

Oskarshamn site investigation

Boremap mapping of core drilled borehole KLX09

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December 2007

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Keywords: KLX09, Geology, Drill core mapping, Boremap, Fractures, BIPS, Simpevarp, Laxemar.

This report concerns a study which was conducted for SKB. The conclusions and viewpoints presented in the report are those of the authors and do not necessarily coincide with those of the client.

Data in SKB's database can be changed for different reasons. Minor changes in SKB's database will not necessarily result in a revised report. Data revisions may also be presented as supplements, available at www.skb.se.

A pdf version of this document can be downloaded from www.skb.se.

Abstract

This report presents the Boremap mapping of KLX09, which is a c 780 m long core drilled borehole and was mapped between 2006-02-02 and 2006-03-22. The borehole was drilled with the declination 276° and the inclination -85°.

KLX09 consists of ~ 76% Ävrö granite (501044), ~ 10% fine-grained diorite-gabbro (505102) and ~ 10% fine-grained dioritoid (501030). The remaining 4% consists of fine- to medium-grained granite (511058), diorite/gabbro (501033) and quartz monzodiorite (501036).

KLX09 has five sections with increased open fracture frequencies, sealed fracture network and crush zones. These sections cover the following intervals: 260–330 m, 490–505 m, 510–560 m, 670–710 m and 750–760 m.

Fractures with fluorite, which is a rare mineral in Laxemar, were mapped. These fractures are quite scattered with an orientation ranging from N to E and dip ranging from 0 to 45 degrees. These fractures have the similar orientation as the fluorite filled fractures mapped in KLX09B–KLX09F.

Sammanfattning

Denna rapport presenterar boremapkartering av KLX09 som ett ca 780 meter långt kärnborrhål och karterades mellan 2006-02-02 och 2006-03-22. Borrhålets deklination är 276° och inklinationen är -85°.

Ävrögranit (501044) är den dominerande bergarten och utgör drygt 76 % av borkärnan, medan ca 10 % utgörs av finkornig diorit-gabbro (505102) och av 10 % finkornig dioritoid (501030). Övriga 4 % utgörs av fin- till medelkornig granit (511058), diorit/gabbro (501033) och kvartsmonzodiorit (501036).

KLX09 har fem sektioner med förhöjd frekvens av öppna sprickor, läkta spricknätverk och krosszoner. Sektionerna ligger i följande intervall: 260–330 m, 490–505 m, 510–560 m, 670–710 m och 750–760 m.

Sprickor med fluorit, vilket är ett ovanligt mineral i Laxemar, har karterats. Orienteringen på dessa sprickor är spridda och de stryker mellan N till O och stupar mellan 0 och 45 grader. Dessa sprickor har liknande orientering som de fluoritfyllda sprickorna i KLX09B–KLX09F.

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2. Search path for the geological summary table.
3. BIPS-image for KLX09.
4. WellCad diagram for KLX09.
5. Legend to WellCad Diagram KLX09.
6. In data: Borehole length and diameter for KLX09.
7. In data: Reference marks for length adjustments for KLX09.
8. In data: Borehole deviation data for KLX09.

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1 Introduction

This report gives a brief presentation of the data gained by mapping of the borehole KLX09 in the Laxemar area, which is one of the activities performed within the site investigation at Oskarshamn. The work was carried out in accordance with Activity plan AP PS 400-06-017. In Table 1-1 controlling documents for performing this activity are listed. Both Activity plan and Method descriptions are SKB's internal controlling documents. Rock type nomenclature that has been used is shown in Table 1-2.

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*.

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

Activity plan	Number	Version
Boremapkartering av KLX09	AP PS 400-06-017	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
Instruktion: Regler för bergarters benämningar vid platsundersökning i Oskarshamn	SKB MD 132.004	1.0
Instruktion för längdkalibrering vid undersökningar i kärnbrorhål	SKB MD 620.010	2.0

Table 1-2. Rock type nomenclature for the site investigation at Oskarshamn.

Rock type	Rock code	Rock description
Dolerite	501027	Dolerite
Fine-grained Götemar granite	531058	Granite, fine-to medium-grained, ("Götemar granite")
Coarse-grained Götemar granite	521058	Granite, coarse-grained, ("Götemar granite")
Fine-grained granite	511058	Granite, fine-to medium-grained
Pegmatite	501061	Pegmatite
Granite	501058	Granite, medium- to coarse-grained
Ävrö granite	501044	Granite to quartz monzodiorite, generally porphyritic
Quartz monzodiorite	501036	Quartz monzonite to monzodiorite, equigranular to weakly porphyritic
Diorite/gabbro	501033	Diorite to gabbro
Fine-grained dioritoid	501030	Intermediate magmatic rock
Fine-grained diorite-gabbro	505102	Mafic rock, fine-grained
Sulphide mineralization	509010	Sulphide mineralization
Sandstone	506007	Sandstone

SKB investigates two potential sites for a deep repository for nuclear waste in the Swedish Precambrian basement at approximately 500 m depth. These places are Forsmark in northern Uppland and Oskarshamn in eastern Småland. In order to make a preliminary evaluation of the rock mass down to a depth of about 1,000 m at these sites, SKB has initiated a drilling program using core drilled boreholes. Every borehole usually starts with a percussion drilled part the first 100 m, where only drill cuttings are examined together with BIPS, followed by core drilling from 100 m down to 1,000 m depth.

Borehole KLX09 is situated within the Laxemar area (Figure 1-1). KLX09 is a c 880 m long telescopic borehole and the borehole orientation is 276/−85°. The mapping of the borehole was performed between 2006-02-02 and 2006-03-22.

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.

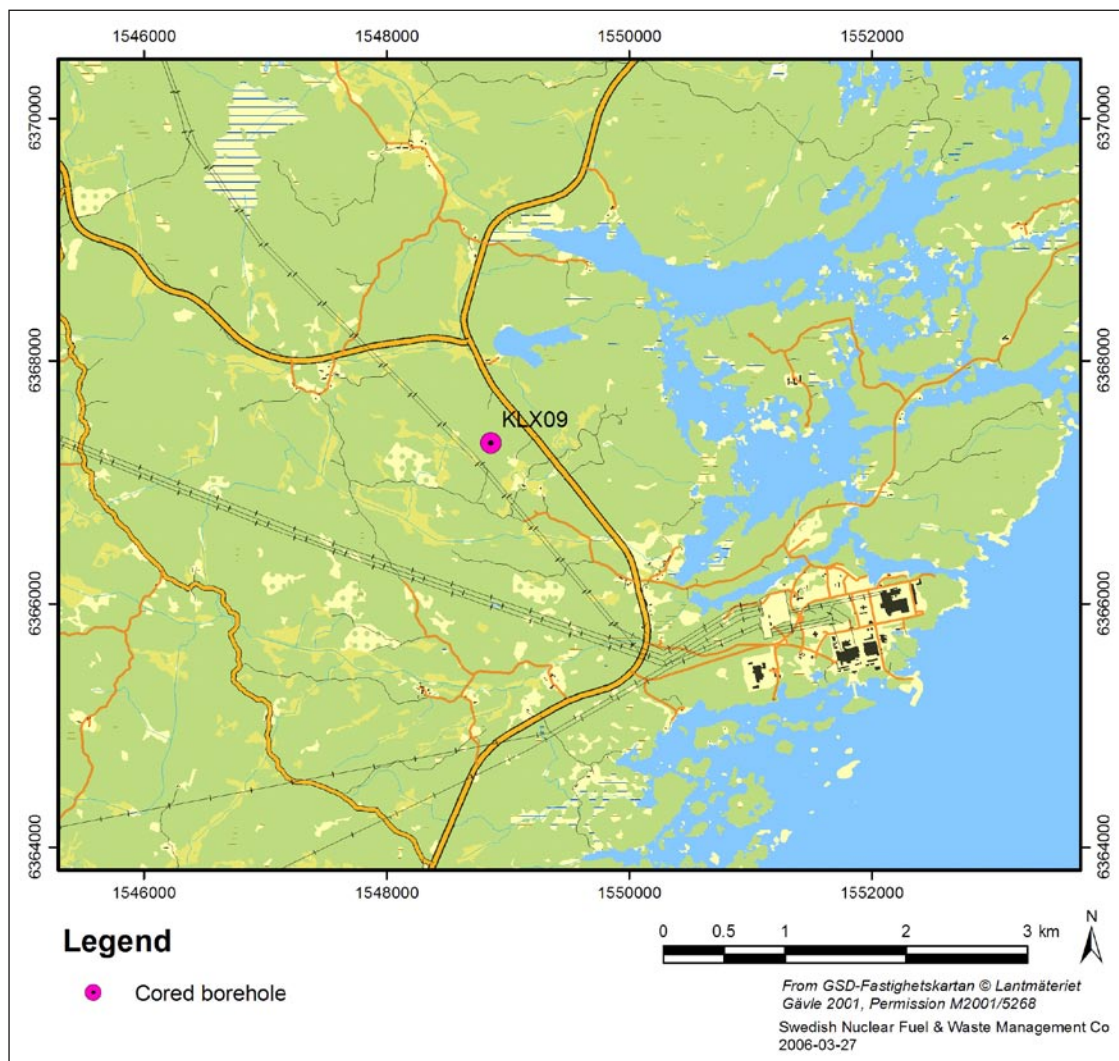


Figure 1-1. Location of the core drilled borehole KLX09.

2 Objective and scope

The principal aim of the mapping activities presented in this report is to obtain a documentation of geological structures and lithologies intersecting borehole KLX09. Geological structures will be correctly orientated in space along the borehole with the Boremap system. The result will serve as a platform for forthcoming investigations of the drill core, as well as various site descriptive modelling.

3 Equipment

3.1 Description of software

Software used for the mapping of KLX09 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, pen, diluted hydrochloric acid, knife, water-filled atomiser and hand lens.

3.3 BIPS-image video film sequences

The BIPS-image of KLX09 covers the interval 102.13 m–873.67 m.

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.

3.4.3 BIPS-image quality

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.

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 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 KLX09 is presented in Table 3-1.

KLX09 have a good BIPS-image quality throughout the borehole except for the intervals: 102–110 m and 871–873 m where the quality is considered acceptable. In the interval 755.76–757.71 m, in order to prevent outfall the borehole wall was covered with a thin steel plate due to very densely fractured rock.

Table 3-1. BIPS-image quality in KLX09.

From (m)	To (m)	Interval (m)	Quality
102	110	8	Acceptable
110	756	646	Good
756	758	2	No Image
758	871	113	Good
871	873	2	Acceptable

4 Execution

4.1 General

Mapping of the drill core of the telescopic drilled borehole was performed and documented according to Activity plan AP PS 400-06-017 (SKB, internal document) referring to the *Method Description for Boremap mapping* (SKB MD 143.006, v. 2.0), *Nomenklatur vid Boremapkartering* (SKB MD 143.008, v. 1.0), *Instruktion: Regler för bergarters benämningar vid platsundersökningen i Oskarshamn* (SKB MD 132.004, v. 1.0) and *Instruktion för längdkalibrering vid undersökningar i kärnbrorrhål* (SKB MD 620.010, v. 2.0), all of them SKB internal documents.

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 mapping was performed by Gunnar Rauséus and Karl-Johan Mattsson (Geosigma AB) and Jan Ehrenborg (Mírab Mineral Resurser AB).

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 eliminated by adjusting the depth of the BIPS-image to reference slots cut into the borehole walls every fiftieth meter (Appendix 7). The level for each slot is measured in the BIPS-images and then adjusted to the correct level using the correct depth value from the SICADA database.

Necessary indata for length adjustment and orientation in space are borehole diameter, reference marks, length and deviation; both collected from SICADA database (Appendices 6–8).

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), SKB internal document. 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 meter 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/Barite.
- X2 Barite.
- X3 Gypsum.
- X4 Molybdenite.
- X5 Bleached fracture walls.
- X7 Broken fracture with a fresh appearance and no mineral fill.
- X8 Fractures with epidotized / 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 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/Type*, interval column. No frequency column is presented for alteration/ type. The alteration/ type 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/Foliated < 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/Foliated ≥ 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 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 very densely fractured rock and to prevent outfall, the borehole wall was covered with a thin steel plate in the the interval 755.76–757.71 m. Because of this, the BIPS-image could not be used for orienting and positioning features in this interval.

Core loss was mapped in four intervals: 291.77–292.24 m, 538.59–539.14 m, 540.69–540.78 m and 756.00–756.20 m.

5 Results

5.1 General

Borehole KLX09 has the declination 276° and the inclination –85°. The drill core is c 779 m long and covers the interval (101.5–880.18 m) while the BIPS-image covers the interval 102.13–873.67 m. The last part of the core was not mapped due to lack of BIPS-image.

All results from the mapping are principally found in the appendices. Information from the SICADA database is shown in the geological summary table in Appendix 1 and as a WellCad diagram in Appendix 4. The BIPS-image is presented in Appendix 3. The 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.

Original data from the reported activity are stored in the primary database SICADA. Data are traceable in SICADA by the Activity plan number (AP PS 400-06-017). Only data in databases are accepted for further interpretation and modelling. The data presented in this report are regarded as copies of the original data. Data in the databases may be revised, if needed. Such revisions will not necessarily result in a revision of the P-report, although the normal procedure is that major revisions entail a revision of the P-report. Minor revisions are normally presented as supplements, available at www.skb.se.

5.2 Lithology

Table 5-1 shows the rock type distribution in KLX09. Ävrö granite (501044) dominates the borehole lithology in KLX09 (76.6%). Fine-grained diorite-gabbro (505102) occurs in two intervals; 342–406 m and 553–590 m with sections of Ävrö granite in between (501044). Fine grained dioritoid (501030) is observed as 2.5–10 m wide sections in the interval 485–553 m and 728–794 m also with intercalated of Ävrö granite in between. Quartz monzodiorite (501036) is present as 3–7 m wide sections at 459 m, 480 m and 553 m borehole length. Fine-grained granite (511058) occurs in the following intervals: 181–183 m, 484–485 m, 549–552 m and 633–635 m. Diorite/gabbro (501033) occurs in the interval 641–647 m (Appendices 1 and 4).

Table 5-1. Lithology distribution in KLX09.

%	Rock types
76.6	Ävrö granite (501044)
10.1	Fine-grained diorite-gabbro (505102)
9.7	Fine-grained dioritoid (501030)
1.7	Quartz monzodiorite (501036)
1.1	Fine-grained granite (511058)
0.7	Diorite/gabbro (501033)

5.3 Sections with open fractures

Five sections show higher frequencies of open fractures and these sections are listed below (Table 5-2).

1. The interval 260–330 m shows a moderate increase in frequency of open fractures, crush zones and sealed fracture network.
2. Between 490–505 m a mylonitic zone of medium to weak intensity occurs. There are also breccia, sealed fracture networks and a moderate increase in the frequency of open fractures.
3. In the interval 510–560 there is high frequency of open fractures and fractures with high J_a -numbers (J_a = joint alteration). There is also an increased amount of sealed fracture networks and crush zones. The interval shows a higher intensity of red staining.
4. The section 670–710 m has an increased frequency of open fractures and fractures with high J_a -number. Gouge exists in this section, as well as increased amounts of sealed fracture network.
5. The thin interval between 750–760 m is similar to section above 670–710 m.

Table 5-2 shows the average fracture frequencies per meter in the section described above.

5.4 Fracture mineralogy and orientation

Fluorite filled fractures occur throughout the drill core (102–873 m) with an increase of frequency in the interval 600–630 m. These fractures are quite scattered with an orientation ranging from N to E and dip ranging from 0 to 45 degrees, but there is another maximum oriented 350/60.

Tables 5-3 and 5-4 show the frequency of minerals found in open and sealed fractures in KLX09. Chlorite and calcite are the most frequently occurring minerals in both open and sealed fractures. Subordinate minerals in open fractures are clay minerals, pyrite and hematite. Clay minerals are more abundant in open fractures but seem almost absent in sealed fractures. This may reflect the fact that it is easier to detect clay minerals on open fracture surfaces than in sealed fractures.

Table 5-2. Average fracture per meter in chosen sections.

Interval (m)	Sealed	Open
102–873 (whole core)	3.5	2.5
260–330	2.9	3.7
490–505	1.7	4.6
510–560	2.4	7.9
670–710	3.5	7.2
750–760	2.7	6.4

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

%	Mineral
83.5	Chlorite
74.9	Calcite
41.8	Clay minerals
15.0	Pyrite
14.5	Oxidized walls
12.1	Hematite
7.3	Prehnite
5.3	Epidote
1.9	Quartz
1.8	Fluorite
< 1.8	Iron hydroxide, red feldspar, white feldspar, biotite, muscovite, laumontite, adularia, apophyllite/barite (X1), chalcopyrite, zeolite, amphibole, gypsum (X3), barite (X2), molybdenite (X4), and unknown mineral, no mineral (X7)

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

%	Mineral
61.1	Oxidized walls
42.6	Calcite
42.0	Chlorite
14.9	Quartz
11.7	Prehnite
11.4	X8, Saussuritized walls
8.3	Epidote
4.6	Adularia
3.6	Pyrite
3.5	X5, Bleached walls
2.7	White feldspar
2.2	Fluorite
1.7	Muscovite
1.5	Red feldspar
< 1.5	Hematite, clay minerals, chalcopyrite, laumontite and apophyllite/barite (X1), no mineral (X7)

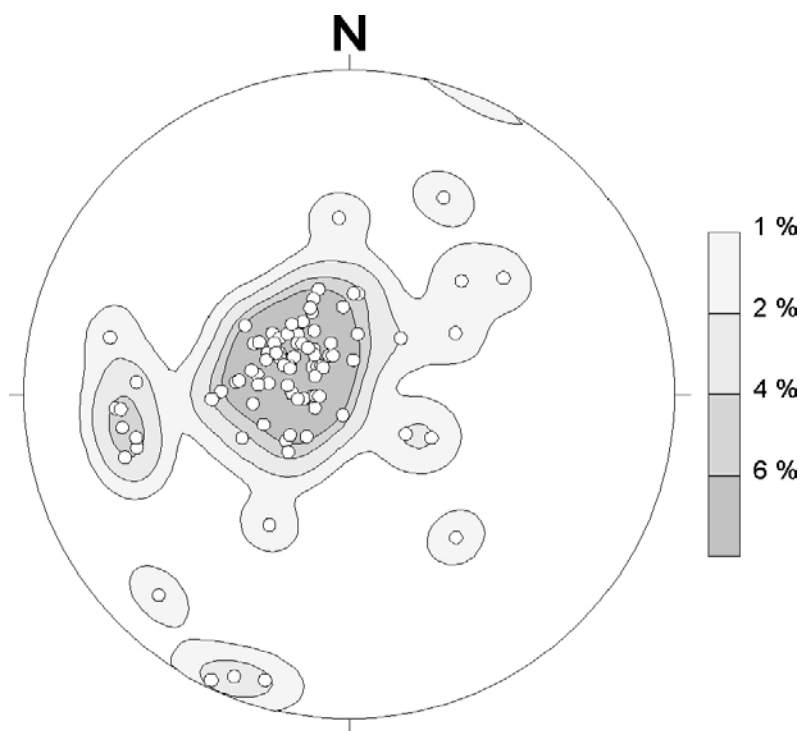


Figure 5-1. Lower hemisphere stereographic projections showing poles to fracture planes. Fluorite filled fractures (open and sealed), n=95.

