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Record 1978/106



WELLS AND METRES DRILLED FOR PETROLEUM EXPLORATION
AND DEVELOPMENT IN AUSTRALIA
IN 1977

Compiled in the
Petroleum Technology Section
by E. Petrie

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SUMMARY

ACKNOWLEDGEMENT

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and quote reference 75/402.

SUMMARY

During 1977, 111 429 m were drilled in the exploration for and the development of Australia's petroleum resources; an increase of 52.6 percent on 1976. Drilling in Victoria and South Australia increased significantly; none was reported in Queensland, the Northern Territory, or Tasmania.

Of the 111 429 m drilled, 60 502 were drilled for exploration; 36 827 of these (61.8 percent) were drilled offshore, and 23 133 (38.2 percent) were drilled onshore.

During the year 41 wells reached total depth, and 4 were drilling ahead. Of 24 exploration drilling operations, 15 were offshore and 19 onshore. Of the 24, 18 were abandoned -9 dry, 2 with an oil show, 4 with gas shows, 2 with both oil and gas shows, and 1 with an unspecified show; 1 was completed as a potential oil producer and 2 were completed as potential gas producers; also 3 wells were drilling ahead at the end of the year. Of the 21 development wells, 2 were completed as potential oil producers, 17 were completed as potential gas producers, 1 was dry, and 1 was drilling ahead at the end of the year.

ACKNOWLEDGEMENT

The Bureau of Mineral Resources acknowledges with thanks the assistance received from State Mines Departments and Operating Companies in the compilation of these data.

NOTES

- 1. Operating Company is that nominated by a group or consortium and as approved by the respective State or Territory Department of Mines.
- 2. The official name of the well is that advised by the respective State or Territory Department of Mines.
- 3. The total depth of each well is the "Driller's Depth". All depths shown were confirmed by the respective State or Territory Department of Mines.
- 4. Abbreviations commonly used in the tabulations:

KB - Kelly bushing FIT - Formation Interval Test m³ - Cubic metres RT - Rotary table m^3/D - Cubic metres per day DF - Derrick floor Mm³/D - Thousand cubic metres per day CL - Collar level MMm³/D - Million cubic metres per day FF - First flange m³WPD - Cubic metres of water per day GL - Ground level AMSL - Above mean sea level GCM - Gas cut mud WD - Water depth BC - Bottom choke DST - Drill stem test TC - Top choke T.D. - Total depth, i.e. depth on - onshore at which drilling oper- off - offshore ations finally ceased in the well concerned.

5. Definitions:

Wells drilled - the number of holes that reach total (final) depth during the period stated.

Metres drilled - unless otherwise stated, the total metres drilled, including suspended or uncompleted holes.

Uncompleted hole - the metres drilled in wells suspended or drilling at 31 December.

Wells suspended - wells on which operations have temporarily ceased, but which may or may not be deepened later.

Average T.D. exploration wells - the average depth of exploration wells that reached total depth during the year. It does not refer to development wells such as those drilled in established fields, e.g. Barrow Island. It is not directly related to the metres drilled in a specific year as it may include some drilling which occurred in the previous year.

Exploration well - a well drilled in search of undiscovered oil or gas, or in the hope of greatly extending the limits of an already known or partly developed pool.

Development well - a well drilled in any known or proved pool with the object of obtaining oil or gas production.

Service well - a development well drilled for water injection, water source, etc.

TABLE 1. Summary of wells and total metres drilled for petroleum exploration and development in Australia up to 31 December 1977

State	Total					YEAR					Tota	1 to
or Territory	31.12	.73	19	974	1	.975		1976		1977	31.1	2.77
	Wells	Metres	Wells	Metres	Wells	Metres	Wells	Metres	Wells	Metres	Wells	Metres
Queens land	837	1 262 695	13	23 551	4	6 456	17	25 985	_	-	871	1 318 673
New South Wales	140	153 503	2	1 130	-		-	-	1	1 182	143	155 815
Victoria	360	555 585	5	14 303	3	8 813	-	920	8	19 462	376	599 123
Tasmania	46	53 962	4	9 516	-	-	-	-	-	-	50	63 478
South Australia	278	426 574	4	9 934	10	20 284	9	23 919	23	56 283	324	536 994
Western Australia	883	1 089 377	22	48 142	9	18 121	. 6	21 551	9	34 502	929	1 211 693
Northern Territory	64	123 221	9	30 2 3 9	3	4 914	-	-	-	- **	76	158 374
Annual Total	_	-	59	136 815	29	58 588	32	72 375	41	111 429	2 769	4 044 150
Cumulative Total	2 608	3 664 917	2 667 3	3 801 732	2 696 3	860 320	2 728	3 932 721	2 769	4 044 150	-	-

