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GEOPHYSICAL REVIEW

ANVIL DISTRICT

Y.T.

for

CURRAGH RESOURCES INC

Whitehorse, Y.T.

by

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STRATAGEX LTD

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GEOPHYSICAL REVIEW: ANVIL DISTRICT

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GEOPHYSICAL REVIEW: ANVIL DISTRICT

1.0 INTRODUCTION

This report encapsulates an intensive review of past geophysical surveys amassed in the course of thirty-five years of exploration in the Anvil district, Y.T. This review, undertaken at the request of Gregg Jilson, Vice-President Exploration for Curragh Resources Ltd., was carried out by the author in the course of a week's visit to Whitehorse at the end of April.

This effort had as its principal objectives:

(1) determination of the effectiveness and completeness of past geophysical surveys;
(2) evaluation of the effectiveness of the various geophysical methods employed vis-a-vis future exploration efforts by Curragh;
(3) identification of any residual targets suggested by the existing geophysical data;
(4) determination of the utility (and feasibility) of further reprocessing to complement or extend the existing compilation maps;
(5) recommendations as to further geophysical surveys in support of continuing exploration by Curragh in the district.

The Anvil district, one of the world's premier base metal camps and a paradigm for the sedimentary exhalative Pb-Zn-Ag sulphide deposits, contains five major ore bodies (Vangorda, Faro, Swim, Grum and Dy) plus other lesser occurrences. The complexities of mineralization and host lithologies are ably summarized in Jennings and Jilson (1982).

In view of the voluminous geophysical files, the intensive prior exploration and the complex geology of the district, it understandably proved impossible to fully scrutinize and assimilate all pertinent information in the course of the week's review. Nonetheless, a major portion of past efforts and surveys was indeed examined and appraised, so that the discussion and comments below are believed to rest on a reasonably informed understanding.

In this regard, particular thanks are due to messrs. Jilson and Pigage for their encouragement and assistance in organizing this effort, for ferreting out obscure files and reports and for providing geological insight and guidance in evaluating the various data sets. Despite their diligent instruction, a variety of errors and omissions have doubtlessly crept into the following discussion; the author hopes that such misapprehensions will be remedied through a continuing interaction with the geological staff of Curragh Resources.

