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Tittel Follow-up on stream sediment and radiometric anomalies in Vestfold, Norway 2007				
Forfatter Wilberg, Rune		Dato År 2008	Bedrift (Oppdragsgiver og/eller oppdragstaker) Intex Resources ASA	
Kommune Re Andebu Larvik Lardal	Fylke Vestfold	Bergdistrikt	1: 50 000 kartblad 18134 17131 17134	1: 250 000 kartblad
Fagområde Geofysikk Geokjemi	Dokument type		Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Snibbedalen Seteråsen Bråtaåsen Grasåsen Skrabbedalen	
Råstoffgruppe Malm/metall	Råstofftype Mo Zn Pb U Th			
Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse En kort rapport basert på en fem-dagers oppfølging av radiometriske og bakkesediment anomalier. Under første del av prøvetakingen manglet man scintillometere, slik at prøvetakingen ble noe vilkårlig. Dette rettet seg senere.				

Follow-up on stream sediment and radiometric anomalies in Vestfold 2007

Intex Resources ASA

Submitted by Rune Wilberg

Mapsheets: 1813 IV
1713 I
1713 IV

Areas: Snippane
Seteråsen
Bråtaåsen
Grasåsen
Skrabbedalen

This is a short note on 5 days follow-up of airborne radiometric anomalies (unpublished maps, NGU) and Mo-Zn-Pb stream sediment anomalies (Ryghaug 1981) in Re, Andebu, Larvik and Lardal municipalities, Vestfold county, and in Skien municipality, Telemark county.

The area is underlain by Permian alkaline igneous and volcanic rocks of the Oslo Paleorift. Intex Resources holds the claim areas Sæteråsen and Snippene, in addition to the Ramnes Mo claims.

The U and Th maps (encl 3 and 4) are compiled by NGU from various surveys. Stream sediment survey was conducted by NGU in 1980. The stream sediments are assayed for Mo, Zn and Pb (encl 5, 6 and 7).

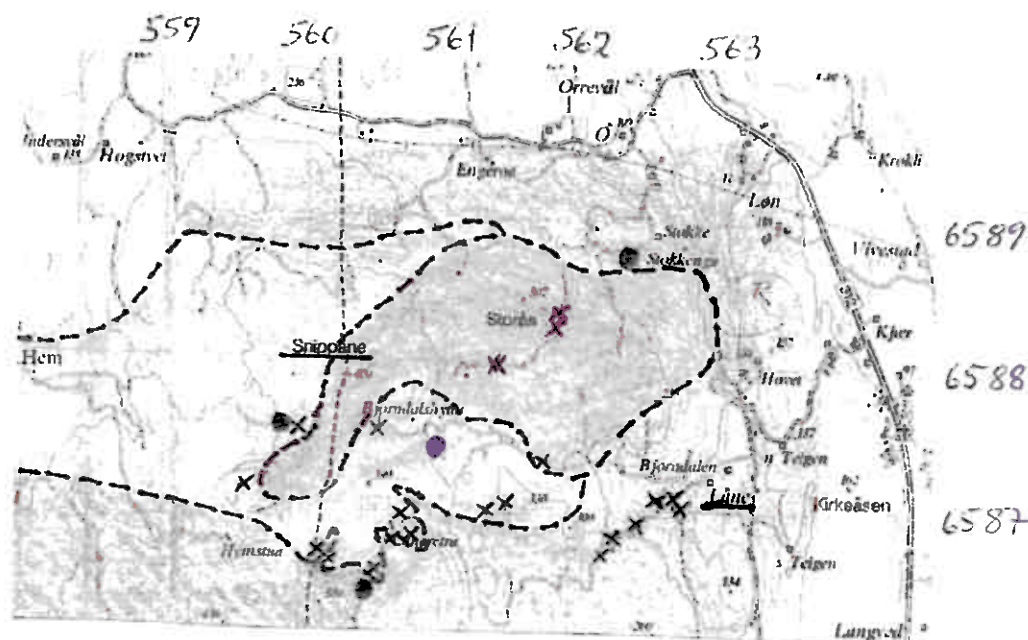
During the first part of follow-up, the lack of a scintillometer made the sampling somewhat arbitrary. The second part was assisted by radiometric ground measurements (Knirps scintillometer).

Snippene

Mapsheet 1813 IV

An initial visit to the Snippene claim area (fig 1) proved anomalous contents of granitophile trace elements in the alkali granite (ekerite) intrusion (samples 99645 and 99646), i.e. 0,1 % Nb, 95 ppm Th, 65 ppm U and 50 ppm Sn. A second visit, including scintillometer survey and sampling, was therefore conducted in the autumn.

Snippene is claimed due to anomalous Mo (up to 132 ppm) and Zn (up to 774 ppm) in stream sediments (Ryghaug 1981, encl 5 and 6).



- | | |
|--------------------------------|---------------------------|
| — Ekerite | ✕ Rock sample location |
| ■ Feldspar-porphyrific syenite | ● Stream sediment anomaly |
| ■ Rhomb porphyry | |

Fig 1. Geologic map Snippene - Låne.

Snippane is located in the Siljan-Skrim area which comprises two intrusive complexes. The southern, Siljan-Hvannes complex consists of a series of monzonitic to syenitic intrusions, which are nested in a systematic way, indicating decreasing emplacement age from east to west. The northern, Skrim-Mykle complex consists of two large, composite intrusive bodies, the Skrim larvikite and the Mykle ekerite. Immediately north of lake Mykle is the Eikeren-Skrim ekerite, the largest of a series of peralkaline granite (ekerite) complexes in the Oslo Rift.

Compared to the Mykle ekerite (Bonin & Sørensen 2003) 20 km to the west, the Snippane ekerite is enriched in HREE, U, Th, Zr, Nb, Ta, Rb and Ba, and has lower contents of Sr and Cs. LREE and Zn contents are approximately equal.

When into comparisons: The Arabian Shield contains one of the largest fields of alkali granites in the world, and their occurrence are comparable to those of the Jos Plateau of Nigeria and Niger.

Average trace element composition of Arabian specialized alkali granites (Ramsay 1986), which are parental to radioactive incompatible element deposits, is lower in Rb, Nb, Ta, U, Th, Sn, W, Y, Zr, Zn and Pb, and higher in Ba and Sr than the samples from the Snippane ekerite. The levels of Ce, La, Nd and Mo are about the same.

A-type granitic rocks of the Tongolo anorogenic complex (Nigeria), where metallization is dominated by Nb-Sn and Sn-W types (Imeokparia 1985), compared to Snippane ekerite: Means of Nb-Sn-bearing granites are higher in Rb, U, W, Ga and Zn, and lower in Ba, Nb, Zr and Pb. About the same in Sr, Sn, Y and Th. Means of Sn-W-bearing granites are higher in Rb, W and Ga, and lower in Ba, Nb, Zr, Th, U, Zn and Pb. About the same in Sr, Sn and Y. This should indicate that the Snippane ekerite is metallogenetically specialized and therefore is prospective for incompatible elements which could be concentrated in roof zones, cupolas, hydrothermally altered rocks such as greisens, in quartz veins, pegmatites or satellite stocks, sills or dykes.

The ekerite is in the area between Bjørndalshytta and Lånesætra enhanced in radiation, 20-25K, compared to the surrounding ekerite which has 8-15K. The samples 100476 and 477 from this area assay 236 ppm Th and 70 ppm U, but yield no clear correlation to REE. Nb is however enriched to 0.13 % in this differentiated part, and Sn up to 256 ppm.

One sample (100471) of alkali granite with a 1 cm thick quartz vein with an associated dark mineral and molybdenite, shows trace element enrichments at the level of Sæteråsen. High frequencies of quartz veins are however nowhere been detected in the alkali granite.

The fluorite veining (fig 2) and molybdenite occurrence at Låne could possibly be related to the ekerite as exocontact mineralizations. In addition to further exploration in the ekerite, also potential exocontact mineralizations in the surrounding rhomb porphyry should be in focus.

