GEOTECHNICAL INVESTIGATION

ENVIRONMENT PLAN SUMMARY

WAY-HSE-PLN-016

Document Date	17/10/2022
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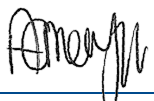
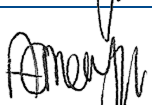
	Name	Title	Date	Signed
Prepared	Amanda Emery	HSEC Manager – Operations	17/10/2022	
Reviewed	Amanda Emery	HSEC Manager – Operations	17/10/2022	
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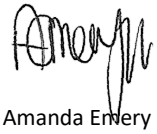
Custodian	To review the document and ensure it is consistent with the planned operation	 Amanda Emery HSEC Manager - Operations
Approval	**Responsibility**	**Signed**
Approver	As the ultimate owner of the Project, accepts the content of this document	 Kevin Craig Chief Operating Officer

List of Tables

List of Figures

1 Introduction

Strike South West Pty Ltd (Strike) and Talon (Aust) Pty Ltd are preparing to develop the Walyering Gas Field in the Shire of Dandaragan in Western Australia (WA) within petroleum exploration permit 447 (EP 447).

As part of the potential development, Strike requires a Geotechnical Investigation (the Project) of the proposed development envelope to support and finalise the Front-End Engineering Design (FEED).

The Geotechnical Investigation will be conducted over two proposed corridors as follows:

- A proposed flowline corridor from (and partially including) the existing Walyering 5 pad to Walyering 6 well pad, and
- A proposed pipeline corridor from (and partially including) the existing Walyering 6 well pad to the boundary of the APA compound for the Parmelia Gas Pipeline.

This environmental plan (EP) is related solely to the Geotechnical Investigation and does not include any other petroleum activities associated with the Walyering Gas Field or potential development.

1.1 Purpose and Scope

An Environment Plan (EP) Summary has been prepared for the management of environmental aspects associated with the Project. The EP Summary has been prepared in accordance with *Petroleum and Geothermal Energy Resources Act 1967* (PGERA), subsidiary legislation, and in consideration of the Department of Mines, Industry Regulation and Safety (DMIRS) Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia – June 2022.

This document is intended only to cover the activities associated with the geotechnical investigation.

1.2 Nominated Operator

Strike is the operating instrument holder of EP 447. Contact details for the Project are provided in Table 1.1.

Table 1.1: Operator Details

Instrument Holder	Contact	Contact Details
Strike South West Pty Ltd	Contact Person(s)	Kevin Craig
	Position	Chief Operating Officer
	Email Address	kevin.craig@strikenergy.com.au
	Telephone No.	(+61) 08 7099 7400
	Postal Address	Level 2, 66 King's Park Road West Perth WA 6005

1.3 Activity

The proposed activity involves the use of a rubber-tyred 8-tonne backhoe over three consecutive days to excavate test holes. Test holes will be completed to a target depth of 2 metres unless refusal, collapse, or flooding is encountered at which stage the test hole will be examined at the shallower depth achieved, in order to assess near surface ground conditions and excavatability characteristics.

Depending on ground conditions, the test holes will be kept as small as reasonably practicable whilst allowing access to the target depth. The test holes will not exceed the following dimensions:

- 2 meters long
- 2 meters deep
- 0.5 meters wide

Topsoil and subsoil will be stockpiled separately during excavation. Allowing for Subsoil to be reinstated first, followed by topsoil as soon as the survey activities for each test hole are complete and the excavation is no longer required. Whilst each test hole (excavation) is open it will not be left unattended.

Representative soil samples from selected test holes will be collected and transported to an accredited laboratory.

Dynamic Cone Penetrometer tests will be undertaken adjacent to each of the test holes to assess in-situ ground density; these tests will be carried out to the target depth of the test hole or refusal, whichever is encountered first.

1.4 Location and Tenure

The Project is located approximately 21 km west of Dandaragan and 143 km north of Perth within EP 447. The Project is entirely within previously cleared agricultural land. A land access agreement has been executed between Strike and the current landholder.

Table 1.2: Land Tenure within the Project Area

Property Identifier				
Plan				
Land Parcel	***Lot Number***	***Volume***	***Folio***	***Allocation***
P209656	3907	1379	493	Freehold

The Project consists of ground-breaking geotechnical investigations. This comprises test pitting to a target depth of 2 metres with sampling and laboratory analysis. The proximity of the Project Area to key features in the region are listed in Table 1.3 and illustrated in Figure 1.1. All Project activities will be confined to the Project Area as shown in Figure 1.2.

Table 1.3: Distance to Key Features in the Region

Feature	Distance/Direction from Project Area	Requires Consideration?
National Parks and Nature Reserves		
Enenminga Nature Reserve	7.16 km south-southeast	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.

Feature	Distance/Direction from Project Area	Requires Consideration?
Minyulo Nature Reserve	8.76 km northeast	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Nature Reserve (R 27993)	6.39 km southeast	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Nature Reserve (R 40916)	3.24 km west	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Nature Reserve (R 41986)	7.05 km north	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Wanagarren Nature Reserve	18.03 km west	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Inland Waters		
Caro Swamp	0.27 km southwest	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Douaroba Swamp	8.29 km southwest	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Eneminga Pool	7.45 km south-southeast	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Minyulo Brook	0.27 km southwest	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Mullering Brook	5.27 km north	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Localities		
Cataby	5.88 km east	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.
Dandaragan	21.22 km east	No. Feature lies outside of the Project Area and likely spill trajectory under a worst case spill scenario.

No clearing or disturbance of native vegetation will be undertaken within or outside of the Project Area; therefore, no impacts will occur to National Parks and/or Nature Reserves or any other identified key environmental features.

The coordinates of the Project Area are provided Table 1.4.

Table 1.4: Project Area Coordinates

Point	Easting	Northing	Point	Easting	Northing
1	353804.52	6601300.05	2	353921.68	6601322.66
3	353935.99	6601267.39	4	354025.99	6601283.60
5	354064.14	6601094.04	6	354117.69	6601060.92
7	354404.33	6601100.39	8	354490.00	6600712.57
9	354525.94	6600630.18	10	354598.95	6600562.54
11	354640.64	6600173.00	12	354605.40	6599924.51

Point	Easting	Northing	Point	Easting	Northing
13	354419.84	6599644.63	14	354385.04	6599552.39
15	354473.11	6599420.18	16	354491.00	6599323.57
17	354498.63	6599313.61	18	354381.94	6599190.36
19	354239.98	6599321.24	20	353908.31	6600908.66
21	353828.33	6600842.20	22	353784.30	6600832.43
23	353781.37	6600943.66	24	353857.93	6601013.35
25	353856.91	6601019.28	26	353853.89	6601022.57