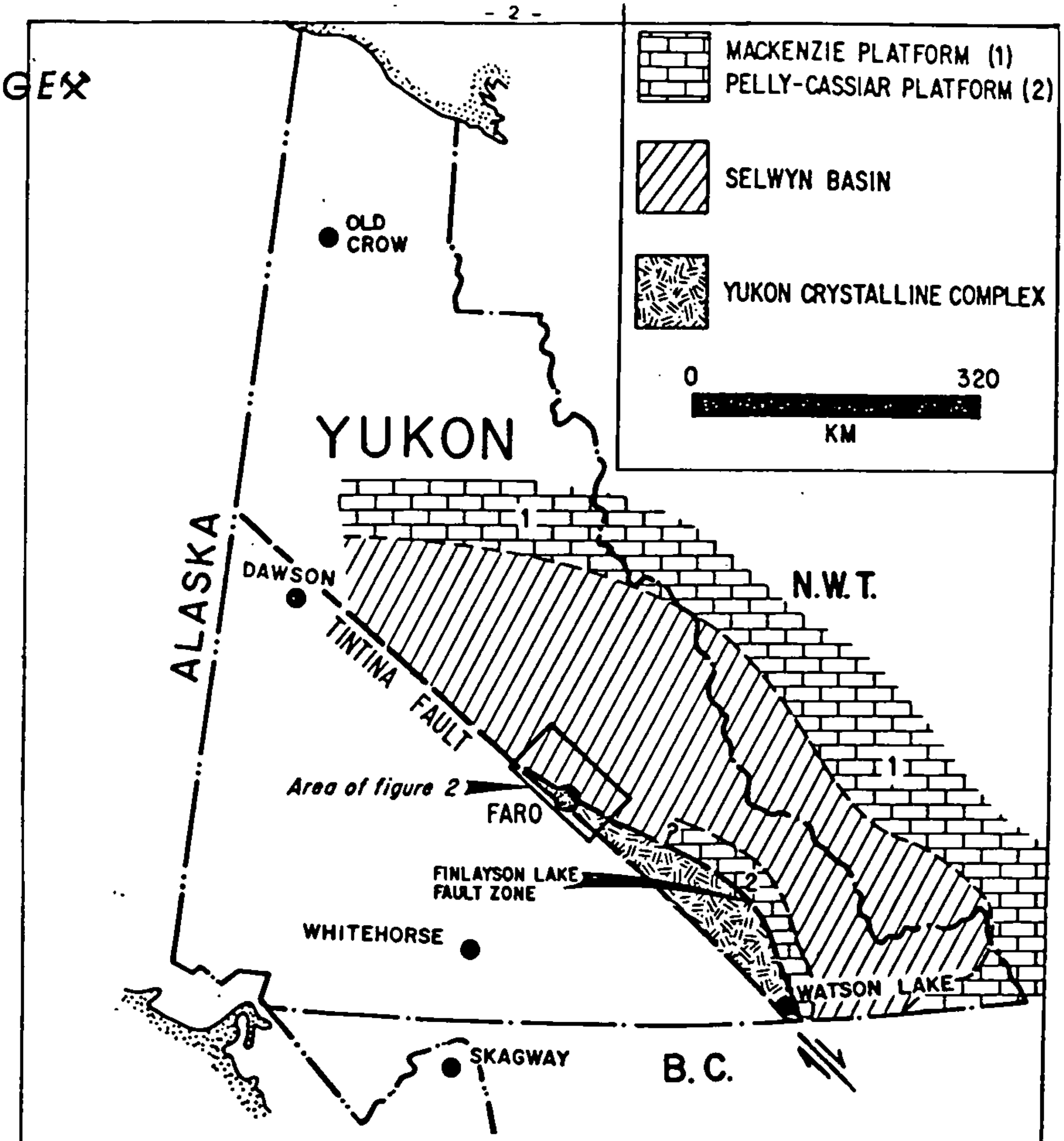
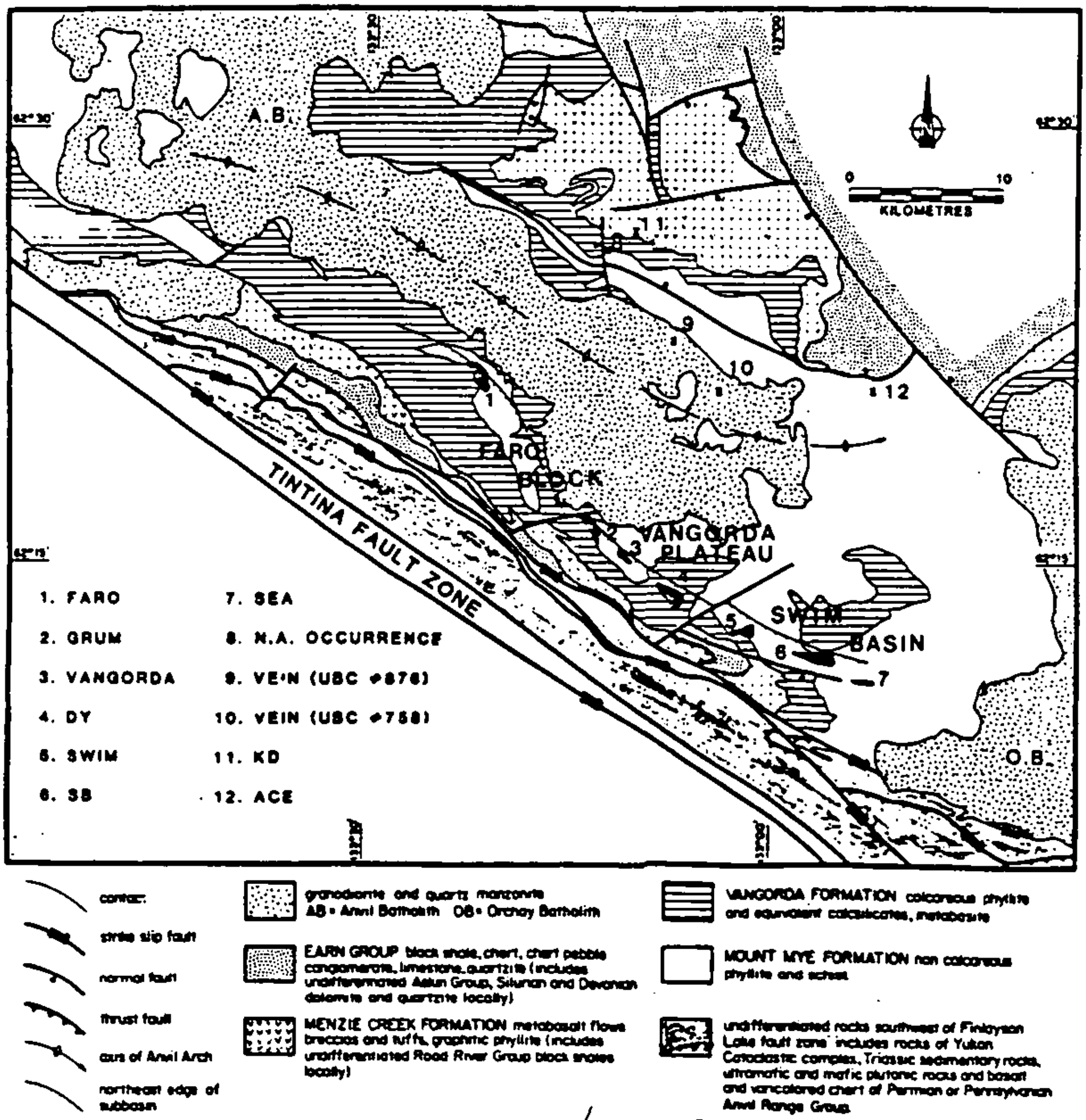