Search paths for the geological summary table

TABLE HEAD LINES		INFORMATION SOURCE			PRESENTATION
Head lines	Sub head lines	Varcode	First suborder	Second suborder	Interval / frequency
Rock type	Lithology	5	Sub 1		Interval
	Grain size	5	Sub 5		Interval
	Texture	5	Sub 6		Interval
Alteration	Type	7	Sub 1 = 700		Interval
	Intensity	7	Sub 1 = 700	Sub 2	Interval
Rock occurrence	Vein + dyke	31	Sub 1 = 2 and 18		Frequency
Structure	Shear zone, < 1m wide	31	Sub 4 = 41 and 42		Frequency
	Brecciated, < 1m wide	31	Sub 4 = 7		Frequency
	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		Frequency
	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	
	Foliated, < 1 m wide	31	Sub 4 = 81		Frequency
Foliated, >= 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 and broken fractures	3			Frequency
	Broken fractures, Aperture = 0	2	SNUM 11= 0		Frequency
	Sealed fracture network < 1 m wide	32			Frequency
	Sealed fracture network >= 1 m wide	32			Interval
Open fractures	All, Aperture > 0	2 and 3	SNum 11>0		Frequency
	Uncertain, Aperture = 0.5 possible and 0.5 probable	2 and 3	SNum 11>0	Sub 12 = 3	Frequency
		2 and 3	SNum 11>0	Sub 12 = 2	
	Certain, Aperture = 0.5 and >0.5	2 and 3	SNum 11>0	Sub 12 = 1	Frequency
	Joint alteration > 1.5	2	SNum16 > 1.5		Frequency
	Crush < 1 m wide	4			Frequency
Crush >= 1 m wide	4			Interval	

BIPS-image for KLX09

Borehole Image Report

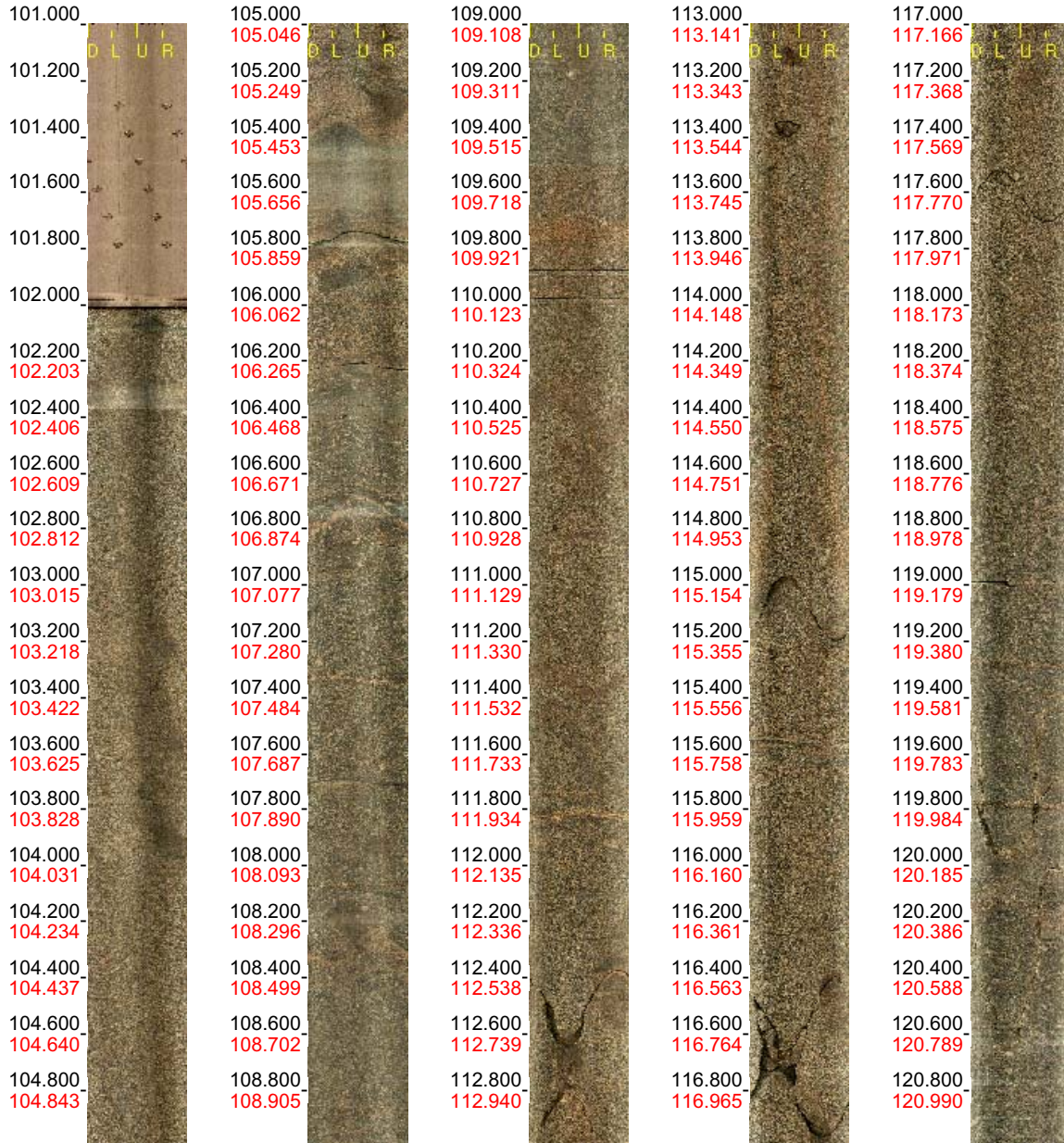
Borehole Name: KLX09
Mapping Name: KLX09_JEPDKJM
Mapping Range: 102.013 - 870.380 m
Diameter: 76.0 mm
Printed Range: 101.000 - 870.536
Pages: 40

Image File Information:

File: D:\BIPSbilder\KLX09\KLX09_101-870m.BIP
Date/Time: 2005-12-01 18:32:00
Start Depth: 101.000 m
End Depth: 870.536 m
Resolution: 1.00 mm/pixel (depth)
Orientation: Gravmetric
Image height: 769536 pixels
Image width: 360 pixels
BIP Version: BIP-III
Locality: LAXEMAR
Borehole: KLX09
Scan Direction: Down
Color adjust: 0 0 0 (RGB)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 101.000 - 121.000 m
 Azimuth: 266.5
 Inclination: -83.7



Printed: 2006-03-22 09:26:54

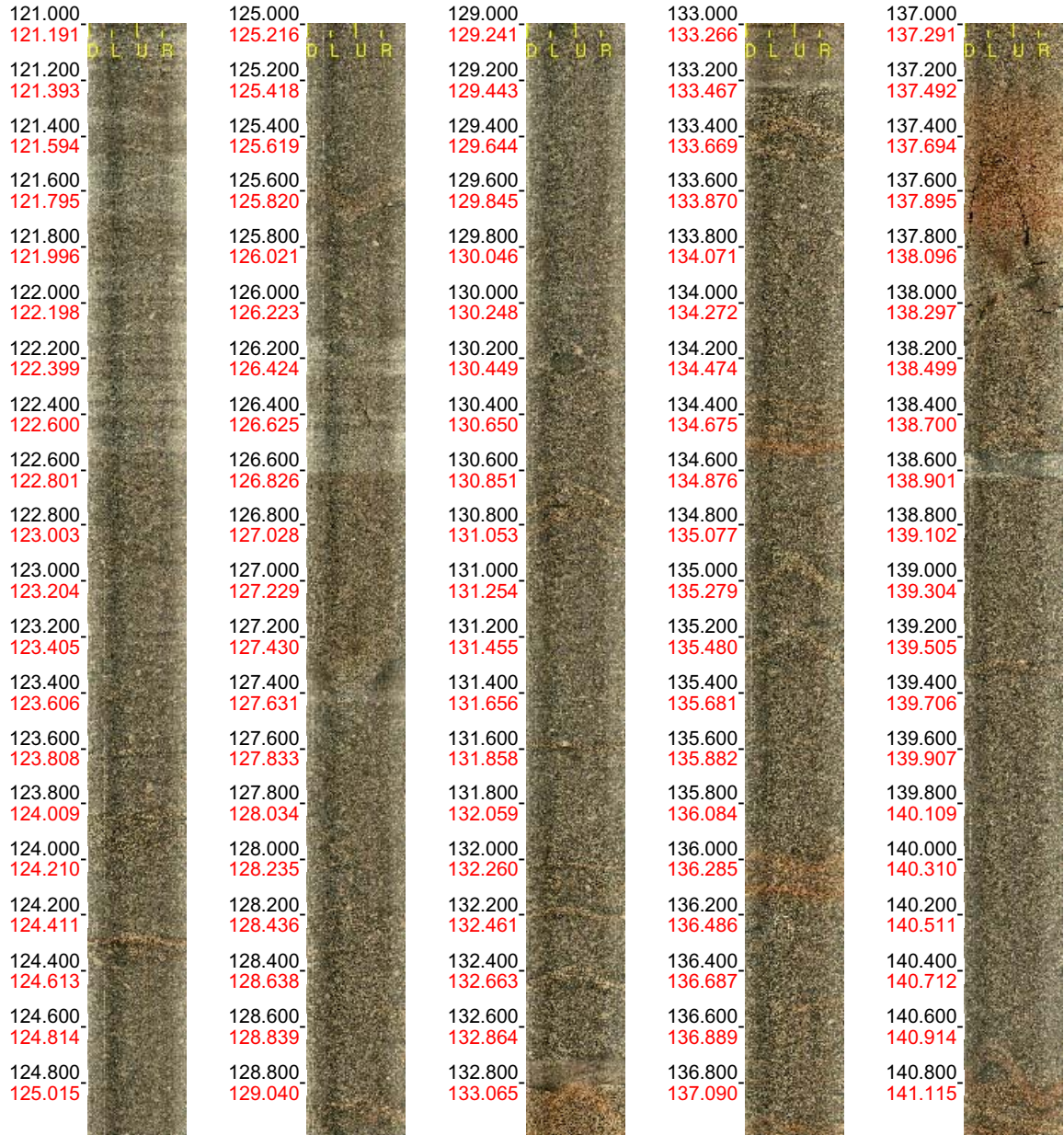
Scale: 1 : 20

Aspect: 150 %

2 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 121.000 - 141.000 m
 Azimuth: 266.5
 Inclination: -83.7



Printed: 2006-03-22 09:26:54

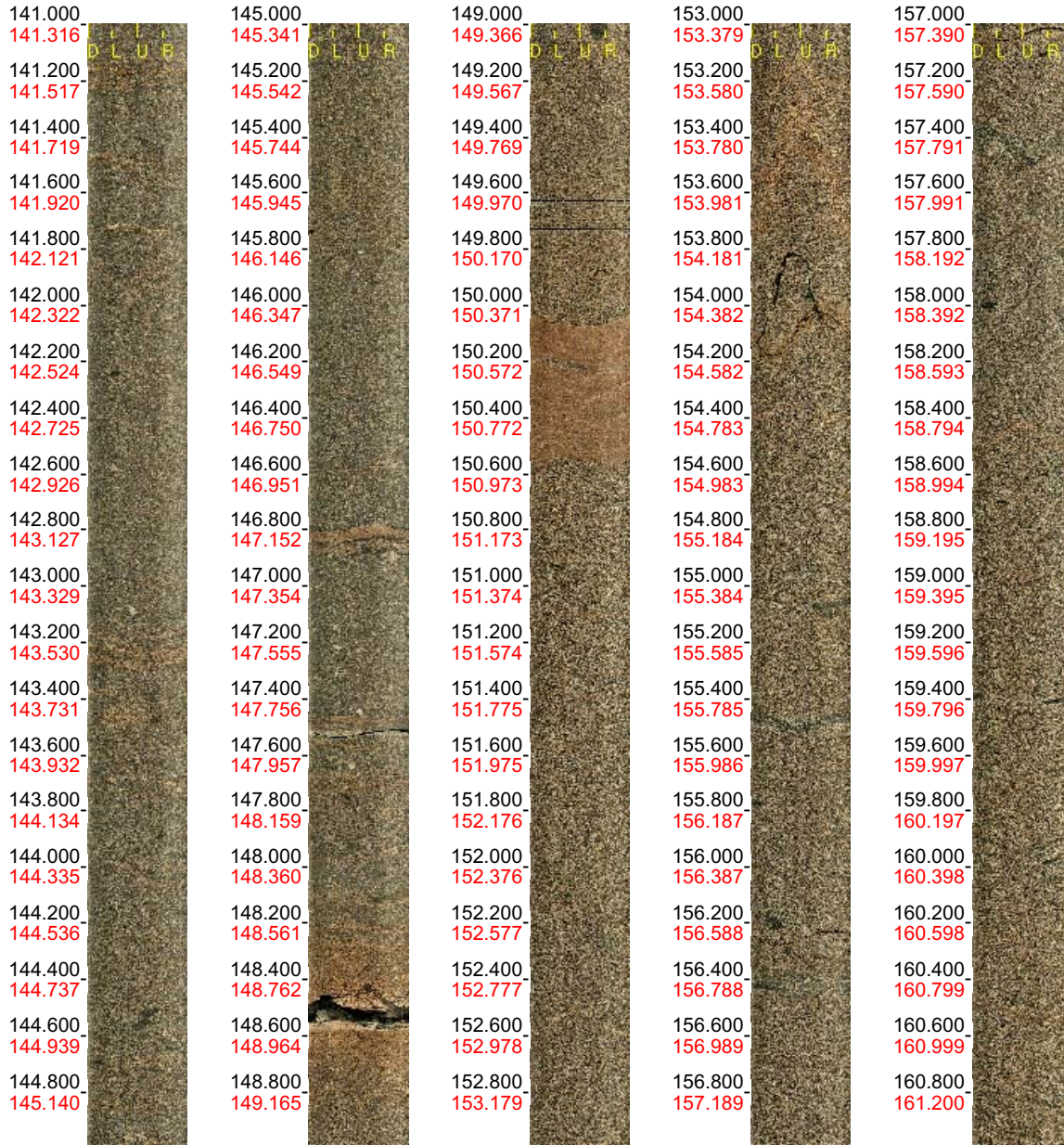
Scale: 1 : 20

Aspect: 150 %

3 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 141.000 - 161.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

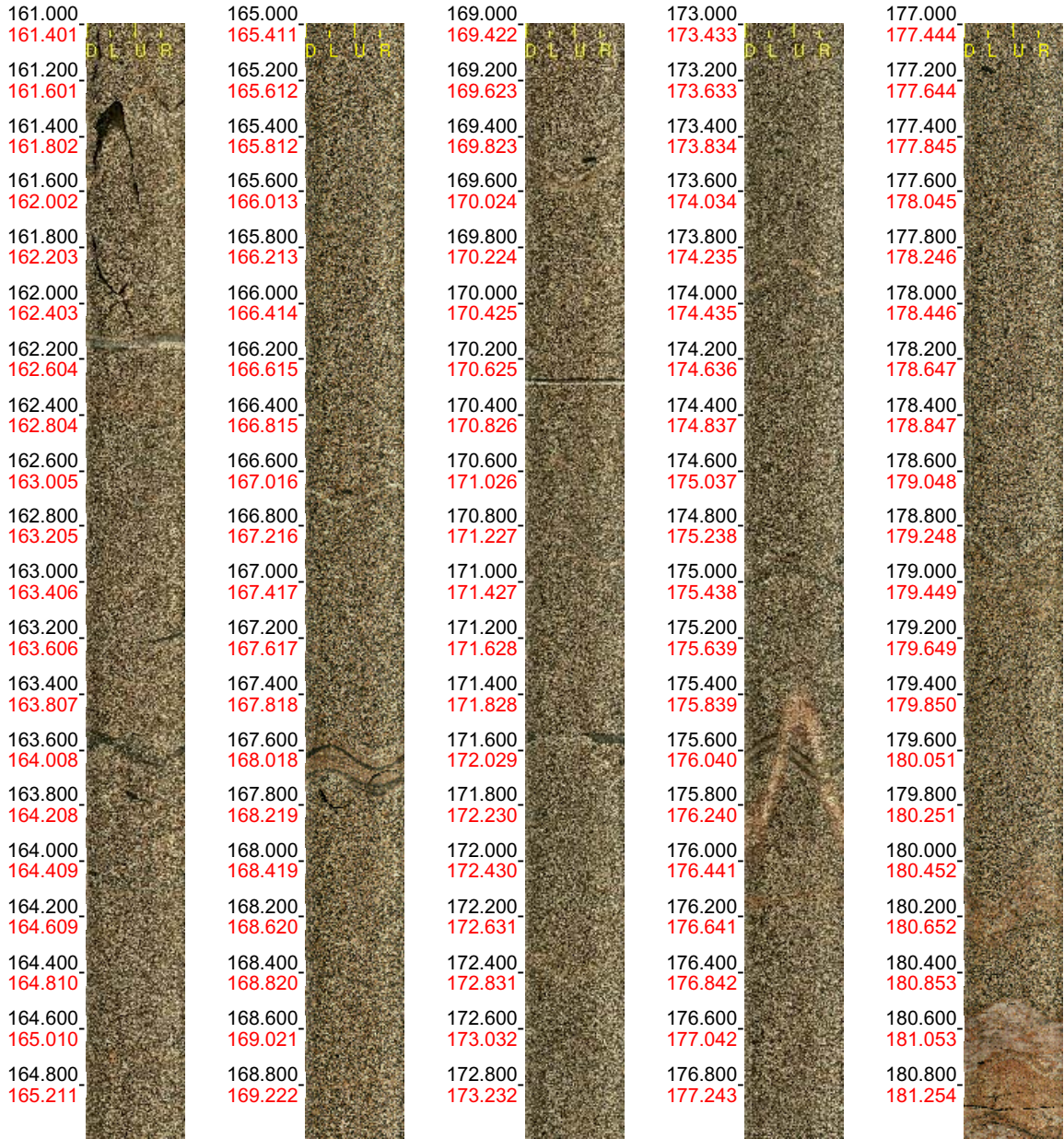
Scale: 1 : 20

Aspect: 150 %

4 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 161.000 - 181.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

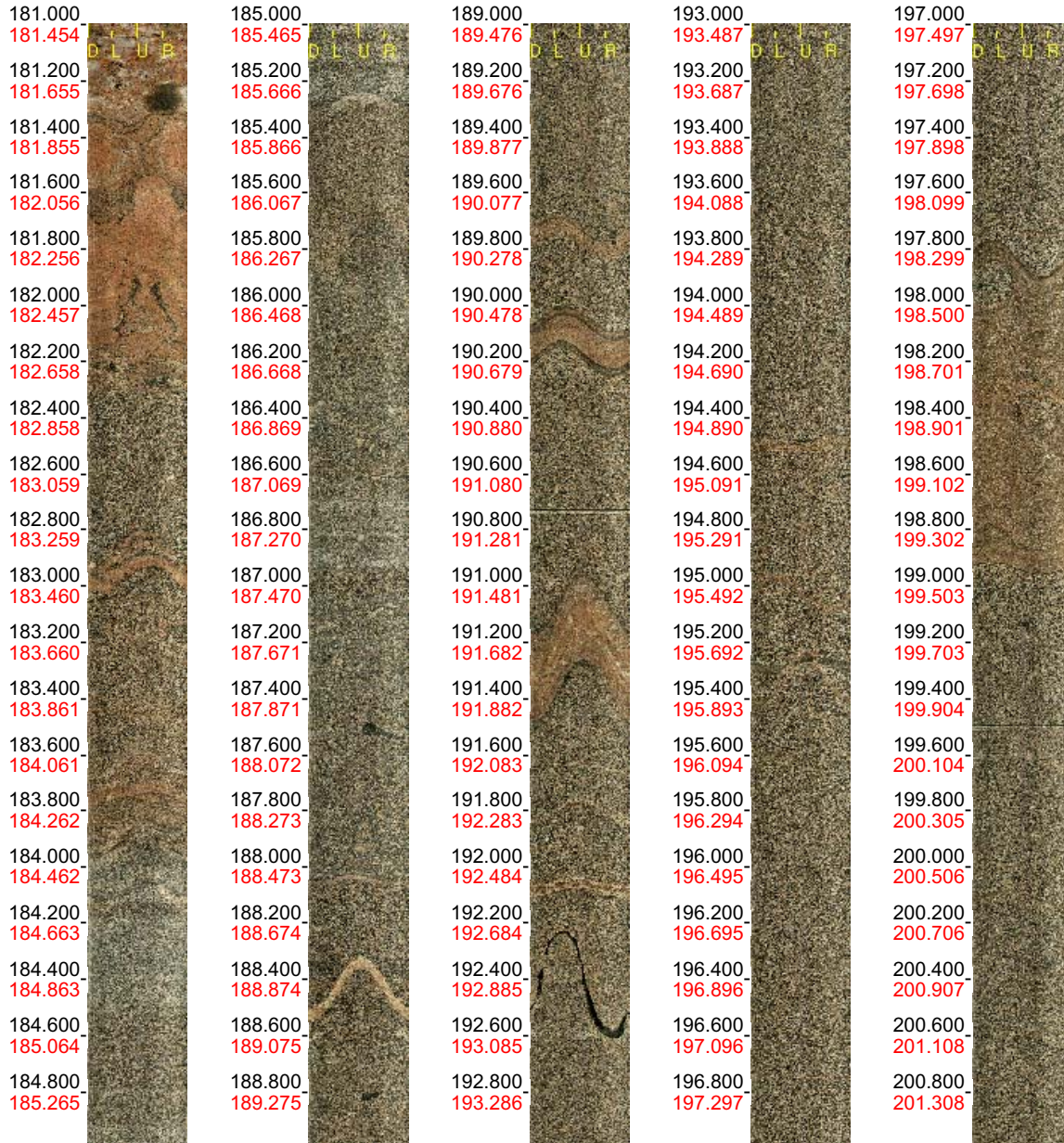
Scale: 1 : 20

Aspect: 150 %

5 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 181.000 - 201.000 m
Azimuth: 266.5
Inclination: -83.7



