




**Public Consultation
Environmental Impacts
Chuditch-2 Appraisal Well
PSC.TL.S0.19.16**


*“Building an Asian
Gas Champion”*

22 April 2025

www.sundaenergy.com



Agenda




- Introduction by MC
- Opening statement by Local Authority representative
- Remarks by ANP representative

- SGBU Presentation - General overview of the project/summary of PSC-TL-S0-19-16/Exploration activities & approvals to date;
 Objective for drilling the Chuditch 2 Appraisal Well
 Location;
 Environment/Benthic/Protected areas/Parks/ZPI's;
 Positive Impacts of the proposed drilling program;
 Negative impacts of the proposed drilling program;
 Environmental Management Plan and Monitoring.
 Local Content/Employment/Goods and Services.


- Questions

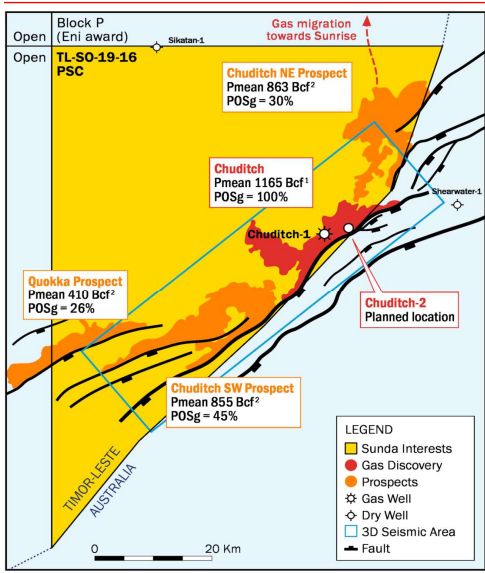
- Closing Statement

1




Chuditch Project Overview






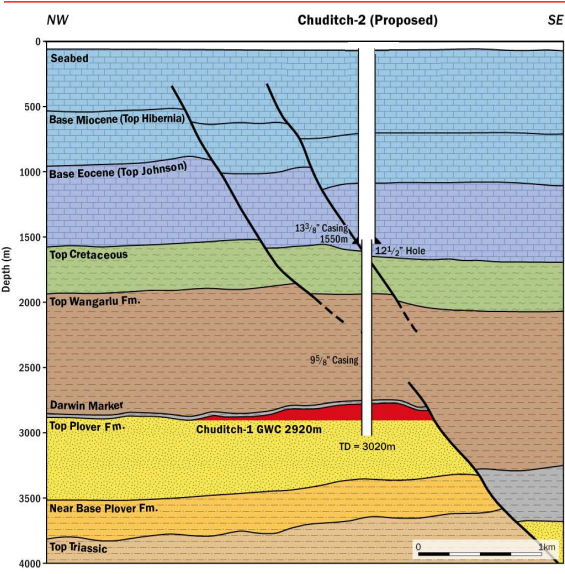
- **Chuditch PSC (Sunda 60%, TIMOR GAP 40%)**
 - Chuditch gas field discovered by Shell in 1998
 - 64m water depth, gas encountered at 2,890m subsea
 - Significant Discovered Resources vital to Timor-Leste economic growth.
 - SGBU preparing to drill and test the Chuditch-2 well
 - Evaluating gas development and export options
 - P.D. approved Nov 2023 – Category A (Decree Law 39/2022-1st amendment to D/L5/2011)
 - TOR approved Nov 2024
 - Draft EIS/EMP under Public consultation.

2

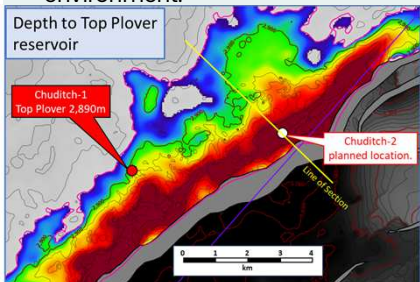


Appraisal Well Drilling to Accelerate Development





- ✓ Plan to drill and test in Q2 2025
- ✓ Target – Gas charged Plover formation
- ✓ Objective 1: To drill the well and test in a safe and environmentally responsible manner
- ✓ Objective 2: To validate resources and conduct flow test to support a fast-track development of the asset for the benefit of the Timor-Leste economy with as low as practicable impact to the receiving environment.



