

APPENDIX A

Boreholes

Figures A-1 to A-3 are intended to illustrate the general distribution of borehole investigation work that has been carried out in the project area to date. Details of the borehole locations shown are stored in the SICADA database. The figures themselves have been generated from RVS (SKB's 3D modelling program for geological data). It should be noted that whilst the vast majority of borehole positions are included in the SICADA database, the records are incomplete. An ongoing SKB project is attempting to localise and record the positions and details of certain 'lost' boreholes.

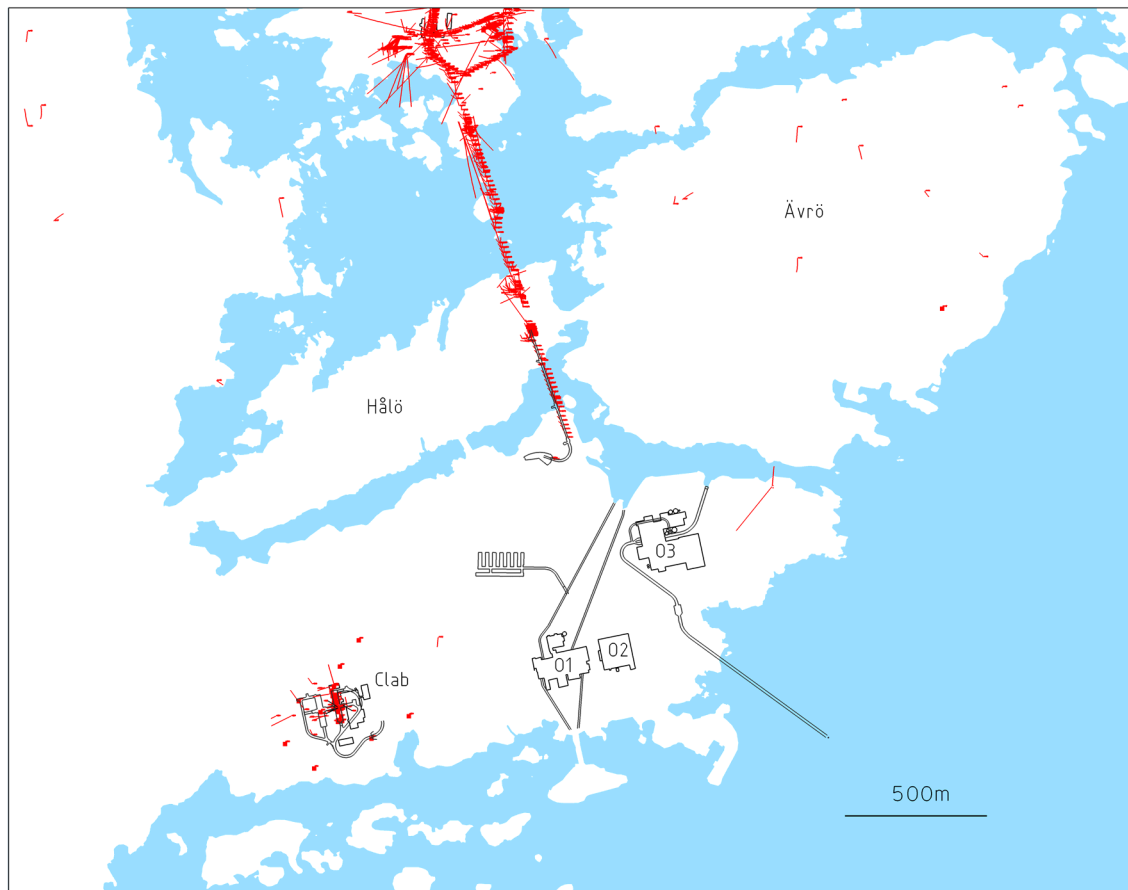


Figure A-1 Project area showing overall distribution of drillhole investigations in red. (Locations from SICADA via RVS. Clab and OKG layouts modified after OKG, dwg nr 78-01-002)

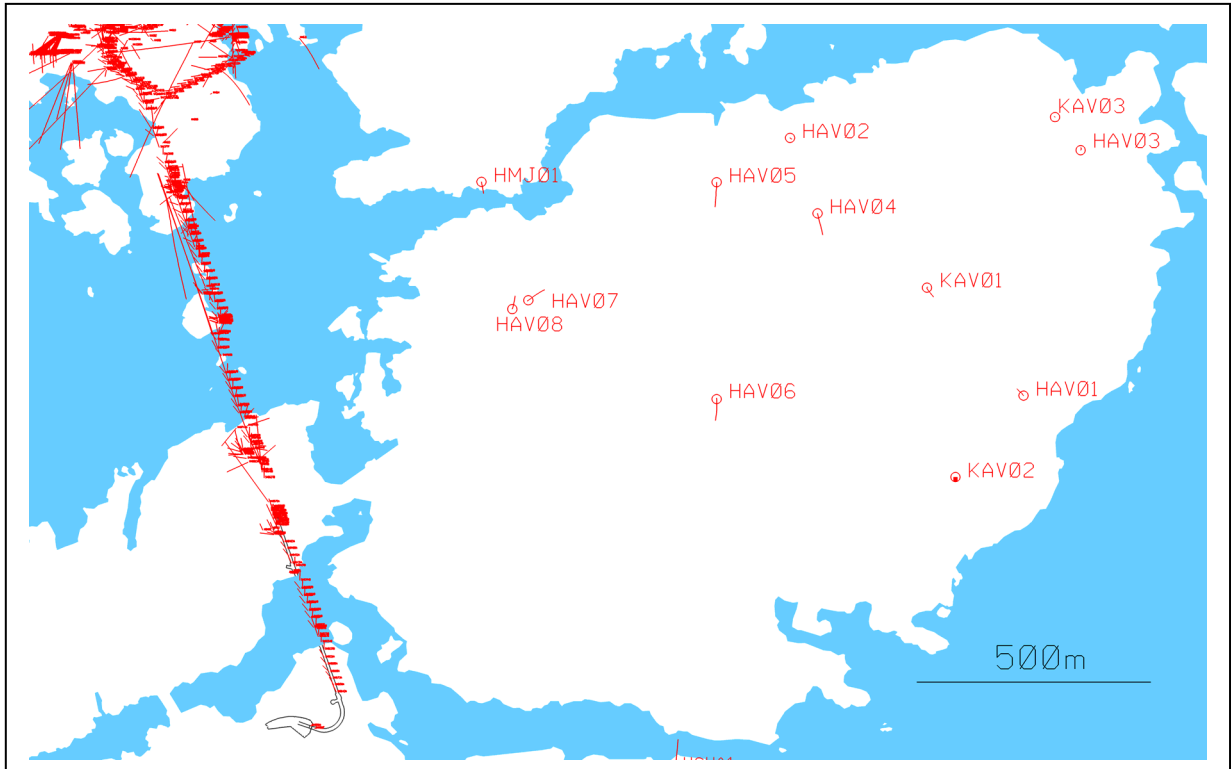


Figure A-2 Boreholes (locations from SICADA via RVS. Äspö access tunnel drillholes indicated with reduced text for clarity. K=rotary cored drillhole (text at start of hole) H=hammer borehole (text at start of hole))

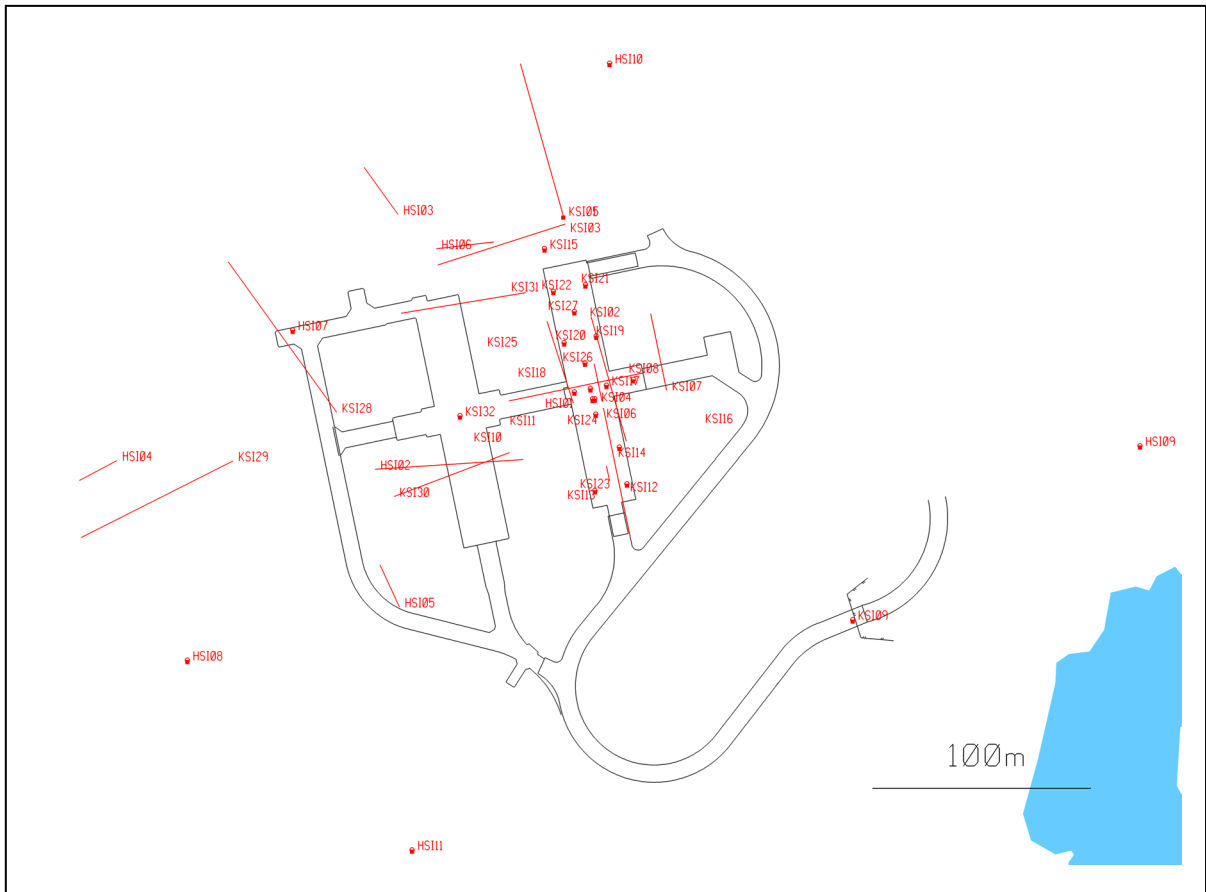


Figure A-3 CLAB Boreholes (locations from SICADA via RVS, Clab layout modified after OKG, dwg 78-01-002. K=rotary cored drillhole (text at start of hole), H=hammer borehole(text at start of hole)

Fracture Data

Fracture mapping and joint statistics (based on, ID 32 Fracture mapping on outcrops, Lars Ericsson, 1987. Text based on AR L-98-22, with additions from Moberg,79 and Clab 1 documentation)

Below are presented rosette diagrams for data sets in the vicinity of the project area.

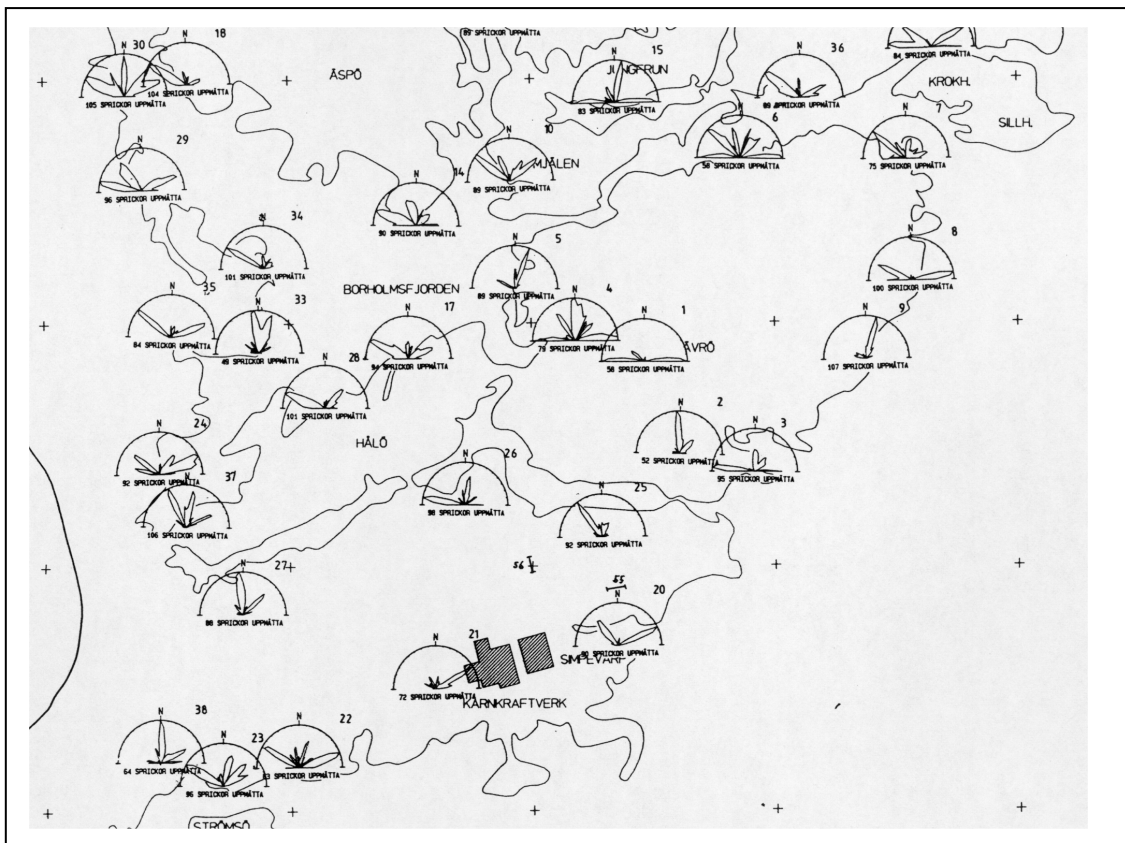


Figure B-1 Local compilations of fracture orientations

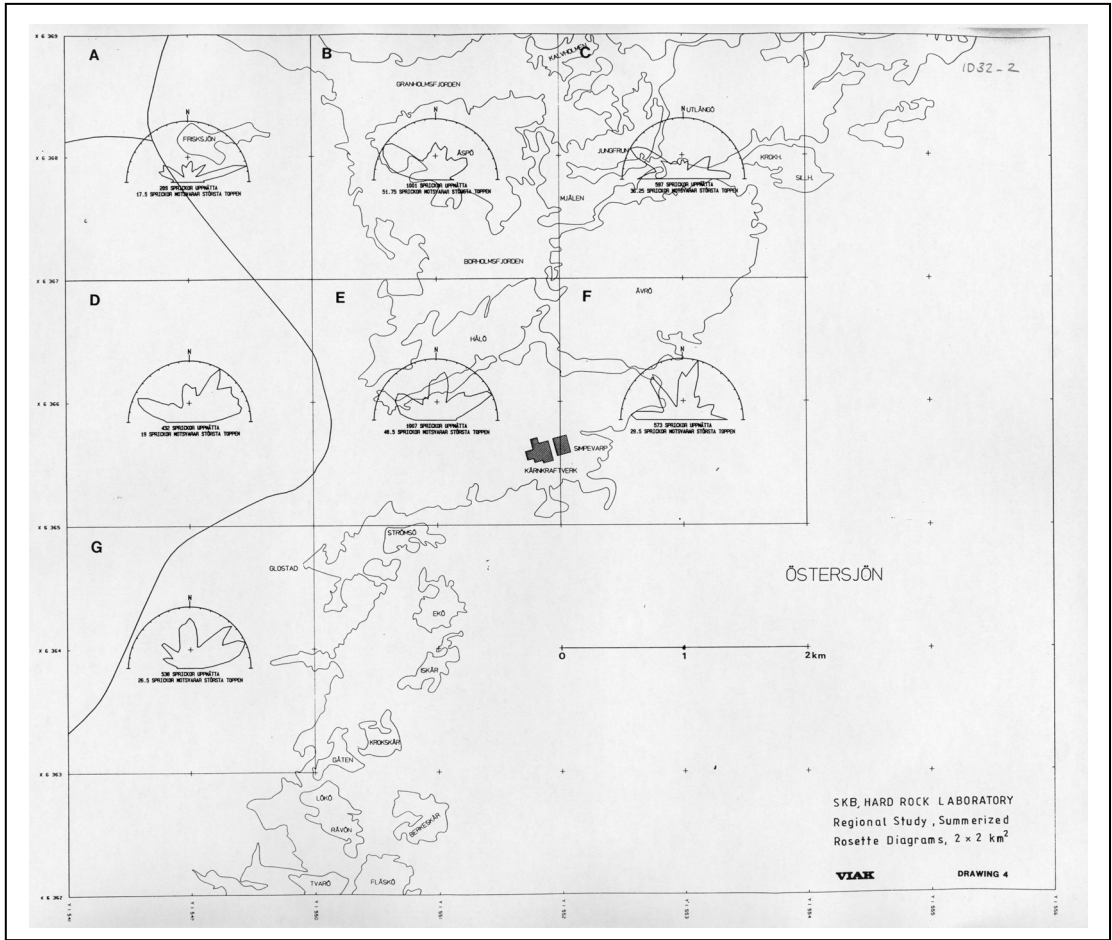


Figure B-2 Regional compilations of fracture orientations

Simpevarp Peninsula

According to Larsson (1959) who focused his studies on the eastern side of the peninsula, the dominant fracture orientations are ENE and NNE. NE is a secondary orientation and NW of tertiary significance. The fractures oriented ENE are generally the longest commonly dipping to the SSE. Joint fillings are dominated by epidote and a red coloration (oxidation) is often noted.

