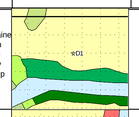
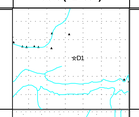
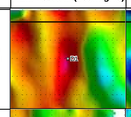
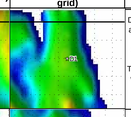
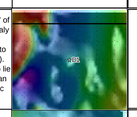
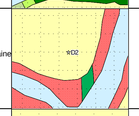
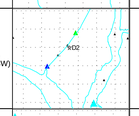
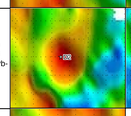
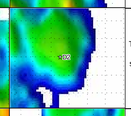
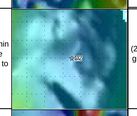
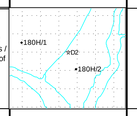
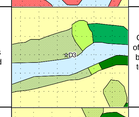
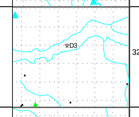
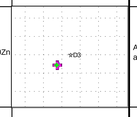
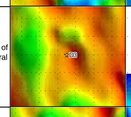
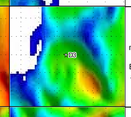
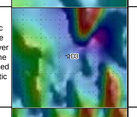
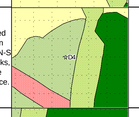
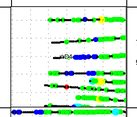
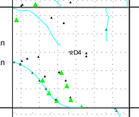
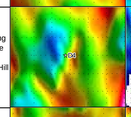
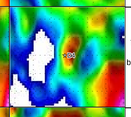
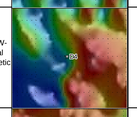
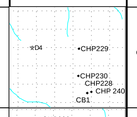
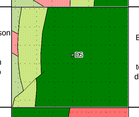
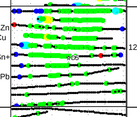
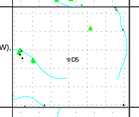
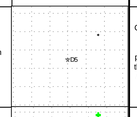
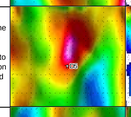
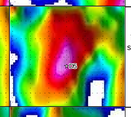
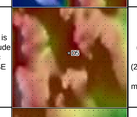
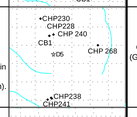
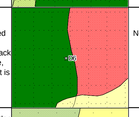
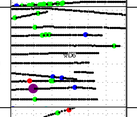
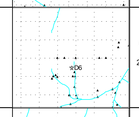
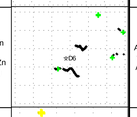
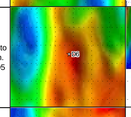
DUNDAS HEM ANOMALIES - 2001 ASSESSMENT

ANOMALY	ACCESS	GEOLOGY				HISTORICAL WORKINGS		GEOCHEMISTRY						GEOPHYSICS					DRILLING		GRIDDING	INTERPRETED SOURCE
		AGE	LITHO	250k	GROUND CHECK	COMMODITY	LOCATION	SOIL	95% (n=11344)	STREAM SED	90% (n=1331)	ROCK	90% (n=1100)	HEM	HEM - 34KHz (200m grid)	HEM - 385KHz (200m grid)	MAG	TMI	RESULTS	LOCATION		
D1	INACCESSIBLE	Quaternary	Glacial deposits, mostly till. Moraine ridge crests indicated. Zeehan inch:mile geol indicates on the boundary between Quaternary Moraine & Cambrian Dundas Gp Crimson Ck Fmn.		Not Checked	-	-	-	-	-		-	-	Anomaly looks to the northern extension of the Colebrook Hill mineralised trend.			D1 lies on a small 40 nT "pimple" of a magnetic anomaly. The anomaly has a coincident magnetic expression which could be due to the pyrrhotite (cf Colebrook Hill). The EM anomaly also appears to lie within a NW-SE structure that can be delineated from the magnetic data.		-	-	-	Unknown
D2	INACCESSIBLE: vehicle track no anomaly covered by numerous logs / fallen trees	Quaternary	Glacial deposits, mostly till. Moraine ridge crests indicated.		Not Checked	-	-	-	-	95Cu+50Sn (0m), 80Pb+950Zn (320mSW)		-	-	The anomaly is N-S striking for 800m and is perhaps the most prospective of all responses for Pb-Zn mineralisation			The EM response is situated within a broad low magnetic response showing no apparent correlation to the EM response.		180H1 (515mWNW) 180H/2 (225mSE) Black carbonaceous / graphitic pelites under 6-12m of glacial cover; no geochem anomalism.		Renison GAO (EL5/63)	Black Carbonaceous Shale