3



CH2 – Well Objectives



- No accidents, incidents, personnel injuries or harm to environment
 - **ZERO** LTI (Lost Time Injury) cases
 - **ZERO** RWC (Restricted Work/Transfer) cases
 - No spills, unplanned discharges or other environmental impacts during the operation.
- Conduct safe & efficient operations in compliance with SBGU Well Delivery Process
 - Deliver a borehole in suitable condition to permit evaluation & well testing of the primary target (Plover Fm reservoir)
- Complete all operations within the planned duration and the approved budget
- Achieve all required strategic and subsurface objectives
 - Obtain full wireline log coverage of the Plover Fm reservoir section and any overlying section of interest.
 - Recover representative reservoir fluid samples suitable for PVT analysis.
 - Acquire large rotary sidewall core samples for conventional and SCAL analysis, and to allow age determination of upper reservoir & seal.
 - Acquire good quality VSI check-shot data from TD to as shallow as data quality permits, for accurate seismic-well tie.
 - Undertake a full drill stem test (DST) to demonstrate commercial reservoir deliverability.
- Ensure compliance with Timor-Leste government legislation.

4




Well Design/Construction




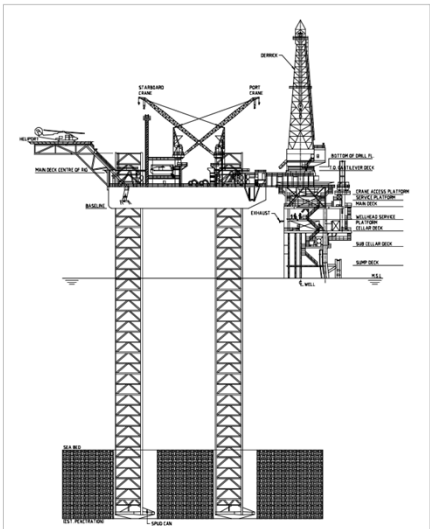
- Well - vertical profile with a total vertical depth (TVD) of approximately 3,010 m.
- SGBU are planning to drill the Chuditch 2 Appraisal well in Q2, 2025.
- The top hole (17 1/2" will be drilled riserless using sea water, High viscosity sweeps of water based mud to the section TD and displaced to 9.5 ppg KCL/polymer water based mud prior to running 13 3/8" casing and cement in place. The BOP will be fitted prior to drilling out for the 12 1/4" section to well TD. Due to reactive clays and other well stability factors identified during offset studies, Saraline 185 V, an OCNS category E NADF will be used. Synthetic based mud in the range of 9.5ppg to 9.8 ppg. **Saraline 185V is readily biodegradable in both marine water (OECD 306 test) and fresh water (OECD 301F test). Saraline demonstrated excellent bioremediation properties even considering onshore land farming methods as proven in studies in Bangladesh, China and New Zealand (Sanzone, et. al., 2016).**
- At TD the well will be logged and 9 5/8" casing run and cemented in place (Contingent upon the well being a success case). On a success case, the well will be tested which involves bringing well fluids to the surface and flared so as to allow volumetric and pressure testing of the formation fluids to be conducted. Once testing is completed, the well will be permanently plugged and abandoned.
- A jack up MODU will be used to construct the well. The selected rig will undergo a rigorous technical selection process to ensure the rig is technically capable of drilling the proposed well safely and has an excellent, best oilfield practice safety standard to ensure the highest standard of personnel and environmental safety.

