Appendix J.1.2 12 240412 Updated work program packs

From:	Matt Kernke
To:	Jeremy Beckett; Rory Ross
Cc:	Tamboran Contact; Russell Jeffrey; Armando de la Flor Olavide; Emily Beresford-Cane
Subject:	Updated work program packs
Date:	Friday, 12 April 2024 4:36:28 PM
Attachments:	Work program meetings.zip image001.png

Hi [redacted],

As discussed, attached is a copy of the updated work program packs for the work program meetings at Mataranka and Katherine.

Please note the Katherine meeting pack is restricted to Subject land 1 scope on EP 98.

The Katherine meeting has all content. You will note I have left a large amount of information in here for the clearances which I think we can largely remove. This can be used by the NLC in the engagement- but maybe not this meeting. I have also included additional information on the [redacted] and the Stuart Plateau Compression Facility and appraisal gas sale EMP. These are likely to be submitted in Early June- so will need engagement to occur on these activities asap.

I am happy to take a call on Monday with Russ and Armando to work through this with you. I know [redacted] is away until next Thursday, but we could potentially do this with [redacted] if available. Please let us know.

Kind Regards
Matt

Matt Kernke
Vice President, Environment and Approvals

tamboran
RESOURCES

M: [redacted]

Tamboran Beetaloo Joint Venture Project
Work Program and Appraisal Gas Information Meeting

2024

Confidential

Kyalla 117 N2- NORTHERN TERRITORY AUSTRALIA

Agenda

1. 2023 Work Program Summary
2. [redacted]
3. Proposed 2024 work program activities
4. Environmental Management Plans
5. [redacted]
6. [redacted]
7. [redacted]
8. [redacted]

Purpose of Work Program Meeting

- Talk through what exploration activity has occurred on the Exploration Permits throughout 2023
- Talk through the results of 2023 Exploration Activity
- Provide an overview of the exploration activity planned for 2024
- Provide an overview of the new 2024 EMP’s
- Talk about appraisal gas sale
- Talk about future Government approvals, including cultural heritage clearances that will require consideration from Native Title Holders

About Tamboran

Introducing Tamboran

We are a publicly listed Australian company with our headquarters in Sydney and staff across Australia and the USA. We are committed to creating value for our shareholders, communities, Territorians and Australians by appraising and developing the gas resources of the Beetaloo Basin. We strive to follow and exceed the example set by Origin in community engagement since 2014 and will continue to focus on economic, development and employment opportunities for Native Title Holders and local communities.

Our Vision

To play a role in the global energy transition by investing in the development of low CO2 unconventional natural gas resources in the Beetaloo Sub-basin of the Northern Territory of Australia and to become a Net Zero carbon emissions gas producer for our equity share of Scope 1 and Scope 2 emissions when the Company achieves commercial gas sales.

Strategy

- Target is to become a Net Zero equity Scope 1 & 2 emissions producer
- Focused, high growth Beetaloo strategy
- High quality assets with significant scale
- Low-cost development targeting multiple markets, premium pricing
- Expertise in unconventional E&P development

Sustainability

- Health & Safety
- Climate Change
- Environment
- People
- Community
- Economic Sustainability

2023 Work Program Summary

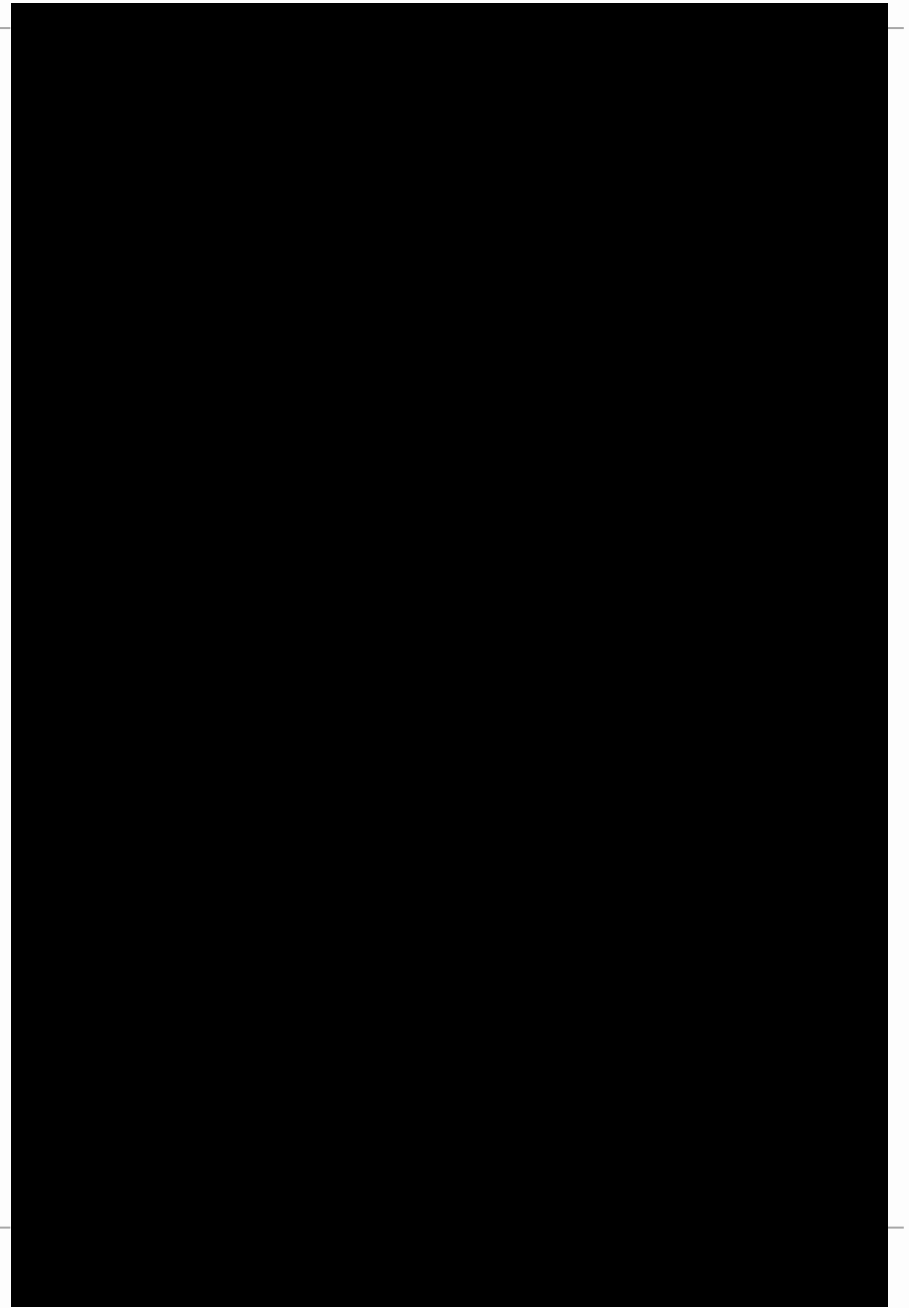
Operations update – 2023 was a big year for the Beetaloo

Key Exploration Results

- Tested the Amungee NW 2H well
- Drilled the Amungee NW 3H well; moved to Shenandoah S area
- Shenandoah S 1H well was successfully drilled, stimulated and tested with economic flow rates of 6.4mmcfd / 1000 m of lateral - **a very good result.**

Setting the project up for success

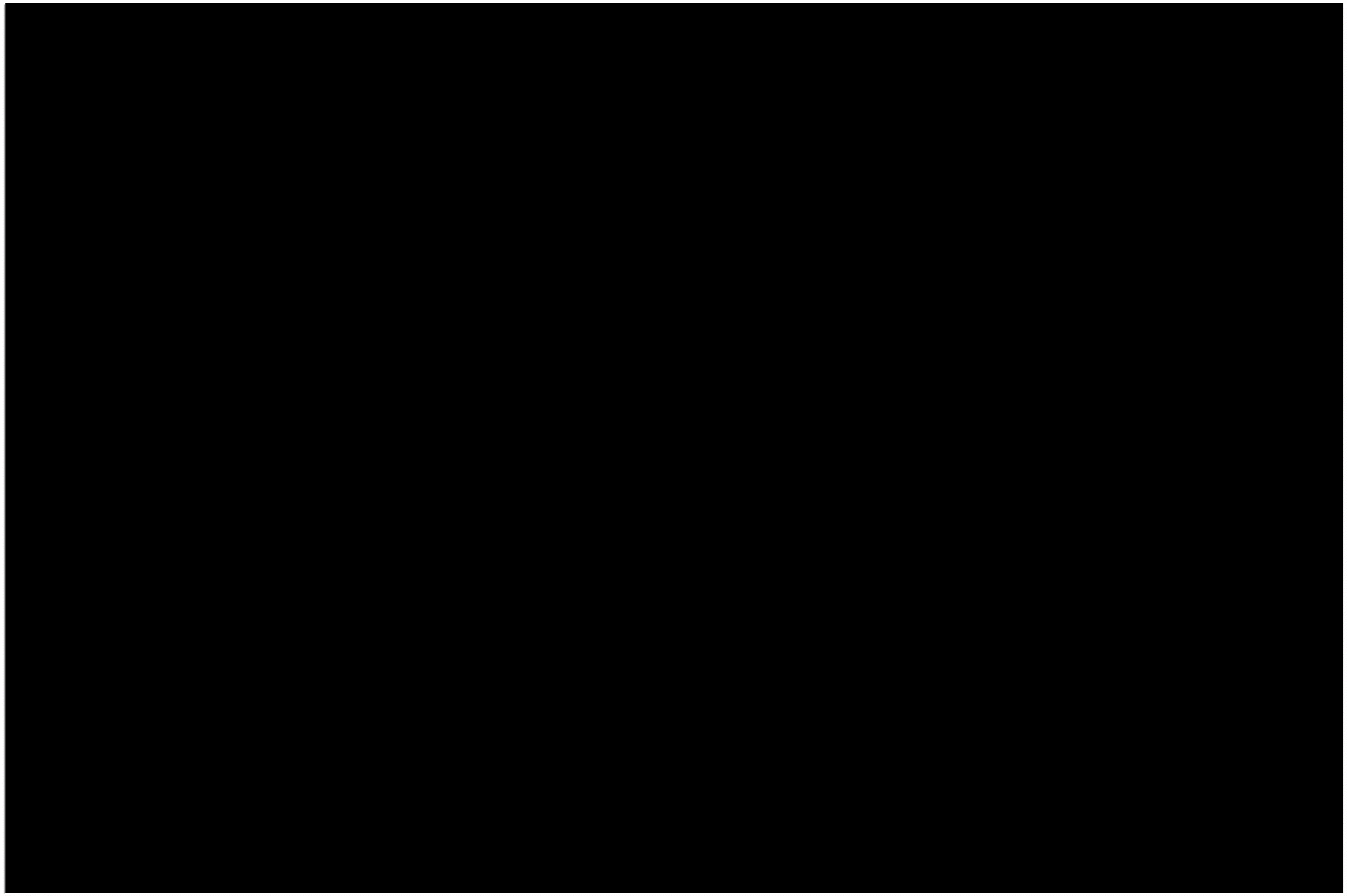
- H&P rig mobilised the super-spec FlexRig® Flex 3 Rig (2023)
- Entered an agreement with Liberty Energy to bring in modern frac fleet (2024)
- Applied to increase in Water Extraction Licence Volume from 175ML to 450ML
- Extractive mineral exploration licences submitted to find sand (2024)
- 2024 EMP needs to be approved by minister on in mid-May for activity to commence



Roadmap to production recap

[redacted]

[redacted]



2024 Proposed Work Program

Proposed 2024 Work Program

Existing approved scope

- Continue well testing the Shenandoah S-1H well (already approved)

New scope under the Shenandoah South E&A EMP:

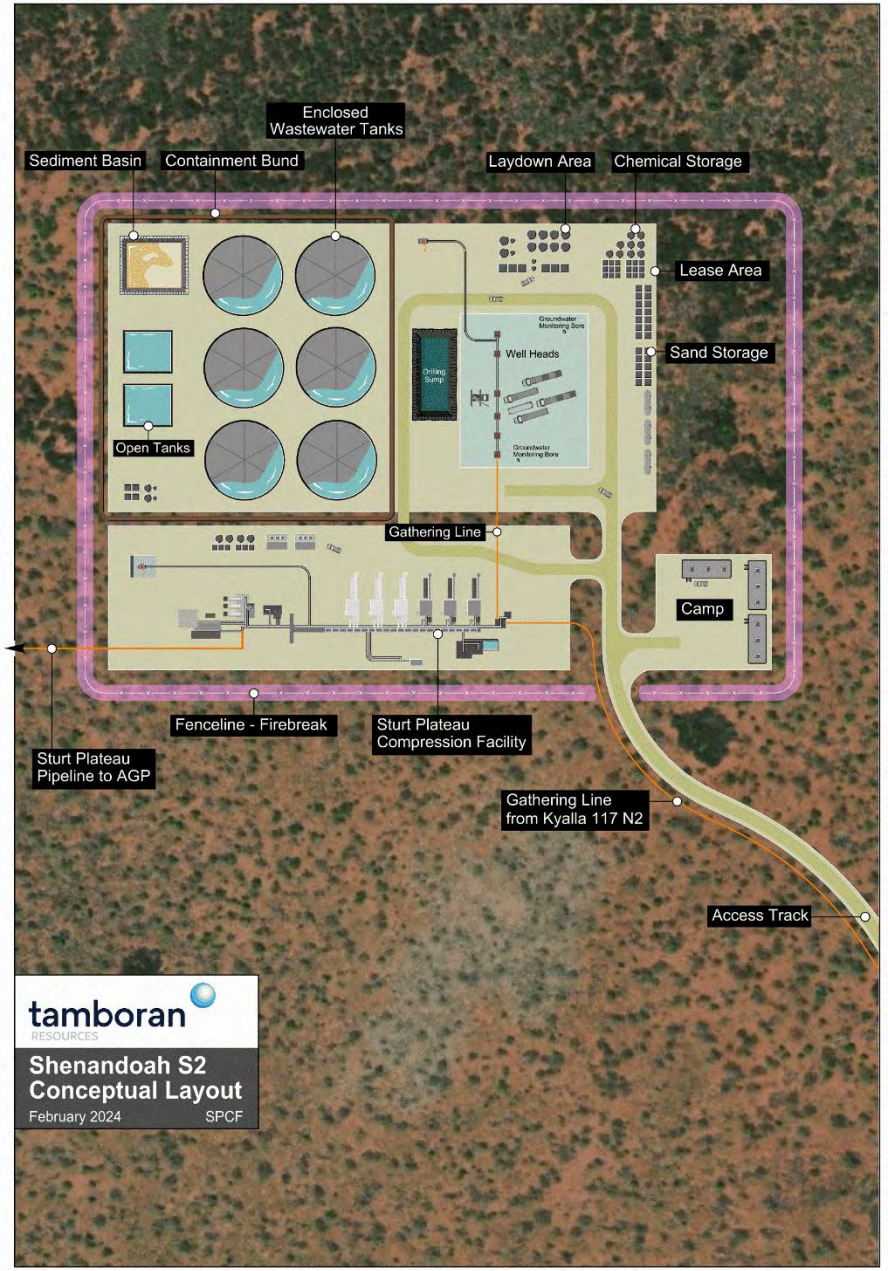
- Construct the new Shenandoah S2 location (civils and water bores)
- Drill, stimulate and well testing of 2 new wells on the Shenandoah S2
- Construct the new location Shenandoah North A and drilling of a new E&A well (contingent)

New scope [redacted] under development:

- [redacted]
- Sturt Plateau Compression Facility EMP covering appraisal gas sale and compression facility

Shenandoah South 2 Construction

- Construction of new Shenandoah S2 including lease pad, camp pad, gravel pit, access tracks and laydown yard
- Located ~3.5km NW of existing Kyalla 117 N2
- Land clearing and civil construction to support activities (~20-25 hectares)
- Drilling water bores (4-6 bores)
- *Images from the Beetaloo*




Lease pad being constructed with water bore being drilled


Drill sump being dug


Access track being maintained/ upgraded

Drilling, stimulation and testing 2 new wells

- Similar activities as before- with larger horizontals
- Drilling of 2 new 3000m horizontal wells on Shenandoah S2
- Stimulation and well testing up to 360 days
- Wastewater storage and evaporation (4-6 tanks)

Images from the Beetaloo project

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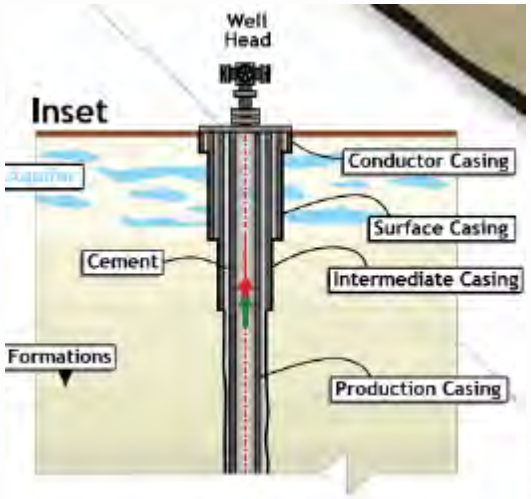
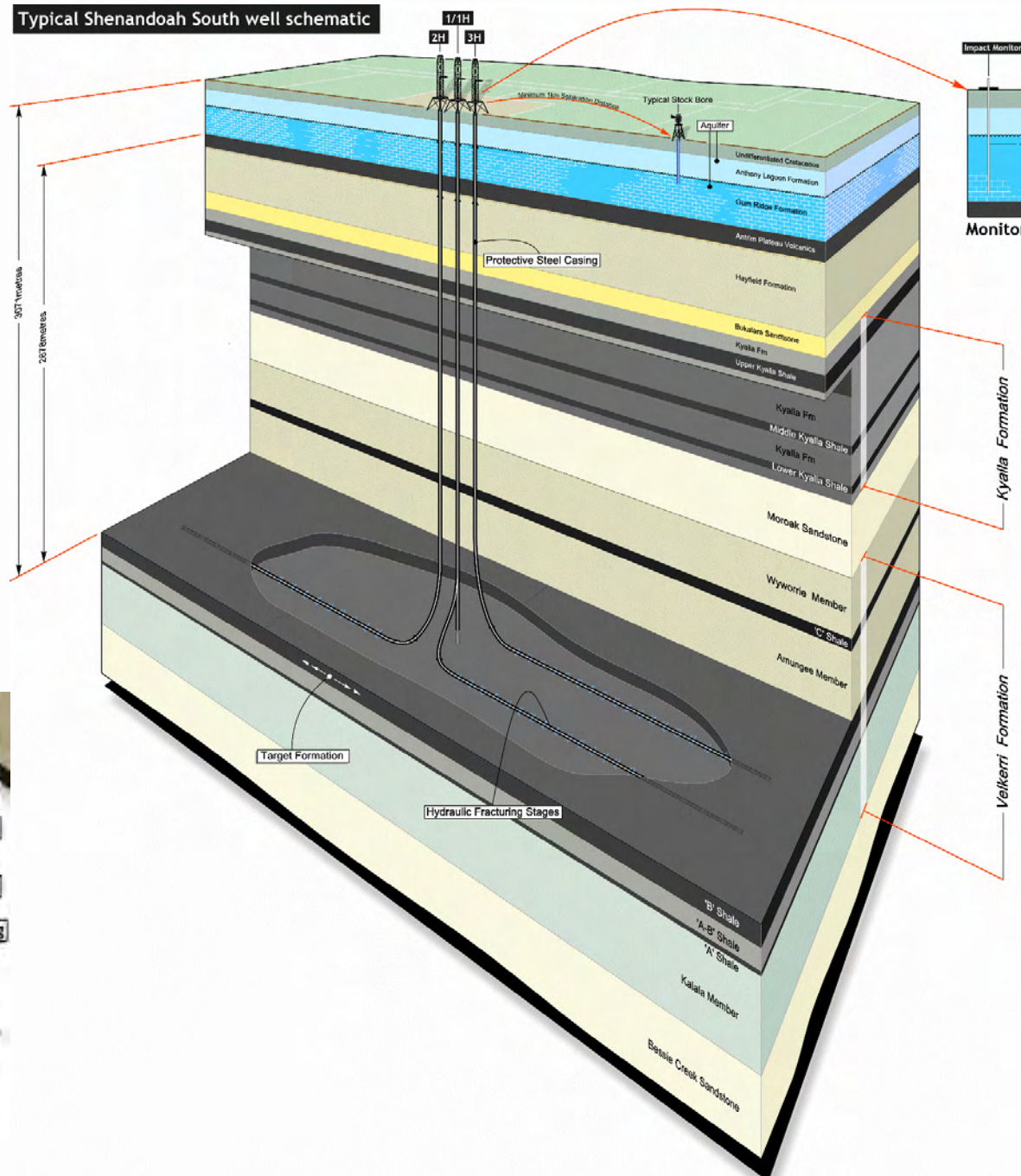
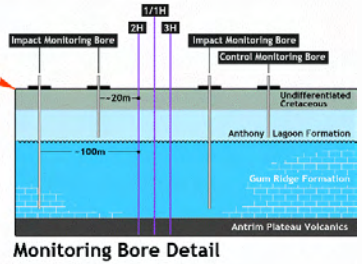
Groundwater protection a key priority

Multiple string of cement and steel protect aquifers







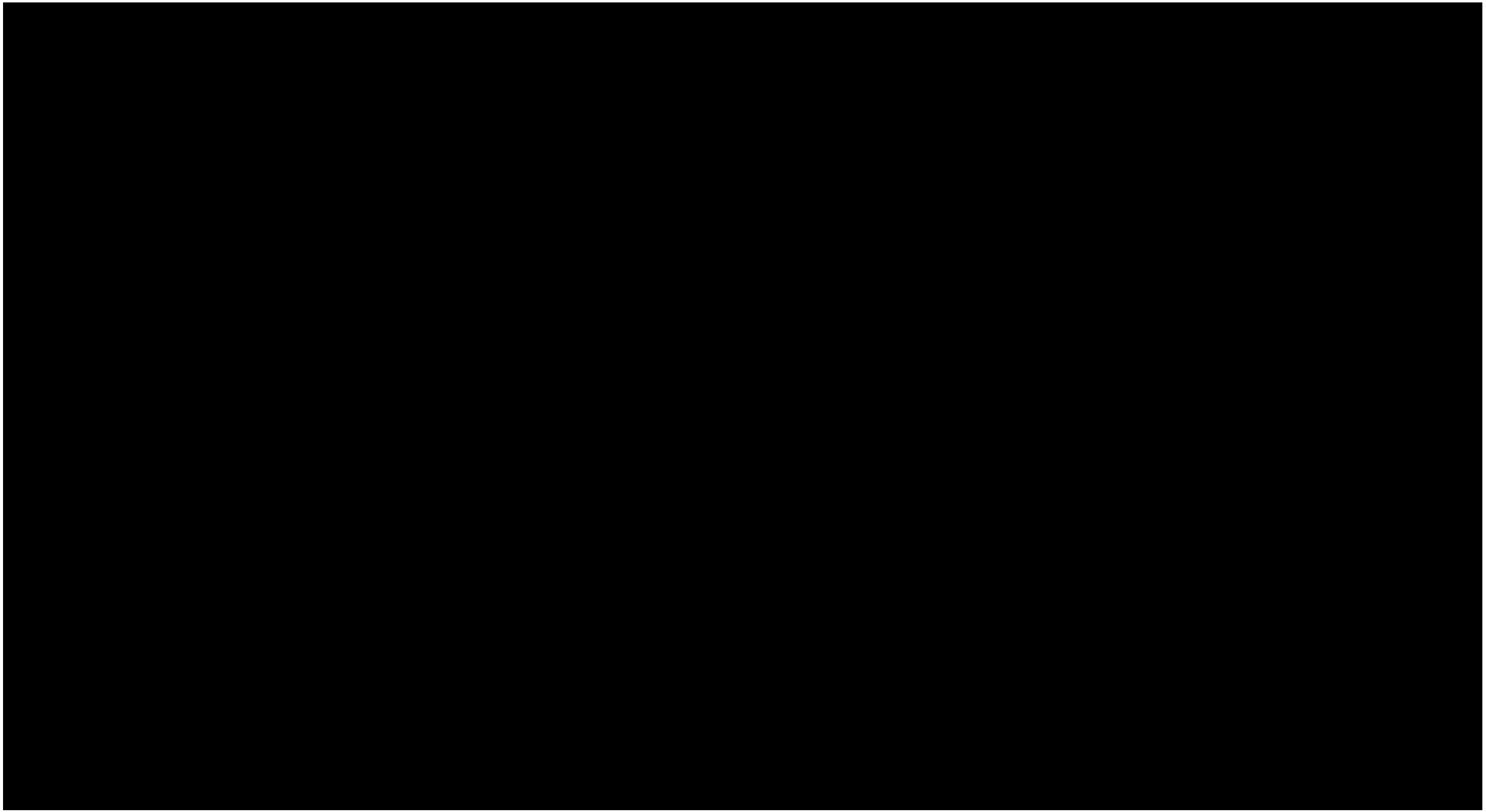
Monitoring Bore Detail

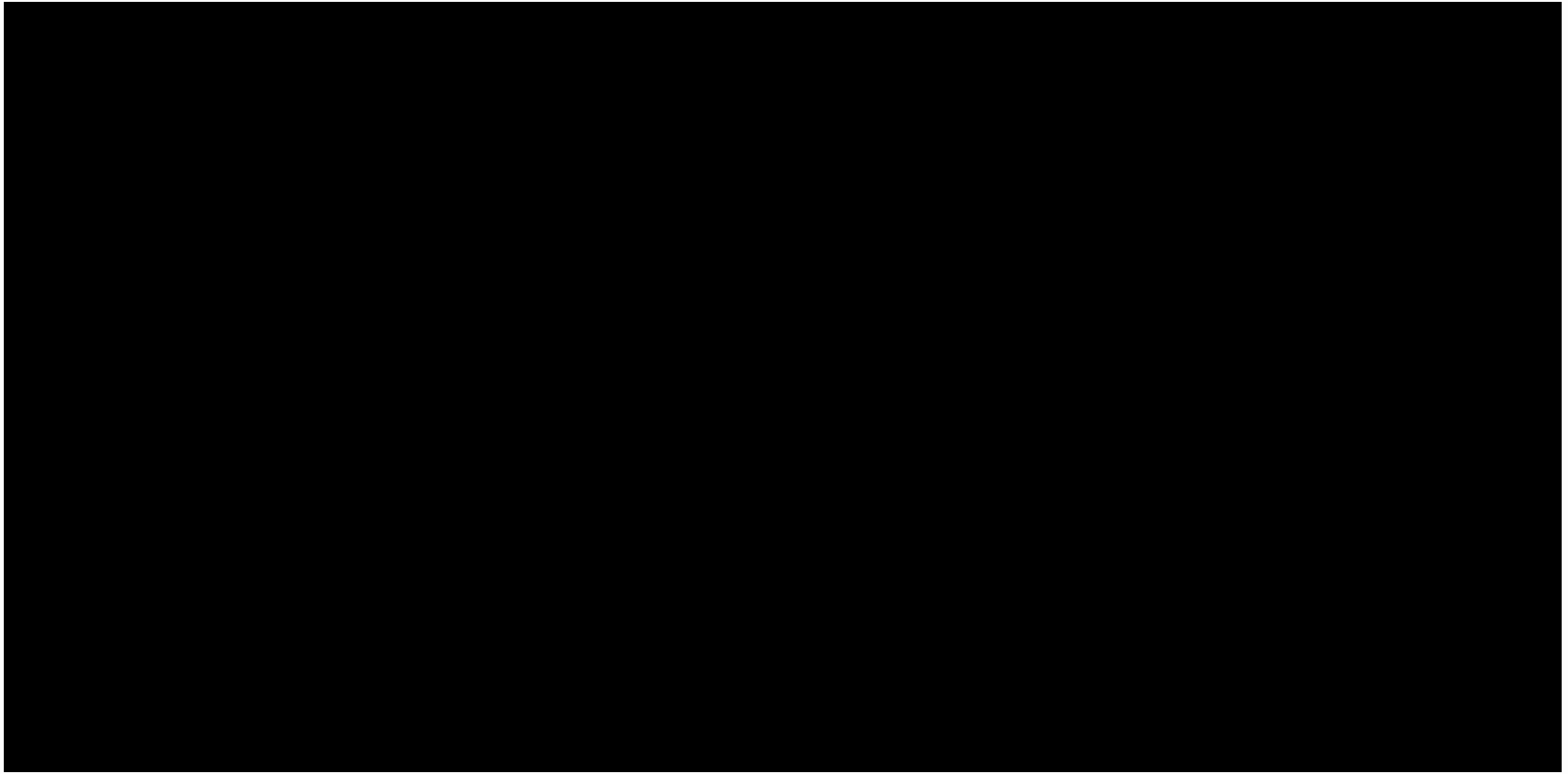
- Typical well schematic- noting Shenandoah Nth A will not have a horizontal
- Wells targeting the Velkerri B –shale
- Approximately 3,100- 3,500m below ground level
- ~2600m below the closest aquifer
- Groundwater is monitored quarterly

Shenandoah North A

- Located within Subject Land 1
- Construction of new 3 ha Shenandoah NA including lease pad, camp pad and access tracks, land clearing and civil construction
- 2024/2025
- Drilling water bores (1-2)
- Drilling of a vertical stratigraphy well
- Example provided is Amungee NW 1 being drilled

Drilling rig





Approvals- Environmental Management Plans, Water Extraction Licences and Beneficial use of Gas Approvals

Other regulatory approvals

- Tamboran continues to consult with the NLC in obtaining the relevant approvals required for its Explorational and appraisal Activities.
- Key approvals for 2024 include:
  - Shenandoah South Exploration and Appraisal Emp
  - [redacted]
  - Sturt Plateau Compression Facility and Appraisal Gas Sale
  - Gum Ridge [redacted] Water Extraction Licence
  - We will discuss these in the following section

Shenandoah South Exploration and Appraisal EMP

Shenandoah South E&A Program EMP

— New Environment Management Plan (EMP) covering activities in Subject land 2 (existing Kyalla 117 N2 area) and Subject Land 1.

