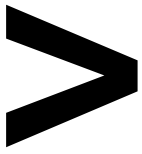


APPENDIX C: HVO S240 REHABILITATION MAINTENANCE SCHEDULE

Carrington GMD		HVO WOOP Dump
<small>HVOCAR201201, HVOCAR200902, HVOCAR201301, HVOCAR201202, HVOCAR201401</small>		
Area (ha)	88.5 ha	52.94 ha
HVO Pit	Carrington Pit	West of Riverview Pit
RMP Final Land Use	Final Landform Pasture/Woodland	Final Landform Woodland
Polygon Centroid Easting	309682.07	308666.66
Polygon Centroid Northing	64029668.841	6399187.34
Slope (minimum)	0 deg	10.1 deg
Slope (maximum)	15 deg	15.6 deg
Primary Aspect	Northwest	East
Secondary Aspect	N/A	West
Landform Surface Preparation	Boomspray Surface Vegetation Soil Aeration	Slash surface vegetation Repair Contours and Complete Drainage Works Soil Aeration
Growth Medium Surface Preparation	Aerate Seed	Aerate Seed



APPENDIX D: 2023 HERITAGE COMPLIANCE INSPECTION AUDITS

Hunter Valley Operations South Aboriginal Heritage Management Plan May 2023 Compliance Audit Inspection

Report prepared for
Hunter Valley Operations



June 2023

Joel Deacon





Introduction

The Hunter Valley Operations Joint Venture (HVOJV) manages the Hunter Valley Operations (HVO) mining complex located in the Hunter Valley. The HVOJV provides management services that include accountability for Aboriginal cultural heritage (ACH) and community consultation. The development of mining operations has occurred through a process of expansion and acquisition, and as a result there are two separate development approvals that apply to the operation - HVO North (DA_450-10-2003) and HVO South (PA_06_0261). The mining and processing activities at HVO are geographically divided by the Hunter River, with movement of coal, overburden, equipment, materials and personnel between the two operational areas.

Each consent contains a condition requiring the development of an Aboriginal Heritage Management Plan (AHMP). These plans have been developed in consultation with the Aboriginal community through the HVO Cultural Heritage Working Group (CHWG) and approved for each operational area. Within each of these plans, provision is made to conduct annual AHMP compliance inspections (biannual for HVO South) with members of the Aboriginal community throughout the life of operations. The purpose of the compliance inspections is to afford the Aboriginal stakeholders and the HVOJV:

- the opportunity to visit mine operations and mine areas to inspect the operational compliance with AHMP provisions and Ground Disturbance Permit (GDP) procedures;
- to inspect and monitor the condition and management of various ACH sites; and
- to review the effectiveness and performance of AHMP provisions in the management of cultural heritage at the mine.

Due to the number of ACH sites within the AHMP areas and the time required to inspect all sites, it is not feasible to inspect every ACH site during the same field trip. Therefore, a regular, rolling program of compliance inspections has been implemented that will visit all sites periodically over a number of years. A record will be kept of each compliance inspection against each ACH site, so that it can be ensured that each site is inspected regularly.

Proposed Activity and Project Brief

The compliance inspection involved visiting a number of ACH sites at HVO South, where an AHMP compliance inspection pro-forma was completed for each. These proformas noted the outcomes of the inspection including evidence of compliance or non-compliance with AHMP provisions, and recommendations on improvements to management provisions or corrective actions. Photographs of the inspected ACH sites were also taken.





Timing & Personnel

The HVO South 2023 H1 AHMP compliance inspection program was conducted on 12 May 2023. The personnel involved in these inspections were:

- Joel Deacon (Arrow Heritage Solutions Principal Archaeologist)
- Peter Bowman (HVO Environment and Community Officer)
- Les Atkinson (CHWG Representative – Jarban and Mugreaba)
- Allen Paget (CHWG Representative – Ungooroo Aboriginal Corporation)
- Clarissa Swan (CHWG Representative – Wonn 1 Consulting)

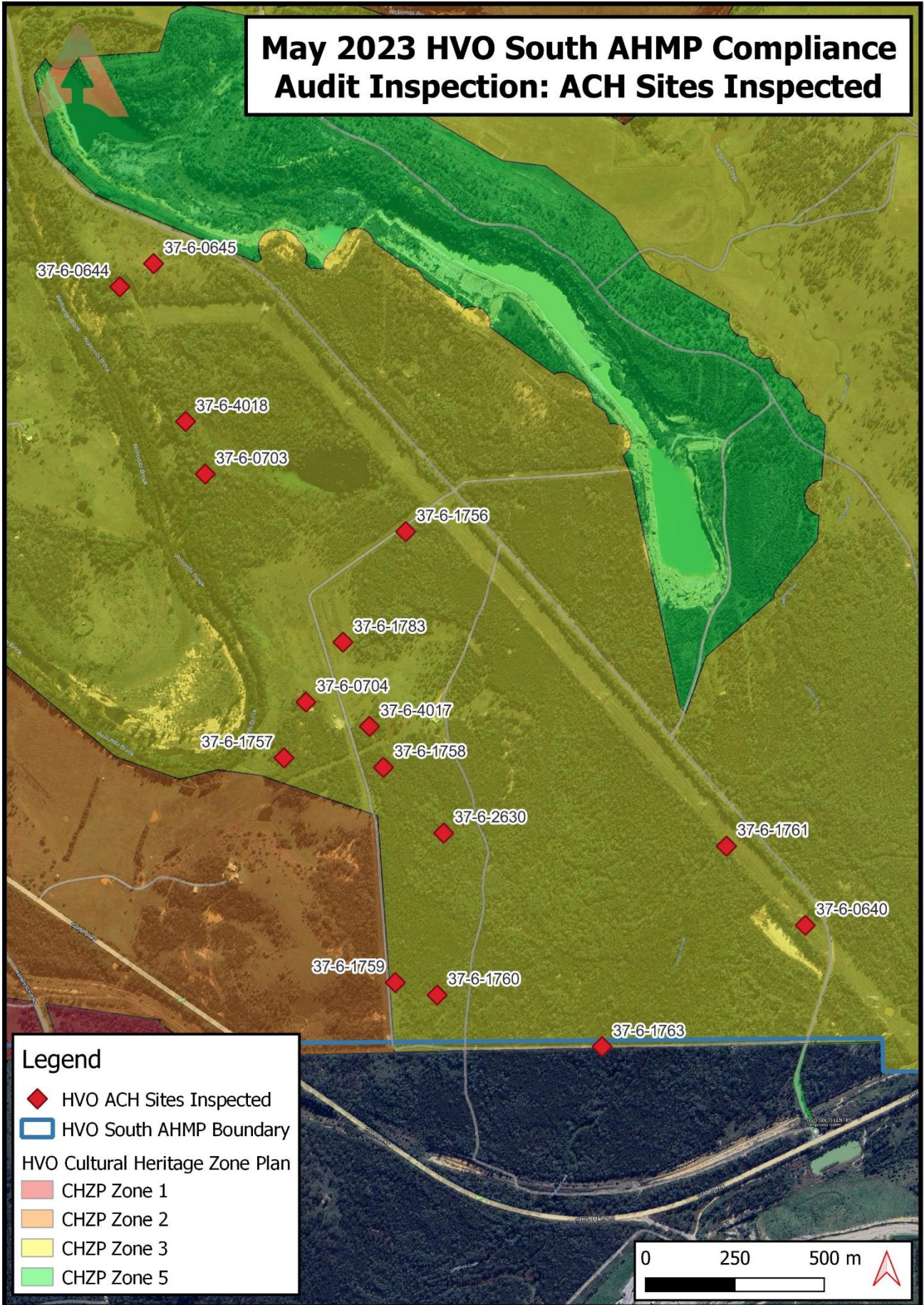
Arrow Heritage Solutions were engaged as independent heritage consultants to conduct the AHMP compliance inspections, with Joel Deacon acting as technical advisor and author of this report. HVO's Environment & Community Officer Peter Bowman arranged the compliance inspection programs and escorted the field team.

