



MINISTER FOR THE ENVIRONMENT;
LABOUR RELATIONS

Statement No.

000488

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**WHITE OPAL-1 EXPLORATION WELL
CAPE RANGE PENINSULA, SHIRE OF EXMOUTH**

Proposal: It is proposed to drill a land-based petroleum exploration well on Commonwealth (Navy) land at Point Murat, Cape Range Peninsula, as documented in schedule 1 of this statement. The well will be drilled directionally to intersect a target at a depth of about two kilometres below the Ningaloo Marine Park.

Proponent: Sun Resources NL

Proponent Address: P O Box 1786, West Perth WA 6872

Assessment Number: 1167

Report of the Environmental Protection Authority: Bulletin 905

The proposal to which the above report of the Environmental Protection Authority relates may be implemented subject to the following conditions and procedures:

1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

Published on

11 DEC 1998

2 Proponent Commitments

- 2-1 The proponent shall implement the consolidated environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in this statement.

3 Work Practices

- 3-1 Prior to commencement of drilling, the proponent shall prepare a written prescription for contractor work practices covering pre-drilling, drilling and decommissioning, to ensure that work practices are carried out at the level of international best practice, to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection and the Department of Minerals and Energy.
- 3-2 The proponent shall ensure that pre-drilling, drilling and decommissioning operations comply with the prescription referred to in condition 3-1.

4 Proponent

- 4-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.
- 4-2 Any request for the exercise of that power of the Minister referred to in condition 4-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.
- 4-3 The proponent shall notify the Department of Environmental Protection of any change of proponent contact name and address within 30 days of such change.

5 Commencement

- 5-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced.
- 5-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 5-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 5-1 and 5-2.
- 5-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

6 Compliance Auditing

- 6-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Department of Environmental Protection.
- 6-2 Unless otherwise specified, the Chief Executive Officer of the Department of Environmental Protection is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal clearances.
- 6-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT

10 DEC 1998

Schedule 1

The Proposal

It is proposed to drill a land-based petroleum exploration well on Commonwealth (Navy) land at Point Murat, Cape Range Peninsula, Shire of Exmouth. The well will be drilled directionally to intersect a target at a depth of about two kilometres below the Ningaloo Marine Park. The target resource is therefore a State resource.

The key characteristics of the proposal are described in the table below.