— Similar activities as previously completed (drilling, stimulation and well testing) **spread over 5 years- Work program 2024 falls under this EMP, as will future works in 25/26.**

— Activities include:

- **Subject Land 2:**
  - 2D seismic program (76KM)
  - 3 new exploration locations; Shenandoah S2, Shenandoah S B and Shenandoah S C
  - Extension of Kyalla 117 N2 location
  - Drilling ,stimulation of 15 new E&A wells
  - Gathering lines connecting sites to allow for water and gas transfers
- **Subject Land 1:**
  - 1 new exploration location at Shenandoah North A
- **Existing Beetaloo W-** to all future decommissioning (NLC cleared in 2014 and 2018)

EMP Engagement with NLC and NTHs - a long and ongoing process

On country meeting with Native Title Holders to confirm 2024 Work Program scope and ongoing engagement on the EMP

Tamboran will continue to engage on exploration activities and scope

Why we are here today

Summary of what is new in the Shenandoah South EMP

New sites

- Construct up to 4 new exploration and appraisal sites and associated infrastructure (camps, access tracks and laydowns)
- New disturbance of ~75 hectares

Civil construction of Kyalla 117 N2 in 2019

Extension of Kyalla 117 N2

- Expansion of existing Kyalla 117 N2 well pad-
- New Disturbance of 4 hectares

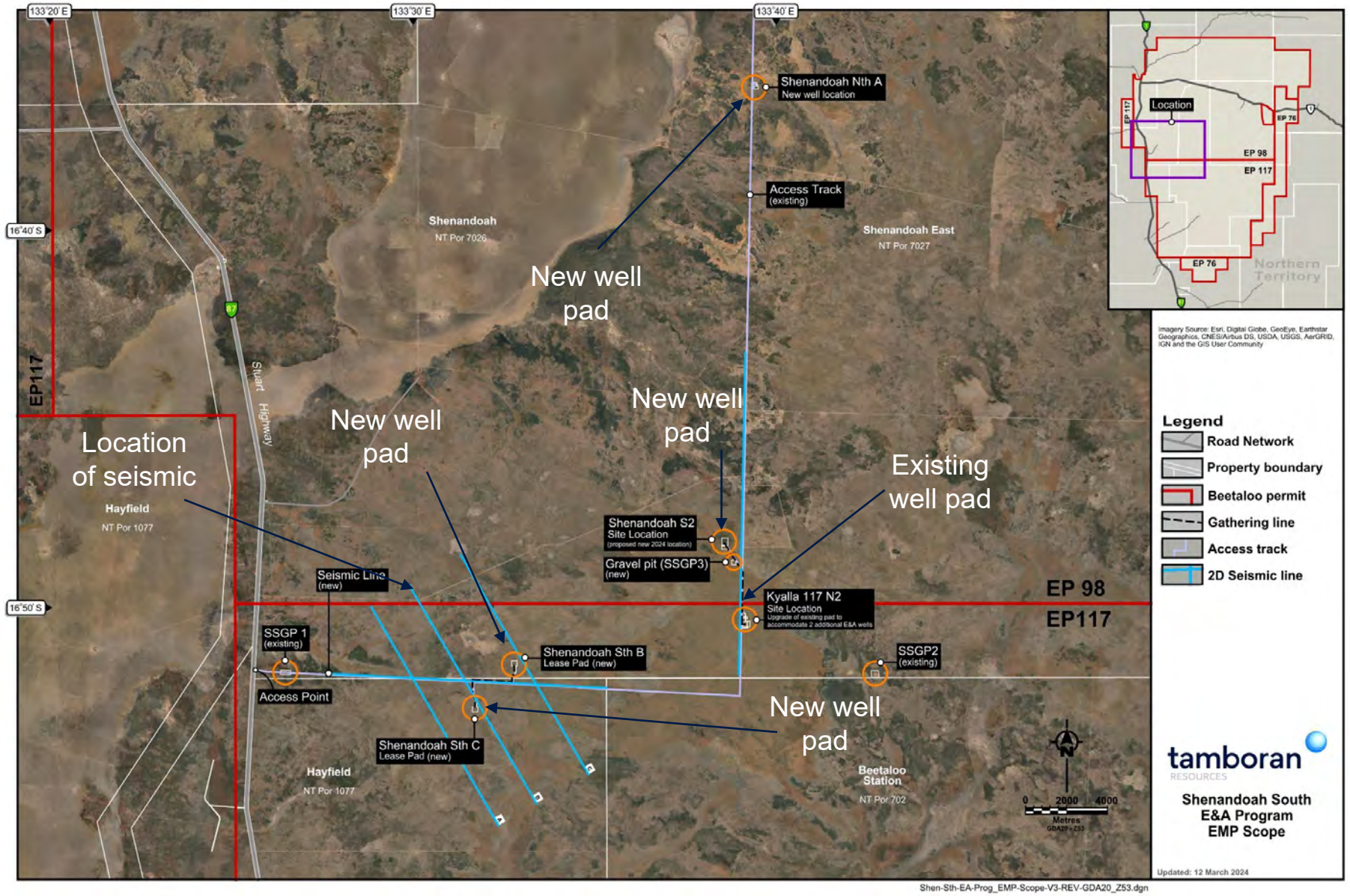
Velkerri 76 S2 construction underway

Drilling of water bores

- Up to 10 water bores at each site to monitor and extract water groundwater

Location of sites and well pad

- Sites located within Exploration Permit 98 and 117
- Site are about 30km from Dunmarra
- 80km from Elliott
- 25km from Jingaloo



What is new in the EMP

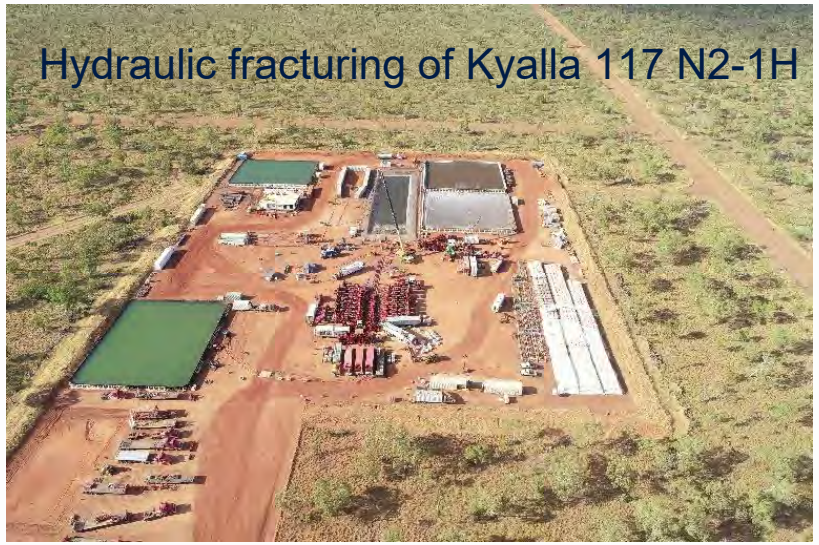
Drilling works

- Tamboran proposes to drill 15 new wells over the next 5 years
- Multiple wells per site (4-6)
- 3000m horizontals (long) at ~3,100 to 3,500m below ground level (deep)
- 1 Vertical well in Subject land 1.

Stimulation and testing of well

- Hydraulic fracture stimulation on each horizontal well
- Testing of well will occur from between 90 to 300 days
- Testing will include flaring

Drilling of Kyalla 117 N2-1H looking over mud sump



Hydraulic fracturing of Kyalla 117 N2-1H

Flaring during well testing

SHENANDOAH S1-H, NORTHERN TERRITORY AUSTRALIA

What is new in the EMP

Access Tracks

- Sealing of existing intersection track with Stuart highway
- Maximise use of existing tracks to reduce clearing
- Upgrade and maintenance of pastoral tracks
- Construction of new access tracks to new locations
- New disturbance ~20 hectares

Grading and forming of existing pastoral track to Kyalla 117 N2

Upgraded track with rock check drains

What is new in the EMP

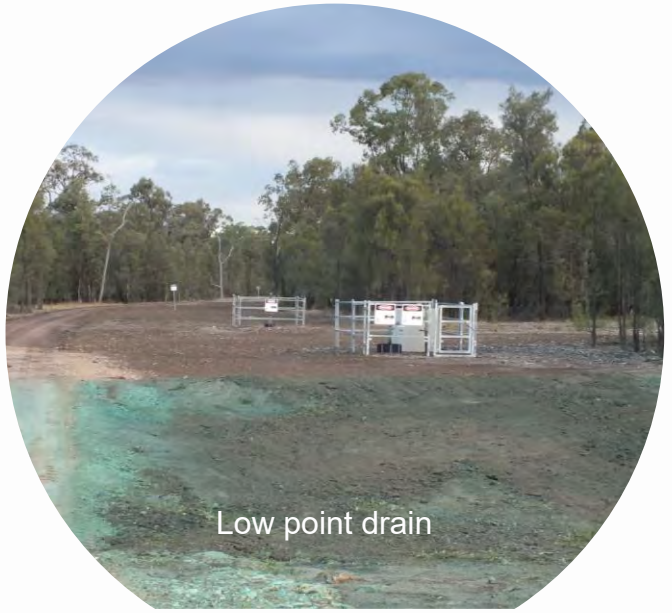
Gathering Lines (pipes)

- Pipelines allowing water and gas to be transported between sites
- Pipes mostly buried and located in cleared areas called “Right of ways”
- ~ 9 kilometres of gathering lines
- 8.5 hectares of new disturbance
- Reduces number of tanks and clearing
- Leak detection used to identify leaks

Civil construction of Kyalla 117 N2 in 2019


High point vent

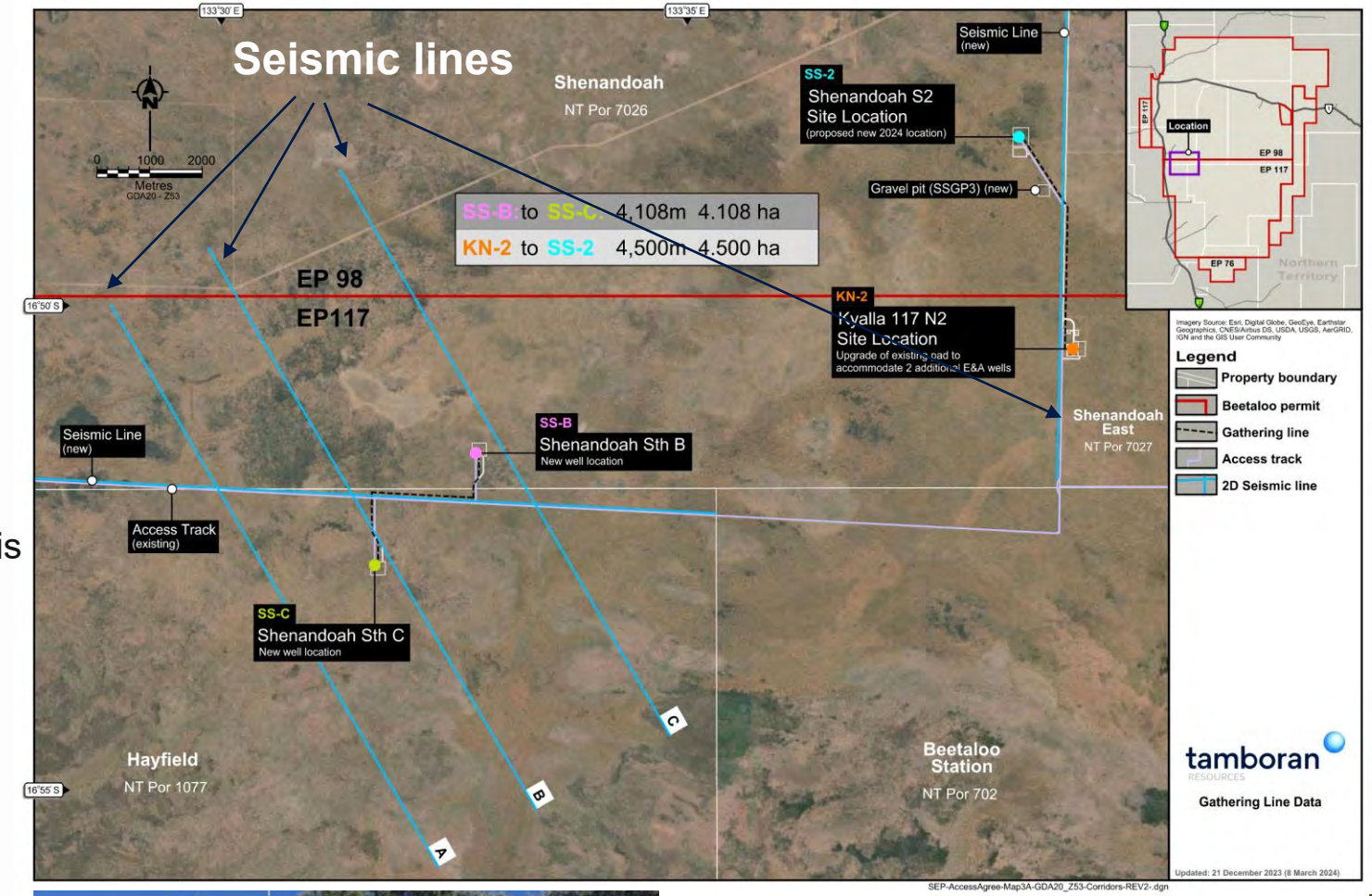
Reinstated gathering right of way


Low point drain

What is new in the EMP

Seismic testing

- Projecting sound wave into earth, reflecting off underground rock formation
- 3 New seismic lines and collection along existing pastoral track
- Use of dynamite charges or conventional vibroseis
- Emphasis on avoidance of clearing as much as possible
- Clearing up to 20 hectares



Vibroseis

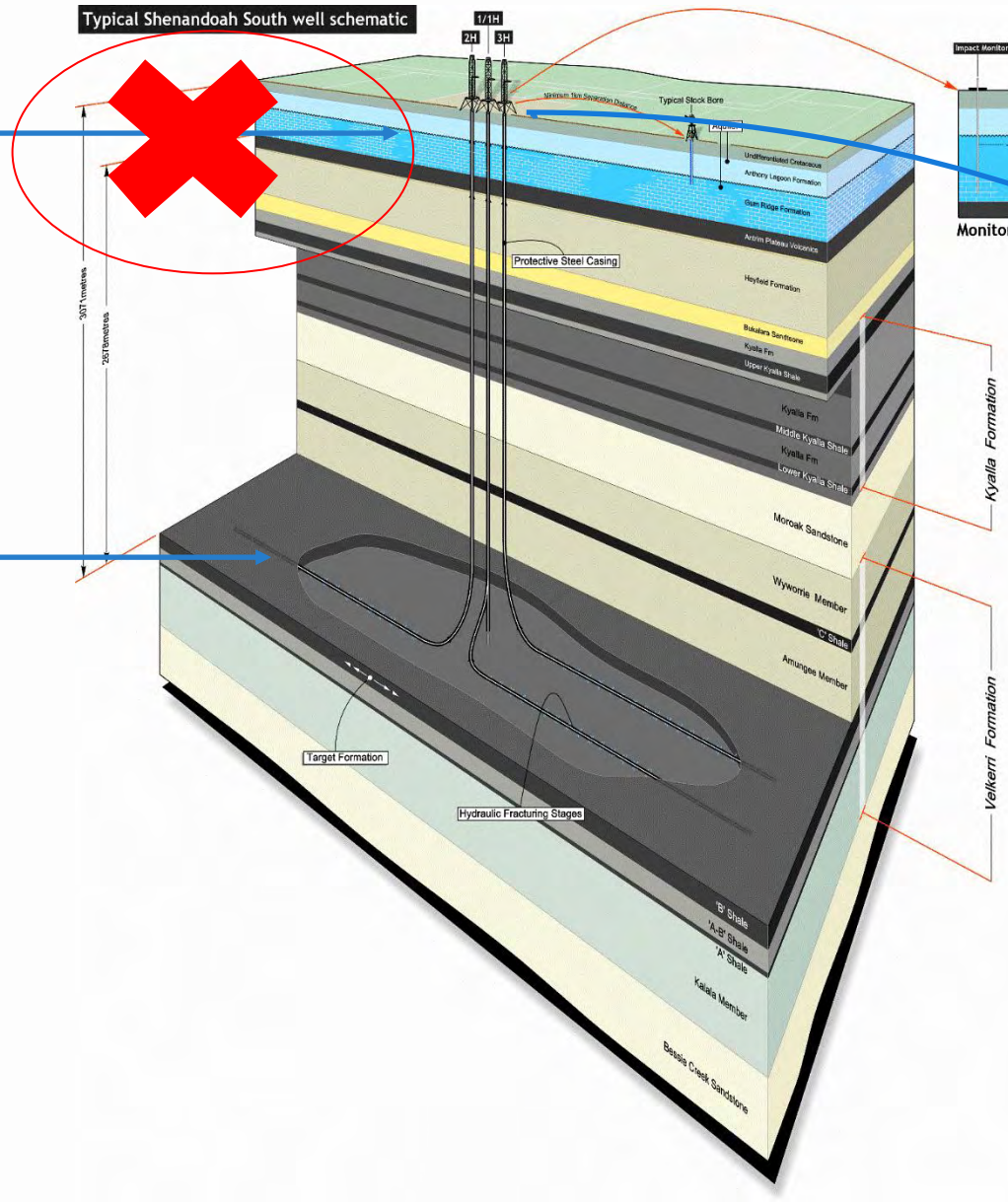

Installation of dynamite charges

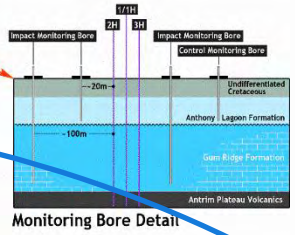
Management of Impacts - Land Clearing

- Clearing of vegetation is required to construct sites and access tracks
- Sites are scouted by ecologists and cultural managers during site selection
- Sensitive sites are avoided
- No clearing in creeks and watercourses proposed
- Cultural managers employed to inspect areas prior to clearing to identify any fauna
- Activity will stop and fauna will be allowed to leave/ removed from the area
- Clearing to avoid large trees and nests where possible

Management of impacts- chemicals

We do not inject fluid here-





Monitoring Bore Detail

We monitor groundwater on each site to detect impacts

Hydraulically fracturing injects fluid here ~3.2km deep

Flowback is returned to double lined wastewater tanks. Water is evaporated or recycled- with any waste removed from site.
<u>No release to creeks or bushland</u>

Management of Impacts - Chemicals and Spills

- Every chemical has the risk of causing harm if used incorrectly- it's not what the chemical is, but how you manage it
- The management of chemicals is standard in industries and businesses across Australia with standardised legislation
- Chemicals used in fracking are not new or special- most can be found in supermarkets, poll shops or hardware stores e.g guar gum, bicarb soda, salt, vinegar and borax
- they are often used in other industries ranging from food preparation, cosmetics or water treatment.
- All chemicals are assessed and approved for use in Australia- they are not secret

Controls

- Hydraulic fracturing chemicals are not injected into aquifers
- All chemicals are stored and handled in bunds to contain spills
- Any spill is cleaned up immediately and reported
- Chemicals are removed from site once we finish and are not disposed of in the bush

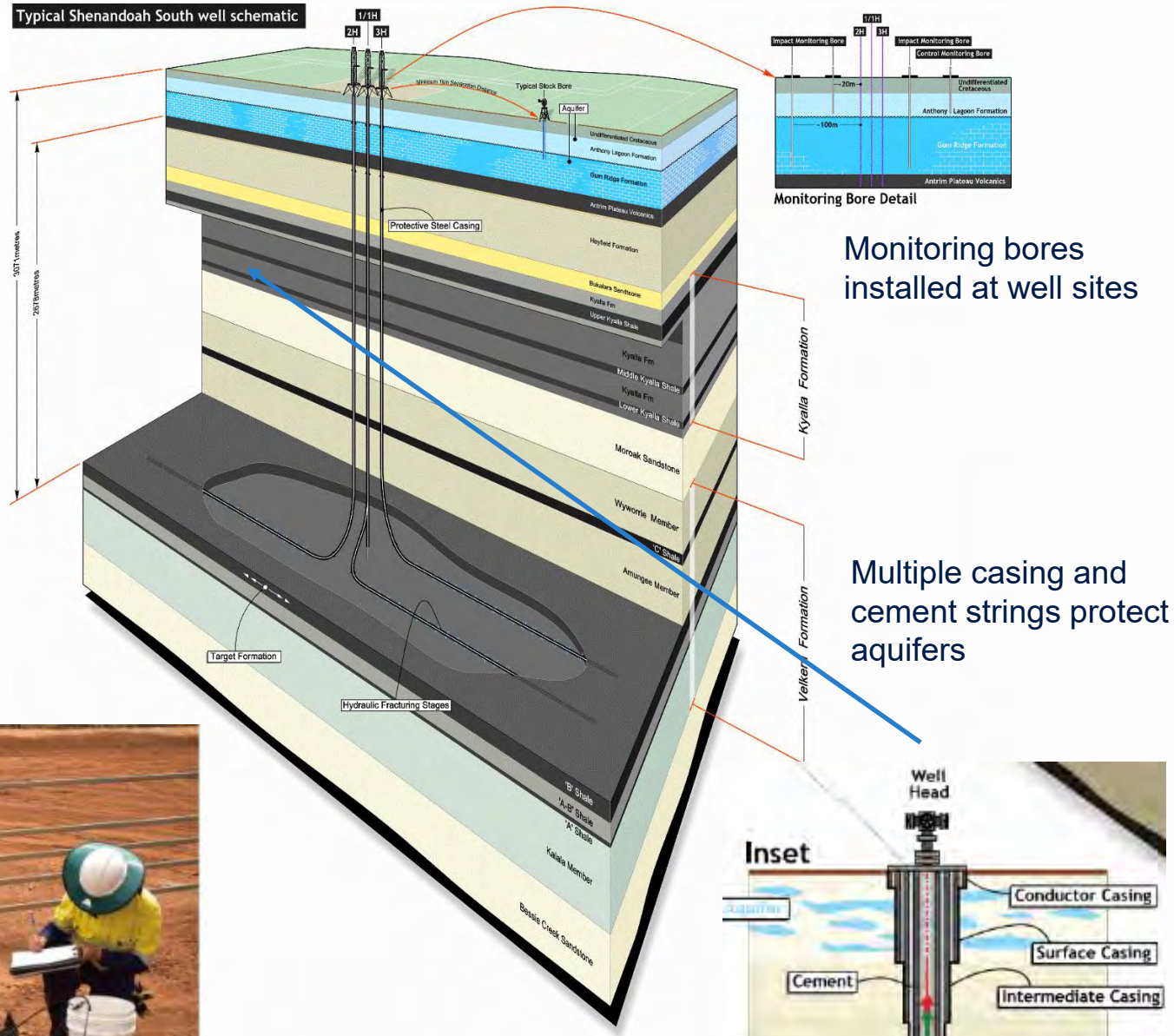
Domestic use

We use chemicals safely on a larger scale

Stimulation use

Management of impacts- Groundwater protection

- The target shales are ~2.6km below the closest regional aquifer (Gum Ridge)
- Wells are designed and constructed with multiple layers of steel and cement to protect aquifers
- We test and monitor the integrity of wells
- We monitor groundwater at each well site
- Wells are plugged with cement at the end of life



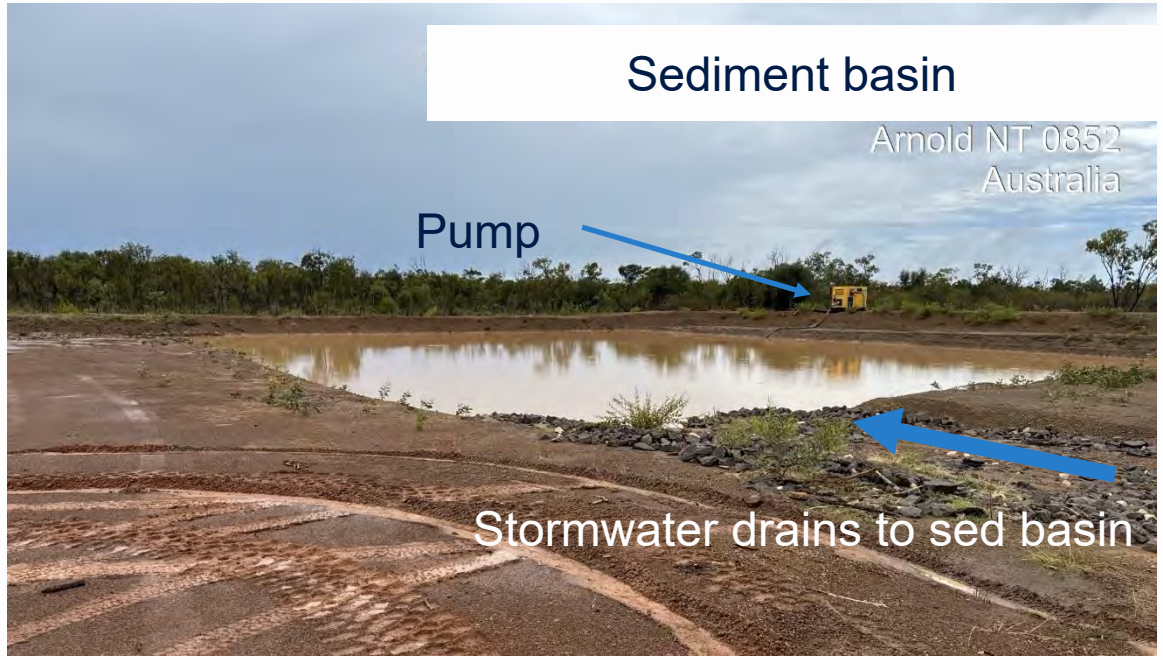
Stormwater Management

Stormwater is collected during flowback wastewater storage

This ensures any spills or wastewater are captured before leaving site.

The water is tested to make sure it's clean

Clean (uncontaminated) stormwater is then released to the surrounding bush



Drilling cutting and mud mix bury cover

- Where safe to the environment, drilling muds and cuttings will be buried onsite via mix-bury cover.
- Cuttings from rocks returned to surface is the largest source of waste.
- Water will be drained/evaporated and material dried out
- Testing of waste will determine if waste can be buried or trucked offsite
- Salt (Chlorides) is the main compound which can be managed through mixing and capping.
- Vegetation will regrow on the capped sump similar to landfills.


