Bergvesenet

Postboks 3021, 7002 Trondheim

Rapportarkivet

Bergvesenet rapport nr	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering
BV 3460			Nordland	
Kommer fra ..arkiv	**Ekstern rapport nr**	**Oversendt fra**	**Fortrolig pga**	**Fortrolig fra dato:**

Tittel

BP NORGE A/S MINERALS
Helgeland Project 1983 Annual Report

Forfatter	Dato	Bedrift
	1983	BP Norge Minerals

Kommune	Fylke	Bergdistrikt	1: 50 000 kartblad	1: 250 000 kartblad
	Nordland	Nordlandske		

Fagområde	Dokument type	Forekomster
Råstofftype	**Emneord**	

Sammendrag

Quotha H 30/1-86
Clk

I N T R O D U C T I O N

This report concerns the results of the 1983 follow-up of stream sediment anomalies detected in the Helgeland area during the 1982 reconnaissance programme. In all 168 anomalous stream systems with detectable gold concentrations were delineated during the reconnaissance programme. These areas were claimed on behalf of the Joint Venture and were the objects of the detailed follow-up during 1983. The follow-up procedure was directed towards a verification and greater definition of the original anomaly by close-spaced follow-up stream sediment sampling along the drainage in order to detect the bedrock sources. The sampling, preparation of samples and analysis remained unchanged so that all analytical results are directly comparable.

Field work started in early June and continued through to the end of September. On the average, four follow-up teams were at work at any one time. The 168 original follow-up targets were grouped into a number of blocks according to their regional geological setting and care was taken that these blocks were followed up by one team such that consistency in the reporting and comparability of the results was ensured.

The follow-up always began with the resampling of the original sample point - which in the majority of anomalies was possible due to the careful marking of sample stations in 1982. The drainage system was then followed upstream and samples collected in 250-500m interval dependent on the variability of the geology. All tributaries entering the main stream were sampled individually and the following perameters recorded for each sample station:

- UTM co-ordinates
- Altitude
- Collection date
- Team initials
- Sample type
- Sample location (River bed, bank etc)
- Sediment colour
- Sediment composition (grain-size distribution)
- Sample weight
- Contamination

In addition the number of the follow-up block - corresponding to the two letters forming part of the sample number, the claim number and the complete (6-digit) map sheet number (1:50.000) were entered at specific locations under field comments. This measure allows sorting of field and analytical data and subsequent statistical analysis with the DEC Rainbow 100 micro computer if necessary.

Slope angles and the appearance of the stream (i.e. meanders, waterfalls, rapids, potholes) were numerically coded and entered at other specific locations under field comments, so that any correlation between gold anomalies and the morphology of the stream section will be detected by regression analysis.

The follow-up teams were carefully instructed to describe the nature of the drainage system including the kind of overburden, slopes, tributaries and vegetation cover. They were also requested to record the geology at the sampling stations and to pay special attention to any signs of hydrothermal alteration and for mineralization such as:

- stockwork features
- silicification
- dolimitization
- carbonitization
- sericitization
- kaolinization
- chloritization
- hematization
- serpentinization
- texture destruction
- pervasive alteration
- veining
- shearing
- mylonitization
- brecciation

All field parameters and corresponding analytical results were key-punched and copied to floppy discs ready to process on the DEC 100 Rainbow micro computer.

The following report describes the field observations and geochemical results for each individual claim. Each claim is described separately and is accompanied by a location map in scale 1:20.000 showing sample locations, analytical results for gold, arsenic, tungsten, copper, lead and zinc. A sketch of the geology of the more interesting claims is shown on overlays.

Gold anomalies are designated by coloured stickers with the actual concentration value shown in ppb Au. The colours stands for any gold found in the sample in concentrations equal or less to the detection limits which is dependent on the sample weight. Yellow covers gold anomalies which are clearly above the detection limit up to 100ppb and red symbols designate anomalies above 100ppb Au.

The remaining elements are typed in form of results. A block with the sample no. appearing on the top, the Cu, Pb, Zn values in the left column and As, W in the right column:

BK 1001
13 (ppm Cu) 7 (ppm As)
43 (ppb Pb) 15 (ppm W)
103 (ppm Zn)

All individual anomaly descriptions appear ordered after map sheets starting in the north-west corner of the exploration area and continuing in the form of a meander towards the south.

RESULTS OF BULK ROCK SAMPLE ANALYSES

SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300FL0001			78	20	149	<1	8	<1	3	<1
0305FM0001			54	2	8	<1	<1	<1	6	<1
0305FM0002			67	0	21	<1	<1	<1	<1	<1
0305FM0003		20	59	22	30	<1	<1	<1	<1	<1
0305FM0004			5	4	15	<1	55	<1	1	<1
0305FM0005		30	7	18	15	<1	38	<1	<1	<1
0305FM0006		10	0	1	1	<1	<1	<1	3	<1
0300HO3001	Holm-not claimed		93	6	28	<1	165	<1	4	1
0300HO3002	Holm-not claimed		23	121	722	1	48	<1	2	2
0300HO3003	Holm-not claimed		18	266	588	1	57	<1	2	2
0300HO3004	Holm-not claimed		19	136	564	<1	44	<1	2	2
0300HO3005	Holm-not claimed	25	25	680	940	2	<10000	8	<1	5
0300HO3006	Holm-not claimed	40	62	1720	2800	3	2300	<1	2	2
0300HO3007	Holm-not claimed	30	39	2400	656	6	173	<1	3	3
0300HU4072	10 Nubmarken		24	6	8	<1	4	<1	<1	<1
0300HU4080	10 Nubmarken		30	14	124	<1	3	<1	<1	<1
0300KD5001	114 Holmtjern	34	3005	18	147	3	8	<1	3	<1
0300KD6006	144 Holmvatn	23	39	6	407	<1	31	<1	3	1
0300KD6007	144 Holmvatn		85	12	79	<1	20	<1	5	5
0300KD6010	144 Holmvatn	27	237	18	83	1	14	32	2	<1
0300LV4003	95/96 Langvatnet	25	2900	10	79	1	28	4	<1	<1
0300MA5001	132 Mellingen		175	26	147	<1	<1	<1	<1	<1

RESULTS OF BULK ROCK SAMPLE ANALYSES

SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300M00001			128	8	48	2	7	<1	8	<1
0300M01002	106 Øydalen		56	16	64	<1	<1	<1	1	<1
0300M01003	106 Øydalen		60	13	34	<1	<1	<1	2	<1
0300M01004	108 Hatten II		19	24	18	<1	2	<1	<1	<1
0300M01004	108 Hatten II		21	25	19	<1	1	<1	<1	<1
0300M01005	108 Hatten II		95	15	66	<1	<1	<1	1	1
0300M01005	108 Hatten II		53	25	15	<1	14	<1	1	<1
0300N03001A		1860	31	10	64	<1	9482	<1	<1	2
0300N03001B		444	40	8	47	<1	8635	<1	2	2
0300N03002	169 Vasbotn	37	37	16	98	1	6	<1	1	<1
0300N03003	169 Vasbotn	29	39	12	99	<1	8	<1	2	<1
0300N03004	169 Vasbotn		40	10	114	<1	3	<1	2	<1
0300N03005	169 Vasbotn		56	10	118	<1	5	1	1	<1
0300N03006	169 Vasbotn	12	56	8	113	<1	12	<1	1	<1
0300N03007	169 Vasbotn	33	48	12	101	<1	185	<1	1	<1
0300N03008	169 Vasbotn	16	42	8	87	<1	9	<1	1	<1
0300N03009	169 Vasbotn		32	16	90	<1	5	<1	2	<1
0300N03010	169 Vasbotn		52	21	112	<1	3	<1	<1	<1
0300N03011	169 Vasbotn		33	20	479	<1	3	<1	<1	<1
0300N03012	169 Vasbotn		16	16	98	<1	6	<1	<1	<1
0300N03013	169 Vasbotn		81	96	388	<1	473	<1	4	2
0300N03014	169 Vasbotn		75	23	50	<1	138	<1	4	3
0300N03015			86	44	74	<1	211	<1	3	<1
0300N03016A			37	25	38	1	28	<1	2	<1
0300N03016B			42	19	82	<1	28	<1	1	<1
0300N03016C			42	19	98	<1	62	<1	1	<1
0300N03017A			157	34	96	<1	33	<1	2	<1
0300N03017B			95	21	70	<1	14	<1	2	2
0300N03018			26	86	20	1	55	<1	2	2
0300N03019			35	17	38	<1	319	<1	3	3

RESULTS OF BULK ROCK SAMPLE ANALYSES

SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300RF2013	68/69 Sør-Svartvatnet		265	8	160	1	<1	<1	<1	<1
0300RF3001	68/69 Sør-Svartvatnet		106	28	117	1	7	<1	1	1
0300RV0001	Råvatn	19	301	>10000	>10000	53	1	<1	<1	2
0300RV0002			373	>10000	>10000	80	163	<1	2	<1
0300RV0003			508	>10000	>10000	90	4	10	<1	1
0300RV0004			66	2245	>100000	14	<1	5	<1	<1
0300RV0005			80	>10000	>100000	60	<1	9	<1	<1
0300RV0006			38	>10000	>10000	4	<1	9	<1	<1
0300RV0007			562	>10000	>100000	12	1	16	<1	1
0300RV2003	17 Rauvatnet	40	64	140	1280	<1	2990	<1	2	5
0300RV2004	17 Rauvatnet		33	56	372	<1	6	<1	1	1
0300RV2005	17 Rauvatnet		770	44	88	<1	6	<1	2	1
0300RV2006	17 Rauvatnet	2220	77	48	64	<1	7280	<1	<1	4
0300RV6105	17 Rauvatnet	1450	13	39	134	<1	>10000	15	2	9
0300RV6106	17 Rauvatnet	910	11	16	22	<1	>10000	12	4	3
0300RV6107	17 Rauvatnet		12	15	17	<1	240	<1	1	1
0300SF3001	51 Sørfjorden		83	5	24	8	2	<1	1	1
0300SF3002	51 Sørfjorden		69	20	77	11	<1	<1	1	1
0300SK3001	45 Grøndalen	2200	1275	43	60	1	<1	<1	2	2
0300SK3002	45 Grøndalen	25	84	32	34	<1	2	<1	1	2
0300SK3003	45 Grøndalen		67	33	39	<1	3	<1	1	2
0300SM5001	58 Stormarken		27	16	22	<1	68	<1	3	2

RESULTS OF BULK ROCK SAMPLE ANALYSES

SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300TE4012	31 S. Vesterdalselven		9	43	30	<1	22	5	<1	<1
0300TE4014	31 S. Vesterdalselven		28	51	164	<1	4	<1	<1	<1
0300TE4015	31 S. Vesterdalselven		1760	31	144	<1	36	<1	2	<1
0300TE4016	31 S. Vesterdalselven		42	26	64	<1	15	<1	2	1
0300TN3001	49 Sørenskogvand		260	48	224	2	<1	<1	<1	<1
0300TN3002	49 Sørenskogvand		872	28	226	3	144	<1	18	1
0300TN3003	49 Sørenskogvand		548	26	326	5	116	<1	36	1
0300TN3004	49 Sørenskogvand		235	32	288	1	334	<1	11	1
0300VE9901	Eiterakroken	390	6000	>10000	>10000	>200	145	155	1	2
0300VE9902	Eiterakroken		113	680	86	3	114	<1	5	1
0300VE9903	Eiterakroken		176	112	114	<1	15	<1	2	1
0300VE9904	Eiterakroken		56	5200	3600	36	86	9	3	4
0300VE9905	Eiterakroken	500	456	4460	>10000	23	5910	<1	1	7
0300VE9906	Eiterakroken		125	26	581	<1	7	<1	2	1
0300VE9907	Eiterakroken		6120	1.5%	1.5%	8	10	<1	1	1
0300VE9908	Eiterakroken		158	244	254	<1	8	<1	3	2
0300VE9909	42 Sørdalen 11 Husvik	100	2610	3.8%	6.5%	52	1450	<1	1	257
0300VE9910	42 Sørdalen 11 Husvik	176	1180	2.9%	1.7%	36	>10000	<1	<1	2
0300VE9911	42 Sørdalen 11 Husvik		99	5.6%	6800	76	119	15	2	2
0300VE9912	42 Sørdalen 11 Husvik		165	4.9%	9.7%	20	>10000	48	<1	2
0300VE9913	42 Sørdalen 11 Husvik		29	3.9%	11.3%	16	486	87	3	1
0300VE9914	42 Sørdalen 11 Husvik		32	2.1%	4.6%	11	306	75	3	1
0300VE9915	42 Sørdalen 11 Husvik		2040	10.9%	2.7%	275	16	150	1	1
0300VE9916	42 Sørdalen 11 Husvik		1250	3400	13.6%	9	4	<1	2	1
0300VE9917	42 Sørdalen 11 Husvik		395	900	9.5%	2	9	<1	1	1

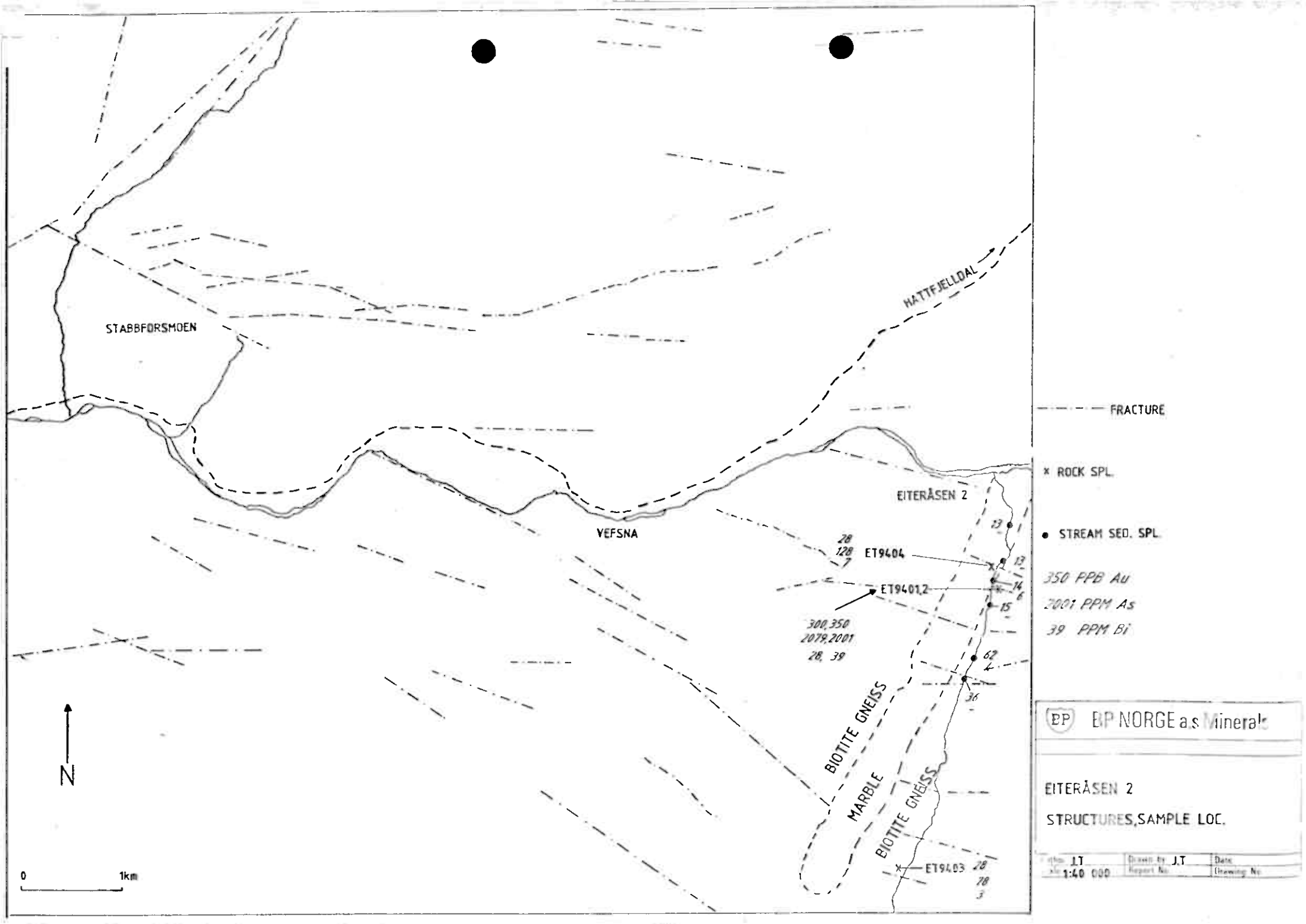
RESULTS OF BULK ROCK SAMPLE ANALYSES

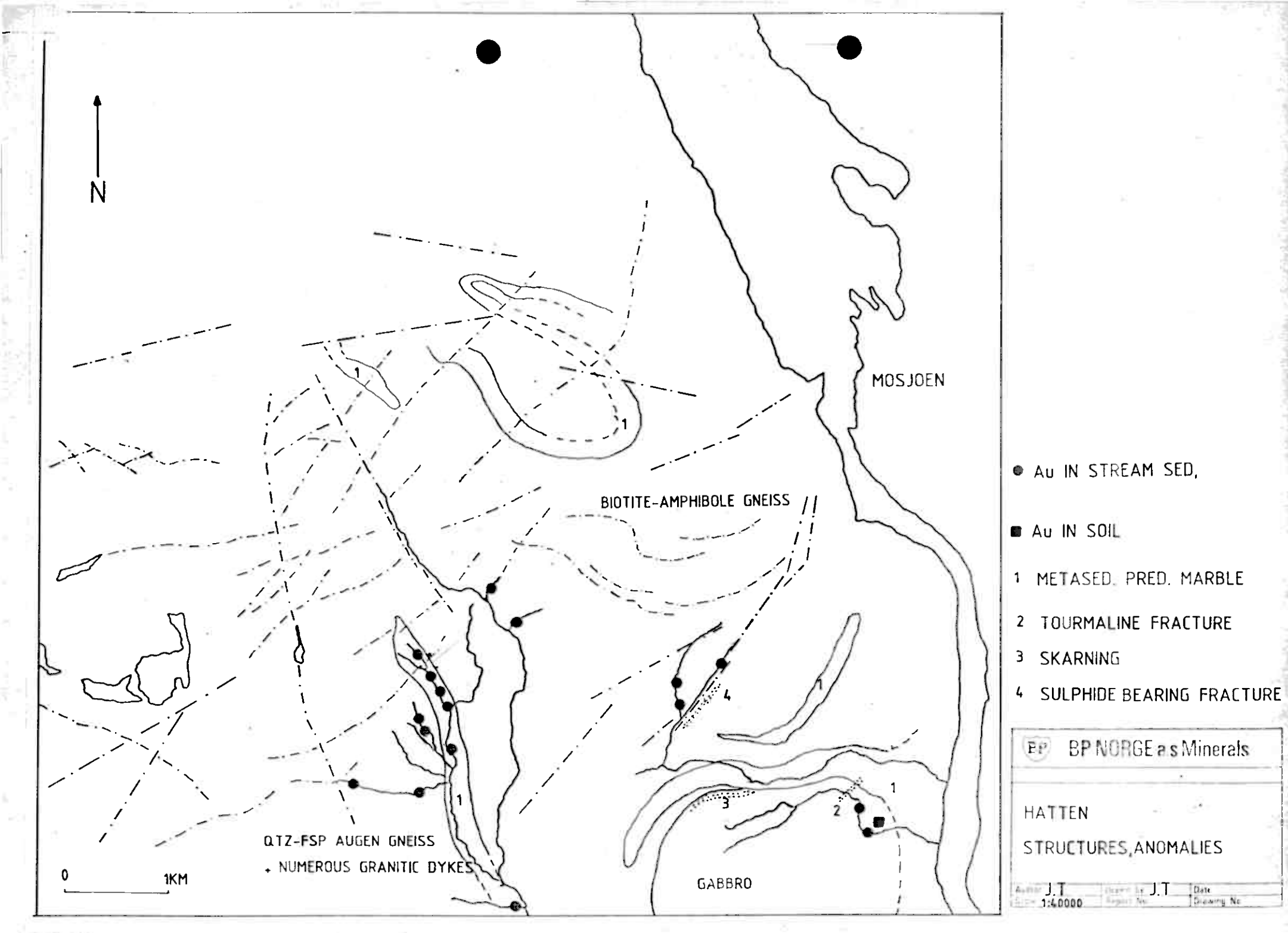
SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300VF4011	8,12,56,104*		5	68	16	<1	3	<1	<1	<1
0300VF4012	8,12,56,104	24	7	62	66	<1	<1	<1	<1	<1
0300VF4015	8,12,56,104	6	53	23	<1	<1	<1	<	<1	<1
0300VV3001	32 Vestfjeldene		1420	12	260	1	<1	<1	5	<1

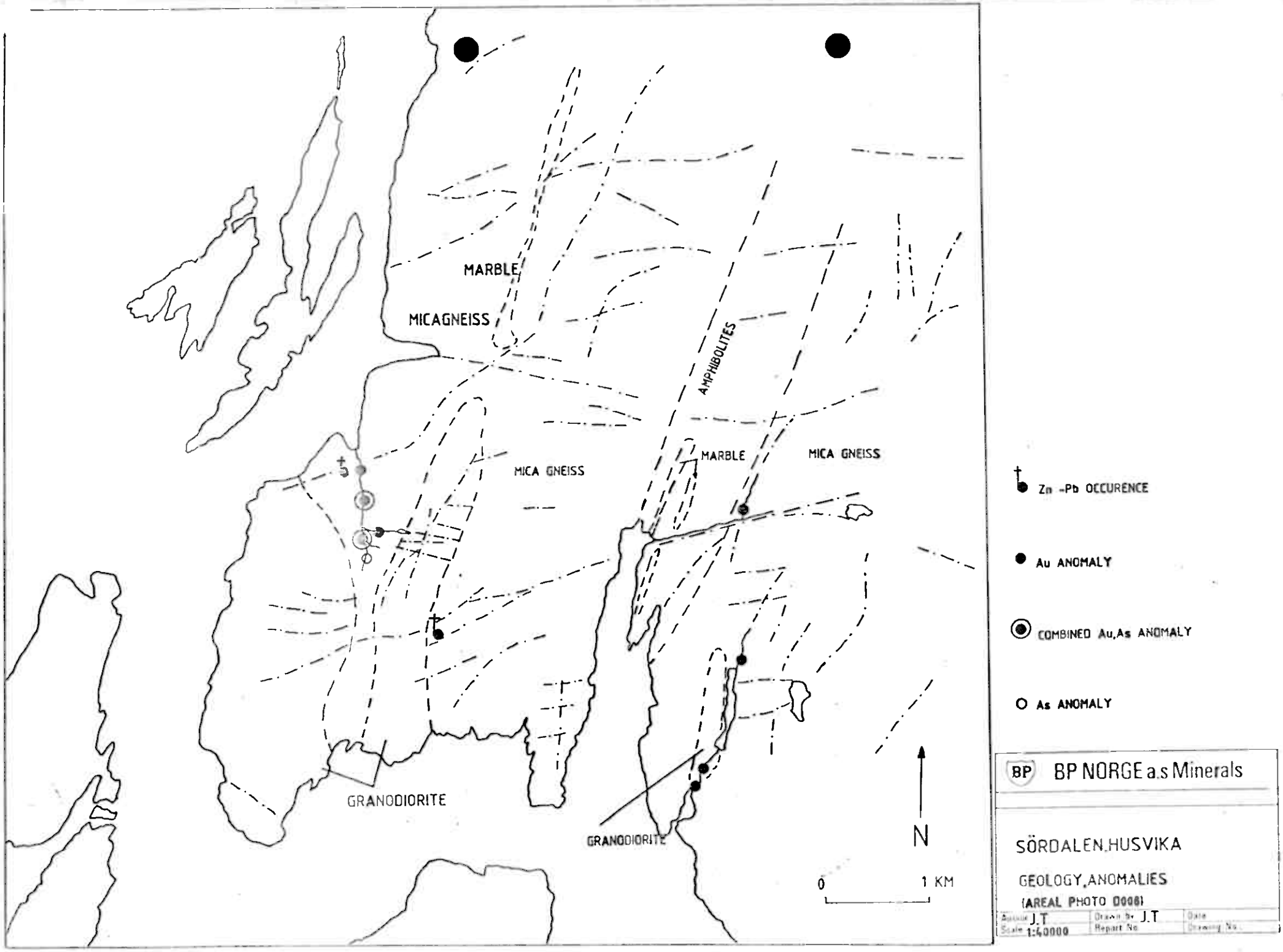
* 8 Trangdalen
12 Livatn
56 Trangdalen B
104 Støttfjelldet

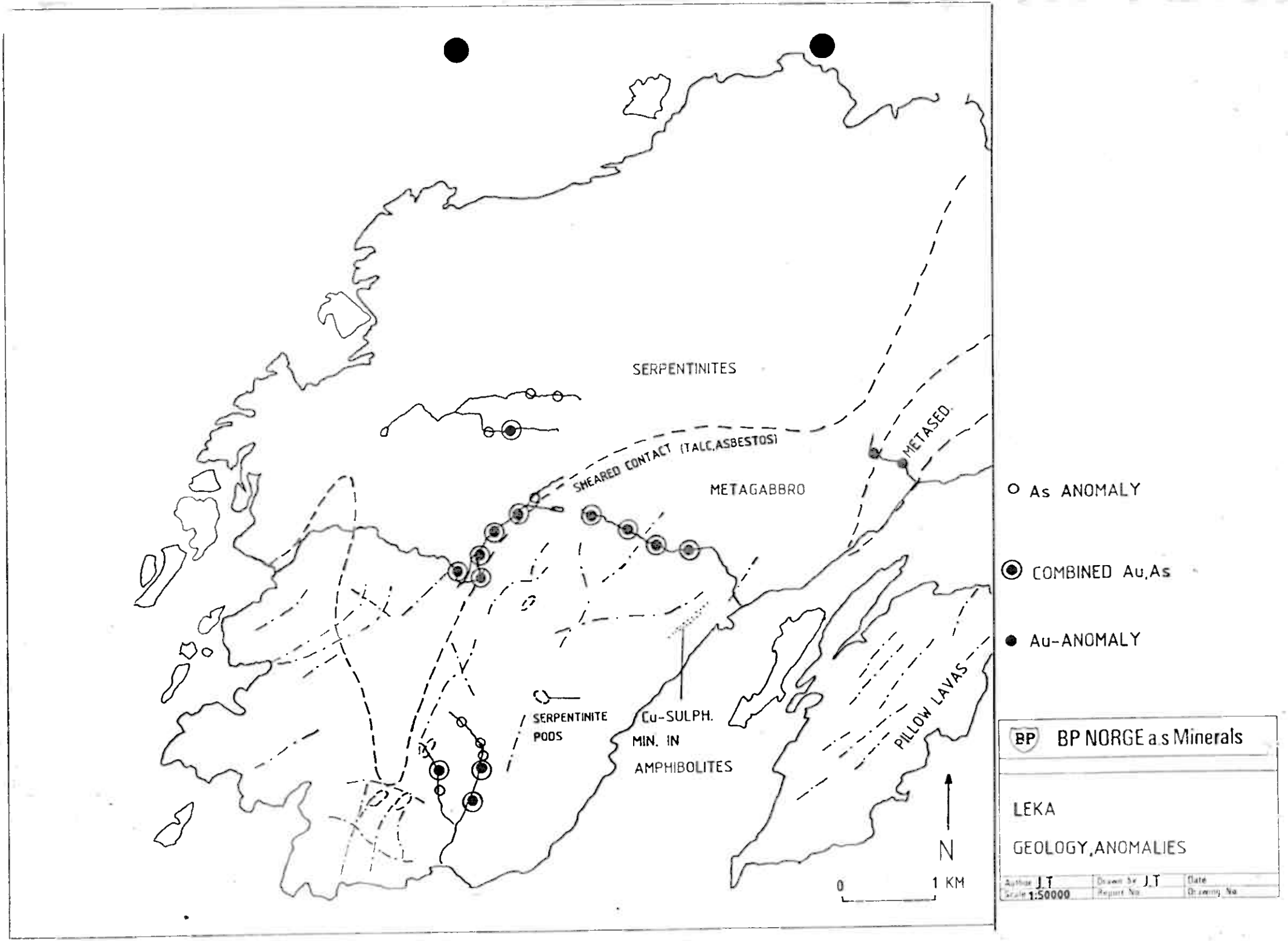
RESULTS OF BULK ROCK SAMPLE ANALYSES

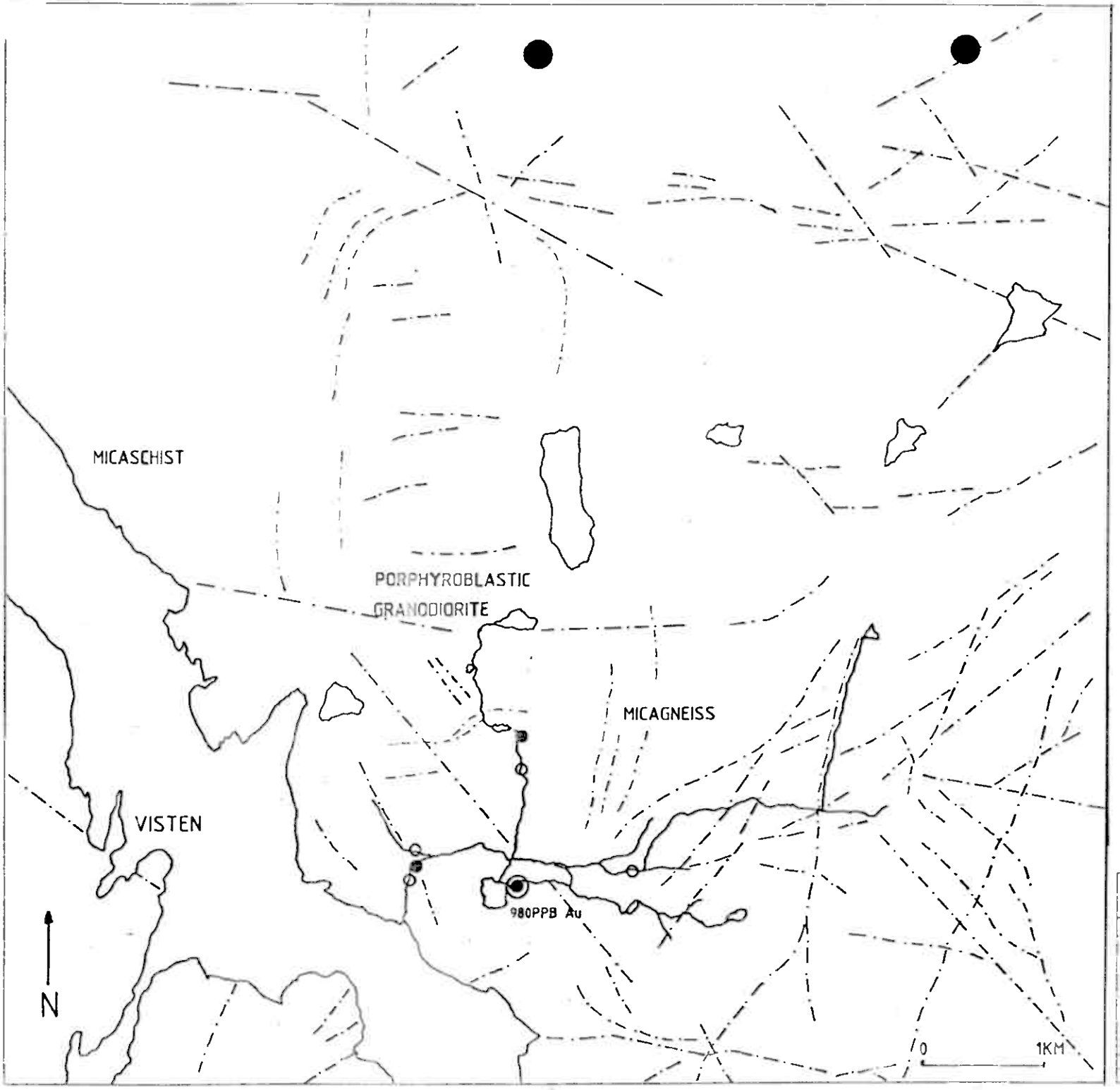
SAMPLE NO.	CLAIM	Au	Cu	Pb	Zn	Ag	As	Sb	Mo	W
0300AD4001	125 Herringbotn		724	445	430	1	<1	<1	1	<1
0300AD4002	125 Herringbotn		688	859	2060	2	<1	<1	8	<1
0300AD4003	125 Herringbotn		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
0300AD4004	125 Herringbotn		167	20	90	<1	<1	<1	1	<1
0300AD1002	122 Almdalen 'A'		112	13	104	2	<1	<1	3	<1
0300AD1003	122 Almdalen 'A'		65	55	19	10	<1	<1	3	1
0300BK0001	118 Storvik		7	13	16	<1	<1	<1	<1	<1
0300BK0002	118 Storvik		40	10	124	<1	<1	<1		<1
0300BK0003	118 Storvik		14	15	78	<1	<1	<1	<1	<1
0300BK0004	118 Storvik	37	31	16	4	<1	<1	<1	1	3
0300BK0005	118 Storvik		6	10	12	<1	<1	<1	<1	<1
0300BK0006	118 Storvik		54	4	5	<1	<1	<1	<1	<1
0300BK1001	117 Bjørknes		25	25	24	<1	7	<1	<1	<1
0300BK1001	117 Bjørknes		18	38	14	<1	<1	<1	1	<1
0300BK1002	117 Bjørknes		42	7	72	<1	<1	<1	1	6
0300EI0001	Not claimed		41	16	3	<1	3	<1	<1	1
0300EI0002	Not claimed		24	15	3	<1	5	<1	<1	<1
0300EI0003	Not claimed		22	14	5	<1	14	<1	<1	<1
0300EI0004	Not claimed		11	13	4	<1	2	<1	<1	<1
0300EI0006	Not claimed		8	6	2	<1	<1	<1	<1	3
0300EI0007	Not claimed		82	14	5	<1	9	<1	29	2
0300EI0008	Not claimed		46	23	3	<1	4	<1	<1	<1
0300EI0009	Not claimed		48	27	5	<1	3	<1	1	<1
0300FF2001	8 Stormoen		22	26	28	<1	<1	<1	1	2
0300FF2002	8 Stormoen		19	35	22	<1	<1	<1	1	1
0300FF2003	8 Stormoen		198	1259	3039	4	9	<1	1	3
0300FF2004	22 Stabforsmoen		30	82	180	<1	31	<1	3	1
0300FF2005	22 Stabforsmoen		1530	22	86	<1	3	<1	4	2
0300FF2006	22 Stabforsmoen		2920	32	180	<1	<1	<1	5	1


STABBFORSMOEN
HATTFJELLDAL
VEFSNA
EITERÅSEN 2
ET9404
ET9401,2
300,350
2079,2001
28, 39
BIOTITE GNEISS
MARBLE
BIOTITE GNEISS
ET9403
FRACTURE
x ROCK SPL.
• STREAM SED. SPL.
350 PPB Au
2001 PPM As
39 PPM Bi
N
0
1km
BP NORGE a.s Minerals
EITERÅSEN 2
STRUCTURES, SAMPLE LOC.
1:40 000


N
MOSJOEN
BIOTITE-AMPHIBOLE GNEISS
QTZ-FSP AUGEN GNEISS
+ NUMEROUS GRANITIC DYKES
GABBRO
0
1KM
1
2
3
4
Au IN STREAM SED,
Au IN SOIL
1 METASED. PRED. MARBLE
2 TOURMALINE FRACTURE
3 SKARNING
4 SULPHIDE BEARING FRACTURE
BP NORGE a.s Minerals
HATTEN
STRUCTURES, ANOMALIES
Author J.T
Scale 1:40000
Drawn by J.T
Project No.
Date
Drawing No.


MARBLE
MICAGNEISS
AMPHIBOLITES
MICA GNEISS
MARBLE
MICA GNEISS
GRANODIORITE
GRANODIORITE
N
0
1 KM
Zn -Pb OCCURENCE
Au ANOMALY
COMBINED Au,As ANOMALY
As ANOMALY
BP NORGE a.s Minerals
SÖRDALEN,HUSVIKA
GEOLOGY,ANOMALIES
(AREAL PHOTO 0008)
Surveyed J.T
Drawn by J.T
Date
Scale 1:40000
Report No
Drawing No


SERPENTINITES
SHEARED CONTACT (TALC,ASBESTOS)
METASED.
METAGABBRO
SERPENTINITE PODS
Cu-SULPH. MIN. IN AMPHIBOLITES
PILLOW LAVAS
N
0
1 KM
As ANOMALY
COMBINED Au,As
Au-ANOMALY
BP NORGE a.s Minerals
LEKA
GEOLOGY,ANOMALIES
Author J.T
Drawn by J.T
Date
Scale 1:50000
Report No.
Drawing No.



● Au ANOMALY

◉ COMBINED Au,As ANOMALY

○ As ANOMALY

BP NORGE a.s Minerals

NEDRE KVANLIVATN

STRUCTURES, ANOMALIES

(AREAL PHOTO F013)

Author J.T	Drawn by J.T	Date
Scale 1:40000	Report No	Drawing No

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Vestvagen**No: **9** Size:4.0 km2

Claim location:Map sheet 1826 IV Tjotta,1826 I Mosjoen

:Air Photo c 009,010,011

:Oko Kart DJ 183 IV

Pegged:Yes---NePartly Claim retained: **yes/No**

Stream length: 1.0 km/ Drainage area:1.0km2

Original sample points(39,9,79,16ppb Au) resampled: Yes Ne

llow up team: OK/GT/AK Duration:3.0 days

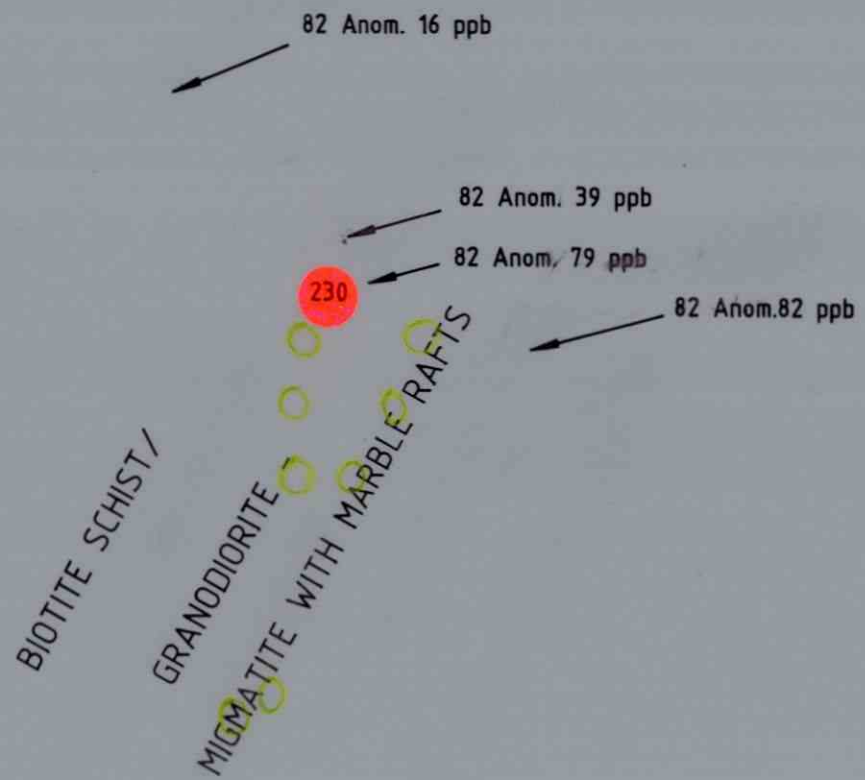
Nos.of follow up sample: HU 4032 - HU 4048

Description of drainage system:
The four anomalous streams drain a plateau on Kjerringlifjeldet.All streams emerge from swamps and small lakes and descend via steeper slopes and exposed bedrock into farmlamnd and pasture.

Geology:
The main lithologies are granodiorite,partly porphyritic and a biotite rich mica schist.Locally a migmatite of these two rock types can be observed.Small outcrops and lenses of marble were found throughout the area.

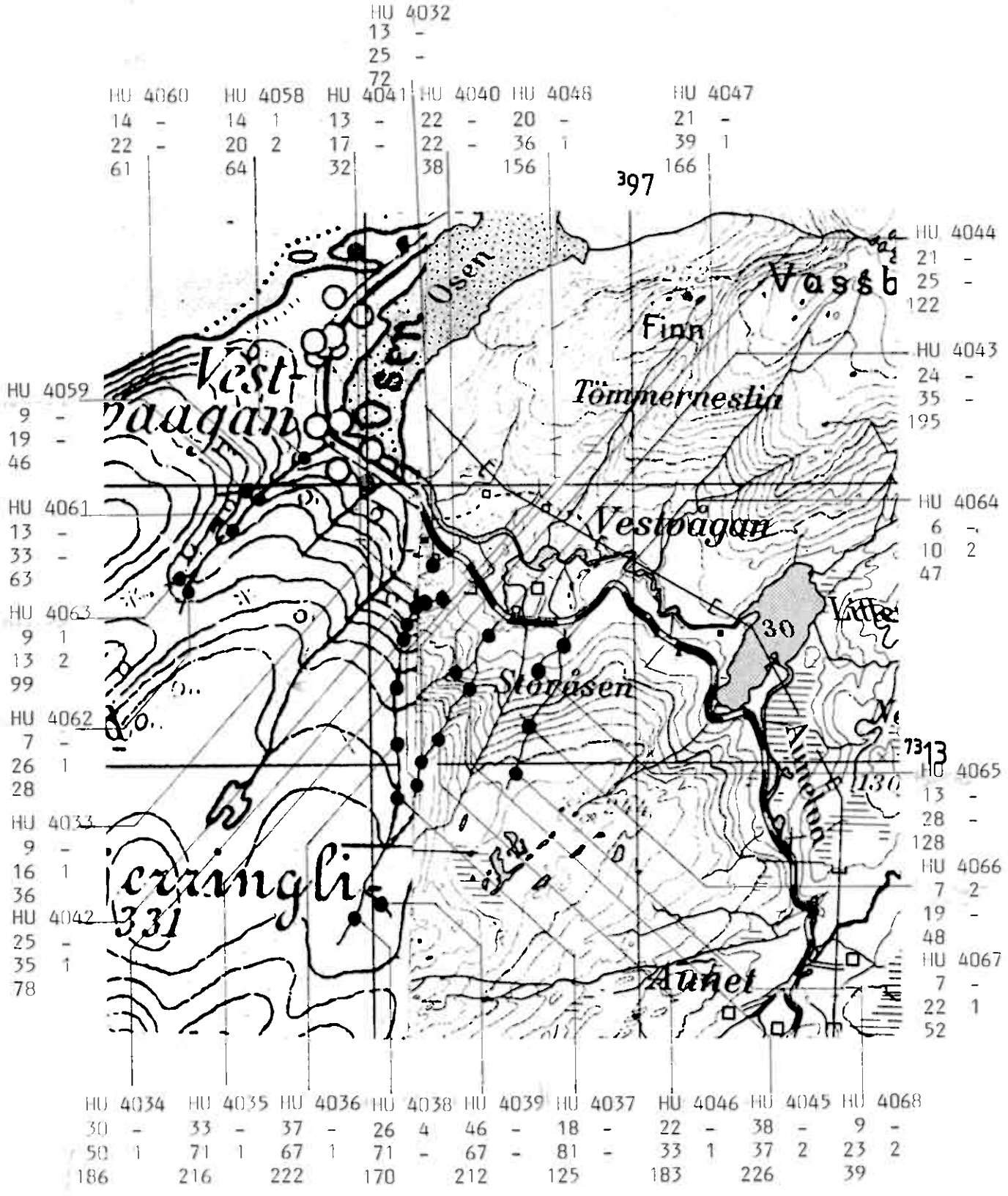
Comments:

Recommendations for further follow up:

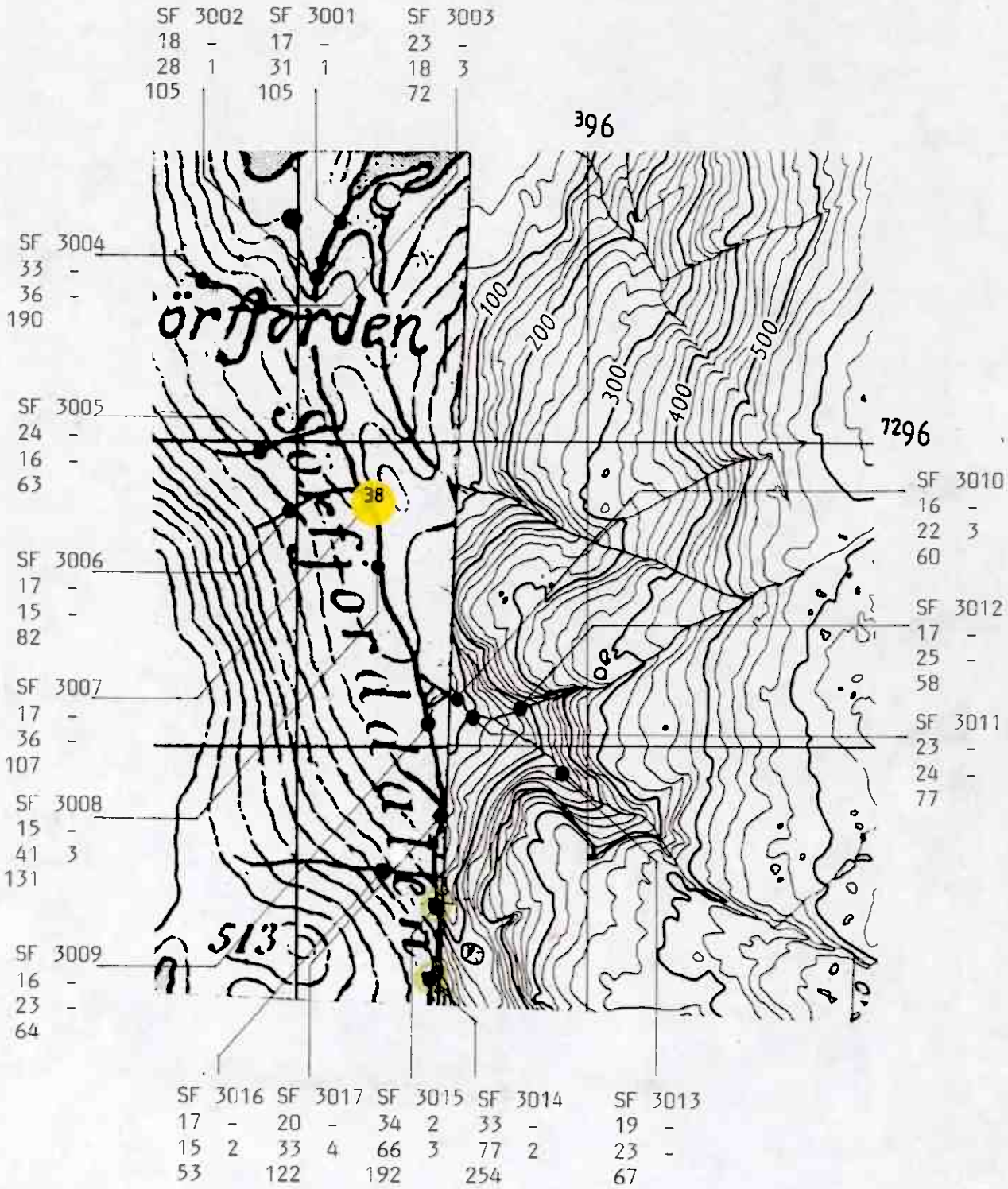


rel. high Pb-Zn
stratiform? ⇒ compare
Herrenglohn

9 VESTVÅGEN



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 9 VESTVÅGEN
Scale 1:20.000



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 51 SØRFJORDEN B
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sordalen No:42 Size:1.0 km^2

Claim location:Map sheet 1826 IV Tjotta

:Air Photo

:Oko Kart

Pegged: Yes No--~~Partly~~Claim retained: yes/ No

Stream length: 1.0 km/ Drainage area:1.0km^2

Original sample point(72ppb Au) resampled: Yes No

Follow up team: CR/AK Duration:1.0 days

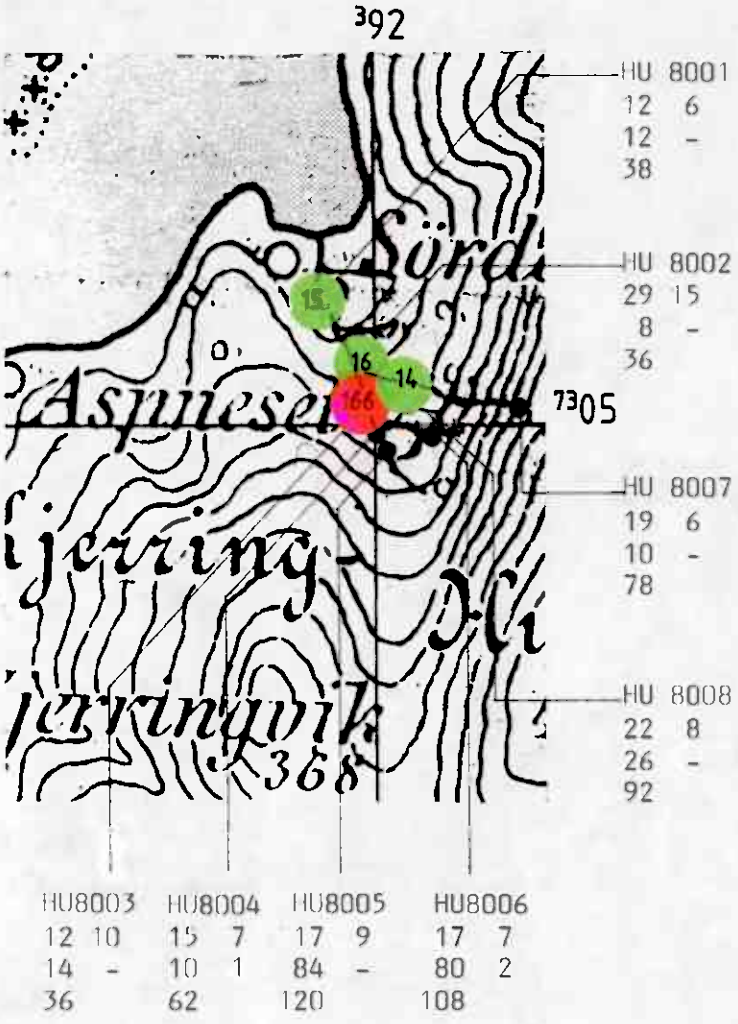
Nos.of follow up sample: HU 8001- HU 8008

Description of drainage system:
The stream splits into 4 small tributaries,all of which were sampled.Higher parts of the drainage run through talus,in lower parts glacial overburden dominates.

Geology:
The main lithology is a homogeneous biotite mica schist.No geological observations possible in lower part of the drainage,due to thick overburden.

Comments:
Four gold anomalies were detected in the lower part of the drainage,all of which are associated with increased arsenic values.

Recommendations for further follow up: Geological mapping and lithogeochemistry.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 42 SØRDALEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Husvik No:11 Size:2.75 km^2

Claim location:Map sheet 1826 II Tjotta

:Air Photo D 008,008,007

:Oko Kart DJ 185 II

Pegged:Yes No Partly Claim retained: yes /No

Stream length: 2.5 km Drainage area:8.0km^2

Original sample point(6 ppb Au) resampled:Yes-No

Follow up team: OK/GT Duration:3.5 days

Nos.of follow up sample: Hu 4002 - HU 4031

Description of drainage system:
The streams drain a north-south trending valley system east of Husvikfjeldet.At the intersection with a minor east-west valley,appx 1 km upstream from the outlet a sediment filled basin developed ,with maeandering streams and clay in river beds.The stream commonly follow cracks and joints of the bedrock.

Geology:
Outcrops in higher altitudes consist of biotite gneiss and phenocrystic granodiorite forming the country rocks.In the lower sections of the stream more strongly sheared varieties of biotite schist predominates.These schists are intercalated with marbles-leading to the development of metamorphic skarns-and sulfide bearing quartzites.The mineralisation of the Husvik field is intimately associated with the contacts between lime rich metasediments and the intrusives.

Comments:
A very detailed stream sediment sampling was undertaken to test the arseniferous base metal mineralization at Husvik for gold.The sampling confirmed the known mineralization extremely well with values up to 4875 ppm Zn,984 ppm Pb and 428 ppm As.Only one sample returned with a medium range gold anomaly,indicating that the presence of gold mineralisation peripheral to the stratabound mineralization at Husvik is unlikely.

Recommendations for further follow up:
None

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Husvik 'B' No:41 Size:1.0 km^2

Claim location:Map sheet 1826 II Tjotta

:Air Photo D 009,008,007

:Oko Kart

Pegged:Yes No Partly Claim retained: yes /No

Stream length: 50 m Drainage area:0.1km^2

Original sample point(9 ppb Au) resampled:YesNo

Follow up team: OK/GT Duration:0.5 days

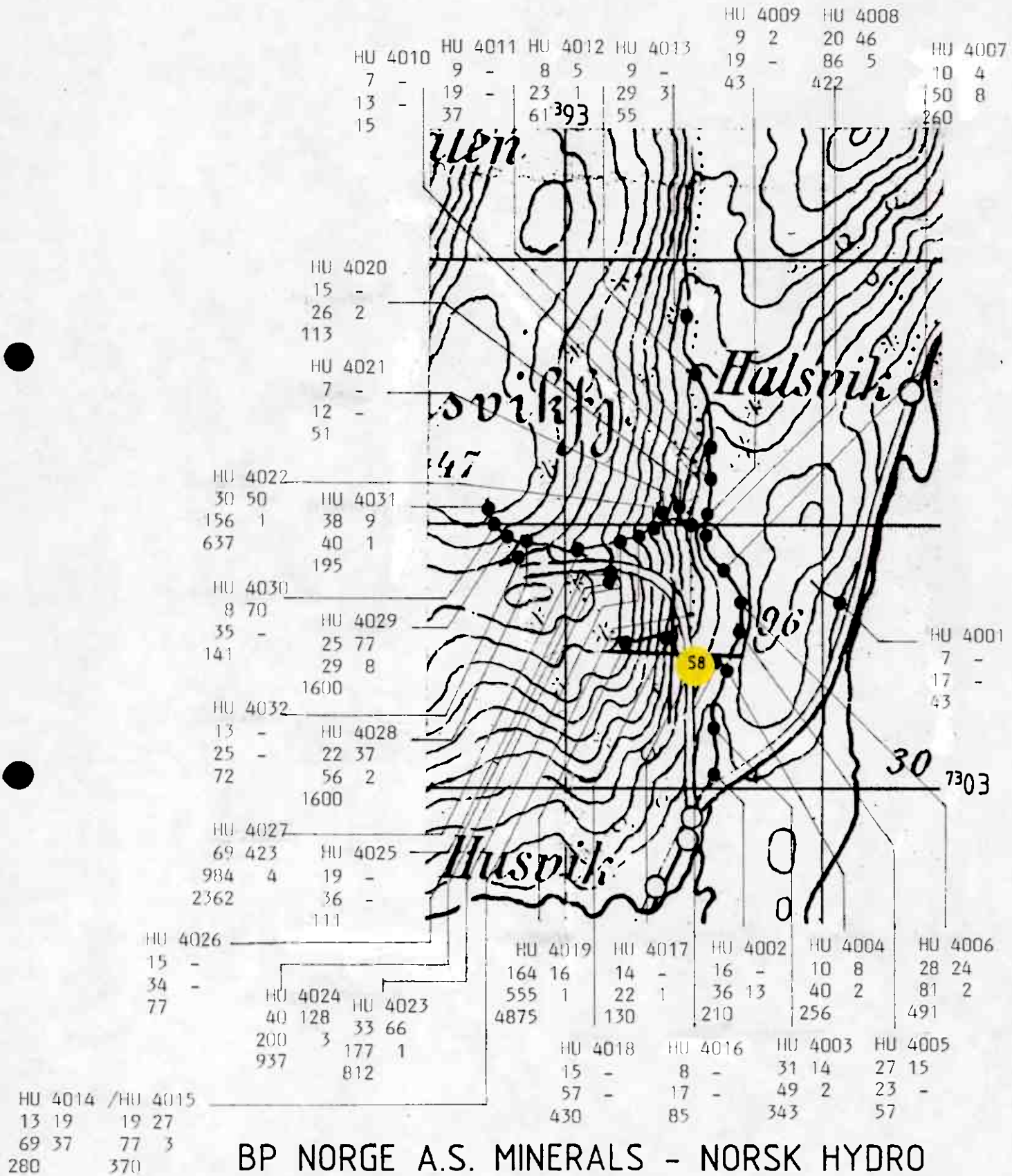
Nos.of follow up sample: Hu 4001

Description of drainage system:
The stream is only 50 m long,following a crack in bedrock.Surroundings are littered,and the 'stream' does not lie within the claimed area.

Geology:
Outcrops consist of biotite gneiss and granodiorite,both intensely sheared..At the source of the stream some hematization,clay weathering and rust was observerd along joints,a 70 cm wide quartz vein/boudin showed very minor sulfide impregnation.Rock sample:0300 HU 4001

Comments:
See no. 11 Husvik

Recommendations for further follow up:
ditto.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 11+41 HUSVIK +
Scale 1:20.000 HUSVIK B

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Nubmarken No:10 Size:1.5 km^2

Claim location:Map sheet 1826 IV Tjotta

:Air Photo c 009,010,011

:Oko Kart DJ 183 IV

Pegged:Yes-No Partly Claim retained: yes No

Stream length: 1.2 km/ Drainage area:1.5km^2

Original sample points(29 ppb Au) resampled:Yes-No

Follow up team: OK/GT Duration:2.0 days

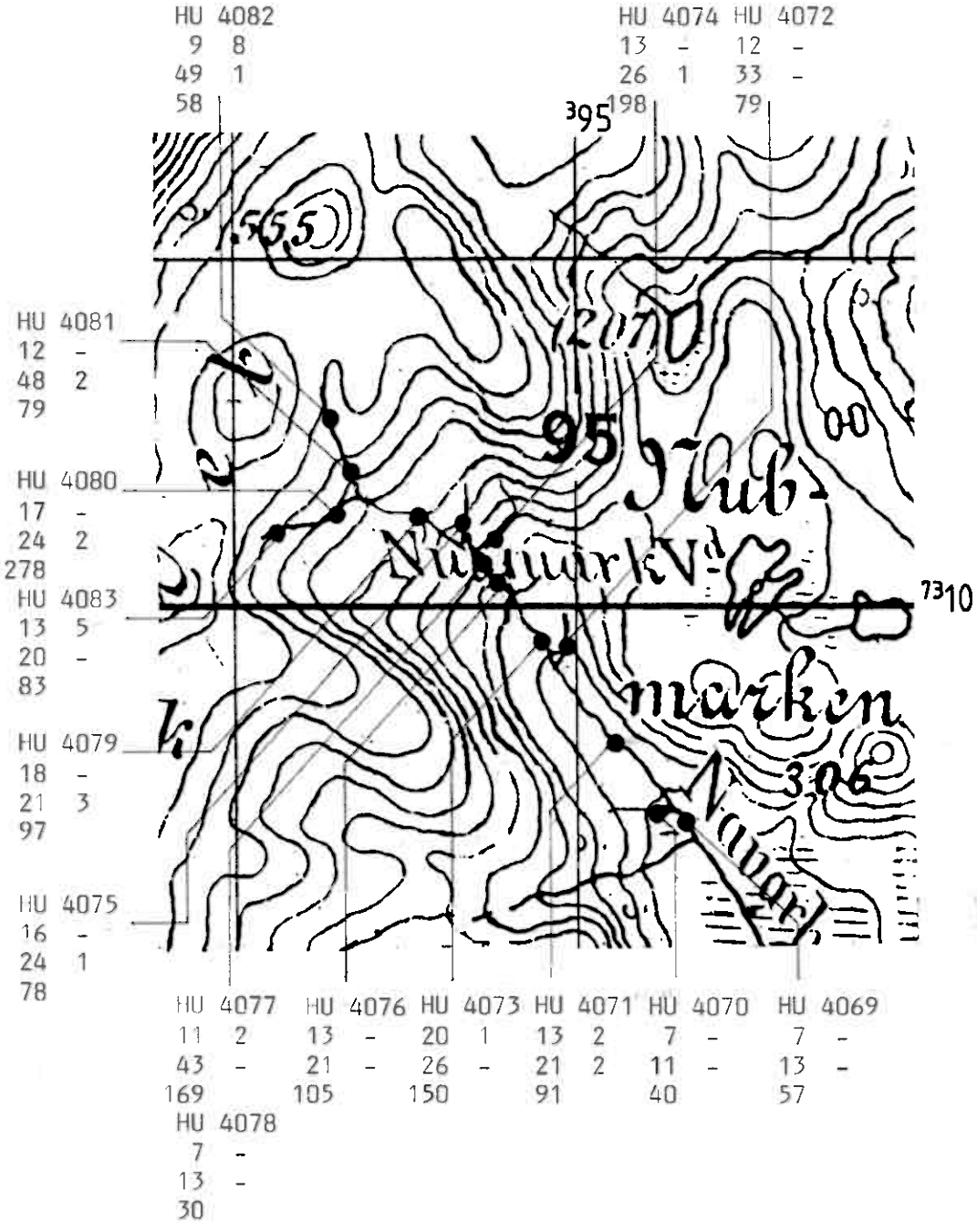
Nos.of follow up sample: HU 4069 - HU 4083

Description of drainage system:
The stream drains the eastern slopes of the Aspviksfjeldet,and runs in southeasterly direction across alluvial plains and bedrock thresholds,forming waterfalls and rapids.Stream branches into several small tributaries,all of which were sampled.Vegetation consists of shrubs above the treeline and birch and picea forrest further down in the valley.

Geology:
The main lithologies are granodiorite,partly porphyritic and a biotite rich mica schist.Locally a migmatite of these two rock types can be observed.Greenish,fine grained calc-silicates,marbles and amphibolites occur as complex infoldings in the upper part of the drainage.The north-south running tributary(sa.no.:0300 HU 4072) runs along a contact between marble and amphibolite.This contact hosts an alteration zone(kaolinisation)of a few dm thickness and 5m length.This alteration was chip sampled sa.no.0300 HU 4072 .

Comments:
Very close spaced sampling was performed,no gold anomalies detected.

Recommendations for further follow up: None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 10 NUBMARKEN
Scale 1:20.000

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name:Hestdalen No:40 Size:0.5 km^2

Claim location:Map sheet 1826 II Tjotta

:Air Photo

:Oko Kart DK 182 I

Pegged:Yes No Partly Claim retained: yes/ No

Stream length: 0.75km/ Drainage area:4.0km^2

Original sample point(30 ppb Au) resampled:Yes No

Follow up team: OK/GT Duration:1.5 days

Nos.of follow up sample: Hu 4053 - HU 4057

Description of drainage system:
The stream system drains the western slopes of Hamran,and flows into a lake elongated in a north-south depression .Overflow from the lake drains southward,and proceeds via an estuary into the sea.

Geology:
The area around the lake is dominated by a biotite gneiss,which commonly exhibits quartz-feldspar boudins.Locally a migmatite is formed by intense"Durchbewegung"of the biotite gneiss and an equigranular granodiorite.

Comments:
Sample no. HU 4053 returned with 132 ppb Au,and is the only sample collected from that drainage.

Recommendations for further follow up:
Further follow up should mainly consist of geological mapping and rock sampling.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Oeverjord No: 6 Size:2.25 km^2

Claim location:Map sheet 1826 II Tjotta,1826 I Mosjoen

:Air Photo D 009,008,010

:Oko Kart

Pegged:Yes No Partly Claim retained: yes /No

Stream length: 0.4km Drainage area:0.1km^2

Original sample points(15,20 ppb Au) resampled:YesNo

Follow up team: OK/GT Duration:1.0 days

Nos.of follow up samples: Hu 4049- HU 4052

Description of drainage system:
Two minor streams draining narrow bedrock valleys (appx. 10 m wide)with birch dominated vegetation.Resampling took place in alluvial cones,follow up samples further upsteam taken from active sediment.

Geology:
Main lithology is a biotite schist with boudins (cm-scale)of quartzo-feldspathic remobilisations.Cobbles of clear and milky quartz in the stream.

Comments:
See no. 40 Hestdalen.

Recommendations for further follow up:
ditto.

ØVERJORD +HESTDALEN.

82 Anom. 20 ppb

BIOTITE SCHIST & GNEISS
WITH QUARTZ-RICH
SEGREGATIONS

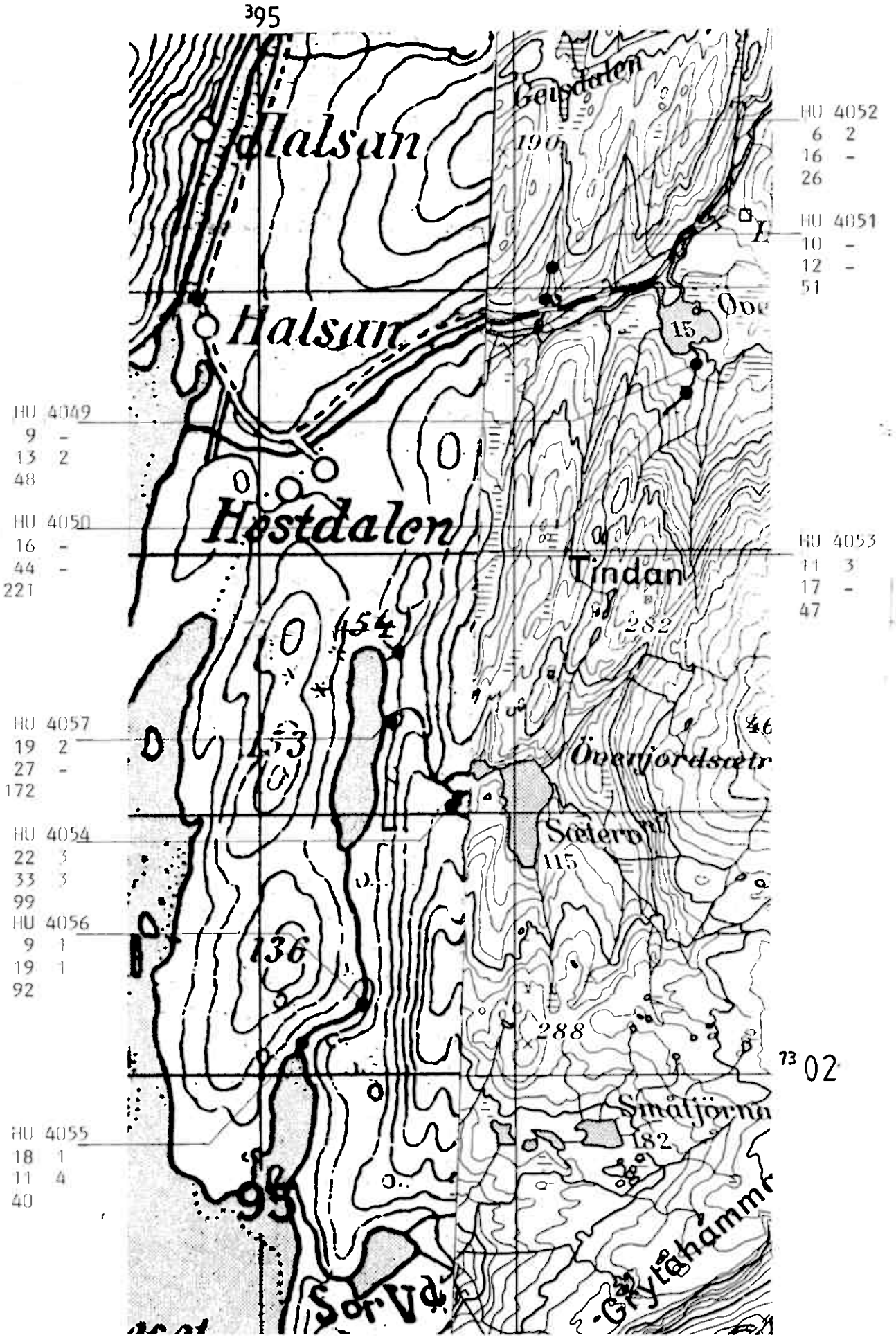
106

132

124

82 Anom. 30pp b

GRANITE/GRANODIORITE



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 6+40 ØVERJORD +
Scale 1:20.000 HESTDALEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sorfjorden A No: 52 Size:1,5 km^2

Claim location:Map sheets 1826 I Mosjoen, 1826 IV Tjotta

:Air Photo E 007,008,009

:Oko Kart DK 180 I,II

Pegged: Yes No-Partly Claim retained: yes/ No

Stream length 2.0km/ Drainage area:2.0 km^2

Original sample point (52 ppb Au) resampled:Yes No

Follow up team: AS/BS Duration:2.0 days

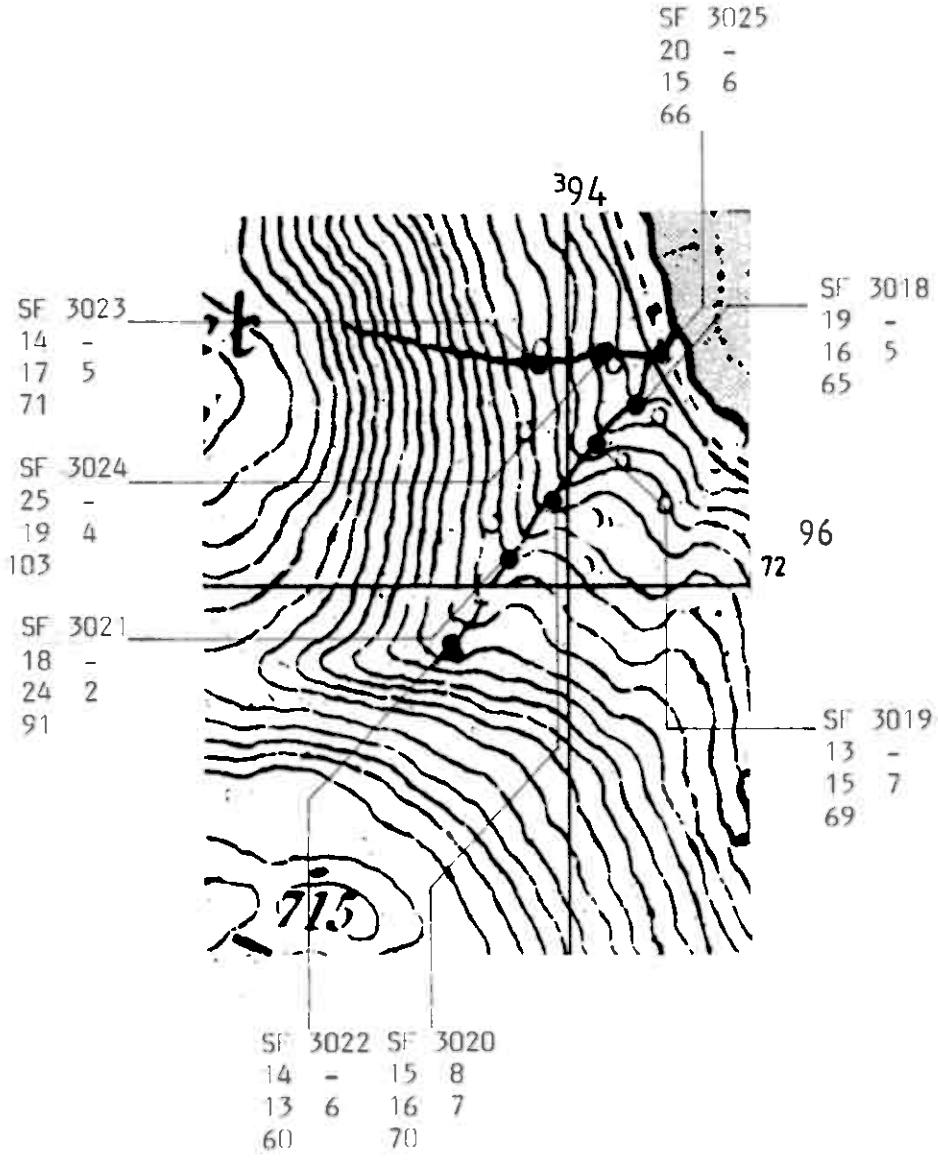
Nos.of follow up samples SF3018-SF3025

Description of drainage system:
Drainage system consists of main stream with 4 tributaries to the west and tributary system A in SE part of the area. A small lake is situated at 60m above see level.<

Main stream: Downstream from the small lake the main stream runs in a narrow gulley, with numerous potholes, small rapids and large boulders in stream bed. Tributaries to the west of the main stream drain steep cliff and boulder fields. Upstream (south) of small lake the main stream is found as a system of smaller braided streams which furthest to the south join up in one stream in gulley that narrows down to 30m furthest to the south. Sampling was not possible south of point 0300SF3014 as the gulley was blocked up by a waterfall.

