16	0.4	0.49	17	12
T2	14-16	0.07	4860	70.8	< 200	< 0.1	0.17	0.5	0.54	18	12
T3	0-2	0.08	4550	63.8	< 200	< 0.1	0.15	0.6	0.49	21	15
T3	2-4	0.06	4140	53.0	< 200	< 0.1	0.12	0.5	0.54	19	12
T3	4-6	0.06	3590	52.4	< 200	< 0.1	0.11	0.4	0.49	16	11
T3	6-8	0.06	3490	52.6	< 200	< 0.1	0.12	0.4	0.60	19	12
T3	8-10	0.04	4000	48.5	< 200	< 0.1	0.12	0.3	0.41	14	10
T4	0-2	0.05	4740	64.6	< 200	< 0.1	0.16	0.2	0.32	12	8
T4	2-4	0.06	4720	67.6	200	< 0.1	0.15	0.7	0.44	19	147
T4	4-6	0.10	5160	70.6	< 200	< 0.1	0.15	0.4	0.74	21	18
T4	6-8	0.09	4690	69.9	< 200	< 0.1	0.16	0.4	0.58	19	12
T4	8-10	0.06	4570	88.8	< 200	< 0.1	0.15	0.3	0.44	14	10
T4	10-12	0.07	5020	153	1000	< 0.1	0.15	0.3	0.48	15	11
T4	12-14	0.06	5040	77.3	300	< 0.1	0.17	0.3	0.45	14	10
T4	14-16	0.05	4890	69.1	300	< 0.1	0.17	0.2	0.34	11	7
T4	16-18	0.04	5140	65.9	< 200	< 0.1	0.14	0.2	0.38	12	8
T4	18-20	0.08	5030	72.5	< 200	< 0.1	0.15	0.6	0.47	17	11
T5	0-2	0.03	2480	39.5	< 200	< 0.1	0.09	< 0.1	0.23	7	4
T5	2-4	0.03	2750	35.2	< 200	< 0.1	0.10	< 0.1	0.95	7	6
T5	4-6	0.03	3820	37.2	200	< 0.1	0.10	0.3	0.19	7	4
T5	6-8	0.03	2550	39.0	< 200	< 0.1	0.10	< 0.1	0.24	7	5
T5	8-10	0.04	2800	40.4	< 200	< 0.1	0.09	0.1	0.33	5	4
T5	10-12	0.03	2140	29.8	< 200	< 0.1	0.07	< 0.1	0.18	6	3
T5	12-14	0.03	2380	32.7	< 200	< 0.1	0.08	< 0.1	0.20	5	3
T5	14-16	0.02	2720	36.7	< 200	< 0.1	0.10	0.1	0.20	8	5
T5	16-18	0.03	2540	33.8	< 200	< 0.1	0.09	< 0.1	0.18	6	3
T5	18-20	0.03	2540	41.3	< 200	< 0.1	0.08	18.4	0.23	6	4
T5	20-22	0.04	3370	47.1	200	< 0.1	0.12	0.1	0.32	10	6
T5	22-24	0.03	4800	42.5	300	< 0.1	0.10	< 0.1	0.20	6	4
T5	22-24	0.04	3730	38.9	200	< 0.1	0.10	< 0.1	0.18	5	4
T5	24-26	0.02	2350	31.3	< 200	< 0.1	0.07	< 0.1	0.18	5	3
T5	26-28	0.03	2980	35.6	200	< 0.1	0.10	< 0.1	0.25	8	6
T6	0-2	0.06	3650	59.3	< 200	< 0.1	0.13	0.4	0.46	18	11
T6	2-4	0.06	4020	58.2	< 200	< 0.1	0.13	0.4	0.52	19	12
T6	4-6	0.06	3990	57.1	< 200	< 0.1	0.13	0.3	0.53	16	10
T6	6-8	0.07	4140	61.6	< 200	< 0.1	0.13	0.4	0.45	19	12
T6	8-10	0.04	3730	56.4	< 200	< 0.1	0.13	0.4	0.33	12	9
T6	10-12	0.05	4030	59.1	< 200	< 0.1	0.13	0.3	0.40	14	9

Table 19. Metals analysis measured as mg kg^{-1}: Thebaud 2007.

Core #	Location	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Cadmium
314520	THE250	0-2	16800	0.1	2	718	0.3	< 1	0.03
314520	THE250	2-4	14000	0.1	2	551	0.4	< 1	0.04
314520	THE250	4-6	14200	0.1	1	506	0.3	< 1	0.03
314520	THE250	6-8	14000	0.2	1	757	0.3	< 1	0.03
314520	THE250	8-10	14700	0.2	2	614	0.3	< 1	0.04
314520	THE250	10-12	13900	0.2	2	569	0.3	< 1	0.03
314520	THE250	12-14	13300	0.1	2	412	0.3	< 1	0.02
314520	THE250	14-16	14600	0.2	2	496	0.3	< 1	0.03
314520	THE250	16-18	14100	0.2	2	639	0.4	< 1	0.03
314520	THE250	18-20	13100	0.2	1	547	0.3	< 1	0.03
314520	THE250	20-22	13700	0.2	1	636	0.4	< 1	0.03
314520	THE250	22-24	14100	0.1	1	732	0.3	< 1	0.03
314520	THE250	24-26	13600	0.2	2	815	0.3	< 1	0.03
314521	THE250	0-2	16000	0.2	2	470	0.4	< 1	0.02
314521	THE250	2-4	14300	0.2	1	488	0.3	< 1	0.02
314521	THE250	4-6	13600	0.1	2	406	0.3	< 1	0.01
314521	THE250	6-8	13600	0.2	2	388	0.3	< 1	0.03
314521	THE250	8-10	14800	0.1	2	450	0.3	< 1	0.02
314521	THE250	10-12	15300	0.1	2	546	0.3	< 1	0.02
314521	THE250	12-14	13700	0.1	1	485	0.3	< 1	0.02
314521	THE250	14-16	14200	0.1	2	594	0.3	< 1	0.03
314521	THE250	16-18	15000	0.2	2	908	0.3	< 1	0.03
314521	THE250	18-20	14900	0.2	2	884	0.4	< 1	0.03
314521	THE250	20-22	14500	0.2	1	726	0.3	< 1	0.02
314521	THE250	22-24	14700	0.2	2	770	0.3	< 1	0.03
314523	THE250	0-2	13300	0.1	2	460	0.3	< 1	0.02
314523	THE250	4-6	14500	0.1	1	503	0.3	< 1	0.02
314523	THE250	8-10	13600	0.1	1	643	0.3	< 1	0.03
314523	THE250	12-14	15800	0.1	2	589	0.4	< 1	0.02
314523	THE250	16-18	15600	0.1	2	748	0.3	< 1	0.04
314523	THE250	20-22	14700	0.1	2	942	0.3	< 1	0.03
314523	THE250	24-26	14000	0.2	2	4580	0.3	< 1	0.05
314523	THE250	28-30	11000	0.2	1	8450	0.2	< 1	0.03
314516	THE500	0-2	15400	0.2	2	314	0.3	< 1	0.02
314516	THE500	2-4	15300	0.2	2	341	0.3	< 1	0.03
314516	THE500	4-6	15800	0.2	2	326	0.4	< 1	0.03
314516	THE500	6-8	15800	0.2	2	369	0.4	< 1	0.02
314516	THE500	8-10	15300	0.2	2	324	0.4	< 1	0.03
314516	THE500	10-12	15100	0.2	2	339	0.4	< 1	0.03
314516	THE500	12-14	14700	0.1	2	449	0.4	< 1	0.02
314516	THE500	14-16	15400	0.1	2	397	0.3	< 1	0.02
314516	THE500	16-18	15900	0.1	2	443	0.4	< 1	0.02
314516	THE500	18-20	14000	0.1	2	468	0.3	< 1	0.01
314516	THE500	20-22	13300	0.2	2	321	0.3	< 1	0.02
314516	THE500	22-24	16600	0.2	2	292	0.4	< 1	0.02
314517	THE500	0-2	15200	0.2	2	285	0.4	< 1	0.02
314517	THE500	2-4	15300	0.2	2	289	0.4	< 1	0.02
314517	THE500	4-6	14900	0.2	2	321	0.4	< 1	0.02
314517	THE500	6-8	15300	0.2	2	322	0.3	< 1	0.02
314517	THE500	8-10	14800	0.2	2	330	0.4	< 1	0.02
314517	THE500	10-12	15200	0.2	2	332	0.4	< 1	0.02
314517	THE500	12-14	16300	0.2	2	356	0.4	< 1	0.03

314517	THE500	14-16	15300	0.2	2	380	0.4	< 1	0.03
314517	THE500	16-18	16400	0.1	2	382	0.4	< 1	0.02
314517	THE500	18-20	14600	0.1	2	335	0.4	< 1	0.02
314517	THE500	20-22	13500	0.2	2	357	0.3	< 1	0.02
314518	THE500	0-2	14600	0.2	2	282	0.3	< 1	0.02
314518	THE500	4-6	15800	0.1	2	348	0.4	< 1	0.02
314518	THE500	8-10	16200	0.1	2	347	0.4	< 1	0.02
314518	THE500	12-14	15600	0.2	2	399	0.4	< 1	0.03
314518	THE500	16-18	16200	0.2	2	447	0.4	< 1	0.02
314518	THE500	20-22	16900	0.1	2	316	0.4	< 1	0.02
314514	THE1000	0-2	11600	0.1	1	239	0.3	< 1	0.01
314514	THE1000	2-4	8180	0.1	2	170	0.2	< 1	< 0.01
314514	THE1000	4-6	8620	< 0.1	1	175	0.2	< 1	< 0.01
314514	THE1000	6-8	9300	< 0.1	2	177	0.2	< 1	0.01
314514	THE1000	8-10	8100	< 0.1	2	162	0.2	< 1	< 0.01
314514	THE1000	10-12	8230	0.1	2	153	0.2	< 1	0.01
314514	THE1000	12-14	9460	0.1	1	184	0.2	< 1	< 0.01
314514	THE1000	14-16	7320	0.1	2	135	0.2	< 1	0.01
314514	THE1000	16-18	8450	0.1	1	155	0.2	< 1	0.01
314514	THE1000	18-20	7470	< 0.1	1	146	0.2	< 1	< 0.01
314514	THE1000	20-22	7440	0.1	2	131	0.2	< 1	< 0.01
314514	THE1000	22-24	7880	0.1	1	154	0.2	< 1	< 0.01
314528	T1	0-2	11900	0.1	2	222	0.3	< 1	0.01
314528	T1	6-8	9060	0.1	2	169	0.2	< 1	< 0.01
314524	T2	0-2	16000	0.2	3	282	0.3	< 1	0.02
314524	T2	4-6	16400	0.2	2	278	0.3	< 1	0.03
314524	T2	8-10	16500	0.2	2	278	0.4	< 1	0.02
314524	T2	12-14	15100	0.1	2	261	0.4	< 1	0.02
314524	T2	16-18	16700	0.2	2	280	0.4	< 1	0.03
314524	T2	20-22	16700	0.2	2	299	0.4	< 1	0.03
314527	T3	0-2	10300	0.1	2	183	0.2	< 1	0.01
314527	T3	6-8	8540	< 0.1	2	189	0.2	< 1	< 0.01
314527	T3	12-14	7860	0.1	2	145	0.2	< 1	< 0.01
314525	T5	0-2	5850	< 0.1	< 1	138	0.2	< 1	< 0.01
314525	T5	6-8	9210	< 0.1	1	247	0.2	< 1	0.01
314525	T5	12-14	6360	< 0.1	< 1	155	0.2	< 1	0.01
314525	T5	18-20	7870	< 0.1	< 1	206	0.2	< 1	0.01
314525	T5	24-26	6520	0.1	< 1	882	0.2	< 1	0.01
314526	T6	0-2	12100	0.1	1	290	0.2	< 1	0.01
314526	T6	4-6	13800	0.1	2	268	0.3	< 1	0.01
314526	T6	8-10	13500	0.1	2	262	0.3	< 1	0.01
314526	T6	12-14	11500	0.1	2	210	0.2	< 1	0.01
314526	T6	16-18	12400	0.1	2	230	0.3	< 1	0.01
314526	T6	20-22	12200	0.1	2	217	0.2	< 1	0.02

Table 19. Continued.

Core #	Location	Depth	Calcium	Chromium	Cobalt	Copper	Iron	Lanthanum	Lead
314520	THE250	0-2	2830	10	1.5	5	7220	6.6	7.6
314520	THE250	2-4	2960	15	1.8	5	9080	7.1	7.1
314520	THE250	4-6	3120	14	2.0	7	10800	9.6	7.0
314520	THE250	6-8	3140	14	2.2	7	11500	8.5	6.9
314520	THE250	8-10	3580	16	2.5	9	13300	11.0	8.4
314520	THE250	10-12	2820	14	1.8	6	10400	8.7	6.5
314520	THE250	12-14	2660	10	1.6	5	8260	6.5	6.1

314520	THE250	14-16	3740	18	2.7	9	14200	9.4	7.6
314520	THE250	16-18	3090	15	2.1	7	10400	7.8	7.2
314520	THE250	18-20	2630	13	1.6	5	8120	8.3	6.2
314520	THE250	20-22	2670	12	1.7	6	8360	6.9	6.6
314520	THE250	22-24	2710	13	1.6	5	7660	5.0	6.6
314520	THE250	24-26	3200	15	2.3	8	12400	8.6	7.2
314521	THE250	0-2	2310	9	1.1	2	5650	5.9	6.4
314521	THE250	2-4	2480	10	1.3	3	6190	6.3	6.0
314521	THE250	4-6	2120	8	1.1	3	4900	4.9	5.6
314521	THE250	6-8	2490	8	1.2	3	6070	6.3	5.9
314521	THE250	8-10	2520	9	1.3	3	5710	5.8	6.0
314521	THE250	10-12	2880	12	1.6	4	7770	7.0	6.6
314521	THE250	12-14	2620	10	1.4	4	7180	6.3	5.9
314521	THE250	14-16	2930	11	1.6	5	8690	8.1	6.7
314521	THE250	16-18	3150	14	1.9	6	10300	8.7	7.1
314521	THE250	18-20	3060	13	1.8	6	9590	5.9	7.3
314521	THE250	20-22	3230	13	1.8	5	9500	7.4	7.2
314521	THE250	22-24	3270	14	2.0	6	10200	8.8	6.9
314523	THE250	0-2	2040	7	0.9	2	4480	4.6	5.0
314523	THE250	4-6	2260	8	0.9	3	4750	5.8	5.7
314523	THE250	8-10	2020	7	0.9	3	4700	5.0	5.1
314523	THE250	12-14	2460	7	1.0	2	4540	4.7	6.9
314523	THE250	16-18	2570	9	1.1	3	5640	5.2	6.0
314523	THE250	20-22	2330	9	1.1	3	5720	6.7	6.0
314523	THE250	24-26	2840	10	1.4	5	8050	6.0	7.0
314523	THE250	28-30	3400	7	0.9	5	4600	4.7	8.2
314516	THE500	0-2	3520	16	2.3	8	13600	9.9	7.2
314516	THE500	2-4	4390	23	3.5	13	21900	17.3	8.3
314516	THE500	4-6	2960	12	1.6	5	9150	7.2	6.4
314516	THE500	6-8	3300	15	2.1	7	12400	10.6	7.1
314516	THE500	8-10	3370	13	2.0	6	10100	8.8	6.6
314516	THE500	10-12	3120	14	1.7	5	9340	6.3	6.4
314516	THE500	12-14	2640	10	1.3	4	7510	7.0	6.1
314516	THE500	14-16	2480	9	1.1	3	5970	5.5	6.0
314516	THE500	16-18	2480	9	1.1	2	6140	5.8	6.3
314516	THE500	18-20	2150	8	1.0	2	5270	4.9	5.4
314516	THE500	20-22	2410	8	1.1	3	5670	4.7	5.3
314516	THE500	22-24	2830	9	1.2	3	6290	6.7	6.4
314517	THE500	0-2	2950	12	1.8	5	8080	8.1	7.2
314517	THE500	2-4	3390	15	2.1	7	11100	7.9	7.2
314517	THE500	4-6	2320	10	1.2	3	6240	5.8	6.1
314517	THE500	6-8	2870	14	1.7	5	8460	7.0	6.9
314517	THE500	8-10	2740	12	1.6	5	7700	6.6	6.5
314517	THE500	10-12	2660	10	1.4	4	7330	6.4	6.4
314517	THE500	12-14	3320	13	1.9	5	9070	8.1	7.2
314517	THE500	14-16	2630	12	1.6	4	7770	6.7	6.8
314517	THE500	16-18	2810	11	1.5	4	7350	6.9	6.6
314517	THE500	18-20	2390	11	1.4	4	7120	5.9	6.2
314517	THE500	20-22	2700	11	1.8	6	9740	10.2	6.6
314518	THE500	0-2	2780	10	1.4	4	6810	7.3	6.0
314518	THE500	4-6	2880	9	1.3	3	6370	7.6	6.0
314518	THE500	8-10	2950	10	1.4	3	6670	6.2	6.5
314518	THE500	12-14	3310	14	1.9	6	10500	7.7	7.0
314518	THE500	16-18	2940	11	1.4	4	7840	7.0	6.3
314518	THE500	20-22	2090	10	1.1	2	6800	5.2	6.2

314514	THE1000	0-2	1670	6	0.8	2	4210	5.6	4.7
314514	THE1000	2-4	1220	6	0.8	2	3870	3.8	3.7
314514	THE1000	4-6	1340	6	0.7	2	3760	3.9	4.0
314514	THE1000	6-8	1430	5	0.7	2	3990	3.5	3.9
314514	THE1000	8-10	1000	4	0.6	1	3160	3.3	3.5
314514	THE1000	10-12	1510	5	0.7	2	3700	4.3	3.5
314514	THE1000	12-14	1550	6	1.0	2	4760	3.8	4.0
314514	THE1000	14-16	1060	5	0.8	2	4030	3.9	3.3
314514	THE1000	16-18	1340	4	0.8	2	3580	3.6	3.7
314514	THE1000	18-20	1170	4	0.6	1	3030	3.5	3.4
314514	THE1000	20-22	1020	4	0.6	1	3030	3.9	3.2
314514	THE1000	22-24	990	4	0.6	1	2590	3.5	3.2
314528	T1	0-2	1890	7	0.9	2	4840	4.6	4.6
314528	T1	6-8	1270	4	0.6	1	3380	2.8	3.6
314524	T2	0-2	3380	14	2.0	6	10400	7.2	7.2
314524	T2	4-6	4330	23	3.2	12	20300	12.4	8.4
314524	T2	8-10	3350	16	1.9	6	10600	6.7	6.9
314524	T2	12-14	2600	10	1.4	4	7460	7.6	6.3
314524	T2	16-18	3780	16	2.3	7	12800	7.7	7.4
314524	T2	20-22	4190	20	2.7	9	15100	11.5	8.6
314527	T3	0-2	1940	6	0.9	2	4490	5.0	4.4
314527	T3	6-8	1420	5	0.7	2	4060	3.7	3.6
314527	T3	12-14	1360	8	0.9	2	4610	4.4	3.8
314525	T5	0-2	920	2	0.4	< 1	1760	3.0	2.6
314525	T5	6-8	1600	5	0.8	2	3900	4.6	3.8
314525	T5	12-14	2440	3	0.5	1	2680	4.9	2.2
314525	T5	18-20	1700	4	0.5	< 1	2550	2.9	3.0
314525	T5	24-26	1850	3	0.6	1	2900	3.9	2.9
314526	T6	0-2	1750	5	0.7	2	3420	4.2	4.6
314526	T6	4-6	2220	7	1.0	2	5010	5.5	5.4
314526	T6	8-10	2380	9	1.3	4	6910	5.2	5.8
314526	T6	12-14	1930	7	1.0	2	5260	4.4	4.6
314526	T6	16-18	2330	8	1.2	4	6870	5.8	5.4
314526	T6	20-22	2160	8	1.0	5	5220	4.2	5.1

Table 19. Continued.

Core #	Location	Depth	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
314520	THE250	0-2	4.9	1300	179	< 0.01	0.2	3	10900
314520	THE250	2-4	4.5	1560	251	-	0.2	3	8820
314520	THE250	4-6	4.3	1370	362	< 0.01	0.3	3	8600
314520	THE250	6-8	4.4	1490	374	-	0.3	3	8410
314520	THE250	8-10	4.3	1790	458	< 0.01	0.4	3	8560
314520	THE250	10-12	4.2	1310	331	-	0.3	2	8710
314520	THE250	12-14	4.3	1250	218	< 0.01	0.2	3	8210
314520	THE250	14-16	4.3	1860	511	-	0.4	3	8400
314520	THE250	16-18	4.7	1480	336	< 0.01	0.3	3	8660
314520	THE250	18-20	4.4	1200	254	-	0.3	2	8070
314520	THE250	20-22	4.6	1240	252	< 0.01	0.2	3	8710
314520	THE250	22-24	4.6	1260	218	-	0.2	3	8870
314520	THE250	24-26	4.4	1580	411	< 0.01	0.3	3	8000
314521	THE250	0-2	5.2	1070	79	< 0.01	0.1	3	11000
314521	THE250	2-4	4.7	1060	156	-	0.2	2	9180
314521	THE250	4-6	4.6	920	104	< 0.01	0.1	2	8990

314521	THE250	6-8	4.7	1020	147	-	0.2	2	8650
314521	THE250	8-10	4.8	1110	134	< 0.01	0.1	2	9650
314521	THE250	10-12	4.9	1290	180	-	0.2	3	9580
314521	THE250	12-14	4.5	1120	162	< 0.01	0.2	2	8870
314521	THE250	14-16	4.5	1370	245	-	0.3	2	8910
314521	THE250	16-18	4.8	1500	293	< 0.01	0.4	3	9190
314521	THE250	18-20	4.6	1430	279	-	0.4	3	9250
314521	THE250	20-22	4.7	1450	263	< 0.01	0.3	3	8700
314521	THE250	22-24	4.7	1620	300	-	0.4	3	9150
314523	THE250	0-2	4.4	870	72	< 0.01	0.1	2	8800
314523	THE250	4-6	4.6	830	92	-	0.2	2	9510
314523	THE250	8-10	4.7	960	85	< 0.01	0.1	2	9380
314523	THE250	12-14	4.9	940	70	-	0.2	2	10500
314523	THE250	16-18	5.0	1110	98	-	0.2	2	10200
314523	THE250	20-22	4.9	1050	108	-	0.2	2	9980
314523	THE250	24-26	5.1	1320	189	-	0.2	2	8970
314523	THE250	28-30	5.0	850	75	-	0.2	2	7380
314516	THE500	0-2	4.6	1610	409	< 0.01	0.3	3	9060
314516	THE500	2-4	4.9	2140	731	-	0.4	4	8450
314516	THE500	4-6	5.0	1400	214	< 0.01	0.2	3	10200
314516	THE500	6-8	4.7	1550	350	-	0.3	3	9680
314516	THE500	8-10	4.6	1440	295	< 0.01	0.3	2	9130
314516	THE500	10-12	4.9	1310	246	-	0.2	3	9240
314516	THE500	12-14	4.9	1190	196	< 0.01	0.1	2	9590
314516	THE500	14-16	5.0	1060	110	-	0.1	2	10100
314516	THE500	16-18	5.0	1110	92	< 0.01	0.1	2	11000
314516	THE500	18-20	4.7	990	80	-	0.1	2	9590
314516	THE500	20-22	4.8	960	121	< 0.01	0.2	2	8480
314516	THE500	22-24	5.2	1190	119	-	0.2	2	10600
314517	THE500	0-2	4.8	1400	240	-	0.2	3	9440
314517	THE500	2-4	4.8	1510	321	< 0.01	0.3	3	9200
314517	THE500	4-6	5.0	1080	109	-	0.1	2	10300
314517	THE500	6-8	4.9	1300	240	< 0.01	0.2	3	9820
314517	THE500	8-10	4.7	1270	222	-	0.2	2	9370
314517	THE500	10-12	4.9	1280	164	< 0.01	0.2	2	9900
314517	THE500	12-14	4.8	1510	260	-	0.2	3	9950
314517	THE500	14-16	5.0	1290	173	< 0.01	0.2	3	9910
314517	THE500	16-18	5.1	1280	176	-	0.2	3	10600
314517	THE500	18-20	5.5	1220	154	< 0.01	0.2	3	9570
314517	THE500	20-22	4.8	1300	252	-	0.3	2	8540
314518	THE500	0-2	4.6	1180	163	< 0.01	0.2	2	9130
314518	THE500	4-6	5.0	1150	145	-	0.2	2	9830
314518	THE500	8-10	4.8	1230	157	< 0.01	0.1	2	10200
314518	THE500	12-14	4.8	1500	298	-	0.2	3	9590
314518	THE500	16-18	5.1	1320	165	< 0.01	0.2	3	10300
314518	THE500	20-22	5.8	1160	62	-	0.1	2	12600
314514	THE1000	0-2	4.5	700	57	-	< 0.1	2	7860
314514	THE1000	2-4	4.3	630	68	< 0.01	< 0.1	1	5790
314514	THE1000	4-6	4.4	540	78	-	0.1	1	5880
314514	THE1000	6-8	4.2	560	70	< 0.01	< 0.1	1	6150
314514	THE1000	8-10	4.4	520	28	-	< 0.1	1	6110
314514	THE1000	10-12	4.4	600	53	< 0.01	< 0.1	1	5420
314514	THE1000	12-14	4.3	850	98	-	0.1	2	6370
314514	THE1000	14-16	4.5	550	60	< 0.01	< 0.1	2	5230
314514	THE1000	16-18	4.3	610	70	-	< 0.1	1	5480

314514	THE1000	18-20	4.4	520	44	< 0.01	< 0.1	1	5270
314514	THE1000	20-22	4.2	540	33	-	< 0.1	1	5220
314514	THE1000	22-24	4.4	490	32	< 0.01	< 0.1	1	5570
314528	T1	0-2	4.4	810	100	-	0.1	2	7880
314528	T1	6-8	4.3	600	60	-	0.5	1	6180
314524	T2	0-2	4.9	1600	283	< 0.01	0.2	3	9950
314524	T2	4-6	4.8	2080	655	-	0.4	4	9320
314524	T2	8-10	5.0	1550	276	< 0.01	0.2	3	10200
314524	T2	12-14	4.9	1120	167	-	0.2	2	9710
314524	T2	16-18	4.7	1810	407	< 0.01	0.3	3	9870
314524	T2	20-22	4.8	1920	469	-	0.3	3	9540
314527	T3	0-2	4.2	840	105	-	0.2	2	6510
314527	T3	6-8	4.0	730	76	-	< 0.1	1	5870
314527	T3	12-14	4.6	760	104	-	0.1	1	5200
314525	T5	0-2	4.9	390	14	-	0.2	< 1	4090
314525	T5	6-8	4.8	750	96	-	0.1	2	6330
314525	T5	12-14	4.9	450	22	-	0.2	1	3820
314525	T5	18-20	5.0	490	22	-	0.2	1	5040
314525	T5	24-26	5.1	510	18	-	0.3	1	4080
314526	T6	0-2	4.2	720	50	-	0.2	2	8300
314526	T6	4-6	4.4	1000	104	-	0.2	2	9120
314526	T6	8-10	4.7	1070	172	-	0.2	2	8700
314526	T6	12-14	4.2	780	106	-	0.2	2	7200
314526	T6	16-18	4.6	1030	168	-	0.2	2	7890
314526	T6	20-22	4.2	970	99	-	0.2	2	7710

Table 19. Continued.