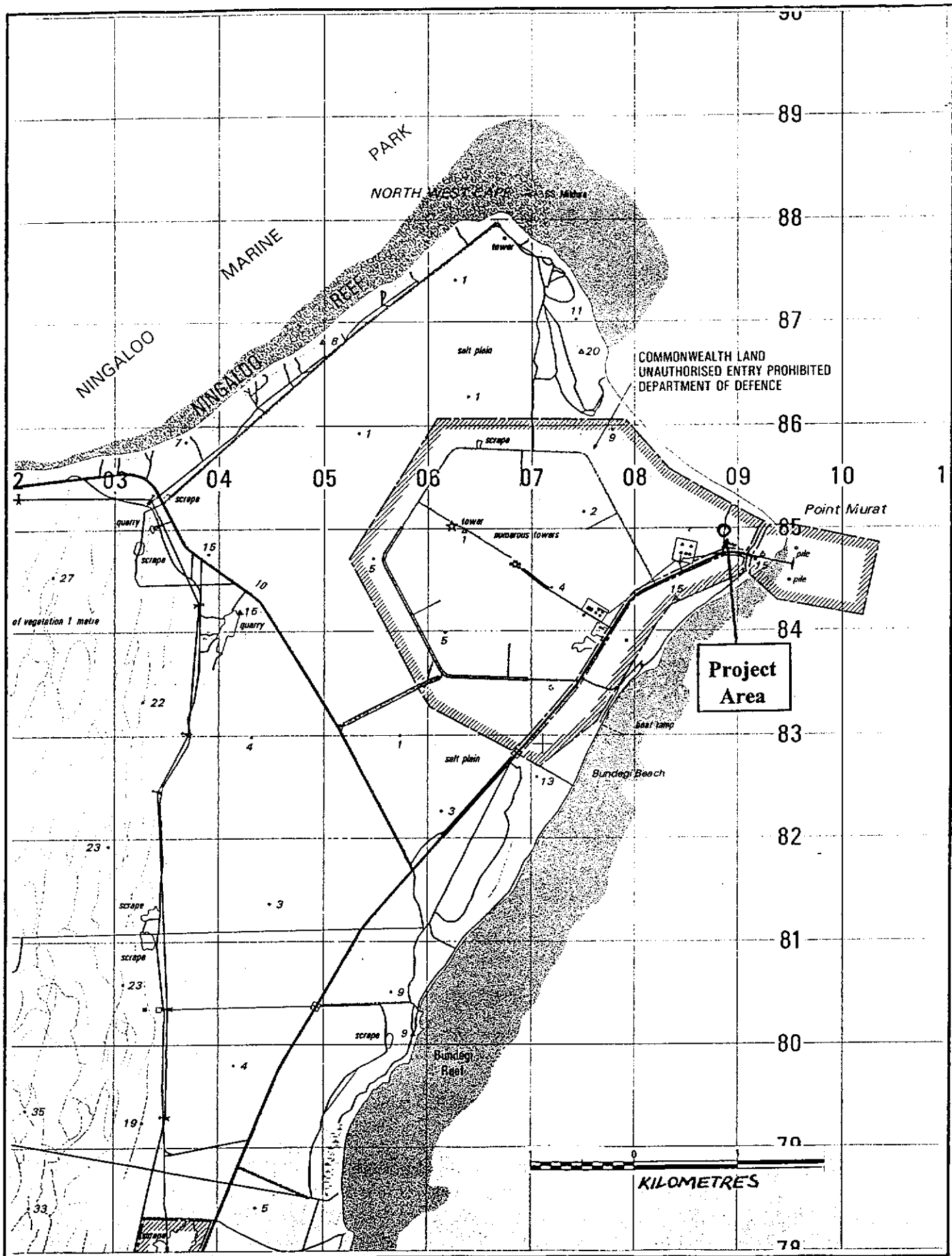
Element	Description
Life of project	approximately 8 weeks
Purpose	exploration for gas/oil
Area of disturbance	approximately 100 m x 100 m plus 0.25 ha if rig camp required
Depth of well	<ul style="list-style-type: none"> Total vertical depth: 2900 metres (approximately) Total measured depth: 3100 metres (approximately)
Width of well bore	60 mm to 216 mm diameter (approximately)
Casing of well	Casing introduced at approximately 20, 250 and 1720 metres below surface
Sump	approximately 20 m x 20 m x 4 m - capacity approximately 1200 cubic metres
Flare pit	approximately 6 metres x 3 metres x 2 metres with firewall on three sides
Drilling cellar	approximately 2 metres x 2 metres x 1.5 metres with steel reinforcement of walls
Water	<ul style="list-style-type: none"> Source: clean saltwater from existing pipeline. Quantity required: initially approximately 950 to 2300 litres/minute until well is fully cased. Thereafter it will be recycled. Disposal: water which is not lost to cavernous formations during drilling will be recycled within the drilling circuit and disposed of into the sump.
Drilling fluids	<ul style="list-style-type: none"> Type: Surface to approximately 250 metres - water, bentonite, lime and caustic soda. Approximately 250 metres to final depth - water and potassium chloride polymers. Quantity: maximum 600 cubic metres. Disposal: waste drilling fluids which are not lost to cavernous formations during drilling will be disposed of into the sump and will seep into the groundwater.
Drilling waste (cuttings and drill waste)	<ul style="list-style-type: none"> Quantity: approximately 200 cubic metres. Disposal: drilling wastes which are not lost to cavernous formations during drilling will be disposed of into the sump. When dry, the sump will be buried within the project area.

