

ENVIRONMENT PLAN SUMMARY

Avenger 2D Seismic Survey

EP 510

MRL-ENR-PLN-0003



REVISION NUMBER	ISSUE DATE	PREPARED BY	APPROVED BY
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1 INTRODUCTION

1.1 BACKGROUND

Energy Resources Limited is a wholly owned subsidiary of Mineral Resources Limited (MinRes). MinRes is proposing to undertake a 2-Dimensional (2D) seismic acquisition survey in the Shire of Ashburton in the Pilbara region of Western Australia within the petroleum exploration permit EP 510 (the Project)) (Figure 1-1).

A total native vegetation clearing-avoidance strategy has been adopted during the survey design phase of the Project, eliminating the need to disturb any existing native vegetation. All Project activities will be undertaken along existing roads, cleared tracks and agricultural areas.

The Project is proposed to be completed within a total activity period of approximately 12 to 15 weeks, from initial mobilisation to removal of all Project equipment and personnel off site.

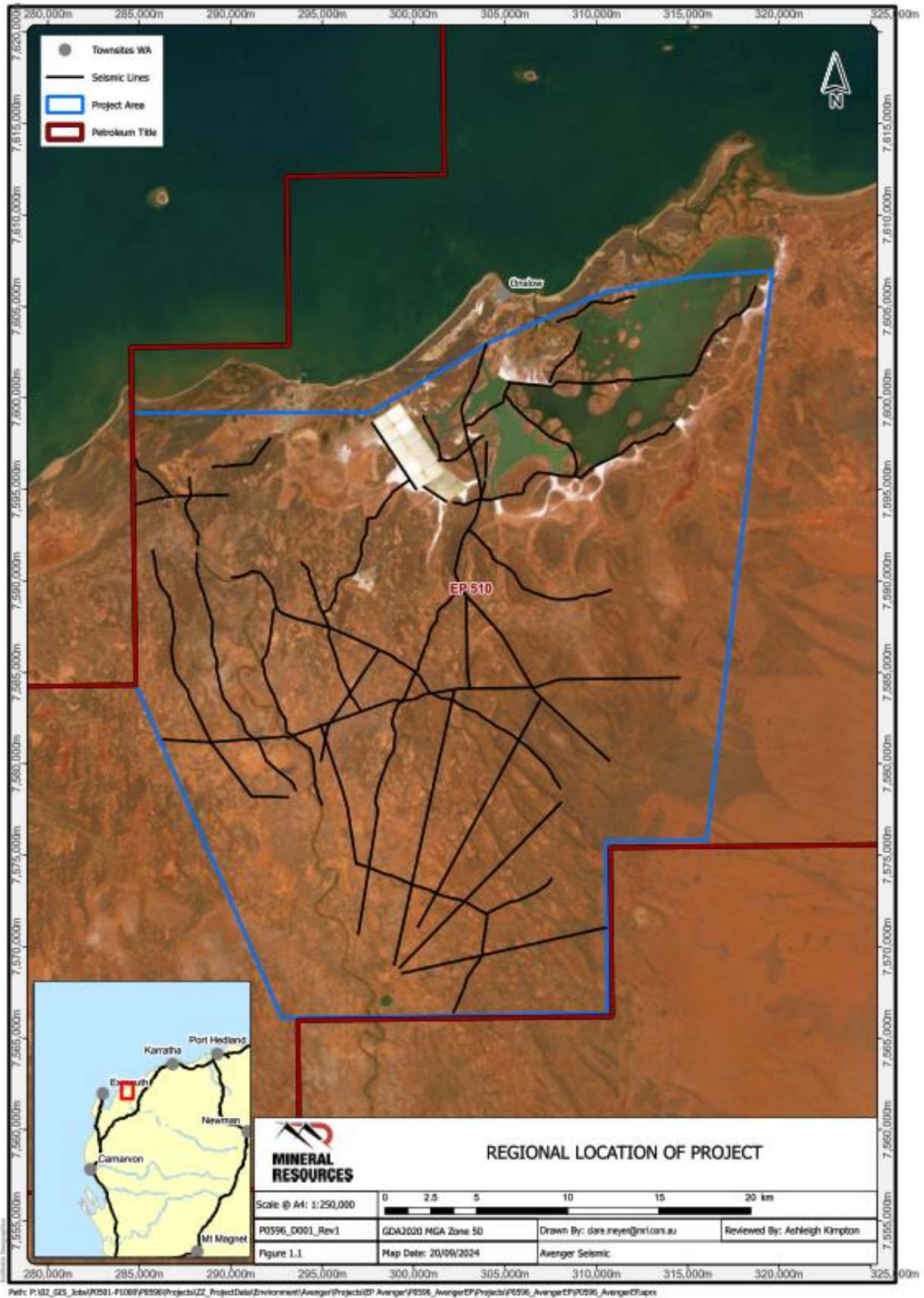


Figure 1-1 Regional Location

1.2 PURPOSE AND SCOPE

The associated Environment Plan (MRL-ENR-PLN-0001) and this summary document have been prepared in accordance with Regulation 11(7) of the *Petroleum and Geothermal Energy Resources Act 1967* (PGER Act) and in consideration of the Department of Mines, Industry Regulation and Safety (DMIRS) Guideline for the Development of Petroleum and Geothermal Environment Plans in Western Australia - 2022.

