Dundas 1:25,000 Past Geophysics

930688

02_4820

Past Exploration within the area of EL 15/1976 - Dundas
CSR Limited*
Ellis, P.D. EL15/1976

5 cm

DRG. NO. 7602-190
EL 15/76 DUNDAS
PAST GEOPHYSICS
1:25000
0 500 1000 m

AMG N

REGIONAL SURVEYS

1982 Geotex 500m lines (infill at 250m?) - Total
1957 Rio Tinto - A'mag - E-W ¼ mile
1973 Turair - Geophoto by Scintrex
1966 Afmag by Mellor for Mines Expl.
1972 Tenneco - Airborne HEM701 EM
1982 CSR DIGHEM II

Roads
EL Boundaries
Relinquished Area Boundary
Joint Venture Boundaries
Mining Lease Boundaries
Rivers

NOTE See Appendix I in CSR Report No EMR 73/87 for details of the Analyses of the surveys - correlate by numbers.

(8) Melba Flat - S. Webster - 1967
- Mag - good detailed work
- Modelled as dipping prism but no drill results
- Detection to 30m
- No contour map

(9) Melba Flats - Hackett, 1968
- Drilling not explained mag source
- EM recommended but no further work done

(11) Melba Flats - McPhar report - 1970
- Only 2 traverses (145 & 103) - dipole-dipole
- Anomalies are narrow & not well resolved (100' dipoles)
- Good geochem correlation.
- Additional lines by E-Z (30N-42N) (200' dipoles)

NORTH MELBA
IP (5 lines)
Magnetics
Soil Geochem Cu, Pb, Zn, Ni, Sn
Drilling

(12) EZ - Scintrex - Hobe
- TURAM - 24 conductors
- Max depth ~60m
- Good TURAM/geochem correlation
- Results indicate a) continuous lithologies/contacts
b) discontinuous pods of sulphides
2. No Magnetic results

(10) E-Z Bruton - 1971
- Report refers to (12) above
- Mag results reflect lithology only
- No significant mineralisation indicated

(17) New Cons. Goldfields Forsythe - 1967-69
- Mag - vertical - coarse sampling ~400' lines - 50' sampling
- Good correlation with high pyrrhotite content assoc. with known mineralisation. Useful regional mapping

(19) (20) - Summary reports
- Additional mag proposed
- IP proposed - not undertaken

ANOMALY A
IP
Drilling

(18) Hinops - Layden - 1974
- Scintrex - gradient IP
- Two reconnaissance traverses
- Lines too short to be meaningful.

BMR CUNI EXTENDED (EZ)
Magnetics
Soil Geochem Cu, Pb, Zn, Ni, Co, As
Turam EM (Scintrex)
Drilling

CSR CUNI
Soil Geochem Sn, Cu, Pb, Zn, Bi, Ag, Au, Ni, Co, Cr, Sb (Mo, W, As, V, Ba)
Mag
VLF
Drilling (2)

CSR NORTH CUNI
Magnetics

CGFA MONTEZUMA
Mag
Soil Cu, Pb, Zn, Ag, Sn
Ni, As, Sb

(31) Montezuma - EZ - 1983
1. Genie - results confirm Dighem results & map Montezuma Fault vs. well. V. few additional anomalies (seems to ~20m)
2. Mag - Maps known geology & fault but nothing extra.

EAST MELBA - EZ
IP

(29) Hanson - Newnham - 1971
IP - pole-dipole - well defined polarizable zones. Some structure interpretable.
SP - correlates well with IP but badly affected by topo
Mag - good structural information, lovely presented (more zones).

(28) - Geophoto - Johnston - 1971
Mag - results used to locate ferromagnesian gossans - also mapped serpentinite contacts
VLF - No mag correlation
- No correlation with gossans
IP - of no use

see 10 above

EZ DEVEREAUX / Melba Flat
Magnetics
Soil Geochem Cu, Pb, Zn, Ni, As

BMR DEVEREAUX
SP } BMR 1958
EM }

GRAND PRIZE
Turam EM
SP
Vertical Mag
Drilling 1963
} BMR 1960 Mines Dept.