Figures

Figure 1: Location of the White Opal exploration well.

Figure 2: Layout of infrastructure on the project area.

Figure 3: Well schematic diagram.



- 1 Spot Elevation
- △ Horizontal control points

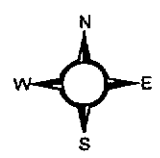


Figure 1. Location of the White Opal-1 well.

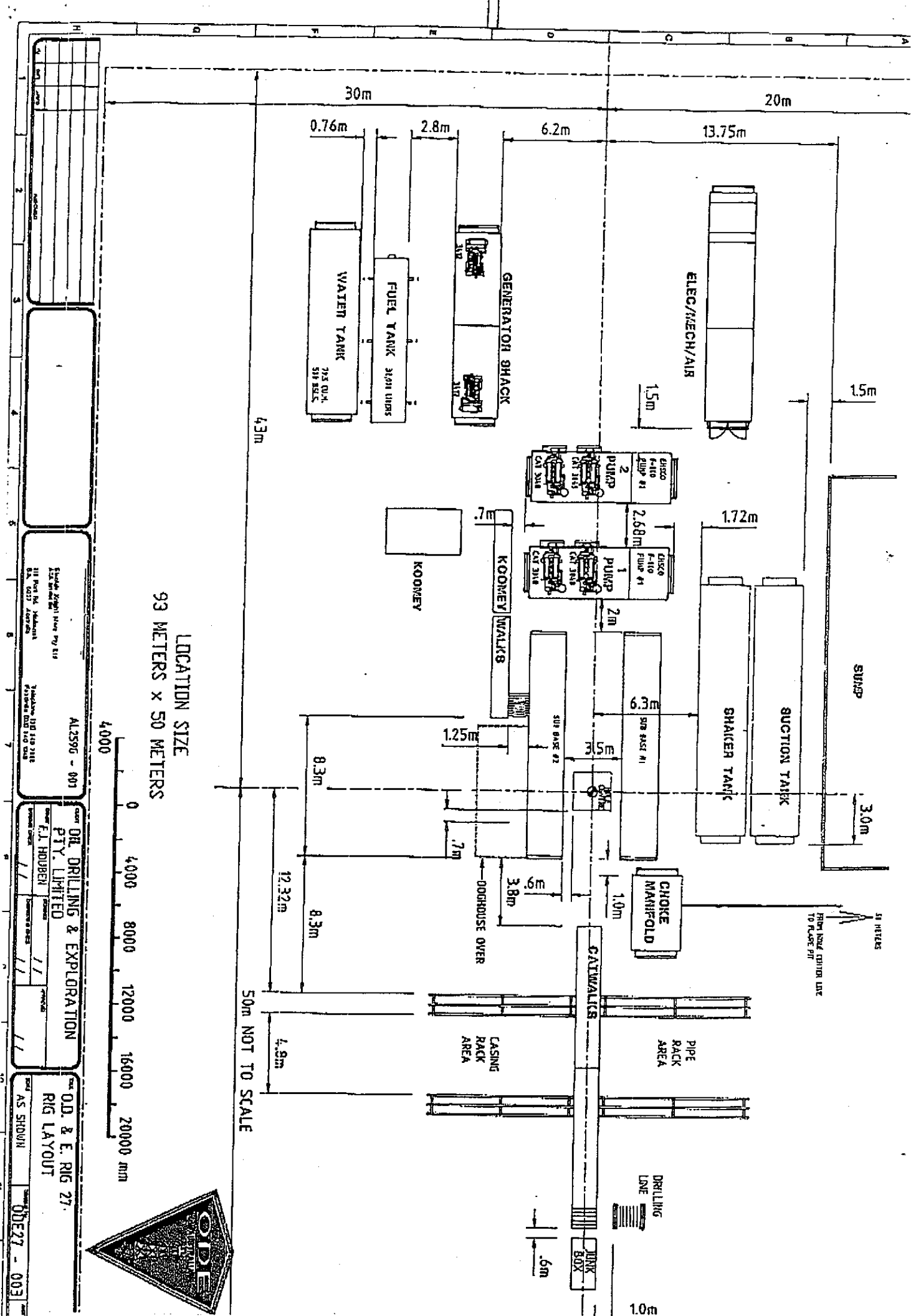


Figure 2. Layout of infrastructure on the project area.