At Eidsfoss, 18 km to the north, the Hofsrud molybdenite mineralization is reported to be genetically linked to ekerite belonging to the Sande cauldron (Stadheim 1942).

Låne

Mapsheet 1813 IV

A visit to Snippane led to detection of molybdenite mineralization 1,5 km east of the claim area (fig 1). Rusty, altered rhomb porphyry is exposed along a forest road westwards from Låne, over a distance of 700 m.

Initial samples (99640-99645) were collected of floats at 562123 6586696, where blasted rocks from the road are used as base for a parking place. Assays showed up to 478 ppm Mo and 62 ppm W in the pyrite-rich, clay-sericite altered, fluorite-bearing rhomb porphyry. Follow-up sampling of outcrops along the road led to detection of pyrite-molybdenite-disseminated and silicified rhomb porphyry at one location. The sample assayed > 1 % Mo and the extent of mineralization should be sought established.



Fig 2. Fluorite vein at Låne (UTM 562685 6587021)

Sæteråsen

Mapsheet 1813 IV

In the Vestfold lava plateau aero-radiometric surveys (1961 and 1981) led to the discovery in 1967 (Hysingjord & Thorkildsen 1971) of some unusual Th-enriched aphyric trachytes. These trachytes, assumed lava flows, situated at Sæteråsen (encl 3) occur as conformable, elongated and lense-shaped bodies within a sequence of porphyritic trachytes and rhomb porphyry flows which represent eruptions from the Ramnes central volcano.

Drilling at Sæteråsen in 1981/82 (Ihlen 1983) indicated 8 mill tons contained in two parallel lenses grading 0,25 % Nb, 0,75 % combined REE, Y and Th, and 1-2 % Zr. These elements occur concentrated in disseminated grains of zircon, pyrochlore, chevkinite and britholite, as well as a number of other Nb-REE-Y-Th-bearing accessory minerals.

As Ta assays were lacking in the earlier reports, 5 samples were collected from a profile over Sæteråsen (encl 1 and 2). One of them (99594) is taken from the mineralized trachyte and

assayed 132 ppm Ta, which demonstrates a Nb/Ta ratio as high as 20 : 1. The content of granitophile trace elements in this sample confirms the consistence in grades earlier reported from this uniformly mineralized trachyte.

The area west of the Ramnes cauldron (Brånan, Nøklegård, Einarsrød, Bølevannet, Solbakken, Solbergvannet, Snappen, Kirilåsen)

Mapsheet 1813 IV

As can be seen from the aero-radiometric survey (encl 3 and 4), enhanced Th and U occur along the syenite contact (the Sæteråsen mineralization is located close to this contact), both in the syenite and in the adjacent rhomb porphyry (and ignimbrite).

Stream sediments from subareas are anomalous in Zn, Pb and Mo (encl 5, 6 and 7).

11 samples (99629-99639) were collected from syenite, rhomb porphyry and ignimbrite in this area, but without scintillometer to target the radiometric anomalies.

Even if the assays show anomalous contents of lithophile elements, indication to ore forming processes are not found. Compared to the distinct and strong radiometric anomaly at Sæteråsen, the enhanced radioactivity bound to the syenite contact seems to be a regional feature. It could be ascribed to the fact that the roof or margins of the magma chamber may become enriched in silica, alkalis and granitophile elements.

Even if selected radiometric anomalies are followed-up earlier (Hysingjord & Thorkildsen 1971, Furuhaug & Sørdal 1983), a scintillometer survey could prove useful.

Bråtaåsen

Mapsheet 1713 I

One sample of clay-sericite altered rhyolitic ignimbrite with pyrite- and molybdenite dissemination assayed 189 ppm Mo.

Grasåsen

Mapsheet 1713 I

One sample of coarse grained syenite assayed 1275 ppm Nb.

Skrabbedalen

Mapsheet 1713 IV

At Skrabbedalen (15 km NNW of Skien), a magnetite-impregnated, fine-grained granite is intruded along the margin of a large larvikite pluton (the Stengestad Complex). It is accompanied by an aeromagnetic anomaly. Ground radiometric measurements show 20K, which is not very high for granitic rocks, but clearly anomalous. The granite is not delineated by mapping, but associated U-, Th- and mag anomalies from the airborne survey suggest an approximate outline of a body with diameter 500 m (fig 3).

The radiometric anomalies covering the granite stock are reflected in enriched Th and U in the assays, but the levels of other granitophile elements does not encourage follow-up, even if they are anomalous.

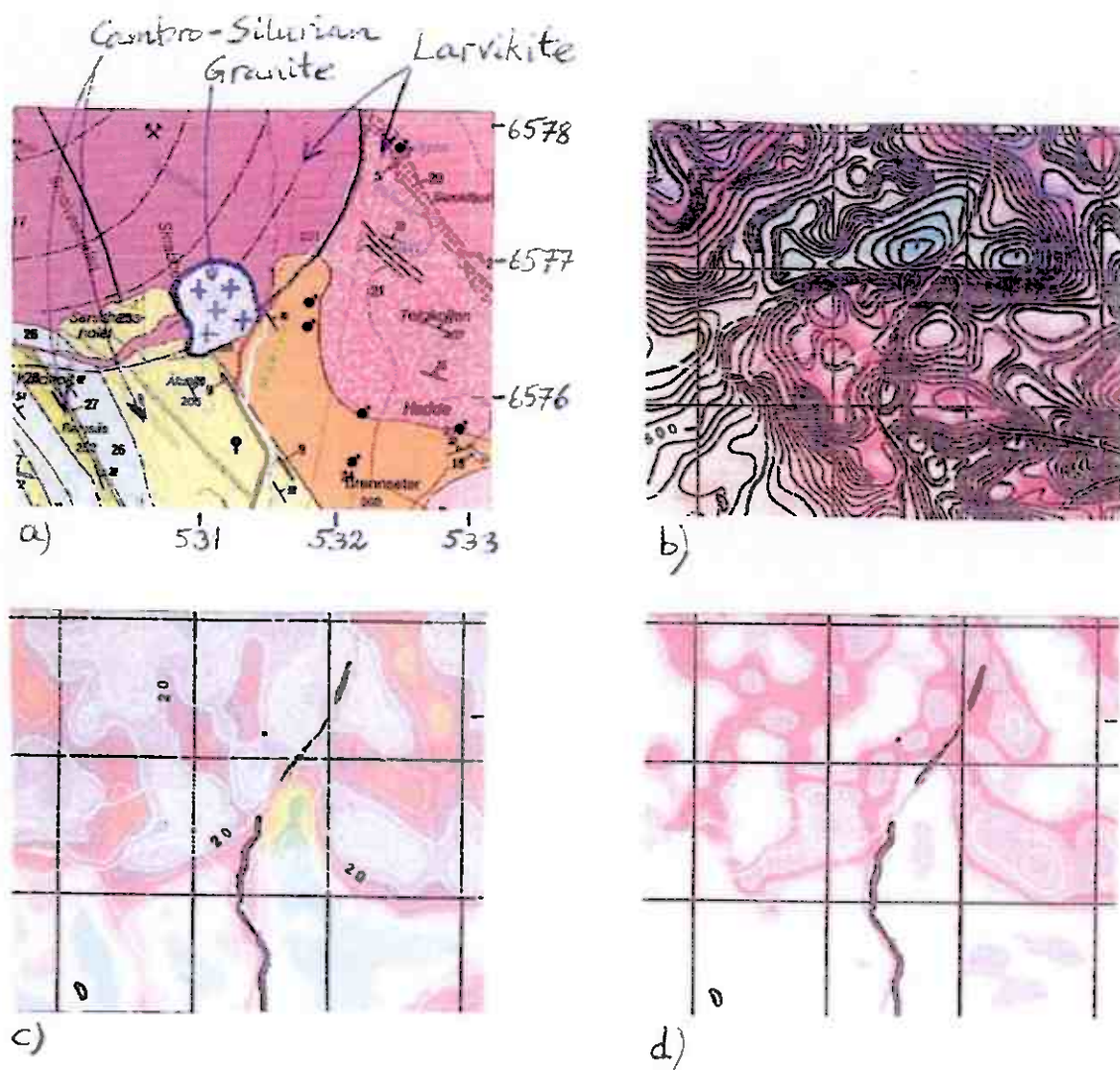


Fig 3. Skrabbedalen, a) geology, b) airborne mag, c) airborne Th, d) airborne U.