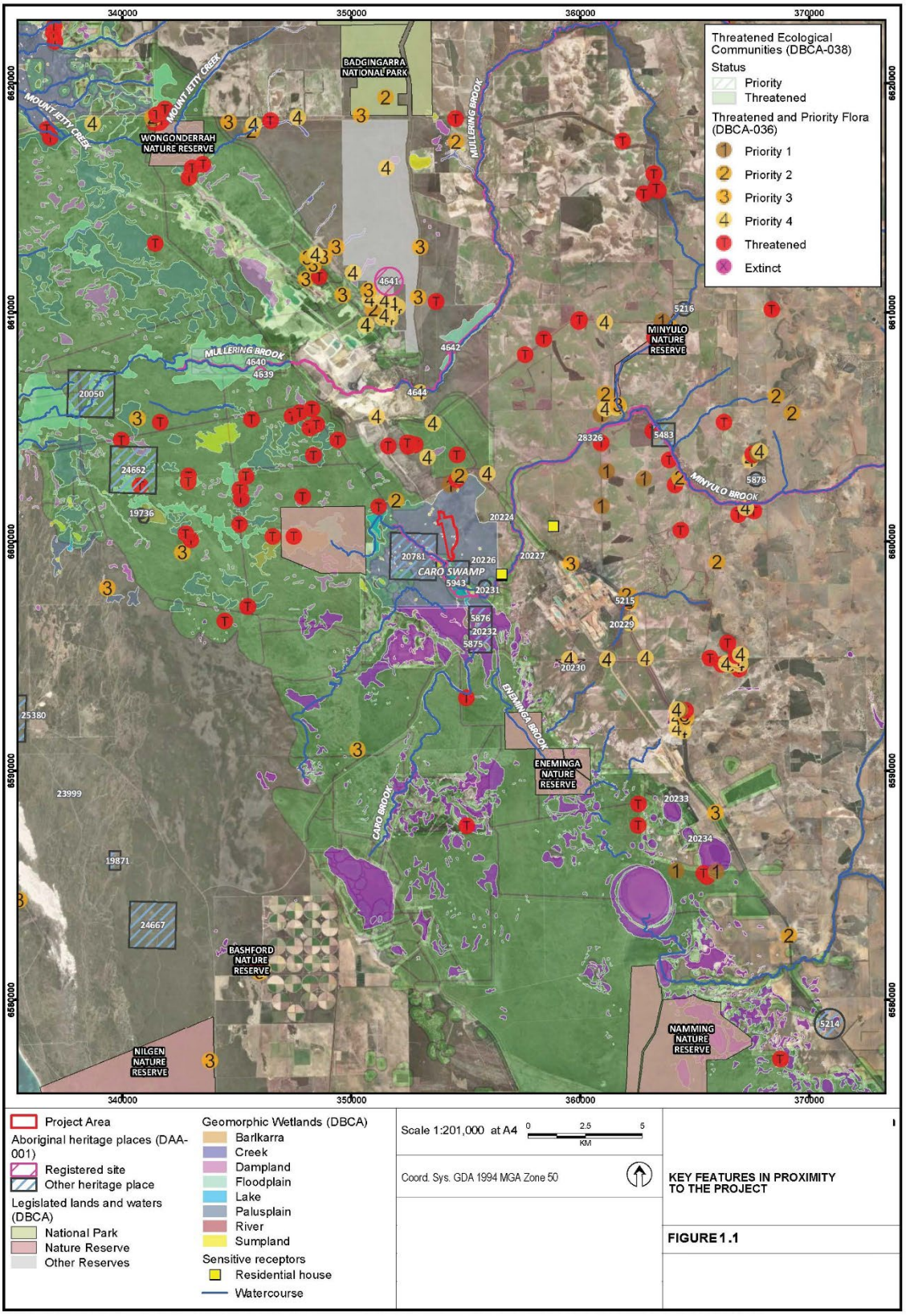


Figure 1.1: Walyering Geotechnical Project Area

Figure 1.2: Walyering Geotechnical Project Area

1.5 Schedule

The total duration of the Project, including mobilisation and demobilisation, is estimated at three days, with activities occurring during daylight hours. Activities are scheduled to commence following regulatory approvals.

1.6 Waste

The Project is not anticipated to generate waste besides personal waste. All personnel will be responsible for maintaining their waste inside vehicles and disposing of it appropriately offsite.

1.7 Completion

Upon completion, all test holes will be backfilled with excavated spoil and compacted by tamping with the backhoe bucket and tracking over the backfill with the backhoe. The disturbed area will be rehabilitated by using the local topsoil and subsoil, stockpiled separately during excavation of the test hole, to best practical match the original ground conditions.

Subsoil will be reinstated first, followed by topsoil as soon as the survey activities for each test hole are complete and the excavation is no longer required.

Demobilisation will occur within a day of the completion of the Project; no equipment will be left in-situ.

2 Existing Environment

This section of the EP Summary describes the existing cultural, physical, and socio-economic environment(s) of the Project Area and identifies relevant values and sensitives of the environment that may be affected by the Project.

2.1 Regional Context

The Project is located in the Perth subregion (SWA02) of the Swan Coastal Plain bioregion and the Lesueur Sandplain subregion (GS3) of the Geraldton Sandplains bioregion as defined by the Interim Biogeographic Regionalisation for Australia (IBRA). The Lesueur Sandplain subregion (GS3) comprises coastal Aeolian and limestones, Jurassic siltstones and sandstones (often heavily lateritised) of central Perth Basin (Desmond & Chant 2001; Mitchell et al. 2002).

The Project Area is located within the Shire of Dandaragan, approximately 21 km west of Dandaragan, and 143 km north of Perth.

2.2 Climate

The climate of the Project Area and the broader region is described as a Mediterranean climate: warm, dry summer seasons, and cool, mildly wet winter seasons. The nearest open weather station is Badgingarra Research Station (Site No. 9037), which is approximately 39 km north of the Project Area.

As of 2021, the region experiences a mean annual maximum temperature of 25.9° C and minimum temperature of 11.9° C. The warmest period experienced in the region typically occurs between December to February, whereas the coolest period is experienced between June to August. Furthermore, the region experiences mean annual rainfall of 537.6 mm. The driest period typically occurs between December to February, and the wettest period is experienced between June to August (Bureau of Meteorology 2022) (Figure 2.1).

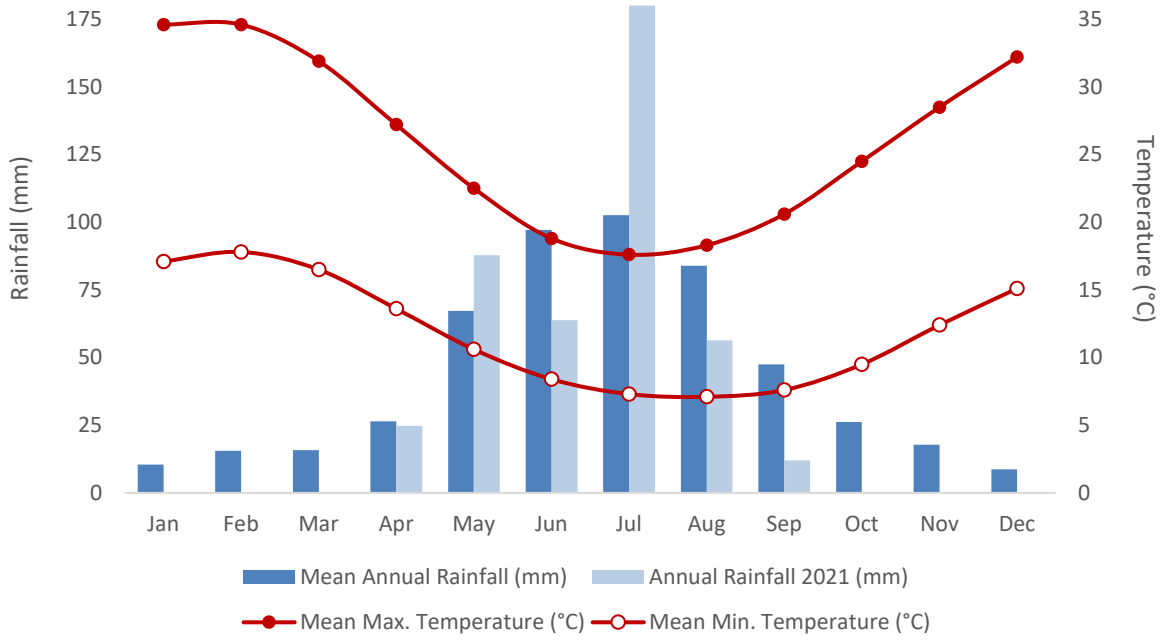


Figure 2.1: Monthly Temperature and Rainfall (Badgingarra Research Station)

2.3 Geology, Landforms and Soils

The Project is located within the Swan Coastal Plain geomorphological division. The Swan Coastal Plain comprises five major geomorphic systems that lie parallel to the coast, namely (from west to east), the Quindalup Dune, Spearwood Dunes, Bassendean Dunes, Pinjarra Plain, and Ridge Hill Shelf (Churchward & McArthur 1980; Gibson et al. 1994). Each major system is composed of further subdivisions in the form of detailed geomorphologic units (Churchward & McArthur 1980; Semeniuk 1990; Gibson et al. 1994).