EP 325

WHITE OPAL-1

WELL SCHEMATIC DIAGRAM

Note : All casings cemented to surface

Surface Elevation ~ 5m

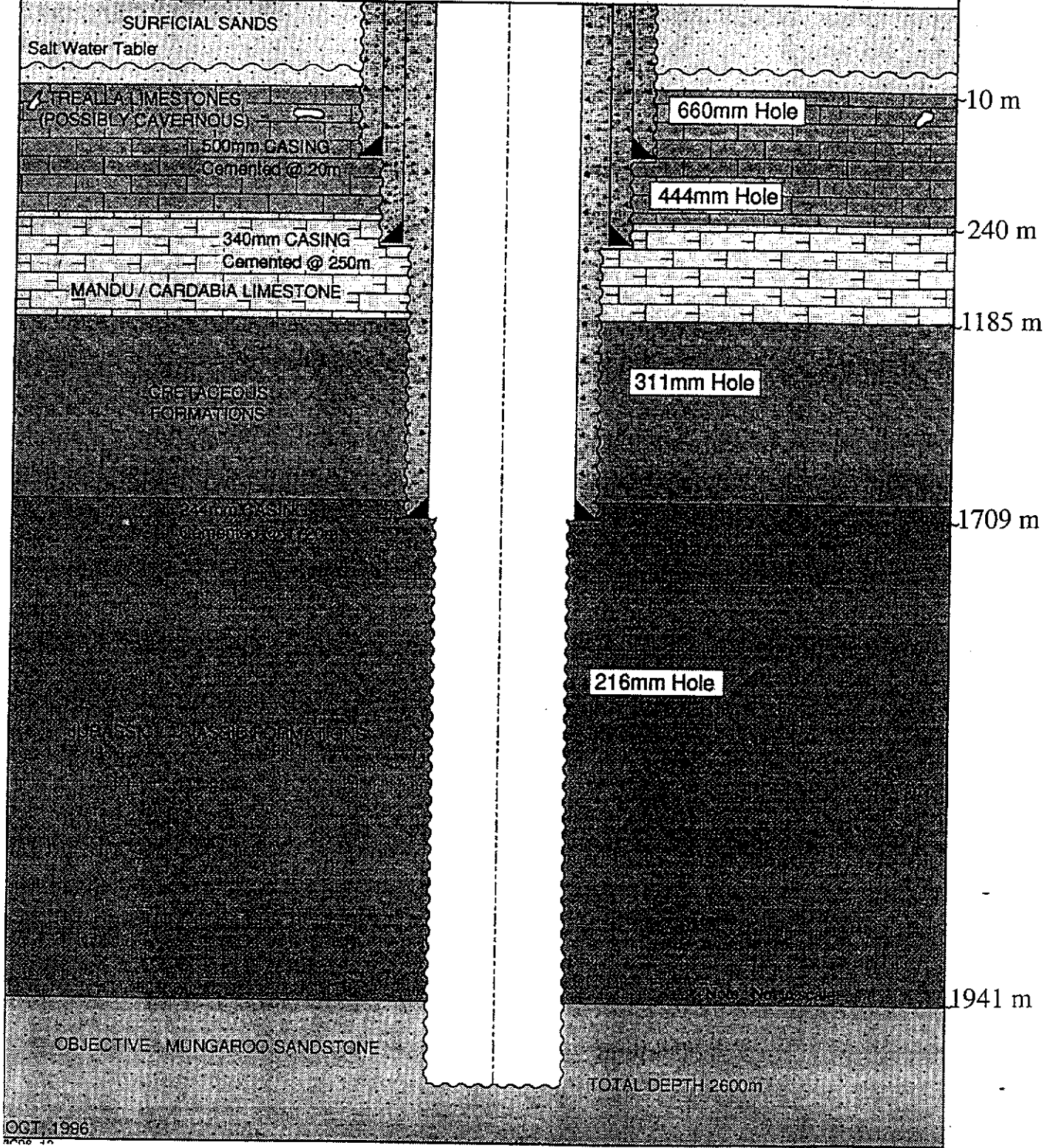


Figure 3. Well schematic diagram.

Schedule 2

**Proponent's Consolidated Environmental Management
Commitments**

December 1998

**White Opal-1 Exploration Well
Cape Range Peninsula
Shire of Exmouth (1167)**

Sun Resources NL

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

Proponent's consolidated environmental management commitments (June 1998)

Commitment	Objective	Action	Timing	Whose advice	Measurement / Compliance
1. Proponent will prepare and implement an Environmental Management Plan (EMP)	To manage potential environmental impacts arising from the proposal	The EMP will be prepared prior to the commencement of drilling operations and implemented throughout the operations.	Pre-construction	Western Australian Department of Minerals and Energy (DME) and Department of Environmental Protection (DEP)	EMP to be prepared to the satisfaction of DEP and DME
2. Operational methods will minimise disturbance to soil and terrain	To minimise impact on existing terrain features	Design the layout of facilities within the Project Area on the basis of a site specific assessment.	Pre-construction	Proponent's Environmental Officer	Inspection completed and signed off by Proponent's Environmental Officer
3. Operational methods will minimise disturbance to existing vegetation	To assist in revegetation of the Project Area following decommissioning	a) Where possible, vegetation will be pruned rather than removed to retain an intact root system. b) Parts of the surfaces of essential operational pads will be spread with limestone gravel which will be mostly removed on decommissioning. c) Shrubs within the Project Area which are not to be damaged will be surrounded with flagging. d) A weed control programme will be used.	Site preparation	Proponent's Environmental Officer	Pre-drilling inspection completed and signed off by Proponent's Environmental Officer
			Site preparation	Proponent's Environmental Officer	Performance Compliance Report
			Site preparation	Proponent's Environmental Officer	Performance Compliance Report
			Site preparation and drilling	Proponent's Environmental Officer	Performance Compliance Report
4. Operational methods will prevent the spillage of waste and materials	To protect the surface environment from the spillage of waste	a) All drilling waste will be retained in a sump until the completion of the operations. The sump will then be backfilled and the surface rehabilitated. b) All spillages of oil or fuel will be contained and removed immediately and	Drilling and decommissioning	Proponent's Environmental Officer	Performance Compliance Report
			Drilling and decommissioning	DEP	Performance Compliance