D3	ACCESSIBLE: E-W trending vehicle track on the sth side of the Pieman River - 4WD	Cambrian	Within / along E-W drainage feature. 25K Sheet shows it is surrounded by Undifferentiated Dundas Group.		Glacial Till 50-100m along sth side of creek. A weathered volcaniclastic boulder (50cm dia) in diggings by a telegraph pole on the south side of the river.	-	-	-	-	-		320Cu+1250Pb+1450Zn (170mSW)		A single line anomaly on the wall of a dam and is quite possibly cultural in origin.			A very high amplitude magnetic anomaly is situated 200m to the north of this EM response however it is unlikely to be related, and the EM anomaly can only be explained as having no associated magnetic response.		-	-	-	Cultural (?)
D4	INACCESSIBLE	Cambrian	Contained within Undifferentiated Dundas Group. On the western side of a fault which is against a N-S trending Cambrian Ultramafic rocks, serpentinite and talc carbonate rocks of the Henty River Sequence.		Not Checked	Late Devonian Replacement Cu-As (<100t)		500Cu+600Zn (200mSE), 280Pb (350mSE), 1800As (250mS)		72Cu+640Sn+200Zn (0m), 94Cu+450Sn+185Zn (350mNE)		-	-	A small N-S striking anomaly lying to the NW of Colebrook Hill. The anomaly has the same characteristics as the Colebrook Hill Mineralisation			The D4 anomaly lies within a NW-SE striking lineament (structural break) delineated from the magnetic data.		-		Collbrook Hill Grid (Getty Oil)	Colebrook Hill Skarn (?)
D5	ACCESSIBLE: N-S trending vehicle track over anomaly - 4WBIKE	Cambrian	Centrally located within the Crimson Creek Formation. Contains undifferentiated basaltic lithic wacke, siltstone & red to green mudstone, with minor basalt to ultramafic intrusives.		Black pyritic shale and interbedded greywacke and grey silt. So 140/85SW. Old workings on topographic high with py-chpy-arpy diss-veins. with Fe-Mn oxide zones.	Late Devonian Vein Cu, Sn, As (10kt - 1Mt) / Replacement Cu, W, Sn, Ag		1600As+1950Cu+165Zn (0m), 5000As+1550Cu (100mE), 3600Cu+140Pb+250Sn+195Zn (100mSE), 5500As (150mE), 235Pb (300mSE)		120Cu+300Zn (375mW), 909Cu (425mNE), 3400Sn (500mW)		85Cu+15Pb+175Zn (425mNW)		Colebrook Hill Mineralisation. The anomaly has several separate sources, shows great depth potential and appears to plunge to the sth. The type of mineralisation & extent of existing drilling would need to be assessed.			The Colebrook Hill EM anomaly is situated directly on a high amplitude (several 100's of nT) magnetic anomaly and lies within a NW-SE lineament (same as D4).		CHP240/241 (200mNNW / 500mS) CHP228/229/230 (225mN/700mNW/415mNW) CHP238 (480mS) CB1 (215mNW) Calc-silicate skarn in hornsfelsed sediment; semi-massive sulphide min. (Cu-richt).		Collbrook Hill Grid (Getty Oil) Ring River Grid (EZ/Getty)	Colebrook Hill Skarn