Beard (1990) describes the Swan Coastal Plain as a low-lying coastal plain, often swampy, with sandhills also containing dissected country rising to the duricrust Dandaragan Plateau on Mesozoic age, mainly sandy, yellow soils. The Project is located within the SWA01 Dandaragan Plateau subregion of WA.

Structurally, the Project lies on the fringe of the Dandaragan Trough, situated around the north Perth Basin.

Soils in the area can be divided into two zones: surface sands and a deeper clay layer. Surface sands are evident to a depth of 5 m within the area and vary considerably in terms of particle arrangement. A clay zone lies beneath the surface sands, which is present at varying depths. This zone contains sediment with elevated clay contents from both the Kaolinite and Smectite groups. Ferricrete gravels are often associated with this clay zone and can be traced to historic laterisation within the region (Blandford and Associates 2008).

The topography of Project Area is generally flat with the elevation dropping gently away to the west of the Project Area, toward the coast.

2.3.1 Acid Sulfate Soils

Acid Sulfate Soils are naturally occurring iron sulfide-rich soils, organic substrates and/or sediments, formed under waterlogged conditions. If exposed to air, these sulfides can oxidise and release heavy metals and sulfuric acid. This process can occur due to drainage, dewatering and/or excavation.

A review of the Australian Soil Resources Inquiry System (ASRIS) database indicated the presence of acid sulfate soils to be "Extremely Low Probability of Occurrence" within the Project Area (ASRIS 2013).

2.4 Regional Hydrology

2.4.1 Surface Water

There are two significant surface water features in proximity to the southern portion of the Project Area, being the Minyulo Brook and Caro Swamp. Minyulo Brook flows through Caro Swamp. The Walyering 5 well pad and its associated belowground flowline have been located as far from these surface features as is reasonably practicable given the target resource and landowner requirements for the well site location.

Minyulo Brook is a minor, non-perennial, dissecting watercourse which is bridged by the pre-existing infrastructure (access tracks) used by the landowner. Both features are located approximately 0.27 km southwest of the Project Area. The swamp is a catchment for several minor, non-perennial watercourses including Caro Brook, Eneminga Brook, and Minyulo Brook.

Wetlands within and surrounding the southern part of the Project Area form an element of the Minyulo Suite, which are a group of continuous wetlands comprising Mullering and Minyulo Brooks, Emu Lakes and smaller sumplands, damplands and seasonal creeks located between brooks within the Bassendean dunes.

Typical surface water within this suite ranges from fresh to hyposaline with pH ranging from 6.9 to 10. Mullering Brook and Minyulo Brook are both regionally significant as they support a high proportion of water dependent flora and act as a flushing mechanism for associated wetlands.

A large portion of the land in the vicinity of the Project is subject to inundation; however, the likelihood of this occurring is low, based on the climate statistics of the region and the low likelihood of a highly extensive and localised storm event (100-year storm) (Desmond & Chant 2001; Mitchell et al. 2002). Caro Swamp and adjacent areas are likely to be seasonally inundated.

There are no significant surface water features within close proximity to the Project Area.

2.4.2 Groundwater

The largest fresh groundwater resources within the north Perth Basin are in the Superficial Leederville, Leederville-Parmelia and, the confined, Yarragadee aquifers. There are also three secondary aquifers: The Mirrabooka, Cattamarra and Eneabba-Lesueur aquifers. In addition to these groundwater resources, there are minor shallow and fractured-rock aquifers that are locally significant sources of water. Hydraulic connection between aquifers is often impeded across faults and low permeability units, both within and between aquifers (DoW 2017).

Groundwater is contained within superficial aquifers including the Leederville and Leederville-Parmelia aquifer east of the Project Area, and the Yarragadee aquifer on the coastal plain and the

Dandaragan Land System (DoW 2017). Groundwater is understood to be relatively shallow, with a depth of ≤ 20 mbgl[1] and the groundwater quality in the broader regional area is understood to be marginal, with a salinity of 500 to 1000 mg/L.

The Leederville aquifer comprises sandstone and shale, with a thickness of up to 550 m. The aquifer is 'semi-confined' to 'confined' with a generally fresh (≤ 1000 µS/cm). The Leederville-Parmelia aquifer consists of the interconnected Leederville formation and the Parmelia Group, comprising sandstone and shale. The aquifer is 'semi-confined' to the north becoming confined to the south with generally fresh groundwater quality. The Yarragadee Formation comprises sand, shale, and siltstone. The aquifer is 'unconfined' to 'confined' with generally fresh groundwater quality.

2.5 Air Emissions

Ambient air quality in the vicinity of the Project Area is expected to be representative of surrounding dust generating activities being primarily pastoral and tourism activities, use of agricultural machinery and vehicle movements.

The Project will give rise to minimal atmospheric emissions as a result of vehicle movements and operation of equipment. These emissions are not expected to cause a reduction in local air quality and are considered comparable to emissions from existing activities in the area.

2.6 Noise Emissions

Ambient noise levels in the vicinity of the Project Area are expected to be affected by industrial, pastoral, and/or tourism activities. These sources of emissions are anticipated to have a relatively low or insignificant impact on the overall noise levels in the local area.

Activities associated with the Project generate noise emissions similar to rural plant and machinery use activities.

The Project will be conducted in accordance with the Environmental Protection (Noise) Regulations 1997 (Noise Regulations).

2.7 Flora and Vegetation

The Project is located entirely within pre-existing cleared areas used for agricultural activities. No clearing of native vegetation is required. Caro Swamp and the surrounding dissecting watercourses in the vicinity of the Project Area comprise intact native vegetation which may support conservation significant flora and communities, that will not be impacted by the Project

2.8 Native Fauna

The Project Area is located entirely within pre-existing cleared areas used for agricultural activities and is therefore expected to have limited fauna habitat value. No clearing of fauna habitat is required for the Project. Due to the short duration of the Project, no impact to native fauna is anticipated.

[1] Groundwater monitoring conducted in the area by Strike since October 2021 have recorded Standing Water Levels (SWL) between 4.65 and 12.37 meters Below Top of Casing (m BTOC). Based on this the test holes associated with this project will not intersect the water table.

2.9 Socio-economic Environment

The Project is located within the Shire of Dandaragan on freehold property which is currently used for agricultural purposes (Pastureland used for livestock, predominantly cattle). The nearest towns are Cataby (approximately 6 km east) and Dandaragan (approximately 21 km northeast). The nearest sensitive receptors (residences) are 2.34 km southeast and 4.52 km east.

The Shire of Dandaragan has an estimated resident population of 3,355 spread across four (4) major townships (Badgingarra, Cervantes, Dandaragan, and Jurien Bay) (Australian Bureau of Statistics 2021). Roads in proximity to the Project include Caro Road, and Brand Highway (both to the east).

The dominant industries within the Shire of Dandaragan are agriculture and pastoralism, broadacre farming, fishing (e.g., the Western Rock Lobster, etc.), mining, and tourism. Combined, these industrial sectors makeup over half of the Shire of Dandaragan's economy.

The Cooljarloo Mine, owned and operated by Tronox Limited, is located approximately 725 m to the north of the Project, at its closest point.

2.9.1 Aboriginal Heritage

A place search for Aboriginal heritage was conducted in March 2021 (Walyering 5) and January 2022 (Walyering 6) on the Department of Planning, Lands and Heritage (DPLH) database. Both searches returned no Registered Aboriginal Sites or Other Heritage Places within the Project Area; however, Minyulo Brook (Site ID 28326) located approximately 0.27 km southwest of Walyering 5, is a registered site with mythological significance because of its associations with the Waugal creation myth (de Gand 2010). This site is registered as Arch Deposit; Artefacts/Scatter; Birthplace; Camp; Ceremonial; Hunting Place; Modified Tree; Mythological; Natural Feature; Plant Resource; and Water Source. A scarred tree located approximately 2.1 km east of the access track to Walyering 6, is a lodged site located on land designated to Iluka Resources Pty Ltd; this site is not within the Project Area.