Tributary system A: Drains area SW of the small lake, lower part runs in braided stream system and boulder field. Upper part on well exposed bedrock, and in narrow gulleys on steeply rising slope, rapids and waterfalls. The upper part of the trib. system A has not been sampled.

Geology:
Main stream: white-grey marbles intercalated with quartz-biotite schist (+-disseminated sulphides) occur downstream of the lake. Upstream, there is less exposure, but mica-schist, marble and granodiorite boulders were recorded in scree at the foot of a cliff to the west of the stream. These also included pyrrhotite-bearing skarn. A rusty area in the cliff wall occurs west of sample SF 3008. Tributary system: augen gneiss in the



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 52 SØRFJORDEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Sorfjorden 'B'** No: **51** Size:0.75 km^2

Claim location:Map sheet 1826 IV Tjotta

:Air Photo E 007,008,009

:Oko Kart DK 180 I,II DK 181 III

Pegged: Yes-No Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:0.75 km^2

Original sample points(76ppb Au) resampled:YesNo

Follow up team: AS/BS Duration:1.0 days

Nos.of follow up samples BF 3018 - BF 3025

Description of drainage system:
Stream system consists of main stream system and tributary system A. The area was sampled after continuous heavy rainfall resulting in very strong current and numerous temporary streams. The sampling was restricted to what was assumed to be the main stream, and tributary B. The drainage area consists of steep, overgrown boulder field up to 300-400 m. above see level, overhung by cliffs above 300-400 m above see level. The main stream was sampled up to 320 m. above see level and trib. B. up to 180 m. above see level. Sample point from 1982 field season (170042) is placed downstream from junction of main stream and trib. A.

Geology:
Outcrops were only found along main stream system, and consisted of mica-schists, gneiss intruded by granodioritic dykes. Boulders of skarn, rusty biotite rich mica-schist, and marbles found in mainstream and trib. A. All rock types with disseminated sulphides (pyrrhotite). It was not possible to locate the source area for these boulders.

Comments:
No Au anomalies detected.

Recommendations:
None.

headwater, with banded gneiss lower down, with a few dm-scale granodiorite dykes.

Comments:
No Au anomalies detected.

Recommendations:
None.

MOSIBEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:HestakslenNo:159 Size:1.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart

Pegged:Yes-No Partly Claim retained: yes /No

Stream length: 1.5 km/ Drainage area:1.5km^2

Original sample point(23ppb Au) resampled: Yes No

Follow up team: TK/HK Duration:1.0 days

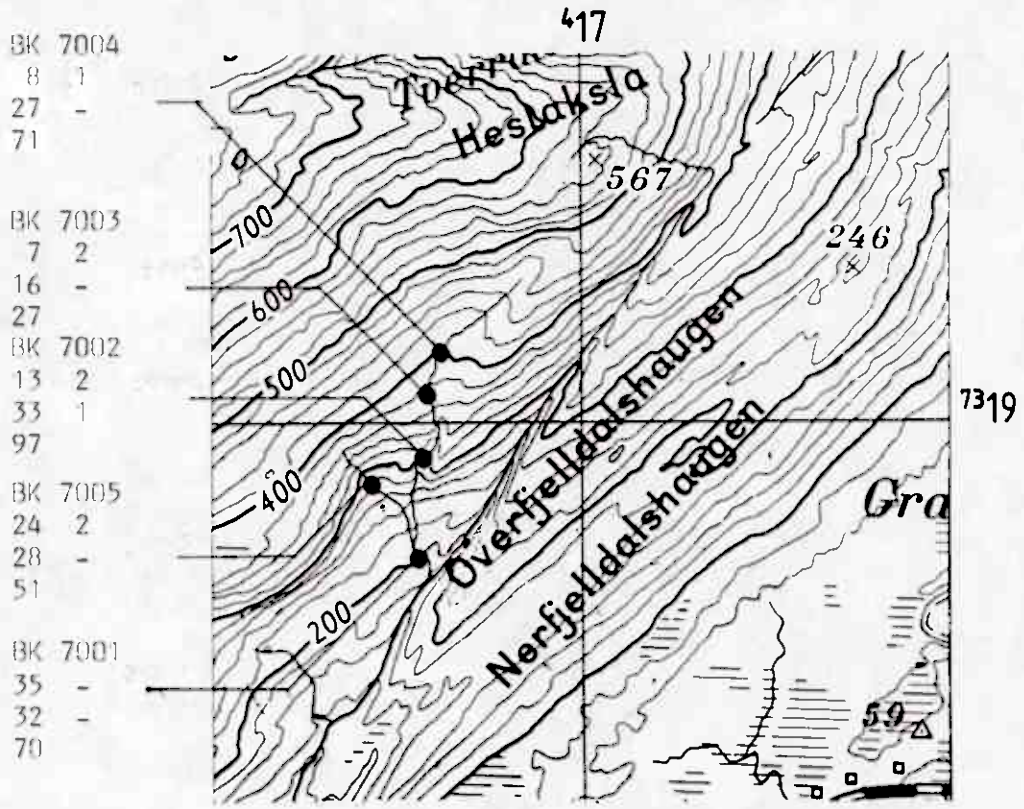
Nos.of follow up sample: BK 7001- BK 7005

Description of drainage system:
The stream system consists of several small tributaries,originating from snow fields,which join into one larger stream.The streams run mostly directely over bedrock.The upper part of the stream system is unaccessable due to very steep slopes.

Geology:
The main lithology is a homogeneous biotite mica schist.The schists show rusty weathering,but sulfide disseminations could not be observed.In addition smaller outcrops of fine-grained grey,banded quartzites and aplitic veins were recorded.

Comments:
None of the follow up samples returned with detectable gold,and trace element concentrations are low,

Recommendations for further follow up:
Further follow up is not recommended.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 159 HESTAKSLEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Fjeldskaret No:116 Size:0.25 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DN 181 II

Pegged:~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 0.5km/ Drainage area:0.25km^2

Original sample points(2ppb Au) resampled: Yes No

Follow up team: IF/TO Duration:0.5 days

Nos.of follow up sample: Mo 1058- Mo 1060

Description of drainage system:
The two very small streams which feed the system drain very small lakes/ponds in thin peat cover over granite, descending via a small marsh to a talus slope and the original anomaly point.

Geology:
Massive homogeneous biotite-muscovite granite in contact with biotite gneisses and thin marbles, containing small (m-size) rafts of the latter.

Comments:
Two medium range gold anomalies;possible gold source in rafted carbonates.

Recommendations for further follow up:
A low priority target;detailed geology and rock sampling.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Steindalsmoen No:107 Size:1.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart ON 101 II,IV

Pegged:~~Yes-No~~ Partly Claim retained: yes/ No

Stream length 10.5km/ Drainage area:8.5km^2

Original sample points(34,40,70ppb Au) resampled: Yes No

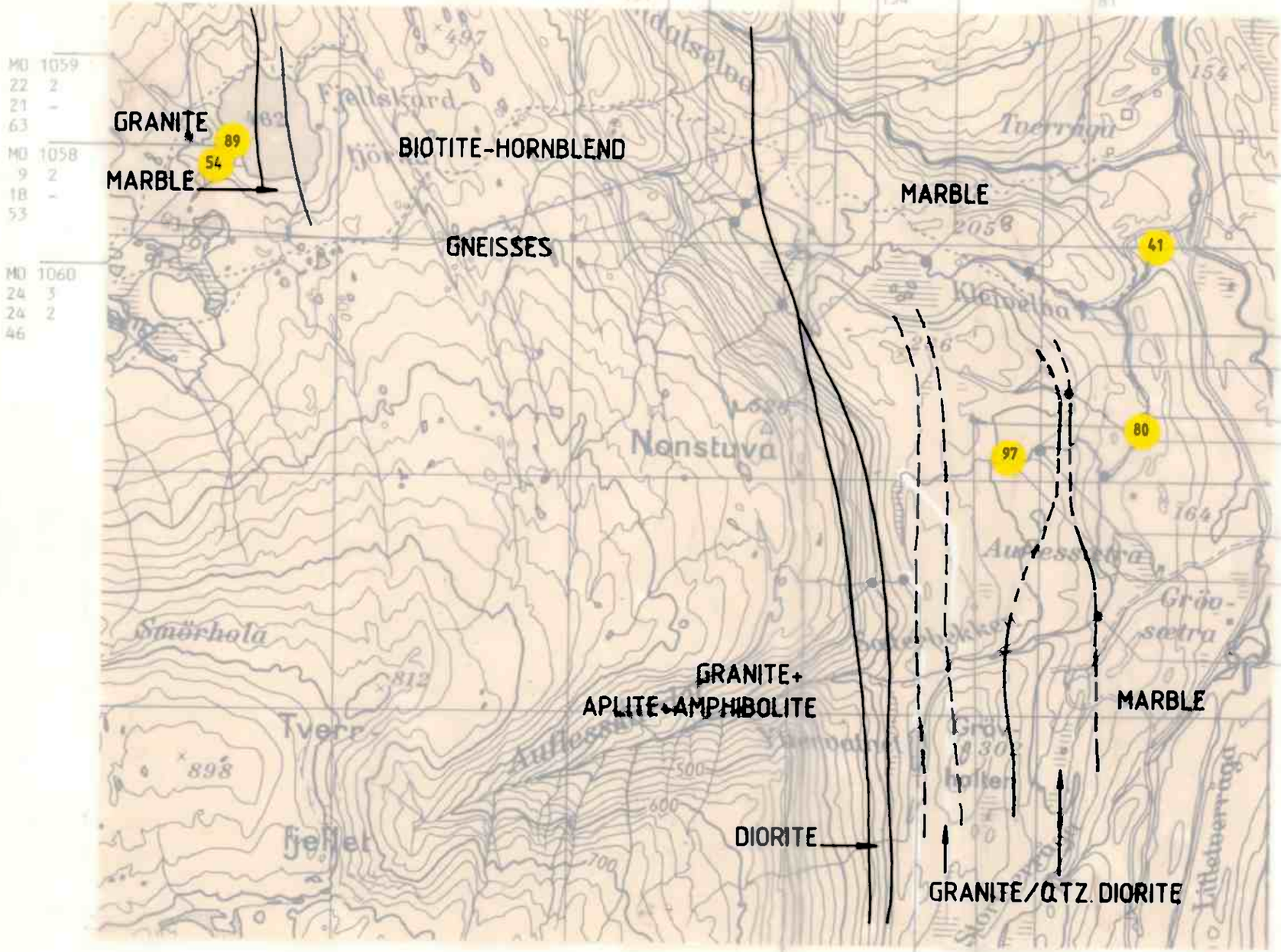
Follow up team: IF/TO Duration:2.0 days
Nos.of follow up sample: Mo 1011- Mo 1025
Mo 6001- Mo 6003

Description of drainage system:
Original sampling point in more of a river than a stream! - Two main sub-'stream' systems: a)northerly: streams descend from a high NW-SE trending cliff into a marshy area, thence via karst systems and rapids cut in marble to the original sampling point which lies in an area underlain by thick clay b)southerly: streams descend from same massive into karst systems and a canyon to join the northerly sub-stream system.

Geology:
a)N. system: stream source in quartz-feldspar-biotite and hornblende gneisses (probably intrusive) forming cliffs and probably underlying bog. The rest of the system is underlain by cream, weakly banded marbles containing small pods of tectonized amphibolite b)S. system: stream source in quartz-feldspar-muscovite-chlorite and feldspar-muscovite granites and aplites with amphibolite?, majority of system runs through strongly karsted marbles (many uncharted streams!). More northern streams drain quartz-feldspar-biotite-muscovite schist/gneiss at source. Pyrr-cpy bearing quartz-veins? over in headwaters of N. system.

Comments:
Three medium range gold anomalies detected;probable source area is cliff bounding valley to the west and the contact zone between intrusives and marbles.

Recommendations for further follow up:
A low priority follow up target.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 116,107 FJELLSKARET
Scale 1:20.000 STEINDALSMOEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Oydalen/Hatten E.No:106,108 Size:3.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DN 182 II,IV

Pegged:Yes No--~~Partly~~Claim retained: yes/ No

Stream lengths 2x1.8km/ Drainage area:2.0km^2

Original sample points(393ppb Au) resampled: Yes No

Follow up team: IF/TO Duration:1.0 days

Nos.of follow up sample: Mo 1026- Mo 1040

Description of drainage system:
Two streams sampled (split upstr. from orig. anom. pt.100105) a) west str.: descends via snowfields in gulleys cut in well exposed schists, thence via gorges commonly following foliation planes to a talus field and bog to 110105. b) east str: descends via snowfields following foliations to a long canyon of shattered well exposed bedrock apparently following zone of intense veining/injection, thence via small gulleys to talus field and semi-bog to 110105.

Geology:
Quartz-biotite gneisses containing amphibolites and conformable quartz veins/sheeted pegmatites, with locally abundant biotite-muscovite granite veins. Most interesting is the E. stream geology, following a zone within pervasively intruded and altered biotite-gneisses (from quartz-veins, tourmaline pegmatite, granite) where pyrrhotite impregnation is common. The western stream does not appear interesting apart fom some thick quartz veining at lower levels.

Comments:
Two middle range and one low range gold anomalies draining Stortua.Sulphide mineralized rock samples did not return Au-values.

Recommendations for further follow up:
The well exposed geology did not reveal any other mineralization than that sampled,therefore no further work is recommended on the Stortua part of this claim.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Hatten No:108 Size:4.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DN 182 III,I

Pegged:Yes ~~No--Partly~~Claim retained: yes/ No

Stream length: 9.5 km/ Drainage area:3.0km^2

Original sample points(40,34ppb Au) resampled: Yes ~~No~~

Follow up team: IF/TO Duration:3.5 days

Nos.of follow up sample: Mo 1041- Mo 1057
Mo 1061- Mo 1081

Description of drainage system:
The anomalous drainage systems in the Kvanndalsnesan area are a)6 streams draining the W. valley slope, descending from bedrock/thin peat bottomed ponds thence via waterfalls and rapids, frequently in the N. via karst tunnels, to the clay/peat valley floor b)the N. section of Kvanndalselva, supplied by small streams draining the E. valley slope via rapids and bog, and part of the N. West slope by the same.

Geology:
Biotite-fsp-(hbl)schists cont. abundant coarse-grained qtz-fsp deformed veins and lenses, and amphibolite horizons, together with interbedded calcite and dolomite marbles. These have been intruded by both biotite and biotite-muscovite granite, only locally tending pegmatitic, with minor skarning, rafts of marble and amphibole schists occur within granites. Minor gabbro also present on W. slope. Three bulk rock samples taken (0300M01003, 1004, 1005) of mineralization:
1003:Pyrrhotite impregnation in quartz-amph-calcsilicate assemblage near contact of large marble enclosure in granite near contact zone.
1004: pyrrhotite-cpy impregnation in quartz-vein and mica-poor granite. The quartz-veining at this location is thick (1-2m), resembling a rusty, coarse-sugar textural quartzite.
1005:Fe hydroxide/limonite-rich, completely altd. gabbro/ amphibolite with rusty quartz-veins, collected only ~150m from 1004.

Comments:
Numerous low to high range gold anomalies,the greatest concentration appearing to suggest a source northwest of Kvanndalsnesan.

Recommendations for further follow up:
Detailed geology and rock sampling at higher elevations and in the rafted marble area.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Oydalen No:106 Size:3.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart

Pegged:Yes-No Partly Claim retained: yes/ No

Stream length 1.3 km/ Drainage area:1.0km^2

Original sample point (857 ppb Au) resampled: Yes No

Follow up team: IF/TO Duration:1.0 days

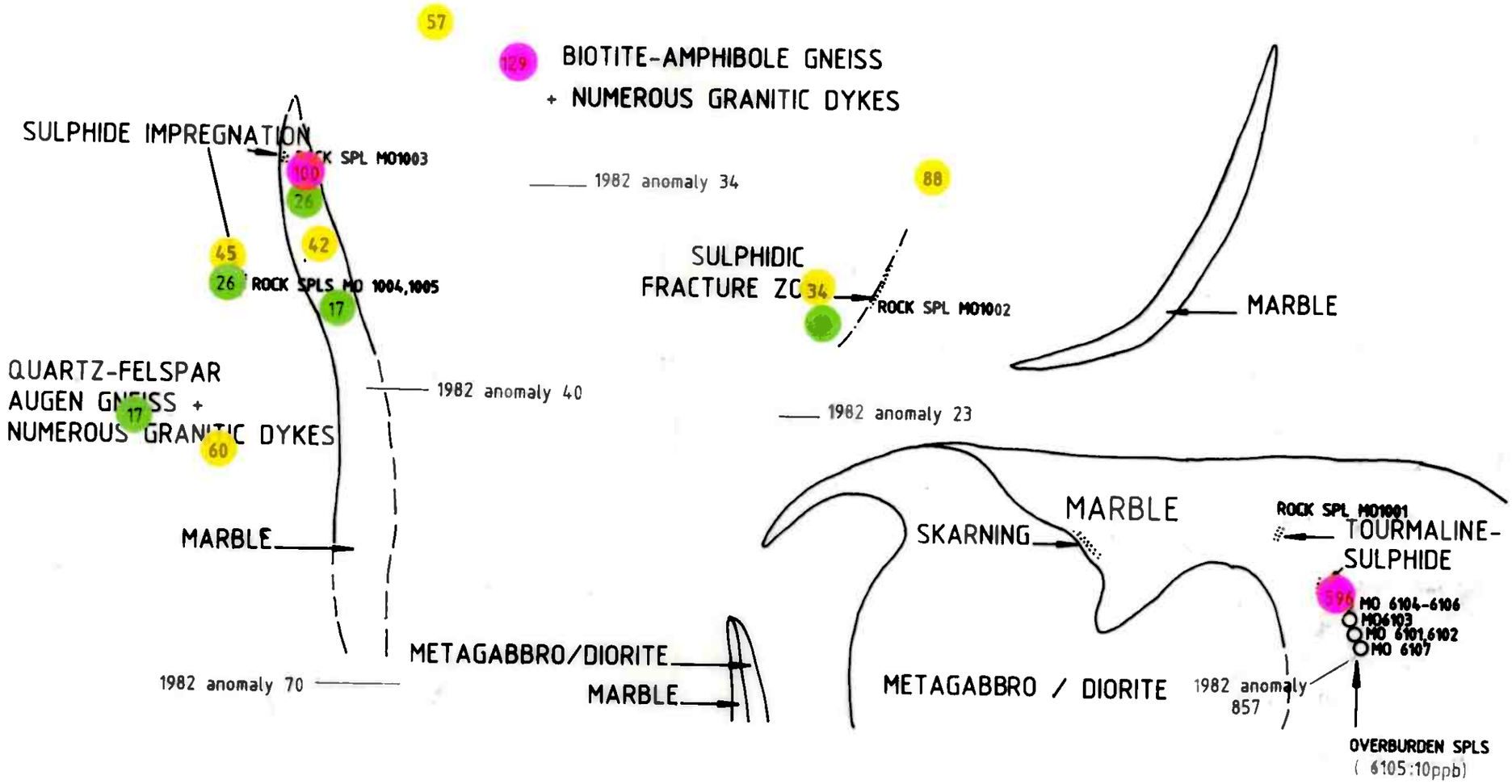
Nos.of follow up sample: Mo 1001- Mo 1010

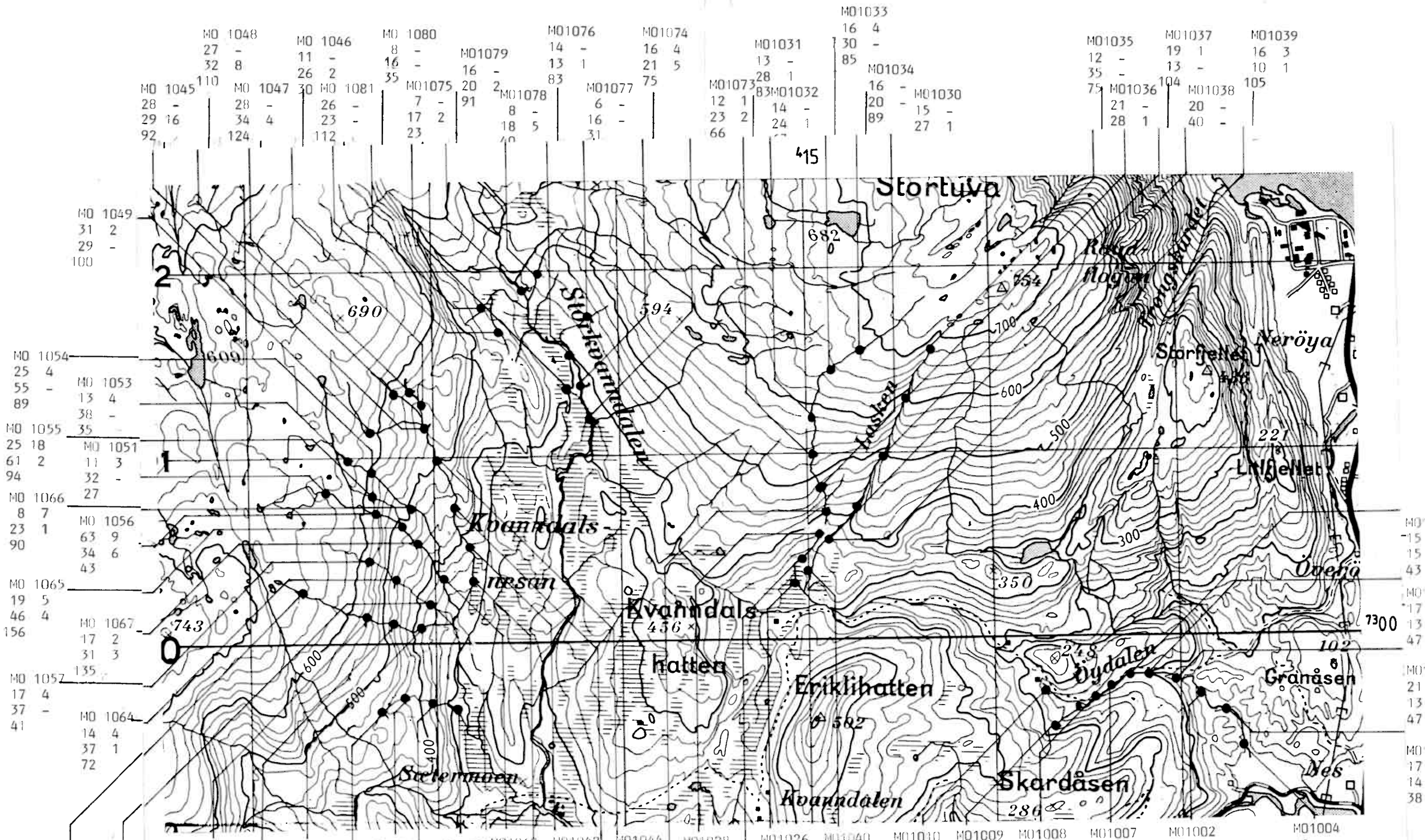
Description of drainage system:
Stream descends from two small streams (one in semikarst terrain)in marbles, commonly following schistosity planes via small rapids to the plane of the river Vefsna and the 1982 anomaly point (110168, 110169), with thick clay overburden, mature stream sede (pebbles, grit, sand, silt, clay). Seven sieved bank samples of the overburden were taken around and upstream of the 1982 anomaly. Only one of these contained 10ppb Au.

Geology:
White-light grey marbles with amphibolites (generally schistose), and relaively minor quartz-feldspar-muscovite-biotite intrusives. Amphibolites contain zones rich in py-pyrr-(tourmaline). Marbles are skarned, particularly near the source of the N. most small stream, with silicification, tourm, pyrr, diopside and other calcsilicates. These were sampled, with negative results.

Comments:
One (very) high-range Au anomaly detected several hundred metres upstream of very high 1982 anomaly. Bank sampling did not detect any possible contaminating drift. Rock samples of sulphide-tourmaline mineralization did not yield Au.

Recommendations:
Detailed geology and lithogeochemistry in the limited area to the N and W of the anomalies: Approx. 1 team day.


57
129
BIOTITE-AMPHIBOLE GNEISS
+ NUMEROUS GRANITIC DYKES
1982 anomaly 34
88
SULPHIDE IMPREGNATION
ROCK SPL MO1003
100
26
42
45
26
ROCK SPLS MO 1004,1005
17
SULPHIDIC
FRACTURE ZC
34
ROCK SPL MO1002
MARBLE
QUARTZ-FELSPAR
AUGEN GNEISS +
NUMEROUS GRANITIC DYKES
17
60
1982 anomaly 40
1982 anomaly 23
MARBLE
SKARNING
MARBLE
ROCK SPL MO1001
TOURMALINE-
SULPHIDE
596
MO 6104-6106
MO6103
MO 6101,6102
MO 6107
METAGABBRO/DIORITE
MARBLE
1982 anomaly 70
METAGABBRO / DIORITE
1982 anomaly
857
OVERBURDEN SPLS
(6105:10ppb)



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 106+108 OYDALEN + HATTEN II
Scale 1:20.000

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name: Livatn No 12 Size: 1.0 km^2

Claim location: Map sheet 1826 I Mosjoen

: Air Photo

: Oko Kart DL 184 I,II

Pegged: ~~Yes---No~~ Partly Claim retained: Yes No

Stream length 1.5 km Drainage area: 0.5 km^2

Original sample point (5 ppb Au) resampled: Yes No

Follow up team: OK/GT Duration: 1.0day

Nos.of follow up sample VF 4004 - VF 4009

Description of drainage system:
Original sample point is situated in a bog on valley floor.A few,very minor streams drain into valley from the north.At head of swamp the valley has its watershed beyond which drainage goes westward.

Geology:
Bedrock is dominated by a biotite rich granodiorite,partly gneissose.Same rock type in alluvial cones.Well rounded cm-sized cobbles on valley floor.

Comments:
One low range gold anomaly.

Recommendations:
None

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Trangdalen No 8 Size:1.0 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DK 182 I,II

Pegged:Yes No-Partly Claim retained: Yes No

Stream length 2.0km Drainage area: 2.0km^2

Original sample point (5 ppb Au) resampled:Yes-No

Follow up team: OK/GT Duration: day

Nos.of follow up sample None

Description of drainage system:
Claimed area outside of drainage system upstream of sample 140147.Wrong positioning of claim is due to old,inaccurate 1 : 50 000 map sheet.Area left without further consideration.

Geology:
Se 56 Trangdalen 'B'.

Comments:
Ditto.

Recommendations:
Ditto.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Trangdalen 'B' No 56 Size: 1.5 km^2

Claim location: Map sheet 1826 I Mosjoen

: Air Photo

: Oko Kart DL 184 III

Pegged: Yes No Partly Claim retained: Yes No

Stream length 0.3 km Drainage area: 0.1 km^2

Original sample point (6 ppb Au) resampled: Yes No

Follow up team: OK/GT Duration: 0.5day

Nos. of follow up sample VF 4001 - VF 4003

Description of drainage system:
Two tributaries sampled have sources in a cliff, flowing down through alluvial cones to the flat valley floor.

Geology:
Biotite-rich granodiorite-mica schist migmatite. Intense shearing and faulting. Boulders of pegmatite found in alluvial cone.

Comments:
One low-range Au anomaly.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: **Stotfjeldet** No 104 Size: 1.0 km^2

Claim location: Map sheet 1826 I Mosjøen

: Air Photo

: Okp Kart DL 184 II

Pegged: Yes ~~No---Partly~~ Claim retained: Yes **No**

Stream length 0.9 km Drainage area: 1.0 km^2

Original sample point (166 ppb Au) resampled: Yes ~~No~~

Follow up team: OK/GT Duration: 1.0day

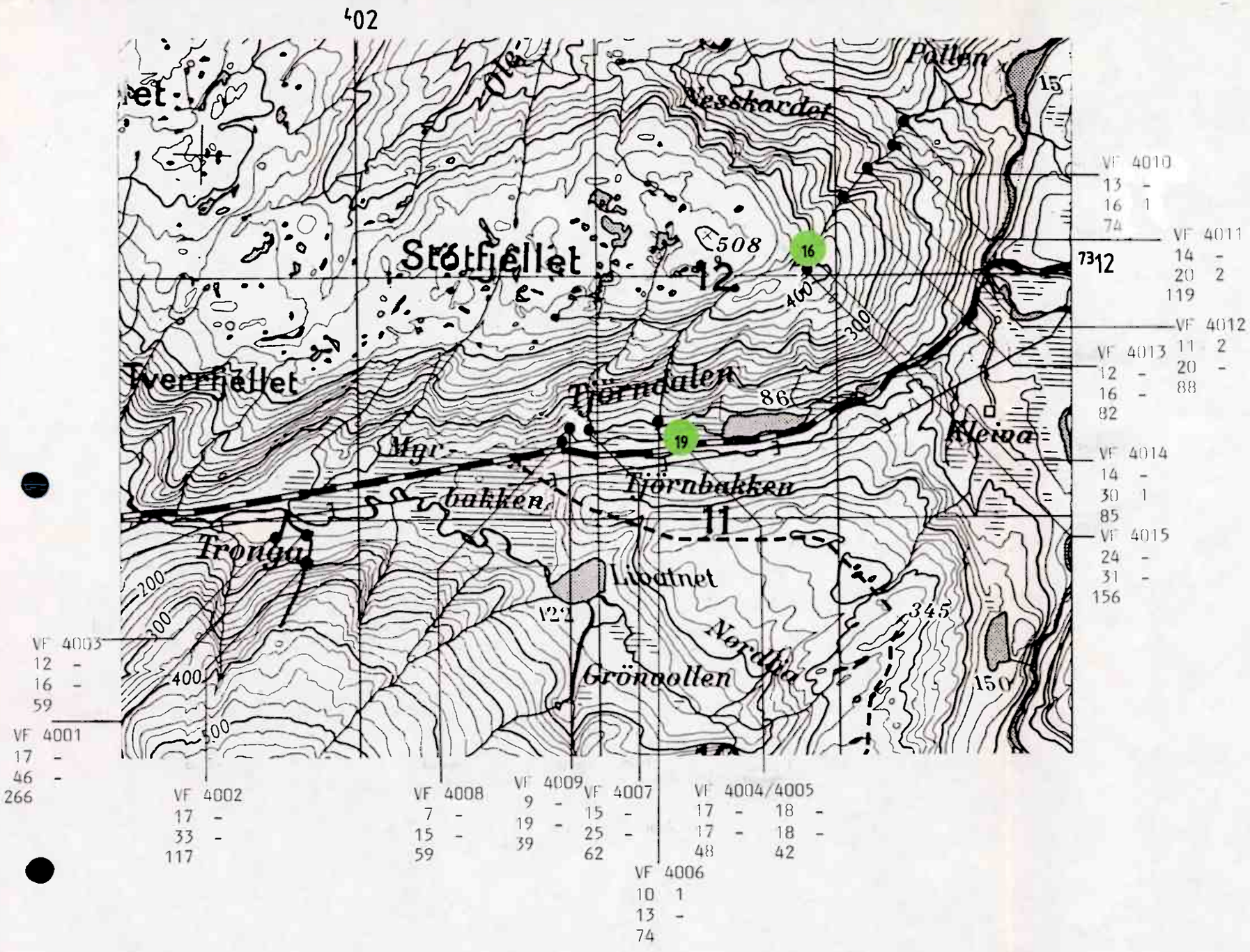
Nos.of follow up sample VF 4010 - VF 4015

Description of drainage system:
Stream begins in a plateau area in eastern Stotfjeldet.It runs in NE - diection,partly in a bedrock crack,and empties into a stream draining an east - west valley.

Geology:
The area is dominated by migmatitic bedrock (granodiorite and biotite schist/gneiss).Low temperature stilbite alteration was observed along the stream.

Comments:
One low range gold anomaly.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name :8,12,56,104 : TRANGDALEN,
Scale 1:20.000 LIVATN,TRANGDALEN B, STØTTFJELL

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Softing No 145 Size: 0.75 km^2

Claim location: Map sheet 1826 I Mo

: Air Photo

: Oko Kart DN 184 II

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: ~~Yes~~ No

Stream length 2.0km Drainage area: 1.0km^2

Original sample point(198 ppb Au) resampled: Yes ~~No~~

Follow up team: JT/GT Duration: 1.0day

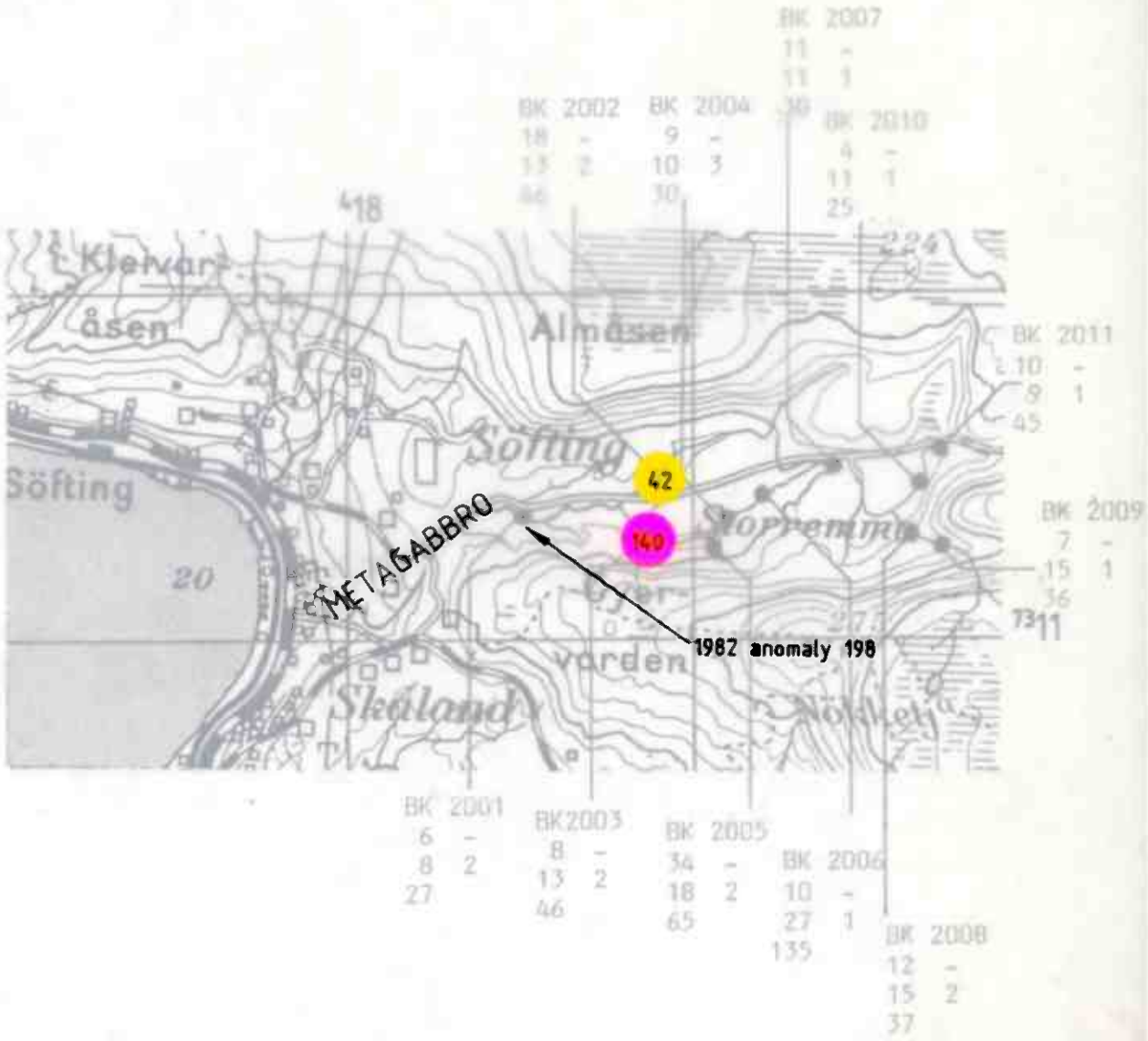
Nos.of follow-up sample : BK 2001 - BK 2011

Description of drainage system:
Lowest part of stream meandering through valley with thick overburden along sides of stream. Farming on alluvial marine sediments upwards from sample point 2008 steeper slopes on both sides with large boulder fields. Upwards sample point 2009 stream disappears under boulder field. Last sample point BK 2011 on tributary below old mine workings (magn og hematite).

Geology:
Lower part of stream partly in alluvial marine clay (silty and grey colour). No outcrops. Further up outcrops and big boulders of dioritic to gabbroic composition (talus), medium-grained, no homogenous structure. Partly pegmatitic veining with coarse-grained veins. Composed mainly of feldspar; quartz, tourmaline, magnetite and amph. as minor components.

Comments:
One high-range and one medium-range anomaly.

Recommendations:
To be followed-up with 117 Bjorknes, as geology similar.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 145 SØFTING
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Ukkelforen No 53 Size:1.0 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DL 185 I

Pegged: Yes-No---~~Partly~~ Claim retained: Yes No

Stream length 1.0 km Drainage area: 1.0 km^2

Original sample point (133 ppb Au) resampled:~~Yes~~-No

Follow up team: AK Duration:1.0day

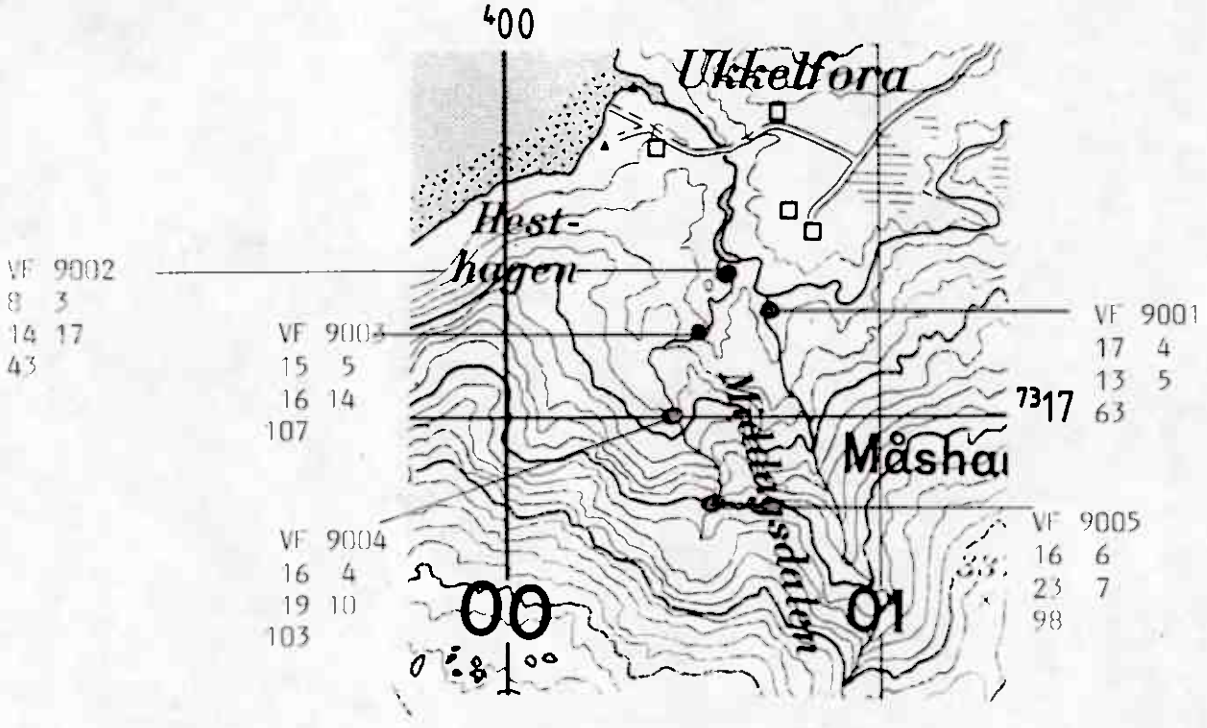
Nos.of follow up samples VF 9001 - VF 9005

Description of drainage system:
Source on bedrock,flowing through a cleft with some talus,to a densely vegetated area with thick clay overburden.

Geology:
Dominated by mica-gneiss which becomes increasingly porphyritic upstream.Marbles occur locally.Boulders of rusty skarn were recorded in the stream.

Comments:
No gold anomalies detected.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 53 UKKELFØREN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Heineadalen No 38 Size:1.0 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

Kart

Pegged:Yes---No Partly Claim retained: Yes No

Stream length 1.0 km Drainage area: 1.0 km^2

Original sample point (2 ppb Au) resampled: Yes No

Follow up team: AK/CR Duration:1.0day

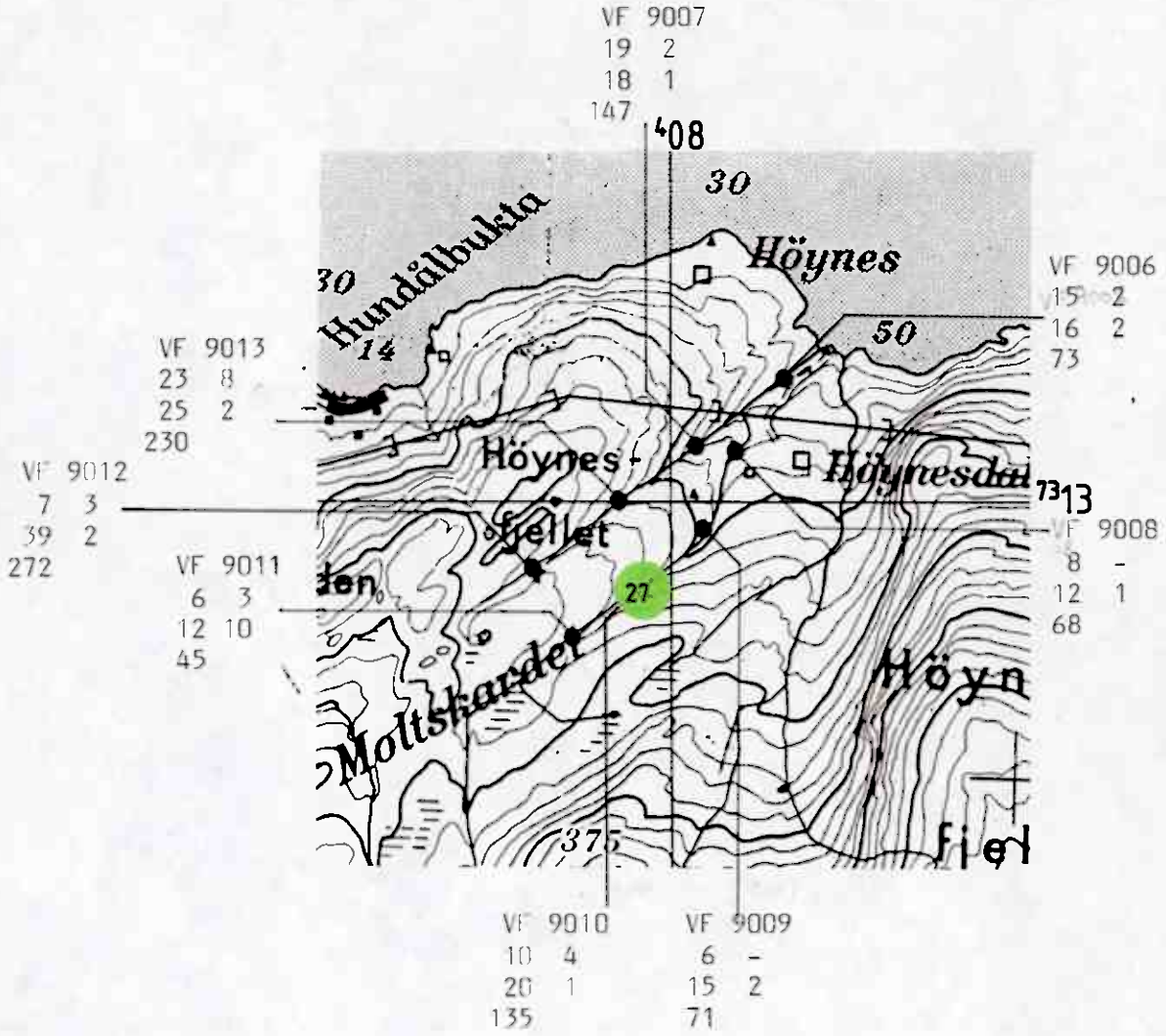
Nos.of follow up samples VF 9006 - VF 9013

Description of drainage system:
Source of two tributaries in a bog ,flowing via clefts with small waterfalls and large boulders,down to pastureland,where they meet.

Geology:
Diorite and diorite-gneiss with schistose amphibolite,and marble interbedded in a complex manner.

Comments:
One low range gold anomaly detected,but no trace element anomalies.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 38 HØINESDALEN
Scale 1:20.000

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name:Digermulen No 37 Size:1.0 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart DM 184 IV

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 3.5 km Drainage area: 1.5 km^2

Original sample point (2 ppb Au) resampled:Yes-No

Follow up team: AK/CR Duration:1.0day

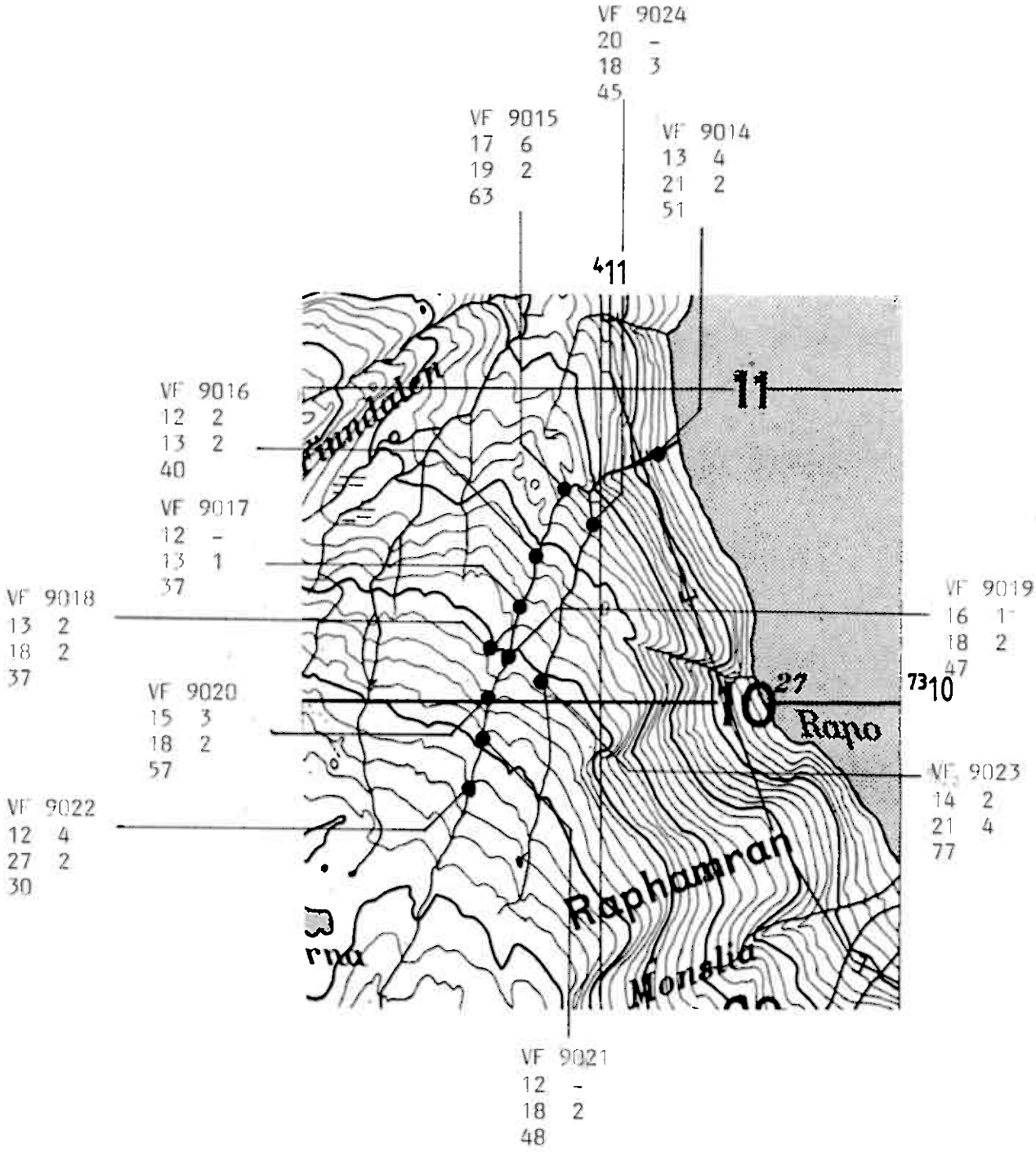
Nos.of follow up sample VF 9014 - VF 9024

Description of drainage system:
Rise by seepage and descent via small clefts and gulleys into a steep sloped,densely vegetated area which continues to the fjord,containing several karsted areas.

Geology:
Granodiorite veined micaschists with small serpentinite pods at high elevations,which grade to granodiorite dominated terrain with migmatisation towards the shore.Several N - S trending intercalations of marble were recorded.

Comments:
No gold anomaly detected.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 37 DIGERMULEN
Scale 1:20.000

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name:**Storstuen** No105 Size:0.25 km^2

Claim location:Map sheet 1926 I Mosjoen

:Air Photo

:Oko Kart DQ 183 III,IV

Pegged:Yes ~~No-Partly~~ Claim retained: Yes **No**

Stream length 0.8 km Drainage area:0.3 km^2

Original sample point (8ppb Au) resampled:Yes ~~No~~

Follow up team: OK/GT Duration:1.0day

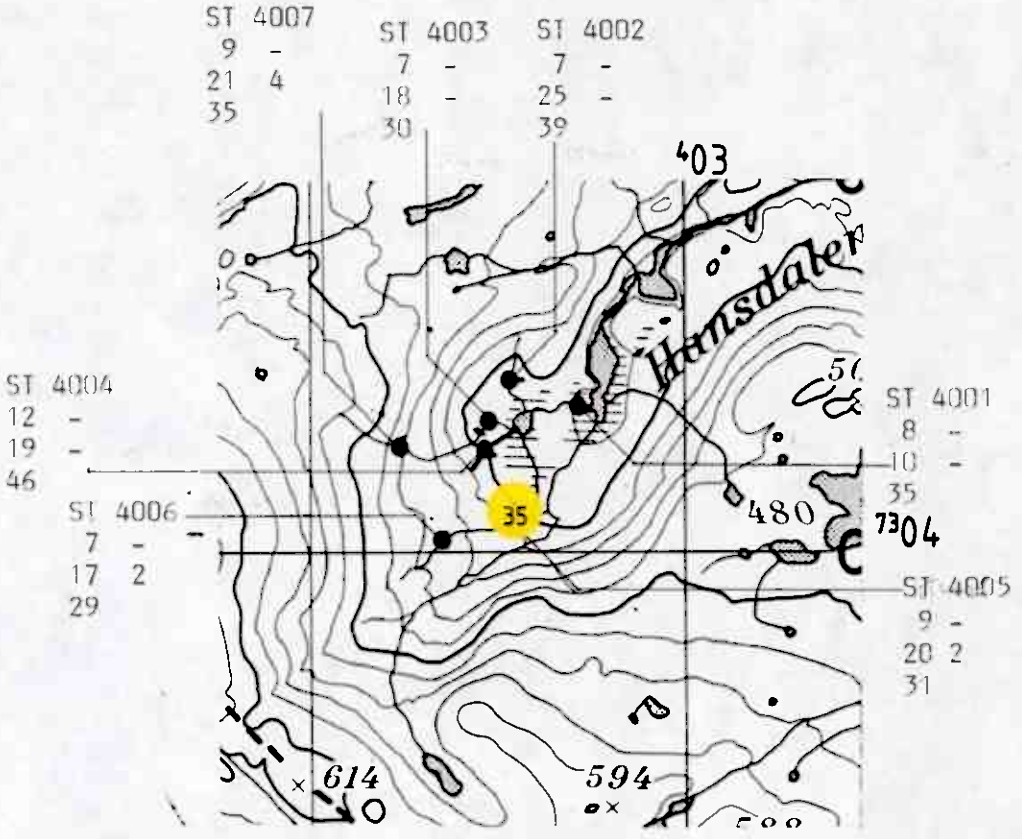
Nos.of follow up sample : ST 4001 - ST 4007

Description of drainage system:
The anomalous stream drains a cirque area with sparse field, mire vegetation and good exposure. The bedrock is largely exposed.

Geology:
In the area an equigranular granodioritic rock type is predominant. At points 4002 and 4003 it contained m-sized angular xenoliths of a darker, biotite-rich variety. In the southern part (along stream where 4005 and 4006 were taken), the bedrock is more diverse with a migmatic rock type with biotite schist/granodiorite, and also granodioritic gneiss, porphyritic granodiorite, pegmatitic and aplitic veining. The rock is sheared with boudins and flow structures. Above 4007 a stockwork area of small extent was found with pegmatitic veins of dm-size.

Comments:
One middle-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 105 STORTUEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Langvatn No7 Size:0.5 km^2

Claim location:Map sheet 1826 I Mosjoen

:Air Photo

:Oko Kart

Pegged: Yes-No---Partly Claim retained: Yes No

Stream length 0.2km Drainage area: 0.2 km^2

Original sample point (20 ppb Au) resampled: Yes No

Follow up team: OK/GT Duration:1.0day

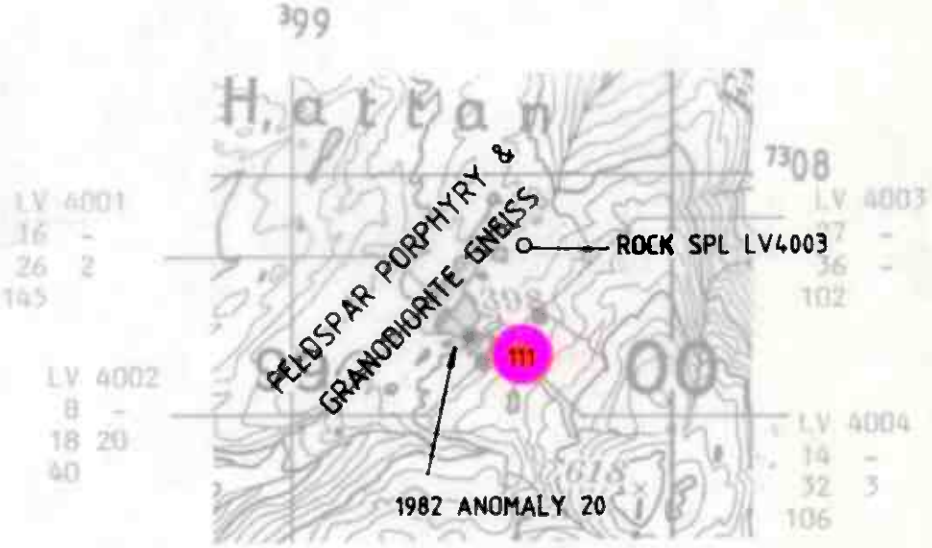
Nos.of follow up sample : LV 4001 - LV 4004

Description of drainage system:
Stream drains a sparsely vegetated plateau area with bedrock cracks in m-scale.The catchment area is partly covered by organic soils underlain by pebbles of heterogeneous petrography.

Geology:
Area is dominated by a biotite gneiss which forms a migmatite with a biotite-poor granodiorite.The latter contains local clusters of cm-sized feldspar crystals.A rusty area of approx. 1*1m showed brassy and silvery sulfides.See rock sample 0300 LV 4003.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 7 LANGVATN
Scale 1:20.000

DRE/A

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Herringbotn No 125 Size: 1.0 km^2

Claim location: Map sheet 1926 IV Drevja

: Air Photo D 018

: Oko Kart DO 18Z IV

Pegged: Yes No---~~Partly~~ Claim retained: Yes No

Stream length 1.5 km Drainage area: 1.0 km^2

Original sample point (16 ppb Au) resampled: Yes No

Follow up team: AS/OK/CB Duration: 2.0days

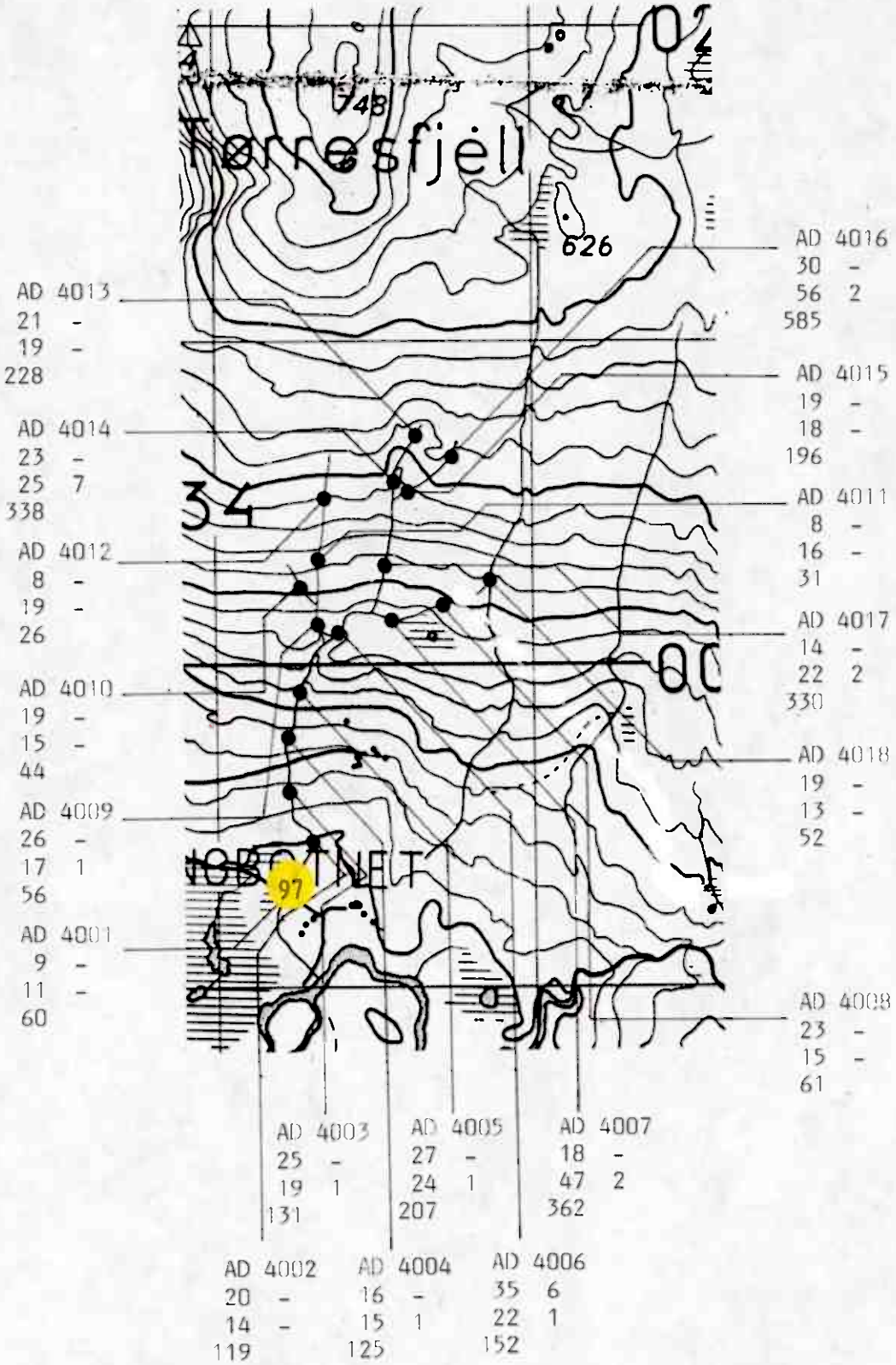
Nos.of follow up samples AD 4001 - AD 4018

Description of drainage system:
System originates on a moderate slope with tributaries in karst and seepage exits,flowing through a bog and thence via a v-shaped scar on to a slope conformable with bedrock schistosity,into a flat bottomed valley.

Geology:
Biotite-muscovite-quartz-garnet schist and quartzo-feldspathic gneiss together with marble,intruded by two generations of acid dykes,themselves cut by pegmatites.Silicification and texture destruction of the schists and gneisses in a 20 m long section was observed,which hosted pyrite/pyrrhotite impregnation.Molybdenite was detected at one locality.Quartz-pyrrhotite veining occurs in the tectonized contact zone between marbles and gneiss.

Comments:
Gold anomaly is confined to drift covered lower part of the drainage.High zinc-anomalies were followed up and sphalerite mineralisation was detected in minor amounts as disseminations in the marble sequence,outcropping along the middle tributary.The thrust hosting the quartz-arsenopyrite-gold mineralization at Rauvatnet can be traced northward into the claim area described above.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 125 HERRINGBOTN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Markabygda No 120 Size:1.0 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo D 015

:Oko Kart DO 182 I

Pegged: Yes-No---Partly Claim retained: Yes No

Stream length 0.75km Drainage area: 0.5 km^2

Original sample point (43 ppb Au) resampled:Yes-No

Follow up team: TK/HK Duration:1.0day

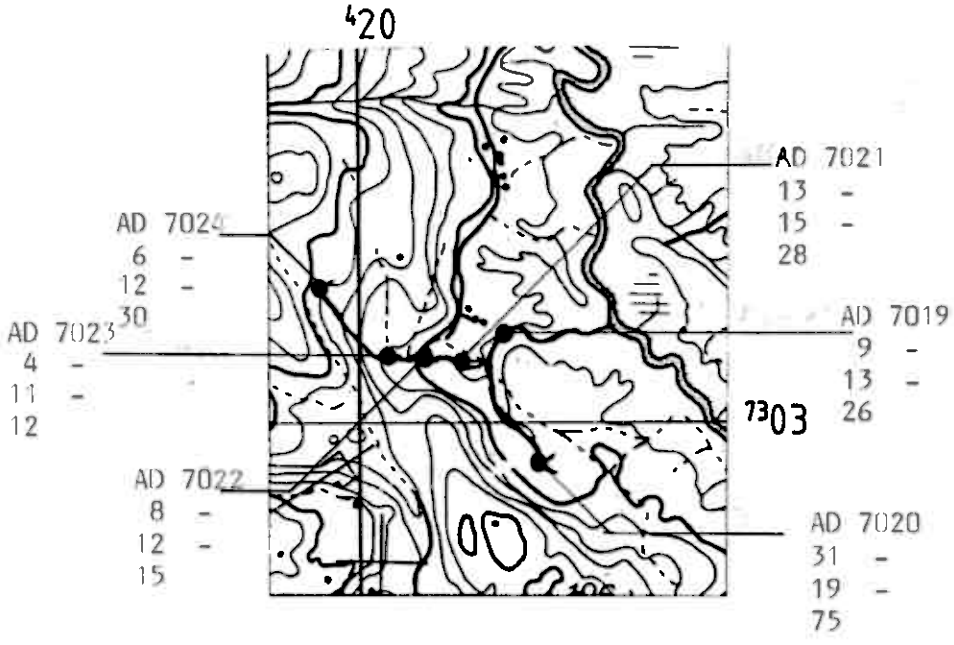
Nos.of follow up samples AD 7019 - AD 7024

Description of drainage system:
Stream rises in a bog and passes several karst tunnels.Clay was observed in the small stream (spl.7020) that joins the main stream at the anomaly site. Resampling not performed due to possible contamination from track.

Geology:
The upper 3/4 of the stream section was dominated by light-grey,white pure marbles grading into fine-grained,pelitic dark-grey marbles in the lower section.

Comments:
One middle range gold anomaly,without trace element association.

Recommendations:
None



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 120 MORKABYGDA
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Alsgarden No:102 Size:0.5 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo E 019

:Oko Kart DO 181 I,III

Pegged: yes-No-Partly Claim retained: yes / No

Stream length 1.5 km/ Drainage area:1.5km^2

Original sample point (35 ppb Au) resampled: Yes-No

Follow up team: KB/OK Duration:1.0 days

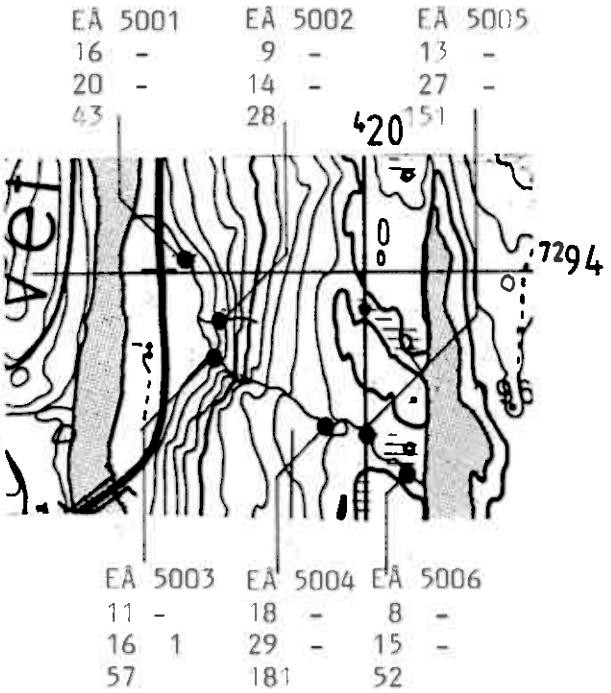
Nos.of follow up sample EI 5001- EI 5006

Description of drainage system:
The stream runs from the lake,200 m asl. to the fjord.The first 400 m from the lake it is a small meandering stream with steepness increasing from 1 to 5 degrees .It passes then through a 5-10 m deep canyon with a slope about 7 - 10 degrees and twins into a very steep waterfall,about 100m high.300 m downstream from the fall a small tributary enters.From the fall and until it passes the railway the stream meanders through thick overburden.

Geology:
The meandering part has sporadic outcrops of gneiss.The canyon is in granodiorite and some micaschist.Further downstream the granodiorite becomes increasingly more foliated.

Comments:
No gold anomalies detected.Trace and base metal values at background level.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 102 ALSGÅRDEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Herring No 121 Size:1.5 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo

:Oko Kart

Pegged:Yes-No-Partly Claim retained: Yes No

Stream length 1.5 km Drainage area: 0.5 km^2

Original sample point (245 ppb Au) resampled: Yes No

Follow up team: JT/OK/GT Duration: 1 day

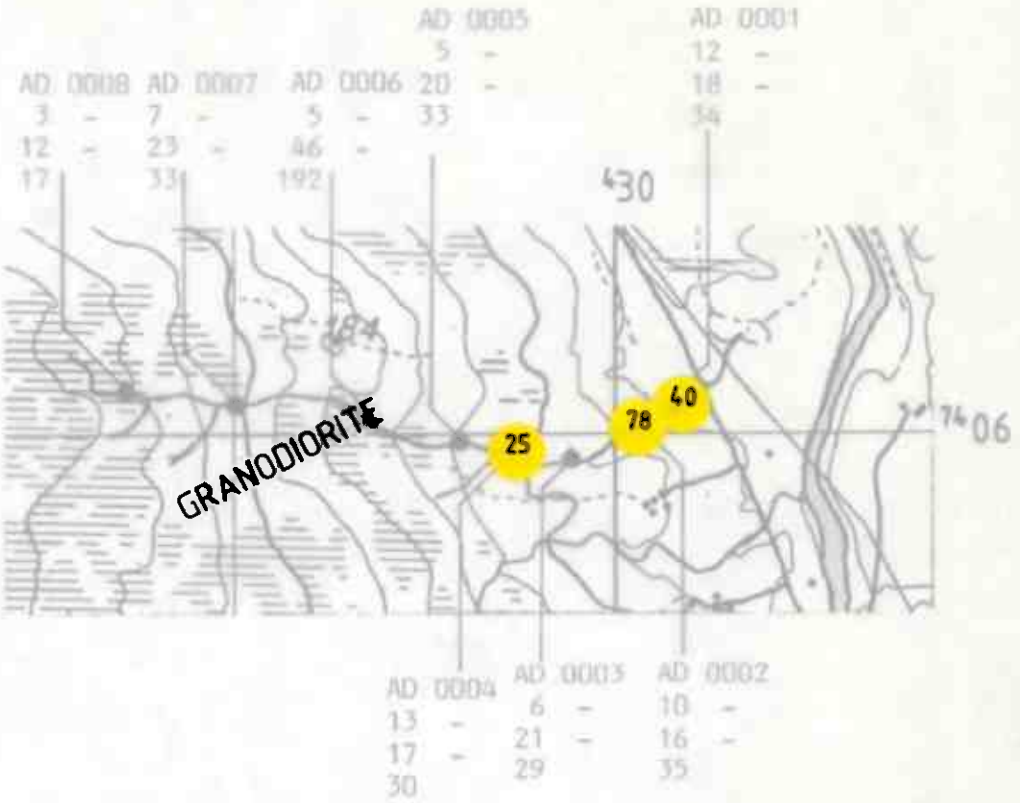
Nos.of follow up samples AD 0001 - AD 0008

Description of drainage system:
Stream flows through gently sloping boggy terrain.Possible contamination from rubbish dump in samples 0001-0004.

Geology:
Diorite - granodiorite with horizons of garnetiferous quartz-mica schist and quartzites.

