In summary, it appears that the geology of the Cutty Sark Prospect was formed by pulses of extrusive andesitic volcanism separated by intermediate ignimbritic eruptions. Hydrothermal alteration and mineralization accompanied phases of this activity with the possible development of vent breccias. Fine epiclastic detritus accumulated in restricted shallow basins during periods of volcanic quiesence which may have been accompanied by the formation of massive sulphide bodies. Renewed volcanicity apparently disrupted some of these beds with fragments being caught up in more felsic (dacitic) mass-debris type deposits or lag-fall breccias. Such features are typical of the geology in the vicinity of many Kuroko-type deposits in Japan.

4.4.2. Geochemistry:

Previous soil sampling by EZ Company outlines a large but relatively low order soil anomaly within the prospective dacitic lithic pyroclastic unit. The anomaly is persistent along strike over at least 900m with maximum assays of 800ppm Zn and 200ppm Pb (See Figure 15.). Present evidence suggests that the area has been adequately covered by the soil geochemical survey.

Assays from the lithogeochemical study have confirmed the anomalous level of Zn with minor Pb from samples within the dacitic pyroclastic and related epiclastic sequence. Some of the more significant results are summarized in the table below (assays in ppm unless otherwise shown).

Sample No.	Cu	Pb	Zn	Ag	Au	Comments
3006	970	2750	30.0%	21.0	0.14	massive sphalerite clast, approx. 2m diameter.
3007	1050	775	7.5%	11.5	0.77	massive sulphide clast/ lens, approx. 1.5m long.
3005	1050	1150	2.8%	27.5	0.74	massive pyrite lens/ clast, approx. 1m long.
3012	85	345	6350	1.5	0.04	dacitic pyroclastic, host rock.
3026	180	10	4300	<0.5	0.01	dacitic pyroclastic, minor sulphide clast.
3011	50	325	5250	4.0	0.05	black shale lens within dacitic unit