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

6 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 201.000 - 221.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

7 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 221.000 - 241.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

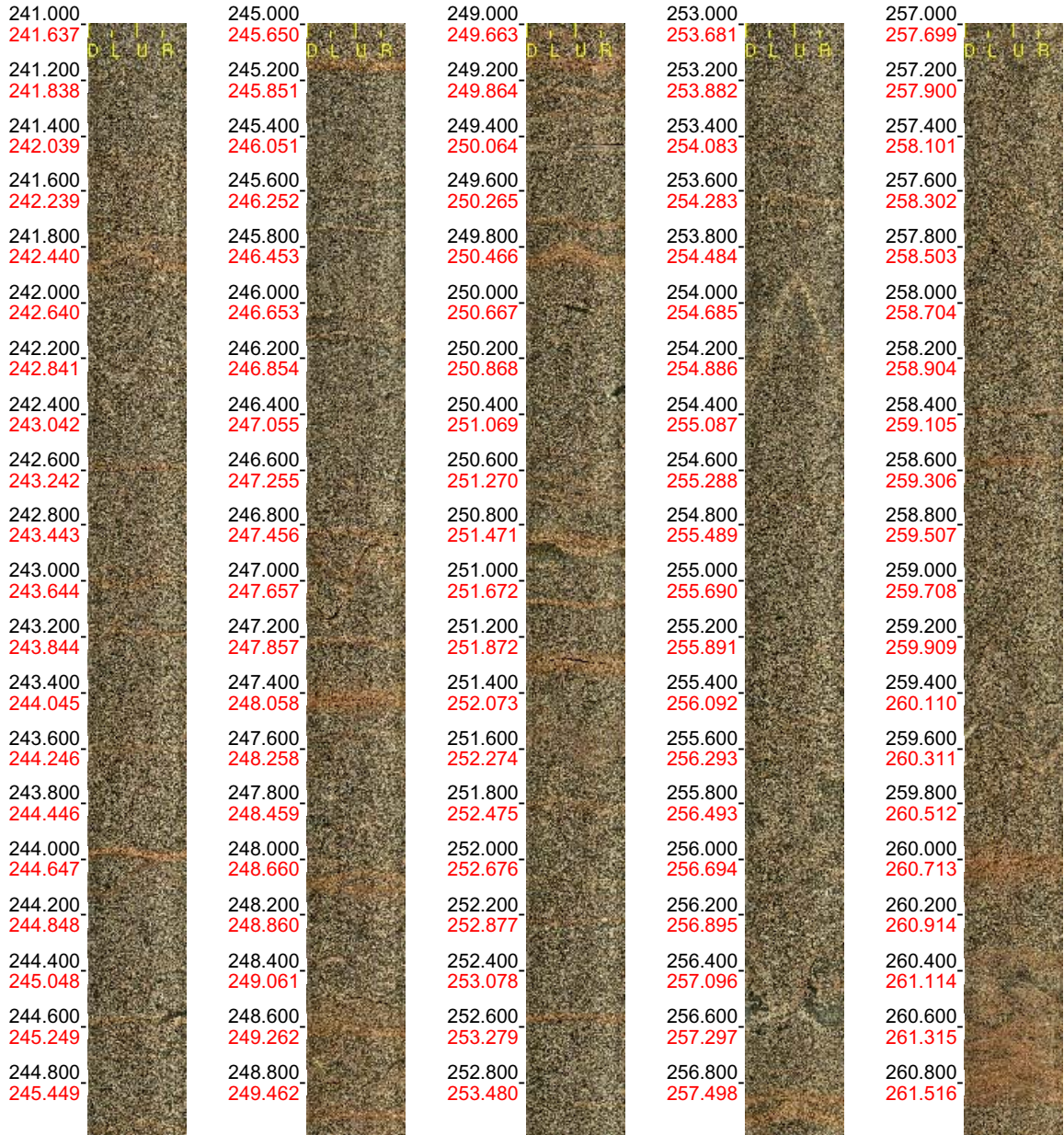
Scale: 1 : 20

Aspect: 150 %

8 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 241.000 - 261.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

9 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 261.000 - 281.000 m
 Azimuth: 266.6
 Inclination: -83.5



Printed: 2006-03-22 09:26:54

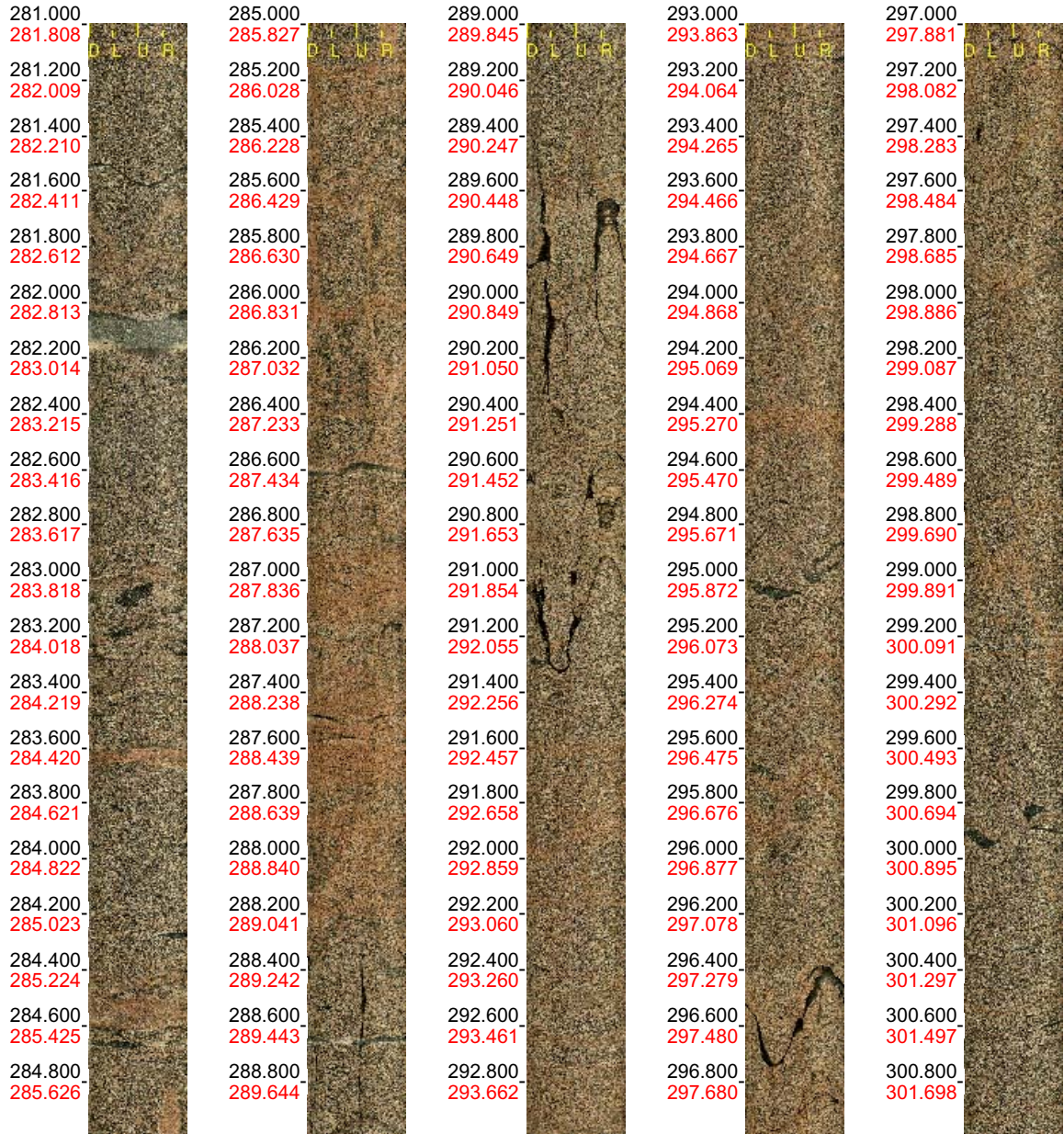
Scale: 1 : 20

Aspect: 150 %

10 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 281.000 - 301.000 m
 Azimuth: 266.5
 Inclination: -83.7



Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 301.000 - 321.000 m
 Azimuth: 266.5
 Inclination: -83.7



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

12 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 321.000 - 341.000 m
 Azimuth: 266.5
 Inclination: -83.7



Printed: 2006-03-22 09:26:54

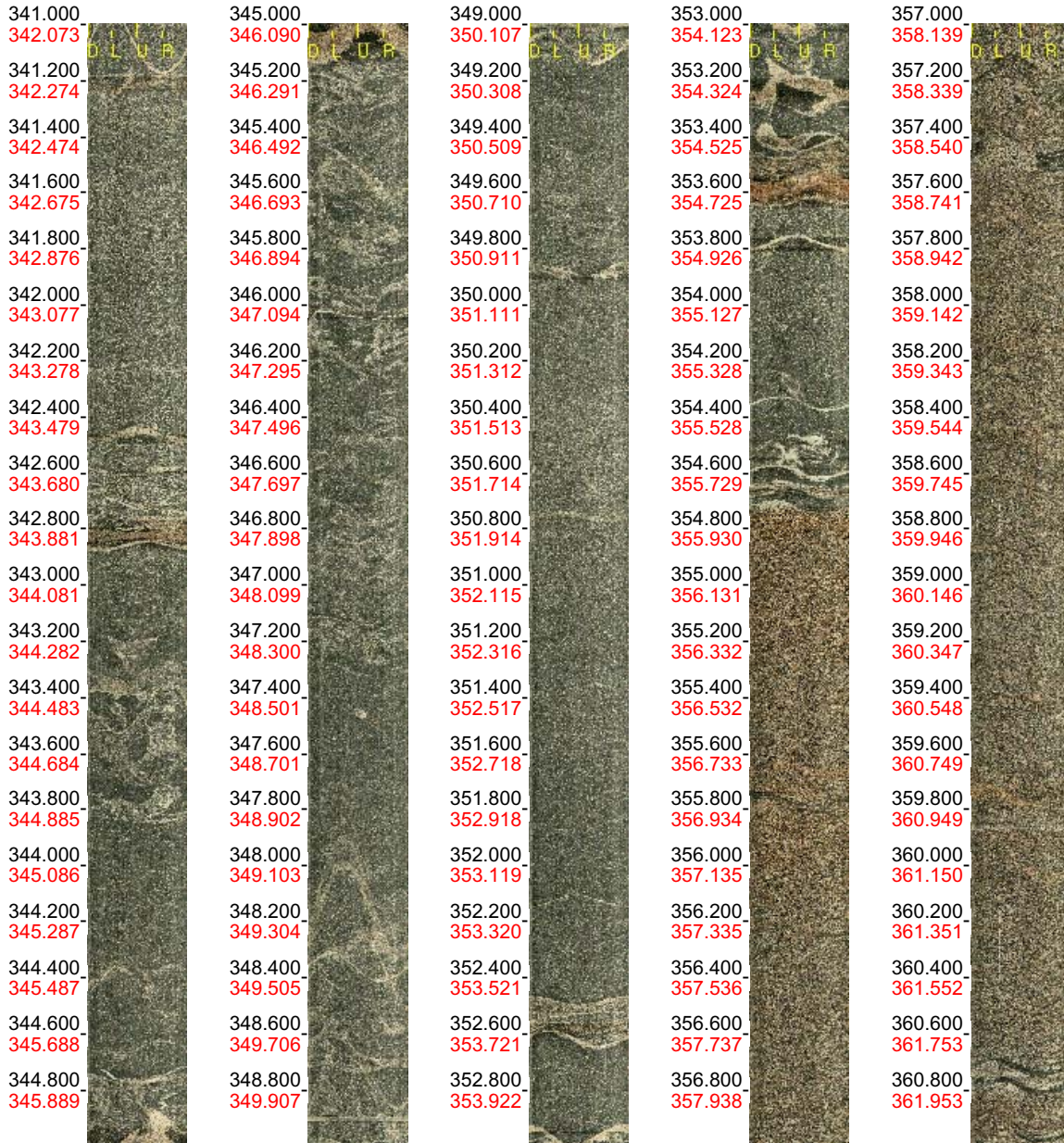
Scale: 1 : 20

Aspect: 150 %

13 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 341.000 - 361.000 m
 Azimuth: 266.4
 Inclination: -83.9



Printed: 2006-03-22 09:26:54

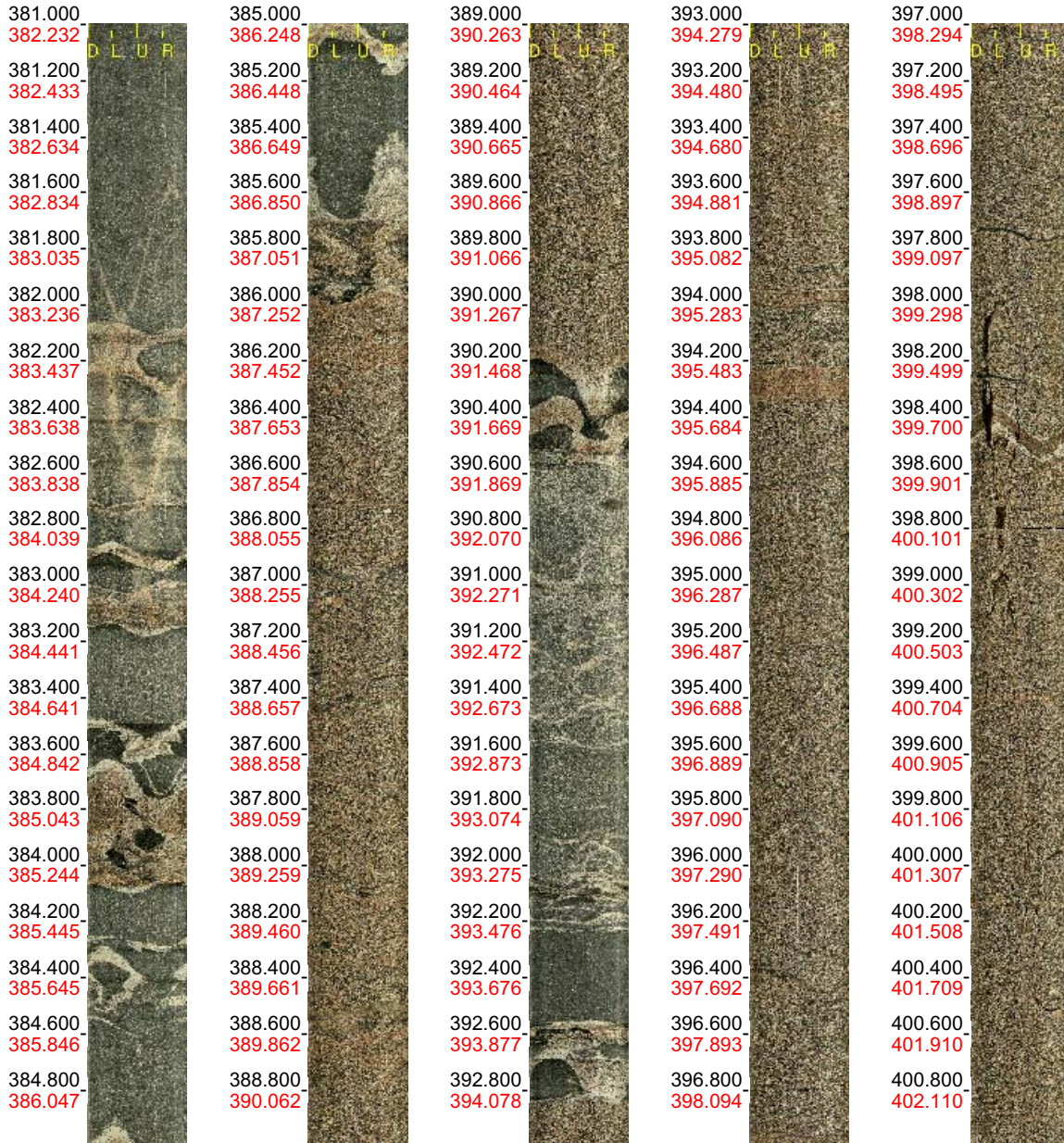
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Aspect: 150 %

14 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 381.000 - 401.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

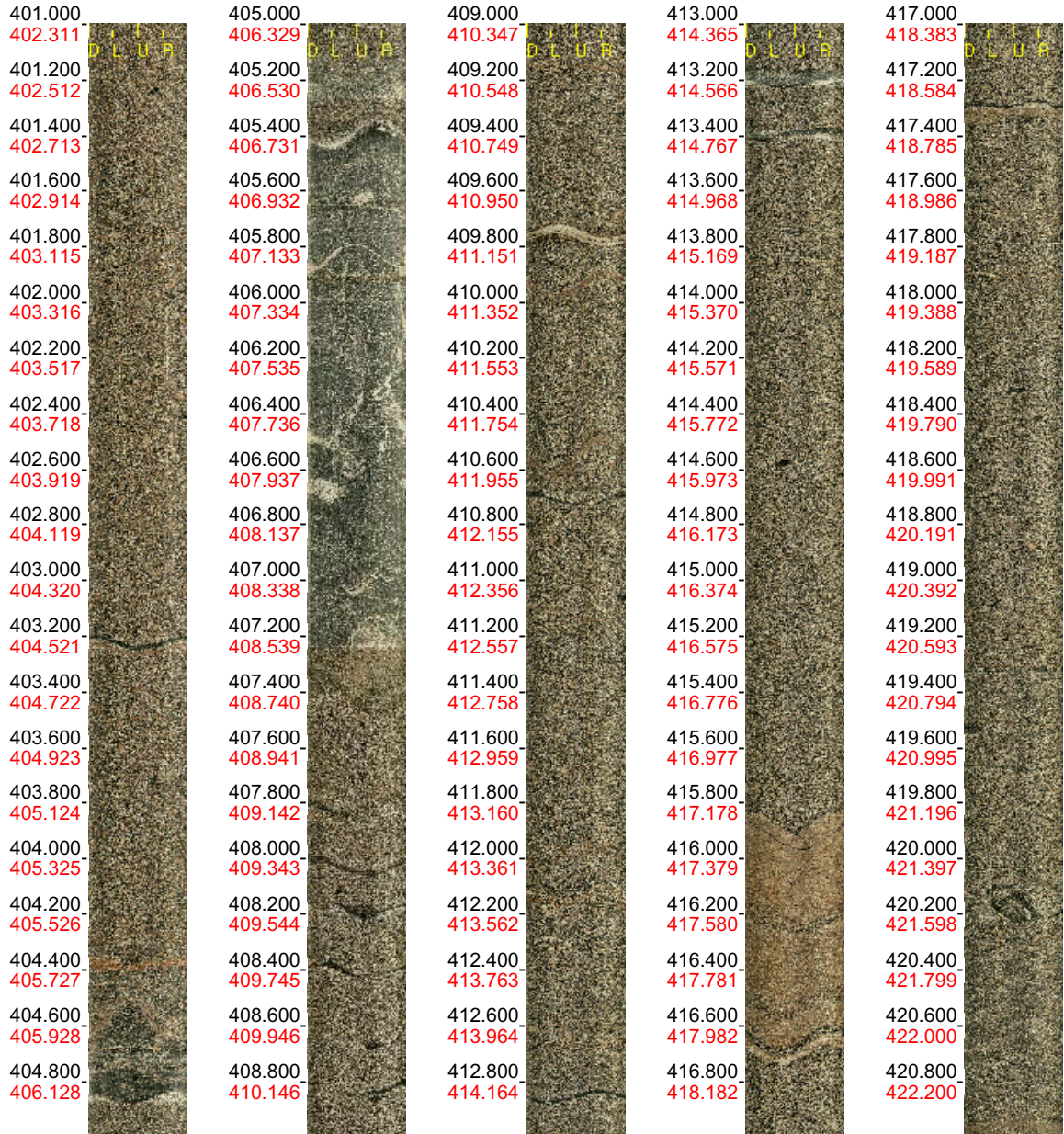
Scale: 1 : 20

Aspect: 150 %

16 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 401.000 - 421.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

17 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 421.000 - 441.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