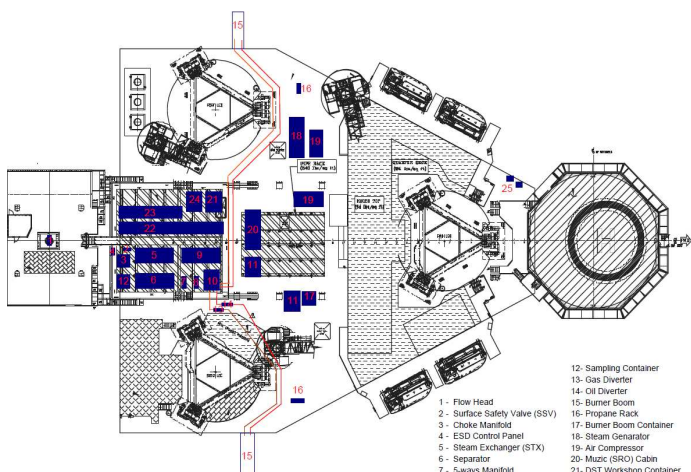
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JACK UP MODU









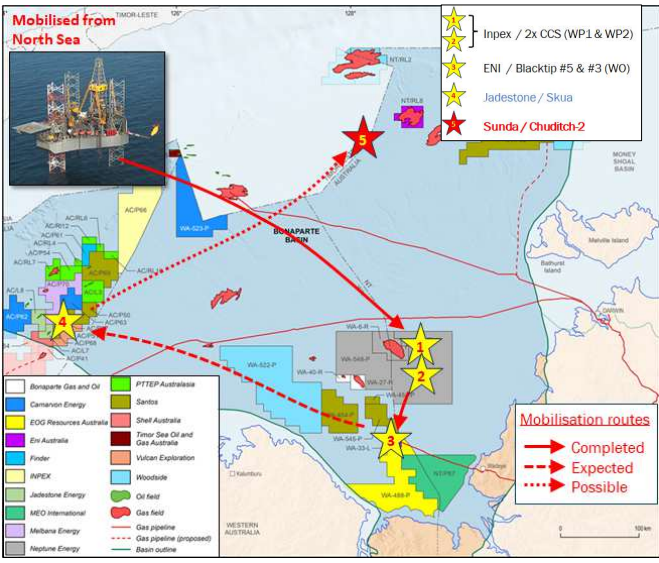
- 1 - Flow Head
- 2 - Surface Safety Valve (SSV)
- 3 - choke Manifold
- 4 - ESD Control Panel
- 5 - Steam Exchanger (STX)
- 6 - Separator
- 7 - Sways Manifold
- 8 - Electrical Transfer Pump
- 9 - Zone II Labcabin
- 10 - Surge Tank
- 11 - Workshop Container
- 12 - Sampling Container
- 13 - Gas Diverter
- 14 - Oil Diverter
- 15 - Burner Boom
- 16 - Propane Rack
- 17 - Burner Boom Container
- 18 - Steam Generator
- 19 - Air Compressor
- 20- Muzzle (SRJ) Cabin
- 21- DST Workshop Container
- 22- DST Long Basket
- 23- DSTV TCP Gun Basket
- 24- TCP Workshop Container
- 25- Jetlon Skid & Explosive Bunker

6



MODU – BIO SECURITY






Company	Contract	Activity	Planned (days)	Actual (days)
INPEX	Firm	2 x Well	100	157
ENI	Firm	1 x Well	75	
Jadestone	Unsigned	1 x Well	70	
SGBU	Unsigned	1 x Well	40	


Company	Start (dd-mmm-yy)	Finish (dd-mmm-yy)	Location	Comment
INPEX	12-Jul-24	16-Dec-24	Australia	WP1 & WP2
ENI	16-Dec-24	01-Mar-25	Australia	P5 and P3 (Workover)
Jadestone	01-Mar-25	10-May-25	Australia	
SGBU	10-May-25	19-Jun-25	Timor-Leste	