Figure 1

Location of the Anvil Pb-Zn-Ag district with respect to selected Paleozoic and Mesozoic tectonic elements northeast of Tintina fault. Tintina fault is an upper Cretaceous, right lateral strike slip fault with approximately 450 km displacement. Yukon Crystalline Complex (also known as Yukon Cataclastic Complex) is an imbricated sequence of mid Paleozoic magmatic arc related rocks and upper Paleozoic ophiolotic rocks; it is exotic with respect to the Yukon further northeast and was "accreted" in upper Jurassic - lower Cretaceous along the Finlayson Lake fault zone, a major transcurrent fault or an upturned thrust.



– Jennings, D.S., Jilson, G.A.
Geology of the Anvil Range and its
Ore Deposits. Jan. 1982.

Figure 2

Geologic map of the Anvil Pb-Zn-Ag district showing location of ore deposits. Nos. 1-7 are the main stratiform deposits, of which only Nos. 1-5 contain significant Pb-Zn.

2.0 PAST GEOPHYSICAL EFFORTS

In the course of this review, the author examined a great range of maps, plots, field notes, memos and reports that spanned the entire period of exploration in the Anvil district, from the discovery of the Vangorda deposit in 1954 to a drill hole EM survey conducted in the fall of 1989.

A number of excellent exploration case histories and papers have been presented on the various discoveries, with useful discussions of the various geophysical techniques employed and their effectiveness (e.g., Aho (1966, 1969), Brock (1973), Sirola (1975), Jennings et al (1983).

Historically, the geophysical tactics favoured by the various major exploration groups (Kerr Addision, Northern Dynasty, Cyprus/Anvil) have primarily involved a combination of magnetics or EM or gravity, with limited use of IP/resistivity. Selection of these methods rested on empirical evidence from field surveys, supported to a rather limited degree by physical property determinations and quantitative analysis.

To a large degree, the choice and effectiveness of the geophysical techniques employed has been strongly influenced by available technology. For instance, the limitations of drift-prone flux-gate magnetometers used without a recording base station hampered full applicability of magnetics in this environment, a limitation that regional aeromagnetic surveys (1963 & 1964) sought to avoid.

Of the spectrum of EM techniques available, TURAM and Crone Shootback JEM/CEM were principally employed on the ground, while airborne coverage was limited to one regional helicopter AEM program conducted in 1964 (Hunting system).

Both JEM and TURAM harboured problems in terms of detection, resolution and interpretation where multiple or complex conductors were present, as is commonly the case in the Anvil district. The response of juxtaposed graphitic conductors may in a number of cases have been mistaken for the adjacent sulphide bodies.

In like manner, the gravity surveys sufferred from non-thermostated instruments with significant drift, an absence of tidal and terrain corrections and crude regional/ residual separations.

IP/resistivity, based on a variety of test surveys with both time-domain and frequency-domain instrumentation, has generally been of secondary importance. Efforts to use IP to detect deep deposits have been at best marginally successful. Complex resistivity (aka spectral IP) has not demonstrated its hoped-for potential in differentiating sulphide from graphitic targets. The Russian technique CHIM which employs DC currents to produce enhanced geochemical anomalies from deep metalliferous bodies may be of interest if its effectiveness is substantiated in carefully controlled test surveys planned for this summer at various sites in Canada.