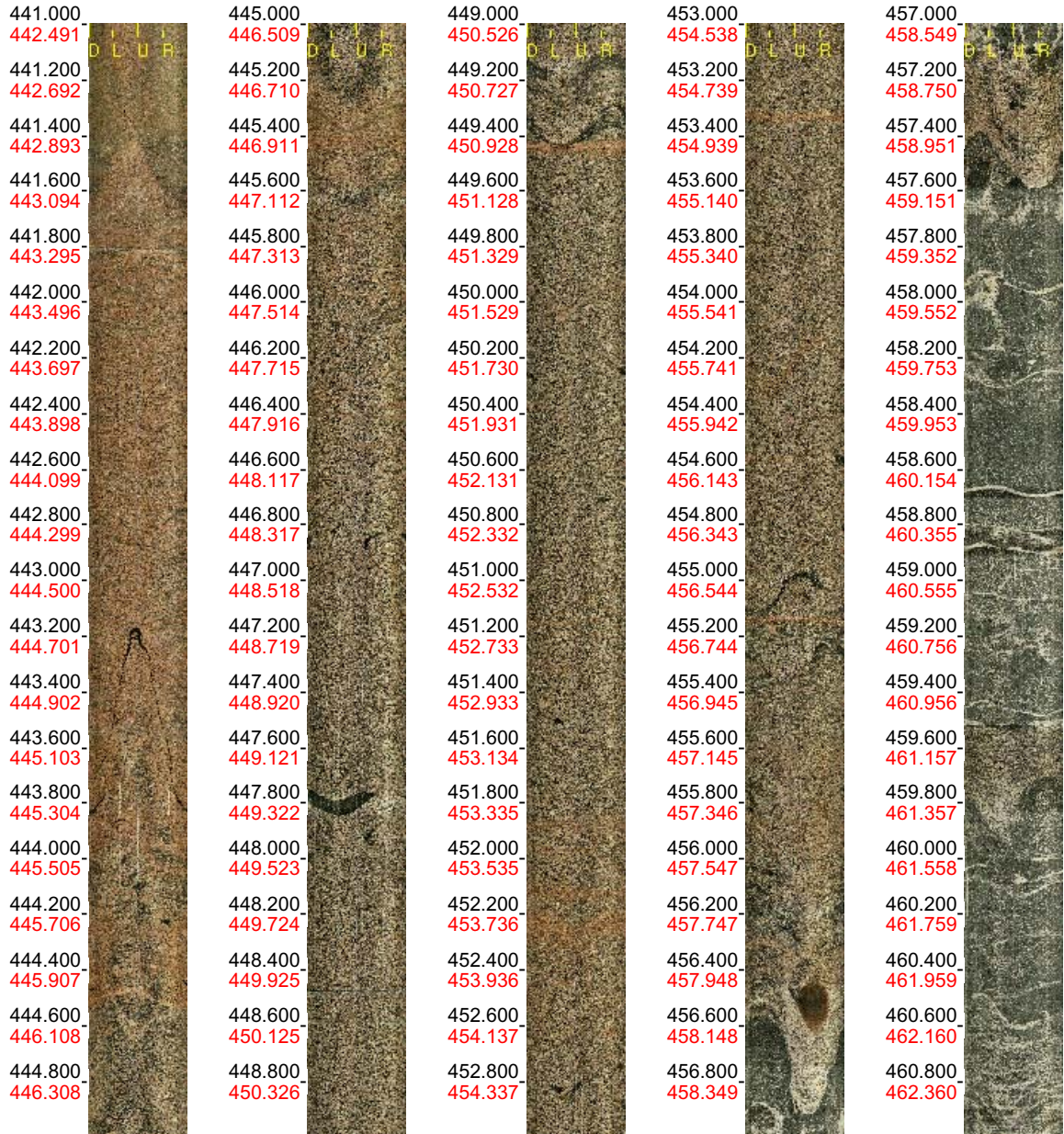
Scale: 1 : 20

Aspect: 150 %

18 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 441.000 - 461.000 m
Azimuth: 264.6
Inclination: -83.8



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

19 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 461.000 - 481.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

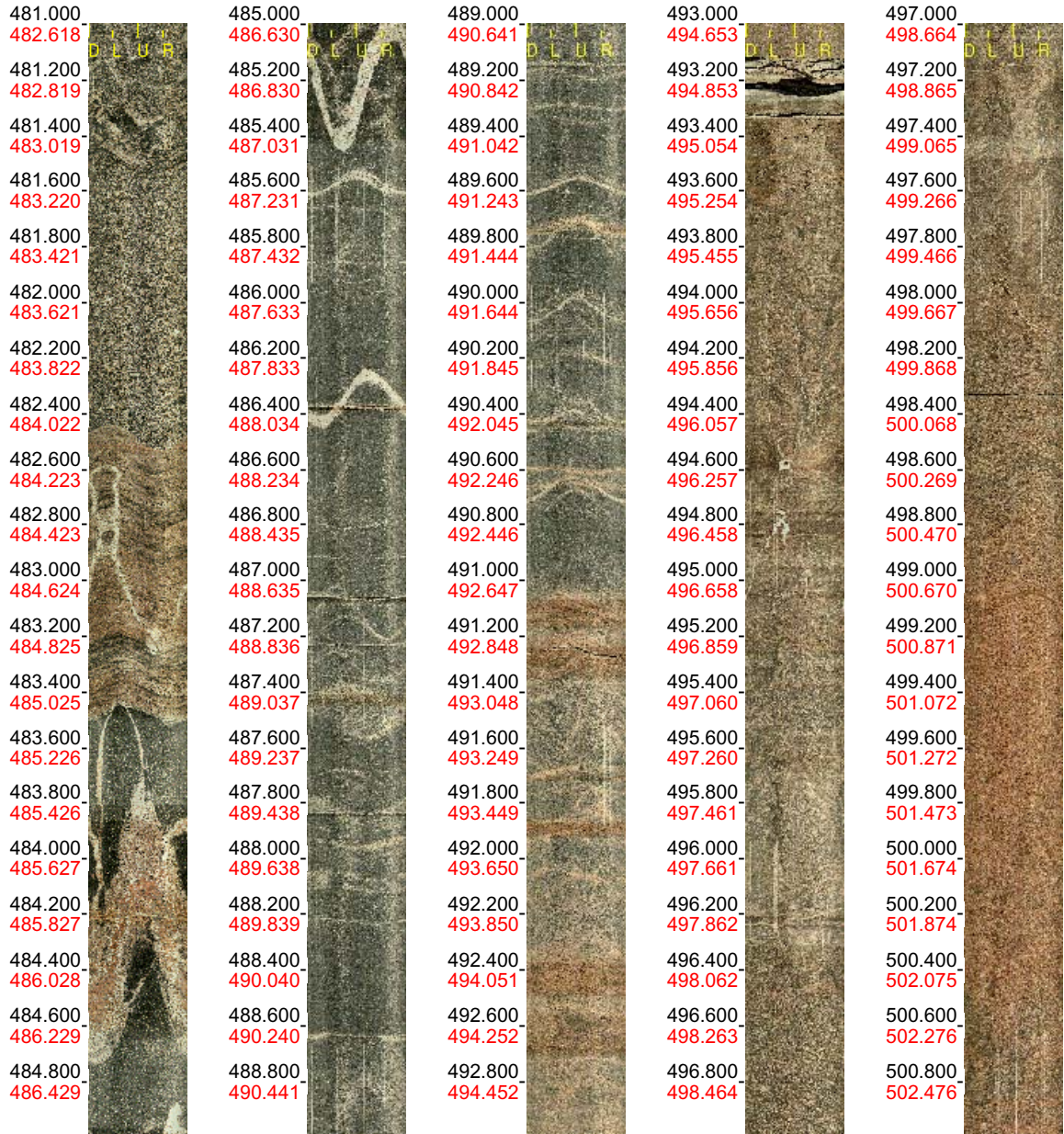
Scale: 1 : 20

Aspect: 150 %

20 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 481.000 - 501.000 m
 Azimuth: 266.4
 Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

21 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 501.000 - 521.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

22 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 521.000 - 541.000 m
 Azimuth: 264.6
 Inclination: -83.8



Printed: 2006-03-22 09:26:54

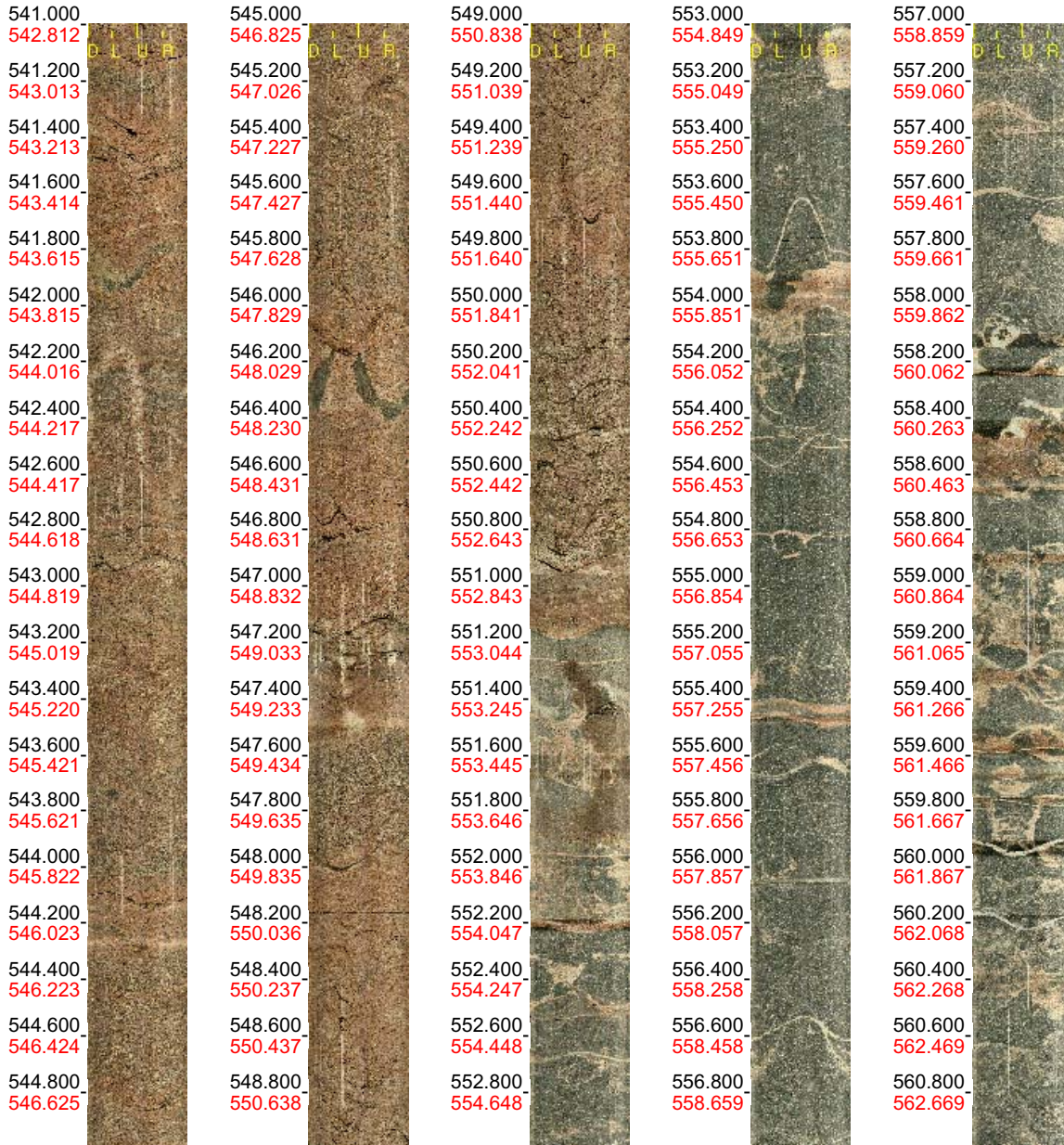
Scale: 1 : 20

Aspect: 150 %

23 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 541.000 - 561.000 m
Azimuth: 266.3
Inclination: -84.0



Printed: 2006-03-22 09:26:54

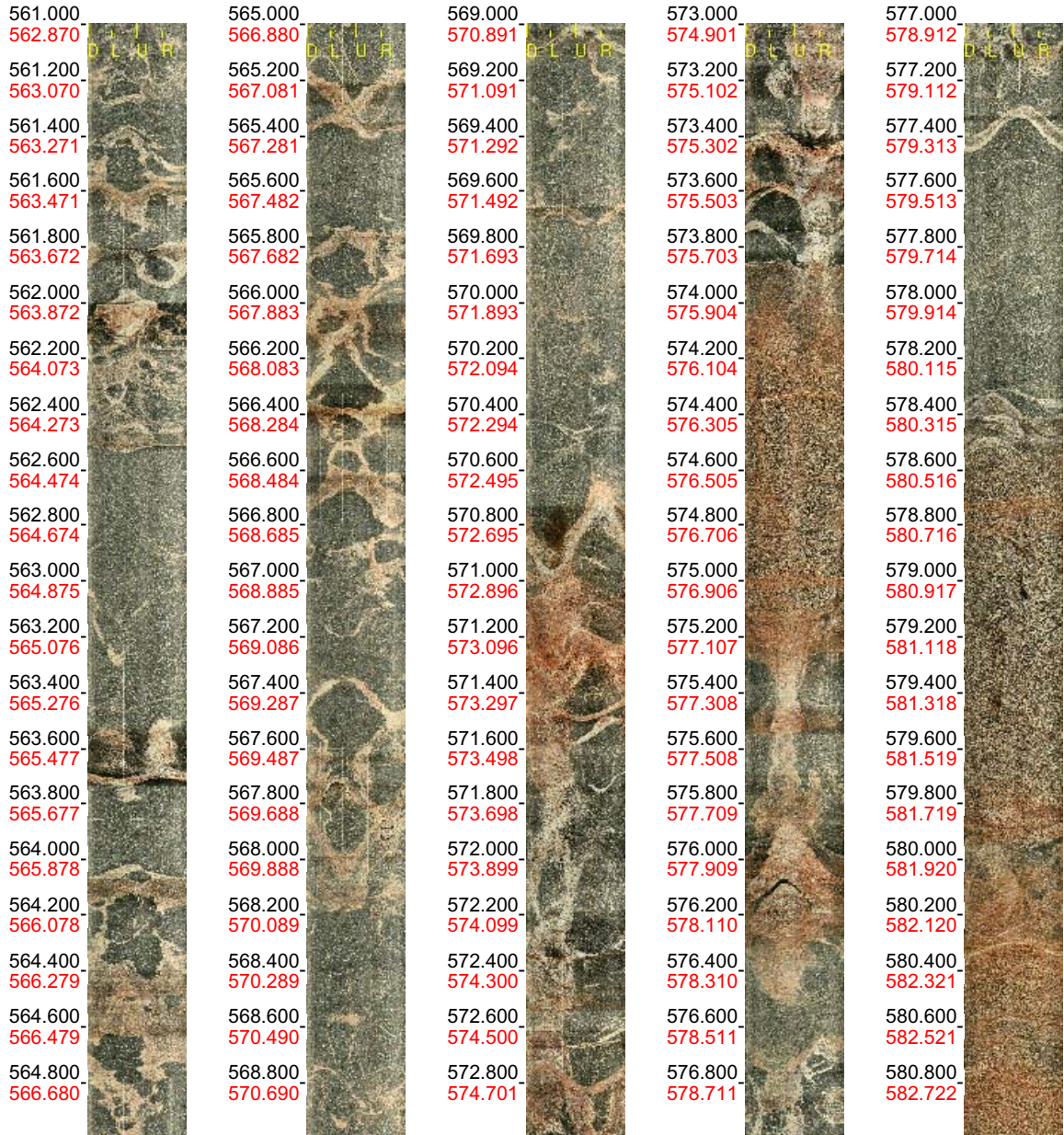
Scale: 1 : 20

Aspect: 150 %

24 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 561.000 - 581.000 m
Azimuth: 264.6
Inclination: -83.9



Printed: 2006-03-22 09:26:54

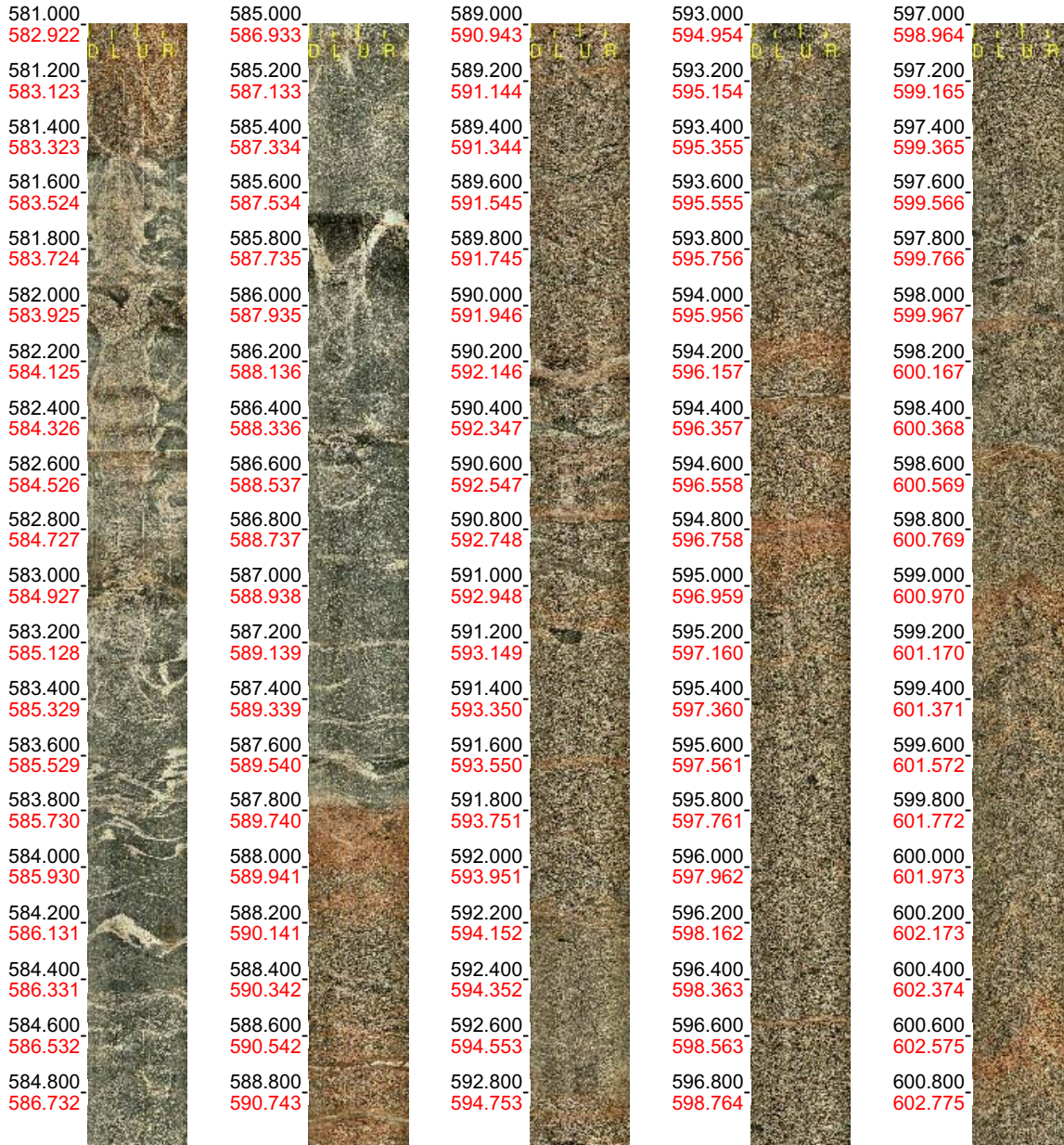
Scale: 1 : 20

Aspect: 150 %

25 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 581.000 - 601.000 m
 Azimuth: 264.6
 Inclination: -83.8



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

26 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 601.000 - 621.000 m
Azimuth: 266.3
Inclination: -84.1



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

27 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 621.000 - 641.000 m
Azimuth: 266.4
Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

28 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 641.000 - 661.000 m
Azimuth: 266.3
Inclination: -84.1



