

## SECTION 1 - ENGINEERING DATA

1.1 Engineering Summary

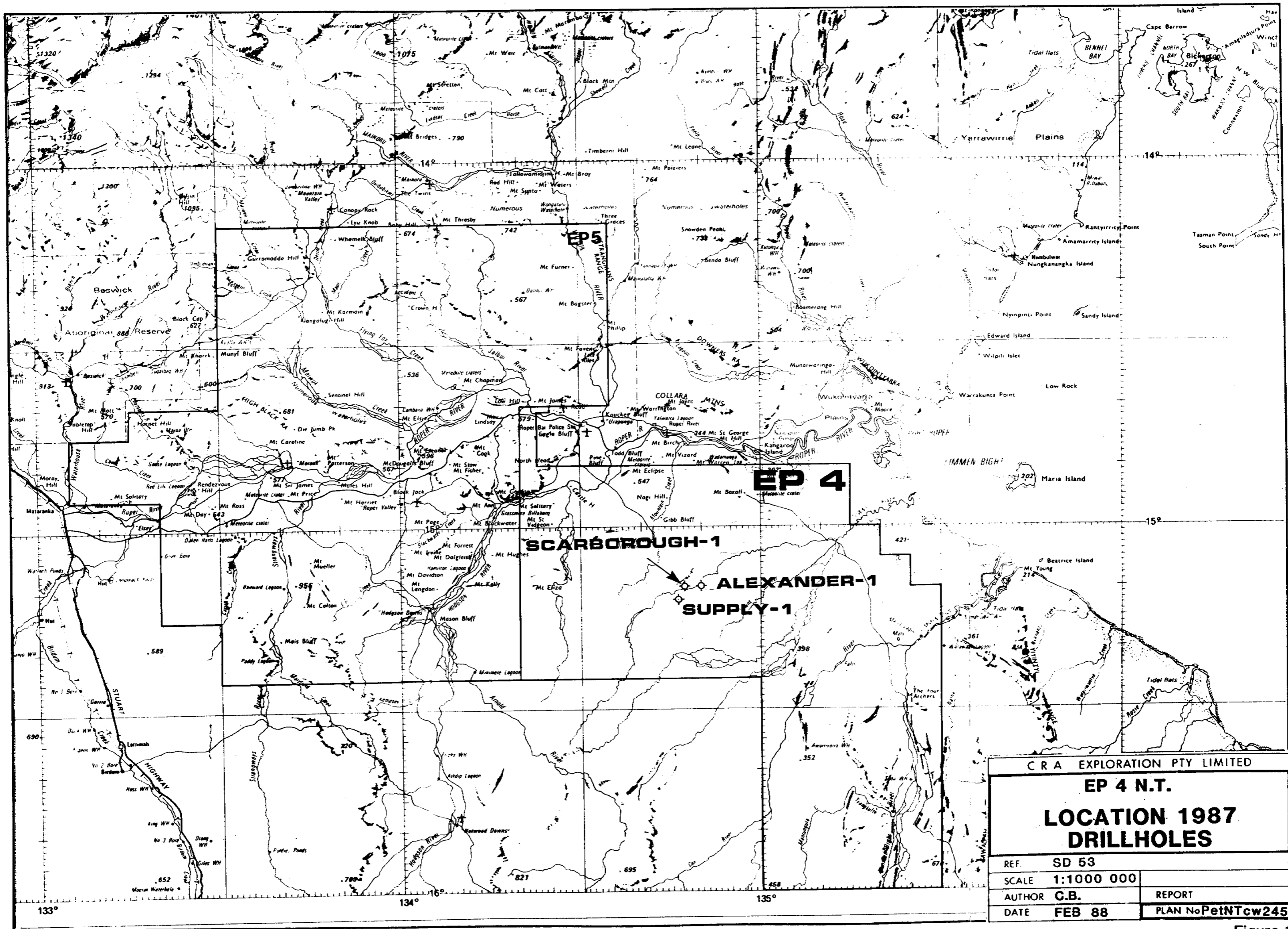
Supply No.1 is located in EP4 (Exploration Permit 4), McArthur Basin, N.T., 190km. due east of Mataranka (Figure 1). The hole was drilled to test the hydrocarbon prospectivity of the Roper Group in the McArthur Basin. The hole was drilled by Pacific Oil and Gas Pty Limited, the permit holder and operator, using ROCKDRIL Contractors Pty. Limited's modified MINDRILL 55 (Longyear 550 - Rig 18).

