

# **Progress Update on Drilling at the Davie Prospect (EL43/2004)**

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## ***Introduction***

The following details a summary update on work currently in progress at the Davie Prospect (EL43/2004), located ~10km west of Queenstown, Tasmania. Here, an access track and new drill pad were constructed immediately pre Christmas 2009, with helicopter mobilisation of the drill rig and associated equipment following on the 12<sup>th</sup> January, 2010. The first hole (SCDDH4) of three planned commenced on 14<sup>th</sup> January with drilling currently suspended at 150.5m (22/1/2010), whilst rig repairs are undertaken.

Preliminary comments relating to drill hole location and geology follow. Further detailed analysis of the geology, structure and mineralisation at Davie will be undertaken in the near term, utilising detailed drill core logging, further geological mapping and compilation and analysis of the existing data.

## **Work Conducted**

### ***Digital Data***

Digital data compiled for the Davie Prospect includes drill collars, surveys etc, on ground waypoints and geology, rock & adit sampling and adit surveys as well as soil geochemical surveys. This data and various other GIS data sets have been compiled to form a Mapinfo Workspace. Data utilised includes regional scale 1:25000 topography, roads and rivers, drill holes, rock and soil geochemistry and geology. Grid images were created for soil geochemical data.

Digital data covering soil and rock chip analysis and descriptions was manipulated and imported to Mapinfo for GIS analysis and display. Grids were made for soil data displaying most analysis elements (Au, As, Cu, Zn, Pb); notably Sb was not gridded due to the very low range of above detection limit data.

Initial interpretation of the grided geochemical data identifies the known NW structural alignment, as well as a more northerly component, which favourably intersect in the vicinity of the SCDDH4 hole trace. Results from interpretation of this data will be presented in the final report on work undertaken.

## ***Survey***

The general prospect area was GPS surveyed to record various point locations, including geology, existing grid and drill holes. The locations for the previously drilled SCDDH1 and SCDDH2&3 were confirmed in the field. The grid was found to be relatively accurately placed, GPS readings being generally within ~4m of currently located grid points.

## ***Geology and Geochemistry***

The geology of the Davie Prospect is summarised in Reid (2001). Further notes follow from a recent investigation of the existing drill core and pad areas.

A cursory re-log of holes SCDDH1 and 2 at the MRT core store was undertaken to gain geological insight and obtain geological descriptions consistent with those previously used. Due to time constraints SCDDH3 is yet to be viewed. Initial interpretation is that drill hole SCDDH3 (to azimuth 228°TN) appears to have drilled down dip on a fault, with SCDDH2 passing through the Harvey Creek Fault's hangingwall at an acute angle (see Section 10N in figure 2), possibly enhancing / extending the mineralised intersection. Bedding to core angles indicate that the beds are folded with their possible anticlinal form yet to be confirmed. Given this as yet weakly defined interpretation, mineralisation maybe sandwiched between two faults in an anticline fold closure.

An adit was located on the FeOxidised spur at a cliff base near the SE end of the gold in soil anomaly and approximately 65m south of the SCDDH2 collar. Between these, some 30m NNE of the adit is a 280° aligned 1m wide sharp spur. Ferruginous outcrop over 0.5m was channel sampled (No. 365202) here where moderate intensity (~15%+) iron oxidised (Limonitic) veins are aligned 270°/88°W dip. A foliated zone and FeO veining orientated at 340°/88°W is driven on for ~4m by the adit. The adit then turns from 305° to 260° for a further 4m, intersecting FeO veined foliation orientated 275°/74°W. The working was channel sampled at 1m intervals along the NE (0 - 3m; No's 365203 to 365205) and NW (3 - 7m; No's 365206 to 365209) walls.

A pronounced spur extends down slope to the SE of the adit, where it and Au anomalism apparently terminates against the weakly Zn-Pb-As (in soil) mineralised Harvey Creek Fault, which likely lies on the western creek bank. The latter area lies at the intersection of a pronounced gully from the NE (fault?), as well as two converging weak gullies from the SW side. One gully apparently forming adjacent to the SW margin of the mapped mineralised cliffs / spur, whilst the creek locally diverts along the NE side of the spur. Potential for fault offset Au mineralisation on the eastern (footwall) side of the Harvey Creek Fault remains undetermined.