Nonetheless, the prior surveys have been clearly effective, as evidenced by the additional major deposits (Swim, Grum and Faro #1, 2 & 3) discovered with the aid of geophysics. The impressive roster of mining geophysicists who have been involved with exploration in the Anvil camp have generally appreciated the applicability and limitations of the various techniques, and the advantages gained through a combined approach, even if individual surveys were less than diagnostic and physical properties not fully determined.

Based on the present review, the extensive ensemble of past geophysical surveys at Faro is judged to constitute generally effective but incomplete coverage of the broad fairway hosting the known deposits and regarded as having the best remaining exploration potential.

Curragh's appreciation of and care for its extensive archives documenting exploration by itself, predecessor and other companies is highly commendable, as is the capturing of the bulk of this information in the form of hand-drafted compilation maps, all of which greatly facilitated this review.

However, it should be noted that in a number of instances past surveys are represented in the archives soley by maps with no indicated topographic features. In other cases, particularly gravity surveys, only residual maps were exhumed and the complete trail from survey notes to reduced data to residual was not seen, so that full appreciation of the portrayed features was not achieved.

Based on the scrutiny of the variety of surveys over the known deposits, a modified version of the table attached to the report by Hill (1983) has been prepared, characterizing the anomalies recorded with the different techniques employed. Hill's table apparently reflected an incomplete review of the evidence, since a significant number of differences may be noted upon comparison.

The importance of high-quality magnetic data in this district, hitherto not fully appreciated by the author, received additional support in the course of scrutinizing the two available airborne magnetic surveys and is highlighted in this table. With the exception of the DY, all deposits discovered to date have a clearly identifiable associated magnetic anomaly; better quality aeromagnetic data might well resolve a broad, deep source associated with the DY. Better quality aeromagnetic data would also assist in recognizing the extensional transverse faulting that has displaced and/or preserved the key contact between the Vangorda and Mt Mye sequences.

One other aspect meriting comment is the apparent lack of any organized series of measurements on core or in drill holes or on exposures that would provide a comprehensive data base as to physical properties, particularly conductivity and susceptibility, for a range of mineralization and host lithologies.

3.0 RESIDUAL TARGETS

Utilizing the insights derived from the review of past surveys, and guided by the compiled prior drilling, surface geology and models for mineralization, a number of geophysical targets were identified that merit further scrutiny to determine their exploration potential. These targets are all considered second (or 2-) priority, since the obvious first priority targets have long since been at least partly tested by drilling.

These secondary targets have been selected on the basis of (1) weak, possibly deep magnetic anomalies and (2) residual (positive) gravity anomalies, preferably where a reasonably complete body of data could be examined. They are shown on the attached 1:2000 scale maps.

It will be noted that the EM data (and possible untested EM conductors) have received less emphasis in this selection of residual targets. This reflects in part the judgement that identifiable EM responses have been diligently pursued in the past with gravity and/or magnetics and, where merited, with subsequent drilling, and in part the poor resolution achieved in areas of complex or multiple conductors. In effect, the remaining exploration potential is discerned to reside in deep, blind deposits, probably beyond the depth of detection of TURAM or JEM, or in sectors with thick overburden and/or intermixed graphitic and sulphide conductors. EM techniques retain considerable interest and applicability, particularly modern airborne systems and deep time-domain ground systems, an aspect that will be commented on further in Section 5.

4.0 ADDITIONAL PROCESSING & COMPILATION

The core of the present compilation is embodied in two series of map sheets at scales of 1" = 1000' and 1" = 2000', respectively, covering both the Anvil and North Anvil areas. Each geophysical parameter is presented as a separate map for each map sheet. These compilations, carried out manually using reduced-scale versions of the original data plots or contour maps, were principally completed in 1978, and partially updated in 1981. They usefully serve the very valuable objective of presenting in organized fashion the various geophysical data collected by different contractors on disparate - and in places overlapping - grids.

The compilation in its present form contains a few deficiencies which limit its applicability for guiding further exploration. The most prominent deficiency is that the residual gravity for the various individual grids have simply been physically amalgamated, and hence display discordant values and trends where grids overlap. In other cases, the residual gravity created by an arbitrary regional/residual separation does not properly outline the features of interest. Additionally, a few surveys were discovered to have been inadvertently omitted from the compilation.

A general limitation of the present compilation is that the information resides primarily in fixed form as maps, and hence cannot be as readily compared, combined and/or subjected to additional processing, or otherwise manipulated as readily as if the data sets were in digital form and hence computer addressable and manipulatable with ACAD and other specialized graphical and geophysical programs.