Sump at end of drilling with cuttings, mud and fluid


Water from sump removed and trucked offsite material blended, lined and then buried


Grass and vegetation allowed to regrow (picture of rehabilitation of a site in QLD)

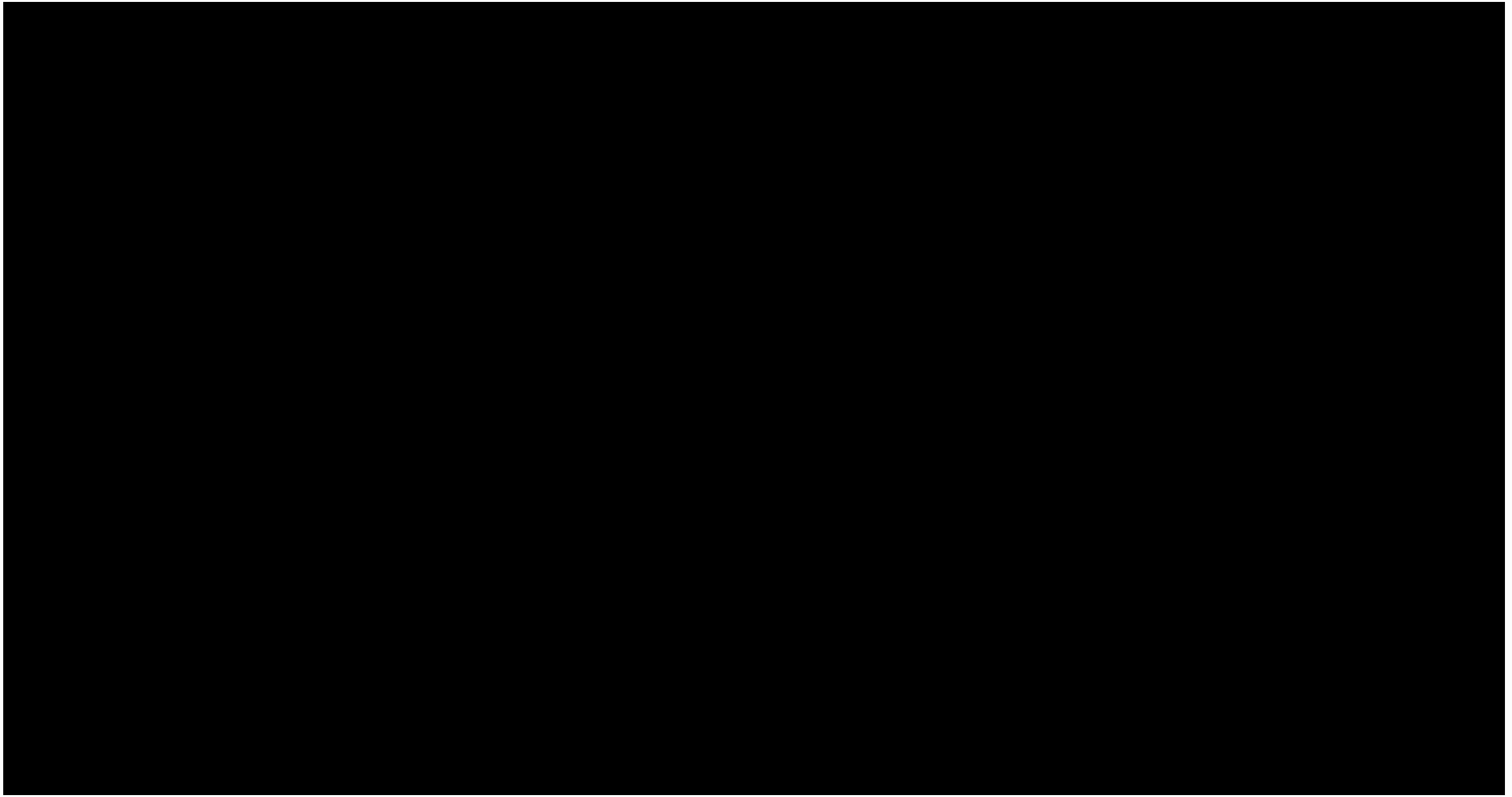
Management of Wastewater

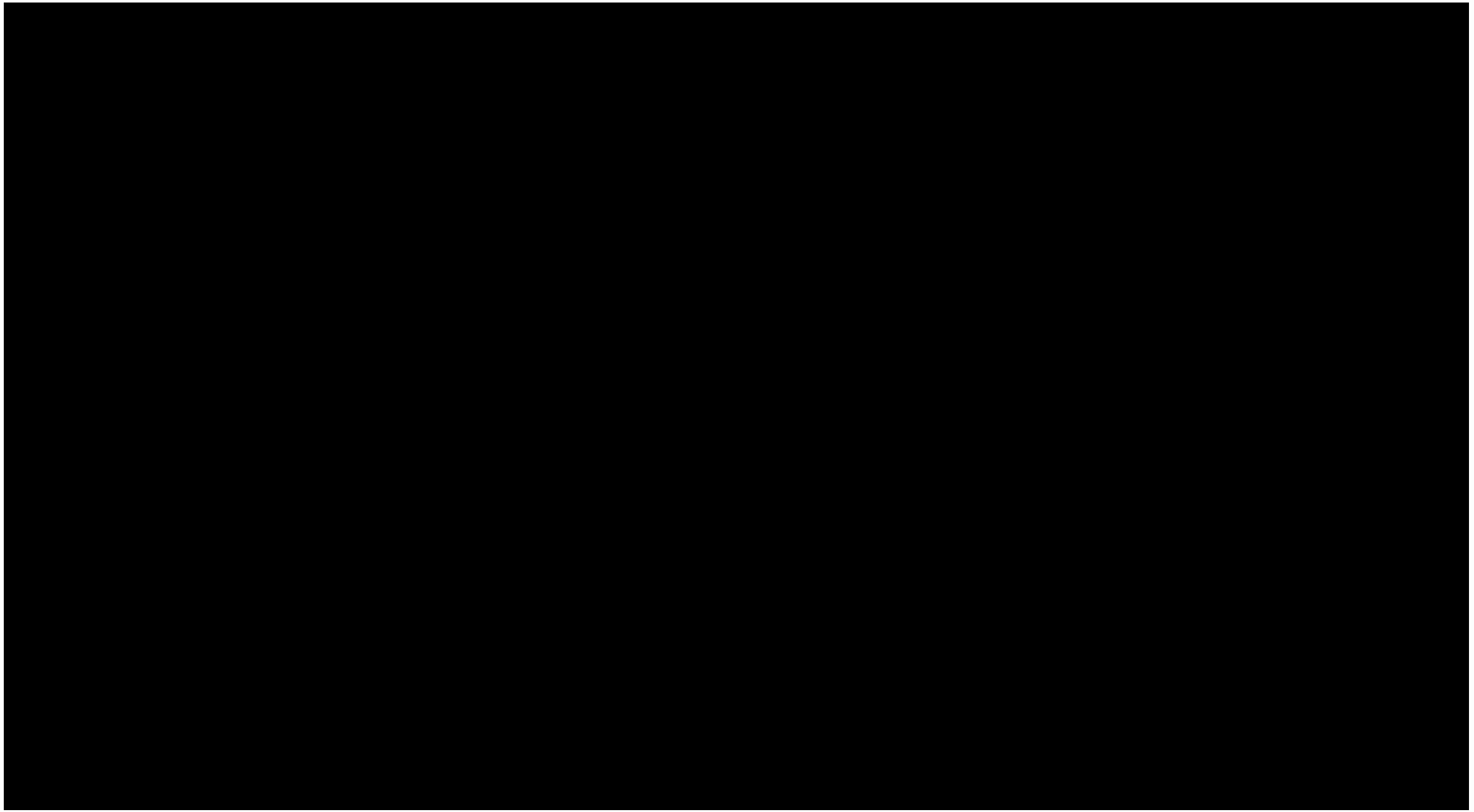
- Tamboran cannot release wastewater to the environment
- All flowback wastewater must be stored in enclosed tanks and removed from site at the end
- Open tanks can be used for evaporation to reduce volumes and trucking
- Open tanks/sumps must have 1300mm of freeboard (enough to manage an entire 1:1000 ARI wet season)
- All tanks are double lined with leak detection
- Tamboran is intending to trial wastewater recycling in 2025/2026 to reduce waste generated and raw water usage

Decommissioning and rehabilitation works

- Decommissioning wells and rehabilitating disturbed areas back to pre-existing levels
- Plugging wells with concrete to protect aquifers
- Removing all infrastructure, re-spreading topsoil and reseeding vegetation

Example of a site being progressively rehabilitated in QLD





New Sturt Platea compression facility and appraisal gas sale EMP

Includes appraisal gas sale

Appraisal Gas Sale Project

➢Appraisal gas sale options

- Tamboran needs to produce gas during appraisal to test the underlying shales prior to investing in a development.
- This will allow the gas to be used for power generation in NT rather than the gas being flared.
- The sale of appraisal gas will increase financial and community benefits to Native Title Holders and will also decrease greenhouse gas emissions
- Appraisal gas is proposed to be generated from the 2 wells drilled on Shenandoah S2 in 2024 - new wells and locations will feed into the plant in the future (2025 and 2026).
- The appraisal gas will be sent to a newly constructed compression facility, referred to as the Sturt Plateau Compression Facility (SPCF)
- A new pipelines (Sturt Plateau Pipeline) is also proposed to be constructed by APA to connect the compressions facility to the Amadeus Gas Pipeline.

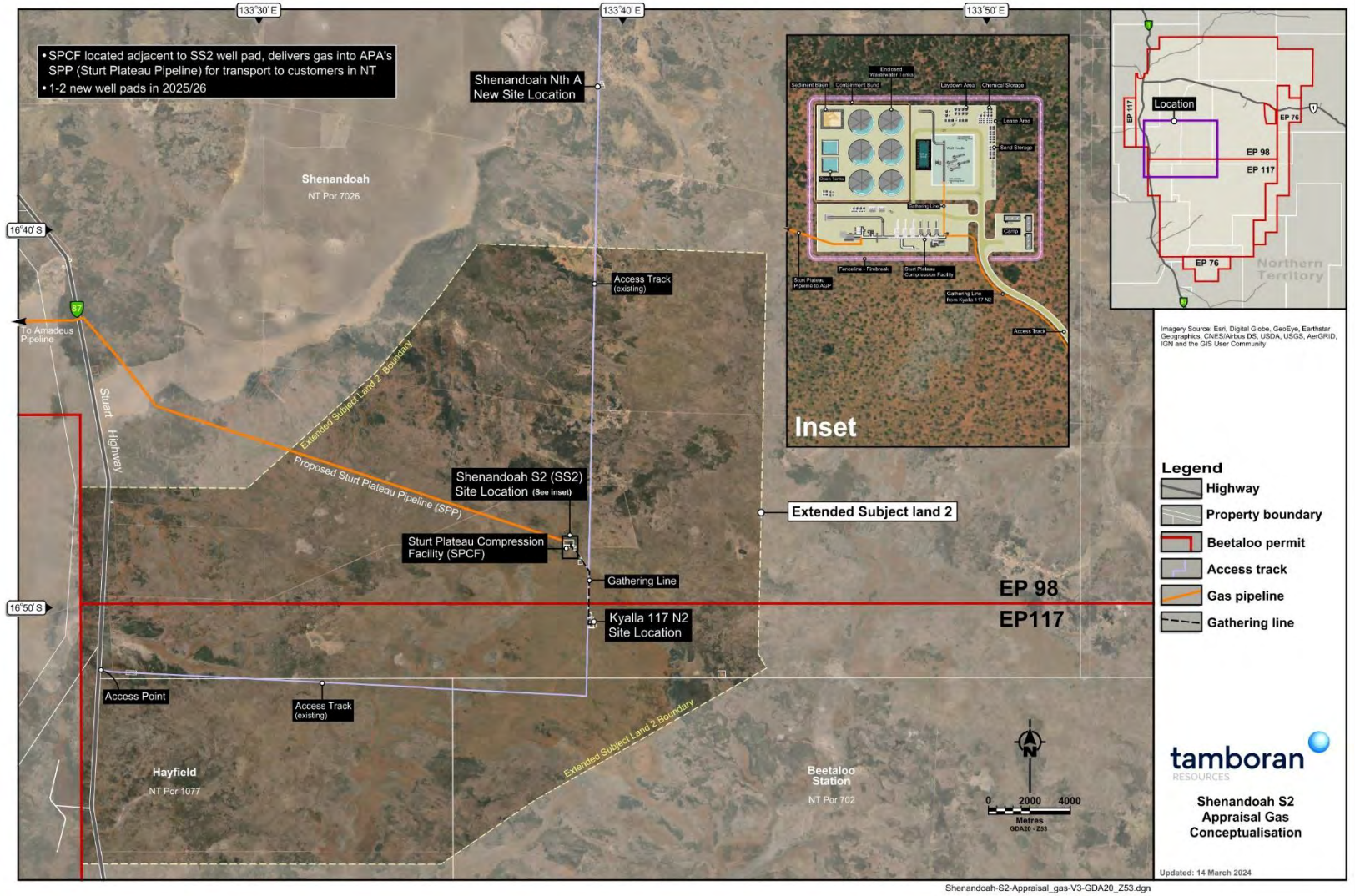
Example of small compression facility

Appraisal Gas Project Overview

- Tamboran proposes to build a temporary 60 TJ/day compression facility at the Shenandoah S2 location on the Hayfield Shenandoah Station (EP 117 and 98) to allow appraisal gas produced from Tamboran's project to be sold instead of flared.
- The Sturt Plateau Compression Facility (**SPCF**) will be constructed to pressurise the gas so that it can enter the Amadeus Gas Pipeline (AGP) via a new 35km pipeline called the Sturt Plateau Pipeline (**SPP).**

[redacted]

- The gas will likely be sold into the domestic Northern Territory market for NT power supply.
- Tamboran is proposing to sell appraisal gas for a minimum of 2 years, with an option to extend for a period of 12 months.



Flaring Gas Vs. Appraisal Gas

Existing - Appraisal gas is flared

- Gas burnt and not used or sold
- Higher greenhouse gas emissions
- No additional financial benefits to NTHs or NT
- Fewer job opportunities

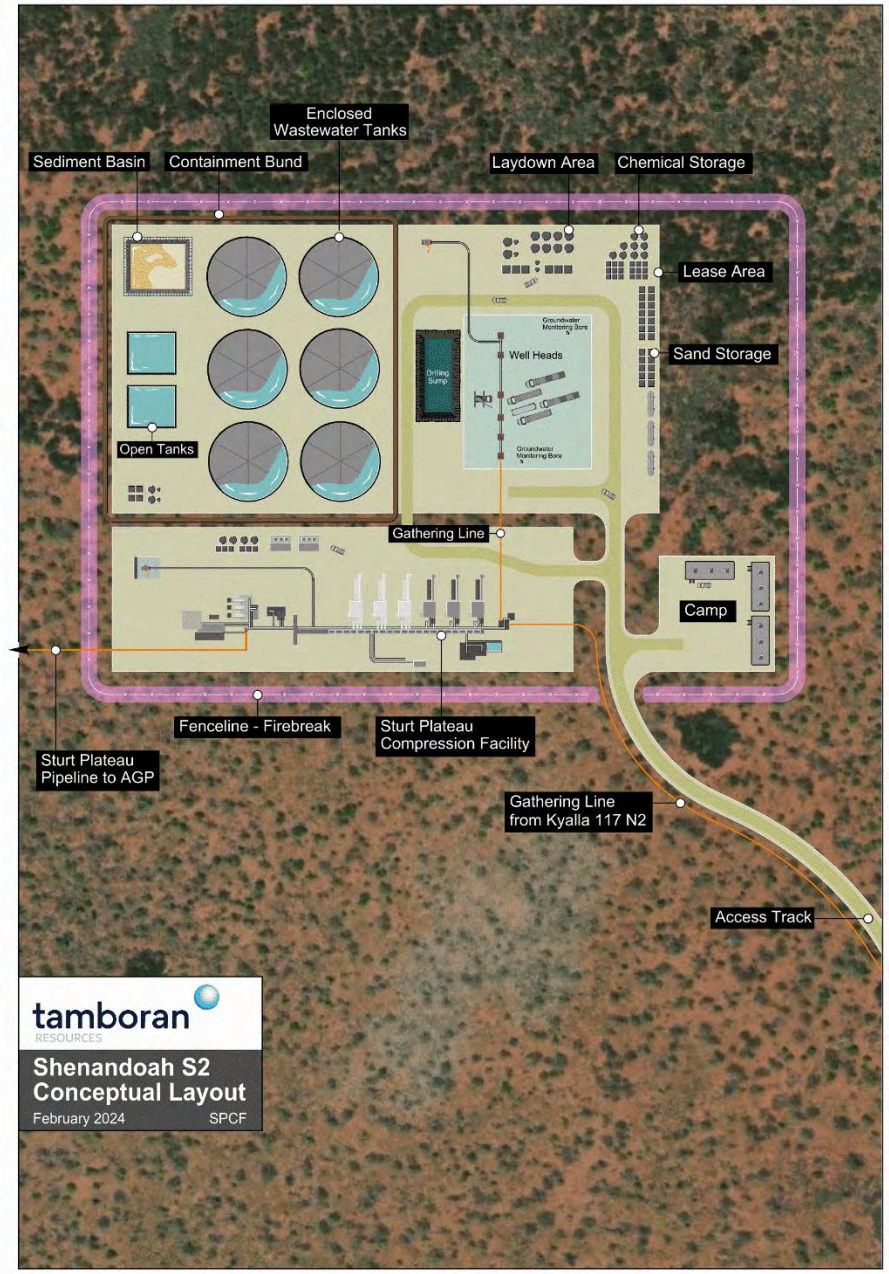
New Plan - Appraisal gas is sold

- Gas is likely sold into the NT for electricity
- Less greenhouse gas emissions than flaring
- More financial benefits for NTHs
- More job opportunities in construction and operation
- Requires a slightly larger clearing area of ~5 ha to support the compression facilities

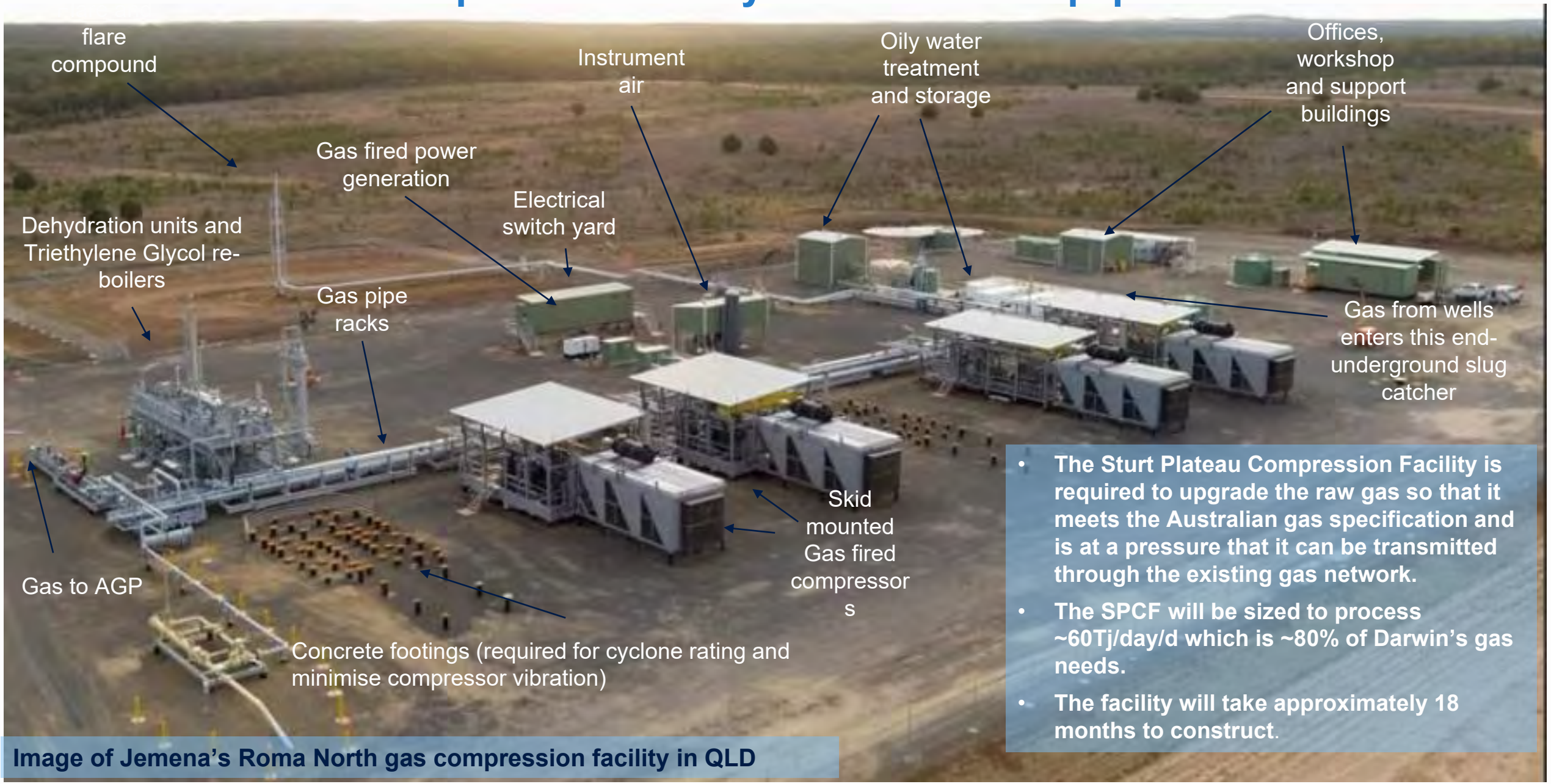
Shenandoah S2 - Appraisal Gas Project

- Sturt Plateau Compressor Facility (SPCF) located at Shenandoah S2 on EP 117, ~3.5Km NW of Kyalla 117 N2
- Facility will have a capacity of up to 60TJ/day
- Earthworks and footings proposed to be started in late 2024 - with compressor construction planned for 2025 dry season
- First gas proposed in Q1 2026 - with appraisal gas sold for 24-36 months
- 2-4 wells to be drilled and connected to facility each year to test new wells and locations (2024 and beyond)

Example of compressor station



Sturt Plateau Compression Facility – overview of equipment



- **The Sturt Plateau Compression Facility is required to upgrade the raw gas so that it meets the Australian gas specification and is at a pressure that it can be transmitted through the existing gas network.**
- **The SPCF will be sized to process ~60Tj/day/d which is ~80% of Darwin's gas needs.**
- **The facility will take approximately 18 months to construct.**

Image of Jemena's Roma North gas compression facility in QLD

Stuart Plateau Compression Facility: New EMP and BUG Approval

- Tamboran will submit a new EMP to the Government in mid 2024 covering the construction and operation of the of the SPCF and Appraisal Gas Sale at the Shenandoah S2 location.
- A separate Beneficial Use of Gas (BUG) application will be submitted to the NTG to authorize the sale
- Beneficial use of gas requires Native Title Holder consent prior to be approved

New SPCF EMP – Air and noise emissions

Image of Jemena's Roma North gas compression facility in QLD

- Environmental Controls- Air and noise
- Low emission gas fired engines to be utilised (Low Nox and CO)
- Diesel use to be minimised
- Instrument air to reduce pneumatic device venting
- Equipment blowdowns directed to flare to avoid venting
- Exhaust mufflers to be used to reduce noise
- Buffers between compressor facility and sensitive receptor
- Noise and air dispersion modelling completed- facility will comply with NEPM and NT Noise standards

New SPCF EMP– Land management

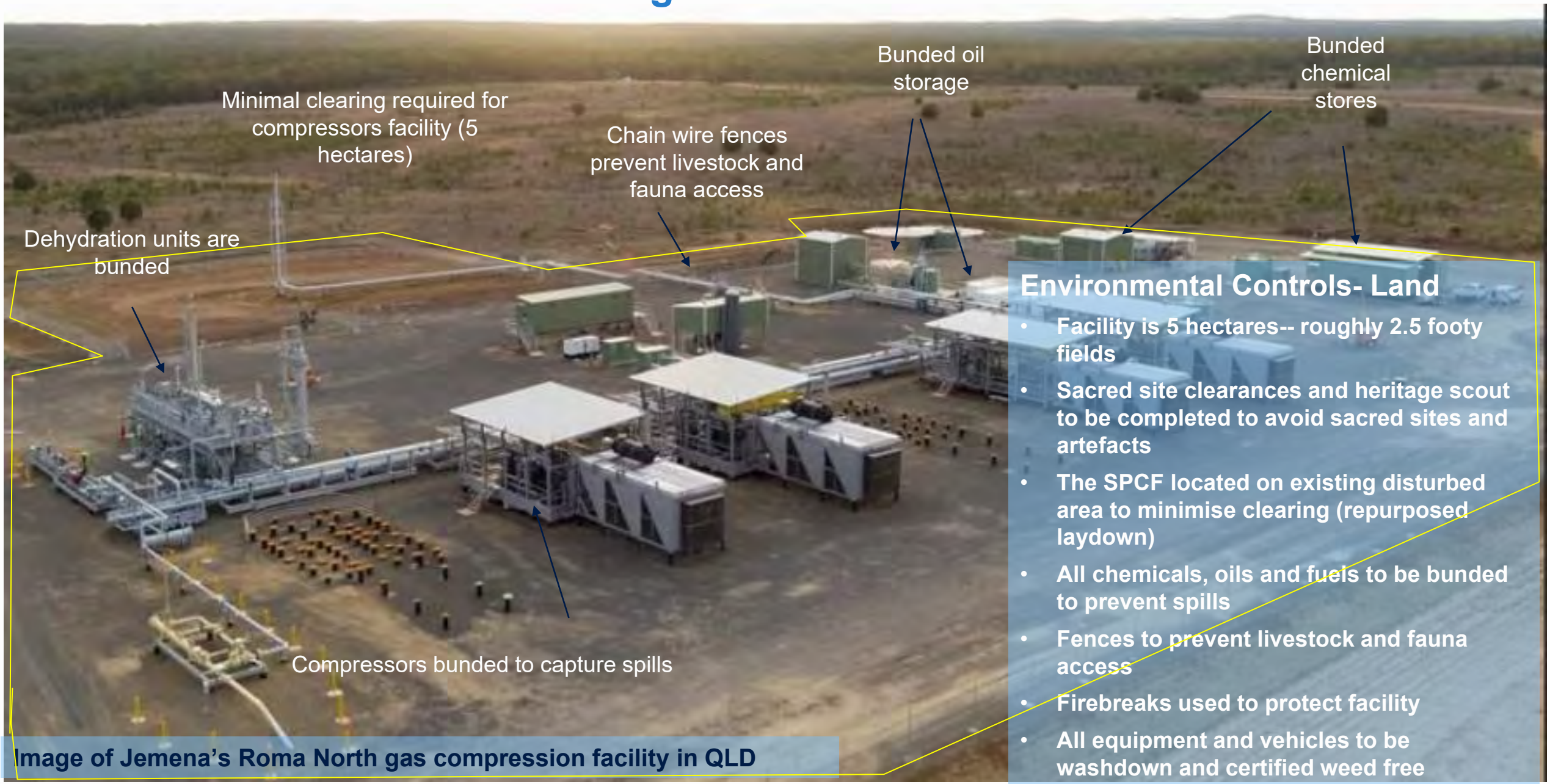


Image of Jemena's Roma North gas compression facility in QLD

Environmental Controls- Land

- Facility is 5 hectares-- roughly 2.5 footy fields
- Sacred site clearances and heritage scout to be completed to avoid sacred sites and artefacts
- The SPCF located on existing disturbed area to minimise clearing (repurposed laydown)
- All chemicals, oils and fuels to be bunded to prevent spills
- Fences to prevent livestock and fauna access
- Firebreaks used to protect facility
- All equipment and vehicles to be washdown and certified weed free

New SPCF EMP – Water management

Aerial view of Jemena's Roma North gas compression facility in QLD

Water Use

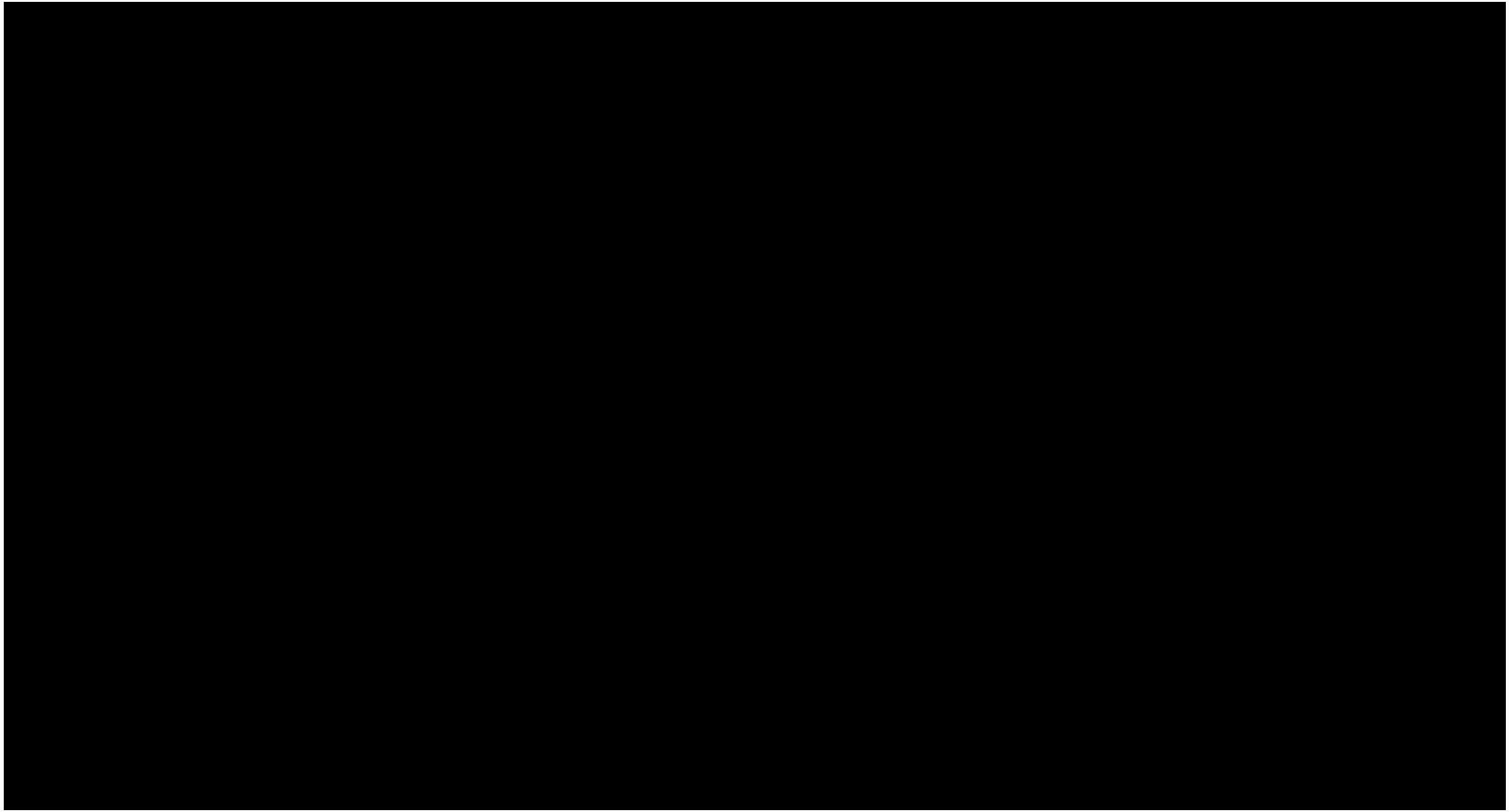
- Facility will not utilise much water- potentially 20-30ML during construction and 1-2ML per year during operations
- All water taken from Gum Ridge Aquifer under existing water extraction licence

Wastewater

- Any entrained wastewater in the gas stream will be separated and sent to wastewater tanks
- Oily water separators used to separate oil from compressor stormwater/ washdown water- waste oil captured and recycled offsite.
- All clean stormwater water sent to infiltration ponds where it is allowed to soak into the ground in a controlled fashion

Erosion and sediment controls

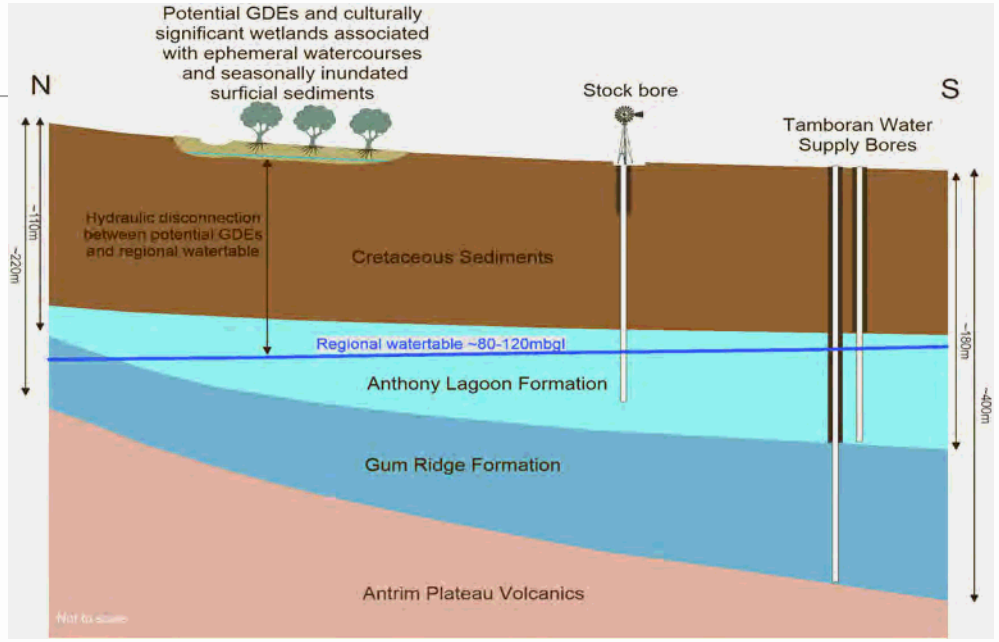
- Clean water to be diverted around site
- Clean water collected onsite to be directed to sediment basins for controlled release

