



Bergvesenet

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Rapportarkivet

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Tittel

Riofinex Norway: Monthly Report for August and September 1976

Forfatter

Johnson, P.R.

Dato

År

30.09 1976

Bedrift (Oppdragsgiver og/eller oppdragstaker)

Norsk Hydro A/S

Kommune

Narvik

Fylke

Nordland

Bergdistrikt

1: 50 000 kartblad

13314

1: 250 000 kartblad

Narvik

Fagområde

Geologi

Boring

Dokument type

Forekomster (forekomst, gruvefelt, undersøkelsesfelt)

Tårstad

Råstoffgruppe

Malm/metall

Råstofftype

Zn, Py

Sammenheng, innholdsfortegnelse eller innholdsbeskrivelse

Rapporten viser til at geologisk kartlegging og geokjemisk prøvetaking (lenger nord) er gjennomført. Ingen større anomalier er påvist geokjemisk.

Det vises til at et lite borprogram er avtalt på Tårstad.

Den geologiske kartleggingen av den mineraliserte sone og borposisjonene blir beskrevet.

Vedlagt kart med geologi og planlagte borhull.

Monthly Report for August and September 1976

From P R Johnson

To C J Knight
D H Mackenzie
N A Lenning

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Ref EN 30

30th September 1976

ABSTRACT

The field season was finished by the end of September and all the geological mapping and geochemical sampling planned had been completed.

Most gechemical results are now available and plotting of them has begun. No major anomalies have been outlined todate but the Malangseidet area continues to look interesting.

The most promising area in the area so far examined by the joint venture is the Tårstad pyrite-zinc showing. It has been agreed a small drill-programme should be carried out as soon as possible to test the lateral continuity width and grade of mineralisation at Tårstad at a shallow depth.

WORK PLANNED FOR AUGUST

It was planned during August to:

1. complete the geological mapping of the Kvittfjell, Trøsen, Kvitnesfjell and Tårstad areas
2. complete regional geochemical sampling in the Fauske area
3. complete follow-up sampling of top-priority areas
4. complete geological examination of low-priority anomalous areas.

WORK CARRIED OUT

GEOLOGICAL WORK

Mapping of top-priority geochemical anomalous areas

During August and September C Embleton has completed mapping the Kvitfjell, Trøsen and Kvitnesfjell areas. The results of the work will be reported in October together with the results of the follow-up sampling.

Tårstad

P Johnson has mapped the Tårstad areas and the coastal strip on the north shore of Ofotfjorden between Tårstad and Evenes.

A preliminary map of the Tårstad pyrite-zinc showing is given in Fig 2.

Outcropping mineralisation occurs on the west bank of the tidal inlet of Tårstadosen, exposed in three inclines. Overall exposure is very poor (less than 10% away from the coast).

Mineralisation consists of varying proportions of pyrite and sphalerite in calcite and dolomite marble. Several types of mineralisation have been observed, viz:

- a) conformable laminae and thin beds of pyrite and sphalerite
- b) thicker beds of rich impregnation of sulphide in marble (up to 70% sulphide) up to 0.5m thick
- c) brecciated dolomite marble with an irregular network of zinc rich sulphide
- d) coarse grained pyrite-calcite veins infilling late tectonic fractures.

Overall the sulphide zone appears to be conformable with the marble wall rocks, strikes N15°E and presumably dips with the wall rocks at between 25-30° to the east. The old inclines themselves are badly weathered and it is

difficult to be confident of the width and grade of mineralisation. Old reports quote up to 9%Zn and widths of a few to several metres. I am sceptical of the latter. Visual estimate of Zn is of the order of 5%Zn.

Outcrops of mineralisation can be seen between 150 and 500m north of the road bridge across Tårstadosen. Strike extension of the mineralised horizon is probably indicated by scattered outcrops of pyritic marble and schist north and south of the inclines.