Detailed fracture mapping was carried of the excavated foundation of O3. The mapping was carried along six profiles (3 with an E-W orientation and 3 with a N-S orientation (ref: ID4). The fractures were classed with the following persistence groups; 2-5m, 5-10m and >10m. The results are shown below.

Summary of fracturemapping carried out in the foundation beneath rector O3

(after Hoffner, 1981)

Fracture group		Frac length (m)	Profile and number of fractures						Total nr in group	Frac frequency Nr frags >2m per m	Mean frac' spacing (m)
Strike	Dip ^o		a	b	c	d	e	f			
N20E	Ca. 90°	2-5	3	6	5	2	5	2	23	0.166	6.02
		5-10	8	7	6	4	5	2	32		
		>10	2	4	-	1	-	2	9		
		Sub tot	13	17	11	7	10	6	64		

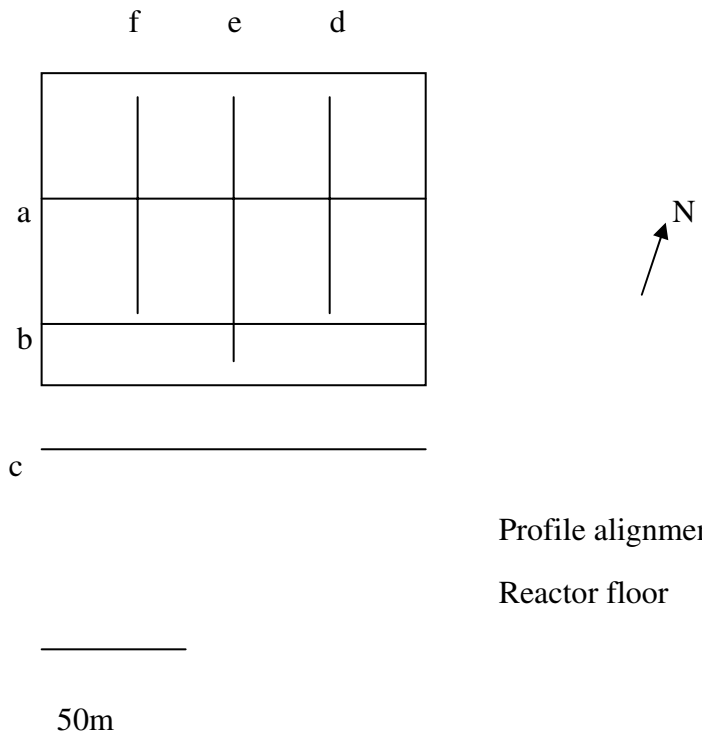
N10W	Ca. 60°E	2-5	3	5	12	-	-	-	20	0.182	5.49
		5-10	5	5	5	-	-	-	15		
		>10	4	2	1	-	-	-	7		
		Sub tot	12	12	18	-	-	-	42		

N60W	Ca. 35°S	2-5	2	9	4	4	5	-	24	0.195	5.19
		5-10	7	8	8	4	5	-	32		
		>10	5	4	1	-	2	7	19		
		Sub tot	14	21	13	8	12	7	75		

N80E	Ca. 60°	2-5	-	-	-	9	8	3	20	0.299	3.34
		5-10	-	-	-	4	7	11	22		
		>10	-	-	-	1	1	2	4		
		Sub tot	-	-	-	14	16	16	46		

Sub tot frags longer than 2m in profile			39	50	42	29	38	29	227		
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Profile length (m)	77	77	77	47	60	47	385		
Frac frequency, fracs >2m/m	0.51	0.65	0.55	0.62	0.63	0.62	0.59	0.59	1.69



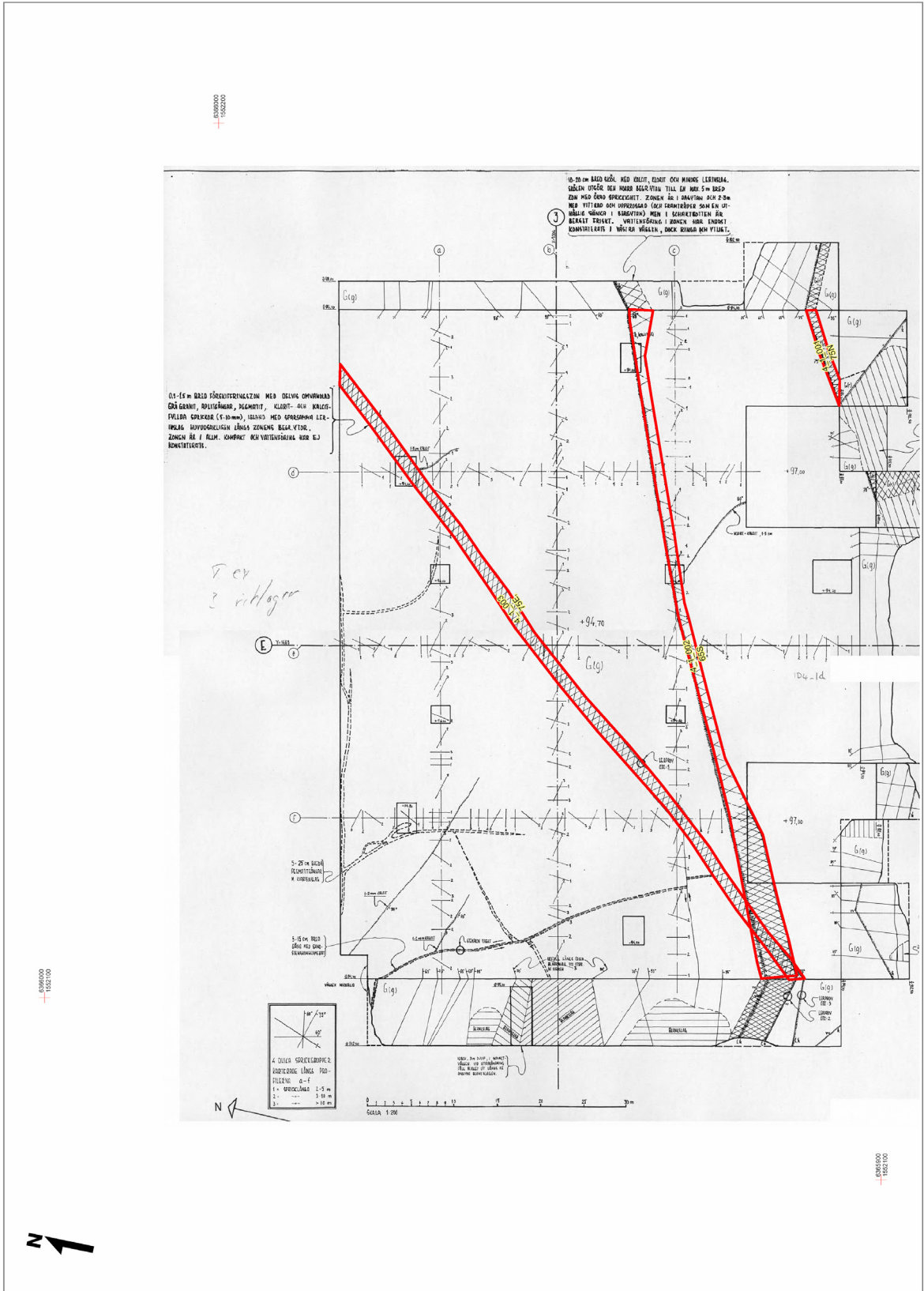


Figure B-3 Fracture mapping beneath reactor O3. The figure has been input into the database.

Clab

Fracture mapping on surface rock outcrops was carried out to supply base data for the design of CLAB (Moberg, 1979 and Munier, 1995). The results showed a clearly dominant fracture orientation of ENE with dips generally steep to moderately steep. A secondary orientation of NS to NW, steeply dipping, was also identified. In addition the later drilling work identified the frequent presence of gently dipping fractures in the area.

Fracture data from the core holes carried out for Clab 1 are compiled below.

Average fracture frequency (number of fractures per meter) subdivided into four different classes; A, B, C, D along with the percentage of each class as represented as in each borehole. Data from core holes D1 to D11, carried out in connection with the construction of Clab 1 (after Moberg, 1979)

Drillhole length (m)		Fracture class							
		A		B		C		D	
		Frac per m	%	Frac per m	%	Frac per m	%	Frac per m	%
D1/40N	95	2.8	10	5.7	24	6.6-7.2	23	14-19	43
D2/45w	84	0-3	9	3.1-6	45	6.3-8.3	27	12-16	19
D3/45S	87	0-3	9	4.5	28	6.8-7.5	18	11-15.5	45
D4/75S	69	0-3	15	5.6	36	7.2	27	16.5	22
D5/90	62	0-3	21	3.9	45	6.6	21	13.0	13
D6/45S	86	0-3	21	4.8-5.2	36	7.1-8.7	24	9.7-10.7	19
D7/60N	72	0-3	17	3.0-3.5	25	7.7-8.2	26	10.2-11	32
D8/30W	73	0-3	19	3.1-6	55	6.1-9	19	>9.1	7
D9/90	16	1.8	63	4.9	31	6.1-9	6	>9.1	0
D10/90	50	0-3	8	4.5-5	38	6.1-9	22	9.3-9.7	32
D11/90	57	0-3	35	3.5-5.1	30	7.1	26	>9.1	9

Original BH Name	Current SICADA designation
D1	KS101
D2	KS102
D3	KS103
D4	KS104
D5	KS105
D6	KS106
D7	KS107
D8	KS108
D9	KS109
D10	KS110
D11	KS111

Fracture classes:

A=Low fracture frequency (1-3 frac/m)

B= Moderate fracture frequency (3.1-6 frac/m)

C=Fairly high fracture frequency (6.1-9 frac/m)

D=High fracture frequency (>9.1 frac/m)

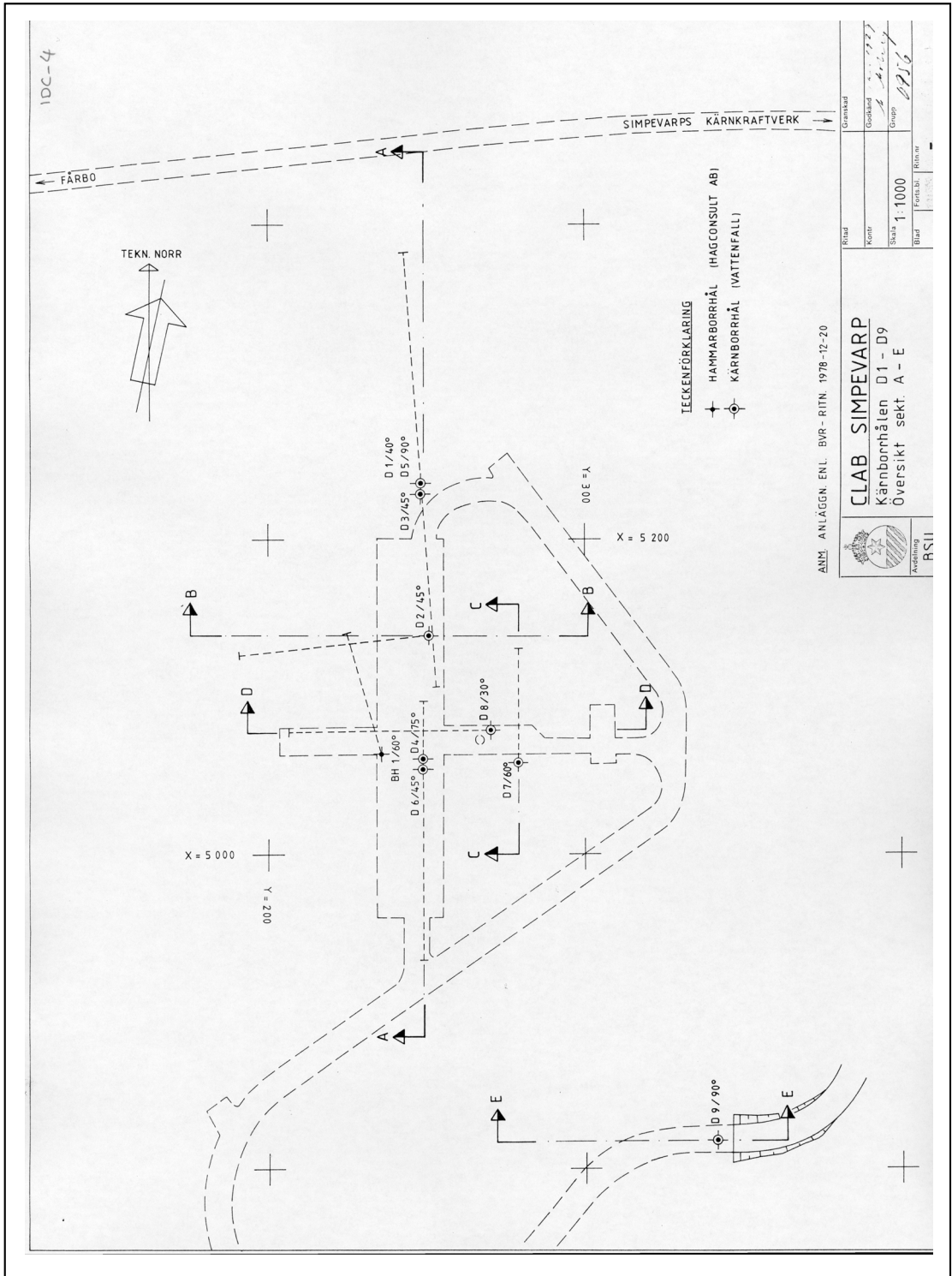


Figure B-4 Clab plan view showing locations for rotary drillholes D1 to D9

Mapping of the Clab 1 transport tunnel (Eriksson, 1982) identifies the dominating fracture orientations to be as follows:

N50O/90

N65W/80S

N25W/90

N50E/30S

N45W/20S

Mapping of the Clab 1 cavern identified three fracture groups as being dominant:

N60O/80S

N30E/80W

N20W/80E-90 (chlorite common)

In addition a fourth less frequent group was identified in the southern part of the cavern:

E-W/30S

Ävrö

Fracture mapping over the Simpevarp region was carried out in 1987. Parameters recorded include: dip, strike, persistence (length), openness and filling (Ericsson, 1987)

The dominant fracture orientations in the general region are ca. N-S and N50W. A secondary orientation ca. E-W also occurs. The vast majority of fractures are vertical or steeply dipping (70-90o).

The first figure includes results of measurements from nine locations on Ävrö. A compilation of this data shows that E-W and N-S to N20E dominate. There are also secondary alignments centred on N50W and N40E.

The mapping work clearly shows that the Ävrö rock mass has fewer fractures per unit volume than the region in general. On the other hand the persistence values are generally higher (longer). The most open and conductive joints are judged to be oriented ca N-S and E-W with calcite and iron oxides as joint fillings. There appears to be a clear correlation between the dominating local joint orientations and the regional lineament orientations, N-S and E-W.

