ESRF	**Experiment title:** Human 8-oxoguanine DNA glycosylase	**Experiment number**: LS-1527
Beamline: ID14-3 BM14	**Date of experiment**: from: 15/9/99 to: 16/9/99 20/11/99 21/11/99	**Date of report**: 22/2/00
Shifts: 3 3	**Local contact(s)**: Hassan Belrhali Vivian Stojanoff	*Received at ESRF:*

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Report:

It has been possible to collect native data on beamline ID14-3 to 2.15Å resolution. In addition, data were collected on putative Mercury (2.9Å), Xenon (4.2Å) and Potassium iodide derivatives (2.4Å). Owing to the weak diffraction of these crystals "in-house" it was not possible to ascertain whether these compounds were successful in producing derivatives prior to the synchrotron visit. Analysis of the synchrotron data showed that derivitisation failed to occur in all cases apart from Mercury. A two wavelength MAD experiment was conducted on beamline BM14 on the Mercury derivative. It was possible to refine heavy atom positions for two sites which were at low occupancy, however, electron density maps phased on these sites proved uninterpretable. Experiments are currently underway to see whether Xenon derivatives of native OGH1 can be obtained using higher gas pressures (~300psi).