The Project will not impact these registered sites.

2.9.1.1 Stop Work Procedure for Aboriginal Heritage

Strike maintains a Stop Work Procedure in the event of a discovery and/or the identification of an object reasonably suspected of being an Aboriginal artefact the following will apply:

1) Stop work immediately in the area/location of potential heritage discovery;
2) Notify supervisor to stop work;
3) Supervisor to contact Strike Health and Safety of the Environment and Communities (HSEC) team;
4) Photograph and GPS coordinate to be supplied; and
5) Strike to advise on heritage value.

On discovery of skeletal material, Step(s) 1 through 4 will be followed. Step 5 will be replaced with:

5) Strike to advise if skeletal material is human.

If so:

a) WA Police and Coroner to advise if skeletal material is human.

All areas of cultural heritage or skeletal materials will be out of bounds to all surface and sub-surface operations until clarification. The Strike site supervisor will delineate site boundaries with star pickets and demarcate all heritage/skeletal materials sites.

In the event of a discovery, the Strike HSEC Department will notify the traditional knowledge holders of the discovery and discuss an appropriate method of managing the discovery. Where appropriate, discoveries will be reported to the Registrar of Aboriginal Sites, DPLH on (08) 6551 800 or via email at registrar@dplh.wa.gov.au.

2.9.2 European Heritage

One Commonwealth Heritage property was identified by a search of the EPBC Act Protected Matters search database: the Lancelin Defence Training Area. This property is situated on Mimegarra Road and is 3.61 km west of the Project Area.

A search was completed on the WA State inHerit Database in March 2022 and found place number 5825 'Caro Grave Sites' along Caro Road, 2 km east of the Project Area.

The Project will not impact these sites.

2.9.3 Geo-Heritage

A place search for geo-heritage sites was conducted in March 2022 on the DMIRS spatial database. The search returned no significant geo-heritage sites within the Project Area.

3 Stakeholder Engagement

Strike maintains a stakeholder consultation program with key stakeholders in relation to its exploration activities in EP 447, including the Project Area.

The key objectives of the consultation program are to:

- Identify relevant stakeholders;
- Initiate and maintain communication;
- Develop tools for ongoing communication;
- Provide for two-way communication on management/mitigation strategies to minimise impacts of the Project on the environment and potentially affected stakeholders; and
- Record consultation activity, key issues, and outcomes.

Strike continues to consult with landholders, traditional owners, local government, state and federal government agencies and other stakeholders with regards to the Project.

3.1 Stakeholder Identification and Ongoing Consultation

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 Projects within EP 447;
- Landowners within the Project Area;
- 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 Project.

Stakeholders engaged to date regarding the Project include:

- Local/State Government agencies, including DMIRS;
- Community stakeholders (e.g., Traditional Owners); and
- Landholders.

The stakeholders identified for this Project are listed in Table 3.1:

Table 3.1 Project Stakeholders

Project Stakeholders	
State Government Agencies and Local Government Authorities	
Department of Mines, Industry Regulation and Safety	Mitchell Luff, Environmental Officer
Community Stakeholders	
SWALSC	heritage@noongar.org.au (various)
Direct Landholder(s)	
Carpenter Beef Pty Ltd (Direct landholder)	Johnnie Dichiera
Nearby (Indirect) Landholder(s)	
Iluka	Ben Martin, Chris Loveland, Mel Henderson

Strike will continue stakeholder consultation in accordance with the Stakeholder Management Plan in advance of, during and following Project activities to ensure awareness, understanding of concerns, and ensuring ongoing positive and two-way effective communication to ensure the successful implementation of the Project and ongoing positive relationships.

Strike also regularly liaises with oil and gas companies on neighbouring tenements to ensure that it keeps abreast of any issues that may be of concern to the local community.

3.2 Recording Stakeholder Engagement

Records of consultation has included the following and will continue to be documented over the life of the Project:

- Date of consultation;
- Person, department, or organisation consulted (e.g., branch, company, position, etc.);
- Method of consultation (e.g., emails, letters, and/or meetings, etc.);
- A summary of the information provided;
- Details of all questions, comments, or concerns raised by the stakeholder;
- Response to the concerns or issues raised; and
- Any additional information or justification for decisions made.

3.3 Project Stakeholder Engagement

Ah a summary of consultation provided in Table 3.2. There are currently no outstanding issues as a result of stakeholder consultation undertaken to date.

Table 3.2 Summary of Stakeholder Consultation

Stakeholder Group	Nature of Consultation	Response	Outcome
State Government Agencies			
DMIRS	Strike provided DMIRS with an overview of the planned exploration (drilling & seismic), development (Walyering & WEFD) for Q3/Q4 2022. The overview included a rundown of the scheduled regulatory submissions for safety, titles and environment (including this Environment Plan)	A new Environment Plan is required for the planned Geotechnical activities in EP 447	A new Environment Plan (this document) has been prepared and submitted to DMIRS for the project.
Community Stakeholder			
Traditional Owner Group	Ongoing consultation and project updates provided. The project area is within the area that had a heritage clearance survey completed in 2021.	Ongoing consultation to discuss potential contract work for future Projects and Cultural Heritage Monitoring and site heritage survey activities.	No new issues raised in ongoing consultation.
Interested Landowners	Provided update on Walyering field and proposed activities. Ongoing consultation and project updates provided.	An email update was provided for the Project along with some overview plans outlining potential upcoming works.	No new issues raised in ongoing consultation updates. Strike will continue to liaise with interested landowners.
Direct Landowner(s)			
Carpenter Beef Pty Ltd	Provided update on Walyering field and proposed activities. Ongoing consultation and the Project updates provided.	No new issues raised throughout the ongoing consultation updates.	Signed access agreement is in place between Carpenter Beef Pty Ltd (ABN 83 132 172 671) and Strike South West Pty Ltd for the project activities.

4 Environmental Risk Assessment and Management

4.1 Environmental Risk Assessment Method

The environmental risk assessment process used by Strike for the Project is comprised of the following components that are discussed further in the following sections:

- Identification of sources of risk (i.e., environmental hazards);
- Identification of the area that may be affected;
- Description of the receiving environment that may be impacted;
- Identification of specific values and/or sensitivities;
- Identification and evaluation of potential environmental impacts;
- Control measure, risk treatment and ALARP decision framework;
- Determine severity of consequence likelihood of event and residual risk ranking; and
- Determine the acceptability.

Consistent with Strike's internal risk management methodology, the risk assessment for the Project has been undertaken in accordance with AS/NZS ISO 31000: 2018 Risk Management - Principles and Guidelines to identify, analyse and evaluate the risk(s) associated with the interaction between the Project and the receiving environment; therein, mitigation plans can be developed to manage the identified risk(s) to 'As Low As Reasonably Practicable' (ALARP).

A risk ranking matrix was utilised to assess the impact type, likelihood, and severity of all identified potential events for the Project (Table 4.1 and Table 4.2).