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- Stadheim, J. 1942: Eidsfoss molybdenforekomst. Bergarkivet rep BA 3332.

Enclosures

1. Sample list
2. Assay table
3. Airborne radiometry Th, and sample locations
4. Airborne radiometry U, and geology
5. Plot of Mo content in stream sediments
6. Plot of Zn content in stream sediments
7. Plot of Pb content in stream sediments

Sample list, rock samples, Vestfold

Sample no	UTM east	UTM north	Description	Location	Year
99591	556771	6573183	Finegrained trachyte	Sæteråsen	2007
99592	556829	6573408	Finegrained trachyte w feldspar phenocrysts	Sæteråsen	2007
99593	556874	6573459	Finegrained trachyte w feldspar phenocrysts	Sæteråsen	2007
99594	556936	6573434	Finegrained trachyte w thin veins of dark min	Sæteråsen	2007
99595	557025	6573398	Finegrained trachyte w feldspar phenocrysts	Sæteråsen	2007
99629	561026	6569298	Grey, weakly clay alt ignimbrite	Brånan	2007
99630	560407	6573849	RP w mt-diss	Neklegård	2007
99631	559005	6578106	Red RP w mt-diss	Einarsgård	2007
99632	558096	6576655	Med- to coarsgr greyred syenite w ilm(?)	Bølevannet	2007
99633	555198	6577359	Grey syenite	Solbakken	2007
99634	555709	6577720	Grey syenite w oxide-diss	Solbergvannet	2007
99635	555692	6577856	Grey syenite w oxide-diss	Solbergvannet	2007
99636	559232	6569614	RP	Snappen	2007
99637	557917	6575720	Coarsegr syenite w oxide-diss	Kirilåsen	2007
99638	558289	6575847	Syenite w oxide-diss, close to diabase	Kirilåsen	2007
99639	558208	6575681	Bleached RP w mt-diss	Kirilåsen	2007
99640	652123	6586696	Light pink RP w semimass py, minor fluorite + Mo (float)	Låne	2007
99641	652123	6586696	Weakly ser-clay alt RP(?) w py, Mo, fluorite and limonite (float)	Låne	2007
99642	652123	6586696	Ser-clay alt, light col RP(?) w py-oxide-diss (float)	Låne	2007
99643	652123	6586696	Weakly clay alt RP(?) w py-Mo-diss (float)	Låne	2007
99644	652123	6586696	Banded, dark red trachytic flow(?) w small (<1mm) fld nodules (float)	Låne	2007
99645	561322	6586961	Med- to finegr alkali granite w oxide-diss	Snippane	2007
99646	561458	6587020	Med- to finegr alkali granite	Snippane	2007
99647	562685	6587021	RP w fluorite vein	Låne	2007
99648	567087	6582968	Ignimbrite w open space qtz vein w sphalerite along cont	Kjønnerød	2007
100469	559572	6587120	Alk granite w miarolites w qtzxx, manganese coating (8-10K)	Snippane	2007
100470	560111	6586676	Med- to finegr alk granite (12K)	Snippane	2007
100471	560202	6586621	Alk granite w qtz vein (10K)	Snippane	2007
100472			Cleaner uncontaminated		
100473	560540	6586547	Alk granite w Mn (15K)	Snippane	2007
100474	560637	6586777	RP w py-diss (5K)	Snippane	2007
100475	560786	6586792	Alk granite (10K)	Snippane	2007
100476	560717	6586934	Medgr alk granite w oxide-diss (21K)	Snippane	2007
100477	560541	6587521	Alk granite (20-25K)	Snippane	2007
100478	559962	6587500	Alk granite (15K)	Snippane	2007
100479	561818	6588383	1cm wide open space qtz-fluorite vein w py, in feldspar-porph syenite	Snippane	2007
100480	561793	6588280	Medgr alk granite w py-diss (13K)	Snippane	2007
100481			Standard 1		
100482	561367	6587988	Alk granite w Mo-diss ls veining feldspar-porphyrritic syenite (15K)	Snippane	2007
100483	561354	6588001	Qtz lense in alk granite	Snippane	2007
100484	561733	6587334	Feldspar-porphyrritic syenite (10K)	Snippane	2007
100485	562690	6587028	Dark red trachyte(?) dyke(?), 1m wide, 170°/90° (30K)	Låne	2007
100486	562624	6587101	Rusty, clay alt RP w fluorite and py-diss (4-5K)	Låne	2007
100487	562541	6587103	Red RP w py-diss (4K)	Låne	2007
100488	562541	6587103	Red RP w py/as diss and in lithophysae (4K)	Låne	2007
100489	562389	6586904	RP w py-diss	Låne	2007
100490	562235	6586810	Silicified RP w py-Mo-diss	Låne	2007
100491	552023	6573638	White, rusty, clay-ser alt rhyolitic ignimbrite w py-Mo-diss (10K)	Bråtaåsen	2007
100492	551927	6573646	White rhyolitic ignimbrite w mm-thick qtz veins and Mn (10-12K)	Bråtaåsen	2007
100493			Cleaner through crusher		
100494	549637	6570670	Coarsegr, red syenite (12K)	Grasåsen	2007
100495	531002	6576562	Finegr, light grey aplitic granite w mt-diss (20K)	Skrabbedalen	2007
100496			Standard 2		
100497	531043	6576664	Finegr, light red aplitic granite w mt-diss (15K)	Skrabbedalen	2007
100498	531053	6576457	Finegr, light grey aplitic granite w mt-diss (20K)	Skrabbedalen	2007
100499	530960	6576315	Finegr, red alk granite w py-mt-diss (12K)	Skrabbedalen	2007

PI07104666 - Finalized

CLIENT : CREWMI - Crew Minerals Asa

of Samples : 62

DATE RECEIVED : 2007-09-19 DATE FINALIZED : 2007-10-22

PROJECT : Ramnes

CERTIFICATE COMMENTS : Interference: Mo>400ppm on ICP-MS Cd, ICP-AES results shown. REE's may not be totally soluble in MS61 method.

PO NUMBER : P-5720

SAMPLE	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
DESCRIP1	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
99591 <1		975	273	6,2	<10	12,75	<5	14	8,04	4,34	26,2	19	26,3	2,67	
99592 <1		1010	234	8,8	<10	1,93	<5	12,5	7,22	4,46	28,1	17,3	22	2,41	
99593 <1		899	261	7,1	<10	3,02	<5	14,45	8,26	5,05	28,1	19,6	22,3	2,82	
99594	2	152	1940	0,8	<10	1,84	<5	101,5	71,6	14,3	91,4	102	325	21,8	
99595 <1		749	264	8,6	<10	13,25	<5	14,15	8,22	4,86	29,2	18,9	26	2,76	
99633 <1		189,5	422	0,9	<10	1,11	<5	15,8	9,26	3,55	39,9	20,4	28,7	3	
99634 <1		54,9	309	0,6	<10	2,68	<5	18,1	14,4	2,18	50,7	14,65	79,5	4,02	
99635 <1		42,8	486	0,8	<10	1,73	<5	22,8	16,3	3,71	44,8	24,4	72,3	4,86	
99636 <1		692	266	6,7	<10	2,16	<5	9,42	6,19	3,06	29,7	12,75	33,9	1,89	
99637 <1		71,4	561	0,7	<10	1,3	<5	14,15	9,91	3,1	44,7	22,2	30,5	2,87	
99638 <1		90,3	961	2,9	<10	1,33		15	15,45	11,9	4,38	44,5	30,6	53,3	3,24
99639 <1		844	262	5,2	<10	8,82	<5	11,15	7,13	3,24	27,1	14,4	30	2,2	
99640	1	267	17,2	54,4	<10	0,81	<5	2,37	1,92	0,42	13,4	1,82	16,1	0,55	
99641	1	778	222	15,9	<10	4,55		14	15,05	6,84	6,8	28,5	26,6	11,7	2,52
99642 <1		453	509	8,3	<10	2,52		12	11,6	6,88	4,81	34,5	22,7	28,2	2,1
99643	1	587	67,3	10,3	<10	1,02		8	4,29	3,48	1,17	23,4	4,23	23	0,98
99644 <1		170	311	<0.5	<10	2,12	<5	36,1	23,6	5,28	25,8	33,1	86,6	7,43	
99645	1	129,5	145,5	0,6	<10	1,52	<5	33,8	29,5	1,9	33,7	14,85	152	7,84	
99646	1	85	241	<0.5	<10	1,29	<5	36,5	27,1	2,26	29,7	19	131,5	8,26	
99647 <1		336	157	5,2	<10	1,68	<5	6,65	4	2,28	17	9,06	14,1	1,28	
99648	1	70,1	161,5	6,5	<10	0,37		43	21,7	9,54	3,01	29,6	26,1	9,2	3,56