TABLE 2. Summary of wells and metres drilled in 1977

State	Wells	drilled	Average T.D. of exploration	Complet	ed as al producer	Plugged and	Well suspended	Uncomp	leted holes	Total metres
Territory	Wells	Metres	wells (metres)	Oil	Gas	abandoned	-	Holes	Metres	drilled
Queensland		-	-		_	••	-	-	_	_
New South Wales	1	1 182	1 182	-	-	1	-	-	-	1 182
Victoria	8	19 462	2 324	3	-	5	-			19 462
Tasmania	-	-	-	-	-	-	-	-	-	-
South Australia	23	54 275	2 355	•	19	4		1	2 008	56 283
Western Australia	9	24 326	3 024	-	-	9	-	3	10 176	34 502
Northern Territory	-	- "	-	-	-	-	-	-	-	-
Total	41	99 245	2 577	3	19	19	-	4	12 184	111 429

TABLE 3. Wells drilled for exploration and development, 1977

Year	Explorat	tion	Development	Total	,
	NFWs	EXT	×		
•		C	NSHORE		,
1973	28	1	5	34	
1974	19	1	8	28	1
1975	5	1	4	10	
1976	13	4	12	29	
1977	7	1	18	26	
•		C) F F S H O R E		
1973	24	7	6	37	
1974	28	3	-	31	
1975	16	3	-	19	
1976	3	-	-	3	
1977	6	7	2	15	
•			TOTAL		
1973	52	8	11	71	
1974	47	4	.8	59	
1975	21	4	4	29	
1976	16	4	12	32	
1977	13	8	20	41	

TABLE 4. Metres drilled for exploration and development, 1977

State or Territory	Exploration wells	Development wells	Service wells	Total
		ONSHOR	E	
Queensland New South Wales Victoria Tasmania	1 182 -	-	- - -	- 1 182 -
South Australia Western Australia Northern Territory Total	11 775 10 718 	44 508 - - 44 508	-	56 283 10 718 - 68 183
Percentage of onshore & offshore	39.1	87.4	_	61.2
•		оггѕног	Е	
Queensland New South Wales Victoria Tasmania South Australia Western Australia Northern Territory Total Percentage of onshore & offshore	13 043 - 23 784 - 36 827 60.9	- 6 419 - - - 6 419 12.6	-	- 19 462 - 23 784 - 43 246 38.8
	0	NSHORE &	0 F F S H	ORE
Queensland New South Wales Victoria Tasmania	1 182 13 043	- 6 419	=	1 182 19 462
South Australia Western Australia Northern Territory Total	11 775 34 502 - 60 502	44 508 - - 50 927	-	56 283 34 502 - 111 429
Percentage of all wells	54.3	45.7		100

TABLE 5. Exploration and development drilling completions, 1977

State	Tota dri:	al lling			COMP	LETIO	NS					lling or pended at
Territory	ope	rations	Oil		G	as	0	il+gas	Dry	1	31.	12.77
	on-	off-2	on-	off-	on-	off-	on	- off-	on-	off-	on-	off-
			ЕХР	L O	R A	TIO	N	DRI	L L :	ING		
Queensland	_	_	_	_	_	_	_				-	
New South Wales	1	-	-	-	-	_	-	-	1	-	_	-
Victoria	-	6	-	1	-	-	-		-	5	-	-
Tasmania	-	-	-	-	-	-	-	-	-	-	-	_
South Australia	5	-	-	-	2	-	-	-	3	-	-	-
Western Australia	3	9	-	-	-	-	-	-	2	7	1	2
Northern Territory	-	-	-	-	-	-	-	-	-	-	-	-
Total	9	15	_	1	2	-	-	_	6	12	1	2
•		1	DEV	E L (ррм	E N '	Г	DRI	LLI	N G		
Queensland				_			_				_	_
New South Wales	_	_	_	_	-	_	-	_	-	-	_	_
Victoria		2	_	2	_	_	_	_		-	-	-
Tasmania	-	-	-		-	_	-	-		-	_	-
South Australia	19	-	-	-	17	-	-	-	1	-	1	-
Western Australia	-	-	-	-	-	-	-	-	_	-	-	-
Northern Territory	-	-	-	-	-	-	-	-	-	-	-	
Total	19	2	-	2	17	_	-	-	1	-	1	

¹ Dry exploration or development well 2 On/Off-refers to onshore and offshore.