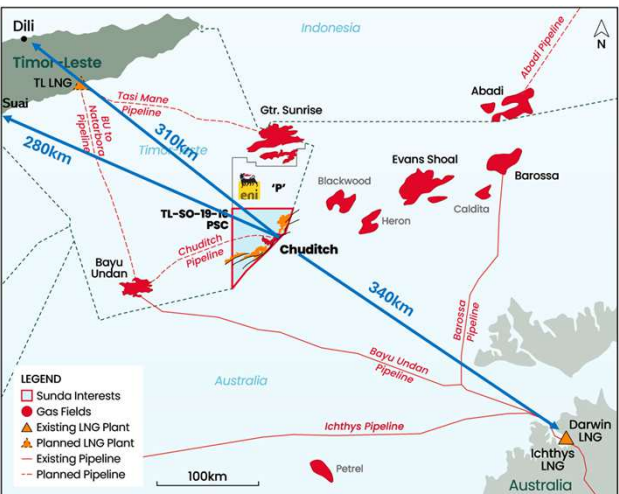
Proposed Rig will have a biosecurity assessment conducted prior to entry to TL waters- As the Rig has been operating within the Browse/Bonaparte Basins for several months after receiving an Australian Biosecurity clearance, no matters of Pest species are anticipated.

7




LOCATION






- ❑ 700 m on the Timor-Leste side of the border between Australian and Timor Exclusive Economic Zone;
- ❑ ~ 280 km from the Suai coastline;
- ❑ Water depth at location is ~ 68m – Open Ocean;
- ❑ Nearest Petroleum projects:
 - Bayu-Undan 140 km + WSW
 - Sunrise 80 km + NE.

8

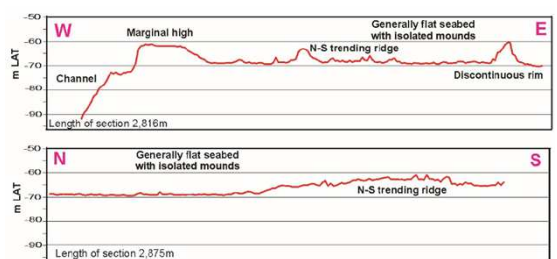


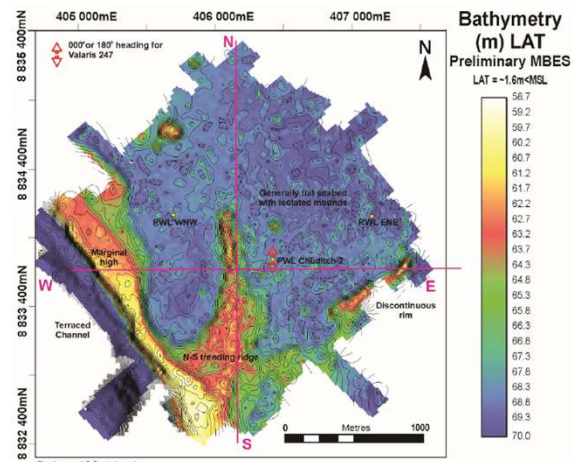
CH2 – Marine Environment



Chuditch-2 Location / Bathymetry

- The proposed location lies on a marine terrace. The topography of the terrace is characterised by water depths between 68-70m on a generally flat seabed, punctuated by frequent subcircular small mounds of 20-30m diameter and 2-4m heights above ambient seabed. An elongate N-S trending ridge is present 210m W of the proposed location.
- The side scan sonar data shows a high degree of similarity in reflective strength and texture over the entire site.





9



Environment



Bonaparte Basin/Timor Sea - tropical climate with a 'wet' season Oct - Mar and a 'dry' season Apr - Sept.

- GeoPhysical and GeoTechnical studies conducted Feb/Mar 2024.
- Environmental Baseline study conducted Jan 2025 to assess air, water and sediment quality and the Benthic infauna, Epi fauna and environment.
- Primary reason for EBS – to establish a comprehensive baseline data to allow effective environmental monitoring and impact assessment from drilling activities. Studies revealed:
- Air quality is expected in general, to be very good. Passing commercial shipping and drilling activities will cause transient and localised air pollution, expected to have a negligible impact on the receiving environment.
- Water column sampling for temperature, salinity, TSS and PH was conducted
- Sediment sampling conducted for particle size distribution (PSD), Heavy metals, (Gold, Mercury and manganese below LOR and As, Ag, Ba, Cd, Co, Cu, Cr, Fe, Pb, Mn, Hg, Ni, Sb, Se & Zn reported as below ANZG (2018) concentrations.
- Oil & grease concentrations below LOR (<500 mg/kg)
- BETXN compounds (Benzene, m-p-Xylene, Toluene, O-Xylene and Ethyl Benzene– below limit of reporting (LOR)- TRH's detected in low concentrations below ANZG (2018) default guideline values (DGV) - refer to Draft EIS submitted for full details.