Core #	Location	Depth	Rubidium	Selenium	Silver	Sodium	Strontium	Sulfur	Tellurium
314520	THE250	0-2	31.2	< 1	0.1	5950	86	500	< 0.1
314520	THE250	2-4	25.2	< 1	0.1	5520	71	500	< 0.1
314520	THE250	4-6	25.0	< 1	0.2	4430	72	400	< 0.1
314520	THE250	6-8	24.0	< 1	0.2	4390	77	400	< 0.1
314520	THE250	8-10	24.2	< 1	0.2	4540	73	400	< 0.1
314520	THE250	10-12	24.4	< 1	0.2	4410	70	400	< 0.1
314520	THE250	12-14	23.5	< 1	0.1	4370	67	400	< 0.1
314520	THE250	14-16	24.3	< 1	0.2	4560	73	300	< 0.1
314520	THE250	16-18	24.8	< 1	0.1	4600	73	300	< 0.1
314520	THE250	18-20	23.0	< 1	0.1	4350	68	300	< 0.1
314520	THE250	20-22	25.1	< 1	0.1	4200	71	200	< 0.1
314520	THE250	22-24	25.4	< 1	0.1	4200	74	< 200	< 0.1
314520	THE250	24-26	23.2	< 1	0.2	4480	77	300	< 0.1
314521	THE250	0-2	31.4	< 1	< 0.1	5110	75	300	< 0.1
314521	THE250	2-4	26.4	< 1	< 0.1	4550	69	300	< 0.1
314521	THE250	4-6	25.6	< 1	< 0.1	4460	64	< 200	< 0.1
314521	THE250	6-8	24.9	< 1	0.1	4510	67	200	< 0.1
314521	THE250	8-10	27.5	< 1	0.1	4800	70	300	< 0.1
314521	THE250	10-12	27.1	< 1	0.1	4540	75	400	< 0.1
314521	THE250	12-14	25.0	< 1	< 0.1	4110	65	400	< 0.1
314521	THE250	14-16	25.3	< 1	0.1	4760	68	500	< 0.1
314521	THE250	16-18	25.6	< 1	0.2	5000	79	600	< 0.1
314521	THE250	18-20	26.1	< 1	0.1	4410	81	500	< 0.1
314521	THE250	20-22	24.6	< 1	0.2	4590	76	500	< 0.1
314521	THE250	22-24	25.6	< 1	0.1	4340	75	400	< 0.1

314523	THE250	0-2	23.6	< 1	< 0.1	4000	63	400	< 0.1
314523	THE250	4-6	26.3	< 1	< 0.1	4320	69	400	< 0.1
314523	THE250	8-10	25.9	< 1	< 0.1	4310	65	400	< 0.1
314523	THE250	12-14	29.7	< 1	< 0.1	4680	77	500	< 0.1
314523	THE250	16-18	28.2	< 1	< 0.1	4590	77	600	< 0.1
314523	THE250	20-22	27.4	< 1	< 0.1	4740	79	600	< 0.1
314523	THE250	24-26	24.5	< 1	0.1	4150	159	1500	< 0.1
314523	THE250	28-30	20.9	< 1	< 0.1	3270	247	2400	< 0.1
314516	THE500	0-2	25.2	< 1	0.2	4530	65	< 200	< 0.1
314516	THE500	2-4	23.7	< 1	0.3	4420	67	< 200	< 0.1
314516	THE500	4-6	28.6	< 1	0.1	4770	68	< 200	< 0.1
314516	THE500	6-8	26.4	< 1	0.2	4690	71	200	< 0.1
314516	THE500	8-10	25.6	< 1	0.1	4400	70	< 200	< 0.1
314516	THE500	10-12	26.0	< 1	0.1	4410	66	< 200	< 0.1
314516	THE500	12-14	27.2	< 1	< 0.1	4480	68	300	< 0.1
314516	THE500	14-16	28.1	< 1	< 0.1	4590	70	200	< 0.1
314516	THE500	16-18	30.2	< 1	< 0.1	4690	70	300	< 0.1
314516	THE500	18-20	25.9	< 1	< 0.1	4000	64	< 200	< 0.1
314516	THE500	20-22	23.8	< 1	0.1	3890	60	< 200	< 0.1
314516	THE500	22-24	28.8	< 1	0.1	5170	71	200	< 0.1
314517	THE500	0-2	27.4	< 1	0.1	4750	68	< 200	< 0.1
314517	THE500	2-4	26.5	< 1	0.2	4690	70	< 200	< 0.1
314517	THE500	4-6	28.7	< 1	0.1	4750	67	< 200	< 0.1
314517	THE500	6-8	27.4	< 1	< 0.1	4720	68	< 200	< 0.1
314517	THE500	8-10	26.7	< 1	0.1	4720	67	< 200	< 0.1
314517	THE500	10-12	28.7	< 1	0.1	4950	68	200	< 0.1
314517	THE500	12-14	28.4	< 1	0.1	5200	73	< 200	< 0.1
314517	THE500	14-16	28.8	< 1	0.1	4800	69	< 200	< 0.1
314517	THE500	16-18	30.1	< 1	0.1	5260	72	< 200	< 0.1
314517	THE500	18-20	27.7	< 1	< 0.1	4800	64	< 200	< 0.1
314517	THE500	20-22	24.4	< 1	0.2	4190	62	< 200	< 0.1
314518	THE500	0-2	25.5	< 1	0.1	4440	66	< 200	< 0.1
314518	THE500	4-6	27.2	< 1	0.1	4800	69	200	< 0.1
314518	THE500	8-10	28.4	< 1	0.1	4860	71	< 200	< 0.1
314518	THE500	12-14	26.6	< 1	0.1	4640	71	200	< 0.1
314518	THE500	16-18	29.8	< 1	0.1	5240	73	300	< 0.1
314518	THE500	20-22	35.5	< 1	< 0.1	4920	66	200	< 0.1
314514	THE1000	0-2	22.8	< 1	< 0.1	3700	56	< 200	< 0.1
314514	THE1000	2-4	16.9	< 1	< 0.1	2690	37	< 200	< 0.1
314514	THE1000	4-6	17.1	< 1	< 0.1	2750	41	< 200	< 0.1
314514	THE1000	6-8	17.6	< 1	< 0.1	3050	46	< 200	< 0.1
314514	THE1000	8-10	17.4	< 1	< 0.1	2520	36	< 200	< 0.1
314514	THE1000	10-12	16.0	< 1	< 0.1	2830	42	< 200	< 0.1
314514	THE1000	12-14	18.5	< 1	< 0.1	2890	42	< 200	< 0.1
314514	THE1000	14-16	15.1	< 1	< 0.1	2430	32	< 200	< 0.1
314514	THE1000	16-18	15.7	< 1	< 0.1	2920	37	< 200	< 0.1
314514	THE1000	18-20	14.5	< 1	< 0.1	2620	35	< 200	< 0.1
314514	THE1000	20-22	14.7	< 1	< 0.1	2540	33	< 200	< 0.1
314514	THE1000	22-24	15.4	< 1	< 0.1	2710	34	< 200	< 0.1
314528	T1	0-2	22.3	< 1	< 0.1	3800	51	< 200	< 0.1
314528	T1	6-8	17.1	< 1	< 0.1	3230	39	< 200	< 0.1
314524	T2	0-2	28.0	< 1	0.1	4680	67	< 200	< 0.1
314524	T2	4-6	25.4	< 1	0.3	4540	68	< 200	< 0.1
314524	T2	8-10	29.0	< 1	0.1	4840	69	< 200	< 0.1
314524	T2	12-14	27.5	< 1	0.1	4430	63	< 200	< 0.1

314524	T2	16-18	28.4	< 1	0.2	4660	69	< 200	< 0.1
314524	T2	20-22	26.6	< 1	0.2	4720	73	200	< 0.1
314527	T3	0-2	18.5	< 1	< 0.1	3480	46	200	< 0.1
314527	T3	6-8	15.7	< 1	< 0.1	3060	39	< 200	< 0.1
314527	T3	12-14	14.2	< 1	< 0.1	2420	34	< 200	< 0.1
314525	T5	0-2	14.0	< 1	< 0.1	1970	26	200	< 0.1
314525	T5	6-8	17.2	< 1	< 0.1	3030	42	300	< 0.1
314525	T5	12-14	11.3	< 1	< 0.1	2240	28	300	< 0.1
314525	T5	18-20	14.0	< 1	< 0.1	2620	35	300	< 0.1
314525	T5	24-26	13.8	< 1	< 0.1	2160	59	500	< 0.1
314526	T6	0-2	22.2	< 1	< 0.1	3880	55	< 200	< 0.1
314526	T6	4-6	24.6	< 1	< 0.1	4270	59	< 200	< 0.1
314526	T6	8-10	25.2	< 1	< 0.1	4450	59	< 200	< 0.1
314526	T6	12-14	20.3	< 1	< 0.1	3640	50	< 200	< 0.1
314526	T6	16-18	22.6	< 1	< 0.1	3760	52	< 200	< 0.1
314526	T6	20-22	21.3	< 1	< 0.1	3880	52	< 200	< 0.1

Table 19. Continued.

Core #	Location	Depth	Thallium	Tin	Uranium	Vanadium	Zinc
314520	THE250	0-2	0.2	0.5	0.9	15	14
314520	THE250	2-4	0.2	0.7	0.5	20	16
314520	THE250	4-6	0.2	0.6	0.6	24	19
314520	THE250	6-8	0.2	0.6	0.6	26	20
314520	THE250	8-10	0.2	1.2	0.7	29	22
314520	THE250	10-12	0.2	0.5	0.6	22	17
314520	THE250	12-14	0.2	0.4	0.5	19	14
314520	THE250	14-16	0.2	0.7	0.8	31	24
314520	THE250	16-18	0.2	0.6	0.5	24	19
314520	THE250	18-20	0.2	0.5	0.5	18	14
314520	THE250	20-22	0.2	0.5	0.5	20	16
314520	THE250	22-24	0.2	0.4	0.4	18	14
314520	THE250	24-26	0.1	0.6	0.6	28	22
314521	THE250	0-2	0.2	0.2	0.3	12	10
314521	THE250	2-4	0.2	0.3	0.4	13	11
314521	THE250	4-6	0.2	0.3	0.3	11	9
314521	THE250	6-8	0.2	0.3	0.3	13	10
314521	THE250	8-10	0.2	0.4	0.4	12	10
314521	THE250	10-12	0.2	0.4	0.5	17	14
314521	THE250	12-14	0.2	0.4	0.4	16	12
314521	THE250	14-16	0.2	0.5	0.5	18	15
314521	THE250	16-18	0.2	0.5	0.6	22	18
314521	THE250	18-20	0.2	0.4	0.5	20	17
314521	THE250	20-22	0.2	0.5	0.5	20	17
314521	THE250	22-24	0.2	0.5	0.6	21	17
314523	THE250	0-2	0.2	0.2	0.2	9	8
314523	THE250	4-6	0.2	0.3	0.3	10	30
314523	THE250	8-10	0.2	0.2	0.3	10	8
314523	THE250	12-14	0.2	0.5	0.3	9	8
314523	THE250	16-18	0.2	0.2	0.3	12	11
314523	THE250	20-22	0.2	0.3	0.3	12	10
314523	THE250	24-26	0.2	0.4	0.4	15	16
314523	THE250	28-30	0.1	0.3	0.3	8	12
314516	THE500	0-2	0.2	0.6	0.6	28	22

314516	THE500	2-4	0.1	1.0	1.1	45	35
314516	THE500	4-6	0.2	0.4	0.4	19	14
314516	THE500	6-8	0.2	0.6	0.6	26	20
314516	THE500	8-10	0.2	0.5	0.6	21	17
314516	THE500	10-12	0.2	0.5	0.4	21	16
314516	THE500	12-14	0.2	0.3	0.4	15	12
314516	THE500	14-16	0.2	0.3	0.4	12	10
314516	THE500	16-18	0.2	0.2	0.4	12	11
314516	THE500	18-20	0.2	0.2	0.3	10	9
314516	THE500	20-22	0.1	0.2	0.4	12	9
314516	THE500	22-24	0.2	0.3	0.4	13	11
314517	THE500	0-2	0.2	0.4	0.5	19	16
314517	THE500	2-4	0.2	0.6	0.6	25	20
314517	THE500	4-6	0.2	0.4	0.4	13	10
314517	THE500	6-8	0.2	0.5	0.5	19	15
314517	THE500	8-10	0.2	0.4	0.4	17	14
314517	THE500	10-12	0.2	0.4	0.4	16	13
314517	THE500	12-14	0.2	0.5	0.6	20	16
314517	THE500	14-16	0.2	0.4	0.4	17	13
314517	THE500	16-18	0.2	0.4	0.4	16	12
314517	THE500	18-20	0.2	0.4	0.4	16	12
314517	THE500	20-22	0.1	0.5	0.7	21	16
314518	THE500	0-2	0.2	0.4	0.4	15	12
314518	THE500	4-6	0.2	0.4	0.4	14	11
314518	THE500	8-10	0.2	0.3	0.4	15	12
314518	THE500	12-14	0.2	0.5	0.5	22	17
314518	THE500	16-18	0.2	0.3	0.5	16	13
314518	THE500	20-22	0.2	0.2	0.3	12	9
314514	THE1000	0-2	0.1	0.2	0.3	8	7
314514	THE1000	2-4	< 0.1	0.2	0.2	8	6
314514	THE1000	4-6	< 0.1	0.2	0.3	9	6
314514	THE1000	6-8	0.1	0.2	0.2	9	6
314514	THE1000	8-10	< 0.1	0.1	0.2	6	5
314514	THE1000	10-12	< 0.1	0.2	0.3	8	6
314514	THE1000	12-14	0.1	0.2	0.2	10	7
314514	THE1000	14-16	< 0.1	0.2	0.3	9	6
314514	THE1000	16-18	< 0.1	0.2	0.2	8	6
314514	THE1000	18-20	< 0.1	0.2	0.3	6	5
314514	THE1000	20-22	< 0.1	0.1	0.3	7	5
314514	THE1000	22-24	< 0.1	0.2	0.2	5	4
314528	T1	0-2	0.1	0.2	0.3	10	8
314528	T1	6-8	< 0.1	0.2	0.2	7	5
314524	T2	0-2	0.2	0.5	0.5	23	18
314524	T2	4-6	0.2	0.9	0.9	41	32
314524	T2	8-10	0.2	0.5	0.5	21	18
314524	T2	12-14	0.2	0.4	0.4	16	12
314524	T2	16-18	0.2	0.6	1.0	26	21
314524	T2	20-22	0.2	0.8	0.7	32	25
314527	T3	0-2	0.1	0.2	0.3	10	8
314527	T3	6-8	< 0.1	0.2	0.2	8	6
314527	T3	12-14	< 0.1	0.2	0.2	10	7
314525	T5	0-2	< 0.1	< 0.1	0.2	3	4
314525	T5	6-8	0.1	0.2	0.3	8	7
314525	T5	12-14	< 0.1	0.1	0.3	5	4
314525	T5	18-20	< 0.1	0.1	0.2	4	4

314525	T5	24-26	< 0.1	0.1	0.3	6	5
314526	T6	0-2	0.1	0.2	0.2	7	6
314526	T6	4-6	0.1	0.2	0.3	10	8
314526	T6	8-10	0.1	0.3	0.3	14	12
314526	T6	12-14	0.1	0.2	0.3	11	8
314526	T6	16-18	0.1	0.4	0.4	14	12
314526	T6	20-22	0.1	0.3	0.3	11	9

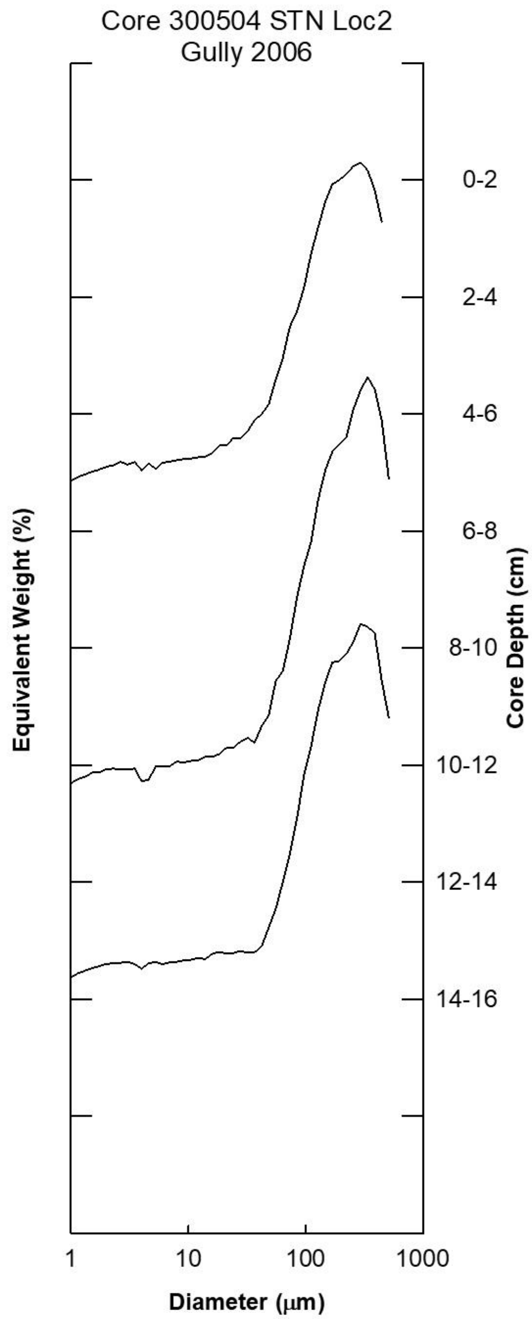

Figure 30. Disaggregated inorganic grain size of Core 300504 (Station Loc2) collected from the Gully, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

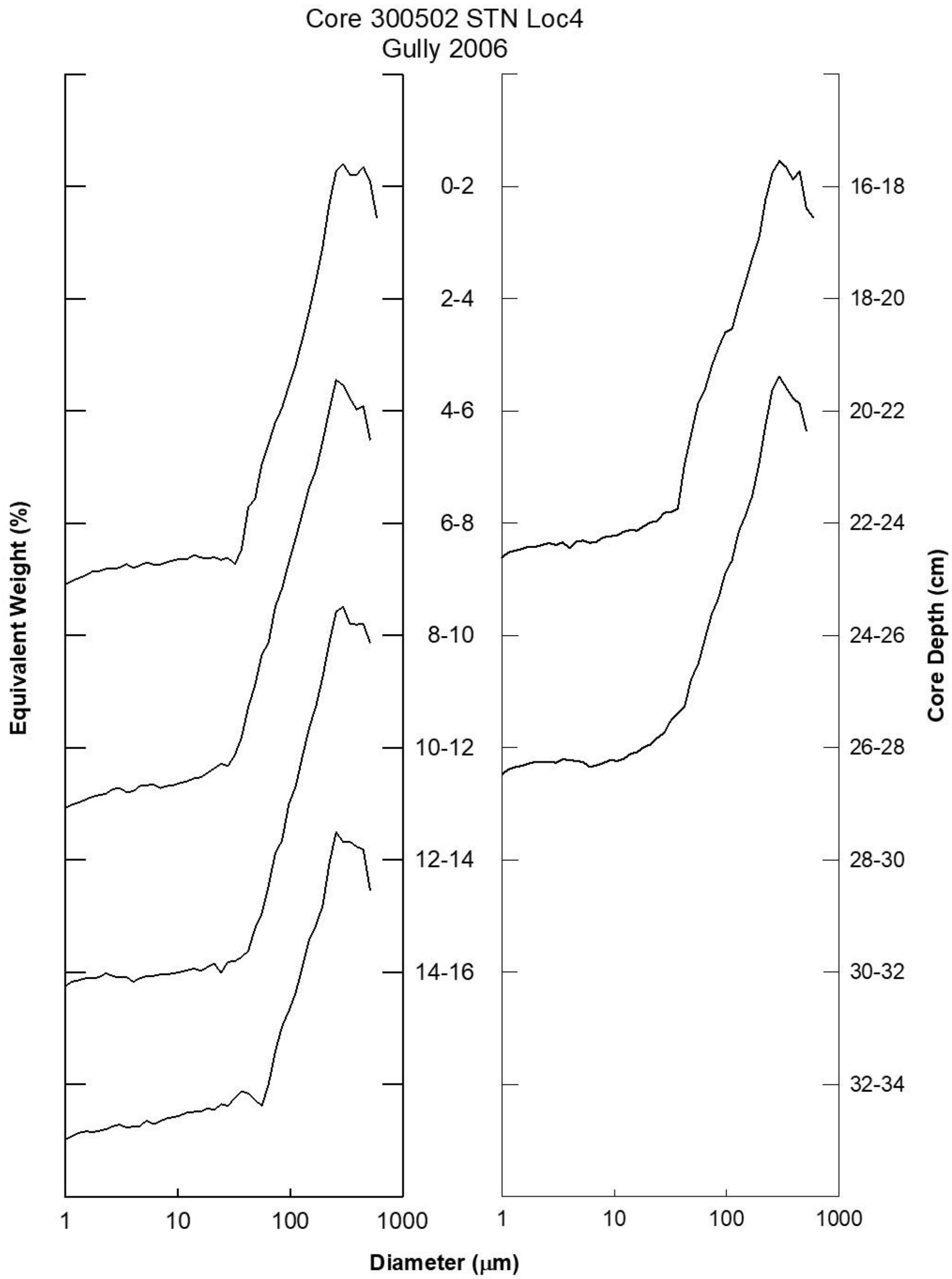

Figure 31. Disaggregated inorganic grain size of Core 300502 (Station Loc4) collected from the Gully, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

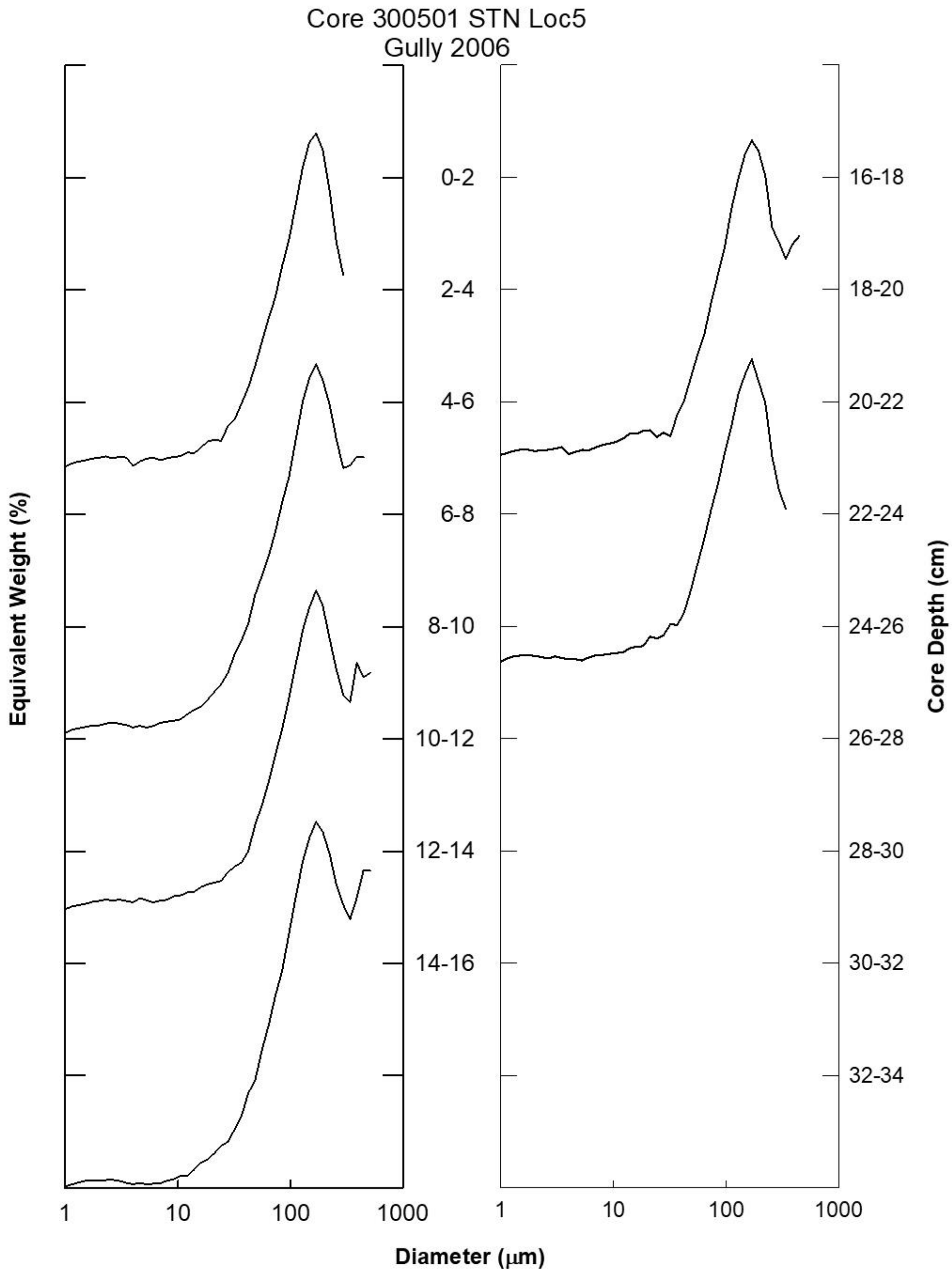

Figure 32. Disaggregated inorganic grain size of Core 300501 (Station Loc5) collected from the Gully, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by two decades and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