Enclosure 2

ME-MS81 La ppm	ME-MS81 Lu ppm	ME-MS81 Mo ppm	ME-MS81 Nb ppm	ME-MS81 Nd ppm	ME-MS81 Ni ppm	ME-MS81 Pb ppm	ME-MS81 Pr ppm	ME-MS81 Rb ppm	ME-MS81 Sm ppm	ME-MS81 Sn ppm	ME-MS81 Sr ppm	ME-MS81 Ta ppm	ME-MS81 Tb ppm	ME-MS81 Th ppm
140,5	1,09	2	195,5	120,5	<5	22	34,7	376	20,2	6	207	10,6	2,64	20,7
113	0,97	2	150	106,5	<5	20	29,8	105	18,4	6	299	8,2	2,38	13,3
127,5	1,09	<2	169	121	<5	17	33,5	115	21	6	228	9,8	2,75	21,6
878	12,5	2	2770	603	<5	160	200	262	104,5	49	219	132,5	16,55	443
131	1,2	2	191	117	<5	16	33,4	213	20	6	232	10,4	2,65	28,2
199	1,17	2	221	141	<5	27	44	174,5	22,4	5	26,5	14,6	2,79	27,2
165	2,75	8	396	83,4	<5	231	28,2	350	13,3	19	25,4	25,9	2,57	45,8
251	2,34	2	474	156,5	<5	39	51	287	25,1	10	13	25,6	3,63	59,1
127	0,97	<2	248	86,5	<5	28	26,6	145,5	13,4	7	492	14,3	1,66	40,1
306	1,76	<2	274	173	<5	10	58,3	196	23	8	14,3	15,5	2,62	40,5
510	2,13	<2	437	266	<5	19	91,8	206	33,2	8	89,9	24,8	3,1	38
126	1,02	<2	198,5	94,9	<5	36	28,2	331	15,55	6	333	11,3	1,93	30,8
13,7	0,38	478	93,7	7,2	<5	34	1,98	153	1,67	2	26,9	5,5	0,33	6,83
375	0,62	103	52,9	193,5	<5	39	62,4	456	27,3	3	110,5	3	3,17	11,05
335	0,98	49	172,5	188	<5	25	61	221	25,5	4	165	10,2	2,49	31
35	0,62	384	150	26,6	<5	28	7,99	276	4,43	5	69,7	8,5	0,64	14,7
165	3,43	6	514	144,5	<5	36	41,8	217	33	15	36,5	31	5,59	80
31,3	5,75	3	1130	27	<5	118	8,48	468	10,65	50	5,7	83,8	4,13	70,8
58,4	4,36	2	984	56,5	<5	48	18	346	15,9	40	6,1	70,6	4,68	95,1
82,1	0,53	4	91,6	56,8	<5	16	17,05	154,5	9,66	2	168,5	4,4	1,21	14,45
63	0,9	90	127,5	94	<5	370	23,2	31,7	28	43	5,3	5,8	4,06	23,7

ME-MS81 Ti	ME-MS81 Tm	ME-MS81 U	ME-MS81 V	ME-MS81 W	ME-MS81 Y	ME-MS81 Yb	ME-MS81 Zn	ME-MS81 Zr
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
<0.5	1,16	3,55	58	5	63,3	7,43	138	965
<0.5	1	2,12	57	3	57,5	6,63	118	961
<0.5	1,19	3,59	47	5	65,6	7,64	94	948
<0.5	11,9	29	6	6	535	83,2	925	>10000
<0.5	1,17	8,26	85	4	66	8,12	168	1120
<0.5	1,33	8,83	22	4	74,3	8,2	142	1180
<0.5	2,46	9,12	46	2	109	17,05	209	2830
<0.5	2,54	17,4	22	4	135	16,5	231	2940
<0.5	0,98	13,85	65	6	49,4	6,51	147	1560
<0.5	1,62	9,51	27	5	76,1	11,25	162	1130
<0.5	1,95	15,75	26	3	90	14,15	109	2040
<0.5	1,09	8,77	31	5	58,7	7,05	196	1170
<0.5	0,33	2,55	17	37	14,9	2,42	27	676
<0.5	0,9	0,85	36	26	68,5	4,85	112	499
<0.5	1	5,48	54	62	54,3	6,65	62	1120
<0.5	0,9	0,59	39	55	25,8	4,05	172	933
<0.5	3,67	21,8	15	8	201	24	272	3380
<0.5	5,5	65,4	<5	15	220	38,6	115	4060
<0.5	4,41	47,7	6	11	231	29,3	151	3590
<0.5	0,6	5,11	31	13	39	3,78	113	623
<0.5	1,22	11,05	52	190	107,5	7,09	2930	318

PI07130658 - Finalized

CLIENT : CREWMI - Crew Minerals Asa

of Samples : 31

DATE RECEIVED : 2007-11-13 DATE FINALIZED : 2008-01-25

PROJECT : Ramnes

CERTIFICATE COMMENTS :