This Environment Plan Summary (EP Summary) documents the operations and mitigation and management measures in the EP, including:

- ▶ contact details of the nominated operator of the activity or nominated liaison person for the Project;
- ▶ location of the activity including coordinates and locality maps of the Project;
- ▶ description of the existing environment that may be affected by the Project;
- ▶ operational details of the Project and proposed timing;
- ▶ environmental impacts and environmental risks of the Project;
- ▶ the implementation strategy included in the EP; and
- ▶ overview of stakeholder consultation.

1.3 OPERATOR DETAILS

Table 1-1 summarises the permit details relevant to the Project. MinRes's wholly owned energy focused subsidiary Energy Resources Limited is the holder of the permit. The nominated operator of the Project is MinRes, which will be responsible for the overall management and operation of the Project. In accordance with the PGER(E)R, contact details for the nominated operator are included in Table 1-2.

Table 1-1: Permit Details

PERMIT	OPERATOR	STAKE	AREA
Exploration Permit 510	Energy Resources Limited	100%	629,274 ha

Table 1-2: Operator Details

CONTACT DETAILS	
Name	Neil Thompson
Position / Company	General Manager – Exploration / Mineral Resources Limited
Address	20 Walters Drive, Osborne Park, WA, 6017
Telephone number	(08) 9329 3600

2 DESCRIPTION OF ACTIVITY

2.1 LOCATION

The area defined as the 'Project Area' is the physical area used to conduct the Project, including the seismic acquisition (i.e. the area within which the seismic source will be generated to obtain data). The seismic source will not be activated outside of the Project Area.

The coordinates defining the Project Area are provided Table 2-1 and displayed in Figure 1-1. The Project is not anticipated to result in any adverse impacts to key features in the region, primarily because there will be no clearing or disturbance of existing native vegetation or habitats.

Table 2-1 Project Area Coordinates (GDA94 / MGA50)

POINT	EASTING	NORTHING
0	284623	7599180
1	284662	7599180
2	297645	7599220
3	303550	7602660
4	303795	7602820
5	303962	7602930
6	310461	7605800
7	315287	7606620
8	319637	7606940
9	316035	7575820
10	310516	7575770
11	310611	7566360
12	292805	7566100
13	284816	7584290
14	284811	7584300
15	284811	7584300
16	284806	7584310
17	284700	7592160
18	284699	7592240
19	284699	7592270

POINT	EASTING	NORTHING
20	284699	7592280
21	284699	7592290
22	284699	7592290
23	284698	7592310
24	284698	7592320
25	284698	7592340
26	284697	7592380
27	284682	7593540
28	284606	7599180
29	284623	7599180
30	284623	7599180

2.2 SCHEDULE AND TIMING

The commencement of mobilisation activities is largely dependent on approvals.

Project activities will occur in three key phases:

1. Phase 1 – positional surveying (mobilisation and survey);
2. Phase 2 – receiver node deployment, data recording, and node recovery;
3. Phase 3 – receiver node deployment, data recording, and node recovery;

The total duration of the Project (i.e. Phases 1, 2 and 3) will be approximately 12 to 15 weeks. This activity duration accounts for some downtime to account for potential delays due to unforeseeable weather or operational circumstances. The maximum number of data acquisition days will be 40 days. The activities covered in the EP will be undertaken during daylight hours only.

2.3 ACTIVITY DESCRIPTION

The activities covered by the EP include:

- ▶ mobilisation;
- ▶ seismic line delineation and preparation;
- ▶ data acquisition;
- ▶ supporting equipment and infrastructure;
- ▶ waste management; and
- ▶ demobilisation and rehabilitation.

2.3.1 Mobilisation

Large equipment such as the vibroseis vehicles and node inventory are typically transported to the Project Area using commercial transport vehicles. The remaining equipment will be brought using light vehicles. Contractors will operate under a certified Integrated Management System and as such, transportation procedures are provided in the contractor's Journey Management Plan. All travel on public roads will be in accordance with the State road legislation.

MinRes will utilise a traffic management company. In private areas, set driving speeds will be restricted (maximum of 40 km / hr on farm tracks and 60 km / h on established private roads). Information on speed limits will be included in the site induction which all staff and contractors will undertake prior to commencement of the Project.

2.3.2 Seismic Line Delineation and Preparation

The proposed seismic lines (Figure 1-1) have been developed through a process of consultation and review to ensure that impacts to the environment are mitigated to ALARP. These lines represent the most likely locations at this time but may require some revision because of unforeseen circumstances that arise prior to commencement or during the acquisition campaign. Seismic survey lines can also be deviated from the nominal mapped alignments without losing definition in survey results. This potential deviation allows survey lines to avoid soaks, creek lines and other environmental values. It has been possible to design this survey to avoid all clearing and disturbance of native vegetation, including where deviations may otherwise be required. Initial proposed lines were developed by the senior geophysicist with the aim of ensuring a desired level of data quality and acquisition across the Project Area.