Results

A total of 16 ACH sites were inspected in the HVO South area, west of the Southern Access Road (see Map below). Although not an active mining zone, this section of the lease was selected for inspection as it is an area being prepared for transfer of ownership to Mount Thorley Warkworth (MTW), who will manage the area for its biodiversity values. For the short-term, however, these ACH sites will need to be managed according to the provisions of the HVO South AHMP. The current inspection will also serve as a baseline condition audit to assist in the future management of these sites by a third party owner.

The table below summarises the results of the compliance inspection and summarises the information recorded on the individual pro-forma inspection sheets. Using a mobile mapper pre-loaded with the GIS co-ordinates for each ACH site, the field team travelled to each locale and attempted to re-identify each site. Sometimes this was not possible due to poor ground surface visibility arising from high vegetation cover, in which case the site was assessed to determine that the vicinity had not been inadvertently disturbed. Another factor affecting site re-identification was the age of the original recording and the level of data recorded. The presence and condition of barricading or fencing was noted, as well as the presence and nature of various potential site disturbing factors (e.g erosion, animal, human). General observations of each site were made if necessary, and, based on information provided for all of the above factors, management recommendations were discussed and agreed by the field team for each site.





AHIMS ID	Site Name	Inspection Date	Site re-identified?	Site intact?	Site fenced/barricaded?	Fencing/barricading intact?	Natural erosion	Livestock damage	Human disturbance	Animal disturbance	Pests & weeds	General observations	Management recommendations
37-6-0640	ISF 1	12/5/2023	No	Yes	No	-	No	No	On bund, recent tree pruning	No	No		Salvage as underneath accessed powerline
37-6-0644	WB5; Wollombi Brook Dam	12/5/2023	No	Yes	No	-	No	No	No	No	Some cactus	Difficult to access	If spraying for cactus, proceed on foot in vicinity
37-6-0645	Wollombi Brook Trench	12/5/2023	No	Yes	Yes	Yes	No	No	No	No	No	Adjacent to replanting area	
37-6-0703	WB21A	12/5/2023	No	Yes	Yes	Yes	No	No	Historic disturbance	No	No	Groundwater monitoring well within fenced area	
37-6-0704	WB20A	12/5/2023	Yes	Yes	Yes	Yes	Severe	No	No	No	No		
37-6-1756	HVO-125	12/5/2023	Yes	Yes	Yes	Yes	No	No	No	No	No		
37-6-1757	HVO-126	12/5/2023	No	Yes	Yes	No	Eroding steep slope	No	No	No	No	Artefacts likely washed downhill	
37-6-1758	HVO-127	12/5/2023	No	Yes	Yes	Yes	No	No	No	No	No	Newly hard fenced	
37-6-1759	HVO-128	12/5/2023	No	Yes	Yes	Yes	No	No	No	No	No	Potential flaked, retouched glass bottle base	
37-6-1760	HVO-129	12/5/2023	Yes	Yes	Yes	Yes	No	No	No	No	No		
37-6-1761	HVO-130	12/5/2023	Yes	Yes	Yes	Yes	No	No	No	No	No		
37-6-1763	HVO-132	12/5/2023	Yes	Yes	Yes	Yes	Severe along track	No	No	No	No		Salvage as on eroding track
37-6-1783	PAD1 HVO	12/5/2023	Yes	Yes	No	-	No	No	No	No	No	Replanting area	
37-6-2630	MTW-347	12/5/2023	No	Yes	No	-	No	No	No	No	No	Likely misplotted from MTW survey	Amend AHIMS record with correct co-ordinates, remove from HVO database
37-6-4017	WB20B	12/5/2023	No	Yes	Yes	Yes	No	No	No	No	No		
37-6-4018	WB21B	12/5/2023	No	Yes	Yes	Yes	No	No	No	No	No		

Results of the May 2023 HVO South Aboriginal Sites Compliance Inspection



Aboriginal Site Management Recommendations

Management recommendations were provided for some of the ACH sites visited, however, as the majority of sites were located on intact landforms with very low risk of future disturbance, the field team were satisfied with the current passive management regime. The nature of those recommendations that were forthcoming are described below.

Potentially salvage to avoid further harm

Site: 37-6-0640; 37-6-1763

These two sites are located in areas which are currently accessed by light vehicles and power-line work crews. Site 37-6-0640 is located upon a man-made earth bund underneath a powerline. As was evidenced during the current audit, this area is frequently accessed by third parties to maintain vegetation within this easement, which represents a risk of harm to the artefact. Site 37-6-1763 is located on a severely eroded track along the lease boundary, which is accessed by mine personnel as well as third parties. Artefacts at this site were noted as having been washed into erosion gullies along this track. Any future track remediation as well as current track use represent risks of harm to this site.

To avoid further harm befalling these two sites, it is recommended that they be salvaged by representatives of the CHWG.



Field team at 37-6-0640 underneath power-lines



Severe erosion at 37-6-1763





Amend ACH databases

Site: 37-6-2630

This ACH site was originally recorded with the site name MTW-347. This site was in fact recorded during a survey at MTW mine in 2009. The fact that the site location within the HVO sites database is exactly 1km due north of the site location within the MTW sites database would indicate that there has been a transcribing error when the site was recorded into the AHIMS database. No artefacts were located within the vicinity of the HVO point.

It is recommended that the AHIMS database be amended to reflect the true position of site MTW-347, and that this site be deleted from the HVO sites database.

Spray for weeds on foot

Sites: 37-6-0644

During the inspection of this site, it was noted that prickly pear was present throughout this area. It is recommended that during future vegetation management programs that personnel are alerted to the existence of this site and that any spraying required therein be completed on foot rather than by vehicle. This general procedure should also be applied to all ACH sites where spraying may be necessary.

Recommendations from the May 2023 AHMP Audit

The following site-specific ACH management recommendations are provided as a result of the May 2023 AHMP Compliance Audit.

- 1. Consider the salvage of sites 37-6-0640 and 37-6-1763 to prevent further damage from erosion and third party access;**
- 2. Amend the AHIMS database to update the true position of site 37-6-2630 and delete same site from HVO ACH sites database; and**
- 3. If conducting vegetation management activities within the vicinity of site 37-6-0644, ensure all access is conducted by foot.**

In addition to providing the opportunity to inspect the condition of a number of ACH sites, this AHMP compliance audit inspection also served as a baseline assessment of these sites prior to the area being transferred to MTW. The intended land-use for this area post-transaction will be for environmental offsetting and management, and so there will be no increased threat of ground disturbing activities to the preservation of these sites. As part of any handover that may occur regarding ACH management within this area, this audit report can be used to





provide a record of the current status of the ACH sites and any management issues that may need attending to in the near future.

As the HVO South AHMP is a binding management document required under the terms of the HVO South consent (PA_06_0261), a thorough review of the AHMP should be undertaken as part of the land transfer process to ensure that there would be no discrepancies or issues arising from new ownership of the transferred lands. For instance, clauses and statements regarding land ownership should be identified and revised if permissible under the terms of the project approval. Furthermore, as the AHMP is tied to the HVO South Coal Project Area, if the land transfer is to have any material affect on the status of the latter then this needs to be reflected in the AHMP. If any changes or revisions to the AHMP are identified as being required, then these should be communicated to the CHWG at the earliest available opportunity. Despite the likely requirement for a new AHMP to be developed if the HVO Continuation Project is approved, the revision of the current AHMP will need to occur regardless if the land transfer will pre-date this approval.

Importantly, MTW will also need to be fully appraised of their ACH obligations under the current HVO South AHMP for any works they intend to conduct in this area. For example, GDPs, Aboriginal community consultation, future compliance audits, ACH database updates, site salvage proposals and cultural objects storage, to list but a few, are all undertakings that will need to be managed through HVO and their ACH management system, regardless of any systems currently in place at MTW.



Hunter Valley Operations Aboriginal Heritage Management Plans November 2023 Compliance Audit Inspections

Report prepared for
Hunter Valley Operations



January 2024

Joel Deacon





Introduction

The Hunter Valley Operations Joint Venture (HVOJV) manages the Hunter Valley Operations (HVO) mining complex and associated Biodiversity Areas located in the Hunter Valley. The HVOJV provides management services that include accountability for Aboriginal cultural heritage (ACH) and community consultation.