APPENDIX C

Data Inventory based on SKB reference list: Format and Coding

The following section includes a description and explanation of the various *column titles* and codes used in the excel (**bold** text) and GIS [text] datatables (Appendices E to H). The obscure field names in the GIS datatables are due to restrictions associated with the ArcGIS program.

Numbering format used:

ID *[IDNR_T]*

Example 1 ID7_3_005 *(Linked to GIS)*

ID7 Identification Number taken from SKB's original reference list. The data referred to was sometimes a specific report, sometimes a group of reports and sometimes a general subject area such as O3 data.

_3 This number refers to a figure selected from the report(s). In this case the third in a sequence. The figure has been scanned and georeferenced.

_005 This number refers to a particular structure, e.g. a lineament in the figure. The structure, represented in the figure by an area, line or point has been digitised and included in the GIS database linked to the table.

Example 2 IDH_3_005

IDH As for example 1, except that the use of a letter in this position in the ID number sequence represents a reference that was subsequently added to the original SKB list.

Example 3 ID7_3_d

-d Here the use of a final letter instead of a number means that the ID refers to geophysical data. A measurement profile or low velocity point that has been digitised and included in the GIS database linked to the table.

Reference	[REF_T] Source report number and/description.
Data source	[DATSRC_T] Source of reference document, typically a company name.
Zone or lineament name	[ZNLNNM_T] Name of an interpreted structure, as used in the original reference.
Source	[SOURCE_T] Origin of data: e.g. geological mapping or geophysics.
Type	[TYPE_T] Type of structure: e.g. fracture zone or lineament; as used in the original reference.
Strike	[STRIKE_T] Strike of feature: compass direction and/or compass bearing (0-360).
Dip	[DIP_T] Dip of feature: 0-90 and a compass direction giving dip direction.
Width	[WIDTH_T] Width in m. Apparent widths indicated.
Mineralisation	[MINERS_T] Mineral infilling of fracture identified in the field:chlorite, calcite etc.
Clay	[CLAY_T] Indicates the presence of clay as an infilling identified in the field. Width and comment given if additional information is available.
Water	[WATER_T] Comments such as- dry, wet dripping with quantification if such information is available.
Style	[STYLE_N] Line styles on figures, <u>Style</u> column (Linked to GIS)
1	solid red line = mapping on surface or underground
2	red dash dot line = topo and/or geophysical indications supported locally by borehole or mapping evidence
3	red dash thick line = topo and/or geophysical indications- regional scale from Version =0
4	red dash thin line = topo and/or geophysical indications
5	blue line = geophysical profile
6	blue square = geophysical low velocity location
7	green dash dot line = topo and/or geophysical indications supported locally by borehole or mapping evidence (Irms Ävrö report)

green dash thin line = topo and/or geophysical indications
(Irms Ävrö report)

MI_SELECT

[MISELECT_T] Codes for data types, MI_SELECT column
(*Link to GIS*)

ca,	CLAB, mapping underground
cb,	CLAB, topo and/or geophysical indications supported locally by borehole or mapping evidence
cc,	CLAB, topo and/or geophysical indications-regional scale from Version 0
cd,	CLAB, topo and/or geophysical indications
ce,	CLAB, geophysical profile
cf,	CLAB, geophysical low velocity location
cg,	CLAB, mapping on the surface
äa,	Ävrö-Hälö, mapping underground
äb,	Ävrö-Hälö, topo and/or geophysical indications supported locally by borehole or mapping evidence
äc,	Ävrö-Hälö, topo and/or geophysical indications- regional scale from Version =0
äd,	Ävrö-Hälö, topo and/or geophysical indications
äe,	Ävrö-Hälö, geophysical profile
äf,	Ävrö-Hälö, geophysical low velocity location
äg,	Ävrö-Hälö, topo and/or geophysical indications supported locally by borehole or mapping evidence, (R-01-06 Ävrö report)
äh,	Ävrö-Hälö, topo and/or geophysical indications, (R-01-06 Ävrö report)
äi,	Ävrö-Hälö, mapping on the surface
oa,	OI-III, mapping underground

	ob,	OI-III, topo and/or geophysical indications supported locally by borehole or mapping evidence
	oc,	OI-III, topo and/or geophysical indications-regional scale from Version 0
	od,	OI-III, topo and/or geophysical indications
	oe,	OI-III, geophysical profile
	of,	OI-III, geophysical low velocity location
	og,	OI-III, mapping on the surface
<i>Borehole</i>		[BOREHOLE_T] an X indicates the reference contains borehole information.
<i>Interpreted zones</i>		[INTPRZON_T] an X indicates the reference contains interpreted zones information.
<i>Rocktype mapping</i>		[RCKTYPMP] an X indicates the reference contains rock type mapping information.
<i>Joint mapping, joint statistics</i>		[JNTMAP_T] an X indicates the reference contains joint mapping, joint statistics information.
<i>Geophysics</i>		[GEOPHYS_T] an X indicates the reference contains geophysics information.
<i>Groundwater</i>		[GRNDWAT_T] an X indicates the reference contains groundwater information.
<i>Grouting</i>		[GROUTING_T] an X indicates the reference contains grouting information.
<i>Deformation, in situ stress</i>		[DEFINSIT_T] an X indicates the reference contains deformation, in situ stress information.
<i>ÄVRÖ-HÅLÖ</i>		[AVRHAL_T] X indicates the object is of geographical relevance to the Ävrö and Hålö area.
<i>ÄVRÖ-HÅLÖ selected zone ref</i>		[AVRHALZ_T] X indicates the object is an interpreted lineament or structure of geographical relevance to the Ävrö and Hålö area.
<i>ÄVRÖ-HÅLÖ selected low velocity point</i>		[AVRHALL_T] X indicates the object is a low seismic velocity anomaly of geographical relevance to the Ävrö and Hålö area.
<i>ÄVRÖ-HÅLÖ selected geophysical profile</i>		[AVRHALG_T] X indicates the object is a geophysical profile of geographical relevance to the OI-III area.
<i>OI-III</i>		[OKG_T] X indicates the object is of geographical relevance to the OI-III area.

<i>OI-III selected zone ref</i>	[OKGZ_T] text X indicates the object is an interpreted lineament or structure of geographical relevance to the OI-III area.
<i>OI-III selected low velocity point</i>	[OKGL_T] X indicates the object is a low seismic velocity anomaly of geographical relevance to the OI-III area.
<i>OI-III selected geophysical profile</i>	[OKGG_T] X indicates the object is a geophysical profile of geographical relevance to the OI-III area.
<i>CLAB</i>	[CLAB_T] X indicates the object is of geographical relevance to the CLAB area.
<i>CLAB selected</i>	[CLABZ_T] X indicates the object is an interpreted lineament or structure <i>zone ref</i> of geographical relevance to the CLAB area.
<i>CLAB selected low velocity point</i>	[CLABL_T] X indicates the object is a low seismic velocity anomaly of geographical relevance to the CLAB area.
<i>CLAB selected geophysical profile</i>	[CLABG_T] an X indicates the object is a geophysical profile of geographical relevance to the CLAB area.
<i>Comments</i>	[COMMEN_T] Description of the reference contents and other comments.

Text formats:

Text in table Comments column:

- XXXX Black text=text taken directly from the reference.
- XXXX Red text=comments by the author.
- XXXX Green text=text taken directly from one reference and then transferred to another location in the table to aid the description of a particular deformation zone or other feature.
- XXXX Blue text=refers specifically to geophysical data.

APPENDIX D

Selected scanned figures from the references used for the generation of the compilation drawings:

The following table contains the final list of figures from which digitised objects were taken in order to generate the GIS compilation data set of selected objects.

Selected scanned figures from the references used for the generation of the compilation drawings 14

ID_Nr	Figure Title	Report Ref
B_1	Clab1, Reception building, foundation geomapping, 1982	Construction phase geological reports, RS Consulting
D_12	Ävrö, Seismic investigations, 1996	AR L-98-22, SKB
E_1	Simpevarp- site descriptive model version 0, 2002	Simpevarp regional model area, Version 0. (SKB draft report)
H_1	Ävrö, Hålö, seismic investigations to 1989	Tec' PM Nr. 25-89-003, SKB
H_2	Ävrö, Hålö geophysical investigations to 1988	Tec' PM Nr. 25-89-003, SKB
H_3	Hålö, geophysical investigations to 1989	Tec' PM Nr. 25-89-003, SKB
I_1	Ävrö, RVS model of Ävrö, 2001	R-01-06, SKB
1_1	Ävrö, Clab, compiled weakness zones, 1984	SKBF-KBS AR 8.4-14, SKB
1_2	Clab1, overview of fracture zones, 1984	SKBF-KBS AR 8.4-14, SKB
4_1	OIII, reactor building, geomapping, 1980	O III. Geomapping, final report
6_1	Hålö, seismic profiles S8701-06, 1988	SKB PR-87-15
8_3	OIII, intake-tunnel part 1 geomapping, 1981	O III. Geomapping, final report
8_4	OIII, intake-tunnel part 2 geomapping, 1981	O III. Geomapping, final report
8_5	OIII, diesel building, geomapping, 1981	O III. Geomapping, final report
8_6	OIII, turbine building, geomapping, 1981	O III. Geomapping, final report
8_8	OIII, tailrace tunnel, geomapping, 1981	O III. Geomapping, final report
8_9	OIII, emergency cold water tunnel, geomapping, 1981	O III. Geomapping, final report

8_11	OIII, intake tunnel part 1, geomapping, 1981	O III. Geomapping, final report
9_1	Clab, site investigations , 1978	PR-97-06, SKB
9_3	Clab 2, seismic investigations 1995 and 1997	PR-97-06, SKB
9_5	Clab, rock type and lineament mapping, 1995	PR-97-06, SKB
9_6	Clab, geological model, 1997	PR-97-06, SKB
9_7	Clab1, geomapping of excavations, 1997	PR-97-06, SKB
11_1	OIII, intake, marine seismic and BH investigations, 1980	Report on seismic investigations at OIII, Roy Stanfors,
11_2	OIII, intake, marine seismic and BH investigations, 1980	Report on seismic investigations at OIII, Roy Stanfors,
14_3	Clab2, geomapping of excavations, 2001	Project PM TP-01-02, PPM 97-3450-12, PPM 97-3450-15, SKB
15_3	OI, tailrace tunnel, geomapping, 1969	Oskarshamnsverken. Roy S.
15_4	OI, intake tunnel , geomapping, 1969	Oskarshamnsverken. Roy S.
16_3	Clab1, geomapping of excavations, 1982	Tekn.PM 25-87-019, SKB
21_3	Ävrö, Hålö, interpreted deformation zones, 1987	PR-25-87-16, SKB
59_1	OII, intake tunnel , geomapping, 1969	OII, Doc Nr 9011-4.8, OKG
63_1	OIII, ground investigations, 1980	A3359, VBB
73_1	Ävrö, Hålö, investigations for potential clab site, 1978	Report 7093503, Hagconsult

[A blue ID number indicates geophysics content](#)

100m Coordinate grid shown on each drawing - RT90

APPENDIX E

O1 to O3 Selected structures (-see attached CD)

The following table represents a subset of the main data set. The selection is based on geographical location.



Microsoft Excel
kalkylblad

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Rocktype mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, in situ stress	AVMO - H1A0	AVMO - H1A0 selected zone ref	AVMO - H1A0 selected low velocity point	AVMO - H1A0 selected low velocity point	AVMO - H1A0 selected low velocity point	AVMO - H1A0 selected low velocity point	ClAB selected geophysical profile	ClAB selected low velocity point	ClAB selected zone ref	ClAB	O-III selected geophysical profile	O-III selected low velocity point	O-III selected low velocity point	O-III selected zone ref	Comments	
8_7	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG																																		O III turbinbyggnad, området runt turbinfundament, geokartering av schaktbotten- not possible to localise/georeference	
8_8	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG										1	oa,				x	x																		O III utloppstunnel geokartering (OIII talrace tunnel geo' mapping)	
8_8_003	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG	Turbine shear zone	Excavation mapping	shear zone	ENE	90 to 85S	0.5-1m	Chlorite	Clay		1	oa,																							This zone, along with ID8_6_001 and 8_6_002 are branches of the same zone, 'Turbinskölen' and should tie up with ID8_4_004 and 8_5_001.	
8_8_004	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	aplite, shear zone?	NE	90	7m apparent width, brecciated				1	oa,																								
8_8_005	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	minor shear zone	NE	70S		Pegmatite	Clay		1	oa,																								
8_8_006	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	minor shear zone	NNE	90		Chlorite	Clay		1	oa,																								
8_9	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping								1	oa,				x	x																		O III nödkylvatten tunnel geokartering (emergency cold water tunnel)	
8_9_007	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping		SE	50S		Calcite, chlorite	Clay		1	oa,																								
8_9_008	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	weathered aplite, shear zone?	SSE	45S	1-1.5m	Chlorite			1	oa,																								
8_9_009	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	aplite, shear zone?	SSE	80E		Calcite, chlorite			1	oa,																								
8_9_010	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	weathered aplite dyke with shear zone	ESE	90	apparent width 2m	Chlorite			1	oa,																								
8_9_011	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG	Turbine shear zone	Excavation mapping	shear zone	ENE	90				damp, dripping	1	oa,																								'Turbinskölen' This zone, along with ID8_8_003, ID8_6_001 and 8_6_002 are branches of the same zone, 'Turbinskölen' and should tie up with ID8_4_004 and 8_5_001.
8_9_012	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG	Turbine shear zone	Excavation mapping	minor shear zone	ENE	90					1	oa,																								
8_11																	x	x																			O III tillloppstunnel del 1 geokartering (OIII intake tunnel part 1 geomapping)
8_11_001	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	minor shear zone	NNE	50W	5-10cm	Chlorite, calcite			1	oa,																								5-10cm bred sköl, med klorit, kalцит. Strykning NNO, stupning 50 V
8_11_002	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	minor shear zone	N	50W	5-10cm	Chlorite, calcite			1	oa,																								5-10cm bred sköl, med klorit, kalцит. Strykning N, stupning 50 V
8_11_003	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	shear zone	NNE	40W	2m brecciated apparent width	Chlorite	Clay (test13)		1	oa,																								2m total apparent bred lersköl & krosszon , med klorit, lerslag. Strykning NNO, stupning 40 V, lerprov 13. Bergutfall

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Rocktype mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Grouling	Deformation, in situ stress	AVMO-HALO	AVMO-HALO selected zone ref	AVMO-HALO selected low velocity point	AVMO-HALO selected low velocity point	AVMO-HALO selected low velocity point	AVMO-HALO selected low velocity point	CLAB	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected low velocity point	CLAB	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected low velocity point	CLAB	Comments			
59_1_005	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillopstunnel, Oskarshamsverket II (OII)	Hagkonsult, (from OKG)		OII tunnel geo mapping	Brecciated zone	ENE	60S	0.1-1m class	chlorite, calcite,	clay,	dripping	1	oa,																													
63_1	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980												x	x			x																							Plan layout, ground investigations, hammer hole soundings, rockhead soundings incl. seismic profile alignments (interpretation as per ID63_2 to 4 and larger interpreted fracture zones (based on Hagkonsult 1975)).	
63_1_001	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		WNW						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_002	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ENE						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_003	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ENE						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_004	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SW						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_005	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SW						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_006	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ENE						1	od,																											unclear if supported by local mapping and drilling information.		
63_1_007	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ESE						1	od,																											unclear if supported by local mapping and drilling information.		