2.3.3 Data Acquisition

The main elements of the Project involve laying out a grid of receiver nodes and conducting a seismic survey using vibroseis technology. Deployment of nodal receivers will commence approximately a week after commencing GPS surveying. Nodes are placed on the ground every 10 m along each seismic line by the line crew (typically numbering around 12 people in light vehicles). The base of each node has a 10cm spike which is buried into the topsoil. The nodes are planted into the ground to approximately 100 mm depth (between 75 mm and 200 mm) so that about 50 mm sits above the ground surface. For areas of hard ground, a hand-held drill and auger will be used for placement, however this is not anticipated to be required during this survey. Approximately 1000 nodes are deployed per day. As the acquisition advances through the Project Area, the receivers will be retrieved on an ongoing basis until completion. The nodes may be "leapfrogged" from behind the seismic source vehicles to be placed ahead of the acquisition. This means that not all receiver lines will be laid at once.

Once at least 600 nodes have been deployed (3 to 6 kilometers) recording can commence. A small vibroseis truck or buggy traverses the seismic line stopping every 10 meters to vibrate the ground with a sweep from around 2 to 100 Hz for around 20 seconds. These low energy acoustic waves are reflected from the subsurface rock interfaces from up to 2 or 3 km depth. A second source vibroseis may also be used meaning data can be recorded in two different places at the same time. Vibroseis vehicles may periodically be taken out of operation for servicing and cleaning. Each fleet will be accompanied by a fire tender unit mounted on a Light Vehicle or trailer.

During the acquisition survey, the nodes passively record any seismic vibrations and store this data within the node memory. Once the data has been recorded, the same line crew will recover all the nodes from the ground after which the data is downloaded at the harvester truck. All vehicles are restricted from any environmentally sensitive areas, hence location survey and node deployment is conducted on foot and the vibroseis source vehicles are excluded. The vibroseis will also not intersect areas with known vegetation and will maintain a safe offset distance from sensitive environmental receptors. Any remediation of lines or repair of property will follow on an as-needs basis following an assessment by MinRes and the relevant Landholder.

2.3.4 Supporting Equipment and Infrastructure

Existing roads and tracks will be used to access the Project Area. Access within the Project Area will utilise roads, already cleared tracks and firebreaks or areas devoid of native vegetation.

Seismic data acquisition requires a fleet of supporting vehicles including light vehicles, utility / all terrain vehicles, fire-fighting tenders, service trucks, buggy vibes and seismic recorder trucks. Already cleared areas within the Project Area will be utilised as laydown areas for storage equipment and fuel storage.

Bulk hydrocarbons will be stored in accordance with AS1940 (The Storage and Handling of Flammable and Combustible Liquids). Fuel storage volumes will range from 800 L to 2,500 L on the refueling and service vehicles, up to 55,000 L in the self-bunded fuel tank that will be used for the Project's diesel storage.

2.3.5 Waste Management

The only planned waste generated during the Project will be general waste, including food waste, plastics and packaging products, wastes from minor in-field servicing and repairs of vehicles and sewage waste.

General wastes will be managed and collected as per the arrangements at the existing facilities utilized for the Project (e.g. Onslow or MinRes Yarri Camp)

Project personnel will utilise either portable toilet facilities at the laydown area or nearby public facilities.

2.3.6 Demobilisation and Rehabilitation

At the conclusion of the seismic survey, all equipment, vehicles and wastes associated with Project activities will be removed from the Project Area.

MinRes has negotiated with individual Landholders the rehabilitation requirements where disturbance is likely to occur on private property. All remediation actions required will be undertaken by the individual Landholders with suitable compensation provided by MinRes through individual Landholder agreements.

Rehabilitation and monitoring of remnant native vegetation will not be required as only existing tracks and degraded areas will be used for seismic lines and access. Areas of remnant native vegetation within the Project area will be avoided and not disturbed.

3 DESCRIPTION OF EXISTING ENVIRONMENT

A summary of the environment within proximity to the proposed pipeline is included in Table 3-1.

Table 3-1: Existing Environment Summary

ENVIRONMENT	SUMMARY
Regional Context	<p>The Project Area is located in the Cape Range subregion, of the Carnarvon Region of the Interim Biogeographic Regionalisation for Australia (IBRA) bioregion. Onslow township is approximately 3 km north of the Project Area, and 83 km east of Exmouth.</p>
Climate	<p>The West Australian Carnarvon region has a semiarid to arid with predominantly winter rainfall.</p>
Landform and Soils	<p>The Project Area is located within the Carnarvon bioregion of Western Australia, the bioregion is has a low and gently undulating landscape with open drainage. The bioregion is associated with industries such as cattle and livestock grazing, mining, tourism and fishing, vegetation in the bioregion comprises of mainly acacia shrublands and saltbush/bluebush shrublands, with areas of tussock grassland in the north. The geology of the Carnarvon bioregion comprises of quaternary alluvial, aeolian and marine sediments overlying Cretaceous strata.</p> <p>The Project Area intersects eight broad soil systems:</p> <ul style="list-style-type: none"> ▶ Cane System (202Cn): Alluvial plains and flood plains supporting snakewood shrublands, soft and hard spinifex grasslands and tussock grasslands. ▶ Cheetara System (203Ct): Alluvial clay plains with gilgais, mixed open tussock grasslands and acacia tall shrublands. ▶ Dune System (201Du): Dune fields supporting soft spinifex and minor hard spinifex grasslands. ▶ Littoral System (201Li): Bare coastal mudflats (unvegetated), samphire flats, sandy islands, coastal dunes and beaches, supporting samphire low shrublands, sparse acacia shrublands and mangrove forests. ▶ Onslow System (201On): Undulating sandplains, dunes and level clay plains supporting soft spinifex grasslands and minor tussock grasslands. ▶ Dune System (203Du): Dune fields supporting soft spinifex and minor hard spinifex grasslands. ▶ Giralia System (203Gi): Sandy plains with linear dunes and broad sandy swales supporting hummock grasslands of hard and soft spinifex with scattered acacia shrubs. ▶ Minderoo System (203Mi): Alluvial plains supporting acacia tall shrubland