10



Benthic Environment & Fauna



- Infauna/Epifauna/Megafauna:** Biological sampling conducted during the EBS survey indicated the Benthic Infauna consist of 192 individuals from 62 taxa identified, Species diversity was evenly distributed with no dominant species. The three most abundant species across all sites were the bristle worm Anthicidae, the Litocorsa sp1 and, the Apeudidae. Overall abundance of the benthic infauna/epifauna around the well location is low . video transects of the location showed the area is generally poor in diversity.

- No observations of turtles, dugongs, whales or other species were made during the survey.

- Corals:**

The Chuditch location is characterised by an unconsolidated heavily silted seabed subject to near seabed currents which readily raise turbidity in the water column with low light levels and observed visibility decreasing to < 1m. No coral reefs or sub tidal shoal communities were noted.

- Fisheries:** The Chuditch location is in deep offshore waters. No interaction with local or commercial fisheries is anticipated

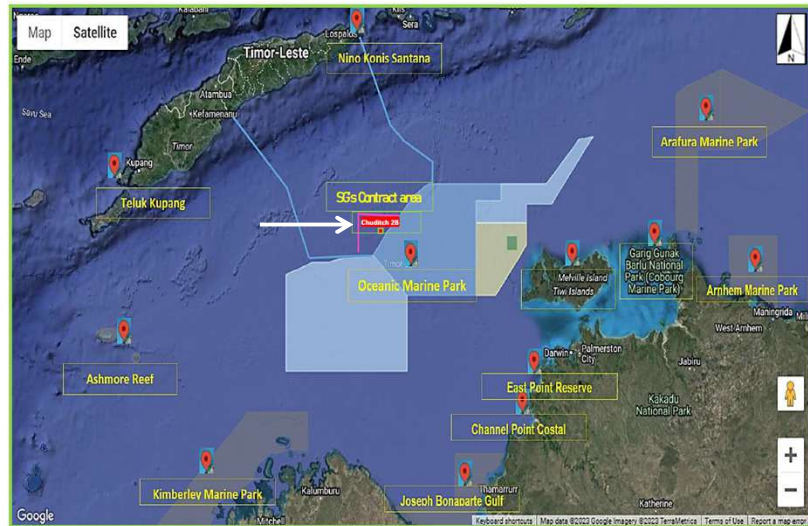
11



Protected Areas/Parks



- ❑ Australian Oceanic Marine Shoals Reserve: The Chuditch location is approximately 15 km West from the nearest boundary of the Australian Oceanic Marine Shoals Reserve. Any pollution generated by drilling activities will track North and West away from the Marine Shoals Reserve. NO impacts are predicted due to the well being constructed in the dry (winter) season.
- ❑ Van Diemen's Rise and several shoals including Evans Shoal and Big Bank Shoals are within the Zone of Potential Impact (Oil Spill)



Positive Impacts



Positive Impacts		
1	Employment	Well Design and construction – Direct employment: Timorese Geologists (2) Timorese Drilling Engineer (1) Timorese Office Support Staff (2) Timorese Environmental Consultancy (7) Consequential: Light vehicle drivers (2)
2	Goods and Services	Accommodation/Office supply Import services for customs clearance
3	Customs Duties & Excise	Taxes and customs duty payable increasing Govt Revenue
4	Community Programs	Support for local education outreach and construction of a new school