Comments:
Low to middle range gold anomalies in area of possible contamination.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 121 HERRING
Scale 1:20.000

121 HERRING

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Almdalen B No 123 Size:0.25 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo

:Oko Kart

Pegged:Yes No-Partly Claim retained: yes/ No

Stream length 1.2 km Drainage area: 0.25km^2

Original sample point (22ppb Au) resampled: Yes No

Follow up team: GT/JT Duration: 1 DAY

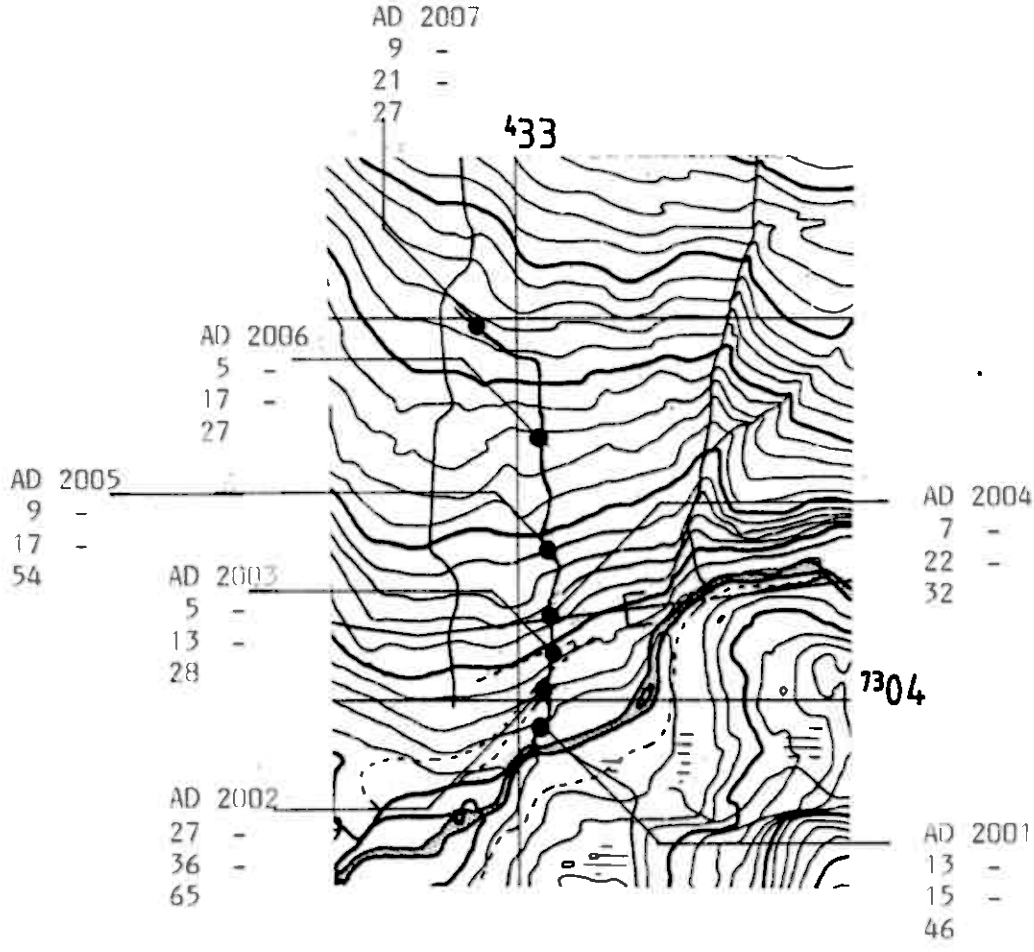
Nos.of follow up samples AD 2001 - AD 2007

Description of drainage system:
Stream rises in a bog and descends over thin boggy overburden, thence through a heavily forested rea via a deep v-shaped valley having steep slopes

Geology:
Biotite-quartz schists with abundant pegmatite and granite veining

Comments:
Only one sample with Au>10ppb. Thick overburden at this sample point(=1982 sample point)

Recommendations:
None recommended.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 123 ALMDALEN B
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Storvik No 118 Size:0.25 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo C 017

:Oko Kart DR 195 III

Pegged:Yes No-Partly Claim retained: yes/ No

Stream length 1.0 km Drainage area: 0.25km^2

Original sample point (86ppb Au) resampled:Yes No

Follow up team: CR/AK Duration: 1.0days

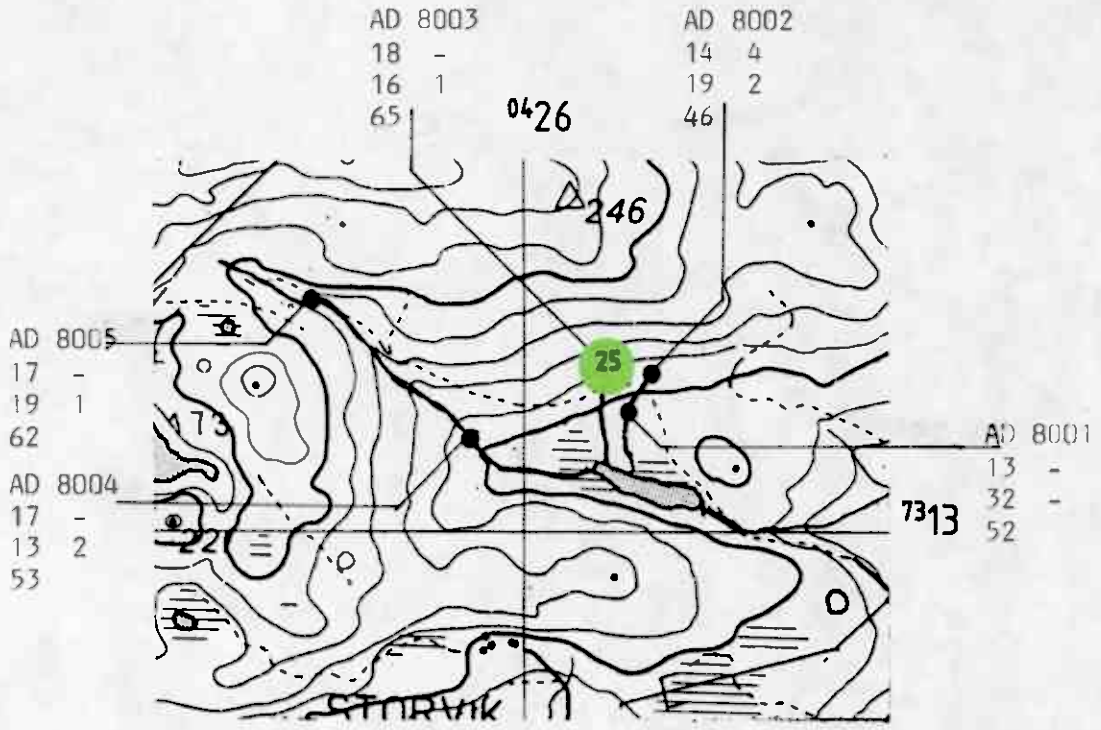
Nos.of follow up samples AD 8001 - AD 8005

Description of drainage system:
Tributary sample originates in a karst outlet in moderately sloped, densely vegetated and karsted area, terminating in a dried-out lake area with thick overburden of clay and soil.

Geology:
Predominantly marble with horizons of graphite schist and amphibolite locally. A weak pyritic impregnation occurs in the smelly marble, while pyrite also occurs in conformable quartz-tourmaline and granodioritic veining.

Comments:
A lithogeochemical follow-up resulted in only one pyrrhotitic mineralization having 30 ppb Au.

Recommendations:
None recommended.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 118 STORVIK
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Reinfjell No 79 Size:0.75 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo D 018

:Oko Kart DQ 181 III

Pegged:Yes No Partly Claim retained: Yes No

Stream length 1.0 km Drainage area: 1.0 km^2

Original sample point (35 ppb Au) resampled: Yes No

Follow up team: JT/GT Duration:1.0day

Nos.of follow up samples AD 2008 - AD 2010

Description of drainage system:
Rises in plateau,descending via boggy area with numerous tributaries,thence down a steep forested boulder slope into a swamp with thick overburden.

Geology:
Massive equigranular granodiorite,hosting abundant undeformed pegmatite veins ranging from 1cm - 30cm in width.

Comments:
One middle range gold anomaly,without trace element association.

Recommendations:
None

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Kjonnasen I No 085 Size:1.0 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: yes/ No

Stream length 1.0 km Drainage area: 1.5 km^2

Original sample point (55ppb Au) resampled:Yes No

Follow up team: TK/AK Duration: 0.5days

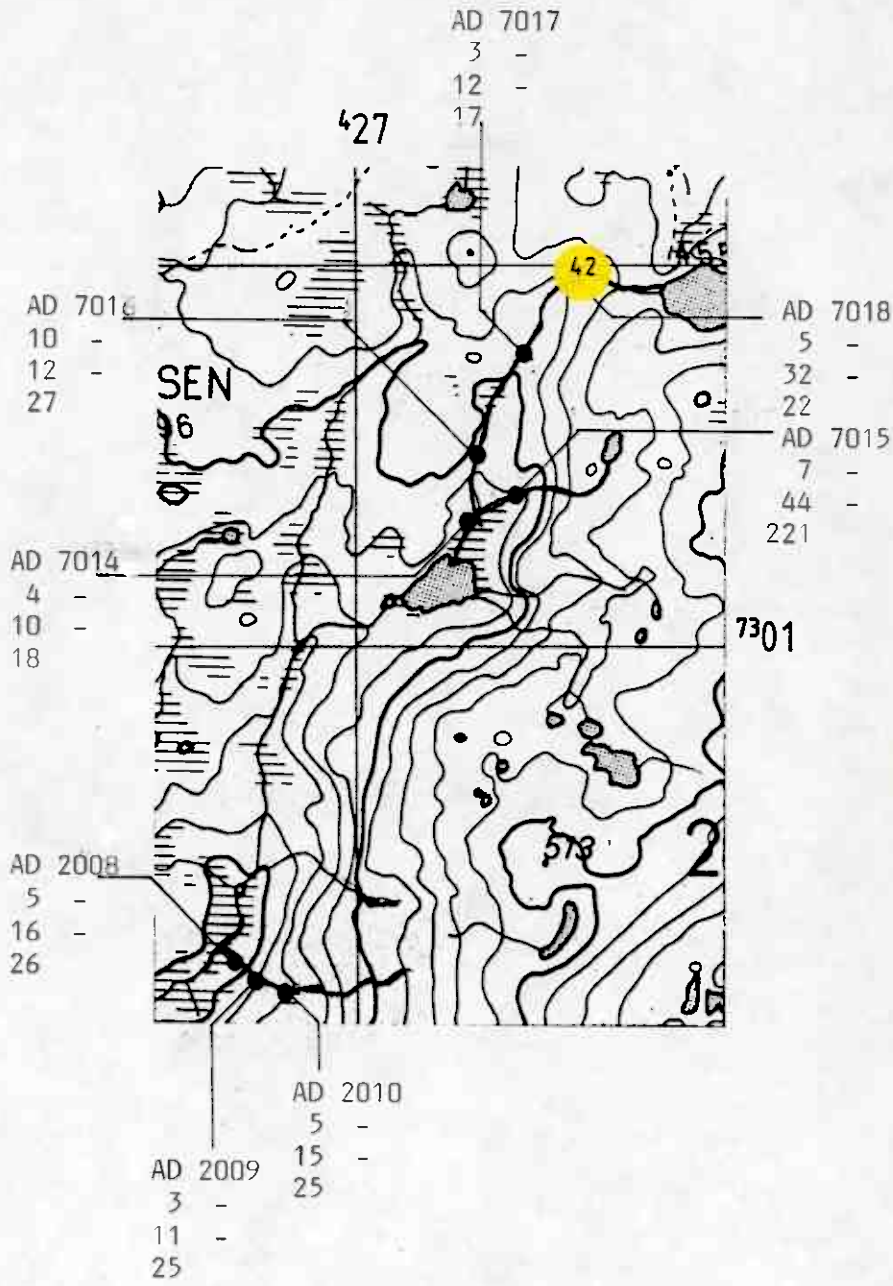
Nos.of follow up samples AD 7014 - AD 7018

Description of drainage system:
Stream rises in small lake,descending steeply into bogs at several elevations,separated by rapids.Possible contamination from carbon-zinc batteries.

Geology:
Dominated by medium-grained biotite granite with abundant tourmaline bearing pegmatites.No skarning apparent at contact with marbles and calc-schists.

Comments:
Possible contamination,especially regarding zinc.

Recommendations:
None recommended.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 79+85 REINFJELL +
Scale 1:20.000 KJØNNÅSEN I

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kjonnaasen III No 124 Size: 0.75 km^2

Claim location: Map sheet 1926 IV Drevja

: Air Photo

: Oko Kart

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 1.0 km Drainage area: 1.5 km^2

Original sample point (35 ppb Au) resampled: Yes No

Follow up team: TK/HK Duration: 0.5day

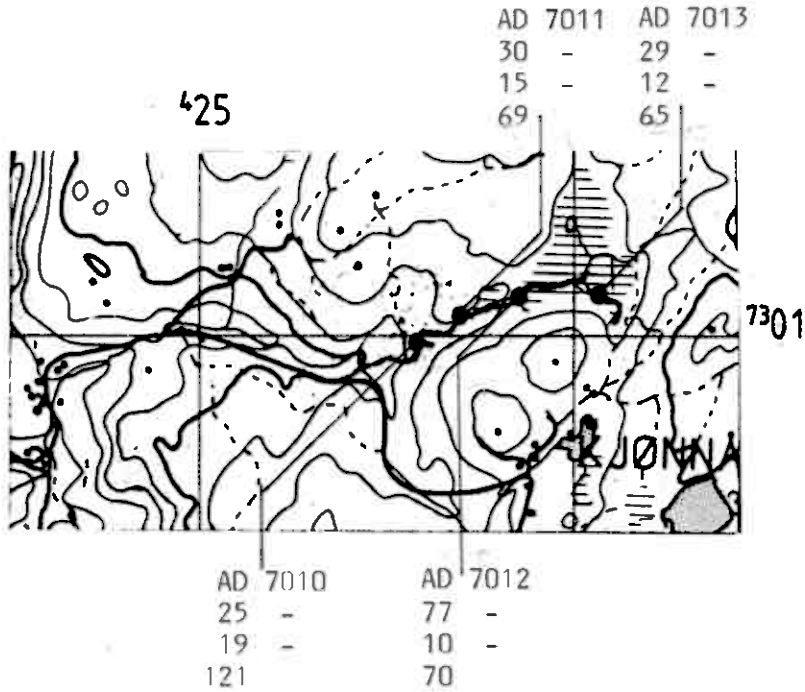
Nos.of follow up samples AD 7010 - AD 7013

Description of drainage system:
Stream emerges from a karst cave at the edge of a bog and flows through a couple of bogs at different levels,separated by a marble ridge,continues over bedrock (marble/calc schist) until it joins another stream below original anomaly sample point.

Geology:
Marbles interbedded with calc-schist,easily recognizable by dense vegetation cover,are surrounded by acid intrusives.The marbles can contain pyrite/pyrrhotite disseminations.East of the source graphite schists ware recorded.

Comments:
Low to middle range gold anomalies in area of possible contamination.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 124 KJØNNÅSEN III
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Almdalen A No 122 Size:8.5 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 1.3 km Drainage area: 0.75km^2

Original sample points(8,24,25/14,36,148 ppb Au) resampled: Yes ~~No~~

Follow up team: IF/TK/HK/OK/GT/HB/JT Duration: 1 DAY

Nos.of follow up samples AD 7001 - AD 7009, AD0101-AD0115, AD0009-AD0019

Description of drainage system:
Stream descends from small lake in bog, thence via a narrow steep course over bedrock via small rapids/falls to a terrace above the river Herring through which it descends gently via broad channels cut in boulder/gravel overburden to the original anomaly point.

Geology:
In lower river terrace area is unknown. In upper area: intermediate (biot-musc-felsp) to acid (musc-felsp-qtz and felsp-qtz-garnet-musc) intrusives strongly predominant. At highest elevations probably interlayered with pelitic (biot-felsp-qtz) metaseds.Small local development of pegmatites, local very thin vuggy quartz veins.

Comments:
See 86 Kjonnasen II

Recommendations:
See 86 Kjonnasen II

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Kjonnasen II No 86 /Size:1.0 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo D 018

:Oko Kart P 182 IV, Q 182 III

Pegged:Yes No-Partly Claim retained: yes/ No

Stream length 1.5 + 0.5 km Drainage area: 1.5 km^2

Original sample point (9,24,8,8,44ppb Au) resampled:Yes No

Follow up team: OK/KA Duration: 2.0days

Nos.of follow up samples AD 4908 - AD 4921

Description of drainage system:
System drains the northern slopes of Reinfjellet. At lower altitudes bedrock crops out at relatively few places (overburden, mires, vegetation). At higher altitudes, bedrock is largely exposed. Mires are common along the streams.

Geology:
Bedrock is uniform in area. Granodiorite dominates and holds in places acidic veins which may form stockworks. Stream pebbles and glacial material show varying petrography.

Comments:
Although a source has not yet been recognized, the number of Au anomalies detected in this area (See also 1982), and the adjoining claim areas (112 Almdalen A, 146 Kjonnasen IV), together with high As values, precludes immediate dropping of the area.

Recommendations:
Detailed lithogeochemical search in headwater areas. Approx. 2-3 team days on the three claim areas.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kjonnasen IV No 146 Size: 1.0 km^2

Claim location: Map sheet 1926 IV Drevja

: Air Photo D 018, E 018

: Oko Kart

Pegged: Yes No Partly Claim retained: yes/ No

Stream length 0.8 + 0.5 km Drainage area: 0.75km^2

Original sample point (160ppb Au) resampled: Yes No

Follow up team: OK/KA Duration: 1.0days

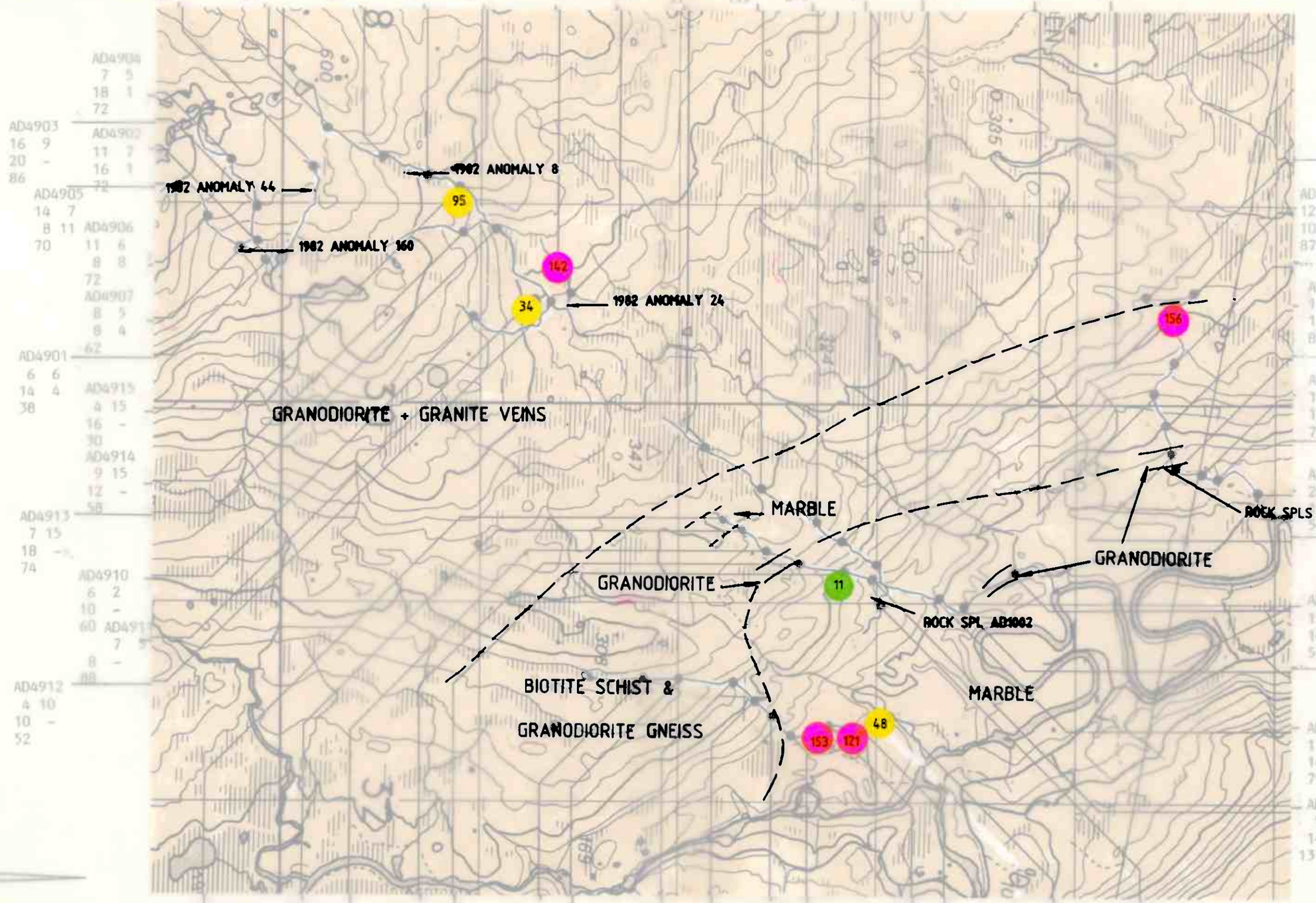
Nos.of follow up samples AD 4901 - AD 4907

Description of drainage system:
System consists of two main streams which drain northernmost part of Reinfjellet. The western one is larger and includes a lakelet system.

Geology:
Area is quite uniform with granodioritic bedrock which in places is gneissose. Acidic veins occur (in some areas forming stockwork). A small outcrop of mafic rock and a marble lens were found close to southern pegging point. UV-hunting in area of 160157 did not show any scheelite in bedrock nor in stream sediment.

Comments:
See 86 Kjonnasen II

Recommendations:
Ditto.



:122,86,146

ALMDALEN A

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Utgard No103 Size: 1.0 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo C 015

:Oko Kart DO 185 III

Pegged: Yes No---~~Partly~~ Claim retained: Yes No

Stream length 1.5km Drainage area: 1.0km^2

Original sample point (45 ppb Au) resampled:~~Yes~~ No

Follow up team: GT/OK Duration: 1.0day

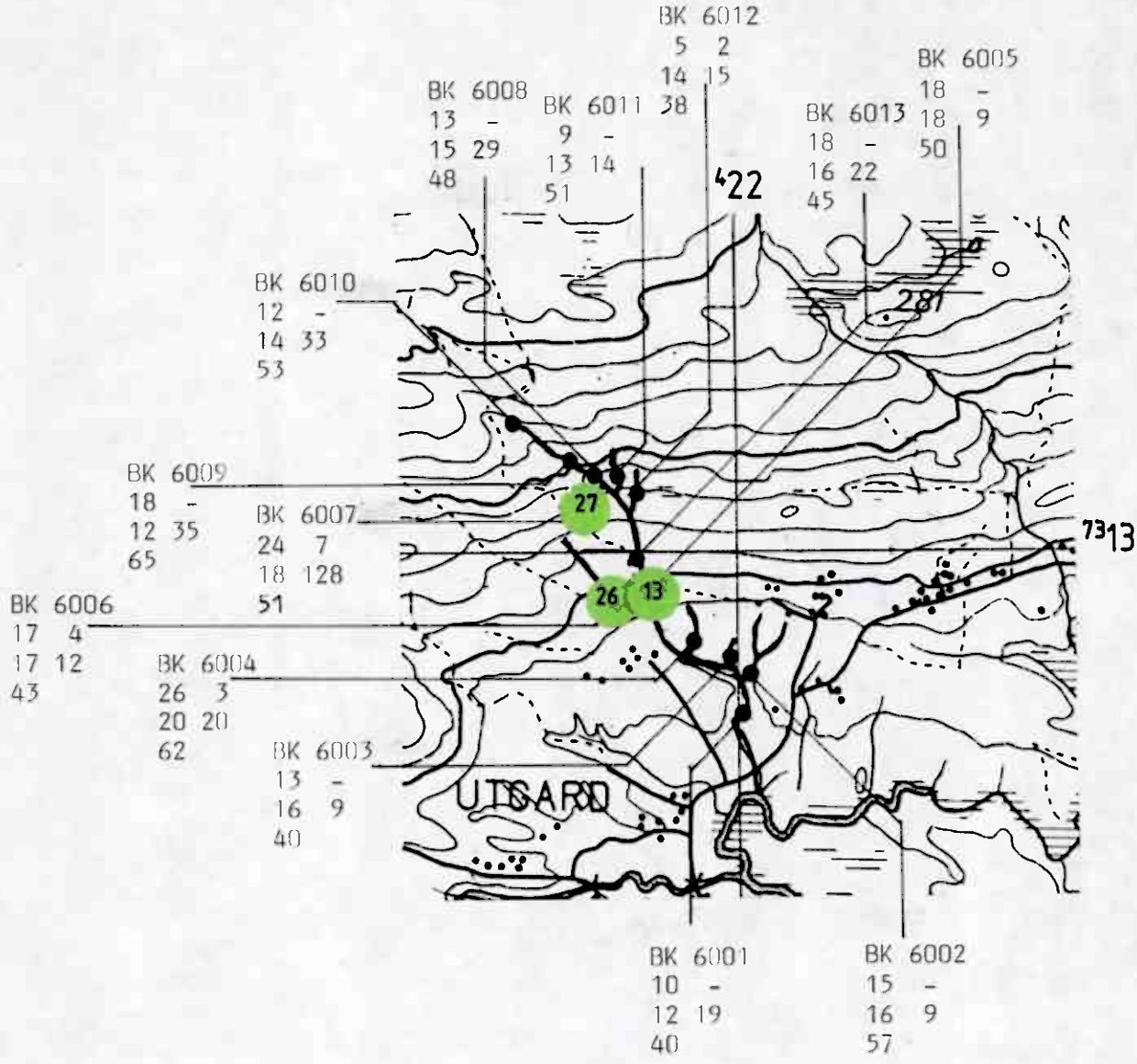
Nos.of follow-up sample : BK 6001 - BK 6013

Description of drainage system:
System drains a forested hillside. Drainage goes partly through karst into a farming area where the streams have cut 5-10m through the sediments. Vegetation is generally dense.

Geology:
Along streams, marble is the most common rock type. In addition, a sulphide-bearing amphibolitic rock and a greenish metasedimentary rock have been found. The latter carried pyrrhotite in one outcrop. Clay was found in farm area sediments.

Comments:
Three low-range Au anomalies detected.

Recommendations:
To be followed-up with 145 Softing and 117 Bjorknes as geology is similar.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 103 UTGARD
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Rokasen No:134 Size:0.5 km^2

Claim location:Map sheet 1826 I Mosjoen 1926 IV Drevja

:Air Photo

:Oko Kart DO 185 III

Pegged:Yes ~~No--Pertly~~ Claim retained: yes/ No

Stream length: 0.7 km/ Drainage area:0.5km^2

Original sample point(84ppb Au) resampled: Yes ~~No~~

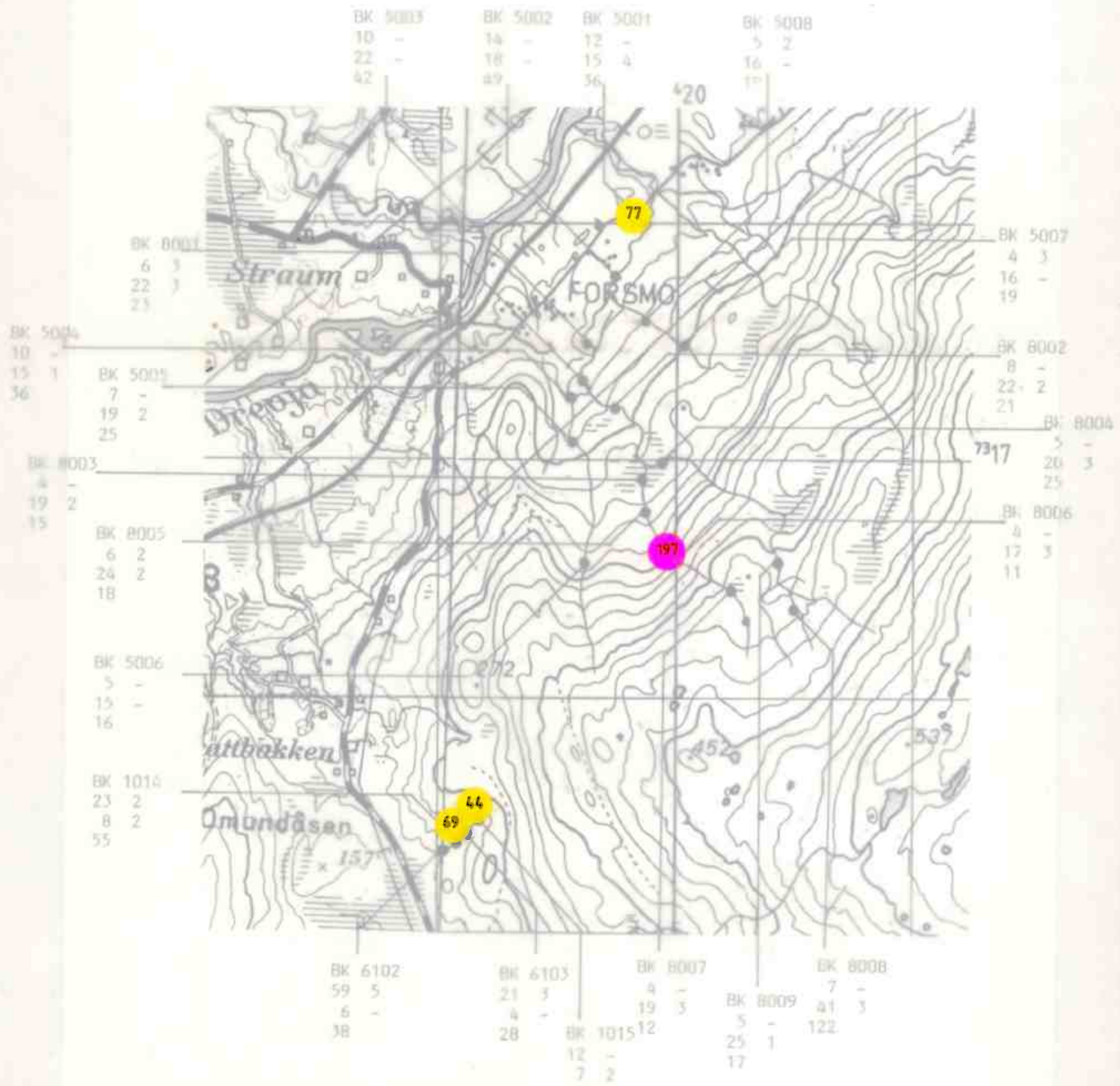
Follow up team: IF/TO Duration:0.5 days
Nos.of follow up sample: BK 1011- BK 1015
BK 6101- BK 6103

Description of drainage system:
The stream rises at a seepage point in thick talus material,descending via small meanders through thickly vegetated slopes to a broad bog (peat over gravels)with very broad meanders to the original sampling point (180249).

Geology:
The only lithology exposed in the stream is coarse grained gabbro,followed by abundant variably schistose amphibolite at higher levels.Fine-medium grained pyrrhotite impregnation is not uncommon.A few hundred meters to the SSE ,grey,finely banded marbles are exposed.Blocks reveal some calc-silicate skarning.

Comments:
All stream sediment samples collected returned with medium level gold anomalies.Trace element concentrations are low.Three bank samples returned no gold anomaly suggesting that gold is present in the active stream sediment.

Recommendations for further follow up:
Further follow up is not of high priority,however it is recommended to retain the claim,as further anomalies occur around the gabbro intrusion.Follow up of these anomalies,with less overburden should clarify if the contact aureole of the gabbro to the metasediments carries significant mineralization.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 134 ROKÅSEN + 162 FORSMO
Scale 1:20.000

134 ROKÅSEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: **Forsmo** No 162 Size: 2.25 km^2

Claim location: Map sheet 1926 IV Drevja

: Air Photo B 014

: Oko Kart

Pegged: Yes No ~~Partly~~ Claim retained: Yes No

Stream length 2.5km Drainage area: 2.5km^2

Original sample points (8,6ppb Au) resampled: Yes No

Follow up team: CR/AK KA/KB Duration: 2.0day

Nos. of follow-up samples : BK 8001 - BK 8009

BK 5001 - BK 5008

Description of drainage system:
System drains a forested hillside. Drainage goes partly through karst into a farming area where the streams have cut 5-10m through the sediments. Vegetation is generally dense.

Geology:
Along streams, marble is the most common rock type. In addition, a sulphide-bearing amphibolitic rock and a greenish metasedimentary rock have been found. The latter carried pyrrhotite in one outcrop. Clay was found in farm area sediments.

Comments:
Three low-range Au anomalies detected.

Recommendations:
To be followed-up with 145 Softing and 117 Bjorknes as geology is similar.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Strauman No 140 Size: 0.75 km^2

Claim location: Map sheet 1928 IV Drevja

: Air Photo B 016

: Oko Kart DP 185 II

Pegged: Yes No ~~Partly~~ Claim retained: Yes No

Stream length 1.0km Drainage area: 2.0 km^2

Original sample point (188 ppb Au) resampled: Yes No

Follow up team: TK/HK JT/GT Duration: 2.0day

Nos. of follow-up samples : MJ 7001 - MJ 7011

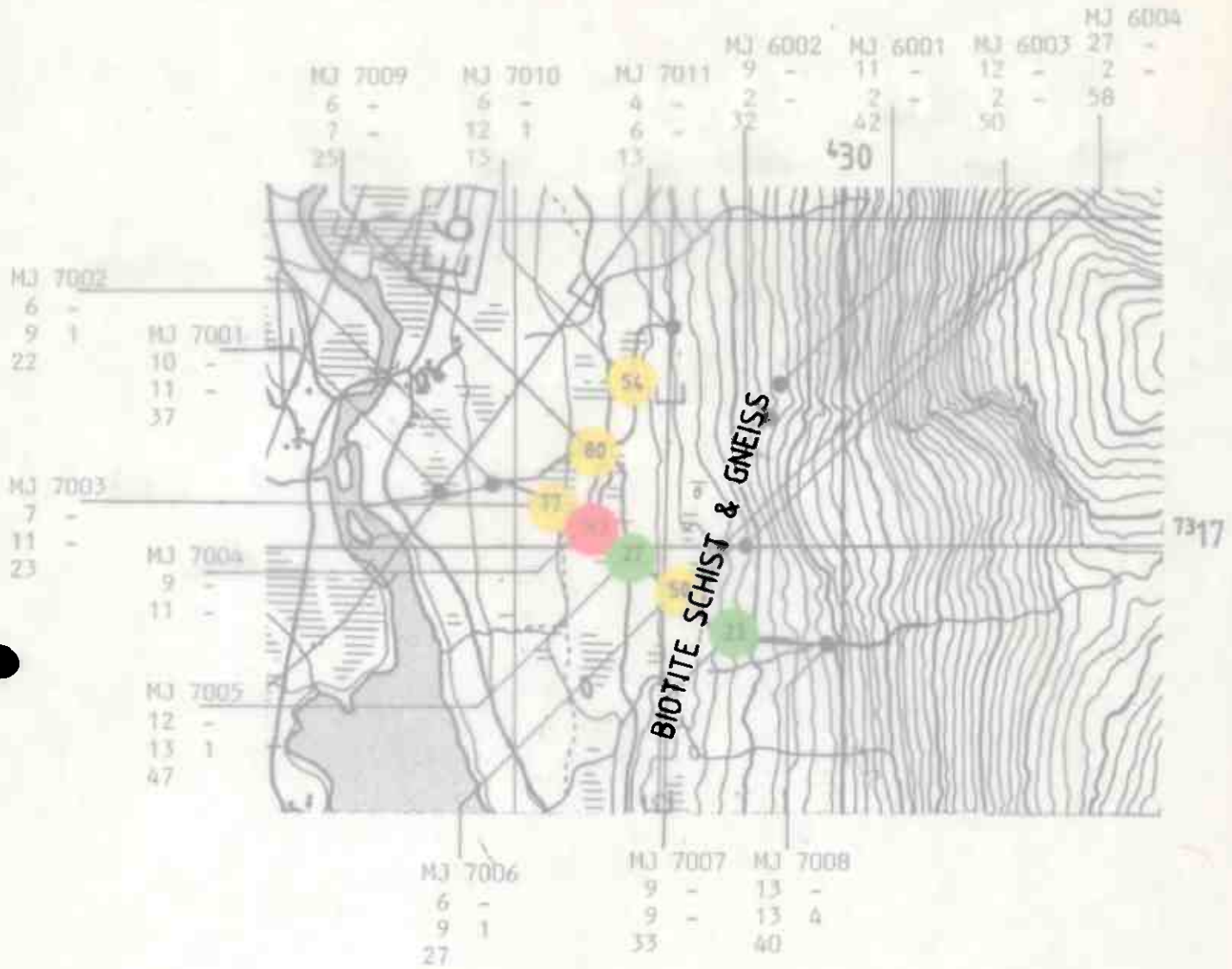
MJ 6001 - MJ 6004

Description of drainage system:
Source of tributaries in inaccessible slope, stream bed being bedrock along most of the system. Blue post-glacial clay locally abundant.

Geology:
Garnet-rich mica-schists and gneisses, local pegmatites and quartz lenses.

Comments:
One high-range, 4 medium-range and 2 low-range Au anomalies detected.

Recommendations:
Detailed geology/lithogeochemistry, to be followed up with 141 Mjavatnet.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 140 STRAUMAN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Bjorknes No117 Size: 1.75 km^2

Claim location: Map sheet 1926 IV Drevja

:Air Photo C 015

:Oko Kart DO 185 I,II,III,IV

Passed: Yes No---Partly Claim retained: Yes No

Stream length 3.0km Drainage area: 2.0km^2

Original sample points(345,22ppb Au) resampled: Yes No

Follow up team: IF/TO Duration: 1.0day

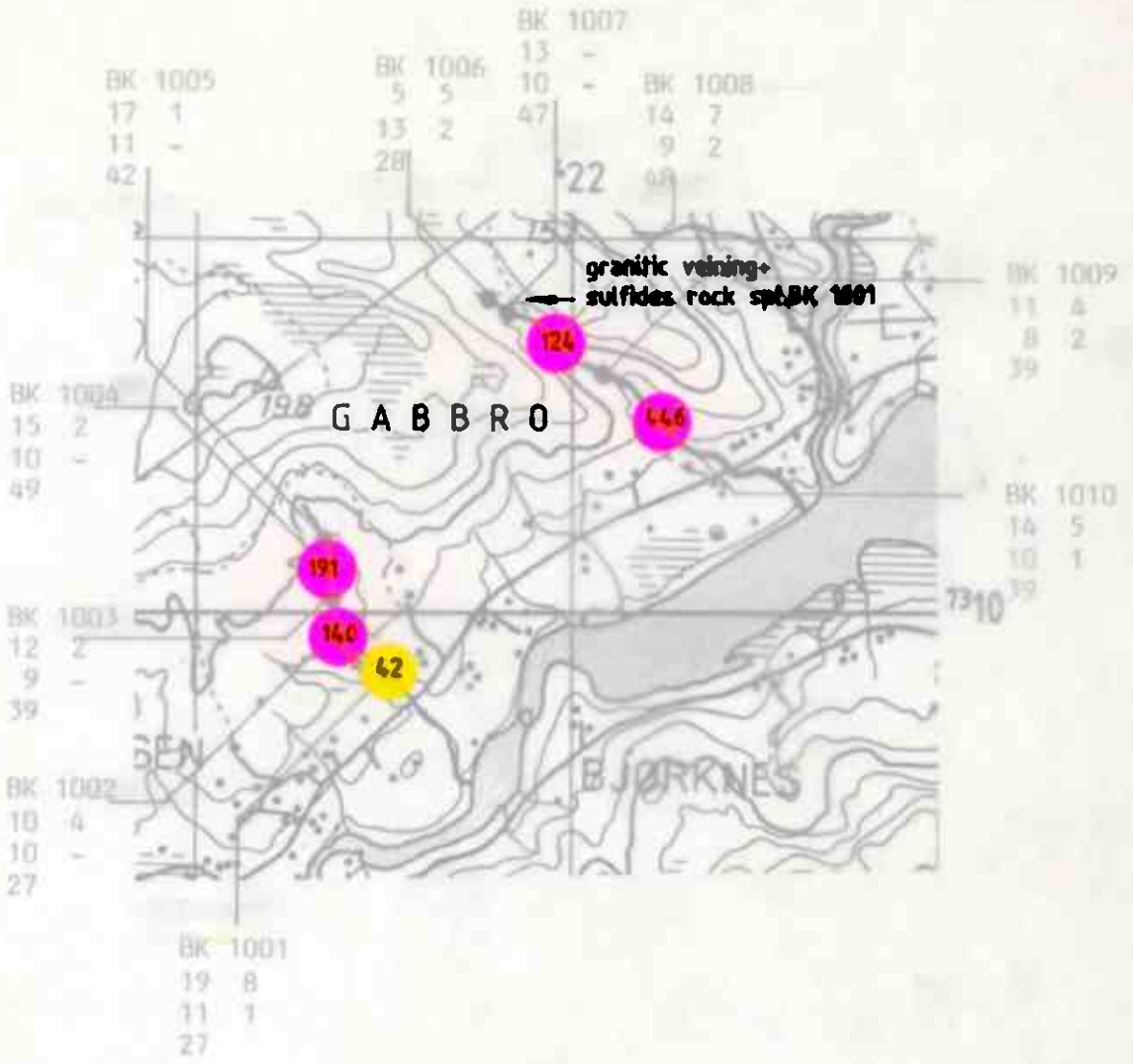
Nos.of follow-up sample : BK 1001 - BK 1010

Description of drainage system:
Two rivers sampled: a)southern: sources via seepage from beneath heavily vegetated overburden of boulders and gravel, descends via channels cut in same through pastureland to original sample point (180229), b)northern: rises in a bog draining gabbro hills, descends via rapids through gravel and clay overburden to original anomaly point (180228).

Geology:
From what little is exposed at lower levels and (better) near the stream sources, the area appears to be mainly homog. gabbro. In the vicinity of sample BK 1007 however, (at least) the gabbro is net-veined by thin (dm) granitic veins and quartz, with loc. abundant pyrrhotite mineralization. (Sample BK 1001 rock chip).

Comments:
Four high-range (to 446ppb) and one medium-range anomaly detected in both streams. Rock sample BK 1001 did not return with Au values.

Recommendations:
Deep overburden sampling of the area. Approx. 3-4 team days.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 117 BJØRKNES
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Mjavatnet No141 Size:4.25 km^2

Claim location:Map sheet 1926 IV Drevja

:Air Photo B 016

:Oko Kart DP 185 IV

Pegged: Yes ~~No---Partly~~ Claim retained: Yes No

Stream length 4.0km Drainage area: 4.5km^2

Original sample point (69 ppb Au) resampled: Yes No

Follow up team: MB/GT OK/KA Duration: 2.0days

Nos.of follow-up samples : MJ 0001 - MJ 0014

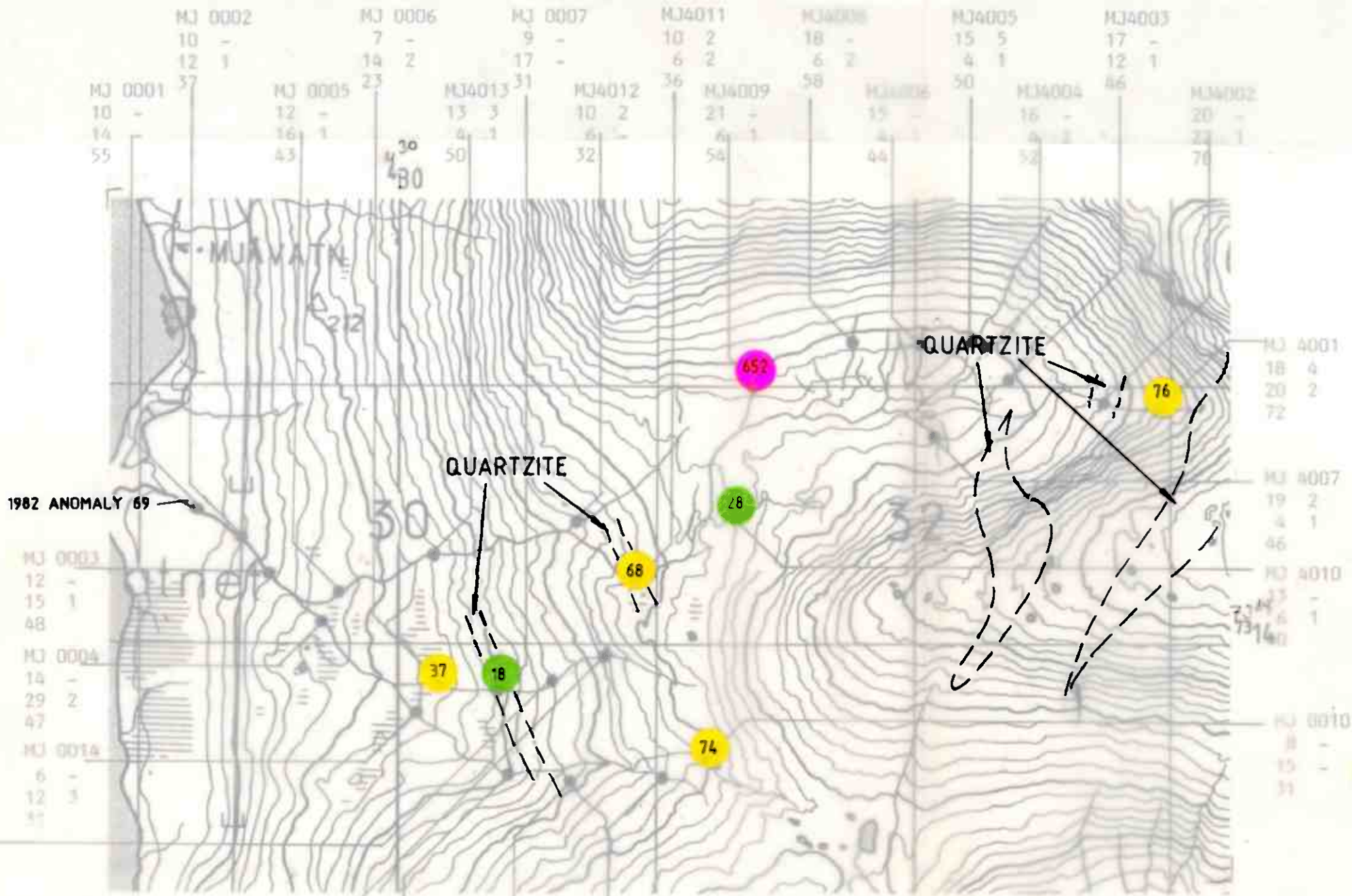
MJ 4001 - MJ 4013

Description of drainage system:
Active sediment development is certain. Flat plateaus at estuary and between 160 and 180m above sea level are covered with residual soils and bogs. Drainages system is accurate in 1:50.000 map sheet. Bedrock is exposed in 80% of all stream sections.

Geology:
Metasedimentary units $220^{o}/75^{o}$ SW predominantly biotite-quartz schists and garnet-amphibolite schists. Subordinate massive bands (up to 30m wide) of pale brown quartzites. At approx. 500m above sea level the contact to an leucogranite was encountered in all stream sections. Blocks and boulders in decreasing order of abundance:
1) quartz-feldspar-muscovite coarse-grained pegmatite. Also observed as 10cm wide veins (disrupted tectonized) in garnet amphibolite.
2) Pale brown coarse-grained quartz veins with sparse sulfides.
3) Strongly rusty stained and silicified intrusives. Fresh rocks show a equigranular intrusive composition of biotite and feldspar quartz deficient.
4) Platy blocks of fine-grained dense grey-black siliceous material with intense sulfur smell. Composition of sulfides unclear as fabric is too fine-grained.

Comments:
1 high-range, 4 med-range and 2 low-range Au anomalies.

Recommendations:
Detailed geology/lithogeochemistry with 140 Straumen.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS

141

Claim block/No./Name : 141 MJÅVATNET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Jamtfjelldalstjonn No 71 Size:1.0 km^2

Claim location:Map sheet 1928 IV Drevja

:Air Photo E 019

:Oko Kart DQ 181 IV,R 181 III

Pegged: Yes ~~No---Partly~~ Claim retained: Yes No

Stream length 1.0 km Drainage area: 0.5 km^2

Original sample point (6 ppb Au) resampled: Yes No

Follow up team: KA/KB Duration:1.0day

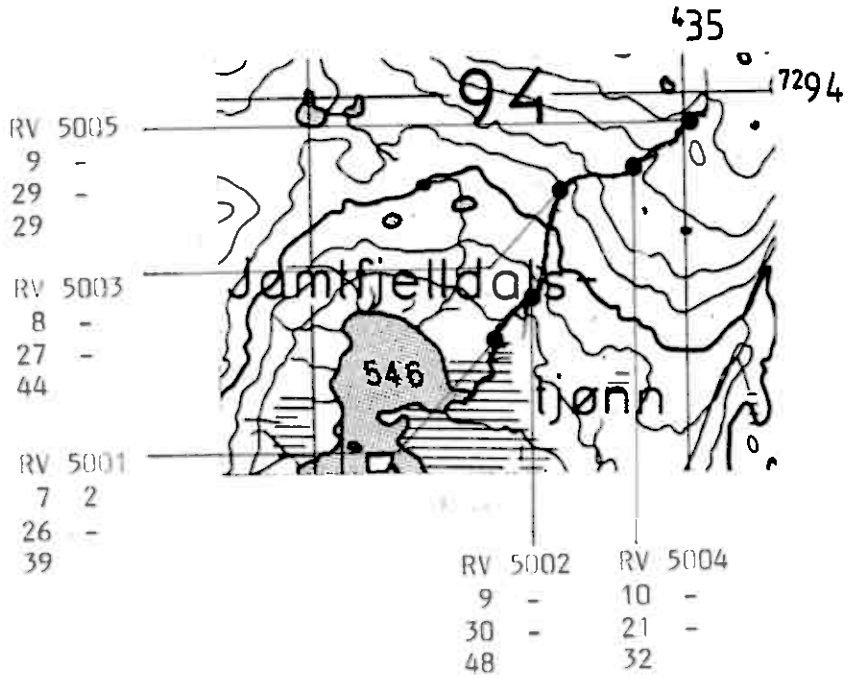
Nos.of follow up sample : RV 5001 - RV 5005

Description of drainage system:
The stream is quite small,only 0.5 m wide and 20.-30cm deep,running over a series of small falls.

Geology:
The dominant lithology in the area is a gneiss,varying in composition from amphibolitic to granitic;occasionally with garnet rich layers.The whole area is penetrated by several generations of pegmatites consisting of quartz,mica and feldspar.

Comments:
No gold anomalies detected.

Recommendations:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 71 JAMTFJELLDALS-TJØNN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Abosjorda No119 Size:0.25 km^2

Claim location:Map sheet 1926 IV Drevha

:Air Photo D 015

:Oko Kart DO 183 I

Pegged:Yes No Partly Claim retained: Yes No

Stream length 1.8km Drainage area: 0.5 km^2

Original sample point(170 ppb Au) resampled:Yes No

Follow up team: JT/GT Duration:1.0day

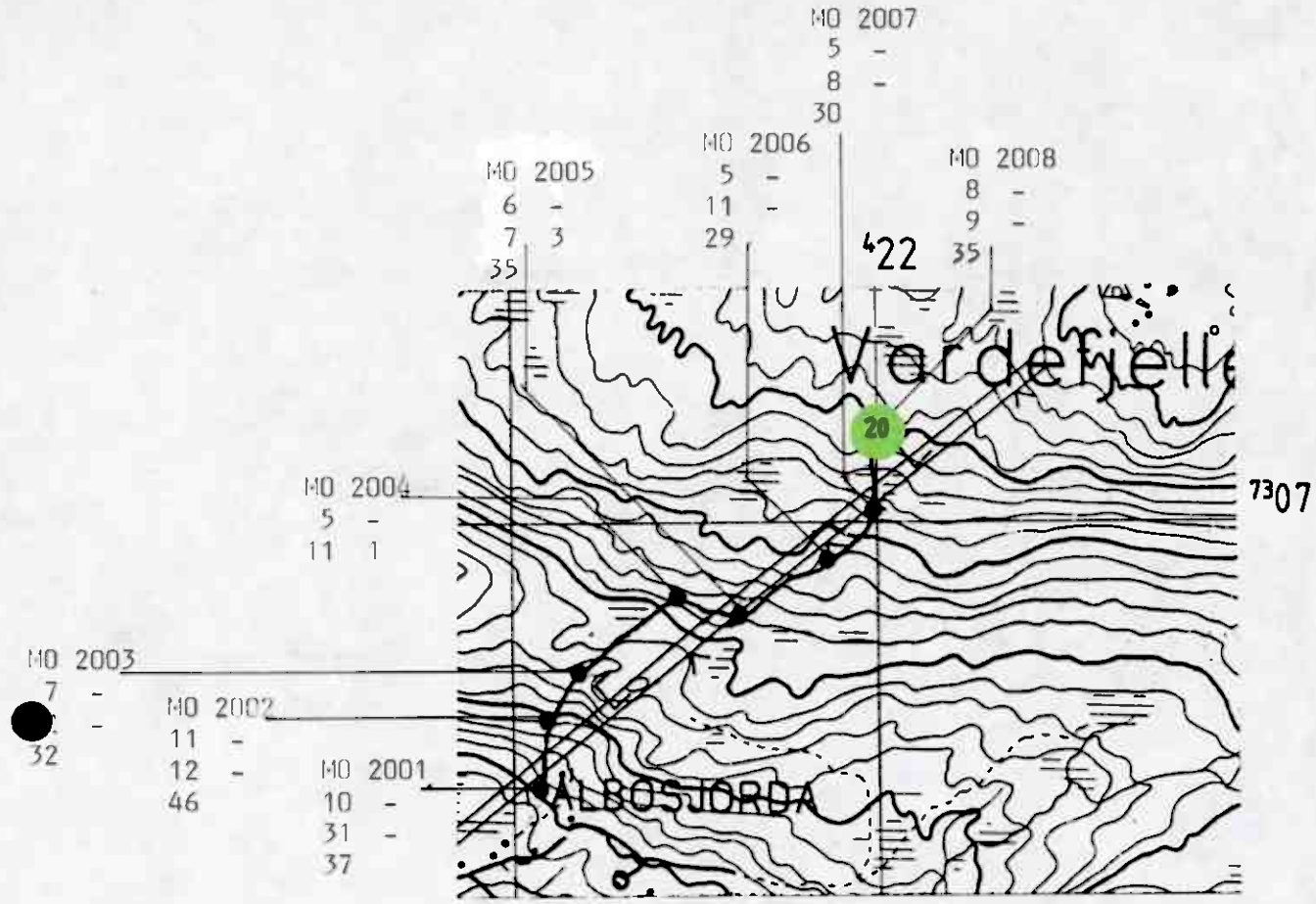
Nos.of follow up sample : MO 2001 - MO 2008

Description of drainage system:
Stream rises in partly forested boggy plateaus and slopes, descending via waterfalls to 20m height partly cut in fault zones along a generally steep slope.

Geology:
Fine-med-to locally coarse-grained monzodioritic intrusive (locally magnetite-rich). Horizontal veining of Ca-feldspar rich composition (plus scattered coarse-grained magnetites). Skarned contacts between marble xenoliths (relatively large inclusions of about 3m width, 5m length) plus silification (Rock sample MO 2001).

Comments:
One low-range Au anomaly detected.

Recommendations:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 119 ÅBOSJORDA
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Reinfjellet II** No:**126** Size:1.0 km2

Claim location:Map sheet 1926 IV Drevje

:Air Photo E 019

:Oko Kart DQ 181 III

Pegged: Yes No-Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:1.0km2

Original sample points(80,13ppb Au) resampled:YesNo

Follow up team: TK/HK Duration:1.0 days

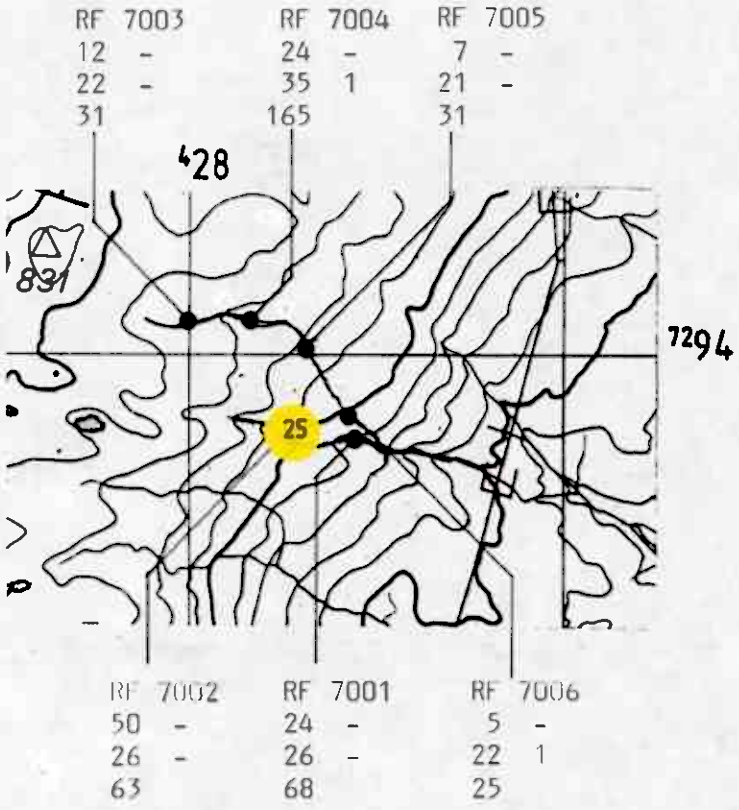
Nos.of follow up sample RF 7001 - RF 7006

Description of drainage system:
Two branched stream. Both branches start from a small glacier/snow pile. They run directly on bedrock for almost the whole distance down to where they join both streams. Were very short from source to original anomaly sample point and were therefore also sampled a bit below anom. smpl. point.

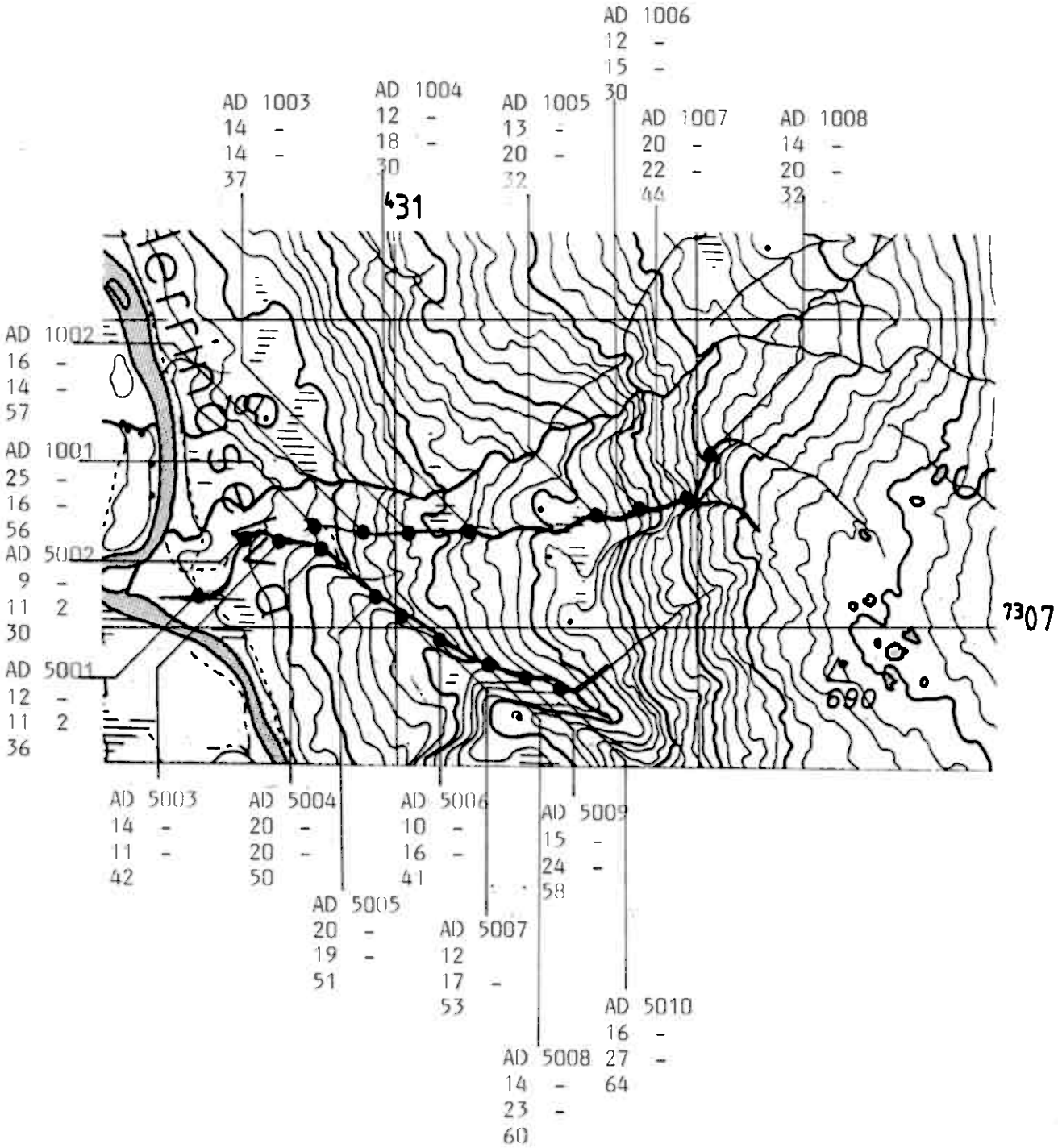
Geology:
Granite (med-grained with lots of coarse pegnatite veins). Sheets of marbles (coarse-grained, white) with skarn minerals at the edges occurred within the granite. Other rocks (schist-like, Wollastonite(?) bearing with pyrite/pyrrhotite) occurred within the marble as thin horizons (Meta. Amphibolite??)

Comments:
One med-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 126 REINFJELLET II
Scale 1:20.000



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 147 HØGREMMEN
Scale 1:20.000

GRANE

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kvalfors No: 94 Size:1.0 km^2

Claim location:Map sheet 1926 II Grane

:Air Photo

:Oko Kart DO 180 I

Pegged: yes-No--Partly Claim retained: yes / No

Stream length 1.5 km/ Drainage area:2.0km^2

Original sample point (25 ppb Au) resampled: Yes-No

Follow up team: JT/GT Duration:1.0 days

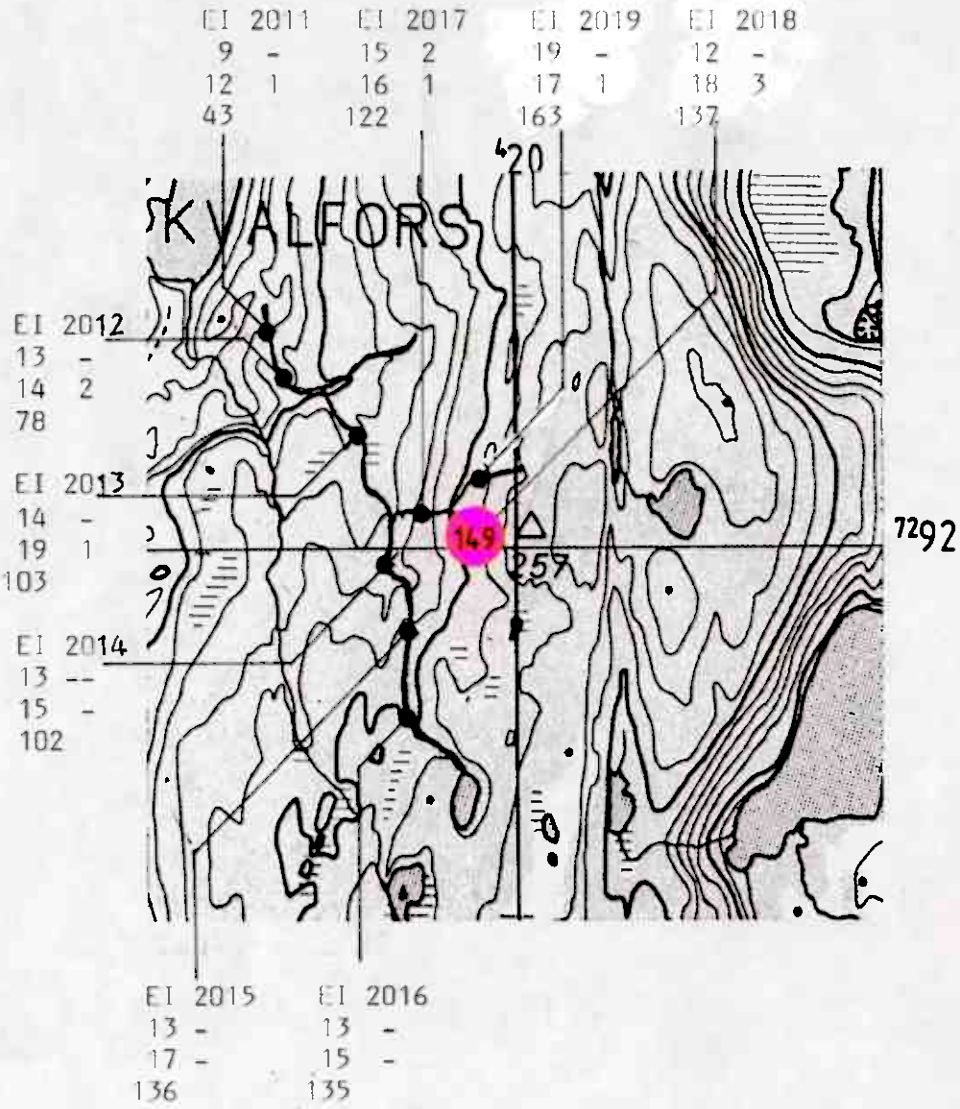
Nos.of follow up sample EI 2011- EI 2019

Description of drainage system:
The stream rises in a boggy area,and in gentle slope,descending gently partly over bedrock(thin overburden) to a swampy area near the river Vefsna. Tributaries entering from the West at higher altitudes were sampled individually.

Geology:
Uniform biotite schists/gneisses grading to granite gneiss.Locally pegmatites and quartz-schlieren.Overall very uniform lithology.

Comments:
One isolated high level gold anomaly,without accompanying pathfinder element anomalies.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 94 KVALFORS
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Eiterasen II No128 Size: 0.5 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 2.5km Drainage area: 3.0 km^2

Original sample points(220ppb Au) resampled: Yes No

Follow up team: KB/KA Duration: 1.0 day

Nos.of follow up sample : FF 5077 - FF 5082

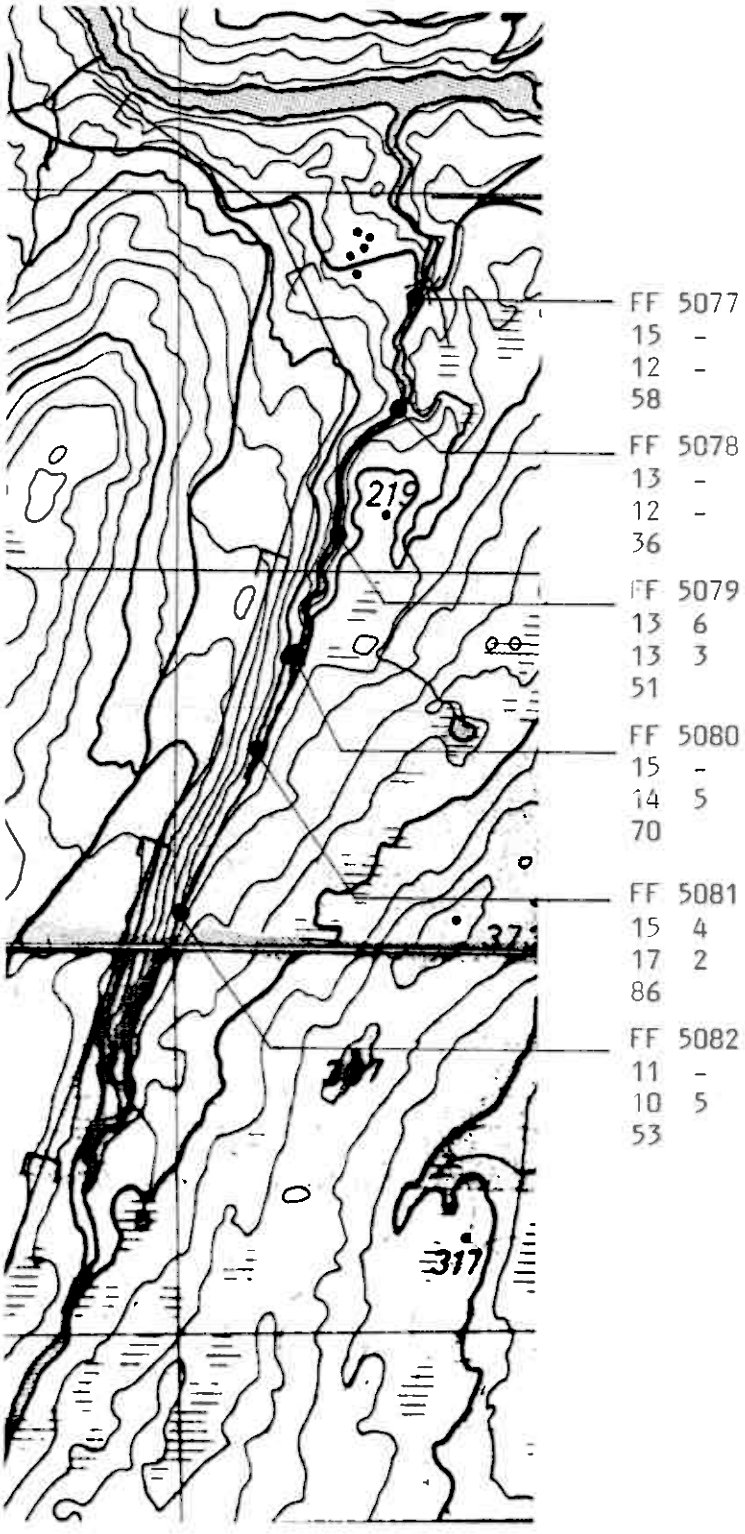
Description of drainage system:
The river is approx. 10m wide and up to 2m deep. It runs in a big steep-walled canyon with a large speed, and is only joined by 2-3 very small tributaries.

Geology:
The bedrock consists of an interlayered white to black marble and a dark mica-schist. The mica-schist often carries small red garnets. At sample point 5082 small (1mm) pyrite cubes, disseminated in a black marble, were observed, most probably of diagenetic origin.

Comments:
Six of the samples returned with detectable gold (four low and two medium range). The sampling was not continued to the headwaters.

Recommendations:
Detailed geology/lithogeochemistry.


13
13
14
15
62
MARBLE + BIOTITE SCHIST
36



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 128 EITERÅSEN II
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Langvatnet II No: 96 Size: 1.5 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart DD 176 II

Pegged: Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 1.5km Drainage area: 1.5 km^2

Original sample points(84ppb Au) resampled: Yes ~~No~~

Follow up team: KB/KA Duration: 1.0 day

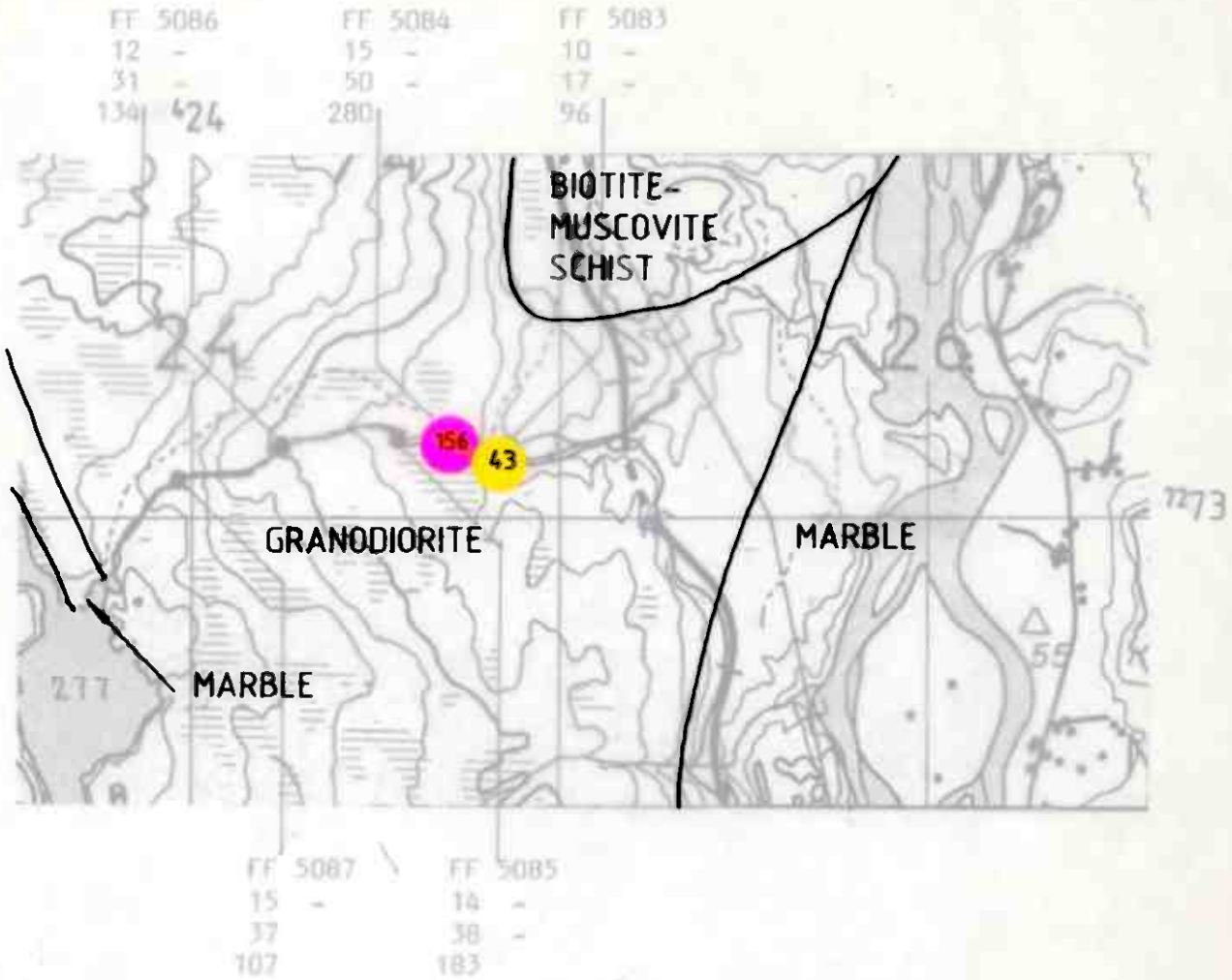
Nos.of follow up sample : FF 5083 - FF 5087

Description of drainage system:
System rises in a lake, having no tributaries, and is relatively broad (3-5m), being braided in several places. Average slope is quite steep (~20^{0}), there being some larger waterfalls.