RONSON RAZORBACK
Mag
IP
SP
Soil Sn, Cu, Pb
Drilling

CARBINE WEST
Mag
VLF-EM
Soil Cu, Pb, Zn, Ni, Co, Ag
Drilling (2)

CARBINE EAST
Mag
VLF
Soil Cu, Pb, Zn, Ni, Co, Ag

EZ MONTEZUMA
GENIE
Mag
Soil Sn, Cu, Pb, Zn, Ag, As, Fe, Mn, Cr
Drilling

NEVADA
VLF
Mag
Soil

INTERMEDIATE
EM, SP, Mag - BMR 1960

BMR CUNI
SP } BMR 1959
EM } BMR 1960
Drilling - Mines Dept 1952-1955
Mag

(23) Geophoto - Turner - 1971
- VLF-EM - 200' lines, 50' reads
- mapped Montezuma Fault + very surface lithological effects.
- geologically useful only.

Cuni - Devereaux
(21) BMR - Kenecke - 1953
1. EM - limited freq. domain coverage
- not definitive + v. shallow (5-10m)
2. Mag - Vertical - sparse data
- Failed to record known basic sills
3. SP - carefully done - 25' sampling
- Results show a number of short strike-length anomalies coinciding with known ore zones
- Results very shallow.
- Topography affecting results.

SOUTH NEVADA
Mag
VLF

CSR RAZORBACK
Soil

NORTH MONTEZUMA
VLF-EM
Soil Geochem Cu, Pb, Zn, Ag, Ni
some Co, As, Sb, Sn
Drill (6)

BMR RAZORBACK
Turam EM
SP
Mag
Drilling - Mines Dept
} BMR 1960 1958-62

NORTH COMET
SP
Mag
VLF-EM
Drilling (2)
IP (part)

(22) Comstaff - 1963
- No text - IP lines + plan only
- Results correlatable & in most instances have detected known mineralisation.

COMSTAFF DUNDAS
Afmag 1966
IP
Soil Geochem Sn, Cu, Pb, Zn, Fe
Drilling (1 hole)

(1) Afmag - 1966
- Data reflects topo. effects
- V. shallow conductor response only

RAZORBACK
Soil Cu, Pb, Zn, Ni, Ag
SP, VLF
Mag

NASSEE COMET
IP
Soil Geochem Cu, Pb (pt) Zn, Ni, Co, As, Cr
SP, Mag, VLF

SOUTH MONTEZUMA

AMOCO BLACKTALK
VLF-EM - 1981
Dighem (part) 1981
Down hole pem, density/gamma
Soil Pb Zn Ag

PLANT
Soil Pb, Zn, Ni, Ag, Cr, Sb
SP (part)
Drilling (3)
Mag
VLF

WEST COMET
Soil Cu, Pb, Zn, Ni, Co, Ag, Cr (Pt Sn As)
SP, VLF-EM
Mag, Drilling

AINSLIE
Soil Cu, Pb, Zn, Ni, Ag
VLF-EM
Drilling (1)

COMET
RESERVOIR
SP
Mag
VLF-EM
Drilling
REM
Soil (part)
Drilling (30)
IP (line)

(25) Geophoto - Kosmosky - 1970
(26)
1. Mag - total - mapped ultrabasics well + pyrrhotite zones
- No response over Pb-Zn deposits
2. Roving EM (REM) - two loop frequency
- oversaturation/topo introduced too much noise to be meaningful
- Non-repeatable results
3. VLF - surface geology correlation was good but very limited depth detection
4. SP - good correlation with VLF indicating only near-surface response. Some faulting mapped
- Topographic anomalies also apparent
5. IP - 1 test line - 1 minor anomaly coincides with gossan

SILVER
Soil Geochem
Pb, Zn, Ag
SP
Mag
VLF-EM

EAST SOUTH COMET
VLF-EM (part)
Drill (2)

Cu, Pb, Zn, Ni, Co, Ag, Sn

SOUTH COMET
VLF-EM
Soil Cu, Pb, Zn, Ni, Co, Ag (some Mag)
Mag (part)
REM
Drilling (6)
SP (part)

TENNECO BLACKTALK
SP - 1972
Gravity 1972
Turair 1972

BONANZA
Soil Cu, Pb, Zn, Ni, Co, Ag, Cr
SP
Mag
VLF
Drill (3)
MARIPOSA WEST

ABS LOAD
Mag
SP
VLF

MARIPOSA EAST
VLF-EM

MT DUNDAS
VLF-EM

Tenneco - 1972
(4) 1. Aubrey EM - HEM-701 - 1972
1600 Hz - not seeing >40m
- No anomalies of note
2. TURAM - Scintrex - 1972
& shallow lithologic conductors determined (~20-30m max)
3. SP - TENNECO - 1972
- Reasonable correlation with TURAM but anomalies discontinuous indicating only partial coupling with geology - conductors are lithological. (10m)

WEST CLIME

(27) GeoPhoto - Petersen - 1971
1. Mag - vertical data
- Strong results & simultaneous outlines
2. SP - Affected badly by topography poor correlation with geochem. Not much use.