The development of HVO's mining operations has occurred through a process of expansion and acquisition, and as a result there are two separate development approvals that apply to the operations - HVO North (DA_450-10-2003) and HVO South (PA_06_0261). The mining and processing activities at HVO are geographically divided by the Hunter River, with movement of coal, overburden, equipment, materials and personnel between two operational areas.

Each consent contains a condition requiring the development of an Aboriginal Heritage Management Plan (AHMP). Such plans have been developed in consultation with the Aboriginal community through the HVO Cultural Heritage Working Group (CHWG) and approved for each operational area. Within each of these plans, provision is made to conduct annual AHMP compliance inspections (biannual for HVO South) with members of the Aboriginal community throughout the life of operations. The purpose of the compliance inspections is to afford the Aboriginal stakeholders and the HVOJV:

- the opportunity to visit mine operations and mine areas to inspect the operational compliance with AHMP provisions and Ground Disturbance Permit procedures;
- to inspect and monitor the condition and management of various ACH sites; and
- to review the effectiveness and performance of AHMP provisions in the management of cultural heritage at the mine.

Due to the number of ACH sites within the AHMP areas and the time required to inspect all sites, it is not feasible to inspect every ACH site during the same field trip. Therefore, a regular, rolling program of compliance inspections has been implemented that will visit all sites periodically over a number of years. A record will be kept of each compliance inspection against each ACH site, so that it can be ensured that each site is inspected regularly.





Proposed Activity and Project Brief

The compliance inspections involved the following elements:

- An AHMP compliance inspection report pro-forma was completed for each ACH site or area visited;
- Photographs of the inspected ACH sites were also taken;
- The pro-forma noted the outcomes of the inspection including evidence of compliance or non-compliance with AHMP provisions, recommendations on improvements to management provisions and/or recommendations on corrective actions;
- Specific site condition monitoring inspection of CM-CD1, as per Schedule 15 of the HVO North HMP; and
- A recently approved GDP area was also inspected to review the ACH conditions in place and actions taken in compliance of those conditions.

Timing & Personnel

The HVO 2023 H2 AHMP compliance inspection program was conducted between 8-10 November 2023. The personnel involved in these inspections were:

- Joel Deacon (Arrow Heritage Solutions Principal Archaeologist)
- Peter Bowman (HVO Environment & Community Officer)
- Luke Hickey (CHWG Representative – Wattaka Cultural Consultants)
- Rhonda Ward (CHWG Representative – Ungooroo Cultural & Community Services)
- Tracey Skene (CHWG Representative – Culturally Aware)

Arrow Heritage Solutions were engaged as independent heritage consultants to conduct the AHMP compliance inspections, and Joel Deacon acted as technical advisor and author of this report. HVO's Environment & Community Officer Peter Bowman arranged the compliance inspection programs and escorted the field team.

HVO North AHMP Compliance Inspection

A total of 52 ACH sites were inspected across various areas at HVO North, including Carrington South, Hunter Valley Services, the Wandewoi Offset Area, Mitchell Pit South and the Wilton Mitchell Pit East AHIP Application area (see Maps 1-5). Although not active mining zones, these areas were selected for inspection for a variety of reasons. Some of the sites are located adjacent to active mining or infrastructure areas, some are located in agricultural properties, some were visited to obtain further information regarding their extent, contents and





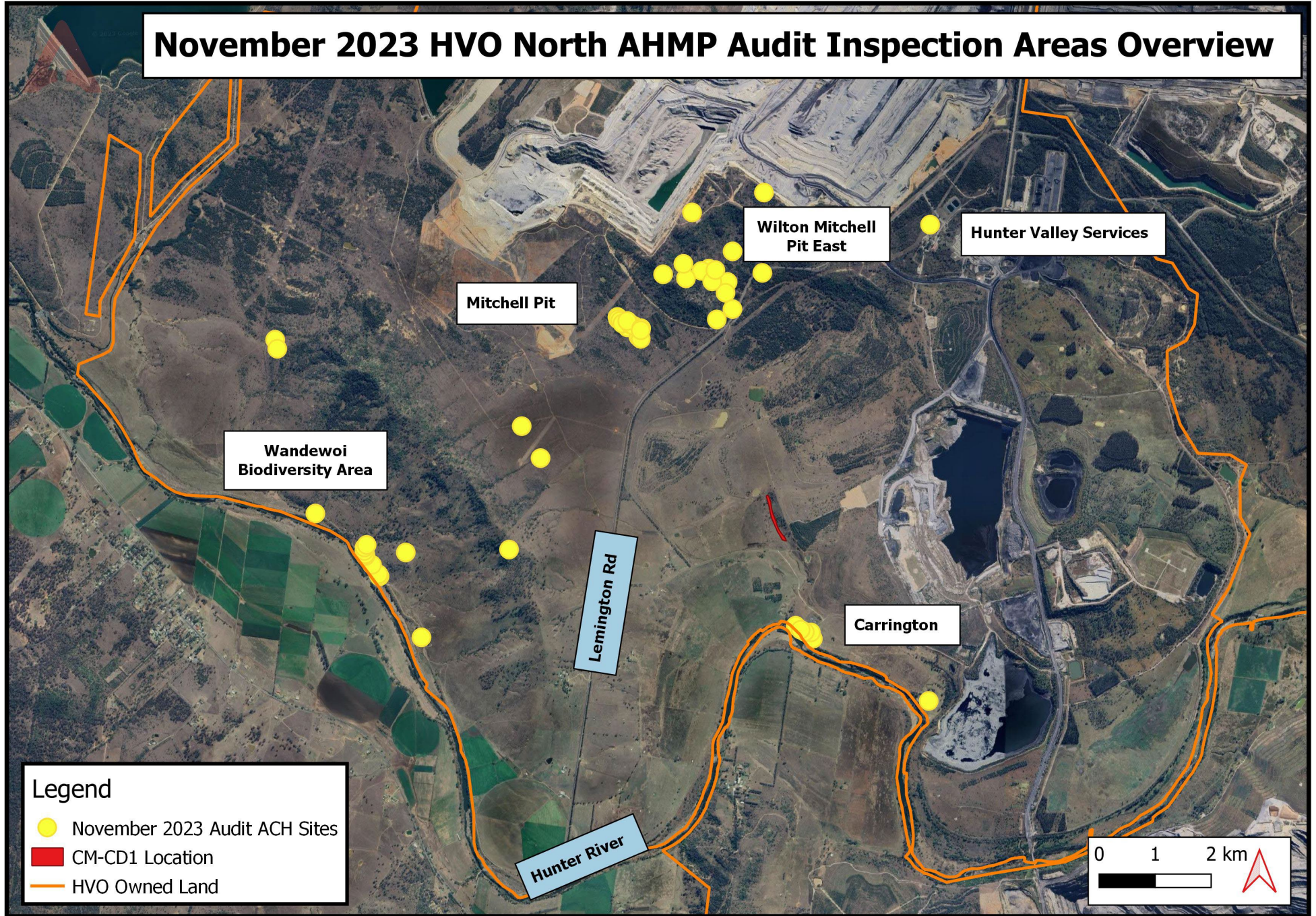
condition, and others were inspected to assess the success of measures implemented as a result of previous audit recommendations.