PO NUMBER : P-6037

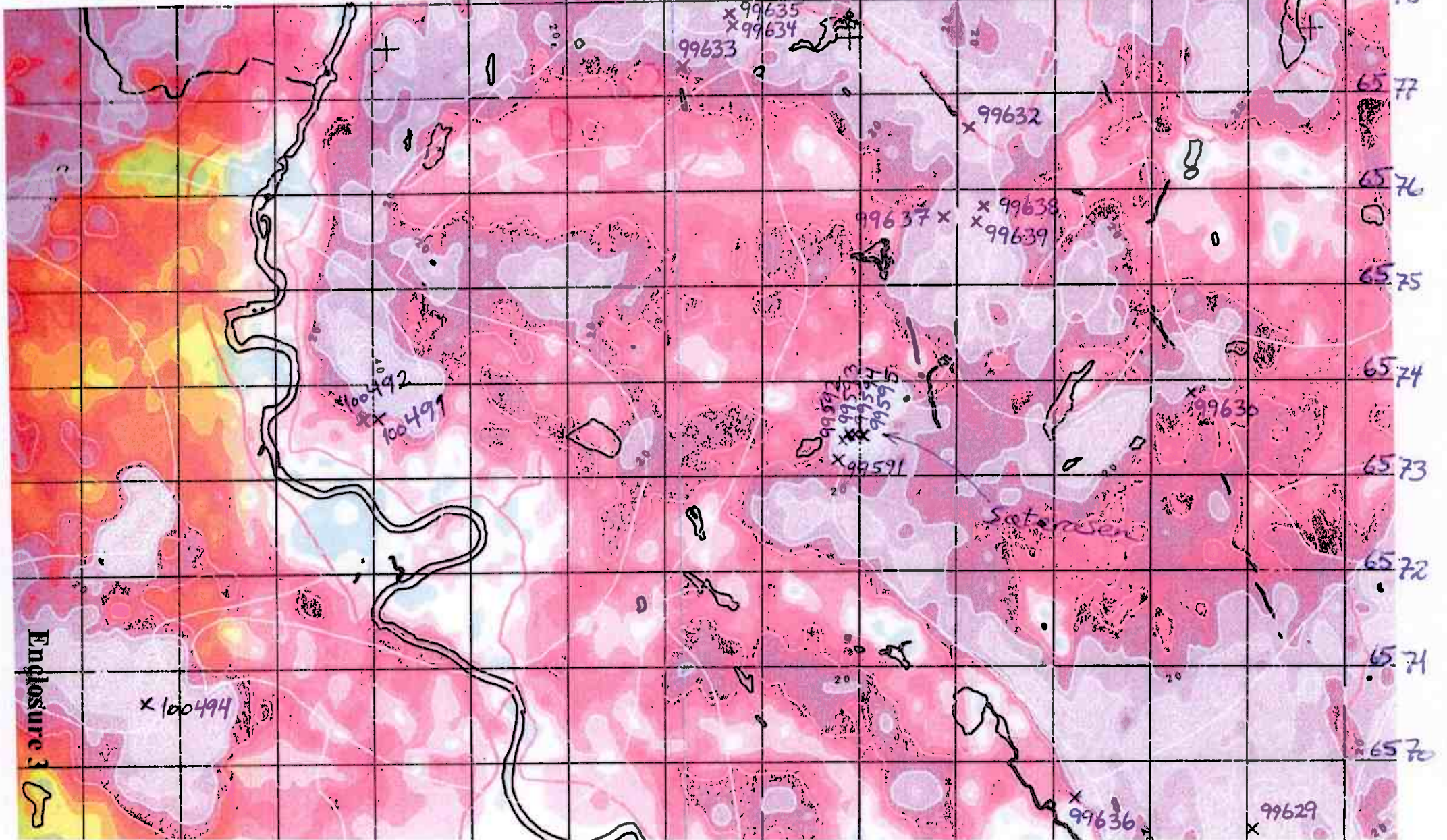
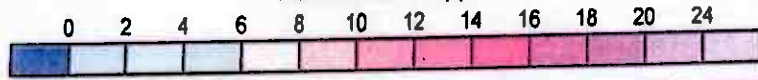
	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
SAMPLE	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
100469	<1	162	292	1,3	<10		1,32	10	17,4	13,95	1,76	31,5	15,6	52,4	4	151,5
100470		94	121,5	0,7	<10		2,69	6	27,8	22,3	1,38	36	12,95	105,5	6,35	29
100471	4	147	2330	0,8	<10		1,25	5	140,5	121	11,65	41,3	130,5	248	31,1	1105
100472	<1	1335	253	5,9	<10		1,01	10	9,44	5,65	4,47	28	13,45	18,3	1,8	129,5
100473	1	148	473	0,9	<10		1,64	<5	38,5	27,7	3,92	41,2	34,4	83	8,16	237
100474	1	536	624	1,2	<10		1,09	<5	36,9	23,5	7,24	47	39,8	67,5	7,45	357
100475	1	105,5	270	0,7	<10		1,92	<5	22,6	17,6	1,68	38,9	15,5	51,9	5,04	115,5
100476	2	131,5	436	0,6	<10		1,28	<5	59,9	44,6	4,06	35,8	40,1	154,5	13,05	199
100477	3	80,5	424	1	<10		2,96	6	41,8	30,6	3,25	35,9	32,2	133	8,93	187,5
100478	4	124	188,5	0,8	<10		3,42	<5	15,45	13,4	0,87	37	8,08	37	3,71	66,2
100479	125	365	204	4	<10		1,07	24	7,74	4,75	1,88	18,2	9,6	17,2	1,5	84,7
100480	5	179	364	1,3	<10		1,26	5	29,3	20,9	3,19	39,6	24,7	66	6,1	187,5
100481	1	560	18,8	2,4		10	1,8	5400	1,38	0,82	0,46	25	1,61	3,4	0,28	9,8
100482	3	134,5	276	1	<10		1,4	68	23,7	17,75	2,39	40,6	18,35	64,9	5,2	140
100483	1	84,8	75,9	1		10	0,59	5	10,9	8,72	0,85	19,7	6,98	31,6	2,49	35,8
100484	1	184,5	260	1,1	<10		0,75	<5	14,9	9,97	1,77	32,3	14	36,8	3,06	132,5
100485	5	314	531	1		10	1,05	5	75,3	51,3	9,06	25,2	54,6	205	15,95	194
100486	<1	123,5	43,2	3,1		10	0,98	<5	4,92	4,12	0,75	38,8	3,05	29,2	1,2	36,2
100487	1	408	214	6,5	<10		1,53	6	9,14	5,94	2,13	24,4	9,26	24,3	1,85	61,4
100488	<1	729	280	9,4	<10		1,7	7	9,39	5,85	2,85	24,1	11,8	23,7	1,86	87,4
100489	1	610	78,1	6,3	<10		1,35	<5	12,05	6,99	2,05	26,4	11	23,6	2,39	33,7
100490	2	419	95,7	38,5	<10		1,02	5	4,45	3	1,08	32,2	5,68	21,5	0,9	56,6
100491	3	256	270	0,8	<10		1,33	<5	23,5	16,3	2,49	47,6	18,2	65,9	4,98	116,5
100492	2	60,5	301	0,5	<10		0,65	<5	18,8	12,45	1,9	33,6	16,5	51,8	3,9	143
100493	1	1350	214	5,6	<10		0,88	10	7,89	4,21	4,81	28,7	11,9	17,2	1,45	114
100494	1	508	400	2,8	<10		3,47	<5	24,8	19,1	3,75	31	22,1	123	5,47	168,5
100495	1	182,5	290	1,8	<10		12,5	<5	12,8	8,69	1,21	30,9	12,9	27,7	2,59	122
100496	3	12,5	384	5,9		10	1,75	638	34	23,3	0,28	20,9	28	8,7	7,03	182,5
100497	1	160	371	1,7	<10		10,35	26	16,95	11,2	1,11	30,2	17,4	22,9	3,4	175,5
100498	1	183,5	304	1,7	<10		8,75	<5	12,35	8,1	1,15	31,1	13,05	23,7	2,46	127,5
100499	1	238	184	1,9		10	12	13	13,4	9,96	0,84	31,2	11,35	20,9	2,91	77,4