Hence it is a general recommendation that the present compilation be maintained, updated and upgraded as a key component of on-going exploration efforts. In particular, conversion of the data sets into computerized files is encouraged as time and funds permit. This conversion, realized through a combination of scanning and digitization, should draw on the primary maps or plots, rather than simply scan in geophysical data in its presently compiled form.

Consideration should be given to reprocessing and proper integration of the numerous gravity surveys. Since different surveys employed different base elevations, different gravity bases, differing Bouguer densities and different regional/residual separations, achieving this objective represents a considerable project in itself and may not warrant the investment, particularly if field notes and primary plots are missing for a significant fraction of the total gravity data base. Consequently, it is recommended at this time that a proper inventory of gravity survey information be assembled, and that Peter Walcott's prior attempt to tie grids be scrutinized. At that point the cost and utility of recalculation, digitization and re-compilation can be more accurately determined. If the full effort is judged not warranted, an alternative approach might be pursued involving re-processing of the larger, reasonably complete, higher quality surveys which could be treated as separate entities; surveys which are tentatively indicated to fulfill these criteria are denoted by an asterisk (*) on the appended maps and in the attached references.

A variety of colour and shadow presentations can be generated once data is in computer-addressable form. These advantages (which are not limited to just geophysical data) may argue for scanning/digitization of the two existing aeromagnetic surveys, particularly if new survey coverage is not forthcoming in the near future. Even though these surveys are deficient by today`s standards due to wider-than-optimal line spacing, uncertainties in recovered flight path, residual diurnal and inter-line variations, and +/-10 nT noise levels, appreciation of the contained information would be enhanced with colour and shadow maps.

5.0 FURTHER SURVEYS & FUTURE TACTICS

The review of past geophysical efforts and the preceding analysis clearly points to a continuing role for geophysics in the present stage of exploration in the Anvil district.

The gravity method is judged to constitute a vital element in future exploration. Systematic, detailed, high quality surveys with full terain and tidal corrections should be completed in those sectors considered to be geologically favourable but without prior gravity coverage. Such data should be usefully contourable to at least 0.2 mgals and interpretable along profiles to 0.15 mgals, so that potential deep sulphide mineralization may be discernible. Possible ambiguities caused by bedrock ridges can be mitigated by mapping overburden thickness by multi-frequency EM, or, more expensively, by seismic refraction. To the extent feasible, these surveys should be tied to GSC base stations and any adjoining prior surveys. Recompilation and reprocessing of past surveys, treated in the preceding section, may require district-wide surveys to tie elevations and local base stations.

State-of-the-art airborne magnetic/EM surveys are viewed as a straegic component of an intensive, multi-year exploration effort in the district. High-quality, detailed aeromagnetic data, flown on accurately located lines and susceptible to the full spectrum of modern processing and display procedures, will generate useful insights as to geology and structure and will enable quantitative interpretation of possible target anomalies. Similarly detailed and diagnostic AEM data will provide a consistent, accurate portrayal of shallow conductive features and horizons, and enable mapping of lithologic units and overburden thicknesses on the basis of calculated (apparent) resistivities. Such a combined survey would replace the present ground and airborne magnetic and EM data bases as the primary geophysical sources.

Helicopter-borne multi-coil/multi-frequency systems are judged to offer the best compromise to achieve the various objectives. However, such systems suffer from a limited depth of exploration (50 - 70m) compared to the INPUT system flown in a fixed-wing aircraft. Consequently INPUT may merit consideration for particular areas (such as Swim Basin), where subdued topography is present and the desire for deeper EM information outweighs the requirements for low-level, detailed aeromagnetic (and EM) information.

Ground EM methods will continue to be relevant to the continuing exploration effort. MaxMin HLEM (or its time-domain equivalent PEM) is advocated for pursuit and delineation of comparatively shallow AEM targets indicated by new airborne surveys. Large-loop time-domain EM is recommended to search for possible deep conductors in favourable geologic terrain, particularly in combination with (airborne) magnetics and/or gravity.

Surface IP/resistivity and spectral IP techniques are considered to be of secondary importance, although their potential for mapping lower grade sulphide accumulations and lithologic units may find application vis-a-vis particular problems or environments. CHIM may merit consideration if its proclaimed capabilities is substantiated.

Seismic techniques are of interest for specialized applications. Seismic refraction can map overburden thicknesses to engineering accuracies. Seismic reflection may provide a means of mapping structural perturbations in engineering delineation of comparatively flat-lying deposits.