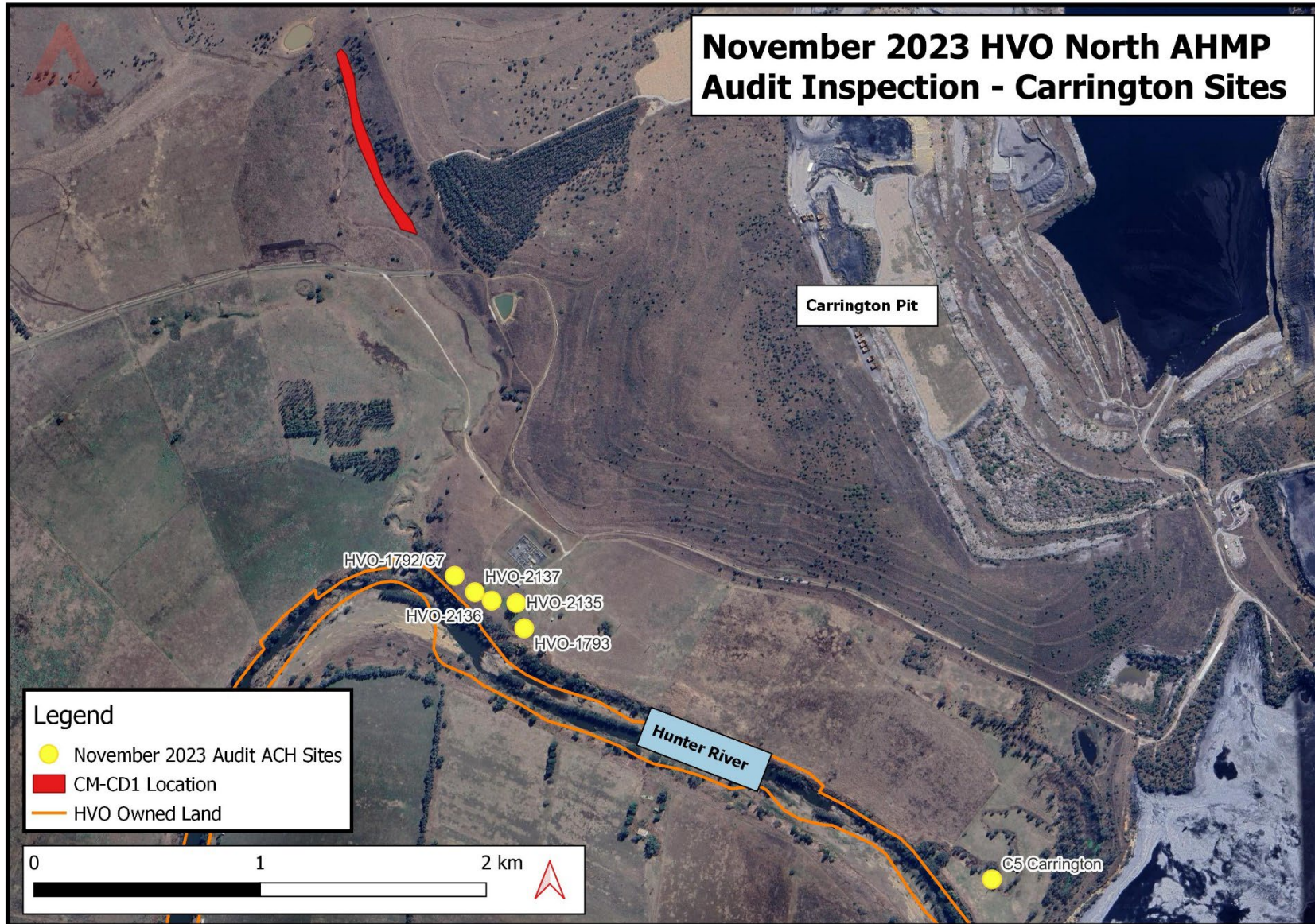
Results

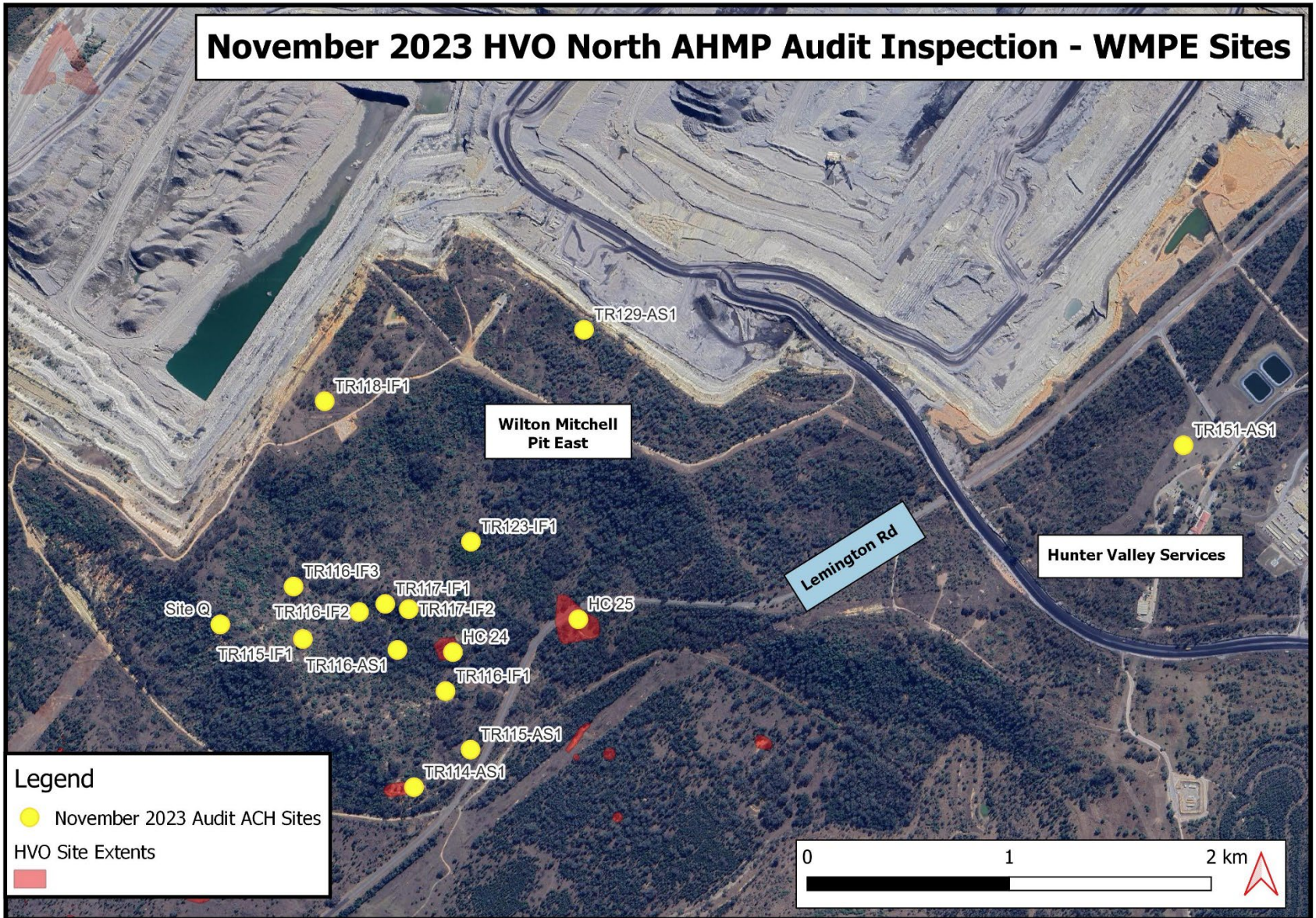
Table 1 details the results of the HVO North compliance inspection and summarises the information recorded on the individual pro-forma inspection sheets. Using a mobile mapper pre-loaded with the GIS co-ordinates for each ACH site, the field team travelled to each locale and attempted to re-identify each site. Sometimes this was not possible due to poor ground surface visibility (GSV) arising from high vegetation cover, in which case the site was assessed to determine that the vicinity had not been inadvertently disturbed. Another factor affecting site re-identification was the age of the original recording and the level of data recorded. The presence and condition of barricading or fencing was noted, as well as the presence and nature of various potential site disturbing factors (e.g erosion, animal, human). General observations of each site were made if necessary, and, based on information provided for all of the above factors, management recommendations were discussed and agreed by the field team for each site.