There are good exposures of pyritic rocks at the coast at Neset, south of Tårstad where the following sequence is found:

(structural top) Sequence of pale marbles and schists

Pyritic zone (2m) with thin pale marbles, thin graphitic marbles, thin dolomites and schists, all with pyrite.

Pale(?shallow water) marbles becoming dolomitic upwards

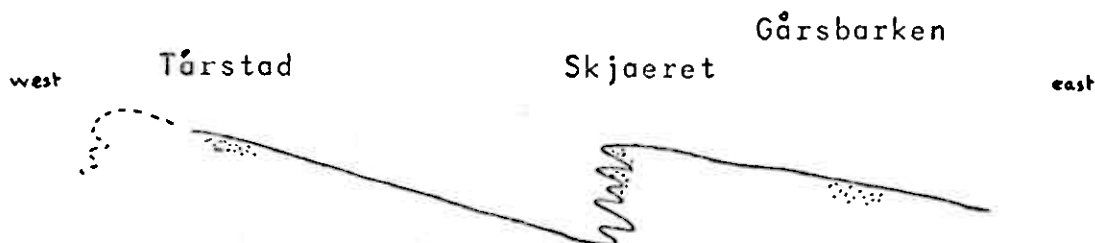
Phlogopite biotite rich marble

Pale marbles (?shallow water/evaporitic)

(structural base) with dolomites

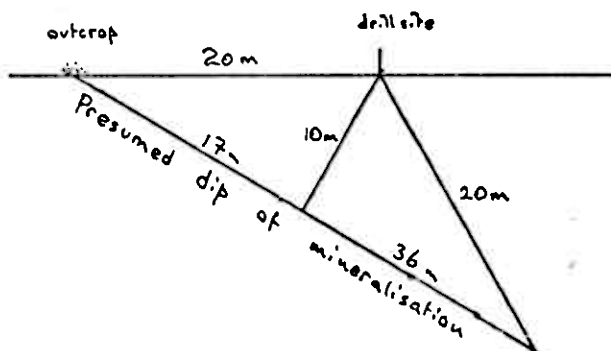
Other pyritic outcrops occur at Skjaeret and Gårsbarken 650 and 800m east of Neset respectively. It is probable they belong to the same zone, repeated by folding. The regional style of folding is asymmetric, overturned to the west with long and short limbs and subhorizontal fold axis plunge.

The exact relationship of the mineralised outcrops to the deformation is not known. If Tårstad coincides with a short limb of a fold, for example, there may be only little depth extension, but, on the other hand, it is possible that Tårstad and Gårsharken lie on the long limbs of folds with the Skjaeret outcrops (where dips are locally very steep) in a short limb as sketched below



At a meeting in Bodø on 17.09.76 (see below) it was decided to carry out a small drill programme (up to 250m of drilling) to test the strike continuity, width and grade of mineralisation at Tårstad at shallow depths.

Five sites will be drilled (Fig 3) with two holes at each site inclined 60° west and 60° east respectively. These holes are estimated to intersect mineralisation between 10-15 and 20-25m down hole respectively and 17 and 36m down dip from the surface



Drilling will be carried out in October or early November.