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grouting	Deformation, in situ stress	AVMO-HALO	AVMO-HALO selected low velocity point	AVMO-HALO selected low velocity point	AVMO-HALO selected zone ref	AVMO-HALO selected geophysical profile	AVMO-HALO selected low velocity point	AVMO-HALO selected low velocity point	O-III selected low velocity point	O-III selected low velocity point	O-III selected low velocity point	O-III selected geophysical profile	CLAB	CLAB selected low velocity point	CLAB selected low velocity point	CLAB selected geophysical profile	Comments
63_1_008	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_009	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		NE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_010	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SW						1	od,																								unclear if supported by local mapping and drilling information.
63_1_011	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ESE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_012	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ESE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_013	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_014	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SE						1	od,																								unclear if supported by local mapping and drilling information.
63_1_015	A3359, Utåtånde över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		E-W to SE						1	od,																								unclear if supported by local mapping and drilling information.
11_1	Roy Stanfors, Rapport över utförde seismiska undersökningar vid OIII (kort), enstaka ritningar	Roy Stanfors												x				x																		Seismic reflection survey plan incl. Velocity values O III, 1980, deep water intake and intake tunnel	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	AVMO-HALO selected geophysical profile	AVMO-HALO selected low velocity point	AVMO-HALO selected zone ref	Or-III selected low velocity point	Or-III selected zone ref	Or-III selected geophysical profile	Or-III selected low velocity point	Or-III selected zone ref	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected zone ref	Comments
63_1_c	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S103
63_1_d	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S104
63_1_e	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S105
63_1_f	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S106
63_1_g	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S107
63_1_h	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S108
63_1_i	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S109
63_1_j	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.						x							Seismic profile S110

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT																				Comments
63_1_k	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.								x										Seismic profile Hagkonsult P2		
63_1_l	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.								x										Seismic profile Hagkonsult P5		
63_1_m	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980										5	oe.								x										Seismic profile Hagkonsult P6		

APPENDIX F

Clab Selected structures (-see attached CD)

The following table represents a subset of the main data set. The selection is based on geographical location.



Microsoft Excel
kalkylblad

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Borehole	Interpreted zones	Rocktype mapping	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, in situ stress	AMNO-HALO	AMNO-HALO selected low velocity profile	AMNO-HALO selected low velocity point	AMNO-HALO selected zone ref	CLAB	CLAB selected zone ref	CLAB selected low velocity point	CLAB selected geophysical profile	Comments
B	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting															x								x	x			Clab 1 byggnadsgeologiskuppfölning av transporttunnel, bergschakt ovan jord och förvaringsbyggnad (text beskrivning) E modul, begränsad vattenförlostmätning i D101 till D112 (korta BH, plan finns), deformationsmätningar men flera detaljer i IDC: ler analys	
B_1	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)													x								x	x			CLAB1 IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.	
B_1_001	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	krosszon (brecciated zone)	N58E	75S	(shown as approx 2m wide on drawing).		Clay analysis dominated by chlorite		1	cg.													x	x			Green schist: the rock is closely jointed in the vicinity of the brecciated zone. IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
B_1_002	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	sköl (fracture zone with gouge)	N68E	90					1	cg.													x	x			Minor structure. IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
B_1_003	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	sköl (fracture zone with gouge)	N68E	90					1	cg.													x	x			Minor structure. IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
B_1_004	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	sköl (fracture zone with gouge)	N48E	70S			Clay analysis dominated by		1	cg.													x	x			Clay analysis:green completed weathered rock, easily crushed with a pestle, dominated by chlorite. IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
B_1_005	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	sköl (fracture zone with gouge)	N70E	75S					1	cg.													x	x			IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
B_1_006	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting		Kartering av fundament (foundation mapping)	sköl (fracture zone with gouge)	N70E	80S					1	cg.													x	x			IMPORTANT MAPPING DATA FROM THE SURFACE. -NOT TO BE CONFUSED WITH DATA MAPPED IN THE TUNNELS AT DEPTH.
E_1	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)																				x				x	x			Figure 4-6 Lineaments and fracture zones (local major and regional) at the surface
E_1_014	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	E-W						3	oc,cc.													x	x			
E_1_021	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	NNW-SSE						3	oc,cc.							x						x	x			
E_1_022	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	NW-SE						3	oc,cc.													x	x			

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Interpreted zones	Borehole	Rocktype mapping	Joint mapping, joint statistics	Groundwater	Geophysics	Joint mapping, joint statistics	Deformation, in situ stress	Gouging	AVRO-HALO selected geophysical profile	AVRO-HALO selected low velocity point	AVRO-HALO selected zone ref	O-III selected low velocity point	O-III selected zone ref	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB	Comments	
E_1_024	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	SW-NE						3	cc,																x	x			
E_1_026	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	SW-NE						3	cc,																x	x			
1_1	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB												x	x														x	x			Figure showing Avro and CLAB fracture zones and sketch cross sections.
1_1_002	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	Clab1, Zone 5	topo, seismic and structural geological evidence	probable weakness zone	N 30 W					classed as moderately water bearing	4	cd,															x	x			CLAB 1, Zon 5, (same zone/lineament as IDB_5_003, IDC_1_002, ID16_1_022, and ID 73_3_005) According to IDC_1_002 probable minor weakness zone, ID_73_005 seismic or structural geologically indicated judged as moderately water bearing.	
1_2	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB												x	x														x	x			Oversiktskarta visande sprickzoner och borrhåslagen inom CLAB området- ref till tabell 4.3. (Map showing fracture zone and BH positions in the CLAB area, combining both investigation results and excavation mapping for Clab1) ID16_3 better source of infor
1_2_003	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	CLAB 1, Zon 4	tunnel mapping with major lateral extension		N40E	90	2m breccia zone with blocky rock and brecciated pegmatite	incl. brecciated pegmatite	cm thick clay layers locally	Dripping water locally	2	cb,																x	x			
1_2_004	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	CLAB 1, Zon 5	Topo		N30W						4	cd,																x	x			CLAB 1, Zon 5. Zonens förlopp är markerat av avlånga sänkor i terrängen i NV-SE-lig riktning. Strykning 30 V. Från flygbildstolkning
9_5	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997													x	x														x	x			Plan of - rock types, lineaments and joint statistics

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	MI_SELECT	Rocktypes mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, in situ stress	AMVO-HALO	AMVO-HALO selected geophysical profile	AMVO-HALO selected low velocity point	AMVO-HALO selected zone ref	O-Ill	O-Ill selected low velocity point	O-Ill selected zone ref	CLAB	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	Comments		
9_5_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zone 2	Topo, geophysics -low velocity points(<4000m/s) along profiles LS110-12 and LS106-07	lineament,	NE- ENE		5-10m	red alteration			4	cd,																						
9_5_002	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zone 4	Topo	lineament,	NW-SE						4	cd,																						
9_5_003	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zone 5	Topo, seismic low velocity points along LS109-12 coincide with lineament	lineament,	NNE-SSW						4	cd,																						
9_5_004	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zone 6	Topo, seismic low velocity points along LS109-12 coincide with lineament	lineament,	ENE-WSW						4	cd,																						
9_5_005	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zon 7	Topo	lineament,	NE-SV						4	cd,																					tolkade lineament, eventuella svaghetszon, baserad på topografi, viss rödfärgning längst lineament, men ingen mylonite eller ökad uppsprickning av berget	
9_5_006	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zon 3	Topo	lineament,	ENE-WSW						4	cd,																						
9_5_007	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier		Topo	lineament,	W-E						4	cd,																						
9_5_008	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SCC, Raymond Munier	Zon 1	Topo	lineament,	ENE-WSW						4																							
9_6	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB														x	x		x															Plan- geological model with fracture zones -1997 KEY CLAB FIGURE(but pre excavation) topo/seismik/BH indikerad	
9_6_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	SZ1, coincides with CLAB Zone 1	topo, seismic, 2 drillholes KS128, KS101 (=D1, 1978), HS103	weakness zone	N60E	60-70 SSE	Shown on drawing with apparent width of 15m. Verified by drilling with width judged as 10-20m Acc. ID1_1 CLAB 1, Zon 1: true width	red alteration, mylonite	clay locally	higher K värde i KS128. Zone generally tight. Hydraulic tests in HS103 and KS128 indicate T= 10-8 - 10-7 m2/s (low).		2	cb,																				Probable fracture zone location at ground surface, SZ1 (incorporates low velocity points from ID9_3), coincides with CLAB Zon 1, Acc. ID_D (AR L-98 24) width judged to be 10-20m. Enligt ID1_1 CLAB 1, Zon 1, rock is schistose closely jointed with red alte	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Rocktypes mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, in situ stress	AVMO-HALO	AVMO-HALO selected geophysical profile	AVMO-HALO selected low velocity point	AVMO-HALO selected zone ref	O-III selected zone ref	O-III selected low velocity point	O-III selected geophysical profile	CLAB	CLAB selected zone ref	CLAB selected low velocity point	CLAB selected geophysical profile	Comments
16_3_008	Tekn.PM 25-87-019. Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors		Clab 1 mapping	gouge filled fracture	W-E		ID_9_7 : apparent width of approx 0.5-1.0m). Acc. ID1_2_007 <0.3m				1	ca.																				(shown on ID_9_7 with an apparent width of approx 0.5-1.0m) Enligt ID1_2_007 Rörelseplan (sköl) <0.3m bredd.
16_3_009	Tekn.PM 25-87-019. Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors		Clab 1 mapping	gouge filled fracture	N-S	80E	ID_D_5 < 2m. ID_9_7 apparent width of approx 0.5-1.0m). Acc. ID1_2_006 <0.3m				1	ca.																				(same as ID9_7_007), (info' från ID8: förkastning med dm-stora rörelse). Enligt ID_D_5 breddet är mindre än 2m (shown on ID_9_7 with an apparent width of approx 0.5-1.0m) Enligt ID1_2_006 Rörelseplan (sköl) <0.3m bredd.
9_1	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.												x				x										x	x	x		Situationsplan med 1978 års undersökningar- seismik profiler, låghastighetszoner borrhållagen visas	
9_3	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																x										x	x			Plan of seismic profiles from 1995 and 1997, low velocity positions	
9_1_001	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 1, geophysics, seismic, low velocity zones <4000m/s, profile LS104 (78), previously named S7804	
9_1_002	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 1, geophysics, seismic, low velocity zones <4000m/s, profile LS102 (78), previously named S7802	
9_3_001	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_002	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS106(95)	
9_3_003	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS106(95)	
9_3_004	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS106(95)	
9_3_005	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS135(97)	
9_3_006	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS111(95)	
9_3_007	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_008	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS135(97)	
9_3_009	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS107(95)	
9_3_010	SKB PR-97-06. CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.															x	x			CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS107(95)	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	M_SELECT	Rocktype mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Geophysics	Deformation, In situ stress	AMNO-HALO	AMNO-HALO selected geophysical profile	AMNO-HALO selected low velocity point	AMNO-HALO selected zone ref	Or-III selected geophysical profile	Or-III selected low velocity point	Or-III selected zone ref	CLAB	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	Comments
9_3_011	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_012	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_013	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS111(95)	
9_3_014	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS135(97)	
9_3_015	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS108(95)	
9_3_016	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS108(95)	
9_3_017	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS111(95)	
9_3_018	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS111(95)	
9_3_019	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS135(97)	
9_3_020	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS135(97)	
9_3_021	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS109(95)	
9_3_022	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_023	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_024	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS109(95)	
9_3_025	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS109(95)	
9_3_026	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS109(95)	
9_3_027	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS112(95)	
9_3_028	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																x	x		CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS108(95)	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Rocktype mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, in situ stress	AMRO-HALO	AMRO-HALO selected geophysical profile	AMRO-HALO selected low velocity point	AMRO-HALO selected zone ref	CLAB	CLAB selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB	O-IIII selected geophysical profile	O-IIII selected low velocity point	O-IIII selected zone ref	O-IIII	AMRO-HALO selected geophysical profile	AMRO-HALO selected low velocity point	AMRO-HALO selected zone ref	Comments
9_3_029	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS112(95)
9_3_030	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS112(95)
9_3_031	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS107(95)
9_3_032	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS107(95)
9_3_033	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS107(95)
9_3_034	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS108(95)
9_3_035	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS111(95)
9_3_036	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										6	cf.																									CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS106(95)
9_1_a	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS 101 (78), previously named S7801
9_1_b	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS 102 (78), previously named S7802
9_1_c	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS 103 (78), previously named S7803
9_1_d	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS 104 (78), previously named S7804
9_1_e	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS 105 (78), previously named S7805
9_3_a	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS106 (95)
9_3_b	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS107 (95)
9_3_c	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS108 (95)
9_3_d	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS109 (95)
9_3_e	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																									Seismic profile LS110 (95)

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	MI_SELECT	Rocktype mapping	Interpreted zones	Borehole	Joint mapping, joint statistics	Geophysics	Groundwater	Deformation, in situ stress	AVRO-HALO	AVRO-HALO selected geophysical profile	AVRO-HALO selected low velocity point	AVRO-HALO selected zone ref	Or-III selected low velocity point	Or-III selected zone ref	Or-III selected low velocity point	Or-III selected geophysical profile	CLAB	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	Comments	
9_3_f	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																					Seismic profile LS111 (95)
9_3_g	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																				Seismic profile LS112 (95)	
9_3_h	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.										5	ce.																				Seismic profile LS135 (97), profile length modified after ID 9_16	

APPENDIX G

Ävrö and Hålö Selected structures (-see attached CD)

The following table represents a subset of the main data set. The selection is based on geographical location.



Microsoft Excel
kalkylblad

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water		Style	ML_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grounding	Deformation, in situ stress	AVRO_HALO	AVRO_HALO selected zone ref	AVRO_HALO selected low velocity point	AVRO_HALO selected low velocity point	AVRO_HALO selected low velocity point	CIAB selected zone ref	CIAB selected low velocity point	CIAB selected low velocity point	CIAB selected low velocity point	CIAB selected low velocity point	CIAB selected low velocity point	CIAB selected low velocity point	CIAB selected low velocity point	Comments
E_1_016	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)	ZSM0004A0	Topo, airborne magnetic and VLF. Verified by ground geol & geophys. Aspö tunnel	Local major or regional fracture zone	NE (035-080)	60-70 SE	50-200m indicated by magnetic data.					3	ac,oc,										x	x											
E_1_017	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	N-S							3	ac,										x	x											
E_1_018	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)	ZSM0004B0, SFZ05	Topo, airborne magnetic and VLF. Verified by ground geol & geophys, borehole KAV01 (A-1)	Local major or regional fracture zone	NE (040-060)	60-70 SE	50-200m indicated by magnetic data.					3	ac,										x	x											
E_1_019	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)	ZSM0004B0, SFZ05	Topo, airborne magnetic and VLF. Verified by ground geol & geophys, borehole KAV01 (A-1)	Local major or regional fracture zone	NE (040-060)	60-70 SE	50-200m indicated by magnetic data.					3	ac,										x	x											
E_1_020	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	W-E							3	ac,oc,										x	x		x									
E_1_023	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament								3	ac,										x	x											
E_1_034	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	NW							3	ac,										x	x											
E_1_035	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)		combination of geophysical and topographic data)	Local major or regional lineament	N-S till NE							3	ac,oc,										x	x		x									
L_1	SKB, R-01-06, RVS-modellering, Ävrö, Markström and Stanfors, 2001	SKB																					x	x												Figure 3-4, Model version 3, surface location of interpreted zones on and around Ävrö
L_1_001	SKB, R-01-06, RVS-modellering, Ävrö, Markström and Stanfors, 2001	SKB	Z13	seismik	zone/structure	225	57	100					8	ah,										x	x											Note that a digital 3D structural geological model exists in RVS version 3
L_1_002	SKB, R-01-06, RVS-modellering, Ävrö, Markström and Stanfors, 2001	SKB	Z14	ytkartering, seismik, BH KAV01, KAV03	zone/structure	95	49	50					7	ag,										x	x											Note that a digital 3D structural geological model exists in RVS version 3
L_1_003	SKB, R-01-06, RVS-modellering, Ävrö, Markström and Stanfors, 2001	SKB	Z15	seismik, BH KAV01, KAV03, HAV07	zone/structure	64	36	50					7	ag,										x	x											Note that a digital 3D structural geological model exists in RVS version 3