A traverse along the spur leading NW from the new SCDDH4 drill pad was undertaken, aiming to check for a possible NW strike extension of the mineralised structure and open Au in soil anomaly. This traverse also aimed to / but failed to locate a known Au prospect. Several composite rock samples were collected. These included quartz vein rich (~5%) scree / eluvium (Composite rock chip No. 365210) from up slope of the “Unnamed” prospects plotted location, but along strike from the Davie mineralisation. Only sparse quartz veinlets in generally fine grained siliceous sandstone subcrop / float was noted along the ridge.

Medium to coarse grained sandstone, that notable bears disseminated chromite grains to several millimetres, is evident in subcrop immediately NW of the SCDDH4 drill pad as well as ~100m down slope to the SW. Here weak to moderate intensity pervasive silicification destroys protolith sandstone textures (Composite rock chip No. 365211) within weakly quartz veined coarse-grained float to small boulder size.

Principal alteration styles identified from macroscopic rock and drill core investigation include:-

- ◆ Pervasive silicification (mostly of weak intensity)
- ◆ Semi-pervasive and veined cream coloured silica (+/-carbonate /calc-silicate?)
- ◆ Sericite veining / foliation (+/- fine-grained pyrite?)
- ◆ Quartz +/- FeO stockwork, locally bearing semi – pervasive silica – FeO vein selvages
- ◆ Quartz veining

Pervasive silicification is commonly evident destroying protolith textures to varying degrees. This style is apparently best developed within coarser grained lithologies.

Semi-pervasive and veined silica – carbonate alteration is poorly identified at this stage (Petrology and XRD required). It's typically cream in colour and forms irregular vein stockwork that tends to semi-pervasive style in more strongly developed zones.

Sericite veining / foliation (+/- fine grained pyrite?) is evident in some of the stronger sericitic zones, locally forming / enveloping strong quartz development along what appears to be a structural foliation. Notably the sericitic foliation crosscuts FeO-quartz stockwork veining and another generation of quartz veining, however @130m in SCDDH4 grey quartz veining is offset by but continuous through sericitic foliation suggesting these two generations may have been at least in part synchronous in formation.

A further quartz veinlet generation crosscuts the FeO bearing quartz stockwork. These veins are typically up to 3mm width and are commonly vuggy, bearing fine drusy quartz.

## ***Drilling***

Drilling 50m along strike either side of the existing holes on grid line 10N was initially planned. However suitable pad sites, that could be prepared in a timely manner, on the steep slopes in the drill holes planned vicinity could not be located. Thus a compromise pad located on a ridge 80m along strike NW of grid line 10N was utilised for the first hole SCDDH4.

The ongoing interpretation from the formerly drilled and SCDDH4 holes will determine the location of further drilling. Potential planned holes are tabulated below (Table 1 & Figure 1).

Hole_ID	East(AGD66)	North(AGD66)	Priority	Az(TN)	Dip	Depth	Comment	Section
SCDDH4	375689.47	5336335.67		48	-60	200	In progress, targets 100m+ wide Au in soil to 107ppb	14N
SCDDH5p1	375787.5	5336255	3	48	-50	175	targets adit and SE end Au in soil	8N
SCDDH5p2	375689.47	5336335.67	1	48	-85	200	targets beneath SCDDH4	14N
SCDDH5p3	375689.47	5336335.67	3	48	-85	200	targets above SCDDH4	14N
SCDDH6p1	375667.95	5336267.83	2	48	-60	200	targets Au in soil to 112ppb, SSW of SCDDH4	12N
SCDDH6p2	375668.48	5336392.74	5	48	-60	120	targets isolated Au in soil to 74ppb, NW of SCDDH4	16N
SCDDH6p3	375756	5336293	4	48	-85	160	Further tests 10N, intersects SCDDH2 ~ 100m down hole	10N

Table 1: showing potential drill holes (Grid AGD66, Zone 55).