MARIPOSA SOUTH

GEOPHOTO
VLF-EM
Soil Geochem Cu, Ni, Co, Pb, Zn, Ag

(7) McIntyre Mines - 1972
1. Mag - no significant anomalies - data ok.
2. EM (Freq domain - 2 loop system) - 1 test line - no anomalies.
3. IP - CGG - good data but no significant anomalies - gradient
4. SP. - No significant anomalies.

(24) Tenneco - 1973
1. Gravity - no terrain corrections
No correlation with TURAM or SP conductors. Largely elevation effects.

(16) BMR - Loh - 1950
1. Mag - vertical
- Not meaningful due to heavy working equipment
2. GRAV - used terrain corrections
- 2.5 gm/cc
- Data appears good and indicates zone extension of mineralisation

BMR MARIPOSA
Gravity/Magnetics - BMR 1950

(30)

AMOCO MARIPOSA
EM37 - Geotronics 1982
Gravity - Meinhill 1982
Dipole-Dipole IP - Geophysics 1984 (2 lines)
VLF-EM - 1984
Down hole DEM
" " density/gamma
Drilling
Soil Pb Zn Ag Sn Cu

(13) Summary report
- as above

(14) CGG for McIntyre Mines
- No significant IP or EM anomaly

ANOMALY 1
Magnetics
Turam EM (line)
IP
SP (not made)
Soil geochem Cu, Pb, Zn

SUNNY CORNER
Crone PEM 1975
Down hole PEM
" density/gamma

(30) Amoco - Bishop - Stapler - Collins
VLF - Surface effects only
Only real anomaly at Mariposa workings
GRAVITY - Insufficient detail - poor quality
CRONE PEM - No significant anomalies
EM-37 - Loop effect anomalies only
IP - dipole-dipole - correlated with EM-37 but coincidental
Magnetics - No anomalies

MCINTYRE MARIPOSA
Grad IP - CGG 1971
SP - CGG 1971 (not made)
Soil Geochem Cu, Pb, Zn
Drilling

RIO TINTO BANNOCKBURN
Gravity - Rio Tinto 1959
Magnetics " "
EM " "

WESTERNAX
Soil Pb Zn Ag

HOWARDS ROAD
VLF-EM
Magnetics
Soil Geochem

AMOCO BANNOCKBURN
VLF-EM 1981
Soil Pb Zn Ag

(15) - Rio Tinto - Boniwell, 1959
- Lines too far apart - no worthwhile correlation
1. EM - Overburden response only
2. Mag - No correlatable mag./anomalies
3. GRAV - Indicates inhomogeneities in LS only (or bad corrections)

(13) McIntyre Mines - 1971
- Summary report only - CGG gradient IP
- IP defined Mariposa workings well plus
a) galena/pyrite zone
b) shears

(14) CGG report of Mariposa work
1. IP - workings plus 3 other significant but shallow anomalies (to 20 m)
- Overburden >100 Ωm
2. EM - No use - 2 loop freq. technique
3. SP - No use due to overburden

HOWARD
EM
Soil Geochem Cu, Pb, Zn, Ni

AMBER CREEK
VLF-EM
Magnetics
Soil Geochem Cu, Pb, Zn, Fe, Ni, Co, Ag
Deep Geochem Cu, Pb, Zn (part)

PROFESSOR
Soil Pb Zn Ag

(6) GeoPhoto 1972
1. Mag - v. broad readings & lines
No obvious anomalies.
2. VLF - Data ok
- Response indicating varying overburden thickness to Gordon LS. Some graphitic shale response possible.
* Good geol. map of area

5370000mN
5365000mN
5360000mN
5355000mN
5350000mN
365000mE
370000mE
375000mE