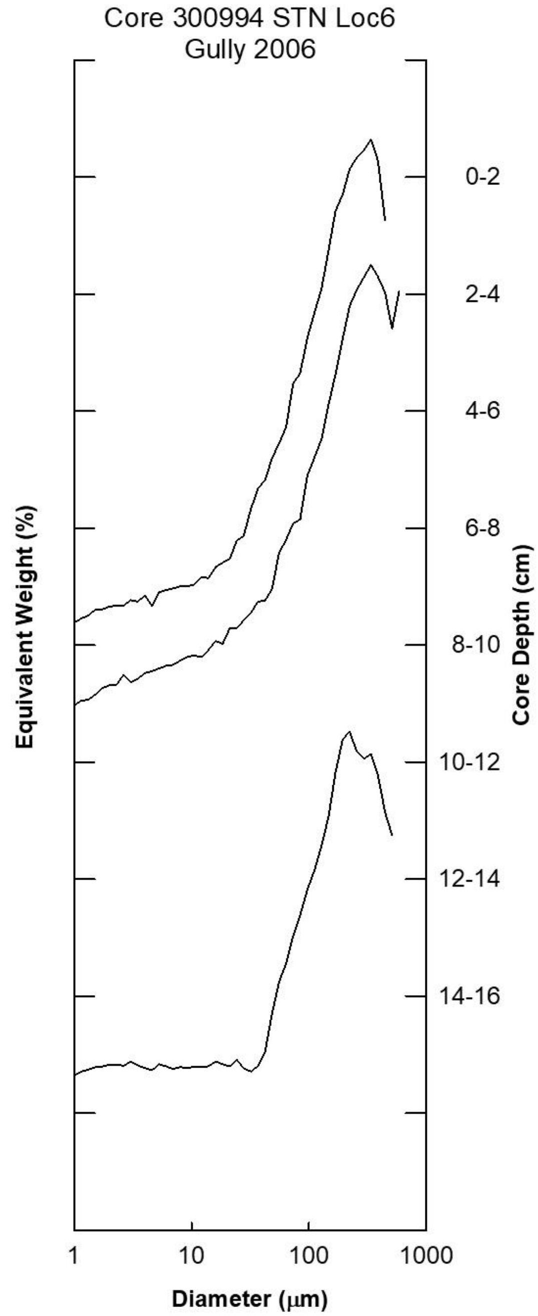

Figure 33. Disaggregated inorganic grain size of Core 300994 (Station Loc6) collected from the Gully, 2006. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by decades according to depth in the core and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

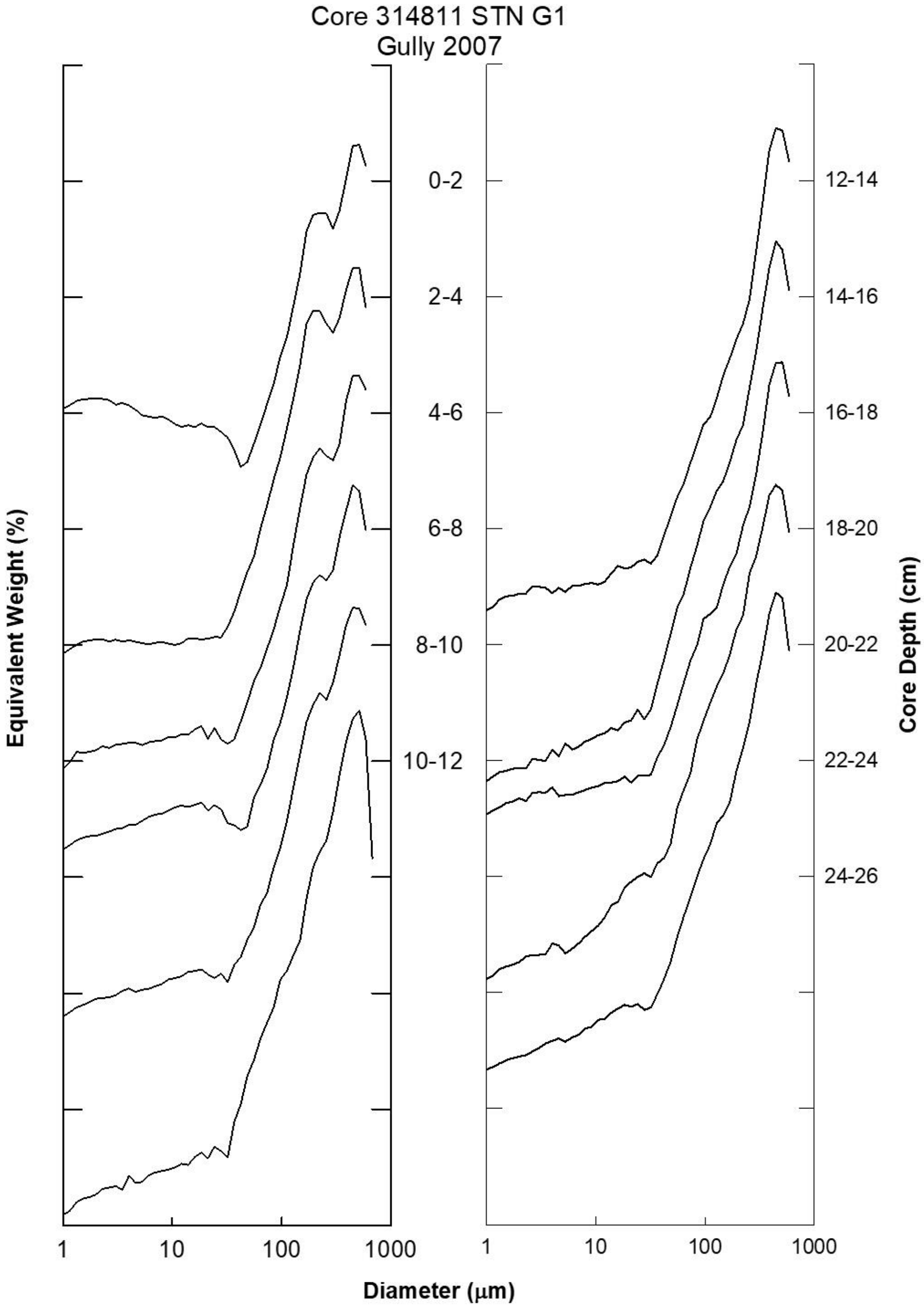

Figure 34. Disaggregated inorganic grain size of Core 314811 (Station G1) collected from the Gully, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

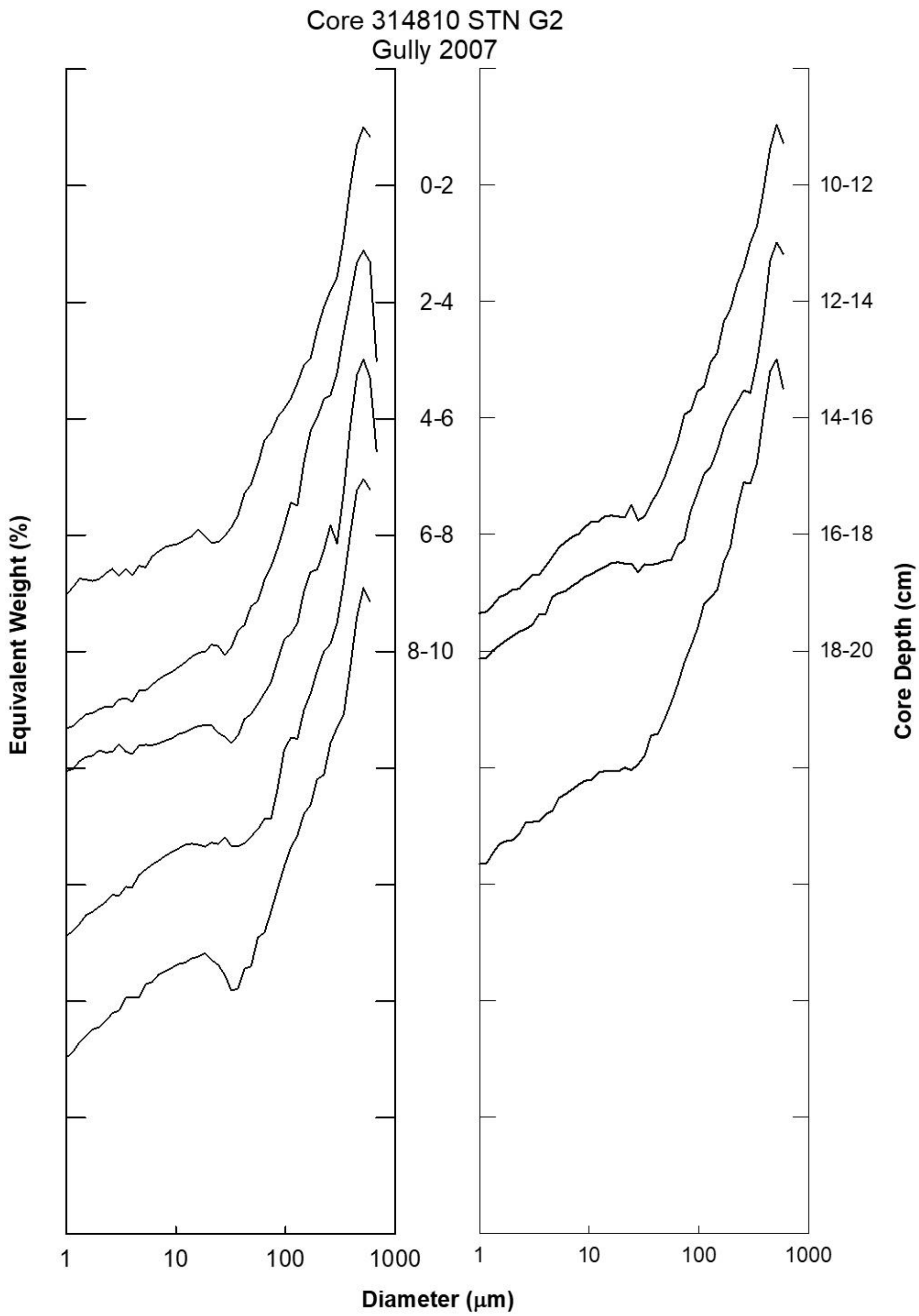

Figure 35. Disaggregated inorganic grain size of Core 314810 (Station G2) collected from the Gully, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

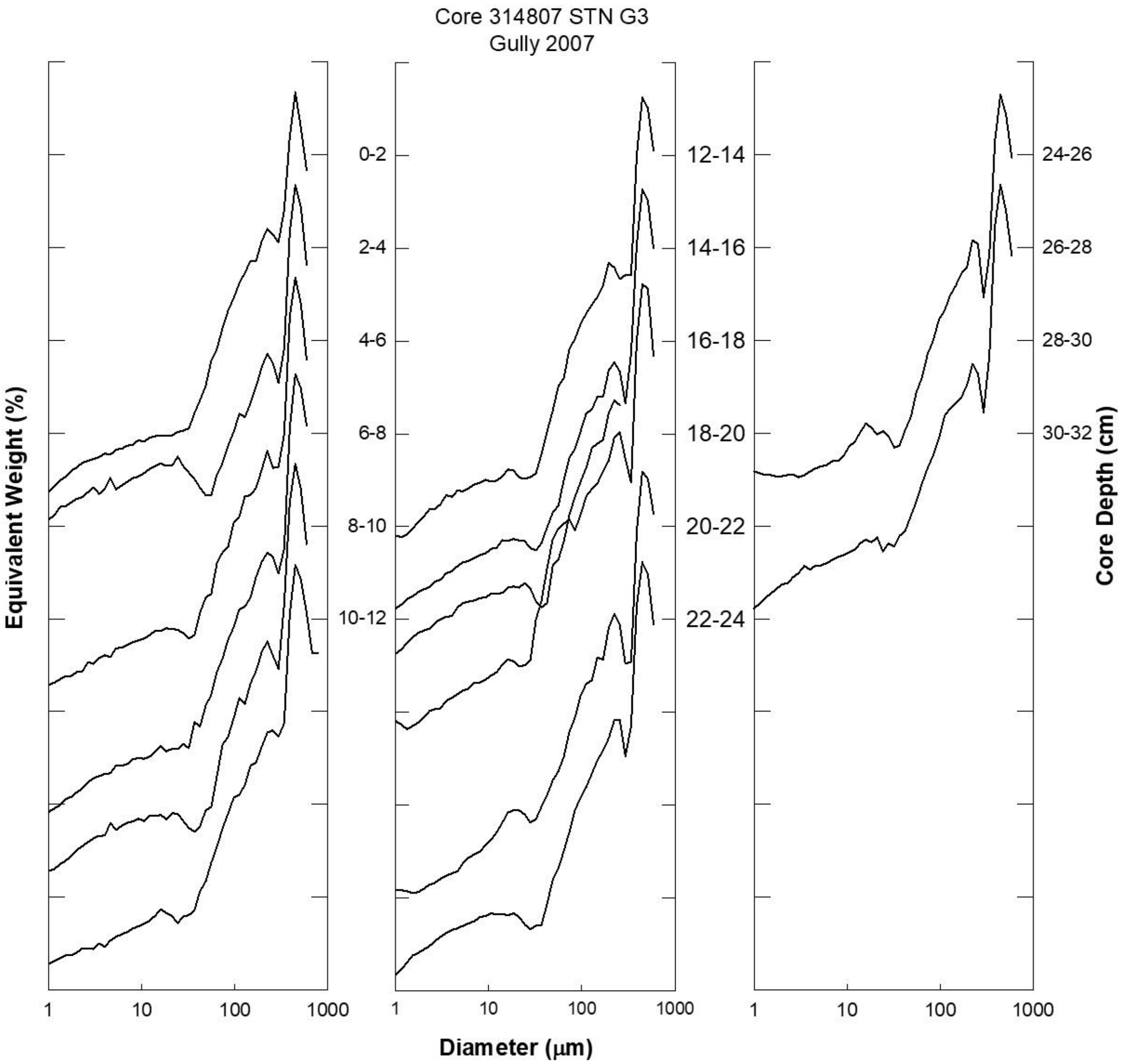

Figure 36. Disaggregated inorganic grain size of Core 314807 (Station G3) collected from the Gully, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

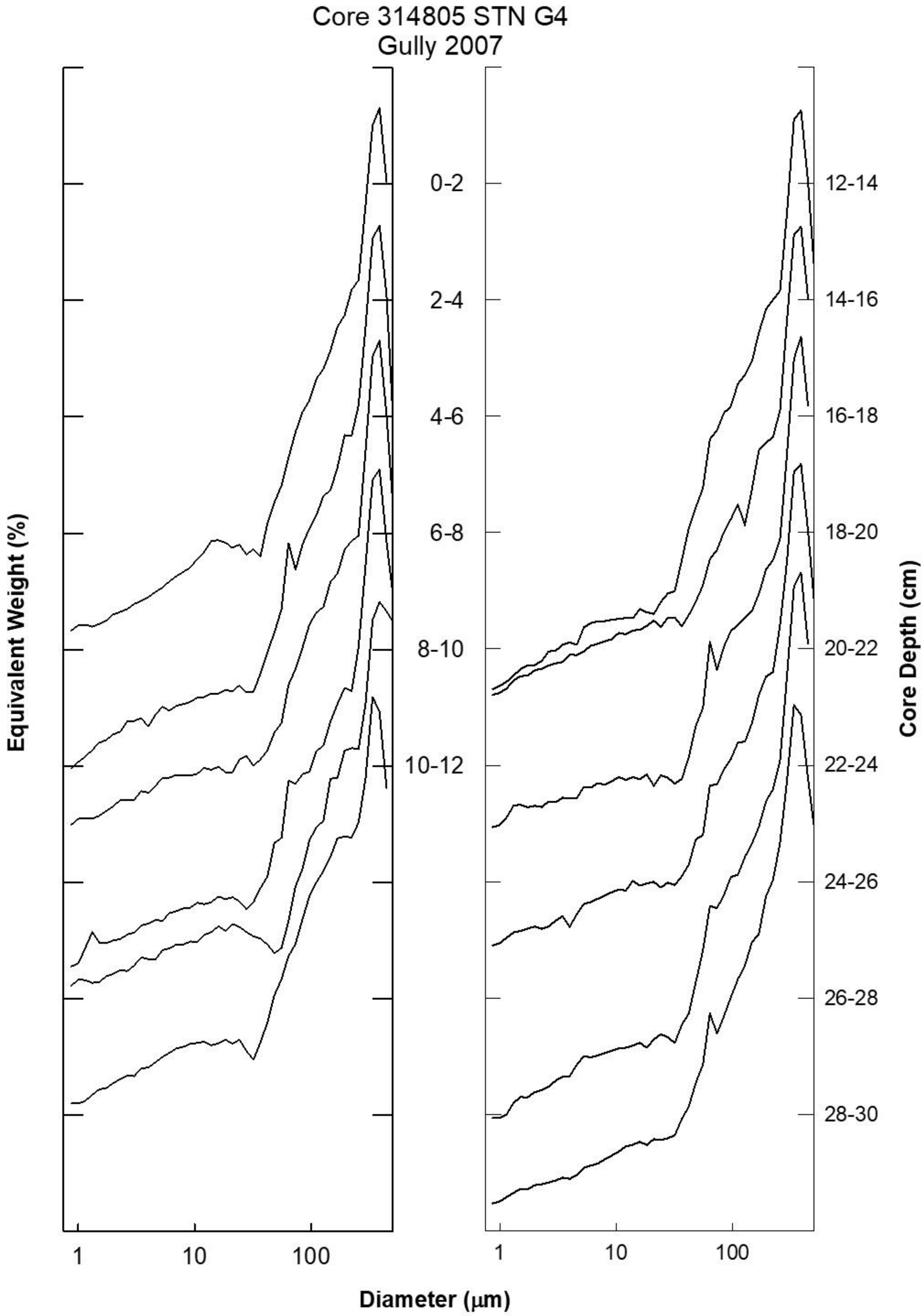

Figure 37. Disaggregated inorganic grain size of Core 314805 (Station G4) collected from the Gully, 2007. The y-origin for each curve starts at $1e^{-3}$ and increases decadally, $1e^{1}$. Each curve is offset by one decade and is presented as log vs. log plot to preserve the shape of the distribution. Each curve corresponds to a depth in the sediment core indicated by the right y-axis.

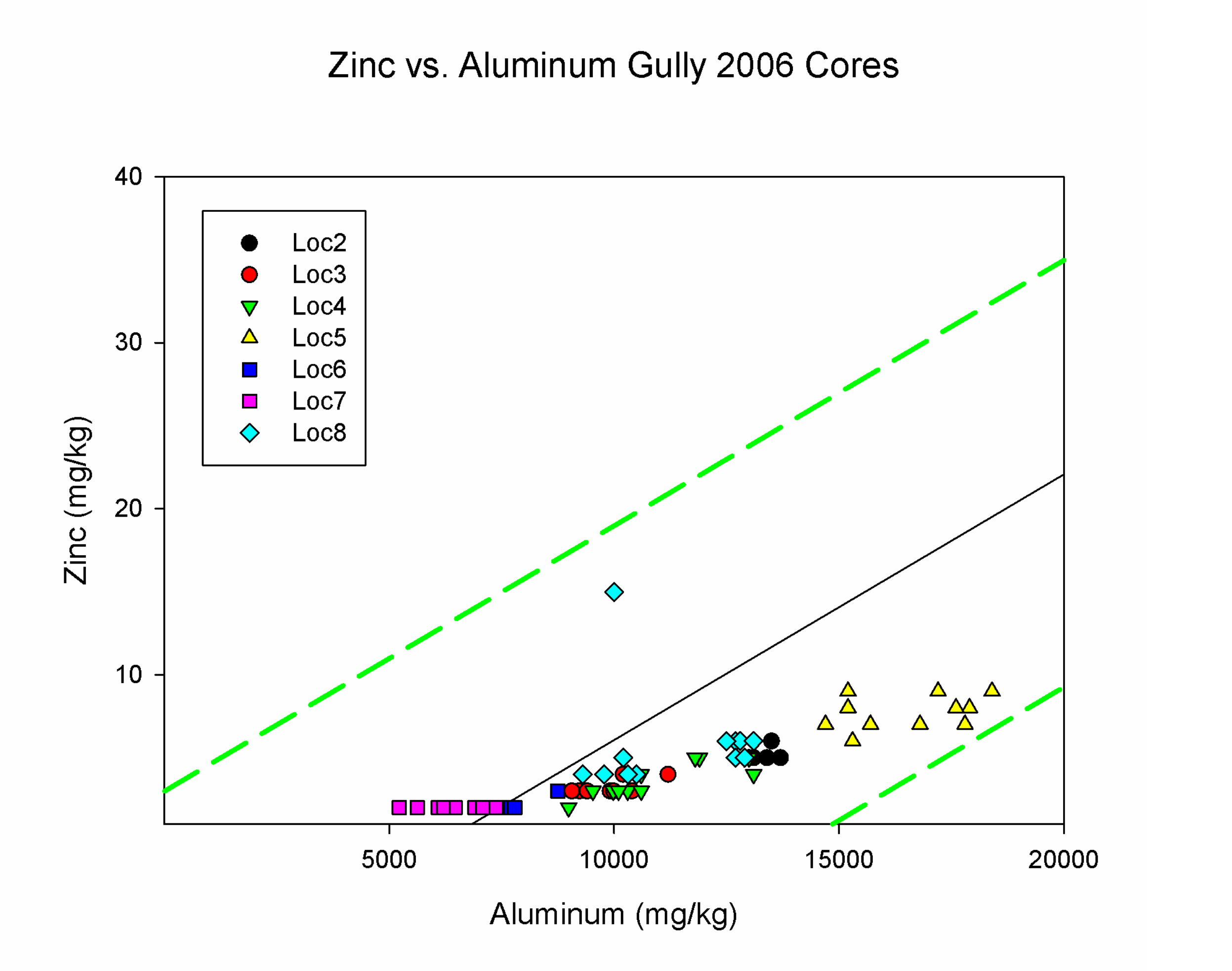

Figure 38. Zinc vs. aluminum plotted by core. Cores collected from the Gully, 2006. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

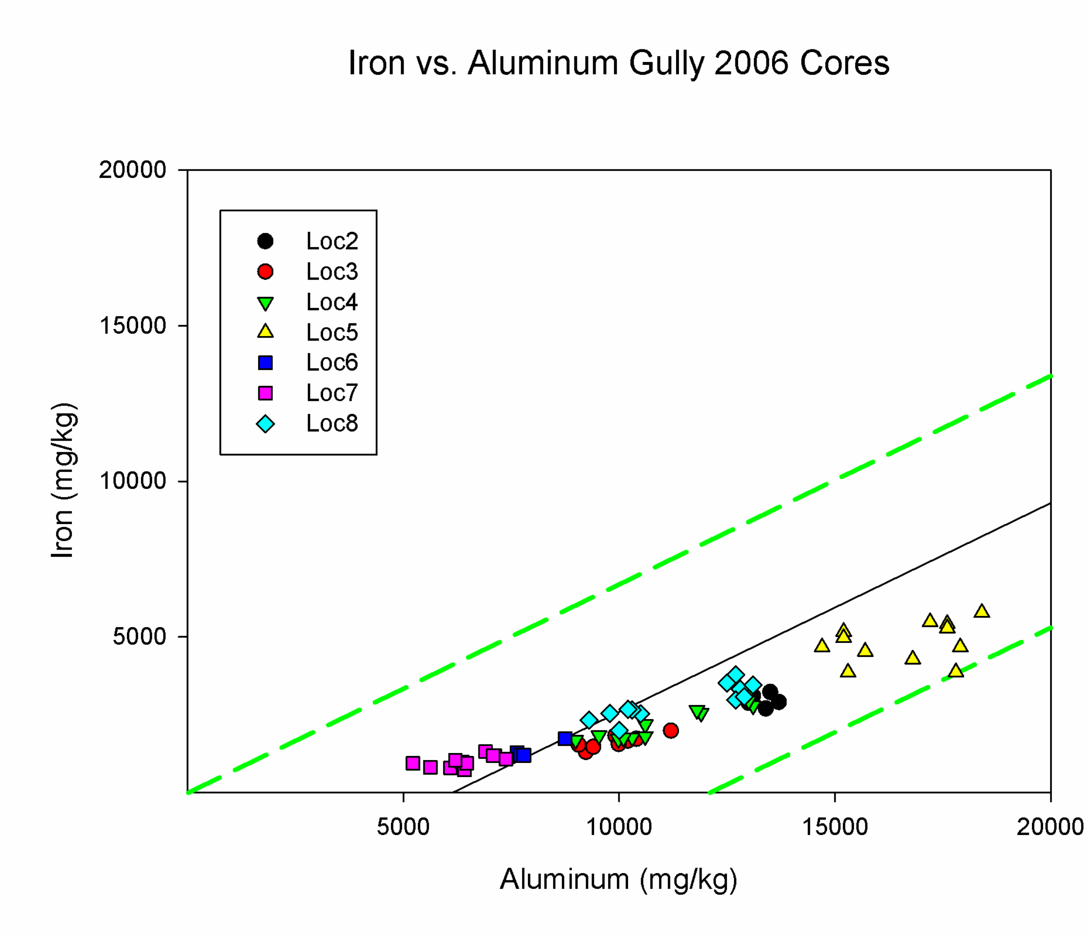

Figure 39. Iron vs. aluminum plotted by core. Cores collected from the Gully, 2006. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