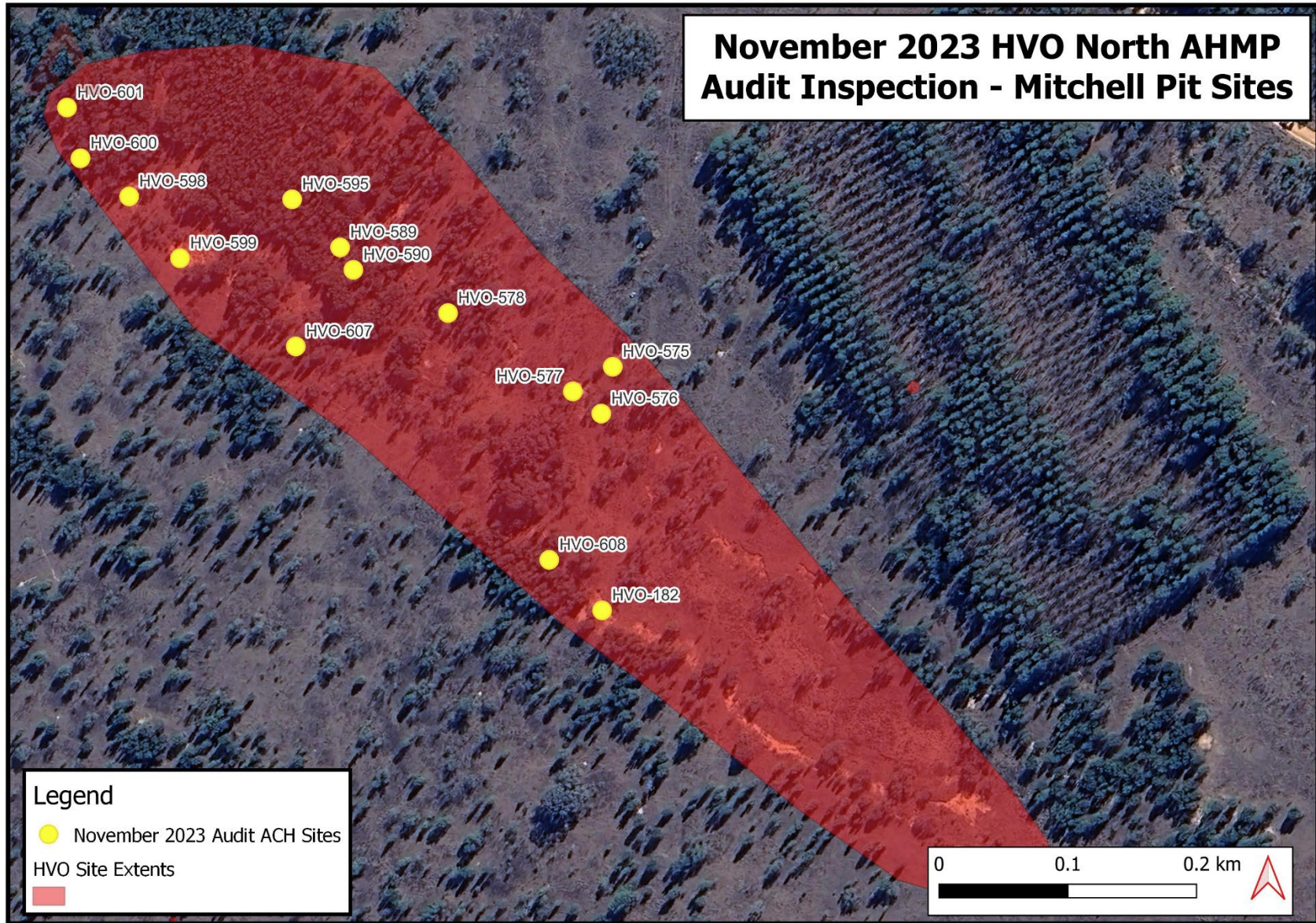


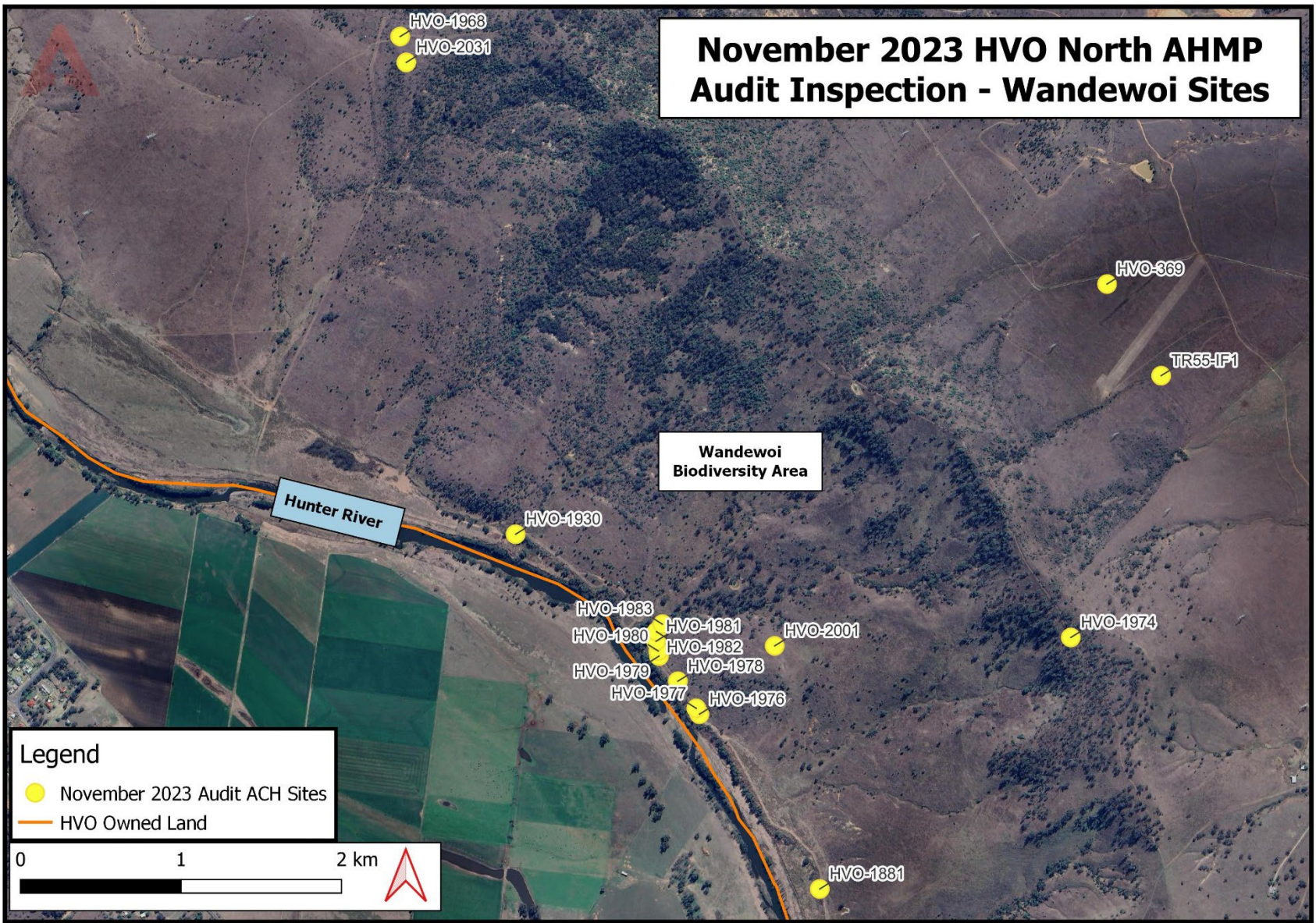
November 2023 HVO North AHMP Audit Inspection Areas Overview











AHIMS ID	Site Name	Inspection Date	Site re-identified?	Site intact?	Site fenced/barricaded?	Fencing/barricading intact?	Natural erosion	Livestock damage	Human disturbance	Animal disturbance	Pests & weeds	General observations	Management recommendations
37-2-0528	Site Q	9/11/23	No	Yes	No	-	No	No	No	No	No	Old recording – co-ords probably erroneous	
37-2-0796	HVO-182	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-575	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-576	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-577	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-578	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-589	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-590	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-595	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-598	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-599	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-600	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-601	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-607	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0796	HVO-608	9/11/23	Yes	Yes	No	-	No	No	No	No	No	Some bunting installed near fencelines	
37-2-0800	HC 24	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-0801	HC 25	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-2081	HVO-1793	10/11/23	No	Yes	No	-	No	No	No	No	No		Consider re-auditing when GSV improves
37-2-2082	HVO-1792/C7	10/11/23	Yes	Yes	No	-	Some	No	No	No	No	Located on old dam edge	
37-2-5324	HVO-369	9/11/23	No	Yes	No	-	No	No	No	No	No		Consider re-auditing when GSV improves
37-2-5624	HVO-1881	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5672	HVO-1930	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5701	HVO-2031	10/11/23	Yes	Yes	Yes	No	No	No	No	No	No		
37-2-5712	HVO-2001	10/11/23	Yes	Yes	Yes	No	No	No	No	No	No		
37-2-5727	HVO-1976	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5728	HVO-1977	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5729	HVO-1978	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5730	HVO-1979	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves