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	M1_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grounding	AVRO-IMC Deformation, in situ stress	AVRO-IMC	AVRO-IMC selected low velocity point	AVRO-IMC O selected low velocity point	AVRO-IMC O selected low velocity point	AVRO-IMC O selected low velocity point	O-I-I selected geophysical profile	O-II selected low velocity point	O-III selected low velocity point	O-III selected zone ref	CIAB	CIAB selected zone ref	CIAB selected low velocity point	CIAB selected geophysical profile	Comments	
21_3_011	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 15. From IDD13_002: seismic reflection survey 1997 Zone B. From ID1_1_007: Zone 1	geophysics. From IDD13_002: seismic reflection survey 1997. correlates with brecciated zone 400-500m in KAV01		N70E-90E. From ID1_1_007: N 75 E	From IDD13_002: 35 S, From ID1_1_007: 85S	apparent 75m				4	ad,										x	x												Zone 15, identified by ground surface geophysics, N70-90E
21_3_012	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.	From RS Consulting IDD_13_001	Zone 16	geophysics, BH AV1, AV3, Hav 3 From IDD_13_001: geophysics, BH KAV01 (AV1) between 418-578m and in KAV03, between 157m and bottom (249m). Hydrotests show that it is intercepted by HAV03.	From IDD_13_001: fracture zone	N10E-10W, in text as Strike NSW. From IDD_13_001: NSW	40° W, From IDD_13_001: 40 W	apparent 175m, 'at least 120m' true thickness. From IDD_13_001: 120m		clay alteration.	High K, between 1.4E-6 and 3.0E-5 m/s. Saline water, specific conductivity of 900-1500 mS/m (Avro generally has 150-300 mS/m)	2	ab,										x	x											In Hav 3 the zone is characterized by tectonization, intense fracturing and clay alteration. High K, between 1.4E-6 and 3.0E-5 m/s, 2 to 3 orders of magnitude greater than the surrounding rock. Low bedrock resistivity. Mean fracture frequency in the zone	
21_3_013	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 13, from IDD13_003: Zone A, similar to ID1_1_13, Zone 4	airborne geophysics, from IDD13_003: ground geophysics, similar to ID1_1_13, topo, BH A2 76-86m and BH geophysics		N30E-50E, similar to ID1_1_13, N55E	from IDD13_003: 50NW, similar to ID1_1_13, 20NW	apparent 100m, similar to ID1_1_13, 9m in BH A2			similar to ID1_1_13, K= 2.4*10 ⁻⁶ m/s	4	ad,										x	x											From IDD_13_003 : Zone A dips approx 50 NW passing under KAV 01 at a depth of 900-1000m.	
21_3_014	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 20	geophysics		N10E-30E		apparent 90m				4	ad,										x	x											Zone 20, identified by ground surface geophysics reinterpretation of old 76-77 data.	
21_3_015	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 3	geophysics		N70E-90E		apparent 90m				4	ad,										x	x											Member of Irm's ZS zone series from the RVS Avro model report (ID_J) ,	
21_3_016	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 8	geophysics		N70E-90E		apparent 20m				4	ad,										x	x											Member of Irm's ZS zone series from the RVS Avro model report (ID_J),	
21_3_017	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 7	geophysics		N70E-90E		apparent 40m				4	ad,										x	x											Member of Irm's ZS zone series from the RVS Avro model report (ID_J),	

APPENDIX H

Complete data inventory (-see *attached CD*)



Microsoft Excel
kalkylblad

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	AVRO-HALO	AVRO-HALO selected low velocity point	AVRO-HALO selected zone ref	AVRO-HALO selected geophysical profile	O-Hill	O-Hill selected low velocity point	O-Hill selected zone ref	O-Hill selected geophysical profile	CLAB	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	Comments	
D_5_021	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_022	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_023	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_024	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_025	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_026	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_027	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_5_028	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting		excavation mapping																														Only sketch alignment - not a primary source
D_6	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting																																Fig 1-2 Översikt över Simpevarpshalvön, med befintliga anläggningar. (Plan of Simpevarp peninsula showing the various tunnel and cavern locations)
D_7	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation	RS Consulting												x																				Fig 2-1 Översikt av laget för utfordra seismiska undersökningar och kärnbrorhål i anslutning till kylvattentunnlar till O3- anläggningen (Seismic profile and drillhole locations in relation to O3's cold water tunnel alignments). Only sketch alignments - no
D_8	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting														x																		Fig 4-1 Berggrundskarta över Ävro (enligt Kornfält och Wikman, 1987) (Geological map of Ävro)
D_9	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting														x																		Fig 6-1 (modifierad version från SGU Lund) Toltrade sprickzoner på Ävro baserade på geofysiska mätningar (Gentschein 1987) (Interpreted Ävro fracture zones based on geophysical data)
D_9_001	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting		Ground geophysics (slingram + magnetometer)	fracture zone	NNW																												Only sketch alignment - not a primary source (see ID21_3)
D_9_002	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting		Ground geophysics (slingram + magnetometer)	fracture zone	NE																												Only sketch alignment - not a primary source (see ID21_3)
D_9_003	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting		Ground geophysics (slingram + magnetometer)	fracture zone	N-S																												Only sketch alignment - not a primary source (see ID21_3)
D_9_004	AR L-98-22, Förstudie Oskarshamn, Ävro sammanställning av befintlig geoinformation	RS Consulting		Ground geophysics (slingram + magnetometer)	fracture zone	NW																												Only sketch alignment - not a primary source (see ID21_3)

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water		ML_SELECT	Style	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grounding	Deformation, in situ stress	AVRO-HALO selected geophysical profile	AVRO-HALO selected low velocity point	AVRO-HALO selected zone ref	O-II selected zone ref	O-II selected low velocity point	O-II selected geophysical profile	O-I selected low velocity point	O-I selected geophysical profile	CLAB selected zone ref	CLAB selected low velocity point	CLAB selected geophysical profile	Comments
H_1_d	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile								5	ae.																	Source references are PR 25-87-15, PR 25-89-02				
H_1_e	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile								5	ae.																	Source references are PR 25-87-15, PR 25-89-02				
H_1_f	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile								5	ae.																	Source references are PR 25-87-15, PR 25-89-02				
H_1_g	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile																										(aspo)				
H_1_h	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile																										(aspo)				
H_1_i	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile																										(aspo)				
H_1_j	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile																										(aspo)				
H_1_k	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simpervarps området.(general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile																										(aspo)				

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																											Comments
H_1_j	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_m	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_n	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_o	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_p	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_q	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_r	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	
H_1_s	SKB Tekniskt PM Nr. 25-89-003, Oversiktlig beskrivning av berggrunden i Simevarps området.(general description of rock conditions on Simevarp peninsula) 1989, av R. Stanfors	SKB		seismic profile									5	ae.																							Source references are PR 25-87-15, PR 25-89-02	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																														Comments
J_1_001	SKB, HRL-96-19, Overview of documentation of tunnel, niches and core boreholes, Markström and Erlström, 1996	SKB, Sycon archive	Serial nr.5, 6 & 7, Z6, Z8, Z9, Z0, Z1, Z2 & Z3	tunnel mapping, SA0254B, SA0267F, SA0271B, SA0285G, SA0289A, SA0289B, SA0293F, SA0311A, SA0311B, SA0344A, SA0344B, SA0361A,	Compound fracture zone	southernmost branch, 100, Northernmost branch 210	40-90S	total apparent width= ca. 100m. But individual sub-branches: 8.6, 31.3, 12.6m	Epidote, chlorite, calcite, Fe oxides, quartz	clay in central section, see J1_002	5 liters/min. Required grouting in central section, Ca. 0.5 liters/min in outer branches	1	aa,						x	x																				A heavy fracture zone built up of three branches is documented at approx. 0/270-0/370m. The southern most branch is low dipping to the south, the other two are almost vertical. (southernmost branch, 40, Northernmost branch 90). see IDJ_1_002. For the cent	
J_1_002	SKB, HRL-96-19, Overview of documentation of tunnel, niches and core boreholes, Markström and Erlström, 1996	SKB, Sycon archive	Serial nr. 6, Z8, Z9, Z0, Z1	tunnel mapping, SA0285G, SA0289A, SA0289B, SA0293F, SA0311A,	Compound fracture zone	65	75S	31.3	chlorite, calcite, Fe oxides, quartz	clay	5 liters/min. Required grouting	1	aa,						x	x																			The central branch of IDJ_1_001: the central branch, which is clayey and most intense, there was a need for support and pregrouting- this branch occurs at approx. 0/300-0/330m. Geometric details taken from PR25-95-20, Appendix 3, Fracture zone catalogue.		
1	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB																	x	x																			Geology: limited description of Ävro and CLAB area. Reference is made to more detailed descriptions available in Moberg M 1979, CLAB Simpevarp site investigation, Vattenfall 1979-01-23 och Eriksson K, 1982 CLAB Eng Geol construction reports for transport		
1_1	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB																		x	x																		Figure showing Ävro and CLAB fracture zones and sketch cross sections.		
1_1_001	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	CLAB 1, Zone 1	topo, drillhole D1,	weakness zone	N 60 E	65 SE	30m true thickness	red alteration, mylonite	local clay alteration																												Rock in the zone is schistose and closely jointed with characteristic red coloration. see ID9_6_001			

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																											Comments
1_1_008	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB			weakness zone	ESE																																Weakly indicated lineament
1_1_009	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB			weakness zone	SE																																Weakly indicated lineament
1_1_010	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB			weakness zone	NNE																															Weakly indicated lineament	
1_1_011	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB			weakness zone	W-E																															Weakly indicated lineament	
1_1_012	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	Ävro Zon 3	Topo lineament, BH A2 28-48m with BH geophysics	weakness zone	N55E	30NW	true width 15m			K= 5.7*10-8 m/s																									Ävro. Zon 3, genomkorsar borrhålet A2 och korrelerats med topo lineament i södra delen av Ävro. Uppspruckna delarna av borkårman kännetecknas av låga resistiviteter. A2 28-48m djupt, Strykning N 55 O, Stupning 30 NV, verklig bredd 15m. BH A2: 15m bredd		
1_1_013	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	Ävro Zon 4	Topo lineament, BHA2 76-86m, BH geophysics	weakness zone	N 55E	20NW	9m. broken rock with low resistivity			K= 2,4*10-6 m/s																									very similar location and orientation see ID21_3_013		

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water		MI_SELECT	Style	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grading	Deformation, in situ stress	AVMO-HALO	AVMO-HALO selected geophysical profile	AVMO-HALO selected low velocity point	AVMO-HALO selected zone ref	O-II selected zone ref	O-III selected zone ref	O-II selected low velocity point	O-III selected low velocity point	O-II selected geophysical profile	O-III selected geophysical profile	CLAB selected zone ref	CLAB selected low velocity point	CLAB selected geophysical profile	Comments
8_11_007	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	shear zone	NE	75N	1m	Chlorite	minor clay	dripping		1	oa.																				Ca. 1m bred kloritsköl med mindre lerinslag, vattenförande (droppande), klorit, strykning NO, stupning 75 N		
8_11_008	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	minor shear zone	NNE	90		Chlorite				1	oa.																					Kloritsköl, strykning NNO, stupning vertikal	
8_11_009	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	Brecciated, blocky Aplite, shear zone?	NNE	70-85S		limonite		locally dripping		1	oa.																					Delvis uppkrossad och småblockig applitzon och mindre limonitbelagdaslag, vattenförande (lokalt droppande), Strykning NNO, stupning ca. 70-85S	
8_11_010	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping	Aplite, minor shear zone?	NE	90		Chlorite, calcite		dripping		1	oa.																					Apiltgång, kloritsköl, kalcit, vattenförande (droppande), strykning NO, stupning subvertikal	
8_11_011	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping and a 20-40m wide lineament (depression) on the surface	'disturbed zone'			Apparent width in the tunnel-110m with increased jointing and numerous aplite	Chlorite, calcite, partly weathered	Clay (test 8)			1	oa.																					'Stord' zon med Ökad spricklighet och stort inslag av applitgångar med ler och kloritskolar, kalcit i sprickor och inneslutningar. Berget delvis vittrad. Början av zonen ligger under 20-40m bred sänka i dagytan, apparent length of zone along tunnel = 110m	
8_11_012	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG		Excavation mapping and a 20-40m wide lineament (depression) on the surface	Aplite, shear zone?	ENE	85S	1m partly brecciated, plus 5m with 10-20cm wide platy structure	Chlorite, calcite				1	oa.																					Ca. 1m bred applitgång, delvis krossad, med intilliggande kalcit-kloritsköl norr om applitgången ca. 5m skivigt parti med 10-20cm skivjocklek, strykning ONO, stupning 85S	
9	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et al.																																	1978 Seismic profiles, plan with low velocity positions (ID9_1)1995 och 1997 seismic profiles, plan with low velocity positions (ID9_3), interpretation of profile LST35 cavern CLAB2 in appendix 1. Core and hammer hole positions 1995 and 1997 (ID9_4), 199	
9_1	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et al.																																	Situationsplan med 1978 års undersökningar- seismik profiler, läghastighetszoner borhållagen visas	
9_1_a	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et al.											5	ce.																					Seismic profile LS 101 (78), previously named S7801	
9_1_b	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et al.											5	ce.																					Seismic profile LS 102 (78), previously named S7802	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																							Comments
9_1_c	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																																Seismic profile LS 103 (78), previously named S7803
9_1_d	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS 104 (78), previously named S7804	
9_1_e	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS 105 (78), previously named S7805	
9_1_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															CLAB 1, geophysics, seismic, low velocity zones <4000m/s, profile LS104 (78), previously named S7804	
9_1_002	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															CLAB 1, geophysics, seismic, low velocity zones <4000m/s, profile LS102 (78), previously named S7802	
9_2	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.												x	x																	General plan showing situation from 1995 presentation - interpreted zones, borehole and fracture zones. Same figure as ID1_2		
9_3	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Plan of seismic profiles from 1995 and 1997, low velocity positions	
9_3_a	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS106 (95)	
9_3_b	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS107 (95)	
9_3_c	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS108 (95)	
9_3_d	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS109 (95)	
9_3_e	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															Seismic profile LS110 (95)	
9_3_f	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																																Seismic profile LS111 (95)
9_3_g	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																																Seismic profile LS112 (95)
9_3_h	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																																Seismic profile LS135 (97), profile length modified after ID 9_16
9_3_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS110(95)	
9_3_002	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.																															CLAB 2 area, geophysics, seismic, low velocity zone <4000m/s, profile LS106(95)	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																											Comments	
9_7_013	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB		Clab 1 Mapping	Fracture/shear zone			Acc. ID_D_5 <2m																													Use ID 16_3_005 geometry instead		
9_7_014	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB		Clab 1 Mapping	Fracture/shear zone			Apparent width 5m		Acc. IDB: cm wide clay layers	Acc IDB: water leakage max 11l/min, 30% seawater (700mg Na/l), flow reduced in a few hours to 1.5 -2 l/min), 2 further tests showed should no presence of seawater 32-50 mg Na/l.																										Use ID 16_3_003 geometry instead and transfer text details		
9_9	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB SZ1		Fracture/shear zone																																		
9_9_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB SZ1		Fracture/shear zone																																		
9_9_002	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB SZ7		Fracture/shear zone																																		
9_10	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB 'Zon2' (1995)		Fracture/shear zone																																		
9_10_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB 'Zon2'		Fracture/shear zone																																		
9_11	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	Zon 2' (1997)		Fracture/shear zone																																		
9_11_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB 'Zon2'		Fracture/shear zone																																		
9_11_002	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	CLAB Skjuvzon		Fracture/shear zone																																		
9_12	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	SZ3	topo, seismic	Fracture/shear zone																	x	x														Sektioner genom sprickzon SZ 3, baseras på topo, seismik och CLAB1 data		
9_12_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	SZ3	topo, seismic	Fracture/shear zone			60-80S																														CLAB sprickzon SZ3, stupning 60-80 grader S	
9_13	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	SZ6	HS104 and KS129	Fracture/shear zone						HS104 and KS129 shows very high T=1.5 x 10-3 m2/s											x	x														Sektioner genom sprickzon SZ 6, HS104 och KS129 visar mycket hög transmissivitet, T=1.5 x 10 ⁻³ m ² /s		
9_14	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB			Fracture/shear zone																		x	x													CLAB2, Structural model of cavern 2 (RS predictions, use results of construction mapping instead)		
9_14_001	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	SKB	SZ3		Fracture/shear zone			60-80S			in HS105 T= 1 x 10-5 m2/s																										CLAB2, zon SZ3, stupning 60-80 grader S, i HS105 T= 1 x 10 ⁻⁵ m ² /s		