D6	ACCESSIBLE: N-S / E-W trending vehicle track = FOOT (Natone Ck impassable?)	Cambrian	Contained within Undifferentiated Dundas Group. Contains Quartzwacke interbedded with black phyllic mudstone, grey siltstone, minor conglomerate. To the west is Crimson Ck Formation		North of anomaly is a highly strained black (pyritic) shale with thin interbedded qtz sst beds. So 160/78E. To the east of the anomaly is a quartz veined grey quartzite, So 147/62NE.	Late Devonian Vein Py		100As+345Zn (300mSE), 180Cu (250mNE), 445Pb (500mNW), 520Sn (150mSW), 300Zn (300mNW)		290Sn (300mS)		125Cu+125Pb+65Zn (150-250mNW), 295Cu+205Pb+145Zn (160-250mSW-SE)		Appears like a parallel repetition to the Colebrook Hill Mineralisation. Anomaly appears deeper than D5			The D6 EM anomaly has a corresponding magnetic anomaly that definitely supports the EM anomaly being deeper. The anomaly also lies within the same NW-SE lineament (as a structural break) as the D5 and D4 anomalies.		CHP266/267 (150mSW/125mSSE) NP107 (200mSE) Black carbonaceous shale with interbedded grey fg qtz veined sandstone; minor Pb-Zn anomalism in the shales with pyritic veins.		Grid as for D4 (Getty). Grid as for D5 (RGC). Rosebery Lodes Grid (details as for D4)	Black Carbonaceous Shale
D7	ACCESSIBLE: E-W trending vehicle track on the southern side of the anomaly - 4WD	Cambrian	25K has this anomaly within Dundas Gp sediments, and along the southern edge of a Quaternary alluvium & marsh deposit. PhD studies indicate a Mid-Late Cambrian unit, along a contact between sandstone & a mudstone-sandstone couplet (undifferentiated).		Dominated by turbiditic sediments, including weathered brown siltstones and mg-sandstones (qtz-fsp). So 008/45E - 174/65E. EZ company mapping shows a prominent NE trending fault zone on the W-side of the anom.	Late Devonian veins, varying from Sn to Ag-Cu-Pb to Fe/Py		697As+545Cu+240Pb+452Zn (425mSW), 589As+170Cu+345Pb (500mNW), 1790As+900Cu+2000Pb (650mSW), 9002n (325mSW)		2000Cu+300Pb+1000Zn (250mN)		51Ag+1600Cu+400Pb (650mSW), 600Pb+700Zn (600mNW)		A N-S to NE-SW striking anomaly with a length of 2.5km. The large strike extent suggests a lithological source, however follow-up should be conducted.			The anomaly lies directly on the eastern side of a high amplitude magnetic lineament with the same strike orientation. The high amplitude magnetic anomaly is possibly ultramafics. The EM anomaly has no real associated magnetic anomaly.		MZ1/MZ4 (385mS/635mS) Large Non-outcropping serpentinite complex overlain by Dundas Gp sed with graphitic shear zones; Po veining with elevated Cu-Zn. SS1 (450mW) Dolomitic slst & black shl; 0.01m elevated Sn-Cu-Zn veinlets.		Godkin Minopps/Comstaff Grid (RGC) Frazer Grid (CGFA EL 15/76) Montezuma-RGC (RGC)	Graphitic Shearing / Mineralisation (?)