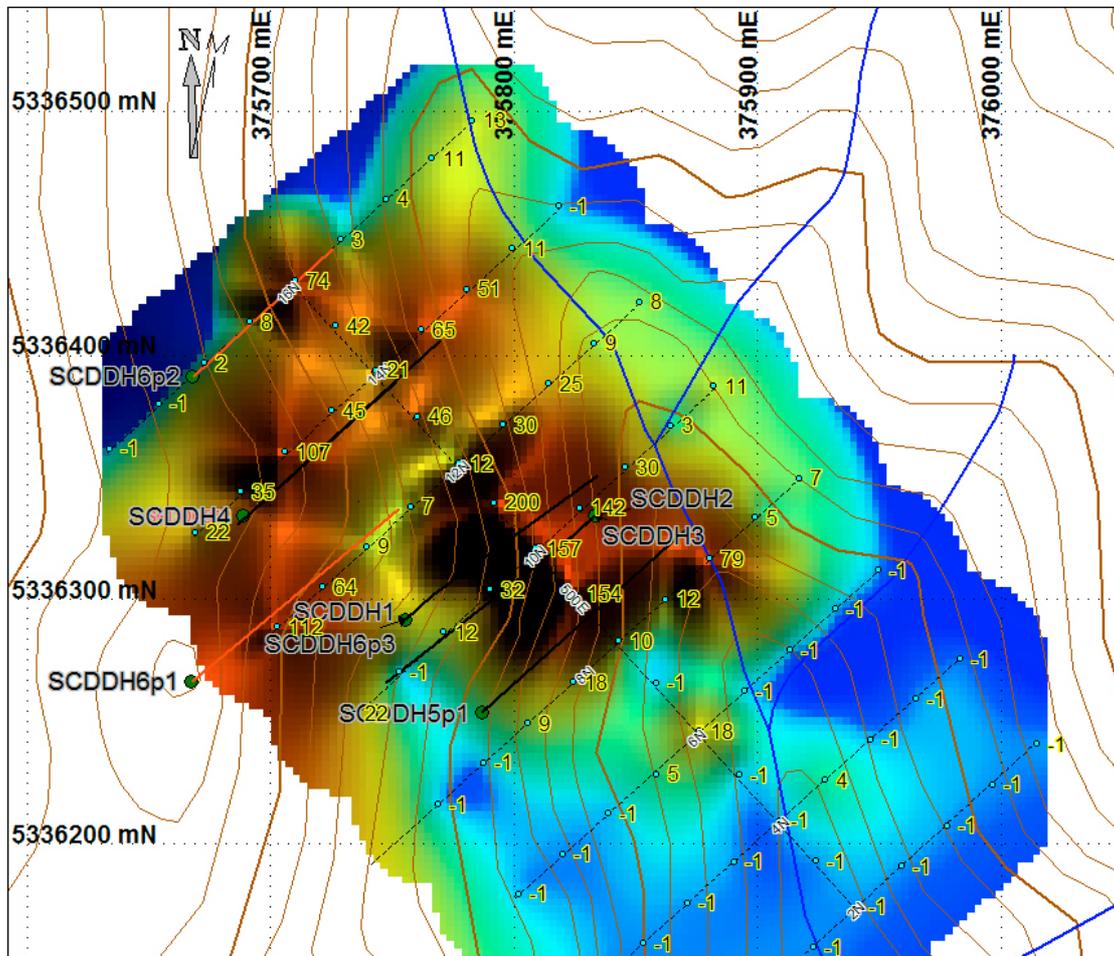


Figure 1: Showing potential drill collars and Au soil geochemistry text and grid (Grid AGD66, Zone55).

## SCDDH4

Drilling of SCDDH4 commenced on 14/1/2010 (Azimuth 48°TN, -60° dip). This hole targets an extensive 100m+ wide (to 107ppb) Au soil anomaly near surface with 167 & 258ppb Au in rock lying further down slope.

Stringer FeO – quartz veining extends weakly from surface, reaching moderate intensity from ~81m down hole. Very good stringer mineralisation has been intersected from 94m to the current 132m logged hole depth (38m+ intersection). Drilling is currently suspended at 151.5m (22/1/2010), whilst rig repairs are undertaken. The drill rig drive spindle possibly broke entering the Harvey Creek Fault at the current 151.5m hole depth. This breakage was coincident with loss of water return, short runs and tightening of the hole, and is consistent with the inferred location of the Harvey Creek Fault (Figure 2).

Fracture core angles at the start of and within the upper (Harvey Junior) Fault are perpendicular to core. This suggests a moderate SW dip for the fault and is in agreement with the inferred dip for the Harvey Creek Fault further NE down slope. The latter is located from elevated base metal in soils, which logically corresponds with the creek area.