TABLE6. Well completion summary - combined onshore and offshore wells

State	Spud	ded								
or	Other	This	Complet	ed as		Abandor	ed		_ v	a.
Territory	year	year	produ	cer	Dry	With	show	vs	ı ı ahead	
			Oil Gas	Oil Ser- vice		Oil Gas	0i1 + Gas	Unspec- ified	Drilling a	Suspended
				Ua3			Jas		DF	-Su
		E	K P L O R	ATION	W	ELLS				
Queensland New South Wales Victoria Tasmania	1	1 5	1		1 2	1	2			
South Australia Western Australia Northern Territory	2	5 10	2		2 4	1 4		1	3	
Total	3	21	1 2		9	2 4	2	1	3	
		D	EVEL	OPMEN	T W	ELLS	3			
Queensland New South Wales Victoria Tasmania South Australia Western Australia Northern Territory	1	2	2 17		1				1	
Total Total	1	20	2 17		1		****		1	

TABLE 7. Well completion summary - onshore wells

State	Spud	ded	St	atus	at 3	1.12	.77				
or	Other	This	Completed as			Abar	ndone	ed		- 11	
Territory	year	year	producer		Dry	V	Vith	show	NS .	head	
			Oil Gas Oil S	er- ice		0i1	Gas	0il +	Unspec- ified	orilling ahead	Suspended
			Gas					Gas		Dril.	Susp
	100	E	X P L O R A T I	0 N	W	ELI	LS				
Queensland New South Wales Victoria Tasmania		1			1						
South Australia Western Australia Northern Territory	1	5 2	2		2	1	1			1	
Australia	1	8	2		4	1	1			1	
		DE	VELOPME	ΝΤ	WE	LL	s				
Queensland New South Wales Victoria Tasmania South Australia Western Australia Northern Territory	1	18	17		1					1	
Australia	1	18	17		1					. 1	

TABLE 8 - Well completion summary - offshore wells

State	Spud	ded		Status	at 3	31.12.77		**
or	Other	This	Complet	ed as		Abandon	ed	ਚ
Territory	year	year	produ	icer	Dry	With	shows	ahead
			Oil Gas	Gas		Oil Gas	Oil Unspec- + ified Gas	Drilling a Suspended
		Е	XPLOF	RATION	W	ELLS		
Queensland New South Wales Victoria Tasmania	1	5	1		2	1	2	
South Australia Western Australia Northern Territory	1	8			3	3	. 1	2
Australia	2	13	1		5	1 3	.2	2
		DE	VELOF	PMENT	W E	LLS		
Queensland New South Wales Victoria Tasmania South Australia Western Australia Northern Territory		2	2					
Australia		2	2				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

TABLE 9. Well completion summary - by State and company

				-			310 310										_	
		Status at 31.12.77 Spud- Completed Abandoned																
State or	Well name	-		Spu													П	~
Territory and	and number		*	de	d	as	pro	duc	er		Wit:	h s	how	s	ad		well	well
Company		Onshore	Offshore	Other year	This year	1	Ś	1 & Gas	Service	>	1	S	1 & Gas	Unspecified	Drilling ahead	Suspended	Exploration 1	Development 1
·····			Of	o G	T.	011	Gas	0i1	Se	Dry	011	Gas	011	5	Dr	Su	Ä	De
QUEENSLAND																		
No drilling oper carried out duri										21								
NEW SOUTH WALES																		
Bow Valley Industries Ltd	Moree No. 3	X			1					1							1	
	-	1			1					1		-					1	-
VICTORIA		•																
Esso Exploration & Production Australia Inc.	Opah No. 1 Barracouta No. 4 Cobia No. 2 Kingfish No. 7		X X X X	1	1 1 1	1				1	1		1				1 1 1 1 1	
	Flounder No. 6 Mackerel A-1A Mackerel A-6	6	X X X		1 1 1	1 1							1			×	1	1
ē	_		8	1	7	3	. 			2	1		2	s (6	2
TASMANIA					-						- 18							
No drilling opers			×				•								v		9	
SOUTH AUSTRALIA			*			*												
Delhi Inter- national Oil Corporation	Moomba No. 21 Big Lake No. 14 Moomba No. 22 Big Lake No. 15	X X X X		1	1 1 1		1 1 1		:-				·					1 1 1