D8	ACCESSIBLE: N-S trending unmapped vehicle track directly over anomaly - FOOT (on Renison Mine Lease)	Cambrian	25K & 250K show the region to be covered by Quaternary alluvium & marsh deposits, 25K indicates that this could overly Dundas Gp Cambrian Basalt. PhD studies show an Early Mid Cambrian Age? Comprised of a mafic-ultramafic complex.		To the sth there is a change from basalt to sediments (gy fg sst & blk sht). There is a zone of ser-qtz alteration over the anomaly (?). Nth of the anomaly is a series of ultramafics (mag anom?) incl. Serpentinite.	Quaternary Placer Sn, W (<100t)		240Pb+320Zn (200mE), 500Pb+350Zn (475mSE), 800Pb+340Zn (485mENE)		610Pb+290Zn (300mS)		-		Situated near the Renison Mine Lease and is characteristic of a narrow pyrrhotite style body. Response not closed off to the north.			The anomaly has a coincident high amplitude magnetic anomaly and thus has every chance of being a pyrrhotite occurrence which may or may not have associated tin (ie Renison style mineralisation).		S280/S283 (500mN/375mNW) Serpentinite complex & argillite, some altered qtz veining with low grade sulphides; no assay data. S374 (TCR No. 71-1111) (525mNE)		Renison ML? (130m N)	Pyrrhotite Veining
D9	ACCESSIBLE: N-S trending vehicle track over the anomaly - 4WD (on Renison Mine Lease)	Cambrian	25K geology indicates a Cambrian Gabbro which is 300m south of a Devonian Granite (Pine Hill Granite) with contact metamorphism.		To the south - sediments (rd-bn slt-sst) becoming silica alt. near a zone of qtz-py-po veining with the northern contact being clay-ser alt. before becoming a very coarse grained amphibole rich ultramafic (silica alt.?)	Quaternary Placer Sn, W (<100t) Unmarked workings of py-po vein style mineralisation along lithological contact		500Pb+350Zn (400mSW), 800Pb+340Zn (225mW), 525Cu+105Zn (675mENE), 110Cu+340Pb+270Zn (675mESE)		2000Zn+100Pb (650mE)		1000Pb+300Zn+300Cu (425mSW), 910Cu (200mNE)		Situated near the Renison Mine Lease and is characteristic of a narrow pyrrhotite style body. Response not closed off to the north.			Whereas D8 lies on a magnetic anomalies (and thus is most definitely Renison style), D9 lies on a strong N-S striking lineament with which it is most likely related.		-		Carbine-RGC (100m E)	Pyrrhotite Veining
D10	ACCESSIBLE: N-S trending vehicle track over the anomaly - 4WD / FOOT	Cambrian	Undifferentiated Dundas Group. Contained within a mudstone-siltstone-slate with a contact to the east with a conglomerate on a N-S / NNW trending structure.		Sheared black pyritic shale and grey siltstone, So/1 175/80E. Shale package surrounded by a conglomerate containing well rnd pebbles up to 5cm dia. RGC company mapping shows a N/NNE striking narrow Hodge slate, with Cu min in Kapi Fault.	Late Devonian Vein Pb, Ag, Cu, Zn, As, Croco (100t - 10kt)		7500Zn+270Pb+105Cu (200mNE), 3002n+495Pb (350mNNE), 620Pb (225mW)		2900Pb+380Zn (600mN), 110Ba+130Pb+170Zn (125mN)		1852n (200mSSE)		A sharp discrete anomaly extending N-S for a strike length of 300m. The anomaly has very sharp edges suggesting a shallow source. The discrete nature of the response makes it worthy of follow-up.			D10 has a small coincident 40 nT anomaly (as an inflection in the TMI). The anomaly is in an area of numerous small magnetic anomalies and the coincidence could be unrelated.		KAPI1/KAPI2 (550mNNW) Cleaved gy-blk shales (occ. pyritic), altered carbonate rich rocks; no significant mineralisation (trace Ni).		Carbine RGC grid / Renison ML? / Black Hill	Black Pyritic Shale
