P-06-244

Oskarshamn site investigation

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ISSN 1651-4416
SKB P-06-244

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Keywords: DFN, KLX11B, KLX11C, KLX11D, KLX11E, KLX11F, Geology, Drill core mapping, Boremap, Fractures, BIPS, Simpevarp, Laxemar.

Abstract

This report presents the Boremap mapping of KLX11B–KLX11F. The purpose of the core drilled DFN boreholes KLX11B–KLX11F is to connect fracture sets and geological structures between the boreholes.

The lithology in borehole, KLX11B, KLX11C, KLX11D, KLX11E and KLX11F is dominated by quartz monzodiorite (501036). Subordinate rock type is fine-grained granite (511058). KLX11C and KLX11D contain thin intervals, 0.5 to 8 cm, of sandstone (506007).

One section in KLX11B, three sections in KLX11C and KLX11D and four sections in KLX11E and KLX11F have been highlighted based on anomalous fracture frequencies, alterations and structural features.

Sammanfattning

Denna rapport presenterar boremapkartering av DFN-borrhålen KLX11B–KLX11F, syftet med DFN-borrhålen är att försöka koppla ihop sprickset och strukturer mellan borrhålen.

Litologin i borrhål KLX11B, KLX11C, KLX11D, KLX11E och KLX11F domineras av kvarts-monzodiorit (501036). Underordnad bergart är finkornig granit (511058). Tunna, 0.5–8 cm, sektioner av sandsten (506007) förekommer i KLX11C och KLX11D.

En sektion i KLX11B, tre i KLX11C och KLX11D samt fyra sektioner i KLX11E och KLX11F, kan urskiljas baserat på förhöjd sprickfrekvens, sidobergets omvandlingar och geologiska strukturer.

Contents

1 Introduction

This report comprises the DFN boreholes (DFN = Discrete Fracture Network) and consists of the following five boreholes: KLX11B, KLX11C, KLX11D, KLX11E and KLX11F. DFN is a method to create a 3D-model of different fracture sets in a defined volume.

The DFN boreholes are situated in the Laxemar area (Figure 1-1). Mapping of the drill cores was performed between 2006-07-04 and 2006-08-30. Table 1-1 shows the orientation of the different boreholes.

Detailed mapping of the drill cores is essential for a three dimensional modelling of the geology at depth. The mapping is based on the use of BIPS-image (Borehole Image Processing System) of the borehole wall and by the study of the drill core itself. The BIPS-image enables the study of orientations, since the Boremap software calculates strike and dip of planar features such as foliations, rock contacts and fractures.

The work was carried out in accordance with activity plan AP PS 400-06-089. In Table 1-2 controlling documents for performing this activity are listed. Both activity plan and method descriptions are SKB's internal controlling documents.

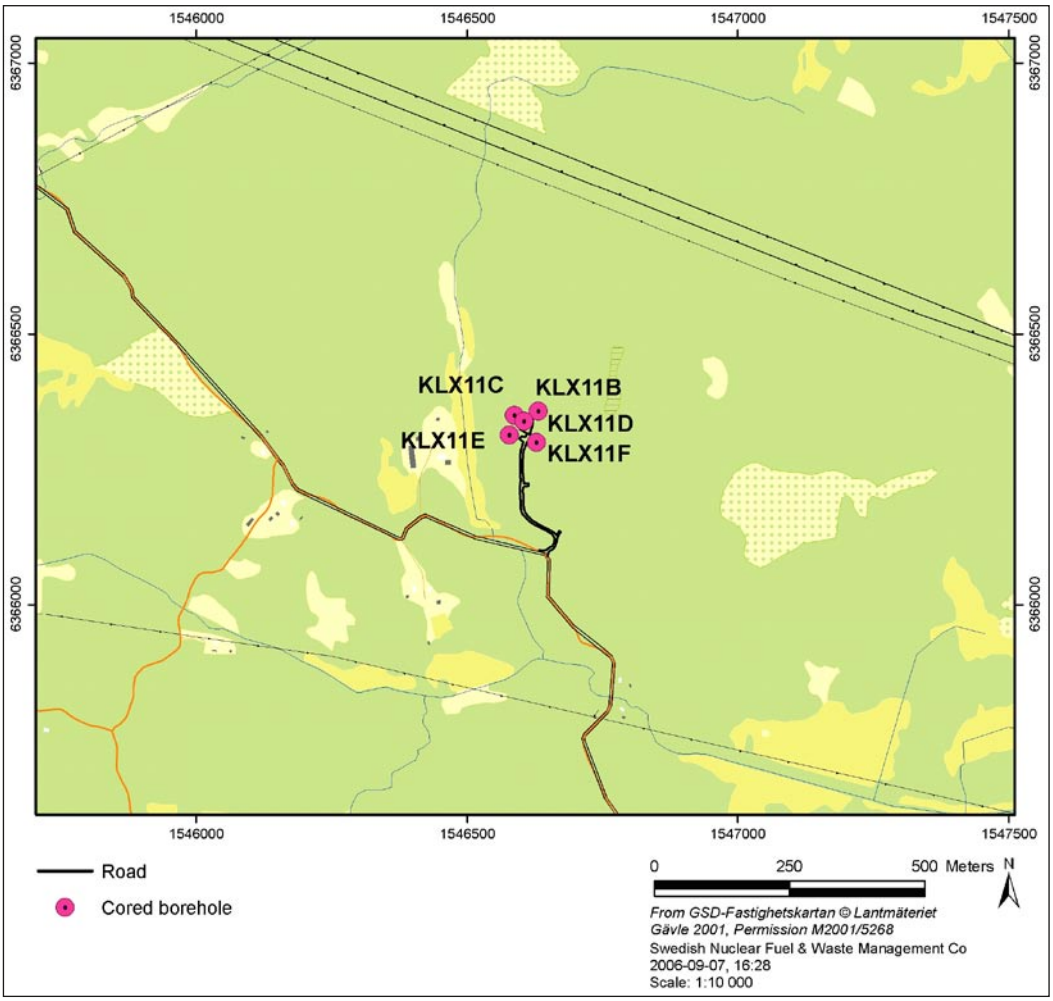


Figure 1-1. *Location of the core drilled DFN boreholes.*

Table 1-1. Orientation of the DFN boreholes.

Borehole	Bearing (°)	Inclination (°)	Length (m)
KLX11B	136.2	–89.9	~ 99.25
KLX11C	159.34	–60.51	~ 120.15
KLX11D	268.70	–58.99	~ 120.35
KLX11E	336.17	–60.64	~ 121.30
KLX11F	100.43	–60.97	~ 120.05

Table 1-2. Controlling documents for the performance of the activity.

Activity Plan	Number	Version
Boremapkartering av KLX11B, KLX11C, KLX11D, KLX11E och KLX11F	AP PS 400-06-089	1.0
Method Descriptions	**Number**	**Version**
Nomenklatur vid Boremapkartering	SKB MD 143.008	1.0
Method Description for Boremap mapping	SKB MD 143.006	2.0
Mätsystembeskrivning för Boremap	SKB MD 146.005	1.0

2 Objective and scope

The main purpose of the DFN boreholes is to enhance the knowledge about geological properties such as frequency and orientation of structures and fractures in sub-surface/near surface bedrock in the Laxemar area.

3 Equipment

3.1 Description of software

Software used for the mapping was Boremap v. 3.7, with bedrock and mineral standards of SKB. The data presentation was made using StereoNet, WellCad v. 4, Microsoft Access and Microsoft Excel. Boremap is the software that unites orthodox core mapping with modern video mapping, where Boremap shows the image from BIPS (Borehole Image Processing System) and extracts the geometrical parameters: length, width, strike and dip from the image.

3.2 Other equipment

The following equipment is used to facilitate the core mapping: folding rule and pen, diluted hydrochloric acid, knife, water-filled atomiser and hand lens.

3.3 BIPS-image video film sequences

Table 3-1. BIPS-image length

Borehole	Length (m)
KLX11B	4.000–99.604
KLX11C	4.000–119.497
KLX11D	3.990–119.195
KLX11E	4.034–121.360
KLX11F	3.998–118.866

3.4 BIPS-image video film quality

The visibility of thin fractures in BIPS depends on image resolution, image contrast and image quality.

3.4.1 BIPS-image resolution

Resolution of the BIPS-image is perhaps the principal reason why very thin fractures as well as very thin apertures are not visible in the BIPS-image and the resolution depends on the BIPS video camera pixel size and illumination angle.

3.4.2 BIPS-image contrast

Thick fractures are always visible in both drill core and the BIPS-image. However, the visibility of thin fractures depends strongly on the contrast between the fracture and the wall rock. A bright fracture in a dark rock is clearly visible in the BIPS-image. But a bright coloured fracture in a light coloured rock might, however, be clearly visible in the drill core but not visible in the BIPS-image, especially if the fracture and wall rock have the same colour. The opposite is true for dark fractures.

In very rare cases when the BIPS-image contrast between a very thin fracture and the wall rock is very strong the fracture might be visible in the BIPS-image even if it is not visible in the drill core.

3.4.3 BIPS-image quality

BIPS-image quality is sometimes limited due to:

1) blackish coatings probably related to the drilling equipment,
2) vertical bleached bands from the clayey mixture of drill cuttings and water,
3) light and dark bands at high angle to the drill hole related to the automatic aperture of the video camera,
4) vertical enlargements of pixels due to stick-slip movement of the camera probe.

Vertical bleached bands and blackish coatings are usually the main disturbances in the BIPS-image quality.

The image quality is classified into four levels; good, acceptable, bad and very bad. Good quality means a more or less clear image which is easy to interpret. If the quality is acceptable it means that the image is not good, but that the mapping can be performed without any problems. An image of bad quality is somewhat difficult to interpret while an image of very bad quality cannot be interpreted except from very obvious and outstanding features. It should be remembered that even if only 10–20% of the image is visible, this is often enough for an acceptable interpretation. When the BIPS-image quality is so bad that fractures and structures cannot be identified they can still be oriented using the *guide-line method* (section 4.3.3). The BIPS-image quality for the DFN boreholes is presented in Table 3-2.

Table 3-2. BIPS-image quality.

Borehole	Interval (m)	Quality
KLX11B	4.00–99.60	Good
KLX11C	4.00–199.50	Good
KLX11D	4.00–16.5	Good
	16.50–119.20	Acceptable
KLX11E	4.00–48.00	Good
	48.00–60.50	Acceptable
	60.50–76.00	Good
	76.00–112.50	Acceptable
	112.50–121.10	Bad
KLX11F	4.00–118.9	Good

4 Execution

4.1 General

Mapping of the drill core of the boreholes was performed and documented according to activity plan AP PS 400-06-089 (SKB, internal document) referring to the *Method Description for Boremap mapping* (SKB MD 143.006, v.2.0) and *Nomenklatur vid Boremapkartering* (SKB MD 143.008, v.1.0).

The drill core was displayed on inclined roller tables and mapped in its entire length with the Boremap software. The core mapping was carried out without any detailed geological knowledge of the area but with access to geophysical logs from the borehole and rock samples.

The term *oxidation* has been used as an alteration type until the mapping of KLX05. However, research has shown that the red colour of the bedrock is actually not only a result of oxidation. Since April 2005 the term *red staining* is used instead of the term *oxidation.*

The mapping was performed by Gunnar Rauséus and Stefan Eklund (Geosigma AB) and by Jan-Erik Ehrenborg (Mirab).

4.2 Preparations

Any depth registered in the BIPS-image deviates from the true depth in the borehole, a deviation which increases with depth, about 0.5 m/100 m. This problem is usually eliminated by adjusting the depth of the BIPS-image to reference slots cut into the borehole walls every fiftieth metre, but the DFN boreholes lack these reference marks.

Necessary data adjustment is borehole diameter, reference marks, length and deviation; both collected from SICADA database (Appendices 6–8). The Boremap software uses all the data extracted from SICADA database to calculate the true orientations of the different observations.

4.3 Execution of measurements

Concepts used during the core mapping, are defined in this chapter.

4.3.1 Fracture definitions

Definitions of different fracture types and aperture, crush zones and sealed fracture network are found in *Nomenklatur vid Boremapkartering* (SKB MD 143.008, v.1.0). Apertures for broken fractures have been mapped in accordance with the definitions in MD 143.008 v. 1.0.

Two types of fractures are mapped in Boremap; broken and unbroken. Broken are fractures that split the core while unbroken fractures do not split the core. All fractures are described with their fracture minerals and other characteristics, e.g. width, aperture and roughness. Visible apertures are measured down to 1 mm in the BIPS-image. Smaller apertures, which are impossible to detect in the BIPS-image, are denoted a value of 0.5 mm. If the core pieces don't fit well, the aperture is considered "probable". If the core pieces do fit well, but the fracture surfaces are dull or altered, the aperture is considered "possible".

All fractures with apertures > 0 mm are treated as open in the SICADA database. Only few broken fractures are given the aperture = 0 mm. Unbroken fractures usually have apertures = 0 mm. Unbroken fractures that have apertures > 0 mm are interpreted as partly open and are included in the open-category. Open and sealed fractures are finally frequency calculated and shown in Appendix 1.

4.3.2 Fracture alteration and joint alteration number

Joint alteration number is principally related to the thickness of, and the clay content in a fracture. Thick fractures rich in clay minerals are given joint alteration numbers between 2 and 3. The majority of the broken fractures are very thin to extremely thin and seldom contain clay minerals. These fractures receive joint alteration numbers between 1 and 2.

A subdivision of fractures with joint alteration numbers between 1 and 2 was introduced to facilitate both the evaluation process for fracture alterations and the possibility to compare the alterations between different fractures in the boreholes. The subdivision is based on fracture mineralogy as follows:

a) fracture wall alterations,

b) fracture mineral fillings assumed to have been deposited from circulating water-rich solutions,

c) fracture mineral fillings most likely resulting from altered wall rock material.

Joint alteration number equal to 1: Fractures with or without wall rock alteration, e.g. oxidation or epidotization, and without mineral fillings is considered as fresh. The joint alteration number is thus set to 1.

Minerals such as calcite, quartz, fluorite, zeolites, laumontite and sulphides are regarded as deposited by circulating water-rich solutions and not as true fracture alteration minerals. The joint alteration number is thus set to 1.

Joint alteration number equal to 1.5: Epidote, prehnite, hematite, chlorite and/or clay minerals are regarded as fracture minerals most likely resulting from altered wall rock. A weak alteration is thus assumed and the joint alteration number was set to 1.5. Extra considerations have been given to clay minerals since the occurrence of these minerals often resulted in a higher joint alteration number.

Joint alteration numbers higher than 1.5: When the mineral fillings is thick and contain a few mm of clay minerals, often together with epidote and chlorite, the joint alteration number is set to 2. In rare cases, when a fracture contains 5–10 mm thick clay, together with chlorite, the joint alteration number is set to 3.

When the alteration of a fracture is too thick (and/or intense) to give the fracture the joint alteration number 1.5 and too thin and/or weak to give it a 2, 1.7 and 1.8 is used.

4.3.3 Mapping of fractures not visible in the BIPS-image

Not all fractures are visible in the BIPS-images, and these fractures are orientated by using the *guide-line method*, based on the following data:

- Amplitude (measured along the drill core) which is the interval between fracture extremes along the drill core.
- The relation between the orientations of the fracture trace, measured on the drill core and a well defined structure visible in the BIPS-image.
- Absolute depth.

Orientation of fractures and other structures with the *guide-line method* is done in the following way: The first step is to calculate the amplitude of the fracture trace in the BIPS-image (with 76 mm diameter) from the measured fracture amplitude in the drill core (with 50 mm diameter). The second step is the correction of strike and dip. This is done by rotating the fracture trace in the BIPS-image relative to a feature with known orientation. The fracture trace is then put at the correct depth according to the depth measured on the drill core.

The *guide-line method* can be used to orientate any feature that is not visible in the BIPS-image. It is also a valuable tool to control that the personnel working with the drill core is observing the same feature as the personnel delineating the trace in the BIPS-image, especially in intervals rich in fractures.

The error of orientating fractures using the *guide-line method* is not known but experience and an estimation using stereographic plots indicated that the error is most likely insignificant. Accordingly, the *guide-line method* is so far considered better than mapping lots of non-oriented fractures. The fractures in question are mapped as "non-visible in BIPS" and can therefore be separated from fractures visible in BIPS which probably have a more accurate orientation.

4.3.4 Definition of veins and dikes

Rock occurrence is the way Boremap handles the occurrence of lithology up to 1 metre wide. Chiefly two different rock occurrences are mapped: veins and dikes. These two are separated by their respectively length in the drill core; veins are set to 0–20 cm and dikes are set to 20–100 cm. Rock occurrences that covers more than 100 cm of the drill core are mapped under the feature *rock type.*

4.3.5 Mineral codes

In the case where properties and/or minerals are not represented in the mineral list, following mineral codes have been used:

X1 apophyllite.

X2 gypsum.

X5 bleached fracture walls.

X7 broken fracture with a fresh appearance and no mineral fill.

X8 fractures with saussuritized walls.

4.4 Data handling

Mapping of the drill core is performed on-line on the SKB network, in order to obtain the best possible data security. Before every break (> 15 minutes) a back-up is saved on the local disk. As a regular quality check every working day a Summary report (from Boremap) and a WellCad plot is printed in order to find possible misprints. The mapping is also quality checked by a routine in Boremap before it is exported to and archived in SICADA database. Personnel from SKB also perform spot test controls and regular quality revisions. All primary data is stored in SKB's database SICADA and only these data are later used for interpretation and modelling.

4.5 Geological summary table, general description

A Geological Summary table (Appendix 1) is an overview of the features mapped with the Boremap software. It also facilitates comparisons between Boremap information collected from different boreholes and is more objective than a pure descriptive borehole summary. The table is the result of cooperation between Jan Ehrenborg from the mapping personnel and Pär Kinnbom from PO (site investigation, Oskarshamn). The aim was to make a standard form in handy A4-size, where all information is taken directly from the Boremap database using simple and well defined search paths for each geological parameter (Appendix 2).

Data from the Boremap database cannot automatically be extracted into the Geological Summary table. First the data has to be sorted out and frequencies in the different column must be calculated in Microsoft Excel. WellCad is used to create the Geological Summary table from the frequency calculations of mapped features. From the Boremap database the data to the non-frequency columns are retrieved, i.e. lithology and red staining.

The Geological summary table consists of 23 columns, each one representing a specific geological parameter, presented as either intervals or frequencies (see section 4.5.1 for column description). Intervals are calculated for parameters with a width ≥ 1 m and frequencies for parameters with a width < 1 m. Frequency information is treated as point observations. It should be noted that parameters with a thickness of only 1 mm get the same "value" as a similar parameter with a thickness of 999 mm since both are treated as point observations and used for frequency calculations.

Parameters are sometimes related in such a way that the mapping of one parameter cause a decrease in the frequency of another parameter. This type of intimate relationship between parameters has been noted for the following cases;

- There is a decrease in the frequency of *unbroken fractures* with oxidised walls and without mineral fillings in intervals mapped with *Alteration – red staining.*
- No *unbroken fractures* are mapped in intervals of *sealed fracture network*.
- No *broken fractures* are mapped in intervals with *crush.*
- Hybrid rock and composite dikes generally include a large amount of fine to medium grained granite veins. These veins are not mapped and the frequency presented for veins + dikes in column 6 (Appendix 1) are lower than the true frequency in composite dike intervals.

4.5.1 Columns in the geological summary table

The Geological summary table includes the following 23 columns:

Column 1: *Rock Type/Lithology*, interval column. Only lithologies longer than 1 m are presented here. Shorter lithologies are presented in column 6. This column is identical with the ordinary WellCad presentation.

Column 2: *Rock Type/Grain size*, interval column. Interval limits follows column 1. This column is identical with the ordinary WellCad presentation.

Column 3: *Rock Type/Texture*, interval column. Interval limits follows column 1. This column is identical with the ordinary WellCad presentation.

Column 4: *Alteration/red staining*, interval column. No frequency column is presented for alteration/ red staining. The alteration/ red staining column is identical with the ordinary WellCad presentation.

Column 5: *Alteration/intensity*, interval column. This column is identical with the ordinary WellCad presentation.

Column 6: *Rock Occurrence/Veins + Dikes < 1 m wide*, frequency column. This rock type column can be seen as the frequency complement to the rock type/lithology interval column. Only rock type sections that are thinner than 1 m can be described as rock occurrences in Boremap. Thicker rock type sections are mapped as rock type.

Column 7: *Structure/Shear Zone < 1 m wide*, frequency column. This column includes ductile shear structures as well as brittle-ductile shear structures and these are mapped as rock occurrences in Boremap. Ductile sections in mm – cm scale are mapped as shear structures and in dm – m scale as sections with foliation in column 12.

Column 8: *Structure/Brecciated < 1 m wide*, frequency column. Breccias < 1 m wide are mapped as rock occurrence in Boremap. Very thin micro breccias along sealed/natural fracture planes are generally not considered.

Column 9: *Structure/Brecciated ≥ 1 m wide*, interval column. Breccias > 1 m wide are mapped as rock type/structure in Boremap.

Column 10: *Structure/Mylonite < 1 m wide*, frequency column. Mylonites < 1 m wide are mapped as rock occurrence/structure in Boremap.

Column 11: *Structure/Mylonite ≥ 1 m wide* is an interval column. Mylonites > 1 m wide are mapped as rock type/structure in Boremap.

Column 12: *Structure/Foliation < 1 m wide* is a frequency column. Sections with foliation < 1 m wide are mapped as rock occurrence/structure in Boremap. Very thin sections with foliation are called ductile shear structures and presented in column 7.

Column 13: *Structure/Foliation ≥ 1 m wide* is an interval column. Sections with foliation ≥1 m wide are mapped as rock type/structure in Boremap.

Column 14: *Sealed fractures/All*, frequency column. This column includes all fractures mapped as unbroken in the Boremap system and this includes unbroken fractures where the drill core is not broken as well as unbroken fractures interpreted to have broken up artificially during/after drilling.

Column 15: *Sealed fractures/Broken fractures with aperture = 0*, frequency column. This column includes unbroken fractures interpreted to have broken up artificially during/after drilling.

Column 16: *Sealed fractures/Sealed Fracture Network < 1 m wide*, frequency column. The sealed fracture network parameter is the only parameter that is generally evaluated directly from observations of the drill core. These types of sealed fractures can only in rare cases be observed in the BIPS-image.

Column 17: *Sealed fractures/Sealed Fracture Network ≥ 1 m wide*, interval column.

Column 18: *Open fractures/All Apertures > 0*, frequency column. This column includes all broken fractures, both fractures that with certainty were open before drilling and fractures that probably or possibly were open before drilling.

Column 19: *Open fractures/Uncertain, Aperture = 0.5 probable + 0.5 possible*, frequency column. This column includes fractures that probably or possibly open before drilling.

Column 20: *Open fractures/Certain Aperture = 0.5 certain and > 0.5*, frequency column. This column includes fractures that with certainty were open before drilling.

Column 21: *Open fractures/Joint alteration > 1.5*, frequency column. This column show fractures with stronger joint alteration than normal. This parameter is generally correlated with the location of lithologies with a more weathered appearance.

Column 22: *Open fractures/Crush < 1 m wide*, frequency column. This column includes shorter sections with crush.

Column 23: *Open fractures/Crush ≥ 1 m wide*, interval column. This column includes longer sections with crush.

4.6 Nonconformities

Due to the lack of reference marks in KLX11B for length adjustments, recorded length from the BIPS-logging was used.

5 Results

5.1 General

All results from the mapping are principally found in the Appendices. Information from the SICADA database is shown in the Geological Summary tables in Appendix 1 and as WellCad diagrams in Appendix 4. BIPS-images are presented in Appendix 3. Search paths to Geological Summary table are presented in Appendix 2 and In-data, such as borehole length, reference marks, deviation data and diameter are presented in Appendices 6–8.