ME-MS81 Lu ppm	ME-MS81 Mo ppm	ME-MS81 Nb ppm	ME-MS81 Nd ppm	ME-MS81 Ni ppm	ME-MS81 Pb ppm	ME-MS81 Pr ppm	ME-MS81 Rb ppm	ME-MS81 Sm ppm	ME-MS81 Sn ppm	ME-MS81 Sr ppm	ME-MS81 Ta ppm	ME-MS81 Tb ppm	ME-MS81 Th ppm	ME-MS81 Tl ppm	ME-MS81 Tm ppm	
2,37	5	340	96,3	<5		41	29,4	264	16,1	17	10,7	23,7	2,64	92,8	0,8	2,3
4,24	10	762	26,5	<5		87	7,75	558	9,07	44	7,6	53,6	3,57	101	0,7	3,85
41,1	592	2790	746		5	276	223	463	139,5	147	54,1	135	22,3	109,5	0,7	24,6
1,05	16	178	91,2	<5		12	26,2	103,5	14,85	5	811	9,7	1,81	14,2	<0.5	0,86
5,01	34	860	166	<5		78	50,5	404	35	31	27,8	57,1	6,03	170,5	0,7	4,62
3,48	89	470	231	<5		66	69,4	233	40,7	13	34,3	28,7	6,26	66,2	0,6	3,46
3,16	6	475	67,5	<5		27	21,8	321	13,55	17	9,4	30,4	3,22	95	0,5	2,95
7,61	6	1175	155,5	<5		116	47,2	548	37,4	63	11,7	83,4	8,39	256	0,6	7,32
4,66	11	1360	143,5	<5		92	44,5	560	31,7	92	8,1	98,1	6,29	216	0,6	4,88
3,01	4	1250	40,8	<5		29	13,35	647	8,42	49	7,9	94,6	1,96	150,5	0,5	2,52
0,76	95	146,5	60,1	<5		86	18,3	162	9,75	6	57,7	8,3	1,21	21,5	<0.5	0,74
3,49	29	600	116	<5		28	36,4	336	22,7	24	16,1	37,5	3,99	119	0,6	3,48
0,15	523	12,2	8,5		6	9	2,3	45,7	1,61	2	492	0,9	0,23	2,35	<0.5	0,14
3,17	56	589	86,1	<5		29	26,8	331	16,85	22	17,2	35	3,16	117,5	0,5	3,02
1,51	109	391	26,2		5	19	8,04	199,5	5,63	25	5,4	24	1,33	52,2	<0.5	1,44
1,78	13	340	79,6	<5		12	25,6	304	13,65	9	13,5	20,8	2,11	62,5	0,7	1,66
8,4	4	1385	170		12	75	52,1	288	44,9	27	50,9	87,2	9,71	283	0,5	8,19
0,81	28	216	14,4	<5		43	4,33	117	2,86	4	136	13,3	0,64	19,2	0,6	0,72
0,91	12	157	50,9	<5		28	14,3	149,5	9,15	6	183,5	8,3	1,51	21,9	0,8	0,9
0,89	31	161,5	76,1	<5		45	22,3	250	12,8	6	110	8,3	1,72	22,4	1,5	0,85
1	36	163,5	38,2		6	18	9,79	173,5	9,38	4	124,5	9,1	1,76	26,7	<0.5	1,03
0,58	>10000	155	36,4		6	60	10,6	325	5,74	8	82,6	9,4	0,71	19,3	1	0,48
2,71	189	718	88,6	<5		36	28,8	345	17,25	18	22,3	37,4	3,15	100,5	<0.5	2,61
2,11	19	494	81	<5		27	26,5	185	14,95	12	10,1	28	2,55	80,3	<0.5	2,01
0,58	12	148	77,8	<5		9	22,9	99,6	12,35	3	783	8	1,38	13,25	<0.5	0,59
3,83	9	1275	133,5	<5		62	40,6	329	25,7	18	168,5	81,7	3,82	107,5	<0.5	3,17
1,45	53	324	72,6		5	24	23,4	514	12,6	18	58,6	22,9	1,85	173	0,5	1,42
4,06	2970	111,5	122,5		6	312	40,1	75,1	27,3	368	11,3	9,4	4,63	68,7	0,8	3,86
1,93	103	255	101	<5		44	33,6	534	17	29	48,6	18,2	2,46	151,5	0,5	1,78
1,36	16	279	72,7	<5		40	23,6	502	12,3	13	61,3	18,3	1,8	162,5	<0.5	1,32
2,01	16	208	56,6		5	45	18,1	507	10,5	26	75,7	16,6	1,83	122,5	0,7	1,75

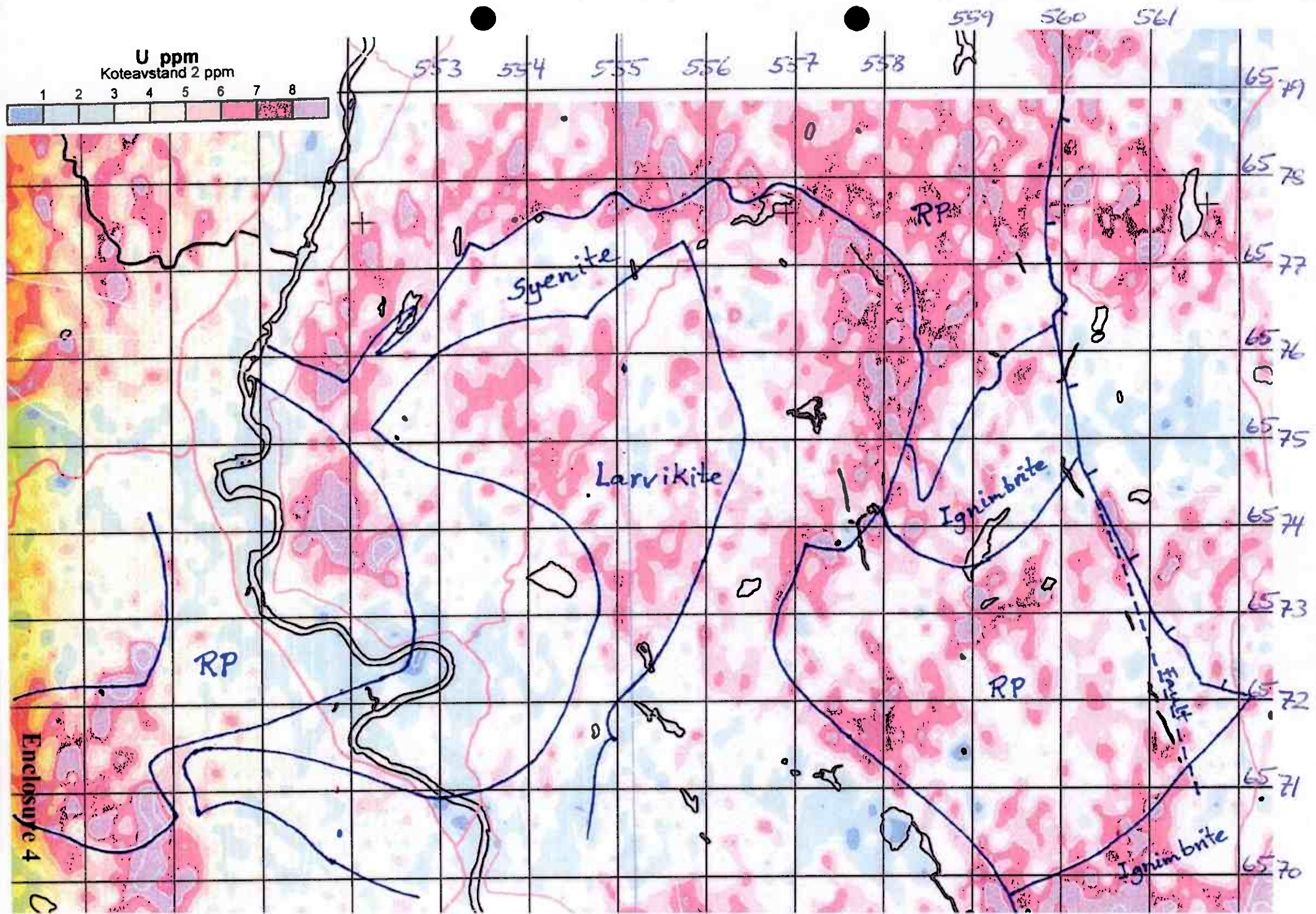
ME-MS81 U	ME-MS81 V	ME-MS81 W	ME-MS81 Y	ME-MS81 Yb	ME-MS81 Zn	ME-MS81 Zr
ppm	ppm	ppm	ppm	ppm	ppm	ppm
12,3	9	8	119	16,5	79	1520
28,4	7	10	169,5	28,2	89	3090
102	10	28	683	228	196	7360
4,68	30	10	46,2	6,51	112	755
54,2	6	8	258	33,8	333	2480
27,7	36	12	217	23,8	288	2690
19,35	8	7	147,5	21,2	83	1620
65,4	6	15	377	52,5	346	4450
74,3	7	16	241	33,1	80	3760
78 <5		10	96,3	19,1	98	963
6,78	24	10	40,4	5,13	78	730
21,6	16	8	173	24,6	189	1980
1,55	76	3	7,5	0,95	59	111
29,5	12	7	155,5	22,3	160	2110
15,9	9	7	97,8	10,5	63	840
16,35	13	4	71,8	11,75	143	1210
77,6	19	32	467	58	301	8670
7,6	47	43	29,5	5,21	37	1180
5,75	33	84	46,6	6,02	132	1060
5,79	38	90	47,1	5,9	91	1040
7,95	49	64	59,8	6,99	124	1080
7,62	36	40	25,3	3,49	42	983
30,4	21	12	138,5	18,4	54	2470
21,8	16	5	113	14,3	199	1960
3,53	37	4	34,1	3,91	126	813
72,9	18	21	144	23,9	122	5100
48,9	11	8	68,6	10,25	69	910
40,2 <5		6040	234	28	3320	151
40,5	7	190	101,5	13,3	166	704
45,8	9	22	63,4	9,31	80	731
38,7	12	23	75,8	13,15	70	606