Geology:
Headwaters in biotite-gneiss with numerous pegmatites, grading downstream to slightly foliated biotite-rich granodiorite. A marble (?raft) occurs in the lake area.

Comments:
One medium and one high-range Au anomaly.

Recommendations:
A low-priority target.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name :96 LANGVATNET II
Scale 1:20.000

96 LANGVATNET II

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Langvatnet No: 95 Size: 1.0 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart DO 180 I

Pegged: Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0 km^2

Original sample points(126 ppb Au) resampled: Yes ~~No~~

Follow up team: KB/KA Duration: 1.0 day

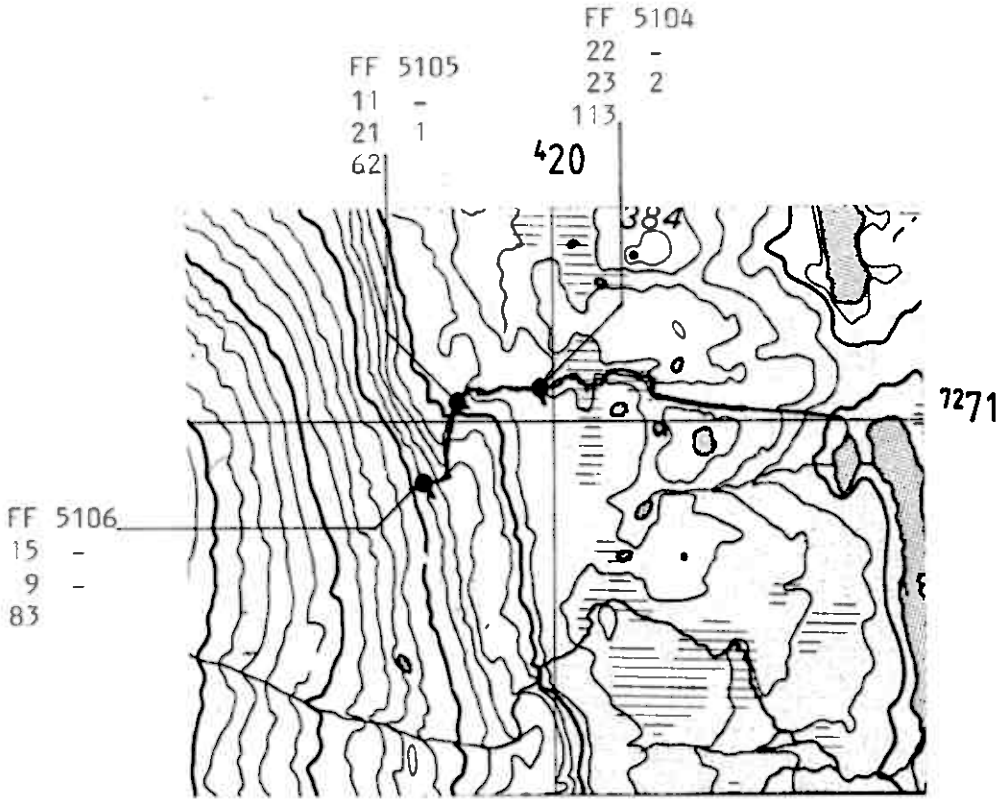
Nos.of follow up sample : FF 5104 - FF 5106

Description of drainage system:
Source in partly karsted area, descending via rapids to a flat area where it meanders.

Geology:
Upstream the geology changes from marble to granite, but the contact has not been observed.

Comments:
No Au anomalies observed.

Recommendations:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 95 LANGVATNET I
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Finnsasen No 97 Size: 0.5 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart DP 176 I

Pegged: Yes No-Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 0.5 km^2

Original sample points(94 ppb Au) resampled: Yes No

Follow up team: KB/KA Duration: 0.5 day

Nos.of follow up sample : FF 5050

Description of drainage system:
The stream is very small and comes from a moor.

Geology:
The stream runs in till. No outcrops.

Comments:
One sample only - no anomaly confirmation.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Lia I No: 98 Size: 0.5 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart DO 176 I

Pegged: Yes No Claim retained: Yes No

Stream length 0.75km Drainage area: 0.5 km^2

Original sample point (18ppb Au) resampled: Yes No

Follow up team: KB/KA Duration: 0.5 day

Nos.of follow up sample : FF 5088 - FF 5091

Description of drainage system:
The stream flows from a small lake through a small canyon. In some places it disappears under the talus. The stream is 1-2m wide. It has one small tributary.

Geology:
Poor exposure. A few exposures of marble and granodioritic gneiss, the former being locally skarned. A few small (5-20cm) quartz-pyrite veins.

Comments:
No Au anomalies detected.

Recommendations:
None - see also 99 Lia II.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Lia II No: 99 Size:0.75 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart DO 177 IV

Pegged:Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 0.7km Drainage area:0.75 km^2

Original sample points(30ppb Au) resampled:Yes ~~No~~

Follow up team: KB/KA Duration:0.5 day

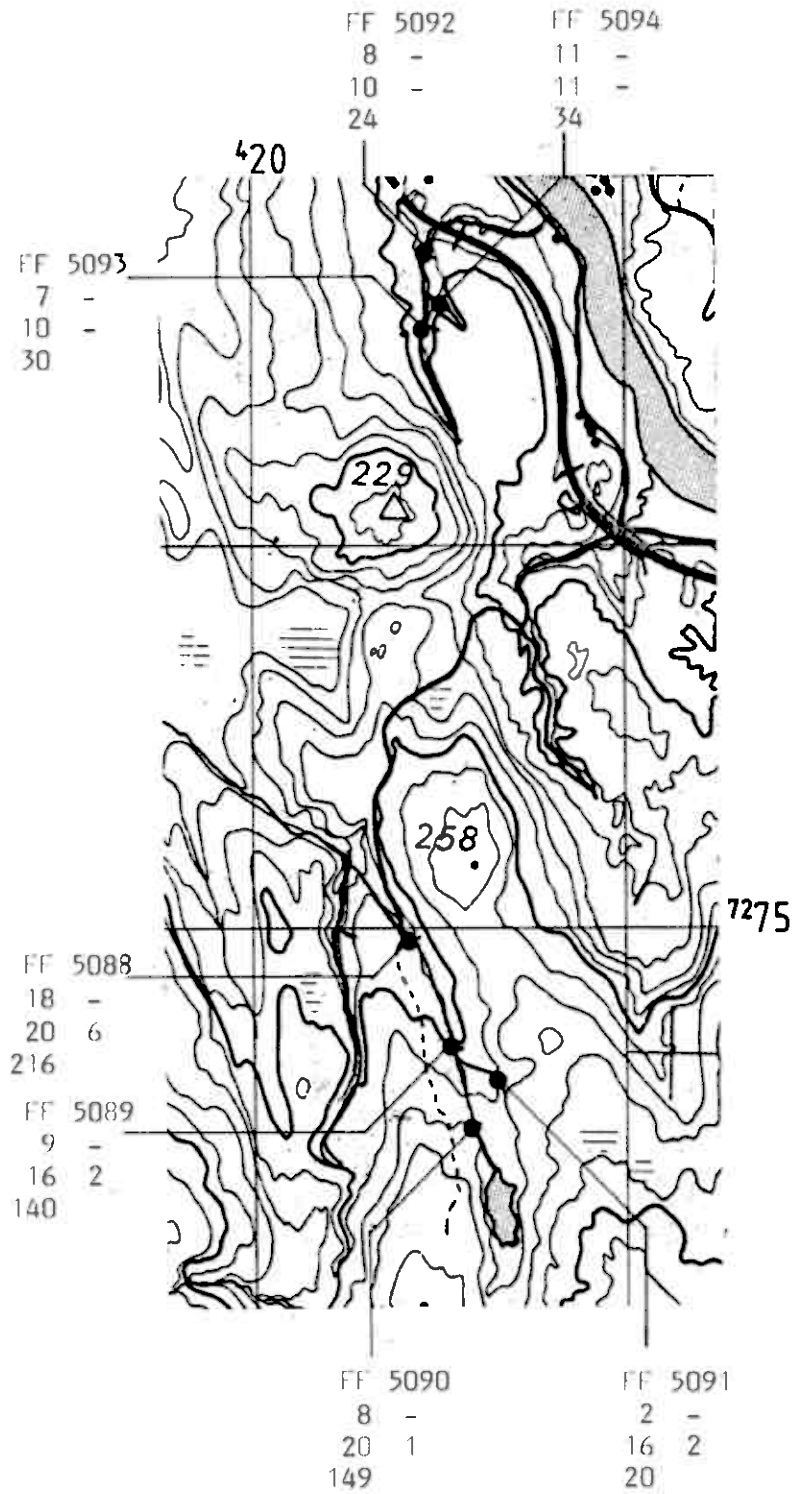
Nos.of follow up sample : FF 5092 - FF 5094

Description of drainage system:
The stream is sampled upstream from the railroad. In the lower part it has covered a canyon in marble. Further upstream there are some falls and the stream originates in a small moor. It has one small tributary.

Geology:
In the lower part the stream runs in marble. In the upper part there are some outcrops of granodiorite. There is a thin till overburden in most of the area.

Comments:
See 98 Lia I.

Recommendations:
Ditto.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 99+98 LIA II + LIA I
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Svebakk No:129 Size: 0.5 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 1.0km Drainage area: 1.5 km^2

Original sample points(54 ppb Au) resampled:~~Yes~~ No

Follow up team: KB/KA Duration:1.0 day

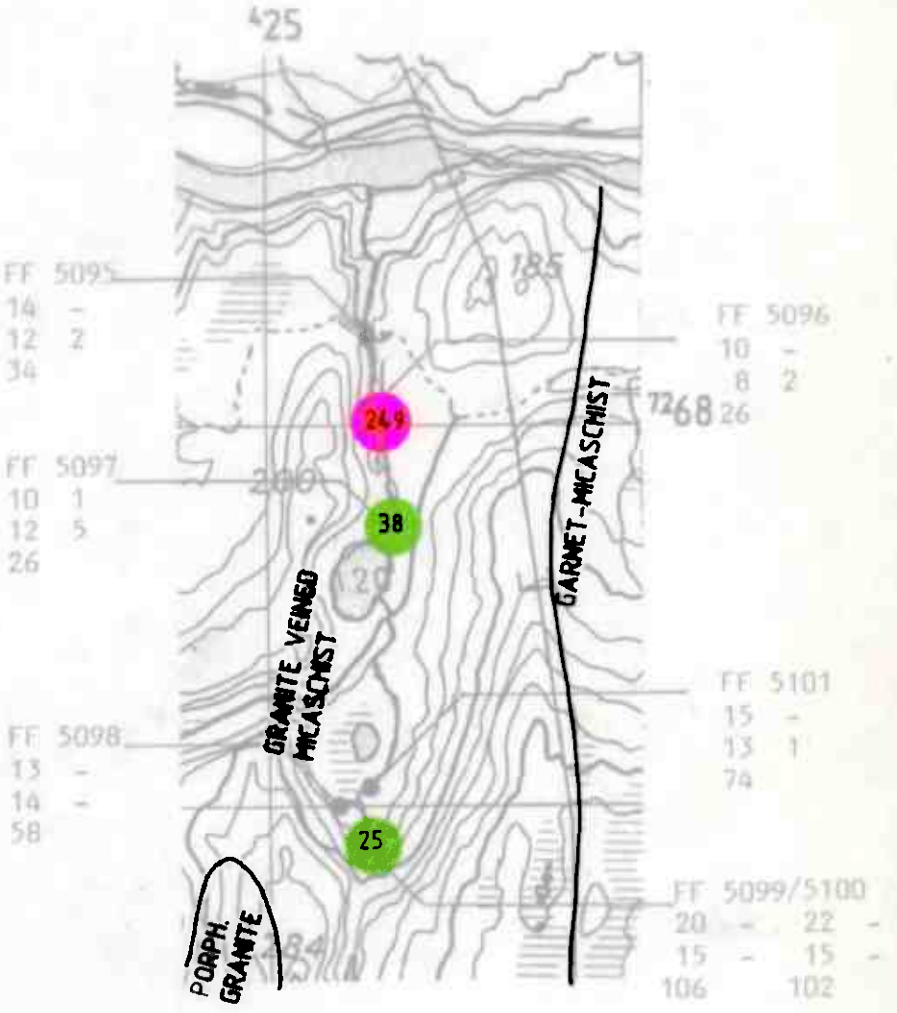
Nos.of follow up sample : FF 5095 - FF 5101

Description of drainage system:
The river is rather small, less than 2m wide. It's lower part has several falls. Above the moor is a fall, partly in talus and there is one tributary.

Geology:
The upper part of the river runs through talus with boulders of marble and granite. The moor lies in an area of till overburden and alluvial sediments. Downstream the lake there are outcrops of garnet - mica-schist.

Comments:
Two low and one high-range Au anomaly detected.

Recommendations:
A low-priority target, geology/lithogeochemistry.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 129 SVEBAKK 129 SVEBAKK
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Vardehaugen No: 84 Size:2.5 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart DO 180 III,179 I

Penned: yes-No---~~Partly~~ Claim retained: yes / No

Stream length 1.5 km/ Drainage area:2.0km^2

Original sample point (9 ppb Au) resampled: Yes-No

Follow up team: JT/GT Duration:1.0 days

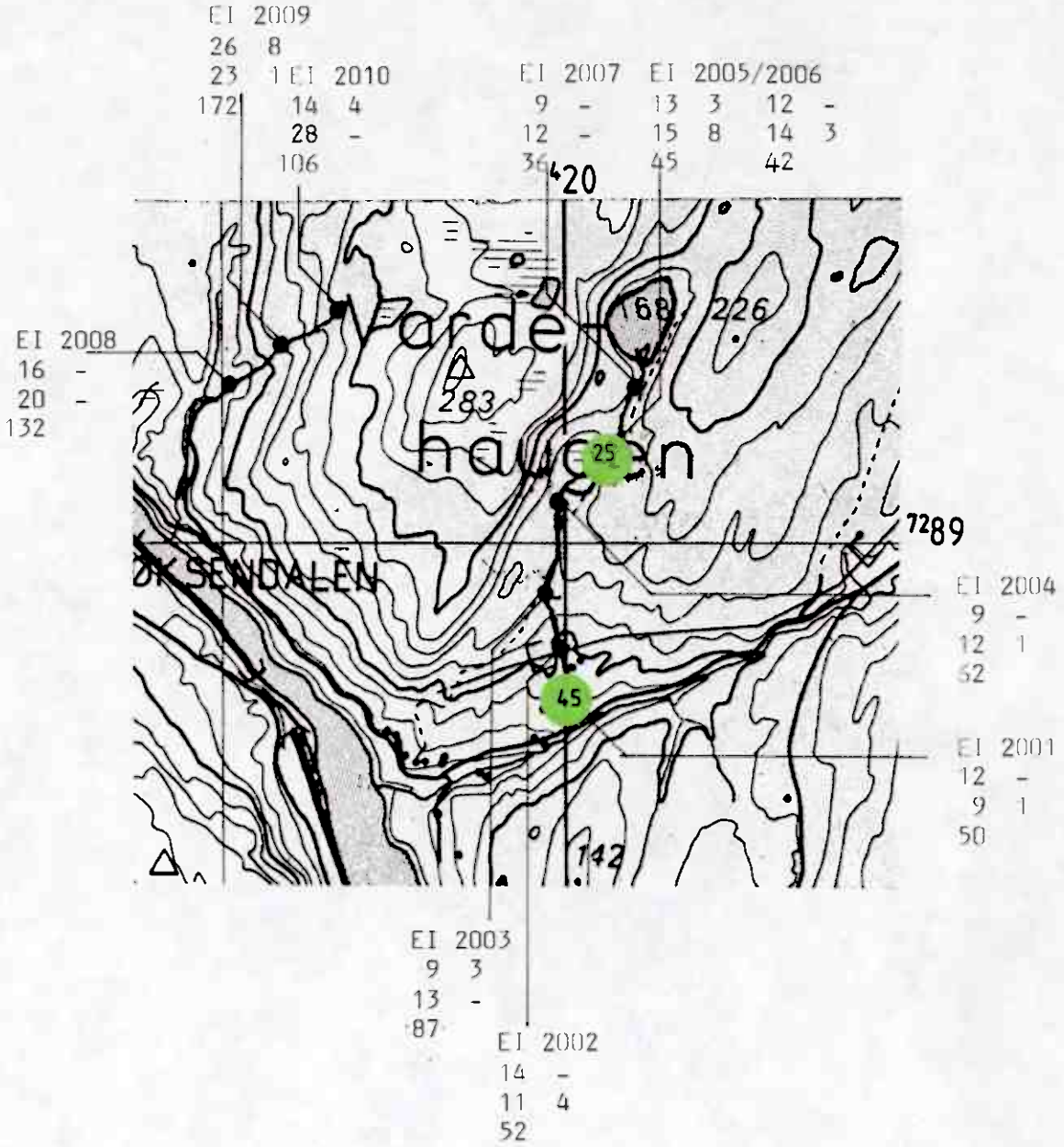
Nos.of follow up sample EI 2001- EI 2010

Description of drainage system:
Rises in steep cliffs,descending through a small lake and thence over gentle slopes with small waterfalls.Very irregular drift cover from thin to thick post-glacial clay.The high range 1982 anomaly (110006,389 ppb) was not resampled,as the sediment at this point was derived from outwash of glacial bank material.

Geology:
Stream partly follows contact zone between biotite schist/gneiss and grey-banded marble with no contactmetamorphic reaction zone observed.Marbles are phlogopite-rich,containing inclusions of pegmatite.Biotite gneiss is possibly of granitic origin.Few exposures.

Comments:
Two low range gold anomalies,not accompanied by pathfinder element anomalies.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 84 VARDEHAUGEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Laksfors No:100 Size:0.75 km^2

Claim location:Map sheet 1926 II Grane

:Air Photo

:Oko Kart

Pegged:yes No Partly Claim retained: yes / No

Stream length 1.5 km/ Drainage area:1.5km^2

Original sample point (35 ppb Au) resampled: Yes-No

Follow up team: JT/GT Duration:0.5 days

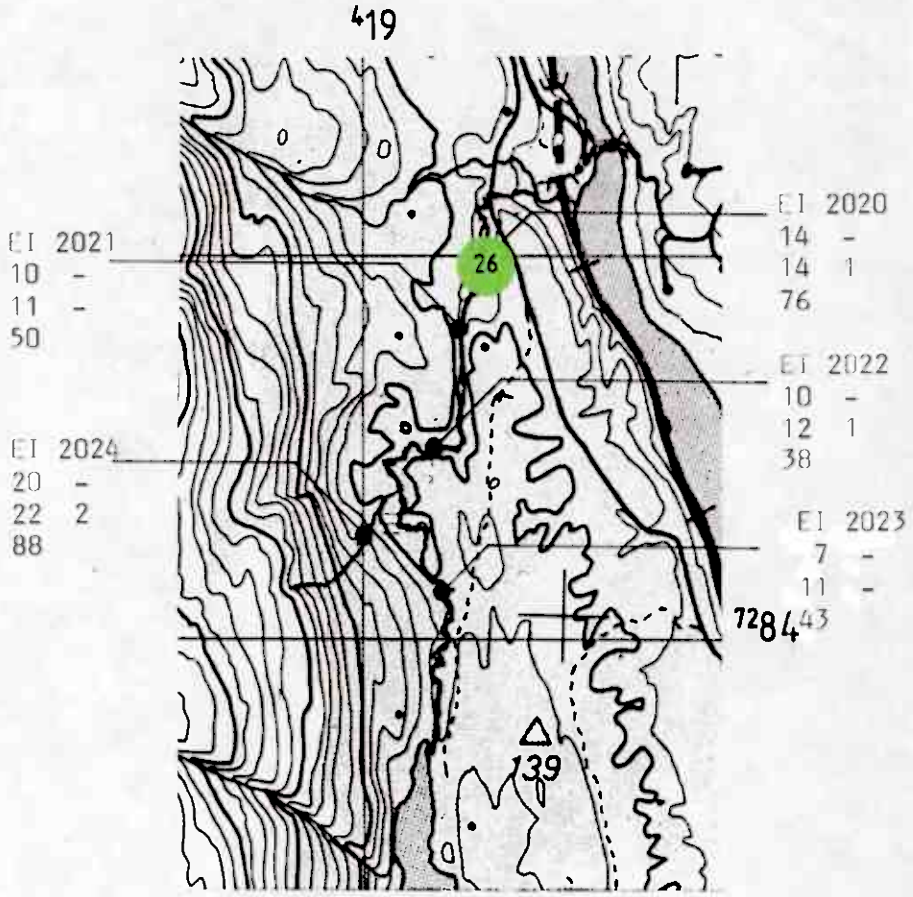
Nos.of follow up sample EI 2020- EI 2024

Description of drainage system:
Descends from a cliff through gentle topography covered in thick overburden(sandy silt over blue postglacial clay).Karst features are common.

Geology:
Stream follows contact zone between medium grained massive granite and grey-banded marble. Few exposures.

Comments:
One low range gold anomaly.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 100 LAKSFORS III
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Laksfors I No:73 Size:4.5 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart P 177 I, III

Pegged:Yes No--Partly-Claim retained: yes No

Stream length 10.0 km/ Drainage area:5.0km^2

Original sample points(4,26,121,57,6ppb Au) resampled:Yes No

Follow up team: JT/GT OK/GT Duration:5.0 days

Nos.of follow up samples RF 2009 - RF 2040

RF6101 - RF6106

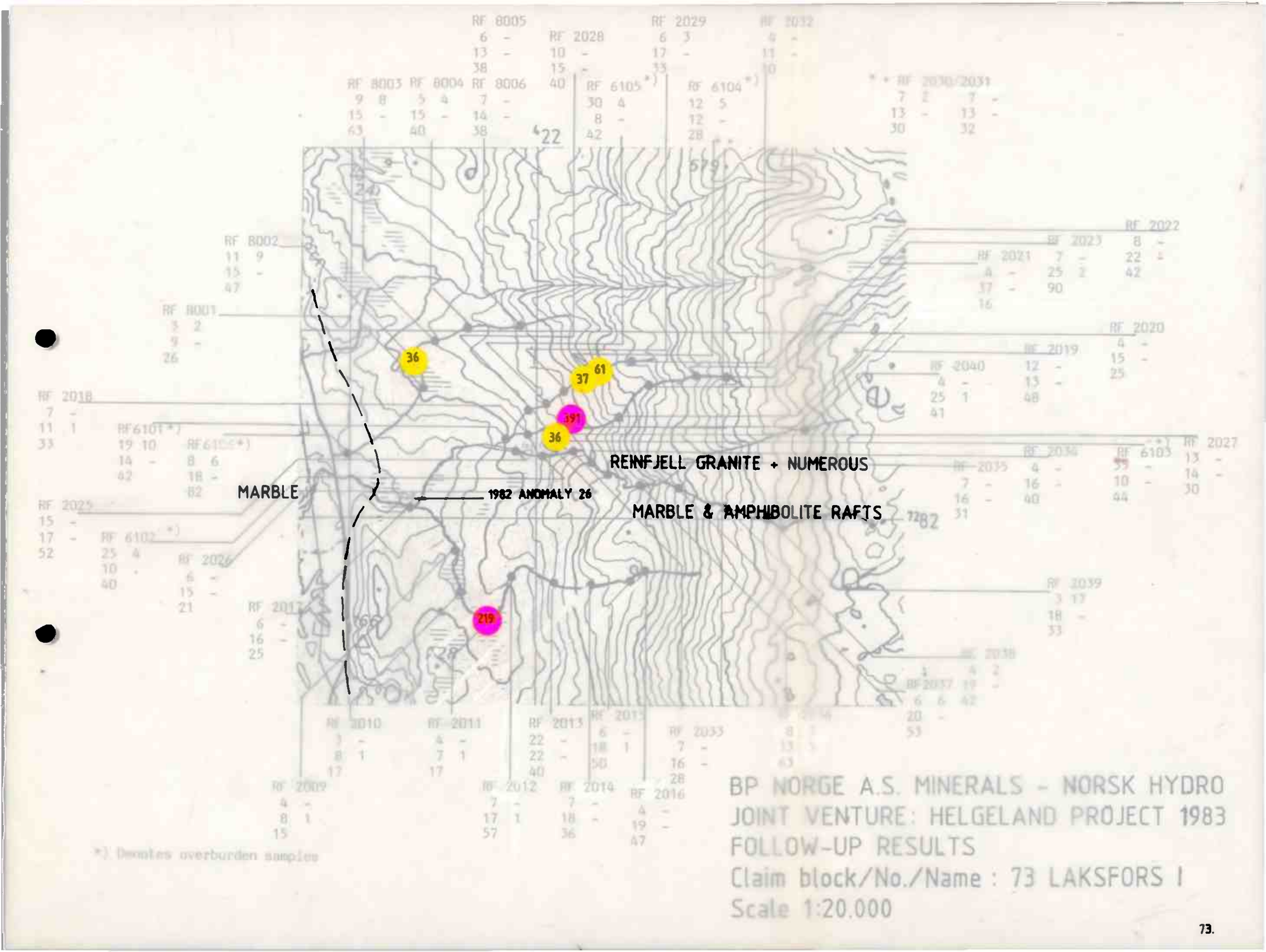
RF8001 - RF8006

Description of drainage system:
Sources of tributaries in steep, thinly-covered slope (most samples taken here), thence into forested and bog area with meandering in very poorly exposed terrain. Dominated by the homogeneous Reinfjell granite/granodiorite, which contains intensive aplitic and pegmatitic veining, and numerous inclusions of marble (partly skarned), biotite schist and amphibolite.

Geology:
Dominated by the homogeneous Reinfjell granite/granodiorite, which contains intenseve aplitic and pegmatitic veining, and numerous inclusions of marble (partly skarned), biotite schist and amphibolite.

Comments:
Six Au anomalies were detected in 4 of the 5 tributaries forming the system (2 high-range and 4 medium-range), these draining a 'strike-length' of approximately 2kms. During a second follow-up in 1983, 6 overburden samples were taken near anomalous sample points, two adjacent points having medium-range Au anomalies.

Recommendations:
Detailed geology and possible overburden sampling. Approximately 2-3 team days.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 73 LAKSFORS I
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sor-Svartvatnet B No: 68 Size:2.75 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 0.7 km/ Drainage area:1.0km^2

Original sample point (25 ppb Au) resampled: Yes-No

Follow up team: CR/AK/JT Duration:0.5 days

Nos.of follow up samples RF 8017 - RF 8019

Description of drainage system:
Stream has its source in a bog depression on bare rock,part snow covered,flowing however most of its length through thick overburden.

Geology:
See no. 87 Sor-Svarvatnet H.

Comments:
ditto

Recommendations:
ditto

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Svartvatnet No: 18 Size:3.0 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:1.0km^2

Original sample point (14 ppb Au) resampled: Yes-No

Follow up team: CR/AK/JT Duration:0.5 days

Nos.of follow up samples RF 8020 - RF 8032

Description of drainage system:
Stream flows mainly through deep overburden.

Geology:
See no. 87 Sor-Svarvatnet H.

Comments:
ditto

Recommendations:
ditto

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sor-Svartvatnet H No: 87 Size: km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: yes-~~No~~--~~Partly~~ Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:1.5km^2

Original sample point (293 ppb Au) resampled: Yes-~~No~~

Follow up team: CR/AK/JT Duration:1.0 days

Nos.of follow up samples RF 8037 - RF 8048

Description of drainage system:
Source is bog,descending through peatland and a heavily vegetated valley to join Vesterelven where the overburden consists of thick clay.

Geology:
Vesterelven follows a bed of marble which includes abundant granodiorite dykes and boudinaged amphibolite lenses which reflects the intense tectonic activity along the entire valley on the east side of the Reinfjellet granite.Micaschist hosts the marble at Svartvatnet,this being intruded by intensely pegmatite-veined porphyritic diorite.At the contact of the Reinfjell granodiorite,a thin marble stripe occurs,with local skarn mineralization.(pyrite,pyrrhotite)

Comments:
Taken along with claims nos.18,68, and 83 nine gold anomalies were detected.Three high range anomalies are concentrated in the south-east corner of the claims.These anomalies are broadly associated with strong arsenic anomalies,a pattern characteristic of the stream sediment anomalies downstream from the Quartz-arsenopyrite-gold veins at Rauvatn.This cluster of anomalies could be explained by a repetition of the mineralization aforementioned caused by strike-slip faulting in NW-SE direction.

Recommendations:
A high priority follow-up target.Deep overburden sampling with detailed geology/lithogeochemistry.In addition some tests with ground geophysics (EM and Mag.)are planned.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sor-Svartvatnet G No: 83 Size: km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:2.0km^2

Original sample point (39 ppb Au) resampled: Yes-No

Follow up team: GR/AK/JT Duration:1.0 days

Nos.of follow up samples RF 8007 - RF 8015

Description of drainage system:
Source is well exposed terrain within a cleft,flowing over a steeper slope also with good exposure to a moderately sloped area with glacial overburden and vegetation.

Geology:
See no. 87 Sor-Svarvatnet H.

Comments:
ditto

Recommendations:
ditto

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Vesterelva No: 98 Size: km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart P 177 I,III

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 3.0 km/ Drainage area:2.0km^2

Original sample point (48 ppb Au) resampled: Yes-No

Follow up team: GT/OK Duration:1.0 days

Nos.of follow up samples RF 6001 - RF 6009

Description of drainage system:
Tributaries have sources in boggy terrain south of Klubbfjellet,flowing through thick overburden of glacial till and post-glacial clay/pebble beds.

Geology:
See Sor-Svartvatnet H.

Comments:
Ditto.

Recommendations:
Ditto.

REINFJELL GRANODIORITE

MARBLE

BIOTITE SCHIST & GNEISS

MARBLE

PORPHYRITIC DIORITE / GRANODIORITE

333

32

71

83

15

63

205

144

11

106

48

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 18,68,83,87,88 SVARTVATNET
Scale 1:20.000 VATNE,SØR SVARTVATNET
H. VESTERELVA

SVARTVATNET-VESTERELVA

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Rauvatnet No 17 Size: 3.0 km^2

Claim location: Map sheet 1926 III GRANE

: Air Photo Flight Path F 2576

: Oko Kart DQ 179 II,IV

Pegged: ~~Yes-No~~ Partly Claim retained: Yes No

Stream length 2.0 km Drainage area: 2.0 km^2

Original sample point (65 ppb Au) resampled: ~~Yes~~ No

Follow up team: GT/OK Duration: 1.0day

Nos.of follow up sample : RV 6001 - RV 6011

Description of drainage system:
Sources in sparsely vegetated slope and cuts in the valley side, descending rapidly into wide grassland area above treeline with local seepage.

Geology:
Bedrock in area very complicated and heterogenous quartz rich intrusives interbedded with banded marbles, metaseds with large amounts of mafic constituents and greenish metaseds. Marble areas are mainly covered by forest.

Comments:

Recommendations:

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name 17,77,78,92,93
Scale 1:20.000 RAUVATNET, JAMTFLELLDAL I-IV

Nordre Svartvatnet

PORPHYRITIC DIORITE / GRANODIORITE

MARBLE

BIOTITE SCHIST & GNEISS

AMPHIBOLE GNEISS

BIOTITE SCHIST & GNEISS

ROCK SPLS 2003-2006

QUARTZ-ARSENOPYRITE VEINS

ROCK SPL 6007

ROCK SPLS 6105-6107

THRUST

101

15 77

13

319 3150 588 194 64 1740

32 500 117 405 32

RV 2003: 9 4 / 18 - / 20
RV 2005: 32 1 / 28 - / 118
RV 2006: 20 3 / 19 - / 53
RV 6031: 11 - / 35 - / 37
RV 6030: 11 - / 24 - / 30
RV6032: 9 - / 25 - / 41
RV6033: 8 - / 28 -
RV6036 RV6035: 27 - 24 10 / 29 - 26 - / 52
RV 6034
RV 2002: 12 7 / 37 - / 53
RV 2001: 12 6 / 33 - / 39
RV 2004: 50 5 / 42 - / 234
RV 6022: 14 22 / 23 - / 46
RV 6108: 12 6 / 22 - / 38
RV 6107: 20 103
RV 6021: 20 - / 62
RV 6012: 7 - / 18 - / 38
RV 6013: 12 2 / 20 - / 54
RV 6014: 6 - / 22 - / 26
RV 6015: 8 1 / - / 29
RV 6029: 8 1 / 18 - / 20
RV 6023: 13 19 / 23 - / 40
RV 6024: 12 19 / 25 - / 40
RV 6028: 25 110 / 43 - / 56
RV 6027: 20 2 / 32 - / 153
RV 6025: 12 18 / 22 - / 42
RV 6016: 15 3 / 22 - / 76
RV 6017: 14 - / 22 - / 72
RV 6105: 10 11 / 22 - / 56
RV 6106: 14 64 / 20 - / 64
RV 6005: 13 - / 25 - / 50
RV 6004: 8 - / 19 - / 21
RV 6003: 6 - / 16 - / 17
RV 6002: 8 2 / 17 -
RV 6001: 21 - / 20 - / 47
RV 6006: 8 - / 20 - / 50
RV 6007: 13 7 / 20 - / 50

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Jamtfjelldalen I No77 Size:1.5 km^2

Claim location:Map sheet 1926 III GRANE

:Air Photo

:Oko Kart DO 180 I

Pegged:Yes-No Partly Claim retained: Yes No

Stream length 1.0 km Drainage area:0.5 km^2

Original sample points(41,2 ppb Au) resampled:Yes No

Follow up team: GT/OK Duration:1.0day

Nos.of follow up sample : RV 6090 - RV 6096

Description of drainage system:
Anomalous streams drain western slopes of Jamtfjelldalen both anomalies are in small streams close to drainage area.

Geology:
The area is dominated by a gneissose granodioritic bedrock which in places shows porphyritic appearance and biotite schist inclusions. Leucocratic veining occurs in dm-scale and m-spacing. Stream pebbles can show varying petrography. Clay in stream bed has been found at high altitude (130m above present valley floor).

Comments:
Taken together with claims 78,92,93 (Jamtfjelldal II-IV)-numerous high Au anomalies (to 1.7ppm). Follow-up detected quartz-arsenopyrite veining (containing to 2.2ppm Au) along fractures which are conjugate to a thrust plane on the E. side of Jamtfjelldal. Low to high Au anomalies on the W. valley side suggests these fractures to continue.

Recommendations:
A high-priority area - follow-up by deep overburden sampling, particularly along the thrust, aided by detailed air-photo fracture interpretation, together with further lithogeochemistry and geology.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: **Jamtfjelldalen II** No **78** Size: 0.75 km^2

Claim location: Map sheet 1926 III Grane

: Air Photo

: Oko Kart O 180 I

Pegged: Yes-No---Partly Claim retained: **Yes** No

Stream length 1.0 km Drainage area: 0.5 km^2

Original sample point (83 ppb Au) resampled: Yes **No**

Follow up team: JT/BS Duration: 1.0day

Nos.of follow up sample : RV 2001 - RV 2006

Description of drainage system:
System flows along fracture zone with locally derived stream sediment.

Geology:
Medium to coarse grained porphyroblastic biotite gneiss - probably a metadiorite. Topographic depressions form in metasediments (biotite - hornblende mica schists and marbles). The latter are heavily veined by pegmatite and granite.

Comments:
See no.77 Jamtfjelldalen I

Recommendations:
ditto

ANOMALY FOLLOW UP : HELGELAND PROJECT 1988

Claim Name:Jamtfjelldalen III No92 Size:0.25 km^2

Claim location:Map sheet 1926 III GRANE

:Air Photo

:Oko Kart DQ 179 I,III

Pegged:Yes No-Partly Claim retained: Yes No

Stream length 0.5 km Drainage area:0.25 km^2

Original sample point (43 ppb Au) resampled:Yes No

Follow up team: GT/OK Duration:1.0day

Nos.of follow up sample : RV 6012 - RV 6015

Description of drainage system:
Anomalous stream drains part of the eastern slopes of lower Jamtfjelldalen. Stream starts as seepage just above the vegetation line and, after having been joined by some tricklets and small tributaries enters into the main str. in Jamtfjelldalen in valley bottom.

Geology:
Mountain slope above anomalous stream shows intensive stockwork veining of feldspar-rich white veins in medium-grey biotite-rich intrusive rock (granodiorite) veins are in dm-scale with m-scaled spacing, rock is fresh. Veins contain in parts small quantities of green epidote like mineral which seems to be secondary to primary veining. Grey-clay is found in sediments up to an altitude of 550 m.

Comments:
See 77 Jamtfjelldal I.

Recommendations:
Ditto.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Jamtfjelldalen IV No93 Size:2.25 km^2

Claim location:Map sheet 1926 III GRANE

:Air Photo

:Oko Kart DQ 179 I,III

Pegged:Yes No-Partly Claim retained: Yes No

Stream length 3.0 km Drainage area:1.5 km^2

Original sample point (219 ppb Au) resampled:Yes No

Follow up team: GT/AK GT/CK Duration:2.0day

Nos.of follow up sample : RV 6016 - RV 6029

Description of drainage system:
Anomalous stream drains eastern slopes of southern part of mountains between Rauvatnet lake and Jamtfjelldalen. Most of the tributaries and main stream start above treeline on mountain slope and run to northwest until they join main stream at bottom of cliff which approximately parallels mountain slope.

Geology:
Area is dominated by a mica schist, in places approaching gneissose appearance and a quartz-rich intrusive-looking rock. In addition, marble, pegmatoid lenses, quartz veining, skarn and minor amounts of sulfides were found. Clay found in sample points 6028 and 6029.

Comments:
See 77 Jamtfjelldal I.

Recommendations:
Ditto.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Fellingfors No 19 Size:4.25 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart DP 176 III,V

Pegged:Yes No-Partly Claim retained: Yes No

Stream length 4.0km Drainage area: 3.5 km^2

Original sample points(101,37,27ppb Au) resampled:Yes No

Follow up team: KB/KA Duration:3.0 day
Nos.of follow up sample : FF 5001 - FF 5025
FF 5102 & FF 5103
FF 6015 - FF 6026

Description of drainage system:
Two main streams: a: Rising in a moor, the lower part running alongside a dirt track in an agricultural area. b: A large (>10m wide) stream having a source in till, flowing in its upper part along a canyon, thence becoming braided with boulders to 2m diameter.

Geology:
Headwaters in mica-schist interbedded with garnet-muscovite 'granitic meta-sandstone'. Boulders of granite, quartz, amphibolite, marble and a fine-grained purple rock type (?volcanic) in drift.

Comments:
Numerous mid-to high-range Au anomalies.

Recommendations:
Detailed geology and lithogeochemistry.

FF 5023
12 4
7 -
36

FF 5022
13 3
7 5
40

FF 5024
15 3
8 -
53

FF 6019
15 7
12 9
76

FF 5103
15 -
17 3
100

FF6018
17 7
16 -
96

FF6017
14 6
10 -
92

FF6015
39 7
8 1
84

FF5010
20 -
14 -
57

FF 5017
24 -
11 2
69

FF5020
20 3
11 1
60

FF5024
15 8
11 3
32

430

FF 6016
14 5
12 1
90

FF 5102
18 2
17 -
95

FF 5025
12 -
11 1
59

FF5018
19 -
8 -
36

FF5019
16 -
9 1
41

FF5016
24 -
11 1
62

FF5009
19 -
13 1
43

FF5011
22 -
13 1
72

FF5015
19 -
12 1
60

FF5001
21 2
15 -
52

FF5008
27 4
15 -
53

FF5008
19 -
15 1
63

FF 5014
19 -
15 1
107

FF 6024
11 5
12 -
56

FF 6025
29 4
16 3
150

FF 6026
26 8
16 -
92

FF 5013
16 -
13 1
51

FF 5012
36 -
18 -
105

FF 5007
18 -
14 2
63

FF 5006
25 -
16 -
56

FF 5005
14 -
15 -
125

FF 5004
21 -
16 2
76

FF 5003
12 7
15 -
193

260
40
68
46
200
46
308
11
222
153
83
160
228
156

1982 ANOMALY 101

QUARTZITE

BIOTITE SCHIST & GNEISS +
THIN MARBLES

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 19 FELLINGFORS
Scale 1:20 000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Ravatnet I No: 75 Size: 1.25 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart P 178 I, III

Pegged: Yes-No---Partly Claim retained: yes / No

Stream length 2.5 km/ Drainage area: 2.0 km^2

Original sample points (11, 63 ppb Au) resampled: Yes No

Follow up team: JT/OK/GT Duration: 2.0 days

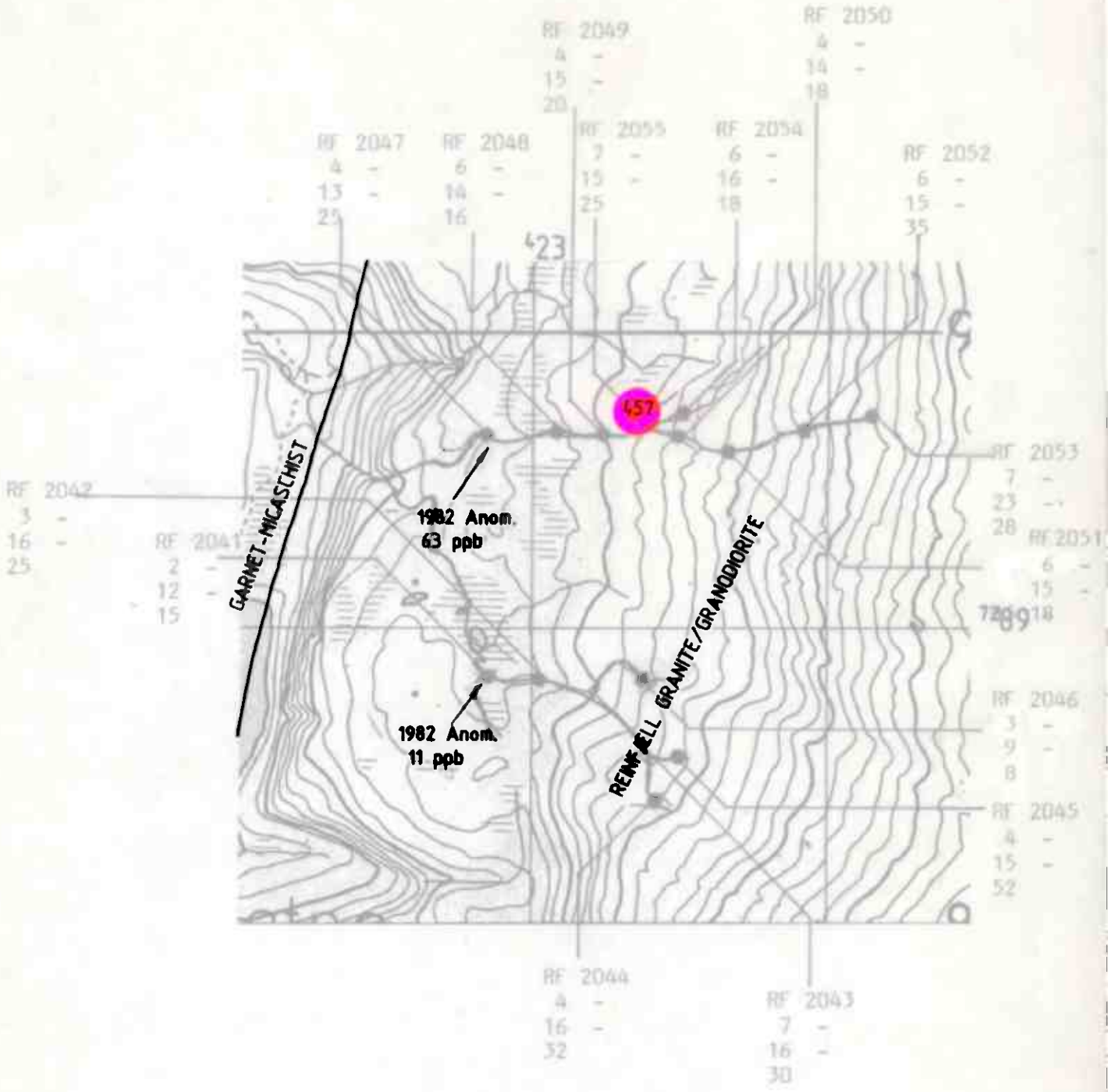
Nos.of follow up samples RF 2041 - RF 2055

Description of drainage system:
Stream with two large and various smaller tributaries drains the rocky slopes of Reinfjellet to the west as well as a large boggy plateau below the treeline.

Geology:
Rather uniform with extensive equigranular granitic-granodioritic bedrock. Locally, gneissose appearance. In a few places, pegmatitic stockwork of small extension (Down to a few m wide).

Comments:
Single (very) high-range Au anomaly detected in small tributary to sampled stream. N.B. claim area lies on opposite side of Reinfjell intrusive to the Sorsvartvatnet claim group.

Recommendations:
A relatively low-priority target - will be included in Sorsvartvatnet follow-up. Approx. 1 team day detailed geology.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 75 RÅVATNA I

75 RAVATNA I

Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Laksfors II No: 74 Size: 0.25 km^2

Claim location: Map sheet 1926 III Grane

: Air Photo

: Oko Kart P 177 I, III

Pegged: Yes No Partly Claim retained: yes/ No

Stream length 2.0 km/ Drainage area: 2.5km^2

Original sample points(157ppb Au) resampled: Yes No

Follow up team: JT/GT Duration: 1.0 days

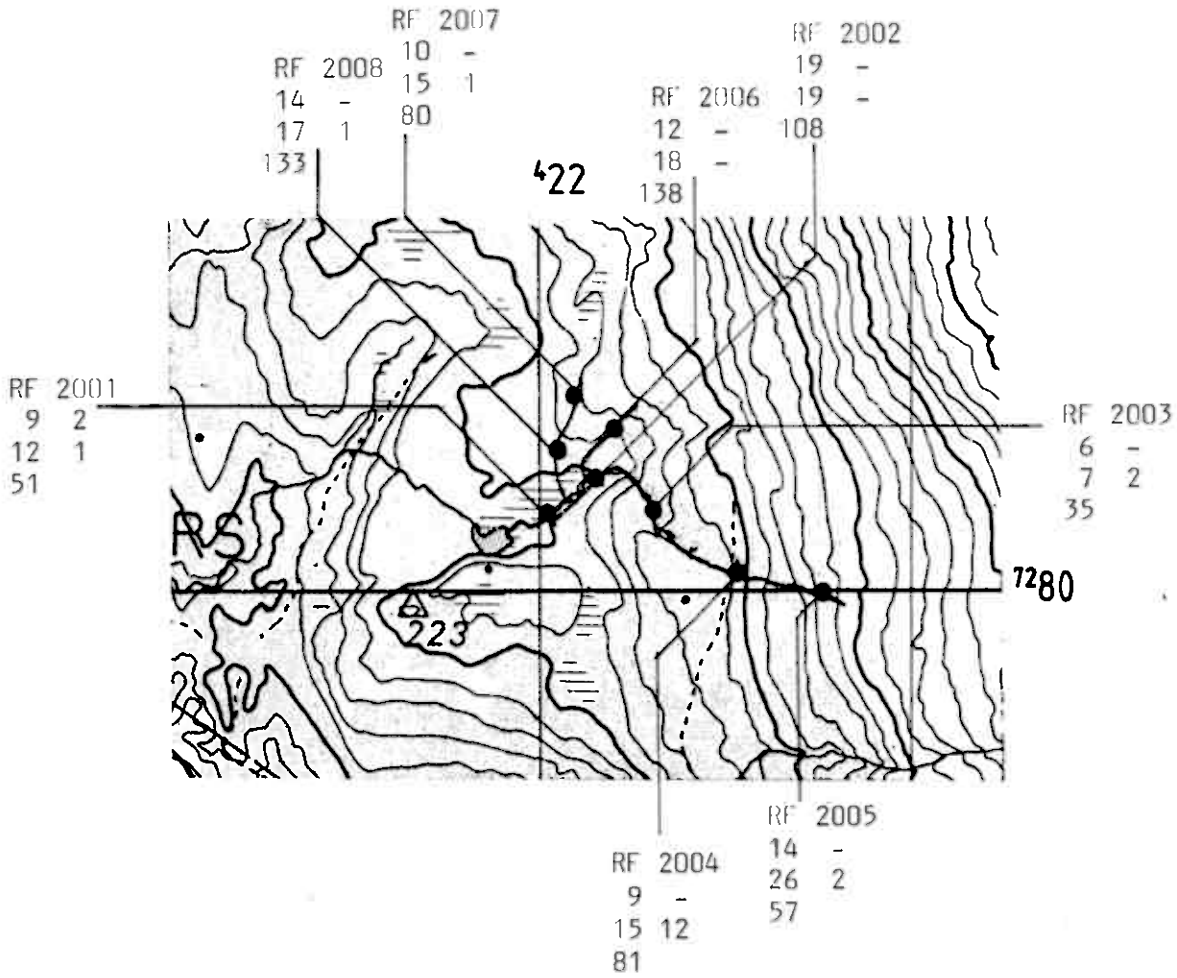
Nos.of follow up samples RF 2001 - RF 2008

Description of drainage system:
Sources of tributaries in karsted marbles and by seepage, flowing via moderate terrain terraces separated by scarps with waterfalls, to the original anomaly point in bog and boulder field.

Geology:
White medium-grained granite with assimilated biotite-schist. These are locally slightly skarned and hornfelsed. Marble horizons occur. Sparse veining (quartz) in the granite (1cm-1dm thick).

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 74 LAKSFORS II
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Ravatnet II No: 76 Size: 0.0 km^2

Claim location: Map sheet 1926 III Grane

: Air Photo

: Oko Kart

Pegged: Yes No Partly Claim retained: yes / No

Stream length 1.5 km/ Drainage area: 1.0 km^2

Original sample point (22 ppb Au) resampled: Yes-No

Follow up team: CR/AK Duration: 1.0 days

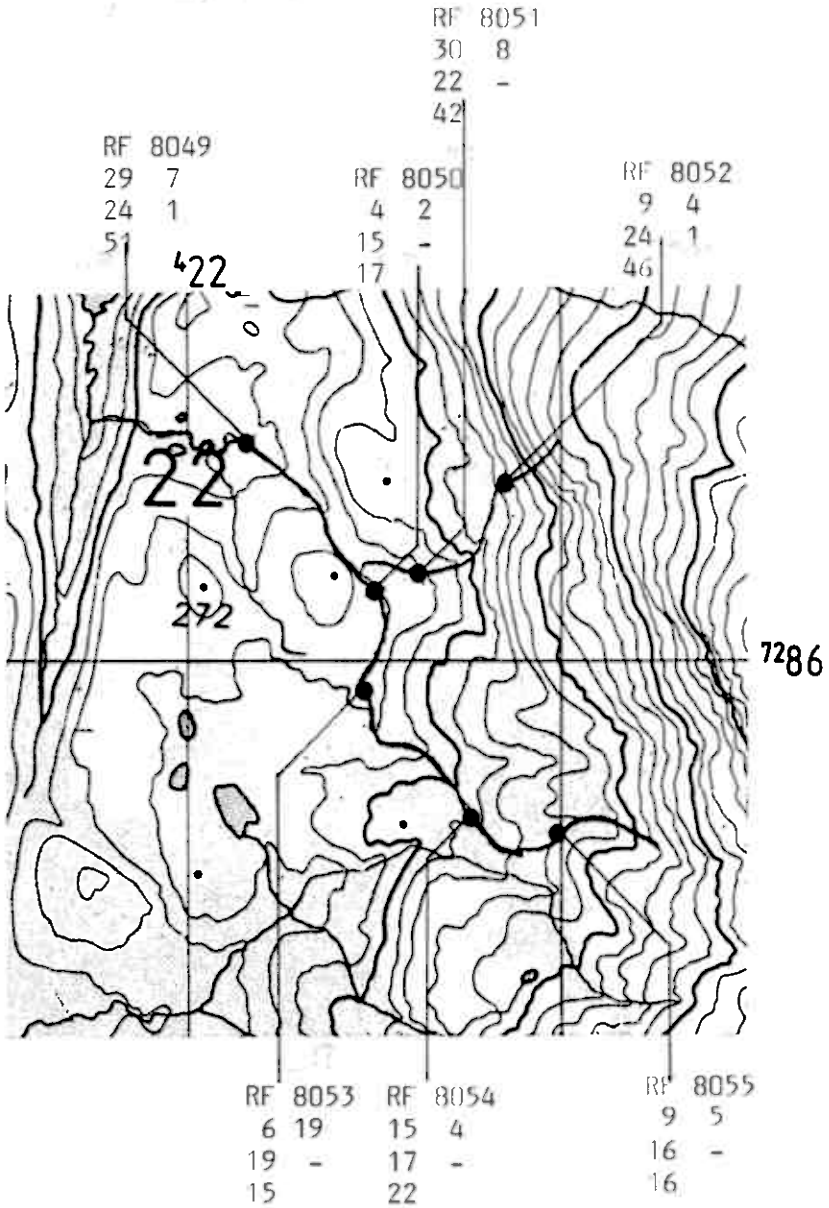
Nos.of follow up samples RF 8049 - RF 8058

Description of drainage system:
The drainage system consists of several parallel streams, washing the steep naked western slope of Reinfjell. These streams all meet in a bog, from which the rivex continues into a fairly dry, moderately sloped area to the resample point. This lies in the end of another boggy area.

Geology:
At resample point the rocktype is fine to medium grained, light gneiss with biotite foliation. This foliation diminishes at 8050. Up the mountain slope there is increasing veining of granitic/dioritic composition. Here you see xenoliths (host rock) of more fine-grained and biotite-rich material. Further up the host rock is more coarse-grained, with phenocrysts and garnets. Talus material shows that the top of the mountain consists of rock, looking like Trondhjemite. It is unfoliated, appears as an intrusive. The veining mentioned has a thickness of up to 1/2 m, different ages, some curved, some not, volume increase of host rock ~10%.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 76 RÅVATNA II
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Sor-Svartvatnet C No:69 Size:6.0 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Oko Kart D 179 I,II

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 6.0 km/ Drainage area:8.0km^2

Original sample points (181.2 ppb Au) resampled: Yes-No

Follow up team: AB/BS Duration:2.5 days

Nos.of follow up sample RF 3001 - RF 3068

Description of drainage system:
Numerous tributaries drain boggy areas and the well exposed western slopes of the Reinfjellet valley,thence meandering through bog and glacial till.For the lowermost 1.5 kms the stream flows in a shallow valley with small waterfalls/gulleys with good exposure.

Geology:
Stream drains all the lithological units in the northern part of Reinfjellet i.e. eastern marble,biotite-gneiss,western marble and Reinfjellet granodiorite,lying as N-S to NNE-SSW orientated bands.Going from east to west the sequence is as follows:
1.Intrusives:Porphyritic granddiorite,intruded by a later generation of more acid,equigranular dykes.
2.A 0.5 - 1.0 km broad eastern marble zone,running parallel to the mainstream between Svartvatnet and Nordre Svartvatnet.
The marble is interbanded with granodioritic,gneissose rocks and amphibolite lenses and pods.These rocks conceivably represent deformed and metamorphosed dykes.The amphibolites are often sulfide bearing (pyrrhotite,minor pyrite and very few grains of Cu-sulfides.)

The above mentioned rock types are all intersected by nearly undeformed granodioritic dykes.
3.The eastern marble zone is followed by a 2 km.broad biotite schist/gneiss zone.The contact between these two lithologies seems to be gradual over 10 - 30m with decreasing amounts of marble forming bands within the biotite gneiss.The proportion of mafic constituents in the biotite schists is highly variable.
4. Western marble zone of 1 km width.This marble sequence is frequently intruded by leucocratic dykes following the general strike direction.

5.Furthest to the west of the sampled area,intrusive rocks of granodioritic composition were encountered.A zone of 10 - 50 m wide skarn alteration(with diss.py,po)was observed at the contact to tthe western marble.

Comments:
Taken together with Sor-Svartvatnet D + F ten gold anomalies were detected(4 high range,2 mid range and 4 low range).As in the Sor-Svartvatnet area as a whole the majority of the larger anomalies appear to be associated with the contacts of the Reinfjell porphyritic granodiorite to the metasediments.

Recommendations:
A high priority follow-up target:geological mapping,deep overburden sampling and test ground geophysics.

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name: Sor-Svartvatnet D No: 80 Size: 0.5 km^2

Claim location: Map sheet 1926 III Grane

: Air Photo

: Oko Kart D 178 II,IV

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area: 1.0 km^2

Original sample point (27 ppb Au) resampled: Yes-No

Follow up team: AS/BB Duration: 2.5 days

Nos.of follow up samples RF 3001 - RF 3069

Description of drainage system:
Source is part bog, part exposed plateau terrain, flowing through thick glacial till to a flat overgrown boulder field.

Geology:
See claim no. 69 Sor-Svartvatnet C

Comments:
Ditto.

Recommendations:
Ditto.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Sor-Svartvatnet E No: 91 Size: 1.0 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart D 178 II,IV

Pegged: yes-No---Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area: 1.0km^2

Original sample point (120 ppb Au) resampled: Yes-No

Follow up team: AS/BS Duration: 0.5 days

Nos.of follow up samples RF 3001 - RF 3069

Description of drainage system:
Headwaters are very small,little flow through partly exposed,part bog terrain.Continuing via flat bog into sligtly steeper area with better exposures.

Geology:
See claim no. 89 Sor-Svartvatnet C

Comments:
Ditto.

Recommendations:
Ditto.

ANOMALY FOLLOW UP - HELGELAND PROJECT 1983

Claim Name:Sor-Svartvatnet F No: 82 Size:0.5 km^2

Claim location:Map sheet 1926 III Grane

:Air Photo

:Okd Kart D 178 II,III

Pegged: yes-No---Partly Claim retained: yes / No

Stream length 2.0 km/ Drainage area:3.0km^2

Original sample point (80 ppb Au) resampled: Yes-No

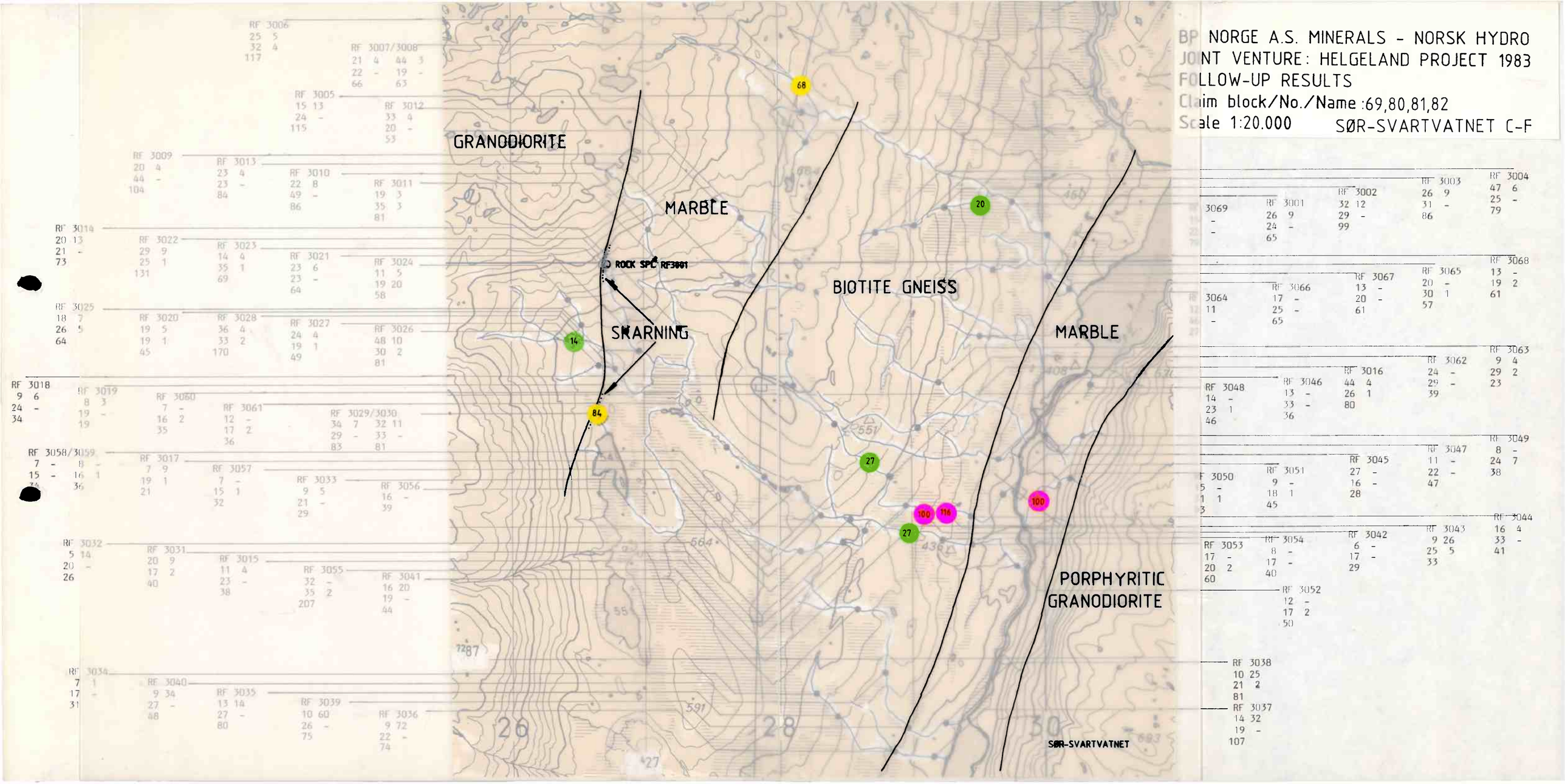
Follow up team: AS/BS Duration:1.0 days

Nos.of follow up samples RF 3001 - RF 3069

Description of drainage system:
The headwaters lie in flat to moderately steep terrain of partly exposed biotite gneiss,thence flowing eastward through the densely forrested western marble zone.

Geology:
See claim no. 68 Sor-Svartvatnet C
Comments:
Ditto.

Recommendations:
Ditto.


BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name :69,80,81,82
Scale 1:20.000 SØR-SVARTVATNET C-F
GRANODIORITE
MARBLE
ROCK SPC RF3001
SKARNING
BIOTITE GNEISS
MARBLE
PORPHYRITIC GRANODIORITE
SØR-SVARTVATNET
RF 3006 25 5 32 4 117
RF 3007/3008 21 4 44 3 22 - 19 - 66 63
RF 3005 15 13 24 - 115
RF 3012 33 4 20 - 53
RF 3009 20 4 44 - 104
RF 3013 23 4 23 - 84
RF 3010 22 8 49 - 86
RF 3011 19 3 35 3 81
RF 3014 20 13 21 - 73
RF 3022 29 9 25 1 131
RF 3023 14 4 35 1 69
RF 3021 23 6 23 - 64
RF 3024 11 5 19 20 58
RF 3025 18 7 26 5 64
RF 3020 19 5 19 1 45
RF 3028 36 4 33 2 170
RF 3027 24 4 19 1 49
RF 3026 48 10 30 2 81
RF 3018 9 6 24 - 34
RF 3019 8 3 19 - 19
RF 3060 7 - 16 2 35
RF 3061 12 - 17 2 36
RF 3029/3030 34 7 32 11 29 - 33 - 83 81
RF 3058/3059 7 - 8 - 15 - 16 1 36
RF 3017 7 9 19 1 21
RF 3057 7 - 15 1 32
RF 3033 9 5 21 - 29
RF 3056 16 - 39
RF 3032 5 14 20 - 26
RF 3031 20 9 17 2 40
RF 3015 11 4 23 - 38
RF 3055 32 - 35 2 207
RF 3041 16 20 19 - 44
RF 3034 7 1 17 - 31
RF 3040 9 34 27 - 48
RF 3035 13 14 27 - 80
RF 3039 10 60 26 - 75
RF 3036 9 72 22 - 74
RF 3003 26 9 31 - 86
RF 3004 47 6 25 - 79
3069 - -
RF 3001 26 9 24 - 65
RF 3002 32 12 29 - 99
RF 3068 13 - 19 2 61
3064 11 -
RF 3066 17 - 25 - 65
RF 3067 13 - 20 - 61
RF 3065 20 - 30 1 57
RF 3063 9 4 29 2 23
RF 3048 14 - 23 1 46
RF 3046 13 - 33 - 36
RF 3016 44 4 26 1 80
RF 3062 24 - 29 - 39
RF 3049 8 - 24 7 38
F 3050 5 - 1 1 3
RF 3051 9 - 18 1 45
RF 3045 27 - 16 - 28
RF 3047 11 - 22 - 47
RF 3044 16 4 33 - 41
RF 3053 17 - 20 2 60
RF 3054 8 - 17 - 40
RF 3042 6 - 17 - 29
RF 3043 9 26 25 5 33
RF 3052 12 - 17 2 50
RF 3038 10 25 21 2 81
RF 3037 14 32 19 - 107
68
20
14
84
27
100
116
100
27
551
564
591
436
1287
26
28
30
27
55
5
683

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Stabforsmoen No: 20 Size: 5.5 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart DQ 175 I; 176 III

Pegged: Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 7.0km Drainage area: 6.0 km^2

Original sample points(142 ppb Au) resampled: Yes No

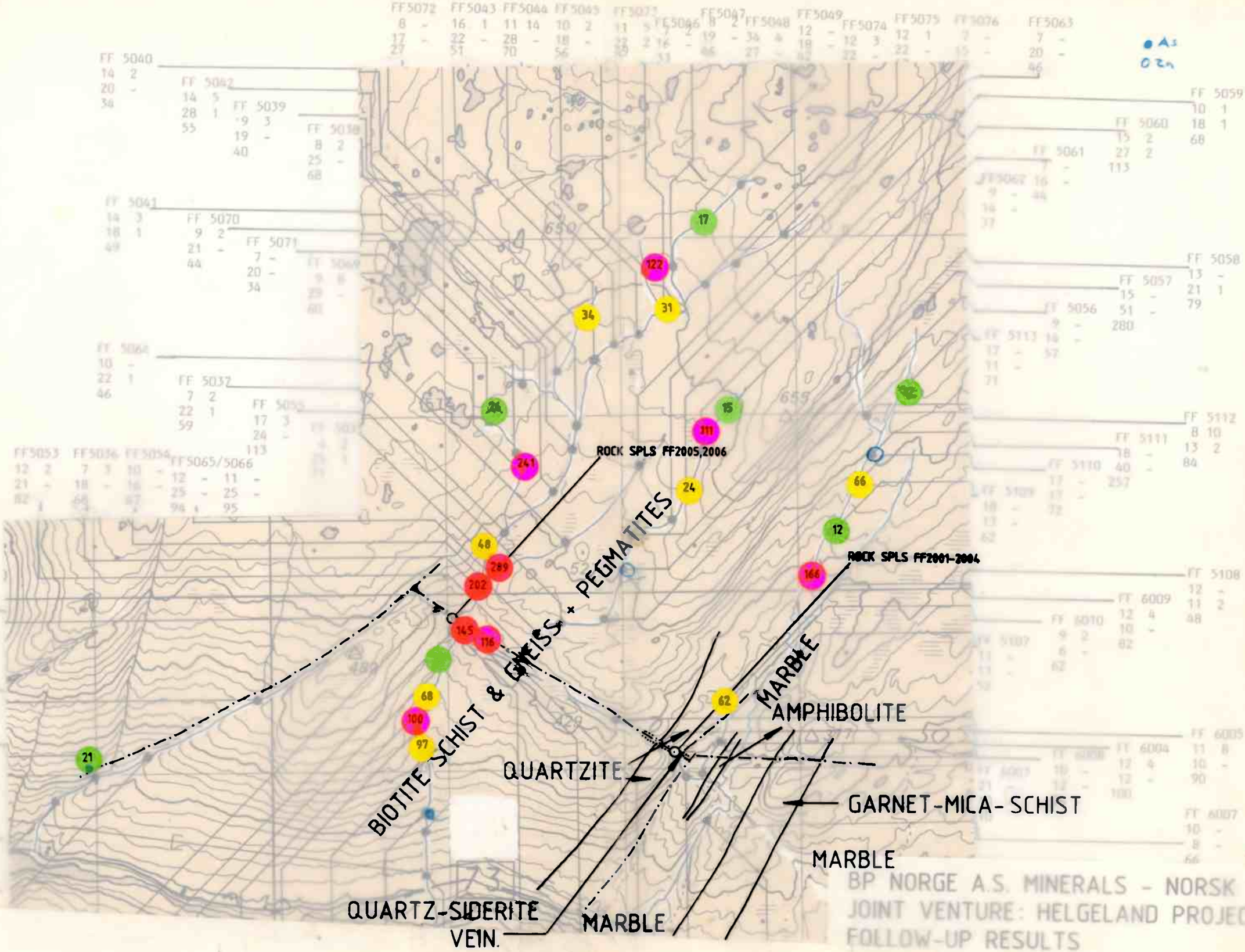
Follow up team: KB/KA Duration: 5.0 day
Nos.of follow up sample : FF 5026 - FF 5176
FF 6001 - FF 6010
FF 6020 - FF 6023

Description of drainage system:
The drainage system covers 6 km^2 and consists of the main stream and 10 tributaries. The lower part of the main stream has an average slope of 20^0 and contains several small and 2 major falls, while the upper half is less steep. Throughout its length the stream runs on bare rock, often in canyons.

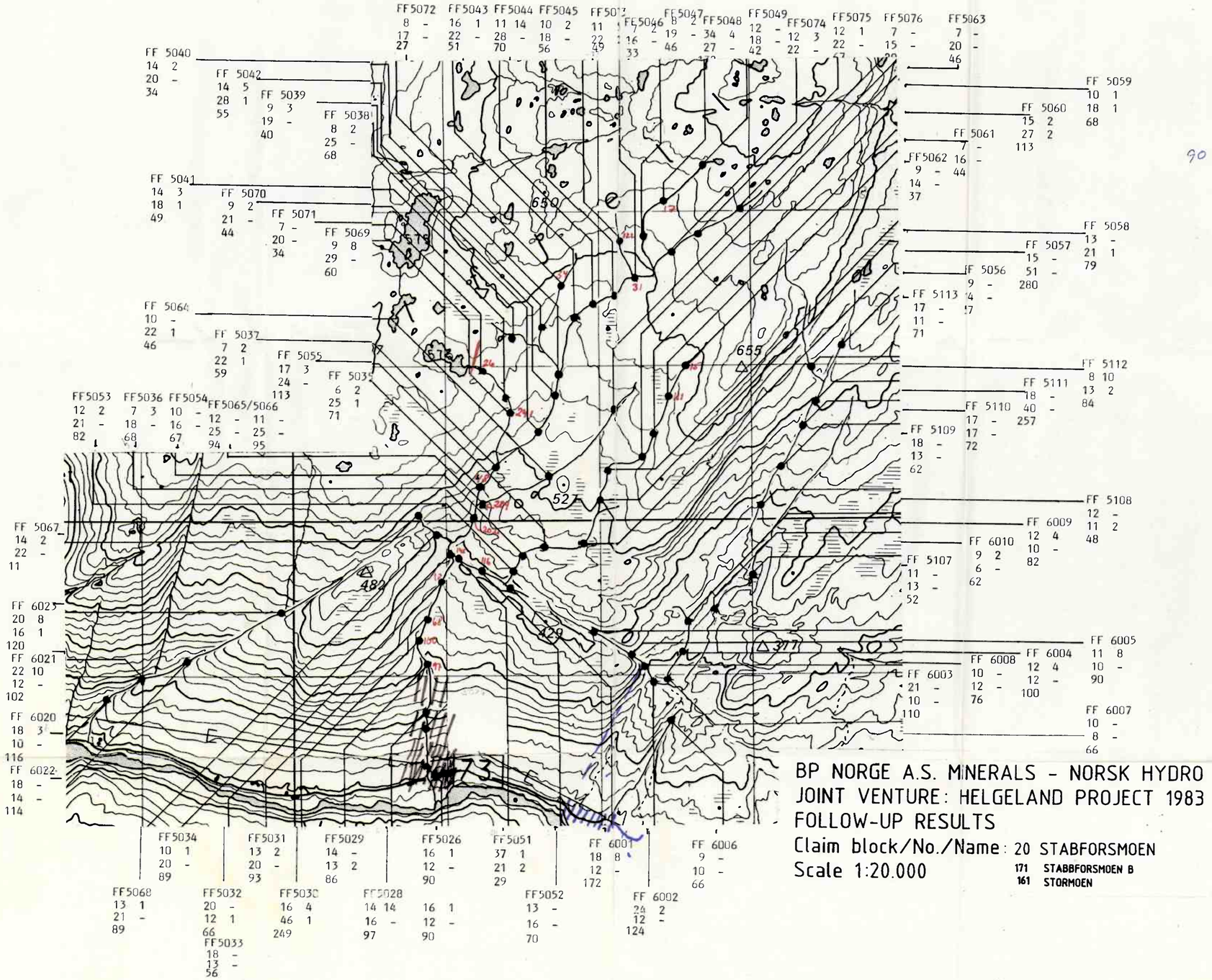
Geology:
Dominated by biotite-rich quartz-mica schists, intruded by pegmatites. Serpentinite occurs in the upper part of the drainage system. A horizon of quartzite appearance occurs in the schists towards the SE, where marbles also make an appearance. Quartz veining occurs associated with a NW-SE fracture, locally containing siderite.