ENVIRONMENT	SUMMARY
	<ul style="list-style-type: none"> ▶ Nanyarra System (203Ny): Alluvial plains supporting tall acacia shrublands and low eucalypt woodlands with prominent tussock grasses including buffel grass. ▶ Uaroo System (202Ua): Broad sandy plains, pebbly plains and drainage tracts supporting hard and soft spinifex hummock grasslands with scattered acacia shrubs. ▶ Yankagee System (203Yn): Plains with dunes and numerous claypans, supporting soft spinifex and snakewood shrublands.
Acid Sulfate Soils	Soil within the Project Area is classed between having an extremely low probability of occurrence (1-5 %), to having a high probability of occurrence (>70 %) of acid sulfate soils.
Surface water	<p>The Project Area contains the Ashburton River, underneath the rivers entrance at the Exmouth Gulf. The Ashburton River Basin covers 66,850 km² and extends about 560 km inland in the north-west region of Western Australia, the river itself flows in a southeastern direction from the mouth, stretching over 600 km in length. Along with the Ashburton River, numerous non-perennial water courses pass through the Project Area</p> <p>There are no Ramsar listed wetlands or Nationally Important (Directory) listed wetlands within, or in the vicinity of the Project Area.</p>
Groundwater	The largest and main aquifer that exists in the Carnarvon region is the Birdrong Sandstone Aquifer, commonly referred to as the Birdrong. The Birdrong is the most productive groundwater resource in the Carnarvon Artesian Basin (CAB), it varies in depth between 200 to over 1000 m, at a thickness of 20-30 m. Groundwater produced from the aquifer is brackish, between <1000 to >12,000 mg/L in some areas. Flow rates from bores produce substantial quantities of up 6000 kL per day, with flow direction occurring westerly, and groundwater salinity increasing along the flow path. Recharge to the Birdrong Sandstone Aquifer is restricted to areas of outcrop, such as the Kennedy Range, and favourable structures where groundwater can recharge through other formations, such as at Rocky Pool on the Gascoyne River and the eastern boundary of Meedo Station close to the Wooramel River. Groundwater from the Birdrong Sandstone Aquifer can also flow into the underlying sedimentary rocks, where they are sufficiently permeable.
Public drinking water	The Project Area does not overlap any PDWSA's. The closest PDWSA, the Cane River Water Reserve, is 12.6 km east of the Project Area.
Conservation areas	<p>There are no National Parks within the Project Area. There are no known ESAs within the Project Area.</p> <p>One Conservation Park in Gazettal with the National Reserve System exists within the Project Area, the Cane River (Mount Minnie and Nanutarra) Conservation Park. One Red Book Recommended Conservation Reserve exists within the Project Area, the Coastal Region Exmouth Gulf to Mary Anne Islands.</p> <p>Access into the following Crown reserves will require the Department of Planning, Lands and Heritage (DPLH) to seek recommendations of the Minister of the Environment under s15A of the PGER Act:</p>

ENVIRONMENT	SUMMARY
	<ul style="list-style-type: none"> ▶ Reserve 19291: Reserve comprises Lot 305 on DP49430, Lot 719 on DP400252, Lot 851 on DP408818 and Lot 330 on DP402361. (N967556).
Regional vegetation	<p>The majority of Project Area has been previously cleared for agricultural purposes. Six vegetation communities are associated with the Project Area;</p> <ul style="list-style-type: none"> ▶ Cape Yannare Coastal Plain_43 ▶ Cape Yannare Coastal Plain_127 ▶ Cape Yannare Coastal Plain_589 ▶ Cape Yannare Coastal Plain_608 ▶ Cape Yannare Coastal Plain_670 ▶ Cape Yannare Coastal Plain_676 ▶ Cape Yannare Coastal Plain_98 ▶ Cape Yannare Coastal Plain_1271 ▶ Onslow Coastal Plain_585 ▶ Onslow Coastal Plain_606 ▶ Onslow Coastal Plain_676
Weeds / Pathogens	<p>Weeds known to occur in the Shire of Ashburton Include:</p> <ul style="list-style-type: none"> ▶ <i>Cenchrus ciliaris</i> (Buffel-grass) ▶ <i>Cylindropuntia</i> spp. (Prickly pears) ▶ <i>Parkinsonia aculeata</i> Jerusalem Thorn) ▶ <i>Prosopis</i> spp. (Mesquite) <p>Of these weeds, <i>Cylindropuntia</i> spp. (Prickly pears), <i>Parkinsonia aculeata</i> Jerusalem Thorn) and <i>Prosopis</i> spp. (Mesquite) are all Weeds of National Significance (WoNS) and Declared Pests.</p>
Fauna	<p>6 species of native fauna of conservation or other significance were identified as having the potential to occur or have habitat within the Project Area.</p>
Heritage	<p>The majority of the Project Area resides within the Thalanyji determination area (WAD6113/1998). Some of the Project Area resides in land without Native Title claims. The Project Area is located within multiple Indigenous Land Use Areas (ILUA):</p> <ul style="list-style-type: none"> ▶ Ashburton Salt Project ILUA (WI2023/005)