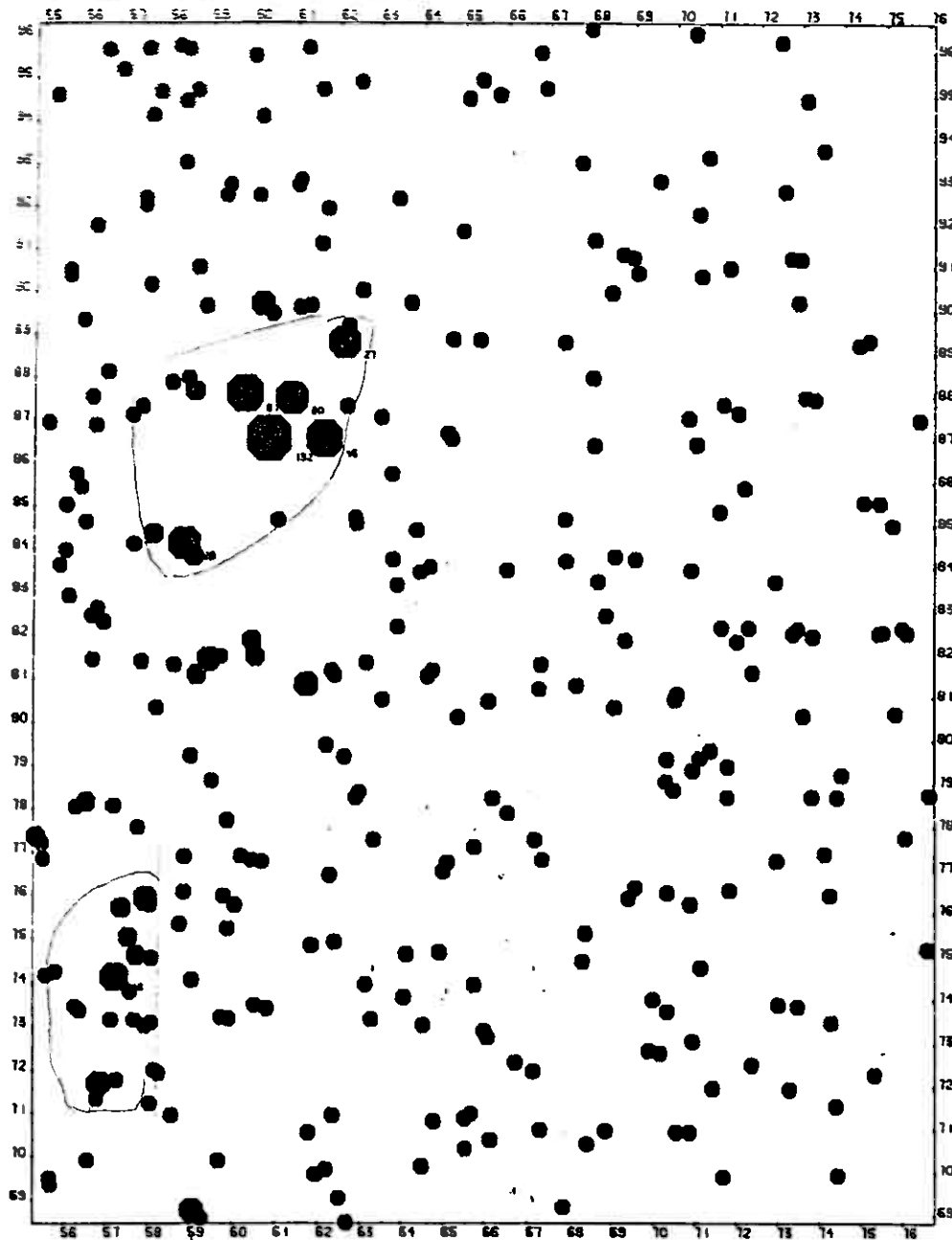
554 555 556 557 558 559 560 561 562

Th ppm
Koteavstand 5 ppm



Enclosure 3

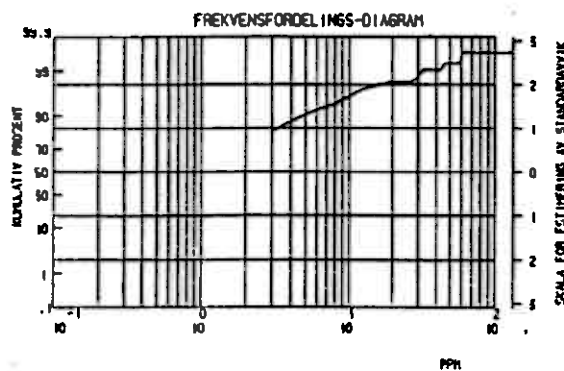




SYMBOL :



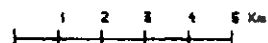
ØVRE GRENSE : 6 10 16 25 39 63 100 160 250 390 > 390



PPH

N= 314
MIN= 0
MAX= 132
MIDDEL= 2

MÅLESTOKK :