Comments:
Numerous low to high-range Au anomalies with no apparent pattern of distribution.

Recommendations:
A high priority follow-up target. Detailed geology, lithogeochemistry plus possible D.O.B. See also 161 Stormoen.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Block/No./Name: 20 STABFORSMOEN



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 20 STABFORSMOEN
Scale 1:20.000

171 STABBFORSMOEN B
161 STORMOEN

90

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Stormoen No161 Size: 2.0 km^2

Claim location: Map sheet 1926 III Grane

:Air Photo

:Oko Kart

Pegged: Yes-No---~~Partly~~ Claim retained: Yes No

Stream length 2.0km Drainage area: 2.5 km^2

Original sample points(47 ppb Au) resampled: Yes No

Follow up team: KB/KA Duration: 1.0 day

Nos.of follow up sample : FF 5107 - FF 5113

Description of drainage system:
The lower part was a flat meandering stream approx. 1/2 -1m wide running in a swamplike area - the upper part runs in a small canyon with several 1/2 -1m high waterfalls. One place an underground stream emerged 1/2m from the main stream and joined it.

Geology:
The bedrock is in general poorly exposed. When observed, it consists of greyish-white to grey marble. Sometimes with a poorly developed schistosity.

Comments:
See 20 Stabforsmoen.

Recommendations:
Ditto.

ETERA

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Storvasaasen No164 Size: 0.5 km^2

Claim location: Map sheet 1826 II Eitera

:Air Photo

:Oko Kart

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0 km^2

Original sample point (31 ppb Au) resampled: Yes No

Follow up team: GT/OK Duration: 1.0day

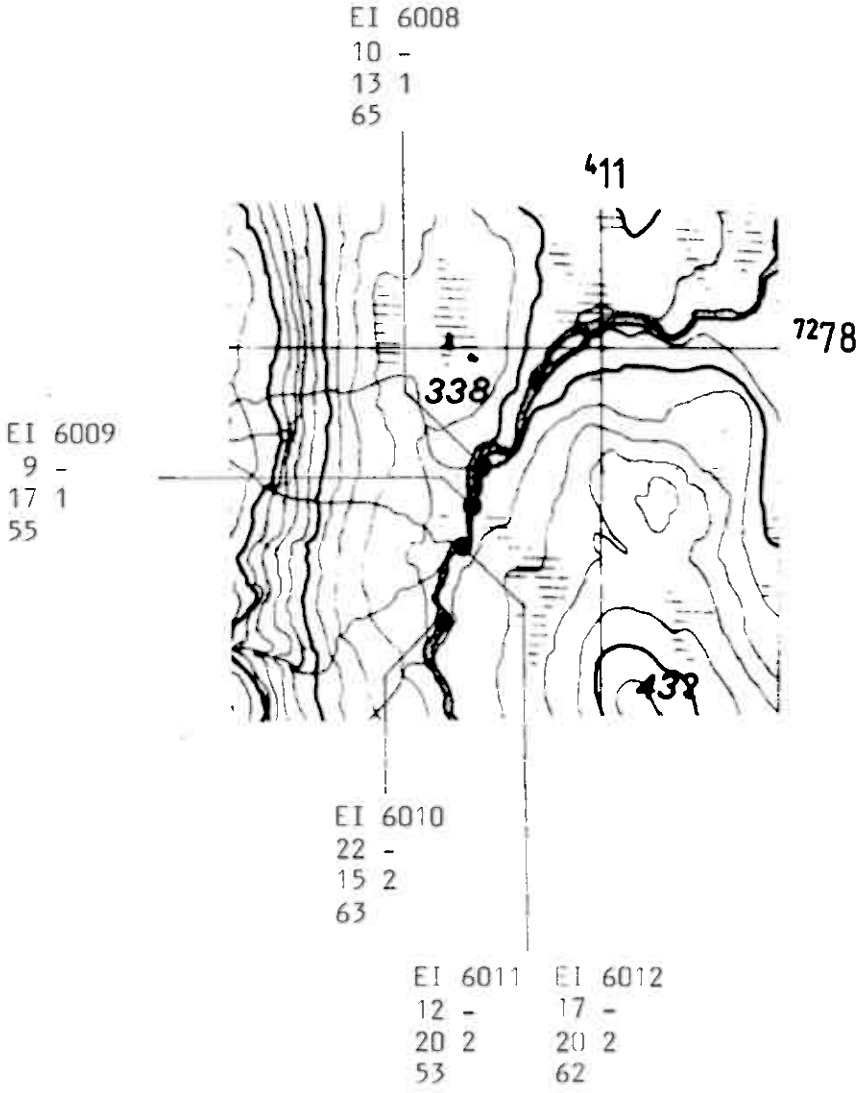
Nos.of follow up sample : EI 6008 - EI 6012

Description of drainage system:
Streams sampled drain east and west sides of a long valley, descending via cliffs to the west, and via more gentle topography with karst phenomena to east.

Geology:
Dominated by locally gneissose granodiorite with common marble bands.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 164 STORVASSAASEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Fjelldenden No: 91 Size:1.5 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 178 I

Pegged:Yes No Partly Claim retained: yes/ No

Stream length 0.5 km/ Drainage area:0.5km^2

Original sample point (43 ppb Au) resampled: Yes-No

Follow up team: TK/HK Duration:0.5 days

Nos.of follow up sample EI 7063- EI 7064

Description of drainage system:
Short stream(300-400 m)above 1982 anomaly rising in bedrock.

Geology:
No exposures,due to heavy overburden.Boulders of gneiss in the streambed.

Comments:
Two low range and one high range anomalies.Trace and base metal concentrations generally low. Drift seriously hampers this claim and those of 101 Kroken and 112 Steinbekken.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kroken No: 101 Size:2.25 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 178 II

Pegged:~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 1.5 km/ Drainage area:2.5km^2

Original sample points (41,9,318 ppb Au) resampled: ~~Yes~~-No

Follow up team: TK/HK Duration:1.0 days

Nos.of follow up sample EI 7051- EI 7062

Description of drainage system:
Two branches rise in meltwater fed bogs.Good development of active stream sediment.The stream descends through moraine at lower levels.

Geology:
Biotite-muscovite schists with pegmatite veins.Abundant well-rounded boulders of chromite bearing serpentinite occur in the drift below the moraine level .These boulders were not found further upstream.

Comments:
See no. 91 Fjelldenden

Recommendations:
Ditto.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Steinbekken No:112 Size:1.0 km^2

Claim location:Map sheet 1926 II Bitera

:Air Photo

:Oko Kart DN 178 I

Pegged: Yes-No---~~Partly~~ Claim retained: yes/ No

Stream length 1.0 km/ Drainage area:1.5km^2

Original sample point (41 ppb Au) resampled: Yes-No

Follow up team: TK/HK Duration:1.0 days

Nos.of follow up sample EI 7066- EI 7070

Description of drainage system:
Stream rises via a small lake and a bog,descending over marbles.

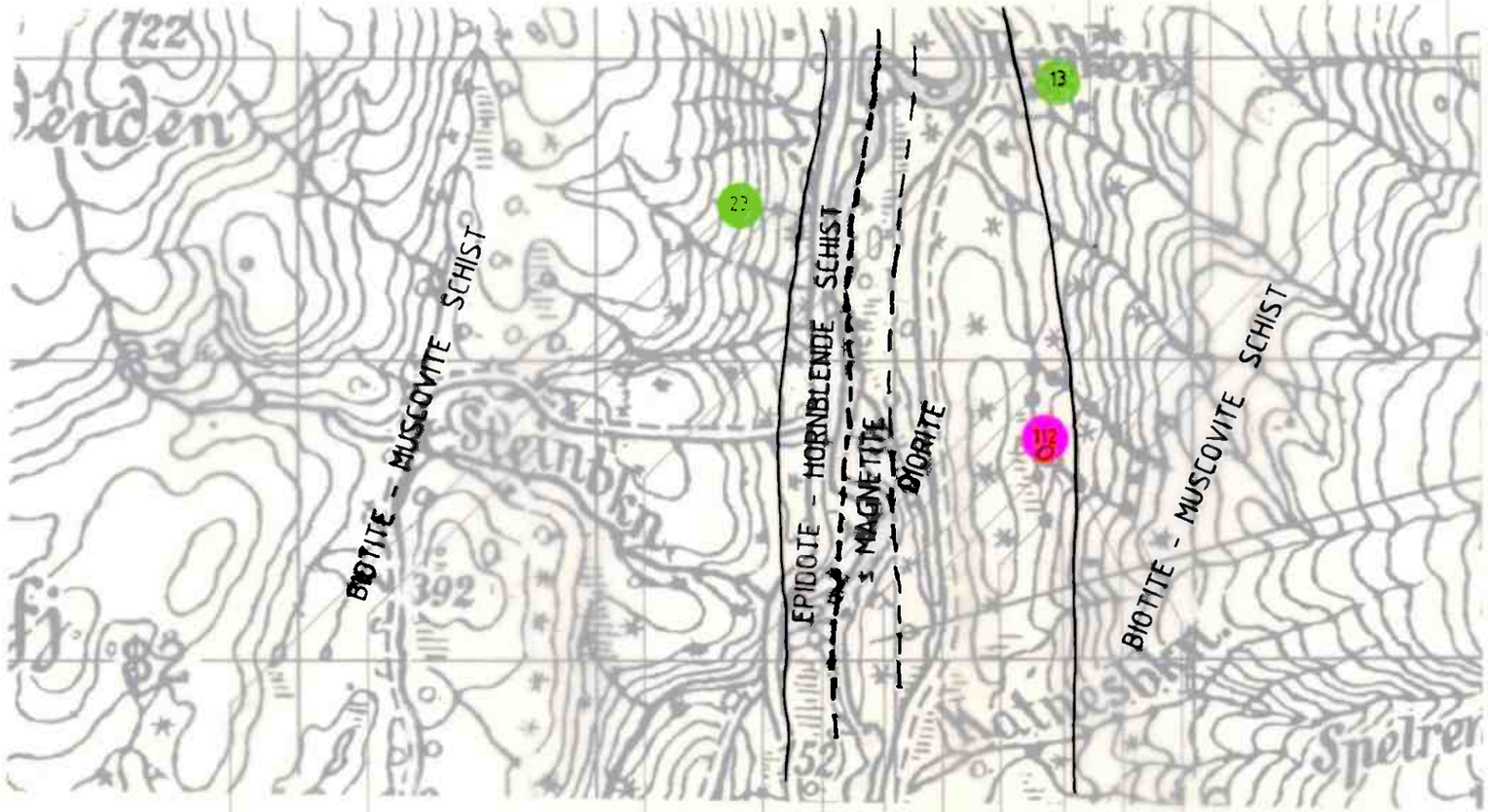
Geology:
Micaschist and dioritic gneisses with pegmatite veins,interbanded with marbles.Granodiorite abundant in the western part of the area.

Comments:
Two low range and one high range anomalies.Trace and base metal concentrations generally low. Drift seriously hampers this claim and those of 101 Kroken and 91 Fjelldenden.

Recommendations:
None.

E17059 E17060 E17061 E17062

24	24	25	23
19 3	14 2	15 2	16 2
47	45	50	40



E1 7064	E1 7063	E17065	E17058	E17052	E17054	E17056
10 -	18 -	13 -	15 -	14 1	10 3	5 -
14 2	12 1	15 2	11 2	35 3	18 2	12 1
41	44	41	39	170	66	21

E17051	E17053	E17055	E17057
16 3	10 -	13 -	4 -
13 1	19 1	16 2	8 1
53	68	37	16

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 91,101,112:FJELLDENDEN,
Scale 1:20.000 KROKEN, STEINBEKKEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Saeterskaret No: 33 Size: 1.25 km^2

Claim location: Map sheet 1826 II Eitera

:Air Photo

:Oko Kart

Pegged: Yes No Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0 km^2

Original sample point (4ppb Au) resampled: Yes No

Follow up team: CR/AK/JT Duration: 0.5 day

Nos.of follow up sample : VV 2006 - VV 2010

Description of drainage system:
A high energy stream (little sediment), rising in cliffs and talus slopes, flowing over bedrock down to numerous small lakes and potholes. At many points the stream disappears beneath talus. Generally thin or absent overburden.

Geology:
Overwhelmingly granodiorite - of fine-grained and porphyritic types, the latter being younger. Late fissure fillings of zeolite to 0.5m scale.

Comments:
No Au anomalies.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Vestfjeldene No: 32 Size: 3.75 km^2

Claim location: Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DL 178 IV; M 178 III

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: Yes No

Stream length 7.0km Drainage area: 5.0 km^2

Original sample point (ppb Au) resampled: ~~Yes~~ ~~No~~

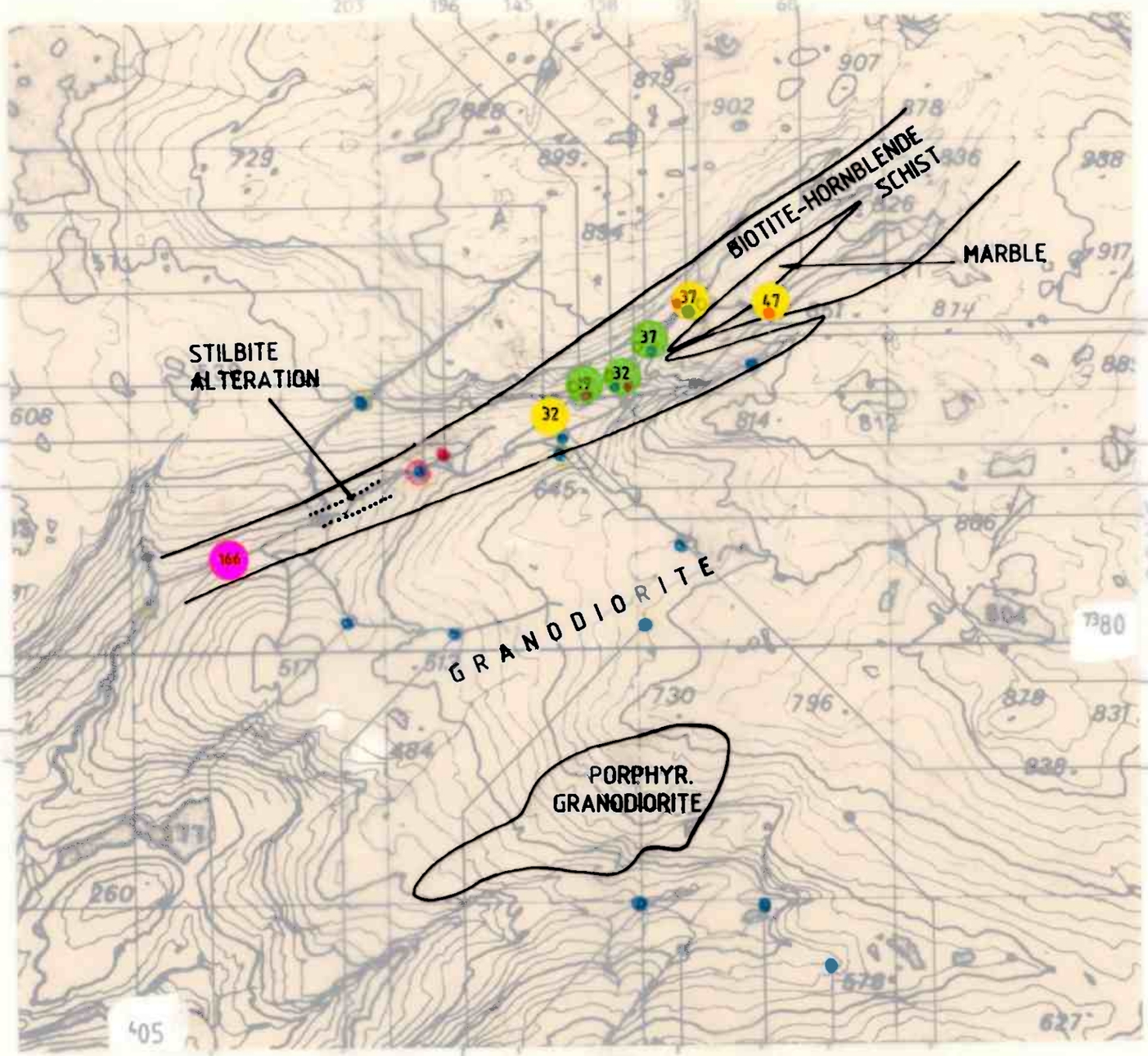
Follow up team: AS/BB -(CR/AK/UT) Duration: 3.5 day
Nos.of follow up sample : VV 2001 - VV 2005
VV 2011 - VV 2017
VV 3001 - VV 3017

Description of drainage system:
Source in snow-filled gulleys, descending via gulleys in well exposed terrain to a single gulley, thence into an area with numerous large overgrown boulders, (mainly derived from the surrounding slopes), with thin overburden which is probably morraine derived.

Geology:
The axis of the stream system follows a broad NE-SW trending raft of metasediments within both prophyritic and equigranular granodiorite. The metasediments are dominated by biotite-hornblende schist/gneiss which contain a thin marble horizon. The latter is skarned at contacts with numerous granite/granodiorite dykes, sulphides being observed at only one locality (VV 3001). To the N. West of the system, numerous smaller lenses and rafts of pelite occur in the granodiorite. Intense zones of stilbite introduction occur striking sub-parallel (i.e. approx. 045°) to the main gulley, the largest of these (approx. 70m broad x 200m strike), occuring near sed. sample points VV 3012, 3013.

Comments:
Seven Au anomalies were detected in the main stream and one of the upper gulleys along a 2.5km length (1x high-range, 3x med-range, 8x low-range). Skarn sample VV 3001 was not anomalous. The source is likely to be closely bound to the 045 fracture system within the metasedimentary raft.

Recommendations:
Detailed geology/lithogeochemistry.



W
As
Zn

VV 3001 29 - 24 6 75
VV 2015 18 13 17 14 61
VV 2014 28 39 70 25 116
VV 3008 19 29 69 5 112
VV 3013 9 6 39 2 98
VV 3012 23 4 21 2 61
VV 3010 8 4 35 1 105
VV 3009 15 9 62 1 60
VV 3011 14 5 19 3 45
VV 3002 41 - 46 38 203
VV 3003 34 29 91 27 196
VV 3004 28 18 83 8 145
VV 3005 36 27 58 55 158
VV 3006 28 9 63 4
VV 3007 15 12 28 10 68
VV 2004 25 29 84 6 63
VV 2005 31 7 47 3 95
VV 2003 27 11 21 4 82
VV 2002 18 33 23 4 42
VV 2001 22 48 62 3 61
VV 2012 19 15 51 4 50
VV 2013 16 40 65 2 53
VV 2016 8 31 27 2 56
VV 2017 5 60 27 2 48
VV 2010 10 27 25 2 40
VV 2011 16 77 116 2 85
VV2009 14 9 35 5 96
VV2008 14 29 48 2 48
VV2007 13 27 45 2 56
VV2006 9 5 28 3 33

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name 32 VESTFJELDENE &
33 SAETERSKARET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:ForholtenNo: 89 Size:2.5 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 179 I,II,III,IV

Pegged:Yes No Partly Claim retained: yes/ No

Stream length 3.0 km/ Drainage area:8.0km^2

Original sample point (107 ppb Au) resampled: Yes No

Follow up team: TK/HK Duration:2.0 days

Nos.of follow up sample EI 7030- EI 7050

Description of drainage system:
Main stream rises in bog fed by meltwater,descending via karst systems.A triburtary has its source in Klubvath.N.B. possible contamination on samples EI 7048 - 7050 from roads,forrest tracks.

Geology:
The high ground in the west consists of micaschist and granodiorite,grading into interbedded marbles and quartzites together with amphibolites and acid horizons(?tuffaceous) in the lower parts of the valley.

Comments:
Three low-range and one high range anomalies,which appear to have a source within quartz-diorite to the north-west.

Recommendations:
Detailed geology and lithogeochemical sampling.Compare also with no.113 Forholten B.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Foxholten B No:113 Size:1.75 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 180 II,IV

Pegged: yes ~~No-Partly~~ Claim retained: yes/ No

Stream length 2.0 km/ Drainage area:2.0km^2

Original sample point (107 ppb Au) resampled:-~~Yes~~ No

Follow up team: TK/HK Duration:1.0 days

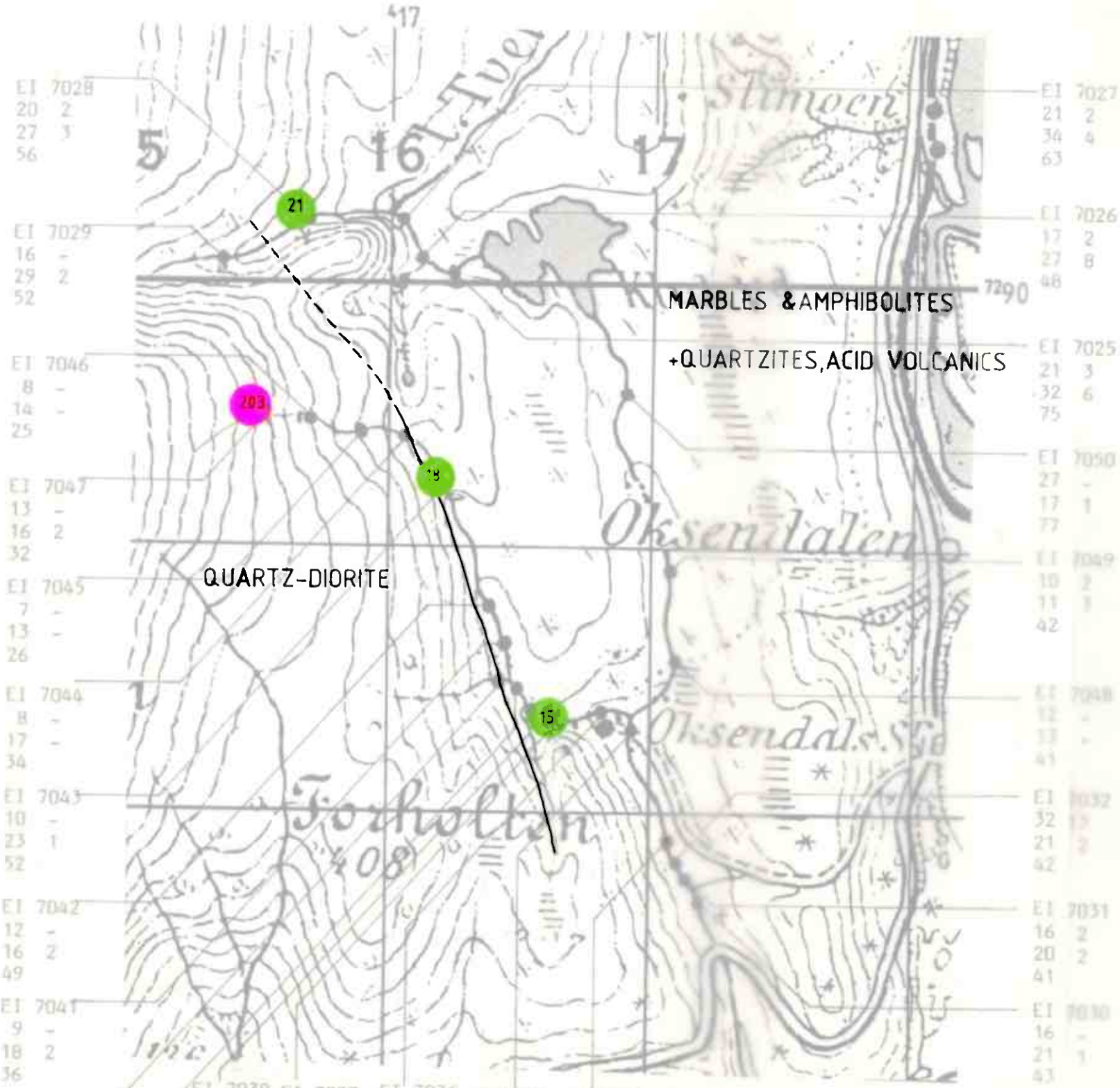
Nos.of follow up sample EI 7025- EI 7029

Description of drainage system:
Stream originates in a cliff,flowing powerfully through a very steep and narrow valley,containing large boulderm at upper levels.Many potential sample points inaccessible.

Geology:
Interbedded quartzites,amphibolites and high grade gneisses form the moutains at upper levels,with impure marbles and thin amphibolites at lower levels.Along strike of the major structure,which is followed by the stream at higher altitudes tourmaline and apatite bearing quartz-veins were recorded.The structure runs NNE-SSW and transects the litholbgies perpendicular.

Comments:
See no. 89 Foxholten.

Recommendations:
The east-west trending structures should be examined carefully as a possible bedrock source for the high level gold anomaly.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 113+89 FORHOLTEN B

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Fjellskarelven No: 62 Size:2.0 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 178 I,II

Pegged:~~yes~~-No Partly Claim retained: yes / No

Stream length 1.0 km/ Drainage area:1.0km^2

Original sample point (138 ppb Au) resampled: ~~Yes~~-No

Follow up team: GT/OK Duration:1.0 days

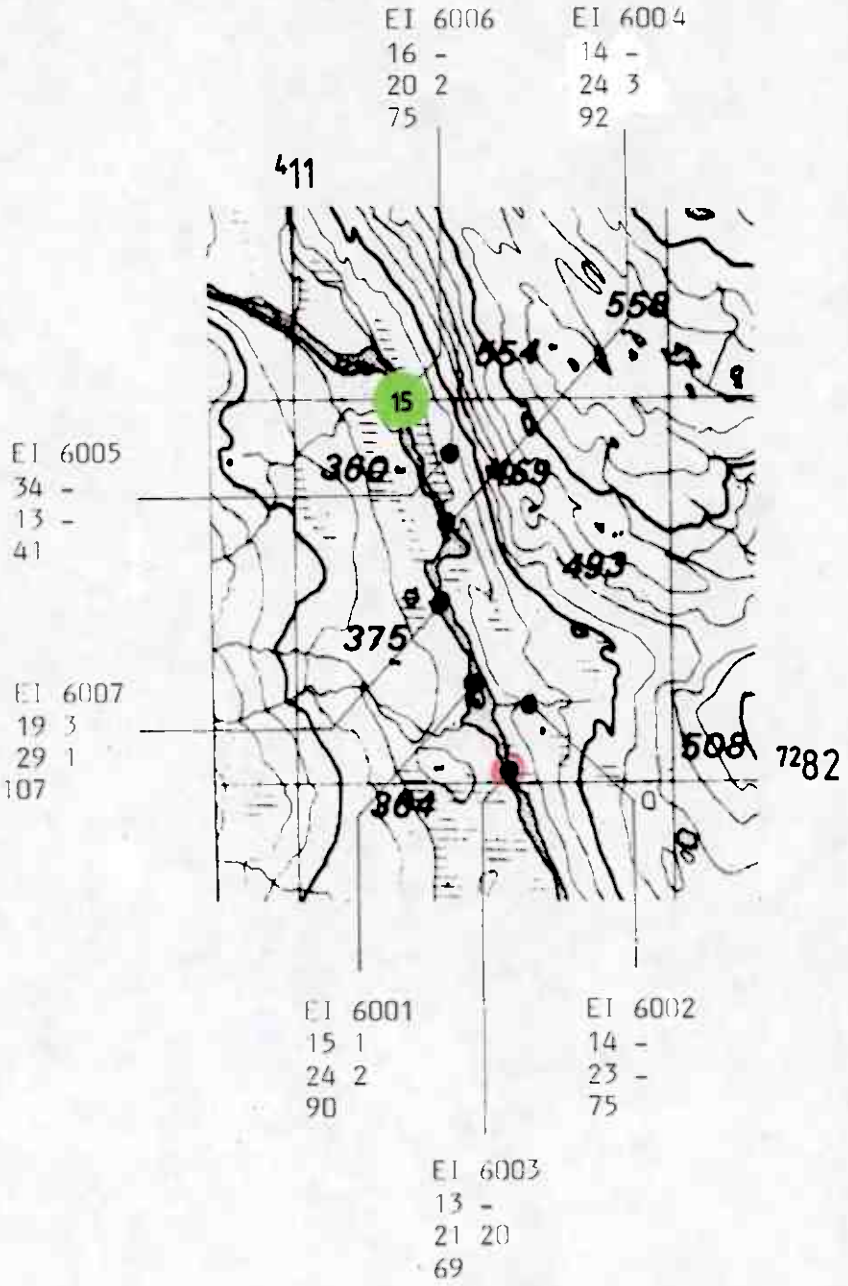
Nos.of follow up sample EI 6001- EI 6007

Description of drainage system:
Several tributaries draining the east and west sides of a NW-SE trending valley were sampled together with the main stream.

Geology:
Dominated by granodiorite with minor occurrences of mica schist/gneiss,green metasediments and quartz veins.

Comments:
Only one low range gold anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 62 FJELLSKARELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Eiteraen No: 58 Size:1.00 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 176 5-2

Pegged:yes No Partly Claim retained: yes / No

Stream length 1.5 km/ Drainage area:1.0km^2

Original sample point (137 ppb Au) resampled: Yes-No

Follow up team: TK/HK Duration:0.5 days

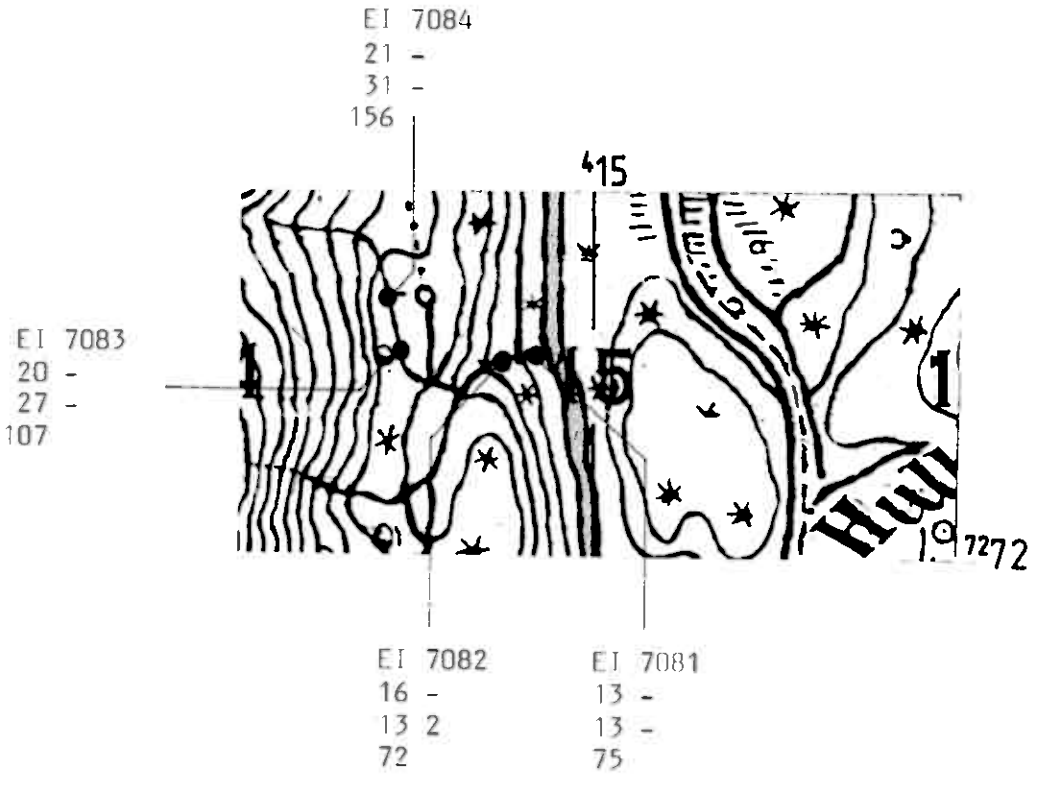
Nos.of follow up sample EI 7081- EI 7084

Description of drainage system:
Rises in a boulder pile,concealing a karst outlet.Descends via several karst caverns,running over bedrock at lower levels.Bog at original sample point.

Geology:
Partly pyrite-pyrrhotite bearing micaschist and grey gneiss with horizons of coarse,white to light grey marble.Quartz rich boudins occur locally.Amphibolitic horizons ,less then 10 m in width .

Comments:
No gold anomalies detected.Trace and base metal values at background level.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 58 EITERÅEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Vistinderne No: 35 Size:0.75 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart DN 176 II

Pegged:yes No-Partly Claim retained: yes / No

Stream length 1.0 km/ Drainage area:0.5km^2

Original sample points (31.37 ppb Au) resampled: Yes-No

Follow up team: KB/KA Duration:1.0 days

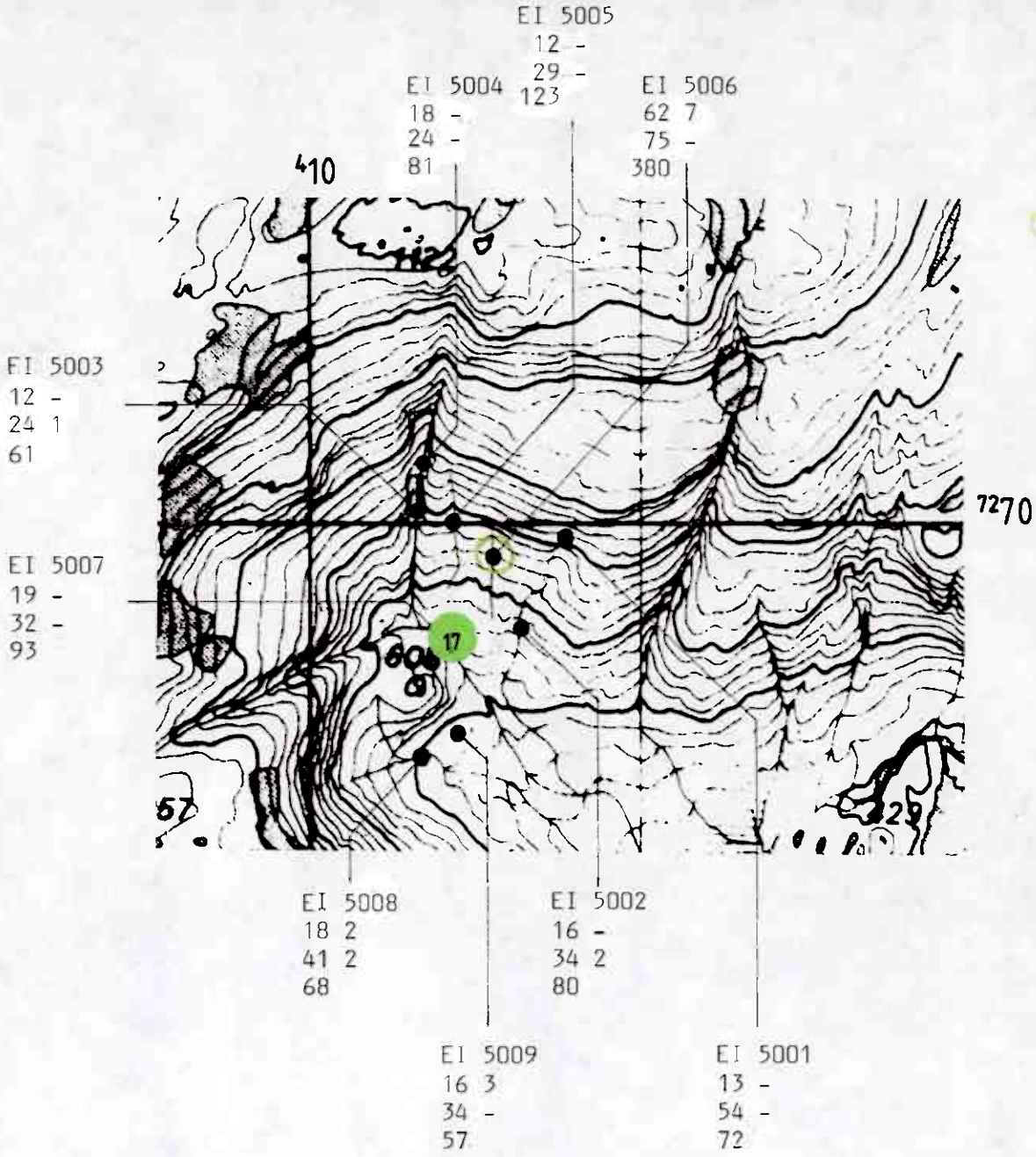
Nos.of follow up sample EI 5001- EI 5009

Description of drainage system:
Several tributaries originating in snowfields descend via steep slopes of bare rock.

Geology:
Biotitic granite-gneiss with pegmatoids containing a serpentinite pod and minor amphibolite.

Comments:
Only one low range gold anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 35 VISTTINDENE
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:TaalitiNo:165 Size:0.5 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Oko Kart

Pegged:~~yes~~---No Partly Claim retained: yes/ No

Stream length 2.0 km/ Drainage area:2.0km^2

Original sample point (196 ppb Au) resampled: Yes-No

Follow up team: TK/HK Duration:1.0 days

Nos.of follow up sample EI 7071- EI 7077

Description of drainage system:
Stream rises in a small lake,flows through small bogs thence descending over a steeper slope,partly over bedrock.Small tributary at smaller level also sampled.

Geology:
Biotite schist intruded by granite/granodiorite with barren and alteration free veining in contact zone.

Comments:
One isolated high range gold anomaly,not associated with anomalous trace or base metal values.

Recommendations:
None.Applies also to no. 96 Granheim.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Granheim No: 90 Size:1.0 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo

:Øko Kart DN 177 I,III

Pegged:~~yes---No~~ Partly Claim retained: yes/ No

Stream length 0.5 km/ Drainage area:1.0km^2

Original sample point (33 ppb Au) resampled: ~~Yes-No~~

Follow up team: TK/HK Duration:0.5 days

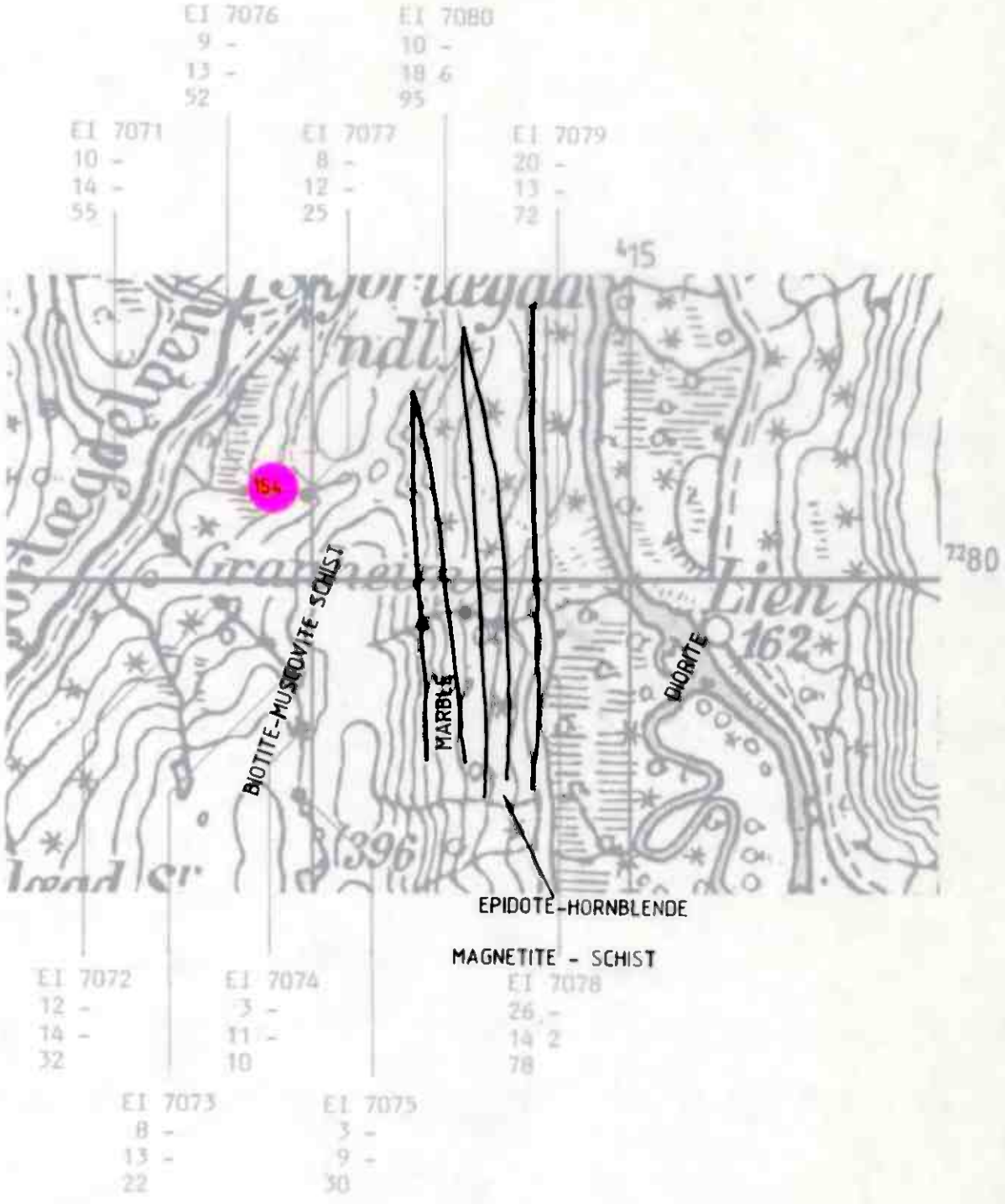
Nos.of follow up sample EI 7078- EI 7080

Description of drainage system:
Stream originates in a bog, descending partly over bedrock,with a steep slope at lowermost levels.Seepage and possible contamination from bank along length of stream.

Geology:
Heavy overburden.Muscovite rich micaschist are outcropping in the streambed.Large boulders of pegmatite and amphibolite at lower levels.

Comments:
One isolated high range gold anomaly,not associated with anomalous trace or base metal values.

Recommendations:
None.Applies also to no. 165 Taaliti.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 90+165 GRANHEIM +
Scale 1:20.000 TAALITI

96 GRANHEIM
165 TAALITI

VENESTA

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Almosen No: 21 Size:6.5 km^2

Claim location:Map sheets 1826 III Vevelstad

1826 II Bitera

:Air Photo F 011,012,013

DJ 179 I,II

Pegged: Yes-No Partly Claim retained: yes/ No

Stream length 11.0km/ Drainage area:9.0 km^2

Original sample points(199,191ppb Au) resampled:Yes/No

Follow up team: AS/BS Duration:1.0 days

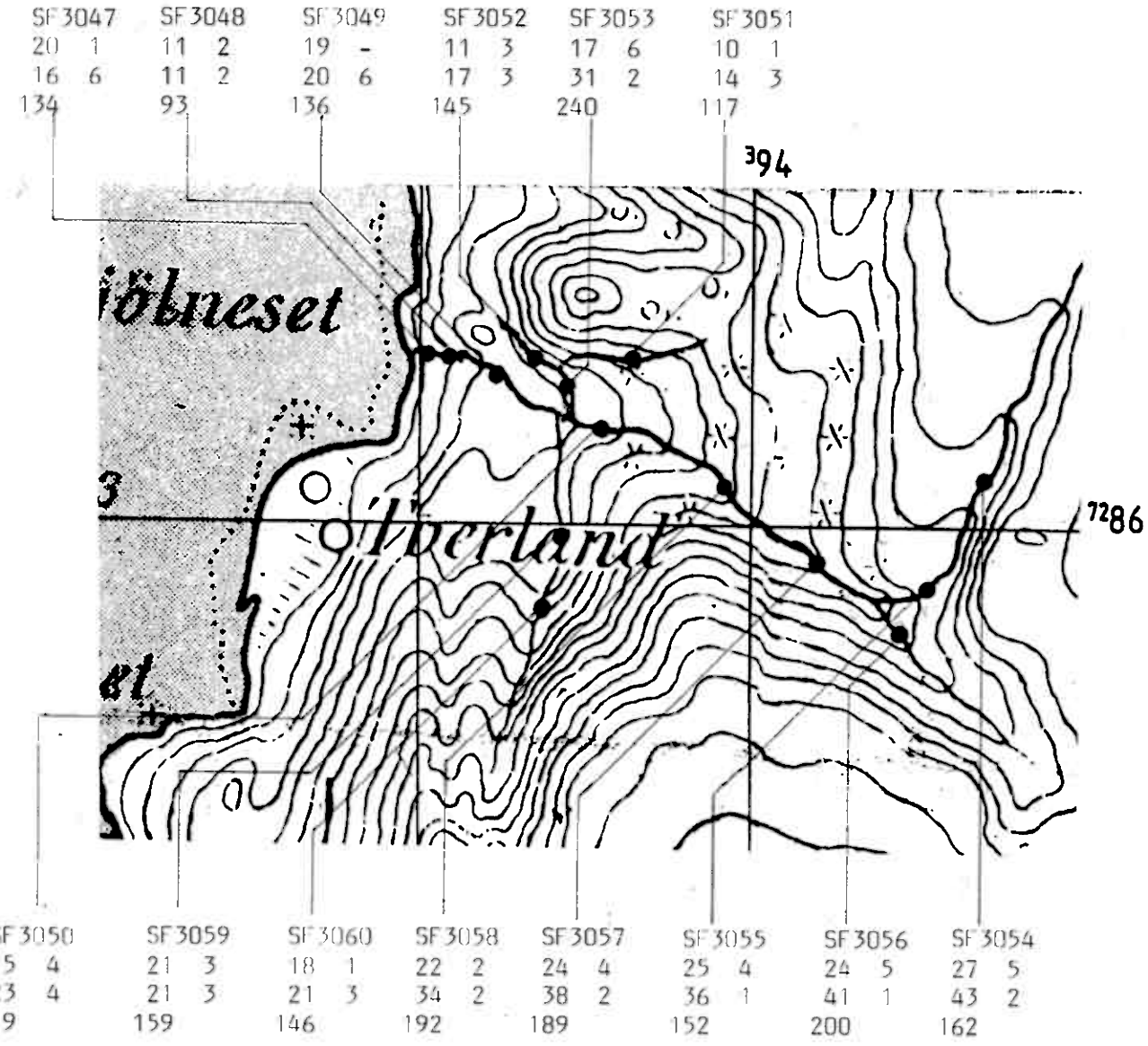
Nos.of follow up samples SF 3047 & SF 3080

Description of drainage system:
Lower (i.e. western) part of sampled stream falls steeply to the coast to ~100-150 m above sea level, to flat area of partly boggy terrain. Two tributaries join the mainstream in this area. The one from the south (A) and the other from the north (B). The upper part (i.e. east) of the sampled stream runs in steep gorge. The main stream was sampled to a point 310 m above sea level very little overburden in the upper part of the stream system. (See sketch map).

Geology:
The rock type observed in the area was mica schist/gneiss. In the western part up to 20% of porphyritic-granodiorite was observed as irregular dykes parallel to foliation. Leucocratic fine-medium grained granitic dykes were observed in the whole area. (dm-m scale ~1dyke/25m). The dykes are discordant to foliation and only very slightly to undeformed. At the eastern end of tributary B at sample point SF304 boulders of marble were observed. The foliation in the western part has a strike of 170^{o}-10^{o}. Whilst the strike of the foliation in the eastern steep part is 80^{o}-100^{o}. Stilbite filling of joints mm scale observed at sample points 3054-56.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 21 ALMOSEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: S.Vesterdalselven No:31 Size:1.0 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo /

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: yes/ No

Stream length: 2.0km Drainage area:3.0 km^2

Original sample point(25 ppb Au) resampled:~~Yes~~No

Follow up team: OK/GT Duration:1.0 days

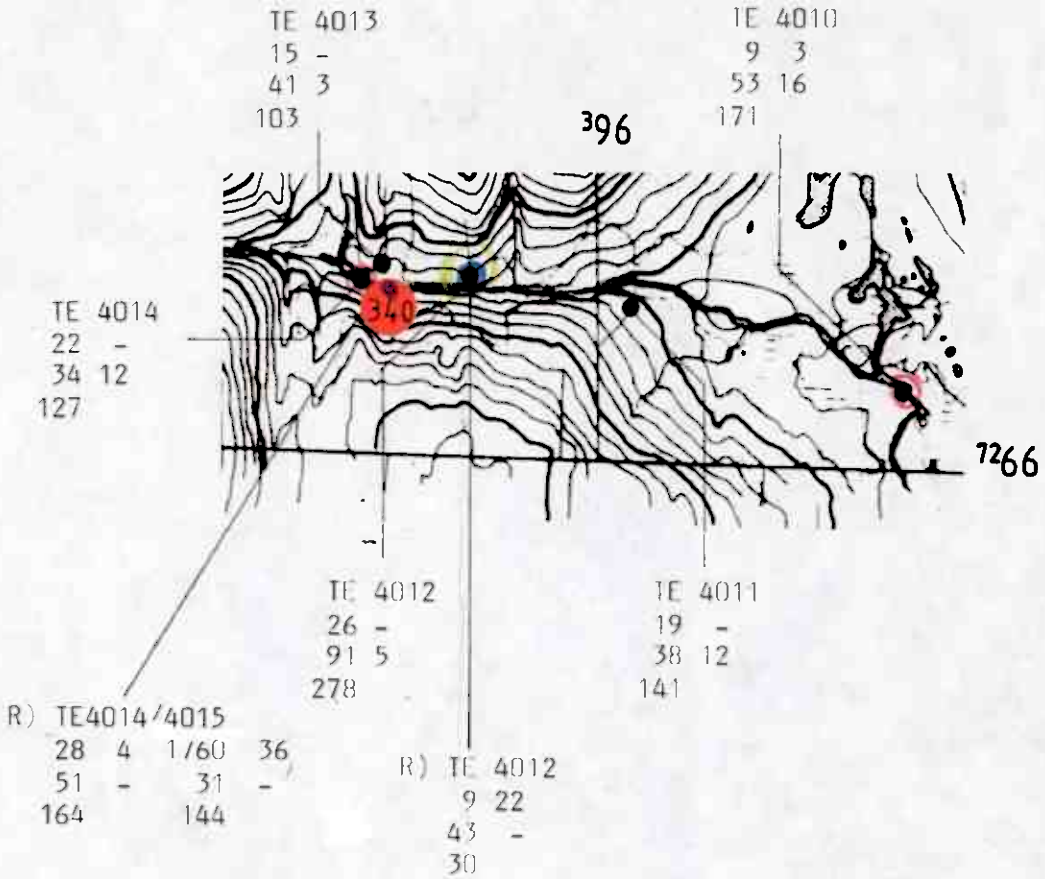
Nos.of follow up samples: TE 4010 - TE 4014

Description of drainage system:
The stream follows a steep sided east -west trending valley. Tributary valleys run north - south with near vertical walls.East of U 96000 the stream bed widenes and outcrops are sparse.

Regional Geology:
The area is dominated by granodiorite.In addition mica-schists,marbles and greenish metasediments(skarn)were found.The general strike of the metasedimentary layers and rafts within the granodiorite is north-south.The metasediments vary in width from 1-25m and the marbles often form detached pods and lenses,elongated along strike.Granodioritic veining in the metasediments is comon,a well a stilbite alteration of the intrusives.Rock samples TE 4012,4014 and 4015 were collected to test mineralisation and/or alteration found.Sample TE 4015 returned with 340 ppb Au,1760 ppm Cu and 35 ppm As.This sample was collected from a 1-3 dm wide sulfide bearing ,fine grained greenish rock at the contact between granodiorite and marble(likely to be a metamorphic skarn).The mineralisation is crosscut at right angle by a 1 m wide north-south trending alteration zone.The alteration product is a crumbly,pale red material (stilbite)and was sampled separately(TE 4014).This sample returned without detectable Au.

Comments:
Anomalous rock sample was collected from outside the claimed area! No gold anomalies detected in stream sediments.

Recommendations for further follow up:
Bulk sampling of the mineralization,local geology/lithogeochemistry.



R) Denotes rock samples

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 31 S. VESTERDALSELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Rubben No:29 Size:0.5 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo 5575 H 14/

:Oko Kart

Pegged:~~Yes~~-No Partly Claim retained: yes /No

Stream length: 0.5km Drainage area:0.5 km^2

Original sample point(96 ppb Au) resampled:~~Yes~~No

Follow up team: AK/CR Duration:1.0 days

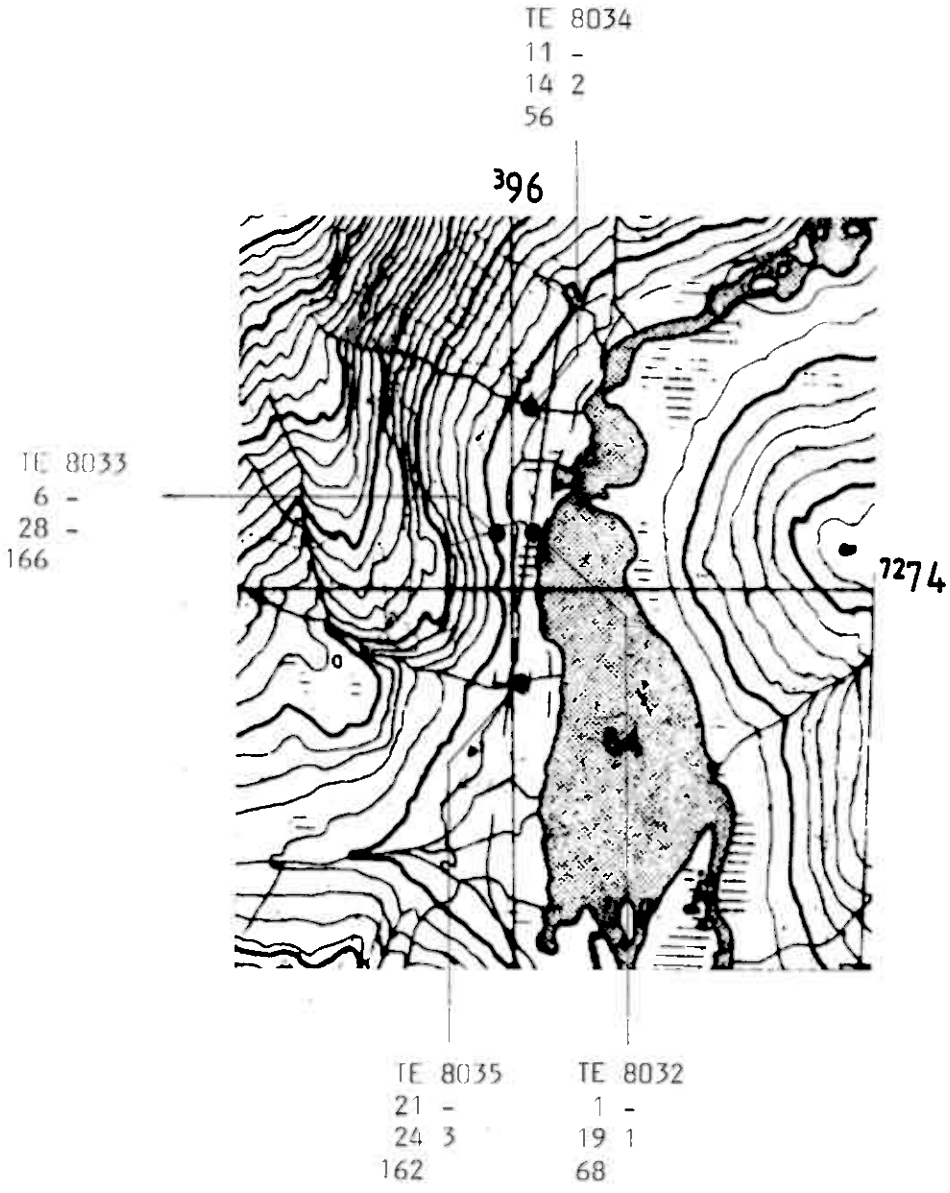
Nos.of follow up samples: TE 8032 - TE 8035

Description of drainage system:
The stream emerges from a seepage in a boulderfield,some 800 m west of the lake.The uppermost slope is moderate with forrest.Towards the lake the slope angle declines and the overburden becomes boggy.Overburden coverage is persistent throughout the drainage system,and clay was observed in parts of the stream bed.

Regional Geology:
No outcrops were seen along the stream.Boulders consist of granodiorite(partly with weak stilbite alteration) and mica schist.Looking from the helicopter it was evident that the main valley was built up from the metasediments whereas towards west and at higher altitudes the granodiorite predominates.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 29 RUBBEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Nedre Kvanlivatn No: 23 Size:4.5 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo F 012,013,014

:Okd Kart DK 180 III

Pegged: Yes-No-Partly Claim retained: yes/ No

Stream length 7.0km/ Drainage area:8.0 km^2

Original sample point (199 ppb Au) resampled:Yes No

Follow up team: AS/BS Duration:2.0 days

Nos.of follow up samples BF 3026 - BF 3046

BF 3001 - BF 3017

Description of drainage system:
The drainage system comprises a main stream with a general east-west direction. Four tributaries to the north of the main stream with an orientation north-south were sampled. To the south of the main stream a stream system (A) parallel to the main stream was sampled. The lower (i.e. western) 1km of the main stream and the two tributaries in the western part (B+C) run in creeks. Often very narrow with rapids and small water falls. The overburden is local and thin. Most of the area is barren rock with sparse vegetation at higher altitudes. The creeks are often infilled with overgrown boulders. Between 1-2 km upstream from the coast the main stream and tributary system A runs in flat area. Here the main stream is strongly meandering and in places consists of a braided stream system. Tributary system A passes through a boggy area in the western part and drains a small lake further to the west. 3 small streams run into the small lake from the south and east. The tributary system drains the eastern slope of Hogfjeld.

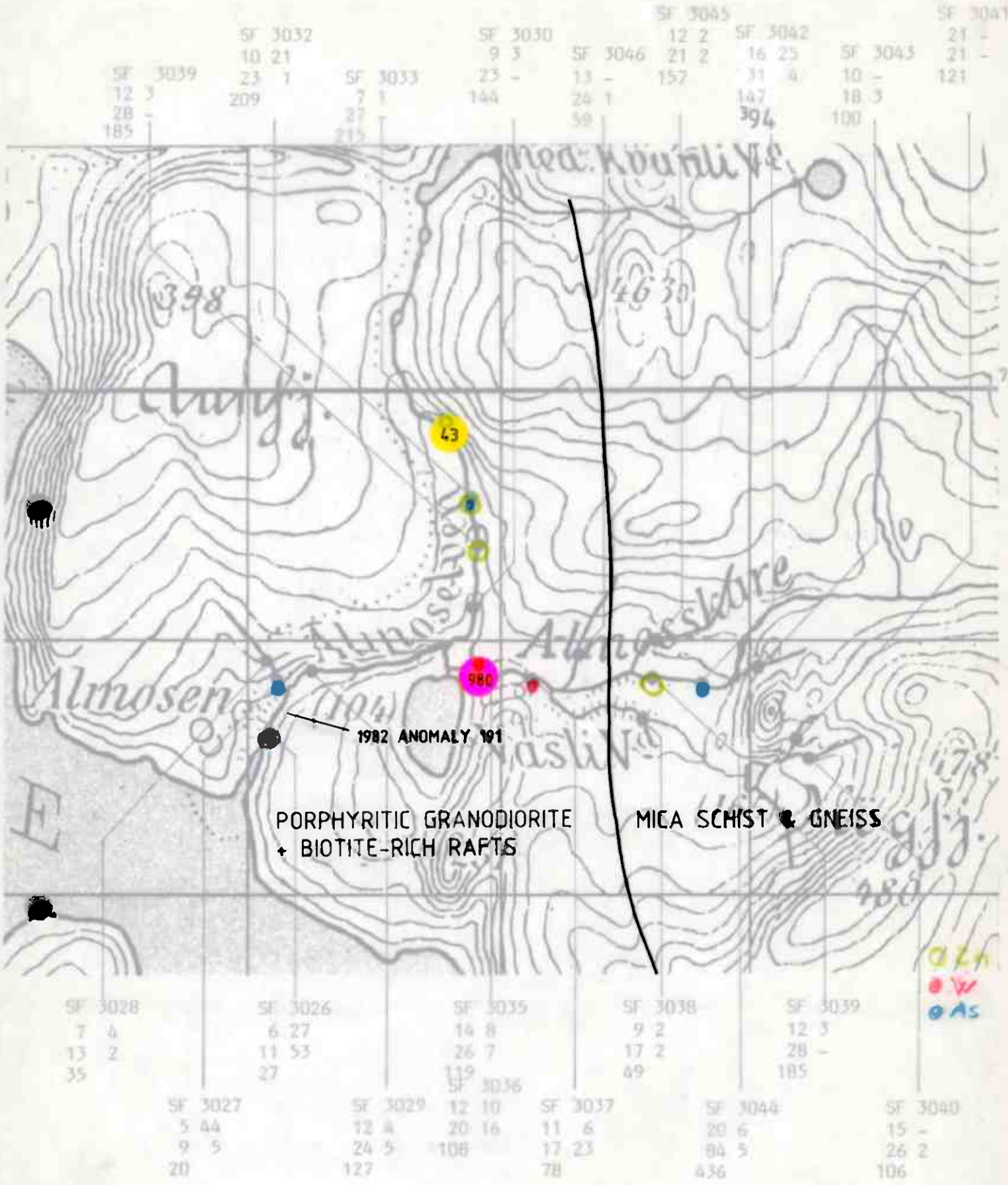
The difference in drainage pattern between the western and eastern part of the sampled area, is mainly governed by the difference in lithology in the two parts. The rock type being porphyrite granodiorite in the western part and metasediments (mainly mica-schist) in the eastern part. The N-S orientation of the tributaries B and C is governed by major N-S striking fracture zones.

Geology:

Strong alteration of the porphyritic granodiorite occurs in the western part of the area, in 0.1 to 10 m broad NW-SE nd N-S trending zones. This consists of chloritization, sericitization and epidotization and the introduction of k-feldspar and quartz. Thin jasperadal silica and stilbite occurs as veinlets. No sulphides were observed (Rock samples SF 3003-3008).

Comments:
Two anomalies detected : 1 (very) high range =980 ppb, one medium-range).

Recommendations:
Low-priority area :geology/lithogeochemistry.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 23 KVANLIVATN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Hoiholm No61 Size:1.25 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo 5575 G 010

:Oko Kart DH 178 I

Pegged: Yes-No---Partly Claim retained: Yes No

Stream length 1.5km Drainage area: 1,0 km^2

Original sample points(43 ppb Au) resampled:Yes-No

Follow up team: CR/AK Duration:1.0day

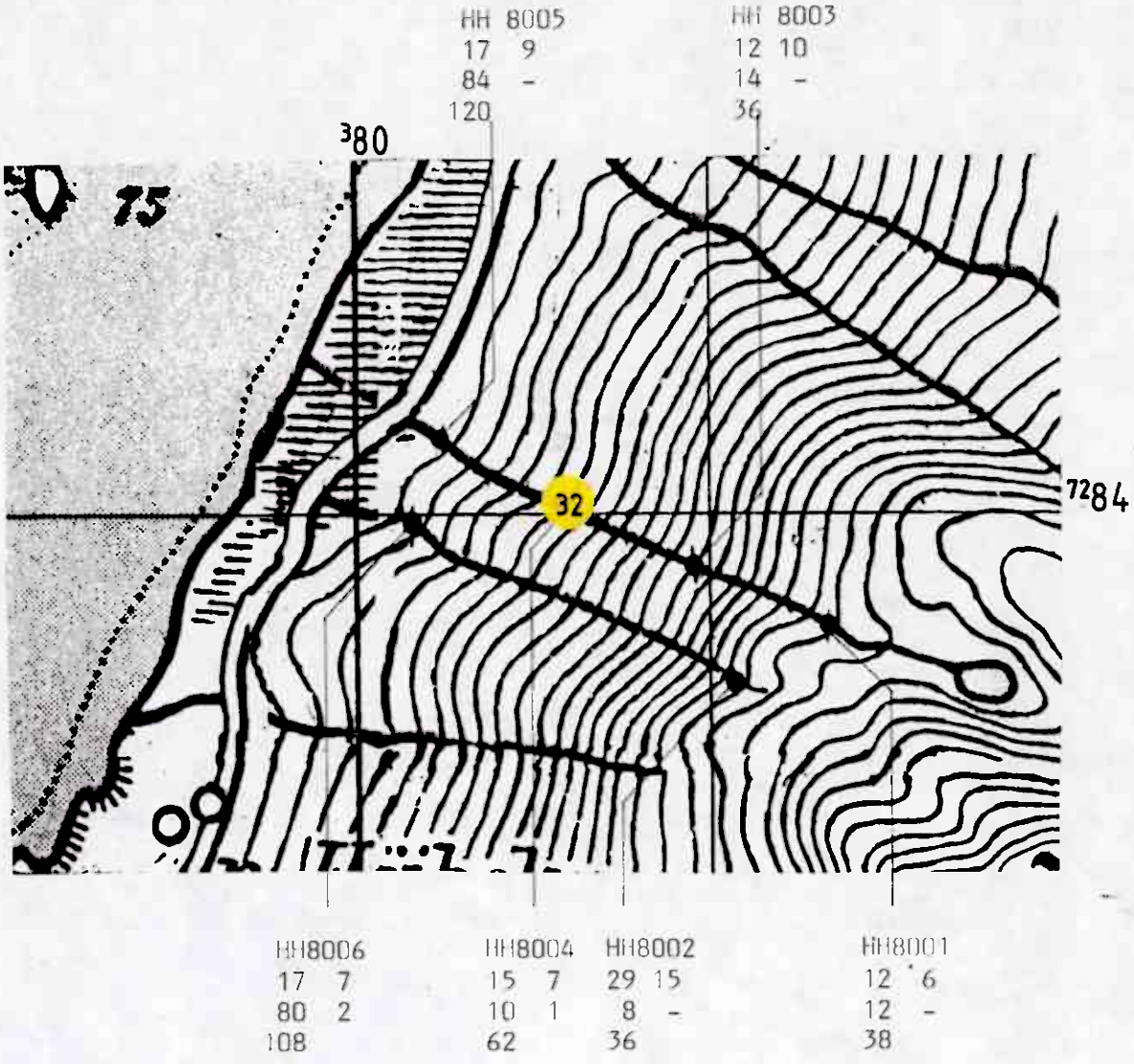
Nos.of follow up samples : HH 8001 - HH 8006

Description of drainage system:
The system has its sources in a lake and on well exposed slopes,flowing through talus and bedrock to a plateau,thence again over bedrock to another talus field before draining into a bog.

Geology:
In the sampled area two rock types alternate:a banded calc-silicate schist and an intrusive porphyritic granodiorite.The granodiorite seems to be unfoliated with evenly distributed phenocrysts of up to 3x7 cm.The schist is very fine grained and varying in colour (creme,greenish,reddish,grey and brown).In the contact zones between the two rock types,sulfides have been recognized (pyrite,pyrrhotite)

Comments:
One medium range gold anomaly,but overall high arsenic values.Relatively few samples collected so far.

Recommendations:
A low priority follow up target,the source of the high arsenic anomalies,known as the best pathfinder for gold in the district should be investigated.Care should be taken to distinguish the petrography of the variably coloured metasediments.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 61 HOIHOLM
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Kilviken No: 22 Size:0.5 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo F 011,012,013

:Oko Kart DJ 179 I,II

Pegged: Yes No-Partly Claim retained: yes/ No

Stream length 0.05km/ Drainage area:0.02 km^2

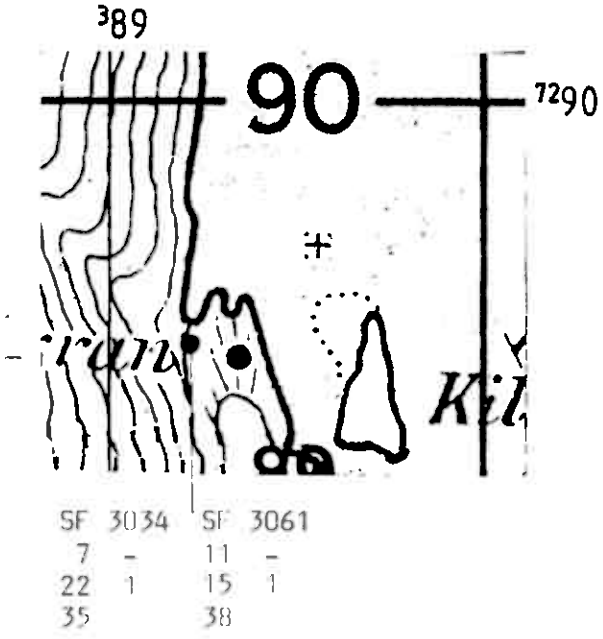
Original sample points(3/37ppb Au) resampled:YesNo

Follow up team: AS/BS Duration:0.5 days

Nos.of follow up samples SF 3034 & SF 3061

Description of drainage system:
The original sample (i.e. no. 160028,(1983)) is taken in a very small stream (seepage), which may be followed for approx. 100m inland. The sediment in the stream consists mainly of light-grey clay. The drainage area is approx. 100x200m in the immediate vicinity of the stream.

Geology:
The area in the immediate vicinity of the stream (i.e. within 50-100 m of the stream) consists of marble interbanded with dm scale silica, sulphide (pyrh.,pyr)rich bands. The marble is enclosed by porphyritic granodiorite. To the west the contact is clearly tectonic with strong foliation of the marble parallel to the contact between granodiorite and marble (170^0-180^0/80^0E). No development of skarn minerals. To the east the contact is clearly intrusive, with development of an up to 5m broad skarn mineral rich zone. Coarse-grained stilpnomelane, vesulianite and not identified green mineral, observed in dm broad folded bands in the marble. The silica rich bands are most numerous in the eastern part of the marble (i.e. towards the skarn contact). Sulphides in the silica rich bands are pyrrhotite and small amounts of pyrite. Both minerals are found as small (<1mm) disseminated grains and as larger (up to 0.5x1cm) aggregates. The silica rich bands can be followed for up to several tens of meters. A rock chip sample (0300SF3001) has been taken in the most sulfide rich part of the silicate rich bands, 0-5m from the eastern contact between the marble and the porphyritic granodiorite. The skarn contact is intersected by dm thick fine to medium-grained granitic dykes, which are undeformed.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 22 KILVIKEN
Scale 1:20.000

Comments:
No Au anomalies detected.

Recommendations:
None.