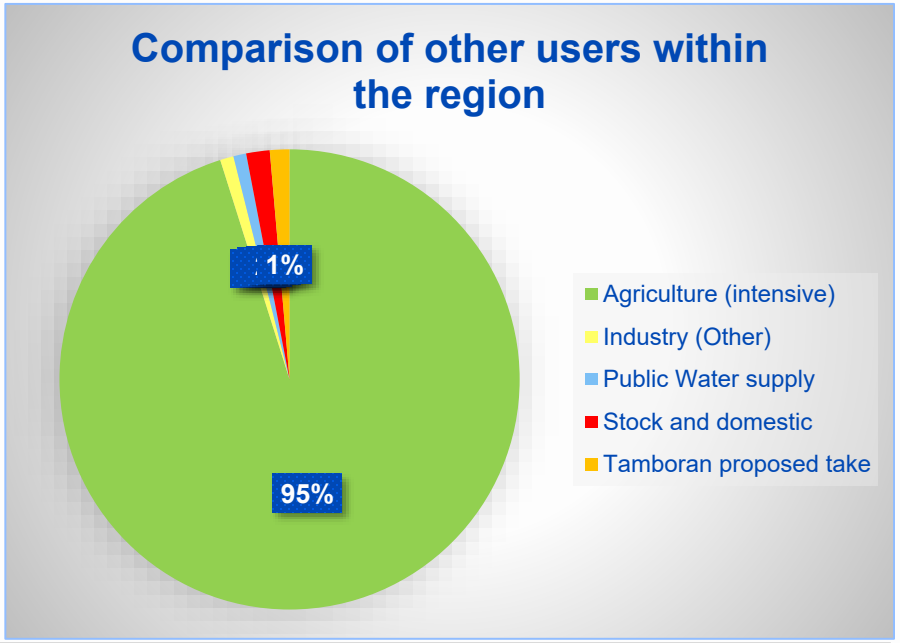


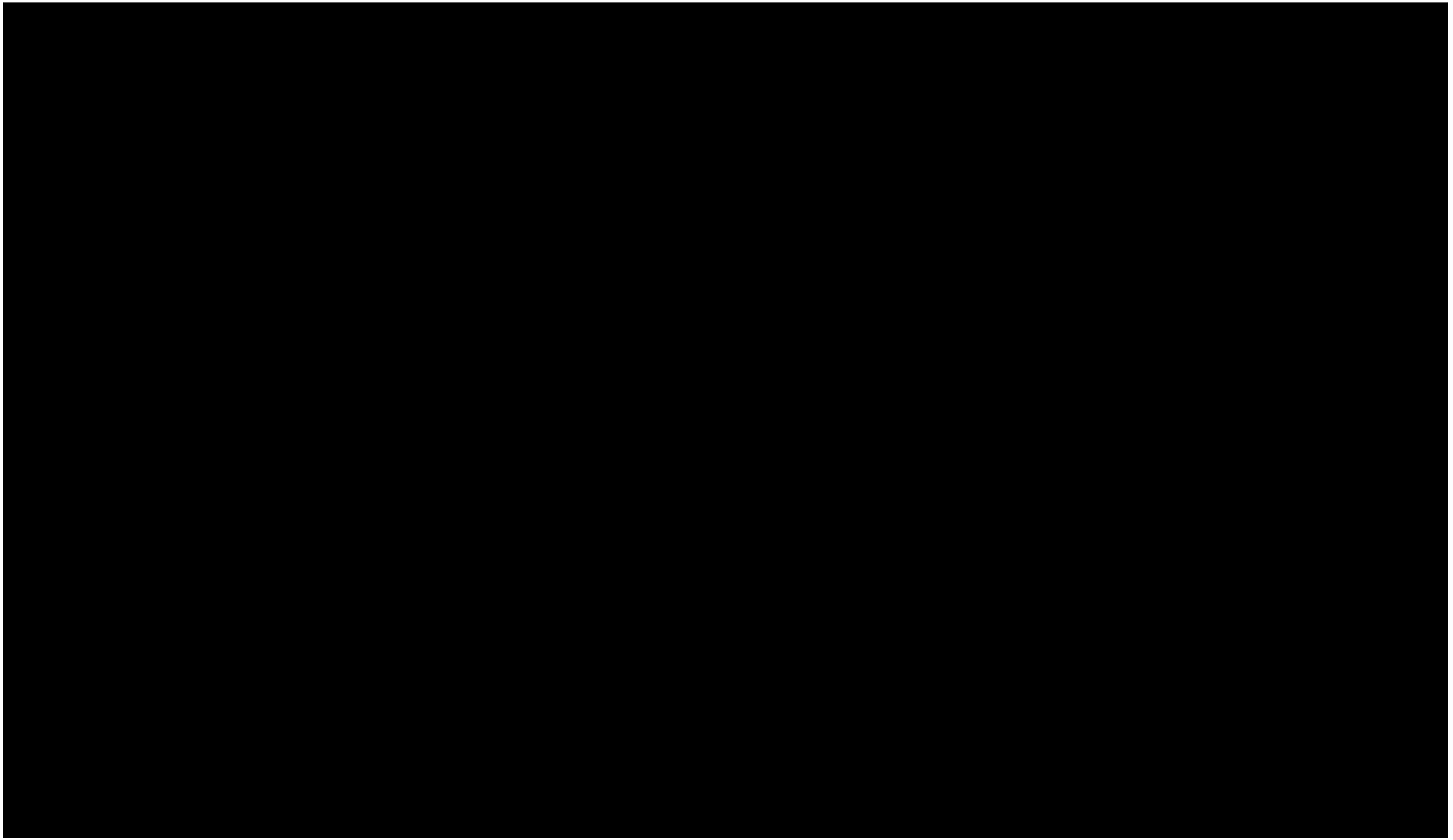
Water Extraction Licences

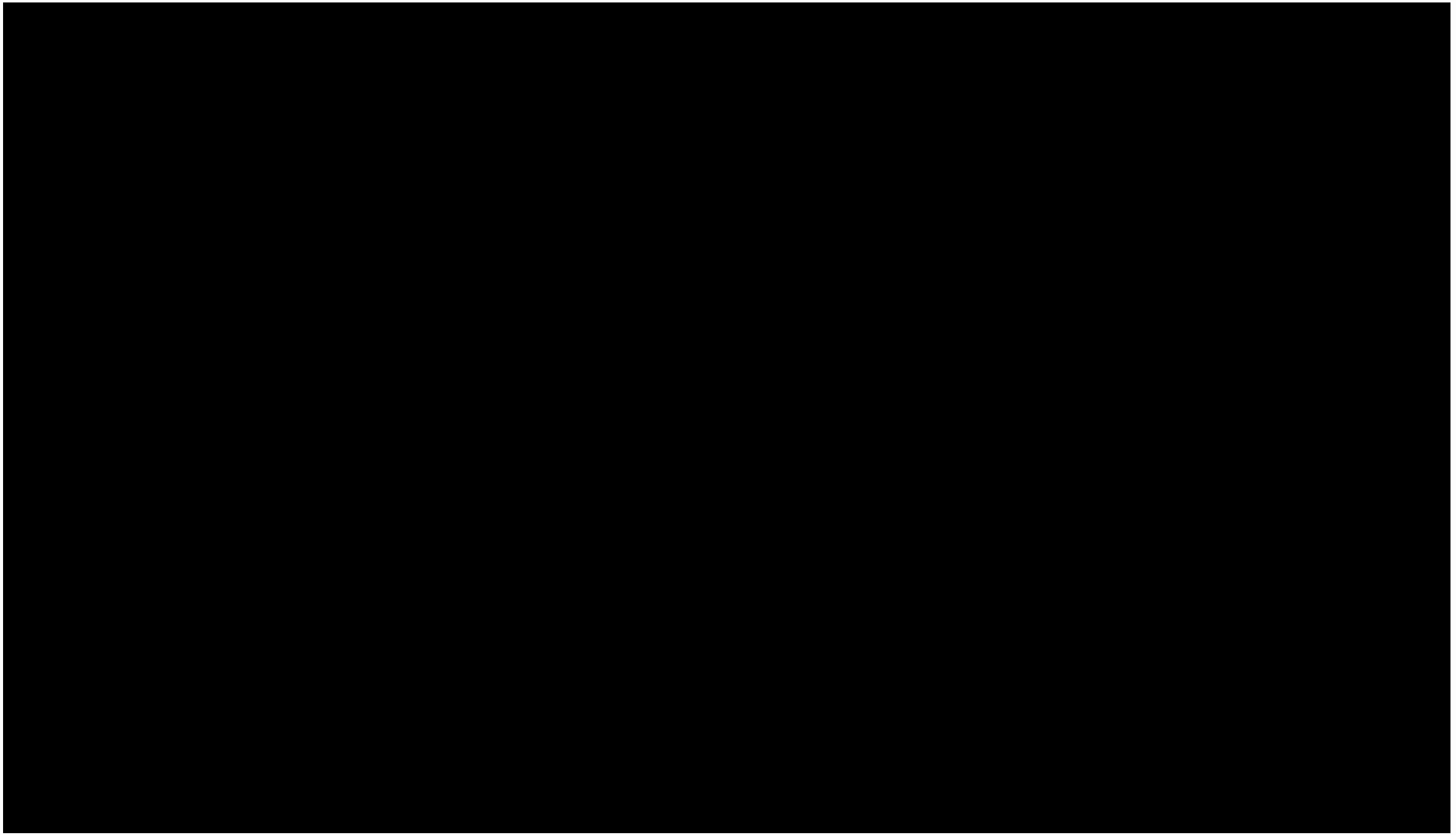
Water Extraction Licences

- Water for activities will be sourced from the Gum Ridge [redacted]
- Water monitoring and modelling confirms water extraction will not impact features such as water holes, creeks or Springs
- Future activities will require up to 450ML/year of water to support the drilling, stimulation and appraisal of multiple wells- this may increase depending on well sizes
- An amendment Water Extraction Licence from 175ML/year to 450 ML/year from the Gum Ridge Formation (GRF)
- A further 100ML/year will be submitted in mid 2024 taking water from the Anthony Lagoon Formation
- Tamboran will continue to monitor groundwater and surface water level and quality to demonstrate no harm





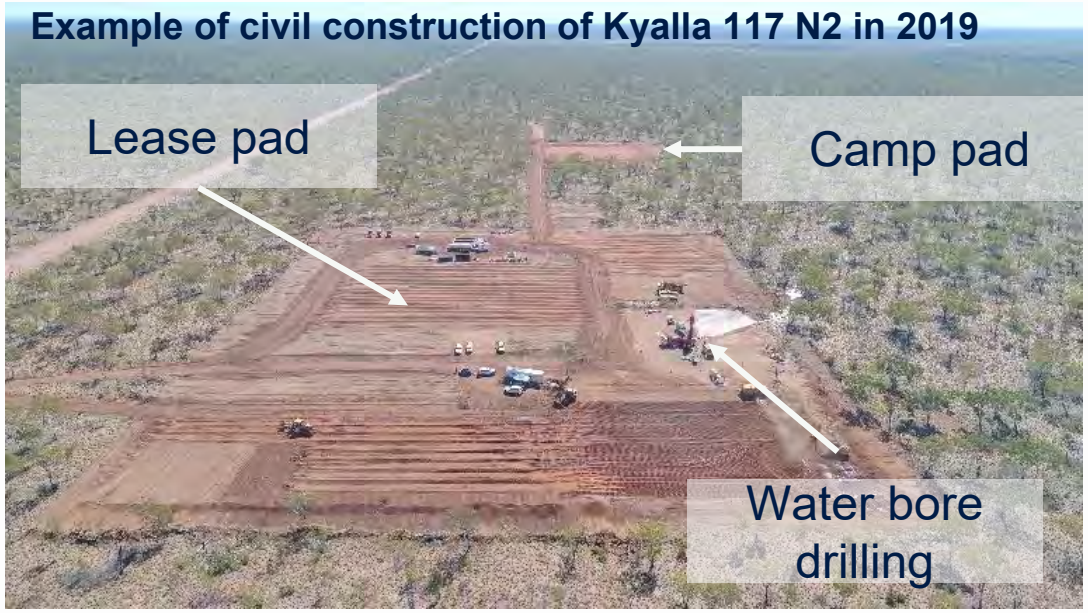


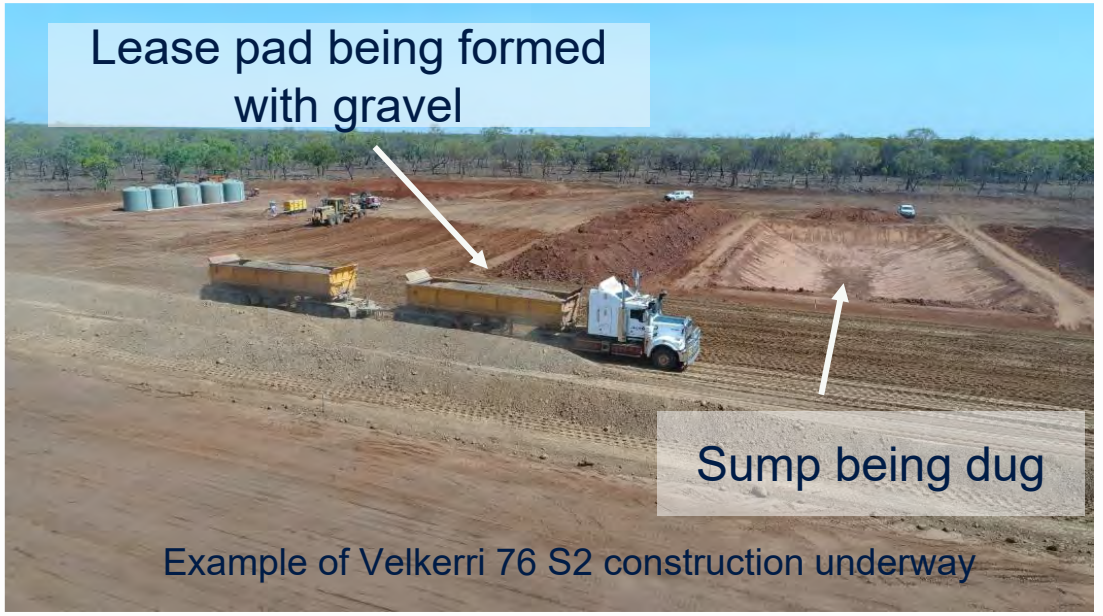


Clearance scope- civil construction

Each site will contain a lease pads, camp pad, helipad, laydown and firebreak

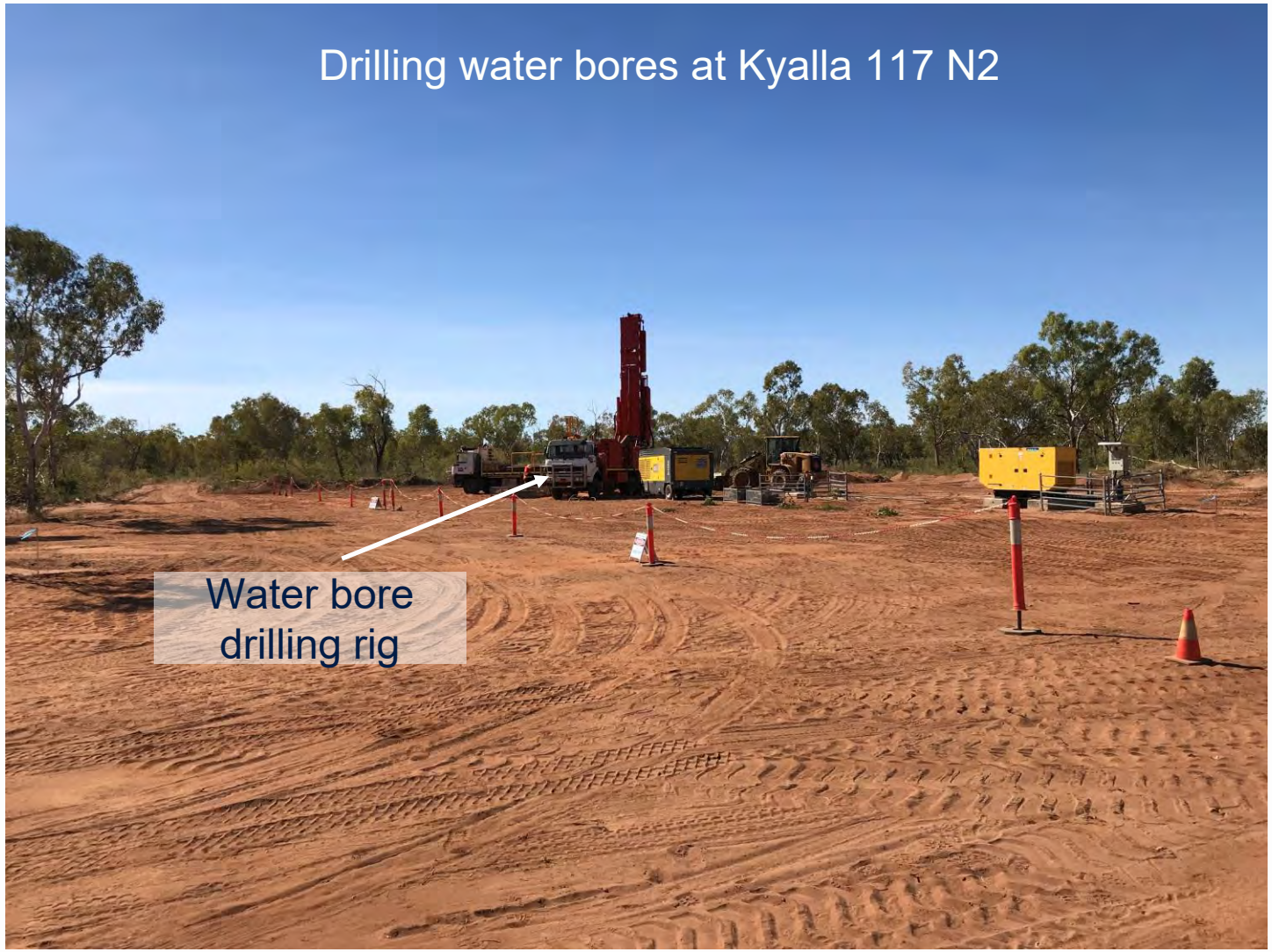
- Each site will have up to 25 ha of clearing
- Earthmoving equipment used to clear vegetation and complete earth works
- Topsoil is stripped and stored around edges of lease pad or in stockpiles for use in rehabilitation
- Sumps that will contain drilling fluids and cuttings excavated down and lined to hold all water
- Sediment basins constructed on lease pads to manage stormwater water collected
- Total new disturbance up to 150 hectares (total for all sites)





Water and monitoring bore drilling

- Up to 10 water bores at each site to monitor and extract water groundwater
- Bores are typically one of the first activities to occur on a site.
- Bores constructed in accordance with the Minimum construction requirements for water bores in Australia standard
- Monitoring of the water quality and level will be completed before and after stimulation to demonstrate contamination has not occurred



Access track construction

- Maximise use of existing tracks to reduce clearing
- Upgrade and maintenance of pastoral tracks
- Construction of new access tracks to each new location as required
- Designed in accordance with the NTG Road Construction Standards for Rural roads
- Typically 14m wide containing the formed track, shoulder and cut out drains
- Bed level crossings to be utilised in watercourses with culverts used to minimise impacts to water flow
- Total new disturbance estimated at ~50 hectares or 35 kms

Grading and forming of existing pastoral track to Kyalla 117 N2

Upgraded track with rock check drains

Gravel Pits

- Gravel is required during the construction of access track, lease pads and other infrastructure
- Up to 15 hectares of new gravel pits could be constructed- up to 5 new pits
- Volumes of gravel to be used are less than 300,000m^3
- Gravel pits are cleared and stripped of topsoil
- Felled vegetation and soil pushed to edge of pit for use in rehabilitation
- When no more gavel needed, pit will be recontoured, topsoil replaced and felled vegetation return


Existing Gravel pit 3 near Kyalla 117 N2- ~3.5 hectares


Loading gravel from the existing Gravel pit 3 near Kyalla 117 N2-

Exploration and appraisal well drilling

- Multiple wells (up to 8) could be drilled per site on each of the lease pads
- 15- 20 wells over 5 years
- Site contains
  - Drilling rig
  - Offices for operational staff
  - Sump for drilling fluids, cuttings and muds
  - Freshwater storage tanks
  - Chemical and fuel storage
  - Water bores
  - Casing and material storage
  - Camp

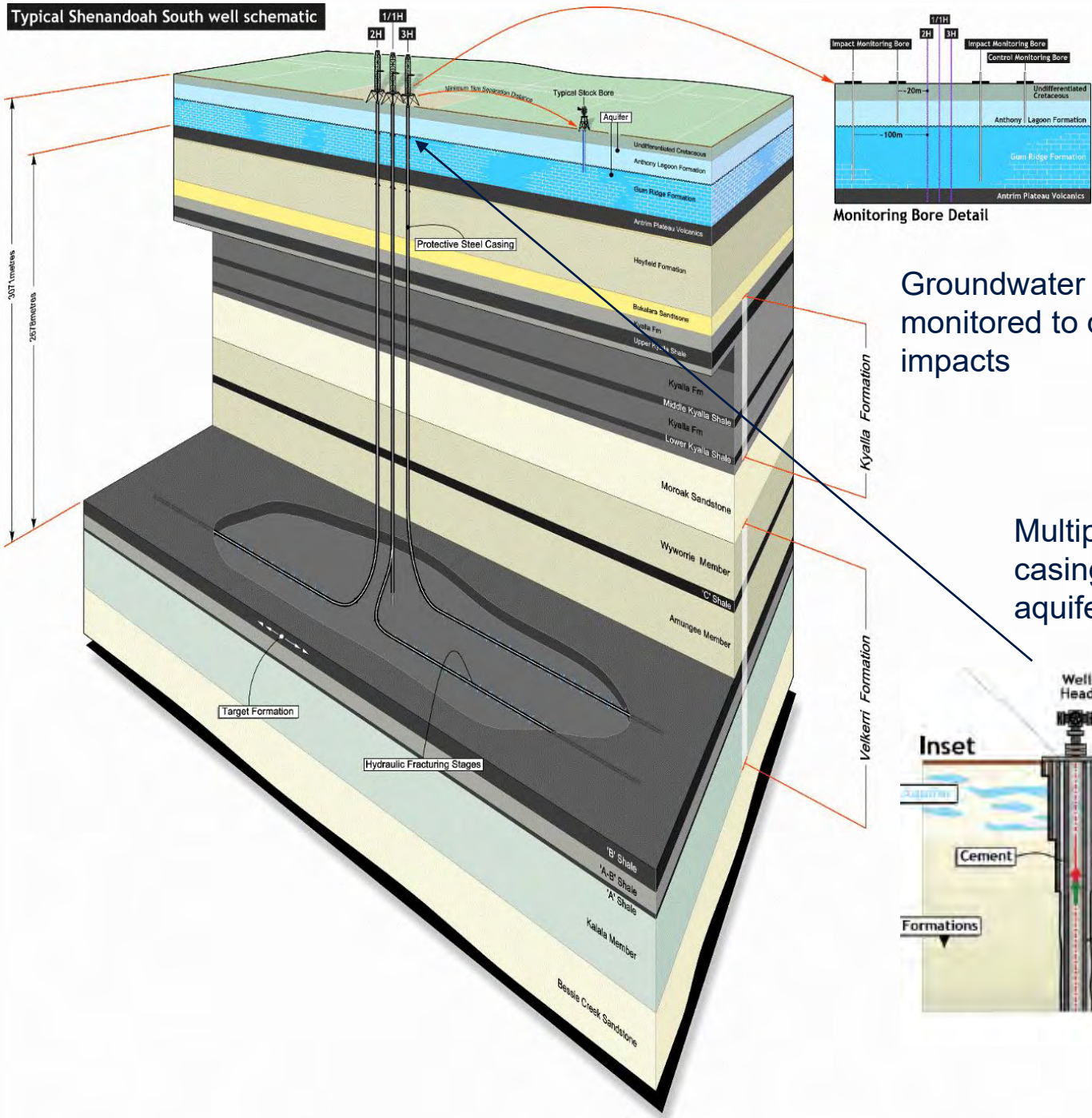
Drilling rig at of Kyalla 117 N2-1H about to start drilling

Typical E&A wells on a pad

- Wells drilled to ~3,500m (deep) and up to 5000m horizontal (long).
- Shale formation is ~2.6km below the Gum Ridge aquifer

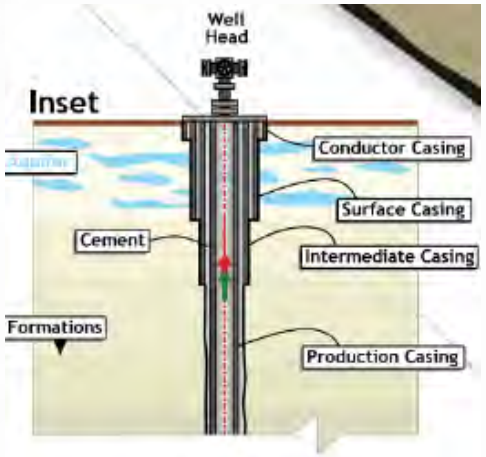
- Groundwater protected through multiple strings of casing and cement

- Isolation of the aquifers is independently verified before stimulation



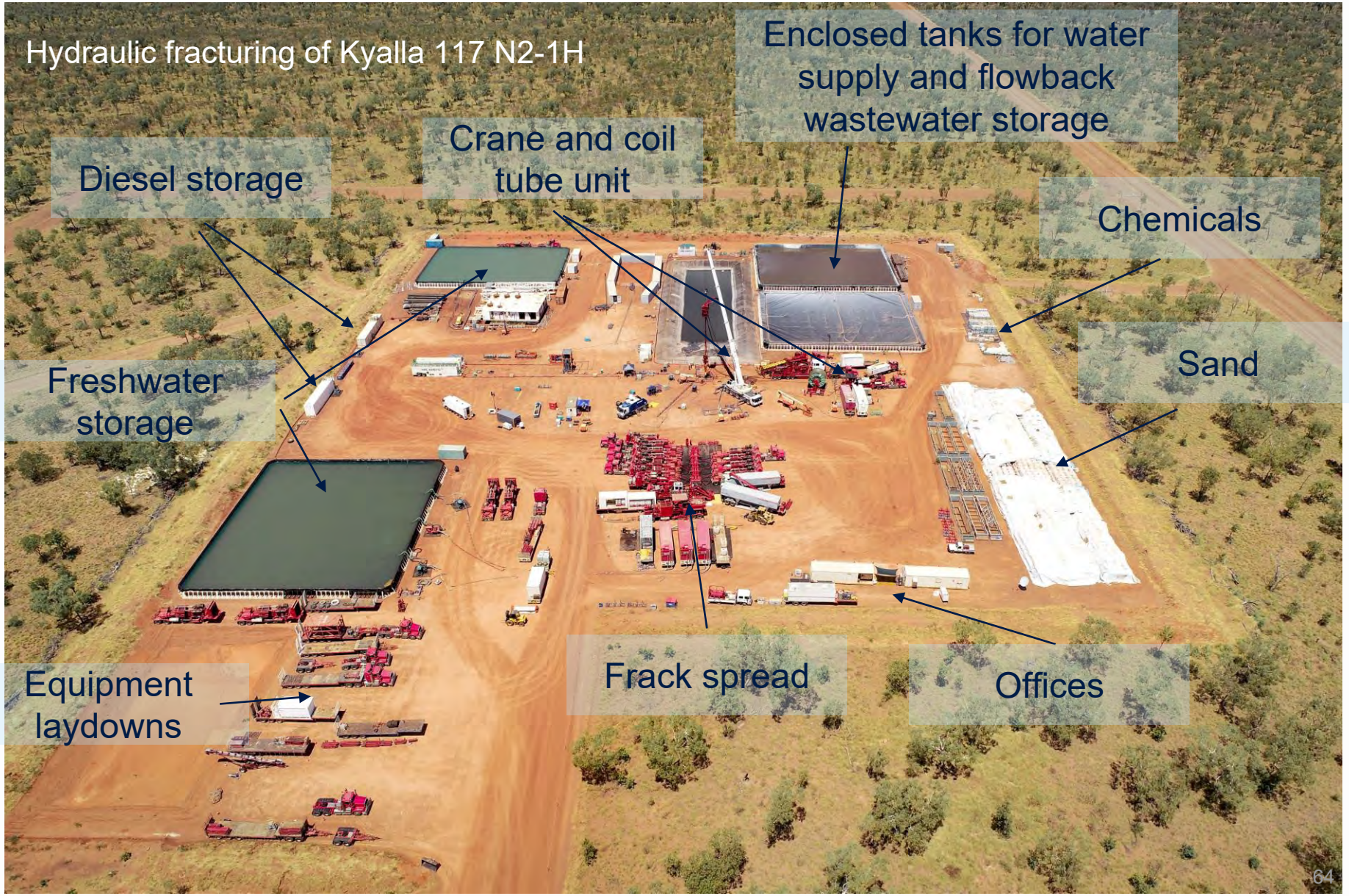
Groundwater monitored to detect impacts

Multiple strings of casing protect aquifers



Hydraulic Fracturing

- Hydraulic fracture stimulation will be completed on each horizontal well
- Injection of water, sand and chemicals at high pressure to fracture shale rocks 3.2KM below ground
- Water main component being ~90- 95% of fluid volume
- All chemicals and chemical handling areas to be bunded to prevent spills
- Wells designed to protect aquifers through multiple barriers