37-2-5731	HVO-1980	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5732	HVO-1981	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5733	HVO-1982	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5734	HVO-1983	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Fenced on side of track & thickly vegetated	Consider re-auditing when GSV improves
37-2-5759	HVO-1968	10/11/23	No	Yes	Yes	No	slight	No	No	No	No		Consider re-auditing when GSV improves
37-2-5766	HVO-1974	10/11/23	No	Yes	No	-	No	No	On road edge	No	No		Consider re-auditing when GSV improves
37-2-5858	HVO-2135	10/11/23	Yes	Yes	No	-	No	No	Yes, historic	No	No	At entrance to old shed	
37-2-5859	HVO-2136	10/11/23	No	Yes	No	-	No	No	Some, historic	No	No	Near farm gate	Consider re-auditing when GSV improves
37-2-5860	HVO-2137	10/11/23	No	Yes	No	-	No	No	Some, historic	No	No	On old contour	Consider re-auditing when GSV improves
37-2-6511	TR55-IF1	9/11/23	Yes	Yes	No	-	No	No	No	No	No		Consider re-auditing when GSV improves
37-2-6521	TR114-AS1	9/11/23	Yes	Yes	No	-	Yes	No	No	No	No	On old scour	
37-2-6522	TR115-AS1	9/11/23	Yes	Yes	No	-	No	No	Some, historic	No	No	On old contour	
37-2-6523	TR115-IF1	9/11/23	No	Yes	No	-	No	No	No	No	No		
37-2-6524	TR116-AS1	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6525	TR116-IF1	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6526	TR116-IF2	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6527	TR116-IF3	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6528	TR117-IF1	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6529	TR117-IF2	9/11/23	Yes	Yes	No	-	No	No	No	Some	No	Pig activity	
37-2-6530	TR118-IF1	9/11/23	Yes	Yes	No	-	Slight	No	No	No	No		
37-2-6531	TR123-IF1	9/11/23	No	Yes	No	-	No	No	No	Some	No	Pig activity	
37-2-6532	TR129-AS1	9/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-2-6533	TR151-AS1	10/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-5-0495	C5 Carrington	10/11/23	No	Yes	Yes	Yes	No	No	No	No	No	Located on steep, thickly vegetated creek bank	Consider re-auditing when GSV improves

Table 1: Results of the November 2023 HVO North Aboriginal Sites Compliance Inspection

Aboriginal Site Management Recommendations

There were no specific management recommendations put forward for any of the ACH sites visited. All sites were located on stable landforms with no evidence of disturbance, nor were they under threat from potential future disturbance. There were a number of sites that were unable to be relocated due to poor GSV. These sites could be targeted for inspection at future audits if and when GSV improves.

Consider re-auditing when GSV improves

Site: 37-2-2081, 5324, 5624, 5672, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5759, 5766, 5859, 5860, 6511, 37-5-0495

These sites are located in areas where surface vegetation is extremely thick and prevents visibility of the ground surface. It is recommended that the sites are revisited during a future audit inspection when vegetation levels are much lower so that better attempts can be made to relocate their contents. It should be noted, however, that one benefit to such thick vegetation is that this will aid in preventing movement of any artefacts through erosion or other means.



Example of poor GSV at site 37-2-5324



CM-CD1

The HVO North HMP (Schedule 15) contains a specific Plan of Management for Aboriginal site CM-CD1 (AHIMS ID 37-2-1877) that includes a description of measures that would be implemented to protect, monitor and manage potential impacts on the site by HVO North's mining operations and associated activities. As shown in the Carrington map above, CM-CD1 includes an area c.450m long and up to 25m in width and is located immediately to the west of HVO Carrington Pit and c.900m north of the Hunter River.

As part of the brief for this compliance inspection audit, the consultant was also required to audit the current condition of CM-CD1 with reference to the management measures outlined in Schedule 15 of the HVO AHMP. It should be positively noted that the elements of the management regime identified in previous compliance audits continue to be robustly applied. The maintenance of these management processes will be the ongoing focus of compliance audits at CM-CD1:

1. A disturbance exclusion buffer area will be maintained around Aboriginal cultural heritage site 37-2-1877 (CM-CD1) of not less than 20m from the boundary of the recorded extent of the CM-CD1 site and incorporating the Older Stratum.

During the November 2023 inspection of CM-CD1 no unauthorised ground disturbance was noted within the disturbance exclusion buffer area (as bound by the co-ordinates in Point 2 below). This area has been demarcated with pegs and subject to vegetation slashing using hand-held equipment.

2. The CM-CD1 disturbance exclusion buffer area will be aligned within the following coordinates (GDA 94):
 - i. North-East corner at E308805 and N6403833
 - ii. North-West corner at E308696 and N6403791
 - iii. South-West corner at E308861 and N6403341
 - iv. South-East corner at E308996 and N6403355

See Point 1.

3. The CM-CD1 disturbance exclusion buffer area is to be zoned as a Zone 1 Restricted Access Area within the HVO North Cultural Heritage Zoning Scheme (CHZS). All development disturbance activities are to be excluded from within the buffer area.

The CM-CD1 exclusion area is zoned as Zone 1 in the HVO North CHZS.





4. The CM-CD1 disturbance exclusion buffer area will be delineated with stock-proof fencing and appropriate signage denoting that the area is a Restricted Access Area and no ground disturbance is authorised within the buffer area except where such ground disturbance is authorised under the provisions of this Plan of Management. Ground disturbance, such as for archaeological investigations, may require a consent under relevant legislation.

The entirety of CM-CD1, including a substantial buffer, has been delineated with stock-proof fencing and adequate Cultural Heritage Site signage is visible on the fence. A second fence, aligning with the coordinates in Point 2 above and the pegged area described in Point 1, is planned to be installed during 2024.

5. Access within the CM-CD1 disturbance exclusion buffer area will be limited to authorised personnel and visitors only either on foot (e.g. for monitoring inspections) or in light vehicles (e.g. for pest, weed and fire management) for the purposes of implementing the management provisions approved under this Plan of Management.

No evidence was noted to suggest the contrary has occurred, with vegetation slashing having been conducted with hand-held tools only.

6. An annual site condition monitoring inspection will be conducted by HVO personnel with representatives of the CHWG and the results of the inspection reported as an element of the HVO North DA 450-10-2003 Annual Environmental Management Report. The results of the inspection will also be reported to Aboriginal community stakeholders through the CHWG and/or other relevant Aboriginal community consultation forum.

This report documents the 2023 annual site condition inspection.

7. A series of condition and disturbance monitoring photo points will be established within the CM-CD1 disturbance exclusion buffer area and condition monitoring images taken during the course of the annual monitoring inspection. **Five photographic monitoring points have been established from where disturbance monitoring photographs of CM-CD1 are taken. These points are located in the north-west, north-east, south-west and south-east of the site, as well as the centre. These photographs and their locational information are contained in Appendix A of this report.**





8. HVO will determine the nature and risks of potential impacts of blasting activities upon site CM-CD1 as an element of the HVO North blast management plan. Consistent with the results of the risk assessment process used to inform the development of the HVO North blast management plan, HVO will implement appropriate management measures to protect site CM-CD1 from any adverse impact that may be caused by blasting in a manner consistent with the provisions of this Plan of Management. In accordance with Schedule 4 of Condition 40 of the Approval, regular visual monitoring will be undertaken to confirm that impacts have not been caused by blasting vibration or from flyrock impacts.

No evidence of any blasting-related disturbance or flyrock impacts were noted during the site inspection. Indeed, blasting activity in the Carrington Pit ceased on the 17th October 2018 and mining and blasting activity was been focused on the eastern side of the Carrington Pit in the years leading up to the cessation of blasting.

9. As mining, and related blasting activities, approach the CM-CD1 disturbance exclusion buffer area, regular visual monitoring to confirm that impacts have not been caused by blasting vibration will be conducted by HVO personnel. Damage to CM-CD1 caused by flyrock is considered a very low risk, however, if it is evident, through regular monitoring, that this risk profile may increase in the future, protective management measures will be considered.