The DFN boreholes vary between 100 m and 122 m in length and Table 5-1 shows the exact lengths of each drill core.

5.2 Lithology and structures

The lithology in KLX11B, KLX11D and KLX11F is dominated by quartz monzodiorite (501036), subordinate rock type is fine-grained granite (511058) varying from 0.6% to 4.5%. KLX11C and KLX11E are totally dominated by quartz monzodiorite (501036). Table 5-2 shows the documented rock types.

KLX11C and KLX11D contain thin intervals, 0.5 to 8 cm, of sandstone (506007). These rock occurrences are situated at ~ 31 and ~ 94 m borehole length in KLX11C, and at ~ 29–30 m and 64 m borehole length in KLX11D.

One section in KLX11B, three sections in KLX11C and KLX11D and four sections in KLX11E and KLX11F are recognized by anomalous fracture frequencies, alterations and structural features.

Table 5-1. Length of the DFN boreholes.

Borehole	Length (m)
KLX11B	0.95–100.20
KLX11C	0.00–119.99
KLX11D	0.30–120.18
KLX11E	0.00–121.38
KLX11F	0.30–119.77

Table 5-2. Lithology distribution in the DFN boreholes.

Rock type	KLX11B (%)	KLX11C (%)	KLX11D (%)	KLX11E (%)	KLX11F (%)
Quartz monzodiorite (501036)	92.6	100.0	99.4	100.0	95.5
Fine-grained granite (511058)	3.4		0.6		4.5

Section interval characteristics

KLX11B

1. 69.00–78.00 m. Increased frequency of open fractures, sealed fracture networks, ductile and brittle-ductile shear zones, breccia, foliation and red staining occurs within this section.

KLX11C

1. 4.00–8.50 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm.
2. 29.00–36.00 m. Increased frequency of sealed fractures, sealed fracture network, foliation, red staining and saussuritization occurs within this section.
3. 306–309 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks and brittle-ductile shear zones.

KLX11D

1. 59.00–68.3 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks, core loss, foliation and red staining occurs within this section.
2. 90.10–97.3 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks, foliation and red staining occurs within this section.
3. 103.30–110.5 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks and red staining occurs within this section.

KLX11E

1. 14.50–21.10 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks, ductile and brittle-ductile shear zones, red staining and saussuritization occurs within this section.
2. 39.30–54.0 m. This section is foliated and has an increased number of ductile shear zones.
3. 67.90–75.40 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks, red staining and saussuritization occurs within this section.
4. 113.6–118.7 m. Increased frequency of open fractures, sealed fracture networks, red staining and brittle-ductile shear zones occurs within this section.

KLX11F

1. 4.00–11.50 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, foliation and saussuritization occurs within this section.
2. 48.61–51.60 m. Increased frequency of sealed fractures, sealed fracture networks, ductile and brittle-ductile shear zones, foliation and epidotization occurs within this section.
3. 64.20–72.90 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks, crush zone and red staining occurs within this section.
4. 117.20–118.7 m. Increased frequency of open fractures and open fractures with aperture > 0.5 mm, sealed fracture networks and a brittle-ductile shear zone occurs within this section.

5.3 Fracture mineralogy

The mineralogy in sealed fractures is dominated by oxidized walls calcite and chlorite and to a lesser extent by quartz.

Calcite and chlorite dominates the mineralogy in open fractures. Secondary is clay minerals and oxidized walls. Gypsum occurs frequently in KLX11B. Table 5-3 shows the mineralogy in sealed fractures and Table 5-4 shows the mineralogy in open fractures.

Table 5-3. Frequency of minerals and rock wall alteration in sealed fractures.

Mineral	KLX11B (%)	KLX11C (%)	KLX11D (%)	KLX11E (%)	KLX11F (%)
Calcite	50.7	35.4	46.7	60.9	45.7
Oxidized Walls	66.2	64.9	71.4	56.5	64.8
Chlorite	44.4	40.8	28.8	49.9	56.3
Hematite	2.5	1.3	3.6	4.2	0.3
Epidote	4.9	7.6	2.3	4.2	3.8
Quartz	15.1	18.7	15.6	15.9	31.1
Prehnite	11.3	6.3	13.1	1.3	1.7
White Feldspar	9.2	21.8	1.3	10.2	23.2
Red Feldspar	11.3		4.8		
Adularia	4.9	15.2	7.4	10.6	15.0
Pyrite	1.4	2.5	0.6	1.3	1.4
Clay Minerals	1.4	6.6	1.7	1.5	1.4
Laumontite			0.2		1.0
X8		2.2	1.5	0.2	2.4
X5	0.4	1.6	0.2	0.2	
X7	1.4	0.3	0.6	0.2	1.4
Iron Hydroxide	0.4			0.2	

Table 5-4. Frequency of minerals and rock wall alteration in open fractures.

Mineral	KLX11B (%)	KLX11C (%)	KLX11D (%)	KLX11E (%)	KLX11F (%)
Calcite	76.9	69.2	73.5	69.3	55.8
Chlorite	72.5	76.9	77.0	89.1	80.8
Pyrite	8.8	30.0	14.2	13.9	10.0
Hematite	3.8	5.4	12.7	11.9	8.3
Clay Minerals	26.3	38.5	31.4	40.1	44.2
Oxidized Walls	37.5	23.1	37.3	27.7	17.5
Epidote	3.8	1.5	5.9	2.0	4.2
Laumontite		0.8	1.0		0.8
Iron Hydroxide	4.4	3.8	5.4	4.0	4.2
Quartz	4.4	5.4	3.9	5.4	5.0
Adularia	0.6	2.3	1.5	5.9	2.5
Prehnite	7.5	1.5	2.9	0.5	
White Feldspar	6.9	1.5	0.5	2.0	
Red Feldspar			1.0	0.5	
Biotite			1.0		0.8
X1		1.5	0.5		
X2	9.4				
X7	5.0	1.5	4.9		2.5
X8			0.5		
Unknown Mineral			0.5		

Geological Summary table KLX11B

GEOLOGICAL SUMMARY KLX11B — **APPENDIX:**

Site	LAXEMAR
Borehole	KLX11B
Coordinate System	RT90-RHB70
Date of mapping	2006-06-29 16:56:00

Signed data

ROCKTYPE SIMPEVARP: Fine-grained granite; Quartz monzodiorite

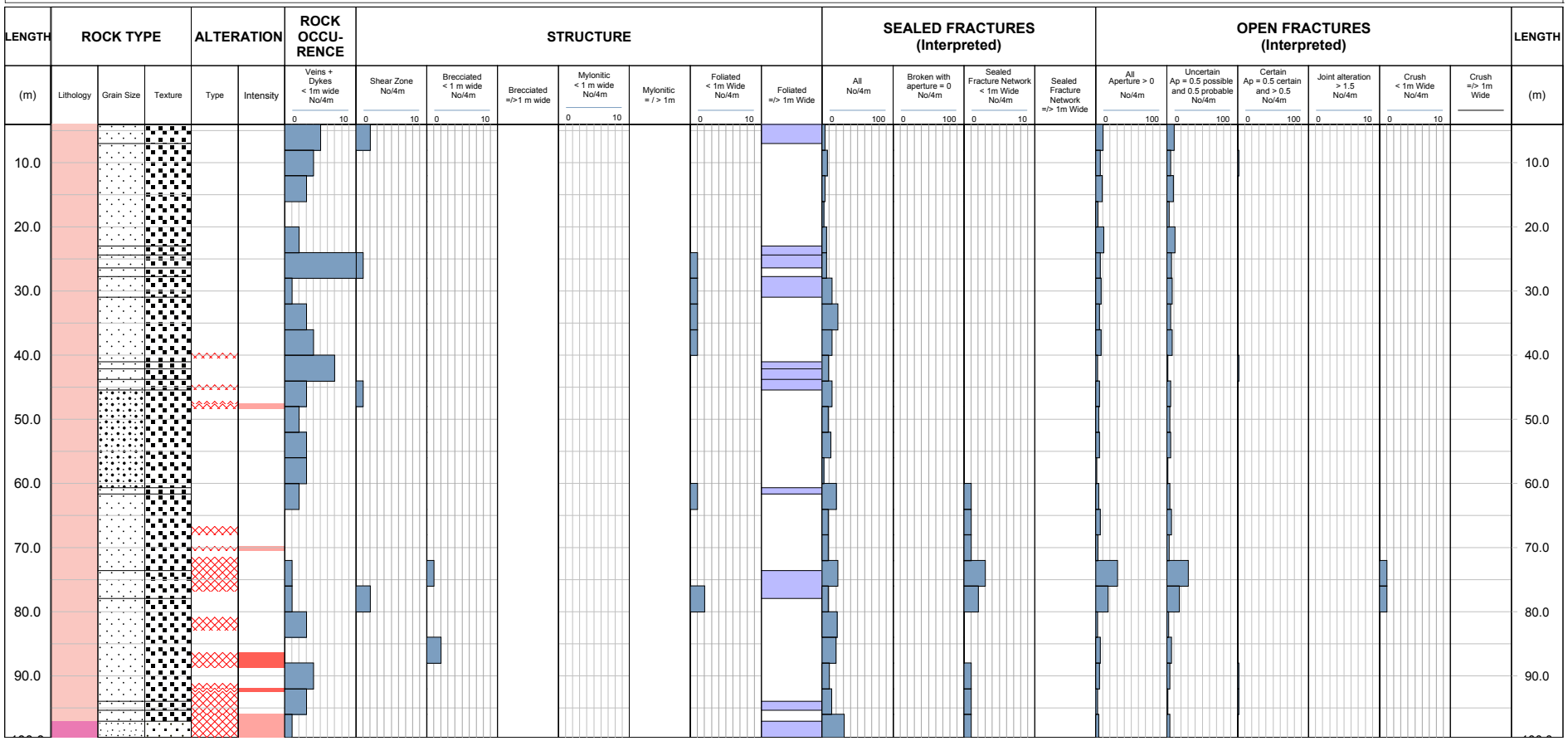
GRAINSIZE: Fine to medium grained; Medium to coarse grained; Medium-grained

TEXTURE: Porphyritic; Equigranular

ALTERATION TYPE: Oxidized

ALTRATION INTENSITY: Weak; Medium

STRUCTURE INTENSITY: Weak; Weak



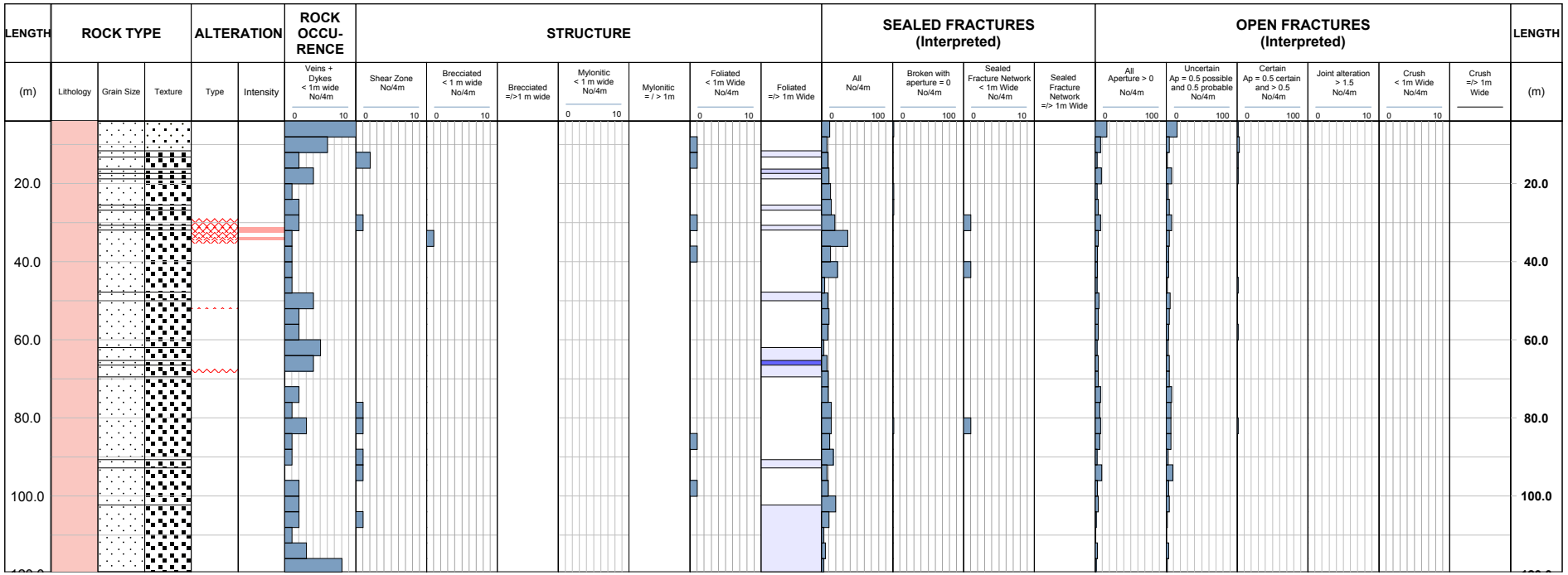
Geological Summary table KLX11C

GEOLOGICAL SUMMARY KLX11C — **APPENDIX:**

Site	LAXEMAR
Borehole	KLX11C
Coordinate System	RT90-RHB70
Date of mapping	2006-06-29 16:57:00

Signed data

ROCKTYPE SIMPEVARP: Quartz monzodiorite
GRAINSIZE: Medium-grained
TEXTURE: Porphyritic; Equigranular
ALTERATION TYPE: Red Staining
ALTRATION INTENSITY: Weak
STRUCTURE INTENSITY: Faint; Weak; Medium



Geological Summary table KLX11D

GEOLOGICAL SUMMARY KLX11D — **APPENDIX:**

Site	LAXEMAR
Borehole	KLX11D
Coordinate System	RT90-RHB70
Date of mapping	2006-06-29 16:57:00

Signed data

ROCKTYPE SIMPEVARP: Fine-grained granite; Quartz monzodiorite

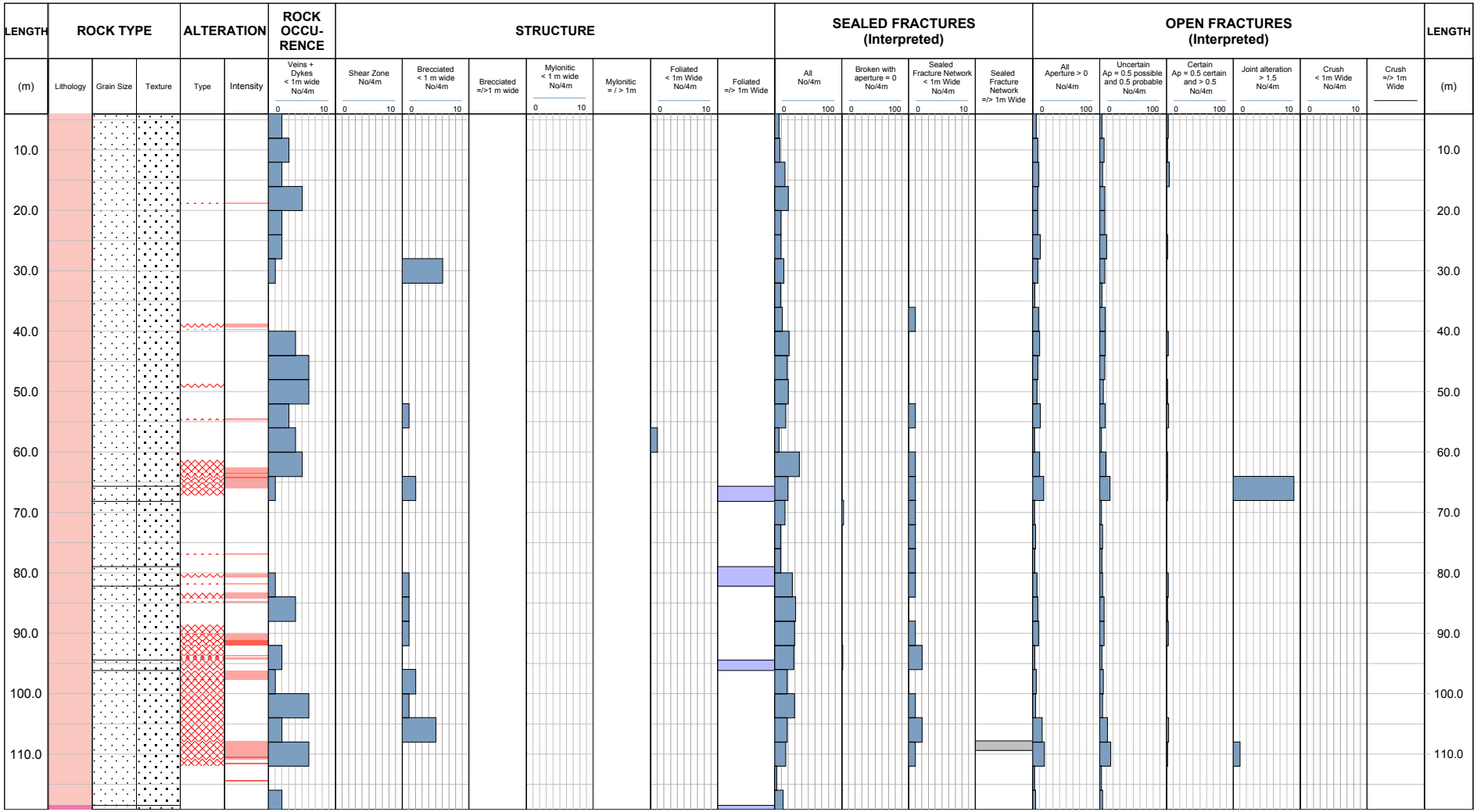
GRAINSIZE: Fine-grained; Medium-grained

TEXTURE: Porphyritic

ALTERATION TYPE: Oxidized

ALTRATION INTENSITY: Weak; Medium

STRUCTURE INTENSITY: Weak



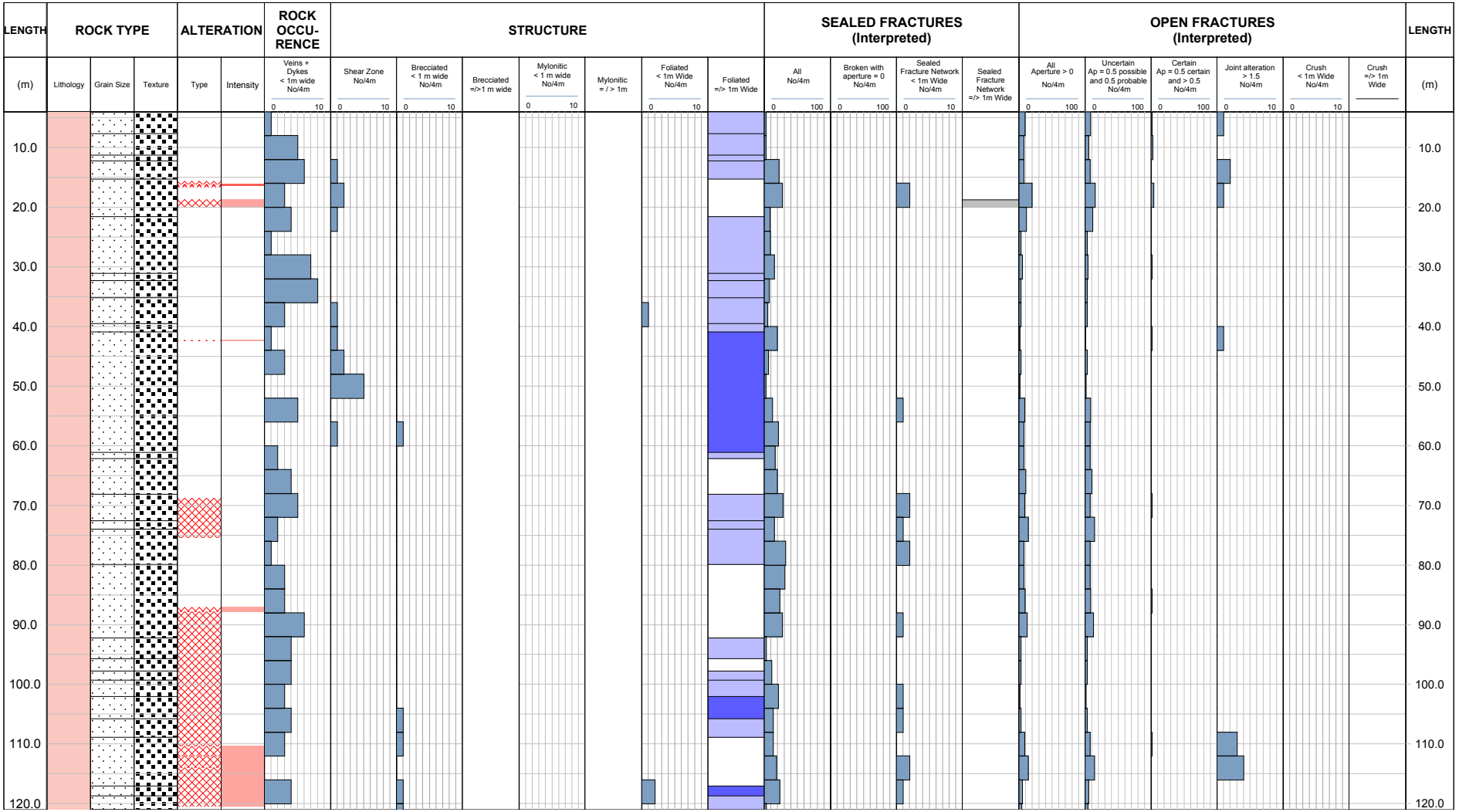
Geological Summary table KLX11E

GEOLOGICAL SUMMARY KLX11E — **APPENDIX:**

Site	LAXEMAR
Borehole	KLX11E
Coordinate System	RT90-RHB70
Date of mapping	2006-06-29 16:58:00

Signed data

ROCKTYPE SIMPEVARP: Quartz monzodiorite
GRAINSIZE: Medium-grained
TEXTURE: Equigranular
ALTERATION TYPE: Oxidized
ALTRATION INTENSITY: Weak, Medium
STRUCTURE INTENSITY: Weak, Weak, Strong



Geological Summary table KLX11F

GEOLOGICAL SUMMARY KLX11F — **APPENDIX:**

Site	LAXEMAR
Borehole	KLX11F
Coordinate System	RT90-RHB70
Date of mapping	2006-06-29 16:59:00