STOCKMARKET

ANOMALY FOLLOW UP : HELGELAND PROJECT 1983

Claim Name: Remfjeldet No 27 Size: 1.0 km^2

Claim location: Map sheet 1826 II Eitera

: Air Photo 5575 G 015

: Oko Kart DK 178 IV, 177 III

Pegged: Yes No Partly Claim retained: Yes No

Stream length 0.6km Drainage area: 2.0 km^2

Original sample point (30 ppb Au) resampled: Yes-No

Follow up team: AS/BS Duration: 0,5day

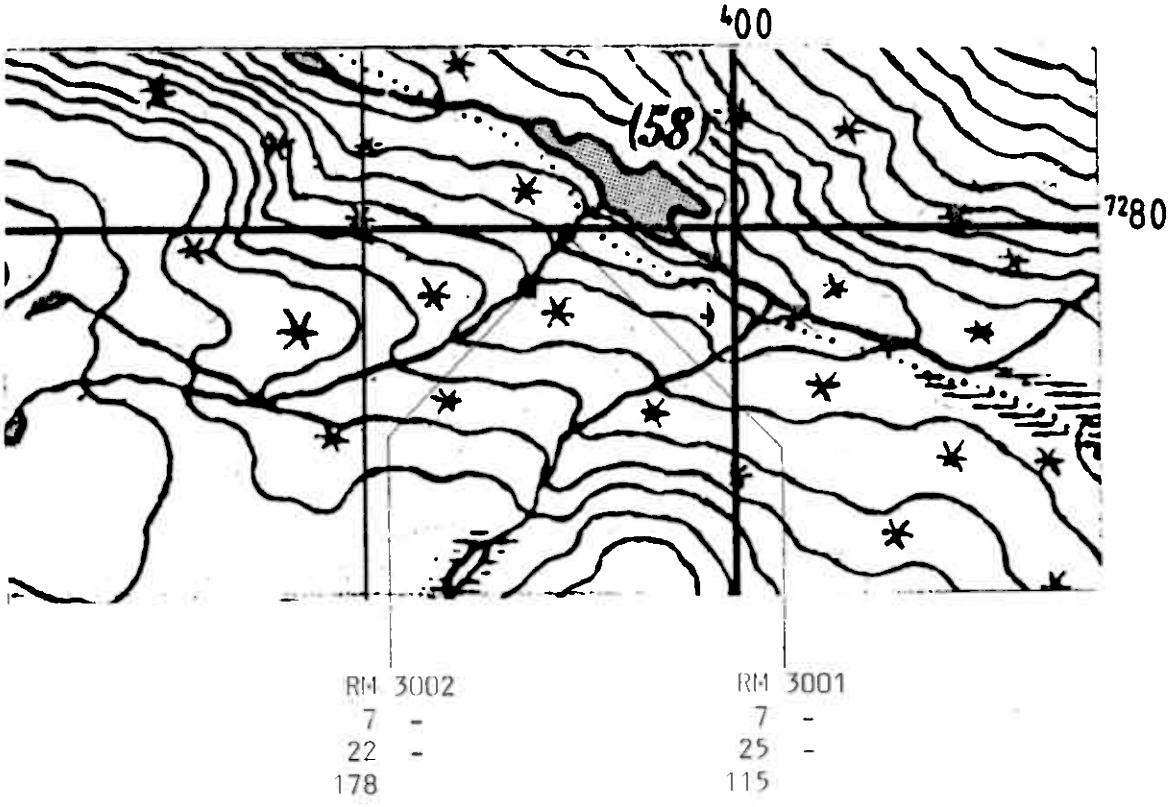
Nos. of follow up sample : RM 3001 - RM 3002

Description of drainage system:
Stream may be followed approx. 600m WSW of small lake. Lower part adjacent to lake runs in flat boggy terrain, upper part in narrow gorge infilled with large overgrown boulders, under which the stream disappears.

Geology:
Area is dominated by a massive, homogeneous, medium-grained granodiorite, crosscut by pegmatite veins. Very few boulders with stilbite on joint surfaces were observed.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 27 REMFJELDET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: N.Vesterelven No:28 Size:1.5 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo /

:Oko Kart DK 175 II

Pegged:Yes ~~No-Partly~~ Claim retained: yes /No

Stream length: 0.8km Drainage area:0.3 km^2

Original sample point(9 ppb Au) resampled:Yes~~No~~

Follow up team: OK/GT Duration:2.0 days

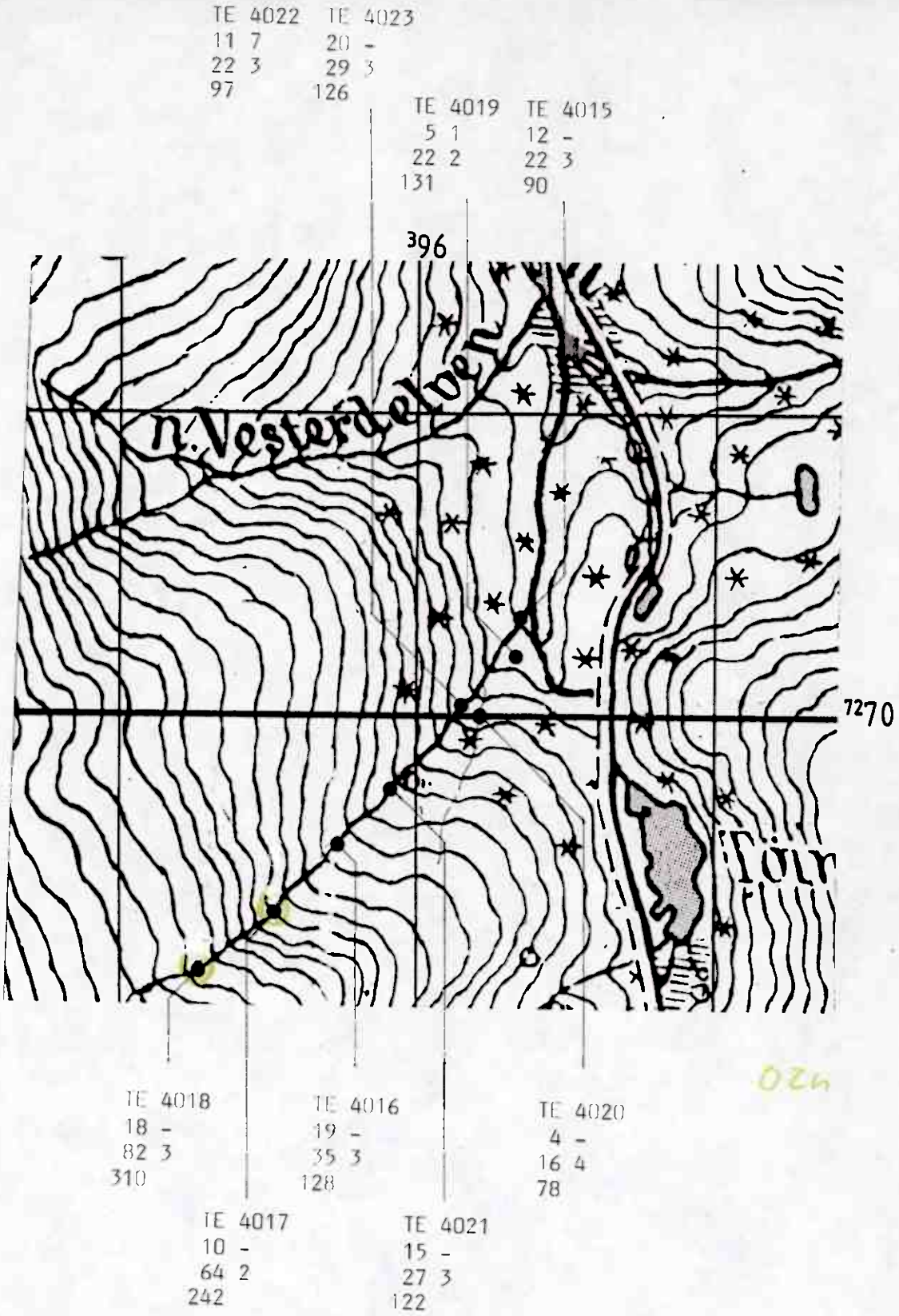
Nos.of follow up samples: TE 4015 - TE 4023

Description of drainage system:
The stream,with one tributary in the lower part,drains the eastern slope of Laksmarkelvdalen.Over the lower 300 m the stream runs with moderate slope angles through forrest,partly also on overgrown talus.At higher altitudes the slope angle becomes very steep and the stream passes through a gorge into more moderate slopes again.

Geology:
The area is dominated by granodiorite.In addition mica-schists,marbles and greenish metasediments(skarn)were found.The granodiorite is greatly affected bysilbite alteration along north-south trending fissures.Rock sample 0300 TE 4016 was taken from this alteration.Upslope of stream sed.samples TE 4022/23 and TE 4021 a sulfide bearing biotite schist was detected.These horizons were between 0.4 and 4.0 meter wide.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 28 N. VESTERELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Rundtjernet No:30 Size:o.75 km^2

Claim location:Map sheet 1826 II Eitera

:Air Photo /

:Oko KartDK 175 IV

Pegged:Yes ~~No-Partly~~ Claim retained: yes /No

Stream length: 2.8km Drainage area:2.0 km^2

Original sample point(40 ppb Au) resampled:~~Yes~~No

Follow up team: OK/GT Duration:1.0 day

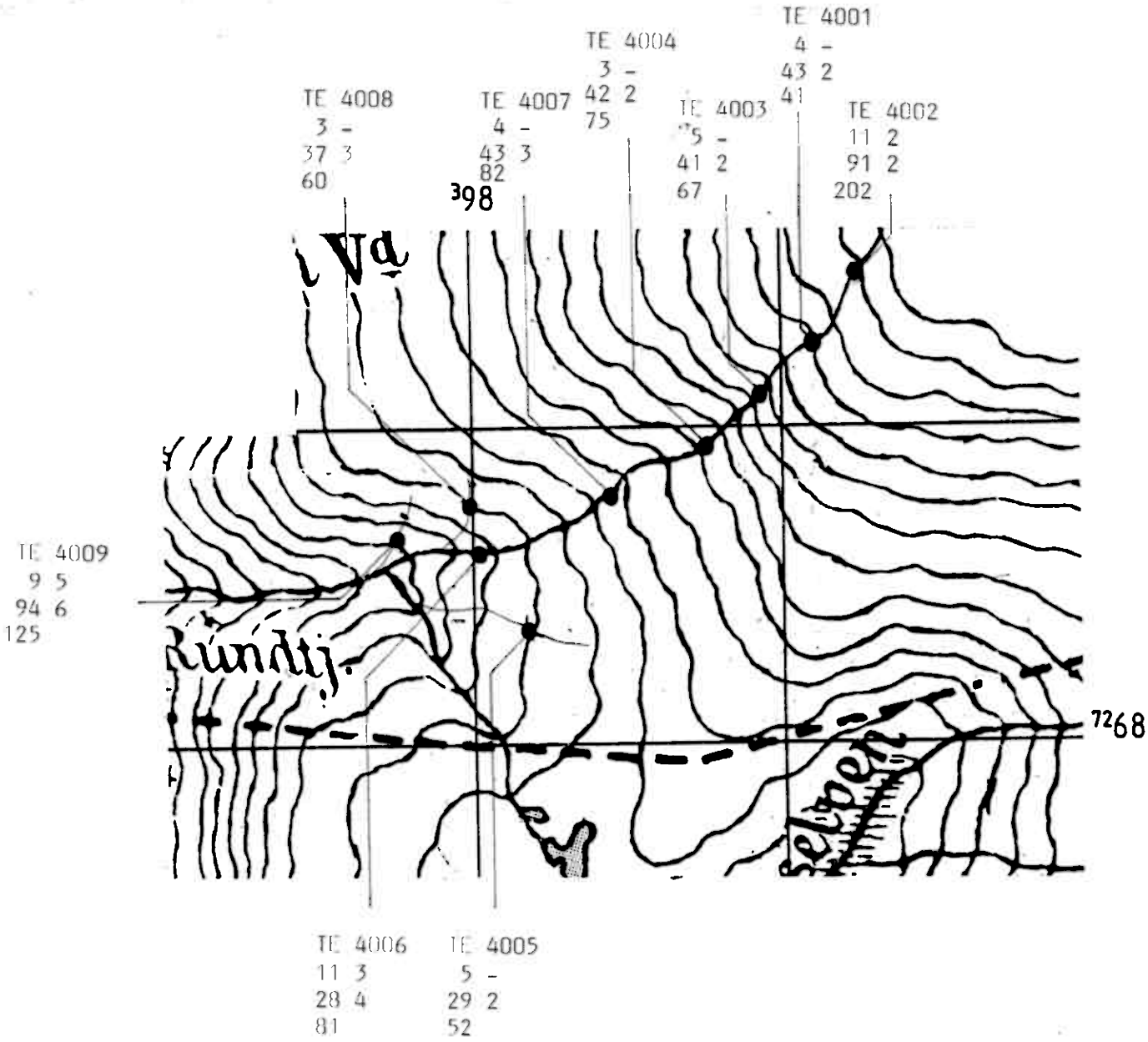
Nos.of follow up samples: TE 4001 - TE 4009

Description of drainage system:
The stream system drains the western slopes of the Osterdalsfjeldet.The area is sparsely vegetated, streams running on bedrock carry only little active sediment.

Geology:
The area is dominated by porphyritic granodiorite with intense acid veining. Locally inclusions of a basic rock type,marbles,biotite schists and greenish metasediments(skarns)were found.Metasediments and skarns are concentrated around sample points TE 4006 and TE 4008.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 30 RUNDTJERN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Andalsvagen 'A'No 54 Size:1.0 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo H 009,010,011

:Oko Kart DH 178 I, 177 III,IV

Pegged:Yes No Partly Claim retained: Yes No

Stream length 2.0km Drainage area: 2.0 km^2

Original sample point(60ppb Au) resampled:Yes No

Follow up team: CR/AK Duration:1.0 day

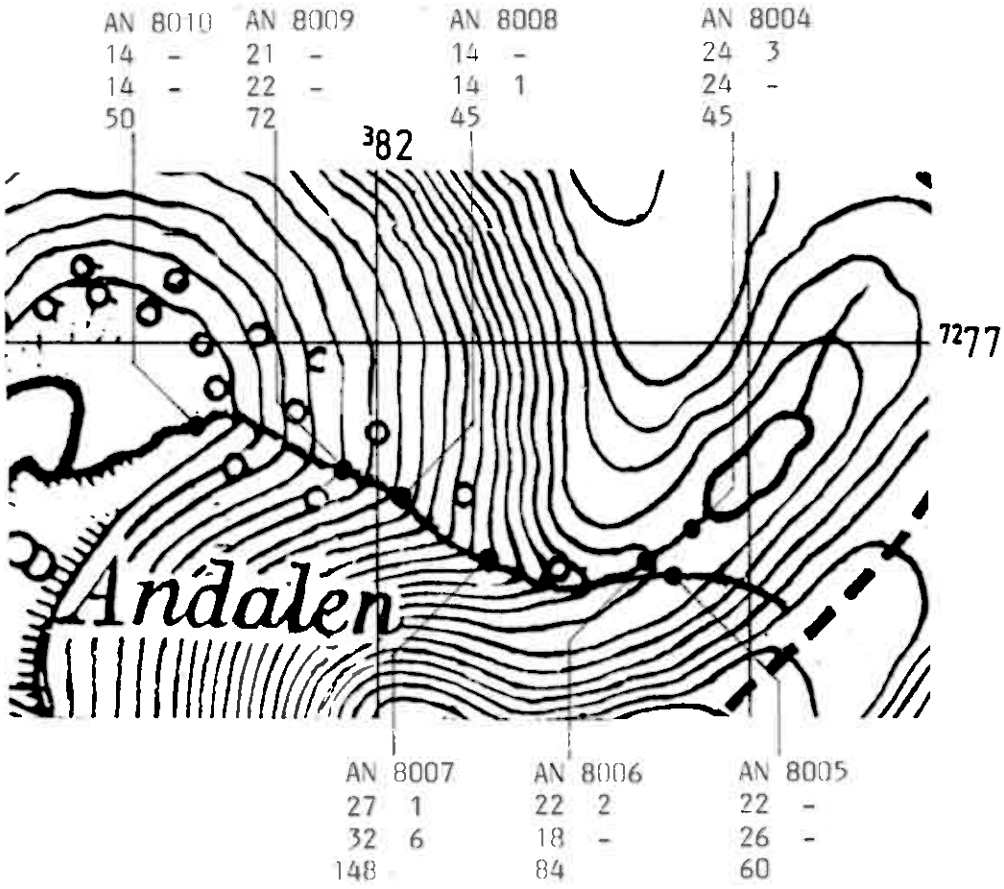
Nos.of follow up samples : AN 8004 - AN 8010

Description of drainage system:
Rises in a lake and flows via a steep-sided cleft to the valley bottom which is covered in alluvial overburden and densely vegetated.

Geology:
Headwater area consists of porphyritic diorite. Joints in the cleft zone of the stream are filled with stilbite. Pyrite-stilbite was also observed in a cleft of the uppermost tributary. The lower valley is talus covered.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 54 ANDALSVÅGEN A
Scale 1:20.000

ANOMALY FOLLOW UP : HELGELAND PROJECT 1983

Claim Name:Andalsvagen 'B' No 55 Size:1.0 km^2

Claim location:Map sheet 1826 III Vevelstad

:Air Photo H 010,011

:Oko Kart DH 177 II,IV H 176 I

Pegged:Yes No Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0 km^2

Original sample point(341ppb Au) resampled:Yes No

Follow up team: CR/AK Duration:1.0 day

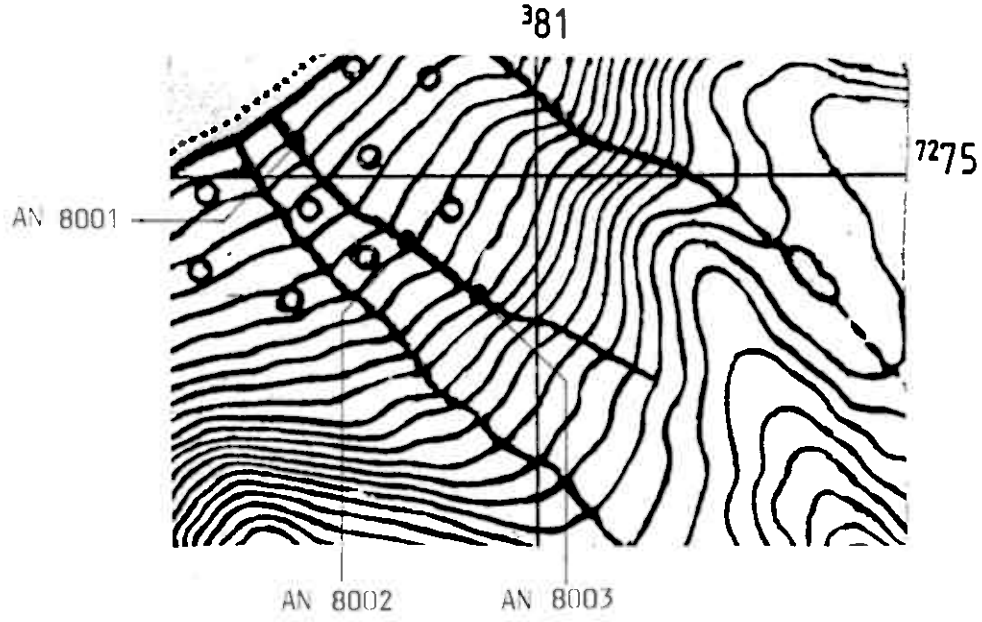
Nos.of follow up samples : AN 8001 - AN 8003

Description of drainage system:
Source in a steep bare slope, with several waterfalls, the rest of the valley being covered by deep overburden, the stream being braided. Abundant stream sediment.

Geology:
Porphyritic diorite in headwaters, lower valley having no exposure (diorite boulder field).

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 55 ANDALSVÅGEN B
Scale 1:20.000

VELFJORD

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Vasbotnet No:148 Size:0.75 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DF 172II; G 172 I

Fenced:~~Yes~~ No ~~Partly~~ Claim retained: Yes No

Stream length 1.25km Drainage area: 2.0 km^2

Original sample point (21,18ppb Au) resampled:~~Yes~~ No

Follow up team: AS/KA Duration: 0.5day

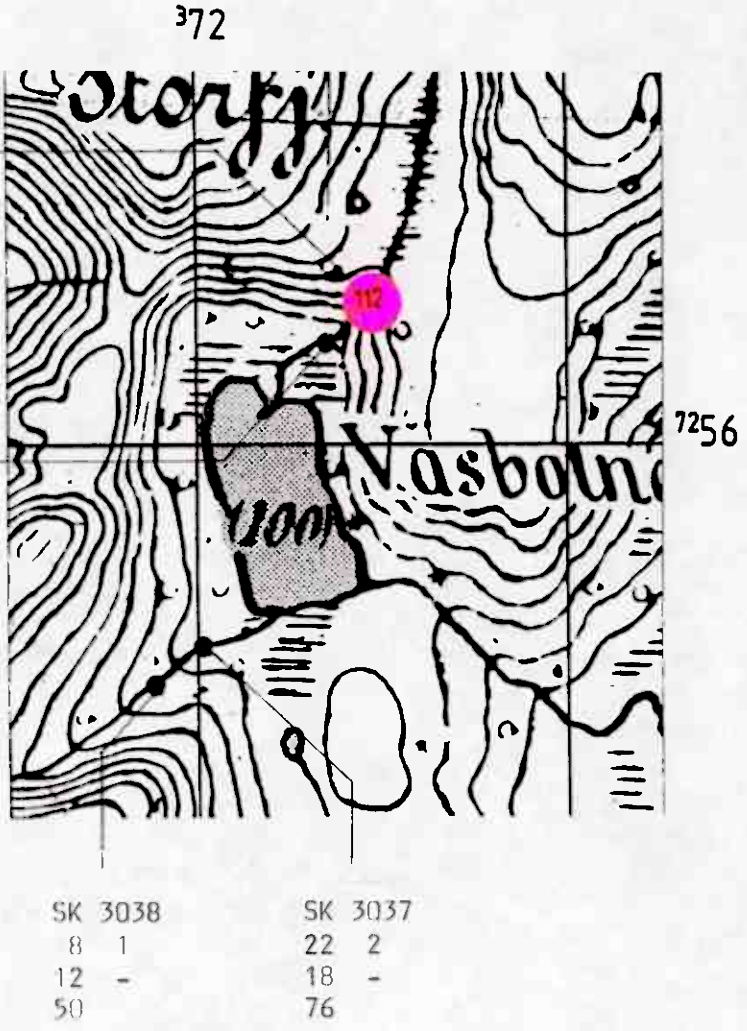
Nos.of follow up sample : SK 3035 - SK 3038

Description of drainage system:
Stream drains bog-filled flat bottomed valley, thence descending over a steep scarp to marsh and to Vasbotnet.

Geology:
Dominated by muscovite-biotite schist with a blue-green tint (?andalusite or kyanite bearing). Quartz occurs as veins, and lenses both concordant and discordant to schistosity. No sulphides recorded.

Comments:
One high-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 148 WASBOTNET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Raakhallen No:43 Size:1.25 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart

Pegged:~~Yes~~-No Partly Claim retained: yes /No

Stream length: 2.5km Drainage area:2.0km^2

Original sample point(8 ppb Au) resampled:~~Yes~~No

Follow up team: CR/AK Duration:1.0 days

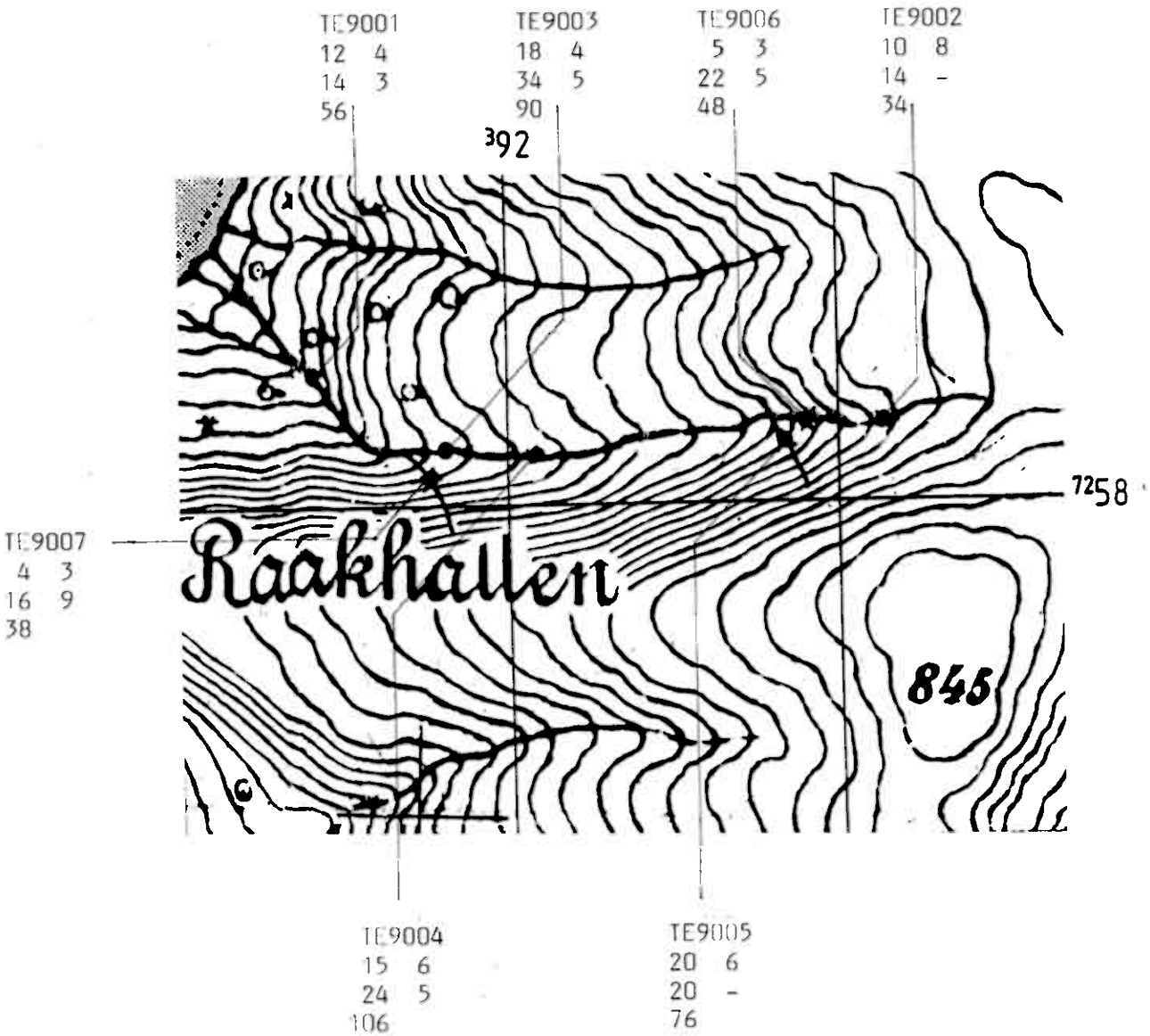
Nos.of follow up samples: TE 9001 - TE 9007
Description of drainage system:

The source of the stream lies on bedrock.It continues over a plateau and descends via a cleft and a boulder field into an area with overburden and dense vegetation.

Geology:
Main lithology is a leucocratic,foliated gneiss.becoming increasingly more migmatitic towards east.At sample point 0333TE9006 mica schist was observed.Mineralization was not found.

Comments:
No gold anomaly detected.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 43 RAAKHALEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Bordvik No: 57 Size: 1.0 km^2

Claim location: Map sheet 1825 IV Velfjord

: Air Photo

: Oko Kart DH 172 I,II

Pegged: Yes No Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0km ^{2}

Original sample point (114ppb Au) resampled: Yes No

Follow up team: AS Duration: 0.5day

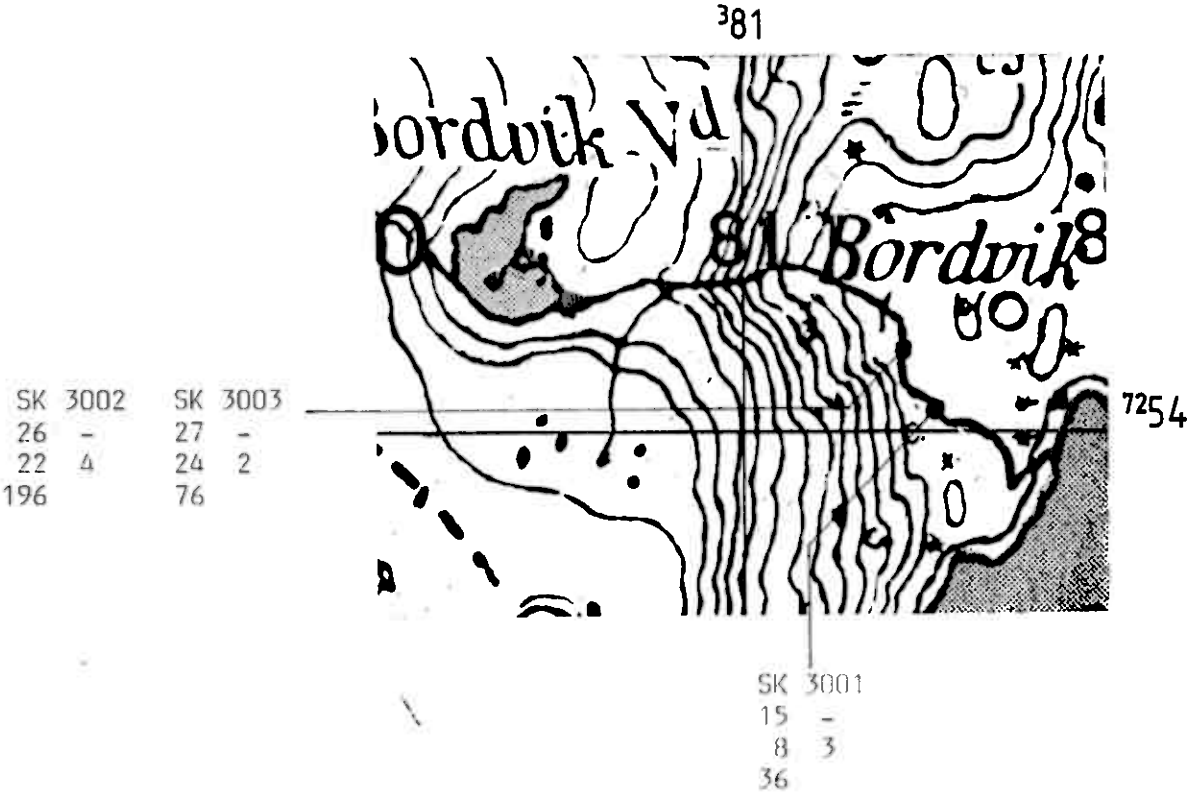
Nos.of follow-up samples : SK 3001 - SK 3003

Description of drainage system:
The drainage system consists of one stream, running through flat pastures, fields and boggy terrain in the lower part. To the west of this flat area the terrain rises very steeply and the stream flows down cliffs with small waterfalls and rapids. The original sample (190047) and this years duplicate samples (SK 3002/3) have been taken immediately below the very steep slope.

Geology:
Feldspar-quartz-biotite-(hornblend)-gneiss, granodiorite and marble were observed in the area.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 57 BORDVIK
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Jellemoen No: 14 Size: 2.0 km^2

Claim location: Map sheet 1825 IV Velfjord

: Air Photo

: Oko Kart DG 172 IV

Pegged: Yes No Partly Claim retained: Yes No

Stream length 1.5km Drainage area: 2.5 km^2

Original sample point (29ppb Au) resampled: Yes No

Follow up team: AS/KA Duration: 1.0 day

Nos.of follow-up sample : SK 3020 - SK 3026

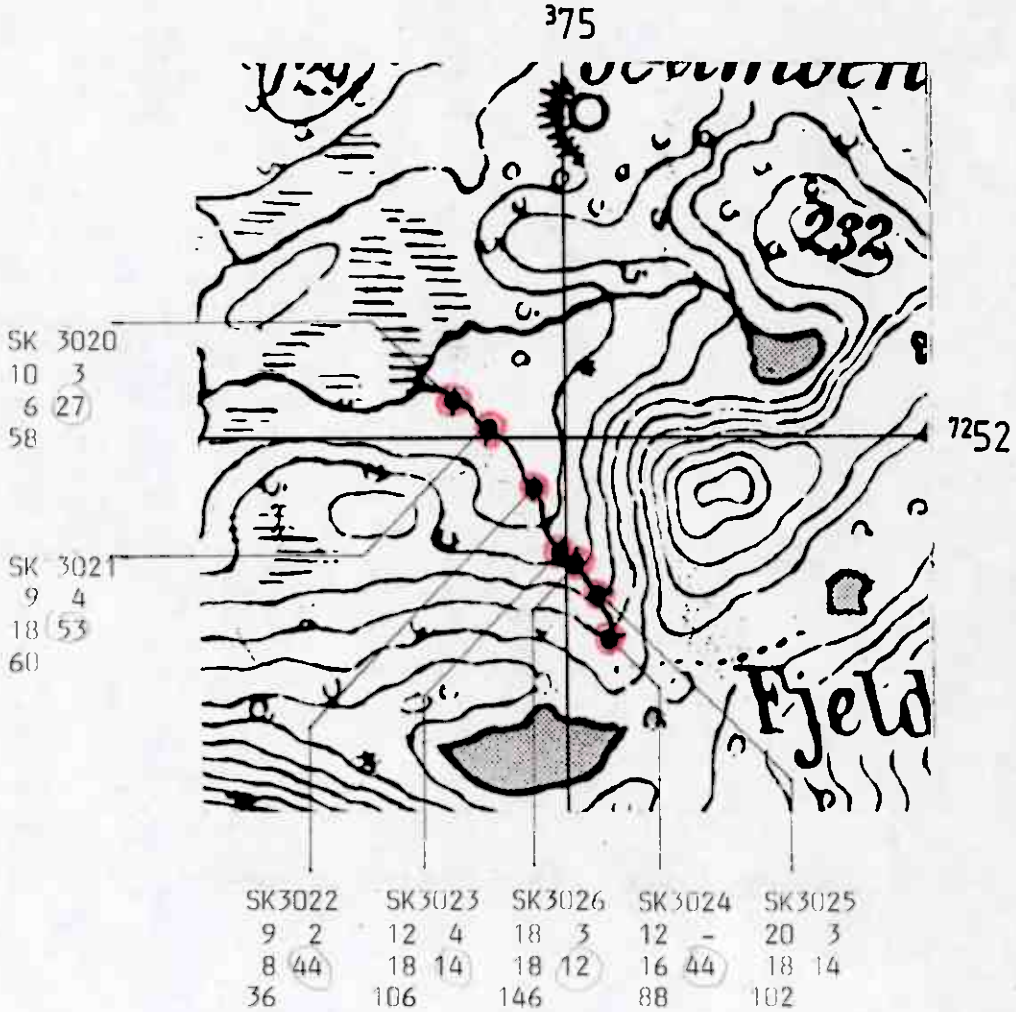
Description of drainage system:
Source a karst hole at geological contact, flowing over partly overgrown, steep boulder field to wide flat, marshy valley bottom with thick overburden.

Geology:
Headwaters in marble intruded by diorite. Boulder field of biotite gneiss and diorite, the former commonly being altered (sericitization, argillization, silicification with pyrite + pyrrhotite) near contacts with the diorite. Similar alteration observed in cliff faces (to 20 x 50m, trending 180°.

Comments:
No Au anomalies detected but high W and ubiquitous As.

Recommendations:
Detailed geology/lithogeochemistry.

OW



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 14 JELLEMOEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Grondalen No 45 Size: 2.0 km^2

Claim location: Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DH 173 III

Pegged: Yes-No ~~Partly~~ Claim retained: Yes No

Stream length 3.0km Drainage area: 3.0km^2

Original sample point (41ppb Au) resampled: ~~Yes~~ No

Follow up team: AS/TG/KA Duration: 1.0day

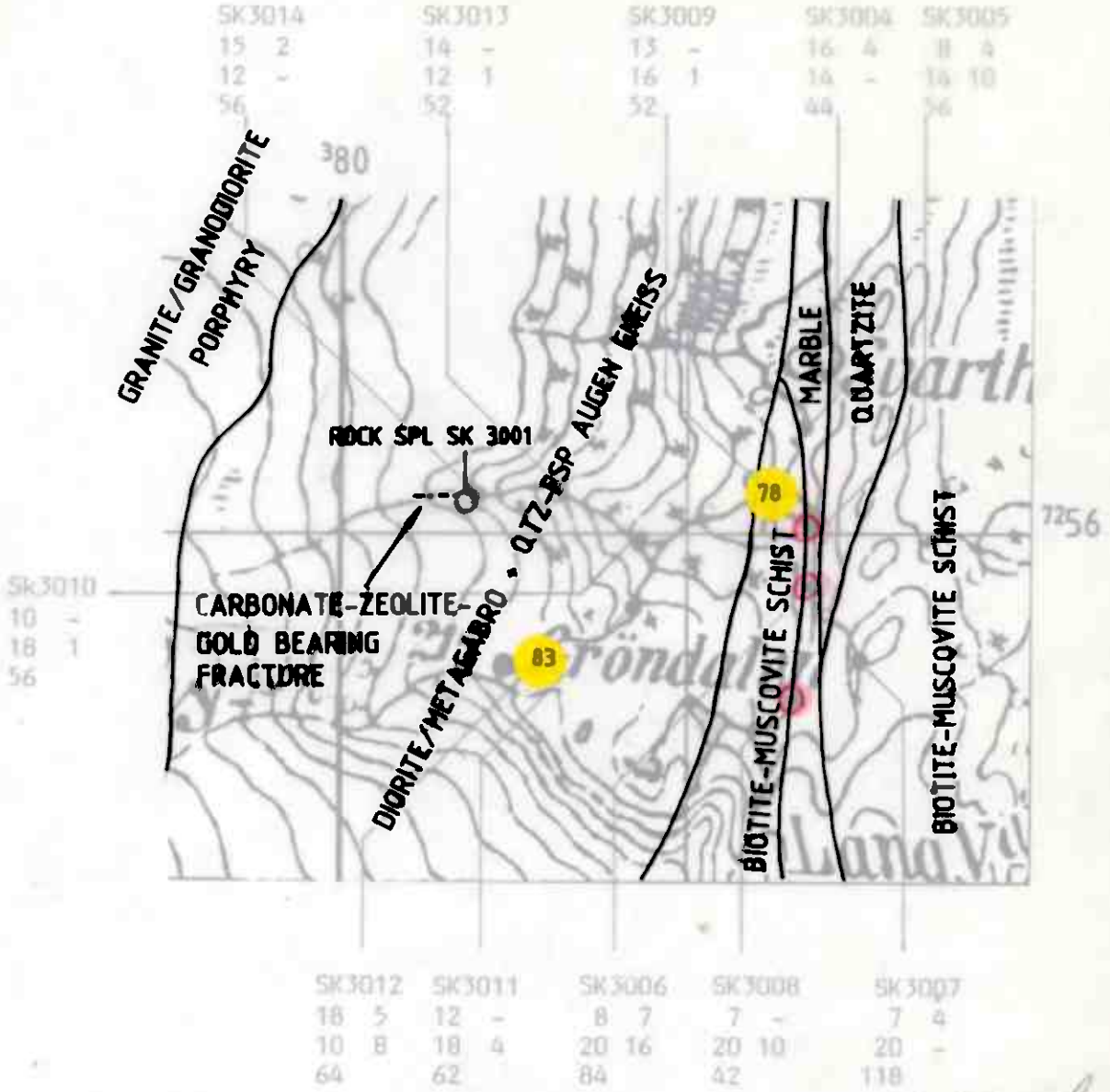
Nos.of follow-up samples : SK 3004 - SK 3014

Description of drainage system:
Rises in steep slopes and boulder screes, thence flowing via three tributaries through boggy areas with moderate overburden. These join to flow through pastureland.

Geology:
Biotite-muscovite schist containing a marble-quartzite-amphibolite package to the east. The majority of the catchment area is composed of a feldspar-quartz-biotite-(hornblend)-gneiss and diorite/metagabbro sequence which is intruded in the far west by a porphyritic granite/granodiorite (?related to the Skomovik granite). A quartz-zeolite-pyrrhotite-pyrite-filled fracture zone trending 090° (exposed over approx. 0.3x5.0m) was recorded in interbedded diorite porphyry and quartz-feldspar augen gneiss above sediment samples Sk 3013, 3014. (Rock sample SK 3001).

Comments:
Two medium-range Au anomalies detected. Rock sample SK 3001 returned with 2.2 g/t Au.

Recommendations:
A relatively high-priority target. Detailed geology/ lithogeochemistry and possible overburden sampling.



shatelaund
Shear zone ?
low dip
or
alt. in crosscutting
fracture zones ?

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 45 GRØNDALEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kvaerngroen No:150 Size:1.0 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DG 173 I,II,III

Pegged:~~Yes~~ No ~~Partly~~ Claim retained: Yes No

Stream length 2.5km Drainage area: 3.5km^2

Original sample point (5 ppb Au) resampled: Yes ~~No~~

Follow up team: AS/KA Duration: 1.0day

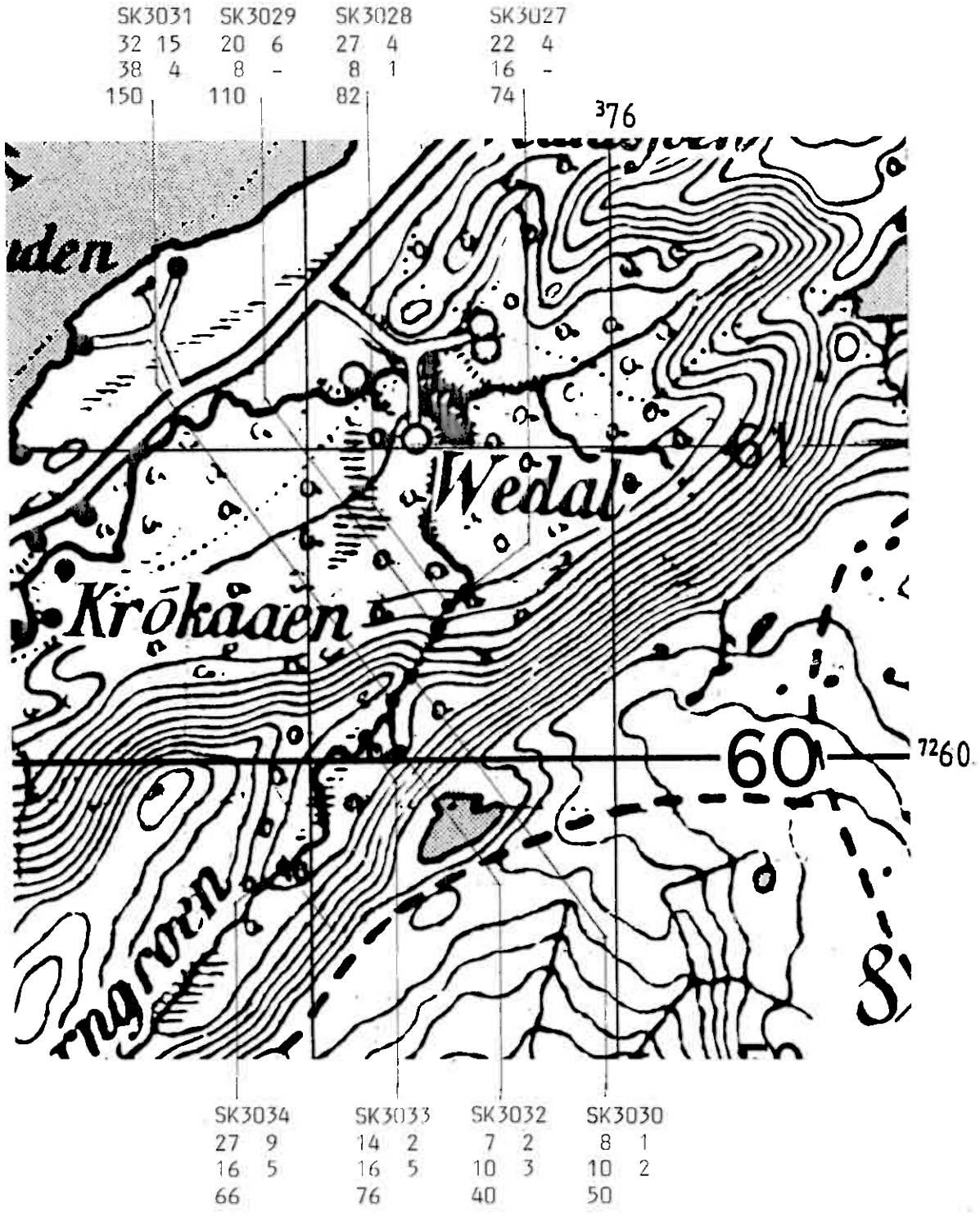
Nos.of follow-up sample : SK 3027 - SK 3034

Description of drainage system:
Source in a cave, thence flowing through flat marshland bound to the S. East by a steep cliff (1 tributary), thence over a scarp face via a waterfall. The stream then flows through a boulder scree onto land with common potential contanimants (denns, tractor traces,a quarry).

Geology:
Biotite-muscovite schist/gneiss with quartz intercalations and milky veins which locally carry pyrrhotite occur in the scarp face. Numerous boulders of marble were recorded, but their source was not found. Boulders of tourmaline-bearing granite (Skomoviken type) were also recorded as well as porphyritic granodiorite.

Comments:
No Au anomalies were detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 150 KVAERNGROEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Hatten No:47 Size:1.5 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DK 170 I

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 3.0km Drainage area: 2.0km^2

Original sample point (166ppb Au) resampled: Yes No

Follow up team: AS/BS Duration: 1.0day

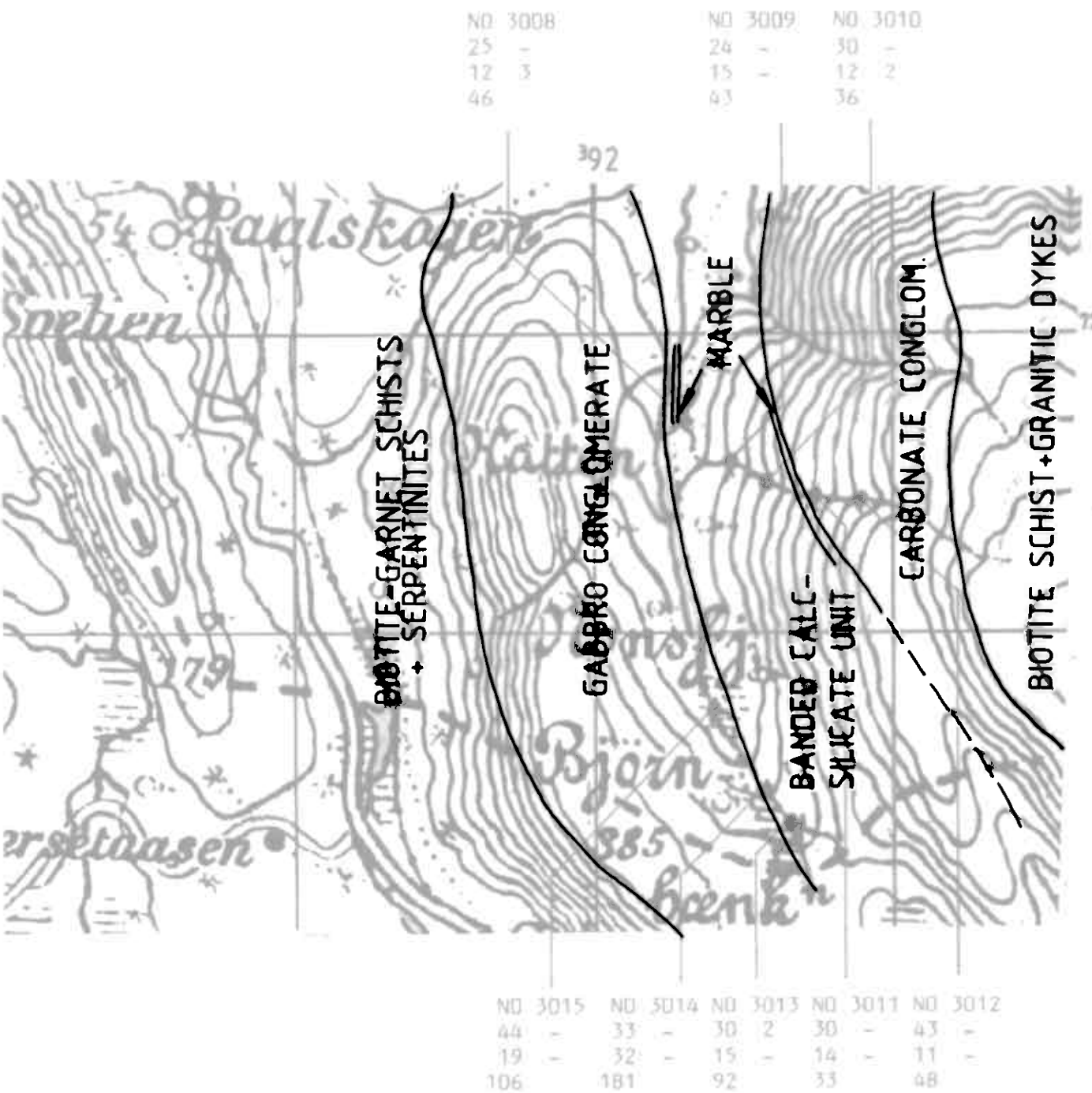
Nos.of follow-up samples : NO 3008 - NO 3015

Description of drainage system:
Two branches of system - 1)rising in a steep slope with thin overburden, flowing steeply down on bedrock via numerous waterfalls to a broad N-S valley with moderate overburden/rounded boulder fields but little exposed bedrock. 2)rising in a moderate slope with little exposure, flowing via small rapids to join 1) in the N-S valley.

Geology:
Headwaters in carbonate-rich conglomerate, underlain downstream by a banded calc-silicate sequence rich in evenly distributed fine-grained sulphides, with thin marble at the contact. Occurring structurally beneath are gabbro-granite clast conglomerates, with another thin marble at or near contact. The southern tributary and the N-S valley follow this contact.

Comments:
No confirmation of original Au anomaly. Claims kept as part of the interesting Sausvatn-Sobergslien belt.

Recommendations:
No follow-up will be carried out in this claim area, but immediately on strike to the south with claim 49 Sorenskogvand if the pyrrhotite-arsenopyrite mineralizations discovered there are Au-bearing.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 47 HATTEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Skaret No: 15 Size:1.0 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DH 172 III

Pegged:Yes-~~No-Partly~~ Claim retained: Yes No

Stream length 0.75km Drainage area: 1.0km^2

Original sample point (64ppb Au) resampled: Yes No

Follow up team: AB/TO/KA Duration: 1.0day

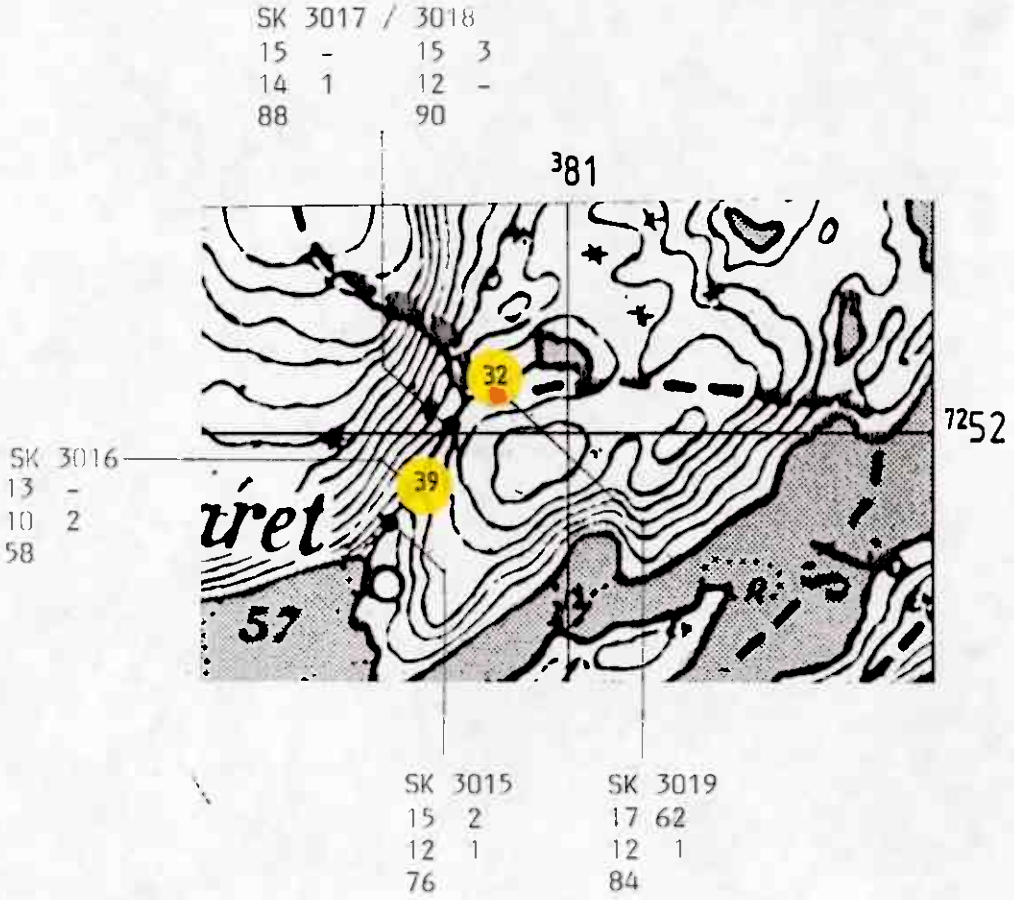
Nos.of follow-up sample : BK 3027 - BK 3034

Description of drainage system:
Source in flat bog and small lake, then flowing through a narrow boulder-filled gorge to the fjord.

Geology:
The main rock types in the area consist of gneiss (migmatite and marbles. Outcrops of marble were predominantly found along the bottom of the WNE-SSE trending gorge in which the stream runs. The marble here was coarse-grained (1-3mm) often with disseminated flakes of graphite, and disseminated eu-subhedral pyrite.

Comments:
Two medium-range Au anomalies detected, with locally high As.

Recommendations:
To be followed-up with the 45 Grondalen claim.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 15 SKARET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Skomoviken B No: 44 Size:0.5 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DH 173 I

Pegged:Yes No ~~Partly~~ Claim retained: Yes No

Stream length 0.5km Drainage area: 0.5km^2

Original sample point (2 ppb Au) resampled:~~Yes~~ No

Follow up team: AS/KA Duration:(2 hours) day

Nos.of follow-up sample :

Description of drainage system:
No follow-up samples taken due to lack of watercourses. Original anomaly a lakeshore sediment.

Geology:
Skomoviken granite, commonly rich in tourmaline both as clots to 1cm with quartz and in veinlets which trend towards forming breccias. At one locality, fine veining containing galena-sphalerite was recorded.

Comments:
Rock samples of sulphide mineralization and quartz-tourmaline rich zones did not yield Au anomalies. The area is kept however due to interest in the Grondalen-Skomoviken belt.

Recommendations:
Detailed geology/lithogeochemistry, taken with the Grondalen-Jellemoen region.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Markafjell No:48 Size:0.5 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart DJ 170 II

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 0.75km Drainage area: 0.5km^2

Original sample point (53ppb Au) resampled: Yes No

Follow up team: AS/BS Duration: 1 day

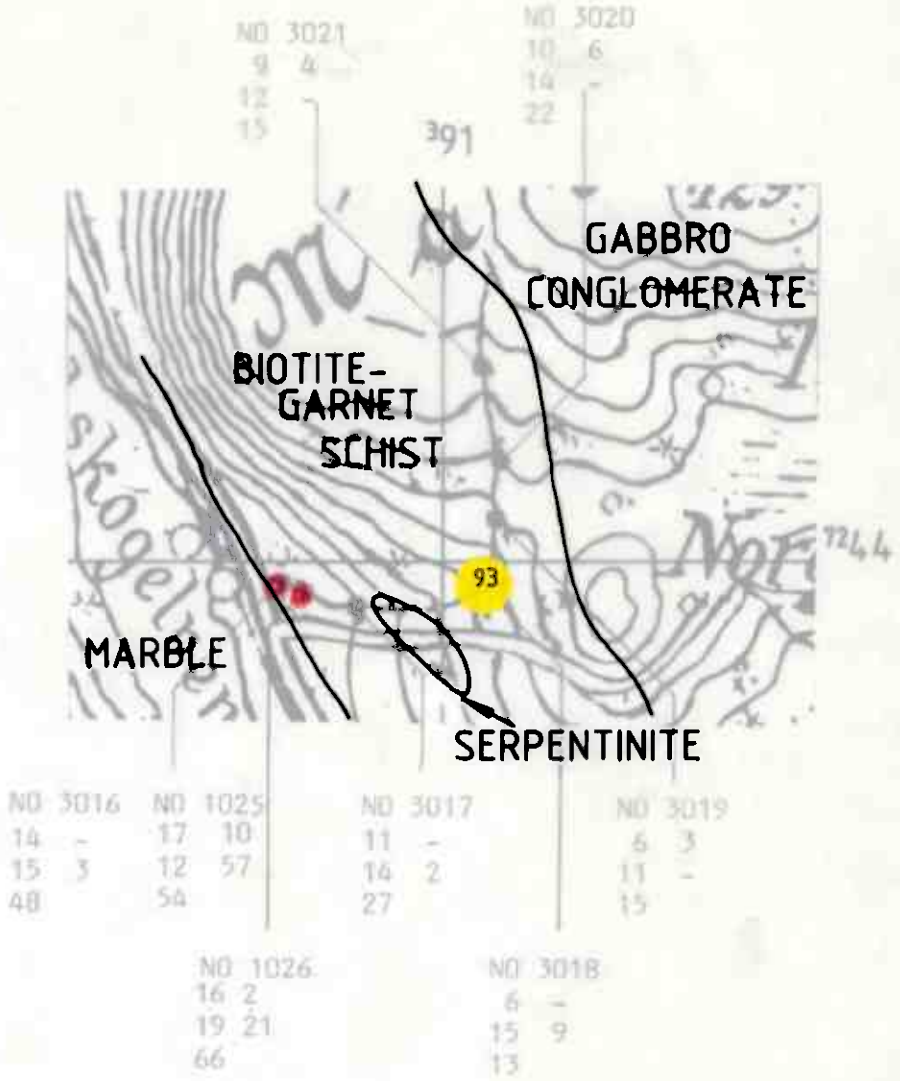
Nos.of follow-up samples: NO 8016 - NO 3021

Description of drainage system:
The drainage system consists of 1 stream running E-->W in the lower part, through flat partly boggy terrain, with only few outcrops. The upper part of the stream running N-->S, runs down a moderately steep slope. The lower part of the slope being covered by an overgrown boulder scree, with no outcrops of bedrock, and the upper part being covered by a thin to medium, boggy overburden.

Geology:
Headwaters in gabbro-clast conglomerate, underlain downstream by a banded clac-silicate sequence rich in well distributed fine-grained pyrite-pyrrhotite which is cut by diorite/gabbro dykes. Quartz veins containing pyrite-pyrrhotite and skarning were recorded. This sequence is underlain by a biotite-hornblend-garnet gneiss with abundent dislocated (sweat) quartz veining and minor zeolite-filled fractures. A serpentinite occurs at the base of this succession.

Comments:
One mid-range Au anomaly detected upstream of original anomaly point. Two pan samples were also taken which were not anomalous.(

Recommendations:
Claims retained as part of interest in Sausvatn-Sobergslien belt.



Strukturmål skarn ?

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 48 MARKAFJELL
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Manslien No:46 Size:0.25 km^2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo 6495-25.6-10

:Oko Kart DK 171 III

Pegged: Yes ~~No---Partly~~ Claim retained: Yes No

Stream length 0.25km Drainage area: 0.5km^2

Original sample point (11ppb Au) resampled:~~Yes~~ No

Follow up team: AS Duration: 0.5day

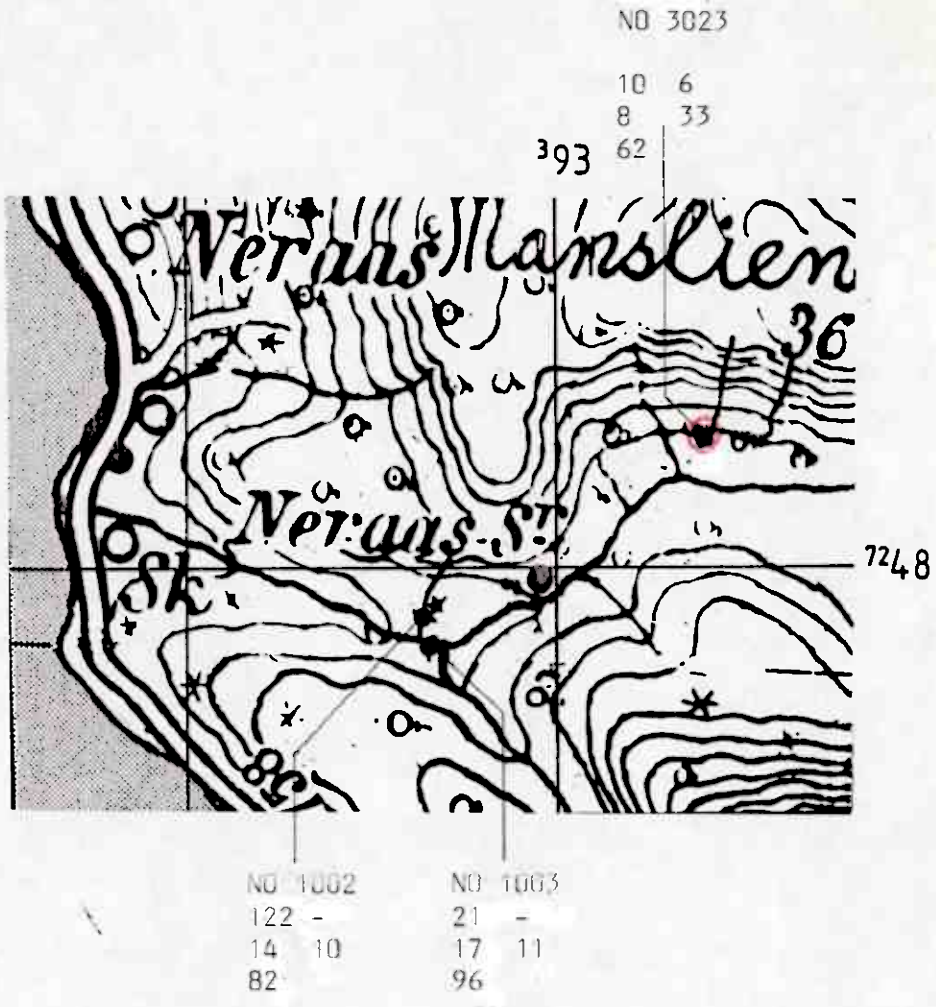
Nos.of follow-up samples: NO 3023

Description of drainage system:
Source in steep heavily wooded slope with abundant seepage with rapid flow down to flat farmland. Single sample taken at foot of this slope.

Geology:
Poor exposure, but area lies in probable strike extension of the S. Sausvatn carbonate conglomerate, here intruded by gabbro and amphibolite, which is underlain by the banded calc-silicate sequence.

Comments:
No verification of original Au anomaly. Somewhat high W.

Recommendations:
Single claim kept as part of interest in Sausvatn-Sobergslien belt.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 46 MANSLIEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Vasbotn** No**169** Size: km2

Claim location:Map sheet 1825 IV Velfjord

:Air Photo

:Oko Kart

Pegged: Yes No---Partly Claim retained: Filed in 1983

Stream length a)0.5km;b)1.0km;c)0.3km;d)0.5km

Drainage area: 2.0 km 2

Original sample point (ppb Au) resampled: Yes No

Follow up team: IF/AS Duration:3.0days

Nos.of follow up sample : NO 1007 - No 1024

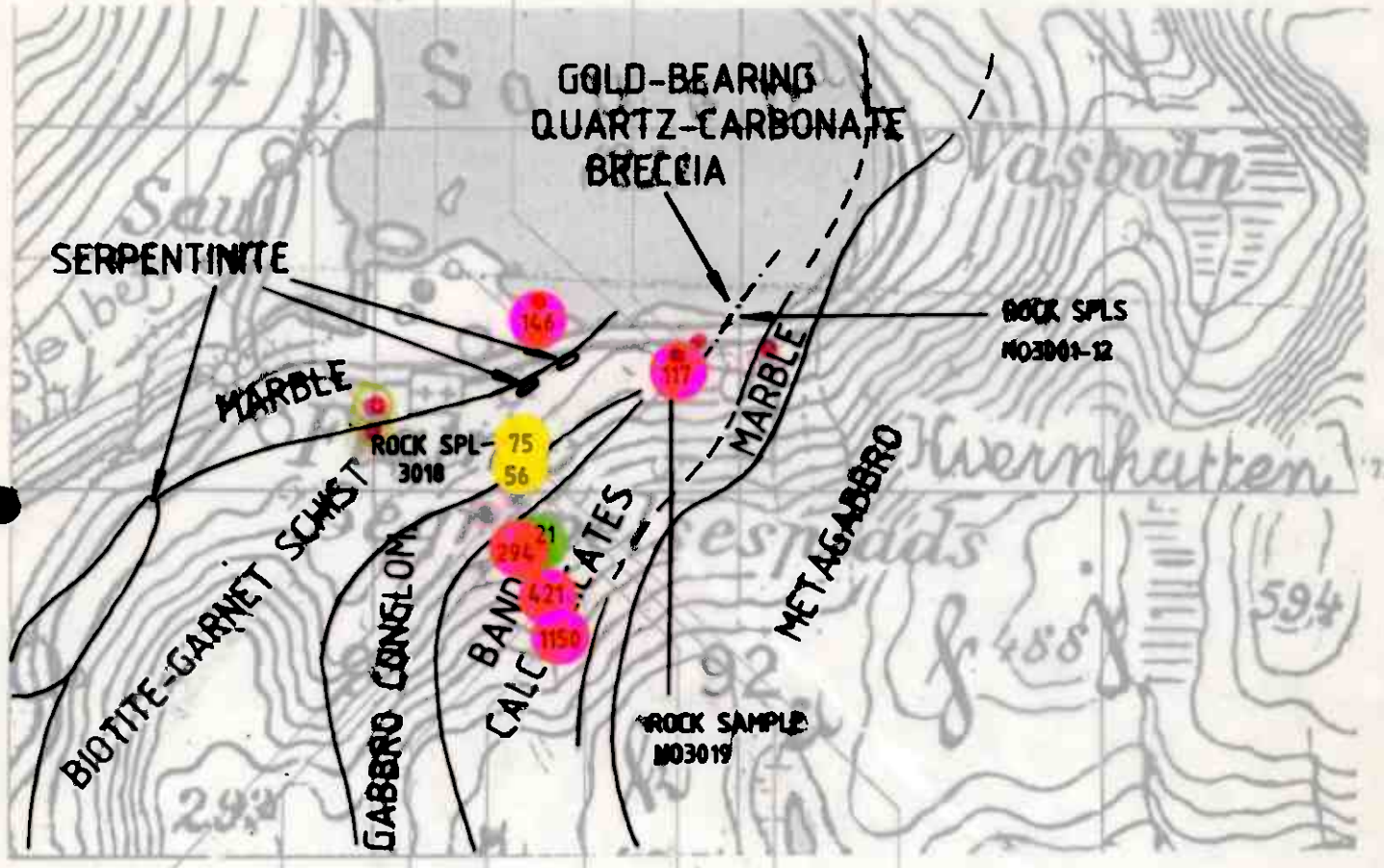
No 1032,1033,1037(all pan samples)

Description of drainage system:
A) and b): rise in moderate slopes with thin overburden (karsting in b), b) flowing over steep cliffs with numerous falls and rapids down to a plateau with moderate slope and bedrock in stream bed thence over a cliff to a farmland plain with post-glacial marine deposits (clay and gravel). A) flows only via rapids to the latter. Streams c) and d) rise in moderate to steep grassy slopes, flowing via rapids to the farmland plain S. of Sausvatnet.

Geology:
All streams drain a sequence of metasediments, these being in order upstream: marble, biotite-garnet schist (serpentinite pods occur near the contact of these), gabbro-clast conglomerate, and a banded calc-silicate-sulphide rich unit, locally containing marbles. The latter have been intruded by a large metagabbro body which has caused strong skarning. On the south shore of Sausvatn, a quartz-carbonate-arsenopyrite vein-breccia occurs within a sheared and silicified zone of several metres width within the calc-silicate rich unit.

Comments:
Analysis of the arsenopyrite-bearing breccia revealed up to 2 g/t Au. This prompted a panning survey of the area. Stream b) was recognized as highly anomalous 4) high-grade anomalies to 1150 ppb Au, 2 med-grade anomalies and one low-grade anomaly). In addition a 0.5 mm flake of free gold was recovered. Streams a) and d) were not anomalous. Stream c) however, which also drains the strike projection of the S. Sausvatnet vein-breccia yielded high-range Au anomaly.

Recommendations:
A high-priority area, detailed geology/lithogeochemistry, particularly in the calc-silicate unit. Mineralogical studies of retained pan concentrate splits.



ALL PAN SAMPLES

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 169 VASBOTN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Sorenskogvand No: 49 Size: 1.0 km^2

Claim location: Map sheet 1825 IV Velfjord

: Air Photo

: Oko Kart DK 169 I,III

Pegged: Yes No---Partly Claim retained: Yes No

Stream length 0.5km Drainage area: 1.0km^2

Original sample points(4,1,2,3ppb Au) resampled: Yes No

Follow up team: AB/BS Duration: 1.0day

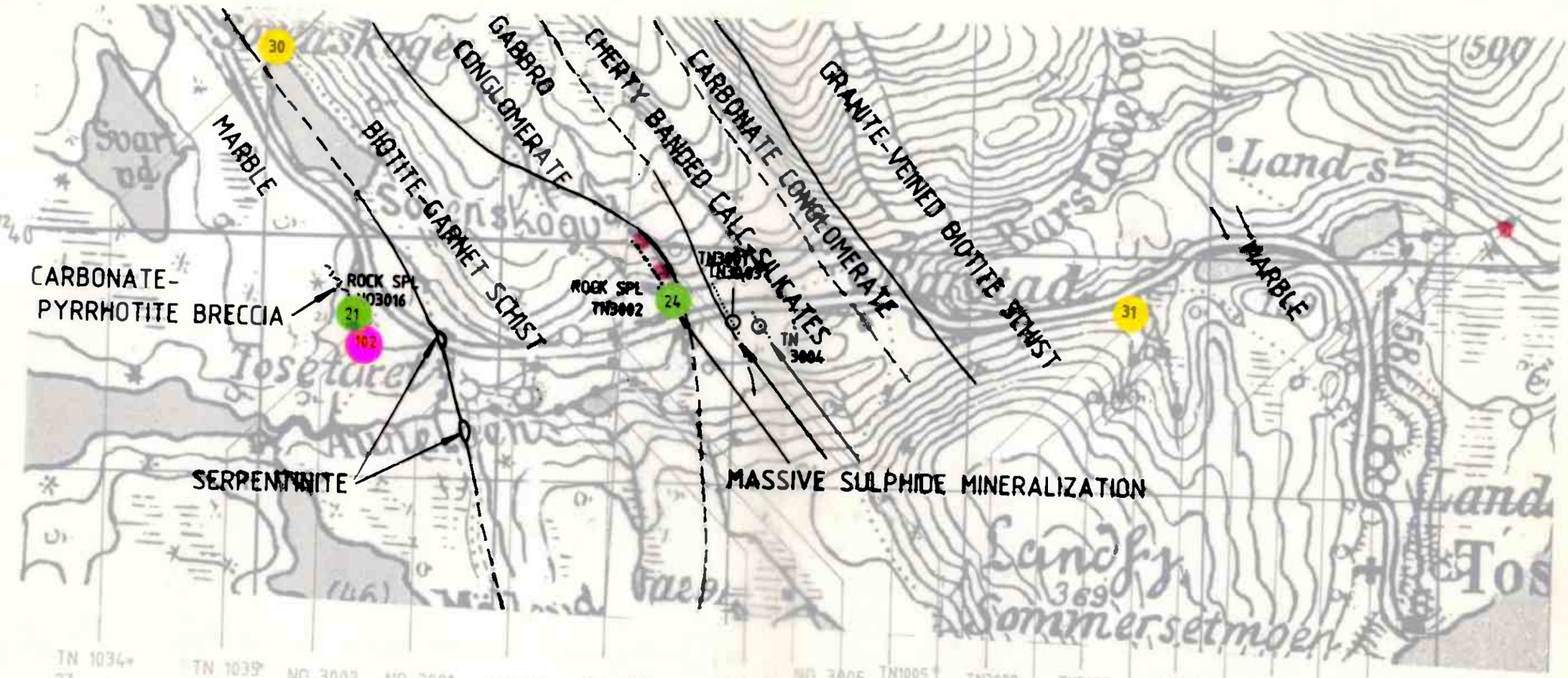
Nos.of follow-up samples: NO 3001 - NO 3007

Description of drainage system:
The drainage system consists of a major E-->W stream running in a flat valley which narrows upstream towards the east. The valley bottom is filled with thick glacial till. A number of tributaries drain into the main stream from steep slopes to the north and south. The upper part of the main stream partly inside the claimed area no. 64, Tosen I (Tosen claim block, TN 13).