Access preparation involved upgrading of existing pastoral roads and seismic (Amoco, 1983) lines, while drill pad preparation required bulldozing of scrub over an area 50m x 50m. Water for drilling was supplied from a natural catchment 4km. from the drillsite, potable water was carted from a waterhole approximately 15km. from camp.

Supply-1 was spudded on the 1st October, 1987. A 7-7/8" hole was rotary drilled to 10.3m and 6-5/8" casing set as conductor at 10.3m. A 101mm hole was fully cored to a total depth of 182.5m. It was decided to continue the hole to investigate geology, prior to running 5" casing, as drilling difficulties were being encountered. The hole was terminated at 182.5m as a result of drilling difficulties.

No electric logs were run in Supply-1.

The well was plugged (with a 40m. surface plug) and abandoned on 9th October, 1987. Total time from spud to rig release was 9 days.



C R A EXPLORATION PTY LIMITED	
EP 4 N.T.	
LOCATION 1987 DRILLHOLES	
REF.	SD 53
SCALE	1:1000 000
AUTHOR	C.B.
DATE	FEB 88
REPORT	PLAN NoPetNTcw245

Figure 1

3.

1.2 General Data

Well Name and number	Supply-1
Operator	Pacific Oil & Gas Pty Limited
Interest Holders	Pacific Oil & Gas Pty Limited 100%
Petroleum Title	EP4, Northern Territory
Location:	
1:250,000 sheet	Hodgson Downs SD5314
1:100,000 sheet	St Vidgeon 5867
Latitude	15°12'42"
Longitude	134°45'59"
Metric grid reference	484394SE 83227906N
Seismic (Amoco 1983)	Line 83-161, SP 445
Elevation	80m AMSL
Total Depth	182.5m (Driller only)
Commencement date	01/10/87
Total depth reached	08/10/87
Completion date	09/10/87
Drilled by	ROCKDRIL Contractors P/L
Drilling rig	RIG 18
Hole size	101mm
Plugging Details	40m plug at surface

— Same AMG's as for ALEXANDER-1

1.3 Drilling Rig

## ROCKDRIL RIG 18 - RIG AND EQUIPMENT DESCRIPTION

DRILLING RIG: Longyear-Model 550

1. Drawworks: Longyear single drum operation 3/4" line up to 4 parts with lockhead disc breaking system.
2. Power: One Caterpillar type 3304T diesel engine, mechanically driving rotation and drawworks (5 speeds) and hydraulically driving holdback rams, breakout and spinning tools and chuck.  
  
One Perkins 4.354 diesel engine hydraulically driving two (2) triplex pumps and wireline winch assembly.
3. Mast: Box section angle type mast  
  
Working height above sub structure-50 ft.  
  
Static hook load capacity (4 lines) 85,000 lbs.  
  
Racking Capacity-9,600 ft of CHD 76 drill pipe.
4. Substructure: Allison low loader with box type drill floor and support racking capacity up to 40 tons.
5. Rig Machinery: Longyear pipe breakout and spinning tool to handle drill pipe and casing up to 3.7".
6. Rig Pumps: Two (2) Bean 435 triplex pumps hydraulically driven. Capacity 37 gallons/minute Rating 1200 psi.
7. Mud Systems: Two (2) steel tanks with a capacity of 40 barrels each operating on a settling basis.  
  
One (1) only 40 barrel mixing tank.  
  
One (1) CD62 mono pump for mixing and desilting.  
  
One (1) only two cone desilter bank.

5.