Signed data

ROCKTYPE SIMPEVARP: Fine-grained granite; Quartz monzodiorite

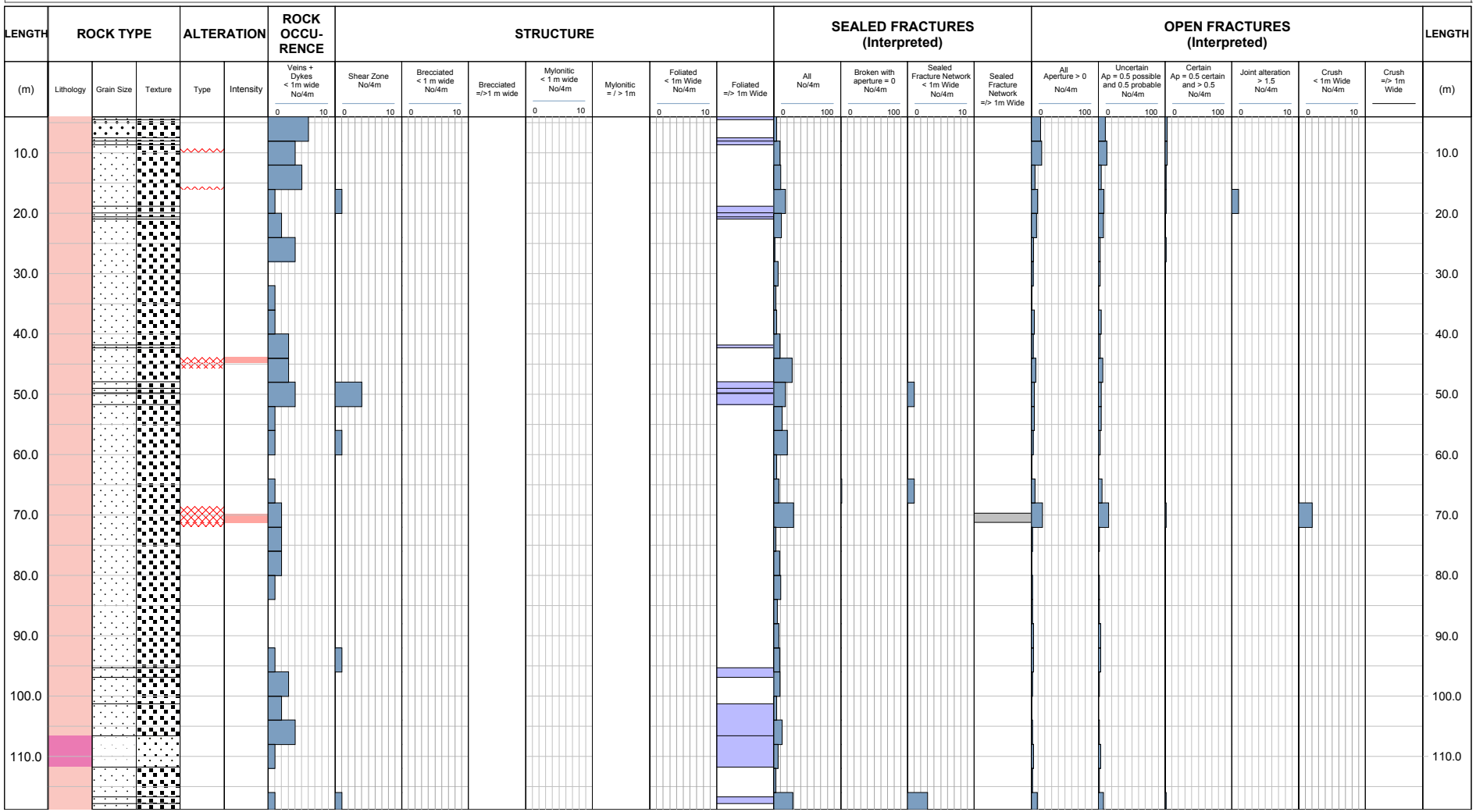
GRAINSIZE: Fine-grained; Coarse-grained; Medium-grained

TEXTURE: Porphyritic; Equigranular

ALTERATION TYPE: Oxidized

ALTRATION INTENSITY: Weak

STRUCTURE INTENSITY: Weak; Weak



Search paths for the Geological Summary table

TABLE HEAD LINES		INFORMATION SOURCE			PRESENTATION
Head lines	**Sub head lines**	**Varcode**	**First suborder**	**Second suborder**	**Interval / frequence**
Rock type	Lithology	5	Sub 1		Interval
	Grain size	5	Sub 5		Interval
	Texture	5	Sub 6		Interval
Alteration	Oxidation	7	Sub 1 = 700		Interval
	Oxidation intensity	7	Sub 1 = 700	Sub 2	Interval
Rock occurrence	Vein + dyke	31	Sub 1 = 2 and 18		Frequence
Structure	Shear zone	31	Sub 4 = 41 and 42		Frequence
	Brecciated, < 1m wide	31	Sub 4 = 7		Frequence
	Brecciated, >/= 1m wide	5	Sub 3 = 7	Sub 4; 101 and 102 = 102	Interval
		5	Sub 3 = 7	Sub 4; 103 and 104 = 104	
	Mylonite, < 1 m wide	31	Sub 4 = 34		Frequence
	Mylonite, >/= 1 m wide	5	Sub 3 = 34	Sub 4; 101 and 102 = 102	Interval
		5	Sub 3 = 34	Sub 4; 103 and 104 = 104	
	Foliation zone, < 1 m wide	31	Sub 4 = 81		Frequence
	Foliation zone, >/= 1 m wide	5	Sub 3 = 81	Sub 4; 101 and 102 = 102	Interval
		5	Sub 3 = 81	Sub 4; 103 and 104 = 104	
Sealed fracture	All unbroken fractures	3			Frequence
	and broken fractures	2	SNUM 11= 0		
	Broken fractures, Aperture = 0	2	SNum 11 = 0		Frequence
	Sealed fracture network < 1 m wide	32			Frequence
	Sealed fracture network>/= 1 m wide	32			Interval
Open fractures	All, Aperture > 0	2 and 3	SNum 11>0		Frequence
	Uncertain, Aperture = 0.5 possible and 0.5 probable	2 and 3	SNum 11>0	Sub 12 > 1	Frequence
	Certain, Aperture = 0.5 certain	2 and 3	SNum 11>0	Sub 12 = 1	Frequence
	Joint alteration > 1.5	2	SNum16 > 1.5		Frequence
	Crush < 1 m wide	4			Frequence
	Crush >/= 1 m wide	4			Interval

BIPS-image of KLX11B

Borehole Image Report

Borehole Name: KLX11B

Mapping Name: KLX11B_Geosigma_1

Mapping Range: 0.000 - 100.200 m

Diameter: 76.0 mm

Printed Range: 4.000 - 99.360

Pages: 6

Image File Information:

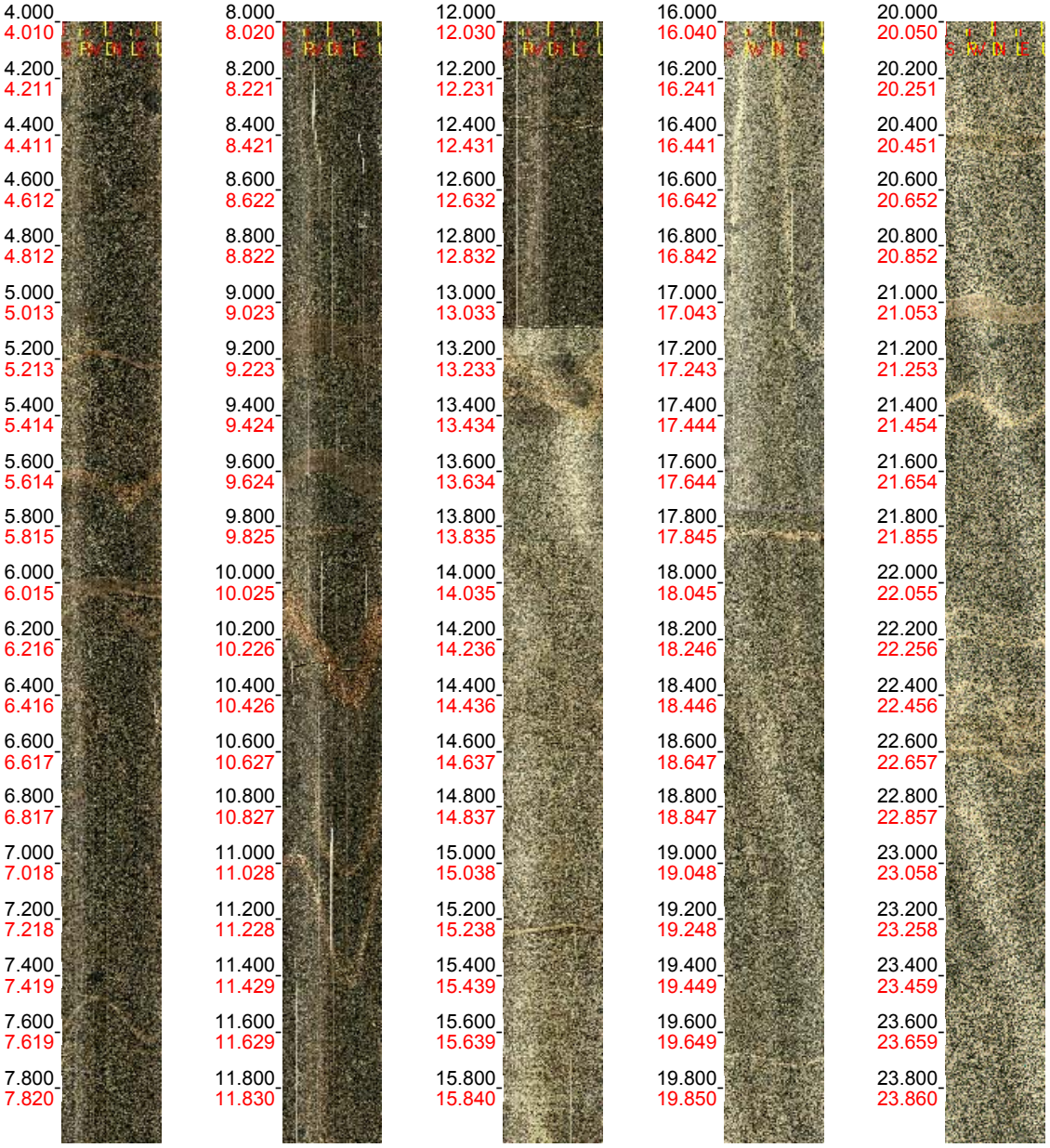
File:	D:\BIPSbilder\KLX11B\KLX11B_4-99m.BIP
Date/Time:	2006-05-10 18:12:00
Start Depth:	4.000 m
End Depth:	99.360 m
Resolution:	1.00 mm/pixel (depth)
Orientation:	Magnetic
Image height:	95360 pixels
Image width:	360 pixels
BIP Version:	BIP-III
Locality:	LAXEMAR
Borehole:	KLX11B
Scan Direction:	Down
Color adjust:	0 0 0 (RGB)

Magnetic north to borehole coord north: 2.370
Image rotation to borehole direction: 189.070

Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 1 (6)

Borehole: KLX11B
Mapping: KLX11B_Geosigma_1

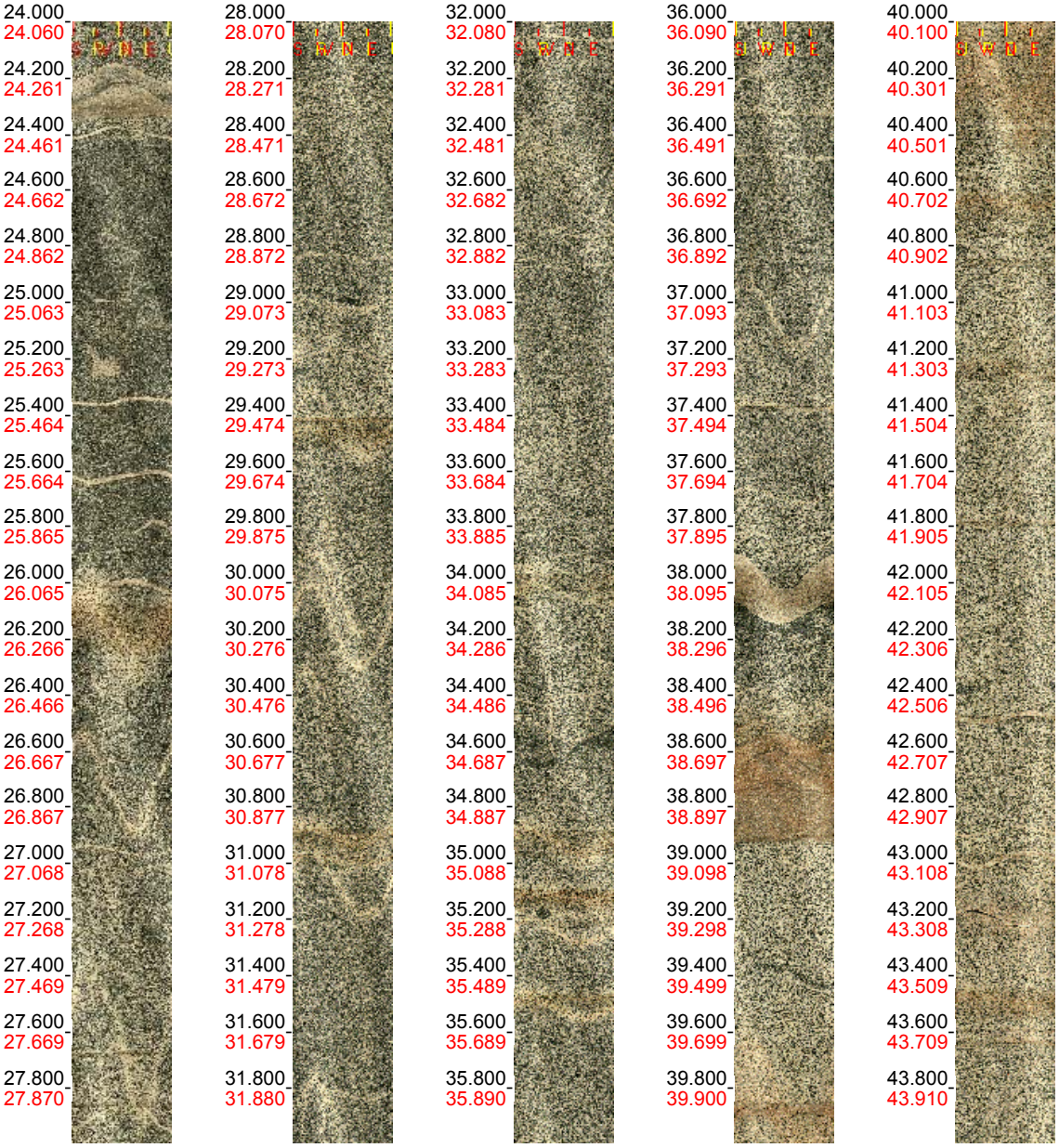
Depth range: 4.000 - 24.000 m
Azimuth: 156.3
Inclination: -89.9



Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 2 (6)

Borehole: KLX11B
Mapping: KLX11B_Geosigma_1

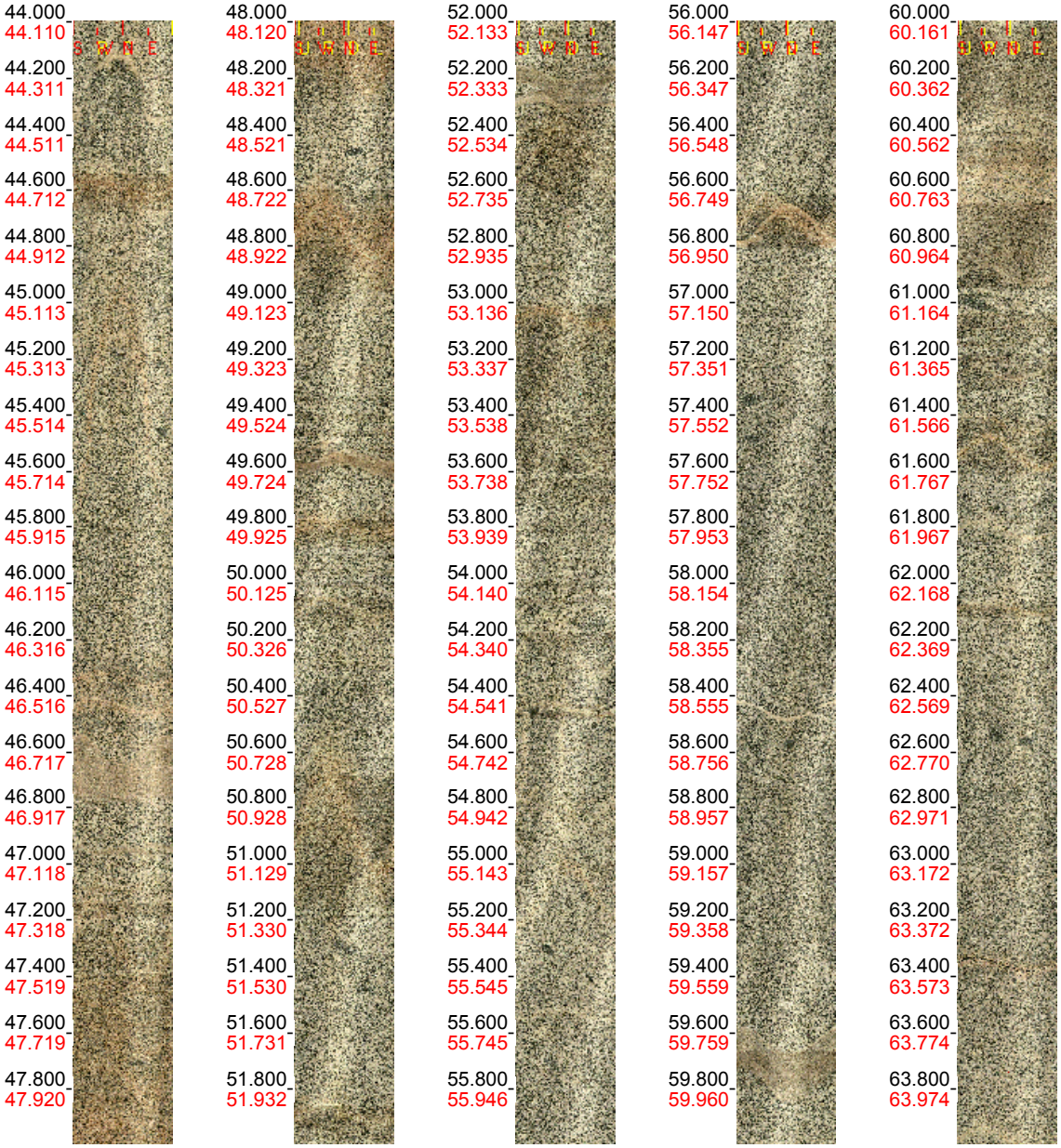
Depth range: 24.000 - 44.000 m
Azimuth: 166.2
Inclination: -89.5



Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 3 (6)

Borehole: KLX11B
Mapping: KLX11B_Geosigma_1

Depth range: 44.000 - 64.000 m
Azimuth: 176.7
Inclination: -89.4



Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 4 (6)

Borehole: KLX11B
Mapping: KLX11B_Geosigma_1

Depth range: 64.000 - 84.000 m
Azimuth: 182.0
Inclination: -89.4

Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 5 (6)

Borehole: KLX11B
Mapping: KLX11B_Geosigma_1

Depth range: 84.000 - 99.360 m
Azimuth: 185.3
Inclination: -89.5

Printed: 2006-09-05 08:52:30 Scale: 1 : 20 Aspect: 150 % 6 (6)

BIPS-image of KLX11C

Borehole Image Report

Borehole Name: KLX11C

Mapping Name: KLX11C_Geosigma_1

Mapping Range: 0.000 - 120.150 m

Diameter: 76.0 mm

Printed Range: 4.000 - 119.840

Pages: 7

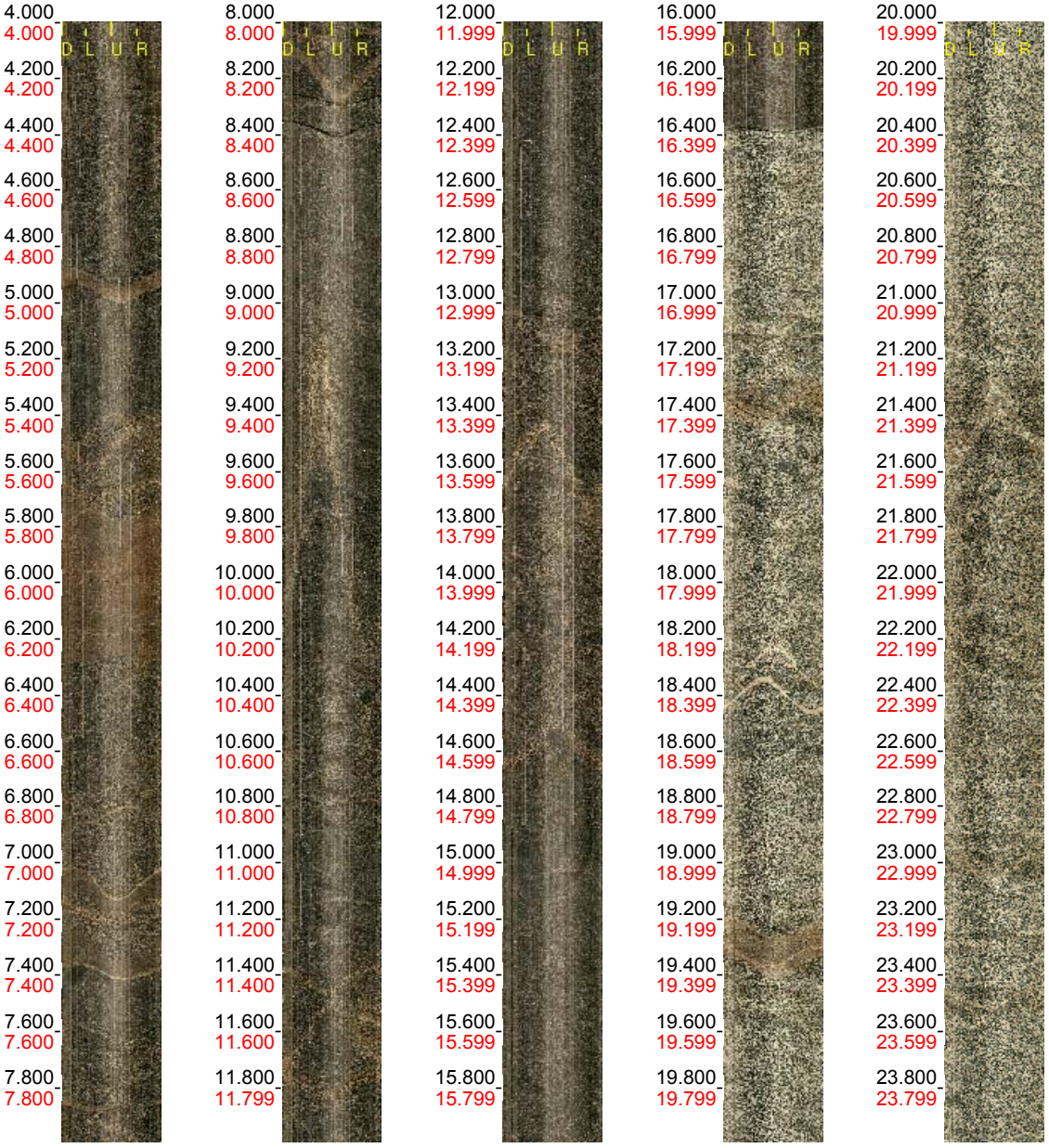
Image File Information:

File:	D:\BIPSbilder\KLX11B-F\KLX11C\KLX11C_20060704.BIP
Date/Time:	2006-07-04 09:17:00
Start Depth:	4.000 m
End Depth:	119.840 m
Resolution:	1.00 mm/pixel (depth)
Orientation:	Gravmetric
Image height:	115840 pixels
Image width:	360 pixels
BIP Version:	BIP-III
Locality:	LAXEMAR
Borehole:	KLX11C
Scan Direction:	Down
Color adjust:	0 0 0 (RGB)

Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 1 (7)

Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

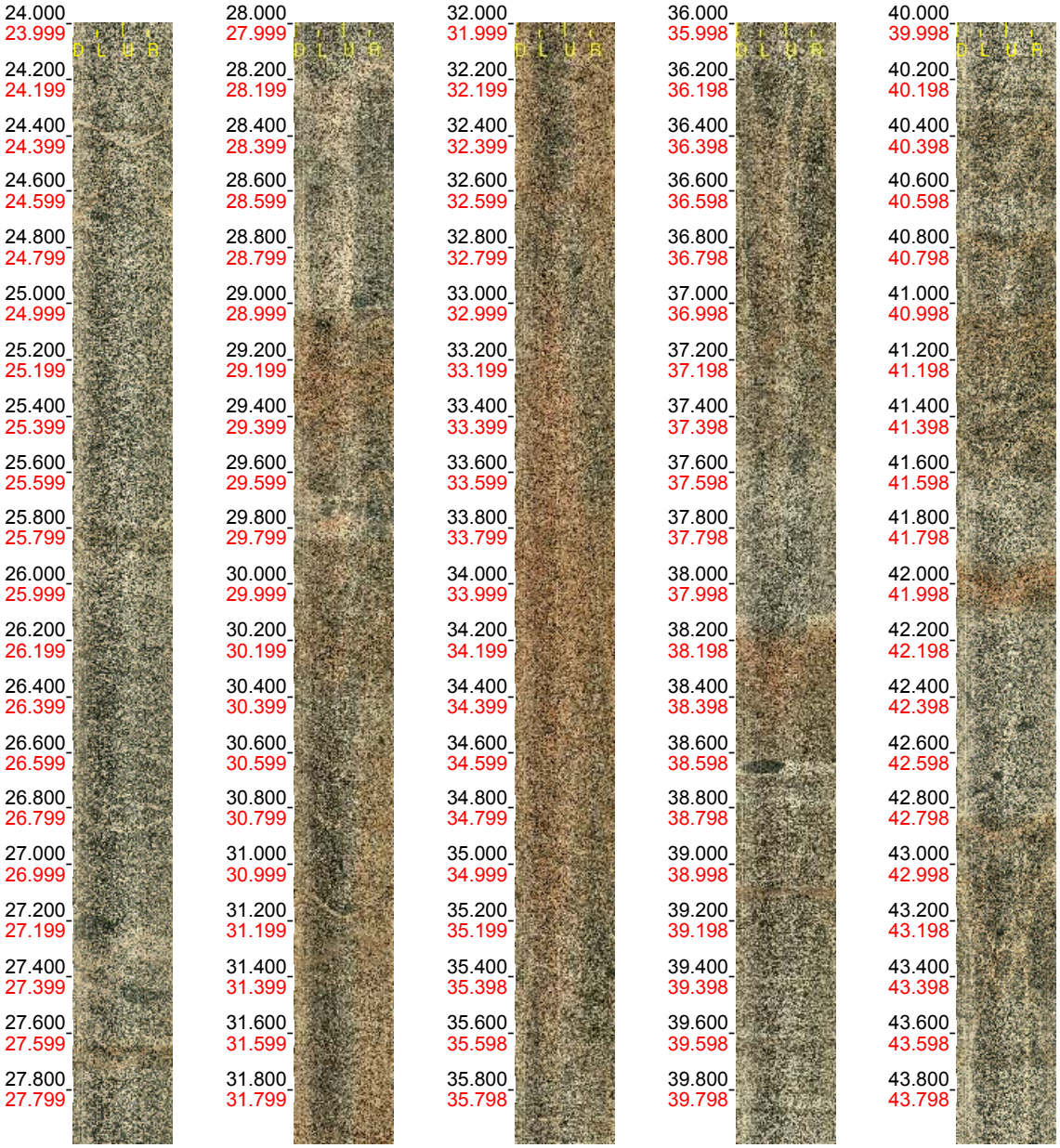
Depth range: 4.000 - 24.000 m
Azimuth: 157.6
Inclination: -60.8



Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 2 (7)

Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

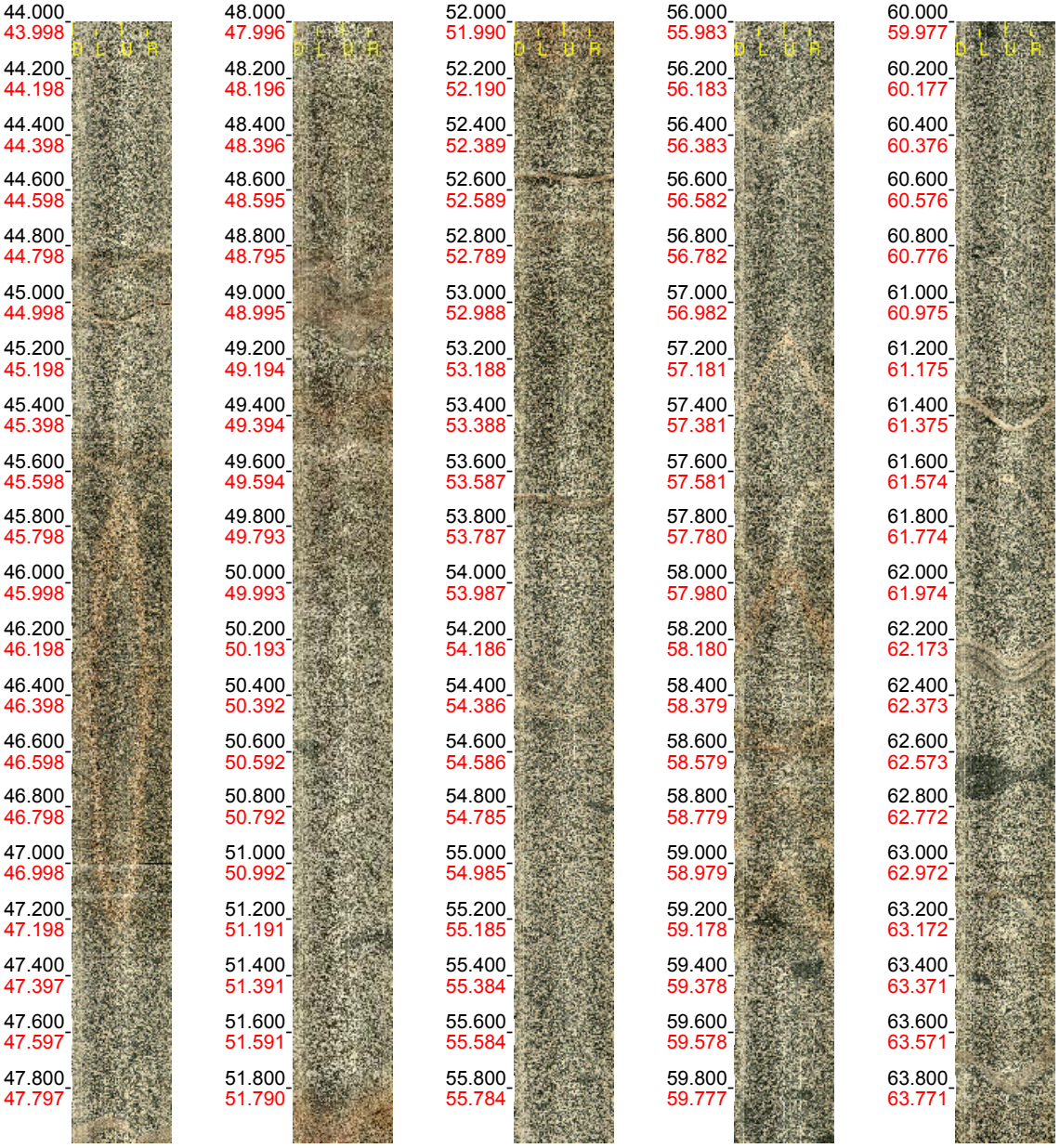
Depth range: 24.000 - 44.000 m
Azimuth: 159.8
Inclination: -60.6



Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 3 (7)

Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

Depth range: 44.000 - 64.000 m
Azimuth: 161.7
Inclination: -60.4



Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 4 (7)

Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

Depth range: 64.000 - 84.000 m
Azimuth: 162.0
Inclination: -60.3

Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 5 (7)

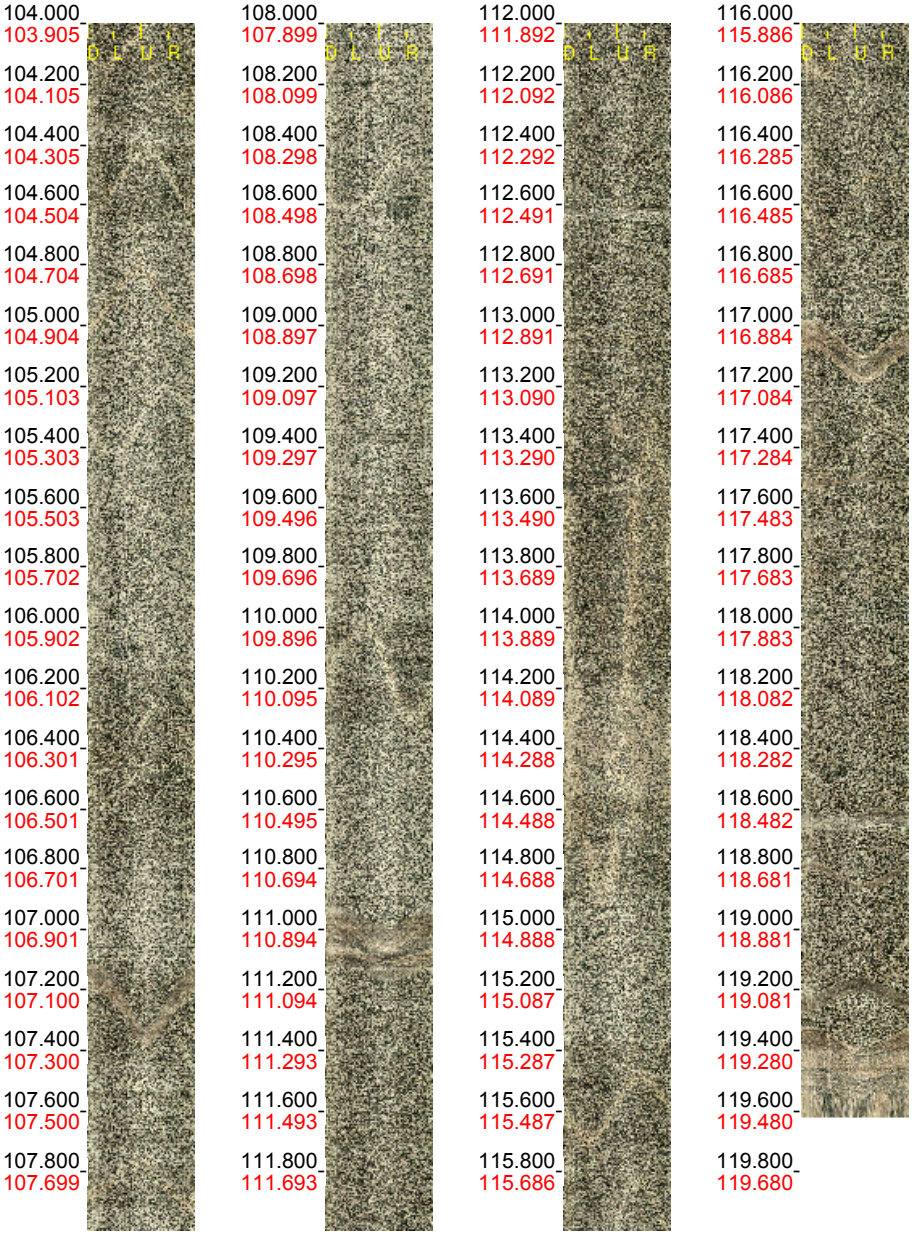
Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

Depth range: 84.000 - 104.000 m
Azimuth: 164.2
Inclination: -60.1

Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 6 (7)

Borehole: KLX11C
Mapping: KLX11C_Geosigma_1

Depth range: 104.000 - 119.840 m
Azimuth: 165.4
Inclination: -59.7



Printed: 2006-07-06 13:58:07 Scale: 1 : 20 Aspect: 150 % 7 (7)

BIPS-image of KLX11D

Borehole Image Report

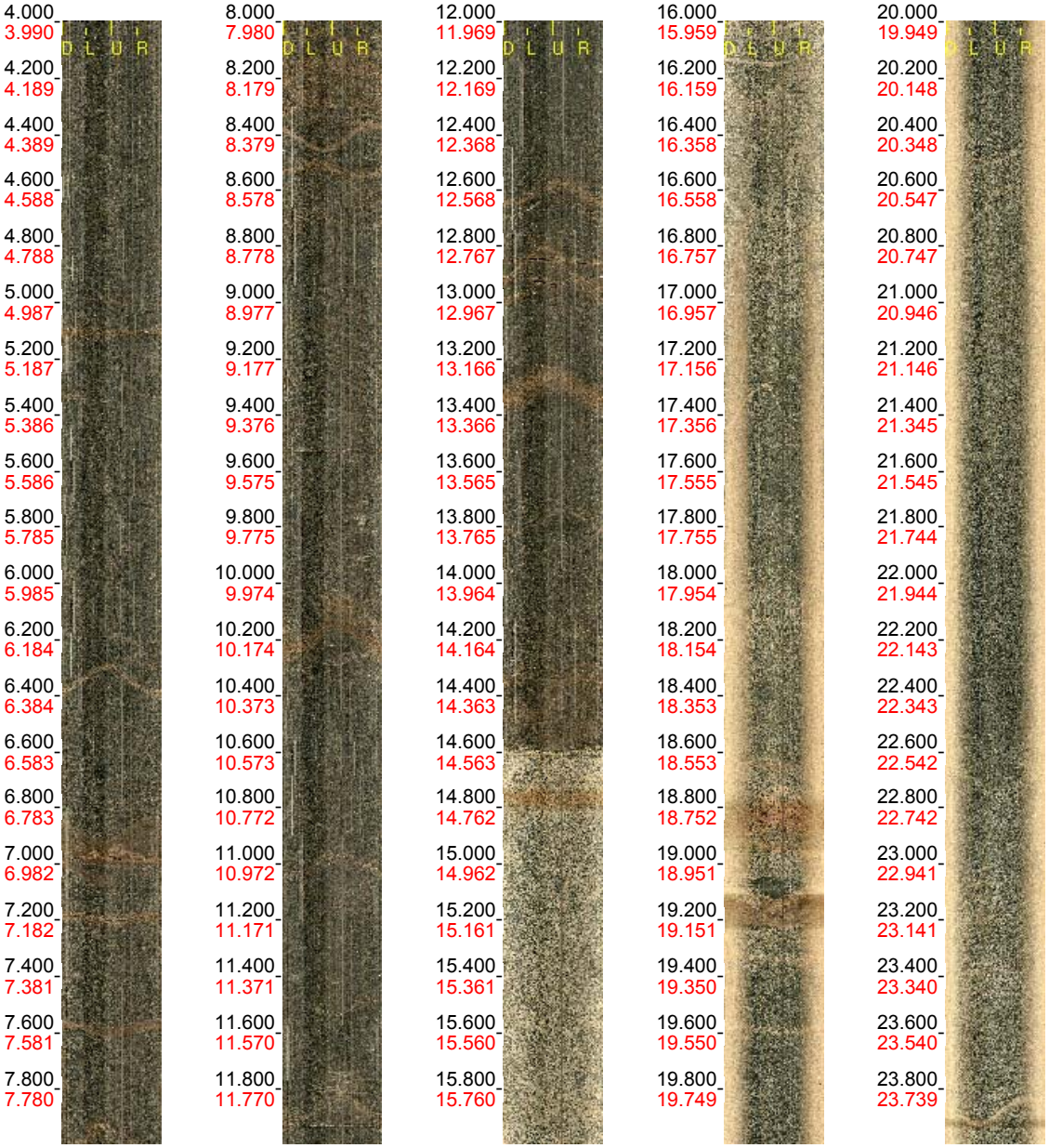
Borehole Name:	KLX11D
Mapping Name:	KLX11D_Geosigma_1
Mapping Range:	0.000 - 120.350 m
Diameter:	76.0 mm
Printed Range:	4.000 - 119.456
Pages:	7

Image File Information:

File:	D:\BIPS_Images\KLX11D\KLX11D.BIP
Date/Time:	2006-07-04 12:37:00
Start Depth:	4.000 m
End Depth:	119.456 m
Resolution:	1.00 mm/pixel (depth)
Orientation:	Gravmetric
Image height:	115456 pixels
Image width:	360 pixels
BIP Version:	BIP-III
Locality:	LAXEMAR
Borehole:	KLX11D
Scan Direction:	Down
Color adjust:	0 0 0 (RGB)

Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

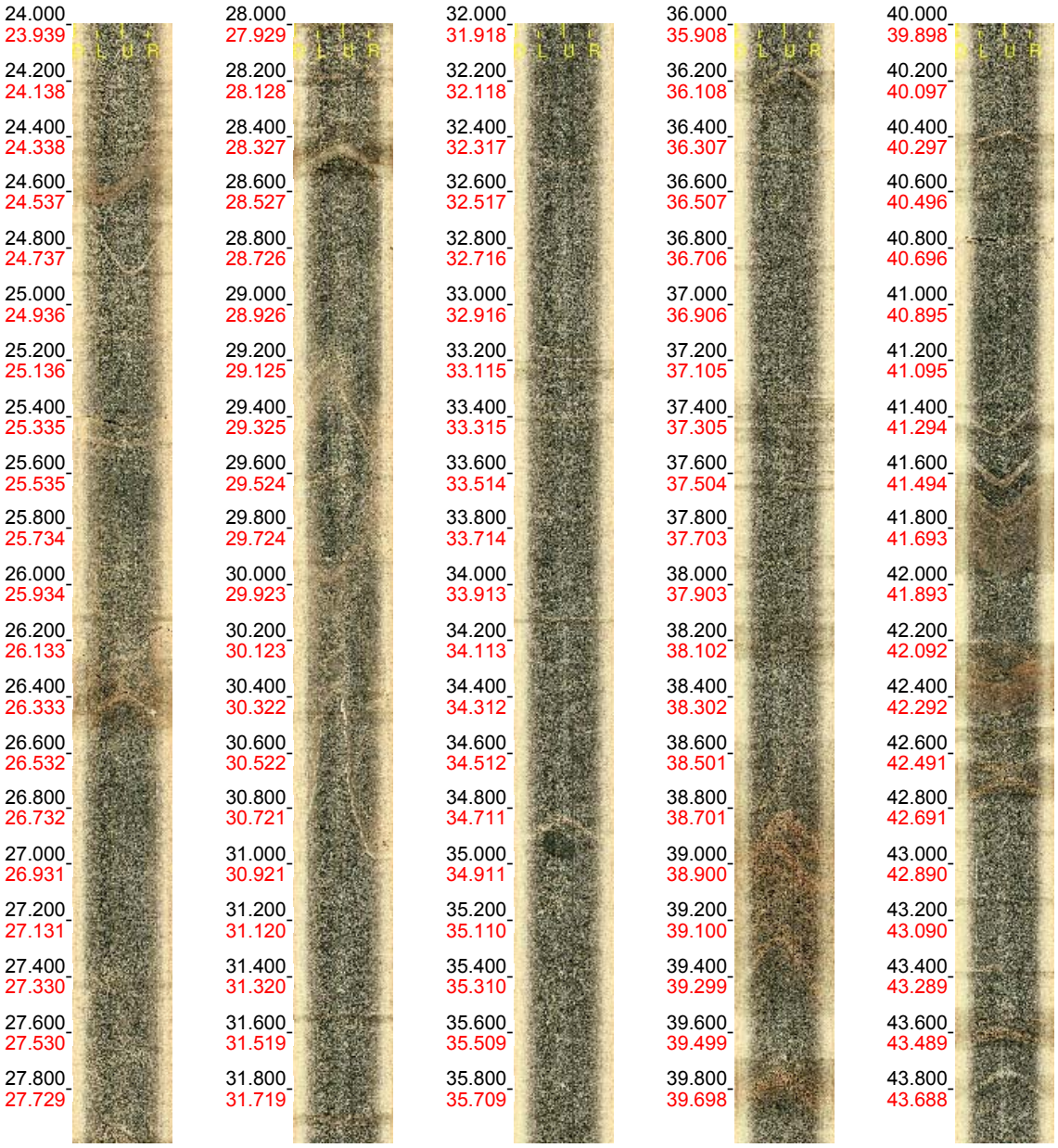
Depth range: 4.000 - 24.000 m
Azimuth: 269.2
Inclination: -59.0



Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 2 (7)

Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

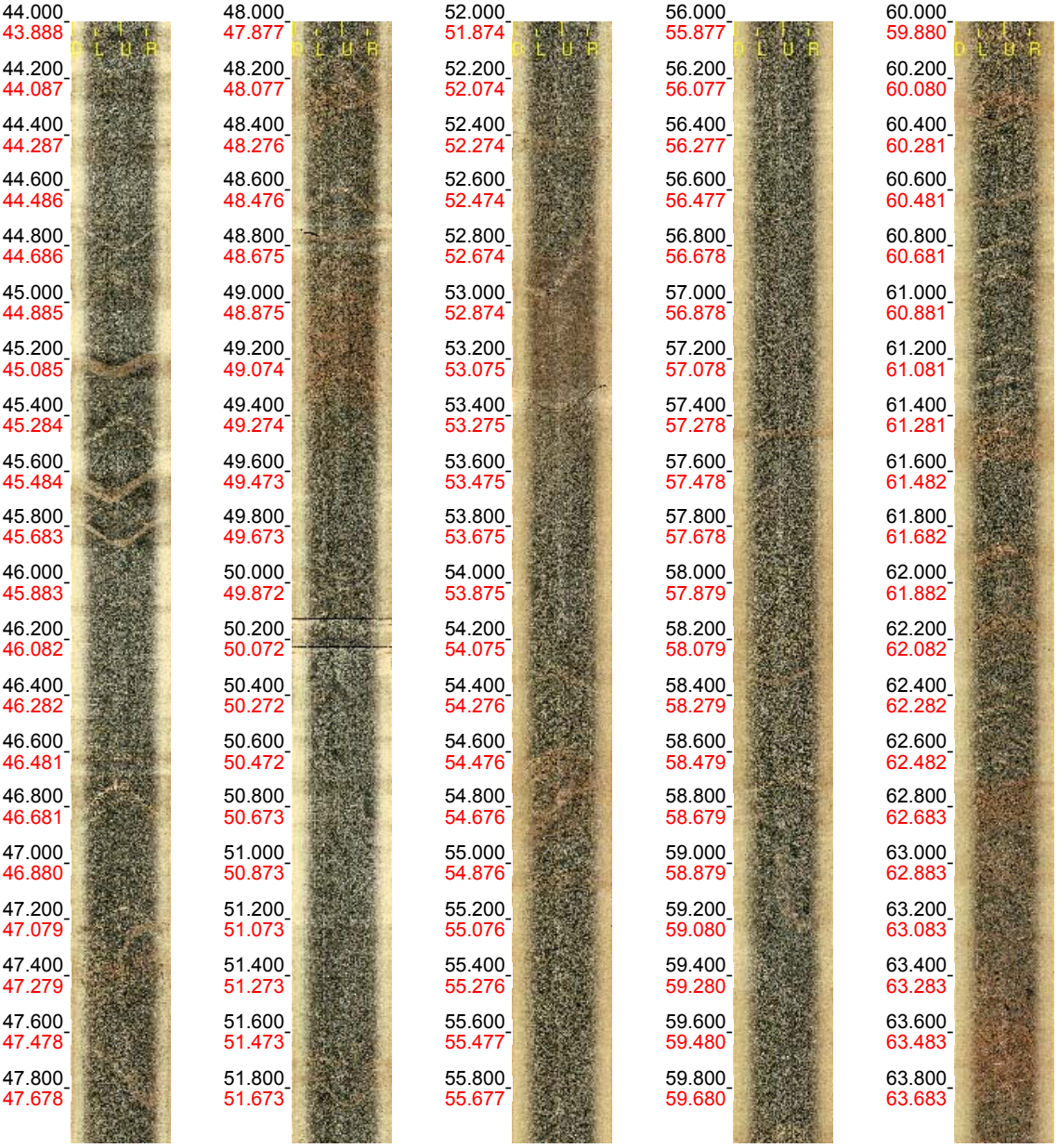
Depth range: 24.000 - 44.000 m
Azimuth: 270.0
Inclination: -58.2



Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 3 (7)

Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

Depth range: 44.000 - 64.000 m
Azimuth: 270.9
Inclination: -57.7



Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 4 (7)

Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

Depth range: 64.000 - 84.000 m
Azimuth: 274.8
Inclination: -56.8

Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 5 (7)

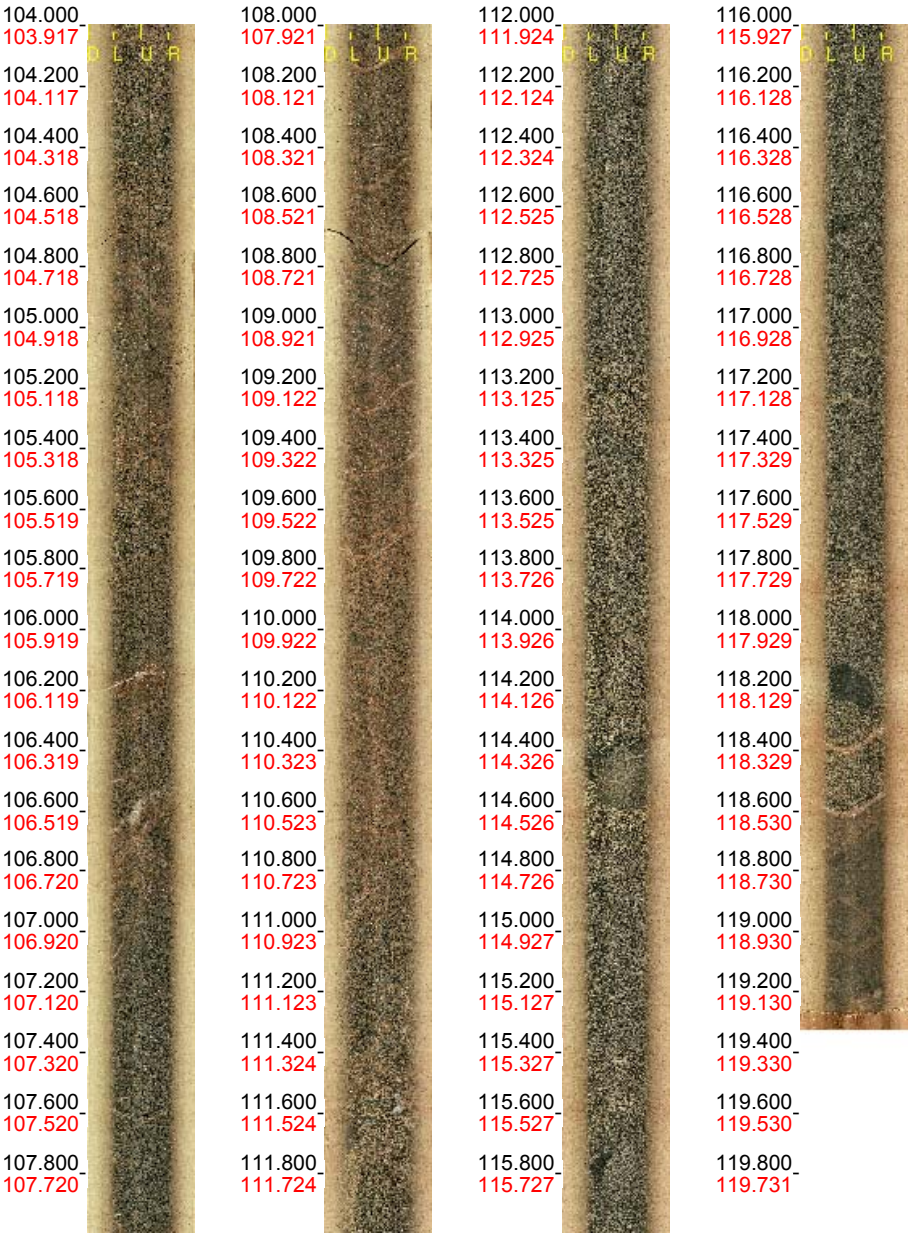
Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

Depth range: 84.000 - 104.000 m
Azimuth: 273.0
Inclination: -56.0

Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 6 (7)

Borehole: KLX11D
Mapping: KLX11D_Geosigma_1

Depth range: 104.000 - 119.456 m
Azimuth: 274.5
Inclination: -55.5



Printed: 2006-07-13 11:36:57 Scale: 1 : 20 Aspect: 150 % 7 (7)

BIPS-image of KLX11E

Borehole Image Report

Borehole Name: KLX11E

Mapping Name: KLX11E_Geosigma_1

Mapping Range: 0.000 - 121.300 m

Diameter: 76.0 mm

Printed Range: 4.000 - 120.864

Pages: 7

Image File Information:

File:	D:\BIPSbilder\KLX11B-F\KLX11E\KLX11E.BIP
Date/Time:	2006-05-10 13:02:00
Start Depth:	4.000 m
End Depth:	120.864 m
Resolution:	1.00 mm/pixel (depth)
Orientation:	Gravmetric
Image height:	116864 pixels
Image width:	360 pixels
BIP Version:	BIP-III
Locality:	LAXEMAR
Borehole:	KLX11E
Scan Direction:	Down
Color adjust:	0 0 0 (RGB)

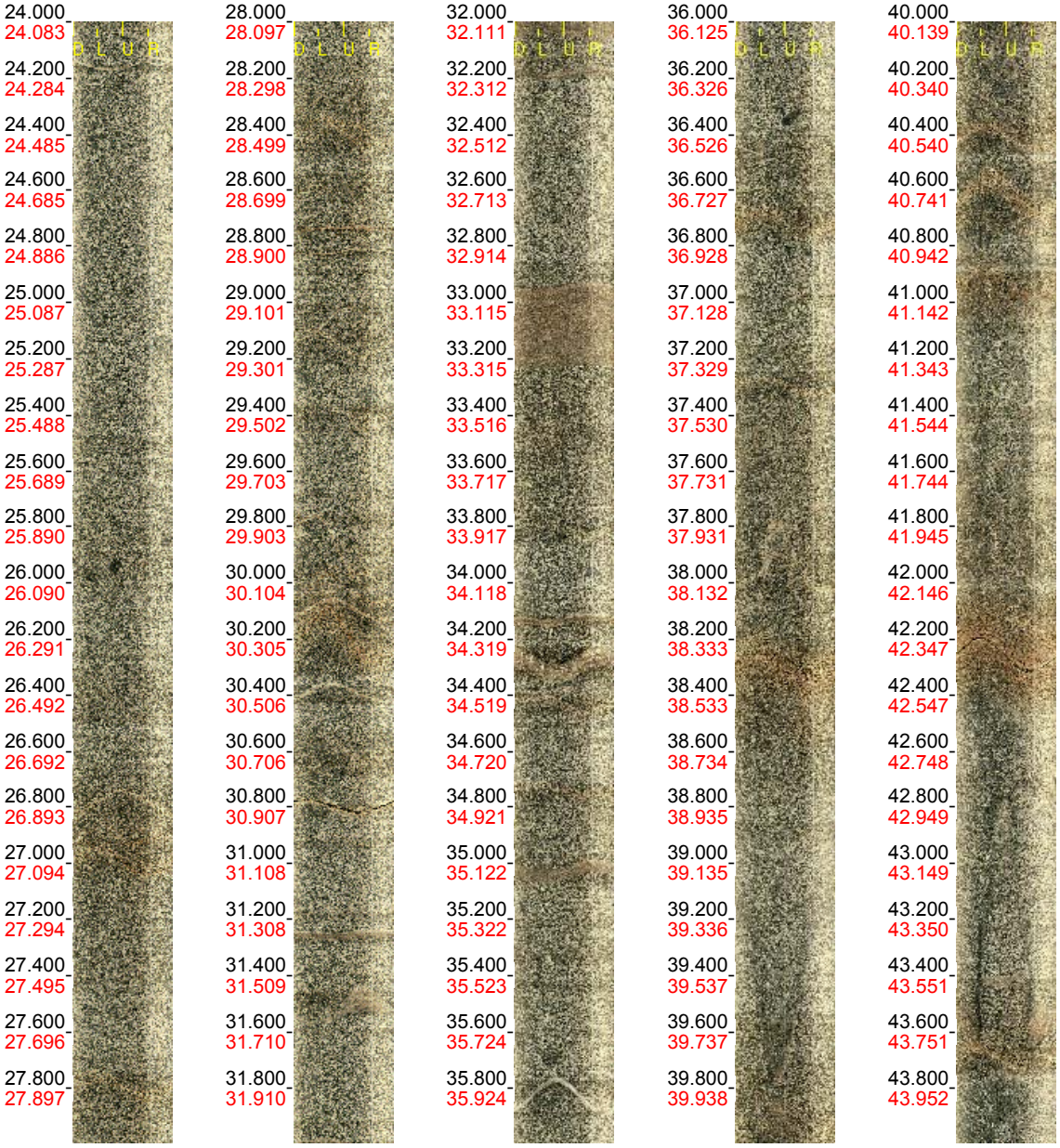
Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 4.000 - 24.000 m
Azimuth: 335.4
Inclination: -61.0

Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 2 (7)

Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 24.000 - 44.000 m
Azimuth: 337.1
Inclination: -60.5



Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 3 (7)

Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 44.000 - 64.000 m
Azimuth: 338.7
Inclination: -60.0

Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 4 (7)

Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 64.000 - 84.000 m
Azimuth: 341.3
Inclination: -59.6

Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 5 (7)

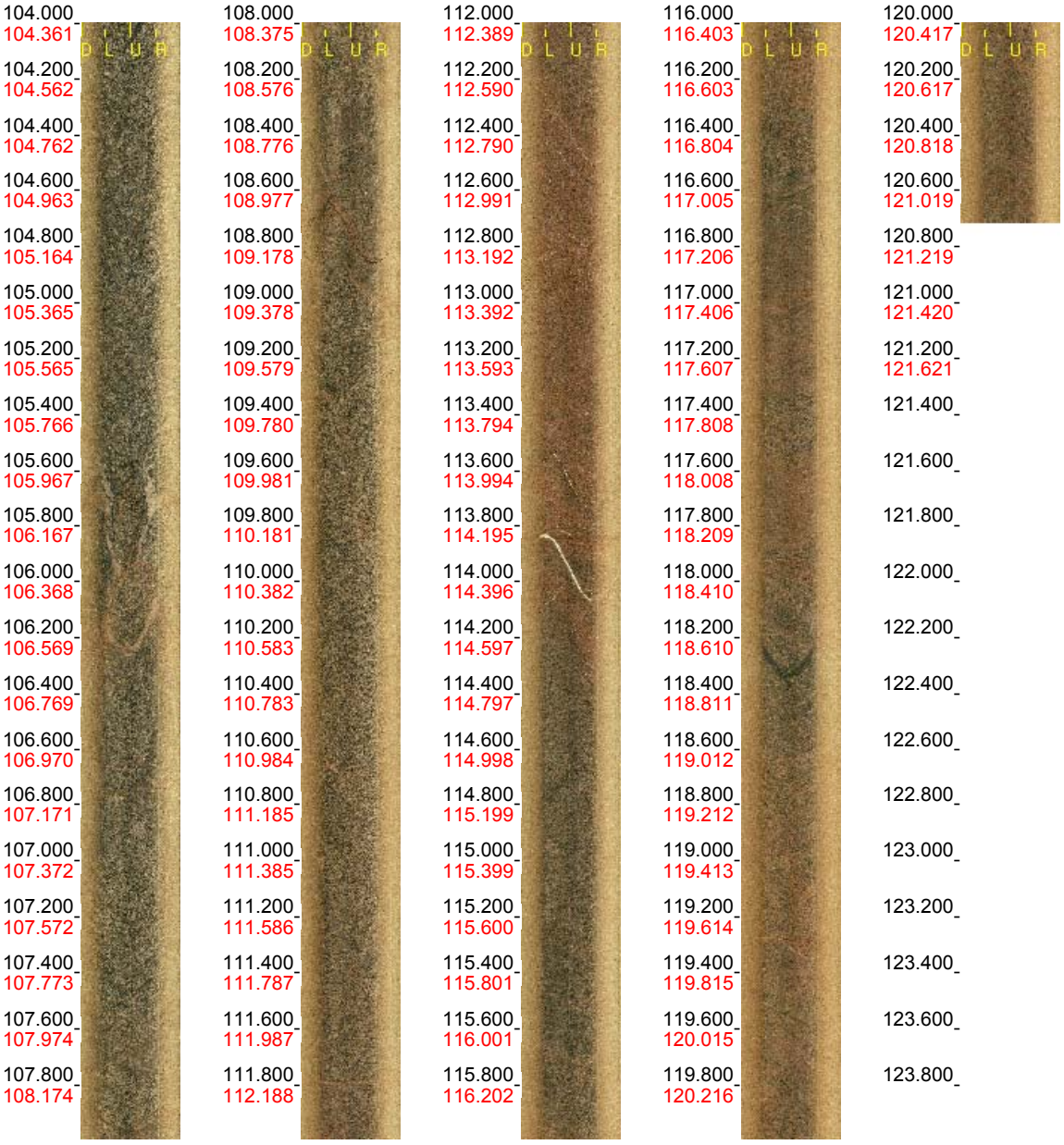
Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 84.000 - 104.000 m
Azimuth: 342.3
Inclination: -59.0

Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 6 (7)

Borehole: KLX11E
Mapping: KLX11E_Geosigma_1

Depth range: 104.000 - 120.864 m
Azimuth: 343.8
Inclination: -58.5



Printed: 2006-07-12 09:53:42 Scale: 1 : 20 Aspect: 150 % 7 (7)

Appendix 3e

BIPS-image of KLX11F

Borehole Image Report

Borehole Name: KLX11F

Mapping Name: KLX11F_Geosigma_1

Mapping Range: 0.000 - 120.050 m

Diameter: 76.0 mm

Printed Range: 4.000 - 119.072

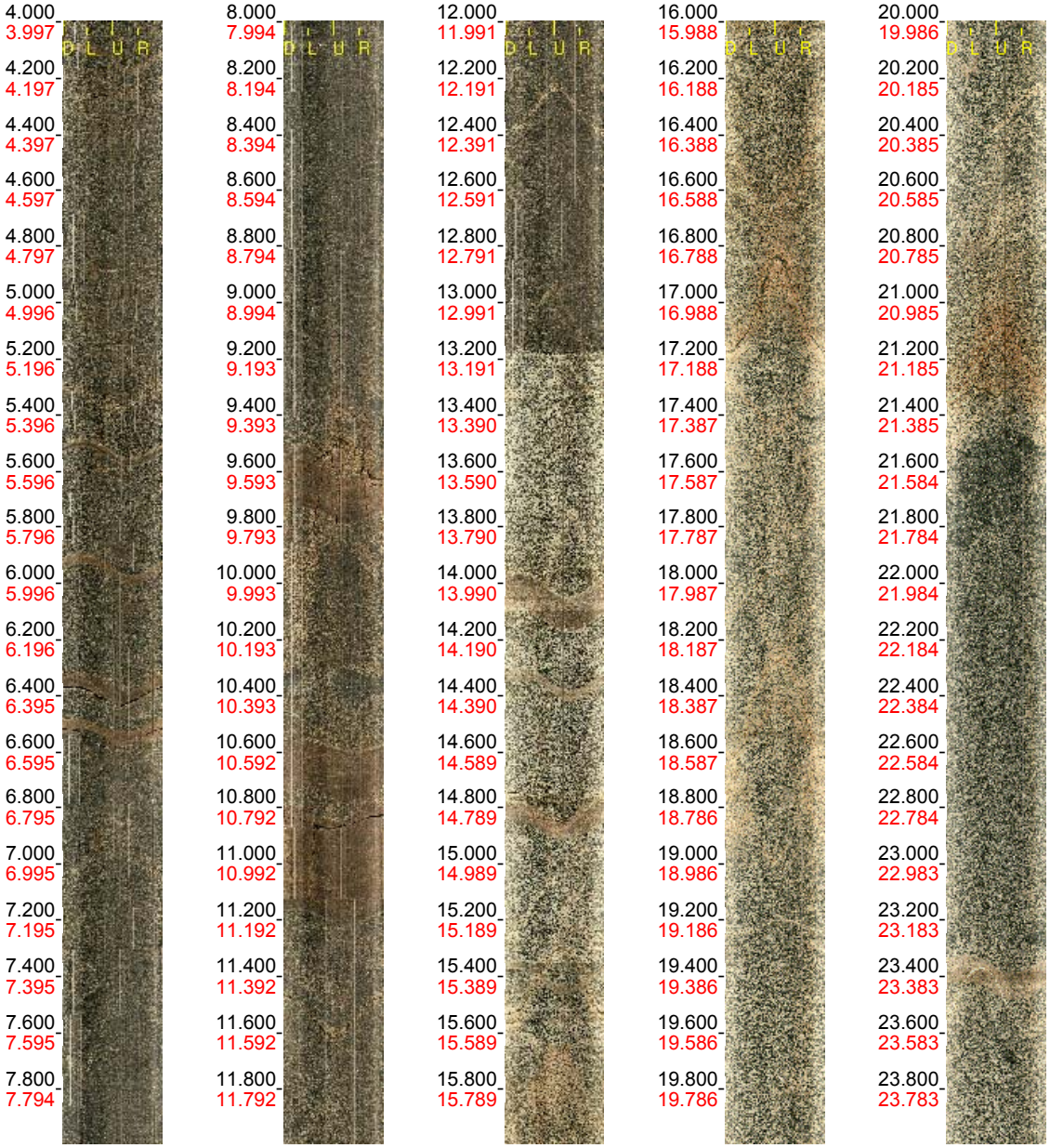
Pages: 7

Image File Information:

File:	D:\BIPSbilder\KLX11B-F\KLX11F\KLX11F.BIP
Date/Time:	2006-07-04 10:56:00
Start Depth:	4.000 m
End Depth:	119.072 m
Resolution:	1.00 mm/pixel (depth)
Orientation:	Gravmetric
Image height:	115072 pixels
Image width:	360 pixels
BIP Version:	BIP-III
Locality:	LAXEMAR
Borehole:	KLX11F
Scan Direction:	Down
Color adjust:	0 0 0 (RGB)

Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

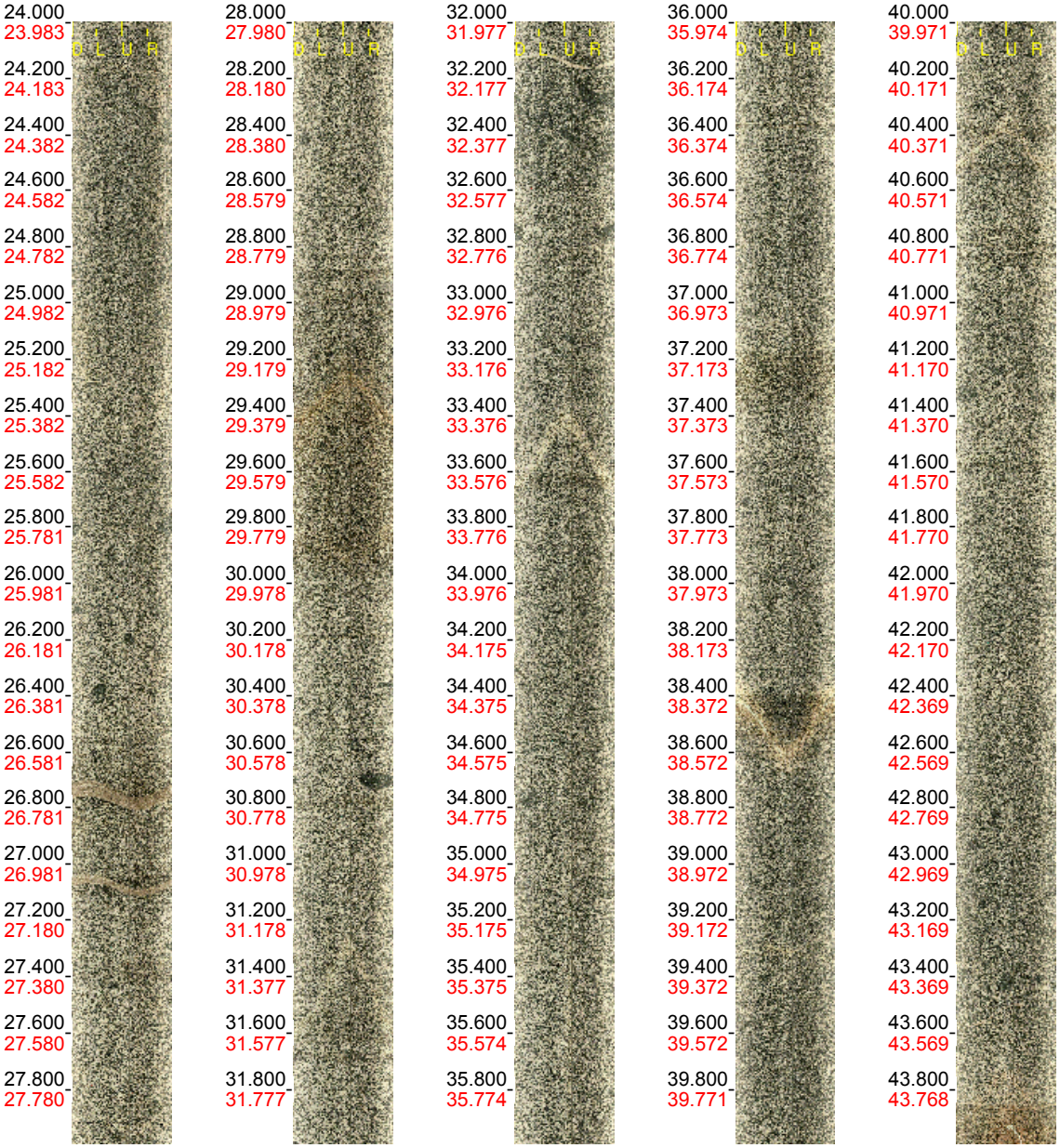
Depth range: 4.000 - 24.000 m
Azimuth: 88.8
Inclination: -61.1



Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 2 (7)

Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

Depth range: 24.000 - 44.000 m
Azimuth: 90.5
Inclination: -60.6



Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 3 (7)

Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

Depth range: 44.000 - 64.000 m
Azimuth: 91.9
Inclination: -60.1

Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 4 (7)

Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

Depth range: 64.000 - 84.000 m
Azimuth: 94.1
Inclination: -59.6

Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 5 (7)