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																										Comments	
15_2_004	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	ENE																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone ENE	
15_2_005	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	N-S																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone strike N-S	
15_2_006	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	ENE																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone ENE	
15_2_007	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	SE																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone SE	
15_2_008	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	W-E																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike W-E	
15_2_009	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	W-E																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone W-E	
15_2_010	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	W-E																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike W-E	
15_2_011	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	ENE																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike ENE	
15_2_012	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	ENE																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike ENE	
15_2_013	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	ENE																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike ENE	
15_2_014	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	W-E																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike W-E	
15_2_015	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	W-E																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike W-E	
15_2_016	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	ENE																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone ENE	
15_2_017	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	ENE																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike ENE	
15_2_018	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	NW																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike NW	
15_2_019	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			fracture, brecciated zone in rock	NW																															Surface mapping not to be confused with underground tunnel mapping. fracture, brecciated zone in rock , strike NW	
15_2_020	Oskarshamnsverken. Roy S.	VBB, (Hagkonsult)			probable weakness zone	ENE																															Surface mapping not to be confused with underground tunnel mapping. probable weakness zone strike ENE	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	MI_SELECT	Style	AVRO-H410 selected geophysical profile	AVRO-H410 selected low velocity point	AVRO-H410 selected zone ref	O-III selected zone ref	O-III selected geophysical profile	O-III selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	CLAB selected low velocity point	Comments
16_1_003	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(åspo)
16_1_004	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(åspo)
16_1_005	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(åspo)
16_1_006	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 14	Topo and geophysics	Fracture zone	ESE		Apparent 75m						x									Use ID21_3 instead, same geometry
16_1_007	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 15	Topo and geophysics	Fracture zone	ENE		Apparent 70m						x									Use ID21_3 instead, same geometry
16_1_008	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 16	Topo and geophysics	Fracture zone	SSE		Apparent 180m						x									Use ID21_3 instead, same geometry
16_1_009	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 13	Topo and geophysics	Fracture zone	NE		Apparent 90m						x									Use ID21_3 instead, same geometry
16_1_010	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 17	Topo and geophysics	Fracture zone	SE		Apparent 75m						x									Use ID21_3 instead, same geometry
16_1_011	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 18	Topo and geophysics	Fracture zone	ENE III NE		Apparent 65m						x									Use ID21_3 instead, same geometry
16_1_012	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 5	Topo and geophysics	Fracture zone	NE		Apparent 60m						x									Use ID21_3 instead, same geometry
16_1_013	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 10	Topo and geophysics	Fracture zone	ENE		Apparent 25m						x									Use ID21_3 instead, same geometry
16_1_014	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 6	Topo and geophysics	Fracture zone	NE		Apparent 60m						x									Use ID21_3 instead, same geometry
16_1_015	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 9	Topo and geophysics	Fracture zone	ENE		Apparent 25m						x									Use ID21_3 instead, same geometry
16_1_016	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 8	Topo and geophysics	Fracture zone	ENE		Apparent 25m						x									Use ID21_3 instead, same geometry
16_1_017	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 7	Topo and geophysics	Fracture zone	ENE		Apparent 50m						x									Use ID21_3 instead, same geometry
16_1_018	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 19	Topo and geophysics	Fracture zone	NNE		Apparent 80m						x									Use ID21_3 instead, same geometry
16_1_019	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 3	Topo and geophysics	Fracture zone	ENE		Apparent 90m						x									Use ID21_3 instead, same geometry
16_1_020	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	Avro zone 20	Topo and geophysics	Fracture zone	NNE		Apparent 95m						x									Use ID21_3 instead, same geometry
16_1_021	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(summary drawing- low confidence in zone placement-original tunnel mapping available -delete)
16_1_022	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(summary drawing- low confidence in zone placement-original tunnel mapping available -delete)
16_1_023	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(summary drawing- low confidence in zone placement-original tunnel mapping available -delete)
16_1_024	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(summary drawing- low confidence in zone placement--original tunnel mapping available -delete)
16_1_025	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone	E-W		0.2-0.4m chlorite gouge	Chlorite														(summary drawing- low confidence in zone placement--original tunnel mapping available -delete)
16_1_026	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors		Topo and geophysics	Fracture zone																		(summary drawing- low confidence in zone placement-original tunnel mapping available -delete)
16_1_027	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	CLAB1 'R' Fracture zone		Fracture zone	ONO	80S	>5m, from IDA, fracture zone c. 5m wide,															(summary drawing- low confidence in zone placement-original tunnel mapping available -delete)
16_1_028	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Avro området	Roy Stanfors	OI-III, Zone L		Fracture zone	from IDA, NE	15 SE	from IDA, c.10m ,															(summary drawing- low confidence in zone placement-original tunnel mapping available -delete) Dip from IDA, 15 SE

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	ML_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Grounding	Deformation, in situ stress	AVRO-HALO	AVRO-HALO selected geophysical profile	AVRO-HALO selected low velocity point	AVRO-HALO selected zone ref	O-II selected zone ref	O-III selected zone ref	O-III selected geophysical profile	O-III selected low velocity point	CLAB	CLAB selected zone ref	CLAB selected geophysical profile	CLAB selected low velocity point	Comments	
16_3	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors													x	x	x																	Kartering, CLAB1, transport tunnel. Better quality copy taken from SYCON file, excluded 'cut and paste' CLAB1 bergrum mapping, instead use ID9_7 for the bergrum.	
16_3_001	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors		Clab 1 Mapping	gouge filled fracture	NW-SE, 40E.	30NE	(shown with an apparent width of <1m on the drawing)				1	ca.																						
16_3_002	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors	Zone 4	Clab 1 Mapping	brecciated zone of blocky rock, a broken pegmatite dyke and gouge along S boundary.	ID1_1_004: N	90	2m (brecciated zone shown with an apparent width of approx' 1.5m on the drawing and the skoi with an apparent width of approximately 1m) ID9_7_001, ritad med apparent thickness 1.5m.		cm- wide gouge bands. From IDB Clay test CLAB003: mixed layer illite, chlorite and montmorillonite with weak swelling potential.	dripping	1	ca.																						(same as ID9_7_001 The slope on the walls of the tunnel mapping indicates that zone is not vertical. , ID1_1_004 CLAB 1, Zon 4.)
16_3_003	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors	Zone 3.	Clab 1 mapping	Brecciated blocky zone (2-3m apparent width) with a schistose zone (2-3m apparent width) along S boundary.	ID1_1_003: N	65S	Brecciated blocky zone (2-3m apparent width) with a schistose zone (2-3m apparent width) along S boundary. ID1_1_003: c. 8m, elsewhere true width quoted as 6m (same zone as ID9_7_014, there mapped as approx' 5m wide (apparent width), the		IDB: cm- wide clay bands	IDB: dripping water, local running water, max 1 l/min, 30% seawater (700mg Na/l), water inflow reduced in a few hours to 1.5 -2 l/min), a further two tests showed no presence of sea water 32-50 mg Na/l (The higher initial flow was thought to be due to	1	ca.																						Dip acc. ID1_1_003: 65 S
16_3_004	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors		Clab 1 mapping	gouge filled fracture	W-E	45S	ID_D_5 <2m, ID_9_7 and ID16_3 with an apparent width of approx 0.5m)	Chlorite		Dripping	1	ca.																						(same zone as ID_9_7_002). Enligt ID_D_5 breddet är mindre än 2m (shown on ID_9_7 and ID16_3 with an apparent width of approx 0.5m)
16_3_005	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävro området	Roy Stanfors		Clab 1 mapping	gouge filled fracture	NNW		ID_D_5 <2m, ID_9_7 with an apparent width of approx 0.5m. Acc. ID1_2_009: <0.3m	Chlorite			1	ca.																						(same zone as ID9_7_013). Enligt ID_D_5 breddet är mindre än 2m, Enligt ID1_2_009 Rørelseplan (skoi) <0.3m bredd, CLAB 1 tunnel.

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	MI_SELECT	Style	Borehole	Interpreted zones	Rocktype mapping	Joint mapping, joint statistics	Geophysics	Groundwater	Geology	Deformation, In situ stress	AVRO-H410 selected geophysical profile	AVRO-H410 selected low velocity point	AVRO-H410 selected zone ref	AVRO-H410 selected zone ref	O-II selected zone ref	O-III selected low velocity point	O-III selected geophysical profile	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	Comments
21_3_012	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.	From RS Consulting IDD_13_001	Zone 16	geophysics, BH AV1, AV3, Hav 3 From IDD_13_001: geophysics, BH KAV01 (AV1) between 418-578m and in KAV03, between 157m and bottom (249m). Hydrotests show that it is intercepted by HAV03.	From IDD_13_001: fracture zone	N10E-10W, in text as Strike NSW. From IDD_13_001: NSW	40W	apparent 175m, 'at least 120m' true thickness. From IDD_13_001: 120m		clay alteration.	High K, between 1.4E-6 and 3.0E-5 m/s. Saline water, specific conductivity of 900-1500 mS/m (Avro generally has 150-300 mS/m)	2	ab.																			In Hav 3 the zone is characterized by tectonization, intense fracturing and clay alteration. High K, between 1.4E-6 and 3.0E-5 m/s, 2 to 3 orders of magnitude greater than the surrounding rock. Low bedrock resistivity. Mean fracture frequency in the zone
21_3_013	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 13, from IDD13_003: Zone A, similar to ID1_1_13, Zone 4	airborne geophysics, from IDD13_003: ground geophysics, similar to ID1_1_13, topo. BH A2 76-86m and BH geophysics		N30E-50E, similar to ID1_1_13, N55E	20-50NW	apparent 100m, similar to ID1_1_13, 9m in BH A2			similar to ID1_1_13, K=2.4*10 ⁻⁶ m/s	4	ad.																		From IDD_13_003 : Zone A dips approx 50 NW passing under KAV 01 at a depth of 900-1000m. Dips acc. IDD13_003: 50NW, similar to ID1_1_13, 20NW	
21_3_014	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 20	geophysics		N10E-30E		apparent 90m				4	ad.																			Zone 20, identified by ground surface geophysics reinterpretation of old 76-77 data.
21_3_015	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 3	geophysics		N70E-90E		apparent 90m				4	ad.																			Member of lrm's Z5 zone series from the RVS Avro model report (ID_1).
21_3_016	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 8	geophysics		N70E-90E		apparent 20m				4	ad.																			Member of lrm's Z5 zone series from the RVS Avro model report (ID_1).
21_3_017	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 7	geophysics		N70E-90E		apparent 40m				4	ad.																			Member of lrm's Z5 zone series from the RVS Avro model report (ID_1).
21_3_018	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 19	geophysics		N10E-30E		apparent 75m				4	ad.																			Based on reinterpretation of old 76-77 data
21_3_019	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 40m				4	ad.																			weakly indicated/minor fracture zone

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water			MI_SELECT	Stye	Borehole	Rocktype mapping	Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Gridding	Deformation, in situ stress	AVRO-H410 selected zones ref	AVRO-H410 selected low velocity point	AVRO-H410 selected zones ref	AVRO-H410 selected low velocity point	O-Ill	O-Ill selected low velocity point	O-Ill selected zone ref	GLAB	GLAB selected zone ref	GLAB selected low velocity point	GLAB selected low velocity point	Comments	
21_3_020	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 10	geophysics		N70E-90E		apparent 30m						4	ad.									x	x										Member of lrm's ZS zone series from the RVS Avro model report (ID_I).	
21_3_021	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 17	geophysics		N30W-50W		apparent 75m						4	ad.									x	x											
21_3_022	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 18	geophysics, topo depression, intersected by borehole Av1		N50E-70E		apparent 60m						4	ad.									x	x											
21_3_023	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 40m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_024	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		NE		apparent 40m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_025	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 9	geophysics		N70E-90E		apparent 35m						4	ad.									x	x											Member of lrm's ZS zone series from the RVS Avro model report (ID_I).
21_3_026	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 35m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_027	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 5	airborne geophysics		N50E-70E		apparent 50m						4	ad.									x	x											
21_3_028	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.		Zone 6	geophysics		N30E-50E		apparent 50m						4	ad.									x	x											
21_3_029	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 50m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_030	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 30m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_031	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 30m						4	ad.									x	x											weakly indicated/minor fracture zone
21_3_032	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 50m						4	ad.									x	x											weakly indicated/minor fracture zone

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water			MI_SELECT	MI_Style	Borehole	Rocktype mapping Interpreted zones	Joint mapping, joint statistics	Geophysics	Groundwater	Graveling	Deformation, in situ stress	AVRO-4H10	AVRO-4H10 selected low velocity point	AVRO-4H10 selected zone ref	AVRO-4H10 selected geophysical profile	O-Ill selected low velocity point	O-II selected zone ref	O-III selected geophysical profile	O-III selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	CLAB selected low velocity point	Comments
21_3_072	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		SSE		apparent 20m						4	ad.																		weakly indicated/minor fracture zone	
21_3_073	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		SE		apparent 25m						4	ad.																		weakly indicated/minor fracture zone	
21_3_074	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		SE		apparent 25m						4	ad.																		weakly indicated/minor fracture zone	
21_3_075	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		NNW		apparent 25m						4	ad.																		weakly indicated/minor fracture zone	
21_3_076	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		SSE		apparent 15m						4	ad.																		weakly indicated/minor fracture zone	
21_3_077	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ENE		apparent 25m						4	ad.																		weakly indicated/minor fracture zone	
21_3_078	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		NE		apparent 60m						4	ad.																		weakly indicated/minor fracture zone	
21_3_079	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.																																(aspo)	
21_3_080	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.																																(aspo)	
21_3_081	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.																																(aspo)	
21_3_082	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		SSO		apparent 40m						4	ad.																		weakly indicated/minor fracture zone	
21_3_083	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.			geophysics		ONO		apparent 15m						4	ad.																		weakly indicated/minor fracture zone	
21_4	PR-25-87-16, Preliminary investigations of fracture zone at Avro- results of investigations performed July '86 -May '87.																x																Resistivity map of Avro, including interpreted zones.	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water			Style	ML_SELECT	MT_SELECT	Borehole	Rocktype mapping	Interpreted zones	Joint mapping	Joint statistics	Geophysics	Groundwater	Graveling	Deformation	In situ stress	AVM0-HALO	AVM0-HALO selected low velocity point	AVM0-HALO selected zones ref	AVM0-HALO selected geophysical profile	AVM0-HALO selected low velocity point	AVM0-HALO selected geophysical profile	O-Ill selected low velocity point	O-Ill selected geophysical profile	O-Ill selected low velocity point	O-Ill selected geophysical profile	GLAB	GLAB selected low velocity point	GLAB selected geophysical profile	GLAB selected low velocity point	GLAB selected geophysical profile	Comments
32	PR-25-87-05, Fracture mapping on outcrops, findings of detailed and regional survey.	Ericsson																			x																				Detailed fracture mapping and fracture statistics covering Simpevarp peninsula, Avro and Aspö.	
32_1	PR-25-87-05, Fracture mapping on outcrops, findings of detailed and regional survey.	Ericsson																			x																				Joint rosettes, regional	
32_2	PR-25-87-05, Fracture mapping on outcrops, findings of detailed and regional survey.	Ericsson																			x																				Joint rosettes, local	
38	PR 25-89-13	Stenberg, Sehstedt																x			x																			Geophysical profile measurements on interpreted regional aeromagnetic lineaments in the Simpevarp area. Major regional lineaments only. Airborne survey incl. Aeromagnetic. Interpreted profiles. Ingenting som påverkar projekt området, använda Simp V0 istå		
38_1	PR 25-89-13	Stenberg, Sehstedt																x			x																			Geophysical profile measurements in the Simpevarp area, plan.		
38_1_001	PR 25-89-13	Stenberg, Sehstedt		geophysics	Regional lineament																																			use version 0 instead		
38_1_002	PR 25-89-13	Stenberg, Sehstedt		geophysics	Regional lineament																																			use version 0 instead		
38_1_003	PR 25-89-13	Stenberg, Sehstedt		geophysics	Regional lineament																																			use version 0 instead		
38_1_004	PR 25-89-13	Stenberg, Sehstedt		geophysics	Regional lineament																																			use version 0 instead		
38_1_005	PR 25-89-13	Stenberg, Sehstedt		geophysics	Regional lineament																																			use version 0 instead		
40	PR 25-89-23, Regional geological study seismic refraction survey	Rydström, Greber																																							Seismic refraction survey, total length 2000m, 11 low velocity zones. Falls outside immediate project area	
41	PR 25-89-23, Regional geological study seismic refraction survey	Rydström, Greber																																						See ID 40 (same reference)		