D11	INACCESSIBLE	Cambrian	Undifferentiated Dundas Group & correlates on a North trending structure (PhD). 100m to the south is a series of Proterozoic? Interbedded quartzwacke, slate, mudstone and sandstone sequence. Zeehan (inch:mile) map shows the anomaly to be within the Crimson Creek Formation.		Not Checked. EZ company mapping shows the anomaly to be near a triple juction of Dundas Gp shales - sandstones / Oonah Fmn slates / Crimson Ck siltstones - arenites, with the anomaly on the Montezuma Fault.	Late Devonian Vein: CDExt - Ag, Cu, Pb, Bi, As (100t - 10kt) / WHPro - Pb, Cu, Ag, Sn, Zn, Au, Bi, Sb (>20t produced @ 2%Cu-41.7%Pb-1%Zn-0.09%Sn-21.7%Sb-5.3g/tAg) / SHWWPro - Pb, Zn, Ag, As, Sb		325002n+2150Pb+750Cu (400mNW), 135Cu (350mS), 155Pb (200mSW), 440Zn (400mSW)		10000As+500Cu+2000Pb+10000Sn+2000Zn (225mNE), 3000As+500Cu+1000Pb+10002n (375mW)		151Ag+2300Cu+13000Pb+193000Zn (400mNNW), 1800Cu+3700Pb+16002n (400mW), 280Cu+360Pb (300mENE)		A suite of 4 separate EM sources. It is likely that the same system (either mineralised or shales) is the source of these responses. Second highest amplitude (after Collbrook Hill) in survey.			There are no associated magnetic responses.		DDH MZP258 (550mNNW) Sed breccia, mnr volcanic arenite, thinly interbedded laminated black slsts and volcaniclastic debris flow breccia; py-arpy stringer veining in Montezuma Fault with elevated Sn-As-Zn in volcaniclastics / elevated Pb-Zn-Ag in py-po-gn-sp-tet-chpy veins in sed. breccia		Montezuma EZ/CSR grid. Montezuma grid. Montezuma Grid (As for D7). Frazer Grid (As for D7)	Sheared Shales / Mineralisation (?)
D12	INACCESSIBLE	Cambrian	Dundas Group & Correlates. Approx. 200m to the east is a North trending structure which has brought up a slice of Late Proterozoic? / early Cambrian? Crimson Ck formation correlates.		Not Checked	-	> 750m	350Cu+350Pb (200mSE), 460Zn (225mSE)		340Pb (525mNE), 300Zn (500mNE), 300As (400mNE)		1220Zn (575mESE), 145Zn+455Cu (625mESE)		Single line anomaly that resembles glacial cover - not recommended for follow up.			There are no associated magnetic responses.		MZP261 (625mN) Upper zone of laminated sheared black siltstone; elevated Sn-Pb-Zn-Ag. Lower zone volcaniclastic debris flow breccia; elevated Sn-Zn.		Ring River - EZ / Getty Grid (As for D5). Natone Extension (Getty Oil). Montezuma (As for D11)	Glacial
D13	INACCESSIBLE	Cambrian	Dundas Group & Correlates. Near a triple junction which features other Mid-Late Cambrian rocks, and Late Proterozoic Oonah Fmn (PhD). Possibly straddles the nthn margin of the Pre-Cambrian - Dundas Contact (CD)		Not Checked	Late Devonian Veins Zn, Pb, Ag, Cu, As		190Pb+690Zn (300mESE), 1500Pb+165Zn (400mESE), 220Pb+730Zn (400mESE)		170Cu+1500Pb+1700Zn (225mSW), 170Cu+500Pb+320Zn (325mSE), 1000As (450mN)		97Ag+210Cu+38700Pb+2900Zn (400mNNE), 139Ag+66500Pb+64700Zn (500mNNW), 1400Cu+11000Pb+17500Zn (450mNNW)		Anomaly extends for a strike length of approximately 1.4km. The broadness and the sharp edges of the anomaly suggest a lithological source (such as a shale package) however follow is required to confirm this.			This EM anomaly has a coincident small magnetic anomaly (40-50 nT) and lies on a N-S striking magnetic lineament that possibly represents a structural break or a magnetic dyke (which could also have intruded along a structural break).		-	-	Carbine-CSR ground Grid. Montezuma Grid (As for D11). Frazer Grid (As for D7). Carbine-RGC (As for D10)	Unknown