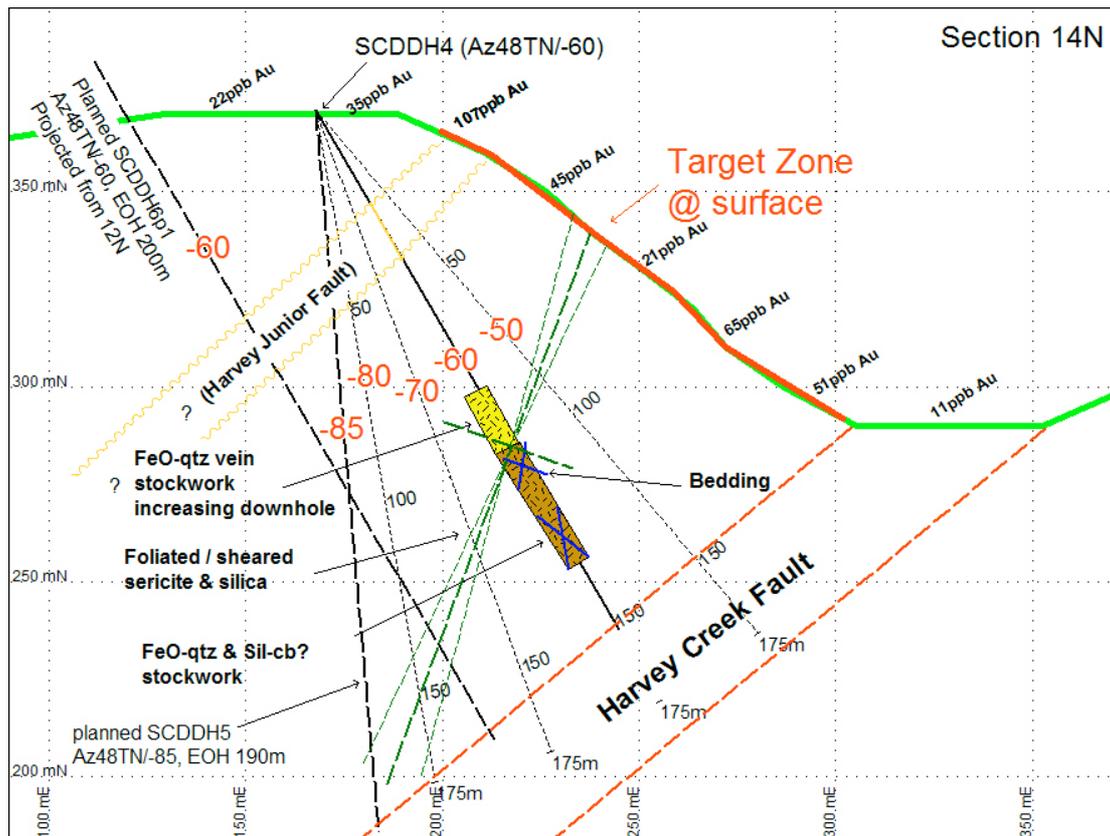


Figure 2: Section 14N drill hole planning showing draft geology on the SCDDH4 trace and options from the current SCDDH4 pad, as well as from a pad targeting line 12N.

Summary SCDDH4 drill log to end 22/1/2010.

From (m)	To (m)	Description
0.00	27.80	pale green fine grained sandstone, variably broken with weak scattered quartz veinlets and FeO-q-stinger veinlets of mostly weak to locally moderate intensity. Minor fault @ 15.5m
27.80	43.80	brittle fault zone, commonly moderate to strongly broken with local puggy fault gouge breccia. Includes a moderately FeO-q-stinger veined fault block of medium/coarse grained sandstone(31.5 to 33.3m)
43.80	81.00	mostly pale green to light brown fine grained sandstone, numerous moderate to strongly broken minor fault zones, FeO-q-stinger veining is mostly weak but locally strongly developed over short intervals, weak pervasive silicification
81.00	94.00	fine grained sandstone, moderate intensity FeO-q-stinger veining commonly bearing semi-pervasive silica-FeO vein selvages, late q-veinlets(w), pervasive silica(w)
94.00	124.00	grey fine to medium grained sandstone, locally displaying relict thin bedding/banding with interbedded fine grained sandstone and minor siltstone, FeO-q-stinger(w/m) but locally moderate to strong (eg. 110 to 115m & 120 to 124m), cream silica(+/-carb - calc-silicate?) stockwork(w/m), sericite(w), broken(w/m)
124.00	132.00	Similar to above, fine/medium grained sandstone, but lacking thin interbeds/bands. FeO-q-stockwork locally strong from 130.5 to 132m. broken(w/m)
132.00	151.50	Not logged to-date; current hole depth (22/01/2010) where drill rig drive spindle broke at 151.5m, coincident with loss of water return; possibly entering the Harvey Creek Fault.

## References

Reid, R. O., 2001; Report on Geological Mapping, Rock Chip and Soil Sampling at the Davie Anomaly – Lynchford Project, EL15/1999. Asarco Exploration Company Incorporated. Tasmanian Company Report 01/4597.