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

			ing	Report
	disposed of at a site appropriately licensed by the WA DEP for the disposal of such wastes.		Decommissioning	Performance Compliance Report
	c) All domestic rubbish and similar waste will be disposed of according to the requirements of the Shire of Exmouth.		Site preparation and drilling	Performance Compliance Report
	d) All fuel in the Project Area will be kept in bunded facilities which meet with the requirements of the WA DME.		Drilling	Performance Compliance Report
	e) All production oil or gas will be flared in the flare pit or diverted to tanks.		Drilling	Performance Compliance Report
5. Only non-toxic drilling fluids will be used during the drilling of the exploration well	To protect the subsurface environment from toxic materials	a) A drilling fluid consisting of water, some bentonite and small amounts of lime and caustic soda will be used between a depth of 0 and approximately 250 metres. b) A drilling fluid consisting of water and potassium chloride polymers will be used beyond a depth of approx. 250 metres.	Drilling	Performance Compliance Report
6. Operational methods will prevent the seepage of harmful pollutants into the subsurface environment	To protect the subsurface environment from seepage of harmful pollutants	a) The exploration well will be cased following the drilling of the cavernous formations where there is potential for seepage. b) The casing will be pressure tested according to the requirements of the WA DME.	Drilling	Performance Compliance Report
7. Take action to restore groundwater quality in the event that leakage or spillage of hydrocarbons may have occurred and inadvertently resulted in the contamination of groundwater.	Maintain the quality of the groundwater beneath the Project Area	In the event of leakage or spillage of hydrocarbons, consult with the WA DEP to identify whether groundwater contamination has occurred, and take action to restore groundwater quality.	Drilling and decommissioning	Performance Compliance Report
8. The Project Area will be rehabilitated to as close to a pre-drilling condition as possible	To return the Project Area to as close to a pre-drilling condition as possible	a) The majority of the introduced limestone gravel will be removed from the Project Area and transported to a site requested by the Shire of Exmouth. Some of the	Decommissioning	Performance Compliance Report

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

			limestone gravel will be buried within the Project Area or left to provide a rough surface to assist in revegetation.					
			b) Rehabilitation of the Project Area will be monitored and measured by comparing photos of the area before and after the drilling operations from identical positions to provide a reference.			Pre-construction and one year following decommissioning	Proponent's Environmental Officer	Performance Compliance Report
			c) An environmental report on the progress of rehabilitation will be prepared one year following decommissioning and forwarded to the WA DME, DEP and the Shire of Exmouth.			One year following decommissioning	DME and DEP	Report submitted to DME, DEP and Shire of Exmouth
			d) If monitoring of rehabilitation shows rehabilitation of the area has not been successful, the Proponent will liaise with the WA Departments of Minerals and Energy and Environmental Protection to identify and implement alternative rehabilitation measures.			One year following decommissioning	DME and DEP	Further reporting only if required by DME and DEP
9. Implement a policy of managing light in the Project Area if drilling occurs during the period of 1 November to 30 April	To reduce light emanation (especially floodlights) from the drilling rig and the Project Area in general so that sea turtles (adults and hatchlings) are not attracted by such lights.		Assess the lighting of the drilling rig and the Project Area, and change lights so that bright lights (especially floodlights) are not seen from the nearby beach. Use yellow globes (rather than white or clear globes) and use light shades to ensure that light is directed to operational areas and not the surrounds.			Commissioning of drilling rig	Proponent's Environmental Officer or Project Manager	Inspection completed and signed off by Proponent's Environmental Officer or Project Manager.
10. In the event of drilling occurring during the period of 1 November to 30 April, implement a monitoring programme of the beach nearest to the Project Area for the presence of sea turtles	Determine whether adult sea turtles and/or hatchlings are present on the beach and swales of the adjoining primary dunes nearest to the Project Area.		Each morning inspect about 500 metres of beach and primary dune swales in the vicinity of the Project Area for the presence of sea turtle tracks. In the event of these being present, contact the Exmouth office of CALM and commence directing or transferring adults to the sea and/or collecting hatchlings and releasing these in the sea.			During drilling operations	Proponent's Environmental Officer and Regional Manager of CALM in Exmouth.	Inspection completed and signed off by Project Manager. Any action taken following discovery of turtle tracks on nearby beaches to be completed to the satisfaction of the

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)

11. Implement a policy to protect Aboriginal cultural heritage sites.	To avoid damage to a small shell scatter located about 70 metres to the north of the Project Area.	Mark the site with flagging tape and instruct staff and contractors to avoid the flagged area.	Pre-construction	Proponent's Environmental Officer	Exmouth District Manager CALM. Inspection completed and signed off by Proponent's Environmental Officer or Project Manager.
---	--	--	------------------	-----------------------------------	---

WHITE OPAL-1 EXPLORATION WELL CAPE RANGE PENINSULA, SHIRE OF EXMOUTH (1167)