D14	ACCESSIBLE: E-W trending vehicle track up to the western edge fo the anomaly - 4WD; continues over anomaly - FOOT	Proterozoic	Late Proterozoic Oonah Formation (on the western side of a fault with the Dundas Gp). Contains Interbedded Quartzwacke, slate, mudstone and sandstone sequences. On a main N-S fault. Could be the eastern margin of the Pre-Cambrian - Dundas contact (CD).		To the west is a series of quartz veined sheared quartzites (?) So 175/68W, the anomaly is best represented by a black graphitic schist. To the east is a package of grey - brown siltstones and greywackes.	Late Devonian Vein Pb, Ag, Sn, Au, Sb, As		2700Pb+565Zn+260Cu (175mWNW), 1500Pb+680Zn+400Cu (225mWNW), 4150Pb+735Zn+240Cu (100mSW), 1450Pb+220Zn (100mSE)		1000As+100Pb (100mW), 1700Pb+110Zn (75mW)		50Ag+2000Cu (150mSE), 5000Cu+27209Pb+320Zn (125mSE), 1100Cu+1800Pb+1400Zn (175mNW), 7500Pb+1300Zn (100mSSE)		Anomaly extends for a strike length of approximately 1.4km. The broadness and the sharp edges of the anomaly suggest a lithological source (such as a shale package) however follow is required to confirm this.			Anomaly D14 has no associated magnetic anomaly and occurs on the south-western side of a broad high amplitude magnetic response.		MZP260 (325mSE) MZP244/245A (125mE/85mS) MZP258/260/261 (150mE) MZN1/2 (150-300mW-SW) Blk shale / grey quartzite overlying Maestries conglomerate & Concert Gp Schist; mostly unmineralised, some minor Sn-Zn-Pb-Ag mineralisation in Oonah Fmn sltst / shl.		Montezuma Grid. Montezuma (As for D11).	Pyrite Veined Graphitic Black Shale
D15	INACCESSIBLE	Proterozoic / Cambrian	Quartzite, slate, mudstone, sandstone 100 - 200 metres north of Dundas Group. Situated on the contact between Pre-Cambrian and undifferentiated Dundas Group (CD).		Not Checked. TEXINS company mapping over the anomaly showed outcrop of Concert Schist and qtz sst / black graphite phyllite. Some mineralised quartz - carbonate veins in dolomitic grey shales.	Late Devonian Vein Pb, Zn, Ag, Cu (production 277180z Ag, 428t Pb, 618t Zn) 10kt - 1Mt 300m l x 320m d x 1m w		-		200Cu (475mSW), 560Pb (275mN), 400Sn (500mNW), 1500Zn (300mNW)		100Cu+1200Pb+3500Zn (400mN), 3100Pb+5500Zn (300mN)		Ovoid HEM anomaly.			This EM anomaly lies within a broad E-W magnetic gradient and really has no apparent discrete associated magnetic anomaly or structure.		A1 (400mWSW) / KHE6 (600mNW) Oonah Fmn slate / dolomite; mnr Pb-Zn mineralisation in carbonate veins in blk slt.		Dundas Grid	Unknown
C1	ACCESSIBLE: N-S track with which surrounds the E-S-W edges of the anomaly - 4WBIKE / FOOT	Cambrian	Dundas Group & Correlates. Located within a zone of major N-S striking faults. West of CVC contact.		Series of bn cleaved shales, gy fg sandstones, rd shales. Sl 170/80E. So 035/87W. There is an area containing a chert-like rock with pyrite crystals in a grey fg sandstone, surrounded by zones of Mn veining and alteration.	Quaternary Placer: LW - Au, Cambrian Disseminated: HM - Pb,Zn,Ag,Cu,An,Sb (<100t), Late Devonian Vein: NPMSM - Cu,Ag,Sb,Zn,Pb (<100t)		1200Zn+310Pb+430Cu (200mSSW), 9002n+520Pb+205Cu (350mNE), 910Zn+240Pb+395Cu (250mNE)		30000Zn+2000Pb+900Cu (100mW)		700Zn+500Pb+200Cu (250mNE), 700000Pb+400Zn (185mSW)		Very minor N-S elongated anomaly