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																															Comments
45	PR 25-87-14, se ID46; PR 25-88-16 geophysical measurements on the island of Åspo: PRAV 77/1, Geofysiska markundersökningar i Oskarshamn: (PR 25-87-16 see ID21)																																							PR 25-87-14, see ID46 same reference. PR 25-88-16, study limited to Åspo island (ID45_1). PRAV77/1. Electromagnetic measurements VLF over Åvro (poor copy): investigation of the bedrock's elastic constants incl. Småland granite.		
45_1	PR 25-87-14, se ID46; PR 25-88-16 geophysical measurements on the island of Åspo: PRAV 77/1, Geofysiska markundersökningar i Oskarshamn: (PR 25-87-16 see ID21)																																						PR 25-88-16, Plan view, ground geophysical measurements, limited to Åspo island.			
45_2	PR 25-87-14, se ID46; PR 25-88-16 geophysical measurements on the island of Åspo: PRAV 77/1, Geofysiska markundersökningar i Oskarshamn: (PR 25-87-16 see ID21)																																						PRAV77/1 Measurement locations, investigation of bedrock elastic properties			
46	PR 25-87-14, Seismic and geoelectrical test survey on Åvro: PR 25-89-02, Shallow reflection seismic, profiles from Åspo	C Ploug: K Klitten																																				(Åspo) PR 25-89-02, Limited to Åspo, layout plan, seismic profiles, Raw data and text description along with interpretations, PR 25-87-14, layout plan, seismic profiles and electrical soundings (ID46_2 och ID46_3) but no interpretation in figure format:				
46_1	PR 25-87-14, Seismic and geoelectrical test survey on Åvro: PR 25-89-02, Shallow reflection seismic, profiles from Åspo	C Ploug: K Klitten																																				(Åspo) PR 25-89-02, plan layout, seismic profiles				
46_2	PR 25-87-14, Seismic and geoelectrical test survey on Åvro: PR 25-89-02, Shallow reflection seismic, profiles from Åspo	C Ploug: K Klitten																																				PR 25-87-14, plan layout, seismic profiles- included in ID_H_2				
46_3	PR 25-87-14, Seismic and geoelectrical test survey on Åvro: PR 25-89-02, Shallow reflection seismic, profiles from Åspo	C Ploug: K Klitten																																				PR 25-87-14, plan layout, electrical soundings, included in ID_H_2				
49	L Eriksson 1976	SGU, SKB																																				-				
55	Oversiktlig geologisk kartering av terrängen öster om Simpevarps by samt förslag till borrhänsprogram för Oskarshamns kärnkraftverk, 1965	Hagconsult																																					Incomplete report. General description of geomapping results.			
55_1	Oversiktlig geologisk kartering av terrängen öster om Simpevarps by samt förslag till borrhänsprogram för Oskarshamns kärnkraftverk, 1965	Hagconsult																																				Overview map, no rock type information visible, probable weakness and fracture zones shown along the tunnel line.				

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																									Comments
56	Hagkonsult 9091185	Hagkonsult																																		
57	Hagkonsult, 9011-4.4, 1969, Markundersökning. Geologisk undersökning inom området för aggregat II, Oil, Simpevarp	Hagkonsult, (fick från OKG																																		Tunnel mapping with weakness zone descriptions in text: repetition of fig ID15_4 Oskarshamn power station geological overview and borehole plan: repetition of ID15_4 Intake tunnel, major structures: repetition av ID15_3 tailrace tunnel, major structures .
57_1	Hagkonsult, 9011-4.4, 1969, Markundersökning. Geologisk undersökning inom området för aggregat II, Oil, Simpevarp	Hagkonsult, (fick från OKG																																		Oil, tailrace area Aggr. II plan, hammer borehole positions, brecciated zones and larger fracture shown. Sections through borehole presented in the report. However all are short (10m) boreholes.
58	Non specific reference	Hagkonsult																																		
59	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamsverket II (Oil)	Hagkonsult, (from OKG)																																		One and a half sides of text; short but clear summary of mapping results
59_1	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamsverket II (Oil)	Hagkonsult, (from OKG)																																		Oil intake tunnel geo mapping. General comments from the text: fracture frequency is moderate. Brecciated zones consist of broken and generally with chlorite, calcite and clay alteration. These minerals are common in the gouge filled fractures. Red zones
59_1_001	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamsverket II (Oil)	Hagkonsult, (from OKG)		Oil tunnel geo mapping	fracture zone	ESE	205	1m	gouge of chlorite and clay.	gouge of chlorite and clay.	dripping																									
59_1_002	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamsverket II (Oil)	Hagkonsult, (from OKG)		Oil tunnel geo mapping	'Red zone'	ENE	805	ca. 5m, brecciated along the northern	chlorite	clay	dripping																								Brecciated along the northern boundary.	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	MI_SELECT	Style	Borehole	Rocktype mapping	Interpreted zones	Joint mapping	Joint statistics	Geophysics	Groundwater	Grounding	Deformation	In situ stress	AVRO-HALO selected zones ref	AVRO-HALO selected low velocity point	AVRO-HALO selected geophysical profile	O-III selected low velocity point	O-III selected zone ref	O-III	CLAB selected zone ref	CLAB	O-III selected geophysical profile	CLAB selected low velocity point	CLAB selected geophysical profile	Comments		
																																				1	oa
59_1_003	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamnsverket II (OII)	Hagkonsult, (from OKG)		Oil tunnel geo mapping	Complex, compound zone	NE	70E	total width ca. 2-3m: crush zone >1m wide, joint swarm 2m wide, crosscutting chlorite, calcite and clay shearzone.	chlorite, calcite	clay	dripping		1	oa																							
59_1_004	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamnsverket II (OII)	Hagkonsult, (from OKG)		Oil tunnel geo mapping	'Red zone'	SE	75N	ca. 10-15m		clay gouge on southern boundary.	dripping		1	oa																							
59_1_005	Hagkonsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillöpstunnel, Oskarshamnsverket II (OII)	Hagkonsult, (from OKG)		Oil tunnel geo mapping	Brecciated zone	ENE	60S	0,1-1m class	chlorite, calcite,	clay,	dripping		1	oa																							
60	PM befärfande geologiska förutsättningarna samt förslag till bergundersökningar för OIII. - Geologisk fältkartering inom området för reaktor III samt inom områdena för tillöpstunnel från Talskär.	Hagkonsult 1974																																			N/A
61	Seismisk undersökning utefter planerad tillöpstunnel till OIII. 1090 m seismisk undersökning utefter intressanta avsnitt av 2 alter-nativa sträckningar av tillöpstunnel från Talskär.	Hagkonsult 1975																																			N/A
62	Oskarshamnsverket III, Simpevarp. Orienterande grund-undersökning för djupvattenintag. Sammanfattande utlåtande. Ekolodning och seismik vid Mårdskär.	Hagkonsult 1976																																			N/A
63	A3359. Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980																																			Appendices to the main report: 1. Report covering seismic investigations at OIII, figures ID63_1 to ID63_5; 2. Report covering rockhead soundings and water loss measurements at OIII; 3. Report covering TV borehole inspections at OIII; 4. Report covering
63_1	A3359. Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980																																			Plan layout, ground investigations, hammer hole soundings, rockhead soundings incl. seismic profile alignments (interpretation as per ID63_2 to 4 and larger interpreted fracture zones (based on Hagkonsult 1975)).

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water																														Comments
63_1_004	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		SW																																		unclear if supported by local mapping and drilling information.	
63_1_005	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		SW																																		unclear if supported by local mapping and drilling information.	
63_1_006	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		ENE																																		unclear if supported by local mapping and drilling information.	
63_1_007	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		ESE																																		unclear if supported by local mapping and drilling information.	
63_1_008	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		SE																																		unclear if supported by local mapping and drilling information.	
63_1_009	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		NE																																		unclear if supported by local mapping and drilling information.	
63_1_010	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		SW																																		unclear if supported by local mapping and drilling information.	
63_1_011	A3359, Utlåtande över de geologiska och bergtekiska förhållandena för Oskarshamnsverket III. Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic.		ESE																																		unclear if supported by local mapping and drilling information.	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	MI_SELECT	Style	Borehole	Rocktype mapping	Interpreted zones	Geophysics	Joint mapping, joint statistics	Groundwater	Gravel	Deformation, in situ stress	AVMO-HALO	AVMO-HALO selected low velocity point	AVMO-HALO selected zone ref	O-III	O-III selected low velocity point	O-III selected zone ref	CLAB	CLAB selected low velocity point	CLAB selected zone ref	CLAB selected geophysical profile	Comments		
63_1_012	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		ESE						1	od.																				unclear if supported by local mapping and drilling information.	
63_1_013	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SE						1	od.																				unclear if supported by local mapping and drilling information.	
63_1_014	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		SE						1	od.																				unclear if supported by local mapping and drilling information.	
63_1_015	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980		topo, seismic,		E-W to SE						1	od.																				unclear if supported by local mapping and drilling information.	
63_2	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980												x				x															Interpreted seismic profiles S101-S104, see ID63_1 for locations	
63_3	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980																																Interpreted seismic profiles S105-S108, see ID63_1 for locations
63_4	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976																																Interpreted seismic profiles S109-S110, see ID63_1 for locations
63_5	A3359, Utåtående över de geologiska och bergtekniska förhållandena för Oskarshamnverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagkonsult 1976, uppdaterings rapport?)	Hagkonsult 1976, VBB 1980												x	x																		Rockhead soundings, water loss measurements, geophysical borehole logging Rb1 to 4. Short holes but include interpreted larger weakness zones.	

ID_Nr	Reference	Data source	Zone or lineament Name	Source	Type	Strike	Dip	Width	Mineralisation	Clay	Water	Style	Comments

- 6 blue square = geophysical low velocity location
- 7 green dash dot line = topo and/or geophysical indications supported locally by borehole or mapping evidence (lrms Avrö report)
- 8 green dash thin line = topo and/or geophysical indications (lrms Avrö report)
- MI_SELECT
- ca, CLAB, mapping underground
 - cb, CLAB, topo and/or geophysical indications supported locally by borehole or mapping evidence
 - cc, CLAB, topo and/or geophysical indications- regional scale from Version =0
 - cd, CLAB, topo and/or geophysical indications
 - ce, CLAB, geophysical profile
 - cf, CLAB, geophysical low velocity location
 - cg, CLAB, mapping on the surface
- aa, Avró-Háló, mapping underground
 - ab, Avró-Háló, topo and/or geophysical indications supported locally by borehole or mapping evidence
 - ac, Avró-Háló, topo and/or geophysical indications- regional scale from Version =0
 - ad, Avró-Háló, topo and/or geophysical indications
 - ae, Avró-Háló, geophysical profile
 - af, Avró-Háló, geophysical low velocity location
 - ag, Avró-Háló, topo and/or geophysical indications supported locally by borehole or mapping evidence, (lrms Avró report)
 - ah, Avró-Háló, topo and/or geophysical indications, (lrms Avró report)
 - ai, Avró-Háló, mapping on the surface
- oa, OI-III, mapping underground
 - ob, OI-III, topo and/or geophysical indications supported locally by borehole or mapping evidence
 - oc, OI-III, topo and/or geophysical indications- regional scale from Version =0
 - od, OI-III, topo and/or geophysical indications
 - oe, OI-III, geophysical profile
 - of, OI-III, geophysical low velocity location
 - og, OI-III, mapping on the surface

APPENDIX I

Traceability of original reference numbers:

ref: SKB P103, 2002-05-15

At a meeting held on 2002-04-24, a preliminary list of references was presented. The aim of the reference selection was to identify key data that was not stored in SICADA but was considered of relevance to SKB's ongoing ground investigations, across the Simpevarp peninsula. Each reference had been previously assigned an ID number during the data inventory phase of the earlier Simpevarp- site descriptive model version 0 project (R-02-35). The preliminary list of reference ID's consisted of the following:

ID.

1, 2, 3, 6, 8, 9, 10, 11, 12, 14, 15, 45, 46, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 67 and 73.

After further consideration the list was expanded to include the following additional references:

ID.

4, 16, 21, 32, 38, 40, 41, 49, 68, 232, 544, 545, 546, 547, 548 and 552.

Details of the reference documents are presented in the table below. The first column contains the original reference ID number from the Version 0 data inventory, which has been maintained in the current project. The second column contains a summary of a description of each reference taken from the Version 0 data inventory. The third column contains a description of the reference created during the present project. The fourth column gives a general description of the data source. The fifth and final column, titled *comments*, includes information relevant to the reference documents.

Further details describing the specific data extracted from each reference are presented in Appendices E to H.

Explanatory notes:

In certain cases the description of the reference material from Version 0 and the current project do not agree in detail. The reason for this is that several of the Version 0 IDs gave a reference description that was essentially a general topic rather than a specific report. eg ID 12, *Information om tunnlar. Mätningar av olika slag, Simpevarpshalvön, O-I, O-II, O-III, tunnlar. Div. ritningar och rapporter i osorterad form vid RS Consulting*. In such cases, all of the reference reports, drawings and data stored at RS Consulting were gone through and the individual reports and drawings were assigned to the ID number whose description best fitted the document contents. These documents pertaining to each ID number are now labelled and physically collected and stored in separately numbered files.

In the Version 0 data inventory, a number of ID references were taken from a list of various Hagkonsult reports with descriptions. The reports themselves have proved to be unobtainable to date. These reports are identified by the text '*NOT AVAILABLE*' in the comments column.

In the Version 0 data inventory, a number of ID references referred to the same document. In some cases this was due to a simple repeat of the same reference material. In other cases this was due to the fact that during the Version 0 data inventory, information within a single report was subdivided into different types of data and awarded its own ID number. In this way a single report could be coupled to a number of different ID numbers. This degree of subdivision and detail was not consistent throughout the list of references. Because of this, during the current project, a single report was allocated to one of the references and fully described under that heading in the data inventory (see Appendices E to H). Where the same report was encountered again in the reference the duplication was noted by appropriate text eg. *ID547, report PR25-87-15 (see ID6, same reference)*.

(see attached CD)



Microsoft Excel
kalkylblad

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data	Reference description from current project.	Data source	Comments
A	Added reference	Diverse documentation including: Sammanställning av geo-data för Simpevarp- Ävrö (compilation of geodata for Simpevarp- Ävrö)	RS Consulting	Loose 'Ävrö fracture zones figure' and Ävrö ground investigation data, hammer borehole logs for HAV4 och HAV5 (50m djupt), se ID1_1. Short descriptions found in the text of the 'fracture zones found in underground structures' (zones A to S) have been inc
B	Added reference	Diverse CLAB documentation, incl. Clab 1 byggnadsgeologiskuppfölning (construction phase geological reports)	RS Consulting	Clab 1 byggnadsgeologiskuppfölning av transporttunnel, bergschakt ovan jord och förvaringsbyggnad (text beskrivning) E modul, begränsad vattenförlustmätning i D101 till D112 (korta BH, plan finns), deformationsmätningar men flera detaljer i IDC; ler analy
C	Added reference	Diverse CLAB documentation, incl. Clab 1, Simpevarp berggrunds undersökning 1978, (various reports and documents covering site investigations for Clab 1). Clab 1 byggnadsgeologiskuppfölning (construction phase geolog	RS Consulting	Clab, Simpevarp site investigations 1978 (1 of 2 red files containing a compilation of diverse documents, incl. BH details (9 x approx. 70m), BH plan, BH logs, fracture frequency, rock types, K test data etc. 'Clab 1 reports' (2nd of 2 red files contain
D	Added reference	Förstudie Oskarshamn, AR L-98-24, AR L-98-22. (Feasibility study Oskarshamn (2 reports))	RS Consulting	AR L-98-24, Förstudie Oskarshamn, Simpevarpshalvön - sammanställning av befintlig geoinformation (Feasibility study Oskarshamn- Simpevarp peninsula, compilation of existing geodata) AR L-98-22, Förstudie Oskarshamn, Ävrö - sammanställning av befintlig ge
E	Added reference	Simpevarp regional model area, Version 0. (SKB draft report)	SKB (sycon)	Simpevarp regional Model (V0) Fig 4-8, RVS structural model - lineaments and deformation zones (local major and regional)
G	Added reference	Hagkonsult 8091152, 1978 Utlåtande beträffande vattenläckage till bergrums-anläggningen för lagring av låg- och medelaktivt avfall, Simpevarp (report on water inflows to the CLAB	Hagkonsult (incomplete report from OKG and RS Consulting)	Incomplete report from OKG. Short description of rock and groundwater conditions, drawings missing.