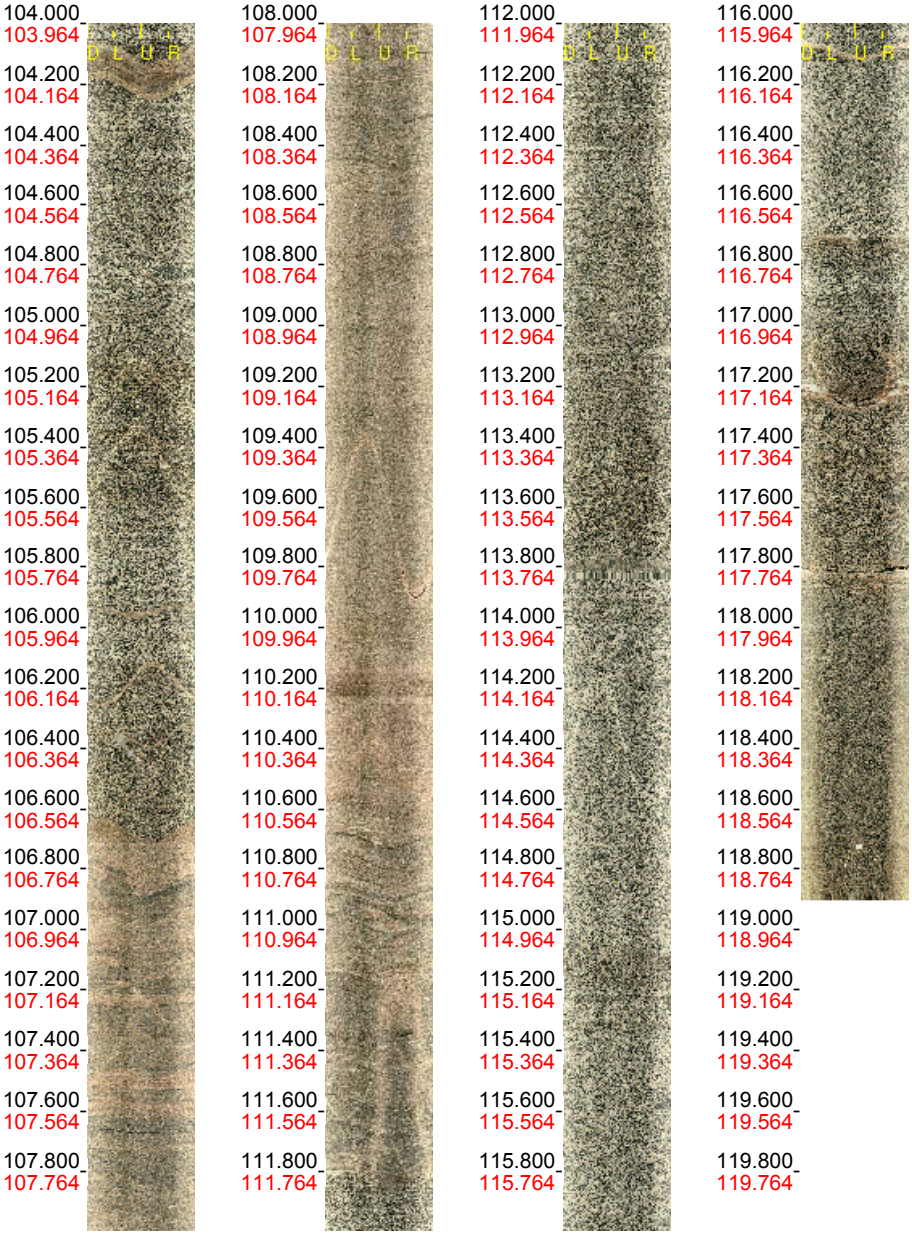
Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

Depth range: 84.000 - 104.000 m
Azimuth: 95.5
Inclination: -59.4

Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 6 (7)

Borehole: KLX11F
Mapping: KLX11F_Geosigma_1

Depth range: 104.000 - 119.072 m
Azimuth: 96.5
Inclination: -59.2

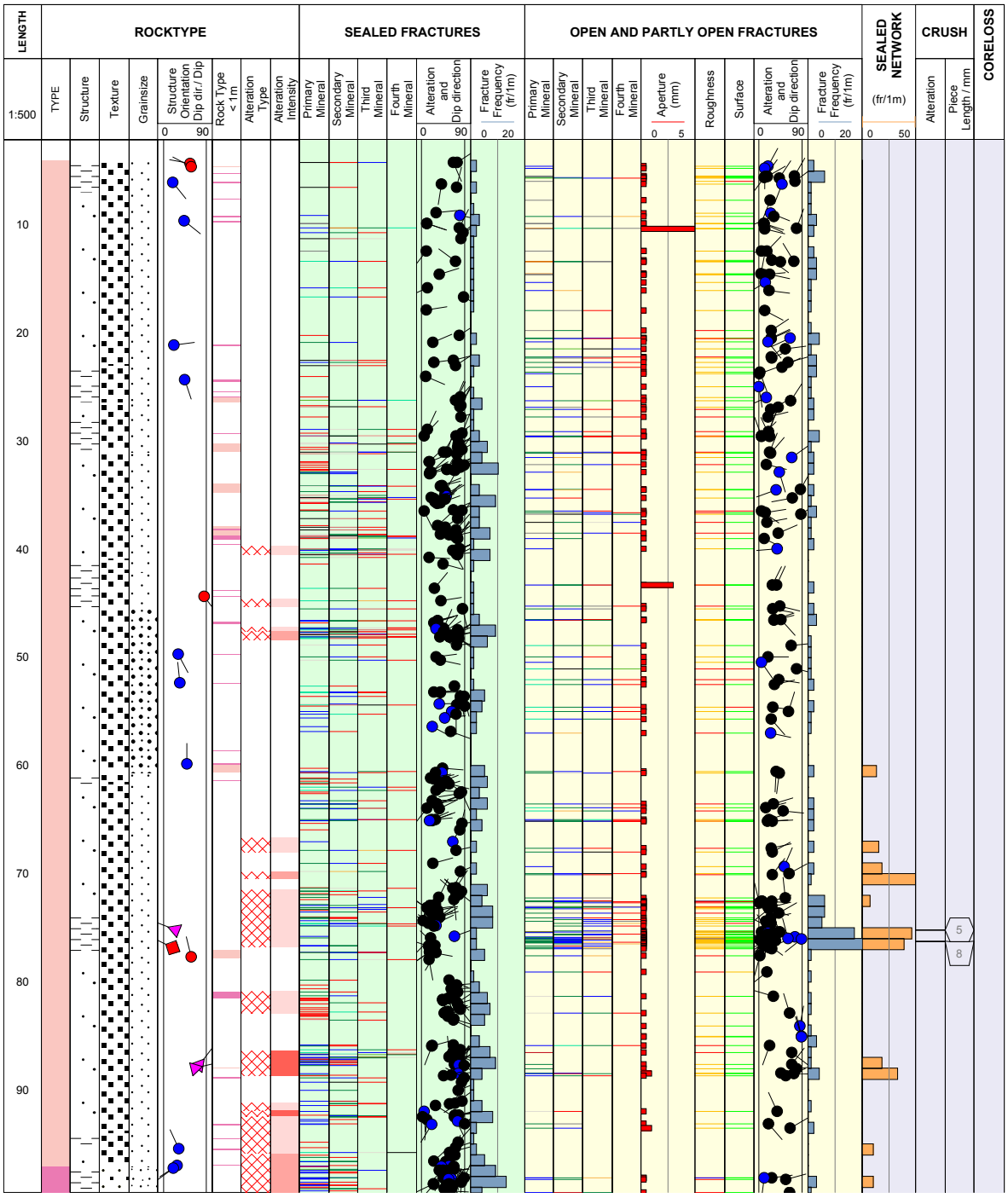


Printed: 2006-07-17 13:18:33 Scale: 1 : 20 Aspect: 150 % 7 (7)

WellCad diagram of KLX11B

Title GEOLOGY IN KLX11B **Appendix:**

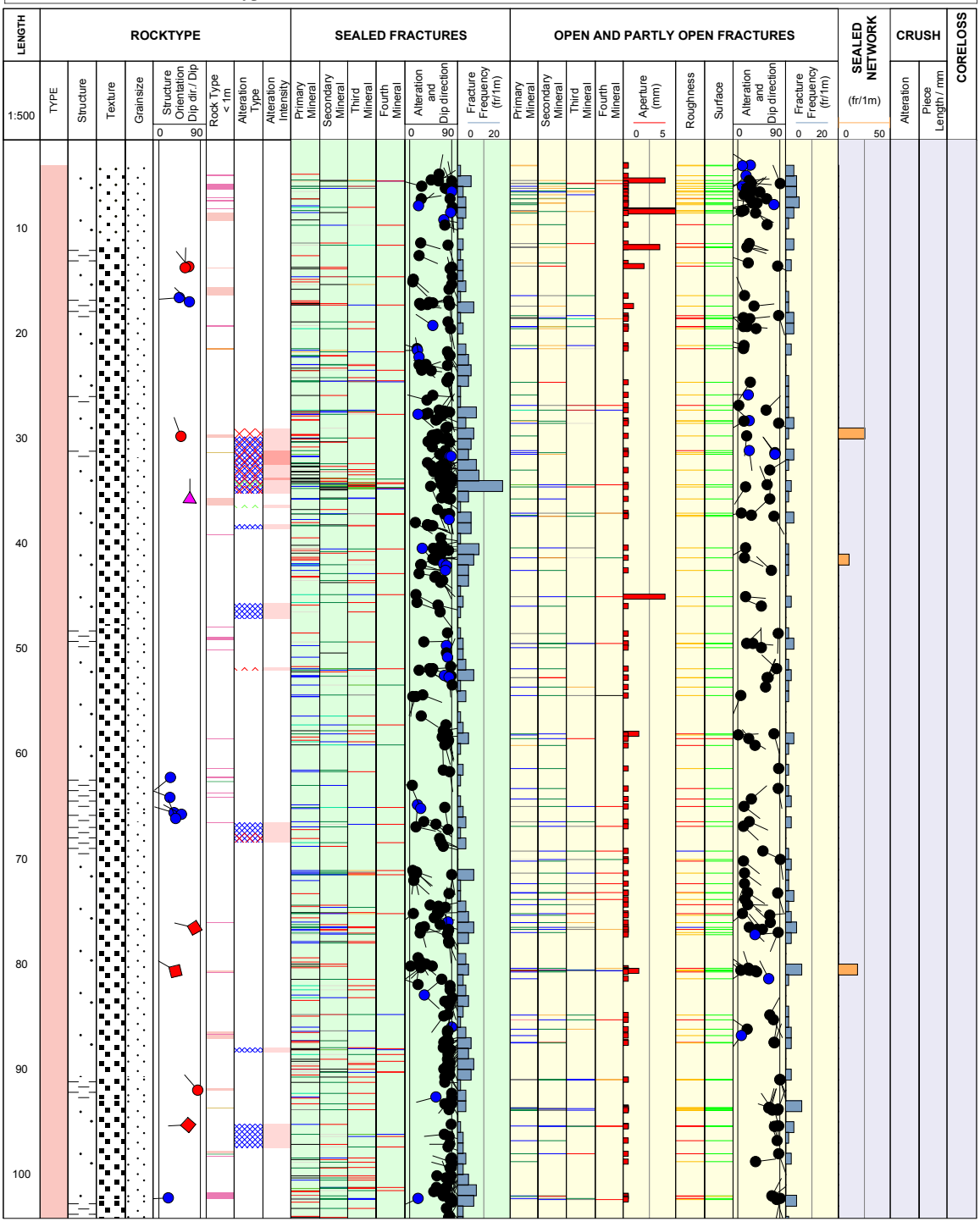
Site	LAXEMAR	**Coordinate System**	RT90-RHB70
Borehole	KLX11B	**Northing [m]**	6366339.51
Diameter [mm]	76	**Easting [m]**	1546604.89
Length [m]	100.200	**Elevation [m.a.s.l.]**	27.27
Bearing [°]	136.16	**Drilling Start Date**	2006-04-22 16:00:00
Inclination [°]	-89.92	**Drilling Stop Date**	2006-04-28 08:50:00
Date of coremapping	2006-06-29 16:56:00	**Plot Date**	2007-10-25 22:03:45
Rocktype data from	p_rock	**Signed data**	

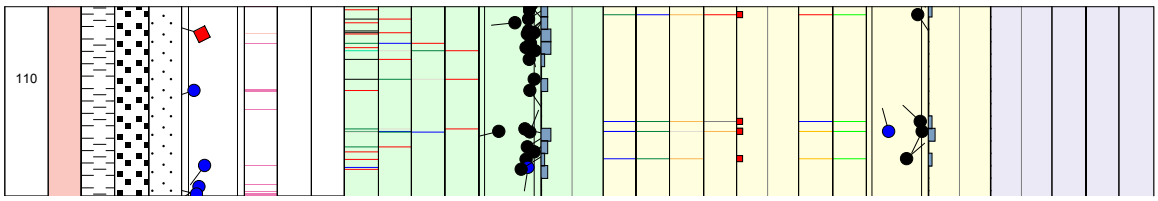


WellCad diagram of KLX11C

Title GEOLOGY IN KLX11C **Appendix:**

Site	LAXEMAR	**Coordinate System**	RT90-RHB70
Borehole	KLX11C	**Northing [m]**	6366350.26
Diameter [mm]	76	**Easting [m]**	1546586.89
Length [m]	120.150	**Elevation [m.a.s.l.]**	27.19
Bearing [°]	159.34	**Drilling Start Date**	2006-03-30 06:00:00
Inclination [°]	-60.72	**Drilling Stop Date**	2006-04-05 14:30:00
Date of coremapping	2006-06-29 16:57:00	**Plot Date**	2007-11-15 22:03:08
Rocktype data from	p_rock	**Signed data**	

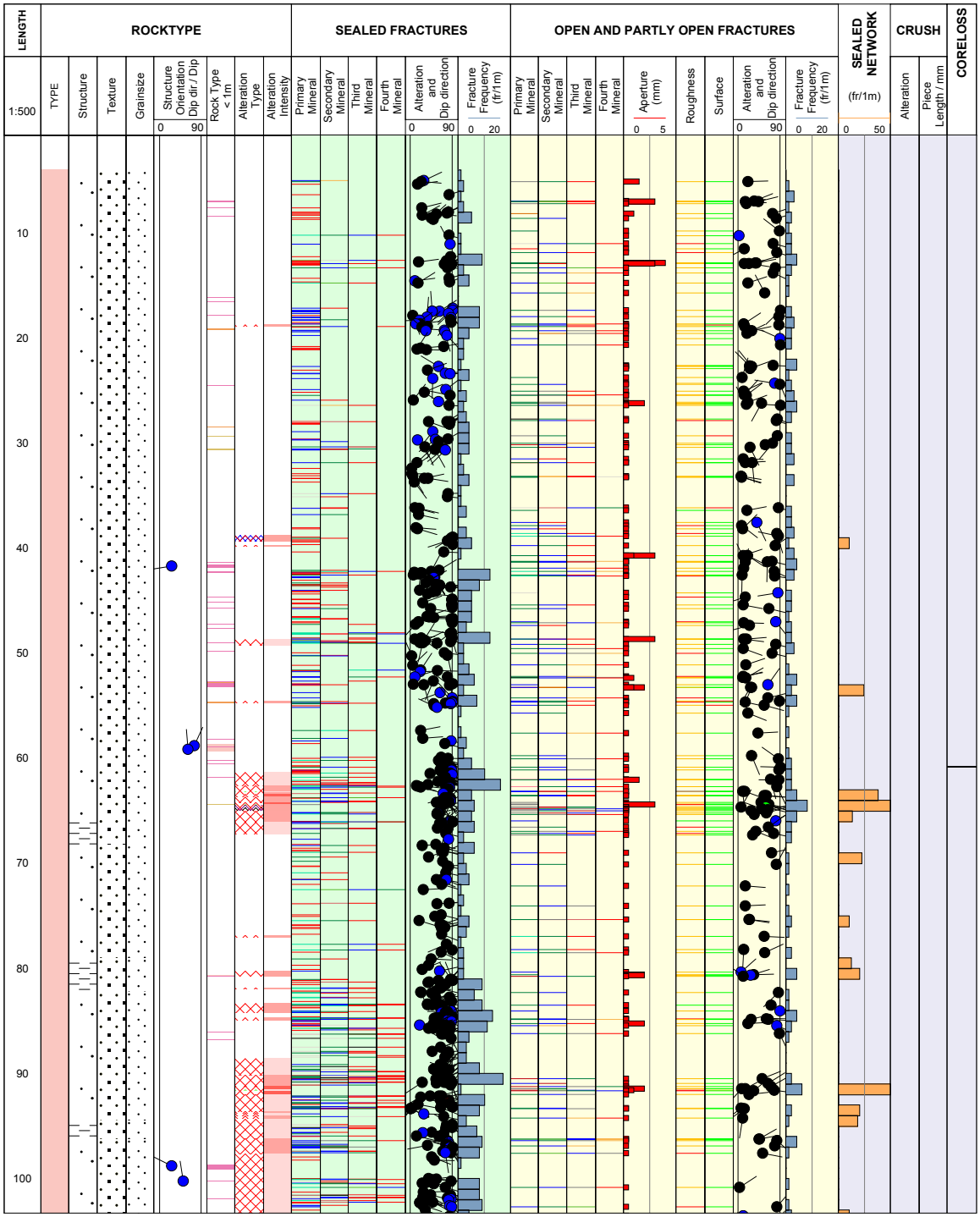


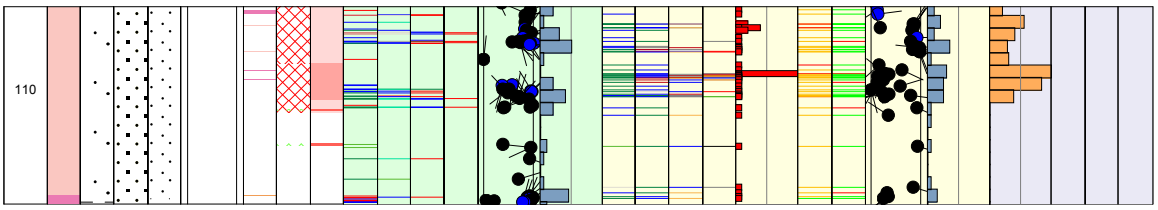

110

WellCad diagram of KLX11D

Title GEOLOGY IN KLX11D **Appendix:**

Site	LAXEMAR	**Coordinate System**	RT90-RHB70
Borehole	KLX11D	**Northing [m]**	6366357.37
Diameter [mm]	76	**Easting [m]**	1546631.42
Length [m]	120.350	**Elevation [m.a.s.l.]**	25.57
Bearing [°]	268.70	**Drilling Start Date**	2006-04-06 06:00:00
Inclination [°]	-58.99	**Drilling Stop Date**	2006-04-13 08:00:00
Date of coremapping	2006-06-29 16:57:00	**Plot Date**	2007-10-25 22:03:45
Rocktype data from	p_rock	**Signed data**	

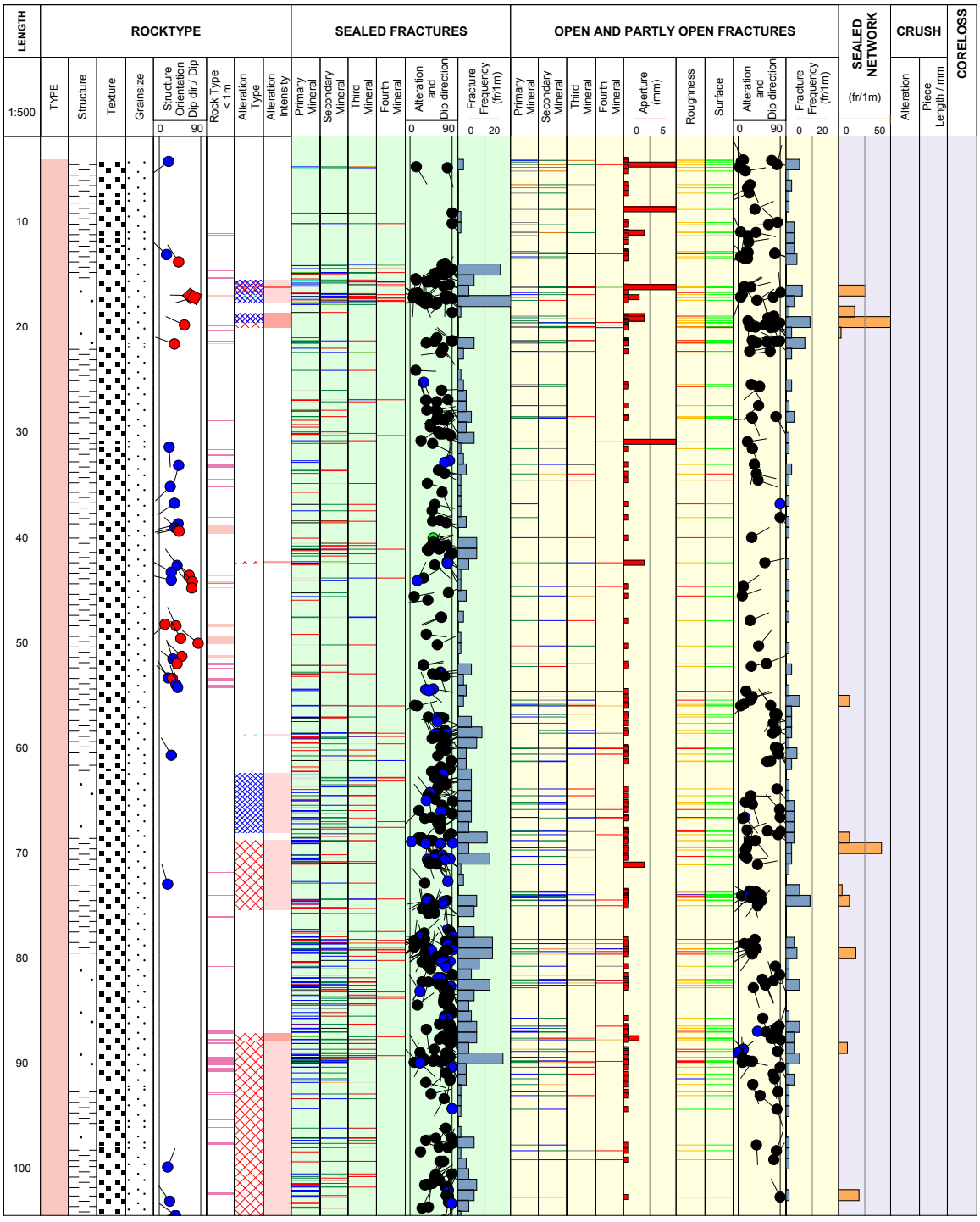


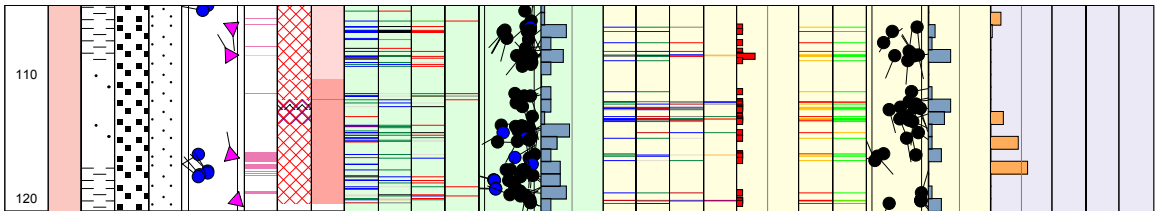

110

WellCad diagram of KLX11E

Title GEOLOGY IN KLX11E **Appendix:**

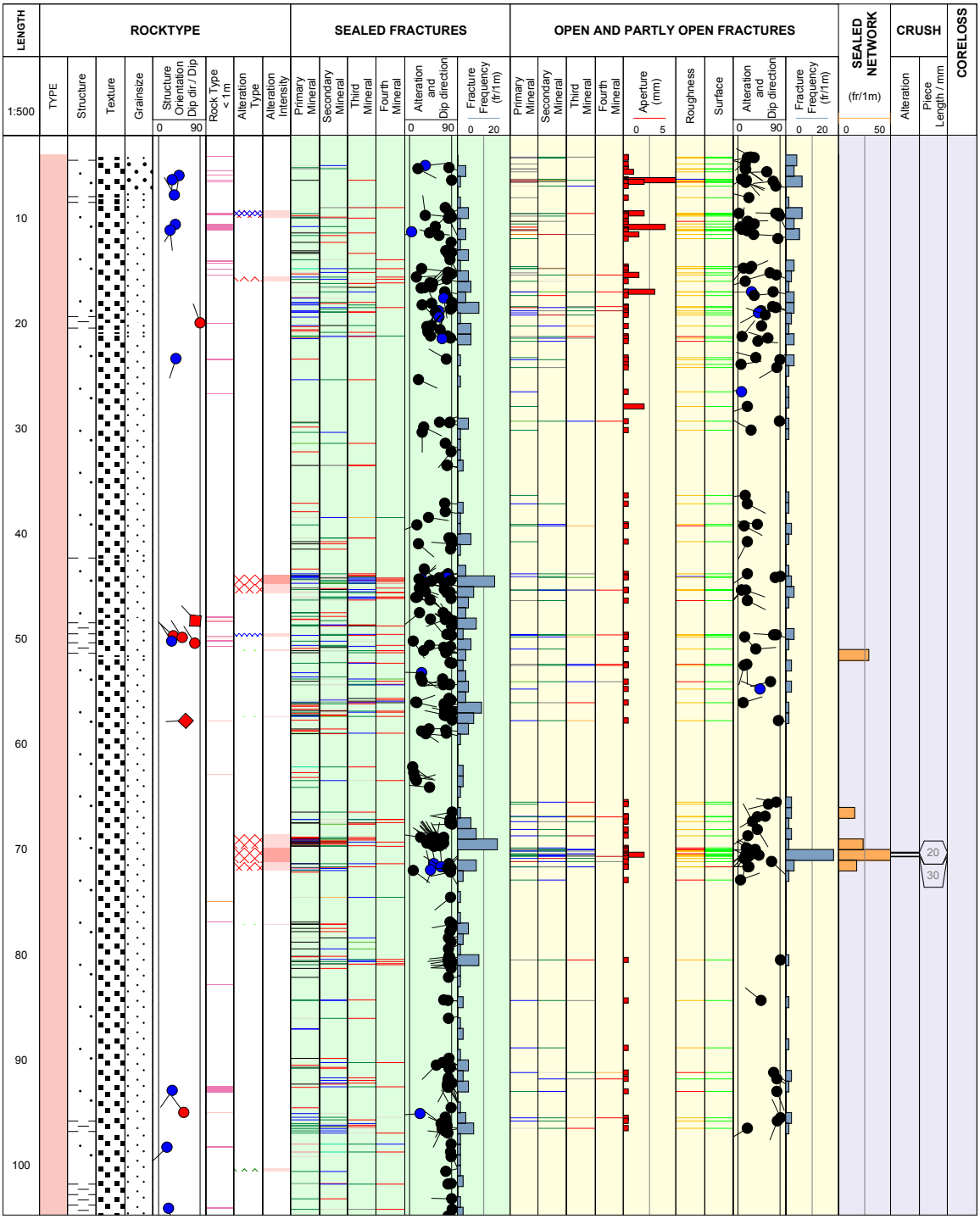
Site	LAXEMAR	**Coordinate System**	RT90-RHB70
Borehole	KLX11E	**Northing [m]**	6366300.39
Diameter [mm]	76	**Easting [m]**	1546627.23
Length [m]	121.300	**Elevation [m.a.s.l.]**	22.65
Bearing [°]	336.17	**Drilling Start Date**	2006-04-13 08:00:00
Inclination [°]	-60.91	**Drilling Stop Date**	2006-04-21 14:08:00
Date of coremapping	2006-06-29 16:58:00	**Plot Date**	2007-10-25 22:03:45
Rocktype data from	p_rock	**Signed data**	