Table 4.1 Risk Assessment Matrix

Severity		Consequence				Increasing Likelihood				
						A	B	C	D	E
						Almost Certain	Likely	Possible	Unlikely	Rare
		People	Environment	Asset/Financial	Reputation/Compliance	The event will probably occur more than once per year (80% - 100%)	The event will probably occur at least once per year (60% - 79%)	The event may occur at least once in five (5) years (40% - 59%)	The event may occur at least once in ten (10) years (20% - 39%)	The event may occur less than once in ten (10) years (0% - 19%)
5	Catastrophic	Catastrophic injury or health effect resulting in two (2) or more fatalities.	Large scale (widespread effects) or irreversible environmental harm; Viability of ecosystems or species affected.	Adverse impact to project/ production/asset damage/ company market value with a financial recovery cost of > $10M.	Adverse international media coverage. Government intervention with prosecution resulting in maximum penalty.	5A	5B	5C	5D	5E
4	Major	Major injury or health effect resulting in permanent disability/illness or single fatality.	Significant, long term environmental harm Major release of pollutants or release of pollutants to an extremely sensitive area.	Adverse impact to project/ production/asset damage/ company market value with a financial recovery cost of $5M to < $10M.	Adverse national media coverage. Government intervention with penalty and/or restricted operations (i.e., Prohibition Improvement Notice (PIN)).	4A	4B	4C	4D	4E
3	Moderate	Moderate injury or health effect requiring advanced medical treatment and/or resulting in Lost Time Injury.	Immediate offsite contamination. Release of pollutants to sensitive areas; short term effect (1 - 2 years), easily rectified.	Adverse impact to project/ production/asset damage/ company market value with a financial recovery cost of $1M to < $5M.	Adverse state media coverage. Breach of any laws/licenses, regulatory monitoring may result on the spot fine OR Improvement Notice	3A	3B	3C	3D	3E
2	Minor	Minor injury or health effect requiring basic medical treatment.	Minor effects on biological or physical environment, onsite or offsite; very short term (months), minimal rectification.	Adverse impact to project/ production/asset damage/ company market value with a financial recovery cost of $250K to < $1M.	Adverse local public/media attention. Non-compliance/ breaches of regulation requiring self-notification to the regulator	2A	2B	2C	2D	2E
1	Negligible	Negligible injury or health effect requiring first aid treatment.	Limited damage to minimal area of low significance, minor on-site effects rectified easily with negligible residual effect(s).	Adverse impact to project/ production/asset damage/ company market value with a financial recovery cost of < $250K.	Public concern restricted to direct landholders/ stakeholders. Technical breach of internal standard operating procedure without penalties or damages	1A	1B	1C	1D	1E

Table 4.2: Risk Level Action

Risk Level	Action Accountability
Severe	Escalate risk to attention of the Executive Management Team and the Board to oversee revised/strengthened mitigation strategies to reduce projected risk.
High	Escalate risk to attention of the Operations Leadership Team and notify accountable member(s) of Executive Team if required, to oversee revised/strengthened mitigation strategies to reduce projected risk.
Moderate	Nominated member of Management Team as a risk owner to undertake active monitoring and assurance activities. If existing mitigations not implemented and/or effective, additional mitigations must be developed and implemented.
Minor	Accept the Risk. Risk is considered ALARP. Management to review risk annually.

4.2 Environmental Risk Management

Environmental management strategies for each environmental aspect are presented in Sections 4.3 to 4.14. Environmental management strategies have been developed for each stage of activity relating to the Project and the activities/sources of risk/hazards associated with them.

The management strategies outline the risk analysis, management/mitigation measures to be implemented and demonstration of ALARP based on the hierarchy of control:

- Elimination;
- Substitution;
- Isolation;
- Engineering Controls;
- Administrative Controls; and
- Personal Protective Equipment (PPE).

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4.3 Soils and Landforms

Environmental Aspect - Soil and Landform			
Activity	Mobilisation, Geotechnical Investigation, Demobilisation		
Hazard	Significant change in landform resulting in erosion/loss of topsoil		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Increased risk of erosion due to change in drainage patterns	Negligible	Rare	Minor
Evaluation of Risks			
The Project Area has been mapped and described as cleared and relatively flat. The Project Area, with Walyering 5 being the most southern point, is 270 m north of the nearest surface water receptor –Minyulo Brook, which flows into Caro Swamp. These are part of a group of continuous wetlands suite to the south. Drainage of stormwater is a combination of local infiltration through the sandy soil and surface water flow into the Minyulo Suite. Due to the nature and the short duration of the Project, there is not a risk of increased erosion; negligible topsoil will be temporarily piled next to testing pits and then will be returned at the completion of the Project.			
Mitigation Measures (Controls to Reduce Consequence & Likelihood)			
Hierarchy of Controls	Measure		
Elimination	Use of access tracks where possible to minimise impact to soil and landform		
Substitution	*Not applicable*		
Isolation	Test holes do not exceed maximum allowable dimensions; • 2 meters long • 2 meters deep • 0.5 meters wide		
Engineering	Subsoil is reinstated prior topsoil;		
	Test holes are compacted by tamping with the backhoe bucket and tracking over the backfill with the backhoe		
Administration	Shortest duration of Project as reasonable		
	Speed limits in place for vehicle traffic		
	Demobilisation will occur within a day of the completion of the Project; no equipment will be left in-situ.		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Increased risk of erosion due to change in drainage patterns	Negligible	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
It is considered that there are no additional practicable impact or risk reduction measures to those described that would provide a disproportionate benefit to the environment. It is therefore considered that the control measures identified for managing environmental impacts associated with soil and landform will reduce the impact and risk to ALARP. The level of risk is determined to be minor. The activities and risk and/or the identified control measures are compliant with applicable legislation. The activities and risk and/or the identified control measures are consistent with conservation advice, industry guidelines, standards and corporate policies, standards and procedures. The activities and the identified impacts and risks will not result in a significant or long-term impact to the values of the region. Stakeholder consultation and consideration of feedback has been undertaken as part of Project planning. The residual environmental risks for the potential impacts identified associated with this Project phase are minor, which is considered acceptable in accordance with levels of acceptability described in Section 4.2.			
Measurement of Environmental Performance			
Environmental Performance Objective			
1	Ensure soil and landform is maintained		

Performance Standard
Maintain soil and landform throughout the Project Area: • Utilising reputable contractors to undertake works in accordance with defined scope; and • Visually monitor erosion repair works post rainfall events.
Reinstate disturbed areas to best practical match original ground conditions: • During survey, test holes do not exceed maximum allowable dimensions; • During completion, Subsoil is reinstated prior topsoil; • Once back filled, test holes are compacted by tamping with the backhoe bucket and tracking over the backfill with the backhoe. • Demobilisation will occur within a day of the completion of the Project; no equipment will be left in-situ.

4.4 Regional Hydrology

Environmental Aspect - Regional Hydrology			
Activity	Mobilisation, Geotechnical Investigation, Demobilisation		
Hazard	• Hydrocarbon (diesel) spill; • Alteration of hydrological regime.		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Localised soil or groundwater impacts	Minor	Rare	Minor
Alteration of surface water quality	Negligible	Rare	Minor
Alteration of hydrological regime	Negligible	Rare	Minor
Evaluation of Risks			
The Project Area is 270 m from the nearest surface water feature and as such the construction Project does not pose a risk to the surface water features.			
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')			
Hierarchy of Controls	Measure		
Elimination	270 m separation distance from Caro Swamp/Minyulo Brook		
Substitution	*Not applicable*		
Isolation	*Not applicable*		
Engineering	Reputable contractors used to undertake works in accordance with defined scope to prevent sedimentation		
Administration	OSCP		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Localised soil or groundwater impacts	Minor	Rare	Minor
Alteration of surface water quality	Negligible	Rare	Minor
Alteration of hydrological regime	Negligible	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
It is considered that there are no additional practicable impact or risk reduction measures to those described that would provide a disproportionate benefit to the environment. It is therefore considered that the control measures identified for managing environmental impacts associated with soil and landform will reduce the impact and risk to ALARP.			
Measurement of Environmental Performance			
Environmental Performance Objective(s)			
2a	No alteration of hydrological regime		
2b	No groundwater or surface water quality impact		
Performance Standard			
Response to a spill is undertaken in accordance with the OSCP Section 9.2 of EP to prevent contamination of groundwater.			
No activities are to occur within 200 m of Minyulo Brook or Caro Swamp to ensure no impact on nearby surface water.			