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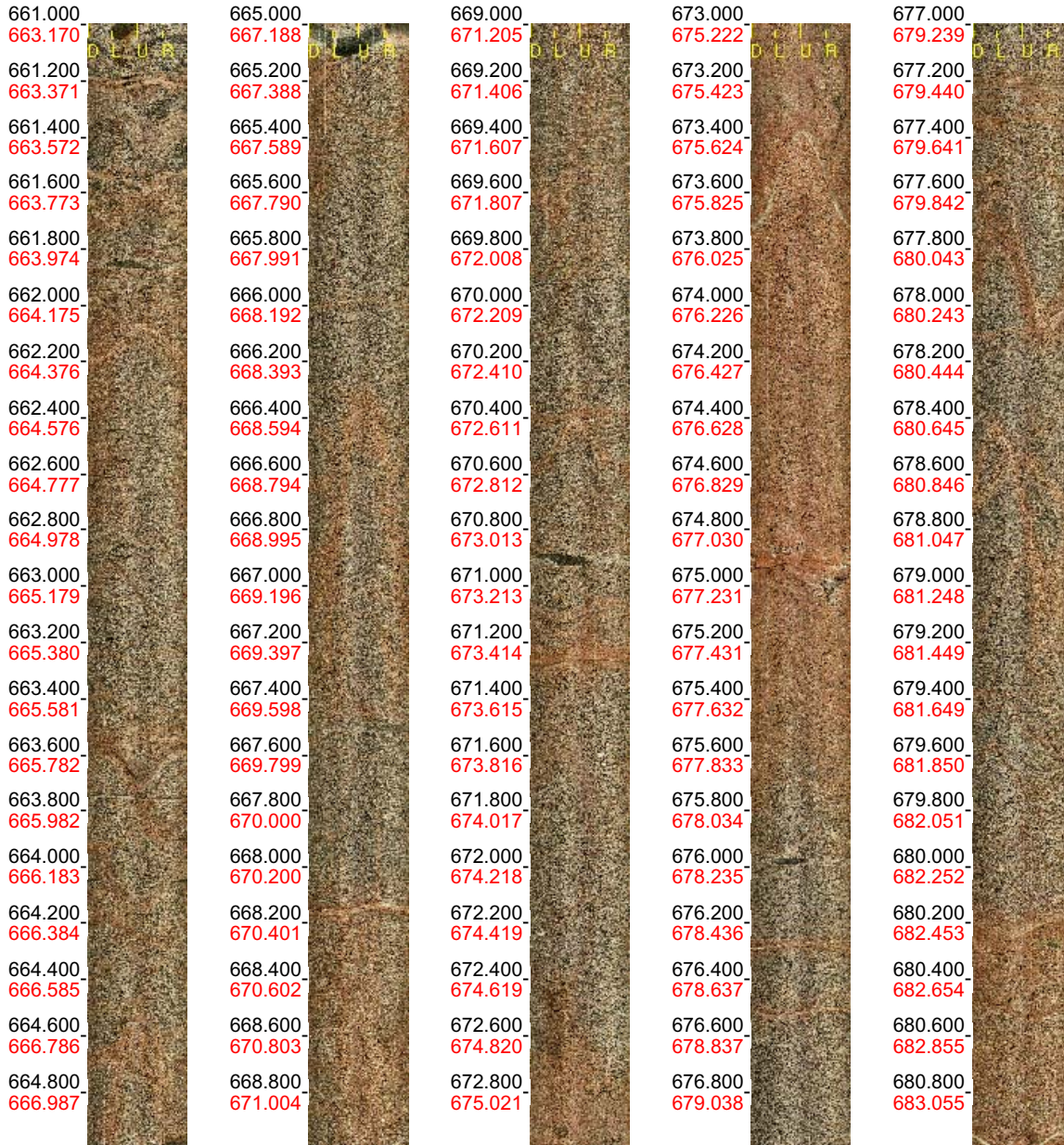
Scale: 1 : 20

Aspect: 150 %

29 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 661.000 - 681.000 m
Azimuth: 264.5
Inclination: -84.0



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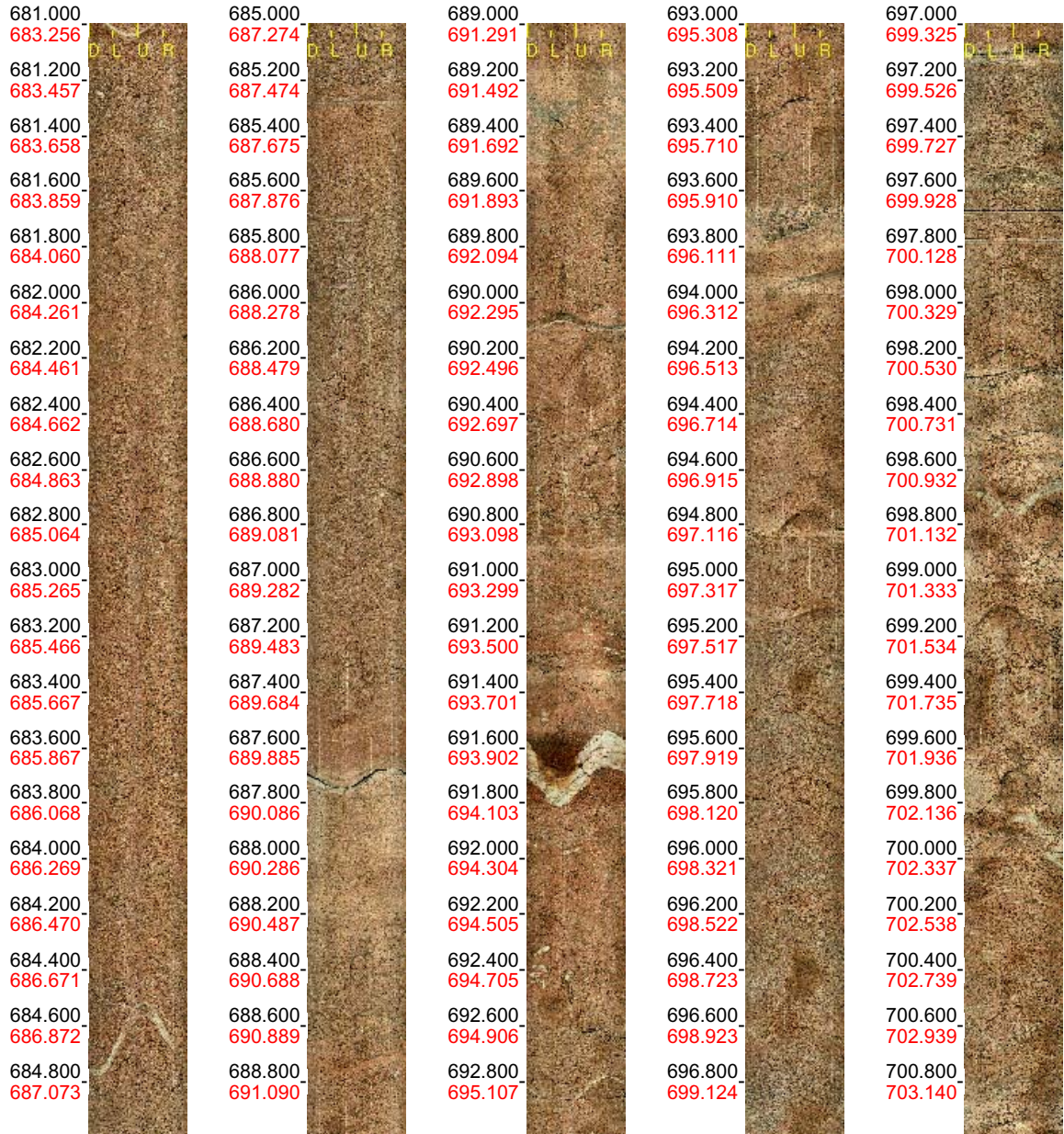
Scale: 1 : 20

Aspect: 150 %

30 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 681.000 - 701.000 m
Azimuth: 264.5
Inclination: -84.0



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

31 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 701.000 - 721.000 m
Azimuth: 264.6
Inclination: -83.8



Printed: 2006-03-22 09:26:54

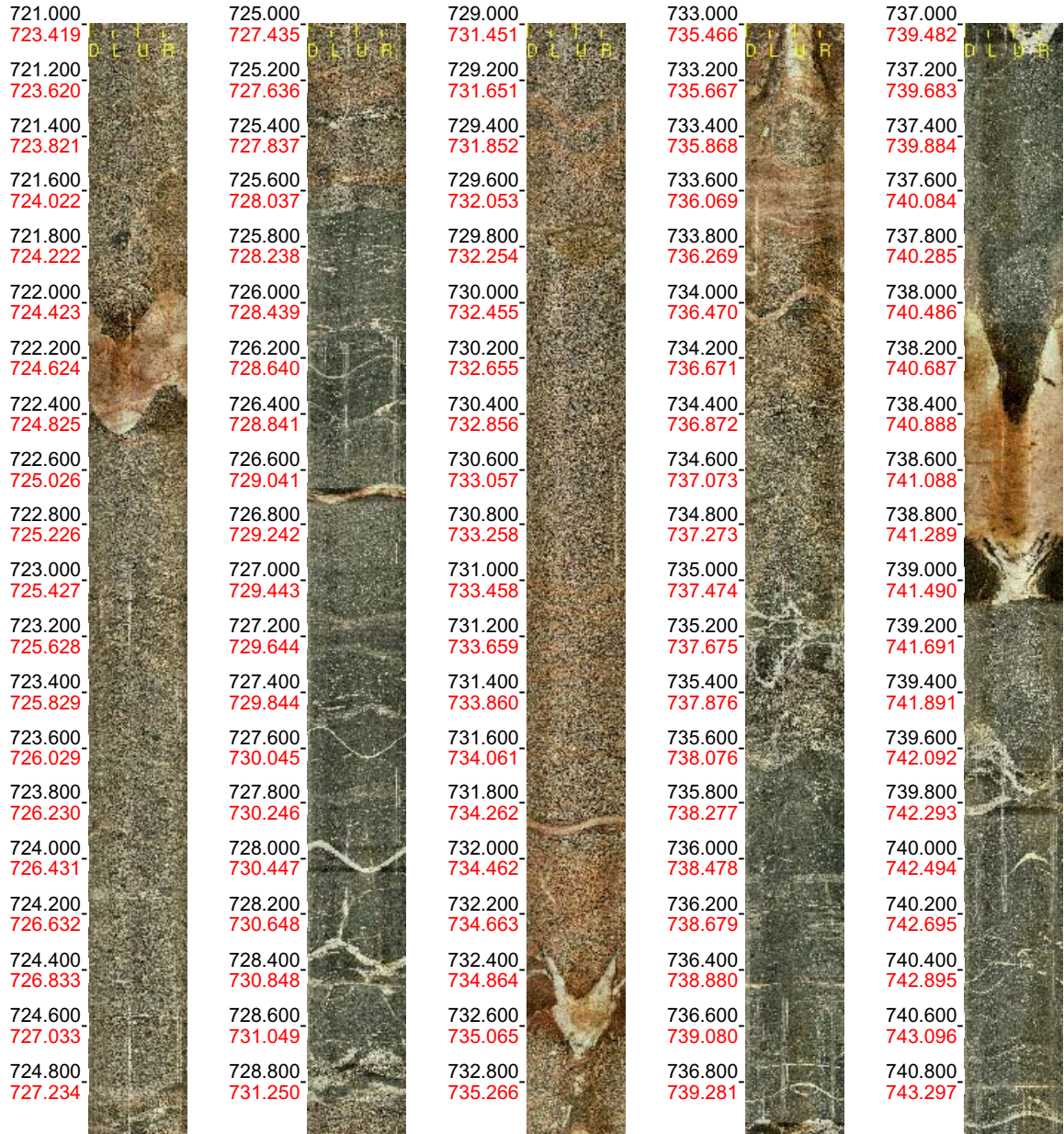
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Aspect: 150 %

32 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 721.000 - 741.000 m
 Azimuth: 266.4
 Inclination: -83.9



Printed: 2006-03-22 09:26:54

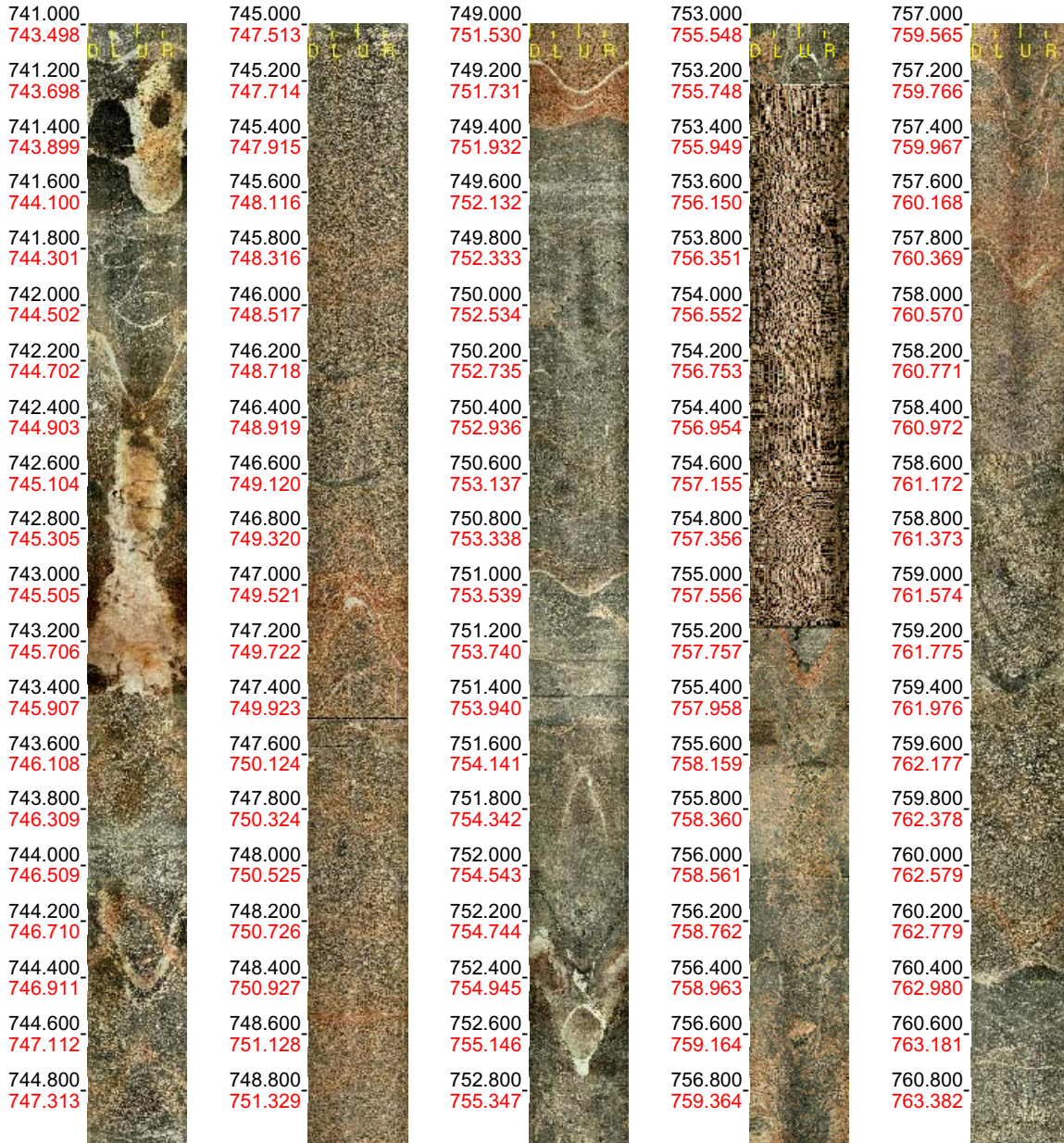
Scale: 1 : 20

Aspect: 150 %

33 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 741.000 - 761.000 m
 Azimuth: 266.4
 Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

34 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 761.000 - 781.000 m
 Azimuth: 266.3
 Inclination: -84.0



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

35 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 781.000 - 801.000 m
Azimuth: 268.2
Inclination: -83.9



Printed: 2006-03-22 09:26:54

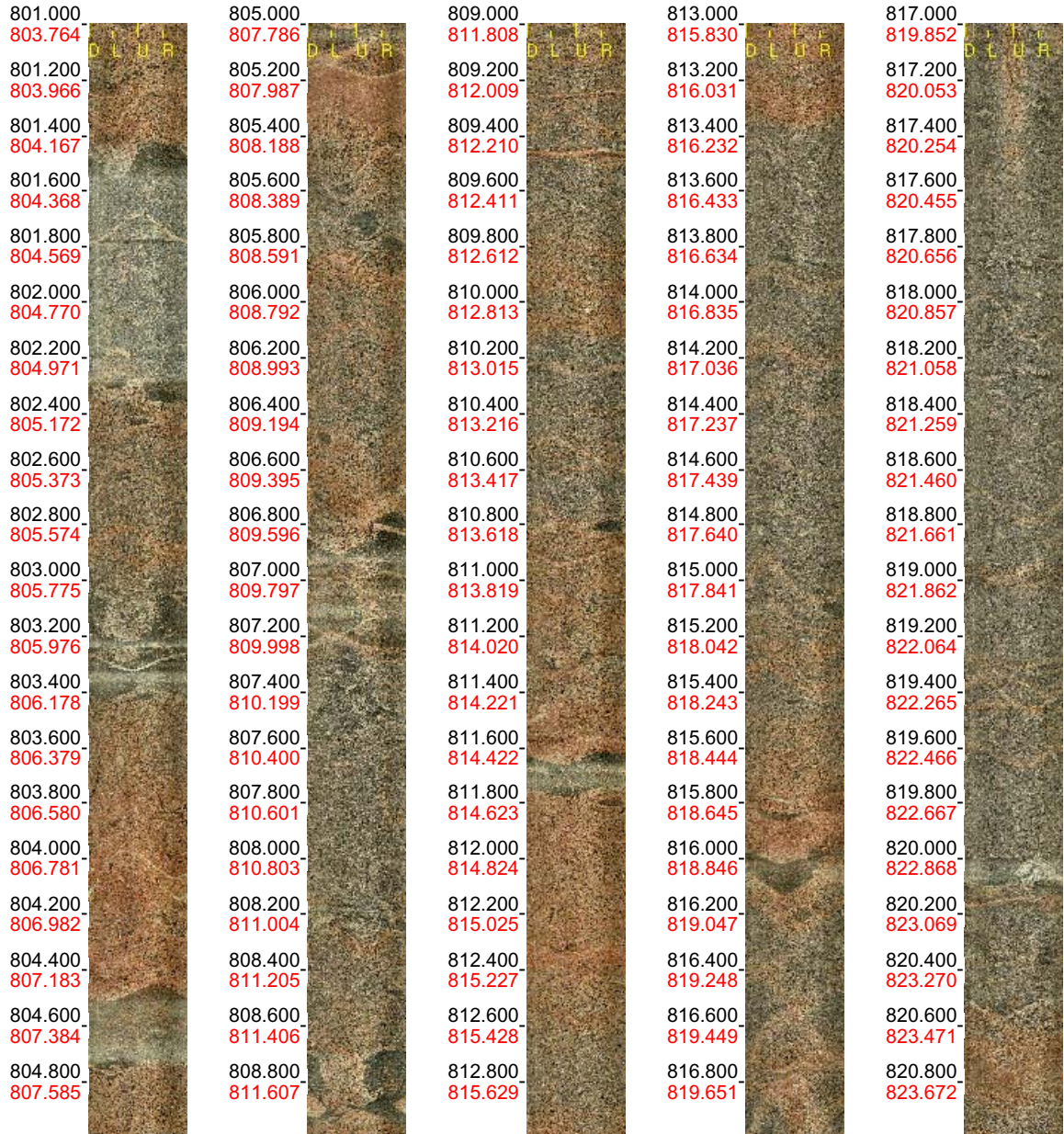
Scale: 1 : 20

Aspect: 150 %

36 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 801.000 - 821.000 m
Azimuth: 268.2
Inclination: -83.9



Printed: 2006-03-22 09:26:54

Scale: 1 : 20

Aspect: 150 %

37 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 821.000 - 841.000 m
Azimuth: 270.0
Inclination: -83.9