Management of Impacts - Chemicals and Spills

- Every chemical has the risk of causing harm if used incorrectly- it's not what the chemical is, but how you manage it
- The management of chemicals is standard in industries and businesses across Australia with standardised legislation
- Chemicals used in fracking are not new or special- most can be found in supermarkets, poll shops or hardware stores e.g guar gum, bicarb soda, salt, vinegar and borax
- they are often used in other industries ranging from food preparation, cosmetics or water treatment.
- All chemicals are assessed and approved for use in Australia- they are not secret

Controls

- Hydraulic fracturing chemicals are not injected into aquifers
- All chemicals are stored and handled in bunds to contain spills
- Any spill is cleaned up immediately and reported
- Chemicals are removed from site once we finish and are not disposed of in the bush

Domestic use

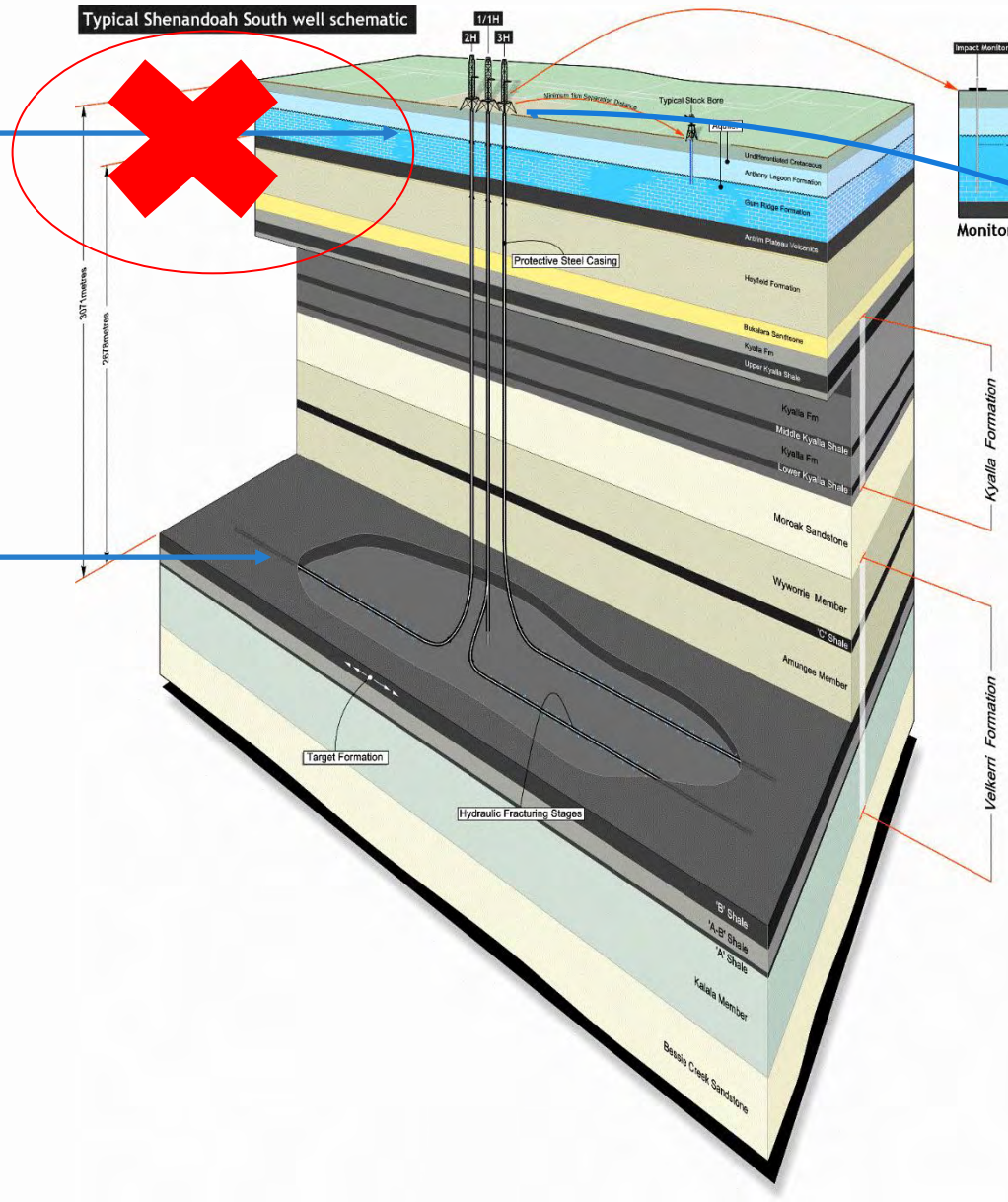
We use chemicals safely on a larger scale

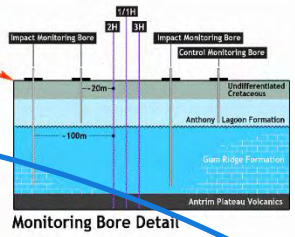
Stimulation use

Management of impacts- chemicals

We do not inject fluid here-

Hydraulically fracturing injects fluid here ~3.2km deep





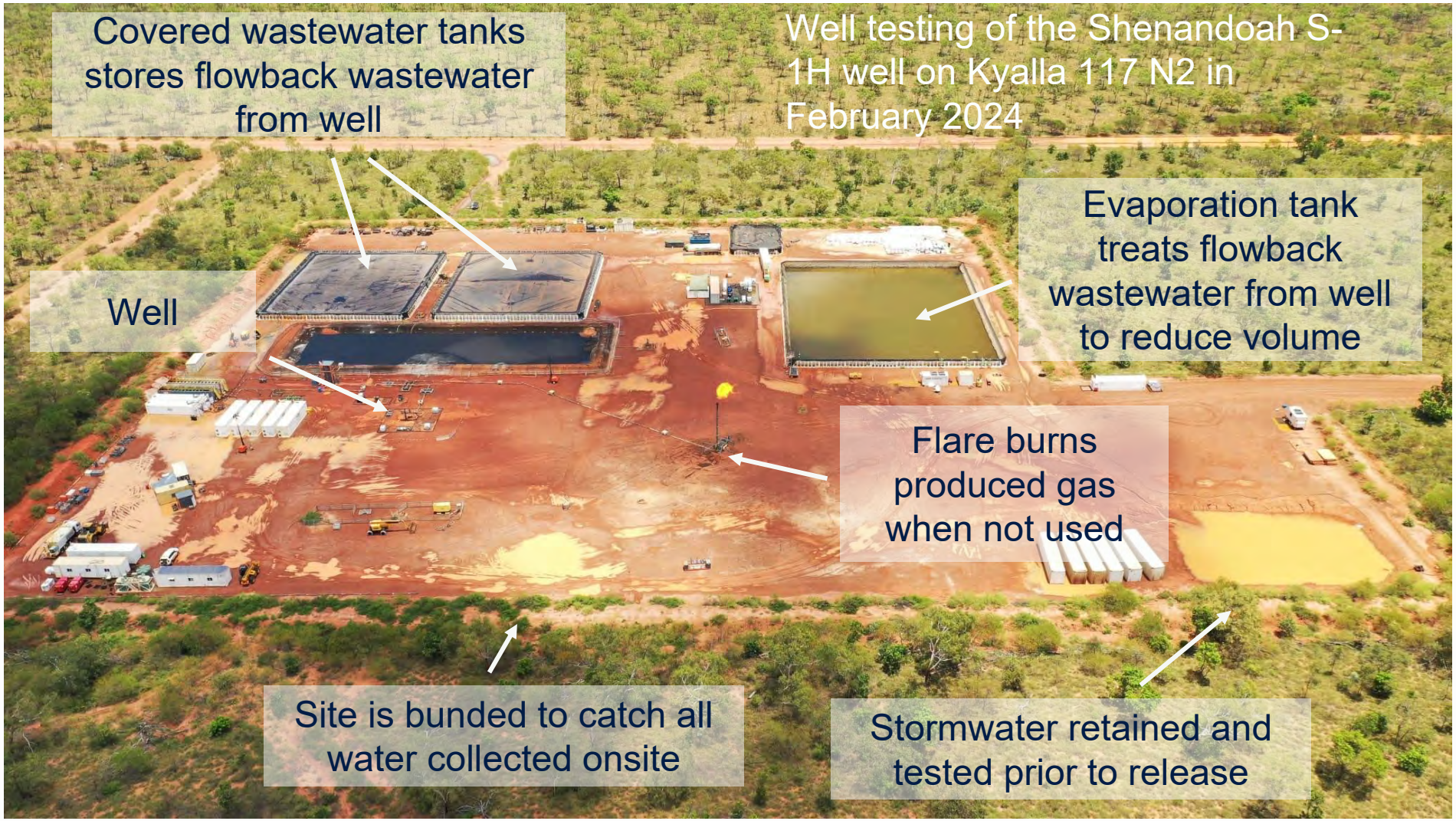
Monitoring Bore Detail

We monitor groundwater on each site to detect impacts

Flowback is returned to double lined wastewater tanks. Water is evaporated or recycled- with any waste removed from site.
No release to creeks or bushland

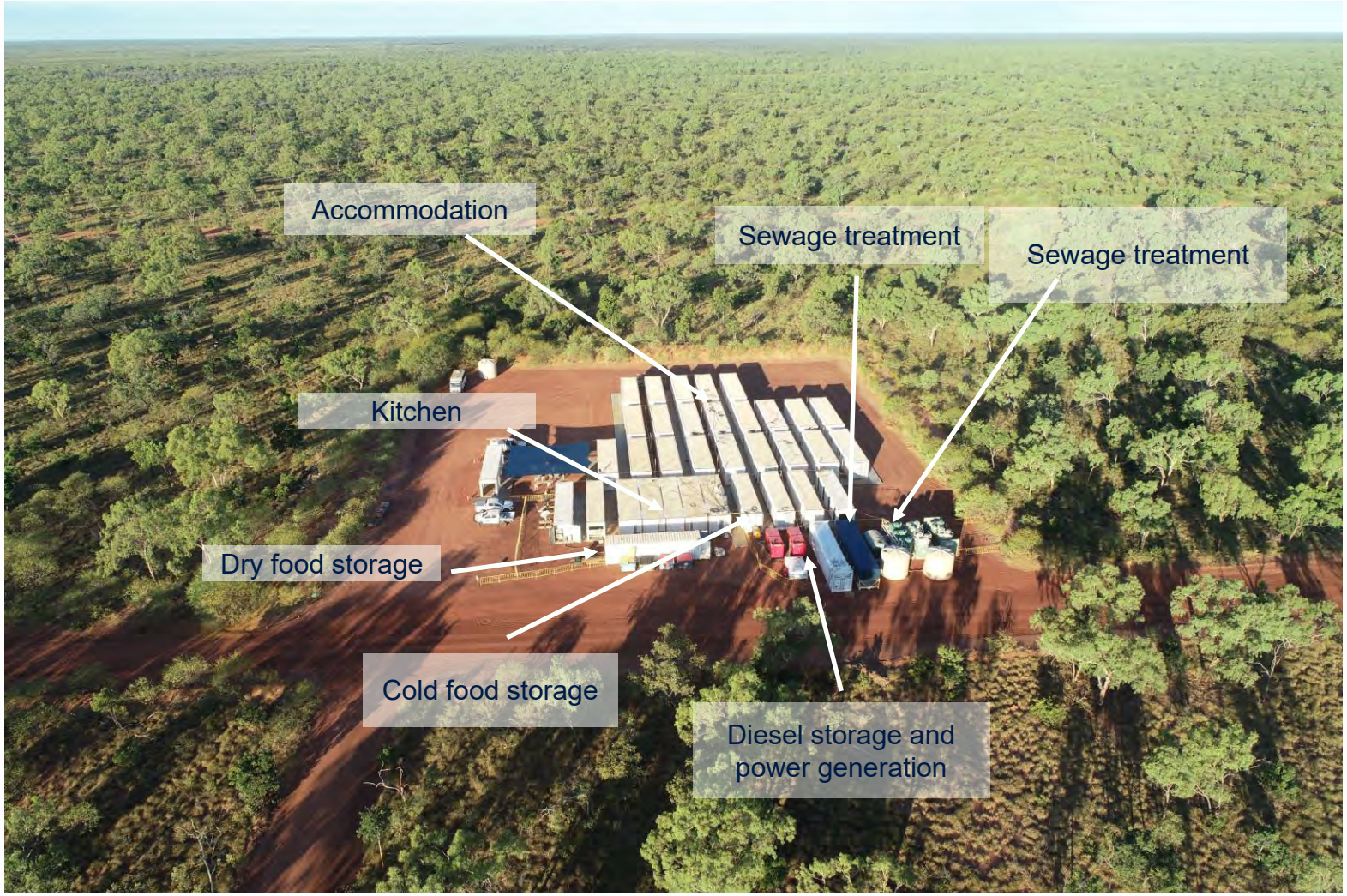
Well testing

- Each well will be tested for between 30-365 days
- Flares will be used to burn the gas if cannot beneficially re-use
- Wastewater will be stored in double lined wastewater tanks (circle or rectangle tanks)
- Where gas is to be sold, it will be sent to the compression facility via gathering lines and not flared



Camps

- Workers house in temporary camps during activities
- Typically used to house 80 people including staff
- Buses transport most workers from Daly Waters Airstrip to reduce impact on local communities and traffic
- Camps contain accommodation, kitchens, ablutions, gyms, eating areas, offices, food storage, water storage, power generation, rubbish bins and sewage treatment infrastructure.
- Camps are operated in accordance with the Department of Health guidelines- including sewage treatment and grey water irrigation



Gathering lines

- Gathering lines allowing water and gas to be transported between sites via pipelines
- Pipes mostly buried and located in cleared areas called “right of ways”
- Temporary surface pipelines transferring water may be used for short periods (3-6 months)
- Reduces number of wastewater tanks and clearing
- Leak detection used to identify leaks during wastewater transfer
- Pipelines to be inspected monthly to gas and liquid detect leaks
- Less than 50 hectares of new disturbance


High point vent in QLD

Reinstated gathering right of way in QLD


Low point drain in QLD

Appraisal gas sale project

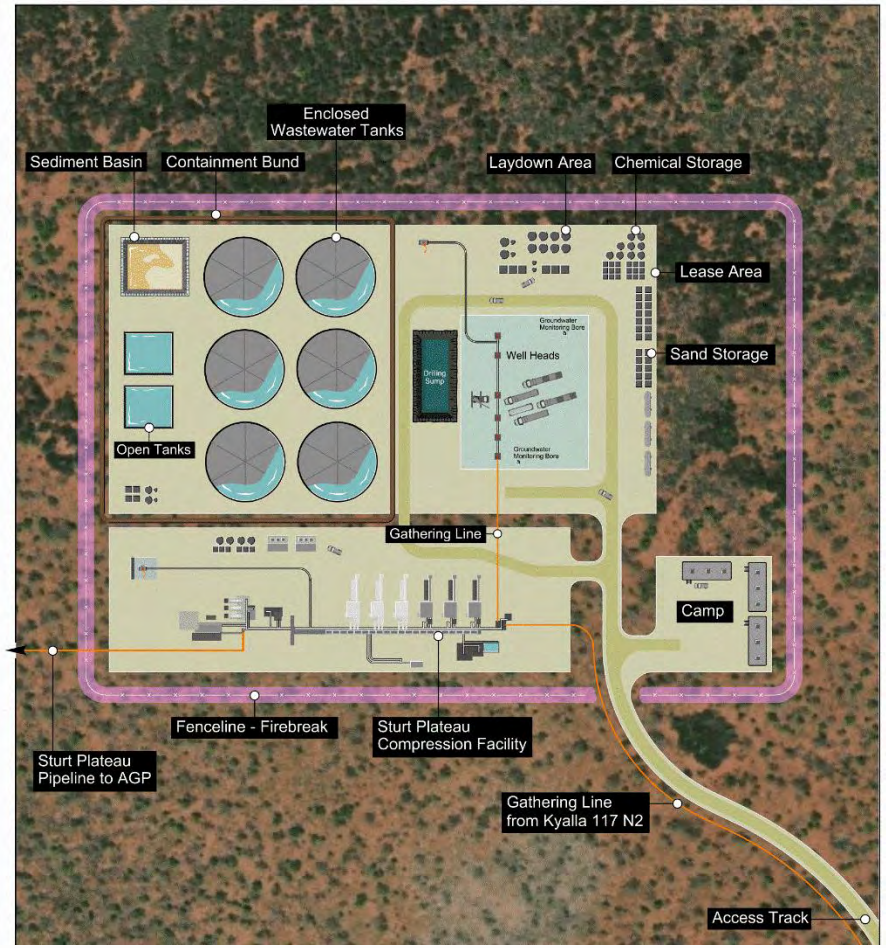
- Tamboran needs to produce gas during appraisal to test the underlying shales prior to investing in a development.
- This will allow the gas to be used for power generation in NT rather than the gas being flared.
- A newly constructed compression facility at Shenandoah S2 is proposed to enable the sale of appraisal gas, referred to as the Sturt Plateau Compression Facility (SPCF)
- Appraisal gas is proposed to be generated from all new wells and locations within the clearance areas
- [redacted]

Example of small compression facility

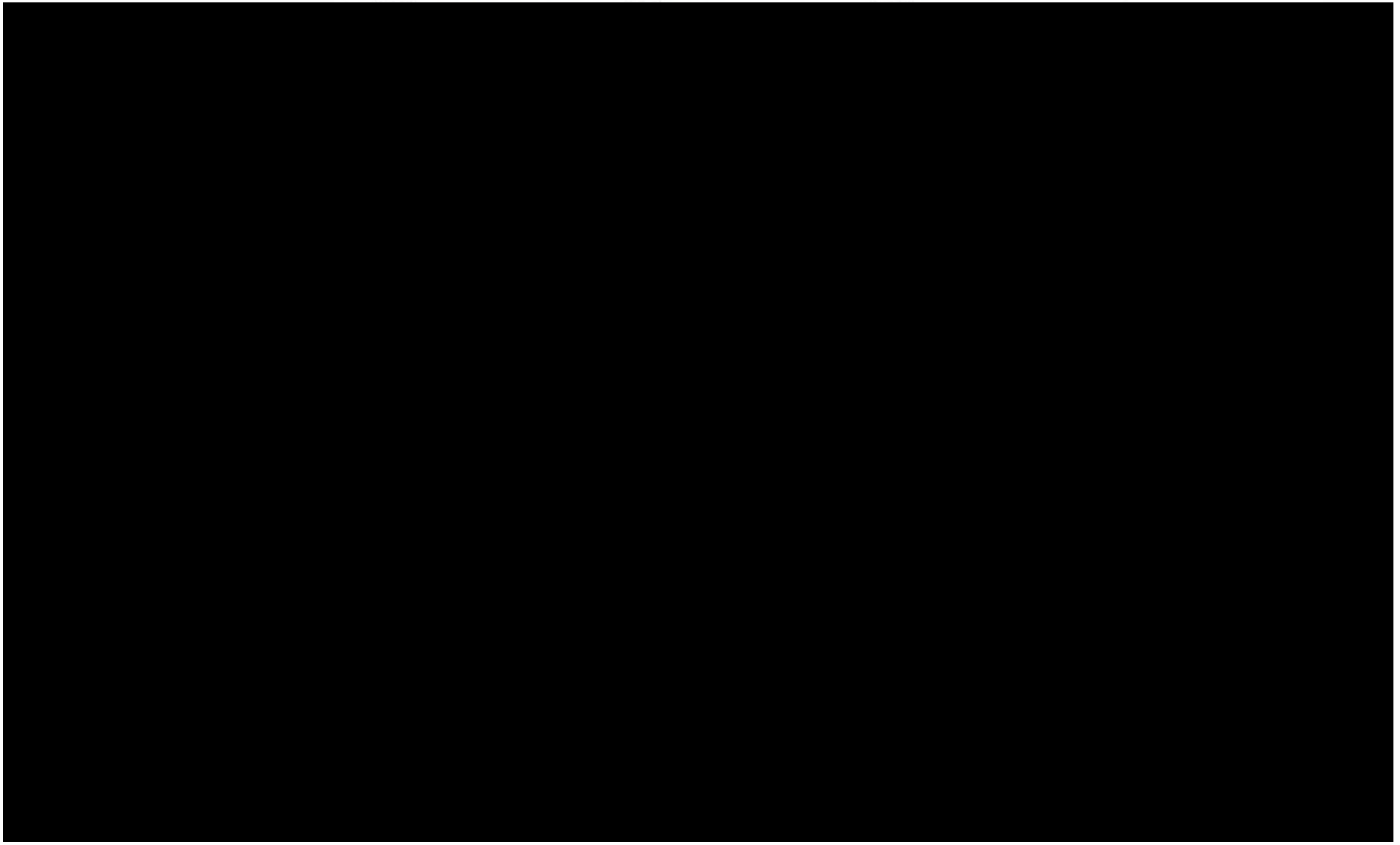
Sturt Plateau Compression Facility

- Sturt Plateau Compressor Facility (SPCF) located at Shenandoah S2 on EP 117, ~3.5Km NW of Kyalla 117 N2 within the clearance area
- Facility will have a capacity of up to 60TJ/day
- Wells drilled in the clearance area may be connected to facility via gathering lines to sell appraisal gas rather than flare it
- This will reduce Greenhouse gas emissions by ~80-90%

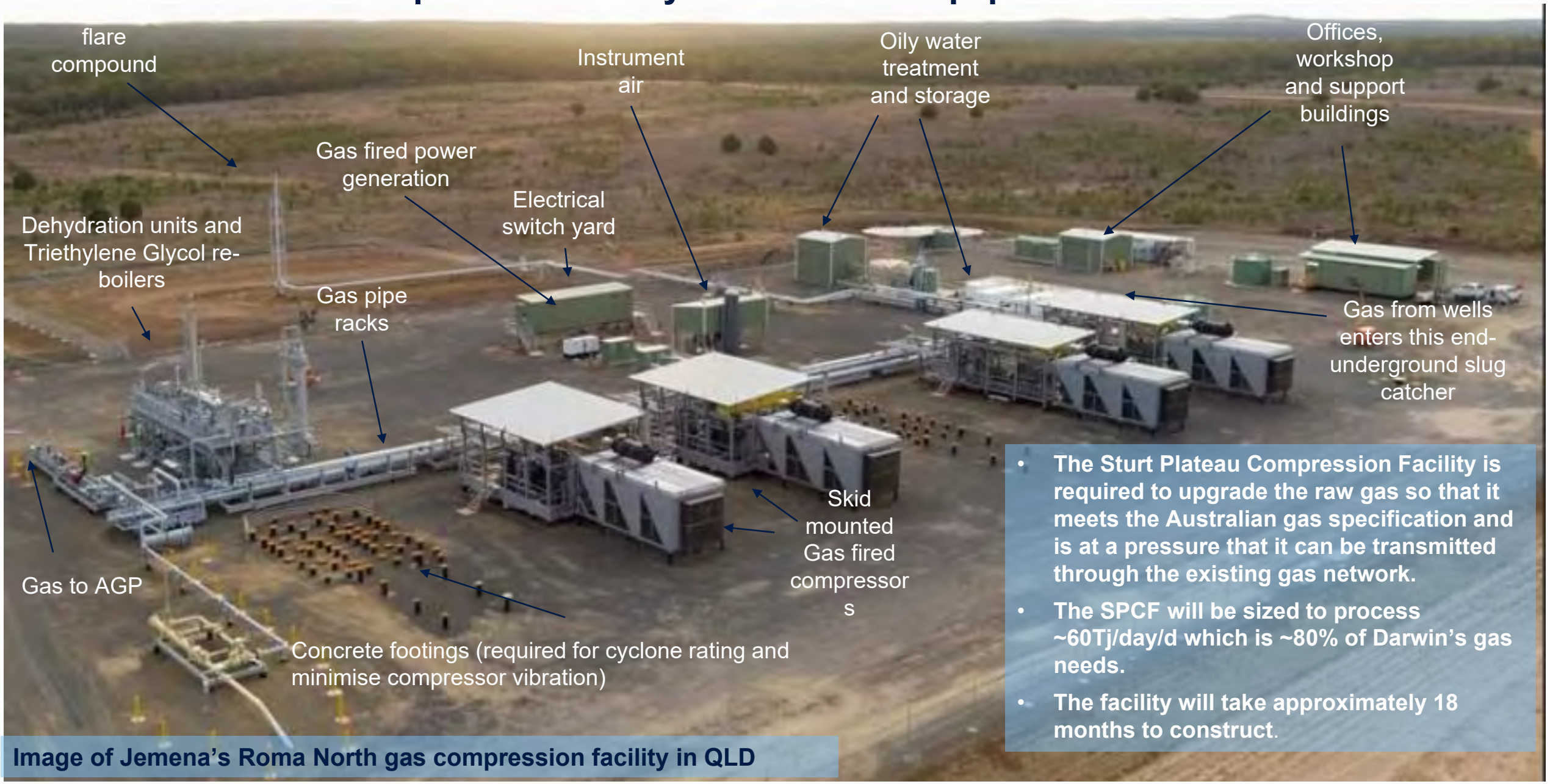
Example of compressor station



Concept of the compressor station



Sturt Plateau Compression Facility – overview of equipment



- **The Sturt Plateau Compression Facility is required to upgrade the raw gas so that it meets the Australian gas specification and is at a pressure that it can be transmitted through the existing gas network.**
- **The SPCF will be sized to process ~60Tj/day/d which is ~80% of Darwin's gas needs.**
- **The facility will take approximately 18 months to construct.**

Image of Jemena's Roma North gas compression facility in QLD

New SPCF EMP – Air and noise emissions

Image of Jemena's Roma North gas compression facility in QLD

- Environmental Controls- Air and noise
- Sale of appraisal gas reduces GHG emissions by ~80-90%
- Low emission gas fired compressor engines to be utilised (Low Nox and CO)
- Diesel use to be minimised
- Instrument air to reduce pneumatic device venting
- Equipment blowdowns directed to flare to avoid venting
- Exhaust mufflers to be used to reduce noise
- Buffers between compressor facility and sensitive receptor
- Noise and air dispersion modelling completed- facility will comply with NEPM and NT Noise standards

New SPCF EMP– Land management

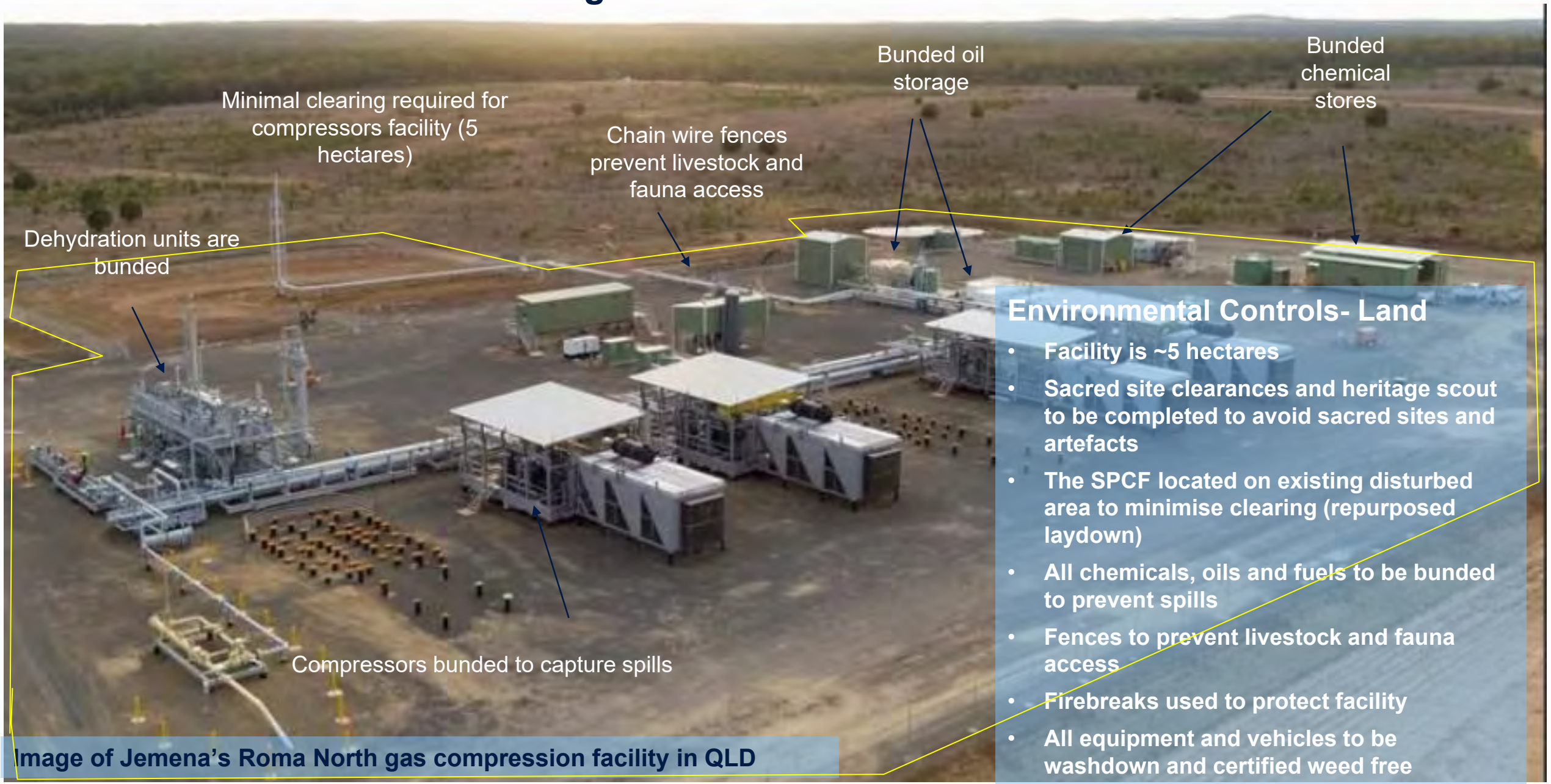
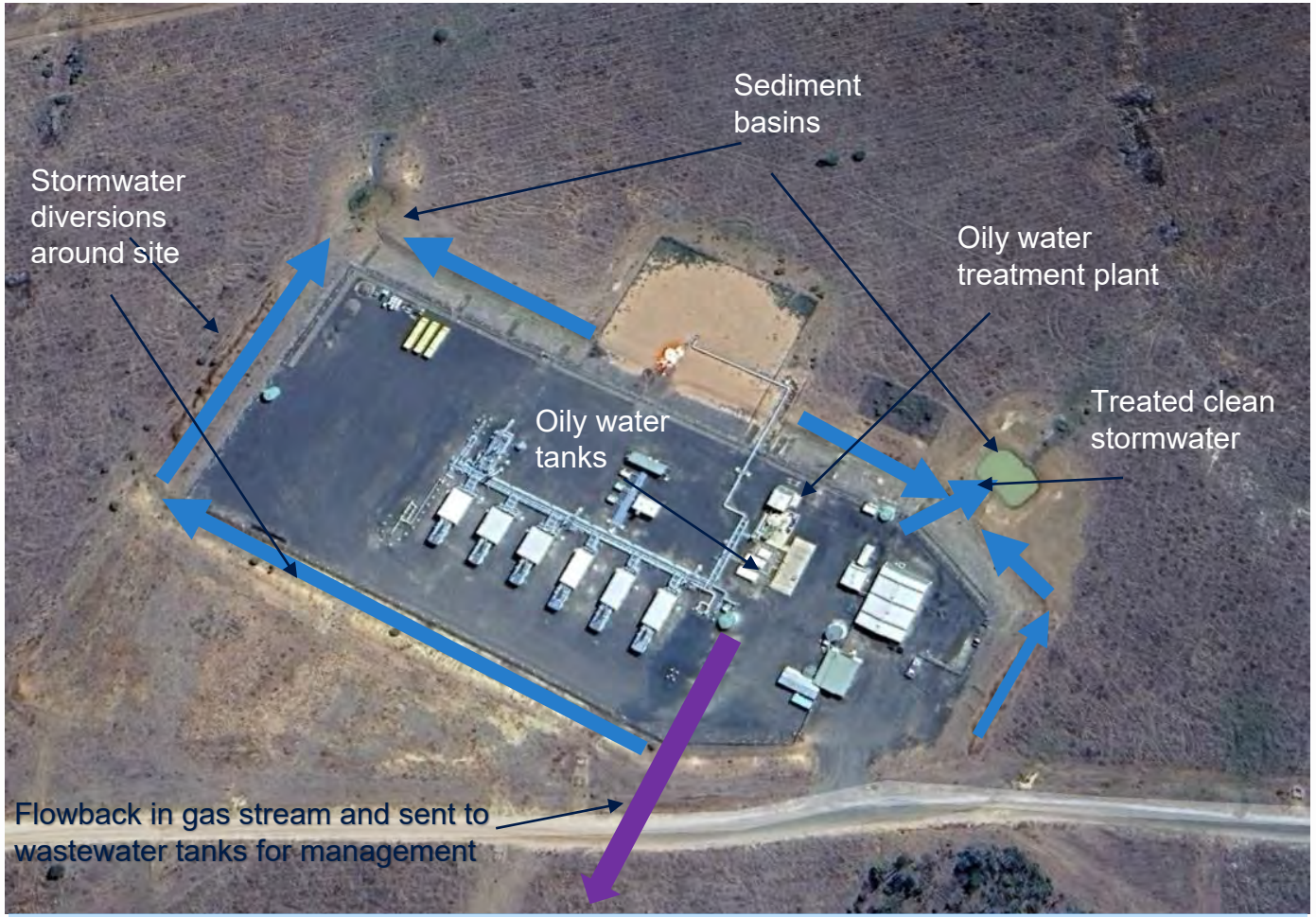