See above Point 8.

10. A variety of land management activities will be required to maintain the cultural and environmental values of the CM-CD1 disturbance exclusion buffer area. Land management activities approved under this HMP are as follows.
- i. Hand or light vehicle spraying of weeds.
 - ii. Brush cutting by hand to control weeds and vegetation.
 - iii. Prescribed burning and fire protection management.
 - iv. Maintenance of fencing including replacement of posts as required.

No evidence was noted of any adverse impacts to CM-CD1 by any of the land management practices listed above. It was noted that weed and vegetation management throughout the CM-CD1 disturbance exclusion buffer had been recently and successfully undertaken.





Recommendations

CM-CD1 continues to be managed well, with no evident impacts to the site's cultural heritage values. All recommended actions from previous compliance inspections have been implemented. The following recommendations relate to land management activities that could be implemented to maintain the environmental values of the site:

- **Using a hand-held brush-cutter and proceeding on foot, the 20m CM-CD1 buffer area should continue to be subject to weed and vegetation growth slashing as and when required;**
- **A fence should be installed around this 20m CM-CD1 buffer area aligned with the current demarcation pegs;**
- **Access between this fence and the outer perimeter fence is restricted to light vehicles and the management of vegetation and pasture-based fuel loads to be achieved through low impact intermittent grazing by livestock;**
- **The CM-CD1 area should continue to be targeted during HVO's vermin control program in order to reduce feral pig disturbance as much as possible.**





HVO South AHMP Compliance Inspection

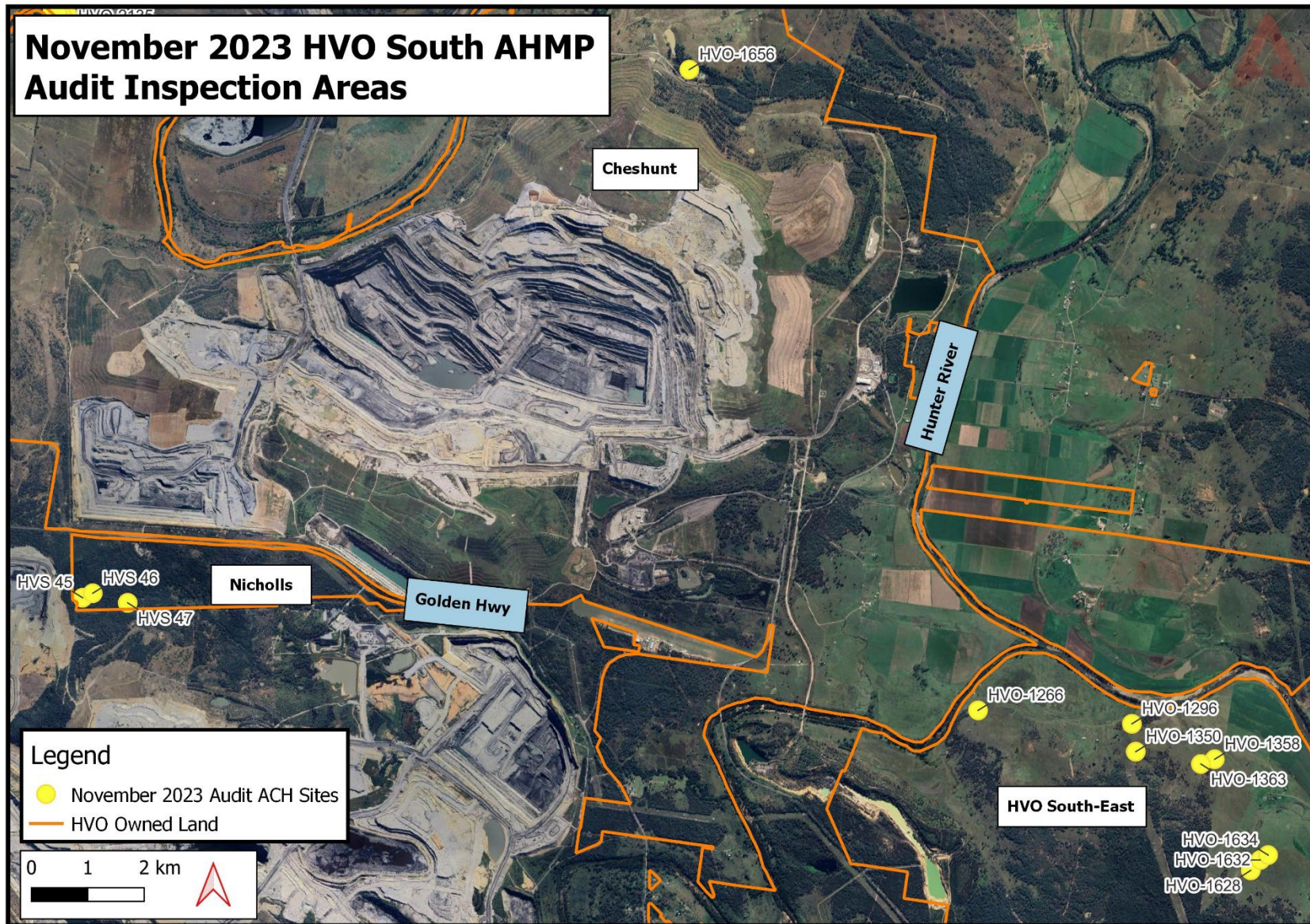
A total of 12 ACH sites were inspected in the HVO South area, at Cheshunt, Nicholls and the HVO Southern areas (see Map below). Although not active mining zones, these areas were selected for inspection as they are accessed by third party users, including for grazing activities.

Results

Table 2 summarises the results of the HVO South compliance inspection and summarises the information recorded on the individual pro-forma inspection sheets. Using a mobile mapper pre-loaded with the GIS co-ordinates for each Aboriginal heritage site, the field team travelled to each locale and attempted to re-identify each site. Sometimes this was not possible due to poor GSV arising from high vegetation cover, in which case the site was assessed to determine that the vicinity had not been inadvertently disturbed. Another factor affecting site re-identification was the age of the original recording and the level of data recorded. The presence and condition of barricading or fencing was noted, as well as the presence and nature of various potential site disturbing factors (e.g erosion, animal, human). General observations of each site were made if necessary, and, based on information provided for all of the above factors, management recommendations were discussed and agreed by the field team for each site.



November 2023 HVO South AHMP Audit Inspection Areas



AHIMS ID	Site Name	Inspection Date	Site re-identified?	Site intact?	Site fenced/barricaded?	Fencing/barricading intact?	Natural erosion	Livestock damage	Human disturbance	Animal disturbance	Pests & weeds	General observations	Management recommendations
37-5-0269	HVS 45	8/11/23	No	Yes	No	-	No	No	No	No	No	Very poor GSV	Reinspect with report notes when GSV improves
37-5-0270	HVS 46	8/11/23	No	Yes	No	-	No	No	No	No	No	Very poor GSV	Reinspect with report notes when GSV improves
37-5-0271	HVS 47	8/11/23	No	Yes	No	-	No	No	No	No	No	Very poor GSV	Reinspect with report notes when GSV improves
37-6-3024	HVO-1656	8/11/23	Yes	Yes	No	-	No	No	No	No	Termite activity		
37-6-3383	HVO-1266	8/11/23	Yes	Yes	No	-	No	No	No	No	No	On ant nest	
37-6-3439	HVO-1296	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-3492	HVO-1350	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-3500	HVO-1358	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-3505	HVO-1363	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-4035	HVO-1634	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-4076	HVO-1628	8/11/23	Yes	Yes	No	-	No	No	No	No	No		
37-6-4080	HVO-1632	8/11/23	Yes	Yes	No	-	No	No	No	No	No		

Table 2: Results of the November 2023 HVO South Aboriginal Sites Compliance Inspection





Aboriginal Site Management Recommendations

There were no specific management recommendations put forward for any of the ACH sites visited. All sites were located on stable landforms with no evidence of disturbance, nor were they under threat from potential future disturbance. There were three sites that were unable to be relocated due to poor GSV and, potentially, inaccuracies in the site recording information. These sites could be targeted for inspection at future audits if and when GSV improves.