Geology:
Headwaters of main system in granite-veined biotite schist containing a thin marble. This is underlain downstream by the following formations (in order): carbonate conglomerate; a cherty, banded calc-silicate sequence; gabbro conglomerate; biotite-garnet schist and finally marble with amphibolites and granitic intrusions. Serpentinite pods occur at the contact of the latter two formations. Massive sulphide mineralization (pyrrhotite-arsenopyrite-chalcopyrite) was recorded at several horizons structurally above and below the gabbro conglomerate. Quartz-carbonate vein brecciation in marbles similar to that hosting Au at Sausvatn (claim 169 Vasbotn) was recorded in a tributary having its headwaters in biotite-garnet schist, which was anomalous in 1982.

Comments:
One high-range Au anomaly detected in the latter stream (above). In addition, five pan samples were taken of which were anomalous, (two were low- range anomalies and one medium-range Au anomaly). Of the rock samples taken, one returned with Au values (153 ppb, Tn 3003: arsenopyrite-bearing massive pyrrhotite.

Recommendations:
Low priority, but will be included in follow-up of Sausvatn-Sobergslien belt. Sulphide horizons to be followed to the south and into claim 05 Tosen.



TN 1034*	TN 1035*	NO 3002	NO 3001	NO3003	NO 3004	NO 3006
23 -	20 5	14 -	11 -	22 -	17 -	12 -
59 3	32 40	15 7	12 2	18 7	16 7	16 3
146	128	57	32	65	45	69

NO 3005	TN1005*	TN3022	TN3025	TN3024	TN3018	TN 3021
18 -	69 8	17 -	26 -	35 -	9 3	18 -
13 4	23 32	12 2	38 -	12 -	8 2	8 18
54	132	115	91	74	38	64

NO 3007	TN 1004*	TN 3026	TN 3023	TN 3019	TN3020
38 -	78 4	15 2	11 2	6 2	5 2
14 2	17 137	18 1	10 1	2 3	6 8
91	98	45	28	36	36

TN1006*
85 -
16 72
114

* DENOTES, PANSAMPLES

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 49,64 SØRENSKOG-VAND, TOSEN I
Scale 1:20.000

TOSBOIN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tosen II No:65 Size: 1.5 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo 6495-25-4-11

:Oko Kart DK 169 II,IV; L169 I

L 170 II,III; L 171 IV

Pegged:Yes No Partly Claim retained: Yes No

Stream length 0.5km Drainage area:0.25km^2

Original sample point(ppb Au) resampled: Yes No

Follow up team: AS/JT Duration: 0.5day

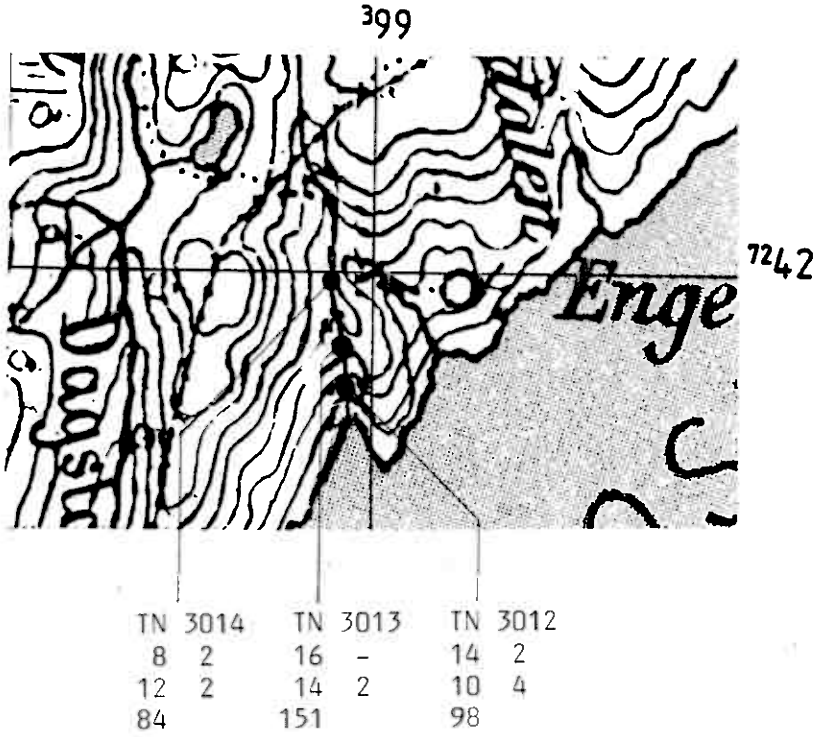
Nos.of follow-up sample : TN 3012 - TN 3014

Description of drainage system:
The original sample (040102) is not taken in major stream which runs N-S, and which the claim area encompasses. The original sample is taken in small stream to the SW which is not on the map. The stream may be followed for approx. 500m in overgrown boulder field.

Geology:
No outcrops observed along stream. In road outcrop approx. 50m from stream at the lower end of stream (south), interbanded hornblende-biotite and calc-silicate gneiss were observed. Metamorphic skarn developed in calc-silicate gneiss (garnet-diopside). Development of tourmaline in quartz-rich sweat bands in hornblend-biotite gneiss. Both types of gneiss and skarn are intersected by fine to medium-grained acid dykes. The dykes are discordant to foliation and slightly deformed. No contact reactions with host rocks were observed. All above mentioned rock types are cut by 0.5-1cm broad quartz-(sulphide) filled linear joints. The claimed area does not cover the stream with the original sample point. Claim with borders: U98500, U99000, N41500, N42000 would cover the drainage area.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 65 TOSEN II
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tosen III No 66 Size: 1.5 km^2

Claim location: Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart DK 163 II,IV; D163 I

L 170 II,III; L 171 IV

Pegged: Yes No Partly Claim retained: Yes No

Stream length 1.5km Drainage area: 3.0km^2

Original sample point(7.4ppb Au) resampled: Yes No

Follow up team: JT/AS Duration: 1.0day

Nos.of follow-up sample : TN 3006 - TN 3011

Description of drainage system:
Stream source in small lake, with seepage and flows down over a steep cliff to an area of thin overburden (locally boggy) past a small dam to the original anomaly point.

Geology:
Headwater in granodiorite, having contact with marble and biotite-hornblend schist/gneiss approx. midway along the stream. Joints filled with zeolite occur in the contact zone.

Comments:
One low-range Au anomaly detected in area with 67 Tosen IV.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tosen IV No:67 Size: 0.5 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart DK 169 II,IV; L 169 I

L 170 II,III; L 171 IV

Pegged:Yes No ~~Partly~~ Claim retained: Yes No

Stream length 0.7km Drainage area:0.75km^2

Original sample point(6 ppb Au) resampled: Yes ~~No~~

Follow up team: AS/JT Duration: 0.5day

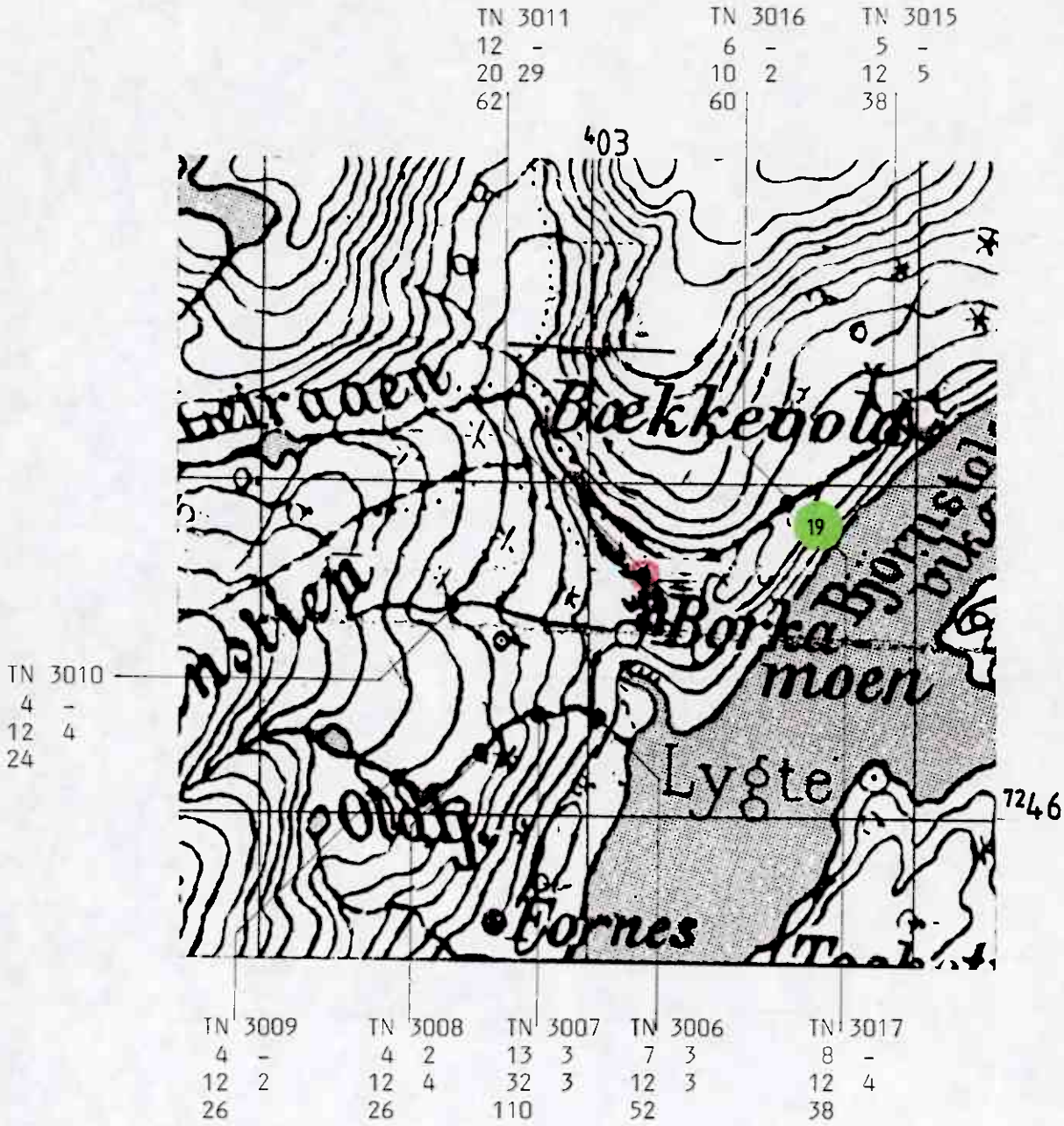
Nos.of follow-up sample : TN 3015 - TN 3017

Description of drainage system:
Sources by seepage, draining a densely vegetated cirque containing boulder fields, with a considerable thickness of overburden. Clay observed in southern tributary (?kaolinitic - derived from weathering of acid intrusive).

Geology:
Poor exposure. Granodiorite, partly porphyritic, was recorded together with local k-feldspar alteration.

Comments:
One low-range Au anomaly in area with 66 Tosen III.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 66+67 TOSEN III+IV
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Breivasselven No:26 Size:1.5 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart DL 1731 III

Pegged:Yes-No Partly Claim retained: yes /No

Stream length: 2.5km Drainage area:1.5 km^2

Original sample point(2 ppb Au) resampled:YesNo

Follow up team: TO/TK Duration:1.0 days

Nos.of follow up samples: TE 7001 - TE 7009

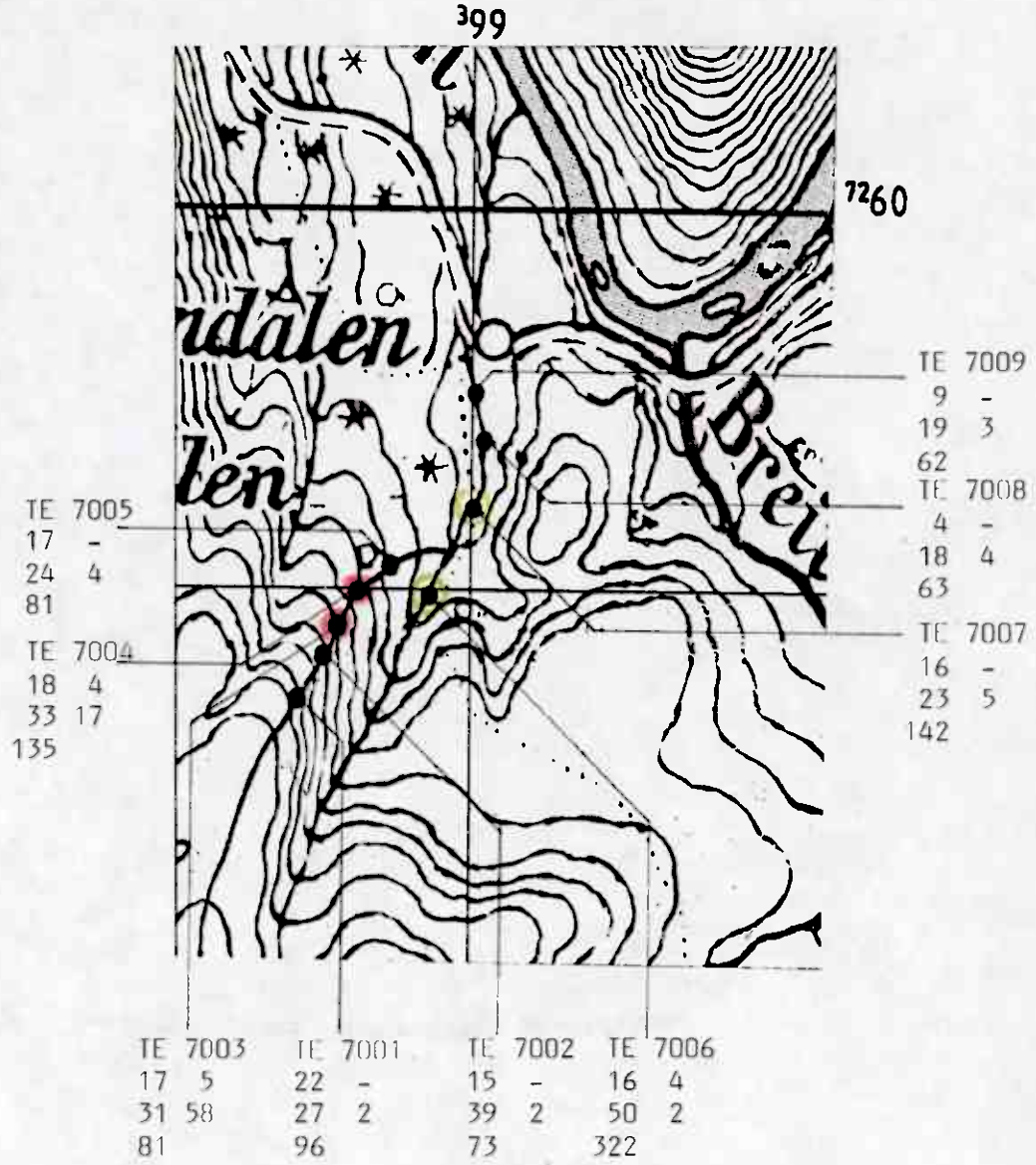
Description of drainage system:

The stream originates from a snow field,and runs mostly directly over bedrock.A tributary enters 400 m south of Strompdalen saeter,and the 1982 original anomalous sample was taken below(north of) that junction. Map sheet Tosbotn bears only little resemblance to the topography!!

Geology:
Higher altitudes along the sides of the valley are dominated by granodiorite ,whereas the valley floor is built up from:marbles,amphibolites and calc-silicate schists.Towards north these varied metasediments are replaced by more homogenuos mica-schists.The western stream runs along a brecciated fracture zone.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 26 BREIVASSELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Storelven No60 Size: 0.25 km^2

Claim location: Map sheet 1825 I Tosbotn

: Air Photo 6495-25-5 013

: Oko Kart DM 171 III

Pegged: Yes ~~No---Partly~~ Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0km^2

Original sample point(20 ppb Au) resampled: ~~Yes~~ No

Follow up team: JT/AB Duration: 1.0day

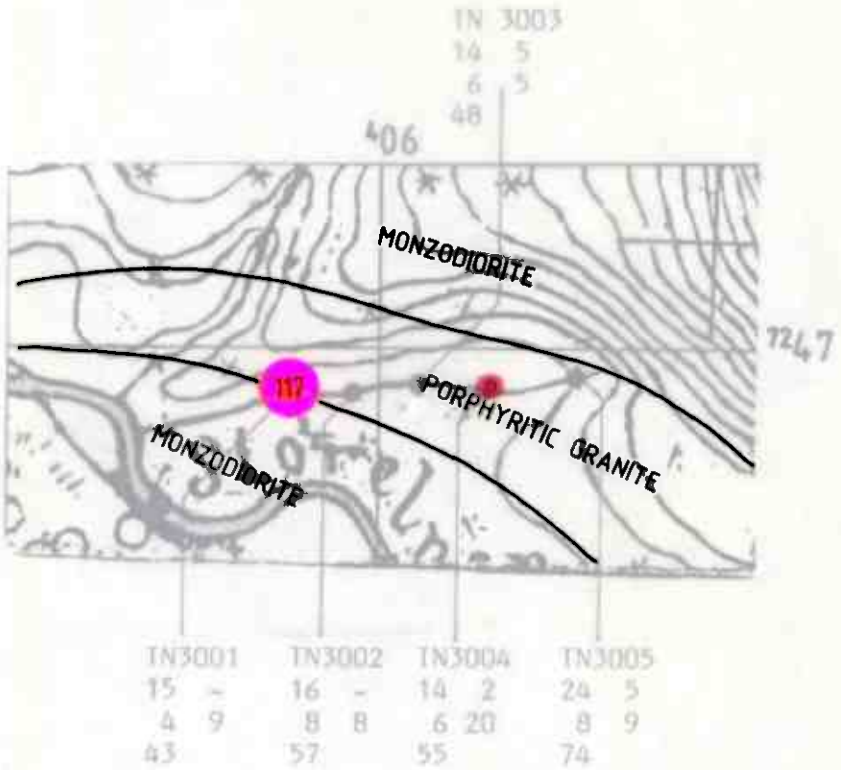
Nos.of follow-up sample : TN 3001 - TN 3005

Description of drainage system:
The stream is a minor tributary to Storelven. The western (lower) part of the stream runs through flat partly cultivated pasture with thick overburden. The central part runs through forest in flat ground with thick overburden. The eastern (upper) part runs in boulder field partly overgrown, and partly with overburden. Bedrock was not observed at any point along the sampled section of the stream.

Geology:
No exposure in sampled section of stream, but apparently consists of porphyritic granite intruded into monzodiorite.

Comments:
One high-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 60 STORELVEN
Scale 1:20.000

60 STORELVEN

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:

Storborja No:25 Size:2.0 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart

Pegged:Yes ~~No--Partly~~ Claim retained: yes /No

Stream length: 2.0km Drainage area:5.0km^2

Original sample points(8,3 ppb Au) resampled:Yes~~No~~

Follow up team: CR/AK Duration:2.0 days

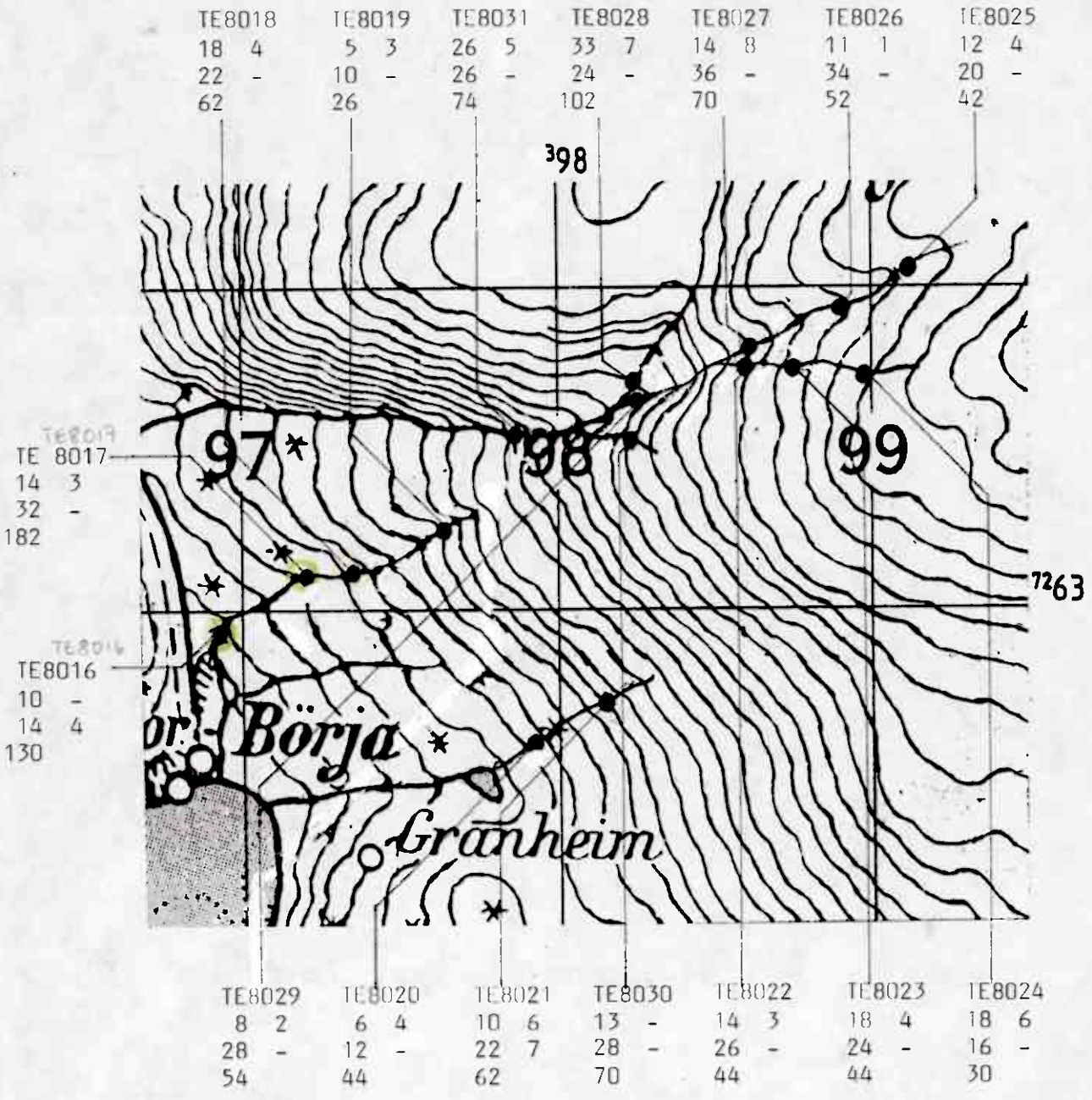
Nos.of follow up samples: TE 8016 - TE 8031

Description of drainage system:
The stream system consists of three subparallel streams running in east-west direction.The southernmost stream(resample of 040156) drains a boggy,densely vegetated hillside.The middle stream(resample of 040123)runs in the upper part over bare rock,and descends via a cleft into a dense forrest.The northernmost stream originates from snowfields,and runs over outcrop into a canyon ending in the main valley with dense vegetation and moderate overburden.

Geology:
Valley bottoms are built up from marbles alternating with mica schists.Skarns within the marbles are frequent and carry disseminated sulfides.The contact between the marbles and the porphyritic granodiorite is discordant.The diorite encloses xenolith of mica-schists.Along the northernmost stream stilbite alteration was observed in an east-west trendind cleft.Around sample point 030 TE 8028 the presence of brecciated ultramafic rocks was recorded.

Comments:
Our claim application collieded with that of Sulfidmalm.Therefore only anomalies,covered by joint-venture claims were followed up.No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 25 STORBØRJA
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tettingelven No:24 Size:3.0 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart

Pegged:Yes ~~No--Partly~~ Claim retained: yes/ No

Stream length: 2.0km Drainage area:2.0km^2

Original sample points(11,2,6,2,3, ppb Au) resampled:YesNo

Follow up team: CR/AK Duration:1.0 days

Nos.of follow up samples: TE 8001 - TE 8015

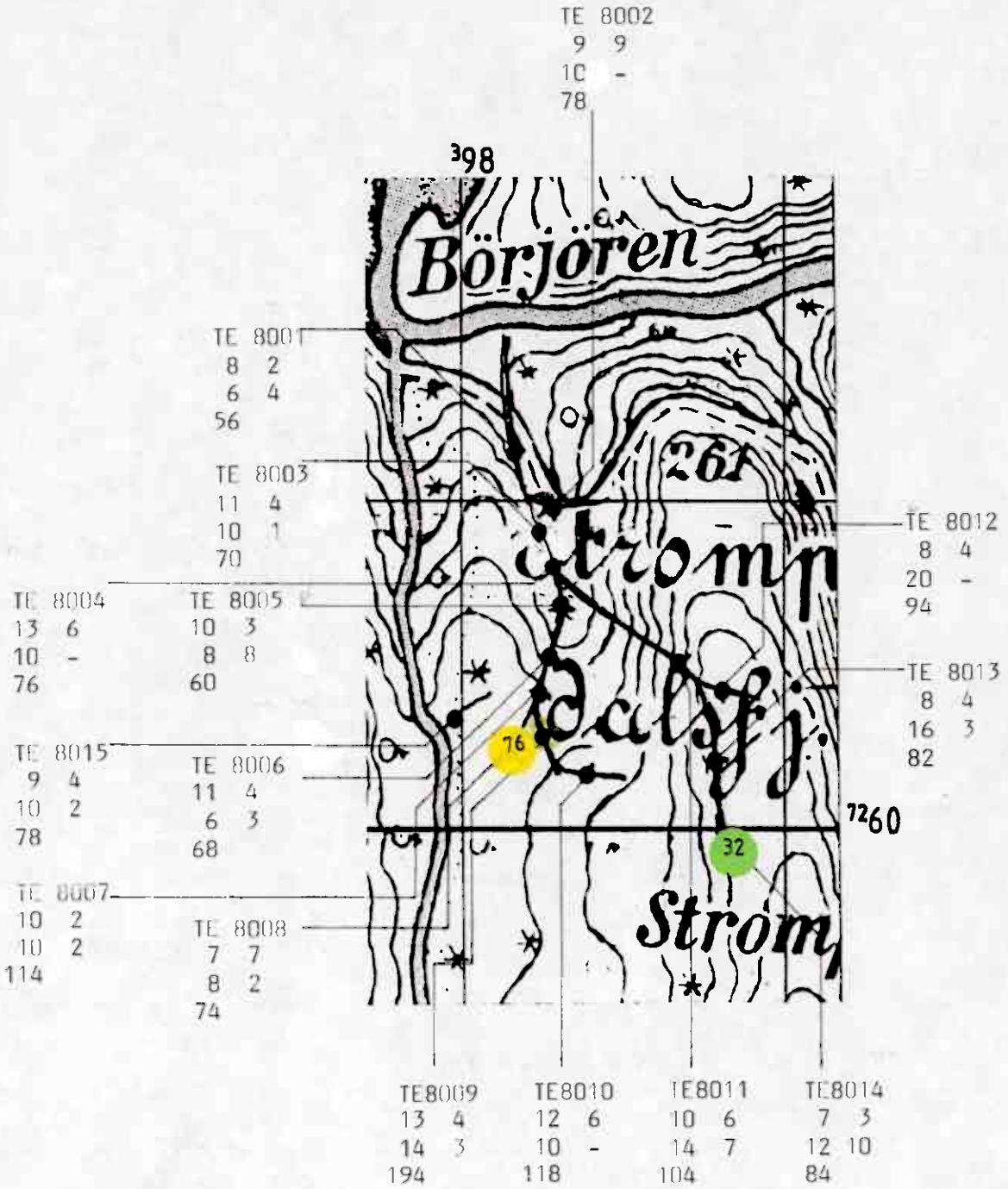
Description of drainage system:

The stream(040132) originates from a bog and descends via a steep waterfall into a valley with dense vegetation and moderate overburden.The stream where sample 040140 had been collected has very limited extend and drains a heavily vegetated hillside.

Geology:
Higher altitudes along the sides of the valley are dominated by granodiorite ,whereas the valley floor is built up from:marbles,amphibolites and calc-silicate schists.Towards south these varied metasediments are replaced by more homogenuos mica-gneisses.Some 50 m downstream of sample 0300TE 8006 an outcrop of ultramafic rocks was recorded.

Comments:
Our claim application collieded with that of Sulfidmalm.Therefore only anomalies,covered by joint-venture claims were followed up.One middle range and one low range anomaly detected,both at extreme end of drainage system.

Recommendations for further follow up:
A low priority target for mapping and rock sampling.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 24 TETTINGELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Feitskaret No:139 Size:3.75 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo 5575 K 017

:Oko Kart DN 174 I,II,III,IV

Pegged:yes No ~~Partly~~ Claim retained: yes / No

Stream length 3.0 km/ Drainage area:7.0km^2

Original sample point (24 ppb Au) resampled: Yes-No

Follow up team: JT/AS Duration:2.0 days

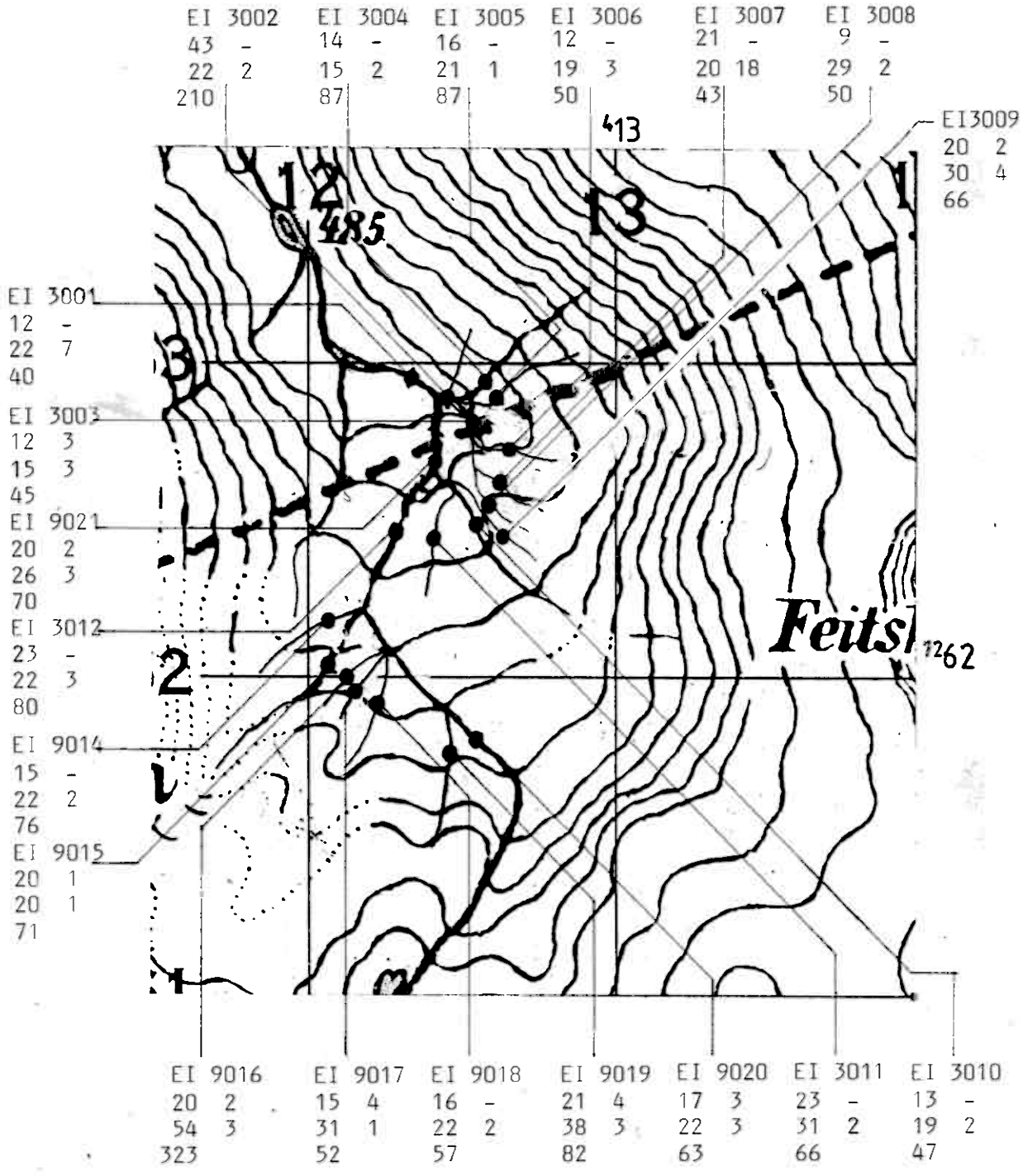
Nos.of follow up sample EI 3001- EI 3012

Description of drainage system:
Stream system originates in a high plateau,descending via waterfalls into a broad,steep sided valley drained by numerous tributaries to east and west.Further south the stream flows along a flat valley bottom and is partly braided. Variable g
cial cover.

Geology:
Biotite schist/gneiss predominates,containing subconcordant granodioritic dykes.Skarning was observed in the south,together with boulders of marble and serpentinite.

Comments:
No gold anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 139 FEITSKARET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Sorfjorden 'B' No: 51 Size: 0.75 km^2

Claim location: Map sheet 1826 IV Tjotta

: Air Photo E 007,008,009

: Oko Kart DK 180 I,II

DK 181 III

Pegged: Yes-No Partly Claim retained: yes/ No

Stream length 1.0 km/ Drainage area: 0.75 km^2

Original sample points(75ppb Au) resampled: YesNo

Follow up team: AS/BS Duration: 1.0 days

Nos.of follow up samples SF 3018 - SF 3025

Description of drainage system:
Stream system consists of main stream system and tributary system A. The area was sampled after continuous heavy rainfall resulting in very strong current and numerous temporary streams. The sampling was restricted to what was assumed to be the main stream, and tributary B. The drainage area consists of steep, overgrown boulder field up to 300-400 m. above see level, overhung by cliffs above 300-400 m above see level. The main stream was sampled up to 320 m. above see level and trib. B. up to 160 m. above see level. Sample point from 1982 field season (170042) is placed downstream from junction of main stream and trib. A.

Geology:
Outcrops were only found along main stream system, and consisted of mica-schists, gneiss intruded by granodioritic dykes. Boulders of skarn, rusty biotite rich mica-schist, and marbles found in mainstream and trib. A. All rock types with disseminated sulphides (pyrrhotite). It was not possible to locate the source area for these boulders.

Comments:
No Au anomalies detected.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Fjeldstuen No:163 Size:0.5 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart

Pegged:~~Yes~~ No ~~Partly~~ Claim retained: yes /No

Stream length: 0.1km Drainage area:0.1 km^2

Original sample point(236 ppb Au) resampled: Yes~~No~~

Follow up team: JT/AB/GT Duration:0.5 days

Nos.of follow up sample : KD 6022

Description of drainage system: Original sample had been taken in small trickle in boggy area 50 meters from mainstream(opposite of workshop for tunnel construction).The seepage emerges after only 50 meters from a small talus with boulders of gneiss.Active stream sediment is underlain with grey alluvial clay .Stream is not on map.

Regional Geology: Uniformely,fine grained biotite schists form the main lithology The schists are regionally interbanded with metasediments such as marbles and amphibole schists.Quartz veining with pyrite nodules is common.

Comments:
No gold anomaly detected.

Recommendations for further follow up:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tosen I No:64 Size:1.5 km^2

Claim location:Map sheet 1825 I Tosbotn

:Air Photo

:Oko Kart DK 169 II,IV;170 II,III;

L 169 I;L 171 IV

Pegged:Yes ~~No-Pereiy~~ Claim retained: yes /No

Stream length: 2.0 km/ Drainage area:3.0km^2

Original sample points(2,6;1 ppb Au) resampled:Yes No

Follow up team: AS Duration:1.0 days

Nos.of follow up samples: TN 3018 - TN 3026

Description of drainage system:
The drainage system is made up of two separate stream systems. An eastern system runing N->S from Landsaeterfjeld to Tosenkapel (at Tosenfjorden). A central system runing from Landfjell towards the North to the Tosen road where the stream runs towards the west, where the stream runs through the Sorenskogvand claim. (No. 49, Nordfjellmark Block). See also follow up sheet on this claim as it is situated at the western end of the same drainage system. 4 samples have been taken in the eastern stream system, which consists of two tributaries. Both tributaries run through flat, boggy ground. The Western (A) drains from a lake whilst the eastern (B) runs through a boulder field in the upper part. Most of the area is covered by a thick overburden of glacial till and bluish-grey clay is present in the stream bed. 5 samples have been taken in the central stream system; which consists of two tributaries upstream from the original sample point (040099). The southern tributaries (C) runs parallel to gneissosity (bedding?) and runs through an area of partly boggy terrain and partly well exposed bedrock. The eastern tributary (D) runs over a well exposed, steep slope, with little overburden further upstream, whilst the lower part runs through terrain similar to the southern tributary.

Geology:
The main part of the sampled streams run in thick to medium-thick overburden and it has not been possible to do any thorough geological observations. (Also because of very bad weather conditions). The main rock type observed in the area is garnet-bearing qtz-fdsp-biotite-mica gneiss.

Comments:
One middle range gold anomaly detected.

Recommendations for further follow up:
Claim retained as part of interest in the Sausvath - Sobergslien belt.

SVENNINGDAL

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Stavaselven No131 Size:1.25 km^2

Claim location:Map sheet 1925 IV Svenningdal

:Air Photo

:Oko Kart DO 174 I,II

Pegged:Yes ~~No-Partly~~ Claim retained: Yes No

Stream length 2.0km Drainage area: 2.5 km^2

Original sample points(236 ppb Au) resampled:Yes No

Follow up team: KB/KA Duration:1.5 day

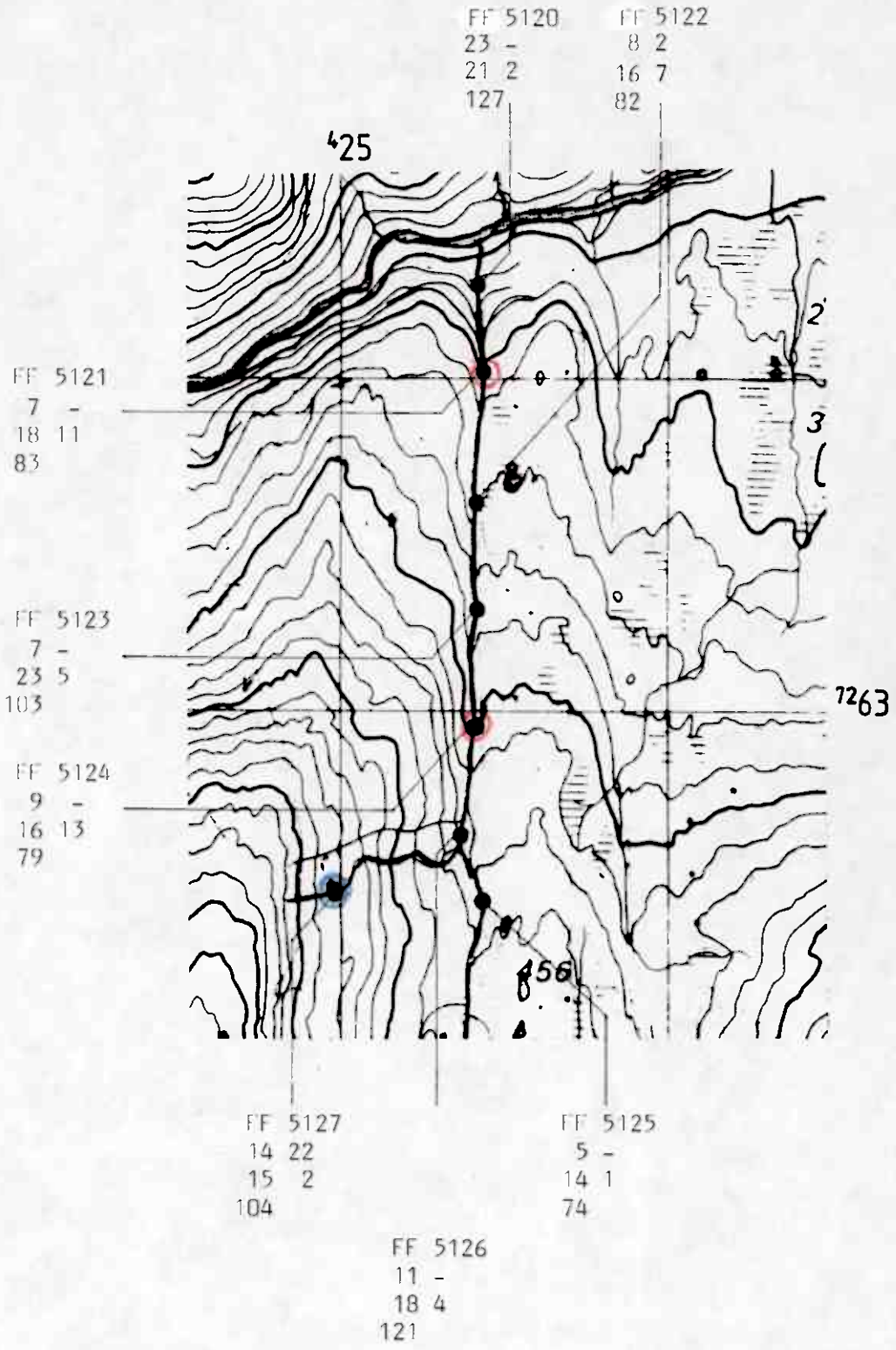
Nos.of follow up sample : FF 5120 - FF 5127

Description of drainage system:
The stream is about 4m wide in its lowest part and narrows to about 1m in the upper part. Most of the stream flows in a deep canyon. A spring and a stream forms the one major tributary. Besides this there are smaller tributaries further down stream.

Geology:
The stream flows mostly in marble. Furthest down stream there is glacial till overburden and many boulders of mica-schist and granodiorite. A bit further up stream there is outcrop of white-black foliated marble and a meta-granodiorite-monzodiorite. Furthest up stream the stream flows in pebbles of mica-schist. There is outcrop of biot/musc.-schist with deformed sugary-grained quartz pegmatites.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 131 STAVASELVEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Rotstokkmobekken No:109 Size: 2.5 km^2

Claim location: Map sheet 1925 IV Svenningdal

:Air Photo

:Oko Kart DP 173 I,II

Pegged: Yes No Claim retained: Yes No

Stream length 4.0km Drainage area: 2.5 km^2

Original sample points(36 ppb Au) resampled: Yes No

Follow up team: KB/KA Duration: 1.0 day

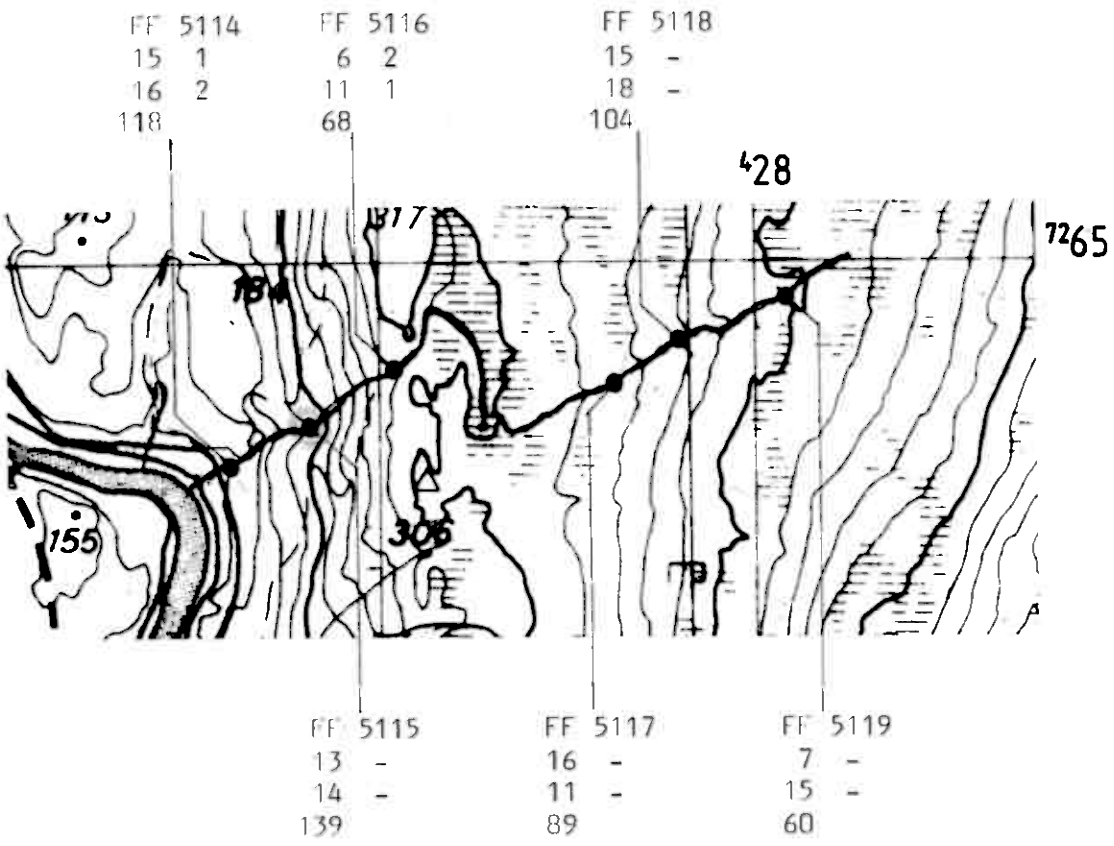
Nos.of follow up sample : FF 5114 - FF 5119

Description of drainage system:
The stream is less than 2m wide. It has no major tributaries, but one very small ditch joins it in the moor. The stream has a very steep slope in its lower part near the E6. In the moor it is meandering for about 300m.

Geology:
The lower part of the stream runs in an area with talus and till overburden. The boulders consist of biotite-gneiss schist and some pegmatites or granites. Further upstream there are outcrops of a monzodioritic rock with micas and pegmatites. Upstream from the moor there are mica-schist with pegmatites.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 109 ROTSTOKKMOBEKKEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Nonstinderne No:130 Size:2.0 km^2

Claim location:Map sheet 1925 IV Svenningdal

:Air Photo

:Oko Kart DP 173 II

Pegged:Yes No-Partly Claim retained: Yes No

Stream length 2.0km Drainage area: 3.5 km^2

Original sample point (89ppb Au) resampled:Yes No

Follow up team: KB/KA Duration:1.5 day

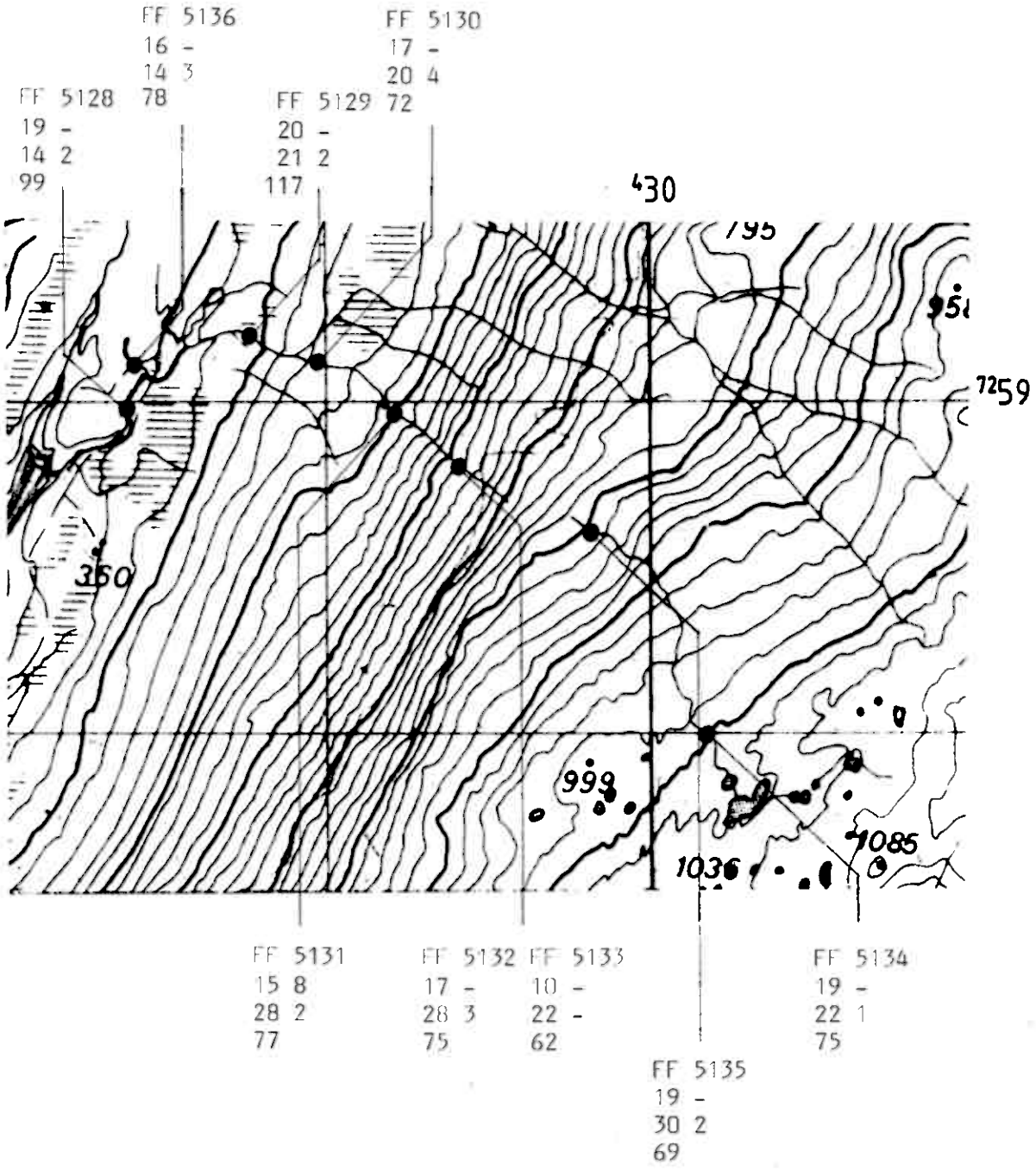
Nos.of follow up sample : FF 5128 - FF 5136

Description of drainage system:
The lower part of the stream, which is 3-4m wide, runs in a moor as a meandering stream. There are several smaller tributaries and one major tributary. The upper part is very steep and flows over benches with many falls.

Geology:
The lower part of the stream is flowing in till. The upper steeper part flows in biotite-gneiss with quartz-veins. Locally the gneiss is rich in amphiboles.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 130 NONSTINDERNE
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Svartjern No: 166 Size: 0.75 km^2

Claim location: Map sheet 1925 IV Svenningdal

: Air Photo

: Oko Kart

Pegged: Yes No Partly Claim retained: yes/No

Stream length: 3.0 km Drainage area: 0.75 km^2

Original sample point (88 ppb Au) resampled: Yes No

Follow up team: JT/AS/GT Duration: 0.5 days

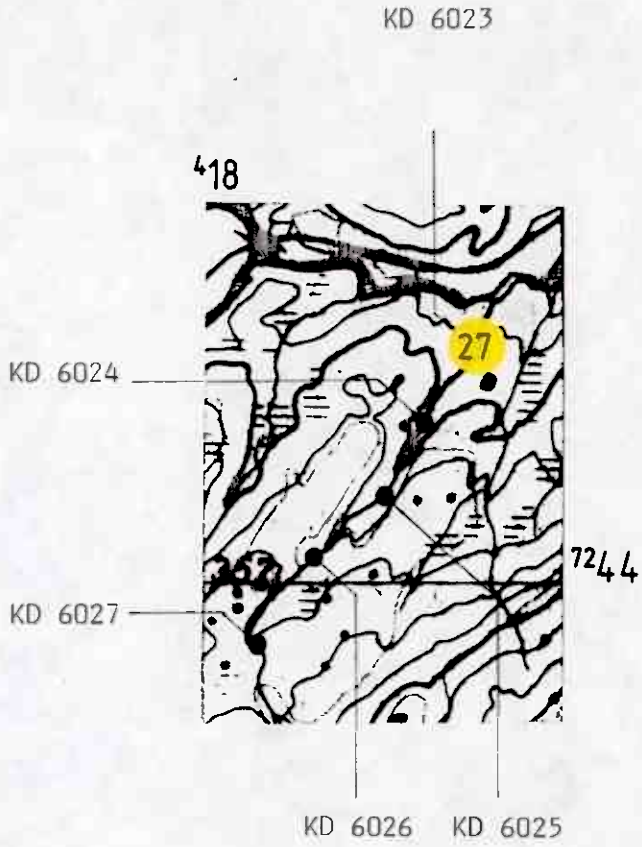
Nos. of follow up samples: KD 6028 - KD 6027

Description of drainage system:
Stream drains southern slopes of Gaasvasselven. 1982 anomaly only in the lower part of the stream close to the confluence with Gavasselva (990036), whereas sampling further upstream (990028+990029 showed no anomalies. Therefore follow-up was restricted to lower part of stream section.

Geology:
Main lithology is a fine-grained, platy biotite schist. these are interbanded with other metasediments such as marbles, schistose amphibolites, chlorite schists and greywacke-like slates.

Comments:
One medium-range anomaly detected.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 166 SVARTTJERN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Bustadbekken No: 110 Size: 2.0 km^2

Claim location: Map sheet 1925 IV Svenningdal

: Air Photo

: Oko Kart DO 171 II, R 171 I,III

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 4.0 km Drainage area: 2.5 km^2

Original sample point (86 ppb Au) resampled: ~~Yes~~ No

Follow up team: HK/TK Duration: 1.5days

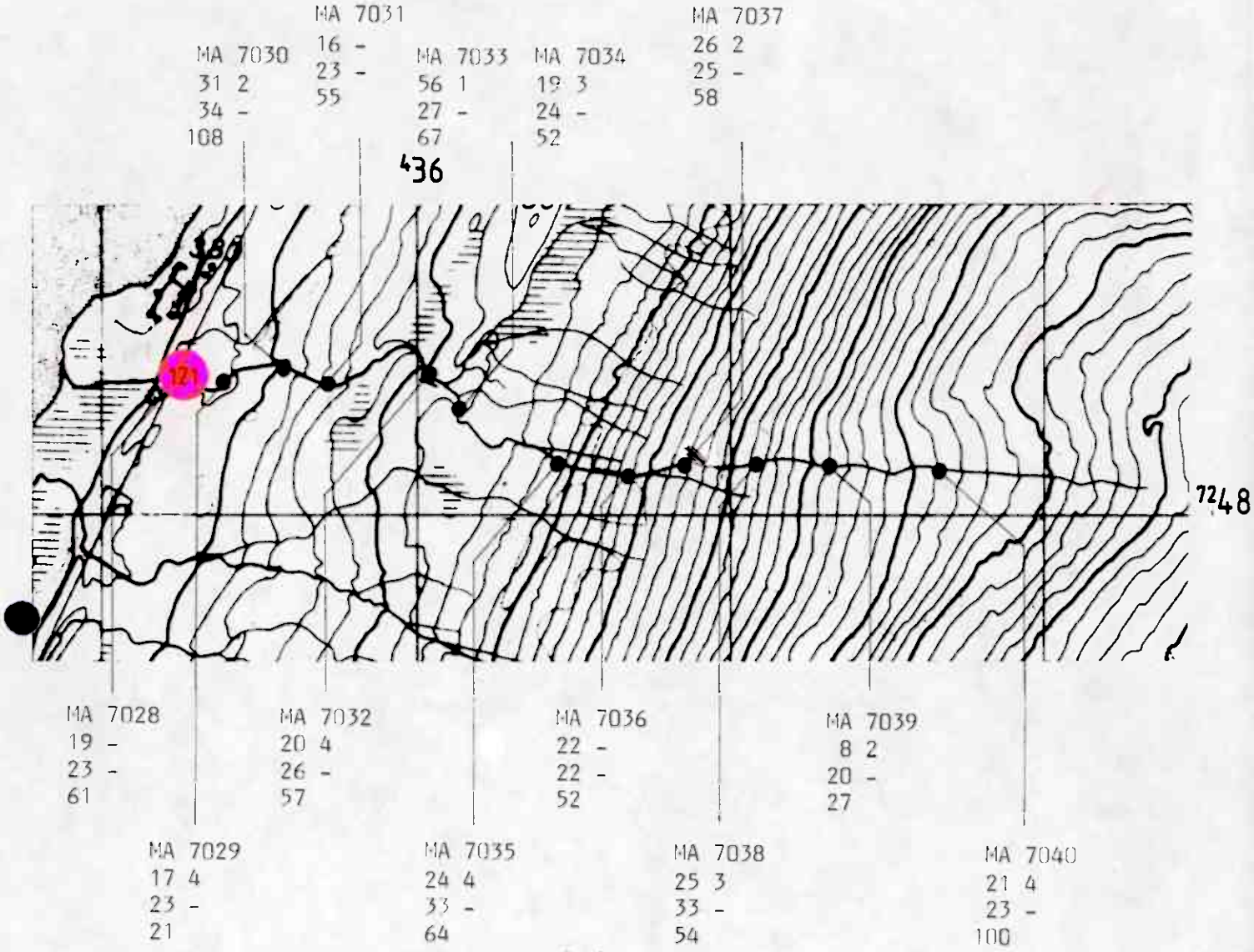
Nos.of follow up samples MA 7028 - MA 7039

Description of drainage system:
Rises in high altitude meltwater area, a large stream flowing over bedrock to 400 m above sea level, where it runs in moraine the rest of the way to N. Riplingvatn.

Geology:
Mica-schists, quartzitic layers with strike NE/SW in lower part. Gneiss with garnets in upper part of stream. Boulders of conglomerate (quartzite congl.), serpentinite + chromite, graphite schist was seen from time to time in the stream. The graphite schist was only seen in upper part of the stream. This stream carried a lot of fresh material weathered from bedrock all the way up to the upper part.

Comments:
One high-range Au anomaly close to original anomaly point in drift covered area.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 110 BUSTADBEKKEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Fiplingvatn No:127 Size:1.0 km^2

Claim location:Map sheet 1925 IV Svenningdal

:Air Photo

:Oko Kart DP 169 I,III

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 0.4km/ Drainage area:0.5 km^2

Original sample point (163 ppb Au) resampled:Yes ~~No~~

Follow up team: HK/TK Duration: 0.5days

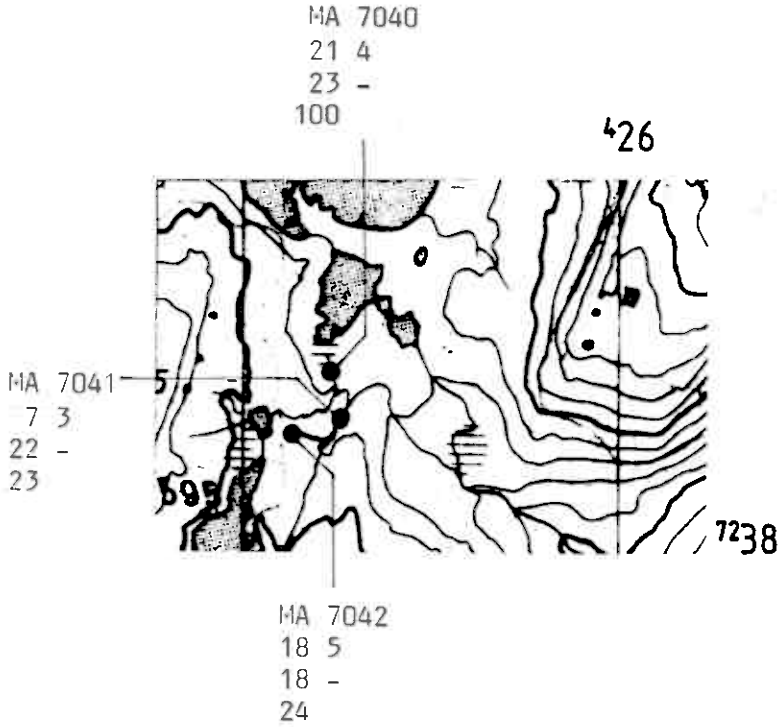
Nos.of follow up samples MA 7040 - MA 7042

Description of drainage system:
Stream starts in a small lake and runs into another larger lake. It runs partly on bedrock, partly on boulders. The last part (where original anomalous sample was taken) is in a bog.

Geology:
Mica-schists, quartzitic layers. (Micagneiss). Medium-grained.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 127 FIPLINGVATN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Baatsbarryggen No:111 Size:1.0 km^2

Claim location:Map sheet 1925 IV Svenningdal

:Air Photo

:Oko Kart DP 170 II,IV

O 170 I,III

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 1.0km/ Drainage area:1.0 km^2

Original sample point (52 ppb Au) resampled:Yes No

Follow up team: HK/TK Duration: 0.5 days

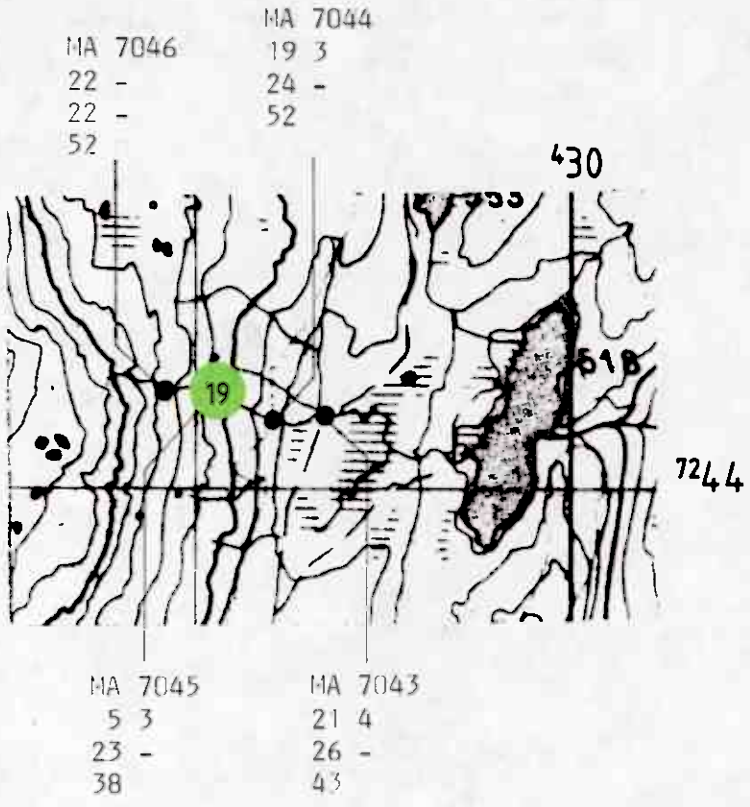
Nos.of follow up samples MA 7043 - MA 7046

Description of drainage system:
Source in icefield, flowing on bedrock in the upper parts down to bog and the original anomaly point. Abundant karsting.

Geology:
Marbles dominate the area, occurring with psammite and mica-schist in the middle and upper sections of the stream.

Comments:
One low-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 111 BAATSBARYGGEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Tomasvatn No:063 Size:1.5 km^2

Claim location:Map sheet 1925 III Majavatn

:Air Photo

:Oko Kart DQ 167 II

Pegged: Yes No---Partly Claim retained: yes/ No

Stream length 4.0 km Drainage area:2.5 km^2

Original sample point (27 ppb Au) resampled:Yes No

Follow up team: HK/TK JT/GT Duration: 3.0days

Nos.of follow up samples MA 7001 - MA 7017

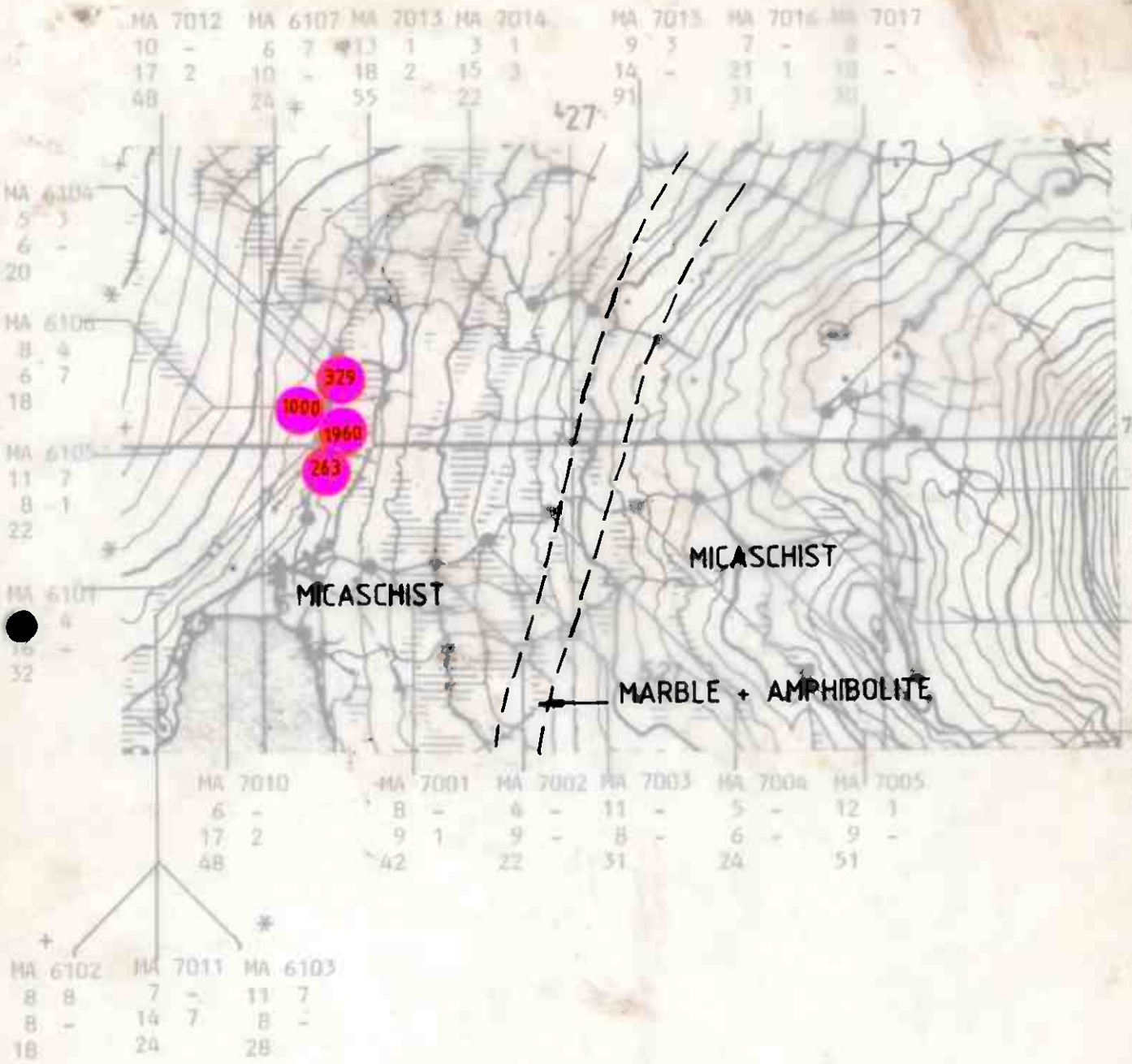
MA 6101 - MA 6107

Description of drainage system:
Two branches, one originating from snow melting in mountain side, (the eastern branch) flowing partly directly on bedrock in the upper 1km. The northern branch runs in moraine for most of its length, originating in a bog up in the mountain side. This branch was sampled several times in 1982. Original sample point (anomalous) could not be found. (It was taken in moraine-washed out by the stream).

Geology:
Metasediments, psammite (medium-grained) + medium-grained mica-schist with biotite. (No rusty mica-schist was seen & no quartz veins).

Comments:
Four high-range Au anomalies detected in a short section of the northern branch, in an area of thick drift. Four overburden samples were taken, one of which returned with a high-range Au anomlaly (329 ppb). (PLEASE SEE 1984 FOLLOW UP SHEET → NOT CORRECT.

Recommendations:
Deep overburden sampling.



* DENOTES PAN SAMPLE
\+ " OVERBURDEN SAMPLE

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 63 TOMASVATN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Dunfjeldet No 133 Size: 0.5 km^2

Claim location: Map sheet 1925 III Majavatn

: Air Photo

: Oko Kart DO 167 I

Pegged: Yes ~~No~~ Party Claim retained: yes/ No

Stream length 0.6 km Drainage area: 1.5 km^2

Original sample point (36 ppb Au) resampled: ~~Yes~~ No

Follow up team: KA/KB Duration: 1.0days

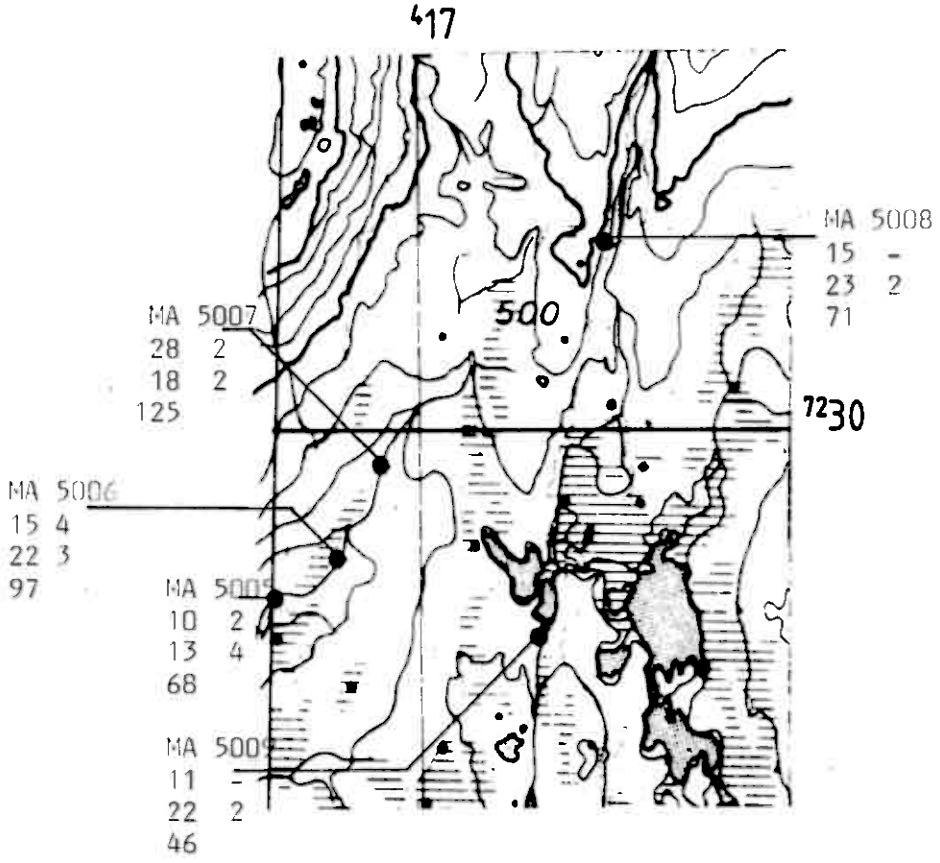
Nos. of follow up samples MA 5005 - MA 5009

Description of drainage system:
The stream is approx. 3m wide/0.5m deep for the first 500m. The last 300-400m narrows on entering a fault valley. It suddenly disappears in a underground spring - the bedrock here is marble.