Image of Jemena's Roma North gas compression facility in QLD

Environmental Controls- Land

- Facility is ~5 hectares
- Sacred site clearances and heritage scout to be completed to avoid sacred sites and artefacts
- The SPCF located on existing disturbed area to minimise clearing (repurposed laydown)
- All chemicals, oils and fuels to be bunded to prevent spills
- Fences to prevent livestock and fauna access
- Firebreaks used to protect facility
- All equipment and vehicles to be washdown and certified weed free

New SPCF EMP – Water management



Aerial view of Jemena's Roma North gas compression facility in QLD

Water Use

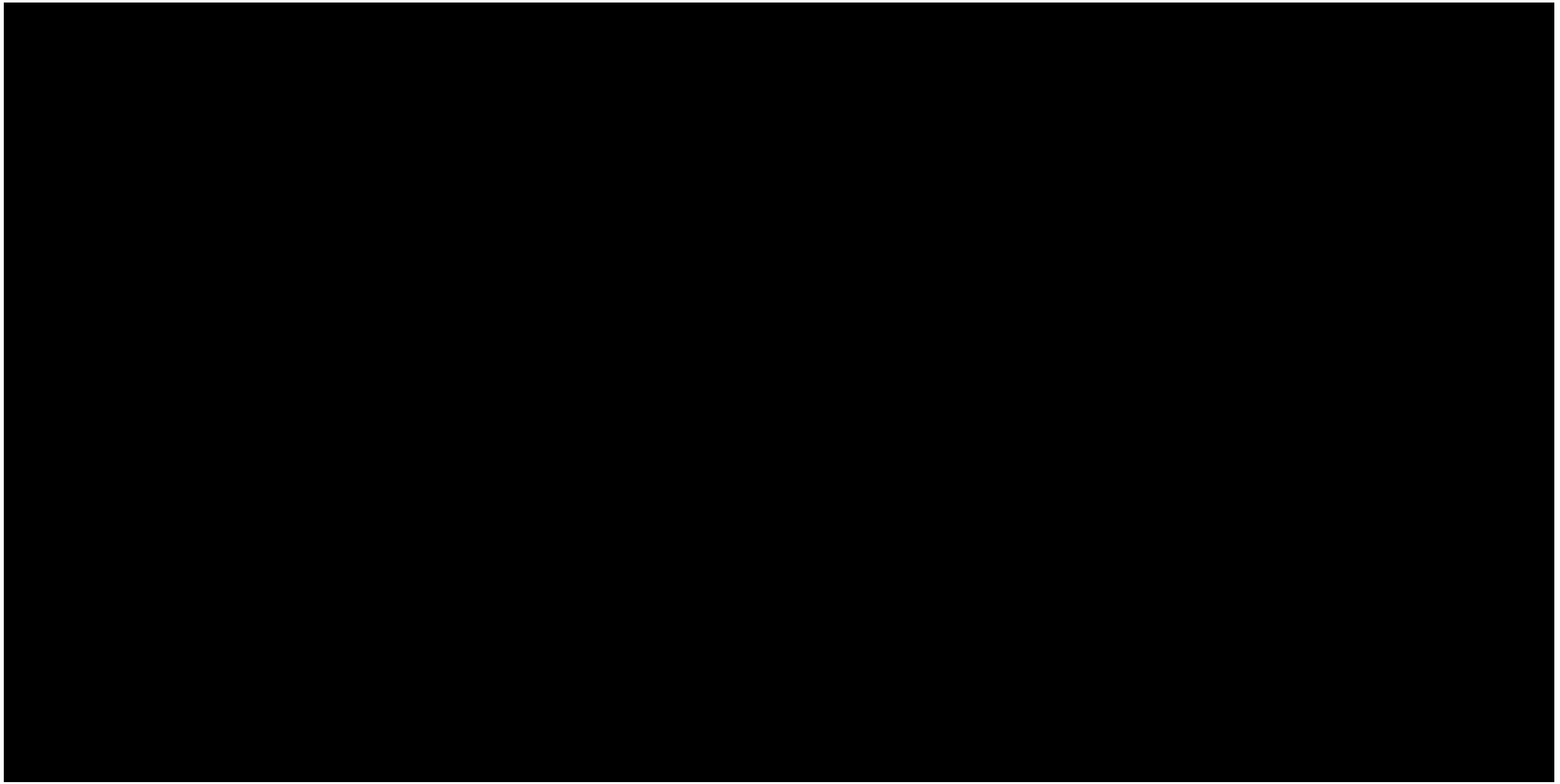
- Facility will not utilise much water- potentially 20-30ML during construction and 1-2ML per year during operations
- All water taken from Gum Ridge Aquifer under existing water extraction licence

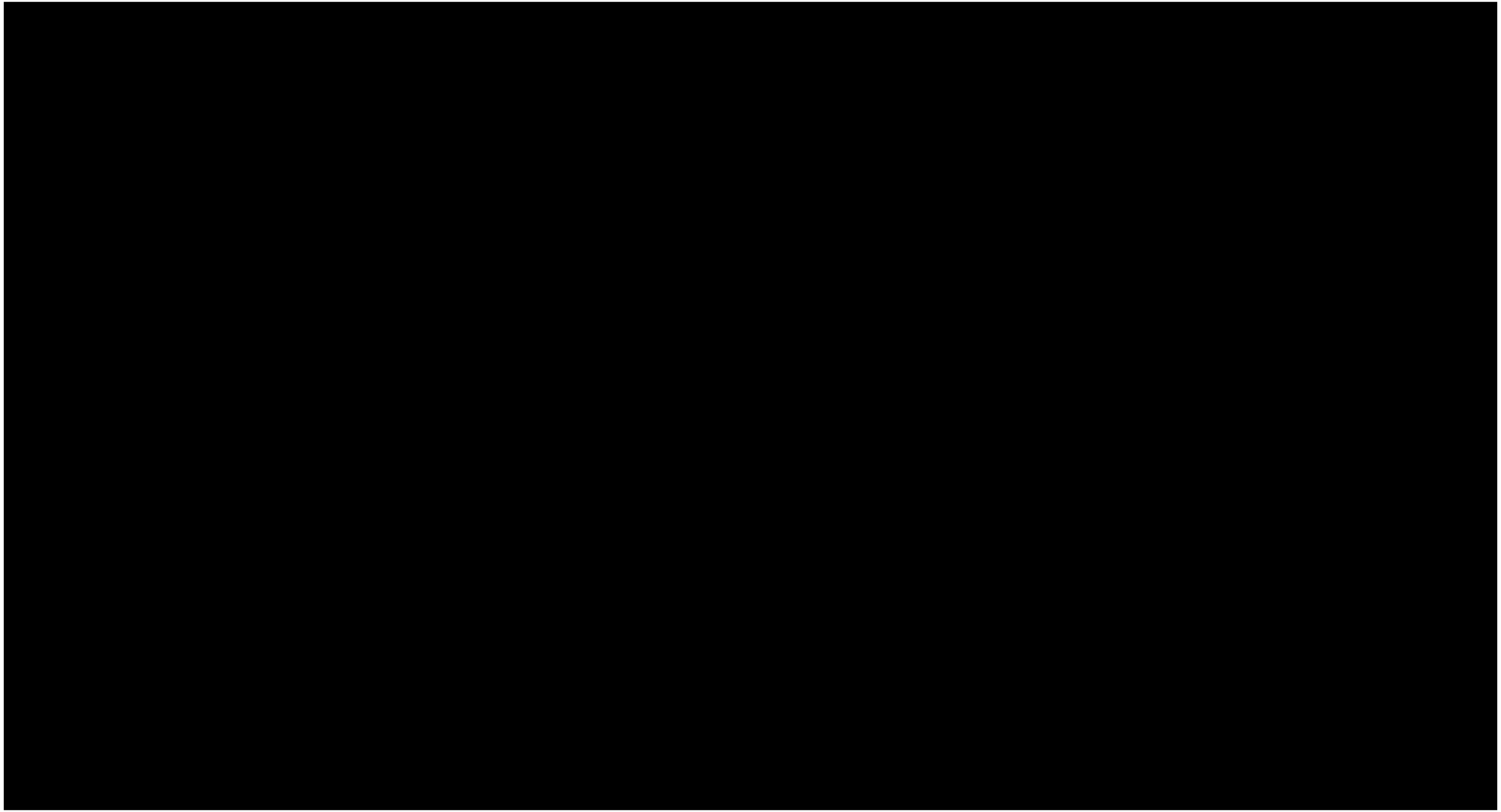
Wastewater

- Any entrained wastewater in the gas stream will be separated and sent to wastewater tanks
- Oily water separators used to separate oil from compressor stormwater/ washdown water- waste oil captured and recycled offsite.
- All clean stormwater water sent to infiltration ponds where it is allowed to soak into the ground in a controlled fashion

Erosion and sediment controls

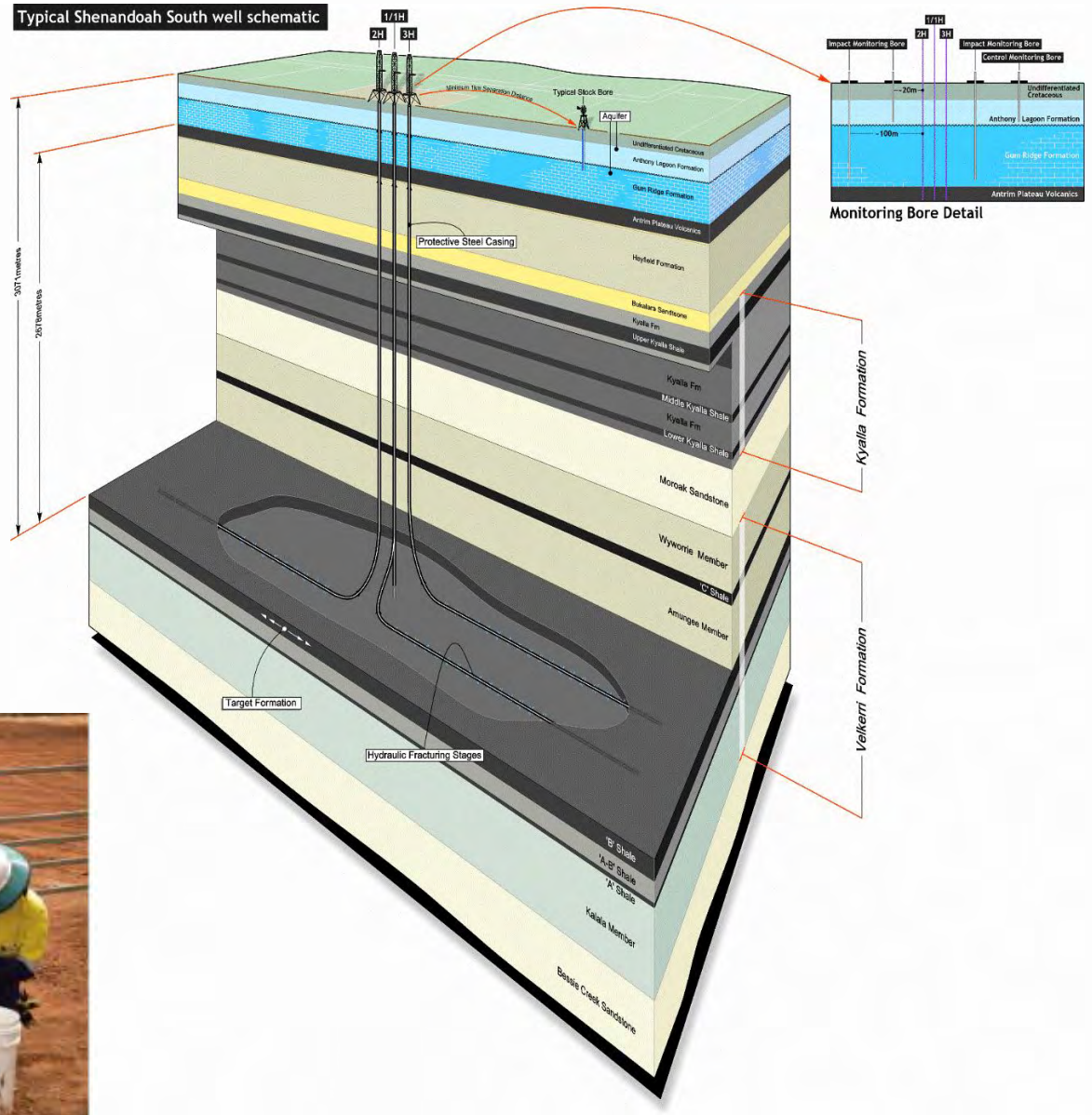
- Clean water to be diverted around site
- Clean water collected onsite to be directed to sediment basins for controlled release





Management of impacts- Groundwater protection

- The target shales are ~2.6km below the closest regional aquifer (Gum Ridge)
- Wells are designed and constructed with multiple layers of steel and cement to protect aquifers
- We test and monitor the integrity of wells
- We monitor groundwater at each well site
- Wells are plugged with cement at the end of life



Management of Impacts - Land Clearing

- Clearing of vegetation is required to construct sites and access tracks
- Sites are scouted by ecologists and cultural managers during site selection
- Sensitive sites are avoided
- No clearing in creeks and watercourses proposed
- Cultural managers employed to inspect areas prior to clearing to identify any fauna
- Activity will stop and fauna will be allowed to leave/ removed from the area
- Clearing to avoid large trees and nests where possible

Management of impacts- Groundwater protection

- Water for activities will be sourced from the Gum Ridge and Anthony Lagoon Aquifers
- Water monitoring and modelling confirms water extraction will not impact features such as water holes, creeks or springs
- Water use estimates are 450ML/year of water to support the drilling, stimulation and appraisal of multiple wells- this may increase depending on size of wells.
- An amendment Water Extraction Licence from 175ML/year to 450 ML/year from the Gum Ridge Formation (GRF)
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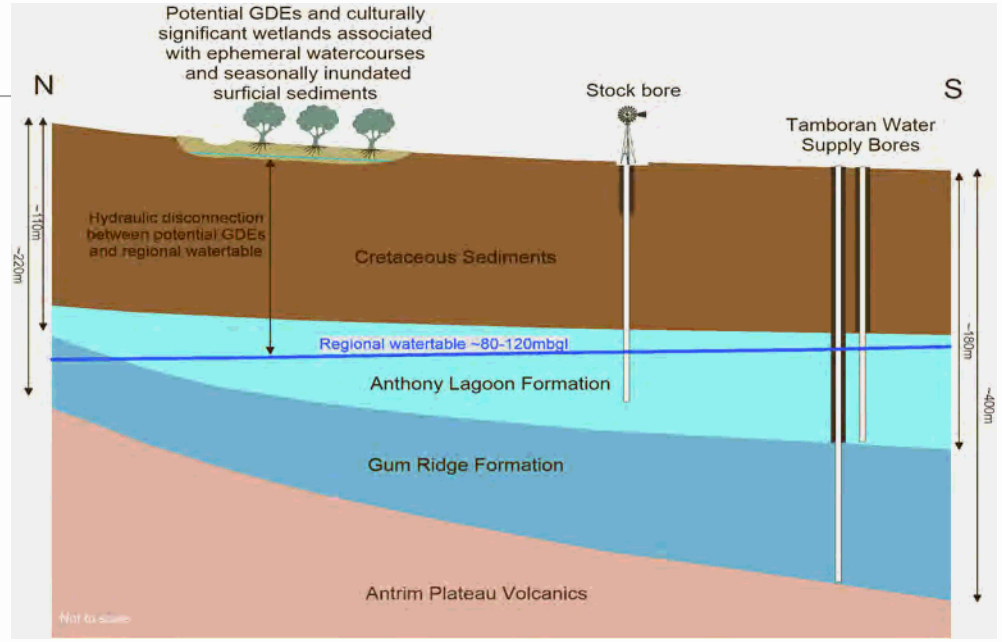
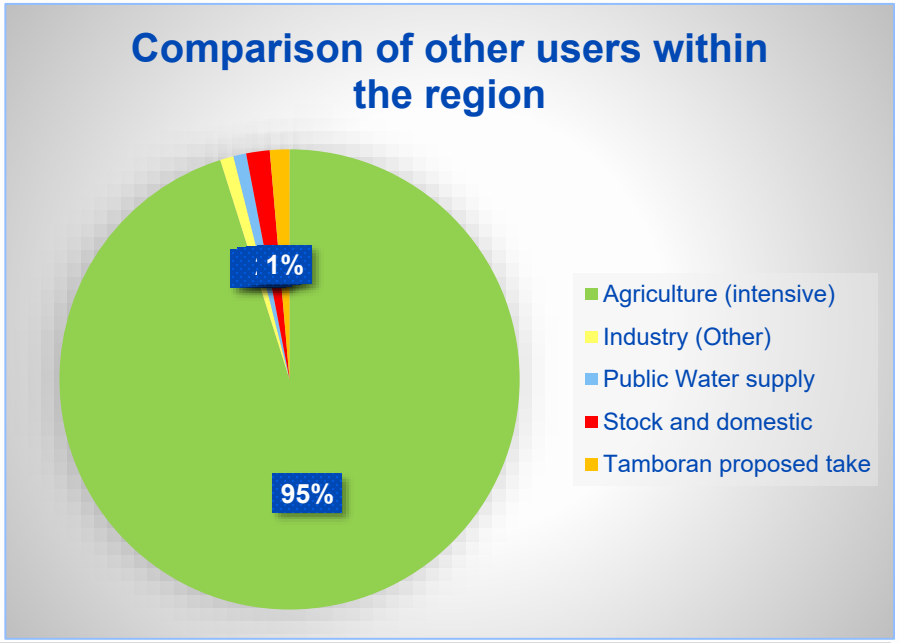




Drilling cutting and mud mix bury cover

- Where safe to the environment, drilling muds and cuttings will be buried onsite via mix-bury cover.
- Cuttings from rocks returned to surface is the largest source of waste.
- Water will be drained/evaporated and material dried out
- Testing of waste will determine if waste can be buried or trucked offsite
- Salt (Chlorides) is the main compound which can be managed through mixing and capping.
- Vegetation will regrow on the capped sump similar to landfills.


Sump at end of drilling with cuttings, mud and fluid


Water from sump removed and trucked offsite material blended, lined and then buried


Grass and vegetation allowed to regrow (picture of rehabilitation of a site in QLD)

tamboran RESOURCES

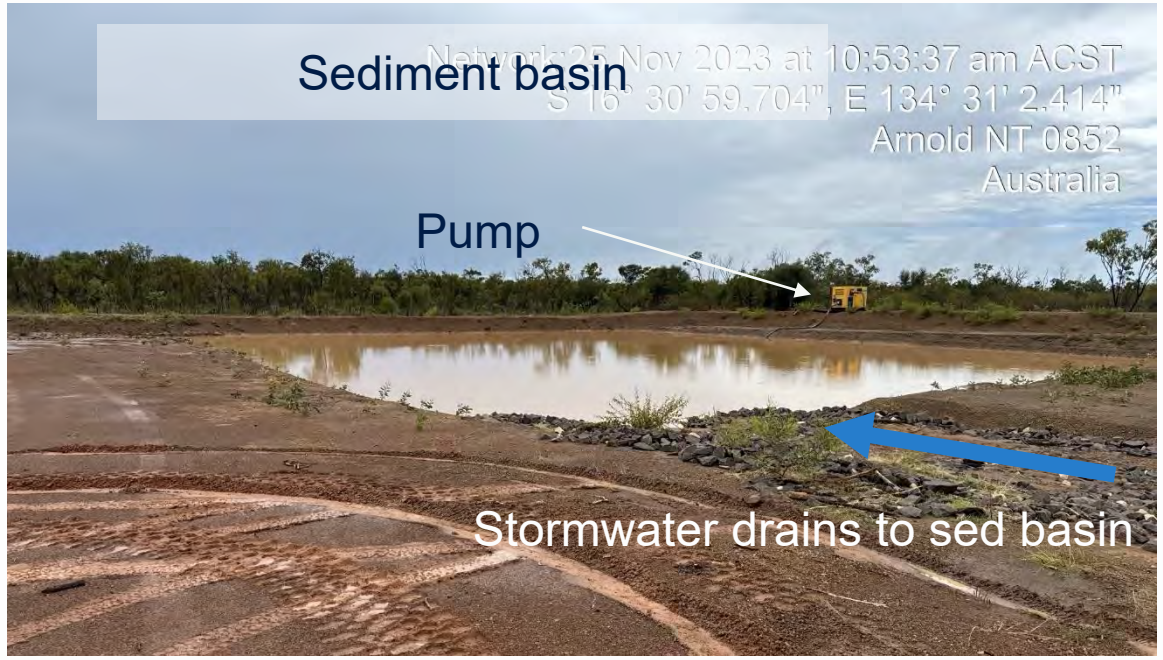
Stormwater Management

Stormwater is collected during flowback wastewater storage

This ensures any spills or wastewater are captured before leaving site.

The water is tested to make sure it's clean before release

Clean (uncontaminated) stormwater is then released to the surrounding bush



Management of Wastewater

- Tamboran cannot release wastewater to the environment
- All flowback wastewater must be stored in enclosed tanks and removed from site at the end
- Open tanks can be used for evaporation to reduce volumes and trucking
- Open tanks/sumps must have 1300mm of freeboard (enough to manage an entire 1:1000 ARI wet season)
- All tanks are double lined with leak detection
- Tamboran is intending to trial wastewater recycling in 2025/2026 to reduce waste generated and raw water usage


Transfer pump


Enclosed tank


Evaporation tank

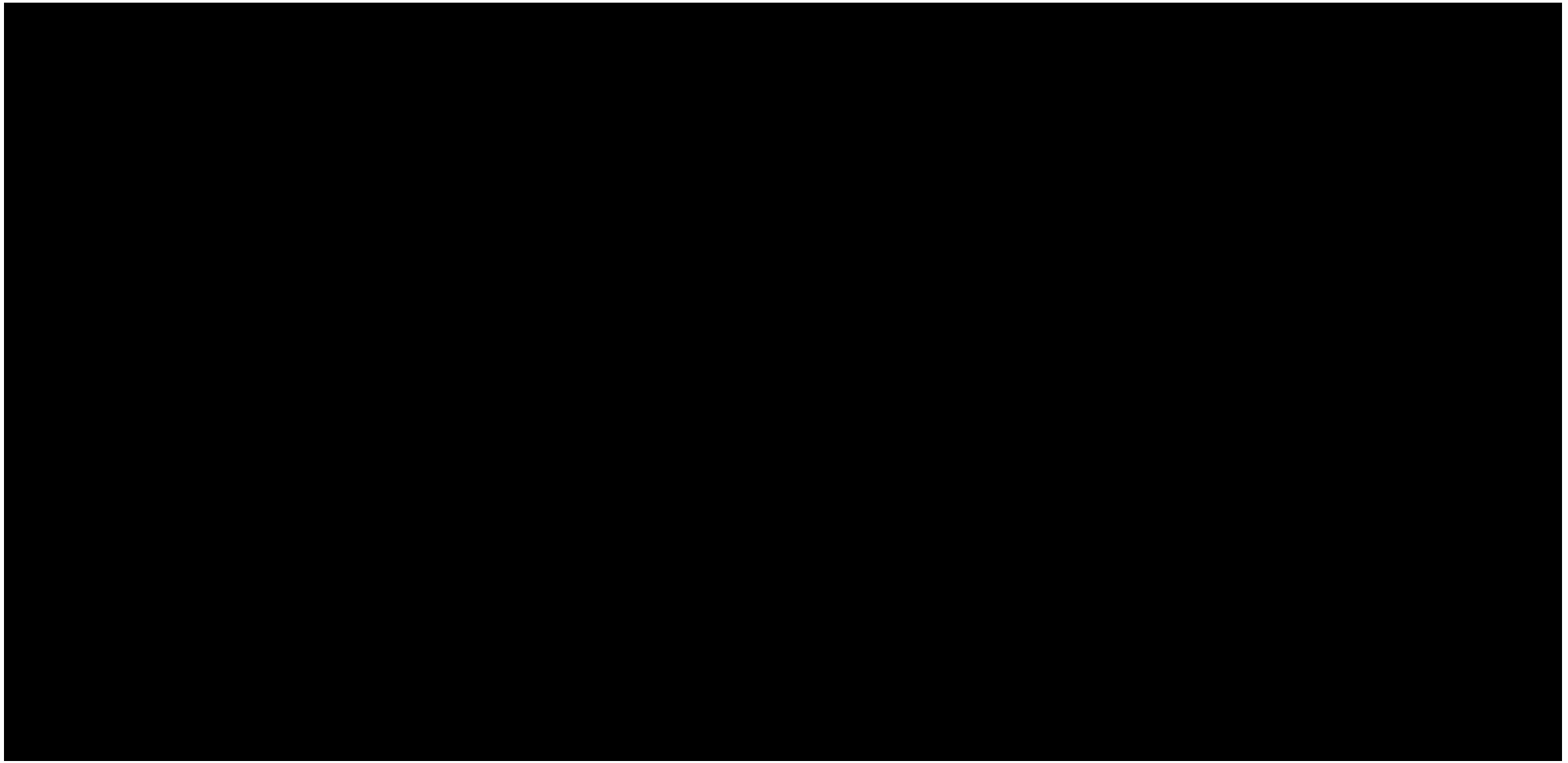
Decommissioning and rehabilitation works

