Aboriginal Heritage

A number of Aboriginal heritage sites have been identified within 600 metres of Longwalls 20-22 secondary extraction and are shown on Figure 1.

The first round monitoring (Round 1) was conducted in January 2012 and March 2012 and included all aboriginal heritage sites located within the 35° Angle of Draw for Longwall 20 (Figure 1).

In addition to the sites listed in Table 1, an additional Aboriginal heritage sites (MET 3) was identified near FRC 13 and was visited during monitoring.

The Round 1 monitoring team included an archaeologist (with experience in rock art recording and management) and Aboriginal stakeholder representatives. A summary of the information collected during monitoring is recorded in the Heritage Management Plan – Subsidence Impact Register.

The monitoring results are used to assess the Project against the Aboriginal heritage subsidence impact performance measure:

Less than 10% of Aboriginal heritage sites within the mining area are affected by subsidence impacts.

Specific details that are recorded during the monitoring program include:

- the date of monitoring;
- the location of longwall extraction (i.e. the longwall chainage) at the time of monitoring;
- comparison of the physical characteristics of the site at the time of monitoring against the previous monitoring and the baseline record (detail/quantify any changes observed);
- inspections of rock surfaces for cracking and/or exfoliation and/or blockfall since the previous monitoring and against the baseline record;
- inspection of art motifs for damage or deterioration since the previous monitoring and against the baseline record;
- identification of any natural deterioration processes (e.g. fire, vegetation growth and water seepage);

- detailed description and quantification of any changes noted during the completion of the above tasks;
- a photographic record of any changes noted during monitoring (taken at the same position and distance as baseline record to allow comparison over time);
- whether any follow-up actions are required to be considered (e.g. implementation of management or initiation of the Contingency Plan, etc.); and
- any other relevant information.

Aboriginal Heritage Site		
FRC 13	FRC 23	FRC 279
FRC 14	FRC 124	FRC 280
FRC 15	FRC 125	FRC 281
FRC 16.1	FRC 160	FRC 284
FRC 16.2	FRC 168	FRC 285
FRC 17	FRC 266	FRC 304
FRC 20	FRC 273	MET 1
FRC 21	FRC 272	PAD 2
FRC 105	FRC 278	-

Table 1 Aboriginal Heritage Site Monitoring – Round 1





METROPOLITAN COAL - ENVIRONMENTAL MONITORING SUMMARY







METROPOLITAN COAL - ENVIRONMENTAL MONITORING SUMMARY

The following changes were noted at sites FRC 15, FRC 16.1, FRC 281 and FRC 284 during monitoring:

- At site FRC 15 (an overhang with artefacts and deposit) the level of moisture was observed to have reduced even though rainfall leading up to the monitoring event resulted in an increase in moisture at other Aboriginal heritage sites. Small cracks have been identified in the rear wall of site FRC 15 and are in close proximity to the art motifs, however, no detailed photography is available from the baseline recording of the area of the cracking and therefore cannot with confidence be attributed to subsidence.
- At site FRC 16.1 (an overhang with art, artefacts and deposit) there was evidence of rock fall from the roof, which was also identified in the 2009 baseline recording. Any changes in rock fall will be examined during the next round of monitoring.
- At site FRC 281 (an overhang with art, artefacts and deposit) multiple cracks ranging from large, medium and small were recorded in the shelter wall either running through or next to motifs. These cracks varied in length but were all approximately 0.4 centimetres wide. The majority of the art recorded shows no evidence of damage or major changes. While cracks were noted in the 2009 baseline survey of this site, additional cracks (not recorded in the baseline) are considered to have resulted from subsidence.
- At site FRC 284 (an overhang with artefacts and deposit) fracturing was recorded in the buttress-like formation at the rear wall indicating that the ceiling is placing significant downward pressure on the rear wall.

Site FRC 168, a grinding groove previously visited and photographed could not be located during Round 1 monitoring.

The Aboriginal heritage subsidence impact performance measure was not exceeding during the review period.