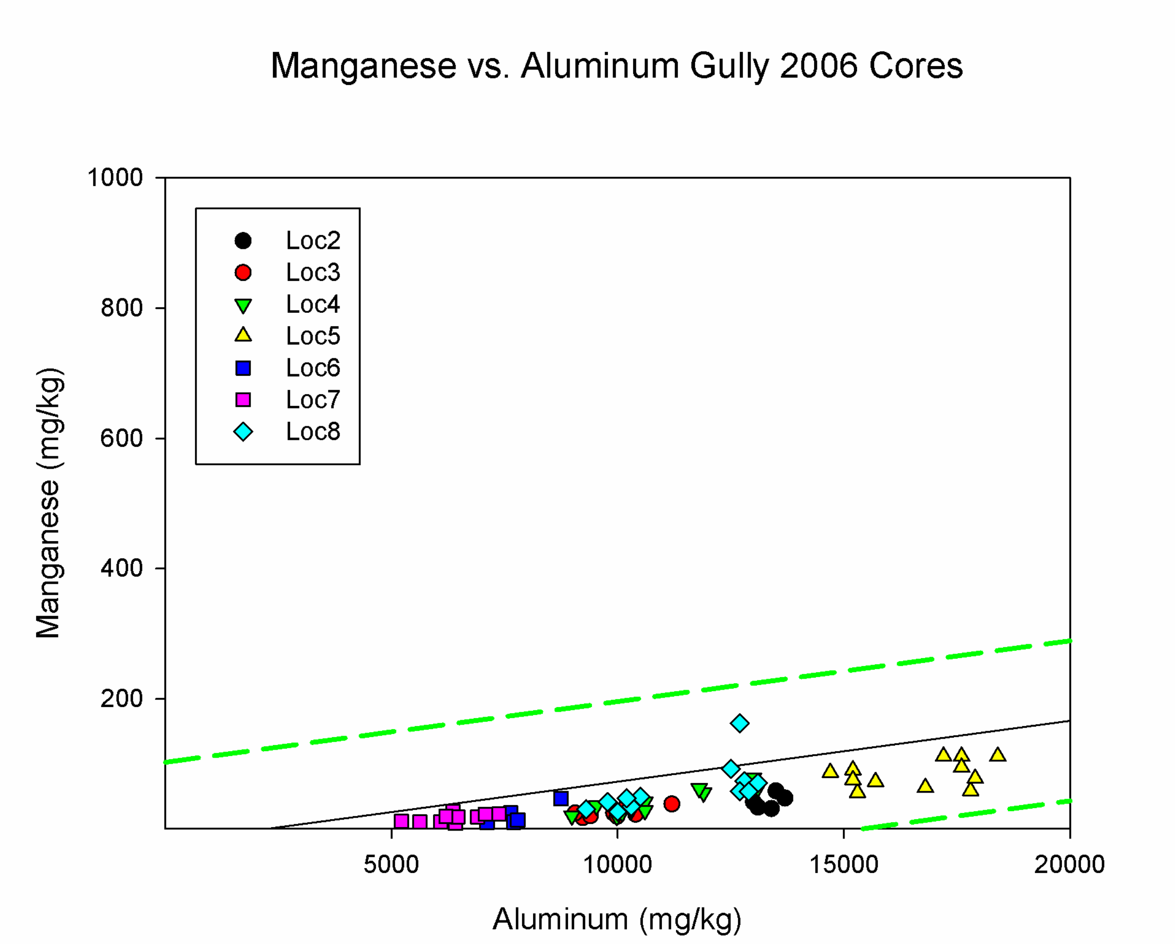

Figure 40. Manganese vs. aluminum plotted by core. Cores collected from the Gully, 2006. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

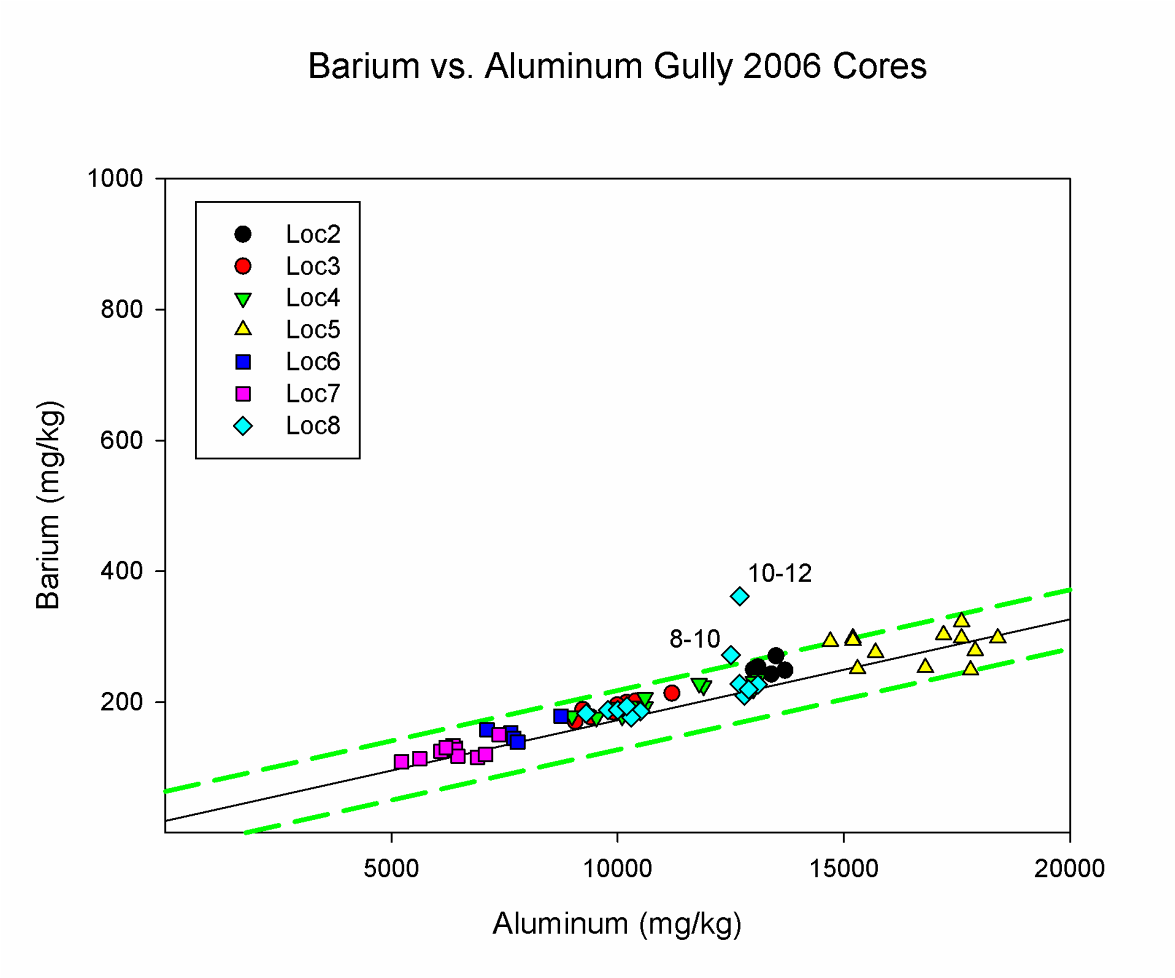

Figure 41. Barium vs. aluminum plotted by core. Cores collected from the Gully, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

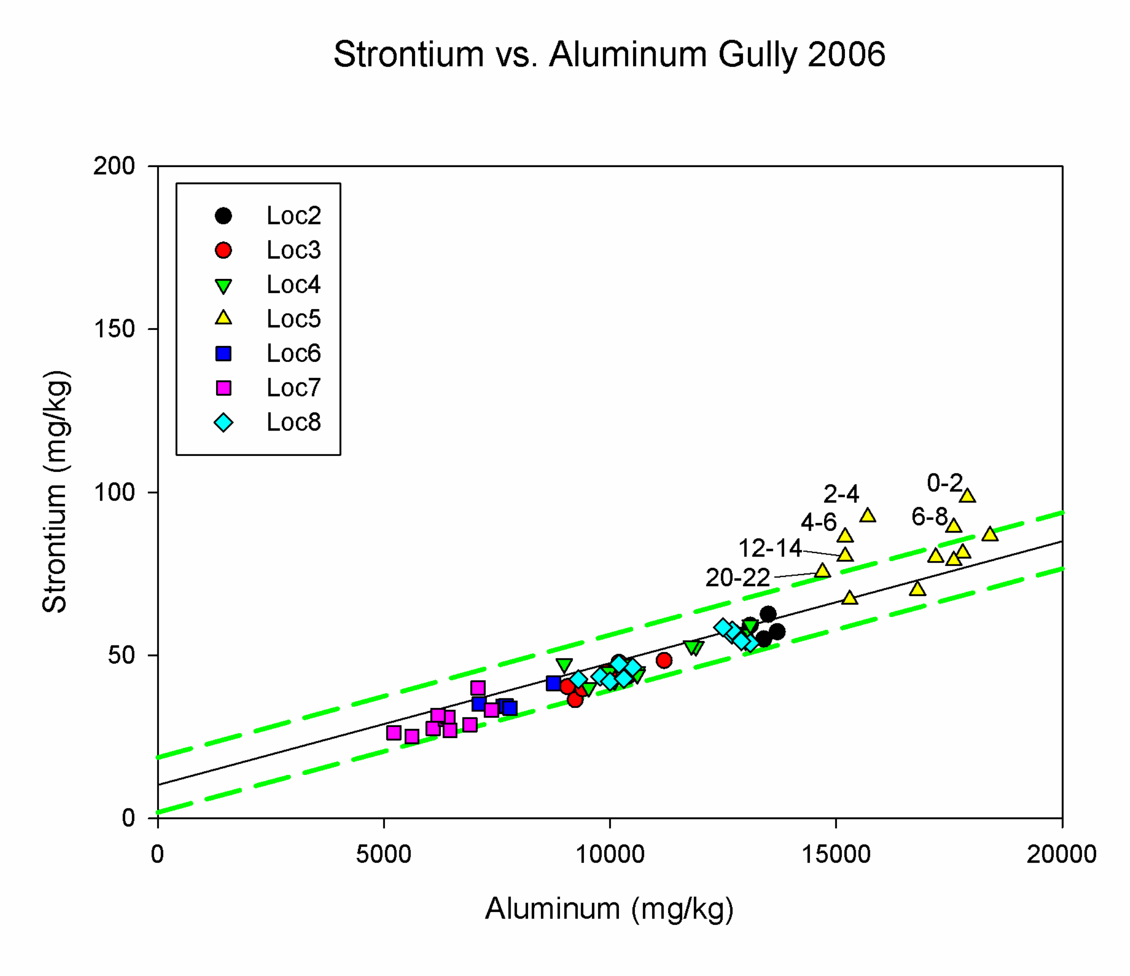

Figure 42. Strontium vs. aluminum plotted by core. Cores collected from the Gully, 2006. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

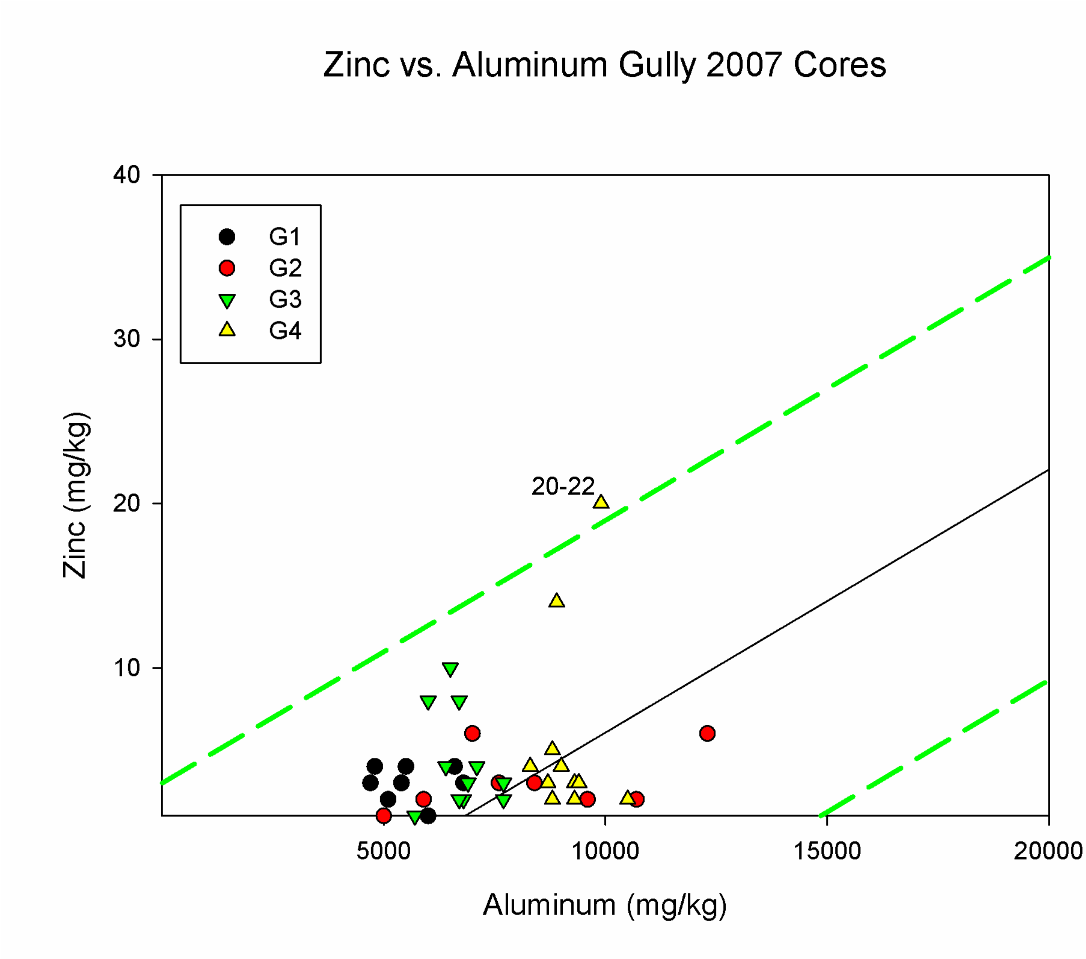

Figure 43. Zinc vs. aluminum plotted by core. Cores collected from the Gully, 2007. Samples in excess of background concentrations are labelled by depth (cm) in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

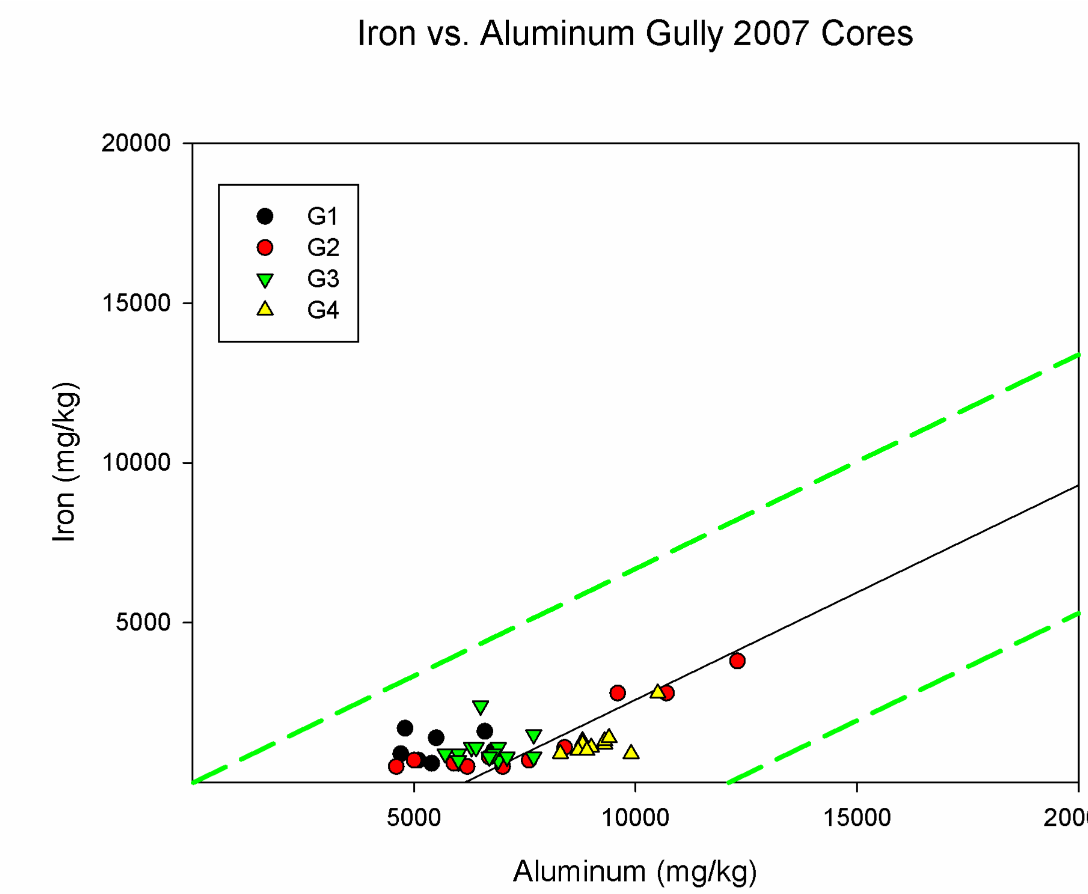

Figure 44. Iron vs. aluminum plotted by core. Cores collected from the Gully, 2007. Samples in excess of background concentrations are labelled by depth in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

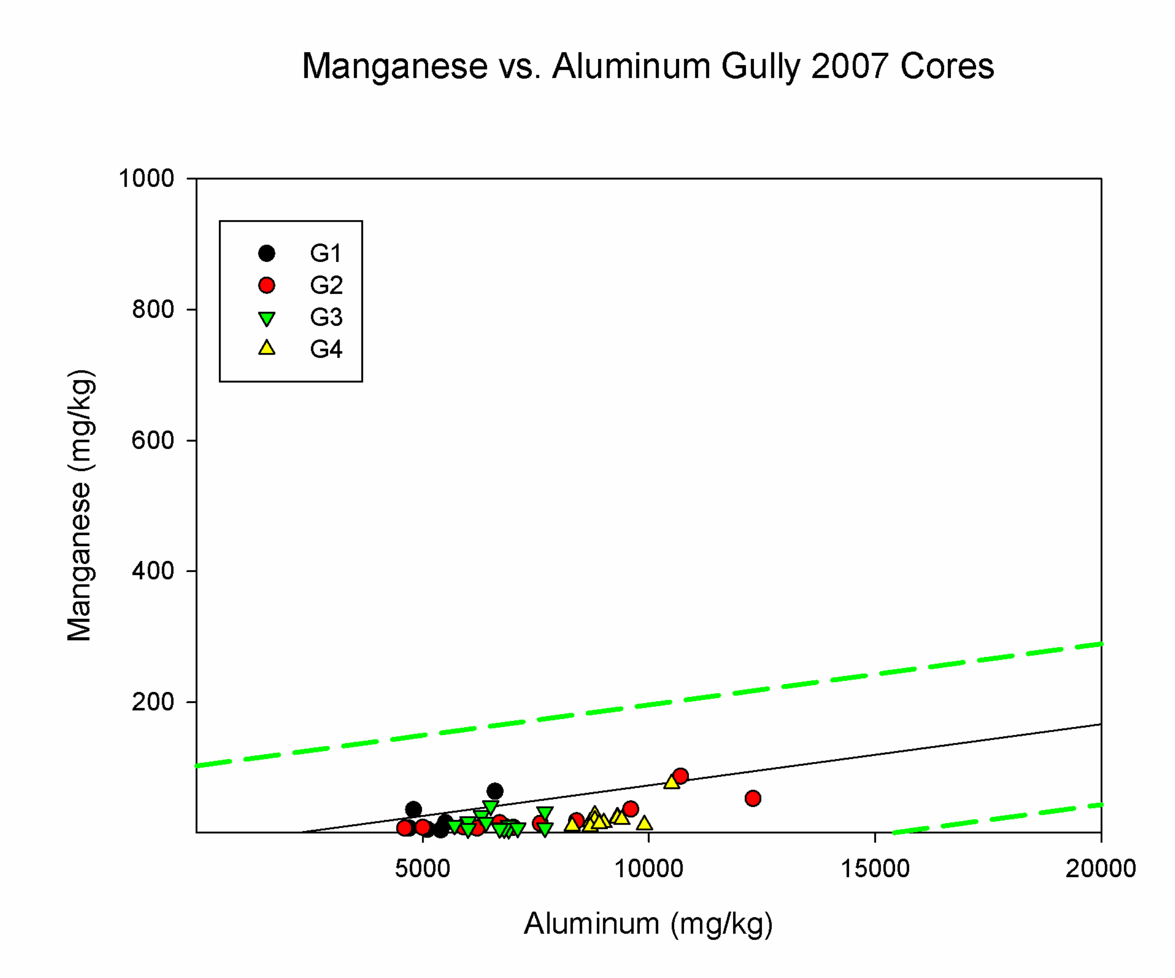

Figure 45. Manganese vs. aluminum plotted by core. Cores collected from the Gully, 2007. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

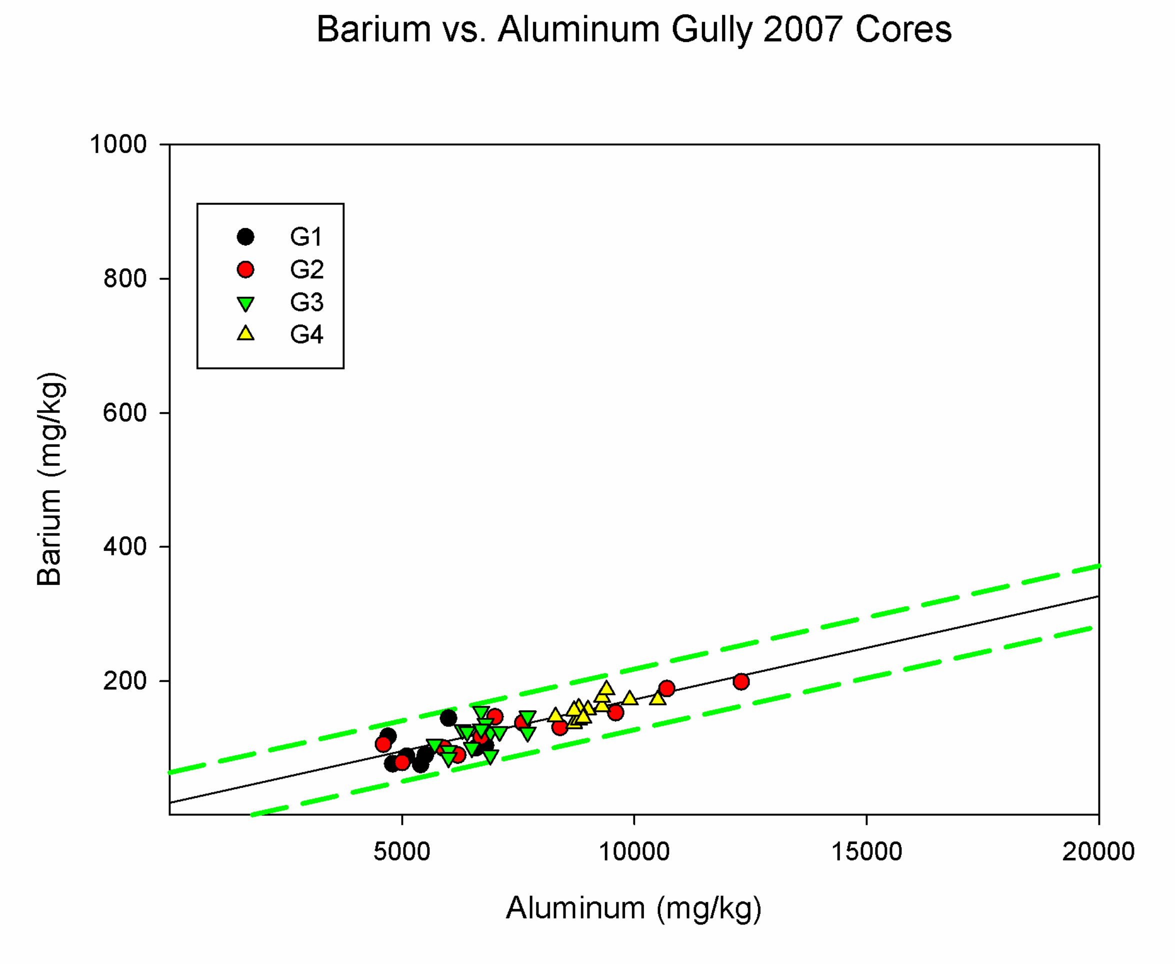

Figure 46. Barium vs. aluminum plotted by core. Cores collected from the Gully, 2007. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

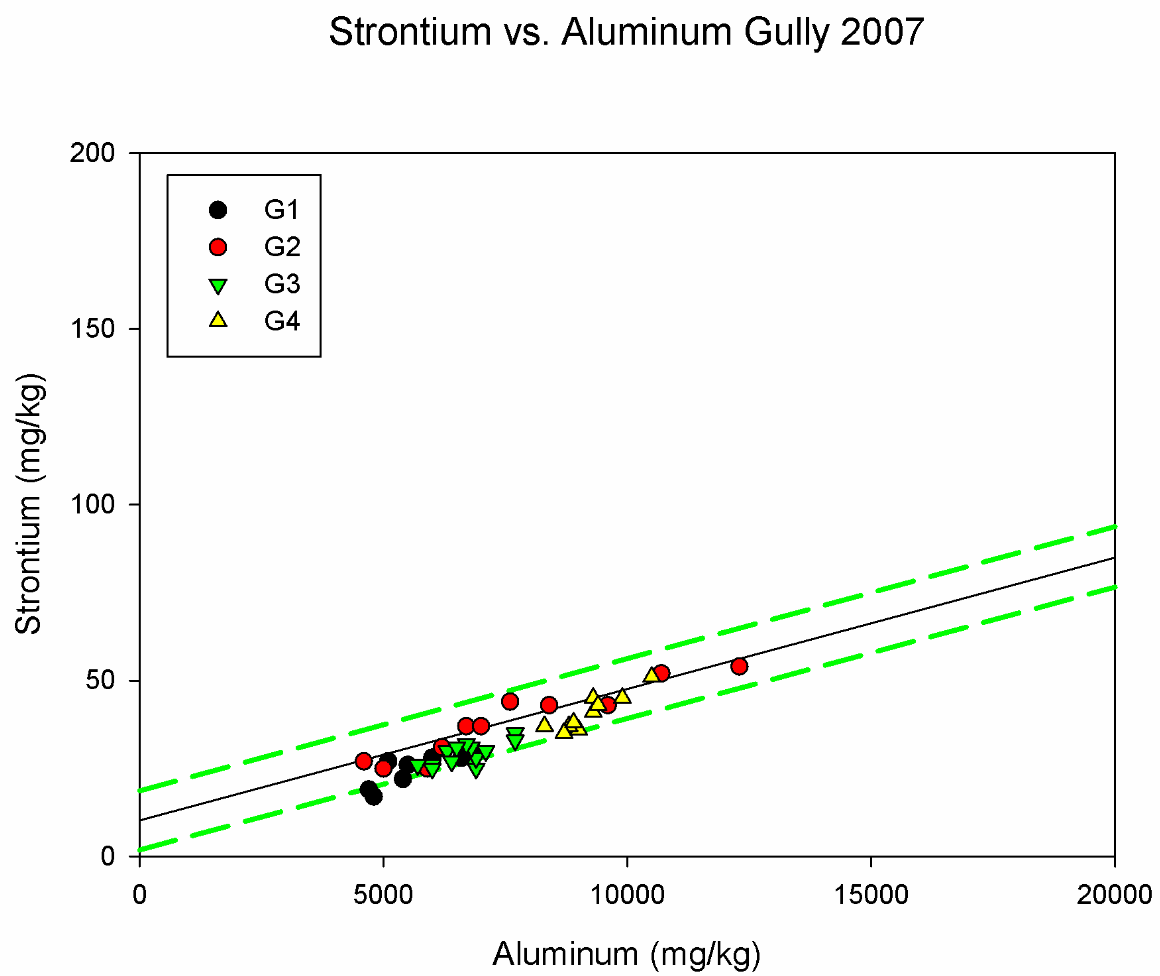

Figure 47. Strontium vs. aluminum plotted by core. Cores collected from the Gully, 2007. Samples in excess of background concentrations are labelled by depth in the core. The black line represents the best fit line from the background data and the green lines represent the 95% confidence interval.