Consider re-auditing when GSV improves

Site: 37-5-0269, 0270, 0271

These sites are located in areas where vegetation is extremely thick and prevents visibility of the ground surface. These sites were recorded in 1997, and so it is possible that the registered location of these sites is erroneous. It is recommended that the sites are revisited during a future audit inspection, with reference to report and site card information, when vegetation levels are much lower so that better attempts can be made to relocate their contents.



Field team assessing visibility levels at site 37-5-0269





Ground Disturbance Audit Check

Aside from affording CHWG representatives with an opportunity to visit mining operations and monitor the condition of ACH sites, another intention of the compliance inspections is to provide the opportunity to inspect the operational compliance with AHMP provisions and GDP procedures. To this end, an inspection was made of fire risk reduction works at the Nicholls block along the route of an historic site called the Dog Leg Fence. These works had been processed through the GDP procedure with conditions inserted to protect nearby ACH sites.



Field team inspecting GDP work area (ACH site located in scrub to left of picture)

The area had been subject to previous ACH and historical heritage assessments, with one ACH site recorded within 10m of the vegetation slashing area (HVS-47 – a mudstone flake and a mudstone core). Despite this site not being able to be re-identified during previous





audits, the site location remains valid and must not be disturbed by any potential ground disturbing activities. The contractors were instructed to park their vehicles at the nearest track and walk into the site. The works were to be conducted with hand tools only and site location HVS-47 to be avoided. This site was to be flagged to assist in its protection.

The field team inspected the recently slashed area and confirmed that the location for site HVS-47 was undisturbed, although no artefacts were found to be present anywhere in the vicinity. All conditions of the GDP were found to have been complied with and the field team were satisfied that ACH protection measures were adequate and appropriate.

Recommendations from the November 2023 AHMP Audit

The following ACH management recommendations are provided as a result of the November 2023 AHMPs Compliance Audit.

1. **Reinspect sites 37-2-2081, 37-2-5324, 37-2-5624, 37-2-5672, 37-2-5727, 37-2-5728, 37-2-5729, 37-2-5730, 37-2-5731, 37-2-5732, 37-2-5733, 37-2-5734, 37-2-5759, 37-2-5766, 37-2-5859, 37-2-5860, 37-2-6511, 37-5-0495, 37-5-37-5-0269, 37-5-0270 and 37-5-0271 when vegetation levels are much lower to ascertain actual location & extent of sites;**
2. **Using a hand-held brush-cutter and proceeding on foot, the 20m CM-CD1 buffer area should continue to be subject to weed and vegetation growth slashing as and when required;**
3. **A fence should be installed around this 20m CM-CD1 buffer area aligned with the current demarcation pegs;**
4. **Access between this fence and the outer perimeter fence is restricted to light vehicles and the management of vegetation and pasture-based fuel loads to be achieved through low impact intermittent grazing by livestock;**
5. **The CM-CD1 area should continue to be targeted during HVO's vermin control program in order to reduce feral pig disturbance as much as possible.**

In addition to providing the opportunity to inspect the condition of a number of ACH sites, this AHMP compliance audit inspection also focussed on visiting those sites within which stone axes had been recorded. This not only afforded the RAPs present to see these artefact types in person and in situ, but also allowed for an up to date photograph catalogue to be created





that could be shared with all CHWG members. The following are photographs of those axes that were able to be re-identified during the current audit.



Ground edge axe from HVO-1628



Stone axe from HVO-1632



Heavily flaked stone axe from HVO-2001





Same stone axe from HVO-2001



Axe preform from HVO-601



Heavily flaked stone axe from HVO-2031

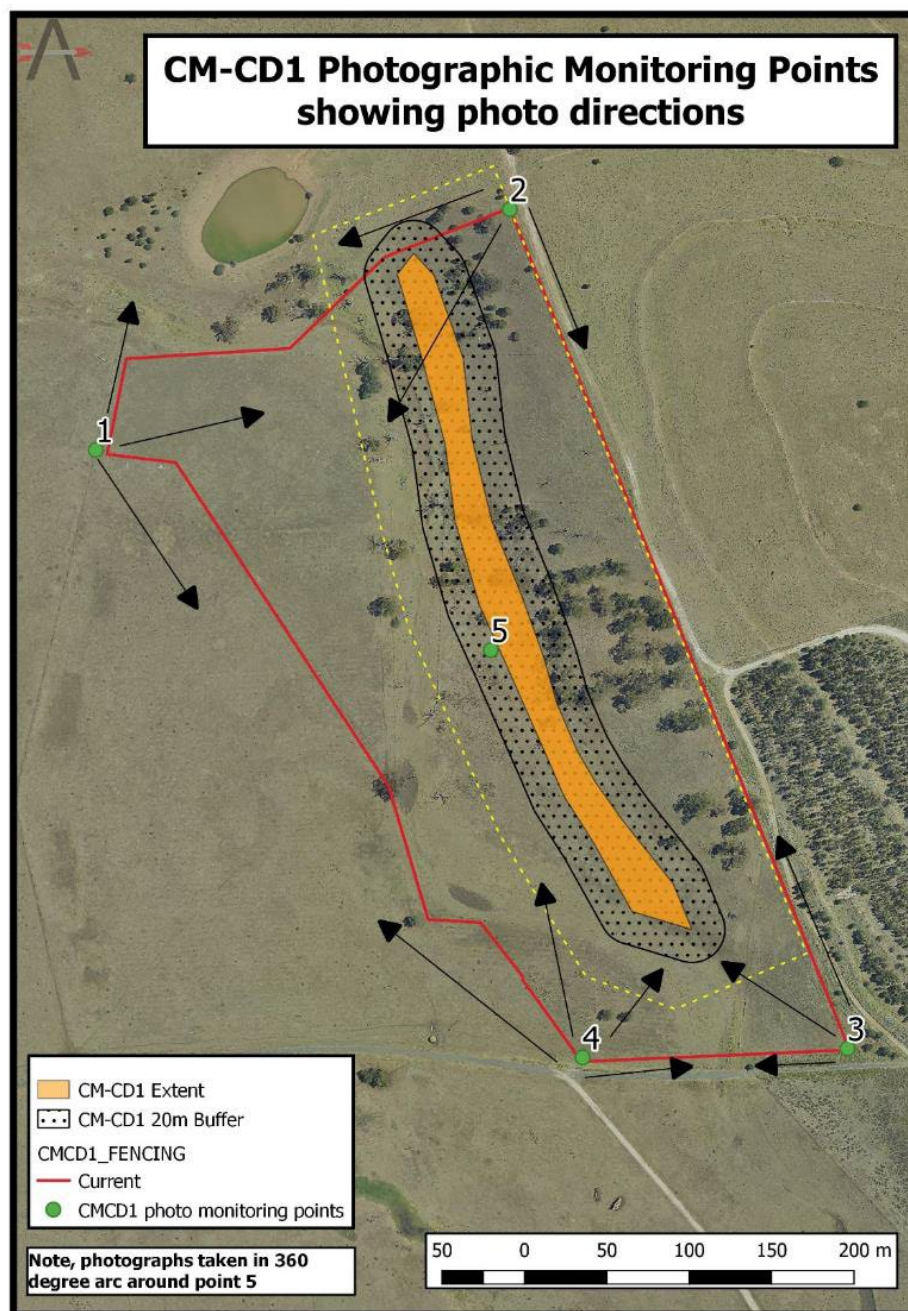




APPENDIX A – CM-CD1 PHOTO MONITORING RESULTS

Photo Point #	Location at CM-CD1	Easting	Northing
1	North-west	308614	6403653
2	North-east	308814	6403807
3	South-east	309022	6403297
4	South-west	308860	6403290
5	Centre	308809	6403513

Co-ordinates (GDA94, z56) for CM-CD1 photo monitoring points



Location of CM-CD1 photo monitoring points





CM-CD1 Monitoring Point 1 Panorama – November 2023



CM-CD1 Monitoring Point 2 Panorama – November 2023





CM-CD1 Monitoring Point 3 Panorama – November 2023



CM-CD1 Monitoring Point 4 Panorama – November 2023





CM-CD1 Monitoring Point 5 Panorama – November 2023: (L-R: north through east through south)



CM-CD1 Monitoring Point 5 Panorama – November 2023 (L-R: south through west through north)