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data	Reference description from current project.	Data source	Comments
H	Added reference	SKB Tekniskt PM Nr. 25-89-003, Översiktlig beskrivning av berggrunden i Simpevarps området, (general description of rock conditions on Simpevarp peninsula) 1989, av R. Stanfors	SKB	Regional summary report with focus on Äspö but including Ävrö and Hålö
I	Added reference	SKB, R-01-06, RVS-modellering, Ävrö, Markström and Stanfors, 2001	SKB	Primarily an RVS modelling exercise rather than an 'approved' structural geological model- lrm/RS comment. Note that a digital 3D structural geological model exists in RVS version 3
J	Added reference	SKB, HRL-96-19, Overview of documentation of tunnel, niches and core boreholes, Markström and Erlström, 1996	SKB, Sycon archive	Original digital source of mapping data from the Äspö underground hard rock laboratory access tunnel
1	SKBF-KBS AR 8.4-14	SKBF-KBS AR 8.4-14. Sammanställning och utvärdering av berggrundsgeologiska och hydrologiska förhållanden i simpevarpsområdet. (Compilation and assessment of geology and hydrology of the Simpevarp area) B. Gentschein, V. Stejskal	SKB	Geology: limited description of Ävrö and CLAB area. Reference is made to more detailed descriptions available in Moberg M 1979, CLAB Simpevarp site investigation, Vattenfall 1979-01-23 och Eriksson K, 1982 CLAB Eng Geol construction reports for transport
2	Hydrodata. SKBF-KBS AR 8.4-14	Same reference as ID1	SKB	Same reference as ID1
3	SKBF-KBS AK K-0-6:1R6	SKBF-KBS AK K-0-6:1R6, Om de geologiska, särskilt spricktektoniska förhållandena på halvön nordost om Simpevarp, Misterhults socken. 1959	Walter Larsson	Five sides of text including a short summary of fieldwork and site inspection for the O1 siting and seismic risk. -better coverage of these topics are available elsewhere.
4	Ritning nr 30-92-33	OIII 'Ritning nr 30-92-33	Reidar Hoffner	O III Reactor building geological mapping of the floor and walls, see ID8 for other mapping. Incl. memo, Commentary on the mapping work, OIII incl. Weakness zone descriptions
6	SKB PR-87-15	SKB PR-87-15 Seismic refraction investigation at Äspö	Sture Sundin, SKB	Seismic refraction profiles- rockhead level and low velocity zones. Local to Äspö, only the southern end of profile S8701, in the vicinity of Hålö, is geographically relevant. Both raw and interpreted data are presented.
8	O III. Geokartering, slutrapport	O III. Geokartering, slutrapport (geological mapping of excavations, final report)	Hoffner-Stanfors, OKG	Short description of Simpevarp peninsula geology, site investigation for the intake tunnel and deep water intake structure, cored drillholes KBH 2 to KBH 11 short holes (15m) drilled upwards from the tunnel incl. BH logs; limited grouting report and minutes

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data)	Reference description from current project.	Data source	Comments
9	Berggrundsundersökning Clab2. SKB PR-97-06	SKB PR-97-06, CLAB Etapp 2 Projekt rapport, berggrundsundersökningar 1995 och 1997	Stanfors et.al.	1978 Seismic profiles, plan with low velocity positions (ID9_1);1995 och 1997 seismic profiles, plan with low velocity positions (ID9_3), interpretation of profile LS135 cavern CLAB2 in appendix 1. Core and hammer hole positions 1995 and 1997 (ID9_4), 199
10	Roy Stanfors, 'Simpevarpshalvön, O-I, O-II, O-III, tunnlar, 'VBB, Hagconsult, Konsortier. '1959-ca 1985. 'Div.ritningar och rapporter i osorterad form	Roy Stanfors	VBB, Hagconsult, Konsortier	Mapping of drillcores from 1981-01 in intake tunnel part 1, section 0/024, short summary of result in text format, multiple brecciated zones. O III intake tunnel corehole Nr 1 from section 0/023.5 photos 0-71m. -cross-check content with SICADA data orde
11	'Seismik och loggningar, 'Roy Stanfors 'Simpevarpshalvön, O-I, O-II, O-III, tunnlar. 'Div.ritningar och rapporter i osorterad form	Roy Stanfors, Rapport över utförde seismiska undersökningar vid OIII (kort), enstaka ritningar	Roy Stanfors	Seismic reflection survey, O III, 1980, deep water intake and intake tunnel, plan och profiles
12	'Information om tunnlar, 'Mätningar av olika slag, 'Simpevarpshalvön, O-I, O-II, O-III, tunnlar' Div.ritningar och rapporter i osorterad form	Roy Stanfors, no specific reference, information included in other ID references DELETED		-
14	Byggn.geol uppföljning CLAB2	CLAB stage 2 Construction geo documentation 2001, Project PM TP-01-02, PPM 97-3450-12 BH TV images from KSI 31 and KSI 32, PPM 97-3450-15 Rock stress in KSI 32	SKB-report Johan Berglund,	Extensive geomapping of CLAB2, only major structures have been included here, a complete coverage of detailed mapping results are available. Incl. Petrographic analysis of rock types, clay analysis, water chemistry. Groundwater around CLAB, monitored time
15	Geokartering, O-I, O-II, Oskarshamnswerken. Roy S.'VBB, (Hagkonsult)'1969	Oskarshamnswerken. Roy S.	VBB, (Hagkonsult)	Individual drawings. Geological field mapping in the general OI area 1969, 1:1000. Summary figure of OI tunnel mapping showing main tectonic features (intake to tailrace I). OII, ; PM angående grundundersökningar, '69 -ref: ground investigations- genera

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data)	Reference description from current project.	Data source	Comments
16	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävrö området	Tekn.PM 25-87-019, Sammanställning av data från Simpevarp-Ävrö området	Roy Stanfors	Sammanställning av geodata från Simpevarp-Ävrö området, (Compilation of geodata covering the Simpevarp-Ävrö area) RS '87, with plan of fracture zones and short text descriptions. (includes CLAB area)
21	PR-25-87-16	PR-25-87-16, Preliminary investigations of fracture zone at Ävrö- results of investigations performed July '86 -May '87.	Gentzschein et.al	Fracture zones at Ävrö '87, high frequency of structures shown.
32	Ericsson, 1987, Rapp, diagram	PR-25-87-05, Fracture mapping on outcrops, findings of detailed and regional survey.	Ericsson	Detailed fracture mapping and fracture statistics covering Simpevarp peninsula, Ävrö and Äspö.
38	PR 25-89-13	PR 25-89-13	Stenberg, Sehlstedt	Geophysical profile measurements on interpreted regional aeromagnetic lineaments in the Simpevarp area. Major regional lineaments only. Airborne survey incl. Aeromagnetic. Interpreted profiles. Ingenting som påverkar projekt området, använda Simp V0 istä
40	PR 25-89-23	PR 25-89-23, Regional geological study, seismic refraction survey	Rydström, Greber	Seismic refraction survey, total length 2000m, 11 low velocity zones. Falls outside immediate project area
41	PR 25-89-23	PR 25-89-23, Regional geological study, seismic refraction survey	Rydström, Greber	See ID 40 (same reference)
45	PR 25-87-14; PR 25-88-16; PRAV 77/1; PR 25-87-16	PR 25-87-14, se ID46; PR 25-88-16 geophysical measurements on the island of Äspö; PRAV 77/1, Geofysiska markundersökningar i Oskarshamn; (PR 25-87-16 se ID21)		PR 25-87-14, see ID46 same reference. PR 25-88-16, study limited to Äspö island (ID45_1). PRAV77/1, Electromagnetic measurements VLF over Ävrö (poor copy); investigation of the bedrock's elastic constants incl. Småland granite.
46	PR 25-87-14; PR 25-89-02	PR 25-87-14, Seismic and geoelectrical test survey on Ävrö; PR 25-89-02, Shallow reflection seismic profiles from Äspö	C Ploug; K Klitten	(äspö) PR 25-89-02, Limited to Äspö, layout plan, seismic profiles. Raw data and text description along with interpretations. PR 25-87-14, layout plan, seismic profiles and electrical soundings (ID46_2 och ID46_3) but no interpretation in figure format;
49	L Eriksson 1976,Uppdrag för PRAV	L Eriksson 1976	SGU, SKB	-
55	Översiktlig geologisk kartering av terrängen öster om Simpevarps by samt förslag till borrhingsprogram för Oskarshamns kärnkraftverk. Litteraturförteckning Hagconsult 9091185	Översiktlig geologisk kartering av terrängen öster om Simpevarps by samt förslag till borrhingsprogram för Oskarshamns kärnkraftverk, 1965	Hagconsult	Incomplete report. General description of geomapping results.

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data	Reference description from current project.	Data source	Comments
56	Geologisk fältkartering av området för reaktor I, 15 st jord-berg-sonderingar, 3 bergborrhål. Litteraturförteckning Hagconsult 9091185	Hagconsult 9091185	Hagconsult	NOT AVAILABLE
57	Förslag till undersökningsborringar vid Oskarshamns-verket för aggregat II alt. 2 och dess utloppstunnel. Litteraturförteckning Hagconsult 9091185.	Hagconsult, 9011-4.4, 1969, Markundersökning. Geologisk undersökning inom området för aggregat II, OII, Simpevarp	Hagconsult, (fick från OKG)	Tunnel mapping with weakness zone descriptions in text; repetition of fig ID15_4 Oskarshamn power station geological overview and borehole plan; repetition of ID15_4 Intake tunnel, major structures; repetition av ID15_3 tailrace tunnel, major structures.
58	Geologisk fältkartering över området för reaktor II, geologisk kartering av tunnlar för reaktor I, bormingar för utloppsområdet för tunnel II. Litteraturförteckning Hagconsult 9091185	Non specific reference	Hagconsult	-
59	Geologisk och bergteknisk kartering av tillloppstunnel II. Litteraturförteckning Hagconsult 9091185.	Hagconsult, 9011-4.8, 1972, Markundersökning. Geologisk och bergteknisk kartering av tillloppstunnel, Oskarshamnsverket II (OII)	Hagconsult, (from OKG)	One and a half sides of text; short but clear summary of mapping results
60	Geologisk fältkartering inom området för reaktor III samt inom om-rådena för tillloppstunnel från Tallsjär. Litteraturförteckning Hagconsult 9091185.	PM befräffande geologiska förutsättningarna samt förslag till bergundersökningar för OIII. -Geologisk fältkartering inom området för reaktor III samt inom om-rådena för tillloppstunnel från Tallsjär.	Hagconsult 1974	NOT AVAILABLE
61	Seismisk undersökning utefter planerad tillloppstunnel till OIII. 1090 m seismisk undersökning utefter intressanta avsnitt av 2 alter-nativa sträckningar av tillloppstunnel från Tallsjär. Litteraturförteckning Hagconsult	Seismisk undersökning utefter planerad tillloppstunnel till OIII. 1090 m seismisk undersökning utefter intressanta avsnitt av 2 alter-nativa sträckningar av tillloppstunnel från Tallsjär.	Hagconsult 1975	NOT AVAILABLE

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data)	Reference description from current project.	Data source	Comments
62	Oskarshamnsverket III, Simpevarp. Orienterande grund-undersökning för djupvattenintag. Sammanfattande utlåtande. Litteraturförteckning Hagconsult 9091185	Oskarshamnsverket III, Simpevarp. Orienterande grund-undersökning för djupvattenintag. Sammanfattande utlåtande. Ekolodning och seismik vid Mårdskär.	Hagconsult 1976	NOT AVAILABLE
63	Oskarshamnsverket III, Simpevarp. Utlåtande beträffande geologiska-bergtekniska förhållanden. Litteraturförteckning Hagconsult 9091185	A3359, Utlåtande över de geologiska och bergtekniska förhållandena för Oskarshamnsverket III, Simpevarp Etapp 1, 1980 (** inte 1976 men referens till Hagconsult 1976, uppdaterings rapport?)	Hagconsult 1976, VBB 1980	Appendices to the main report: 1. Report covering seismic investigations at OIII, figures ID63_1 to ID63_5; 2. Report covering rockhead soundings and water loss measurements at OIII; 3. Report covering TV borehole inspections at OIII; 4. Report covering
64	Geologisk-bergteknisk utredning för centralt avfalls-lager i berg. Oskarshamnsverket III, Simpevarp. Litteraturförteckning Hagconsult 9091185.	Geologisk-bergteknisk utredning för centralt avfallslager i berg. Oskarshamnsverket III (OIII), Simpevarp, 1976	Hagconsult (fick från OKG)	Summary of results without the actual results themselves. Short descriptions of descriptions of groundwater, the rockmass and boreholes.
67	Tectonic lineaments in the Baltic from Gävle to Simrishamn.	KBS Teknisk rapport nr 59, Tom Flodén	SKB	All data falls outside the project area
68	Geofysiska markundersökningar i Oskarshamn. Prav Rapport 4.1, Leif Eriksson, Kurt Å Magnusson. Litteraturförteckning Hagconsult	Prav Rapport 4.1, Leif Eriksson, Kurt Å Magnusson	Hagconsult	Ref GDA:BRAP00007 = PRAV 77/1 (according to SGU Library search), see ID45
73	Centralt mellanlager för använt bränsle. Jämförande geologisk och bergteknisk studie beträffande berggrums-förläggning inom två områden vid Simpevarp.	7093503, CLAB, Jämförande geologisk och bergteknisk studie beträffande berggrumsförläggning inom två områden vid Simpevarp	Hagconsult, 1978	incl. Detailed water loss measurements in BH1 (80m deep)
232	Geofysiska markundersökningar i Oskarshamn 06H3a:1. Eriksson Leif; Magnusson Kurt Å, GDA:BRAP00007, SI: 9 DI: 4 TA: 2 KA: 7 SP: Sve, AD. SGU berggrundsbyråns arkiv ID; GDA:BRAP00007; ME: papper, 1977		SGU	Ref GDA:BRAP00007 = PRAV 77/1 (SGU Bibliotek sök), se ID45
544	GROUND GEOPHYSICS Magnetic. PR 25-87-01, PR 25-87-16, PRAV 77/1, PR 25-88-16 (fig 2-4, SKB TR 97-02)	PR 25-87-01 Geophysical profile measurements (fig 2-4, SKB TR 97-02)	SKB, Leif Stenberg	PR 25-87-01 Geophysical measurements (LS), magnetometer och VLF, rå och tolkad data. Laxemar data, minimal intresse (fig 4.5, se ID544_1), inkl.dubbel data från ID21 (see ID21_3)
545	GROUND GEOPHYSICS VLF. PR 25-87-01, PR 25-87-16, PRAV 77/1, PR 25-88-16. (fig 2-4 and 2-5, SKB TR 97-02)	(fig 2-4 and 2-5, SKB TR 97-02)	SKB	PR 25-87-01 (se ID 544 samma referens); PR 25-87-16 (se ID21, samma referens); PRAV 77/1 (se ID45, samma referens); PR 25-88-16 (se ID 45, samma referens)

ID.Nr	Selected reference description according to SKB's original list. (Extracted from Version 0 data)	Reference description from current project.	Data source	Comments
546	GROUND GEOPHYSICS Slingram. PR 25-87-01, PR 25-87-16, PRAV 77/1, PR 25-88-16. (fig 2-4 and 2-5, SKB TR 97-02)	(fig 2-4 and 2-5, SKB TR 97-02)	SKB	PR 25-87-01 (se ID 544, samma referens); PR 25-87-16 (se ID 21, samma referens); PRAV 77/1 (se ID45, samma referens); PR 25-88-16 (se ID45, samma referens)
547	GROUND GEOPHYSICS Seismic refraction. PR 25-87-15 (fig 2-4 and 2-5, SKB TR 97-02)	(fig 2-4 and 2-5, SKB TR 97-02)	SKB	PR 25-87-15 (se ID6, samma referens)
548	GROUND GEOPHYSICS Seismic refraction. PR 25-89-02. PR 25-87-14	(fig 2-6,SKB TR 97-02).	SKB	PR 25-89-02 (se ID 46, samma referens); PR 25-87-14 (se ID 45, samma referens)
552	Understanding the geological history of the rocks and to study the main sets of tectonic zones.PR 25-88-05, PR 25-89-11, PR 25-89-15	(figure 2-7, SKB TR 97-02)	SKB	Fracture mapping study on Äspö island outcrop number 141-176, 179-194 (plan view showing area covered by study)