Table 20. Inorganic grain size spectra: Station Loc2, core 300504, collected from the Gully, 2006.

ID		300208	300210	300212
Station		Loc2	Loc2	Loc2
Depth (cm)		0-2	4-6	8-10
Channel	Diameter			
4	0.7579	0.02466	0.00647	0.01459
5	0.8705506	0.02708	0.00702	0.01541
6	1	0.02915	0.00761	0.01673
7	1.1486984	0.03072	0.00797	0.01755
8	1.3195079	0.03223	0.00865	0.01840
9	1.5157166	0.03363	0.00870	0.01925
10	1.7411011	0.03559	0.00921	0.02004
11	2	0.03668	0.00934	0.02028
12	2.2973967	0.03938	0.00918	0.02052
13	2.6390158	0.03721	0.00917	0.02097
14	3.0314331	0.03908	0.00936	0.02005
15	3.4822023	0.03322	0.00726	0.01814
16	4	0.03803	0.00754	0.02042
17	4.5947934	0.03410	0.00983	0.02073
18	5.2780316	0.03867	0.00985	0.01992
19	6.0628663	0.03938	0.00986	0.02074
20	6.9644045	0.04061	0.01073	0.02090
21	8	0.04137	0.01055	0.02154
22	9.1895868	0.04179	0.01090	0.02174
23	10.556063	0.04289	0.01107	0.02262
24	12.125733	0.04330	0.01180	0.02195
25	13.928809	0.04658	0.01181	0.02454
26	16	0.05406	0.01242	0.02535
27	18.379174	0.05442	0.01410	0.02468
28	21.112127	0.06262	0.01403	0.02469
29	24.251465	0.06160	0.01591	0.02590
30	27.857618	0.07167	0.01713	0.02493
31	32	0.08925	0.01556	0.02515
32	36.758347	0.09998	0.02154	0.02840
33	42.224253	0.12132	0.02654	0.04103
34	48.50293	0.19898	0.05237	0.05925
35	55.715236	0.30270	0.06363	0.10045
36	64	0.56167	0.12084	0.17559
37	73.516695	0.75277	0.27167	0.34797
38	84.448506	1.20889	0.50756	0.83379
39	97.00586	2.35228	0.81073	1.45408
40	111.43047	3.96577	1.85884	2.96877
41	128	6.54799	3.32973	5.09662
42	147.03339	9.25928	4.77821	7.57030
43	168.89701	9.98095	5.57741	7.74982
44	194.01172	11.35042	6.39665	8.94231
45	222.86094	13.17210	11.04714	11.32445
46	256	14.19011	16.18500	16.21420
47	294.06678	12.12298	20.78522	15.21834
48	337.79403	8.20384	16.32615	13.51769
49	388.02344	4.40900	8.75466	5.23667
50	445.72189		2.79310	2.53254
51	512			
	% <16µm	0.80536	0.20386	0.43701
	% <64µm	1.92196	0.45709	0.81685

	d50	198.61	253.25	228.42
	modal	256.00	294.06	256.00

Table 21. Inorganic grain size spectra: Station Loc4, core 300502, collected from the Gully, 2006.

ID		300220	300222	300224	300226	300228	300230
Station		Loc4	Loc4	Loc4	Loc4	Loc4	Loc4
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22
Channel	Diameter						
4	0.7579	0.00262	0.00268	0.00713	0.02976	0.00465	0.00547
5	0.8705506	0.00285	0.00290	0.00752	0.03245	0.00497	0.00582
6	1	0.00309	0.00311	0.00827	0.03477	0.00552	0.00641
7	1.1486984	0.00325	0.00327	0.00850	0.03721	0.00570	0.00673
8	1.3195079	0.00347	0.00345	0.00887	0.03832	0.00593	0.00690
9	1.5157166	0.00374	0.00368	0.00887	0.03774	0.00620	0.00723
10	1.7411011	0.00376	0.00379	0.00904	0.03875	0.00619	0.00750
11	2	0.00393	0.00390	0.00985	0.03993	0.00643	0.00751
12	2.2973967	0.00395	0.00429	0.00922	0.04243	0.00667	0.00747
13	2.6390158	0.00402	0.00435	0.00898	0.04391	0.00642	0.00738
14	3.0314331	0.00433	0.00404	0.00911	0.04155	0.00677	0.00792
15	3.4822023	0.00401	0.00409	0.00822	0.04216	0.00604	0.00774
16	4	0.00422	0.00457	0.00886	0.04261	0.00694	0.00764
17	4.5947934	0.00450	0.00464	0.00922	0.04783	0.00699	0.00746
18	5.2780316	0.00428	0.00469	0.00929	0.04429	0.00670	0.00673
19	6.0628663	0.00430	0.00437	0.00954	0.04735	0.00686	0.00697
20	6.9644045	0.00451	0.00456	0.00959	0.04996	0.00750	0.00729
21	8	0.00470	0.00465	0.00982	0.05125	0.00767	0.00778
22	9.1895868	0.00483	0.00486	0.01007	0.05322	0.00780	0.00763
23	10.556063	0.00483	0.00504	0.01043	0.05635	0.00844	0.00794
24	12.125733	0.00522	0.00536	0.01084	0.05709	0.00874	0.00883
25	13.928809	0.00497	0.00546	0.01028	0.05756	0.00862	0.00914
26	16	0.00489	0.00601	0.01115	0.06161	0.00946	0.01015
27	18.379174	0.00500	0.00656	0.01196	0.05935	0.01023	0.01070
28	21.112127	0.00473	0.00722	0.00987	0.06691	0.01052	0.01224
29	24.251465	0.00495	0.00686	0.01243	0.06436	0.01247	0.01357
30	27.857618	0.00432	0.00860	0.01257	0.07618	0.01257	0.01760
31	32	0.00581	0.01233	0.01363	0.08713	0.01356	0.02025
32	36.758347	0.01395	0.02306	0.01552	0.08313	0.03374	0.02329
33	42.224253	0.01652	0.03595	0.02467	0.07267	0.06270	0.04127
34	48.50293	0.03364	0.06743	0.03338	0.06477	0.11628	0.05492
35	55.715236	0.05094	0.08652	0.05871	0.09984	0.15408	0.09265
36	64	0.07973	0.18124	0.11547	0.19800	0.24932	0.15370
37	73.516695	0.10665	0.26372	0.14869	0.32917	0.36317	0.21349
38	84.448506	0.16862	0.45237	0.31653	0.45452	0.50249	0.36016
39	97.00586	0.25629	0.73233	0.45330	0.65800	0.53634	0.46478
40	111.43047	0.44160	1.23609	0.83858	1.12030	0.89436	0.84382
41	128	0.77442	2.10066	1.51337	1.93795	1.40084	1.17278
42	147.03339	1.44696	2.96344	2.33101	2.60859	2.29360	1.75679
43	168.89701	2.91669	5.38844	4.29244	3.90507	3.46248	3.35535
44	194.01172	7.09662	10.34805	8.70000	9.39857	7.77567	7.61955
45	222.86094	13.74965	18.97832	16.32317	17.74719	13.27797	15.68103
46	256	15.92991	17.03200	18.01415	14.47532	16.83518	20.32737
47	294.06678	12.80123	13.02155	12.68672	14.56223	14.89218	16.18353
48	337.79403	12.74782	10.34172	12.53538	13.14407	11.55228	13.10658
49	388.02344	14.92199	11.05904	12.67835	12.37724	13.63549	11.62463
50	445.72189	11.07580	5.54876	8.64745	5.38132	6.42478	6.67832
51	512	5.25189				5.32048	

52	**588.13356**						
	% <16µm	0.08938	0.09175	0.20152	0.96651	0.14776	0.16151
	% <64µm	0.23414	0.35228	0.40540	1.70246	0.58338	0.45814
	d50	276.22	236.49	249.65	245.62	260.67	252.08
	modal	256.00	222.86	256.00	222.86	256.00	256.00

Table 22. Inorganic grain size spectra: Station Loc5, core 300501, collected from the Gully, 2006.

ID		**300232**	**300234**	**300236**	**300238**	**300240**	**300242**
Station		Loc5	Loc5	Loc5	Loc5	Loc5	Loc5
Depth (cm)		0-2	4-6	8-10	12-14	16-18	20-22
Channel	**Diameter**						
4	**0.7579**	0.02600	0.01089	0.02862	0.00981	0.03169	0.04608
5	**0.8705506**	0.02675	0.01133	0.03039	0.01032	0.03373	0.04853
6	**1**	0.02849	0.01208	0.03223	0.01080	0.03523	0.05210
7	**1.1486984**	0.02956	0.01241	0.03304	0.01125	0.03671	0.05443
8	**1.3195079**	0.03037	0.01279	0.03398	0.01161	0.03775	0.05517
9	**1.5157166**	0.03139	0.01314	0.03542	0.01160	0.03761	0.05538
10	**1.7411011**	0.03185	0.01313	0.03607	0.01171	0.03646	0.05448
11	**2**	0.03288	0.01372	0.03714	0.01179	0.03700	0.05349
12	**2.2973967**	0.03151	0.01394	0.03627	0.01184	0.03750	0.05178
13	**2.6390158**	0.03270	0.01362	0.03708	0.01159	0.03843	0.05414
14	**3.0314331**	0.03209	0.01326	0.03602	0.01109	0.03966	0.05203
15	**3.4822023**	0.02707	0.01261	0.03503	0.01082	0.03438	0.05101
16	**4**	0.02970	0.01305	0.03814	0.01109	0.03582	0.05098
17	**4.5947934**	0.03131	0.01258	0.03650	0.01083	0.03744	0.04978
18	**5.2780316**	0.03206	0.01303	0.03495	0.01096	0.03725	0.05308
19	**6.0628663**	0.03035	0.01387	0.03623	0.01099	0.03938	0.05532
20	**6.9644045**	0.03167	0.01423	0.03687	0.01164	0.04145	0.05581
21	**8**	0.03250	0.01446	0.03970	0.01196	0.04251	0.05678
22	**9.1895868**	0.03299	0.01494	0.04033	0.01282	0.04431	0.05792
23	**10.556063**	0.03565	0.01654	0.04281	0.01276	0.04698	0.05889
24	**12.125733**	0.03491	0.01815	0.04338	0.01457	0.05230	0.06375
25	**13.928809**	0.03927	0.01930	0.04781	0.01672	0.05205	0.06612
26	**16**	0.04446	0.02233	0.05084	0.01790	0.05518	0.06674
27	**18.379174**	0.04620	0.02625	0.05239	0.02041	0.05611	0.08111
28	**21.112127**	0.04519	0.03078	0.05428	0.02386	0.04878	0.07807
29	**24.251465**	0.06109	0.03871	0.06498	0.02584	0.05340	0.08365
30	**27.857618**	0.07047	0.05699	0.07302	0.03347	0.04972	0.10500
31	**32**	0.09718	0.07553	0.07949	0.04387	0.07669	0.10277
32	**36.758347**	0.13522	0.10670	0.09980	0.07017	0.10231	0.13278
33	**42.224253**	0.20712	0.19159	0.17159	0.09067	0.16381	0.20969
34	**48.50293**	0.34193	0.28149	0.25437	0.16721	0.26493	0.35980
35	**55.715236**	0.55778	0.42382	0.41131	0.28159	0.39963	0.60615
36	**64**	0.86084	0.70363	0.71704	0.51619	0.75842	1.09071
37	**73.516695**	1.62882	1.27004	1.22796	0.86217	1.33959	1.83551
38	**84.448506**	2.79547	2.16368	2.30719	1.85519	2.40282	3.52368
39	**97.00586**	5.75908	4.61124	4.59429	3.89342	5.25102	6.12248
40	**111.43047**	12.15316	10.04475	9.18044	7.98091	9.64912	11.67486
41	**128**	20.49094	16.33428	14.82211	13.11239	16.03138	17.54684
42	**147.03339**	24.78912	21.78456	21.08437	18.30217	21.33742	23.99655
43	**168.89701**	17.59749	15.55100	15.29161	14.78255	17.16221	15.22350
44	**194.01172**	7.62373	9.52063	7.79323	9.44635	10.33651	9.90039
45	**222.86094**	2.65871	4.66573	4.14427	5.04618	3.56267	3.29066
46	**256**	1.34494	2.58526	2.46171	3.31693	2.64302	1.65430

47	**294.06678**		2.72447	2.11957	2.47727	1.86885	1.11772
48	**337.79403**		3.26444	4.73051	3.84049	2.53575	
49	**388.02344**		3.21903	3.52611	6.81767	2.98500	
50	**445.72189**			3.87954	6.71655		
51	**512**						
	% <16µm	0.69107	0.30307	0.80800	0.25856	0.86566	1.19703
	% <64µm	2.29770	1.55727	2.12006	1.03357	2.13622	3.02279
	d50	131.08	139.63	141.57	150.65	139.09	132.11
	modal	147.03	147.03	147.03	147.03	147.03	147.03

Table 23. Inorganic grain size spectra: Station Loc6, core 300994, collected from the Gully, 2006.

ID		**2699757**	**2699761**	**2699765**
Station		Loc6	Loc6	Loc6
Depth (cm)		0-2	2-4	10-12
Channel	**Diameter**			
4	**0.7579**	0.00144	0.00276	0.01951
5	**0.8705506**	0.00156	0.00305	0.02100
6	**1**	0.00170	0.00335	0.02282
7	**1.1486984**	0.00180	0.00342	0.02357
8	**1.3195079**	0.00202	0.00380	0.02479
9	**1.5157166**	0.00203	0.00430	0.02511
10	**1.7411011**	0.00214	0.00456	0.02614
11	**2**	0.00218	0.00461	0.02610
12	**2.2973967**	0.00219	0.00557	0.02547
13	**2.6390158**	0.00243	0.00482	0.02760
14	**3.0314331**	0.00235	0.00517	0.02561
15	**3.4822023**	0.00269	0.00579	0.02435
16	**4**	0.00216	0.00600	0.02326
17	**4.5947934**	0.00285	0.00633	0.02623
18	**5.2780316**	0.00296	0.00667	0.02514
19	**6.0628663**	0.00307	0.00679	0.02398
20	**6.9644045**	0.00319	0.00741	0.02487
21	**8**	0.00320	0.00794	0.02427
22	**9.1895868**	0.00331	0.00816	0.02511
23	**10.556063**	0.00382	0.00792	0.02491
24	**12.125733**	0.00376	0.00911	0.02525
25	**13.928809**	0.00466	0.01088	0.02765
26	**16**	0.00509	0.01023	0.02631
27	**18.379174**	0.00549	0.01393	0.02516
28	**21.112127**	0.00782	0.01407	0.02873
29	**24.251465**	0.00865	0.01634	0.02422
30	**27.857618**	0.01474	0.01903	0.02274
31	**32**	0.02178	0.02361	0.02529
32	**36.758347**	0.02589	0.02409	0.03364
33	**42.224253**	0.03983	0.03050	0.07135
34	**48.50293**	0.05305	0.06153	0.13238
35	**55.715236**	0.07323	0.07977	0.18997
36	**64**	0.17228	0.10969	0.32687
37	**73.516695**	0.21120	0.11894	0.49679
38	**84.448506**	0.42365	0.28083	0.81274
39	**97.00586**	0.69057	0.40121	1.18417
40	**111.43047**	1.11141	0.57499	1.93108
41	**128**	2.35239	1.13697	3.40350
42	**147.03339**	5.15869	2.07670	8.22109

43	**168.89701**	7.08421	4.11352	15.51704
44	**194.01172**	11.75387	7.91229	18.35681
45	**222.86094**	14.65500	10.86167	12.35130
46	**256**	16.93275	13.98063	10.70132
47	**294.06678**	21.06717	17.81985	11.75956
48	**337.79403**	13.79996	14.10125	7.69433
49	**388.02344**	4.27376	10.36095	3.74850
50	**445.72189**		5.09418	2.37238
51	**512**		10.63483	
52	**588.13356**			
	% <16µm	0.05751	0.12841	0.54273
	% <64µm	0.31308	0.42152	1.12253
	d50	234.75	273.11	192.13
	modal	294.06	294.06	194.01

Table 24. Inorganic grain size spectra: Station G1, core 314811, collected from the Gully, 2007.

ID		**269987**	**269988**	**269989**	**269990**	**269991**	**269992**
Station		G1	G1	G1	G1	G1	G1
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.09854	0.00757	0.00799	0.01665	0.00595	0.00109
5	**0.8705506**	0.10878	0.00843	0.00857	0.01729	0.00629	0.00123
6	**1**	0.11728	0.00925	0.00978	0.01888	0.00687	0.00133
7	**1.1486984**	0.12747	0.01001	0.01199	0.02077	0.00753	0.00157
8	**1.3195079**	0.13194	0.01074	0.01192	0.02192	0.00791	0.00170
9	**1.5157166**	0.13290	0.01098	0.01198	0.02258	0.00843	0.00175
10	**1.7411011**	0.13480	0.01125	0.01249	0.02260	0.00895	0.00185
11	**2**	0.13255	0.01119	0.01345	0.02367	0.00911	0.00206
12	**2.2973967**	0.12994	0.01077	0.01299	0.02471	0.00920	0.00211
13	**2.6390158**	0.11851	0.01115	0.01383	0.02603	0.00963	0.00217
14	**3.0314331**	0.12261	0.01072	0.01408	0.02658	0.01045	0.00203
15	**3.4822023**	0.11699	0.01104	0.01441	0.02817	0.01101	0.00267
16	**4**	0.10715	0.01069	0.01444	0.02822	0.01028	0.00232
17	**4.5947934**	0.09604	0.01042	0.01375	0.03064	0.01072	0.00236
18	**5.2780316**	0.09330	0.01017	0.01453	0.03303	0.01090	0.00269
19	**6.0628663**	0.09134	0.01048	0.01493	0.03476	0.01153	0.00286
20	**6.9644045**	0.09397	0.01070	0.01508	0.03532	0.01201	0.00294
21	**8**	0.08856	0.01030	0.01611	0.03754	0.01316	0.00301
22	**9.1895868**	0.08071	0.01005	0.01599	0.03993	0.01347	0.00316
23	**10.556063**	0.07612	0.01036	0.01714	0.04146	0.01397	0.00339
24	**12.125733**	0.07882	0.01142	0.01691	0.04026	0.01525	0.00332
25	**13.928809**	0.07587	0.01139	0.01884	0.04194	0.01556	0.00388
26	**16**	0.08183	0.01126	0.01996	0.04420	0.01609	0.00424
27	**18.379174**	0.07593	0.01135	0.01562	0.03760	0.01450	0.00378
28	**21.112127**	0.07566	0.01173	0.01931	0.04187	0.01356	0.00477
29	**24.251465**	0.06905	0.01168	0.01537	0.03853	0.01475	0.00435
30	**27.857618**	0.06189	0.01438	0.01411	0.02930	0.01250	0.00384
31	**32**	0.04816	0.01949	0.01538	0.02805	0.01748	0.00773
32	**36.758347**	0.03434	0.02905	0.02198	0.02553	0.02051	0.01106
33	**42.224253**	0.03810	0.04277	0.03200	0.02721	0.02887	0.01932
34	**48.50293**	0.05512	0.05858	0.04955	0.04929	0.03723	0.02678
35	**55.715236**	0.08069	0.10274	0.06390	0.06285	0.05847	0.04104
36	**64**	0.12083	0.16172	0.09385	0.08694	0.07353	0.05596
37	**73.516695**	0.17918	0.26883	0.13725	0.15412	0.12191	0.07596

38	**84.448506**	0.30962	0.41613	0.21854	0.21380	0.18012	0.13071
39	**97.00586**	0.45082	0.73921	0.32810	0.35336	0.30294	0.15511
40	**111.43047**	0.84493	1.33639	0.73449	0.64619	0.59528	0.21391
41	**128**	1.58358	2.57392	1.52268	1.32524	1.15342	0.28237
42	**147.03339**	3.68115	5.92484	2.96124	2.48679	2.18474	0.65604
43	**168.89701**	5.13082	7.63852	4.18159	3.49200	3.07064	1.22097
44	**194.01172**	5.32031	7.58468	4.98532	4.02768	3.87485	1.66573
45	**222.86094**	5.24944	5.92219	4.28540	3.61642	3.36559	2.06341
46	**256**	3.87625	4.93118	3.93215	4.44735	4.76294	3.63773
47	**294.06678**	5.56701	6.61898	5.41192	8.53572	8.14766	7.56651
48	**337.79403**	10.40090	11.46602	12.72233	14.37892	14.86789	14.65688
49	**388.02344**	20.19883	17.83800	20.98745	23.93479	21.10693	23.03905
50	**445.72189**	20.51458	17.89311	21.03605	21.46014	20.77664	27.32443
51	**512**	13.59677	8.14413	15.89329	9.82312	14.95277	15.63213
52	**588.13356**						1.44470
53	**675.58805**						
	% <16µm	2.35421	0.22909	0.30118	0.63297	0.22818	0.05149
	% <64µm	2.97499	0.54213	0.56836	1.01741	0.46214	0.17840
	d50	348.5123	314.4364	356.7413	348.7446	354.0629	375.8171
	modal	445.72	445.72	388.02	388.02	388.02	445.72

Table 24. Continued.

ID		**269993**	**269994**	**269995**	**269996**	**269997**
Station		G1	G1	G1	G1	G1
Depth (cm)		12-14	14-16	16-18	18-20	20-22
Channel	**Diameter**					
4	**0.7579**	0.00183	0.00064	0.00321	0.00120	0.00213
5	**0.8705506**	0.00198	0.00066	0.00344	0.00131	0.00216
6	**1**	0.00210	0.00073	0.00372	0.00140	0.00229
7	**1.1486984**	0.00246	0.00079	0.00394	0.00159	0.00245
8	**1.3195079**	0.00261	0.00081	0.00430	0.00168	0.00260
9	**1.5157166**	0.00264	0.00085	0.00443	0.00173	0.00272
10	**1.7411011**	0.00274	0.00086	0.00473	0.00183	0.00281
11	**2**	0.00274	0.00085	0.00445	0.00204	0.00288
12	**2.2973967**	0.00320	0.00104	0.00526	0.00210	0.00310
13	**2.6390158**	0.00315	0.00101	0.00532	0.00211	0.00333
14	**3.0314331**	0.00309	0.00099	0.00528	0.00213	0.00364
15	**3.4822023**	0.00278	0.00123	0.00587	0.00264	0.00383
16	**4**	0.00308	0.00109	0.00494	0.00255	0.00402
17	**4.5947934**	0.00284	0.00141	0.00504	0.00217	0.00378
18	**5.2780316**	0.00320	0.00124	0.00504	0.00238	0.00410
19	**6.0628663**	0.00320	0.00131	0.00532	0.00264	0.00432
20	**6.9644045**	0.00333	0.00146	0.00556	0.00302	0.00489
21	**8**	0.00339	0.00153	0.00584	0.00338	0.00507
22	**9.1895868**	0.00330	0.00165	0.00602	0.00378	0.00582
23	**10.556063**	0.00348	0.00172	0.00638	0.00445	0.00591
24	**12.125733**	0.00413	0.00191	0.00648	0.00564	0.00670
25	**13.928809**	0.00477	0.00182	0.00664	0.00609	0.00729
26	**16**	0.00453	0.00213	0.00724	0.00804	0.00783
27	**18.379174**	0.00464	0.00221	0.00647	0.00901	0.00755
28	**21.112127**	0.00516	0.00275	0.00738	0.00993	0.00796
29	**24.251465**	0.00541	0.00227	0.00739	0.01065	0.00711
30	**27.857618**	0.00499	0.00276	0.00752	0.00991	0.00744
31	**32**	0.00588	0.00459	0.01074	0.01298	0.00969
32	**36.758347**	0.00868	0.00742	0.01349	0.01445	0.01303
33	**42.224253**	0.01279	0.01226	0.01930	0.01893	0.01839

34	**48.50293**	0.01869	0.02094	0.03000	0.03935	0.03005
35	**55.715236**	0.02463	0.02750	0.04692	0.05586	0.04549
36	**64**	0.03677	0.04578	0.07240	0.07708	0.06607
37	**73.516695**	0.05329	0.07017	0.09775	0.15088	0.09912
38	**84.448506**	0.07932	0.11641	0.16647	0.21972	0.14130
39	**97.00586**	0.09094	0.15182	0.18345	0.31090	0.18820
40	**111.43047**	0.13173	0.21117	0.20701	0.43364	0.28712
41	**128**	0.20868	0.25663	0.32976	0.56328	0.33660
42	**147.03339**	0.29235	0.37371	0.46896	0.81195	0.43646
43	**168.89701**	0.42607	0.57863	0.60432	1.35079	0.80865
44	**194.01172**	0.58337	0.78348	1.06143	1.78223	1.28260
45	**222.86094**	0.95405	1.64401	1.54767	4.17379	2.16818
46	**256**	2.48573	3.36458	2.95508	5.77178	4.56911
47	**294.06678**	6.49343	7.90399	6.76089	10.35262	8.64416
48	**337.79403**	18.21110	17.70003	17.42008	19.34000	18.48592
49	**388.02344**	28.17522	29.98155	26.86350	23.90120	28.09957
50	**445.72189**	26.94191	25.23588	27.06586	21.15683	25.17461
51	**512**	14.67459	11.47171	13.92771	9.35634	8.97193
52	**588.13356**					
53	**675.58805**					
	% <16µm	0.06603	0.02561	0.11122	0.05787	0.08586
	% <64µm	0.16143	0.11045	0.26767	0.24698	0.24041
	d50	373.0778	365.7541	371.1832	347.0710	359.6846
	modal	388.02	388.02	445.72	388.02	388.02

Table 25. Inorganic grain size spectra: Station G2, core 314810, collected from the Gully, 2007.