Drill hole electrical and EM methods constitute an obvious complement to deep drilling for mineralization at depths beyond the capabilities of surface methods. The initial foray with DH EM (1989, White Geophysics), although unsuccessful in locating an off-hole conductor, provided an instructive exercise as to logistics and costs, and suggested that distracting responses from graphitic horizons may be limited. A more complete suite of conductivity measurements on types of mineralization and host lithologies would help determine which type of drill hole electrical survey would provide the optimum assistance in this setting.

Finally, thorough analysis and integration of all relevant data is encouraged to enhance exploration effectiveness for additional deposits in this comparatively mature camp.

6.0 SUMMARY & RECOMMENDATIONS

An intensive review of past geophysical surveys in the Anvil district has confirmed the efficacy of geophysics vis-a-vis past and on-going exploration, identified residual targets based on available gravity and aeromagnetics, and outlined directions and means to enhance effectiveness in the search for further deposits in this intensively explored district.

Specific recommendations distilled from the review include:

(1)More complete determination of relevant physical properties of mineralization and host lithologies;

(2)Reprocessing and integration of various past gravity surveys to the extent feasible;

(3)Computerization of the vital compilation maps to enable more effective use and updating;

(4)Digitization, re-display and augmented interpretation of available aeromagnetic data;

(5)Reflying of a major portion of the district with detailed aeromagnetics and AEM;

(6) Deployment of high-quality gravity surveys in favourable areas presently lacking in coverage;

(7) Use of state-of-the-art time-domain EM, both on surface and in drill-holes, to complement geologically directed deep exploration;

(8) Continued integration and regular scrutiny of geophysical tactics and techniques vis-a-vis specific exploration programs to optimize current efforts.

Respectfully submitted,
Jerry Roth
Jerry Roth
Senior Consulting Geophysicist

TABLE I

ANOMALY COMPARISON TABLE

Deposit	Reserves(Mt)	Geophysical Response					
		AEM	EM	AMAG	G.Mag	grav.	IP
Vangorda (1953)	5.2	+++	+++	+++	(++)	+++	+++
Faro #1 (1964)	37 (tot)	++	(++)	++	(++)	+++	(++)
#2		?	++	+	(+)	+	+
#3		N	??	+	(?)	+	??
Swim (1965)	4.3	+?Gf	Gf	++	++	++	(++)
Grum (1973)	28	+?Gf	+?	++	(+)	++	?
DY (1976)	18	N	(N?)	?	(N?)	(N)	??
SB (1964)		?	+?	+	+	?	(+)
SEA (1964)		+?	++	+	+?	+?	(+)

Explanation:

+++	Strong response
++	Moderate response
+	Weak but distinguishable
?	Weak, uncertain
??	Very questionable response
N	No response
( )	No survey; estimated response

NB: Deposits arranged chronologically except for SB and SEA, with corresponding pattern of increasing depths.

Ground EM surveys: mostly TURAM: occ. CEM/JEM responses

REFERENCES
(with selected comments)

General

Aho, A.E., 1966, Exploration methods in Yukon with special reference to Anvil district, Western Miner Vol. 39 pp127-148

Aho, A.E., 1969, Base metal province of Yukon, CIM Bull. April pp397-409

Brock, J.S., 1973, Geophysical exploration leading to the discovery of the Faro Deposit, Y.T., CIM Bull. vol 66 no. 738, pp 997-116

Chisholm, E.O., 1957, Geophysical exploration of a lead-zinc deposit in Yukon Territory, *in* Methods and Case Histories in Mining Geophysics, Sixth Commonwealth Mining and Metallurgy Congress, pp 269-277

Hall, G.I., 1983, Anvil District Compilation, Dome Petrol.

Jennings, D.S. and Jilson, G.A., 1984, Geology and sulphide deposits of Anvil Range, Yukon *in* Mineral Deposits of the Northen Cordillera pp319-361

Jennings, D.S. and Simpson, J.G., 1983, Exploration methods and discovery histories, Anvil district, Y.T.

Sirola, W.M., 1975, Kerr Addison's Grum deposit: Exploration in the Yukon's Anvil Range, CMJ p40

Tempelman-Kluit, D.J., 1972, Geology and origin of the Faro, Vangorda and Swim concordant zinc-lead deposits, central Yukon Territory, GSC Bulll 208, 73p

Walcott, P., 1983?, IP/resistivity measurements on small-scale samples

References (cont.)