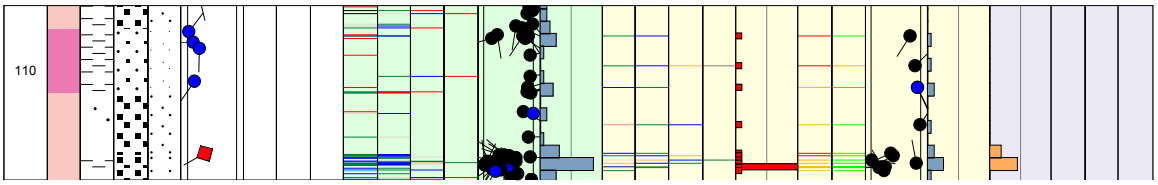



110
120

WellCad diagram of KLX11F

Title	GEOLOGY IN KLX11F	Appendix:	
Site	LAXEMAR	Coordinate System	RT90-RHB70
Borehole	KLX11F	Northing [m]	6366314.09
Diameter [mm]	76	Easting [m]	1546577.96
Length [m]	120.050	Elevation [m.a.s.l.]	24.47
Bearing [°]	88.61	Drilling Start Date	2006-03-14 06:00:00
Inclination [°]	-61.13	Drilling Stop Date	2006-03-17 18:00:00
Date of coremapping	2006-06-29 16:59:00	Plot Date	2007-10-25 22:03:45
Rocktype data from	p_rock	Signed data	

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Legend to WellCad Diagram

Title LEGEND FOR LAXEMAR KLX11B

Site LAXEMAR
Borehole KLX11B
Plot Date 2007-10-25 22:03:45
Signed data

ROCKTYPE LAXEMAR
- Äspö Diorite
- Dolerite
- Fine-grained Götemargranite
- Coarse-grained Götemargranite
- Fine-grained granite
- Pegmatite
- Granite
- Ävrö granite
- Quartz monzodiorite
- Diorite / Gabbro
- Fine-grained dioritoid
- Fine-grained diorite-gabbro
- Sulphide mineralization
- Sandstone
- Soil
- Ävrö quartz monzodiorite
- Ävrö granodiorite

ROCK ALTERATION TYPE
- Oxidized
- Chloritisized
- Epidotisized
- Weathered
- Tectonized
- Sericitisized
- Quartz dissolution
- Silicification
- Argillization
- Albitization
- Carbonatization
- Saussuritization
- Steatitization
- Uralitization
- Laumontitization
- Fract zone alteration

MINERAL
- Epidote
- White Feldspar
- Hematite
- Calcite
- Chlorite
- Quartz
- Clay Minerals
- Prehnite
- Iron Hydroxide

STRUCTURE
- Cataclastic
- Schistose
- Gneissic
- Mylonitic
- Ductile Shear Zone
- Brittle-Ductile Zone
- Veined
- Banded
- Massive
- Foliated
- Brecciated
- Lineated

TEXTURE
- Hornfelsed
- Porphyritic
- Ophitic
- Equigranular
- Augen-Bearing
- Unequigranular
- Metamorphic

GRAINSIZE
- Aphanitic
- Fine-grained
- Fine to medium grained
- Medium to coarse grained
- Coarse-grained
- Medium-grained

STRUCTURE ORIENTATION
- Cataclastic
- Bedded
- Gneissic
- Schistose
- Brittle-Ductile Shear Zone
- Ductile Shear Zone
- Lineated
- Banded
- Veined
- Brecciated
- Foliated
- Mylonitic

ROCK ALTERATION INTENSITY
- No intensity
- Faint
- Weak
- Medium
- Strong

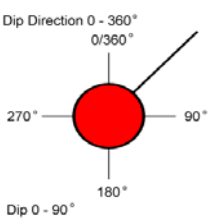
ROUGHNESS
- Planar
- Undulating
- Stepped
- Irregular

SURFACE
- Rough
- Smooth
- Slickensided

CRUSH ALTERATION
- Slightly Altered
- Moderately Altered
- Highly Altered
- Completley Altered
- Gouge
- Fresh

FRACTURE ALTERATION
- Slightly Altered
- Moderately Altered
- Highly Altered
- Completely Altered
- Gouge
- Fresh

FRACTURE DIRECTION
STRUKTURE ORIENTATION



Title LEGEND FOR LAXEMAR KLX11C

Site LAXEMAR
Borehole KLX11C
Plot Date 2007-10-25 22:03:45
Signed data

ROCKTYPE LAXEMAR

- Äspö Diorite
- Dolerite
- Fine-grained Götemargranite
- Coarse-grained Götemargranite
- Fine-grained granite
- Pegmatite
- Granite
- Ävrö granite
- Quartz monzodiorite
- Diorite / Gabbro
- Fine-grained dioritoid
- Fine-grained diorite-gabbro
- Sulphide mineralization
- Sandstone
- Soil
- Ävrö quartz monzodiorite
- Ävrö granodiorite

STRUCTURE

- Cataclastic
- Schistose
- Gneissic
- Mylonitic
- Ductile Shear Zone
- Brittle-Ductile Zone
- Veined
- Banded
- Massive
- Foliated
- Brecciated
- Lineated

TEXTURE

- Hornfelsed
- Porphyritic
- Ophitic
- Equigranular
- Augen-Bearing
- Unequigranular
- Metamorphic

GRAINSIZE

- Aphanitic
- Fine-grained
- Fine to medium grained
- Medium to coarse grained
- Coarse-grained
- Medium-grained

STRUCTURE ORIENTATION

- Cataclastic
- Bedded
- Gneissic
- Schistose
- Brittle-Ductile Shear Zone
- Ductile Shear Zone
- Lineated
- Banded
- Veined
- Brecciated
- Foliated
- Mylonitic

ROCK ALTERATION TYPE

- Oxidized
- Chloritisized
- Epidotisized
- Weathered
- Tectonized
- Sericitisized
- Quartz dissolution
- Silicification
- Argillization
- Albitization
- Carbonatization
- Saussuritization
- Steatitization
- Uralitization
- Laumontitization
- Fract zone alteration

ROCK ALTERATION INTENSITY

- No intensity
- Faint
- Weak
- Medium
- Strong

ROUGHNESS

- Planar
- Undulating
- Stepped
- Irregular

SURFACE

- Rough
- Smooth
- Slickensided

CRUSH ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completley Altered
- Gouge
- Fresh

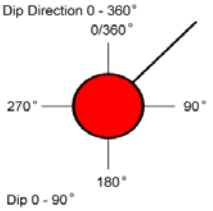
MINERAL

- Epidote
- White Feldspar
- Hematite
- Calcite
- Chlorite
- Quartz
- Pyrite
- Clay Minerals
- Laumontite
- Prehnite
- Iron Hydroxide

FRACTURE ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completely Altered
- Gouge
- Fresh

FRACTURE DIRECTION
STRUKTURE ORIENTATION



Title LEGEND FOR LAXEMAR KLX11D

Site LAXEMAR
Borehole KLX11D
Plot Date 2007-10-25 22:03:45
Signed data

ROCKTYPE LAXEMAR

- Äspö Diorite
- Dolerite
- Fine-grained Götemargranite
- Coarse-grained Götemargranite
- Fine-grained granite
- Pegmatite
- Granite
- Ävrö granite
- Quartz monzodiorite
- Diorite / Gabbro
- Fine-grained dioritoid
- Fine-grained diorite-gabbro
- Sulphide mineralization
- Sandstone
- Soil
- Ävrö quartz monzodiorite
- Ävrö granodiorite

STRUCTURE

- Cataclastic
- Schistose
- Gneissic
- Mylonitic
- Ductile Shear Zone
- Brittle-Ductile Zone
- Veined
- Banded
- Massive
- Foliated
- Brecciated
- Lineated

TEXTURE

- Hornfelsed
- Porphyritic
- Ophitic
- Equigranular
- Augen-Bearing
- Unequigranular
- Metamorphic

GRAINSIZE

- Aphanitic
- Fine-grained
- Fine to medium grained
- Medium to coarse grained
- Coarse-grained
- Medium-grained

STRUCTURE ORIENTATION

- Cataclastic
- Bedded
- Gneissic
- Schistose
- Brittle-Ductile Shear Zone
- Ductile Shear Zone
- Lineated
- Banded
- Veined
- Brecciated
- Foliated
- Mylonitic

ROCK ALTERATION TYPE

- Oxidized
- Chloritisized
- Epidotisized
- Weathered
- Tectonized
- Sericitisized
- Quartz dissolution
- Silicification
- Argillization
- Albitization
- Carbonatization
- Saussuritization
- Steatitization
- Uralitization
- Laumontitization
- Fract zone alteration

ROCK ALTERATION INTENSITY

- No intensity
- Faint
- Weak
- Medium
- Strong

ROUGHNESS

- Planar
- Undulating
- Stepped
- Irregular

SURFACE

- Rough
- Smooth
- Slickensided

CRUSH ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completley Altered
- Gouge
- Fresh

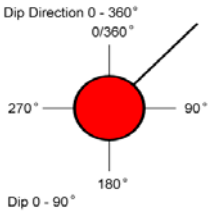
MINERAL

- Biotite
- Epidote
- White Feldspar
- Hematite
- Calcite
- Chlorite
- Quartz
- Clay Minerals
- Laumontite
- Prehnite
- Iron Hydroxide
- Oxidized Walls

FRACTURE ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completely Altered
- Gouge
- Fresh

FRACTURE DIRECTION
STRUKTURE ORIENTATION



Title LEGEND FOR LAXEMAR KLX09E

Site LAXEMAR
Borehole KLX09E
Plot Date 2007-10-25 22:03:45
Signed data

ROCKTYPE LAXEMAR

- Äspö Diorite
- Dolerite
- Fine-grained Götemargranite
- Coarse-grained Götemargranite
- Fine-grained granite
- Pegmatite
- Granite
- Ävrö granite
- Quartz monzodiorite
- Diorite / Gabbro
- Fine-grained dioritoid
- Fine-grained diorite-gabbro
- Sulphide mineralization
- Sandstone
- Soil
- Ävrö quartz monzodiorite
- Ävrö granodiorite

STRUCTURE

- Cataclastic
- Schistose
- Gneissic
- Mylonitic
- Ductile Shear Zone
- Brittle-Ductile Zone
- Veined
- Banded
- Massive
- Foliated
- Brecciated
- Lineated

TEXTURE

- Hornfelsed
- Porphyritic
- Ophitic
- Equigranular
- Augen-Bearing
- Unequigranular
- Metamorphic

GRAINSIZE

- Aphanitic
- Fine-grained
- Fine to medium grained
- Medium to coarse grained
- Coarse-grained
- Medium-grained

STRUCTURE ORIENTATION

- Cataclastic
- Bedded
- Gneissic
- Schistose
- Brittle-Ductile Shear Zone
- Ductile Shear Zone
- Lineated
- Banded
- Veined
- Brecciated
- Foliated
- Mylonitic

ROCK ALTERATION TYPE

- Oxidized
- Chloritisized
- Epidotisized
- Weathered
- Tectonized
- Sericitisized
- Quartz dissolution
- Silicification
- Argillization
- Albitization
- Carbonatization
- Saussuritization
- Steatitization
- Uralitization
- Laumontitization
- Fract zone alteration

ROCK ALTERATION INTENSITY

- No intensity
- Faint
- Weak
- Medium
- Strong

ROUGHNESS

- Planar
- Undulating
- Stepped
- Irregular

SURFACE

- Rough
- Smooth
- Slickensided

CRUSH ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completley Altered
- Gouge
- Fresh

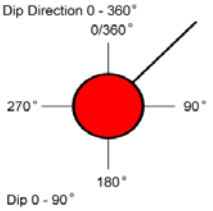
MINERAL

- Epidote
- Flourite
- Hematite
- Calcite
- Chlorite
- Quartz
- Pyrite
- Clay Minerals
- Laumontite
- Prehnite
- Iron Hydroxide

FRACTURE ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completely Altered
- Gouge
- Fresh

FRACTURE DIRECTION
STRUKTURE ORIENTATION



Title LEGEND FOR LAXEMAR KLX11F

Site LAXEMAR
Borehole KLX11F
Plot Date 2007-10-25 22:03:45
Signed data

ROCKTYPE LAXEMAR

- Äspö Diorite
- Dolerite
- Fine-grained Götemargranite
- Coarse-grained Götemargranite
- Fine-grained granite
- Pegmatite
- Granite
- Ävrö granite
- Quartz monzodiorite
- Diorite / Gabbro
- Fine-grained dioritoid
- Fine-grained diorite-gabbro
- Sulphide mineralization
- Sandstone
- Soil
- Ävrö quartz monzodiorite
- Ävrö granodiorite

STRUCTURE

- Cataclastic
- Schistose
- Gneissic
- Mylonitic
- Ductile Shear Zone
- Brittle-Ductile Zone
- Veined
- Banded
- Massive
- Foliated
- Brecciated
- Lineated

TEXTURE

- Hornfelsed
- Porphyritic
- Ophitic
- Equigranular
- Augen-Bearing
- Unequigranular
- Metamorphic

GRAINSIZE

- Aphanitic
- Fine-grained
- Fine to medium grained
- Medium to coarse grained
- Coarse-grained
- Medium-grained

STRUCTURE ORIENTATION

- Cataclastic
- Bedded
- Gneissic
- Schistose
- Brittle-Ductile Shear Zone
- Ductile Shear Zone
- Lineated
- Banded
- Veined
- Brecciated
- Foliated
- Mylonitic

ROCK ALTERATION TYPE

- Oxidized
- Chloritisized
- Epidotisized
- Weathered
- Tectonized
- Sericitisized
- Quartz dissolution
- Silicification
- Argillization
- Albitization
- Carbonatization
- Saussuritization
- Steatitization
- Uralitization
- Laumontitization
- Fract zone alteration

ROCK ALTERATION INTENSITY

- No intensity
- Faint
- Weak
- Medium
- Strong

ROUGHNESS

- Planar
- Undulating
- Stepped
- Irregular

SURFACE

- Rough
- Smooth
- Slickensided

CRUSH ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completley Altered
- Gouge
- Fresh

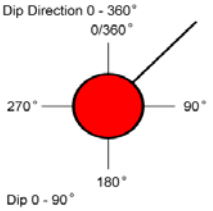
MINERAL

- Biotite
- Epidote
- Hematite
- Calcite
- Chlorite
- Quartz
- Pyrite
- Clay Minerals
- Laumontite
- Iron Hydroxide
- Oxidized Walls

FRACTURE ALTERATION

- Slightly Altered
- Moderately Altered
- Highly Altered
- Completely Altered
- Gouge
- Fresh

FRACTURE DIRECTION
STRUKTURE ORIENTATION



Appendix 6a

In-data: Borehole length and diameter for KLX11B

Hole Diam T - Drilling: Borehole diameter

KLX11B, 2006-04-22 16:00:00 - 2006-05-08 08:50:00 (0.300 - 100.200 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
0.300	1.210	0.1170	
1.210	100.200	0.0757	

Printout from SICADA 2006-06-29 11:50:34.

Appendix 6b

In-data: Borehole length and diameter for KLX11C

Hole Diam T - Drilling: Borehole diameter

KLX11C, 2006-03-30 06:00:00 - 2006-04-05 14:30:00 (0.000 - 120.150 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
0.000	2.000	0.0960	
2.000	120.150	0.0757	NT

Printout from SICADA 2006-06-28 14:30:22.

Appendix 6c

In-data: Borehole length and diameter for KLX11D

Hole Diam T - Drilling: Borehole diameter

KLX11D, 2006-04-06 06:00:00 - 2006-04-13 08:00:00 (0.000 - 120.350 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
0.000	2.000	0.0960	
2.000	120.350	0.0757	

Printout from SICADA 2006-06-28 14:32:01.

Appendix 6d

In-data: Borehole length and diameter for KLX11E

Hole Diam T - Drilling: Borehole diameter

KLX11E, 2006-04-13 08:00:00 - 2006-04-21 14:08:00 (0.000 - 121.300 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
0.300	2.000	0.0960	HQ
200.000	121.300	0.0757	Corac N/3

Printout from SICADA 2006-06-28 14:33:25.

Appendix 6e

In-data: Borehole length and diameter for KLX11F

Hole Diam T - Drilling: Borehole diameter

KLX11F, 2006-03-14 06:00:00 - 2006-03-17 18:00:00 (0.000 - 120.050 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
0.000	2.000	0.0960	
2.000	120.050	0.0757	

Printout from SICADA 2006-06-28 14:34:49.

In-data: Reference marks for length adjustments for KLX11C

Reference Mark T - Reference mark in drillhole

KLX11C, 2006-05-03 09:45:00 - 2006-05-03 14:30:00 (47.000 - 98.000 m)

Bhlen (m)	Rotation Speed (rpm)	Start Flow (l/h)	Stop Flow (l/h)	Stop Pressure (bar)	Cutter Time (s)	Trace Detectable	Cutter Diameter (mm)	Comment
47.00	400.00	400	800	44.0	150			Pumpen slog ifrån
98.00	400.00	400	800	48.0	105			Pumpen slog ifrån Släppte kulan 13:41

Printout from SICADA 2006-09-14 10:51:22.

In-data: Reference marks for length adjustments for KLX11D

Reference Mark T - Reference mark in drillhole

KLX11D, 2006-04-13 13:00:00 - 2006-04-13 18:00:00 (50.000 - 100.000 m)

Bhlen (m)	Rotation Speed (rpm)	Start Flow (l/h)	Stop Flow (l/h)	Stop Pressure (bar)	Cutter Time (s)	Trace Detectable	Cutter Diameter (mm)	Comment
50.00	400.00	350		55.0	300			Dålig indikering vid stopp
100.00	400.00	350		55.0	360			Dålig indikering vid stopp, släppte kulan 17:25

Printout from SICADA 2006-09-14 10:53:39.

In-data: Reference marks for length adjustments for KLX11E

Reference Mark T - Reference mark in drillhole

KLX11E, 2006-04-21 16:00:00 - 2006-04-21 18:30:00 (50.000 - 100.000 m)

Bhlen (m)	Rotation Speed (rpm)	Start Flow (l/h)	Stop Flow (l/h)	Stop Pressure (bar)	Cutter Time (s)	Trace Detectable	Cutter Diameter (mm)	Comment
50.00	400.00	300		50.0	100			Inget utslag, stoppade vid 50 bar
100.00	400.00	300		50.0	120			Inget utslag, stoppade vid 50 bar, Släppte kulan 18:17

Printout from SICADA 2006-09-14 10:54:45.

In-data: Reference marks for length adjustmens for KLX11F

Reference Mark T - Reference mark in drillhole

KLX11F, 2006-05-03 14:43:00 - 2006-05-04 07:30:00 (50.000 - 101.000 m)

Bhlen (m)	Rotation Speed (rpm)	Start Flow (l/h)	Stop Flow (l/h)	Stop Pressure (bar)	Cutter Time (s)	Trace Detectable	Cutter Diameter (mm)	Comment
50.00	400.00	400	800	44.0	100			Ingen indikation
101.00	400.00	400	700	44.0	114			Ingen indikation

Printout from SICADA 2006-09-14 10:55:34.

