DATE:
February 25, 1991
TO: Gary Wells
COPIES TO:

FROM: John Bradford
SUBJECT: Drill Target Compilation, Mosquito King

## A. Bowler Creek

## Data Available

- Noranda 1:5000 geology map
- Noranda SE-88 HLEM anomalies
- DDH locations
- Noranda detailed soil grids ( $600 \times 400 \mathrm{~m}, 50 \mathrm{~m}$ lines: Harry and Dick grids)


## Anomalies

Anomaly A

- multielement soil anomaly, $-100 \times 550 \mathrm{~m}$, open to SW ; trend at acute angle to strike of units and EM conductors; zoned from Cu - Zn along SE to Ag - Pb to NW; partially overlaps double (or broad) 350 m long Max-Min conductor.
- reinterpretation of Noranda geology suggests anomaly lies between two high angle cross-faults in area of mafic $>$ felsic volcanics.
- soil anomaly tested by one DDH: Dick-1, with weak $\mathrm{Zn}-\mathrm{Pb}$ mineralization. Conductor possibly tested by GM-9, with weak $C u$ mineralization (Zn, Pb values unknown). Three DDH apparently collared just $S$ of conductor.

Anomaly $B$

- Cu - Ag soil anomaly; possibly related to mafic dyke/fault.

Anomaly C - China Creek area

- EM anomaly coincident with China creek horizons; tested by BC-
 $\mathrm{BC}-13,16$ and 17 may have tested horizon or may have missed (either too short or collared to $S$ of horizon).
- no soi.. data for this area.

Anomaly D

- long series of EM anomalies (with partially coincident mag, according to Black, 1978), tested by BC-6, BC-9, GM-10, GM-11, Harry-1, 2, which intersected low grade (up to $1.2 \% \mathrm{Zn}, 0.44 \% \mathrm{Cu}$ ) mineralization over 1-4 m widths; not closed off by drilling.
- soil, mag data unavailable.

Anomaly E - Harry Grid

- overlapping NNE trending $\mathrm{Cu}, \mathrm{Pb}$ and Ag anomalies ~100x400 m; 2 multielement cores; open both ends; low Zn values.
- geophysics, geology not available.
- not drill tested.


## Priority

1 - A, C
$2-\mathrm{D}, \mathrm{E}$
$3-B$

## B. Mosquito King

## Data Available

- I: 5000 geophysical compilation, incorporating: Huntec IP, Craigmont EM-16, Orell Shootback EM, Walcott IP, Noranda HLEM.
- Craigmont $\mathrm{Pb}, \mathrm{Zn}, \mathrm{Cu}$ soil data.
- Noranda $\mathrm{Pb}, \mathrm{Zn}, \mathrm{Cu}$ and Ag soil data, EM and mag for Gash grid (poorly located).
- 1:5000 geology compilation.
- DDH locations.


## Anomalies

Anomaly A - Main showing area

- coincident surface mineralization, $\mathrm{Zn}-\mathrm{Pb}$ soil anomaly, IP and EM-16 anomaly. Open and untested to NE of $\mathrm{MK} 81-1$ ( $15 \% \mathrm{Zn}+\mathrm{Pb} / 1.15$ m).
- IP anomaly open to NE (extends to edge of grid).
- SW extent of zone is probable F3/F4 fold hinge, with Ball.park sl uwing to $W$ being the continuation of the same horizon. Hinge area tested by MK81-2A, B ( $7 \% \mathrm{Zn}+\mathrm{Pb} / 1.83 \mathrm{~m}$ ). Plunge of fold should be ascertained if possible and tested down plunge.
- intersections from Ballpark anç Main showing areas suggest grade and thickness increase to NE.
- should ascertain why DDH 77-1 and 77-2 failed to intersect mineralization (too short?). Need sections.

Anomaly B - Eastern showing area

- semi-coincident surface mineralization, 400 m long EM anomaly, $\mathrm{Zn}-\mathrm{Pb}$ soil anomaly. Untested by drilling. Trench \#7: 26\% $\mathrm{Zn}+\mathrm{Pb} / \mathrm{I}$ m.
- Main showing is probably continuous to Eastern showing area. Total strike length of Anomalies $A+B: 1.0-1.3 \mathrm{~km}$. Covered by Noranda's Gash grid.