Two (2) only Honda centrifugal pumps for transfer, recirculating and mixing.

8. Kill mud/cement mixing:

One (1) 40 barrel tank utilizing mono pump and hoppers for mixing kill mud and cement as required.

9. B.O.P. Equipment

One (1) Regan Torus annular type blow out preventor with a 7-1/16 bore and having a working pressure of 3,000 psi.

One A.P.I. threaded wellhead and drilling spool to suit 5" A.P.I. casing.

One (1) twin choke manifold with adjustable Cameron chokes and three (3) outlets rated at 3000 psi and two inch (2") 3000 psi valves.

One (1) Hydril K80 accumulator with a storage capacity of eighty (80) gallons at 1500 psi pressure.

One (1) Oilwell D 323 triplex plunger with a rating of 3000 psi for use as a kill pump.

One (1) Guiberson type H wireline B.O.P. and oilsaver rated at 3000 psi with a type C releasing attachment.

One (1) lower kelly cock (2.75") with a rating of 3000 psi.

10. Tubular Equipment:

CHD 101 drill pipe (800 metres) and barrels 4-3/4" Collars and Stabilizers.

11. Utility and Auxilary Equipment:

One (1) Caterpillar power generating unit (output 135 k.v.a.).

One (1) fully equipped workshop container carrying tools and spare parts.

Two (2) Toyota Landcruiser utilities.



1.6 Mud Record

See Appendix I for full details.

1.7 Water Supply

The water supply for drilling was from a natural catchment approximately 4km. from the drill site. Potable water was carted from a waterhole 15km. from camp.

1.8 Bit and Deviation Record

Bits:

One bit was used in the drilling of Supply-1.

Details are given in Appendix II.

Deviation

A summary of the deviation surveys recorded is given in Table 1.

1.9 Fishing Operations

Nil

1.10 Sidetracked Hole

Nil

1.11 Formation Testing

Nil

TABLE 1

DEVIATION SURVEY SUMMARY

WELL: SUPPLY-1  
LOCATION: EP4, NORTHERN TERRITORY

DEPTH (metres)	DEVIATION (degrees)
182.5	3.0

Using Eastman Camera supplied by Eastman Christiansen  
- Sale Victoria.



1.12 Time Analysis

An account of the time spent on the well from spud to rig release is given in Table 2 (and detailed in Appendix I), and the time/depth for Supply-1 curve is included as Figure 2.

1.13 Costs

An account of costs is compiled below:

Operation/Item	Cost \$A	Total \$A
Rotary Drilling Costs	\$80/metre	
Coring Costs	0 - 99m \$90/m 100-199m \$95/m 200-299m \$100/m 300-399m \$105/m 400-499m \$110/m 500-599m \$115/m 600-699m \$120/m	
Work Rate	\$140/hr	
Standby	\$105/hr	
Camp	\$37.50/man/day	Average \$650/day
Earthworks	average \$120/day	
Fuel	average \$200/day	
Others	- Vehicles \$220/day - Site manager \$150/day - Staff \$900/day - Genset \$ 45/day - Eastman camera \$ 45/day - Caravan \$200/week ATCO \$180/week Watertank \$150/week	
Total Cost Supply-1		\$61,526

Extra costs for entire drill programme  
Mobe/Demobe \$18,000.

TABLE 2

TIME ANALYSIS

WELL: SUPPLY-1  
 PERMIT: EP4, NORTHERN TERRITORY

O P E R A T I O N	T I M E (hrs)	P E R C E N T A G E
Rig Up/Tear down	7.5	4.1
Drill Actual	131.5	72.3
Condition/Circulate	2.5	1.4
Trips	6	3.3
Repair Rig	0.5	0.3
Deviation Survey	0.5	0.3
Run casing and Cement	3.5	1.9
Wait on cement	11.25	6.2
Standby	15	8.2
Drilling cement	2	1.1
Retube	1.75	0.9
TOTAL	182.00	100.0

DAYS 7.5

# TIME - DEPTH CURVE

## SUPPLY - 1