Negative Impacts



No	Impact	Initial Impact Rating	Residual Impact post mitigation
1	Air quality- All phases of drilling operations	Negligible	N/A
2	Air Quality decommissioning Rig	Negligible	N/A
3	Dili Traffic all phases	Negligible	N/A
4	Sea water all phases	Minor (Localised)	Negligible
5	Operational Leaks & spills – All phases	Minor (localised)	Negligible
6	Worst Case Oil Spill Response	Moderate	Minor
7	Biodiversity (Benthic population)	Minor	Minor
8	Biodiversity Macro fauna	Negligible	Negligible
9	Putrescible waste	Negligible	Negligible
10	Solid Waste- All phases	Minor	Minor
11	Noise during all phases	Minor	Minor
12	Light during all phases	Minor	Minor
13	Vibration during all phases	Minor	Minor
14	Noise/Vibration during demobing Rig	Minor	Minor
15	Increased salinity during well construction	Minor	Negligible
16	Increase water temperature from discharges all phases	Negligible	Negligible
17	Smothering of benthic habitat- drilling 12 ¼" section	Minor	Minor
18	Turbidity/Increased TSS drilling phase	Minor	Minor
19	Use of NADF – 12 ¼" section	Minor	Minor
20	Community	No impact	N/A
21	Artisanal/Commercial fishing	Negligible	N/A

14



Environmental Management Plan & Monitoring

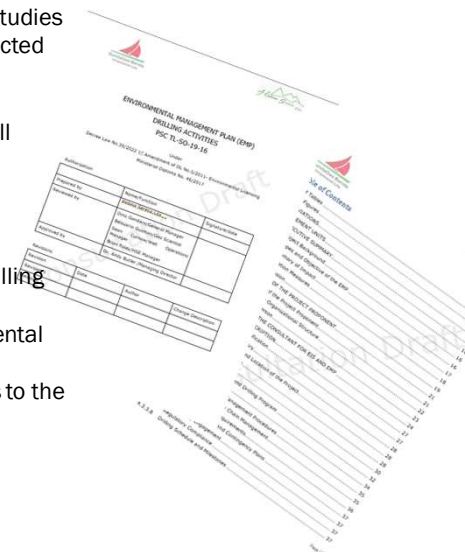


SGBU has submitted a draft Environmental Management Plan based on studies undertaken during the Environmental Base line survey and studies conducted during compilation of the Environmental Impact Statement.

The draft EMP is available via the ANP website or that of Sunda Energy. All stakeholders are recommended to read the submissions.

The EMP is designed to:

- Identify and manage all environmental risk created by the proposed drilling activity to as low as reasonably practicable.
- To demonstrate the assessment and mitigation of identified environmental impacts and ongoing monitoring during the active drilling phase of operations to measure and understand any potential or actual impacts to the receiving environment.



15

CH2 – Logistics/Waste Management

Chuditch-2

- ± 530m NW of the Australian / Timor-Leste maritime boundary
- ± 340km SE of Suai / Timor-Leste
- ± 355km SE of Dili / Timor-Leste
- ± 365km NW of Darwin / Australia
- The closest producing field is the Bayu Undan gas condensate field / ±140km to the WSW.
- The proposed giant gas condensate field development, Greater Sunrise, is ±100km to the north.

Logistics

- Shore base – Darwin / Australia
- Waste – Darwin/Australia
- Rotary Wing – Dili / Timor-Leste

16

COMMUNITY

- The actual drilling program will have no impact on the community
- It will not affect artisanal fishing.
- There are no current offshore fishing contracts in place for the area.
- Impact to shorelines is not predicted in the event of an oil spill.
- Commercial Shipping into and out of Timor-Leste is through the Project area with a relatively limited.
- Rarely tourism activity - There is no regular passenger vessel passing by the area.
- The submarine cable project is planning to be connecting from Darwin Port across the Timor Sea to Dili. The preliminary planning route shows that the cable is most likely to be distributed across the eastern part of the contract area from Darwin.
- There is currently only one operating petroleum asset in proximity to the SundaGas' Contract area; the production facility of the Bayu-UndanGas' field. The distance from Chuditch contract area from well location to Bayu-Undan gas field is approximately 130km.

Small scale fishing area in Timor Sea

Various types of vessels activity around the Timor Sea from 2001 -2023

17