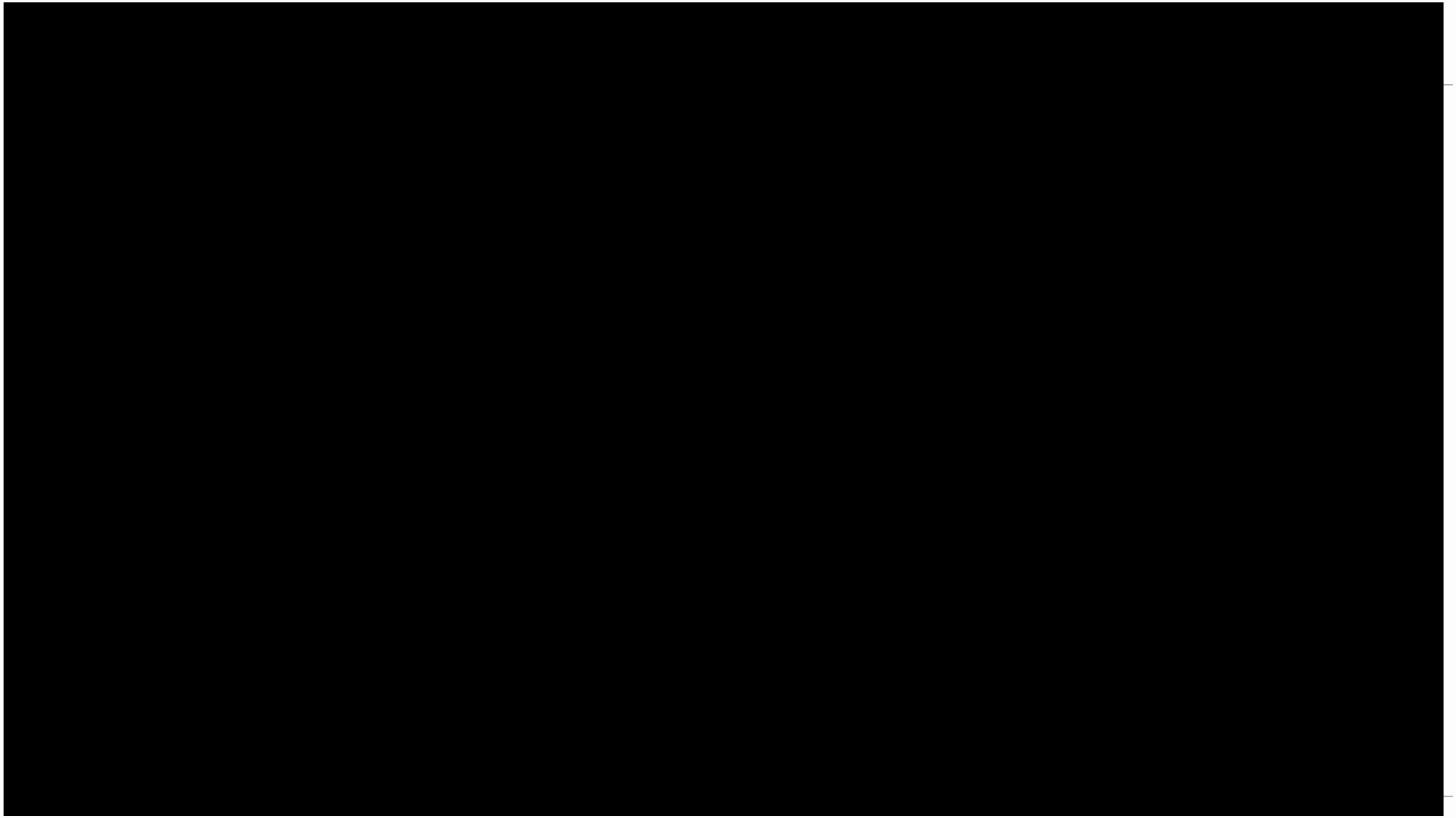
- Decommissioning wells, gas plants and rehabilitating disturbed areas back to pre-existing levels
- Plugging wells with concrete to protect aquifers
- Purging all pipelines and removing surface components prior to abandonment
- Removing all surface facilities, recontouring, re-spreading topsoil and reseeding vegetation

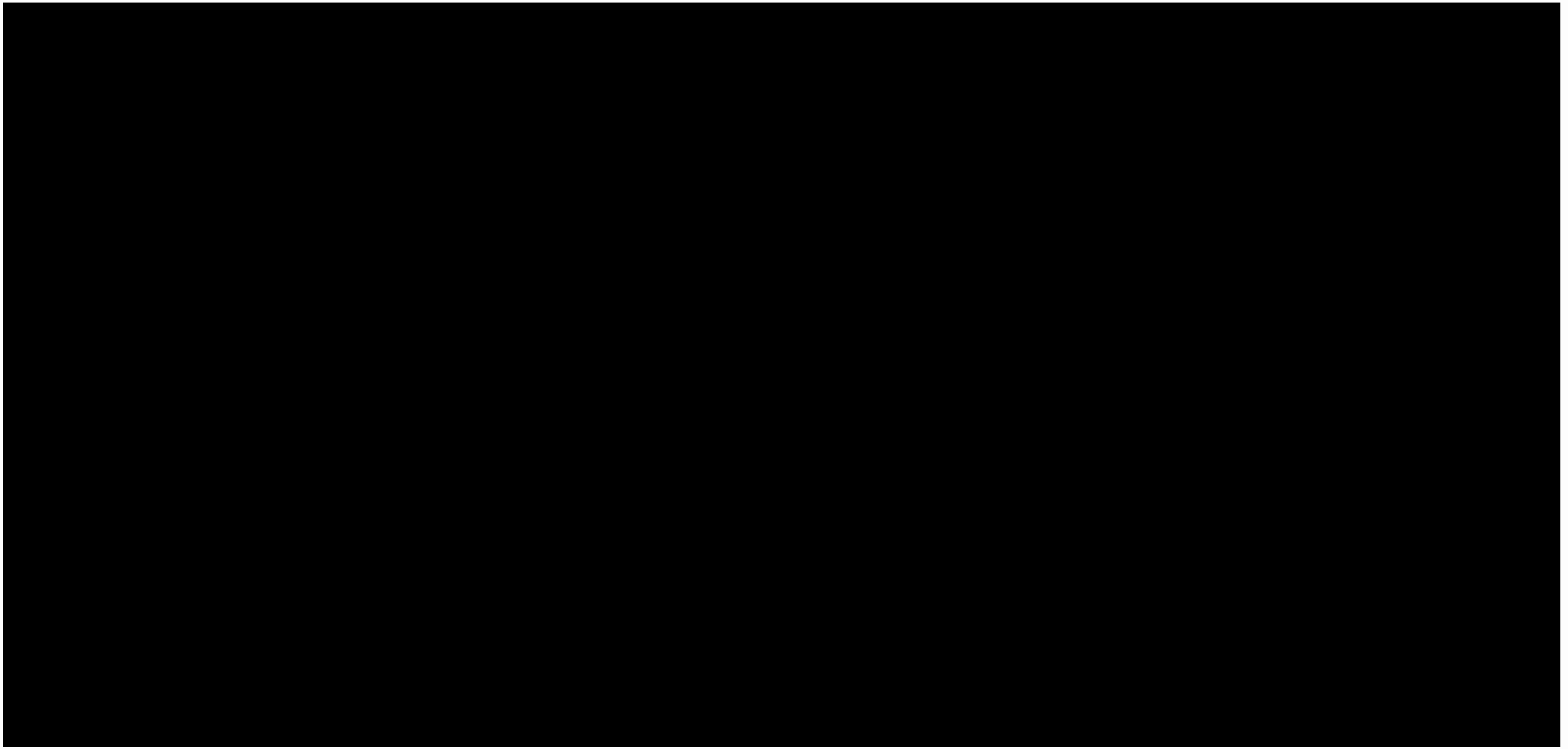
Example of a site being progressively rehabilitated in QLD

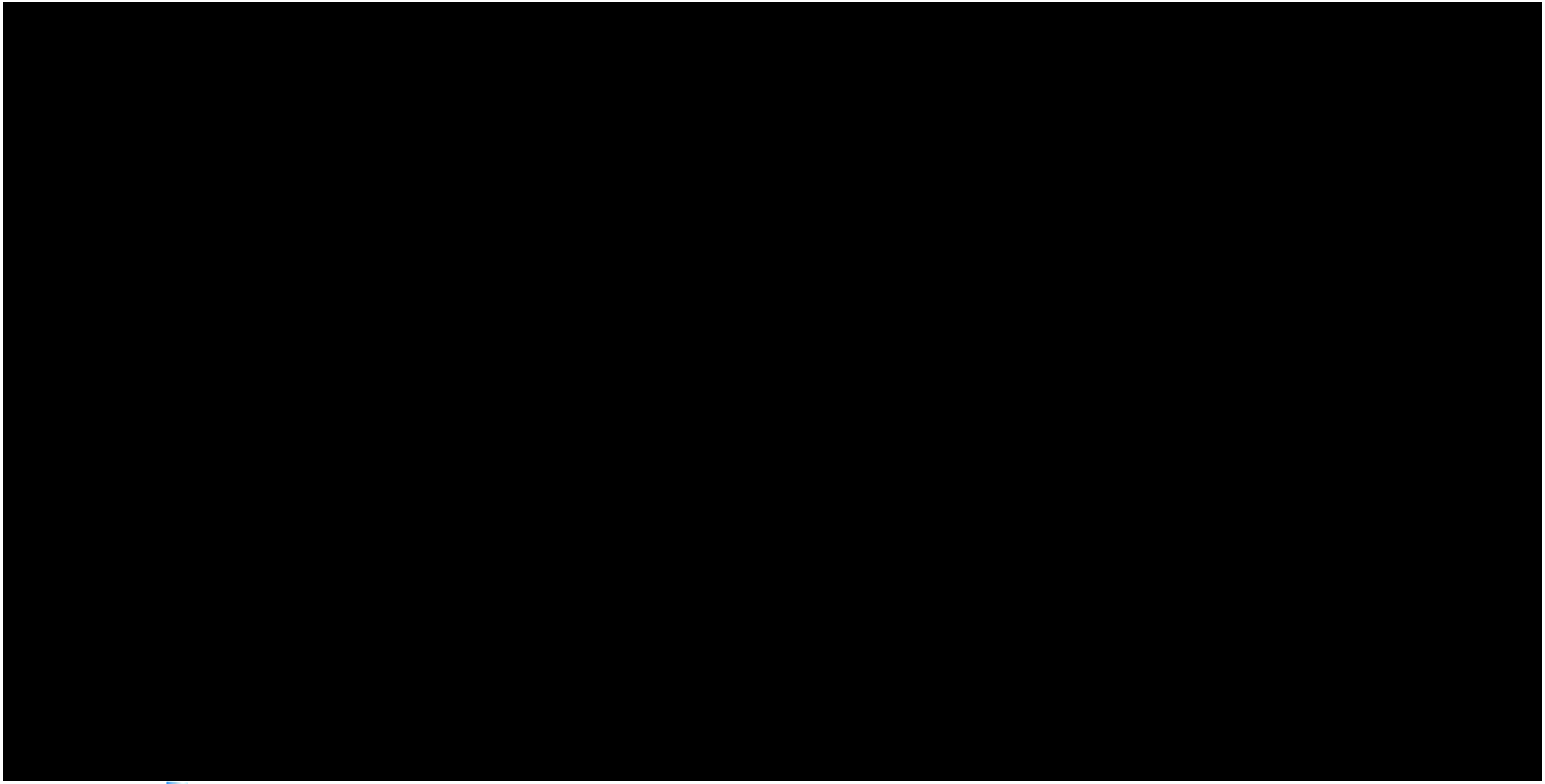
Regional Water Monitoring Program

- ~ 14 surface water sites across the basin are proposed to be monitored before and after the wet season to monitor water quality
- Program implemented by an indigenous business with support by an external hydrogeologist and cultural managers.
- Tamboran recognises that these are sensitive sites and request advice as to how to approach this program
- Data collected will be made available to Native Title Holders









Questions?

Tamboran Beetaloo Joint Venture Project
Work Program and Appraisal Gas Information Meeting

EP98

2024

Confidential

Kyalla 117 N2- NORTHERN TERRITORY AUSTRALIA

Agenda

1. 2023 Work Program Summary
2. Beetaloo roadmap to production– recap
3. Proposed 2024 work program activities
4. Environmental Management Plans
5. New sacred site clearances
6. Sand Extraction License
7. Local employment opportunities
8. Next steps and questions

Purpose of Work Program Meeting

- Talk through what exploration activity has occurred on the Exploration Permits throughout 2023
- Talk through the results of 2023 Exploration Activity
- Provide an overview of the exploration activity planned for 2024
- Provide an overview of the new 2024 EMP’s
- Talk about appraisal gas sale
- Talk about future Government approvals, including cultural heritage clearances that will require consideration from Native Title Holders

About Tamboran

Introducing Tamboran

We are a publicly listed Australian company with our headquarters in Sydney and staff across Australia and the USA. We are committed to creating value for our shareholders, communities, Territorians and Australians by appraising and developing the gas resources of the Beetaloo Basin. We strive to follow and exceed the example set by Origin in community engagement since 2014 and will continue to focus on economic, development and employment opportunities for Native Title Holders and local communities.

Our Vision

To play a role in the global energy transition by investing in the development of low CO2 unconventional natural gas resources in the Beetaloo Sub-basin of the Northern Territory of Australia and to become a Net Zero carbon emissions gas producer for our equity share of Scope 1 and Scope 2 emissions when the Company achieves commercial gas sales.

Strategy

- Target is to become a Net Zero equity Scope 1 & 2 emissions producer
- Focused, high growth Beetaloo strategy
- High quality assets with significant scale
- Low-cost development targeting multiple markets, premium pricing
- Expertise in unconventional E&P development

Sustainability

- Health & Safety
- Climate Change
- Environment
- People
- Community
- Economic Sustainability

2023 Work Program Summary

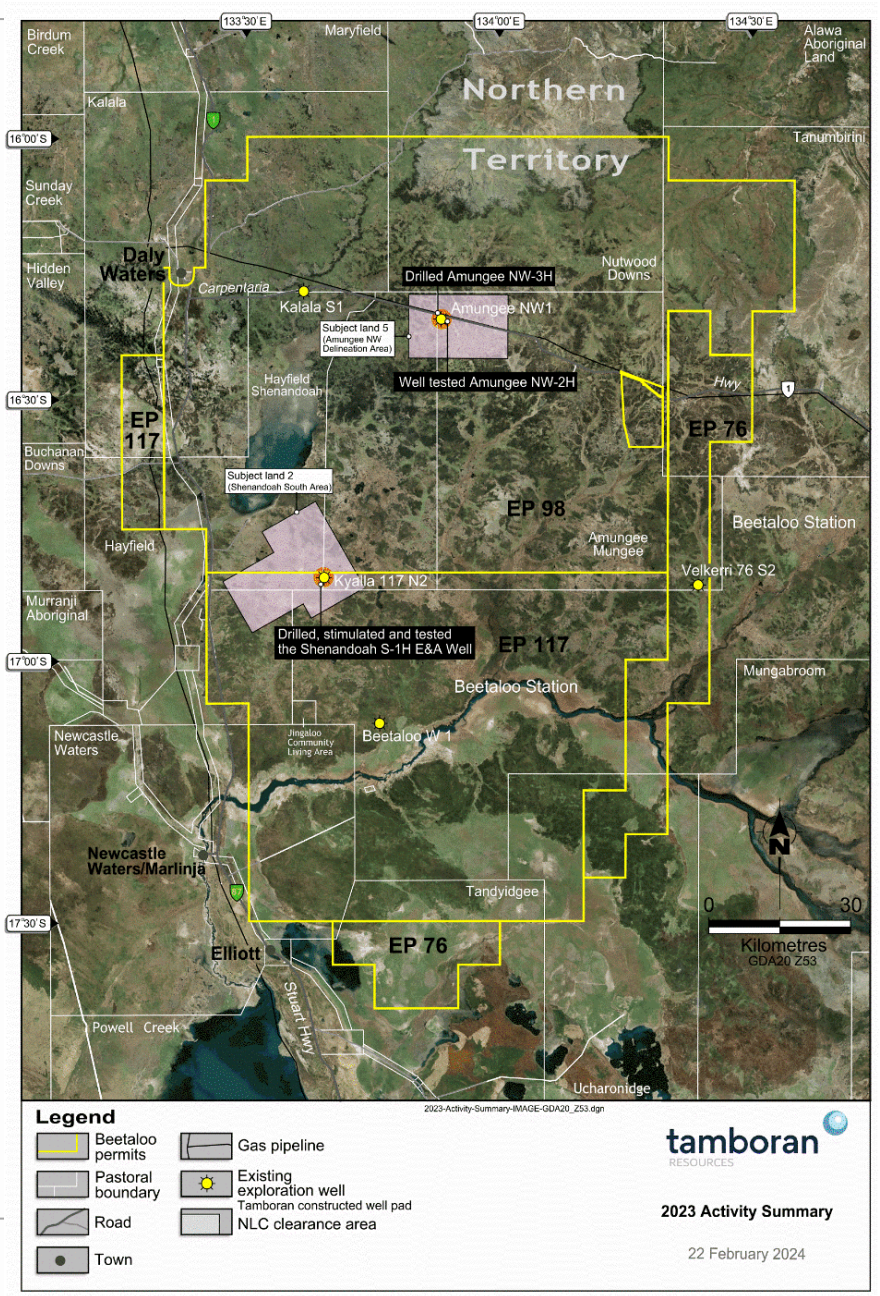
Operations update – 2023 was a big year for the Beetaloo

Key Exploration Results

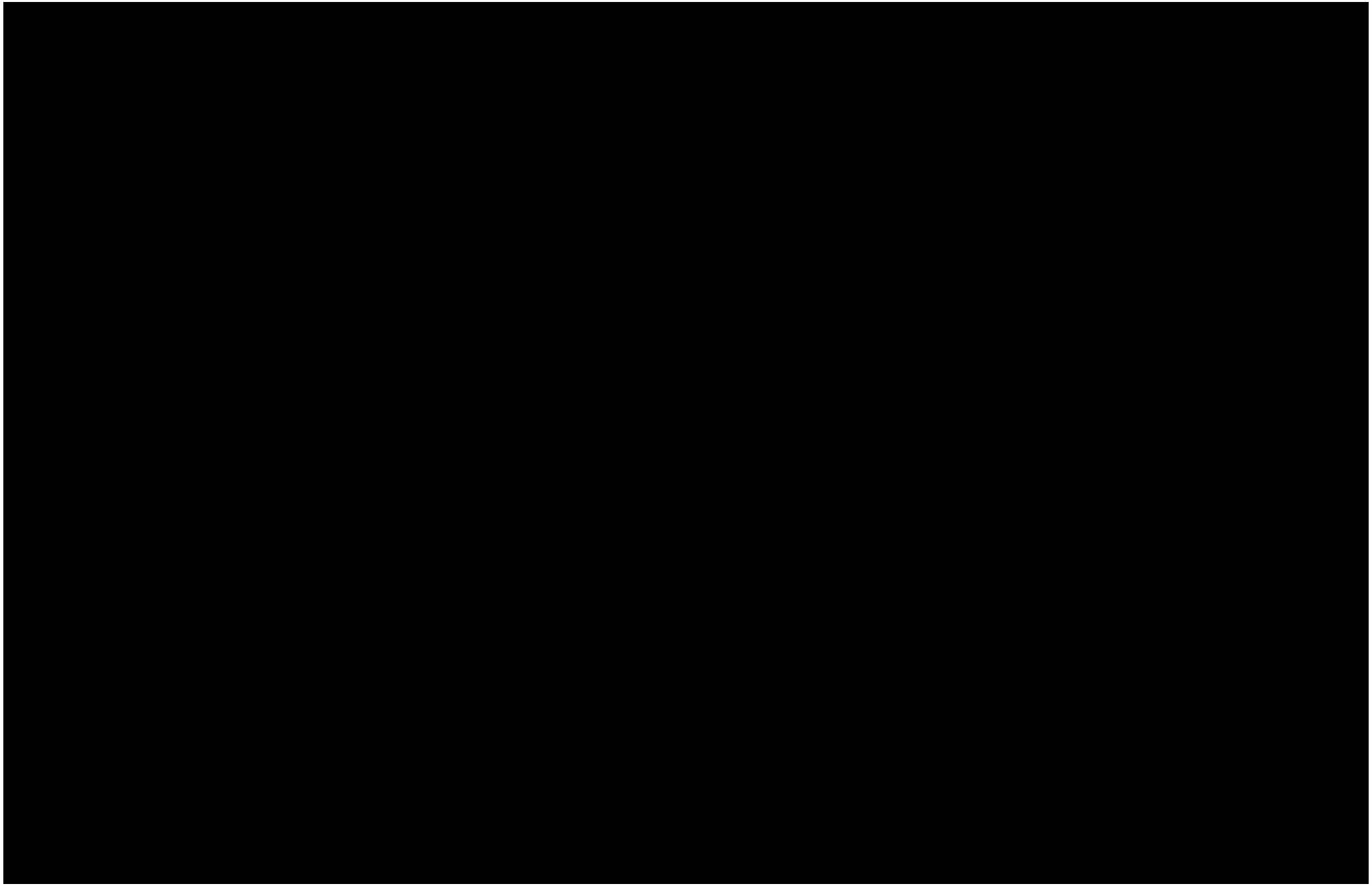
- Tested the Amungee NW 2H well
- Drilled the Amungee NW 3H well; moved to Shenandoah S area
- Shenandoah S 1H well was successfully drilled, stimulated and tested with economic flow rates of 6.4mmcfd / 1000 m of lateral - **a very good result.**

Setting the project up for success

- H&P rig mobilised the super-spec FlexRig® Flex 3 Rig (2023)
- Entered an agreement with Liberty Energy to bring in modern frac fleet (2024)
- Applied to increase in Water Extraction Licence Volume from 175ML to 450ML
- Extractive mineral exploration licences submitted to find sand (2024)
- 2024 EMP needs to be approved by minister on in mid-May for activity to commence



Roadmap to production recap



2024 Proposed Work Program

Proposed 2024 Work Program

New scope under the Shenandoah South E&A EMP proposed to be completed in 2024/25:

- Construct the new location Shenandoah North A and drilling of a new E&A well
- Work is anticipated to occur in either 2024 or 2025

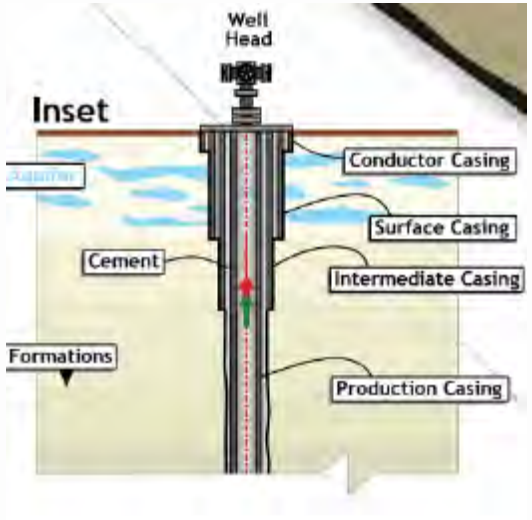
Shenandoah North A

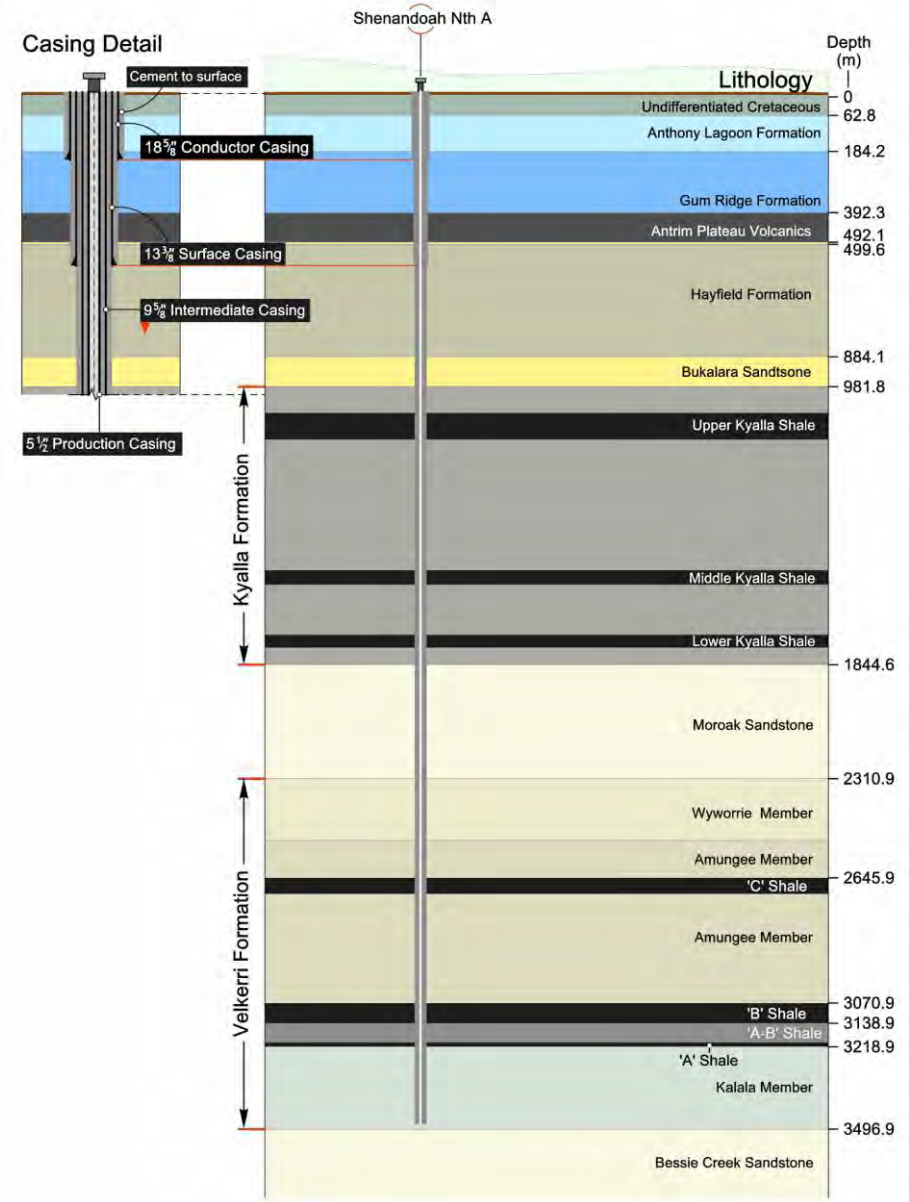
- Located within Subject Land 1
- Construction of new 3 ha Shenandoah NA including lease pad, camp pad and access tracks, land clearing and civil construction
- 2024/2025
- Drilling water bores (1-2)
- Drilling of a vertical stratigraphy well
- Example provided is Amungee NW 1 being drilled

Drilling rig

Well overview

Multiple string of cement and steel protect aquifers





- 1 vertical well targeting the Velkerri B –shale
- Approximately 3,100- 3,500m below ground level
- ~2600m below the closest aquifer
- No hydraulic fracturing proposed
- Groundwater is monitored quarterly from the site before and after drilling

Approvals- Environmental Management Plans and Water Extraction Licences

Other regulatory approvals

- Tamboran continues to consult with the NLC in obtaining the relevant approvals required for its Explorational and appraisal Activities.
- Key approvals for 2024 covering subject land 1 include:
  - Shenandoah South Exploration and Appraisal EMP
  - Gum Ridge [redacted] Water Extraction Licence

We will discuss these in the following section

Shenandoah South Exploration and Appraisal EMP

Shenandoah South E&A Program EMP

— New Environment Management Plan (EMP) covering activities in Subject land 2 (existing Kyalla 117 N2 area) and Subject Land 1.

— Similar activities as previously completed (drilling, stimulation and well testing) **spread over 5 years- Work program 2024 falls under this EMP, as will future works in 25/26.**

— Activities include:

- **Subject Land 1:**
  - 1 new exploration location at Shenandoah North A
- **Subject Land 2:**
  - [redacted]
  - 3 new exploration locations; Shenandoah S2, Shenandoah S B and Shenandoah S C
  - Extension of Kyalla 117 N2 location
  - Drilling ,stimulation of 15 new E&A wells
  - Gathering lines connecting sites to allow for water and gas transfers
- **Existing Beetaloo W-** to all future decommissioning (NLC cleared in 2014 and 2018)

EMP Engagement with NLC and NTHs - a long and ongoing process

On country meeting with Native Title Holders to confirm 2024 Work Program scope and ongoing engagement on the EMP

Tamboran will continue to engage on exploration activities and scope

Why we are here today

Summary of what is new in the Shenandoah South EMP

New sites

- Construct the Shenandoah North A site
- New disturbance of ~5 hectares

Drilling of water bores

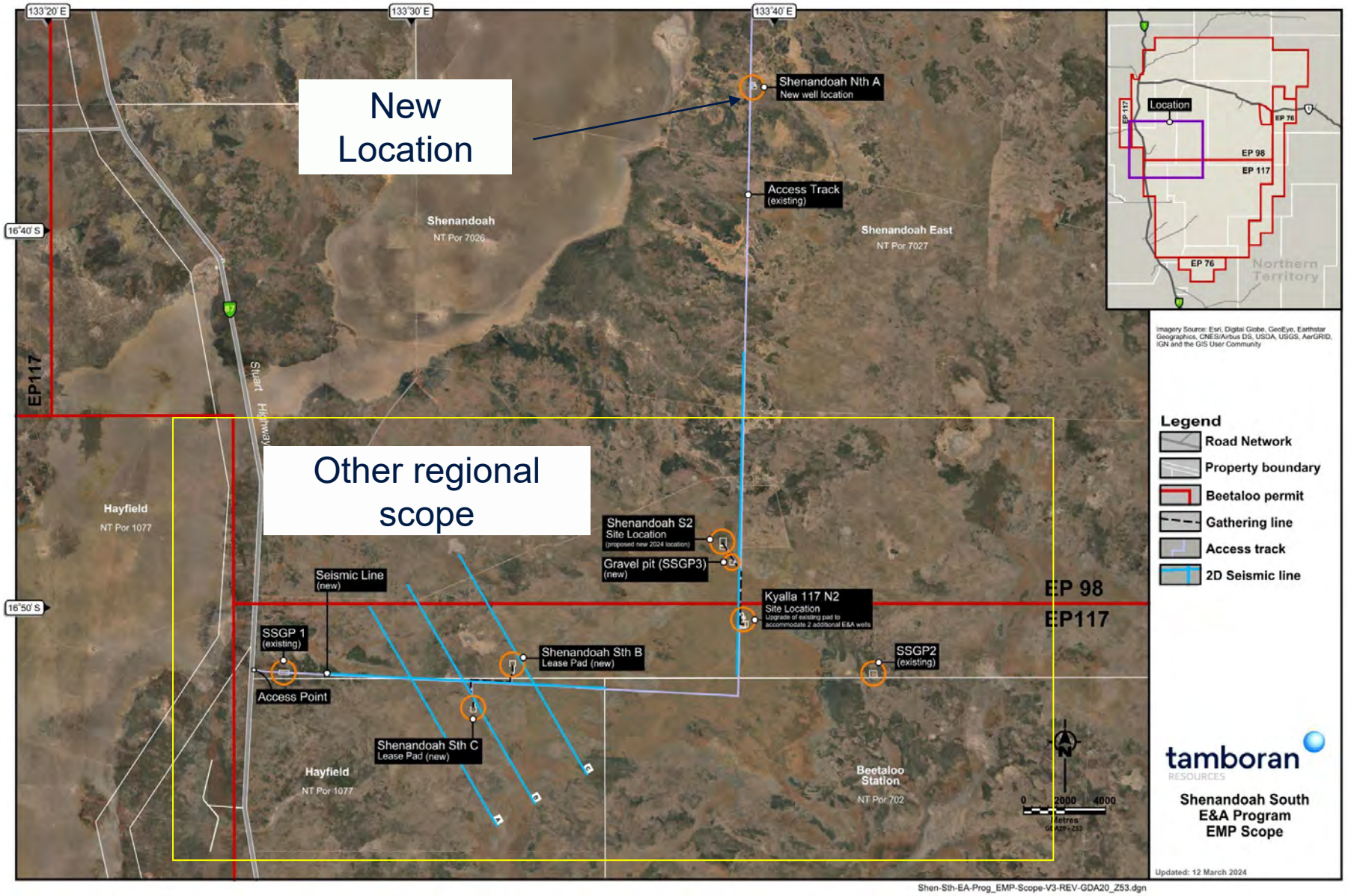
- Up to 2 water bores at each site to monitor and extract water groundwater

Civil construction of Kyalla 117 N2 in 2019

Velkerri 76 S2 construction underway

Location of sites and well pad

- Shenandoah North A located in EP 98
- ~25 K East of Dunmarra
- ~100km North of Elliott



What is new in the EMP

Drilling works

- Tamboran proposes to drill a new vertical exploration well at the site in subject land 1
- Well drilled~3,100 to 3,500m below ground level (deep)
- Well either suspended or plugged and rehabilitated.
- No hydraulic fracturing proposed.
- All wastewater and drilling material removed from site.