ENVIRONMENT	SUMMARY
	<ul style="list-style-type: none"> ▶ Macedon ILUA (WI2010/023) ▶ Thalanyji and Minderoo Pastoral ILUA (WI2009/024) <p>The Thalanyji People, part of the Buurabalayji Thalanyji Aboriginal Corporation (BTAC), are the Traditional Owners on the land.</p> <p>Heritage places that intersect the proposed seismic lines include:</p> <ul style="list-style-type: none"> ▶ Amber 1 (ID: 5949) - Registered site listed as Artefacts / Scatter ▶ Mindurru (Ashburton River) (ID: 6540) – Registered site listed as Mythological ▶ Ashburton River Artefact Scatter (ID: 29707) – Registered site listed as Artefacts / Scatter, Arch Deposit ▶ Old Racecourse Camp (ID: 6572) – Registered site listed as Camp ▶ Beadon Creek Midden (ID: 6574) – Registered site listed as Artefacts/ Scatter; Midden; Other. ▶ Jinta 2 (ID: 6620) – Registered site listed as a Water Source ▶ Urala Station Crossing 1 (ID: 7371) – Registered Site listed as Artefacts/ Scatter, Midden. ▶ Urala Station Crossing 2 (ID: 7273) – Registered Site listed as Artefacts/ Scatter, Midden. <p>All registered heritage places that intersect Survey lines do so on already existing roads / access tracks that are already heavily disturbed. The use of these existing roads / tracks within these heavily disturbed areas for the survey is unlikely to have any detrimental impacts to the Aboriginal heritage places listed.</p> <p>A search of the State Heritage Register recorded the closest State Heritage Place as the Old Onslow Townsite (HCWA No. 3444). The place intersects the Project Area in the north-west. The Shire of Ashburton Municipal Inventory of Heritage Places last reviewed by the council in October 2019 identified the 'Permanent pools in the Ashburton River' (HCWA No. 15373), a heritage place that intersects with the Project Area. The heritage place is located 23 m from the nearest seismic line.</p>
<p>Socio-Economic Environment</p>	<p>Tourism is an established industry in the Shire of Ashburton due to its vicinity to the western coastlines and Karijini National Park. The region is also known for its rugged, ancient landscape and historical importance.</p>