Compilation Sheet D-6

1964 Aeromagnetic survey, Huntings
(line sp = 1000 ft, elev = 400 ft; orig. maps;
data contoured at 20 nT; anomaly resolution: 40nT)

1965 AEM survey, Lockwood
(1000 ft line spacing, 100 ft elev w/ 7m bird at 4000 Hz;
anomalies presented in contoured form with I and Q peaks
in ppm indicated)

1969 Gravity Interpretation, Hill Rust Claims, Rose Creek Area
(contains profiles of G_{obs}, regional)

1969 Gravity Survey, Rose Creek Area (report) by R.B. Galeski, Overland Expltn Serv Ltd, for Hecla Mining Co Ltd.
(contains only residual B.G. plot;
main anomaly tested w/ 3 DDHs: calc-sil w/ minor Po/Py)

1969 Gravity Survey (report), by D.R. Vohra, CAMS, for Kim Expltn
(covers parts of JO & RAE claims; 400 ft line sp;
data presented as contours of residual? B.G. only)

1969 Gravity Survey of JOE Claims, Rose Creek Area, Y.T. (report), by W.G. Cook et al, Overland Expltn Serv., for Hecla Mining Co Ltd.
(comprises western extension of Hill-Rust grid:236-332W; data show very strong regional grad to N & NE from granite; visual regional only, shown on profiles)

1970 Summary Report, Hill-Rust Claim Group, by G.D. House, Hecla Operating Co.

Miscellaneous Commments:

Aeromag: extensional transverse faulting evident; three residual anomalies

Ground Mag: 25% of favourable sector

TURAM: 70% of fav. sector; fair agreement w/ AEM conductors

Gravity: 5 surveys/ 30% of fav. sector; three possible residual anoms.; data for large JOE grid not compiled

References (cont)

Compilation Sheet E-6 (Faro #1, 2 & 3)

1964 Aeromagnetic survey, Huntings
(distinct anom over Faro; several poss. residual anoms)

1965 AEM survey, Lockwood

1966 IP Survey, ACE< DEA, Faro#2 & Vangorda, by D.A. MacDonald
(survey used Geoscience f-domain equip w/ d-d, a=300 & 600 ft; readily discernible responses over Vangorda and Faro #2)

1967 IP Survey, Faro, SEA & Bill Claim Groups (report), by Roger Watson, Huntec Ltd., for Anvil Mining Corp Ltd.
(scattered traverses w/ t-domain p-dp a=300 ft; strong response over Faro on line 80W)

1970 IP Test Survey over Faro #3 Orebody, by P. Walcott, for Kangaroo Expltn Ltd.
(three lines surveyed over downfaulted Faro #3; target questionably discernible as broad, weak chargeability response at depth with no change in apparent resistivity; modern IP receiver with better sensitivity might have yielded better definition.)

1972 EM Test Survey, Faro #3 Orebody, by P. Walcott
(deeper #3 zone prob. not reflected, but definite response over shallower #2 recorded)

1976 Gravity Survey, W. Faro (report), by P. Walcott
(approx. 300 stns; B.G. map; not incorp. in compilation)

1989 Borehole Pulse EM Survey, Faro NW Project (report), by D. Hrynyk et al., White Geoph., for Curragh Resources
(first attempt to utilize DH EM for deep, blind targets; employed 8 channel Crone rcvr; better S/N achievable with current 20 channel rcvrs)

Miscellaneous Comments:

Ground Magnetics: 70% coverage of favourable sector, mostly on 800 ft line spacing; contoured at 100 nT; aeromag shows better coherence and definition of anomalies

TURAM: coverage comparable to magnetics; anoms generally consistent with AEM responses, but poor resolution of multiple conductive settings.

Gravity: six surveys; 50% coverage; inconsistent residuals; six possible targets

References (cont)

Compilation Sheet F-6 (Vangorda, Grum, Dy)

1965 Gravity Survey, DY (NW) Claims (report), by J.S. Brock, Dynasty Exploration
(detailed survey over several magnetic features in area of complex geology - omitted from compilation; survey by United Geoph in 1964, w/ superv by Galeski; original notes; plus separate map of B.G. map w/ values)

1966 Ground Geophysical Investigations, SUN Claim Group (report), by J.S. Brock for Anvil Mining Corp.
(MF-1 magnetic and CEM w/ s=300' surveys; various shallow sources defined and tested by RH, encountering Gf +/- Po; southern magnetic anomaly app. untested)

1968 Gravity Interpretation, DY Group (report), by R. Galeski, for Anvil Mining Corp.
(1333 stns measured by Overland Expltn Serv; plots of elevations and B.G.; poor regional/residual separation; ltd discussion)