Anomaly C - Ballpark showing area

- semi-coincident surface mineralization, Pb soil anomaly, IP and Shootback EM anomalies. Tested by 9 drill holes, 5 of which intersected low grade mineralization (best: MK81-8, with $4 \%$ $\mathrm{Zn}+\mathrm{Pb} / 1.5 \mathrm{~m})$.
- strike extent limited to $N E$ by fold hinge, but open and untested to SW of $\mathrm{DDH} 77-4$ ( $3.6 \% \mathrm{Zn}+\mathrm{Pb} / 1 \mathrm{~m}$ ). Westernmost trench (\#13): $10 \%$ $\mathrm{Pb}+\mathrm{Zn} / 1 \mathrm{~m}$. Shootback EM anomaly extends to NE of suspected hinge zone -300 m.


## Anomaly D

- Zn-Pb soil anomaly, between EM-16 anomalies. Small gap between this anomaly and the downslope dispersion from the Main and Ballpark showings. Untested.


## Anomaly E

- 500 m long EM anomaly (weaker response than Anomaly B) and semicoincident Pb soil anomaly. Untested.
- on Gash grid, 500 m N of Eastern showing,


## Anomaly F

- 250 m N of Ballpark showing, coincident Huntec IP, EM-16 and weak

Shootback EM anomaly; no soil response. Untested.

## Anomaly G

- coincident $\mathrm{Zn}-\mathrm{Pb}$ soil anomaly and EM-16 anomaly; tested by DDH 77-5 (no intersection).


## Anomaly H

- overlapping broad IP, EM-16 and weak Shootback EM anomalies, broad Pb anomaly. Weak conductive/magnetic zone (Noranda report 14439; data unavailable).
- tested by Trench N-4 (location poor). Conductivity due to graphitic sediments and up to $5 \%$ disseminated Py-Po; mag response due to increased disseminated magnetite. Trench \#3 (just $N$ of $N-$ 4?) : $2.3 \% \mathrm{Zn}+\mathrm{Pb} / 1 \mathrm{~m}$.


## Anomaly I

- Pb-Zn soil anomaly within broad Shootback EM anomaly. Soil anomaly open to west. Untested.


## Anomaly J

- broad conductive zone (EM-16 and Shootback), with coincident $\mathrm{Pb}-$ Zn soil anomalies. Pb-Zn-Ag soil anomaly and EM conductor (Noranda report; data unavailable).
- tested by DDH 77-6 (no intersection) and Noranda trench \#3. Mineralization SE of road consists of 2 m wide zone of disseminated sulphide ( $0.48 \% \mathrm{~Pb}$ ), NW of road includes 29 m wide (not true width) zone of up to $6.0 \% \mathrm{~Pb}, 2.45 \% \mathrm{Zn}$ in individual samples.

Anomaly K - Spar showing

- surface mineralization and coincident IP anomaly. To SW (along strike?) is coincident $\mathrm{Pb}-\mathrm{Zn}-\mathrm{Cu}-\mathrm{Ag}$ soil anomaly (Noranda report; data unavailable). To NNE is 800 m long HLEM conductor.
- tested by 9 drill holes (locations poor); 2 of which intersected horizon (almost collared in it). Strike extent unknown and untested in both direotions. Noranda trench $\# 2$ indicated 7 m wide zone of disseminated galena, up to $1.4 \% \mathrm{~Pb}, 0.9 \% \mathrm{Zn}$.


## Anomaly L

- broad area of long HLEM anomalies (probably formational).
- tested by Noranda trench \#1. Uncovered graphitic sediments, no mineralization.

Anomaly M

- coincident Huntec IP, EM-16 anomaly. Trench \#6: $22 \% \mathrm{Zn}+\mathrm{Pb} / 1.2 \mathrm{~m}$.

Numerous other geophysical anomalies, suspected to be formational; need geochemistry to sort out.

## Priority

1-A, B, C, K
2 - D, E, F, G, J, M
3 - H, I, L

| Area | Number | Type | Width | Zn\% | Pb\% | $\mathrm{Ag}(\mathrm{g} / \mathrm{t})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern | 7 | chip | 1.0 | 14.70 | 11.10 | 136.09 |
| Main | 8 | chip | 1.2 | 7.80 | 6.52 | 69.59 |
| Ballpark | 10 | chip | 1.2 | 7.20 | 5.65 | 94.61 |
|  | 11 | chip | 0.7 | 8.30 | 2.60 | 49.36 |
|  | 12 | chip | 1.4 | 3.40 | 2.81 | 55.19 |
|  | 13 | chip | 1.0 | 4.23 | 6.33 | 148.43 |
| Western | 2 | chip | 1.0 | 0.43 | 11.50 | 142.60 |
|  | 3 | chip | 1.0 | 1.65 | 0.72 | 13.03 |
|  | 6 | chip | 1.2 | 16.20 | 5.74 | 128.89 |
| Spar | adit | chip | 3.0 | 8.25 | 36.60 | 836.43 |