Printed: 2006-03-22 09:26:54

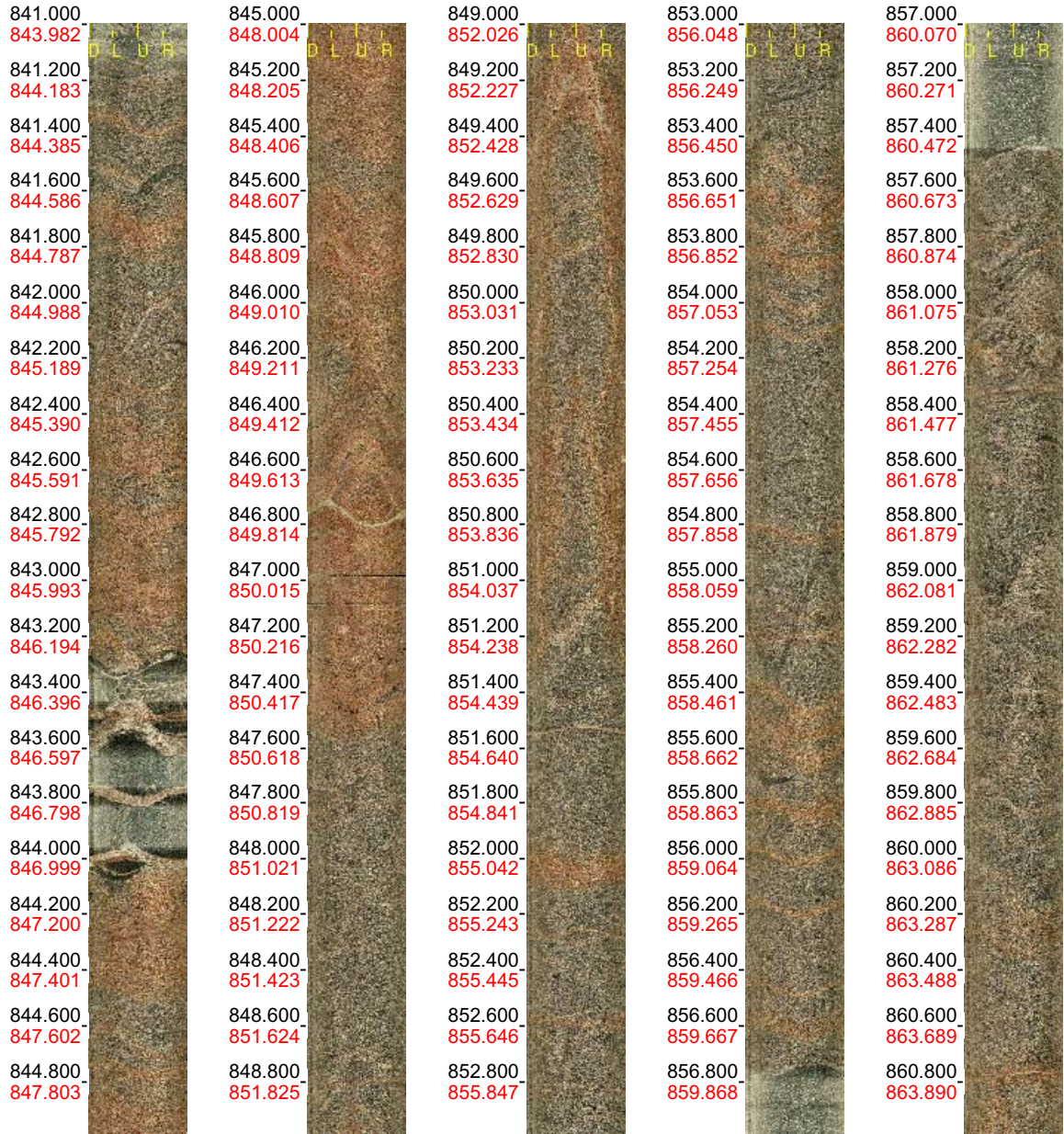
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Aspect: 150 %

38 (40)

Borehole: KLX09
 Mapping: KLX09_JEPDKJM

Depth range: 841.000 - 861.000 m
 Azimuth: 270.0
 Inclination: -83.9



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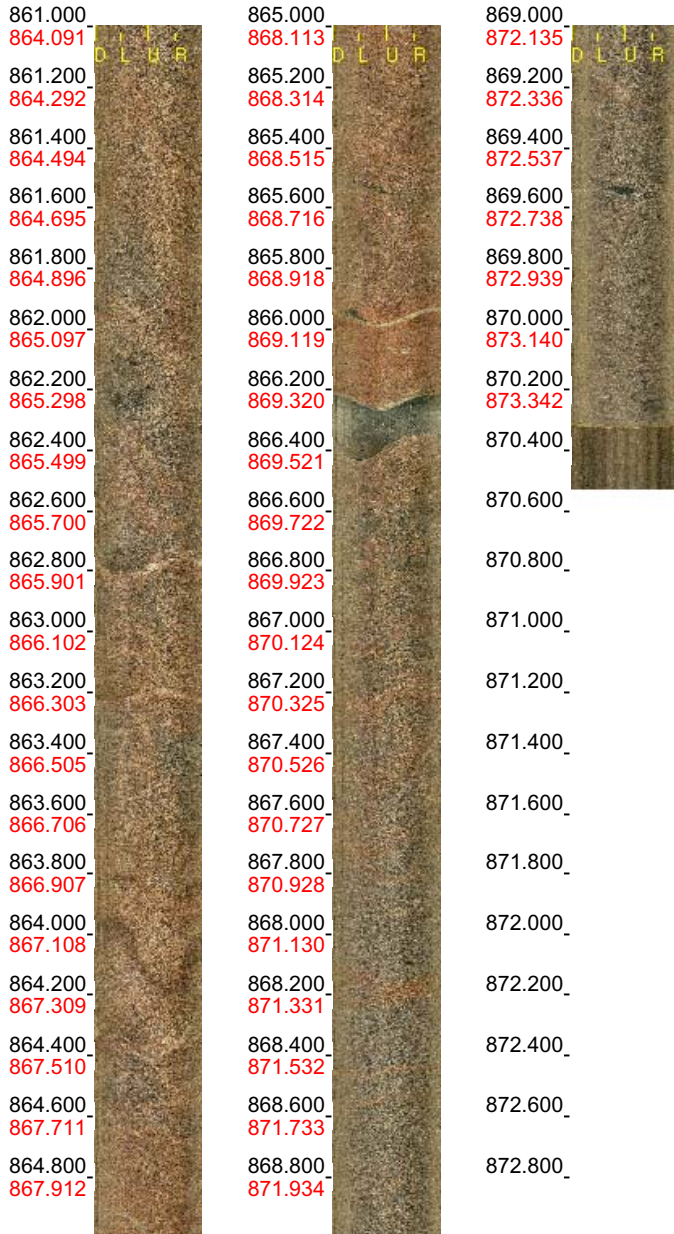
Scale: 1 : 20

Aspect: 150 %

39 (40)

Borehole: KLX09
Mapping: KLX09_JEPDKJM

Depth range: 861.000 - 870.536 m
Azimuth: 271.8
Inclination: -83.9



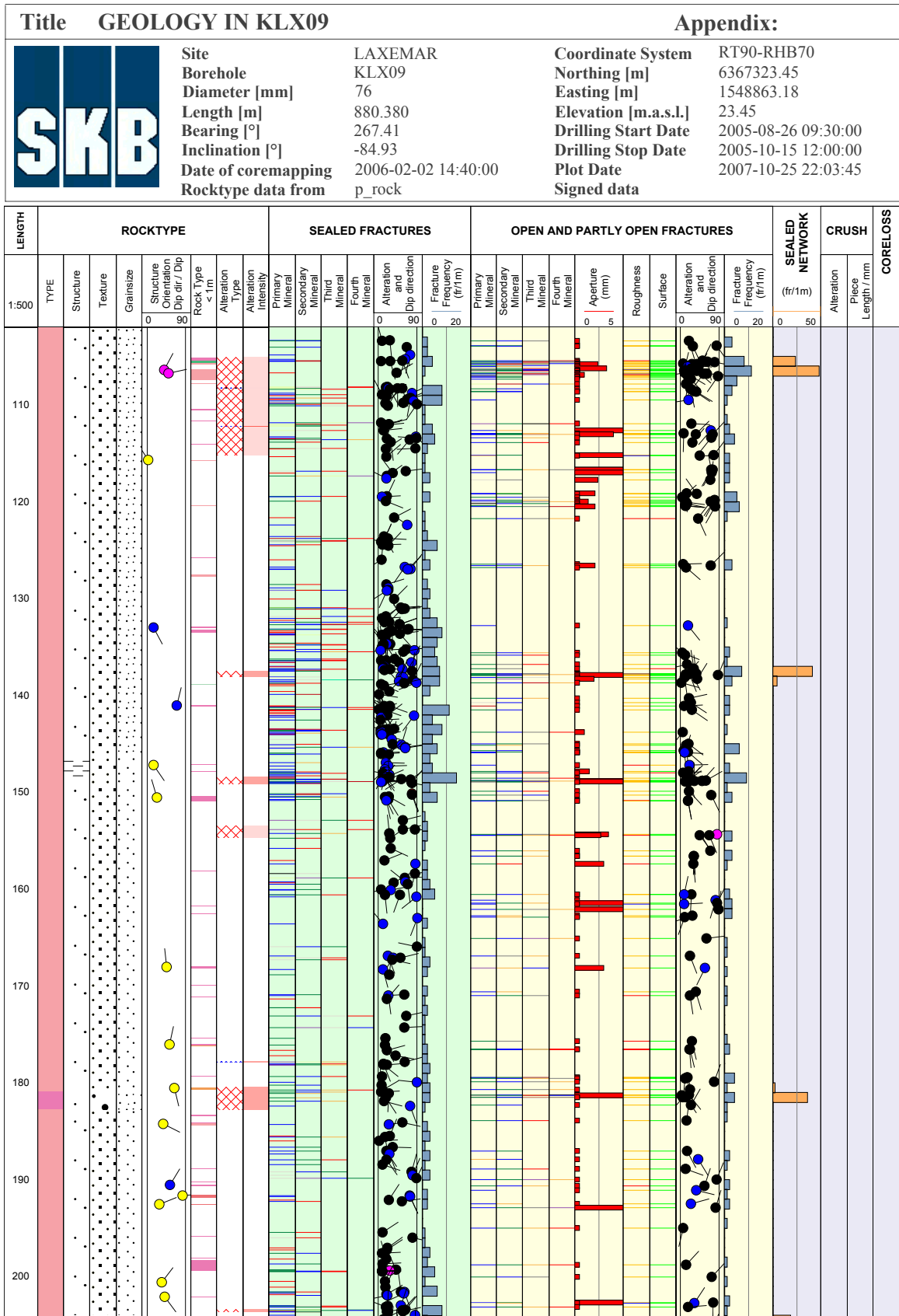
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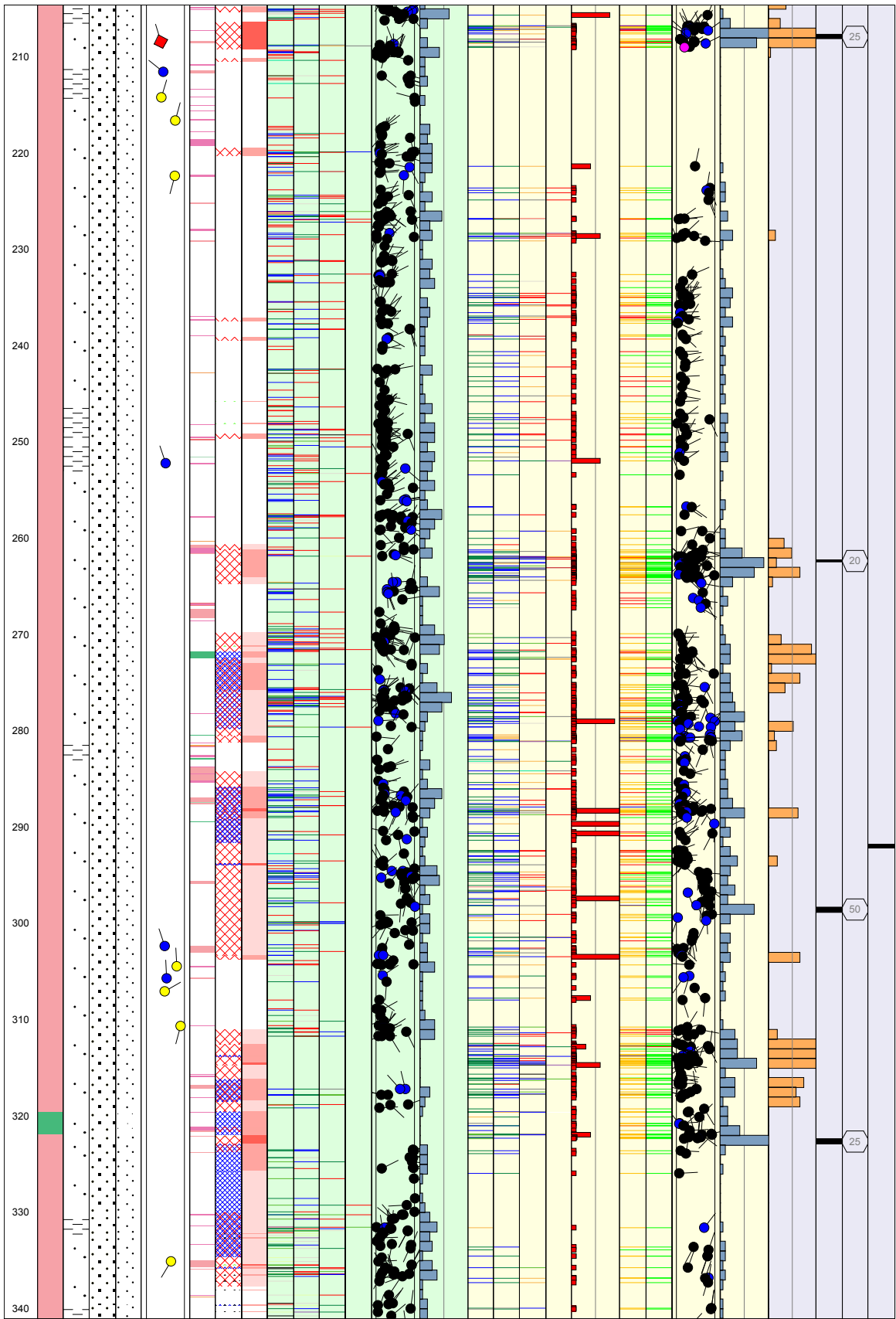
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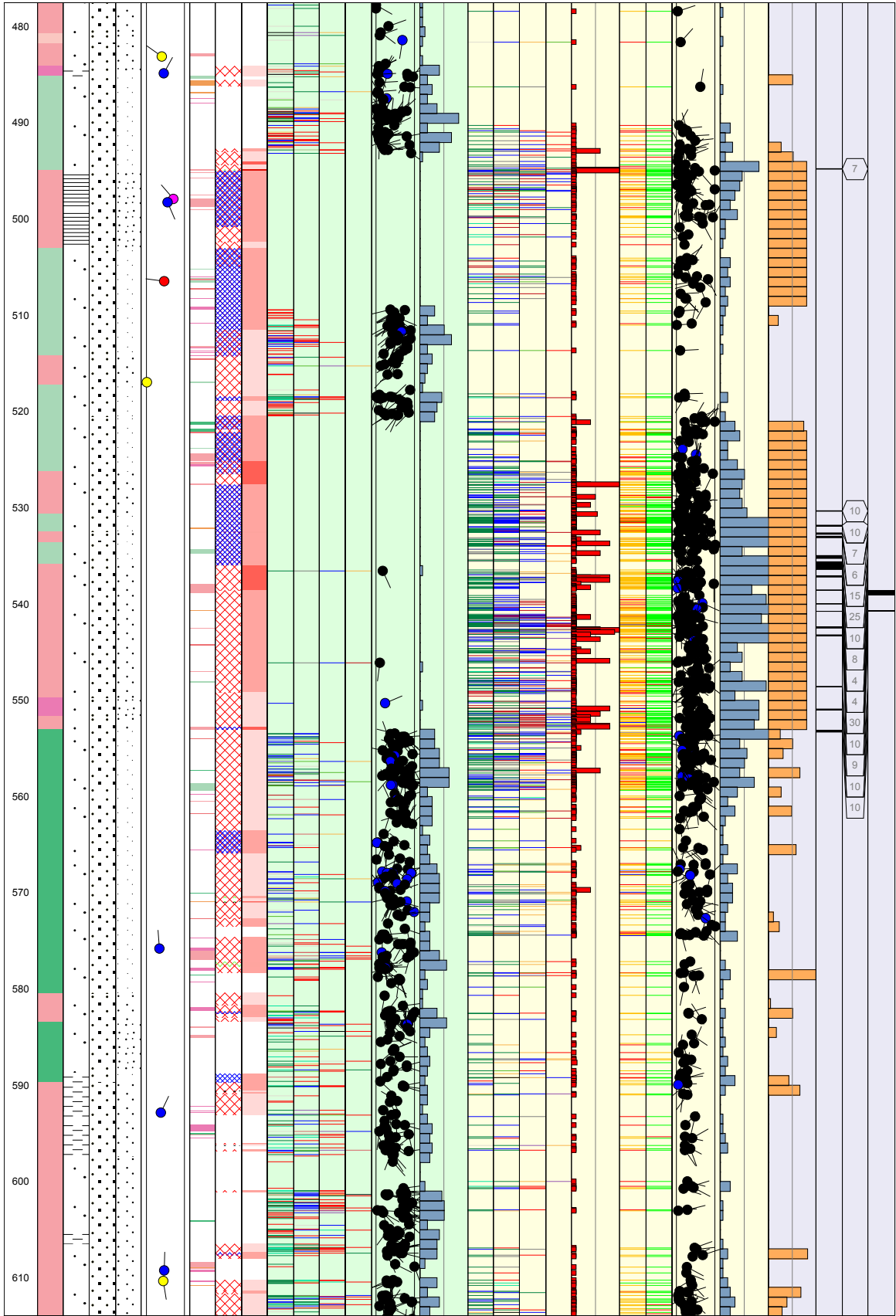
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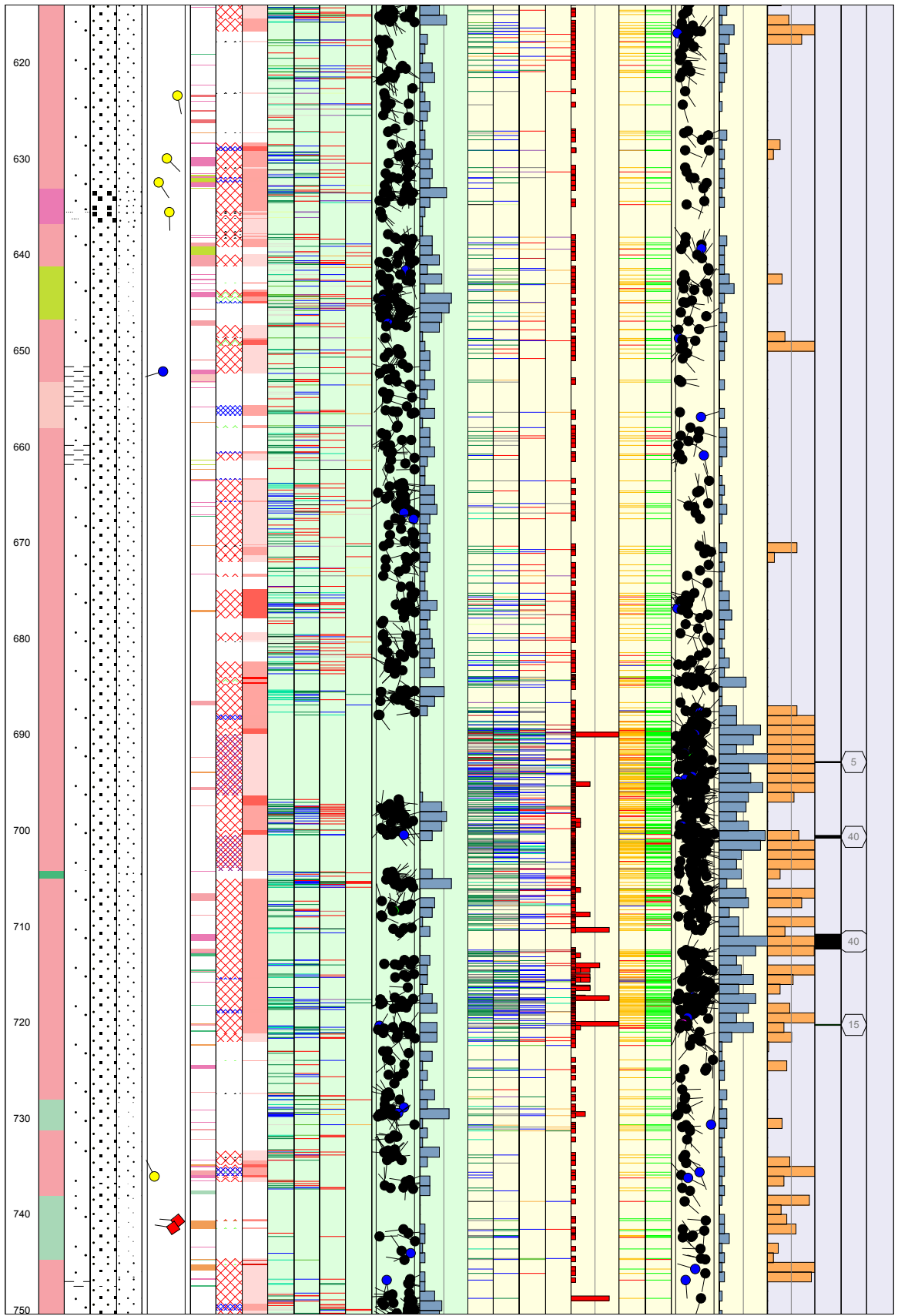
40 (40)