	,					 Stat	us	at	31.	12.	77			•				
State or Territory	Well name and number			Spu de	d-	Cor	np1	etec	1 _ A	bar	ıdor		nows	_ 			-	1
and Company	•	ę	re	year	year			Gas	9		*		Gas	ified	ng ahead	ded	ation wel	pment well
		Onshore	Offshore	Other	This	011	Gas	0i1 &	Service	Dry	011	Gas	0i1 &	Unspecified	Drilling	Suspended	Exploration	Development
SOUTH AUSTRALIA	(Cont'd)															_		
	Moomba No. 23 Big Lake No. 16 Moomba No. 24 Big Lake No. 17	X X X X			1 1 1		1 1 1											1 1 1
	Big Lake No. 18 Big Lake No. 19 Big Lake No. 19A Big Lake No. 21	X X X X			1 1 1 1 1		1 1 1			1								1 1 1 1
	Big Lake No. 22 Poolowanna No. 1 Namur No. 2 Kidman No. 1	X X X X			1 1 1 1		1 1 1 1				1						1 1 1	1
	Big Lake No. 20 Macumba No. 1 Big Lake No. 23 Narcoonowie No. 1	X X X			1 1 1 1		1			1							1	1
	Moomba No. 25 Gidgealpa No. 14 Gidbealpa No. 15 Moomba No. 26	X X X X			1 1 1		1 1 1		÷	ī					1			1 1 1
,	-	24		1	23		19			3	1			<u></u>	1		5	19
WESTERN AUSTRALI	<u>A</u>	 							-									
Arco Australia Ltd	Plover No. 3		X		1					1							1	
Phillips Australian Oil Company	Peel No. 1		Х		1					1					,		1	
West Australian Petroleum Pty Ltd.	Denison No. 1 Warro No. 1 Hermite No. 1 Bundegi No. 1	X X	X X	1	1 1 1		*			1		1		1	1 1		1 1 1 1	
Woodside Petrol- eum Ltd	Warro No. 2 North Rankin No. 5 Haycock No. 1	Х	X X	1	1							1 1			1		1 1 1	

State or Territory	Well name and number			Spu	d-	Co	tus mplo	ete	d .	Aba		ned h s	how	<u> </u>			11	
and Company		Onshore	Offshore	Other year	This year	0i1	Gas	Oil & Gas	Service	Dry	0i1	Gas	Oil & Gas	Unspecified	Drilling ahead	Suspended	Exploration wel	Development well
WESTERN AUSTI	RALIA (Cont'd)																	
	Scott Reef No. 2 Scott Reef No. 2A Caswell No. 1		X X X		1 1 1					1		1			1		1 1 1	
		3	9	2	10		a			4		4		1	3		12	

NORTHERN TERRITORY

No drilling operations were carried out during the year.

TABLE 10. Details of wells drilling or completed - by State and company

Well name & number	Lat Lor	ng.	S E ")	Elevat: reference ground	nce/	Dates: spudded/ T.D.	Status and results at 31.12.77	Met From -to	res Total	Tentative AAPG classification of well: on spudding in/on completion
				No dr	illin	g operation	QUEENSLAND ns were carried out during the year			
]	NEW SOUTH WALES			
			· · · · · · · · · ·	······································		Bow V	alley Industries Ltd.			
MOREE No. 3			17.08 52.28	KB GL		15.8.77 23.8.77	Plugged and abandoned	0 1182	1182	NFW DRY
	· · ·						VICTORIA			
	· · · · · ·]	Esso 1	Exploration	n and Production Australia Inc.			
SWORDFISH No. 1			36 23.5		25 70	21.12.76 15.1.77	Plugged and abandoned	920 2469	1549	NFW DRY
OPAH No. 1			45.8 42.2		25 78.6	23.3.77 28.3.77	Plugged and abandoned	0 2501	2501	NFW DRY
BARRACOUTA No. 4			20.79 04.01		25 46.6	30.3.77 23.4.77	Plugged and abandoned oil and gas occurrence confirmed.	0 1458	1458	EXT EXT
COBIA No. 2			31.79 16.241	KB WD		2.5.77 14.5.77	Plugged and secured oil occurrence confirmed	0 2498	2498	EXT EXT
KINGFISH No. 7			14.05 59.76	KB WD	25 77	26.5 77 10.6.77	Plugged and abandoned oil occurrence confirmed	0 24 1 5	2415	EXT EXT