4.5 Regional Flora and Vegetation

Environmental Aspect - Flora and vegetation			
Activity	Mobilisation, Geotechnical Investigation, Demobilisation		
Hazard	Failure to stay within Project Area whilst travelling to and from location		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Damage to native vegetation	Minor	Rare	Minor
Evaluation of Risks			
The Project Area is located entirely within pre-existing cleared areas used for agricultural activities. No clearing of native vegetation is required. Caro Swamp and the surrounding dissecting watercourses in the vicinity of the Project Area comprise intact native vegetation which may support conservation significant flora and communities. As the Project will not disturb native vegetation no impact is anticipated.			
Mitigation Measures (Controls to Reduce Consequence & Likelihood)			
Hierarchy of Controls	Measure		
Elimination	No clearing of native vegetation is required for the Project.		
Substitution	*Not applicable*		
Isolation	*Not applicable*		
Engineering	Vehicles and equipment movement will be restricted to the designated tracks and construction areas.		
	Land access will be in in accordance with landholder access agreement.		
Administration	Site Induction covers Project Area, access restrictions, speed limits and flora/vegetation conservation significant values of the surrounding area.		
	Signage on site indicating correct access.		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Damage to native vegetation	Minor	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Strike have eliminated direct impacts on native vegetation through the selection existing cleared areas for all project activities. Possible indirect impacts on vegetation have been managed by: • Addressing dust emissions; • Preventing personnel from travelling outside the Project Area by: ○ Restricting access to designated tracks and construction areas; Implementing speed limits; and Inducting personnel. It is considered that there are no additional practicable impact or risk reduction measures to those described that would provide a disproportionate benefit to the environment. It is therefore considered that the control measures identified for managing environmental impacts associated with vegetation will reduce the impact and risk to ALARP. The acceptability of the flora risks to the activity were assessed and based on the risk treatments implemented and the residual risk is deemed to be acceptable without the need to implement further controls.			
Measurement of Environmental Performance			
Environmental Performance Objective(s)			
3	No clearing of native vegetation		
Performance Standard			
All activities are undertaken in accordance with this EP to minimise the impact of the Project on native vegetation: • Land access will be in in accordance with landholder access agreement; Vehicles and equipment movement will be restricted to the designated tracks and the Project Area.			
Induction of personnel outlines the Project Area and access restrictions. Documented evidence (records of inductions for individuals working on site and induction content available to auditor) shows that all personnel during compliance audit period have completed the induction outlining: • Project Area; and • Access restrictions.			

4.6 Terrestrial Fauna

Environmental Aspect - Terrestrial Fauna			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	• Vehicle incident		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	**Consequence**	**Likelihood**	**Inherent Risk**
• Injury and/or death of native/conservation-significant fauna • Modification of fauna behaviour	Minor	Possible	Moderate
Evaluation of Risks			
Preliminary risk assessment has identified that potential impacts of the proposal are unlikely to significantly impact fauna values of the area. Given no clearing of fauna habitat, it is likely that impacts on fauna will be minimal. Impacts include: • Vehicle movements on access tracks potentially causing fauna strike over a period of 3 days; • Noise associated with vehicles and equipment potentially deterring fauna from the vicinity of the Project Area for up to 3 days; Impacts to fauna can be managed through the implementation of management measures (see control measures below).			
Mitigation Measures (Controls to reduce Consequence & Likelihood)			
Hierarchy of Controls	**Measure**		
Elimination	Activities limited to daylight hours only		
	Test holes are not left open overnight		
Substitution	*Not applicable*		
Isolation	Vehicles and equipment to be used only within the approved Project Area		
	Test holes are immediately reinstated upon completion of survey activities.		
Engineering	Vehicle movements on designated access tracks and construction areas only		
	Maintenance of equipment and vehicles per manufacturer recommendations to minimise noise		
Administration	All personnel to be inducted prior to arriving to site to identify Strike's travel procedures (including third-party contractors)		
	Induction includes vehicle speed limits, staying on access tracks and the requirement for personnel to be alert for wildlife		
	Test holes to have a person in attendance when excavation is open		
	Test holes will be checked for fauna immediately prior to backfilling.		
	Speed limits in place for vehicle traffic		
Potential Environmental Impact	**Consequence**	**Likelihood**	**Residual Risk**
• Injury and/or death of native/conservation-significant fauna • Modification of fauna behaviour	Minor	Unlikely	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Overall, the controls for this aspect are considered in line with similar projects approved in the region, and consistent with industry practices. Fauna impacts are predominantly through vehicle impact, waste and to a lesser extent dust, light and noise. The key risks associated with fauna can be managed to ALARP through the implementation of the controls above. The acceptability of the Project was based on the following: • No clearing of fauna habitat; and • No significant impact on conservation significant fauna species possibly occurring in the region.			
Measurement of Environmental Performance			
Environmental Performance Objective			
4	No conservation significant fauna fatalities		
Performance Standard	**Measurement Criteria**	**Person Responsible**	
Maintain vehicles and equipment in accordance with service schedules to minimise noise.			

Environmental Aspect - Terrestrial Fauna
Minimise impact on fauna in accordance with this EP by: • Vehicles and equipment to be used only within approved Project Area; • Requirement for personnel to undertake an induction prior to undertaking activities; and Speed limits in place for vehicle traffic and speed limits adhered are to by all personnel and visitors.
Minimise impact of test holes / excavations on fauna in accordance with this EP by: • Requirement for personnel attendance while test holes are open; • Tests holes to be immediately reinstated upon completion of survey activities; and • Test holes are not permitted to be left open overnight;

4.7 Greenhouse Gas Emissions

Environmental Aspect - Greenhouse Gas Emissions			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	Emissions from vehicles and equipment		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Greenhouse Gas (GHG) and Volatile Organic Carbon (VOC) emissions resulting in significant reduced air quality.	Negligible	Rare	Minor
Evaluation of Risks			
The use of fuel to power vehicle and equipment will result in small volumes of gaseous emissions of GHG such as carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), along with non-GHG particulate emissions such as Sulfur oxides (SOx) and Nitrous oxides (NOx). These emissions add to the GHG load in the atmosphere. The emissions from this Project are no different to those from the various forms of light and heavy vehicle traffic that operate in the area (e.g., local road traffic, farm equipment, facilities), and in themselves are insignificant. Project related emissions will not present a significant increase in air emissions over background levels.			
Mitigation Measures (Controls to Reduce Consequence and Likelihood)			
Hierarchy of Controls	Measure		
Elimination	*Not applicable*		
Substitution	*Not applicable*		
Isolation	Project activities are over a relatively short duration		
Engineering	Vehicles and equipment regularly maintained		
Administration	Fuel usage records are maintained		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
GHG and VOC emissions resulting in significant reduced air quality.	Negligible	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
It is considered that there are no additional practicable impact or risk reduction measures to those described that would provide a disproportionate benefit to the environment. It is therefore considered that the control measures identified for managing environmental impacts associated with emissions will reduce the impact and risk to ALARP. Based on the nature and scale of the operation minimal emissions are expected to be generated across the short duration of the activity, assessment of acceptability considered the minor impact that emissions would have on the local air shed. The residual risk was deemed to be acceptable without the need to implement further controls.			
Measurement of Environmental Performance			
Environmental Performance Objective			
5	Ensure air quality is maintained		
Performance Standard			
Maintain vehicles and equipment in accordance with service schedules to minimise vehicle emissions.			
Fuel usage records are maintained.			