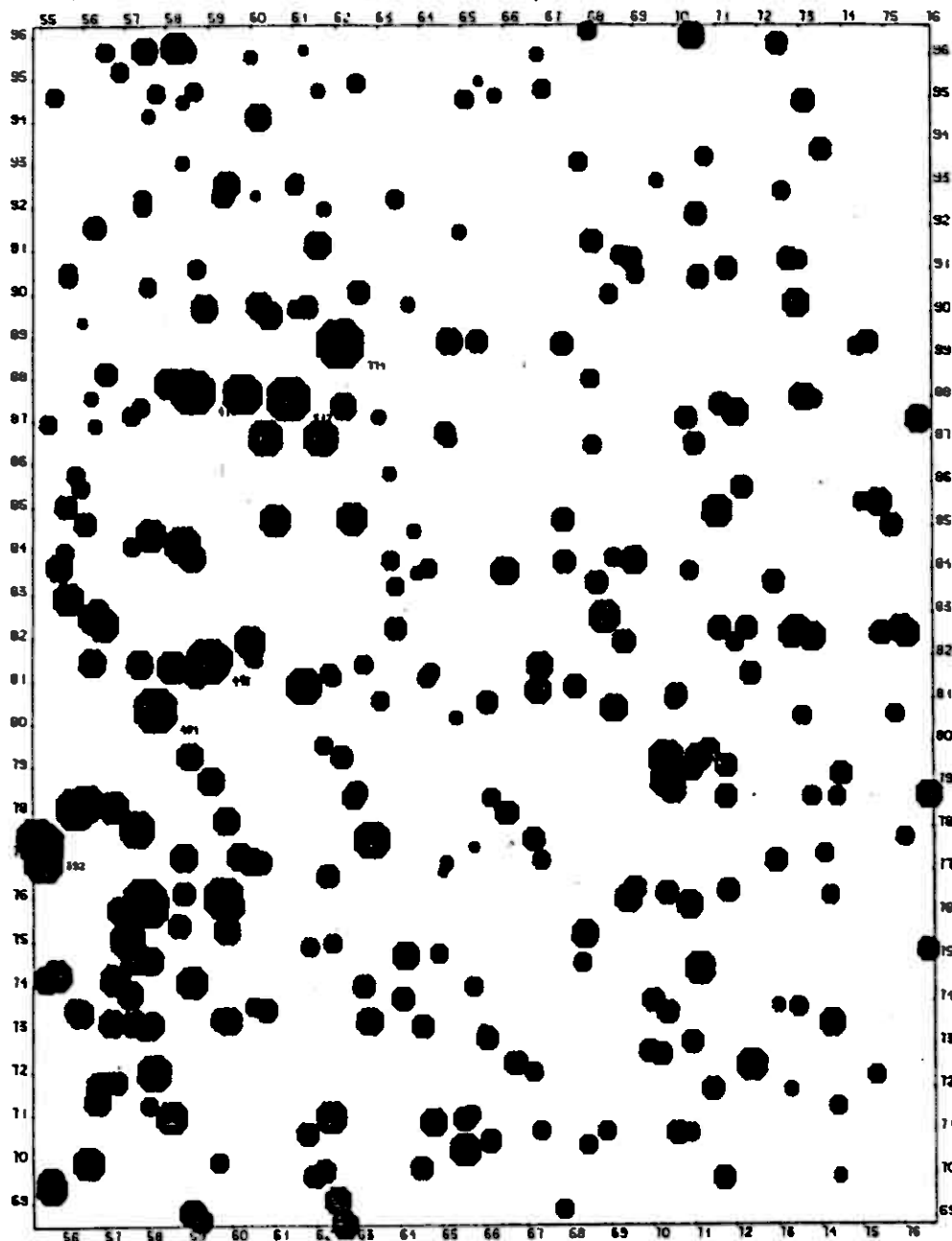
Enclosure 5

Tegning nr. 1778A/4

TUE, MAR 31, 1981

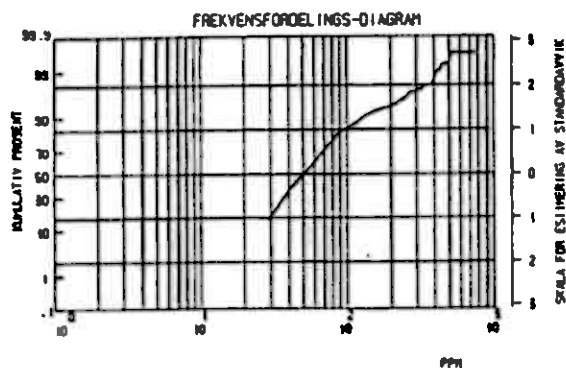
ELEMENT 2

Zn



SYMBOL :

ØVRE GRENSE : 10 16 25 39 63 100 160 250 390 630 > 630



PPM 2

Nr 314

MIN= 12

MAX= 771

MIDDEL= 72

MÅLESTOKK :

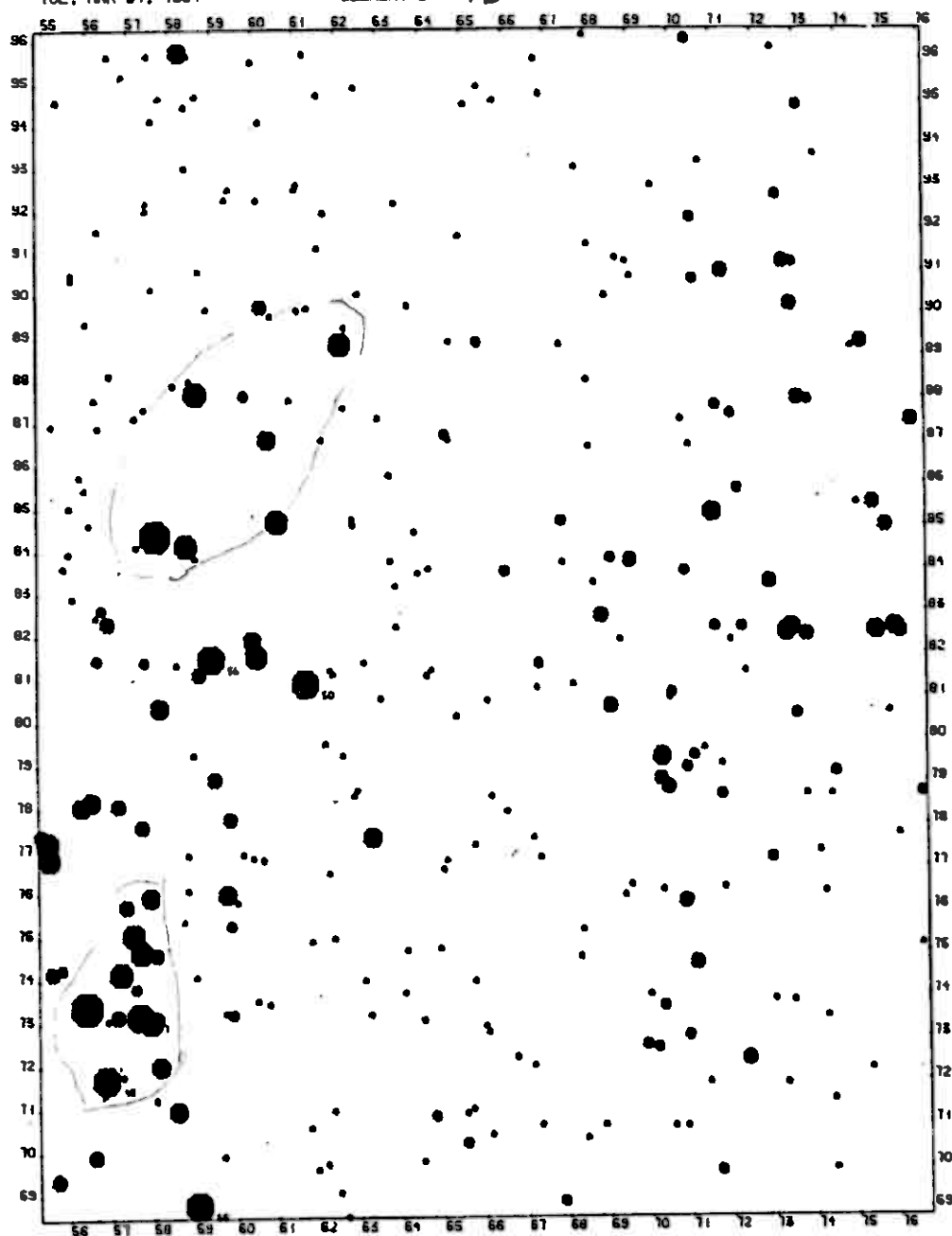


Enclosure 6

Tegning nr. 1778A/2

NORGES GEOLOGISKE UNDERSØKELSE BEKKESEDIMENT (-0.10 mm)
TUE, MAR 31, 1981 ELEMENT 3 P6

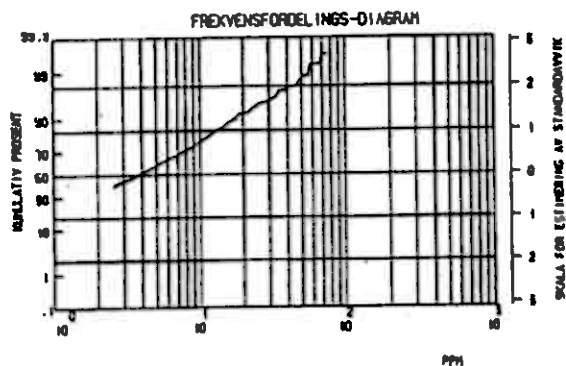
KARTBLAD 7



SYMBOL :



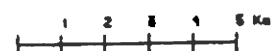
ØVRE GRENSE : 6 10 16 25 39 63 100 160 250 390 > 390



PPH 3

N= 314
MIN= 1
MAX= 75
MIDDEL= 7

MÅLESTOKK :



Enclosure 7
Tegning nr. 1778A/3