Well name & number	Lat Long (o	Е	ref		ion: nce/ (m)	Dates: spudded/ T.D.	Status and results at 31.12.77		res Total	clas of w	tative AAPG ssification well: spudding in/ completion
			-			VICT	CORIA (Cont'd)		10		
FLOUNDER No. 6		07.01 09.23			25 93	12.7.77 14.12.77	Plugged and abandoned oil and gas occurrence confirmed	0 2622	2622		EXT EXT
MACKEREL A-1A		50.65 30.03			34 93	9.7.77 5.12.77	±	0 2591	1402 2589		DEV DEV
							suspended at 2591 m. Re-drilled from 1402 m to final total depth of 2589 m. Completed as an oil producer	2591	1187	3778	
MACKEREL A-6		50.65 30.03			34 93	12.12.77 31.12.77	Completed as an oil producer	0 2641	2641		DEV DEV
,			No	dr	illin	g operation	TASMANIA as were carried out during the year				
						<u>s</u>	SOUTH AUSTRALIA				
		i				Delhi Inter	mational Oil Corporation				
MOOMBA No. 21		29.5 21.5		KB 4	16 10.8	19.12.76 3.1.77	Completed as a gas producer	2377 2377	NIL		DEV DEV
BIG LAKE No. 14	28 140				35.6 31.3	2.1.77 20.1.77	Completed as a gas producer	0 2572	2572		DEV DEV
MOOMBA No. 22	28 140			KB :	38 33.8	19.1.77 7.2.77	Completed as a gas producer	0 2516	2516		DEV DEV

.

Well name & number	Lat. S Long. E (o ' ")	Elevation: reference/ ground (m)	Dates: spudded/ T.D.	Status and results at 31.12.77		res Total	Tentative AAPG classification of well: on spudding in/on completion
			SOUTH	AUSTRALIA (Cont'd)			
BIG LAKE No. 15	28 12 02 140 19 43	KB 41 GL 36	8.2.77 24.2.77	Completed as a gas producer	0 2533	2533	DEV DEV
MOOMBA No. 23	28 10 07 140 12 15.5	KB 57 GL 52	18.2.77 7.3.77	Completed as a gas producer	0 2517	2517	DEV DEV
BIG LAKE No. 16	28 13 11 140 18 14	KB 38 GL 34	8.3.77 23.3.77	Completed as a gas producer	0 2513	2513	DEV DEV
MOOMBA No. 24	28 09 49 140 11 37	KB 37 GL 32	13.377 5.4.77	Completed as a gas producer	0 2478	2478	DEV DEV
BIG LAKE No. 17	28 14 03 140 16 39	KB 37 GL 33	31.3.77 15.4.77	Completed as a gas producer	0 2597	2597	DEV DEV
BIG LAKE No. 18	28 14 22 140 17 05	KB 37 GL 33	13.4.77 15.5.77	Completed as a gas producer	0 2560	2560	DEV DEV
BIG LAKE No. 19	28 12 41 140 19 32	KB 37 GL 32	24.4.77 22.5.77	Plugged and abandoned, unsuccessful fishing operation	0 2582	2582	DEV DRY
BIG LAKE No. 19A	28 12 30 140 19 32	KB 41 GL 36	28.7.77 14.8.77	Completed as a gas producer	0 2534	2534	DEV DEV
BIG LAKE No. 21	28 14 46 140 15 54	KB 43 GL 38	23.5.77 8.6.77	Completed as a gas producer	0 2577	2577	DEV DEV
BIG LAKE No. 22	28 15 33 140 15 00	KB 36 GL 31	14.6.77 30.6.77	Completed as a gas producer	0 2606	2606	DEV DEV
POOLOWANNA No. 1	26 25 34 137 40 31	KB30 GL 26	2.8.77 16.9.77	Plugged and abandoned. Oil show	0 3074	3074	NFW DRY

