

Ohanet (Algeria)

In early 2001, Woodside purchased a 15% interest in the Ohanet gas development in Algeria. This project, operated by BHP Billiton, is governed by a Risk Services Contract (RSC) with Algeria's national oil company (Sonatrach). In this RSC, the participants agreed to develop several gas fields and install a gas processing plant in return for the opportunity for cost recovery plus a fixed return taken from the sale of gas-liquid by-products (LPG and condensate). Woodside does not have any share in the sales gas delivered from the development.

This type of contract is frequently used internationally by national oil companies to develop their indigenous resources. While Woodside does not have a direct mineral interest in the gas-liquids, it is recognised international practice to book reserves in such circumstances based on economic interest, i.e. value rather than technical estimate of volumes. Woodside has estimated Reserves volumes that reflect the value of this asset, using product prices at the end of 2001. The product prices are quoted along with the resulting volumes. Higher prices should not be applied to these volumes to estimate their value, as the RSC specifies a maximum return.

LPG Reserves have been categorised as Dry Gas Reserves for consistency with NWSV definitions. Again, this does not imply any Woodside interest in the sales gas. The resulting Dry Gas Reserves are estimated to be 0.10 Tcf at the Proved level and 0.13 Tcf at the Probable level. Woodside's share is 0.02 Tcf at both the Proved and Probable levels. These estimates are based on a 31 December 2001 LPG price of US\$157.00/tonne.

Condensate Reserves are estimated to be 608 MMbbl at the Proved level and 767 MMbbl at the Probable level. Woodside's share is estimated to be 9.1 MMbbl at the Proved level and 11.5 MMbbl at the Probable level. The corresponding condensate price on 31 December 2001 was US\$20.16/bbl.

Hydrocarbon Reserves as at 31 December 2001						
Production Licence Area, North West Shelf						
Area	Proved			Probable, including Proved		
	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]
WA-1-L	1195	2032	-	1508	2901	-
WA-3-L	130	590	-	176	845	-
WA-5-L/6-L	443	1439	-	600	2182	-
WA-23-L/24-L	064	387	-	112	647	-
WA-3-L/9-L	000	04	106	000	05	206
WA-11-L/9-L	005	27	422	010	41	856
WA-16-L/3-L	020	17	156	026	26	308
Total Remaining Recovery	1857	4496	684	2432	6647	1370
Future Fuel and Flare Gas	239	-	-	314	-	-
Total Reserves	1618	4496	684	2118	6647	1370
Woodside Reserves Share (refer notes)	356	1010	114	445	1384	228
Remark: Woodside Share above incorporates Athena volumes accessed via agreement with WA-17-L holders (refer Reserves Statement for more information)						
Retention Lease Area, North West Shelf						
Area	Proved			Probable, including Proved		
	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]
WA-7-R	024	150	-	032	201	-
WA-9-R	009	57	-	013	81	-
WA-10-R	000	00	47	001	00	116
Total Remaining Recovery	033	207	47	046	282	116
Future Fuel and Flare Gas	005	-	-	006	-	-
Total Reserves	028	207	47	040	282	116
Woodside Reserves Share (refer notes)	005	35	08	007	47	19
Remark: To add transparency to the NWSV gas reserves tables, Future Fuel and Flare is shown as a visible bottom line item. Future Fuel and Flare Gas for the processing and transportation to the delivery point for Domgas and LNG is 12.9% of Dry Gas.						
Production Licences AC/L5 and WA-20-L and Permit WA-271-P						
Area	Proved			Probable, including Proved		
	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]	Dry gas [Tcf]	Condensate [MMbbl]	Oil [MMbbl]
AC/L5	-	-	741	-	-	1161
WA-20-L	-	-	169	-	-	337
WA-271-P	-	-	1159	-	-	1640
Total Reserves	-	-	2069	-	-	3138
Woodside Reserves Share (refer notes)	-	-	1613	-	-	2385
International						
Area	Proved			Probable, including Proved		
	Dry gas* [Tcf]	Condensate [MMbbl]	Oil [MMbbl]	Dry gas* [Tcf]	Condensate [MMbbl]	Oil [MMbbl]
Ohanet (Algeria)	010	608	-	013	767	-
Total Reserves	010	608	-	013	767	-
Woodside Reserves Share (refer notes)	002	91	-	002	115	-
Remark: The Dry Gas Reserves shown for Ohanet are actually LPG (C3+C4), but have been shown as Dry Gas for consistency with NWSV definitions. Woodside has no share in the sales gas from this project (refer Reserves Statement).						