Drilling of Kyalla 117 N2-1H looking over mud sump

What is new in the EMP

Access Tracks

- Sealing of existing intersection track with Stuart highway
- Maximise use of existing tracks to reduce clearing
- Upgrade and maintenance of pastoral tracks
- Construction of new access tracks to new locations
- New disturbance ~2-3 hectares

Grading and forming of existing pastoral track to Kyalla 117 N2

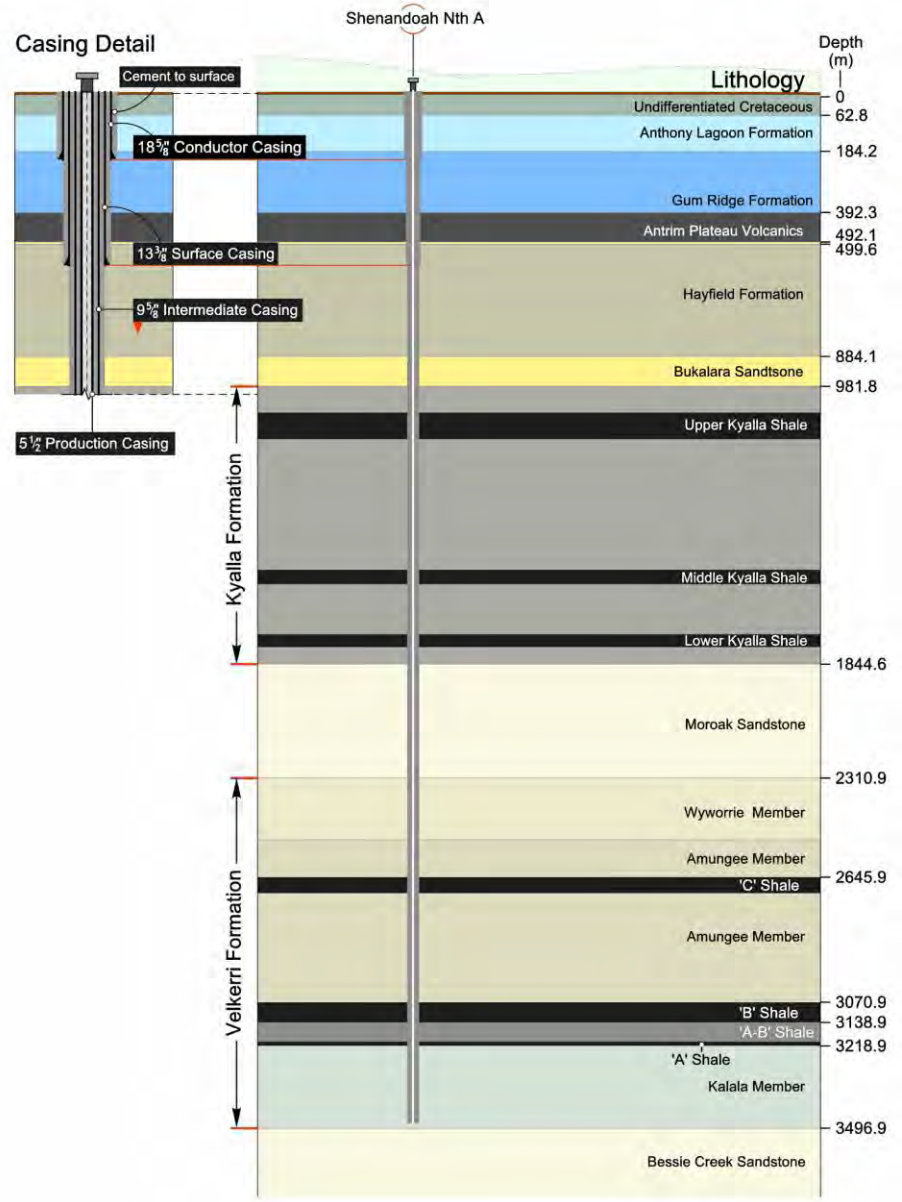
Upgraded track with rock check drains

Management of Impacts - Land Clearing

- Clearing of vegetation is required to construct sites and access tracks
- Sites are scouted by ecologists and cultural managers during site selection
- Sensitive sites are avoided
- No clearing in creeks and watercourses proposed
- Cultural managers employed to inspect areas prior to clearing to identify any fauna
- Activity will stop and fauna will be allowed to leave/ removed from the area
- Clearing to avoid large trees and nests where possible

Management of impacts- Groundwater protection

- The target shales are ~2.6km below the closest regional aquifer (Gum Ridge)
- Wells are designed and constructed with multiple layers of steel and cement to protect aquifers
- Multiple casing and cement strings protect aquifers
- We test and monitor the integrity of wells
- We monitor groundwater at each well site
- Wells are plugged with cement at the end of life



Decommissioning and rehabilitation works

- Once the well is no longer required, we will decommission the well and rehabilitate the site back to pre-existing levels
- Plugging wells with concrete to protect aquifers
- Removing all infrastructure, re-spreading topsoil and reseeding vegetation

Example of a site being progressively rehabilitated in QLD

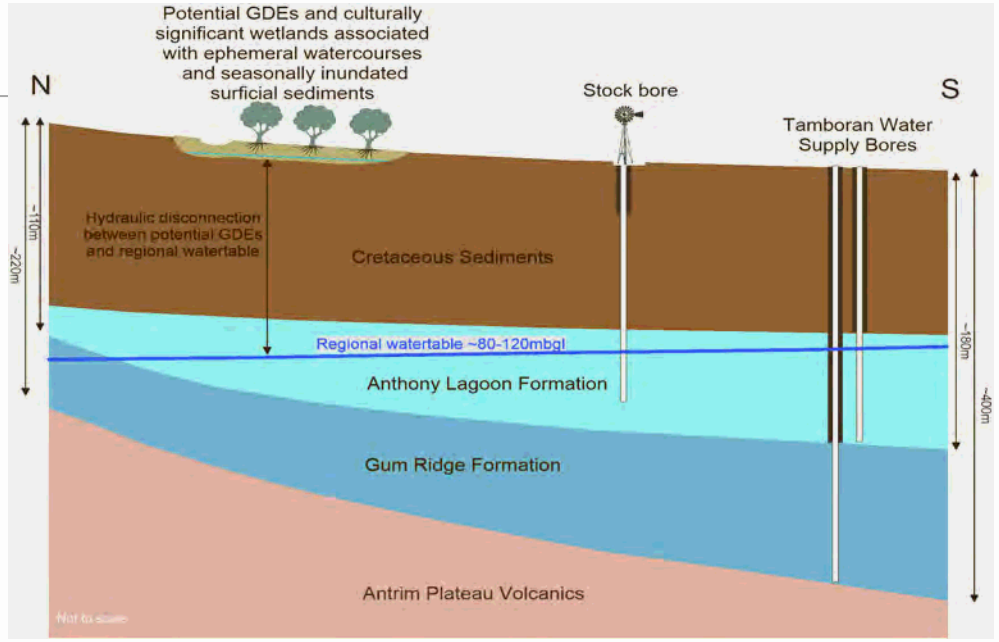
Water Extraction Licences

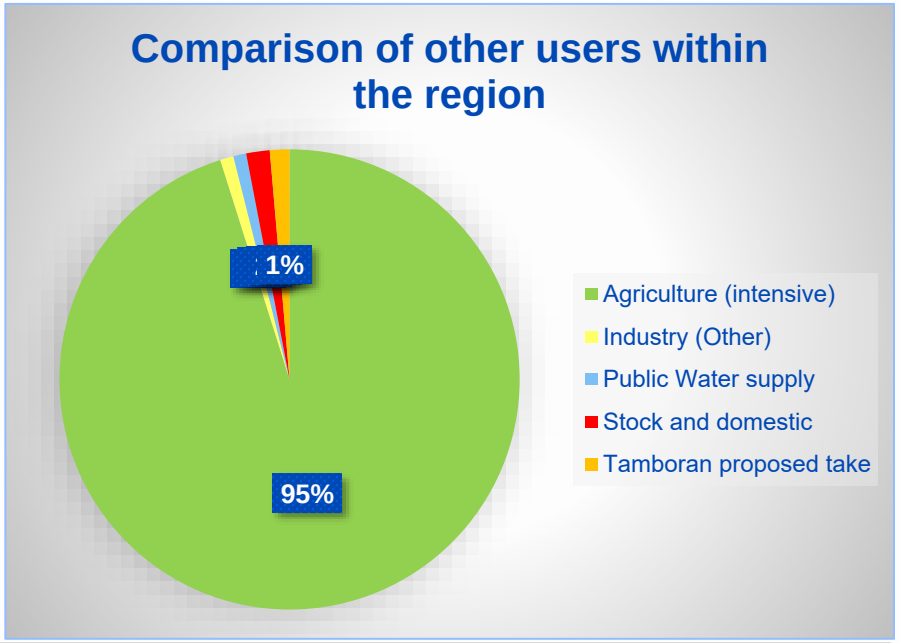
Water Extraction Licences

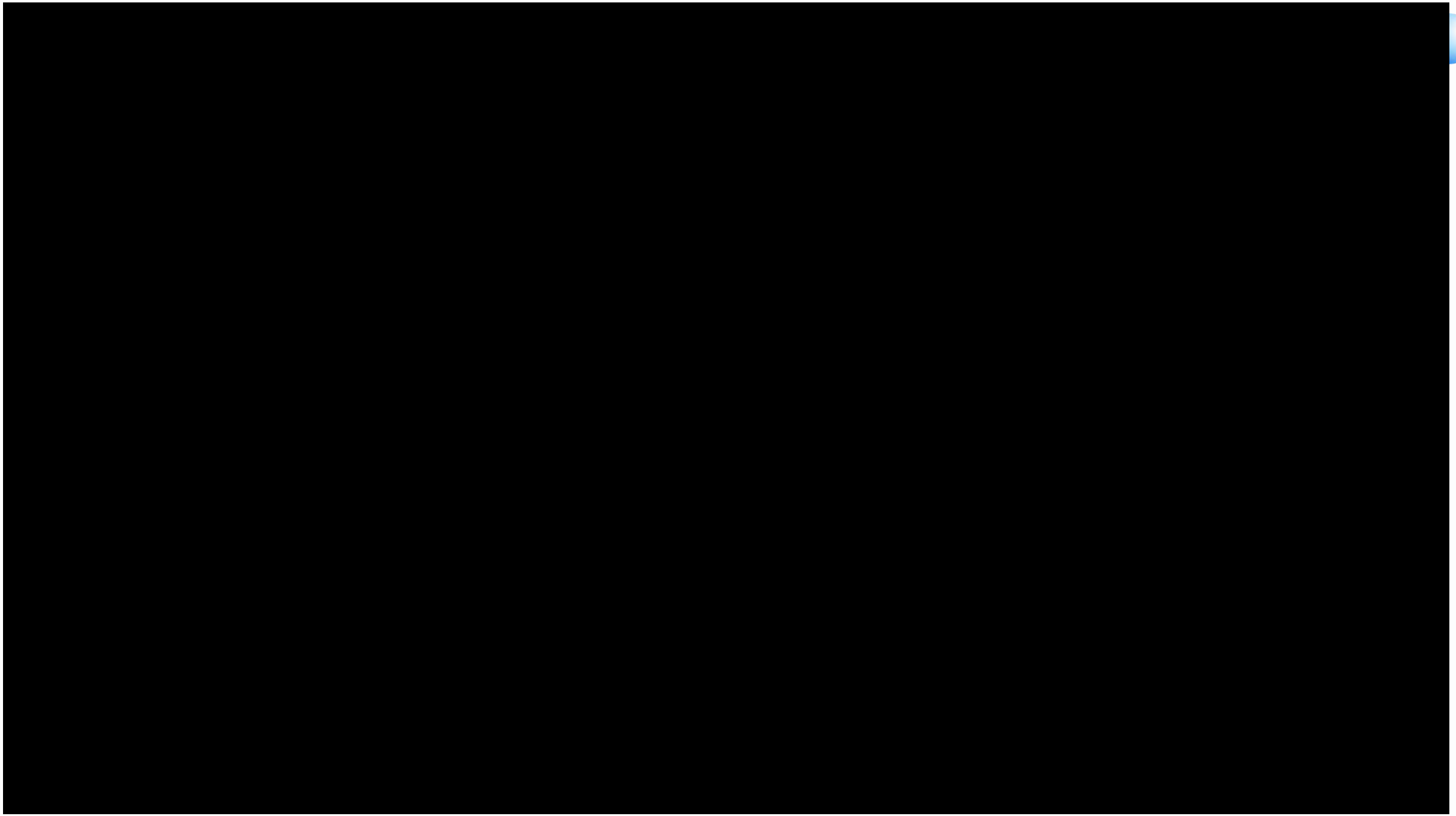
- Water for activities will be sourced from the Gum Ridge and Anthony Lagoon Aquifers
- Water monitoring and modelling confirms water extraction will not impact features such as water holes, creeks or Springs
- Future activities will require up to 450ML/year of water to support the drilling, stimulation and appraisal of multiple wells- this may increase depending on well sizes
- An amendment Water Extraction Licence from 175ML/year to 450 ML/year from the Gum Ridge Formation (GRF)

[redacted]

- Tamboran will continue to monitor groundwater and surface water level and quality to demonstrate no harm

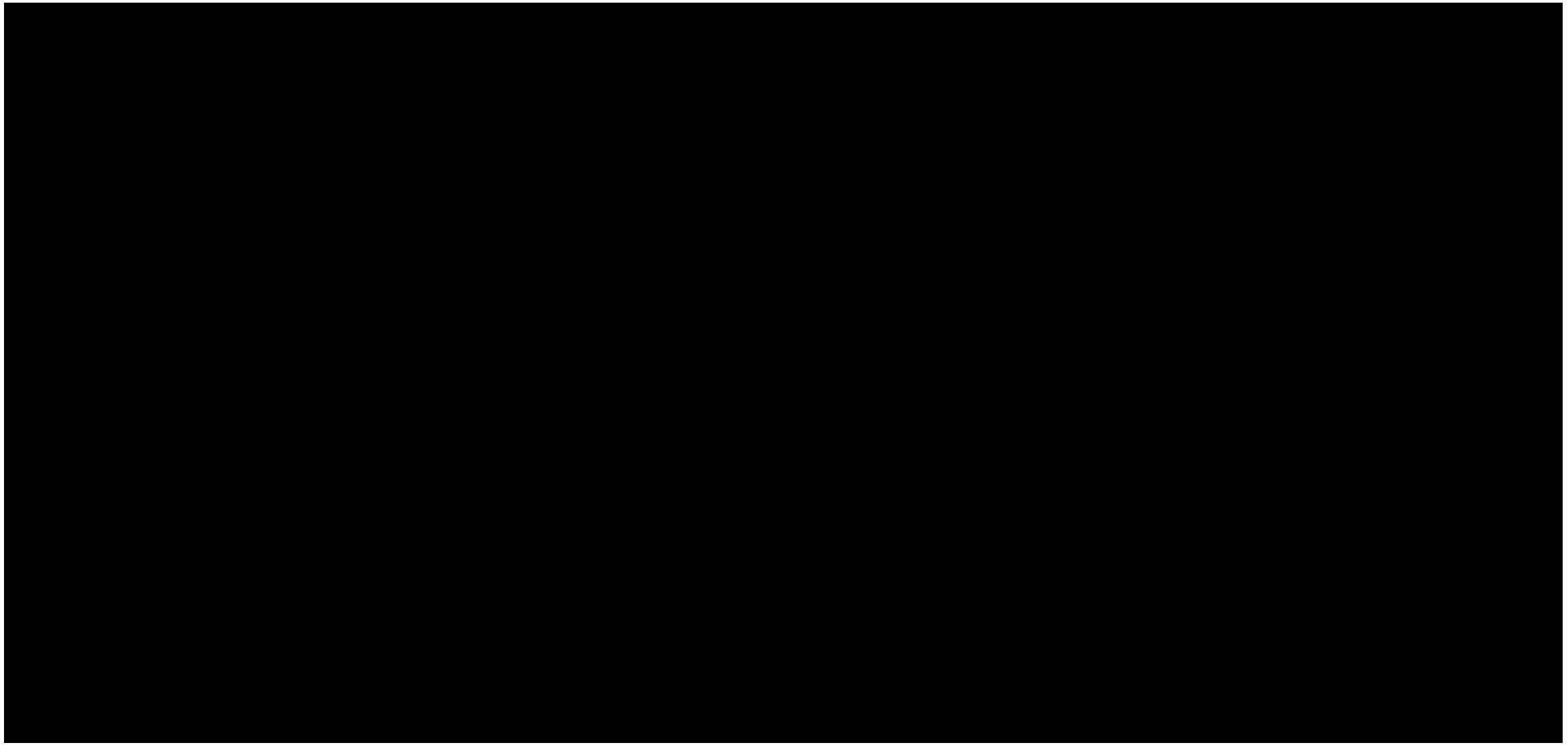


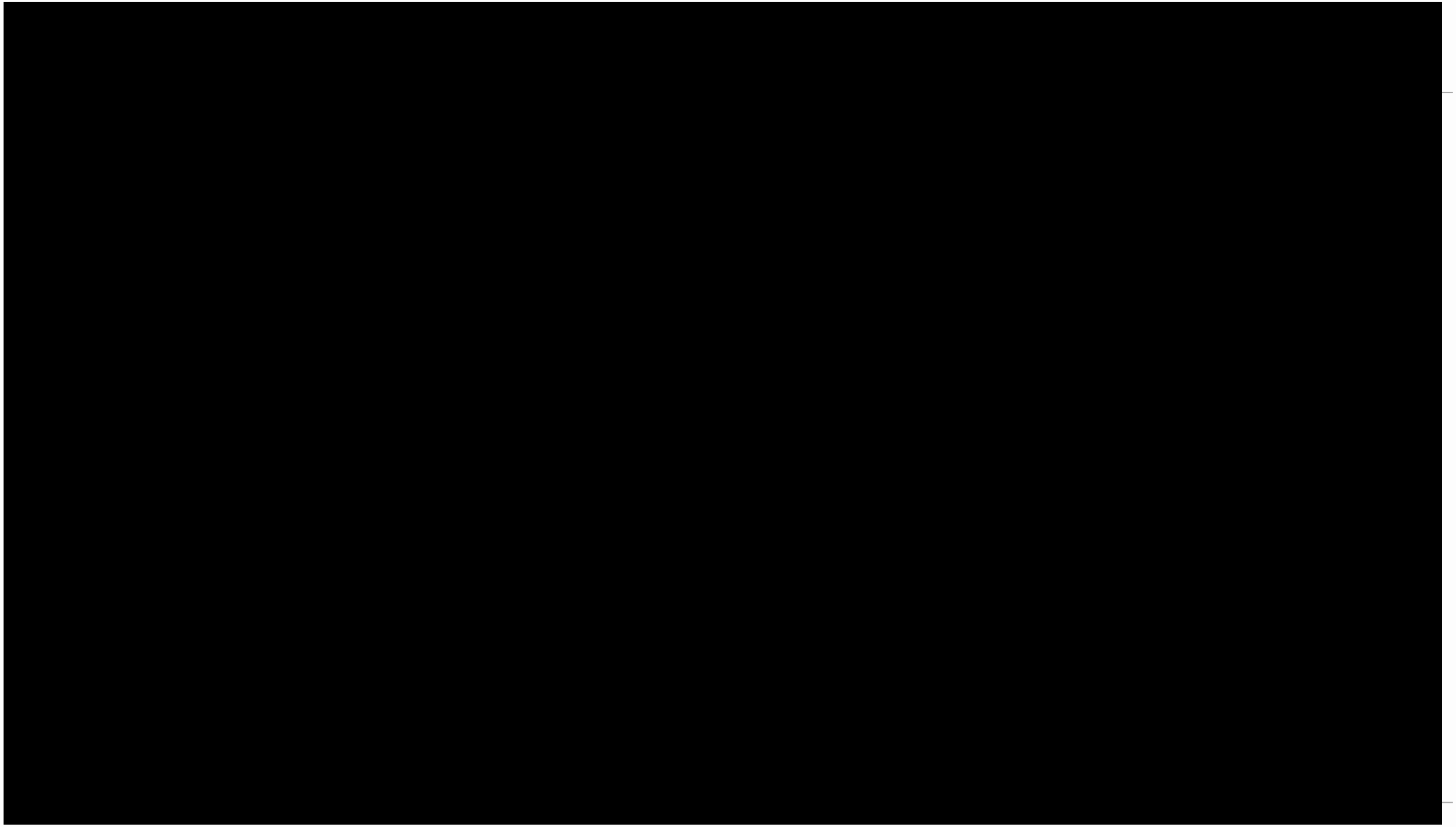


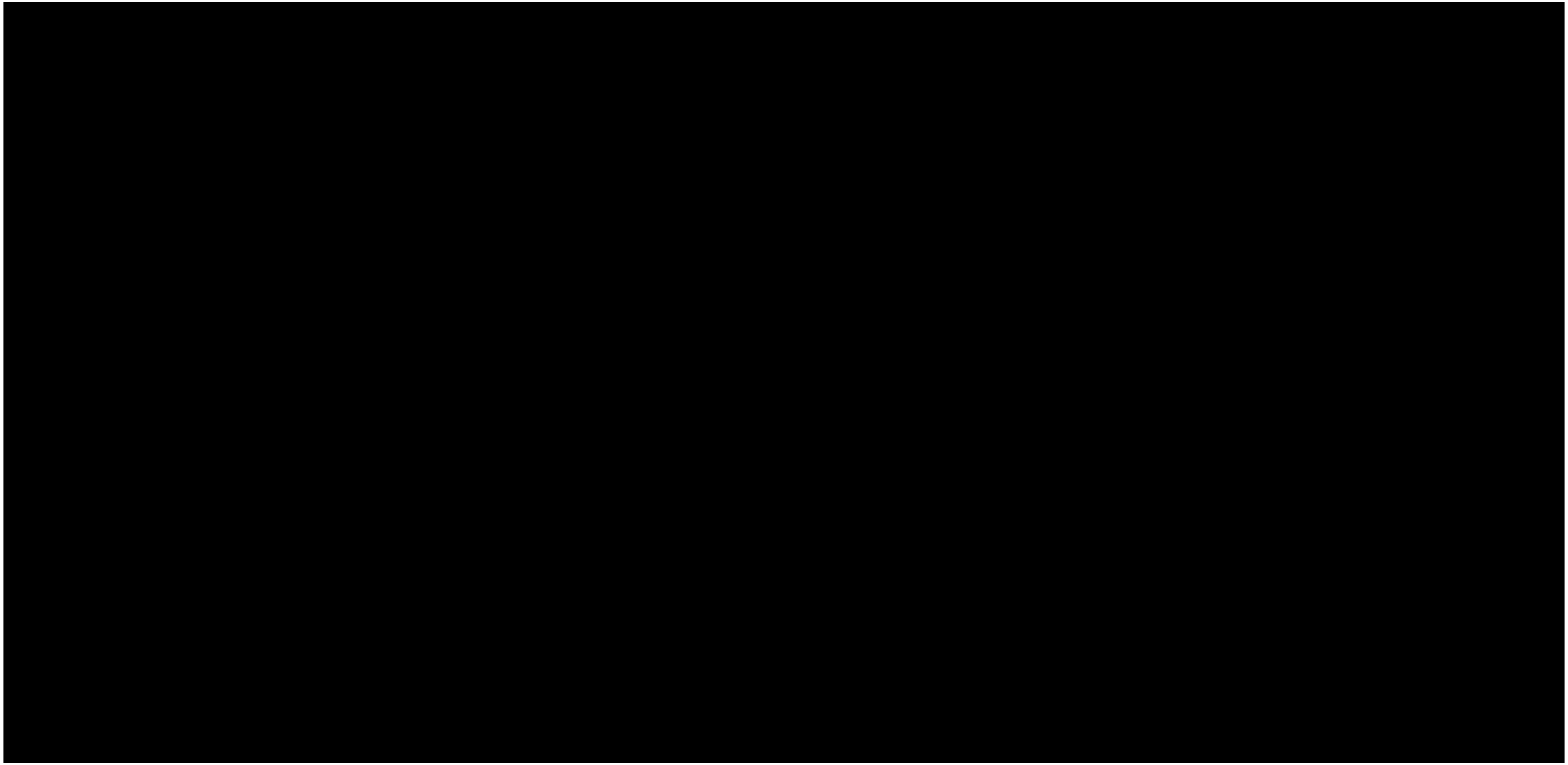


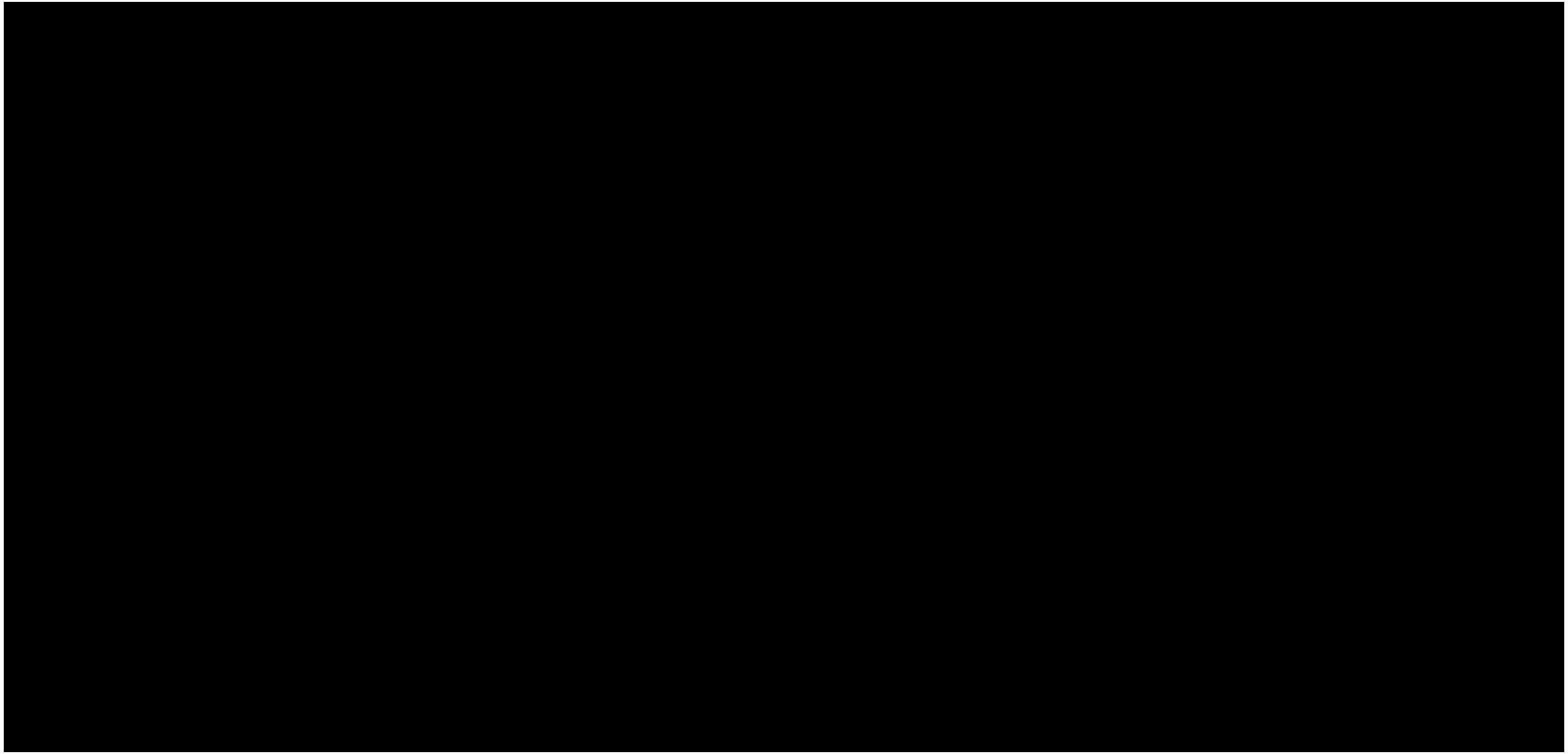
Regional Water Monitoring Program

- ~ 14 surface water sites across the basin are proposed to be monitored before and after the wet season to monitor water quality
- Program implemented by an indigenous business with support by an external hydrogeologist and cultural managers.
- Tamboran recognises that these are sensitive sites and request advice as to how to approach this program
- Data collected will be made available to Native Title Holders









Questions?