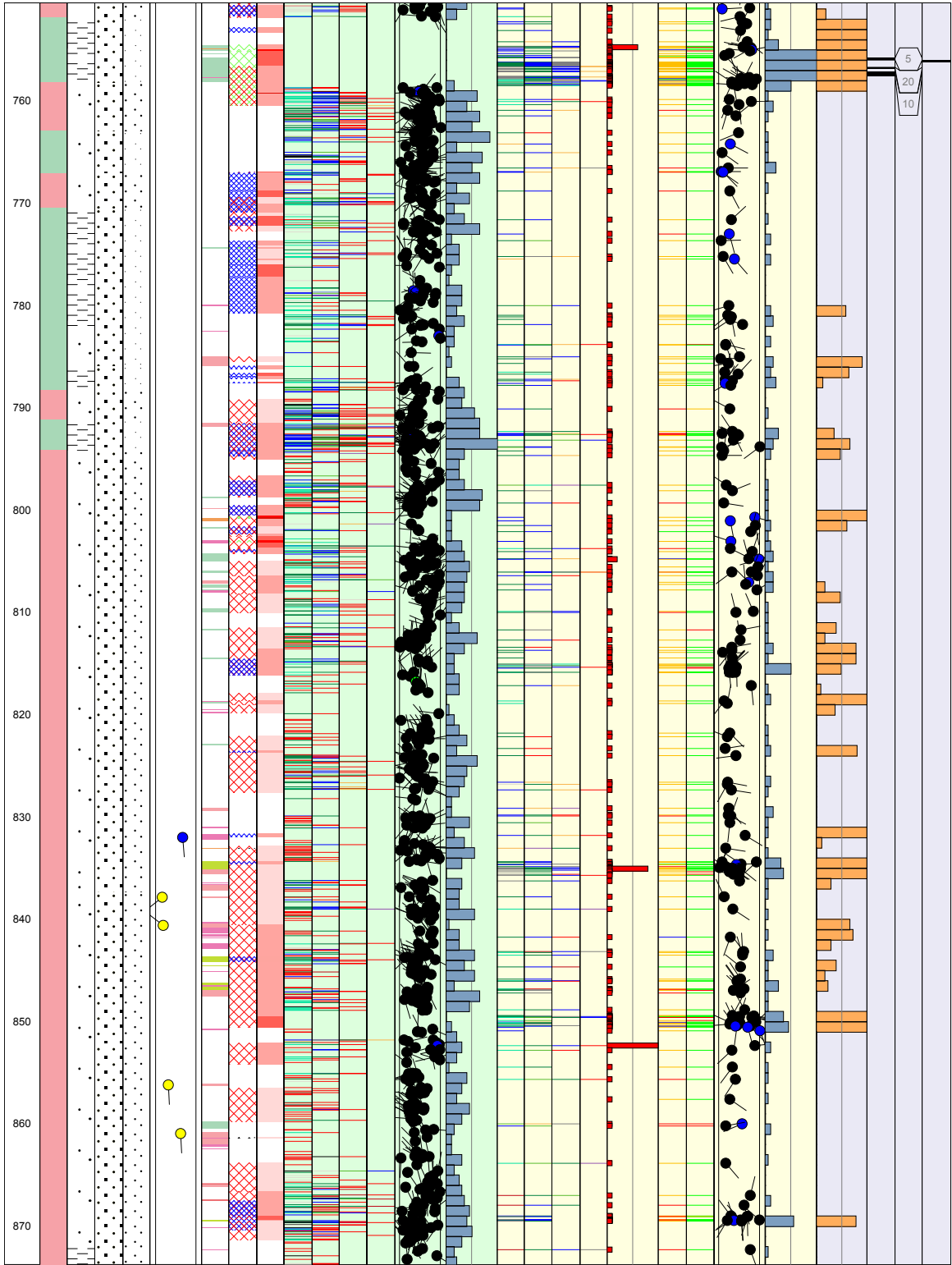
WellCad diagram for KLX09











Legend to WellCad diagram for KLX09

Title		LEGEND FOR LAXEMAR		KLX09	
		Site	LAXEMAR		
		Borehole	KLX09		
	Plot Date	2007-10-25 22:03:45			
	Signed data				
ROCKTYPE LAXEMAR		ROCK ALTERATION TYPE		MINERAL	
	Åspö Diorite		Oxidized		Biotite
	Dolerite		Chloritised		Epidote
	Fine-grained Göttemargranite		Epidotized		Flourite
	Coarse-grained Göttemargranite		Weathered		White Feldspar
	Fine-grained granite		Tectonized		Hematite
	Pegmatite		Sericitized		Calcite
	Granite		Quartz dissolution		Chlorite
	Åvrö granite		Silicification		Chalcopyrite
	Quartz monzodiorite		Argillization		Quartz
	Diorite / Gabbro		Albitization		Red Feldspar
	Fine-grained dioritoid		Carbonatization		Muscovite
	Fine-grained diorite-gabbro		Saussuritization		Unknown
	Sulphide mineralization		Steatitization		Pyrite
	Sandstone		Uralitization		Clay Minerals
	Soil		Laumontitization		Laumontite
	Åvrö quartz monzodiorite		Fract zone alteration		Prehnite
	Åvrö granodiorite				Oxidized Walls
STRUCTURE		STRUCTURE ORIENTATION		ROCK ALTERATION INTENSITY	
	Cataclastic		Cataclastic		No intensity
	Schistose		Bedded		Faint
	Gneissic		Gneissic		Weak
	Mylonitic		Schistose		Medium
	Ductile Shear Zone		Brittle-Ductile Shear Zone		Strong
	Brittle-Ductile Zone		Ductile Shear Zone		
	Veined		Lineated	ROUGHNESS	
	Banded		Banded		Planar
	Massive		Veined		Undulating
	Foliated		Brecciated		Stepped
	Brecciated		Foliated		Irregular
	Lineated		Mylonitic	SURFACE	
TEXTURE					Rough
	Hornfelsed				Smooth
	Porphyritic				Slickensided
	Ophitic			CRUSH ALTERATION	
	Equigranular				Slightly Altered
	Augen-Bearing				Moderately Altered
	Unequigranular				Highly Altered
	Metamorphic				Completely Altered
GRAINSIZE					Gouge
	Aphanitic				Fresh
	Fine-grained			FRACTURE ALTERATION	
	Fine to medium grained				Slightly Altered
	Medium to coarse grained				Moderately Altered
	Coarse-grained				Highly Altered
	Medium-grained				Completely Altered
					Gouge
					Fresh
				FRACTURE DIRECTION	
				STRUKTURE ORIENTATION	
				Dip Direction 0 - 360°	
				0/360°	
				270°	
				180°	
				90°	
				Dip 0 - 90°	

Appendix 6

In-data: Borehole length and diameter for KLX09

KLX09, 2005-08-26 09:30:00 - 2005-10-15 12:00:00 (100.600 - 880.380 m)

Sub Secup (m)	Sub Seclow (m)	Hole Diam (m)	Comment
100.600	101.050	0.0860	T-86
101.050	880.380	0.0758	Corac N3/50

Printout from SICADA 2006-02-06 14:00:33.

Appendix 7

In-data: Reference marks for depth adjustments for KLX09

KLX09, 2005-10-23 07:00:00 - 2005-10-23 12:00:00 (110.000 - 850.000 m)

Bhlen (m)	Rotation Speed (rpm)	Start Flow (l/min)	Stop Flow (l/min)	Stop Pressure (bar)	Cutter Time (s)	Trace Detectable	Cutter Diameter (mm)	Comment
110.00	400.00	100	1000	48.0	150	Yes		
150.00	400.00	100	1000	50.0	165	Yes		
200.00	400.00	120	1000	52.0	210	Yes		
250.00	400.00	120	1000	52.0	177	Yes		
300.00	400.00	160	1000	54.0	185	Yes		
350.00	400.00	100	1000	52.0	155	Yes		
400.00	400.00	140	1000	52.0	168	Yes		
450.00	400.00	200	1000	50.0	320	Yes		
500.00	400.00	200	1000	55.0	300	Yes		
550.00	400.00	150	1000	56.0	320	Yes		
600.00	400.00	200	1000	56.0	440	Yes		
650.00	400.00	120	1000	54.0	460	Yes		
700.00	400.00	220	1000	54.0	200	Yes		
750.00	400.00	240	1000	52.0	225	Yes		
800.00	400.00	220	1000	54.0	220	Yes		
850.00	400.00	240	1000	52.0	440	Yes		

Printout from SICADA 2006-02-02 16:30:40.