Geological Traverses

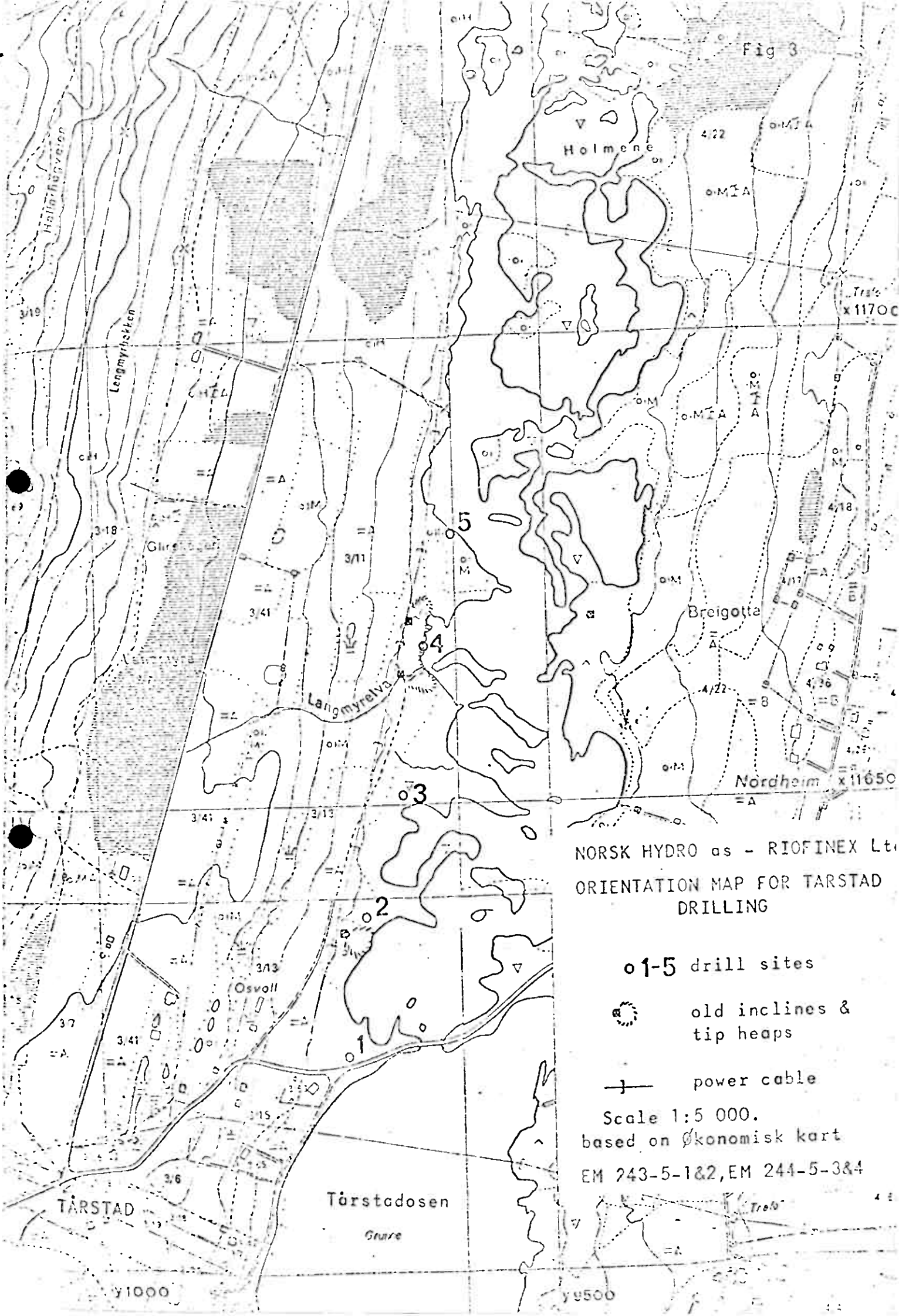
During August and September geological traverses have been carried out across the area south of Fauske along the Medby-Beiarn road, around the island of Rolla, across the Hårfjell syncline (south of Ofotfjorden) and along Ausfjorden.

These traverses cross various tracts of marble which have been geochemically sampled or strike extensions of areas sampled and will be reported later.

GEOCHEMISTRY

Fauske

The preliminary results for Pb, Zn and Ba of regional sampling in the Fauske area are shown on Figs 4 & 5 with local geology shown on Fig 6. Samples coloured green have values above the threshold.



NORSK HYDRO as - RIOFINEX Lt.
ORIENTATION MAP FOR TÅRSTAD
DRILLING

○1-5 drill sites

○ old inclines &
tip heaps

— power cable

Scale 1:5 000.

based on Økonomisk kart

EM 243-5-1&2, EM 244-5-3&4