ID		**269979**	**269980**	**269981**	**269982**	**269983**	**269984**	**269985**	**269986**
Station		G2	G2	G2	G2	G2	G2	G2	G2
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16
Channel	**Diameter**								
4	**0.7579**	0.00288	0.00202	0.00876	0.00320	0.00302	0.00195	0.00825	0.00136
5	**0.8705506**	0.00309	0.00220	0.00940	0.00359	0.00327	0.00211	0.00857	0.00149
6	**1**	0.00359	0.00229	0.00983	0.00403	0.00368	0.00217	0.00865	0.00149
7	**1.1486984**	0.00425	0.00259	0.01149	0.00461	0.00446	0.00247	0.01004	0.00183
8	**1.3195079**	0.00416	0.00290	0.01247	0.00547	0.00506	0.00291	0.01116	0.00220
9	**1.5157166**	0.00406	0.00296	0.01282	0.00587	0.00573	0.00306	0.01233	0.00233
10	**1.7411011**	0.00420	0.00321	0.01424	0.00648	0.00598	0.00338	0.01345	0.00238
11	**2**	0.00472	0.00339	0.01363	0.00711	0.00679	0.00341	0.01469	0.00268
12	**2.2973967**	0.00515	0.00337	0.01381	0.00819	0.00786	0.00395	0.01543	0.00337
13	**2.6390158**	0.00449	0.00387	0.01611	0.00799	0.00831	0.00449	0.01675	0.00341
14	**3.0314331**	0.00513	0.00399	0.01388	0.00958	0.01068	0.00450	0.02063	0.00347
15	**3.4822023**	0.00452	0.00371	0.01323	0.00950	0.01080	0.00532	0.02069	0.00396
16	**4**	0.00548	0.00464	0.01560	0.01211	0.01071	0.00640	0.02916	0.00424
17	**4.5947934**	0.00529	0.00463	0.01585	0.01347	0.01398	0.00773	0.03142	0.00547
18	**5.2780316**	0.00655	0.00521	0.01578	0.01485	0.01455	0.00862	0.03281	0.00589
19	**6.0628663**	0.00729	0.00578	0.01630	0.01611	0.01692	0.00953	0.03614	0.00646
20	**6.9644045**	0.00796	0.00629	0.01721	0.01771	0.01815	0.01012	0.03922	0.00714
21	**8**	0.00822	0.00669	0.01797	0.01914	0.01935	0.01164	0.04369	0.00770
22	**9.1895868**	0.00847	0.00736	0.01961	0.02043	0.02089	0.01292	0.04583	0.00786
23	**10.556063**	0.00918	0.00810	0.02032	0.02205	0.02142	0.01294	0.04984	0.00903
24	**12.125733**	0.00978	0.00903	0.02186	0.02247	0.02327	0.01435	0.05291	0.00930
25	**13.928809**	0.01119	0.00977	0.02295	0.02199	0.02409	0.01460	0.05702	0.00937
26	**16**	0.00979	0.01001	0.02335	0.02119	0.02591	0.01427	0.05797	0.00925

27	**18.379174**	0.00868	0.01148	0.02324	0.02294	0.02244	0.01414	0.05621	0.00998
28	**21.112127**	0.00873	0.01118	0.02006	0.02233	0.02054	0.01799	0.05618	0.00945
29	**24.251465**	0.00987	0.00933	0.01869	0.02560	0.01680	0.01324	0.04763	0.01067
30	**27.857618**	0.01170	0.01093	0.01646	0.02144	0.01233	0.01435	0.05559	0.01257
31	**32**	0.01481	0.01513	0.01905	0.02118	0.01285	0.01873	0.05486	0.01886
32	**36.758347**	0.02293	0.01702	0.02642	0.02271	0.01897	0.02309	0.05634	0.01947
33	**42.224253**	0.02730	0.02466	0.02910	0.02599	0.01994	0.03074	0.05955	0.02555
34	**48.50293**	0.04054	0.02730	0.03548	0.02986	0.03527	0.04442	0.06017	0.03564
35	**55.715236**	0.06548	0.04121	0.04403	0.03651	0.03878	0.06263	0.08097	0.05149
36	**64**	0.07592	0.05372	0.05424	0.03660	0.05877	0.10712	0.09091	0.07911
37	**73.516695**	0.10377	0.07718	0.08405	0.06705	0.09228	0.11622	0.16151	0.10909
38	**84.448506**	0.12178	0.11961	0.12746	0.14286	0.14301	0.16946	0.22890	0.15700
39	**97.00586**	0.14891	0.19097	0.14235	0.18274	0.20705	0.18713	0.33026	0.25473
40	**111.43047**	0.20323	0.18039	0.17606	0.17817	0.26464	0.30188	0.37961	0.28941
41	**128**	0.29023	0.42552	0.33123	0.31726	0.40623	0.36257	0.52955	0.33433
42	**147.03339**	0.33078	0.78739	0.48393	0.43703	0.48485	0.67481	0.82962	0.58235
43	**168.89701**	0.57807	1.02128	0.50732	0.68918	0.80371	0.86022	1.10227	0.78299
44	**194.01172**	0.91048	1.47673	0.74826	1.00385	0.87748	1.41602	1.36961	1.66785
45	**222.86094**	1.25199	1.59335	1.22458	1.16704	1.63575	1.96472	1.73170	2.79959
46	**256**	1.64243	2.46699	0.84459	1.77803	2.23304	3.22118	1.64258	2.74228
47	**294.06678**	3.61197	5.43970	2.34352	3.90815	2.88252	4.40630	3.01243	4.07115
48	**337.79403**	9.90595	10.80025	8.68526	10.21474	7.25861	8.97954	7.15677	10.59281
49	**388.02344**	22.33850	21.94688	23.66063	24.26051	19.90246	20.75373	22.53745	25.21780
50	**445.72189**	31.81451	27.78106	32.34358	30.32826	35.25213	33.08241	32.06271	32.12947
51	**512**	26.32199	22.23114	22.44258	24.78282	27.01465	22.99448	25.66996	17.88469
52	**588.13356**		3.12559	5.21138					
53	**675.58805**								
	% <16µm	0.12966	0.10403	0.33310	0.25594	0.25898	0.14860	0.57870	0.10241
	% <64µm	0.34948	0.28226	0.58899	0.50569	0.48282	0.40221	1.16417	0.30536
	d50	402.7797	394.5403	405.8583	397.7471	408.1009	398.6220	401.9388	388.0489
	modal	445.72	445.72	445.72	445.72	445.72	445.72	445.72	445.72

Table 26. Inorganic grain size spectra: Station G3, core 314807, collected from the Gully, 2007.

ID		**260361**	**260362**	**260363**	**260364**	**260365**	**260366**	**260367**
Station		G3	G3	G3	G3	G3	G3	G3
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12	12-14
Channel	**Diameter**							
4	**0.7579**	0.00209	0.01087	0.00186	0.00072	0.00187	0.00182	0.00077
5	**0.8705506**	0.00234	0.01181	0.00193	0.00083	0.00192	0.00192	0.00080
6	**1**	0.00271	0.01295	0.00205	0.00091	0.00202	0.00205	0.00078
7	**1.1486984**	0.00311	0.01603	0.00223	0.00098	0.00227	0.00221	0.00082
8	**1.3195079**	0.00338	0.01623	0.00238	0.00114	0.00247	0.00237	0.00095
9	**1.5157166**	0.00392	0.01792	0.00242	0.00120	0.00277	0.00236	0.00113
10	**1.7411011**	0.00429	0.01961	0.00266	0.00135	0.00322	0.00255	0.00130
11	**2**	0.00482	0.02039	0.00272	0.00149	0.00356	0.00281	0.00155
12	**2.2973967**	0.00499	0.02307	0.00340	0.00174	0.00392	0.00282	0.00154
13	**2.6390158**	0.00525	0.02600	0.00325	0.00190	0.00430	0.00276	0.00176
14	**3.0314331**	0.00553	0.02214	0.00376	0.00201	0.00458	0.00317	0.00218
15	**3.4822023**	0.00603	0.02489	0.00403	0.00213	0.00461	0.00292	0.00210
16	**4**	0.00585	0.03298	0.00385	0.00216	0.00628	0.00342	0.00245
17	**4.5947934**	0.00668	0.02477	0.00481	0.00261	0.00532	0.00374	0.00242
18	**5.2780316**	0.00674	0.02725	0.00490	0.00259	0.00585	0.00398	0.00259
19	**6.0628663**	0.00732	0.02994	0.00523	0.00272	0.00635	0.00423	0.00287
20	**6.9644045**	0.00751	0.03288	0.00561	0.00306	0.00655	0.00462	0.00297

21	**8**	0.00837	0.03396	0.00586	0.00316	0.00697	0.00486	0.00320
22	**9.1895868**	0.00806	0.03693	0.00611	0.00308	0.00665	0.00519	0.00307
23	**10.556063**	0.00890	0.04093	0.00667	0.00327	0.00752	0.00559	0.00314
24	**12.125733**	0.00928	0.04430	0.00746	0.00373	0.00747	0.00635	0.00349
25	**13.928809**	0.00939	0.04716	0.00737	0.00422	0.00770	0.00745	0.00414
26	**16**	0.00946	0.04439	0.00788	0.00373	0.00684	0.00674	0.00406
27	**18.379174**	0.00941	0.04430	0.00778	0.00396	0.00802	0.00626	0.00338
28	**21.112127**	0.01024	0.05589	0.00761	0.00393	0.00791	0.00525	0.00329
29	**24.251465**	0.01065	0.04388	0.00698	0.00447	0.00662	0.00619	0.00341
30	**27.857618**	0.01125	0.03744	0.00615	0.00405	0.00558	0.00641	0.00377
31	**32**	0.01631	0.03202	0.00667	0.00768	0.00509	0.00718	0.00609
32	**36.758347**	0.02264	0.02569	0.01159	0.00687	0.00582	0.01165	0.01059
33	**42.224253**	0.03242	0.02129	0.01699	0.01157	0.00864	0.01480	0.01785
34	**48.50293**	0.06028	0.02150	0.01854	0.01517	0.00940	0.02351	0.03250
35	**55.715236**	0.08053	0.03569	0.03963	0.02663	0.02008	0.03482	0.04005
36	**64**	0.13437	0.04728	0.05179	0.03682	0.04370	0.05483	0.08201
37	**73.516695**	0.20757	0.07301	0.05908	0.05910	0.05339	0.07941	0.10610
38	**84.448506**	0.28546	0.10298	0.10852	0.08175	0.08481	0.11807	0.15393
39	**97.00586**	0.41231	0.16121	0.12562	0.12635	0.14003	0.12717	0.19860
40	**111.43047**	0.53124	0.14870	0.20827	0.13504	0.12034	0.16237	0.24548
41	**128**	0.71788	0.20957	0.21402	0.16899	0.19904	0.25935	0.29907
42	**147.03339**	0.71672	0.31892	0.25693	0.28407	0.27503	0.28431	0.39876
43	**168.89701**	1.16749	0.51576	0.40429	0.40861	0.43742	0.41608	0.69681
44	**194.01172**	1.57773	0.71195	0.64470	0.51632	0.56944	0.59348	0.61842
45	**222.86094**	1.37811	0.56665	0.42236	0.46217	0.40183	0.62694	0.46404
46	**256**	1.13041	0.34723	0.42883	0.30789	0.28643	0.53709	0.51436
47	**294.06678**	2.52020	0.81337	0.97976	0.56700	1.43466	0.74582	0.51790
48	**337.79403**	15.58063	14.61729	17.86654	11.22954	18.05364	11.19898	9.91658
49	**388.02344**	47.16298	46.94393	47.14140	43.25358	46.68240	37.98473	41.87334
50	**445.72189**	19.24719	26.94504	24.64877	30.22662	24.64448	26.62038	32.50142
51	**512**	6.83994	6.54201	6.21875	12.00108	6.38519	11.47986	11.24216
52	**588.13356**						4.23942	
53	**675.58805**						4.26974	
	% <16µm	0.12658	0.57299	0.09056	0.04702	0.10415	0.07917	0.04603
	% <64µm	0.38977	0.93509	0.22039	0.13508	0.18816	0.20198	0.17102
	d50	362.5558	370.3548	367.6377	378.9976	367.6117	383.5398	380.5185
	modal	388.02	388.02	388.02	388.02	388.02	388.02	388.02

Table 26. Continued.

ID		**260368**	**260369**	**260370**	**260371**	**260372**	**260373**	**260374**
Station		G3	G3	G3	G3	G3	G3	G3
Depth (cm)		14-16	16-18	18-20	20-22	22-24	24-26	26-28
Channel	**Diameter**							
4	**0.7579**	0.00123	0.00067	0.04065	0.00116	0.00135	0.00362	0.00117
5	**0.8705506**	0.00132	0.00080	0.04312	0.00121	0.00151	0.00386	0.00130
6	**1**	0.00145	0.00074	0.04762	0.00122	0.00171	0.00369	0.00145
7	**1.1486984**	0.00166	0.00065	0.05648	0.00118	0.00203	0.00352	0.00167
8	**1.3195079**	0.00178	0.00072	0.06452	0.00113	0.00240	0.00353	0.00186
9	**1.5157166**	0.00197	0.00077	0.07179	0.00116	0.00257	0.00341	0.00210
10	**1.7411011**	0.00213	0.00088	0.07650	0.00126	0.00279	0.00343	0.00234
11	**2**	0.00223	0.00103	0.07972	0.00139	0.00305	0.00354	0.00243
12	**2.2973967**	0.00257	0.00109	0.09253	0.00147	0.00345	0.00359	0.00282
13	**2.6390158**	0.00269	0.00110	0.10093	0.00162	0.00382	0.00335	0.00312
14	**3.0314331**	0.00315	0.00133	0.10713	0.00173	0.00419	0.00351	0.00371
15	**3.4822023**	0.00333	0.00143	0.10894	0.00184	0.00453	0.00386	0.00338

16	**4**	0.00377	0.00157	0.13595	0.00195	0.00472	0.00417	0.00374
17	**4.5947934**	0.00414	0.00172	0.15036	0.00240	0.00502	0.00439	0.00376
18	**5.2780316**	0.00428	0.00180	0.15648	0.00271	0.00532	0.00454	0.00398
19	**6.0628663**	0.00460	0.00207	0.16082	0.00296	0.00564	0.00498	0.00431
20	**6.9644045**	0.00497	0.00209	0.17098	0.00319	0.00623	0.00498	0.00464
21	**8**	0.00515	0.00225	0.17300	0.00369	0.00639	0.00569	0.00487
22	**9.1895868**	0.00581	0.00249	0.18920	0.00424	0.00683	0.00717	0.00517
23	**10.556063**	0.00592	0.00271	0.18997	0.00511	0.00672	0.00805	0.00554
24	**12.125733**	0.00716	0.00328	0.19411	0.00649	0.00676	0.01032	0.00656
25	**13.928809**	0.00707	0.00373	0.22078	0.00833	0.00653	0.01275	0.00712
26	**16**	0.00736	0.00353	0.22793	0.00879	0.00685	0.01131	0.00665
27	**18.379174**	0.00710	0.00315	0.22116	0.00877	0.00626	0.00967	0.00757
28	**21.112127**	0.00699	0.00319	0.24767	0.00793	0.00519	0.01050	0.00530
29	**24.251465**	0.00585	0.00361	0.21728	0.00652	0.00459	0.00921	0.00649
30	**27.857618**	0.00556	0.01002	0.15579	0.00704	0.00504	0.00698	0.00599
31	**32**	0.00669	0.01601	0.13579	0.00964	0.00511	0.00735	0.00783
32	**36.758347**	0.00985	0.03585	0.15055	0.01287	0.00869	0.01077	0.00879
33	**42.224253**	0.01431	0.07378	0.38279	0.01846	0.01575	0.01500	0.01289
34	**48.50293**	0.01683	0.09562	0.44319	0.02309	0.02069	0.02764	0.01838
35	**55.715236**	0.03185	0.10878	0.69077	0.03323	0.03220	0.03967	0.02881
36	**64**	0.05554	0.11866	1.36119	0.06177	0.05167	0.07127	0.04203
37	**73.516695**	0.06855	0.09210	2.08777	0.08806	0.08836	0.09885	0.05712
38	**84.448506**	0.10748	0.13552	3.06912	0.15273	0.12196	0.16639	0.08744
39	**97.00586**	0.16730	0.21347	4.31893	0.20272	0.15679	0.20734	0.15288
40	**111.43047**	0.18393	0.25362	7.02773	0.22170	0.21875	0.30207	0.18369
41	**128**	0.25159	0.29251	7.87244	0.39102	0.30393	0.38368	0.21119
42	**147.03339**	0.25262	0.40015	8.65309	0.36987	0.39027	0.52334	0.24447
43	**168.89701**	0.48315	0.51348	16.71019	0.81444	0.52326	0.60368	0.32372
44	**194.01172**	0.58970	0.91133	23.02641	1.14967	0.82215	1.19567	0.55891
45	**222.86094**	0.47004	1.04267	20.36860	0.87027	0.82567	1.08264	0.43585
46	**256**	0.21410	0.53251		0.33426	0.33566	0.29192	0.16804
47	**294.06678**	0.74366	0.30013		0.34978	0.71082	0.83293	0.67678
48	**337.79403**	10.94257	10.11543		8.81978	13.96779	13.90433	16.84355
49	**388.02344**	42.58024	40.80672		39.19485	41.37742	44.09886	47.13279
50	**445.72189**	32.75725	37.02513		32.94213	31.02522	26.71451	24.58220
51	**512**	9.94151	6.85808		13.84320	8.87635	9.26445	8.11360
52	**588.13356**							
53	**675.58805**							
	% <16µm	0.08	0.03	2.63	0.06	0.09	0.11	0.08
	% <64µm	0.19	0.39	5.50	0.19	0.20	0.26	0.19
	d50	379.41	380.49	160.26	383.90	375.76	372.05	369.58
	modal	388.02	388.02	194.01	388.02	388.02	388.02	388.02

Table 27. Inorganic grain size spectra: Station G4, core 314805, collected from the Gully, 2007.

ID		**260375**	**260376**	**260377**	**260378**	**260379**	**260380**
Station		G4	G4	G4	G4	G4	G4
Depth (cm)		0-2	2-4	4-6	6-8	8-10	10-12
Channel	**Diameter**						
4	**0.7579**	0.00146	0.00095	0.00312	0.00189	0.01293	0.01259
5	**0.8705506**	0.00163	0.00108	0.00351	0.00201	0.01463	0.01257
6	**1**	0.00164	0.00120	0.00355	0.00273	0.01443	0.01329
7	**1.1486984**	0.00157	0.00137	0.00353	0.00374	0.01372	0.01497
8	**1.3195079**	0.00167	0.00159	0.00374	0.00303	0.01395	0.01665

9	**1.5157166**	0.00178	0.00168	0.00410	0.00299	0.01561	0.01706
10	**1.7411011**	0.00201	0.00187	0.00450	0.00318	0.01638	0.01882
11	**2**	0.00211	0.00197	0.00509	0.00326	0.01771	0.02040
12	**2.2973967**	0.00223	0.00243	0.00506	0.00356	0.01724	0.02180
13	**2.6390158**	0.00247	0.00243	0.00511	0.00370	0.01936	0.02161
14	**3.0314331**	0.00263	0.00258	0.00609	0.00427	0.02262	0.02525
15	**3.4822023**	0.00283	0.00218	0.00588	0.00441	0.02190	0.02564
16	**4**	0.00314	0.00274	0.00675	0.00476	0.02165	0.02837
17	**4.5947934**	0.00341	0.00323	0.00789	0.00467	0.02616	0.03160
18	**5.2780316**	0.00386	0.00298	0.00794	0.00544	0.02708	0.03429
19	**6.0628663**	0.00429	0.00329	0.00839	0.00565	0.02919	0.03749
20	**6.9644045**	0.00466	0.00340	0.00833	0.00598	0.02922	0.03865
21	**8**	0.00509	0.00355	0.00827	0.00605	0.03106	0.04094
22	**9.1895868**	0.00603	0.00388	0.00859	0.00668	0.03087	0.04170
23	**10.556063**	0.00696	0.00391	0.00964	0.00647	0.03536	0.04271
24	**12.125733**	0.00861	0.00419	0.00924	0.00678	0.03738	0.03989
25	**13.928809**	0.00871	0.00420	0.00988	0.00756	0.04196	0.04130
26	**16**	0.00834	0.00449	0.00883	0.00717	0.03834	0.04451
27	**18.379174**	0.00749	0.00440	0.00883	0.00746	0.04388	0.04101
28	**21.112127**	0.00800	0.00492	0.01133	0.00685	0.04146	0.04451
29	**24.251465**	0.00659	0.00428	0.01215	0.00588	0.03737	0.03562
30	**27.857618**	0.00731	0.00432	0.01007	0.00672	0.03436	0.02986
31	**32**	0.00631	0.00618	0.01136	0.00892	0.03295	0.04193
32	**36.758347**	0.01220	0.00950	0.01364	0.01120	0.02921	0.06249
33	**42.224253**	0.01841	0.01400	0.01940	0.02178	0.02463	0.10717
34	**48.50293**	0.02578	0.02233	0.02351	0.02409	0.02729	0.14759
35	**55.715236**	0.04443	0.08244	0.04981	0.07472	0.04670	0.23240
36	**64**	0.07402	0.04873	0.06787	0.07026	0.09249	0.29559
37	**73.516695**	0.11016	0.08013	0.10416	0.08519	0.13102	0.48310
38	**84.448506**	0.13893	0.11028	0.16530	0.08908	0.23109	0.76845
39	**97.00586**	0.21306	0.14353	0.20907	0.13407	0.29646	1.00404
40	**111.43047**	0.25841	0.20922	0.23230	0.14993	0.33817	1.25530
41	**128**	0.37225	0.23529	0.38507	0.24062	0.77651	1.65541
42	**147.03339**	0.59728	0.36715	0.44858	0.34039	0.79271	2.38877
43	**168.89701**	0.74738	0.69795	0.72574	0.46808	1.35329	2.48314
44	**194.01172**	1.23663	0.68820	0.85862	0.43956	1.42464	2.42954
45	**222.86094**	1.50020	1.25471	0.95439	1.04745	1.39243	3.26114
46	**256**	6.69105	5.94714	5.17059	5.37803	3.46496	7.88864
47	**294.06678**	32.10325	34.13246	32.99954	28.82744	17.97393	39.21405
48	**337.79403**	45.30343	44.16647	45.54279	35.50577	25.78790	29.07188
49	**388.02344**	10.43031	10.86764	10.32175	8.34158	21.45137	6.41626
50	**445.72189**		0.83752	1.50709	2.72659	17.03147	
51	**512**				4.31002	6.59497	
52	**588.13356**				5.48117		
53	**675.58805**				6.09118		
	% <16µm	0.08	0.06	0.14	0.10	0.51	0.60
	% <64µm	0.22	0.21	0.31	0.27	0.87	1.38
	d50	299.60	299.88	301.14	309.41	329.45	279.98
	modal	337.79	337.79	337.79	337.79	337.79	294.06

Table 27. Continued.