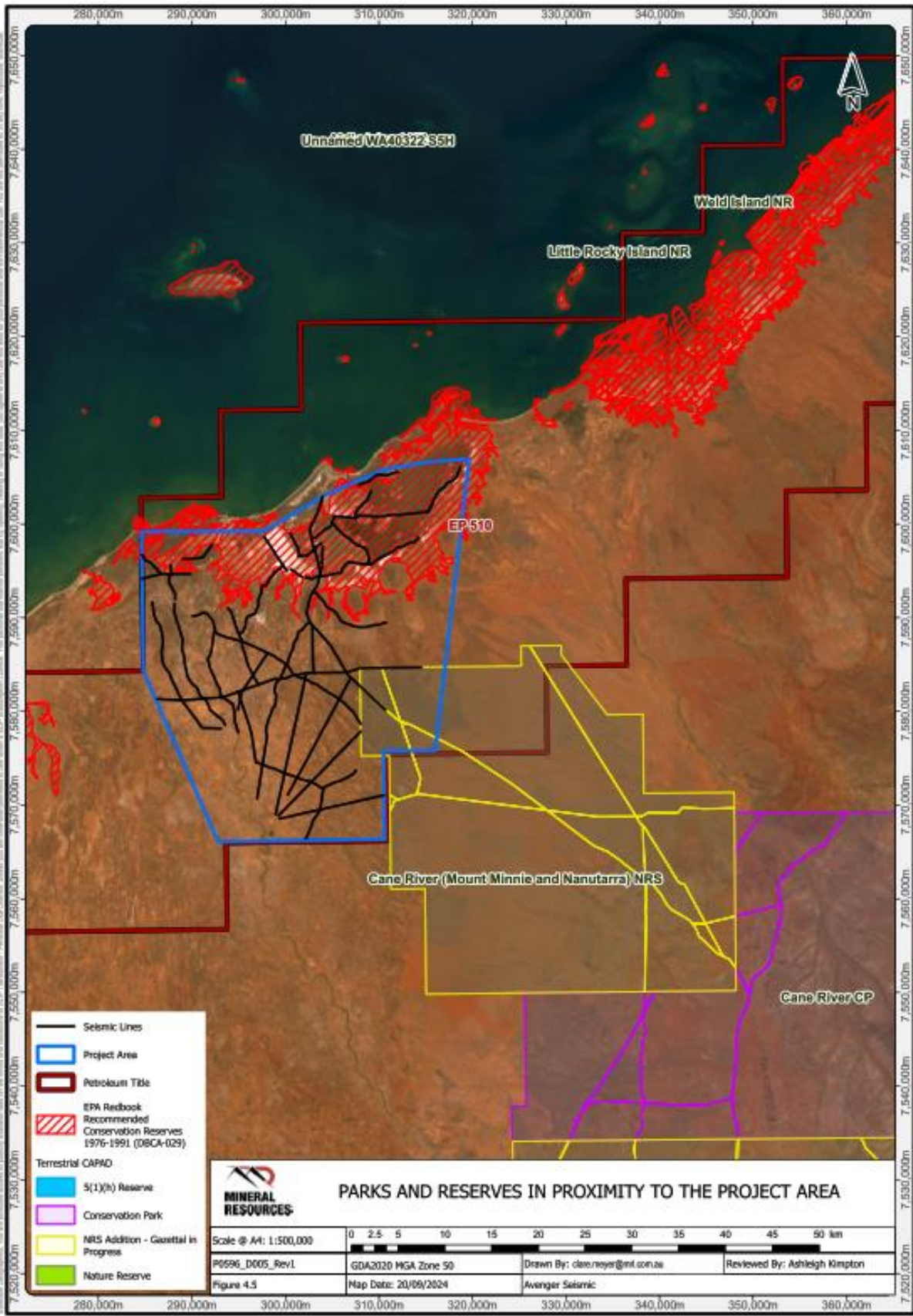


Figure 3-1 Conservation Significant Areas

4 ENVIRONMENTAL RISK ASSESSMENT METHODOLOGY

The risk assessment was undertaken in accordance with the MinRes risk management process, as detailed within the EP. This approach generally aligns with the processes outlined in ISO 31000:2018 Risk Management – Guidelines. Aspects, hazards and their associated management measures are detailed below in Table 4-1.

Table 4-1: Risk Assessment Summary

ASPECT	HAZARD	MANAGEMENT MEASURES
Native fauna and livestock	<ul style="list-style-type: none"> ▶ Collision with vehicle or machinery; ▶ Impacted by equipment transported or stored in the Project Area; ▶ Workers, vehicles and machinery traversing the Project Area; and ▶ Noise and vibration. 	<ul style="list-style-type: none"> ▶ Use existing roads or tracks to travel to and from Project Area where available and practicable, in accordance with Journey Management Plan; ▶ Maximum vehicle speed of 40 km/hr on farm tracks, 60 km/hr on established private roads and 10 km/hr near other sensitive receptors; ▶ Induction and awareness training; ▶ All on-ground activities will be undertaken during daylight hours; and ▶ Machinery, vehicles and equipment to stay on seismic lines or cleared roads and tracks.
Spill response	<ul style="list-style-type: none"> ▶ Spill / loss of containment of hydrocarbons during transport to and from site; ▶ Traversing the site (machinery/vehicles, walkover) during line surveying, data acquisition, and decommissioning / rehabilitation activities; ▶ Refuelling or servicing of vehicles and machinery; ▶ Vehicle or machinery break down / damage during works; and ▶ Storage of fuels or hydrocarbons. 	<ul style="list-style-type: none"> ▶ Drivers licensed to transport bulk hydrocarbons; ▶ Transport containers will be appropriate for road conditions; ▶ Hydrocarbons and chemicals only stored within the laydown area; ▶ All operational machinery, vehicles and equipment to be inspected prior to commencement; ▶ Journey management plan will be in place for all Project vehicles mobilising to/from site from locations greater than 75 km; ▶ Refueling in accordance with the contractor's Refueling Standard Operating Procedure; ▶ Refueling will not be conducted within 100 m of surface water, reserves;

ASPECT	HAZARD	MANAGEMENT MEASURES
		<ul style="list-style-type: none"> ▶ No vehicle movements within 25 m of surface water, except to cross on existing tracks and roads; ▶ Refuelling will be undertaken along existing tracks or cleared areas; ▶ Use drip trays, spill mats or equivalent while refuelling; ▶ Stocked spill kits will be maintained and accessible at laydown areas, and on service and refuelling vehicles; ▶ Remove and dispose of any contaminated material offsite to a licensed facility using a licensed contractor; ▶ Inductions and awareness training, including Project OSCP; and ▶ Implementation of Project OSCP in the event of a spill or leak.
Dust emissions	<ul style="list-style-type: none"> ▶ Vehicles and machinery movements. 	<ul style="list-style-type: none"> ▶ Avoid clearing of native vegetation and disturbance of soil; ▶ Use sealed roads or tracks where practicable (pre-plan routes prior to mobilisation); ▶ Maximum vehicles speed of 40 km / hr on farm tracks, 60 km / hr on established private roads and 10 km / hr near homesteads and/or associated buildings, stockyards, dams, bores and tanks; ▶ Stop activities where excessive dust generation is noticed and do not recommence until dust control measures are implemented; and ▶ Inductions and awareness training.
Habitat modification	<ul style="list-style-type: none"> ▶ Disturbance of native vegetation; ▶ Unauthorised access to areas previously inaccessible and associated damage to flora and vegetation and fauna habitat; 	<ul style="list-style-type: none"> ▶ No clearing or disturbance of native vegetation; ▶ Adhere to any access permits and approval condition requirements; ▶ No vehicle access into any native vegetation areas including understorey;