Reconciliation of Hydrocarbon Reserves between 31 December 2000 and 31 December 2001							
Area	Remaining Recovery at 31.12.2000		Changes during 2001		Produced in 2001	Remaining Recovery at 31.12.2001	
	Proved Dry Gas [Tcf]	Probable* Dry Gas [Tcf]	Proved Dry Gas [Tcf]	Probable* Dry Gas [Tcf]	Dry Gas [Tcf]	Proved Dry Gas [Tcf]	Probable* Dry Gas [Tcf]
	WA-1-L	1225	1538	000	000	030	1195
WA-3-L	130	176	000	000	-	130	176
WA-5-L/6-L	476	632	(010)	(009)	023	443	600
WA-23-L/24-L	064	112	000	000	000	064	112
WA-3-L/9-L	000	000	000	000	000	000	000
WA-11-L/9-L	008	013	000	000	003	005	010
WA-16-L/3-L	020	026	000	000	000	020	026
WA-7-R	009	013	000	000	-	009	013
WA-9-R	024	032	000	000	-	024	032
WA-10-R	000	001	000	000	-	000	001
Ohanet*	-	-	010	013	-	010	013
Total Remaining Recovery	1956	2543	000	004	056	1900	2491
Future Fuel and Flare Gas	253	328	-	-	-	244	320
Total Reserves	1703	2215	-	-	-	1656	2171
The Dry Gas Reserves shown for Ohanet are actually LPG (C3+C4), but have been shown as Dry Gas for consistency with NWSV definitions. Woodside has no share in the sales gas from this project (refer Reserves Statement). As a result, the Future Fuel and Flare figure only applies to NWSV fields.							
Condensate							
Area	Remaining Recovery at 31.12.2000		Changes during 2001		Produced in 2001	Remaining Recovery at 31.12.2001	
	Proved Condensate [MMbbl]	Probable* Condensate [MMbbl]	Proved Condensate [MMbbl]	Probable* Condensate [MMbbl]	Condensate [MMbbl]	Proved Condensate [MMbbl]	Probable* Condensate [MMbbl]
	WA-1-L	2109	2978	00	00	77	2032
WA-3-L	590	845	00	00	-	590	845
WA-5-L/6-L	1769	2506	(99)	(93)	231	1439	2182
WA-23-L/24-L	389	649	00	00	02	387	647
WA-3-L/9-L	04	05	00	00	00	04	05
WA-11-L/9-L	33	48	00	00	07	27	41
WA-16-L/3-L	17	26	00	00	00	17	26
WA-7-R	150	201	00	00	-	150	201
WA-9-R	57	81	00	00	-	57	81
WA-10-R	00	00	00	00	-	00	00
Ohanet	-	-	608	767	-	608	767
Total Reserves	5118	7339	509	674	317	5311	7696
Oil							
Area	Remaining Recovery at 31.12.2000		Changes during 2001		Produced in 2001	Remaining Recovery at 31.12.2001	
	Proved Oil [MMbbl]	Probable* Oil [MMbbl]	Proved Oil [MMbbl]	Probable* Oil [MMbbl]	Oil [MMbbl]	Proved Oil [MMbbl]	Probable* Oil [MMbbl]
	WA-3-L/9-L	73	248	102	27	69	106
WA-11-L/9-L	695	1129	00	00	273	422	856
WA-16-L/3-L	207	395	36	00	87	156	308
WA-10-R	47	116	00	00	-	47	116
WA-271-P	802	1225	357	415	-	1159	1640
AC/L5	862	1244	284	322	405	741	1161
WA-20-L	233	441	00	(40)	64	169	337
Total Reserves	2919	4798	779	724	898	2800	4624

1. Definitions

"Condensate" is defined as "C5 plus" hydrocarbon components for NWSV, but is sales product for Ohanet.

"Dry Gas" is defined as "C4 minus" hydrocarbon components plus inerts. These volumes include LPG (propane and butane) Reserves.

"Tcf" means trillion (10¹²) standard cubic feet of gas.

"MMbbl" means millions of standard barrels of oil, NGLs and condensates.

"MMboe" means millions of barrels of oil equivalent. The conversion factor for Dry Gas to oil equivalent is 1 barrel of oil equivalent for each 5,700 standard cubic feet of gas.

"Reserves" are identified volumes that have been demonstrated to be producible from known resources in which the Company has a material interest from a given date forward, at commercial rates, under presently anticipated production methods, operating conditions, prices and costs. Woodside reports reserves net of the gas required for processing and transportation to the customer (fuel and flare gas).

"Proved Reserves" are those Reserves that, to a high degree of certainty (90% confidence), are recoverable. There is relatively little risk associated with these Reserves.

"Probable Reserves" are those Reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable. There is at least a 50% probability that reserves recovered will exceed Probable Reserves. Unless otherwise indicated, for the purposes of this reserves statement, Probable Reserves are inclusive of Proved Reserves.

"Possible Reserves" are those Reserves that, to a low degree of certainty (10% confidence), are recoverable. There is relatively high risk associated with these Reserves.

"Remaining Recovery" means the volumes that have been demonstrated to be recoverable from the sub-surface. It is equal to the sum of reserves plus the gas required for its processing and transportation to the customer.

"Scope for Recovery" is the recovery estimate of any project for which implementation cannot be shown with sufficient confidence to be technically sound or commercially viable, but which could mature based on reasonable assumptions about the success of additional data gathering, improved reservoir management, maturing technology from current research, relaxations in the market constraints and/or terms and conditions for implementing such a project.

2. Notes

Net cumulative production of Dry Gas, Condensate and Oil from the North Rankin, Perseus, Goodwyn, Echo-Yodel, Warena, Cossack, Lambert, Hermes, Lamina-Corallina, and Legendre fields to 31 December 2001 was 669 Tcf, 3165 MMbbl and 2749 MMbbl, respectively.

Woodside's share of Dry Gas Reserves for the NWSV is an estimate based on the hydrocarbon quantities required to be produced for Woodside's Domestic Gas interest, currently 50% and Woodside's 16.7% LNG interest. Woodside's exact share of Domgas production depends on the volume sold and capacity delivered.

Woodside's exact share of Condensate Reserves for the NWSV depends on the percentage of total production derived from Domgas sales (Woodside's interest currently 50%), LNG (Woodside's interest 16.7%) and Gas Recycling Ventures.

Oil and Condensate volumes have been rounded to the nearest 0.1 MMbbl. Gas volumes have been rounded to the nearest 0.01 Tcf.

"The information contained in this Reserves Statement has been compiled by Mr Glen Johnson. Mr Johnson's qualifications include a Bachelor of Applied Science (Chemical Engineering) from the University of Waterloo, Canada and more than 22 years of relevant experience. Mr Johnson has consented in writing, to the inclusion of this information in this Annual Report."