Well na & numbe	Lat. Long. (o '	Е	Elevation: reference/ ground (m)		Status and results at 31.12.77		res Total	Tentative AAPG classification of well: on spudding in on completion
				Sour	TH AUSTRALIA (Cont'd)	***		
NAMUR No.	28 11 140 25		KB 50 GL 46	25.8.77 7.9.77	Future gas producer DST No. 1 1651-1657 m flowed at rate of 212 376 m ³ /D DST No. 2 1652-1683 m flowed at rate of 291 664 m ³ /D. Both through ½" choke	0 1737	1737	EXT EXT
KIDMAN No	28 14 140 49		KB 73 GL 69	7.9.77 14.10.77	Completed as a gas producer D.S.T. No. 1, 2005-2018 m flowed at rate of 275 000 m /D D.S.T. No. 2 2045-2064 m flowed at 314 000 m /D D.S.T. No. 3, 2126-2156 m flowed at rate of 11 327 m /D	0 2353	2353	NFW NFD
BIG LAKE	28 12 140 20		KB 37 GL 32	23.9.77 13.10.77	Completed as a gas producer	0 25 3 9	2539	DEV DEV
MACUMBA N	26 26 136 51		KB 45 GL 41	15.10.77 10.11.77	Plugged and abandoned	0 2616	2616	NFW DRY
BIG LAKE	28 16 140 15		KB 36 GL 32	19.10.77 5.11.77	Completed as a gas producer	0 2671	2671	DEV DEV
NARCOONOW	28 29 140 43		KB 56 GL 52	27.10.77 10.11.77	Plugged and abandoned	0 1996	1996	NFW DRY
MOOMBA No	28 11 140 14		KB 33 GL 29	22.11.77 8.12.77	Completed as a gas producer	0 2481	2481	DEV DEV
GIDGEALPA	27 57 140 02		KB 37 GL 33	26.11.77 8.12.77	Completed as a gas producer	0 2109	2109	DEV DEV

Well name & number	Lat. S Long. E	Elevation reference, ground (m)	spudded/	Status and results at 31.12.77	Met From -to	res Total	Tentative AAPG classification of well: on spudding in/on completion
			SOU	TH AUSTRALIA (Cont'd)			
GIDGEALPA No.	15 27 57 53 140 01 28	KB 37 GL 33	14.12.77 29.12.77	Completed as a gas producer	0 2115	2115	DEV DEV
MOOMBA No. 26	28 01 56 140 14 28	KB 41 GL 36	16.12.77 -	Drilling ahead	0 2008	2008	DEV -
			<u> </u>	ESTERN AUSTRALIA			
			A	rco Australia Ltd			
PLOVER No. 3	12 49 03 126 06 57	KB 21 WD 75	13.12.77 24.12.77	Plugged and abandoned	0 1219	1219	NFW DRY
			Phillips	Australian Oil Company			
PEEL No. 1	32 15 48 115 26 43	KB 30 WD 42	7.10.77 2.12.77	Plugged and abandoned	0 3714	3714	NFW DRY
			West Aust	ralian Petroleum Pty Ltd.			
DENISON No. 1	29 13 32 114 57 17	KB 35 GL 27	23.12.76 18.1.77	Plugged and abandoned	901 2300	1339	NFW DRY
WARRO No. 1	30 10 06. 115 44 11.		27.2.77 11.9.77	Plugged and abandoned. Gas shows Plugged back from 4435 m to 3356 m. Drilled to T.D. of 4385	0 4435 4435	3356 4385 1029	NFW DRY 5464
HERMITE No. 1	20 49 58 115 42 08.	KB 27 46 WD 17	15.9.77 24.11.77	Plugged and abandoned. Minor hydrocarbon shows	0 3300	3300	NFW DRY

Well name & number	Lat. S Long. E	Elevation: reference/ ground (m)	Dates: spudded/ T.D.	Status and results at 31.12.77		res Total	Tentative AAPG classification of well: on spudding in/on completion
		*	WESTERN AU	USTRALIA (Cont'd)			
BUNDEGI No. 1	22 01 05 114 09 32		4.12.77	Drilling ahead	0 2220	2220	NFW -
WARRO No. 2	30 10 05 115 44 02		12.11.77	Drilling ahead	0 3915	3915	EXT -
		•	Woodside	e Petroleum Ltd.			
NORTH RANKIN No. 5	19 34 19 116 09 30	RT 30 WD 126	18.10.76 9.2.77	Plugged and abandoned. Gas flowed at 55.3 mm CFD through 1" choke	3008 3500	492	EXT EXT
HAYCOCK No. 1	19 50 58 115 43 16	RT 53 9 WD 93	1.2.77 7.4.77	Plugged and abandoned. Gas and condensate shows	0 3668	3668	NFW DRY
SCOTT REEF No.	2 14 06 04 121 51 27	RT 53 WD 58	18.4.77 24.4.77	Plugged and abandoned. Mechanical problems	0 310	310	EXT DRY
SCOTT REEF No.	2A 14 06 06 121 51 28	RT 53 WD 64	27.4.77 9.8.77	Plugged and abandoned. Gas shows	0 4820	4820	EXT DRY
CASWELL No. 1	14 14 29 122 28 02		16.8.77	Drilling ahead	0 4041	4041	NFW -