ASPECT	HAZARD	MANAGEMENT MEASURES
	<ul style="list-style-type: none"> ▶ Clearing / disturbance in conservation areas; and ▶ Clearing outside of Project Areas. 	<ul style="list-style-type: none"> ▶ Machinery, vehicles and equipment to stay on previously cleared seismic lines; ▶ Nodes are inserted into the ground to a depth of up to 200 mm on seismic lines; ▶ Remediation in accordance with Landholder requirements; and ▶ Induction and training.
Weeds / disease	<ul style="list-style-type: none"> ▶ Traversing the site (machinery/vehicles) during line surveying and acquisition. 	<ul style="list-style-type: none"> ▶ Vehicle and equipment inspection prior to mobilising to site; ▶ Avoid entering areas of native vegetation with any Project vehicles; ▶ Adhere to any access permit requirements and specific Landholder biosecurity / hygiene agreements; ▶ Restrict vehicle movements and access to existing tracks and roads and existing cleared areas; ▶ Site induction – all workers will be instructed on weed risks and correct weed hygiene measures; and ▶ MinRes maintains a system to register, track and close out complaints raised by relevant stakeholders regarding the threat of weeds, as a result of the Project.
Greenhouse gas emissions	<ul style="list-style-type: none"> ▶ Emissions of exhaust fumes (combustion gases and greenhouse gases) into the atmosphere during transportation/ mobilisation of vehicles; and ▶ Running vehicles and machinery during the Project. 	<ul style="list-style-type: none"> ▶ All vehicles and machinery will have standard emission control devices fitted and be maintained and serviced in accordance with manufacturers' recommendations; ▶ All vehicles and machinery will use standard low sulphur fuels; ▶ Vehicles and machinery will be switched off when not in use; and ▶ Employee inductions and awareness training.
Noise and vibration	<ul style="list-style-type: none"> ▶ Vehicles and machinery used during the Project; and 	<ul style="list-style-type: none"> ▶ Vehicle movements will be minimised as far as possible and will be restricted to the existing roads or access tracks;

ASPECT	HAZARD	MANAGEMENT MEASURES
	<ul style="list-style-type: none"> ▶ Vehicles and machinery used during data acquisition. 	<ul style="list-style-type: none"> ▶ All vehicles and machinery will be modern and maintained and serviced in accordance with manufacturers' recommendations; ▶ All activities will be undertaken during daylight hours; ▶ Maximum vehicles speed of 40 km / hr on farm tracks, 60 km / hr on established private roads and 10 km / hr near other sensitive receptors; ▶ Ongoing consultation, including notification of activity details to relevant stakeholders, throughout the life of the Project; ▶ Safe vibroseis offset distances will be maintained, with vibrating seismic source only on planned seismic lines for short intervals and duration; and ▶ Inductions and awareness training.
Heritage	<ul style="list-style-type: none"> ▶ Traversing the site (vehicles and machinery) and interaction with Aboriginal and European heritage sites during positional surveying and data acquisition activities. 	<ul style="list-style-type: none"> ▶ Stakeholder engagement with Traditional Owners of the land and the Shire of Ashburton prior to commencement of the works; ▶ Identified sites or avoidance areas to be loaded on GPS navigation instruments; ▶ Machinery, vehicles and equipment to stay on seismic lines; ▶ Cease work and report if a new site is discovered during activities (Stop Work Procedure); ▶ Adhere to agreements with traditional Landholder groups and Local Government Areas; and ▶ Inductions and awareness training to ensure all staff are aware of heritage avoidance areas.
Waste	<ul style="list-style-type: none"> ▶ Inappropriate management, handling and disposal of wastes generated; and ▶ Wastes/equipment left within the Project Area. 	<ul style="list-style-type: none"> ▶ Wastes, including hazardous wastes, to be segregated and stored in dedicated waste bins. Domestic wastes (food/lunch waste, paper) and rubbish will be contained in vehicles and disposed of in dedicated waste bins; ▶ All waste stored in bins that have a tightly secured lid.