4.8 Dust Emissions

Environmental Aspect - Dust Emissions			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	Localised generation of dust significantly impacting air quality		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Reduced air quality.	Negligible	Possible	Minor
Evaluation of Risks			
Dust is likely to be generated by vehicles travelling along unsealed tracks and during the excavation of test holes. The amount of dust will relate to the moisture content at the time and the speed of the vehicle. A negligible amount of dust may settle on nearby native vegetation but is expected to result in a temporary reduction in photosynthetic capacity as wind and subsequent rainfall events will wash the dust off. The impacts are expected to be similar to light and heavy vehicle traffic travelling over such surfaces in the local area. Dust generated is unlikely to result in significant nuisance to local landholders given the sparsely populated nature of the Project Area, the low-speed limits employed by vehicles and maintaining a minimum distance of 2 km from homesteads. Vehicles will travel slowly thereby minimising the volume of dust generated.			
Mitigation Measures (Controls to Reduce Consequence & Likelihood)			
Hierarchy of Controls	Measure		
Elimination	*Not applicable*		
Substitution	*Not applicable*		
Isolation	*Not applicable*		
Engineering	Speed limits for vehicle traffic imposed across Project Area		
Administration	Induction of site personnel on vehicle speed limits		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Reduced air quality	Negligible	Possible	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Overall, the controls for this aspect are considered in line with similar projects approved in the region, and consistent with industry practices. The implementation of controls such as speed limits and induction of personnel will address dust impacts. Residual risks associated with dust emissions are considered acceptable on this basis.			
Measurement of Environmental Performance			
Environmental Performance Objective			
6	Ensure air quality is maintained		
Performance Standard			
Induction of personnel includes outline of vehicle speed limits: • Brand Highway 110 km/hr; • Lot access track 40 km/hr; • Walyering 5 and Walyering 6 well pads 20 km/hr; and Lower speed than above if marked by signage or instructed.			

4.9 Noise Emissions

Environmental Aspect - Noise Emissions			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	• Noise from vehicles, machinery and equipment.		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Noise impacts native fauna	Minor	Unlikely	Minor
Evaluation of Risks			
Fauna living or moving within vegetation adjacent to the Project Area will hear sounds associated with Project activities and associated vehicles. The potential sounds are unlikely to differ from existing agricultural activities in the area. Animals with the most ground contact (e.g., lizards, snakes, etc.) may be more disturbed than bipeds (e.g., kangaroos, etc.) or quadrupeds (e.g., native rodents, etc.). Fauna may also experience increased stress and/or expend extra energy in avoidance behaviours. Normal activities (resting, feeding, nesting, breeding) are likely to resume shortly after the disturbance, and as such the impacts are considered minor and temporary.			
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')			
Hierarchy of Controls	Measures		
Elimination	*Not applicable*		
Substitution	*Not applicable*		
Isolation	Vehicles and equipment to be used only within the approved Project area		
	The activities are short term and not located within a noise sensitive locality		
Engineering	Maintenance of equipment and vehicles per manufacturer recommendations		
Administration	Consultation with near-by neighbours		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Noise impacts native fauna	Minor	Unlikely	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Overall, the controls for this aspect are considered to be in line with similar projects approved in the region, and consistent with industry practices. The implementation of controls such as, conducting activities during daylight hours only and routinely maintaining equipment, along with the short-term nature of activities will minimise the potential for environmental impacts on fauna associated with noise emissions. Residual risks associated with noise emissions are considered acceptable on this basis.			
Measurement of Environmental Performance			
Environmental Performance Objective(s)			
-	Refer to Section 4.6 (Terrestrial Fauna) for EPOs.		

4.10 Light Emissions

Environmental Aspect – Light Emissions				
Activity	Mobilisation, Geotechnical Investigations, Demobilisation			
Hazard	Light emissions due to vehicle movement.			
Inherent Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Inherent Risk
Native fauna disturbed by light emissions.		Negligible	Rare	Minor
Evaluation of Risks				
Light emissions have been primarily eliminated by Project activities occurring during daylight only and the short duration of the Project.				
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')				
Hierarchy of Controls	Measure			
Elimination	Project activities occur during daylight hours only.			
Substitution	*Not applicable*			
Isolation	*Not applicable*			
Engineering	Traffic is on designated areas only			
Administration	*Not applicable*			
Residual Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Residual Risk
Native fauna disturbed by light emissions.		Negligible	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability				
Overall, the controls for this aspect are considered in line with similar projects approved in the region, and consistent with industry practices. Residual risks associated with light emissions are considered acceptable on the basis of the project activities short duration.				
Measurement of Environmental Performance				
Environmental Performance Objective				
- Refer to Section 4.6 (Terrestrial Fauna) for EPOs.				

4.11 Weeds and Dieback

Environmental Aspect - Weeds and Dieback				
Activity	Mobilisation, Geotechnical Investigations, Demobilisation			
Hazard	Equipment, machinery and/or vehicle presence on site results in spread of invasive species			
Inherent Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Inherent Risk
Weed introduction and/or spread		Minor	Unlikely	Minor
Evaluation of Risks				
Weeds: Weed seeds or other vegetative matter (present on its own or in soil adhered to vehicle and equipment undercarriages and tyres) may be dislodged within the Project Area. This includes pasture and weeds known in the area. Weeds introduced to a new site may establish themselves and spread or existing weed infestations spread to uninfested areas. The introduction of weed seeds/vegetative matter to an area does not in itself guarantee its spread; it must survive, grow and reproduce in order for it to spread beyond its initial site of introduction. Agricultural crops are not affected by dieback.				
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')				
Hierarchy of Controls	Measure			
Elimination	*Excavated subsoil and topsoil used to backfill test holes / excavations to eliminate introduction of foreign material and potential for weed species.*			
Substitution	*Not applicable*			
Isolation	Vehicles and equipment are inspected and cleaned down for weeds immediately prior to entering the Project area			
	No access will be permitted into the adjacent areas of native vegetation			
Engineering	Hygiene station is established at Walyering (including lined pad with brushes/brooms and weatherproof container for inspection register)			
	Vehicles and equipment are to arrive on site in a clean state and conduct inspection on site including sign off on the hygiene inspection checklist			
	Land access will be in in accordance with landholder access agreement			
Administration	Personnel are required to complete the induction which outlines weed management			
Residual Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Residual Risk
Weed introduction and/or spread		Minor	Unlikely	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability				
Overall, the controls for this aspect are considered in line with similar projects approved in the region, and consistent with industry practices.Introduction and spread of weeds is through equipment and vehicle movements which cannot be eliminated. However, the key risks associated with weeds can be managed to ALARP through the implementation of controls conducting vehicle movements on designated roads and access tracks, undertaking activities in accordance with hygiene control protocols.				
Measurement of Environmental Performance				
Environmental Performance Objective				
7	No declared weed infestations as a result of project activities			
Performance Standard				
• Use of a hygiene station during site preparation activities (including lined pad with brushes/brooms and weatherproof container for inspection register); • Vehicles and equipment are to arrive on site in a clean state and conduct inspection on site including sign off on the hygiene inspection log; and				
Induction of personnel outlines the Project weed hygiene requirements				

Excavated subsoil and topsoil used to backfill test holes / excavations to eliminate introduction of foreign material and potential for weed species.