ID		**260381**	**260382**	**260383**	**260384**	**260385**	**260386**
Station		G4	G4	G4	G4	G4	G4
Depth (cm)		12-14	14-16	16-18	18-20	20-22	22-24

Channel	Diameter						
4	**0.7579**	0.00045	0.00403	0.00293	0.00283	0.00093	0.00172
5	**0.8705506**	0.00048	0.00419	0.00305	0.00297	0.00093	0.00179
6	**1**	0.00052	0.00457	0.00357	0.00330	0.00100	0.00195
7	**1.1486984**	0.00059	0.00536	0.00453	0.00366	0.00127	0.00213
8	**1.3195079**	0.00067	0.00585	0.00458	0.00377	0.00141	0.00230
9	**1.5157166**	0.00072	0.00589	0.00435	0.00395	0.00140	0.00227
10	**1.7411011**	0.00072	0.00654	0.00449	0.00412	0.00155	0.00247
11	**2**	0.00079	0.00676	0.00438	0.00392	0.00162	0.00252
12	**2.2973967**	0.00095	0.00721	0.00489	0.00412	0.00173	0.00261
13	**2.6390158**	0.00096	0.00752	0.00482	0.00463	0.00195	0.00270
14	**3.0314331**	0.00109	0.00772	0.00527	0.00505	0.00211	0.00287
15	**3.4822023**	0.00114	0.00895	0.00522	0.00409	0.00213	0.00279
16	**4**	0.00108	0.00881	0.00525	0.00527	0.00268	0.00302
17	**4.5947934**	0.00153	0.00952	0.00647	0.00642	0.00315	0.00348
18	**5.2780316**	0.00167	0.01066	0.00642	0.00669	0.00310	0.00364
19	**6.0628663**	0.00172	0.01109	0.00700	0.00712	0.00320	0.00378
20	**6.9644045**	0.00174	0.01166	0.00682	0.00765	0.00337	0.00411
21	**8**	0.00179	0.01213	0.00727	0.00810	0.00352	0.00443
22	**9.1895868**	0.00182	0.01375	0.00794	0.00859	0.00369	0.00481
23	**10.556063**	0.00185	0.01337	0.00748	0.00840	0.00375	0.00529
24	**12.125733**	0.00184	0.01445	0.00792	0.01015	0.00391	0.00550
25	**13.928809**	0.00221	0.01462	0.00758	0.00926	0.00411	0.00580
26	**16**	0.00207	0.01578	0.00836	0.00966	0.00375	0.00548
27	**18.379174**	0.00200	0.01756	0.00666	0.00996	0.00441	0.00614
28	**21.112127**	0.00254	0.01543	0.00819	0.00891	0.00490	0.00603
29	**24.251465**	0.00301	0.01861	0.00781	0.00982	0.00459	0.00625
30	**27.857618**	0.00315	0.01864	0.00696	0.00936	0.00412	0.00660
31	**32**	0.00582	0.01571	0.00761	0.01112	0.00588	0.00915
32	**36.758347**	0.01097	0.01959	0.01178	0.01402	0.00735	0.01169
33	**42.224253**	0.01645	0.02562	0.02178	0.02307	0.01369	0.01869
34	**48.50293**	0.02416	0.03525	0.03089	0.02505	0.02561	0.02687
35	**55.715236**	0.06375	0.05934	0.11468	0.06740	0.06208	0.07415
36	**64**	0.07581	0.07098	0.06586	0.06812	0.05896	0.04944
37	**73.516695**	0.10653	0.10121	0.10493	0.09214	0.07686	0.06966
38	**84.448506**	0.12196	0.13088	0.14272	0.11335	0.11019	0.10177
39	**97.00586**	0.19038	0.17412	0.16080	0.15707	0.11447	0.14520
40	**111.43047**	0.22616	0.11614	0.18552	0.15941	0.16304	0.19027
41	**128**	0.29543	0.23552	0.21234	0.22858	0.21167	0.30118
42	**147.03339**	0.52091	0.50848	0.29639	0.40328	0.29619	0.35541
43	**168.89701**	0.83372	0.59411	0.48188	0.57889	0.49089	0.74905
44	**194.01172**	1.00157	0.66076	0.58210	0.63058	0.62155	1.03279
45	**222.86094**	1.19550	1.12547	0.88375	1.60426	1.09419	2.15578
46	**256**	5.57168	6.64799	4.71345	5.67196	5.84370	7.35413
47	**294.06678**	35.38742	36.41661	31.14111	33.11616	34.45200	32.88199
48	**337.79403**	42.43859	42.40049	48.21142	38.91139	45.21709	27.15829
49	**388.02344**	10.41571	10.38108	12.47076	10.49499	11.06030	7.72124
50	**445.72189**	1.45837			2.08127		2.54290
51	**512**				2.00007		4.08673
52	**588.13356**				3.37607		6.89710
53	**675.58805**						5.96404
	% <16µm	0.03	0.19	0.12	0.12	0.05	0.07
	% <64µm	0.16	0.44	0.35	0.31	0.19	0.24
	d50	298.51	296.94	303.76	301.78	300.14	301.10
	modal	337.79	337.79	337.79	337.79	337.79	294.06

Table 28. Metals analysis measured as mg kg^{-1}: Gully, 2006.

Location	Depth (cm)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Cadmium
Loc2	2-4	13500	0.27	2	271	0.30	< 0.1	0.02
Loc2	6-8	13700	0.15	1	249	0.29	< 0.1	< 0.01
Loc2	0-2	13100	0.16	2	254	0.28	< 0.1	< 0.01
Loc2	4-6	13000	0.14	1	250	0.26	< 0.1	0.01
Loc2	8-10	13400	0.14	1	243	0.27	< 0.1	0.01
Loc3	0-2	9910	0.12	1	185	0.20	< 0.1	< 0.01
Loc3	12-14	10200	0.14	< 1	200	0.22	< 0.1	0.02
Loc3	8-10	9230	0.15	< 1	189	0.20	< 0.1	0.02
Loc3	4-6	9060	0.12	1	171	0.19	< 0.1	0.04
Loc3	10-12	10400	0.14	< 1	202	0.19	< 0.1	0.02
Loc3	14-16	9400	0.14	< 1	178	0.20	< 0.1	< 0.01
Loc3	2-4	9990	0.10	2	196	0.21	< 0.1	0.01
Loc3	6-8	11200	0.13	1	214	0.24	< 0.1	0.04
Loc4	16-18	9530	0.10	< 1	177	0.21	< 0.1	0.02
Loc4	4-6	8990	0.10	1	179	0.20	< 0.1	< 0.01
Loc4	8-10	11900	0.13	1	225	0.24	< 0.1	0.03
Loc4	22-24	10300	0.10	< 1	194	0.20	< 0.1	< 0.01
Loc4	18-20	13000	0.13	< 1	220	0.28	< 0.1	0.01
Loc4	6-8	13100	0.16	1	236	0.26	< 0.1	0.02
Loc4	0-2	9980	0.10	1	192	0.20	< 0.1	< 0.01
Loc4	14-16	13000	0.13	< 1	232	0.26	< 0.1	0.02
Loc4	10-12	10600	0.12	< 1	193	0.20	< 0.1	0.02
Loc4	2-4	10100	0.11	1	179	0.20	< 0.1	< 0.01
Loc4	12-14	11800	0.14	1	229	0.26	< 0.1	0.02
Loc4	20-22	10600	0.10	< 1	207	0.23	< 0.1	< 0.01
Loc5	16-18	16800	0.21	2	253	0.39	< 0.1	0.03
Loc5	22-24	15300	0.17	1	251	0.32	< 0.1	0.03
Loc5	12-14	15200	0.18	1	298	0.38	< 0.1	0.04
Loc5	14-16	17800	0.22	1	249	0.36	< 0.1	0.06
Loc5	20-22	14700	0.20	1	293	0.36	< 0.1	0.02
Loc5	0-2	17900	0.18	1	279	0.39	< 0.1	0.03
Loc5	4-6	15200	0.17	2	294	0.38	< 0.1	0.05
Loc5	18-20	17600	0.18	2	298	0.39	< 0.1	0.03
Loc5	8-10	18400	0.18	1	298	0.42	< 0.1	0.04
Loc5	6-8	17600	0.21	2	323	0.38	< 0.1	0.02
Loc5	10-12	17200	0.19	2	303	0.40	< 0.1	0.03
Loc5	2-4	15700	0.18	2	276	0.37	< 0.1	0.03
Loc6	8-10	8750	0.11	1	179	0.20	< 0.1	0.01
Loc6	6-8	7640	0.09	< 1	153	0.15	< 0.1	< 0.01
Loc6	2-4	7700	0.10	1	145	0.18	< 0.1	< 0.01
Loc6	4-6?	7790	0.09	< 1	139	0.18	< 0.1	< 0.01
Loc6	0-2	7110	0.09	1	158	0.16	< 0.1	< 0.01
Loc7	10-12	6410	0.08	< 1	130	0.14	< 0.1	0.02
Loc7	8-10	6090	0.08	< 1	125	0.15	< 0.1	0.01
Loc7	4-6	5620	0.08	< 1	114	0.13	< 0.1	< 0.01
Loc7	2-4	5220	0.10	< 1	109	0.12	< 0.1	< 0.01
Loc7	18-20	6360	0.10	< 1	134	0.16	< 0.1	0.01
Loc7	0-2	6410	0.08	< 1	128	0.13	< 0.1	< 0.01
Loc7	20-22	6900	0.08	1	116	0.17	< 0.1	< 0.01
Loc7	16-18	6460	0.09	< 1	118	0.14	< 0.1	0.02
Loc7	6-8	7380	0.11	< 1	151	0.15	< 0.1	< 0.01
Loc7	14-16	7080	0.10	< 1	120	0.15	< 0.1	< 0.01

Loc7	12-14	6200	0.08	< 1	131	0.14	< 0.1	< 0.01
Loc8	4-6	9780	0.13	2	188	0.22	< 0.1	0.01
Loc8	10-12	12700	0.16	2	362	0.29	< 0.1	0.01
Loc8	6-8	10500	0.14	2	186	0.25	< 0.1	< 0.01
Loc8	12-14	12800	0.15	2	210	0.30	< 0.1	0.01
Loc8	14-16	13100	0.17	1	227	0.30	< 0.1	0.01
Loc8	20-22	10000	0.13	1	188	0.25	< 0.1	< 0.01
Loc8	22-24	12700	0.16	1	228	0.32	< 0.1	< 0.01
Loc8	16-18	12900	0.18	2	220	0.30	< 0.1	< 0.01
Loc8	18-20	10300	0.15	2	177	0.26	< 0.1	< 0.01
Loc8	8-10	12500	0.17	2	272	0.28	< 0.1	< 0.01
Loc8	2-4	9300	0.12	2	183	0.20	0.1	< 0.01
Loc8	0-2	10200	0.14	2	194	0.26	< 0.1	< 0.01

Table 28. Continued.

Location	Depth (cm)	Calcium	Chromium	Cobalt	Copper	Iron	Lanthanum	Lead	Lithium
Loc2	2-4	1930	6	0.8	2	3230	5.0	6.3	4.9
Loc2	6-8	2010	6	0.8	2	2910	5.0	5.9	4.7
Loc2	0-2	2190	5	0.7	2	3110	4.2	5.8	4.6
Loc2	4-6	1750	6	0.8	2	2880	4.7	5.8	4.7
Loc2	8-10	1820	5	0.7	2	2700	4.8	5.6	4.9
Loc3	0-2	1270	4	0.5	1	1830	3.7	4.7	4.5
Loc3	12-14	1370	4	0.6	1	1670	3.8	4.8	4.5
Loc3	8-10	1040	3	0.4	< 1	1310	3.1	4.2	4.4
Loc3	4-6	1420	3	0.5	< 1	1540	3.5	4.0	4.2
Loc3	10-12	1270	4	0.5	1	1730	3.6	4.8	4.4
Loc3	14-16	1220	3	0.5	1	1470	3.5	4.3	4.4
Loc3	2-4	1080	3	0.5	1	1560	3.9	4.4	4.5
Loc3	6-8	1440	4	0.6	1	1990	4.1	5.0	4.6
Loc4	16-18	1270	3	0.6	< 1	1830	3.3	3.9	4.5
Loc4	4-6	2610	3	0.5	< 1	1690	3.3	3.9	4.3
Loc4	8-10	1570	5	0.8	1	2560	4.1	4.8	4.6
Loc4	22-24	1880	4	0.5	1	1770	3.1	4.1	4.4
Loc4	18-20	2010	6	0.8	1	3180	4.0	5.0	4.7
Loc4	6-8	1890	6	0.8	1	2800	4.3	4.9	4.7
Loc4	0-2	1460	3	0.6	< 1	1720	2.9	4.1	4.6
Loc4	14-16	1860	5	0.8	1	2950	4.9	5.0	4.5
Loc4	10-12	1350	4	0.7	1	2190	3.4	4.2	4.5
Loc4	2-4	1330	3	0.5	1	1760	3.0	3.9	4.4
Loc4	12-14	1530	5	0.8	1	2650	3.7	4.9	4.4
Loc4	20-22	1210	3	0.6	1	1810	3.4	4.2	4.6
Loc5	16-18	4940	8	1.0	2	4280	5.3	5.8	5.8
Loc5	22-24	3660	7	0.9	2	3860	4.9	5.5	5.4
Loc5	12-14	4620	10	1.3	2	5170	5.9	6.9	5.7
Loc5	14-16	6590	9	0.9	2	3870	5.0	6.2	5.4
Loc5	20-22	3810	9	1.1	2	4670	6.4	6.2	5.3
Loc5	0-2	9920	9	1.2	2	4670	5.9	6.4	5.6
Loc5	4-6	6530	10	1.1	2	4970	7.5	7.1	5.6
Loc5	18-20	4190	10	1.2	2	5420	6.9	6.7	5.4
Loc5	8-10	6350	11	1.3	2	5780	8.2	7.1	5.5
Loc5	6-8	6510	10	1.2	2	5280	6.1	7.2	5.6
Loc5	10-12	4860	11	1.3	2	5480	6.1	6.7	5.6
Loc5	2-4	8300	9	1.1	2	4530	6.0	6.5	5.5
Loc6	8-10	1280	4	0.6	1	1730	4.2	4.1	4.3

Loc6	6-8	960	3	0.4	1	1290	2.9	3.6	4.4
Loc6	2-4	820	2	0.4	< 1	1210	2.4	4.0	4.4
Loc6	4-6?	1160	2	0.3	< 1	1200	2.7	3.6	4.2
Loc6	0-2	1220	2	0.3	< 1	1190	2.4	3.4	4.4
Loc7	10-12	810	2	0.3	< 1	760	2.4	2.7	4.7
Loc7	8-10	740	2	0.3	< 1	800	2.2	2.7	4.9
Loc7	4-6	650	2	0.3	< 1	810	2.2	2.6	4.4
Loc7	2-4	770	2	0.3	< 1	940	2.2	2.3	3.9
Loc7	18-20	800	2	0.4	< 1	980	2.8	2.8	4.2
Loc7	0-2	710	1	0.3	< 1	730	2.6	3.0	4.2
Loc7	20-22	1650	2	0.4	< 1	1320	2.2	2.4	5.1
Loc7	16-18	740	2	0.4	< 1	940	2.5	2.7	5.0
Loc7	6-8	890	2	0.4	< 1	1080	3.0	3.3	4.5
Loc7	14-16	1060	2	0.4	< 1	1190	2.4	2.9	4.8
Loc7	12-14	800	2	0.4	< 1	1030	2.7	2.9	4.5
Loc8	4-6	1500	4	0.6	1	2550	3.5	4.8	4.7
Loc8	10-12	2020	6	0.9	2	3790	5.9	6.1	5.2
Loc8	6-8	1590	4	0.6	1	2530	3.8	5.0	4.8
Loc8	12-14	2260	7	0.9	2	3330	6.8	5.5	4.8
Loc8	14-16	2320	7	0.9	2	3460	5.5	5.8	5.0
Loc8	20-22	1090	4	0.5	1	2000	3.2	4.5	4.7
Loc8	22-24	2020	6	0.8	1	2980	5.3	5.2	5.0
Loc8	16-18	1840	6	0.8	1	3080	4.9	5.4	4.9
Loc8	18-20	1350	5	0.6	1	2660	4.0	4.3	5.2
Loc8	8-10	1990	7	0.9	2	3520	5.7	6.5	4.8
Loc8	2-4	1300	4	0.5	1	2330	4.2	4.6	4.6
Loc8	0-2	1550	4	0.6	2	2680	3.8	5.2	4.9

Table 28. Continued.

Location	Depth (cm)	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Rubidium
Loc2	2-4	740	59	0.1	2	9480	29.5
Loc2	6-8	670	48	< 0.1	2	9840	28.3
Loc2	0-2	750	34	0.1	2	9880	28.8
Loc2	4-6	700	42	< 0.1	2	9430	28.2
Loc2	8-10	670	32	0.1	2	10000	28.6
Loc3	0-2	450	25	< 0.1	1	7450	22.7
Loc3	12-14	460	36	< 0.1	1	7380	22.6
Loc3	8-10	370	18	< 0.1	1	7290	21.0
Loc3	4-6	360	25	< 0.1	1	6540	19.3
Loc3	10-12	480	23	< 0.1	1	7840	22.4
Loc3	14-16	400	21	< 0.1	1	7330	22.0
Loc3	2-4	440	20	< 0.1	1	7880	23.0
Loc3	6-8	500	39	< 0.1	1	7960	23.8
Loc4	16-18	350	36	< 0.1	1	6860	19.5
Loc4	4-6	420	21	< 0.1	1	6580	19.9
Loc4	8-10	670	56	0.1	2	8350	25.0
Loc4	22-24	480	30	0.1	1	7250	21.6
Loc4	18-20	760	68	< 0.1	2	8710	25.3
Loc4	6-8	700	64	< 0.1	2	8780	25.2
Loc4	0-2	440	20	< 0.1	1	7270	21.0
Loc4	14-16	750	79	< 0.1	2	8860	24.5
Loc4	10-12	600	42	< 0.1	1	7480	21.5
Loc4	2-4	480	26	< 0.1	1	7080	20.8
Loc4	12-14	670	63	0.1	2	8310	24.0

Loc4	20-22	570	29	< 0.1	1	7650	22.4
Loc5	16-18	1020	64	0.2	3	10600	30.1
Loc5	22-24	890	56	0.3	2	10800	31.0
Loc5	12-14	1170	91	0.4	4	12100	33.4
Loc5	14-16	1060	59	0.4	3	10300	30.8
Loc5	20-22	1140	87	0.2	3	12000	34.0
Loc5	0-2	1040	78	0.2	3	10400	31.6
Loc5	4-6	1170	76	0.3	3	11800	33.6
Loc5	18-20	1280	112	0.2	3	12000	33.4
Loc5	8-10	1330	112	0.4	3	11500	32.2
Loc5	6-8	1260	95	0.3	3	12000	34.6
Loc5	10-12	1260	112	0.3	3	11500	33.4
Loc5	2-4	1170	73	0.2	3	10600	30.7
Loc6	8-10	440	47	< 0.1	1	6200	19.2
Loc6	6-8	310	25	< 0.1	< 1	5610	16.4
Loc6	2-4	240	11	< 0.1	< 1	5720	18.6
Loc6	4-6?	280	14	< 0.1	< 1	5710	16.6
Loc6	0-2	250	11	< 0.1	< 1	5550	17.3
Loc7	10-12	290	10	< 0.1	< 1	4780	13.7
Loc7	8-10	310	11	< 0.1	< 1	4740	14.0
Loc7	4-6	210	11	< 0.1	< 1	4440	12.8
Loc7	2-4	290	12	< 0.1	< 1	3630	10.5
Loc7	18-20	310	27	< 0.1	< 1	5010	14.2
Loc7	0-2	170	9	< 0.1	< 1	4940	15.1
Loc7	20-22	370	19	< 0.1	< 1	4440	12.5
Loc7	16-18	270	19	< 0.1	< 1	4630	13.3
Loc7	6-8	380	24	< 0.1	< 1	5850	17.6
Loc7	14-16	500	23	0.1	< 1	4630	13.9
Loc7	12-14	260	20	< 0.1	< 1	4550	13.3
Loc8	4-6	630	42	0.3	1	7120	20.2
Loc8	10-12	720	163	< 0.1	2	8840	26.4
Loc8	6-8	530	50	< 0.1	1	7120	21.7
Loc8	12-14	690	74	< 0.1	2	8630	25.8
Loc8	14-16	730	71	< 0.1	2	9190	27.1
Loc8	20-22	460	27	< 0.1	1	7420	22.5
Loc8	22-24	700	59	< 0.1	2	8800	27.4
Loc8	16-18	720	58	0.1	2	8730	26.0
Loc8	18-20	600	35	< 0.1	1	7360	22.1
Loc8	8-10	840	93	< 0.1	2	8460	24.9
Loc8	2-4	460	31	0.1	1	6630	20.8
Loc8	0-2	540	48	< 0.1	1	7220	22.4

Table 28. Continued.

Location	Depth (cm)	Selenium	Silver	Sodium	Strontium	Sulfur	Tellurium	Thallium
Loc2	2-4	< 1	0.05	4280	62.6	< 200	< 0.1	0.17
Loc2	6-8	< 1	0.04	4320	57.2	< 200	< 0.1	0.17
Loc2	0-2	< 1	0.04	4670	59.2	200	< 0.1	0.16
Loc2	4-6	< 1	0.05	4250	55.4	< 200	< 0.1	0.17
Loc2	8-10	< 1	0.04	4070	55.0	< 200	< 0.1	0.17
Loc3	0-2	< 1	0.03	3190	44.8	< 200	< 0.1	0.13
Loc3	12-14	< 1	0.04	3190	47.8	< 200	< 0.1	0.13
Loc3	8-10	< 1	0.03	3000	36.4	< 200	< 0.1	0.13
Loc3	4-6	< 1	0.04	3020	40.4	< 200	< 0.1	0.12
Loc3	10-12	< 1	0.03	3330	43.6	< 200	< 0.1	0.13

Loc3	14-16	< 1	0.04	2960	39.7	< 200	< 0.1	0.13
Loc3	2-4	< 1	0.03	3180	43.5	200	< 0.1	0.13
Loc3	6-8	< 1	0.03	3520	48.4	< 200	< 0.1	0.14
Loc4	16-18	< 1	0.03	2970	40.1	< 200	< 0.1	0.12
Loc4	4-6	< 1	0.03	2920	47.4	< 200	< 0.1	0.11
Loc4	8-10	< 1	0.04	3900	52.7	< 200	< 0.1	0.15
Loc4	22-24	< 1	0.03	3440	47.3	< 200	< 0.1	0.13
Loc4	18-20	< 1	0.04	4390	56.5	< 200	< 0.1	0.15
Loc4	6-8	< 1	0.04	4420	59.4	< 200	< 0.1	0.15
Loc4	0-2	< 1	0.02	3190	45.0	< 200	< 0.1	0.13
Loc4	14-16	< 1	0.04	4280	54.4	< 200	< 0.1	0.15
Loc4	10-12	< 1	0.03	3870	45.0	< 200	< 0.1	0.14
Loc4	2-4	< 1	0.03	3510	42.2	< 200	< 0.1	0.12
Loc4	12-14	< 1	0.04	3880	53.0	< 200	< 0.1	0.14
Loc4	20-22	< 1	0.03	3610	44.1	< 200	< 0.1	0.13
Loc5	16-18	< 1	0.06	4760	69.9	< 200	< 0.1	0.18
Loc5	22-24	< 1	0.04	4910	67.1	300	< 0.1	0.18
Loc5	12-14	< 1	0.07	5340	80.3	200	< 0.1	0.20
Loc5	14-16	< 1	0.05	5140	81.3	500	< 0.1	0.19
Loc5	20-22	< 1	0.04	5400	75.5	< 200	< 0.1	0.20
Loc5	0-2	< 1	0.05	4640	98.4	200	< 0.1	0.19
Loc5	4-6	< 1	0.05	5450	86.3	200	< 0.1	0.20
Loc5	18-20	< 1	0.06	5750	79.0	< 200	< 0.1	0.20
Loc5	8-10	< 1	0.07	5780	86.7	300	< 0.1	0.20
Loc5	6-8	< 1	0.05	5520	89.2	200	< 0.1	0.21
Loc5	10-12	< 1	0.06	5420	80.1	< 200	< 0.1	0.20
Loc5	2-4	< 1	0.05	5060	92.4	300	< 0.1	0.19
Loc6	8-10	< 1	0.04	2860	41.4	< 200	< 0.1	0.11
Loc6	6-8	< 1	0.03	2420	34.4	< 200	< 0.1	0.09
Loc6	2-4	< 1	0.03	2330	34.5	< 200	< 0.1	0.11
Loc6	4-6	< 1	0.03	2500	33.8	< 200	< 0.1	0.10
Loc6	0-2	< 1	0.03	2630	35.1	< 200	< 0.1	0.10
Loc7	10-12	< 1	0.03	2780	30.5	< 200	< 0.1	0.08
Loc7	8-10	< 1	0.03	2780	27.6	< 200	< 0.1	0.08
Loc7	4-6	< 1	0.02	2010	25.1	< 200	< 0.1	0.07
Loc7	2-4	< 1	0.02	2240	26.2	< 200	< 0.1	0.06
Loc7	18-20	< 1	0.03	2180	30.4	< 200	< 0.1	0.08
Loc7	0-2	< 1	0.03	2140	31.0	< 200	< 0.1	0.09
Loc7	20-22	< 1	0.03	2830	28.7	< 200	< 0.1	0.07
Loc7	16-18	< 1	0.02	2310	27.0	< 200	< 0.1	0.07
Loc7	6-8	< 1	0.03	3050	33.1	< 200	< 0.1	0.10
Loc7	14-16	< 1	0.03	4400	40.0	< 200	< 0.1	0.08
Loc7	12-14	< 1	0.03	2240	31.6	< 200	< 0.1	0.08
Loc8	4-6	< 1	0.04	3880	43.5	< 200	< 0.1	0.12
Loc8	10-12	< 1	0.05	4020	56.4	< 200	< 0.1	0.15
Loc8	6-8	< 1	0.04	3390	46.3	< 200	< 0.1	0.12
Loc8	12-14	< 1	0.04	3950	56.4	< 200	< 0.1	0.15
Loc8	14-16	< 1	0.05	4030	53.8	< 200	< 0.1	0.15
Loc8	20-22	< 1	0.04	3510	42.0	< 200	< 0.1	0.13
Loc8	22-24	< 1	0.04	3970	57.6	< 200	< 0.1	0.16
Loc8	16-18	< 1	0.04	4090	54.4	< 200	< 0.1	0.14
Loc8	18-20	< 1	0.04	3280	42.8	< 200	< 0.1	0.13
Loc8	8-10	< 1	0.05	4330	58.6	< 200	< 0.1	0.14
Loc8	2-4	< 1	0.03	3130	42.7	< 200	< 0.1	0.12
Loc8	0-2	< 1	0.03	3540	47.4	< 200	< 0.1	0.13

Table 28. Continued.