1970 Gravity Survey, SUN Claims (report), by W.T. Salt et al.
(survey by Overland Expltn Serv; plots of elev., B.G. and residual values, plus profiles showing regional//residual separation; best positive residual deep, tested w/ only one DDH)

1970 Geologic, Geophysical and Geochemical Investigations on the SUN-TIE Groups (report), by W.J.Roberts, Dynasty Expltn Ltd.
(includes magnetic survey on northern SUN grid, corresponding to gravity coverage; not compiled)

1972 Gravity Interpretation, Rose and Blind Creek Claims (report), by R. Galeski, for Anvil Mining Corp.
(cover DEA+DY grid; includes only residual B.G. map)

1973 Gravity Interpretation, W. Vangorda Area (report), by R. Galeski, for AEX Minerals Ltd.
(reviews and re-interprets gravity over GRUM & environs: mentions accompanying map but not seen)

1973 Gravity & Turam surveys, SUN claims, Shrimp Lake area (notes)
(not included in compilation; positive grav. anom. tested by DDH 73-2 - possible residual interest)

1977?Test IP Survey DY Deposit, by Peter Walcott
(employed pole-dipole array, a=600, 1200 a/o 1000 ft, reading N=1-4, t-domain equip; mostly near-surface sources)

1981 AEM/Aeromagnetic Orientation Survey, Grum Deposit, MPH Cnsltng
(flown w/ Geonics EM33-3 heli-system w/ 400m lines as test for Getty Metals Ltd by Geoterrex; good delineation of assoc. mag anomaly; AEM response from sulph + graph. seds; should acquire original tapes & review)

1981/82 Spectral IP Test Survey over the GRUM deposit (report), by P. Hallof, Phoenix Geoph., for Cyprus Anvil
(surveyed with 500 & 1000 ft d-d array; need composite; GRUM possibly indicated as weak, deep IP response; resistivity defines shallow-dipping contact)

Miscellaneous comments:

Aeromag: Vangorda - distinct anom in magnetically complex area; GRUM - deep anom; DY - possible weak deep anom not resolved in present data;

Ground Mag: 20% coverage; lines at 400 & 800 ft spacing

TURAM: 70% coverage; fair agreement w/ AEM conductors; no expression of GRUM??

Gravity: 60% coverage/ 5 surveys; didn't find data/maps for major survey over Grum; broad anom detected in 1956 survey by Prospectors Airways over Grum but attributed by Crone to thinning of o/b)

References (cont.)

Compilation Sheet G-6 (Swim, SB & SEA)

1963 ELSEC Airborne Magnetic Survey, for Kerr Addison Mines Ltd. (survey data exists only? as compilation of principal anoms superimposed on geology, plus un-annotated analog traces; flown at 500 ft spacing; distinct anoms recorded at several locations led to discovery of Swim, SB & SEA deposits; not incorporated in 1"=1000 ft compilation series; poss. residual targets)

1964 Magnetic, EM and SP Surveys on the Swim Group (report) by W. Sirola, Kerr Addison Mines Ltd. (covers the subsequently discovered Swim deposit; Magnetics: mod. anom over deposit; CEM: belt of conductors prob. related to gf schist, no anom over mnlztn; SP: similar anoms to CEM; no anom over Swim)

1964 Magnetic, EM, SP, Gravity & Geochemical Surveys, BS1-24 Claims (report), by W.M.Sirola, Kerr-Addison Mines Ltd (magnetics: strong anom over part of SEA deposit; CEM: local anom over part of SEA deposit; gravity: weak 0.4 mgal positive anom over mnlztn; data not compiled)

1964-65 Kerr-Addison (memos & letters) (correspondence btwn Sirola and P. Kavanaugh re importance of magnetics, feasibility of lake gravity survey at Swim)

1965 Lockwood AEM Survey (only compiled anom maps seen)

1967 Spector, A., Re-evaluation of lake gravity

1974 Comments on geophysics (handwritten notes by ?) (mentions absence of grav. anom over SB deposit)

1974 Gravity survey, SWIM claims (& vicinity), by Airborne Geoph. Surveys, for AEX Minerals Corp. (important survey; overlaps prior Kerr-Add Swim survey; only maps of residual gravity found)

Miscellaneous Comments:

AEM: numerous conductors; discrepancies with compiled geology and with compiled TURAM data;

TURAM: 75% of favourable area covered; no indicated problem w/ conductive overburden

Gravity: 50% coverage/ 7 surveys; six 3rd priority residual anomalies, none w/ corresponding magnetic response;

Grnd Mag: 40% of fav. area; quality fair to poor; two possible residual targets.