4.12 Socio-economic

Environmental Aspect - Socio-economic			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	Breach of landowner agreement; Damage to landowner infrastructure; Operations disturb neighbouring landowner or nearby stakeholders; Disruption to surrounding landowners/local residents; Vehicle movements impact local road users; and Security Issues associated with vehicles and equipment remaining at site.		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	**Consequence**	**Likelihood**	**Inherent Risk**
Negative Stakeholder Feedback	Negligible	Possible	Minor
Additional traffic impacting local road users	Negligible	Unlikely	Minor
Noise, light, aesthetics, land use change	Minor	Rare	Minor
Sabotage resulting in vehicle and/or machinery damage	Minor	Unlikely	Minor
Evaluation of Risks			
The Project is located approximately 6 km from Cataby with both visual and audio barriers making it out of the way from the general populous. The nearest residence is 2.3 km from the Project Area. The access tracks are wholly private property (excluding public access) and avoiding other gazetted roads after exiting Brand Highway. Signage will be in place. Vehicles, machinery and/or equipment will be secured while unattended on site to minimise the risk of sabotage.			
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')			
Hierarchy of Controls	**Measure**		
Elimination	Single mobilisation/demobilisation of vehicles and/or machinery reduces volume of traffic during construction activities		
	All equipment is taken offsite at demobilisation.		
Substitution	Traffic during daylight hours only		
Isolation	*Not applicable*		
Engineering	Personnel to drive to conditions and strictly adhere to speed limits		
	Well lease areas to remain fenced and locked when unattended with signage demarcating the name of the well/facility, responsible entity, contact number and hazards associated with the well		
Administration	All Project activities undertaken in accordance with the landowner access agreement		
	All personnel (i.e., employees, contractors and subcontractors) will be instructed (via site-specific inductions) on landowner/stakeholder sensitivities of the surrounding area.		
	Ensure any applicable landowner/stakeholder access agreements are in place before Project commences		
	Stakeholder engagement prior to commencement, during and at the cessation of Project activities		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	**Consequence**	**Likelihood**	**Residual Risk**
Negative Stakeholder Feedback	Negligible	Unlikely	Minor
Additional traffic impacting local road users	Negligible	Unlikely	Minor
Noise, light, aesthetics, land use change	Minor	Rare	Minor
Sabotage resulting in vehicle and/or machinery damage	Minor	Unlikely	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Overall, the controls for this aspect are considered in line with similar temporary projects approved in the region. There are no practicable means of eliminating or substituting the risks associated with landowner/socioeconomic aspects, however, the key risks can be managed to ALARP through the implementation of controls such as: Engaging stakeholders in a manner that effectively reaches them; Reducing traffic to a minimum through single mobilisation and demobilisation; Ensuring personnel adhere to speed limits; and Securing equipment and only keeping a minimum of equipment on site when the site is unattended.			

Environmental Aspect - Socio-economic	
Measurement of Environmental Performance	
Environmental Performance Objective(s)	
8a	No security incidents
8b	No stakeholder complaints
Performance Standard	
• All Project activities, including vehicle and equipment movements, occur inside the Project Area or on existing roads and tracks; • Traffic during daylight hours only; • All non-fixed equipment is taken off-site at demobilisation unless brought onsite under supervision/securely locked; and Strike will conduct stakeholder engagement prior to the commencement of construction activities and continue as the Project progresses.	

4.13 Waste

Environmental Aspect - Waste				
Activity	Mobilisation, Geotechnical Investigations, Demobilisation			
Hazard	Incorrect disposal of waste			
Inherent Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Inherent Risk
Local soil contamination and localised degradation of vegetation		Minor	Unlikely	Minor
Evaluation of Risks				
Waste from personnel working on site is only likely to create an environmental impact if inappropriately disposed of. Unless there is a hydrocarbon or chemical spill, potential waste releases will not to be of a hazardous nature.				
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')				
Hierarchy of Controls	Measure			
Elimination	*Not applicable*			
Substitution	*Not applicable*			
Isolation	*Not applicable*			
Engineering	*Not applicable*			
Administration	Site inductions cover waste management requirements			
	Good housekeeping practices on site enforced throughout the Project via site inspections			
	Any spills are immediately contained and cleaned up as per the OSCP			
	Offsite disposal of waste via a licenced waste contractor / facility			
Residual Risk Analysis and Ranking				
Potential Environmental Impact		Consequence	Likelihood	Residual Risk
Local soil contamination, Localised Degradation of Vegetation		Minor	Rare	Minor
Demonstration of 'As Low As Reasonably Practicable' and Acceptability				
Overall, the controls for this aspect are considered in line with similar projects approved in the region, and consistent with industry practices. It is not practicable to eliminate waste entirely from the Project; however, given the implementation of waste management controls, the risks associated with waste are considered reduced to be ALARP. The residual risks associated with waste are deemed acceptable on the basis that all waste is generated from materials that are considered appropriate for their intended use, sources of waste are known and will be managed appropriately, and relevant PPE will be used when handling hazardous waste materials.				
Measurement of Environmental Performance				
Environmental Performance Objective				
9	No waste released to the environment			
Performance Standard				
Offsite disposal of waste via a licenced waste contractor / facility				
Personnel undertake spill response activities in accordance with the OSCP Section 9.2 of EP: Spills are immediately controlled, contained and cleaned up; and				
The Site will be kept in order with good housekeeping practices for the life of the Project to prevent the release of waste to the environment.				
Induction of personnel outlines the following: • Waste management requirements; • OSCP Section 9.2 of the EP requirements; and Good housekeeping practices.				

4.14 Unplanned Event (Fire)

Environmental Aspect - Unplanned Event (Fire)			
Activity	Mobilisation, Geotechnical Investigations, Demobilisation		
Hazard	Uncontrolled fire due to on-site activities		
Inherent Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Inherent Risk
Potential habitat destruction	Major	Rare	Moderate
Evaluation of Risks			
While the risks of a fire igniting as a result of the Project are remote, the consequences are high. Injury or death of humans (primarily Project personnel) is always a risk when there is fire ignition and subsequent bushfire. This is primarily an occupational health and safety issue that is addressed in the Emergency Response Plan (ERP).			
Mitigation Measures (Controls to Reduce 'Consequence' and 'Likelihood')			
Hierarchy of Controls	Measure		
Elimination	*Not applicable*		
Substitution	*Not applicable*		
Isolation	Vehicles prohibited from accessing areas of native vegetation		
	Smoking is permitted in designated areas only		
Engineering	Maintain vehicles and equipment in accordance with service schedules to minimise risk of fire		
	All vehicles and equipment on site, will be operated on diesel fuel (no petrol or LPG).		
	General housekeeping		
Administration	ERP and emergency exercises (fire drills) in place		
	Compliance with Total Fire Bans / Vehicle Movement Bans		
	OSCP in the EP		
	All vehicles and equipment on site, will be operated on diesel fuel (no petrol or LPG)		
Residual Risk Analysis and Ranking			
Potential Environmental Impact	Consequence	Likelihood	Residual Risk
Potential habitat destruction	Major	Rare	Moderate
Demonstration of 'As Low As Reasonably Practicable' and Acceptability			
Overall, the controls for this aspect are considered in line with similar temporary construction projects approved in the region, and consistent with industry practices. Strike deems the measures proposed to reduce the risks of fire to ALARP. The residual risks are based on the consequence of a fire remaining "major" despite the likelihood being rare. It is on this basis that Strike deems the residual risk acceptable without the need to implement further controls.			
Measurement of Environmental Performance			
Environmental Performance Objective			
10	No fires initiating from the Project		
Performance Standard			
Maintain vehicles and equipment in accordance with service schedules to minimise risk of fire			
Measures are in place in accordance with the requirements of ERP to reduce the risk of or aid in the response to a fire: • Smoking is permitted in designated areas only; • At least one site vehicle shall have a serviceable fire extinguisher; and All vehicles and equipment on site, will be operated on diesel fuel (no petrol or LPG).			
Measures will be taken to reduce the risk of fire: • All vehicles will be parked within the cleared area, with no parking on areas of native vegetation; and Ignition sources will never be left unattended.			

5 Implementation Strategy

5.1 Corporate Environmental Policy

Strike will undertake the Project with a commitment to reduce its impact on the environment to ALARP. This commitment is fundamental to the Strike Energy Limited Environmental Policy (STX-POL-013).

5.2 Implementation

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

- Systems, practices, and procedures for implementing the EP;
- Roles and responsibilities of personnel to ensure the EP is implemented;
- Training and competencies required of personnel;
- Oil spill contingency plan implemented per the EP;
- Monitoring, auditing, and management of non-conformances;
- Record-keeping;
- Reporting and notification arrangements; and
- Review of the EP.

Relevant systems and procedures include:

- HSE Management System;
- HSE Management Plan;
- Emergency Response Plan;
- Stakeholder Register; and
- Journey Management Plan.

The implementation strategy detailed in the EP identifies the responsibilities/roles and competency/training requirements for all personnel (Strike and its contractor(s)) in relation to implementing management controls, monitoring, auditing, and reporting requirements during the Project. The EP details the types of monitoring and auditing that will be undertaken, the reporting requirements for environmental incidents and reporting on overall compliance of the Project.