ASPECT	HAZARD	MANAGEMENT MEASURES
		<ul style="list-style-type: none"> ▶ Hazardous waste bins to be stored within a bounded area, which includes the use of pallet or drum bunds; ▶ All waste material disposed of as per the existing facility procedures (e.g. Yarri Camp) ▶ Inductions and awareness training; ▶ Equipment storage locations to be logged with GPS locations to ensure all equipment can be located and recovered during decommissioning; and ▶ Site inspections to ensure all equipment and wastes removed from Project Area on completion of the Project.
<p>Fire</p>	<ul style="list-style-type: none"> ▶ Ignition source from vehicles, equipment or personnel (smoking, refuelling etc.). 	<ul style="list-style-type: none"> ▶ Smoking only permitted in designated areas; ▶ All cigarette butts disposed of as per the existing facilities procedures; ▶ Hot works permits for high risk activities; ▶ Works in accordance with fire restrictions (e.g. vehicle movement bans; fire bans); ▶ Refuelling in accordance with the contractor's Refuelling Standard Operating Procedure; ▶ Inductions and toolbox meetings undertaken for all staff which will cover the importance of maintaining a safe work environment for fire safety, and to alert workforce to the daily fire risk; ▶ Firefighting equipment (fire extinguishers, fire rake and/or shovel) will be available in all light vehicles; ▶ Fire tenders will be located in the field during survey operations, with bulk water storage tanker located centrally within the Project Area; ▶ Fire extinguisher training; ▶ Ongoing stakeholder consultation is undertaken in accordance with Stakeholder Management Plan; ▶ Immediate notification of stakeholders in the event of an incidence of fire associated with Project activities.;

ASPECT	HAZARD	MANAGEMENT MEASURES
		<ul style="list-style-type: none"> <li data-bbox="871 331 1414 456">▶ Vehicle and machinery movement will be restricted to the Project Area and existing disturbance, tracks, fire breaks and planned seismic lines; and <li data-bbox="871 495 1406 524">▶ No open fires permitted in the Project Area.

5 IMPLEMENTATION STRATEGY

5.1 SYSTEMS, PRACTICES AND PROCEDURES

Energy Resources Limited, as a wholly owned subsidiary of MinRes, will undertake the Project with a commitment to minimise its impact on the environment to ALARP.

MinRes has a set of relevant Health, Safety and Environmental (HSE) standards which make up the HSE Management System and against which major contractor management systems are evaluated and enables activities to be managed to ALARP.

Site preparation and rehabilitation operations are conducted under the seismic contractor's HSE Management System and include the EP and the Project OSCP as incorporated components to their HSE Management System for this Project. The Project will be conducted under the relevant seismic contractor's HSE Management System and are supplemented by MinRes's HSE Management System where any perceived gaps exist. MinRes's principal Safety Case is MRE-SAF-SC-0002 across the Perth and Carnarvon Basin Exploration Permits.

The HSE management documents applicable to the Project in addition to this EP, are as follows:

- ▶ Environmental Management Plan (MRL-EN-PLN-0001);
- ▶ Environmental Policy (MRL-EN-POL-0001);
- ▶ HSEQ Training and Competency Standard (EOC-QA-STD-0006);
- ▶ Environment – Inspections and Audits Procedure (MRL-EN-PRO-0008);
- ▶ Consultation, Communication and Reporting Standard (EOC-QA-STD-0007);
- ▶ Incident Investigation, Corrective and Preventative Action Standard (EOC-QA-STD-0012);
- ▶ Seismic Contractor – Weekly Checklist – Environment (Laydown) (EOC-EN-FRM-0003);
- ▶ Seismic Contractor – Weekly Checklist – Environment (Seismic) (EOC-EN-FRM-0004);
- ▶ Management of Change Standard (EOC-SAF-STD-0007);
- ▶ Fauna Management Procedure (MRL-EN-PRO-0001);
- ▶ Seismic and Drilling Operations Farm Biosecurity Plan (EOC-EN-PLN-0014)
- ▶ Emergency Preparedness and Response Standard (EOC-QA-STD-0010);
- ▶ Incident Investigation, Corrective and Preventative Action Standard (EOC-QA-STD-0012);
- ▶ Dust Management Procedure (MRL-EN-PRO-0012);
- ▶ Weed Hygiene and Control Procedure (MRL-EN-PRO-0007);
- ▶ Weed Hygiene Certificate (MRL-EN-FRM-0004)
- ▶ Heritage Management Procedure (MRL-EN-PRO-0015);
- ▶ Waste Management Procedure (MRL-EN-PRO-0011); and
- ▶ Controlled Waste Transport Checklist (MRL-EN-FRM-0012).

All personnel will be made aware of these documents and their respective contents during the pre-commencement meeting and the Company site induction. A copy of each document will be made available in the site office for all personnel to access over the duration of the Project.

6 STAKEHOLDER ENGAGEMENT

MinRes is undertaking a consultation program with key stakeholders in relation to project activities in the Project Area.

6.1 STAKEHOLDER IDENTIFICATION

Relevant person(s) for the purpose of identifying stakeholders that should be consulted were identified based on the following:

- ▶ departments or agencies that administer the required approval(s) to implement the proposed Project;
- ▶ Landholders within the Project Area;
- ▶ adjacent exploration permit holders potentially impacted by survey ingress;
- ▶ any person or organisation whose functions, interests or activities may be affected by the Project; and any other person or organisation with a potential interest in the proposed Project.

6.2 ONGOING CONSULTATION

The MinRes nominated Operations Manager will be responsible for ongoing stakeholder consultation throughout the Project. MinRes will continue to identify new relevant stakeholders prior to the Project commencing and during the activity. New stakeholders may be identified during ongoing consultation with stakeholders identified to date or direct approach by persons that have become aware of the Project.

If additional stakeholders are identified, they will be contacted by face to face engagement where possible, and/or telephone and email initially and provided with information in relation to the Project including the EP summary document and any additional information requested by the stakeholder and invited to make comment.