Location	Depth (cm)	Tin	Uranium	Vanadium	Zinc
Loc2	2-4	0.1	0.26	9	6
Loc2	6-8	0.1	0.26	8	5
Loc2	0-2	< 0.1	0.24	7	5
Loc2	4-6	< 0.1	0.30	8	5
Loc2	8-10	0.1	0.25	7	5
Loc3	0-2	< 0.1	0.20	5	3
Loc3	12-14	< 0.1	0.24	5	4
Loc3	8-10	< 0.1	0.22	4	3
Loc3	4-6	< 0.1	0.20	4	3
Loc3	10-12	< 0.1	0.29	5	3
Loc3	14-16	0.1	0.22	4	3
Loc3	2-4	< 0.1	0.21	4	3
Loc3	6-8	< 0.1	0.24	6	4
Loc4	16-18	< 0.1	0.22	4	3
Loc4	4-6	< 0.1	0.23	4	2
Loc4	8-10	0.1	0.26	6	5
Loc4	22-24	0.1	0.21	4	3
Loc4	18-20	0.2	0.27	7	5
Loc4	6-8	0.1	0.27	6	4
Loc4	0-2	< 0.1	0.18	4	3
Loc4	14-16	0.1	0.28	7	5
Loc4	10-12	< 0.1	0.19	5	4
Loc4	2-4	< 0.1	0.16	4	3
Loc4	12-14	0.1	0.24	6	5
Loc4	20-22	< 0.1	0.21	4	3
Loc5	16-18	0.2	0.37	11	7
Loc5	22-24	0.2	0.41	10	6
Loc5	12-14	0.3	0.44	13	8
Loc5	14-16	0.2	0.40	12	7
Loc5	20-22	0.3	0.38	11	7
Loc5	0-2	0.2	0.34	12	8
Loc5	4-6	0.2	0.39	12	9
Loc5	18-20	0.2	0.50	13	8
Loc5	8-10	0.2	0.58	15	9
Loc5	6-8	0.2	0.41	13	8
Loc5	10-12	0.2	0.42	14	9
Loc5	2-4	0.3	0.43	11	7
Loc6	8-10	< 0.1	0.30	5	3
Loc6	6-8	< 0.1	0.20	4	2
Loc6	2-4	< 0.1	0.18	4	2
Loc6	4-6?	< 0.1	0.22	3	2
Loc7	0-2	< 0.1	0.17	3	2
Loc7	10-12	< 0.1	0.23	3	2
Loc7	8-10	< 0.1	0.16	3	2
Loc7	4-6	< 0.1	0.30	3	2
Loc7	2-4	< 0.1	0.21	3	2
Loc7	18-20	< 0.1	0.19	3	2
Loc7	0-2	< 0.1	0.16	2	2
Loc7	20-22	< 0.1	0.18	4	2
Loc7	16-18	< 0.1	0.18	3	2
Loc7	6-8	< 0.1	0.22	4	2
Loc7	14-16	< 0.1	0.18	4	2

Loc7	12-14	< 0.1	0.21	4	2
Loc8	4-6	0.1	0.25	6	4
Loc8	10-12	0.2	0.35	8	6
Loc8	6-8	0.1	0.24	6	4
Loc8	12-14	0.2	0.38	9	6
Loc8	14-16	0.2	0.35	9	6
Loc8	20-22	< 0.1	0.23	6	15
Loc8	22-24	0.2	0.38	8	5
Loc8	16-18	0.3	0.29	8	5
Loc8	18-20	< 0.1	0.26	8	4
Loc8	8-10	0.2	0.33	9	6
Loc8	2-4	< 0.1	0.24	6	4
Loc8	0-2	0.1	0.25	6	5

Table 29. Metals analysis measured as %, ppm: Gully, 2007.

	Metal	**Al**	**Ag**	**As**	**Au**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**
	Unit	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Station	**Depth (cm)**									
G1	0-2	0.68	<0.1	2	<0.1	104	<1	<0.1	0.08	<0.1
G1	2-4	0.66	<0.1	2	<0.1	101	<1	<0.1	0.1	<0.1
G1	4-6	0.51	<0.1	<1	<0.1	88	<1	<0.1	0.07	<0.1
G1	6-8	0.47	<0.1	1	<0.1	118	<1	<0.1	0.04	<0.1
G1	8-10	0.54	<0.1	<1	<0.1	76	<1	<0.1	0.1	<0.1
G1	10-12	0.55	<0.1	<1	<0.1	90	<1	<0.1	0.08	<0.1
G1	12-14	0.6	<0.1	<1	<0.1	145	<1	<0.1	0.08	<0.1
G1	14-16	0.48	<0.1	<1	<0.1	77	<1	<0.1	0.06	<0.1
G2	0-2	1.23	<0.1	3	<0.1	199	<1	<0.1	0.19	<0.1
G2	2-4	0.96	<0.1	4	<0.1	153	<1	<0.1	0.14	<0.1
G2	4-6	0.5	<0.1	<1	<0.1	79	<1	<0.1	0.15	<0.1
G2	6-8	0.46	<0.1	<1	<0.1	106	<1	<0.1	0.11	<0.1
G2	8-10	1.07	<0.1	2	<0.1	189	<1	<0.1	0.23	<0.1
G2	10-12	0.84	<0.1	<1	<0.1	131	<1	<0.1	0.15	<0.1
G2	12-14	0.67	<0.1	<1	<0.1	117	<1	<0.1	0.13	<0.1
G2	14-16	0.59	<0.1	<1	<0.1	100	<1	<0.1	0.14	<0.1
G2	16-18	0.7	<0.1	1	<0.1	147	<1	<0.1	0.18	<0.1
G2	18-20	0.76	<0.1	<1	<0.1	138	<1	<0.1	0.26	<0.1
G2	20-22	0.62	<0.1	<1	<0.1	90	<1	<0.1	0.2	<0.1
G3	0-2	0.77	<0.1	1	<0.1	124	<1	<0.1	0.11	<0.1
G3	2-4	0.69	<0.1	3	<0.1	90	<1	<0.1	0.06	<0.1
G3	4-6	0.63	<0.1	<1	<0.1	128	<1	<0.1	0.07	<0.1
G3	6-8	0.6	<0.1	<1	<0.1	97	<1	<0.1	0.06	<0.1
G3	8-10	0.67	<0.1	<1	<0.1	155	<1	<0.1	0.05	<0.1
G3	10-12	0.6	<0.1	<1	<0.1	86	<1	<0.1	0.08	<0.1
G3	12-14	0.69	<0.1	2	<0.1	124	<1	<0.1	0.06	<0.1
G3	14-16	0.68	<0.1	<1	<0.1	137	<1	<0.1	0.07	<0.1
G3	16-18	0.67	<0.1	<1	<0.1	129	<1	<0.1	0.04	<0.1
G3	18-20	0.77	<0.1	2	<0.1	148	<1	<0.1	0.07	<0.1
G3	20-22	0.71	<0.1	2	<0.1	125	<1	<0.1	0.08	<0.1

G3	22-24	0.57	<0.1	<1	<0.1	106	<1	<0.1	0.09	<0.1
G3	24-26	0.65	<0.1	<1	<0.1	101	<1	<0.1	0.08	<0.1
G3	26-28	0.64	<0.1	<1	<0.1	125	<1	<0.1	0.06	<0.1
G4	0-2	0.93	<0.1	<1	<0.1	162	<1	<0.1	0.12	<0.1
G4	2-4	0.87	<0.1	1	<0.1	137	<1	<0.1	0.12	<0.1
G4	4-6	0.88	<0.1	<1	<0.1	142	<1	<0.1	0.09	<0.1
G4	6-8	1.05	<0.1	<1	<0.1	172	<1	<0.1	0.17	<0.1
G4	8-10	0.9	<0.1	2	<0.1	157	<1	<0.1	0.1	<0.1
G4	10-12	0.93	<0.1	<1	<0.1	176	<1	<0.1	0.11	<0.1
G4	12-14	0.88	<0.1	<1	<0.1	160	<1	<0.1	0.1	<0.1
G4	14-16	0.83	<0.1	<1	<0.1	147	<1	<0.1	0.09	<0.1
G4	16-18	0.94	<0.1	<1	<0.1	187	<1	<0.1	0.11	<0.1
G4	18-20	0.87	<0.1	<1	<0.1	156	<1	<0.1	0.09	<0.1
G4	20-22	0.99	<0.1	1	<0.1	172	<1	<0.1	0.08	<0.1
G4	22-24	0.89	<0.1	<1	<0.1	145	<1	<0.1	0.1	<0.1

Table 29. Continued.

	Metal	**Ce**	**Co**	**Cr**	**Cu**	**Fe**	**Hf**	**Hg**	**K**	**La**	**Li**
	Unit	PPM	PPM	PPM	PPM	%	PPM	PPM	%	PPM	PPM
Station	**Depth (cm)**										
G1	0-2	6	0.5	1	0.5	0.1	0.4	<0.01	0.4	3	5
G1	2-4	6	0.5	1	0.8	0.16	0.4	<0.01	0.39	2.7	4.6
G1	4-6	6	0.3	<1	<0.1	0.07	0.3	N.A.	0.32	2.7	6.2
G1	6-8	5	0.2	<1	0.4	0.09	0.3	N.A.	0.33	3	4.6
G1	8-10	6	<0.2	<1	<0.1	0.06	0.2	N.A.	0.3	3.4	5.7
G1	10-12	6	0.5	<1	0.3	0.14	0.3	N.A.	0.31	3	4.9
G1	12-14	5	0.2	<1	<0.1	0.06	0.3	N.A.	0.37	2.3	2.4
G1	14-16	11	0.4	2	0.6	0.17	0.4	N.A.	0.3	5.1	5.3
G2	0-2	10	0.8	6	1.7	0.38	0.4	<0.01	0.76	4.9	5.2
G2	2-4	7	0.6	3	1.4	0.28	0.4	<0.01	0.6	3.3	5.1
G2	4-6	6	0.2	<1	0.1	0.07	0.3	N.A.	0.29	3.3	3.3
G2	6-8	4	0.2	<1	<0.1	0.05	0.3	N.A.	0.3	2.1	3.7
G2	8-10	8	0.6	4	0.4	0.28	0.4	N.A.	0.66	4.4	4.6
G2	10-12	7	0.3	<1	<0.1	0.11	0.4	N.A.	0.5	3.8	3.9
G2	12-14	12	0.2	1	<0.1	0.08	0.3	N.A.	0.4	6.3	3.5
G2	14-16	4	<0.2	<1	0.2	0.06	0.3	N.A.	0.41	2.1	4.1
G2	16-18	5	<0.2	<1	1	0.05	0.3	N.A.	0.43	2.6	1.9
G2	18-20	6	0.2	1	2.2	0.07	0.3	N.A.	0.48	3.2	3.4
G2	20-22	5	0.3	<1	<0.1	0.05	0.3	N.A.	0.41	2.6	3.6
G3	0-2	8	0.6	2	0.7	0.15	0.3	<0.01	0.46	4	4.3
G3	2-4	6	0.5	<1	0.6	0.11	0.2	<0.01	0.44	3	4.9
G3	4-6	6	0.4	<1	0.7	0.11	0.3	N.A.	0.5	2.8	3.6
G3	6-8	5	0.3	<1	<0.1	0.09	0.3	N.A.	0.38	2.5	4.5
G3	8-10	6	<0.2	<1	0.8	0.08	0.4	N.A.	0.51	2.7	5.5
G3	10-12	6	0.3	<1	0.3	0.07	0.4	N.A.	0.38	2.9	4.2
G3	12-14	5	0.2	<1	0.3	0.07	0.3	N.A.	0.47	2.4	4.3
G3	14-16	7	0.2	<1	0.5	0.09	0.2	N.A.	0.47	3.1	2.8
G3	16-18	4	0.3	<1	0.7	0.08	0.3	N.A.	0.49	2.4	3.8

G3	18-20	6	0.3	<1	<0.1	0.08	0.2	N.A.	0.56	3	4.1
G3	20-22	6	0.3	<1	0.3	0.08	0.3	N.A.	0.48	2.8	3
G3	22-24	9	0.2	<1	<0.1	0.09	0.3	N.A.	0.34	3.9	4.3
G3	24-26	5	0.7	2	0.7	0.24	0.4	N.A.	0.36	2.7	4.4
G3	26-28	5	0.3	<1	0.6	0.11	0.4	N.A.	0.42	2.4	2.4
G4	0-2	6	0.5	1	0.9	0.12	0.3	<0.01	0.62	3.1	3.9
G4	2-4	7	0.4	<1	0.5	0.1	0.3	<0.01	0.53	3.4	3.5
G4	4-6	6	0.3	<1	0.8	0.13	0.4	N.A.	0.58	3.1	4.2
G4	6-8	6	0.9	2	1.3	0.28	0.4	N.A.	0.62	3.2	3.8
G4	8-10	8	0.4	1	1.1	0.11	0.3	N.A.	0.63	4.3	5.8
G4	10-12	6	0.5	1	0.4	0.13	0.3	N.A.	0.62	3.3	4.4
G4	12-14	6	0.4	1	0.4	0.12	0.4	N.A.	0.63	3.3	4.3
G4	14-16	7	0.4	<1	0.3	0.09	0.3	N.A.	0.57	3.8	2.8
G4	16-18	7	0.5	1	0.1	0.14	0.4	N.A.	0.62	3.4	4.6
G4	18-20	7	0.4	<1	0.2	0.1	0.4	N.A.	0.61	3.3	4.5
G4	20-22	6	0.4	1	2.2	0.09	0.3	N.A.	0.71	3	3.8
G4	22-24	6	0.4	<1	2.2	0.1	0.4	N.A.	0.65	3.2	3.5

Table 29. Continued.

	Metal	**Mg**	**Mn**	**Mo**	**Na**	**Nb**	**Ni**	**P**	**Pb**	**Rb**	**S**
	Unit	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%
Station	**Depth (cm)**										
G1	0-2	0.02	11	<0.1	0.27	0.6	0.8	0.006	2.9	11.8	<0.1
G1	2-4	0.03	64	<0.1	0.255	0.7	0.9	0.007	2.9	12.7	<0.1
G1	4-6	0.02	6	<0.1	0.201	0.4	0.6	0.005	2.2	9.6	<0.1
G1	6-8	0.02	8	<0.1	0.168	0.3	0.5	0.004	2.6	11.5	<0.1
G1	8-10	0.02	5	<0.1	0.198	0.2	0.2	0.003	2.1	10.7	<0.1
G1	10-12	0.03	16	<0.1	0.23	0.4	1.4	0.004	2.7	9.8	<0.1
G1	12-14	0.02	9	<0.1	0.237	0.4	0.6	0.003	3.1	10.9	<0.1
G1	14-16	0.03	36	<0.1	0.192	1.2	0.4	0.003	2.6	11.7	<0.1
G2	0-2	0.07	53	0.1	0.429	1.5	1.8	0.017	5.6	24.2	<0.1
G2	2-4	0.06	37	<0.1	0.353	0.8	1.5	0.012	3.8	18.4	<0.1
G2	4-6	0.02	9	<0.1	0.195	0.4	0.7	0.031	2	10.3	<0.1
G2	6-8	0.02	8	<0.1	0.146	0.2	0.7	0.008	2.3	8.5	<0.1
G2	8-10	0.07	87	<0.1	0.35	1.7	1.8	0.009	4.8	19.2	<0.1
G2	10-12	0.03	19	<0.1	0.3	0.4	1	0.021	3.5	16.8	<0.1
G2	12-14	0.02	16	<0.1	0.244	0.2	0.6	0.005	2.6	11.9	<0.1
G2	14-16	0.02	10	<0.1	0.215	0.3	0.2	0.005	3	13.1	<0.1
G2	16-18	0.03	9	<0.1	0.259	0.3	0.8	0.007	3.6	12.9	<0.1
G2	18-20	0.03	15	<0.1	0.269	0.3	0.7	0.026	3.2	15	<0.1
G2	20-22	0.04	8	<0.1	0.242	0.3	0.6	0.003	2.4	12.6	<0.1
G3	0-2	0.03	33	<0.1	0.234	1.1	0.9	0.006	3.8	14.7	<0.1
G3	2-4	0.02	12	<0.1	0.221	0.4	0.9	0.006	3.6	16.1	<0.1
G3	4-6	0.02	27	<0.1	0.191	0.5	0.4	0.01	2.3	15.6	<0.1
G3	6-8	0.02	18	<0.1	0.203	0.3	0.8	0.004	2.8	12.7	<0.1
G3	8-10	0.01	8	<0.1	0.159	0.3	0.7	0.004	3.5	15.7	<0.1
G3	10-12	0.01	7	<0.1	0.181	0.4	0.5	0.004	2.8	14.7	<0.1
G3	12-14	0.01	6	<0.1	0.208	0.2	0.8	0.004	3.1	15.4	<0.1

G3	14-16	0.02	7	<0.1	0.219	0.3	0.4	0.004	2.8	14.8	<0.1
G3	16-18	0.02	7	<0.1	0.202	0.2	0.8	0.004	2.9	17.1	<0.1
G3	18-20	0.02	8	0.1	0.242	0.2	0.7	0.003	3.4	18.9	<0.1
G3	20-22	0.02	8	<0.1	0.253	0.4	1.2	0.005	3.1	15.3	<0.1
G3	22-24	0.02	12	<0.1	0.208	0.4	0.5	0.007	2.4	10.9	<0.1
G3	24-26	0.03	42	<0.1	0.254	1.5	1.2	0.003	2.9	12.1	<0.1
G3	26-28	0.02	17	<0.1	0.231	0.6	0.7	0.005	3.1	14.5	<0.1
G4	0-2	0.03	25	<0.1	0.3	1.2	0.9	0.008	4.2	20.1	<0.1
G4	2-4	0.03	17	<0.1	0.325	0.3	0.9	0.009	3.4	16.3	<0.1
G4	4-6	0.04	28	<0.1	0.309	0.6	0.8	0.004	3.6	17.6	<0.1
G4	6-8	0.06	76	0.1	0.35	1.8	1.6	0.006	4.9	20.6	<0.1
G4	8-10	0.04	16	<0.1	0.307	0.6	1.3	0.007	4.1	19.7	<0.1
G4	10-12	0.04	23	<0.1	0.307	1	1.2	0.004	4.3	19.2	<0.1
G4	12-14	0.04	20	<0.1	0.322	0.6	0.9	0.006	4.4	20.4	<0.1
G4	14-16	0.03	11	0.1	0.273	0.4	1.4	0.004	3.9	16.8	<0.1
G4	16-18	0.04	21	<0.1	0.311	0.8	1.4	0.006	4.2	17.7	<0.1
G4	18-20	0.03	10	<0.1	0.298	0.5	0.9	0.003	4.1	21.6	<0.1
G4	20-22	0.03	13	<0.1	0.304	0.4	1	0.004	4.8	22.8	<0.1
G4	22-24	0.03	14	<0.1	0.302	1.1	0.9	0.004	4.4	23.6	<0.1

Table 29. Continued.

	Metal	**Sb**	**Sc**	**Sn**	**Sr**	**Ta**	**Th**	**Ti**	**U**	**V**
	Unit	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM
Station	**Depth (cm)**									
G1	0-2	<0.1	<1	<0.1	30	<0.1	0.6	0.024	0.2	4
G1	2-4	<0.1	<1	<0.1	28	<0.1	0.5	0.028	0.2	6
G1	4-6	<0.1	<1	0.1	27	<0.1	0.6	0.017	0.2	<1
G1	6-8	<0.1	<1	<0.1	19	<0.1	0.8	0.008	0.2	2
G1	8-10	<0.1	<1	0.1	22	<0.1	0.6	0.007	0.2	5
G1	10-12	0.1	<1	0.2	26	<0.1	0.9	0.046	0.3	<1
G1	12-14	<0.1	<1	<0.1	28	<0.1	0.7	0.013	0.3	1
G1	14-16	<0.1	<1	0.1	17	<0.1	2	0.072	0.3	<1
G2	0-2	0.2	<1	0.4	54	<0.1	1	0.085	0.3	12
G2	2-4	0.1	<1	<0.1	43	<0.1	0.9	0.037	0.3	<1
G2	4-6	<0.1	<1	0.1	25	<0.1	1	0.011	1.1	<1
G2	6-8	<0.1	<1	<0.1	27	<0.1	0.7	0.004	0.7	<1
G2	8-10	0.1	<1	0.1	52	<0.1	0.7	0.078	0.3	<1
G2	10-12	0.1	<1	0.1	43	<0.1	0.7	0.017	0.3	<1
G2	12-14	<0.1	<1	0.1	37	<0.1	1.4	0.018	0.3	<1
G2	14-16	0.1	<1	0.2	25	<0.1	0.5	0.011	0.2	<1
G2	16-18	<0.1	<1	0.1	37	<0.1	0.9	0.018	0.3	<1
G2	18-20	<0.1	<1	<0.1	44	<0.1	0.6	0.015	0.4	<1
G2	20-22	<0.1	<1	<0.1	31	<0.1	0.7	0.009	0.2	<1
G3	0-2	<0.1	<1	<0.1	35	<0.1	0.8	0.059	0.3	3
G3	2-4	0.2	<1	<0.1	25	<0.1	0.6	0.018	0.3	2
G3	4-6	<0.1	<1	0.3	30	<0.1	0.6	0.019	0.2	<1
G3	6-8	<0.1	<1	0.1	26	<0.1	0.7	0.015	0.2	<1
G3	8-10	<0.1	<1	<0.1	32	<0.1	0.5	0.01	0.3	<1

G3	10-12	<0.1	<1	<0.1	25	<0.1	0.5	0.006	0.2	<1
G3	12-14	<0.1	<1	<0.1	28	<0.1	0.6	0.006	0.2	<1
G3	14-16	<0.1	<1	<0.1	31	<0.1	0.6	0.009	0.4	<1
G3	16-18	<0.1	<1	<0.1	32	<0.1	0.6	0.007	0.2	<1
G3	18-20	<0.1	<1	<0.1	33	<0.1	0.6	0.009	0.2	<1
G3	20-22	0.1	<1	0.2	30	<0.1	0.8	0.01	0.2	<1
G3	22-24	0.1	<1	<0.1	26	<0.1	0.6	0.009	0.2	<1
G3	24-26	<0.1	<1	<0.1	31	<0.1	0.7	0.131	0.2	<1
G3	26-28	<0.1	<1	0.1	27	<0.1	1.2	0.06	0.3	<1
G4	0-2	<0.1	<1	<0.1	41	0.1	0.7	0.045	0.2	3
G4	2-4	<0.1	<1	<0.1	35	<0.1	0.7	0.021	0.2	4
G4	4-6	<0.1	<1	<0.1	36	<0.1	0.7	0.03	0.2	<1
G4	6-8	0.1	<1	0.3	51	<0.1	0.7	0.126	0.3	1
G4	8-10	<0.1	<1	0.1	36	<0.1	0.7	0.031	0.2	<1
G4	10-12	0.1	<1	0.2	45	<0.1	0.8	0.038	0.2	<1
G4	12-14	<0.1	<1	<0.1	37	<0.1	0.8	0.037	0.2	<1
G4	14-16	0.1	<1	0.2	37	<0.1	0.6	0.017	0.3	<1
G4	16-18	<0.1	<1	0.1	43	<0.1	0.7	0.057	0.2	<1
G4	18-20	<0.1	<1	0.1	35	<0.1	0.6	0.016	0.2	<1
G4	20-22	<0.1	<1	<0.1	45	<0.1	0.7	0.033	0.3	<1
G4	22-24	<0.1	<1	0.2	38	<0.1	0.7	0.031	0.2	<1

Table 29. Continued.

	Metal	**W**	**Y**	**Zn**	**Zr**
	Unit	PPM	PPM	PPM	PPM
Station	**Depth (cm)**				
G1	0-2	<0.1	1.5	3	12.3
G1	2-4	<0.1	3.1	4	17.4
G1	4-6	<0.1	1.3	2	10.9
G1	6-8	<0.1	1.2	3	12.4
G1	8-10	<0.1	1.8	3	8.6
G1	10-12	<0.1	1.1	4	12.8
G1	12-14	<0.1	1	1	9.8
G1	14-16	<0.1	1.5	4	12.9
G2	0-2	<0.1	2.7	6	14.8
G2	2-4	<0.1	2.5	2	14
G2	4-6	<0.1	1.5	1	10.2
G2	6-8	<0.1	1	<1	10
G2	8-10	<0.1	3.1	2	11.9
G2	10-12	<0.1	1.8	3	11.2
G2	12-14	<0.1	2.2	<1	9.3
G2	14-16	<0.1	1.1	2	10
G2	16-18	<0.1	1.4	6	9.3
G2	18-20	<0.1	1.5	3	9.2
G2	20-22	<0.1	1.3	<1	9.7
G3	0-2	<0.1	1.4	3	9.4
G3	2-4	<0.1	1.5	3	7.8
G3	4-6	<0.1	1.3	<1	10.8

G3	6-8	<0.1	1.1	8	10.9
G3	8-10	<0.1	1.2	8	12.3
G3	10-12	<0.1	1.5	<1	12.1
G3	12-14	<0.1	1.2	<1	9.8
G3	14-16	<0.1	1.6	2	8
G3	16-18	<0.1	1.2	2	11.7
G3	18-20	<0.1	1	2	8.1
G3	20-22	<0.1	1.3	4	11
G3	22-24	<0.1	1.8	1	9.9
G3	24-26	<0.1	1.4	10	12.2
G3	26-28	<0.1	1.3	4	11.7
G4	0-2	<0.1	2	2	11.6
G4	2-4	<0.1	1.6	3	10.2
G4	4-6	<0.1	1.8	2	11.6
G4	6-8	<0.1	2.6	2	13.4
G4	8-10	<0.1	2.3	4	11.4
G4	10-12	<0.1	2	3	12
G4	12-14	<0.1	1.7	5	12.9
G4	14-16	<0.1	1.5	4	12.3
G4	16-18	<0.1	1.6	3	12.4
G4	18-20	0.6	1.5	3	11.6
G4	20-22	<0.1	1.7	20	12.1
G4	22-24	<0.1	1.8	14	11.8