NORTHERN TERRITORY

No drilling operations were carried out during the year

APPENDIX:

TENTATIVE AAPG/APEA CLASSIFICATION OF WELLS

- NFW NEW FIELD WILDCAT A new field wildcat is located far from producing pools, and on a structure which has not produced before. In regions where local structure has little or no control over accumulation, these holes are generally at least two miles from the nearest productive area. Distance, however, is not the determining factor. The classification is based on the degree of risk assumed by the operator, and his intention to test a structure or stratigraphic condition not previously proven productive.
- NPW NEW-POOL (Pay) WILDCAT A new pool wildcat is located to explore for new pools on a structure already producing, but off to one side of the presently producing area. In some regions where local structure is almost negligible as a control, exploration holes of this group may be called 'near wildcats'. Such will usually be less than two miles from the nearest productive area. Sometimes a new pool wildcat may extend a pool already developed; if so its final classification is an 'Extension'.
- DPT DEEPER-POOL (Pay) TEST A deeper-pool test is an exploratory hole located within a productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest such pool penetrated by it in order to explore for deeper unknown prospects. Sometimes such a hole extends a deeper pool which has been partly developed in another part of the field.
- SPT SHALLOWER-POOL (Pay) TEST A shallower-pool test is exploratory only if drilled in search of some new productive reservoir, unknown but possibly suspected from data secured from other wells. The test must be located within the productive area of a pool, or pools, previously developed. Sometimes such a test extends a shallower-pool partly developed elsewhere in the same field.

- EXT OUTPOST OR EXTENSION TEST An outpost or extension test is located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive area. Sometimes an outpost discovers a new pool.
- DEV DEVELOPMENT WELL A well drilled to exploit a hydrocarbon accumulation discovered by previous drilling.
- STR STRATIGRAPHIC TEST A drilling effort, geologically directed, to obtain information pertaining to a specific earth condition that might lead toward a possible accumulation of hydrocarbons. It must be drilled without the intention of being completed for hydrocarbon production.

 This classification includes tests identified as 'core tests' by some operators.
- SRV <u>SERVICE WELL</u> A well that is either drilled or completed for the purpose of supporting production of an existing field through observation, injection, water supply, etc.
- MSC MISCELLANEOUS Any test drilled that does not fit one of the above classifications. Two types are Waste Disposal (WD) and Gas Storage (GS) test or well.

Possibilities chart

Classification	Classification after completion or abandonment						
when started	Completed	Abandoned					
	Wells intended for completion as hydro	ocarbon producers					
NFW - New Field Wildcat	NFD - New Field Discovery	DRY - Dry New Field Wildcat					
NPW - New Pool Wildcat	NPD - New Pool Discovery or EXT - Outpost/Extension Wll	DRY - Dry New Pool Wildcat					
DPT - Deeper Pool Test	DPD - Deeper Pool Discovery or DPE - Deeper Pool Extension	DRY - Dry Deeper Pool Wildcat					
SPT - Shallower Pool Test	SPD - Shallower Pool Discovery or SPE - Shallow Pool Extension	DRY - Dry Shallow Pool Test					
EXT - Outpost/Extension Test	NPD - New Pool Discovery or EXT - Extension Well	DRY - Dry Outpost/Extension Test					
DEV - Development Well	NPD - New Pool Discovery or DEV - Development Well	DRY - Dry Development Well					
	Wells not intended for completion as hy	drocarbon producers					
STR - Stratigraphic/Core Test	Will not generally be completed	STR - Abandoned Stratigraphic/Core Test					
SRV - Service Well	See Notes: Classify as OBS - observation; WI - water injection, GI - Gas injection, etc.	SEV - Abandoned service well					
MSC - Miscellaneous	See Notes: Classify as WD - waste disposal; GS - gas storage, etc.	MSC - Abandoned Miscellaneous well.					