In-data: Borehole deviation data for KLX09

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
KLX09	RT90-RHB70	6367323.45	1548863.18	23.45	0.00	0.00	-84.94	267.41	0.990	1.760	0.00	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.44	1548862.91	20.46	3.00	2.99	-84.94	267.41	0.990	1.760	0.05	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.42	1548862.65	17.48	6.00	5.98	-84.96	267.41	0.990	1.760	0.10	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.41	1548862.39	14.49	9.00	8.97	-85.04	267.42	0.990	1.760	0.16	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.40	1548862.13	11.50	12.00	11.95	-85.21	267.43	0.990	1.760	0.21	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.39	1548861.89	8.51	15.00	14.94	-85.34	267.44	0.990	1.760	0.26	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.38	1548861.64	5.52	18.00	17.93	-85.35	267.44	0.990	1.760	0.31	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.37	1548861.40	2.53	21.00	20.92	-85.33	267.45	0.990	1.760	0.36	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.36	1548861.15	-0.46	24.00	23.91	-85.24	267.46	0.990	1.760	0.41	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.35	1548860.90	-3.45	27.00	26.90	-85.19	267.47	0.990	1.760	0.47	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.33	1548860.65	-6.44	30.00	29.89	-85.13	267.47	0.990	1.760	0.52	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.32	1548860.39	-9.43	33.00	32.88	-85.10	267.48	0.990	1.760	0.57	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.31	1548860.14	-12.42	36.00	35.87	-85.08	267.49	0.990	1.760	0.62	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.30	1548859.88	-15.41	39.00	38.86	-84.98	267.50	0.990	1.760	0.67	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.29	1548859.61	-18.40	42.00	41.85	-84.83	267.50	0.990	1.760	0.73	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.28	1548859.34	-21.38	45.00	44.84	-84.75	267.51	0.990	1.760	0.78	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.27	1548859.06	-24.37	48.00	47.82	-84.66	267.52	0.990	1.760	0.83	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.25	1548858.78	-27.36	51.00	50.81	-84.55	267.53	0.990	1.760	0.88	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.24	1548858.49	-30.34	54.00	53.80	-84.43	267.53	0.990	1.760	0.93	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.23	1548858.20	-33.33	57.00	56.78	-84.35	267.54	0.990	1.760	0.98	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.22	1548857.90	-36.31	60.00	59.77	-84.16	267.55	0.990	1.760	1.04	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.20	1548857.59	-39.30	63.00	62.75	-84.09	267.56	0.990	1.760	1.09	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.19	1548857.28	-42.28	66.00	65.73	-84.00	267.56	0.990	1.760	1.14	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.18	1548856.97	-45.26	69.00	68.72	-83.85	267.57	0.990	1.760	1.19	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.16	1548856.64	-48.25	72.00	71.70	-83.71	267.58	0.990	1.760	1.24	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.15	1548856.31	-51.23	75.00	74.68	-83.58	267.59	0.990	1.760	1.30	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.13	1548855.97	-54.21	78.00	77.66	-83.55	267.59	0.990	1.760	1.35	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.12	1548855.64	-57.19	81.00	80.64	-83.52	267.60	0.990	1.760	1.40	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.11	1548855.30	-60.17	84.00	83.62	-83.41	267.61	0.990	1.760	1.45	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.09	1548854.95	-63.15	87.00	86.60	-83.25	267.62	0.990	1.760	1.50	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.08	1548854.59	-66.13	90.00	89.58	-83.13	267.62	0.990	1.760	1.56	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.06	1548854.23	-69.11	93.00	92.56	-83.07	267.63	0.990	1.760	1.61	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.05	1548853.87	-72.09	96.00	95.54	-82.89	267.64	0.990	1.760	1.66	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.03	1548853.49	-75.06	99.00	98.51	-82.73	267.65	0.990	1.760	1.71	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367323.02	1548853.11	-78.04	102.00	101.49	-82.73	267.65	0.990	1.760	1.76	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367323.00	1548852.73	-81.01	105.00	104.47	-82.73	267.66	0.990	1.760	1.81	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.98	1548852.35	-83.99	108.00	107.44	-82.73	267.67	0.990	1.760	1.87	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.97	1548851.97	-86.97	111.00	110.42	-82.71	267.68	0.990	1.760	1.92	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.95	1548851.59	-89.94	114.00	113.39	-82.70	267.69	0.990	1.760	1.97	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.94	1548851.21	-92.92	117.00	116.37	-82.69	267.15	0.990	1.760	2.02	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.92	1548850.83	-95.89	120.00	119.35	-82.68	267.15	0.990	1.760	2.07	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.90	1548850.45	-98.87	123.00	122.32	-82.66	267.15	0.990	1.760	2.13	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.88	1548850.06	-101.84	126.00	125.30	-82.66	268.12	0.990	1.760	2.18	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.87	1548849.68	-104.82	129.00	128.27	-82.66	267.92	0.990	1.760	2.23	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.85	1548849.30	-107.79	132.00	131.25	-82.67	267.16	0.990	1.760	2.28	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.83	1548848.92	-110.77	135.00	134.22	-82.66	267.26	0.990	1.760	2.33	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.82	1548848.53	-113.74	138.00	137.20	-82.66	267.26	0.990	1.760	2.38	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.80	1548848.15	-116.72	141.00	140.17	-82.66	267.26	0.990	1.760	2.44	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.78	1548847.77	-119.70	144.00	143.15	-82.66	267.68	0.990	1.760	2.49	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.77	1548847.38	-122.67	147.00	146.12	-82.64	267.79	0.990	1.760	2.54	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.75	1548847.00	-125.65	150.00	149.10	-82.63	267.88	0.990	1.760	2.59	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.74	1548846.62	-128.62	153.00	152.07	-82.63	267.66	0.990	1.760	2.64	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.72	1548846.23	-131.60	156.00	155.05	-82.63	267.66	0.990	1.760	2.70	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.70	1548845.85	-134.57	159.00	158.02	-82.63	267.61	0.990	1.760	2.75	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.69	1548845.46	-137.55	162.00	161.00	-82.63	267.69	0.990	1.760	2.80	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.67	1548845.08	-140.52	165.00	163.98	-82.63	267.31	0.990	1.760	2.85	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.65	1548844.69	-143.50	168.00	166.95	-82.64	267.26	0.990	1.760	2.90	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.64	1548844.31	-146.47	171.00	169.93	-82.64	267.31	0.990	1.760	2.95	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.62	1548843.93	-149.45	174.00	172.90	-82.65	267.29	0.990	1.760	3.01	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.60	1548843.54	-152.42	177.00	175.88	-82.66	267.28	0.990	1.760	3.06	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.58	1548843.16	-155.40	180.00	178.85	-82.66	267.28	0.990	1.760	3.11	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.56	1548842.78	-158.37	183.00	181.83	-82.65	267.33	0.990	1.760	3.16	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.54	1548842.39	-161.35	186.00	184.80	-82.63	267.35	0.990	1.760	3.21	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.53	1548842.01	-164.32	189.00	187.78	-82.63	267.39	0.990	1.760	3.27	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.51	1548841.62	-167.30	192.00	190.75	-82.63	267.19	0.990	1.760	3.32	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.49	1548841.24	-170.28	195.00	193.73	-82.65	267.16	0.990	1.760	3.37	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.47	1548840.86	-173.25	198.00	196.70	-82.65	267.16	0.990	1.760	3.42	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.45	1548840.47	-176.23	201.00	199.68	-82.66	267.16	0.990	1.760	3.47	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.43	1548840.09	-179.20	204.00	202.65	-82.66	267.18	0.990	1.760	3.52	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.41	1548839.71	-182.18	207.00	205.63	-82.67	267.13	0.990	1.760	3.58	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.39	1548839.32	-185.15	210.00	208.61	-82.68	266.82	0.990	1.760	3.63	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.37	1548838.94	-188.13	213.00	211.58	-82.68	266.82	0.990	1.760	3.68	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.35	1548838.56	-191.10	216.00	214.56	-82.67	267.02	0.990	1.760	3.73	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.33	1548838.18	-194.08	219.00	217.53	-82.67	267.13	0.990	1.760	3.78	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.31	1548837.80	-197.05	222.00	220.51	-82.68	267.13	0.990	1.760	3.84	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.30	1548837.42	-200.03	225.00	223.48	-82.70	267.49	0.990	1.760	3.89	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.28	1548837.03	-203.01	228.00	226.46	-82.72	267.46	0.990	1.760	3.94	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.26	1548836.66	-205.98	231.00	229.43	-82.73	267.51	0.990	1.760	3.99	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367322.25	1548836.28	-208.96	234.00	232.41	-82.73	267.51	0.990	1.760	4.04	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.23	1548835.90	-211.93	237.00	235.39	-82.73	267.72	0.990	1.760	4.09	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.21	1548835.52	-214.91	240.00	238.36	-82.72	267.72	0.990	1.760	4.15	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.20	1548835.14	-217.88	243.00	241.34	-82.73	267.72	0.990	1.760	4.20	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.18	1548834.76	-220.86	246.00	244.31	-82.73	267.63	0.990	1.760	4.25	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.17	1548834.38	-223.84	249.00	247.29	-82.75	267.53	0.990	1.760	4.30	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.15	1548834.00	-226.81	252.00	250.27	-82.75	267.48	0.990	1.760	4.35	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.14	1548833.62	-229.79	255.00	253.24	-82.75	267.85	0.990	1.760	4.41	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.12	1548833.24	-232.76	258.00	256.22	-82.75	267.85	0.990	1.760	4.46	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.11	1548832.87	-235.74	261.00	259.19	-82.78	267.61	0.990	1.760	4.51	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.09	1548832.49	-238.72	264.00	262.17	-82.78	267.56	0.990	1.760	4.56	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.07	1548832.11	-241.69	267.00	265.15	-82.79	267.56	0.990	1.760	4.61	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.06	1548831.74	-244.67	270.00	268.12	-82.81	267.21	0.990	1.760	4.67	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.04	1548831.36	-247.65	273.00	271.10	-82.81	267.21	0.990	1.760	4.72	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.02	1548830.99	-250.62	276.00	274.08	-82.81	267.21	0.990	1.760	4.77	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367322.00	1548830.61	-253.60	279.00	277.05	-82.82	267.46	0.990	1.760	4.82	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.99	1548830.24	-256.58	282.00	280.03	-82.88	267.48	0.990	1.760	4.87	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.97	1548829.87	-259.55	285.00	283.01	-82.89	267.46	0.990	1.760	4.92	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.95	1548829.50	-262.53	288.00	285.98	-82.90	267.56	0.990	1.760	4.98	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.94	1548829.13	-265.51	291.00	288.96	-82.90	267.50	0.990	1.760	5.03	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.92	1548828.76	-268.48	294.00	291.94	-82.91	267.60	0.990	1.760	5.08	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.91	1548828.39	-271.46	297.00	294.91	-82.91	267.60	0.990	1.760	5.13	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.89	1548828.02	-274.44	300.00	297.89	-82.91	267.81	0.990	1.760	5.18	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.88	1548827.65	-277.41	303.00	300.87	-82.90	267.64	0.990	1.760	5.24	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.86	1548827.28	-280.39	306.00	303.84	-82.90	267.59	0.990	1.760	5.29	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.85	1548826.90	-283.37	309.00	306.82	-82.88	267.59	0.990	1.760	5.34	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.83	1548826.53	-286.35	312.00	309.80	-82.86	267.50	0.990	1.760	5.39	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.81	1548826.16	-289.32	315.00	312.77	-82.85	267.39	0.990	1.760	5.44	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.80	1548825.79	-292.30	318.00	315.75	-82.85	267.39	0.990	1.760	5.49	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.78	1548825.41	-295.28	321.00	318.73	-82.85	267.39	0.990	1.760	5.55	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.76	1548825.04	-298.25	324.00	321.70	-82.85	267.51	0.990	1.760	5.60	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.75	1548824.67	-301.23	327.00	324.68	-82.88	267.48	0.990	1.760	5.65	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.73	1548824.30	-304.21	330.00	327.66	-82.88	267.48	0.990	1.760	5.70	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.71	1548823.93	-307.18	333.00	330.64	-82.89	267.48	0.990	1.760	5.75	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.70	1548823.56	-310.16	336.00	333.61	-82.90	267.03	0.990	1.760	5.81	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.68	1548823.19	-313.14	339.00	336.59	-82.92	267.03	0.990	1.760	5.86	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.66	1548822.82	-316.11	342.00	339.57	-82.92	267.03	0.990	1.760	5.91	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.64	1548822.45	-319.09	345.00	342.54	-82.94	267.07	0.990	1.760	5.96	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.62	1548822.08	-322.07	348.00	345.52	-82.95	267.44	0.990	1.760	6.01	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.61	1548821.71	-325.05	351.00	348.50	-82.96	267.44	0.990	1.760	6.06	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.59	1548821.34	-328.02	354.00	351.48	-82.96	266.99	0.990	1.760	6.12	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.57	1548820.98	-331.00	357.00	354.45	-82.98	266.99	0.990	1.760	6.17	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.55	1548820.61	-333.98	360.00	357.43	-82.99	266.94	0.990	1.760	6.22	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367321.53	1548820.25	-336.96	363.00	360.41	-83.00	267.42	0.990	1.760	6.27	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.51	1548819.88	-339.93	366.00	363.39	-83.02	267.42	0.990	1.760	6.32	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.50	1548819.52	-342.91	369.00	366.36	-83.03	267.55	0.990	1.760	6.38	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.48	1548819.15	-345.89	372.00	369.34	-83.03	267.44	0.990	1.760	6.43	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.47	1548818.79	-348.87	375.00	372.32	-83.05	267.44	0.990	1.760	6.48	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.45	1548818.43	-351.84	378.00	375.30	-83.07	267.30	0.990	1.760	6.53	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.43	1548818.07	-354.82	381.00	378.28	-83.06	267.30	0.990	1.760	6.58	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.41	1548817.71	-357.80	384.00	381.25	-83.08	267.13	0.990	1.760	6.63	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.40	1548817.35	-360.78	387.00	384.23	-83.09	267.13	0.990	1.760	6.69	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.38	1548816.99	-363.76	390.00	387.21	-83.09	266.79	0.990	1.760	6.74	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.36	1548816.62	-366.74	393.00	390.19	-83.09	266.79	0.990	1.760	6.79	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.34	1548816.26	-369.71	396.00	393.17	-83.09	266.75	0.990	1.760	6.84	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.32	1548815.90	-372.69	399.00	396.15	-83.10	266.70	0.990	1.760	6.89	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.30	1548815.54	-375.67	402.00	399.12	-83.09	266.70	0.990	1.760	6.95	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.27	1548815.19	-378.65	405.00	402.10	-83.10	266.07	0.990	1.760	7.00	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.25	1548814.83	-381.63	408.00	405.08	-83.12	266.07	0.990	1.760	7.05	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.22	1548814.47	-384.61	411.00	408.06	-83.16	266.07	0.990	1.760	7.10	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.20	1548814.11	-387.58	414.00	411.04	-83.11	266.19	0.990	1.760	7.15	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.18	1548813.75	-390.56	417.00	414.02	-83.10	266.19	0.990	1.760	7.20	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.15	1548813.39	-393.54	420.00	416.99	-83.09	266.23	0.990	1.760	7.26	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.13	1548813.03	-396.52	423.00	419.97	-83.07	266.19	0.990	1.760	7.31	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.10	1548812.67	-399.50	426.00	422.95	-83.06	266.15	0.990	1.760	7.36	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.08	1548812.31	-402.47	429.00	425.93	-83.05	266.13	0.990	1.760	7.41	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.05	1548811.94	-405.45	432.00	428.91	-83.00	266.08	0.990	1.760	7.46	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.03	1548811.58	-408.43	435.00	431.88	-83.00	266.13	0.990	1.760	7.52	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367321.00	1548811.21	-411.41	438.00	434.86	-83.00	266.10	0.990	1.760	7.57	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.98	1548810.85	-414.39	441.00	437.84	-83.00	266.10	0.990	1.760	7.62	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.96	1548810.49	-417.36	444.00	440.82	-83.01	266.10	0.990	1.760	7.67	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.93	1548810.12	-420.34	447.00	443.79	-83.03	266.41	0.990	1.760	7.72	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.91	1548809.76	-423.32	450.00	446.77	-83.03	266.41	0.990	1.760	7.78	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.89	1548809.40	-426.30	453.00	449.75	-83.03	266.92	0.990	1.760	7.83	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.87	1548809.03	-429.27	456.00	452.73	-83.04	266.15	0.990	1.760	7.88	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.84	1548808.67	-432.25	459.00	455.71	-83.08	266.13	0.990	1.760	7.93	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.82	1548808.31	-435.23	462.00	458.68	-83.10	265.95	0.990	1.760	7.98	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.79	1548807.95	-438.21	465.00	461.66	-83.12	265.95	0.990	1.760	8.03	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.76	1548807.59	-441.19	468.00	464.64	-83.13	265.85	0.990	1.760	8.09	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.74	1548807.23	-444.17	471.00	467.62	-83.13	265.80	0.990	1.760	8.14	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.71	1548806.88	-447.14	474.00	470.60	-83.11	265.80	0.990	1.760	8.19	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.69	1548806.52	-450.12	477.00	473.58	-83.09	265.80	0.990	1.760	8.24	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.66	1548806.16	-453.10	480.00	476.55	-83.08	265.85	0.990	1.760	8.29	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.63	1548805.80	-456.08	483.00	479.53	-83.08	265.90	0.990	1.760	8.35	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.61	1548805.44	-459.06	486.00	482.51	-83.08	266.01	0.990	1.760	8.40	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.58	1548805.08	-462.04	489.00	485.49	-83.08	265.95	0.990	1.760	8.45	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367320.56	1548804.71	-465.01	492.00	488.47	-83.07	265.90	0.990	1.760	8.50	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.53	1548804.35	-467.99	495.00	491.44	-83.09	265.80	0.990	1.760	8.55	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.51	1548804.00	-470.97	498.00	494.42	-83.11	266.05	0.990	1.760	8.60	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.48	1548803.64	-473.95	501.00	497.40	-83.09	266.13	0.990	1.760	8.66	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.46	1548803.28	-476.93	504.00	500.38	-83.08	265.75	0.990	1.760	8.71	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.43	1548802.91	-479.90	507.00	503.36	-83.07	265.70	0.990	1.760	8.76	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.40	1548802.55	-482.88	510.00	506.34	-83.05	265.70	0.990	1.760	8.81	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.37	1548802.19	-485.86	513.00	509.31	-83.03	265.75	0.990	1.760	8.86	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.35	1548801.83	-488.84	516.00	512.29	-83.03	265.94	0.990	1.760	8.92	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.32	1548801.46	-491.82	519.00	515.27	-83.04	266.25	0.990	1.760	8.97	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.30	1548801.10	-494.79	522.00	518.25	-83.05	265.92	0.990	1.760	9.02	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.27	1548800.74	-497.77	525.00	521.22	-83.06	265.92	0.990	1.760	9.07	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.25	1548800.38	-500.75	528.00	524.20	-83.06	265.87	0.990	1.760	9.12	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.22	1548800.02	-503.73	531.00	527.18	-83.07	266.23	0.990	1.760	9.17	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.20	1548799.66	-506.71	534.00	530.16	-83.09	265.94	0.990	1.760	9.23	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.17	1548799.30	-509.68	537.00	533.14	-83.17	265.99	0.990	1.760	9.28	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.15	1548798.94	-512.66	540.00	536.12	-83.19	265.99	0.990	1.760	9.33	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.12	1548798.59	-515.64	543.00	539.09	-83.16	266.29	0.990	1.760	9.38	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.10	1548798.23	-518.62	546.00	542.07	-83.16	266.08	0.990	1.760	9.43	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.07	1548797.87	-521.60	549.00	545.05	-83.16	266.00	0.990	1.760	9.49	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.05	1548797.52	-524.58	552.00	548.03	-83.17	265.90	0.990	1.760	9.54	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.02	1548797.16	-527.56	555.00	551.01	-83.18	265.85	0.990	1.760	9.59	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367320.00	1548796.81	-530.54	558.00	553.99	-83.17	265.76	0.990	1.760	9.64	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.97	1548796.45	-533.51	561.00	556.97	-83.16	265.77	0.990	1.760	9.69	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.94	1548796.09	-536.49	564.00	559.95	-83.15	265.82	0.990	1.760	9.74	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.92	1548795.74	-539.47	567.00	562.92	-83.16	265.73	0.990	1.760	9.80	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.89	1548795.38	-542.45	570.00	565.90	-83.16	265.50	0.990	1.760	9.85	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.86	1548795.02	-545.43	573.00	568.88	-83.16	265.62	0.990	1.760	9.90	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.84	1548794.67	-548.41	576.00	571.86	-83.16	265.80	0.990	1.760	9.95	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.81	1548794.31	-551.39	579.00	574.84	-83.16	266.33	0.990	1.760	10.00	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.79	1548793.96	-554.36	582.00	577.82	-83.23	266.45	0.990	1.760	10.06	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.77	1548793.60	-557.34	585.00	580.80	-83.23	266.56	0.990	1.760	10.11	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.75	1548793.25	-560.32	588.00	583.78	-83.23	266.92	0.990	1.760	10.16	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.73	1548792.90	-563.30	591.00	586.75	-83.22	267.15	0.990	1.760	10.21	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.71	1548792.54	-566.28	594.00	589.73	-83.22	267.44	0.990	1.760	10.26	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.70	1548792.19	-569.26	597.00	592.71	-83.18	267.55	0.990	1.760	10.31	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.68	1548791.83	-572.24	600.00	595.69	-83.17	267.49	0.990	1.760	10.37	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.67	1548791.48	-575.22	603.00	598.67	-83.16	267.54	0.990	1.760	10.42	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.65	1548791.12	-578.20	606.00	601.65	-83.16	267.54	0.990	1.760	10.47	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.64	1548790.76	-581.17	609.00	604.63	-83.16	267.52	0.990	1.760	10.52	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.62	1548790.41	-584.15	612.00	607.61	-83.17	267.50	0.990	1.760	10.57	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.60	1548790.05	-587.13	615.00	610.59	-83.18	267.52	0.990	1.760	10.63	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.59	1548789.69	-590.11	618.00	613.56	-83.18	267.64	0.990	1.760	10.68	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367319.58	1548789.34	-593.09	621.00	616.54	-83.17	267.85	0.990	1.760	10.73	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.56	1548788.98	-596.07	624.00	619.52	-83.16	267.85	0.990	1.760	10.78	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.55	1548788.62	-599.05	627.00	622.50	-83.12	268.26	0.990	1.760	10.83	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.54	1548788.26	-602.03	630.00	625.48	-83.10	268.13	0.990	1.760	10.89	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.53	1548787.90	-605.00	633.00	628.46	-83.10	267.77	0.990	1.760	10.94	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.51	1548787.54	-607.98	636.00	631.43	-83.13	267.47	0.990	1.760	10.99	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.49	1548787.18	-610.96	639.00	634.41	-83.13	267.32	0.990	1.760	11.04	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.48	1548786.83	-613.94	642.00	637.39	-83.14	267.20	0.990	1.760	11.09	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.46	1548786.47	-616.92	645.00	640.37	-83.14	266.94	0.990	1.760	11.14	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.44	1548786.11	-619.90	648.00	643.35	-83.12	266.55	0.990	1.760	11.20	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.42	1548785.75	-622.87	651.00	646.33	-83.12	266.47	0.990	1.760	11.25	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.39	1548785.39	-625.85	654.00	649.31	-83.18	266.43	0.990	1.760	11.30	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.37	1548785.04	-628.83	657.00	652.28	-83.22	266.41	0.990	1.760	11.35	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.35	1548784.69	-631.81	660.00	655.26	-83.23	266.69	0.990	1.760	11.40	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.33	1548784.33	-634.79	663.00	658.24	-83.23	266.60	0.990	1.760	11.46	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.31	1548783.98	-637.77	666.00	661.22	-83.20	266.51	0.990	1.760	11.51	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.29	1548783.63	-640.75	669.00	664.20	-83.22	266.23	0.990	1.760	11.56	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.26	1548783.27	-643.73	672.00	667.18	-83.23	266.15	0.990	1.760	11.61	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.24	1548782.92	-646.71	675.00	670.16	-83.24	265.99	0.990	1.760	11.66	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.21	1548782.57	-649.68	678.00	673.14	-83.24	265.71	0.990	1.760	11.71	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.19	1548782.22	-652.66	681.00	676.12	-83.22	265.30	0.990	1.760	11.77	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.16	1548781.86	-655.64	684.00	679.10	-83.22	265.28	0.990	1.760	11.82	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.13	1548781.51	-658.62	687.00	682.07	-83.22	265.28	0.990	1.760	11.87	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.10	1548781.16	-661.60	690.00	685.05	-83.22	265.33	0.990	1.760	11.92	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.07	1548780.80	-664.58	693.00	688.03	-83.21	265.39	0.990	1.760	11.97	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.04	1548780.45	-667.56	696.00	691.01	-83.11	265.39	0.990	1.760	12.03	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367319.01	1548780.09	-670.54	699.00	693.99	-83.05	265.37	0.990	1.760	12.08	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.98	1548779.72	-673.51	702.00	696.97	-83.02	265.44	0.990	1.760	12.13	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.95	1548779.36	-676.49	705.00	699.95	-83.01	265.62	0.990	1.760	12.18	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.93	1548779.00	-679.47	708.00	702.92	-83.01	266.17	0.990	1.760	12.23	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.90	1548778.63	-682.45	711.00	705.90	-83.00	266.31	0.990	1.760	12.28	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.88	1548778.27	-685.43	714.00	708.88	-82.99	266.43	0.990	1.760	12.34	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.86	1548777.90	-688.40	717.00	711.86	-83.00	266.83	0.990	1.760	12.39	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.84	1548777.54	-691.38	720.00	714.83	-83.06	266.70	0.990	1.760	12.44	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.82	1548777.18	-694.36	723.00	717.81	-83.11	266.83	0.990	1.760	12.49	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.80	1548776.82	-697.34	726.00	720.79	-83.12	267.00	0.990	1.760	12.54	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.78	1548776.46	-700.32	729.00	723.77	-83.14	267.40	0.990	1.760	12.60	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.77	1548776.10	-703.29	732.00	726.75	-83.14	267.52	0.990	1.760	12.65	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.75	1548775.75	-706.27	735.00	729.73	-83.16	267.52	0.990	1.760	12.70	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.73	1548775.39	-709.25	738.00	732.70	-83.17	267.52	0.990	1.760	12.75	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.72	1548775.03	-712.23	741.00	735.68	-83.18	267.25	0.990	1.760	12.80	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.70	1548774.68	-715.21	744.00	738.66	-83.20	266.98	0.990	1.760	12.85	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.68	1548774.32	-718.19	747.00	741.64	-83.25	266.84	0.990	1.760	12.91	Measured	2007-01-17 09:52

KLX09	RT90-RHB70	6367318.66	1548773.97	-721.17	750.00	744.62	-83.28	266.78	0.990	1.760	12.96	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.64	1548773.62	-724.15	753.00	747.60	-83.28	267.13	0.990	1.760	13.01	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.63	1548773.27	-727.13	756.00	750.58	-83.25	267.38	0.990	1.760	13.06	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.61	1548772.92	-730.11	759.00	753.56	-83.19	267.71	0.990	1.760	13.11	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.60	1548772.56	-733.08	762.00	756.54	-83.13	267.77	0.990	1.760	13.17	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.58	1548772.20	-736.06	765.00	759.52	-83.10	268.18	0.990	1.760	13.22	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.57	1548771.84	-739.04	768.00	762.49	-83.08	268.75	0.990	1.760	13.27	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.57	1548771.48	-742.02	771.00	765.47	-83.12	269.05	0.990	1.760	13.32	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.56	1548771.12	-745.00	774.00	768.45	-83.16	269.12	0.990	1.760	13.37	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.56	1548770.76	-747.98	777.00	771.43	-83.19	269.12	0.990	1.760	13.42	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.55	1548770.41	-750.95	780.00	774.41	-83.18	269.30	0.990	1.760	13.48	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.55	1548770.05	-753.93	783.00	777.39	-83.16	269.40	0.990	1.760	13.53	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.54	1548769.69	-756.91	786.00	780.37	-83.14	269.45	0.990	1.760	13.58	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.54	1548769.33	-759.89	789.00	783.34	-83.13	269.45	0.990	1.760	13.63	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.54	1548768.98	-762.87	792.00	786.32	-83.16	269.25	0.990	1.760	13.68	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548768.62	-765.85	795.00	789.30	-83.16	269.20	0.990	1.760	13.74	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548768.26	-768.83	798.00	792.28	-83.16	269.50	0.990	1.760	13.79	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548767.90	-771.80	801.00	795.26	-83.16	269.79	0.990	1.760	13.84	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548767.55	-774.78	804.00	798.24	-83.16	270.19	0.990	1.760	13.89	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548767.19	-777.76	807.00	801.22	-83.17	270.00	0.990	1.760	13.94	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548766.83	-780.74	810.00	804.19	-83.20	270.60	0.990	1.760	14.00	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.53	1548766.48	-783.72	813.00	807.17	-83.22	270.71	0.990	1.760	14.05	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.54	1548766.13	-786.70	816.00	810.15	-83.23	271.00	0.990	1.760	14.10	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.54	1548765.77	-789.68	819.00	813.13	-83.23	271.05	0.990	1.760	14.15	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.55	1548765.42	-792.66	822.00	816.11	-83.21	271.09	0.990	1.760	14.20	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.56	1548765.06	-795.64	825.00	819.09	-83.21	271.13	0.990	1.760	14.25	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.57	1548764.71	-798.62	828.00	822.07	-83.19	271.53	0.990	1.760	14.31	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.58	1548764.35	-801.59	831.00	825.05	-83.18	271.69	0.990	1.760	14.36	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.59	1548764.00	-804.57	834.00	828.03	-83.18	271.70	0.990	1.760	14.41	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.60	1548763.64	-807.55	837.00	831.00	-83.18	271.71	0.990	1.760	14.46	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.61	1548763.28	-810.53	840.00	833.98	-83.19	271.78	0.990	1.760	14.51	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.62	1548762.93	-813.51	843.00	836.96	-83.19	271.88	0.990	1.760	14.57	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.63	1548762.57	-816.49	846.00	839.94	-83.19	272.02	0.990	1.760	14.62	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.64	1548762.22	-819.47	849.00	842.92	-83.20	271.79	0.990	1.760	14.67	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.66	1548761.86	-822.45	852.00	845.90	-83.19	272.35	0.990	1.760	14.72	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.67	1548761.51	-825.42	855.00	848.88	-83.16	272.52	0.990	1.760	14.77	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.69	1548761.15	-828.40	858.00	851.86	-83.15	272.95	0.990	1.760	14.82	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.71	1548760.79	-831.38	861.00	854.83	-83.13	273.19	0.990	1.760	14.88	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.73	1548760.43	-834.36	864.00	857.81	-83.12	273.19	0.990	1.760	14.93	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.74	1548760.07	-837.34	867.00	860.79	-83.10	272.66	0.990	1.760	14.98	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.76	1548759.71	-840.32	870.00	863.77	-83.09	272.66	0.990	1.760	15.03	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.78	1548759.35	-843.29	873.00	866.75	-83.09	272.93	0.990	1.760	15.08	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.80	1548758.99	-846.27	876.00	869.73	-83.09	272.99	0.990	1.760	15.14	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.82	1548758.63	-849.25	879.00	872.70	-83.09	272.93	0.990	1.760	15.19	Measured	2007-01-17 09:52
KLX09	RT90-RHB70	6367318.83	1548758.47	-850.62	880.38	874.07	-83.09	272.93	0.990	1.760	15.21	Measured	2007-01-17 09:52

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