In-data: Borehole deviation data for KLX11B

Deviations protocol – KLX11B

SICADA - object_location

Idcode	Coord System	Northing (m)	Easting (m)	Elevation (m.a.s.l.)	Length (m)	Vertical Depth (m)	Inclination (degrees)	Bearing (degrees)	Inclination Uncert (degrees)	Bearing Uncert (degrees)	Radius Uncert (m)	Origin	Indat
KLX11B	RT90-RHB70	6366339.51	1546604.89	27.27	0.00	0.00	-89.93	136.16	0.095	15.017	0.00	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.50	1546604.89	24.27	3.00	3.00	-89.87	136.16	0.095	15.017	0.00	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.50	1546604.90	21.27	6.00	6.00	-89.85	146.10	0.095	15.017	0.01	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.49	1546604.90	18.27	9.00	9.00	-89.79	156.05	0.095	15.017	0.01	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.48	1546604.91	15.27	12.00	12.00	-89.64	165.99	0.095	15.017	0.02	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.45	1546604.91	12.27	15.00	15.00	-89.56	175.94	0.095	15.017	0.03	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.43	1546604.91	9.27	18.00	18.00	-89.47	173.66	0.095	15.017	0.03	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.40	1546604.92	6.27	21.00	21.00	-89.47	173.66	0.095	15.017	0.04	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.37	1546604.92	3.27	24.00	24.00	-89.45	170.41	0.095	15.017	0.05	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.34	1546604.92	0.27	27.00	27.00	-89.42	173.57	0.095	15.017	0.06	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.31	1546604.93	-2.73	30.00	30.00	-89.44	176.86	0.095	15.017	0.06	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.29	1546604.93	-5.73	33.00	33.00	-89.44	183.37	0.095	15.017	0.07	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.26	1546604.92	-8.72	36.00	36.00	-89.45	191.05	0.095	15.017	0.08	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.23	1546604.92	-11.72	39.00	39.00	-89.40	190.36	0.095	15.017	0.09	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.20	1546604.91	-14.72	42.00	42.00	-89.40	190.36	0.095	15.017	0.09	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.16	1546604.91	-17.72	45.00	45.00	-89.41	189.45	0.095	15.017	0.10	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.13	1546604.90	-20.72	48.00	48.00	-89.41	192.50	0.095	15.017	0.11	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.11	1546604.89	-23.72	51.00	51.00	-89.44	194.19	0.095	15.017	0.12	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.08	1546604.89	-26.72	54.00	54.00	-89.41	194.88	0.095	15.017	0.13	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.05	1546604.88	-29.72	57.00	57.00	-89.38	189.46	0.095	15.017	0.13	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366339.01	1546604.87	-32.72	60.00	60.00	-89.38	189.12	0.095	15.017	0.14	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.98	1546604.87	-35.72	63.00	63.00	-89.36	182.19	0.095	15.017	0.15	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.95	1546604.87	-38.72	66.00	66.00	-89.40	188.85	0.095	15.017	0.16	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.92	1546604.86	-41.72	69.00	69.00	-89.38	186.66	0.095	15.017	0.17	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.88	1546604.86	-44.72	72.00	72.00	-89.43	192.92	0.095	15.017	0.18	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.86	1546604.85	-47.72	75.00	75.00	-89.48	193.61	0.095	15.017	0.18	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.83	1546604.84	-50.72	78.00	78.00	-89.50	196.72	0.095	15.017	0.19	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.81	1546604.84	-53.72	81.00	81.00	-89.48	196.90	0.095	15.017	0.20	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.78	1546604.83	-56.72	84.00	84.00	-89.47	192.80	0.095	15.017	0.20	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.75	1546604.82	-59.72	87.00	87.00	-89.47	192.06	0.095	15.017	0.21	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.73	1546604.82	-62.72	90.00	90.00	-89.50	191.14	0.095	15.017	0.22	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.70	1546604.81	-65.72	93.00	93.00	-89.48	186.06	0.095	15.017	0.23	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.67	1546604.81	-68.72	96.00	96.00	-89.48	186.06	0.095	15.017	0.23	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.65	1546604.81	-71.72	99.00	99.00	-89.48	185.99	0.095	15.017	0.24	Measured	2007-01-25 11:15
KLX11B	RT90-RHB70	6366338.63	1546604.81	-72.92	100.20	100.20	-89.48	185.99	0.095	15.017	0.24	Measured	2007-01-25 11:15

Number of rows: 35.
Printout from SICADA 2007-10-26 11:01:36.

In-data: Borehole deviation data for KLX11C

Deviations protocol – KLX11C

SICADA - object_location

Idcode	Coord System	Northing (m)	Easting (m)	Elevation (m.a.s.l.)	Length (m)	Vertical Depth (m)	Inclination (degrees)	Bearing (degrees)	Inclination Uncert (degrees)	Bearing Uncert (degrees)	Radius Uncert (m)	Origin	Indat
KLX11C	RT90-RHB70	6366350.26	1546586.89	27.19	0.00	0.00	-60.73	159.34	0.030	0.620	0.00	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366348.89	1546587.40	24.57	3.00	2.62	-60.83	159.34	0.030	0.620	0.02	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366347.52	1546587.92	21.95	6.00	5.24	-60.82	159.29	0.030	0.620	0.03	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366346.15	1546588.44	19.33	9.00	7.86	-60.78	159.24	0.030	0.620	0.05	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366344.78	1546588.96	16.72	12.00	10.47	-60.71	159.18	0.030	0.620	0.06	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366343.41	1546589.48	14.10	15.00	13.09	-60.70	159.13	0.030	0.620	0.08	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366342.03	1546590.00	11.49	18.00	15.71	-60.66	159.50	0.030	0.620	0.10	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366340.65	1546590.51	8.87	21.00	18.32	-60.64	159.92	0.030	0.620	0.11	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366339.27	1546591.01	6.26	24.00	20.94	-60.64	160.12	0.030	0.620	0.13	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366337.89	1546591.51	3.64	27.00	23.55	-60.64	160.14	0.030	0.620	0.14	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366336.50	1546592.01	1.03	30.00	26.16	-60.61	160.18	0.030	0.620	0.16	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366335.12	1546592.51	-1.59	33.00	28.78	-60.56	160.54	0.030	0.620	0.17	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366333.73	1546593.00	-4.20	36.00	31.39	-60.55	160.54	0.030	0.620	0.19	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366332.33	1546593.49	-6.81	39.00	34.00	-60.52	160.54	0.030	0.620	0.21	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366330.94	1546593.97	-9.42	42.00	36.61	-60.47	161.39	0.030	0.620	0.22	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366329.53	1546594.44	-12.03	45.00	39.22	-60.41	161.53	0.030	0.620	0.24	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366328.13	1546594.91	-14.64	48.00	41.83	-60.39	161.75	0.030	0.620	0.25	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366326.72	1546595.37	-17.25	51.00	44.44	-60.34	161.94	0.030	0.620	0.27	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366325.31	1546595.83	-19.85	54.00	47.05	-60.34	162.07	0.030	0.620	0.29	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366323.89	1546596.28	-22.46	57.00	49.65	-60.35	162.25	0.030	0.620	0.30	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366322.48	1546596.73	-25.07	60.00	52.26	-60.36	162.37	0.030	0.620	0.32	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366321.06	1546597.18	-27.68	63.00	54.87	-60.35	162.44	0.030	0.620	0.34	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366319.65	1546597.63	-30.28	66.00	57.47	-60.33	162.65	0.030	0.620	0.35	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366318.23	1546598.07	-32.89	69.00	60.08	-60.31	163.04	0.030	0.620	0.37	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366316.81	1546598.50	-35.49	72.00	62.69	-60.27	163.20	0.030	0.620	0.38	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366315.38	1546598.93	-38.10	75.00	65.29	-60.25	163.31	0.030	0.620	0.40	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366313.95	1546599.36	-40.70	78.00	67.89	-60.20	163.24	0.030	0.620	0.42	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366312.52	1546599.78	-43.31	81.00	70.50	-60.16	163.67	0.030	0.620	0.43	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366311.09	1546600.19	-45.91	84.00	73.10	-60.13	164.16	0.030	0.620	0.45	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366309.65	1546600.60	-48.51	87.00	75.70	-60.06	164.51	0.030	0.620	0.46	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366308.20	1546601.00	-51.11	90.00	78.30	-60.01	164.64	0.030	0.620	0.48	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366306.76	1546601.39	-53.70	93.00	80.90	-59.92	164.64	0.030	0.620	0.50	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366305.31	1546601.79	-56.30	96.00	83.49	-59.86	164.64	0.030	0.620	0.51	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366303.85	1546602.19	-58.89	99.00	86.08	-59.81	164.77	0.030	0.620	0.53	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366302.39	1546602.58	-61.49	102.00	88.68	-59.74	165.22	0.030	0.620	0.55	Measured	2007-02-06 08:28

KLX11C	RT90-RHB70	6366300.93	1546602.97	-64.08	105.00	91.27	-59.63	165.32	0.030	0.620	0.56	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366299.46	1546603.35	-66.66	108.00	93.85	-59.58	165.52	0.030	0.620	0.58	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366297.99	1546603.72	-69.25	111.00	96.44	-59.52	165.82	0.030	0.620	0.59	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366296.51	1546604.09	-71.83	114.00	99.03	-59.48	166.04	0.030	0.620	0.61	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366295.03	1546604.46	-74.42	117.00	101.61	-59.45	166.06	0.030	0.620	0.63	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366293.55	1546604.83	-77.00	120.00	104.19	-59.41	166.16	0.030	0.620	0.64	Measured	2007-02-06 08:28
KLX11C	RT90-RHB70	6366293.47	1546604.85	-77.13	120.15	104.32	-59.41	166.16	0.030	0.620	0.65	Measured	2007-02-06 08:28

Number of rows: 42.
Printout from SICADA 2007-10-26 11:02:51.

In-data: Borehole deviation data for KLX11D

Deviations protocol – KLX11D

SICADA - object_location

Idcode	Coord System	Northing (m)	Easting (m)	Elevation (m.a.s.l.)	Length (m)	Vertical Depth (m)	Inclination (degrees)	Bearing (degrees)	Inclination Uncert (degrees)	Bearing Uncert (degrees)	Radius Uncert (m)	Origin	Indat
KLX11D	RT90-RHB70	6366357.37	1546631.42	25.57	0.00	0.00	-59.00	268.70	0.030	0.882	0.00	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.33	1546629.87	23.00	3.00	2.57	-59.00	268.70	0.030	0.882	0.02	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.31	1546628.33	20.43	6.00	5.14	-58.86	269.19	0.030	0.882	0.05	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.29	1546626.77	17.87	9.00	7.71	-58.68	269.69	0.030	0.882	0.07	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.29	1546625.21	15.31	12.00	10.27	-58.57	270.19	0.030	0.882	0.10	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.30	1546623.64	12.75	15.00	12.83	-58.45	270.69	0.030	0.882	0.12	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.30	1546622.07	10.19	18.00	15.38	-58.39	269.59	0.030	0.882	0.14	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.30	1546620.49	7.64	21.00	17.93	-58.24	269.83	0.030	0.882	0.17	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.29	1546618.91	5.09	24.00	20.48	-58.20	270.00	0.030	0.882	0.19	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.30	1546617.33	2.54	27.00	23.03	-58.13	270.20	0.030	0.882	0.22	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.31	1546615.75	-0.01	30.00	25.58	-58.08	270.60	0.030	0.882	0.24	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.33	1546614.16	-2.55	33.00	28.13	-57.99	270.78	0.030	0.882	0.27	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.35	1546612.57	-5.09	36.00	30.67	-57.94	271.02	0.030	0.882	0.29	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.38	1546610.97	-7.63	39.00	33.21	-57.81	270.98	0.030	0.882	0.32	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.41	1546609.37	-10.17	42.00	35.75	-57.70	271.13	0.030	0.882	0.34	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.44	1546607.77	-12.71	45.00	38.28	-57.57	271.13	0.030	0.882	0.36	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.47	1546606.15	-15.24	48.00	40.81	-57.41	271.26	0.030	0.882	0.39	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.51	1546604.54	-17.76	51.00	43.34	-57.28	271.55	0.030	0.882	0.41	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.56	1546602.91	-20.28	54.00	45.86	-57.14	272.01	0.030	0.882	0.44	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.63	1546601.28	-22.80	57.00	48.38	-57.01	272.28	0.030	0.882	0.46	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.69	1546599.65	-25.32	60.00	50.89	-56.94	272.37	0.030	0.882	0.49	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.76	1546598.01	-27.83	63.00	53.40	-56.84	272.55	0.030	0.882	0.52	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.84	1546596.37	-30.34	66.00	55.91	-56.75	272.68	0.030	0.882	0.54	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366357.92	1546594.72	-32.85	69.00	58.42	-56.62	272.83	0.030	0.882	0.57	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.00	1546593.07	-35.35	72.00	60.92	-56.48	272.95	0.030	0.882	0.59	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.09	1546591.42	-37.85	75.00	63.43	-56.42	273.13	0.030	0.882	0.62	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.18	1546589.76	-40.35	78.00	65.92	-56.26	273.24	0.030	0.882	0.64	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.28	1546588.09	-42.84	81.00	68.42	-56.20	273.37	0.030	0.882	0.67	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.37	1546586.42	-45.33	84.00	70.91	-56.06	273.37	0.030	0.882	0.69	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.48	1546584.75	-47.82	87.00	73.39	-55.97	273.68	0.030	0.882	0.72	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.60	1546583.07	-50.31	90.00	75.88	-55.94	274.64	0.030	0.882	0.75	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.74	1546581.40	-52.79	93.00	78.36	-55.77	275.04	0.030	0.882	0.77	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366358.90	1546579.72	-55.27	96.00	80.84	-55.72	275.90	0.030	0.882	0.80	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.06	1546578.03	-57.75	99.00	83.32	-55.60	275.04	0.030	0.882	0.82	Measured	2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.21	1546576.34	-60.22	102.00	85.79	-55.52	274.76	0.030	0.882	0.85	Measured	2007-02-06 08:29

KLX11D	RT90-RHB70	6366359.35	1546574.64	-62.69	105.00	88.26	-55.38	274.71	0.030	0.882	0.88	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.49	1546572.94	-65.16	108.00	90.73	-55.33	274.70	0.030	0.882	0.90	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.63	1546571.24	-67.62	111.00	93.20	-55.25	275.06	0.030	0.882	0.93	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.79	1546569.54	-70.09	114.00	95.66	-55.17	275.37	0.030	0.882	0.96	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366359.95	1546567.83	-72.55	117.00	98.12	-55.08	275.51	0.030	0.882	0.98	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366360.12	1546566.12	-75.01	120.00	100.58	-54.98	275.50	0.030	0.882	1.01	Measured 2007-02-06 08:29
KLX11D	RT90-RHB70	6366360.14	1546565.92	-75.29	120.35	100.87	-54.98	275.50	0.030	0.882	1.01	Measured 2007-02-06 08:29

Number of rows: 42.
Printout from SICADA 2007-10-26 11:04:02.

In-data: Borehole deviation data for KLX11E

Deviations protocol – KLX11E

SICADA - object_location

Idcode	Coord System	Northing (m)	Easting (m)	Elevation (m.a.s.l.)	Length (m)	Vertical Depth (m)	Inclination (degrees)	Bearing (degrees)	Inclination Uncert (degrees)	Bearing Uncert (degrees)	Radius Uncert (m)	Origin	Indat
KLX11E	RT90-RHB70	6366300.39	1546627.23	22.65	0.00	0.00	-60.92	336.17	0.090	0.609	0.00	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366301.72	1546626.64	20.03	3.00	2.62	-60.94	336.17	0.090	0.609	0.02	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366303.06	1546626.05	17.40	6.00	5.24	-60.93	336.26	0.090	0.609	0.03	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366304.39	1546625.47	14.78	9.00	7.87	-60.91	336.34	0.090	0.609	0.05	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366305.73	1546624.88	12.16	12.00	10.49	-60.86	336.43	0.090	0.609	0.06	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366307.07	1546624.30	9.54	15.00	13.11	-60.81	336.51	0.090	0.609	0.08	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366308.42	1546623.72	6.92	18.00	15.72	-60.73	336.85	0.090	0.609	0.09	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366309.77	1546623.14	4.31	21.00	18.34	-60.64	337.06	0.090	0.609	0.11	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366311.13	1546622.57	1.70	24.00	20.95	-60.53	337.18	0.090	0.609	0.12	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366312.49	1546622.00	-0.92	27.00	23.57	-60.50	337.18	0.090	0.609	0.14	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366313.85	1546621.43	-3.53	30.00	26.18	-60.45	337.80	0.090	0.609	0.16	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366315.22	1546620.88	-6.14	33.00	28.78	-60.38	338.10	0.090	0.609	0.17	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366316.60	1546620.33	-8.74	36.00	31.39	-60.34	338.37	0.090	0.609	0.19	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366317.99	1546619.78	-11.35	39.00	34.00	-60.25	338.65	0.090	0.609	0.20	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366319.38	1546619.24	-13.95	42.00	36.60	-60.13	338.94	0.090	0.609	0.22	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366320.77	1546618.70	-16.55	45.00	39.20	-60.06	338.83	0.090	0.609	0.24	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366322.17	1546618.17	-19.15	48.00	41.80	-60.01	339.19	0.090	0.609	0.25	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366323.58	1546617.64	-21.75	51.00	44.40	-59.96	339.87	0.090	0.609	0.27	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366324.99	1546617.13	-24.35	54.00	46.99	-59.91	340.24	0.090	0.609	0.28	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366326.41	1546616.63	-26.94	57.00	49.59	-59.87	340.80	0.090	0.609	0.30	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366327.83	1546616.13	-29.53	60.00	52.18	-59.83	341.13	0.090	0.609	0.31	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366329.26	1546615.65	-32.13	63.00	54.78	-59.76	341.24	0.090	0.609	0.33	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366330.70	1546615.16	-34.72	66.00	57.37	-59.65	341.52	0.090	0.609	0.35	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366332.14	1546614.68	-37.31	69.00	59.95	-59.55	341.57	0.090	0.609	0.36	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366333.58	1546614.20	-39.89	72.00	62.54	-59.46	341.68	0.090	0.609	0.38	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366335.03	1546613.72	-42.47	75.00	65.12	-59.38	341.77	0.090	0.609	0.40	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366336.48	1546613.25	-45.05	78.00	67.70	-59.34	342.03	0.090	0.609	0.41	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366337.94	1546612.78	-47.63	81.00	70.28	-59.23	342.63	0.090	0.609	0.43	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366339.41	1546612.33	-50.21	84.00	72.86	-59.13	342.63	0.090	0.609	0.44	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366340.88	1546611.87	-52.78	87.00	75.43	-59.03	342.86	0.090	0.609	0.46	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366342.36	1546611.42	-55.35	90.00	78.00	-58.97	343.30	0.090	0.609	0.48	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366343.84	1546610.98	-57.92	93.00	80.57	-58.85	343.51	0.090	0.609	0.49	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366345.34	1546610.54	-60.49	96.00	83.14	-58.78	343.82	0.090	0.609	0.51	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366346.83	1546610.11	-63.06	99.00	85.70	-58.71	343.82	0.090	0.609	0.53	Measured	2007-02-06 08:29
KLX11E	RT90-RHB70	6366348.33	1546609.67	-65.62	102.00	88.27	-58.63	343.85	0.090	0.609	0.54	Measured	2007-02-06 08:29

KLX11E	RT90-RHB70	6366349.83	1546609.24	-68.18	105.00	90.83	-58.55	344.10	0.090	0.609	0.56	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366351.34	1546608.82	-70.74	108.00	93.39	-58.47	344.53	0.090	0.609	0.58	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366352.85	1546608.40	-73.29	111.00	95.94	-58.37	344.80	0.090	0.609	0.59	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366354.37	1546607.99	-75.85	114.00	98.49	-58.32	344.87	0.090	0.609	0.61	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366355.90	1546607.58	-78.40	117.00	101.05	-58.23	345.25	0.090	0.609	0.63	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366357.43	1546607.18	-80.95	120.00	103.60	-58.14	345.25	0.090	0.609	0.64	Measured 2007-02-06 08:29
KLX11E	RT90-RHB70	6366358.09	1546607.00	-82.05	121.30	104.70	-58.14	345.25	0.090	0.609	0.65	Measured 2007-02-06 08:29

Number of rows: 42.
Printout from SICADA 2007-10-26 11:05:13.

In-data: Borehole deviation data for KLX11F

Deviations protocol – KLX11F

SICADA - object_location

Idcode	Coord System	Northing (m)	Easting (m)	Elevation (m.a.s.l.)	Length (m)	Vertical Depth (m)	Inclination (degrees)	Bearing (degrees)	Inclination Uncert (degrees)	Bearing Uncert (degrees)	Radius Uncert (m)	Origin	Indat
KLX11F	RT90-RHB70	6366314.09	1546577.96	24.47	0.00	0.00	-61.14	88.61	0.035	0.616	0.00	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.13	1546579.40	21.84	3.00	2.63	-61.05	88.61	0.035	0.616	0.02	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.16	1546580.86	19.21	6.00	5.25	-61.04	88.95	0.035	0.616	0.03	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.18	1546582.31	16.59	9.00	7.88	-61.00	89.29	0.035	0.616	0.05	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.19	1546583.77	13.97	12.00	10.50	-60.91	89.62	0.035	0.616	0.06	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.20	1546585.23	11.35	15.00	13.12	-60.83	89.96	0.035	0.616	0.08	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.19	1546586.69	8.73	18.00	15.74	-60.78	90.36	0.035	0.616	0.09	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.18	1546588.16	6.11	21.00	18.35	-60.70	90.51	0.035	0.616	0.11	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.17	1546589.63	3.50	24.00	20.97	-60.62	90.61	0.035	0.616	0.13	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.15	1546591.10	0.88	27.00	23.58	-60.55	90.82	0.035	0.616	0.14	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.12	1546592.58	-1.73	30.00	26.19	-60.45	91.25	0.035	0.616	0.16	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.09	1546594.06	-4.34	33.00	28.80	-60.37	91.35	0.035	0.616	0.17	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.05	1546595.54	-6.94	36.00	31.41	-60.28	91.59	0.035	0.616	0.19	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366314.01	1546597.03	-9.55	39.00	34.01	-60.22	91.76	0.035	0.616	0.21	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.96	1546598.52	-12.15	42.00	36.62	-60.19	92.13	0.035	0.616	0.22	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.90	1546600.01	-14.75	45.00	39.22	-60.11	92.22	0.035	0.616	0.24	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.84	1546601.51	-17.35	48.00	41.82	-60.05	92.42	0.035	0.616	0.25	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.78	1546603.01	-19.95	51.00	44.42	-59.97	92.43	0.035	0.616	0.27	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.71	1546604.51	-22.55	54.00	47.01	-59.89	92.71	0.035	0.616	0.29	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.63	1546606.01	-25.14	57.00	49.61	-59.81	93.39	0.035	0.616	0.30	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.54	1546607.52	-27.74	60.00	52.20	-59.76	93.57	0.035	0.616	0.32	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.44	1546609.03	-30.33	63.00	54.79	-59.67	94.00	0.035	0.616	0.33	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.33	1546610.54	-32.92	66.00	57.38	-59.61	94.16	0.035	0.616	0.35	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.22	1546612.06	-35.50	69.00	59.97	-59.53	94.42	0.035	0.616	0.37	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366313.10	1546613.57	-38.09	72.00	62.55	-59.50	94.64	0.035	0.616	0.38	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.97	1546615.09	-40.67	75.00	65.14	-59.47	94.81	0.035	0.616	0.40	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.84	1546616.61	-43.26	78.00	67.72	-59.46	95.08	0.035	0.616	0.42	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.70	1546618.13	-45.84	81.00	70.30	-59.43	95.22	0.035	0.616	0.43	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.56	1546619.65	-48.42	84.00	72.89	-59.39	95.45	0.035	0.616	0.45	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.41	1546621.17	-51.00	87.00	75.47	-59.38	95.72	0.035	0.616	0.47	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.26	1546622.69	-53.58	90.00	78.05	-59.34	95.77	0.035	0.616	0.48	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366312.10	1546624.21	-56.17	93.00	80.63	-59.33	95.82	0.035	0.616	0.50	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366311.95	1546625.74	-58.74	96.00	83.21	-59.26	96.04	0.035	0.616	0.52	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366311.78	1546627.26	-61.32	99.00	85.79	-59.21	96.40	0.035	0.616	0.53	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366311.60	1546628.79	-63.90	102.00	88.36	-59.17	96.73	0.035	0.616	0.55	Measured	2007-02-06 08:30

KLX11F	RT90-RHB70	6366311.42	1546630.32	-66.48	105.00	90.94	-59.16	96.76	0.035	0.616	0.56	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366311.24	1546631.84	-69.05	108.00	93.52	-59.12	96.66	0.035	0.616	0.58	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366311.07	1546633.37	-71.63	111.00	96.09	-59.11	96.56	0.035	0.616	0.60	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366310.88	1546634.90	-74.20	114.00	98.66	-59.09	97.14	0.035	0.616	0.61	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366310.68	1546636.43	-76.77	117.00	101.24	-59.05	98.34	0.035	0.616	0.63	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366310.45	1546637.96	-79.34	120.00	103.81	-59.00	98.48	0.035	0.616	0.65	Measured	2007-02-06 08:30
KLX11F	RT90-RHB70	6366310.45	1546637.98	-79.39	120.05	103.85	-59.00	98.48	0.035	0.616	0.65	Measured	2007-02-06 08:30

Number of rows: 42.
Printout from SICADA 2007-10-26 11:06:22.