Geology:
White to grey foliated marble with denses of coarse quartz and amphibolite, together with phyllite, intruded by granite/ granite-gneiss, having orange-red feldspars, and porphyritic diorite/monzodiorite with visible sphene itself cut by pegmatites.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 133 DUNFJELDET
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tomasvatn B No: 070 Size: 1.0 km^2

Claim location: Map sheet 1925 III Majavatn

: Air Photo

: Oko Kart DP 166 II

DP 167 IV

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: yes/ No

Stream length 1.0 km Drainage area: 0.75 km^2

Original sample point (89 ppb Au) resampled: Yes ~~No~~

Follow up team: HK/TK Duration: 0.5days

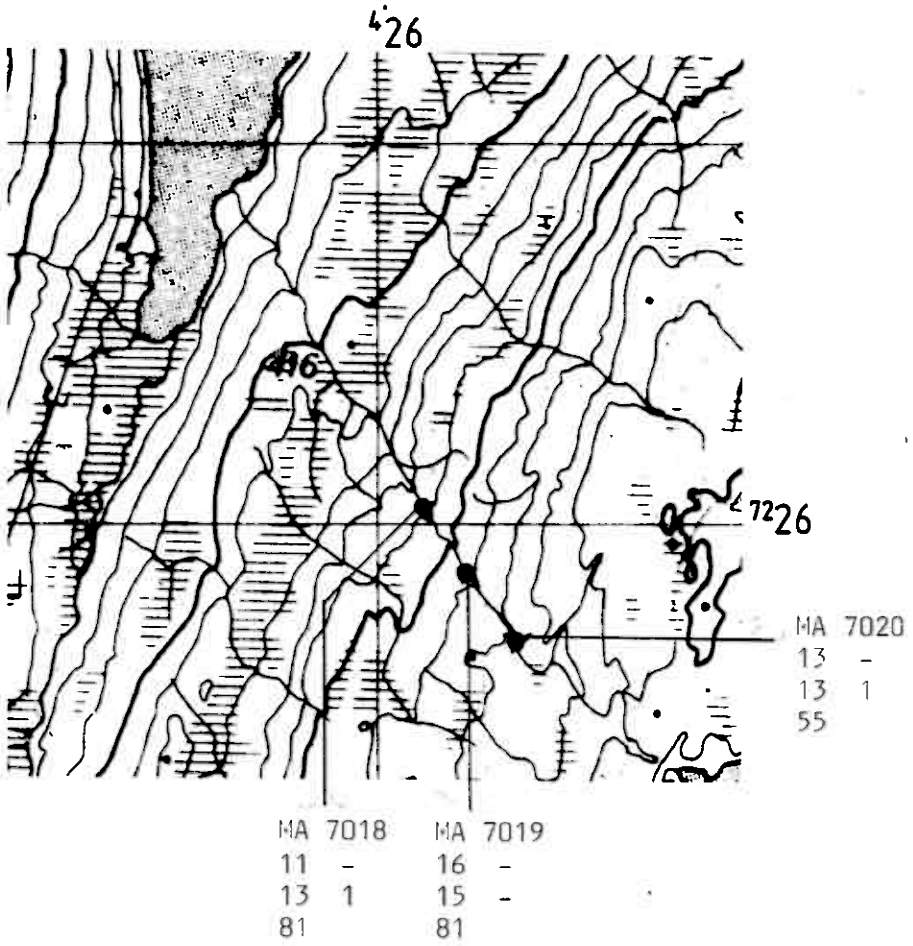
Nos. of follow up samples MA 7018 - MA 7020

Description of drainage system:
Source in bog near hilltop, flowing partly on bedrock and in a fracture traversing strike. Upper 100m has rusty boulders, but this is probably due to precipitation.

Geology:
Mica-schists (med-grained biotite-rich) with layers of grey fine to medium-grained marbles. The marbles are banded having thin layers of mica-schist. Marble horizons could easily be spotted by looking at the vegetation which was very dense on them. Outcrops only in stream sections.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 70 TOMASVATN B
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Mellingen No 132 Size:0.75 km^2

Claim location:Map sheet 1925 III Majavatn

:Air Photo

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: yes/ No

Stream length 1.5 km Drainage area: 2.0 km^2

Original sample point (54 ppb Au) resampled:~~Yes~~ No

Follow up team: KA/KB Duration: 2.0days

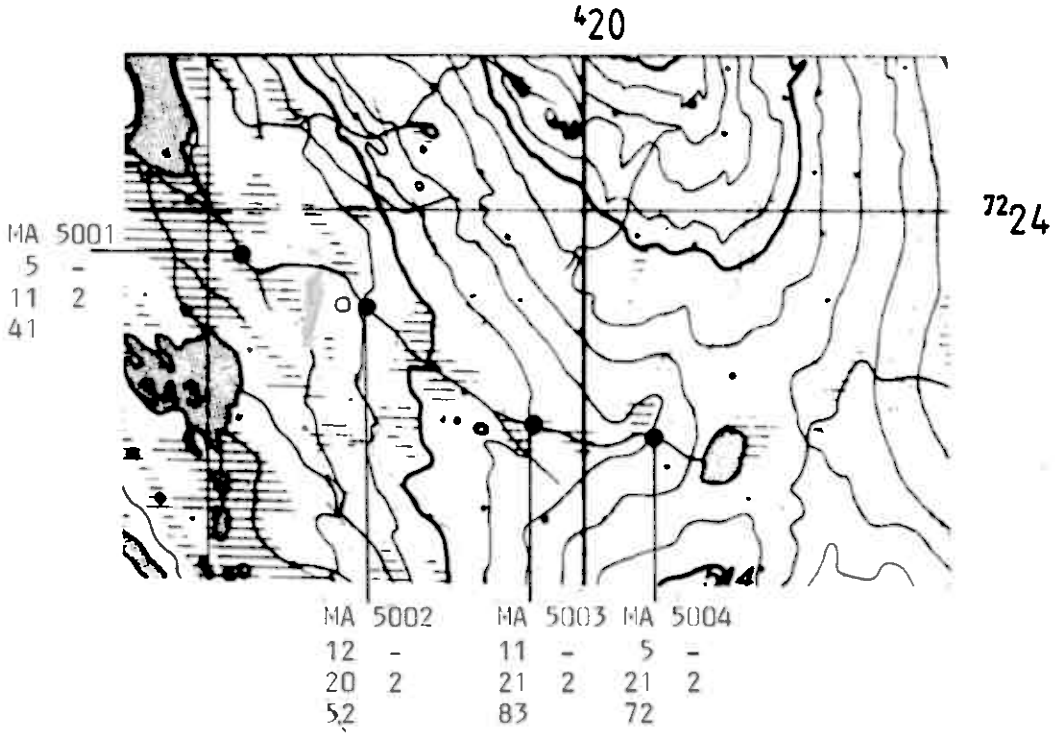
Nos.of follow up samples MA 5001 - MA 5004

Description of drainage system:
Flows on bedrock except for lowermost 0.3-0.4km, with no tributaries, thence into bog to N. Steinvatn.

Geology:
A series of metasediments, in order upstream: quartz-biotite schist, colour-banded marble (with calc silicate reaction boundary at contact with former), amphibolite rich in pyrite, quartzite with layers of mica (+- pyrite).

Comments:
No Au anomalies recorded.

Recommendations:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 132 MELLINGEN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Sor Steinvatnet No 072 Size: 2.75 km^2

Claim location: Map sheet 1925 III Majavatn

: Air Photo

: Oko Kart

Pegged: Yes No Partly Claim retained: yes/ No

Stream length 2.0 km Drainage area: 2.5 km^2

Original sample point (18 ppb Au) resampled: Yes No

Follow up team: HK/TK Duration: 1.0days

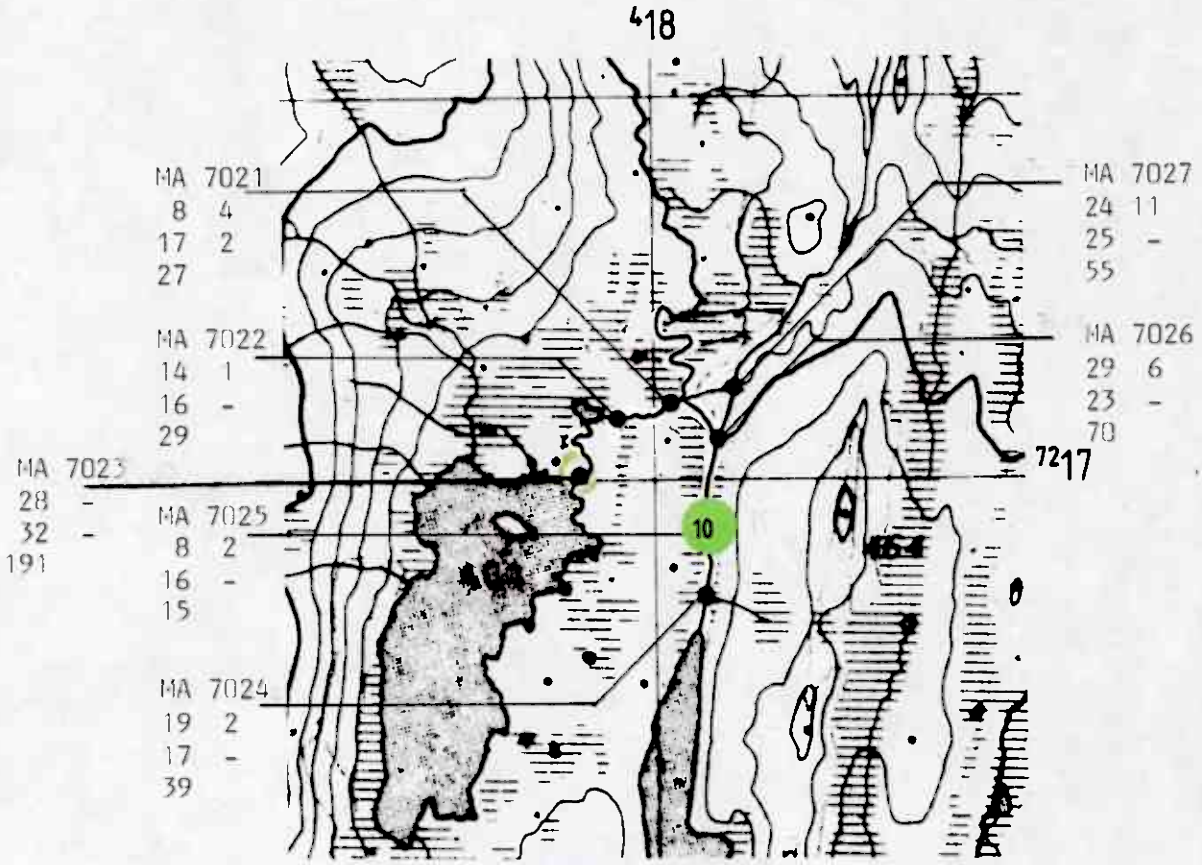
Nos. of follow up samples MA 7021 - MA 7027

Description of drainage system:
Two streams, each originating from two separate lakes, join above original anomalous sample point (which could not be found). The stream from S. Steinvatnet runs partly on bedrock the first 1/2km. The stream from Fisktjern runs in glacial clay down to where the streams join each other.

Geology:
Lower part of stream (below orig. anomalous sample point) runs approx. parallel to strike of banded grey marbles interbedded with mica-schists. Mica-schists dominate area just below and around S. Steinvatnet. Psammitic and mica-schists are interbedded with the marbles.

Comments:
One low-range Au anomaly detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 72 SØR-STEINVATN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Holmvatn No:144 Size:0.5 km^2

Claim location:Map sheet 1825 II Majaklumpen/

:Air Photo

:Oko Kart DN 168/2

Pegged:Yes ~~No--Partly~~ Claim retained: yes/ No

Stream length: 0.8km Drainage area:0.25 km^2

Original sample point(159 ppb Au) resampled:YesNo

Follow up team: GT/OK Duration:1.0 days

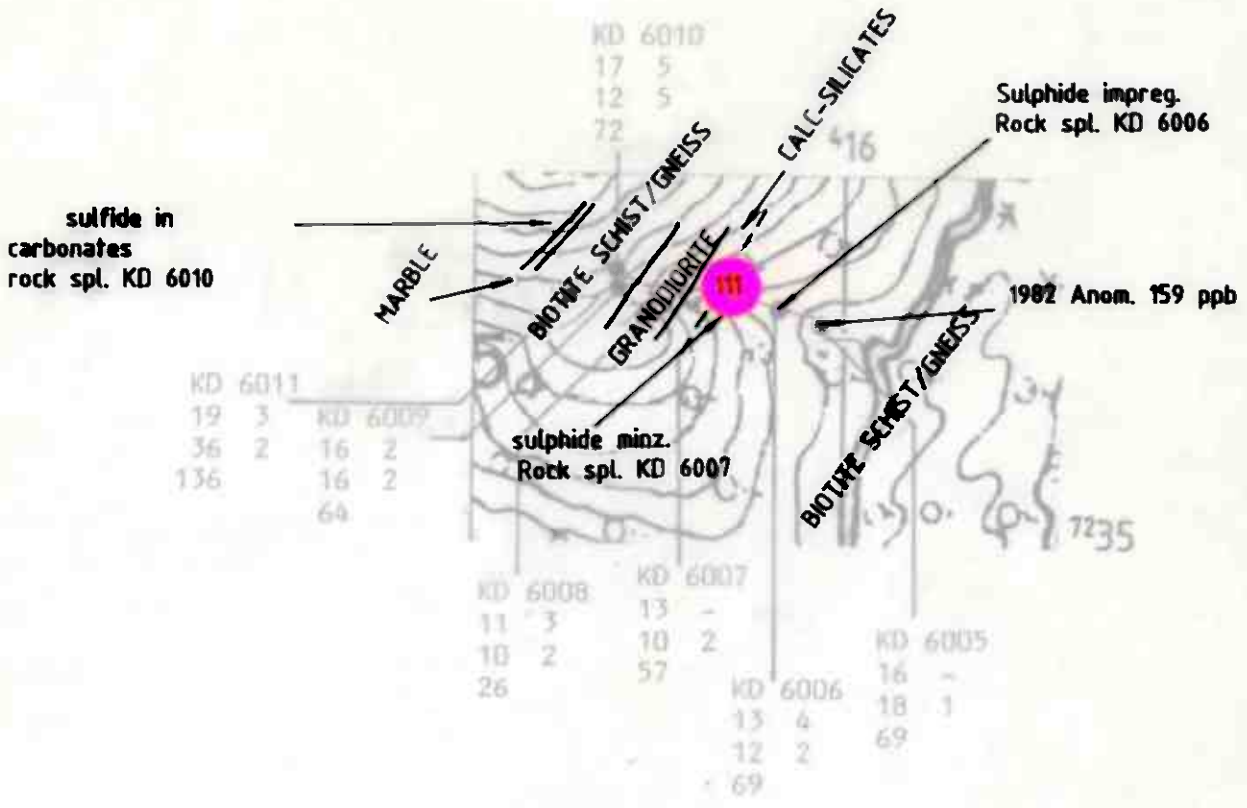
Nos.of follow up samples: KD 6005 - KD 6011

Description of drainage system:
Stream originates in a cirque area with confluence of three minor streams,flows partly along cliffs and over exposed bedrock and joins main stream shortly after sample point KD 6005.Vegetation consists of sparse grass and shrubs in upper part ,and changes to moderately dense birch forrest in lower part.

Regional Geology: Predominant lithology is Biotite Gneiss,with rafts of mica schists,quartz-rich green metasediments and carbonates. Alterations,mineralisations:At sample point KD 6006 a appx. 4 meter wide zone,traceable over 7-8 meters with iron oxides in thin mm-scale stockwork,quartz enrichments and sulfides.Rock sample 0300 KD 6006.Similar alterations occur further upstream until sample point KD 6007.Rock sample 0300 KD 6007
250 meters upstream of sample point KD 6010 a 15-30 cm wide,10meter long sulfide horizon was detected in a marble. This mineralization appears to be connected with a fold closure.Rock sample 0300 KD 6010

Comments:
One high range gold anomaly detected.Rock samples KD 6010,6006 had 27 and 23 ppb detectable gold respectively.

Recommendations for further follow up:
Detailed geology and rock sampling.



Stratabound shearzone ?

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 144 HOLMVATN
Scale 1:20.000

144 HOLMVATN

None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Holmtjern II No:115 Size:1.0 km^2

Claim location:Map sheet 1825 II Majaklumpen

:Air Photo 25-4 15

:Oko Kart DN 168/3

Pegged:Yes No--Partly Claim retained: yes /No

Stream length: 1.0km Drainage area:0.5 km^2

Original sample point(2 ppb Au) resampled:YesNe

Follow up team: GT/OK Duration:1.0 day

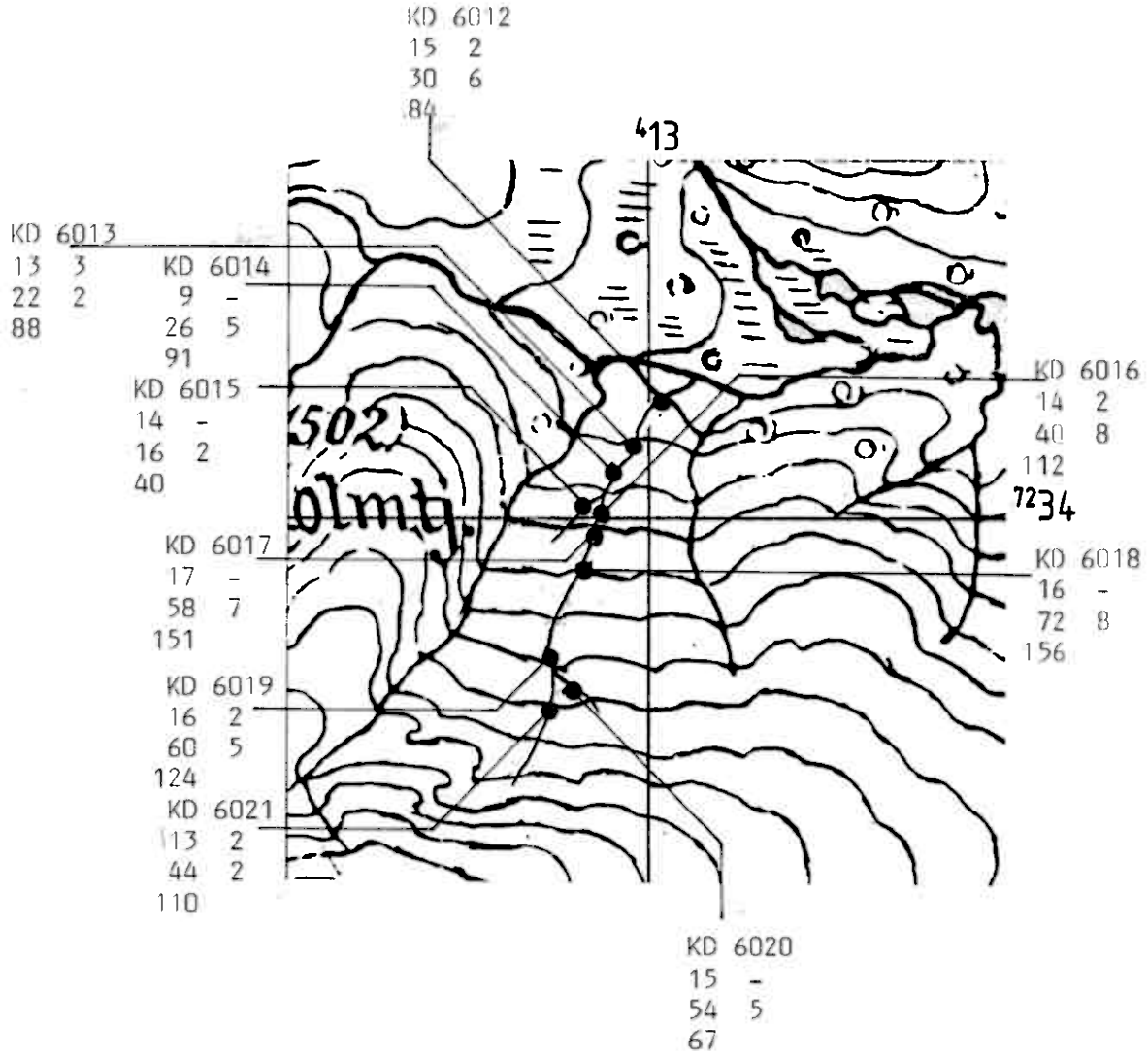
Nos.of follow up samples: KD 6012 - KD 6021

Description of drainage system:
Stream starts from a snowfield,and continues in a 15 m wide canyon.After passing a snow tunnel,the stream descents via a waterfall into a bowl-shaped valley,and proceeds through a delta into the main stream.

Regional Geology:
Predominant lithology is biotite gneiss ,porphyritic in places.This biotite gneiss is in contact with biotite schist in the lower part of the stream and with granodiorite in the upper section of the creek.At sample point KD 6018 (along canyon)the stream follows the contact between the granodiorite in the east and the porphyritic biotite gneiss in the west.Rafts of metasediments(marbles) were observed in the upper section,whereas in the lower parts acidic veining in cm-and dm scale is common. At sample point KD 6016,a 0,6 m wide, rusty weathering horizon,with minor amounts of a specularite like mineral occurs.Vesuvianite bearing skarns were observed near the contacts to marbles.A few stilbite bearing pebbles and boulders were detected along the stream.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 115 HOLMTJERN II
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Holmtjern I No:114 Size:0.25 km^2

Claim location:Map sheet 1825 II Majaklumpen

:Air Photo 25-4 15

:Oko Kart

Pegged:Yes ~~No-Partly~~ Claim retained: yes /No

Stream length: 0.5km Drainage area:0.25 km^2

Original sample point(7 ppb Au) resampled:~~Yes~~No

Follow up team: KB/KA Duration:1.0 days

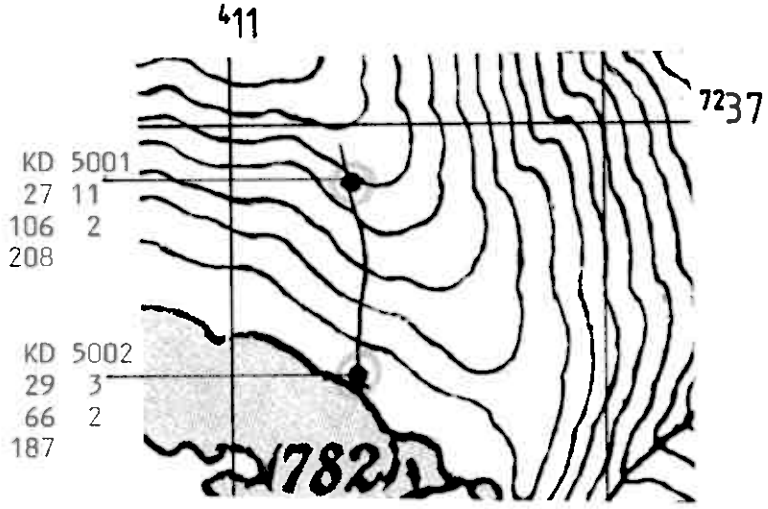
Nos.of follow up samples: KD 5001 - KD 5002

Description of drainage system:
Small stream of one meter width runs along a canyon,probably defining a fault .Most of the stream is snow covered,no tributaries seen.

Regional Geology:
Predominant lithology is biotite gneiss.Local depressions are underlain by marbles and other metasediments.The contacts between the gneisses and the marble horizons are characterized by abundant skarns.Along the NW-shore of the lake intense Quartz veining is observable.These veins reach up to 4m in width.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



high Pb-Zn

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 114 HOLMTJERN I
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Maastjern No:143 Size:0.5 km^2

Claim location:Map sheet 1825 II Majaklumpen/

:Air Photo 25-4-14/

:Oko Kart DN 167/1

Pegged:Yes~~No--Partly~~ Claim retained: yes /No

Stream length: 0.5km Drainage area:0.2 km^2

Original sample point(17 ppb Au) resampled:YesNo

Follow up team: GT/OK Duration:1.0 day

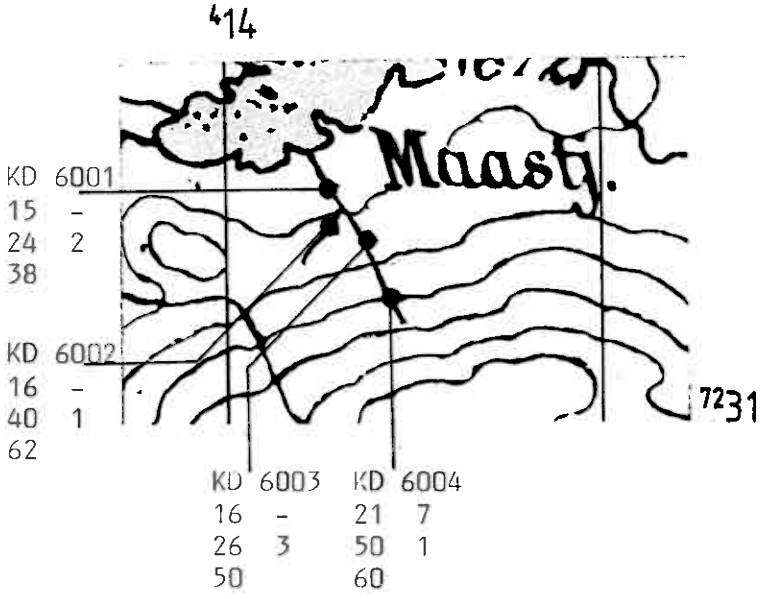
Nos.of follow up samples: KD 6001 - KD 6004

Description of drainage system:
The stream emerges from a snowfield and descends mainly over bare rock,via rapids and waterfalls into the Maastjern.In the lower parts of the stream system some smaller moraines occur .Vegetation is generally sparse.

Regional Geology:
The area is dominated by biotite gneiss with some acidic veining in dm-and cm-scale.Above sample point KD 6004 the geology is more varied with granodiorite,biotite schist/gneiss and acidic veining/stockwork in dm-scale.Garnets were observed in the biotite gneiss,as well as thin rusty layers of a darker rock type with minor amounts of sulfides.Boulders of serpentinite in dm-size were found in the entire catchment area.

Comments:
No gold anomaly detected.

Recommendations for further follow up:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 143 MAASTJERN
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1988

Claim Name: Kalklavdalen II No:135 Size:1.5 km^2

Claim location:Map sheet 1825 II Majaklumpen

:Air Photo 25-4-14/

:Oko Kart

Pegged:Yes ~~No--Partly~~ Claim retained: yes /No

Stream length: 1.5km Drainage area:3.0 km^2

Original sample point(83 ppb Au) resampled:YesNo

Follow up team: CR/AK Duration:1.0 day

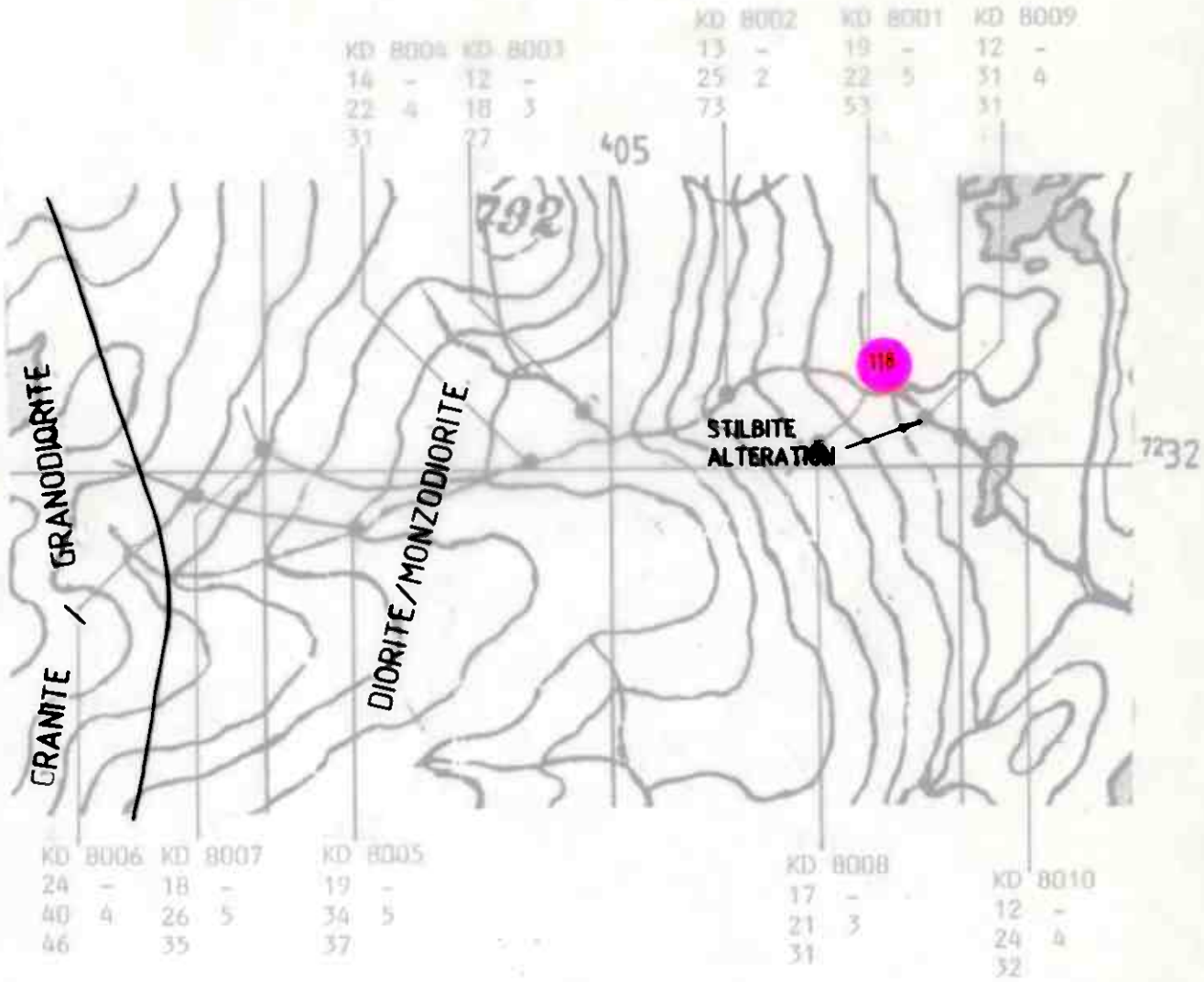
Nos.of follow up samples: KD 8001 - KD 8010

Description of drainage system:
Main stream ,trending east - west branches into several tributaries,all of which were sampled.Streams generally emerge from snowfields and run over bare rock.Overburden is thin or absent,a little till on higher altitudes is believed to be of local derivation.

Regional Geology:
The area is dominated by a coarse grained light diorite.Pegmatoid veining with up to 0.6m width is common.These pegmatoids exhibit a zonation with coarse grained quartz in the center and feldspar towards the margin of the vein.In the gorge,followed by the main stream a fault was detected with stilbite and chlorite alteration.Feldspars are usually reddened along these low temperature alterations.

Comments:
One high range gold anomaly detected.

Recommendations for further follow up:
None



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 135 KALKLAVDALEN II
Scale 1:20.000

135 KALKLAVDALEN II

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kalklavdalen V No:138 Size:1.0 km^2

Claim location:Map sheet 1825 II Majaklumpen/

:Air Photo 25-4-15/

:Oko Kart

Pegged:Yes No-Partly Claim retained: yes /No

Stream length: 3.0km Drainage area:3.0 km^2

Original sample point(4 ppb Au) resampled:YesNo

Follow up team: AB/JT Duration:0.5 day

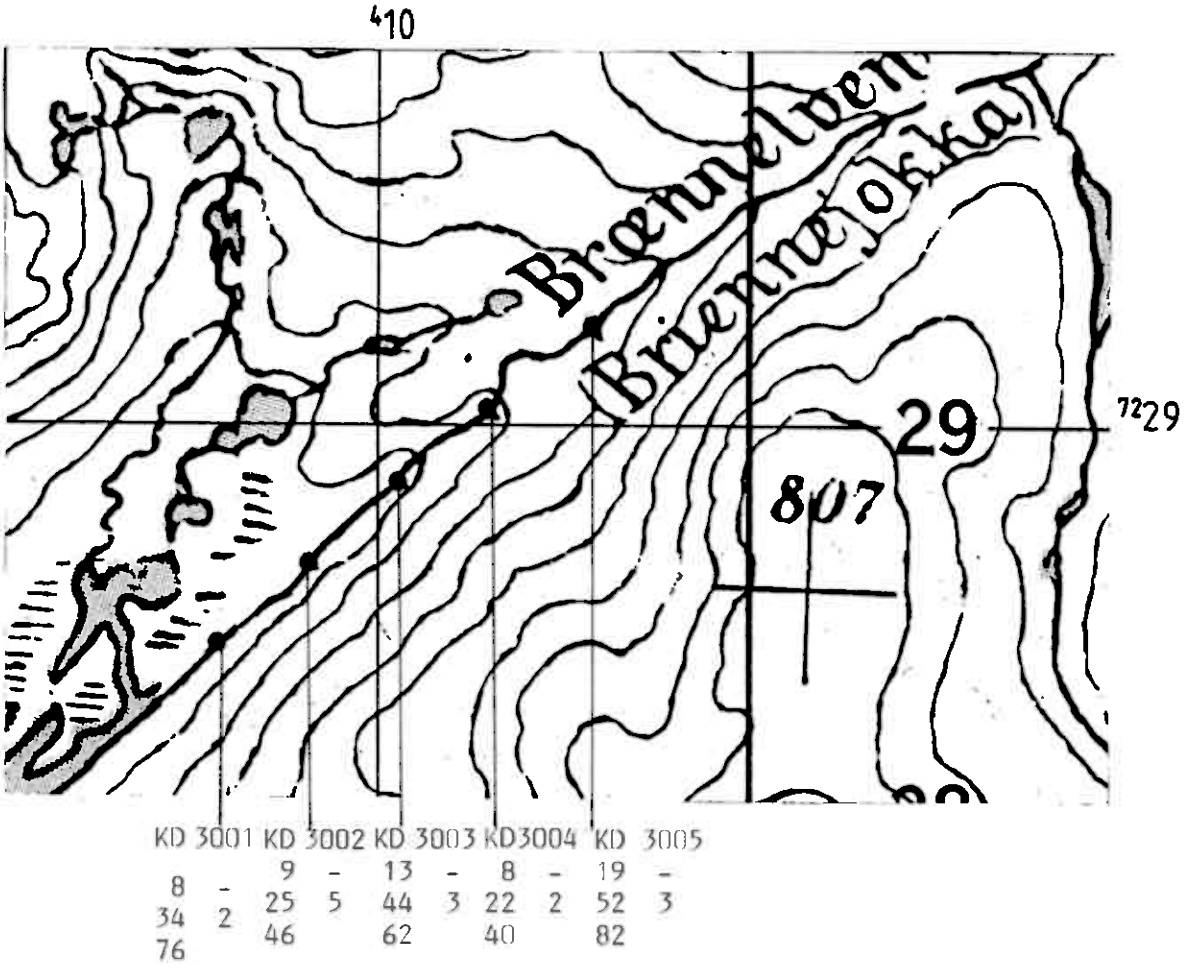
Nos.of follow up samples: KD 3001 - KD 3005

Description of drainage system:
Main stream runs along a deep scar,parallel the regional foliation.Sediment mainly composed of sand-gravel,derived from eroded intrusives,monzonites.N.B.the stream was sampled by mistake,however the samples collected are believed to be representative for the area and the alluvial deposits.

Regional Geology:
The area is dominated by a medium-coarse grained equigranular monzonite.This intrusion has suffered low temperature alteration ,recognizable through irregular cracks and fissures filled with stilbite.The intrusion is bordered by biotite-hornblende schists and garnet-diopside skarn.

Comments:
No gold anomalies detected.

Recommendations for further follow up:
None.



BP NORGE A,S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name: 138 KALKLAVDALEN V
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kalklavdalen III No:136 Size:c.75 km^2

Claim location:Map sheet 1825 II Majaklumpen/

:Air Photo 25-4-14/

:Oko Kart DN 168/1 DN 168/1

Pegged:Yes No--Partly Claim retained: yes /No

Stream length: 1.5km Drainage area:2.0 km^2

Original sample point(68 ppb Au) resampled:YesNo

Follow up team: KB/KA Duration:1.0 day

Nos.of follow up samples: KD 5003 - KD 5012

Description of drainage system:
This entire stream system is not shown on the old 1:50 000 map sheet Mayaklumpen.Except for the lower part,the stream runs over bare rock in a sucession of small falls.From sample point 5003 until 5005 the stream follows in NE-SW direction the contact between a diorite in the east and a gneiss in the west.the higher parts of the stream branches into several tributaries,which follow the N-S,E-W orientated jointing.

Regional Geology: The claim block is built up from equal amounts of monzodiorite and dioritic gneiss.The monzodiorite is described as a fine-medium grained,grey rock consisting of white feldspar,quartz and biotite.Porphyritic plagioclase crystals may reach up to 3-4 cm.The dioritic gneiss consists of white feldspar,minor quartz,biotite and garnet.The gneiss contains amphibolitic xenolith and pegmatoid veining.A skarn zone of 10 meters width ,consisting of layers of marble and amphibolite with bands of diopside and garnets was observed in the uper,northernmost stream section.

Comments:
One middle range gold anomaly detected in area with 137 Kalklavdalen IV.

Recommendations for further follow up:
None

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Kalklavdalen IV No:137 Size:1.25 km^2

Claim location:Map sheet 1825 II Majaklumpen/

:Air Photo 25-4-14/

:Oko Kart DN 168/2

Pegged:Yes ~~No--Partly~~ Claim retained: yes /No

Stream length: 1.5km Drainage area:2.5 km^2

Original sample point(68 ppb Au) resampled:~~Yes~~No

Follow up team: KB/KA Duration:1.0 days

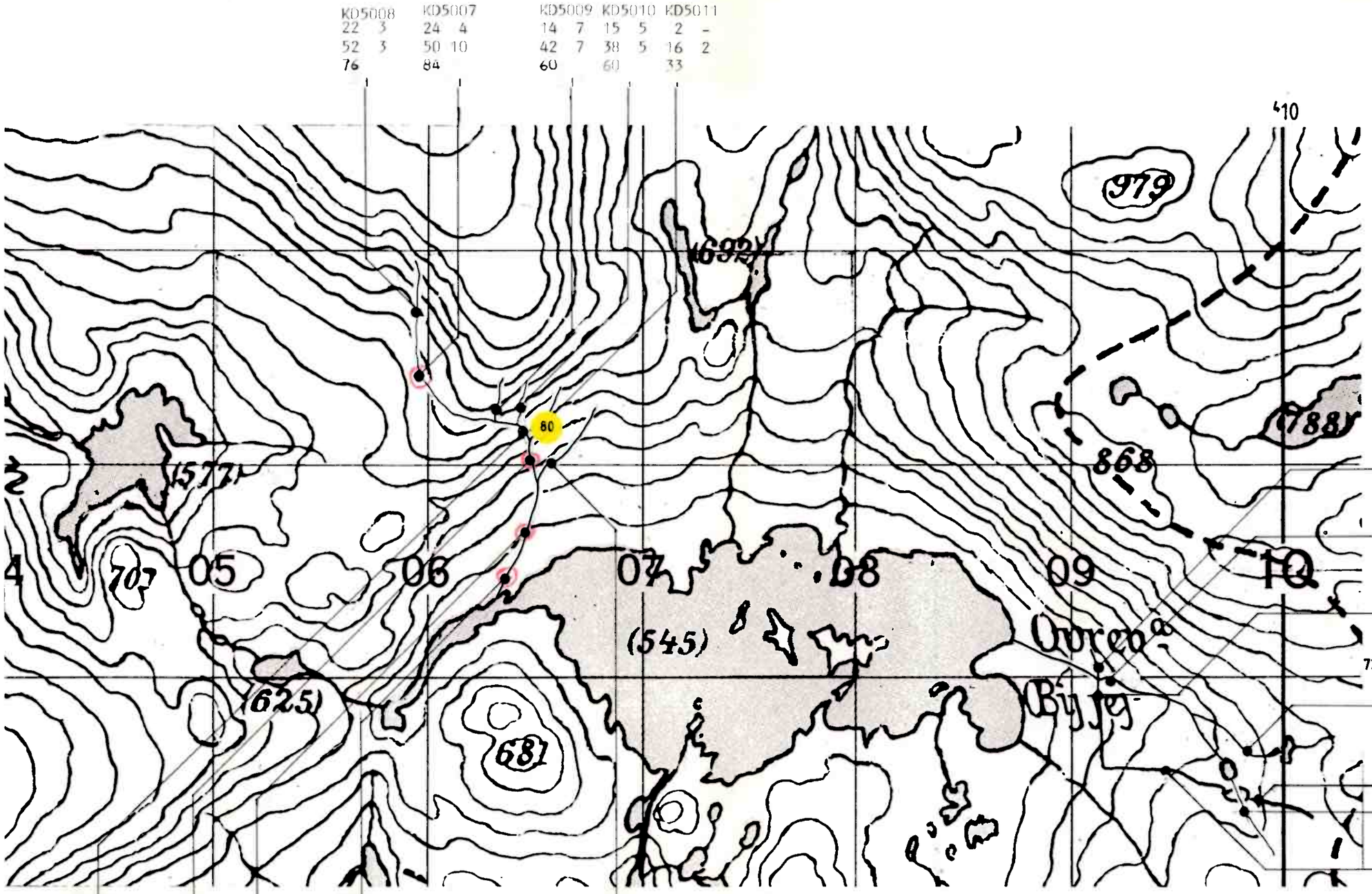
Nos.of follow up samples: KD 5013 - KD 5019

Description of drainage system:
A mainstream and three tributaries were sampled.The mainstream runs mostly over bedrock,and is therefor irregular in width and depth.Generally shallow and up to 5 meters wide forms the stream occasionally little pods and lakes.The three tributaries,as well as the mainstream follow the orthogonal N-S,E-W jointing.

Regional Geology:
Main lithology is gneissose diorite and monzodiorite.In the east of the claim contact to granite.A pegmatitic quartz-vein with chalcopyrite mineralization (rock sample 0300 KD 5001)was found in tributary 1,which follows a N-S trending fault.Further upstream occurs a 10 meter wide mylonite?/shear zone where rock sample 0300 KD 5002 was taken.

Comments:
One middle range gold anomaly detected in area with 136 Kalklavdalen III.

Recommendations for further follow up:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 136+137
Scale 1:20.000 KALKLAVDALEN III+IV

BINDAL

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Bangstad No 39 Size: 2.0 km^2

Claim location:Map sheet 1825 III Bindal

:Air Photo

:Oko Kart

Pegged:Yes No Partly Claim retained: Yes No

Stream length 1.5km Drainage area: 1.0 km^2

Original sample point(32 ppb Au) resampled:Yes No

Follow up team: CR/AK Duration:0.5day

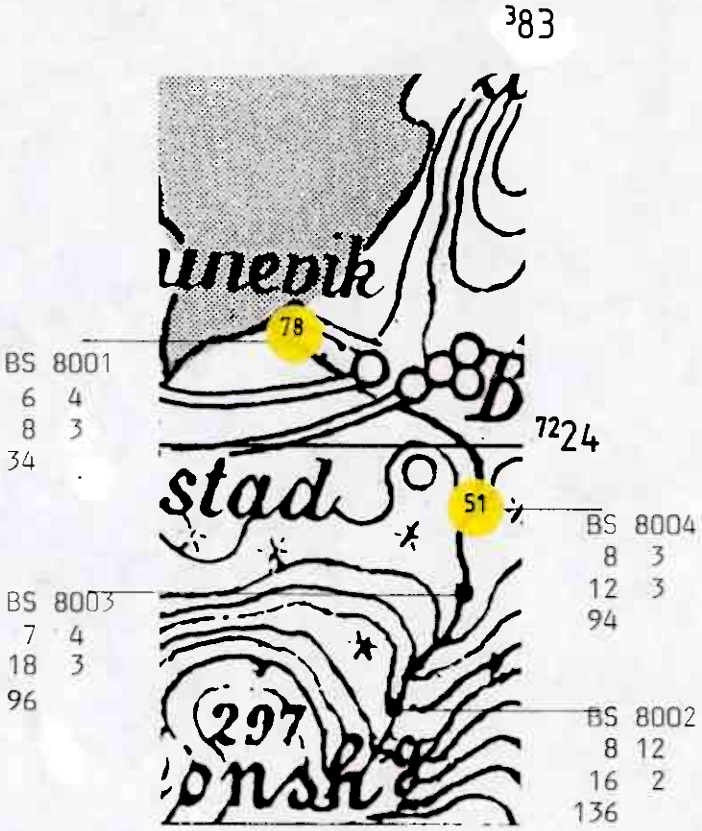
Nos of follow up samples : BB 8001 - BB 8004

Description of drainage system:
Stream rises in corrie with talus slopes, descending through forest with deep overburden, partly through a minor cleft/boulder area, thence via a hilly farmland area (clay overburden) to the fjord.

Geology:
The headwater areas are composed of diorite (in talus) and heavily skarned marbles, the lower valley being diorite which is pervasively veined by quartz-feldspar. Pyrite and pyrrhotite were observed in both veins and host.

Comments:
Two mid-range Au anomalies detectd. Not uninteresting As values.

Recommendations:
Single relatively isolated claim is dropped as it is not pegged but the area may be included dyring follow-up of the Sausvatn-Sobergelien belt north of Tosenfjord.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 39 BANGSTAD
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Bokestad No 36 Size: 0.5 km^2

Claim location: Map sheet 1825 III Bindal

: Air Photo

: Oko Kart DF 168 II

Pegged: ~~Yes~~ No ~~Partly~~ Claim retained: Yes No

Stream length 0.5 km Drainage area: 0.5 km^2

Original sample point (82ppb Au) resampled: ~~Yes~~ No

Follow up team: KB/KA Duration: 0.5day

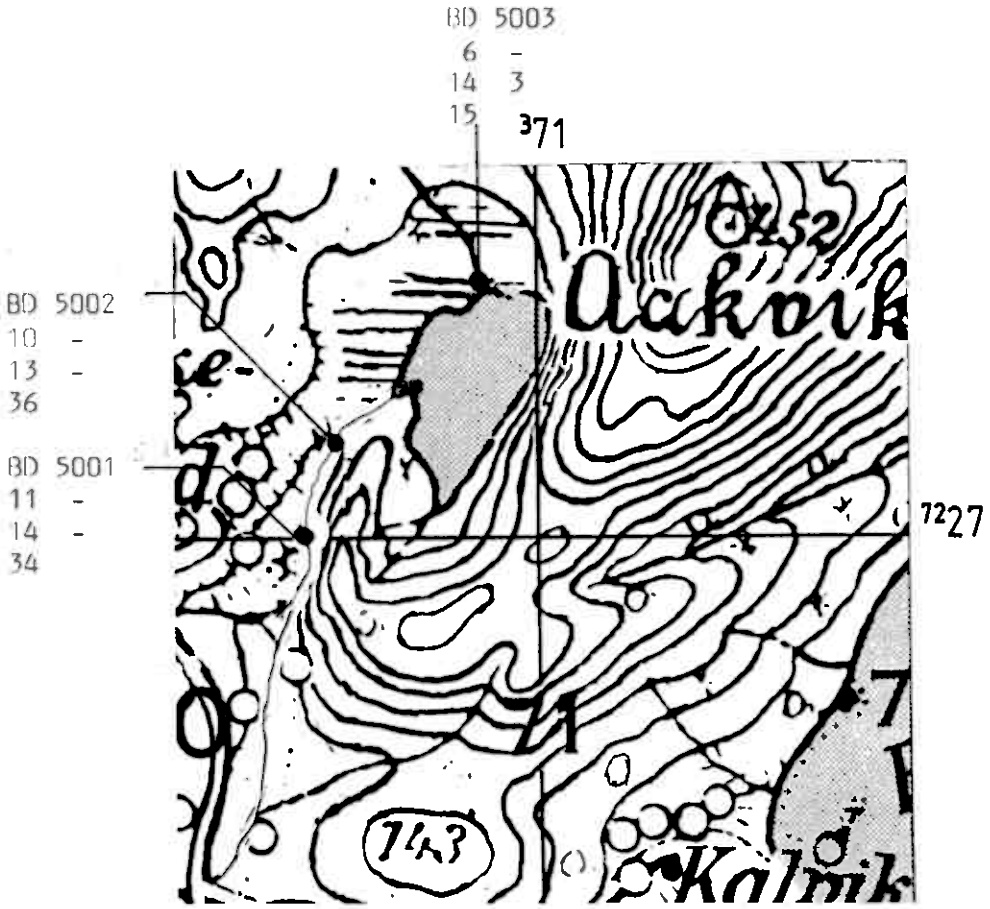
Nos. of follow up sample : BD 5001 - BD 5003

Description of drainage system:
The stream is about 2m wide and has no tributaries. It starts in a lake north of Bokestad and flows mainly through till and in a farmed area. Near the lake there are outcrops of mica-schist.

Geology:
Mica-schist with till overburden. In the stream one finds several boulders of a granitic gneiss.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 36 BØKESTAD
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Tosenfjord No: 5 Size: 1.0 km^2

Claim location: Map sheet 1825 III Bindal

: Air Photo

: Oko Kart

Pegged: ~~Yes~~-No Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 1.0 km^2

Original sample point (ppb Au) resampled: Yes No

Follow up team: CR/AK Duration: 0.25day

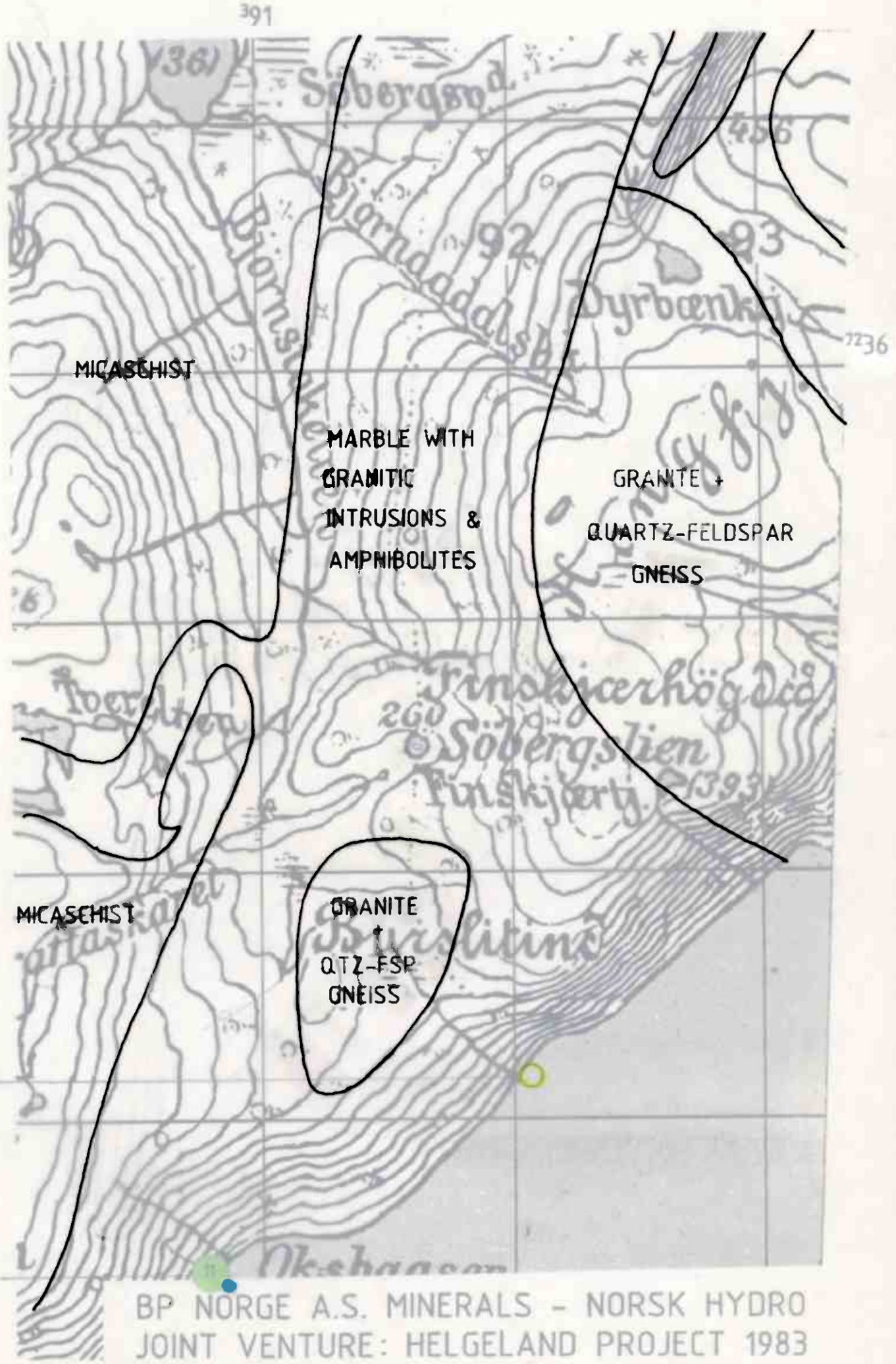
Nos.of follow up sample : TF 8001 - TF 8002

Description of drainage system:
Two streams sampled, draining a steep hillside. The stream of sample TF 8002 flows through an area of dense vegetation and moderate overburden, while that of TF 8001 flows through clefts, talus and karst caverns.

Geology:
The immediate drainage area consists of marble, intruded by quartz diorite.

Comments:
One low-range Au anomaly. High As and W in both streams.

Recommendations:
To be included in follow-up of Sausvatn-Sobergslien belt north of Tosenfjord - detailed geology and lithogeochemistry, possible deep overburden sampling.



TF 8001
33 15
42 8
244

TF 8002
20 158
26 8
100

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 5 TOSENFJORD
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Oksningen No153 Size: 1.0 km^2

Claim location: Map sheet 1825 III Bindal

: Air Photo

: Oko Kart DG 186 IV

Pegged: Yes ~~No~~ ~~Partly~~ Claim retained: Yes No

Stream length 0.7km Drainage area: 0.5 km^2

Original sample point(5 ppb Au) resampled: ~~Yes~~ No

Follow up team: CR/AK Duration: 0.25day

Nos.of follow up samples : OK B001 - OK0B002

Description of drainage system:
Source of system in a swamp (filled-up lake), the stream flowing gently through forest to farmland which extends to the coast.

Geology:
Overwhelmingly deep drift cover (mainly post-glacial clay). Rare scattered exposures of granodiorite.

Comments:
One low-range Au anomaly detected.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:GutvikNo 152 Size:0.25 km^2

Claim location:Map sheet 1725 II Solstad

:Air Photo

:Oko Kart

Pegged: Yes-No---Partly Claim retained: Yes No

Stream length 1.0km Drainage area: 2.0 km^2

Original sample point (7 ppb Au) resampled:Yes-No

Follow up team: KB/KA Duration:0.5day

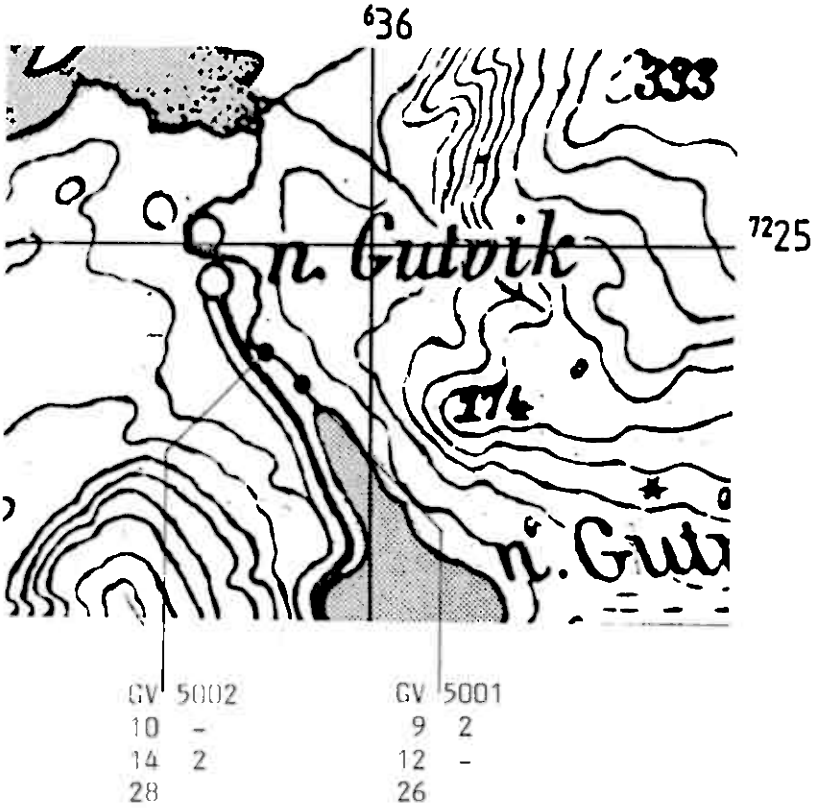
Nos.of follow up sample : GV 5001 - GV 5002

Description of drainage system:
The stream drains the N Gutvikvatnet to the sea.It is about 3 m wide and flows quietly,sometimes meandering through farmland.

Geology:
No exposure,thick cover of till and clay overburden.

Comments:
No Au anomalies detected.

Recommendations:
None.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 152 GUTVIK
Scale 1:20.000

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Rosvik No151 Size:1.75 km^2

Claim location:Map sheet 1725 II Solstad

:Air Photo

:Oko Kart

Pegged: Yes-No---Partly Claim retained: Yes No

Stream length 2.0km Drainage area: 3.0 km^2

Original sample points(10 ppb Au) resampled:Yes-No

Follow up team: KA/KB Duration:1,0day

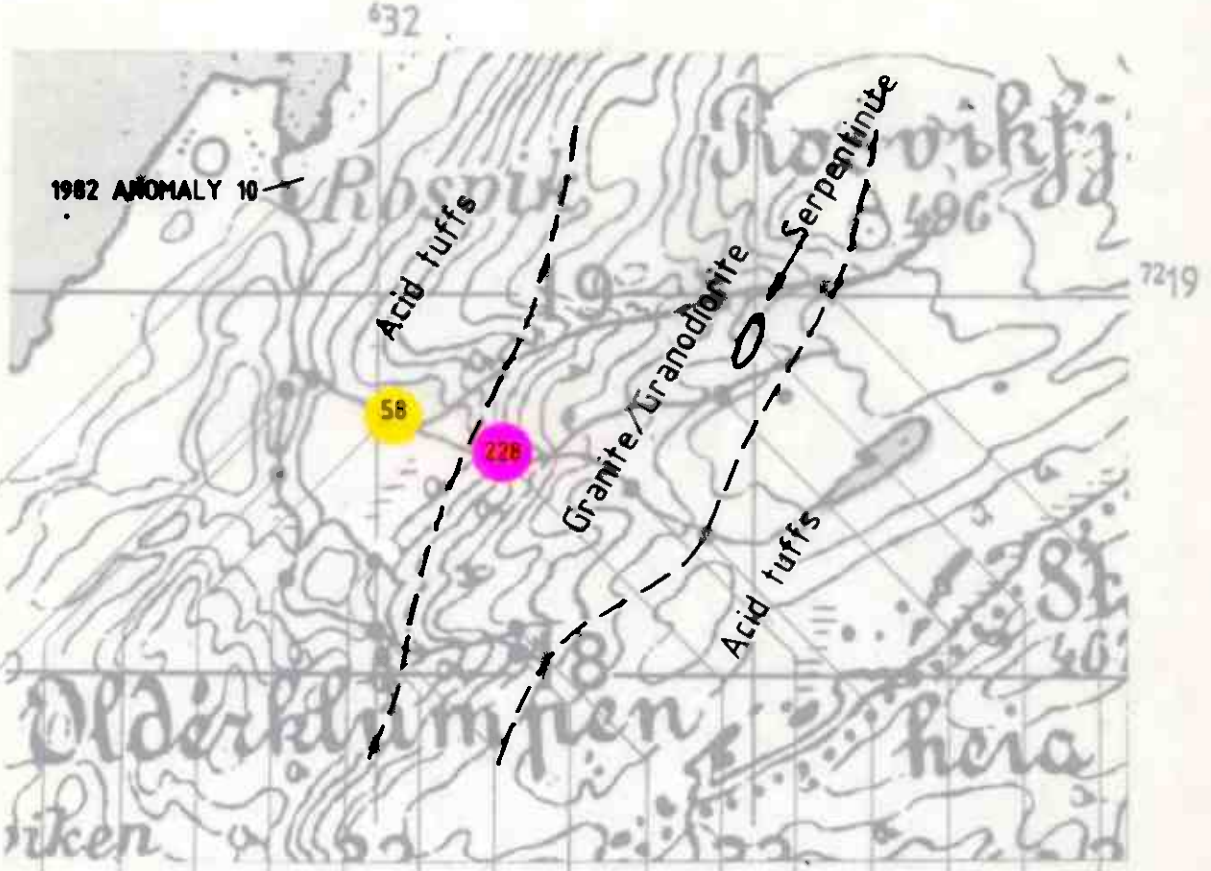
Nos.of follow up samples : RK 5001 - RK 5017

Description of drainage system:
The stream is 2-3m wide and 0.3-0.4 m deep for the first 800m,where it runs in a flat area.The rest of the stream alternates between a steeply plunging and a meandering behaviour.The lowest part of the stream meanders through post-glacial marine sediments.

Geology:
Granite and granodiorite intruded into a fine-grained laminated,pink feldspathic lithology (possibly volcanics) and metasediments(mica schist).A serpentinite pod also occurs.

Comments:
One high and one middle range gold anomaly.The geological association(acid tuffs,serpentinite,granite/granodiorite)is of interest.

Recommendations:
Detailed geological mapping and lithogeochemical sampling.



RK	5001	RK	5002	RK	5004	RK	5012	RK	5014	RK	5016	RK	5006	RK	5008	RK	5009
12	-	16	-	26	-	26	-	17	-	16	-	22	-	18	-	24	-
11	2	14	3	17	-	9	4	12	-	18	-	20	-	21	-	18	-
57		101		132		106		134		101		119		74		144	

RK	5003	RK	5011	RK	5013	RK	5015	RK	5017	RK	5005	RK	5007	RK	5010
10	-	14	-	19	-	25	-	16	-	25	-	11	-	24	-
15	4	9	4	9	1	9	8	17	3	17	-	23	-	13	-
89		100		123		94		91		126		70		149	

BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 151 ROSVIK
Scale 1:20.000

151 ROSVIK

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:Kongsmoen No 168 Size:1.0 km^2

Claim location:Map sheet 1825 IV Kongsmoen

:Air Photo

:Oko Kart

Pegged:Yes No Partly Claim retained: Yes No

Stream length km Drainage area: km^2

Original sample point (ppb Au) resampled:Yes No

Follow up team: KB/KA Duration:1.0day

Nos.of follow up sample : KM 5001 - BD 5004

Description of drainage system:
The stream is approx 1/2m. wide and approx. 0.3m deep. Both the main stream and the tributary terminates in talus lying below steep slope - the sediment seems quite immature.

Geology:
The main lithology is a gneiss of granitic composition - but of varying appearance, from granitic to a typical augen-gneiss with augens consisting of white feldspar. Granitic boulders with epidote alteration have been found.

Comments:
No Au anomalies detected.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Huseby No 154 Size: 0.5 km^2

Claim location: Map sheet 1925 III Leka

: Air Photo NLF 8001, 25-1 (frames 11-12)

25-2 (frames 04-05)

: Oko Kart

Pegged: Yes ~~No---Partly~~ Claim retained: Yes No

Stream length 0.5km Drainage area: 1.0 km^2

Original sample point(302 ppb Au) resampled: Yes ~~No~~

Follow up team: HB/IF Duration: 0.5day

Nos.of follow up sample : LE 0001 - LE 0004

Description of drainage system:
Sources in two drainage ditches in pastureland with post-glacial beach deposits, flowing over moderate slope in coarse talus down to pastureland with post-glacial sand and clay to original sample point.

Geology:
Amphibolites, tending to gabbroic textures exposed near stream in mid-coarse. Minor small pockets of pyrrhotite impregnation.

Comments:
Two high-range Au anomalies detected.

Recommendations:
Collection of lithogeochemical samples with follow-up of 155 Lekatinden II, 157 Lekatinden I and 156 Leketinden.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name: Traelnes No:149 Size:0.5 km^2

Claim location:Map sheet 1725 I Bronnoysund

:Air Photo

:Oko Kart

Pegged:Yes No Partly Claim retained: Yes No

Stream length 3.0km Drainage area:(minute)km^2

Original sample point (82ppb Au) resampled:Yes No

Follow up team: AS/KA Duration:(45 min)

Nos.of follow up sample : BK 3089

Description of drainage system:
Original sample point in a bog-hole fed by muddy seepage.

Geology:
No exposure.

Comments:
None.

Recommendations:
None.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Lekamoen** No**156** Size: 1.0 km2

Claim location:Map sheet 1925 III Leka

:Air Photo NLF 8001, 25-1 (frames 11,12)

25-2 (frames 04,05)

:Oko Kart

Pegged: Yes **No**---Partly Claim retained: Yes **No**

Stream length 3.0km Drainage area: 1.5 km 2

Original sample point (50 ppb Au) resampled: Yes **No**

Follow up team: HB/IF Duration:1.0day

Nos.of follow up sample : LE 0031 - LE 0038

Description of drainage system:
Two major tributaries: a) easternmost draining lake and descending over extensive locally derived fine talus fields and gulleys with moderate slopes/small rapids to the original anomaly point in flat farmland; b) rising beneath high cliff in boggy area, descending in braided form over talus with abundant local exposure, thence via small rapids down to farmland to join tributary a) stream sediments of local derivation.

Geology:
Headwaters of trib. a) in metagabbro/diorite, locally strongly sheared to chlorite-carbonate schist; of trib. b) in similar lithology but with abundant quartz veins. Both descend through massive to strongly sheared diorite and metagabbro.

Comments:
One high-range Au anomaly detected in headwaters of trib. b), 2 low-range Au anomalies in trib. a).

Recommendations:
See claim 155 Lekatinden II.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Lekamoen I No157** Size:1.75 km2

Claim location:Map sheet 1925 III Leka

:Air Photo NLF 8001, 25-1 (frames 11,12)

25-2 (frames 04,05)

:Oko Kart

Pegged: Yes **No**---Partly Claim retained: Yes **No**

Stream length 1.5km Drainage area: 2.0 km 2

Original sample point(494,9ppb Au) resampled: Yes **No**

Follow up team: HB/IF Duration:1.0day

Nos.of follow up sample : LE 0014 - LE 0030

Description of drainage system:
Two separate streams a) draining to S. West, rising in two lakes and flowing entirely through valleys filled with talus of local derivation, excellent exposure; b) draining to west, rising in lake flowing over high cliff directly down to coastal plain.

Geology:
Of stream a): flows parallel and close to contact of serpentinite with metagabbro, being in the former. Stream material locally abundant in asbestiform minerals, talc. Of stream b): rises and flows entirely in variously coloured serpentinites, locally with thin chromite impregnation bands.

Comments:
2 high-range, 1-med range and 2 low-range Au anomalies in stream a); 1 medium-range Au anomaly in stream b).

Recommendations:
See 155 Lekatinden II.

ANOMALY FOLLOW UP HELGELAND PROJECT 1983

Claim Name:**Lekatinden II No155** Size: 0.5 km2

Claim location:Map sheet 1925 III Leka

:Air Photo NLF 8001, 25-1 (frames 11-12)

25-2 (frames 04-05)

:Oko Kart

Pegged: Yes No---~~Partly~~ Claim retained: **Yes** No

Stream length 2.0km Drainage area: 1.5 km 2

Original sample point (49 ppb Au) resampled: Yes No

Follow up team: HB/IF Duration:0.5day

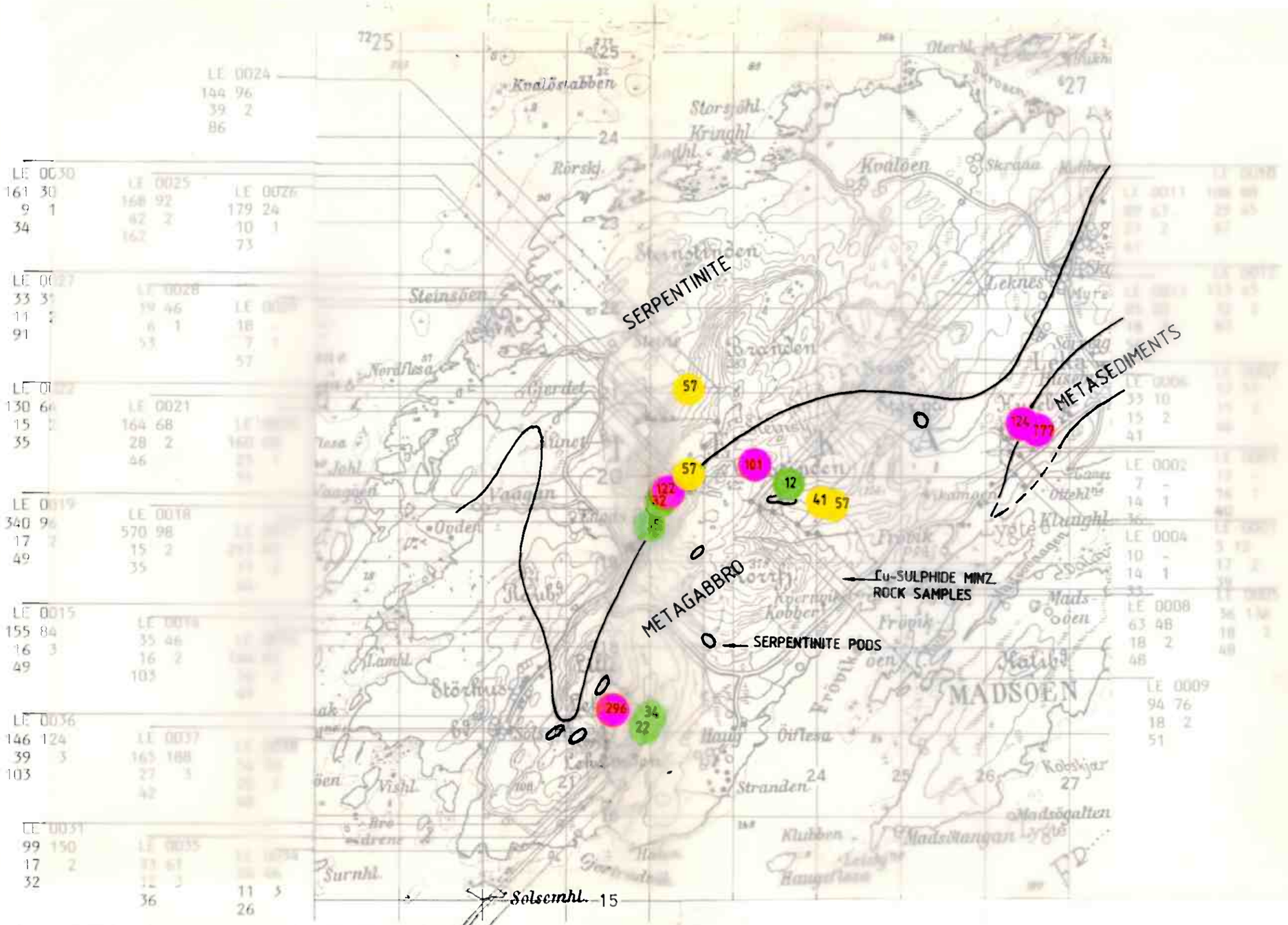
Nos.of follow up sample : LE 0005 - LE 0013

Description of drainage system:
Two major tributaries rising in mod. sloped semi-plateau with excellent exposure and numerous shallow gulleys, descent via steep waterfalls not uncommonly following bedrok fractures to a flat semi-bog area with no exposures. Thence through bedrock gulleys to the original anomaly point.

Geology:
Headwaters in metagabbro with strongly folded chloritic shear-zones. This is cut by sub-vertical fractures commonly containing minor traces of sulphide mineralization. Metagabbro and diorite near original anomaly point.

Comments:
One high-range, 2 med-range and 1 low-range anomaly detected.

Recommendations:
To be followed-up by lithogeochemical sampling to determine the claims 154 Huseby, 156 Lekamoen and 157 Lekatinden I.



BP NORGE A.S. MINERALS - NORSK HYDRO
JOINT VENTURE: HELGELAND PROJECT 1983
FOLLOW-UP RESULTS
Claim block/No./Name : 154-157 HUSEBY,
Scale : 1:50,000 LEKATINDEN II, LEKAMOEN &