Table 1: Summary of 2001 Reserves/Resources Replacement

proved RRR	Production	1 year 2001				3 year 1999-2001				Production	2002 Target	
		Incl A&D		Excl A&D		Incl A&D		Excl A&D			Incl A&D	Excl A&D
		Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP			
Oil/NGL	**0.81**	65%	65%	58%	58%	102%	77%	130%	106%	**0.83**	91%	49%
Gas	**0.57**	86%	86%	42%	42%	50%	50%	55%	55%	**0.58**	113%	69%
Total BOE	1.38	**74%**	74%	**52%**	52%	81%	67%	**101%**	86%	1.41	100%	57%

Additions bln boe	Production	1 year 2001				3 year 1999-2001				Production	2002 Target	
		Incl A&D		Excl A&D		Incl A&D		Excl A&D			Incl A&D	Excl A&D
		Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP			
Oil/NGL	**0.81**	0.53	0.53	0.47	0.47	0.82	0.63	1.05	0.86	**0.83**	0.76	0.41
Gas	**0.57**	0.49	0.49	0.24	0.24	0.28	0.28	0.31	0.31	**0.58**	0.66	0.40
Total BOE	1.38	**1.02**	1.02	**0.72**	0.72	1.12	0.92	**1.39**	1.18	1.41	1.42	0.81

Resources (bln boe)	**2000**	**2001**	**Delta**
SFR (com discovered)	14.1	16.7	
Expectation (incl proved)	32.6	32.7	
Total	46.7	49.4	**2.74**
less Urdaneta West (license)			1.28
Resources added (net)			1.46
Production			1.38
Resources added (gross)			**2.84**

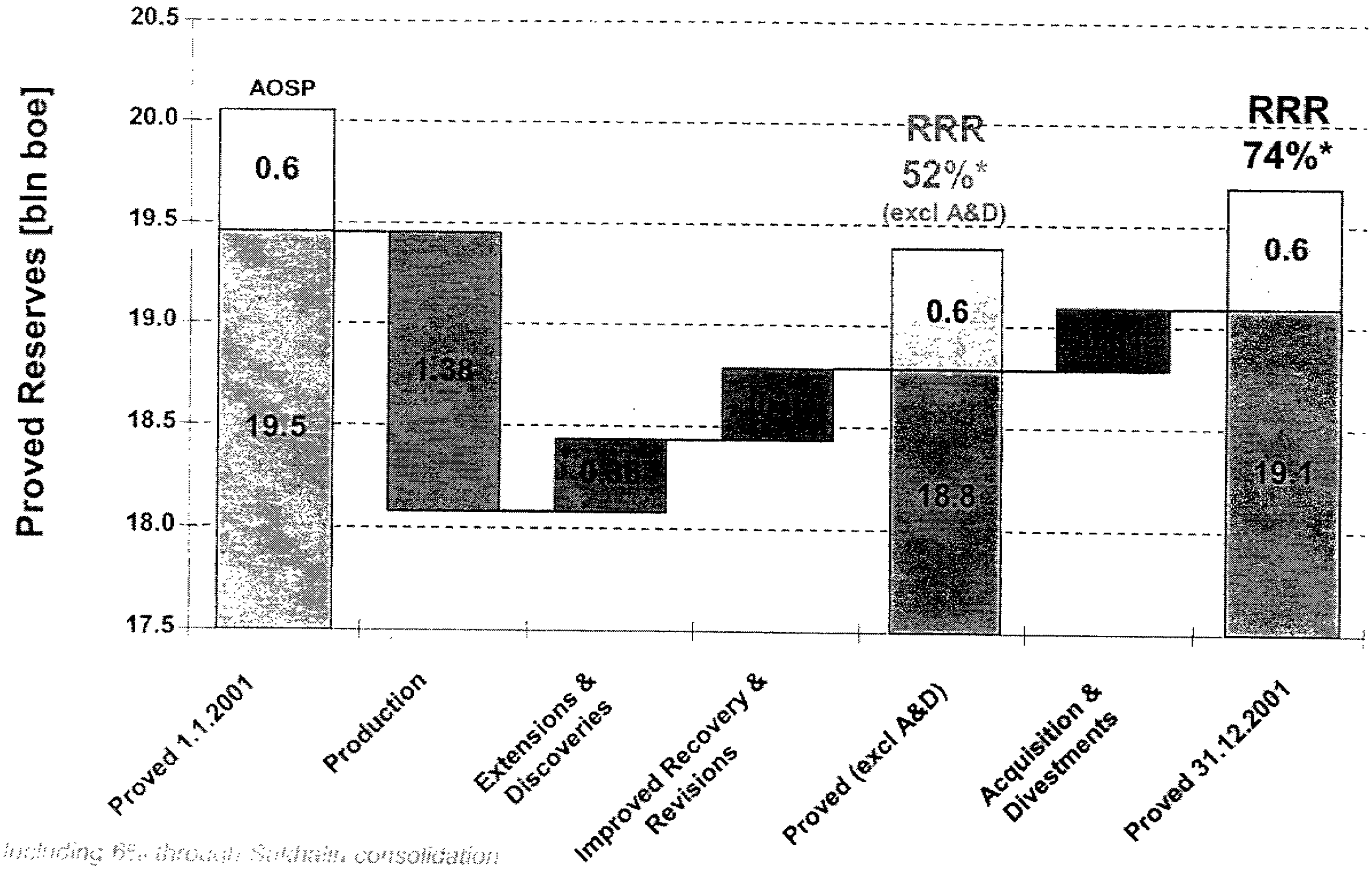
Reserves (bln boe)		**Proved**		**Developed**	
Balance 31.12.2000			20.1		9.0
Additions	*Extensions*	0.36			
	Revisions	0.35		0.17	
	A&D	0.31			
	Transfer to Dev			1.02	
			1.02		1.19
Production			-1.38		-1.38
Balance 31.12.2001			19.7		8.8

Table 2: Total Resource Base as at 31.12.01

bln boe	Oil&NGL	Gas	Total
Proved Developed	*4.3*	*4.4*	*8.8*
Proved Undeveloped	*5.7*	*5.2*	*10.9*
Total Proved	**10.1**	**9.6**	**19.7**
Expectation minus Proved	*6.5*	*6.2*	*12.7*
Total Expectation	**16.9**	**15.8**	**32.7**
(of which in license)	*(12.7)*	*(12.0)*	*(24.7)*
SFR			
Proved techniques	*7.9*	*5.9*	*13.8*
Unproved techniques	*2.7*	*0.2*	*2.9*
Total Resources	**27.5**	**21.9**	**49.4**
Undiscovered	*15.6*	*11.9*	*27.5*
Non commercial	*2.4*	*2.6*	*5.0*
Total Volume	**45.5**	**36.4**	**81.9**

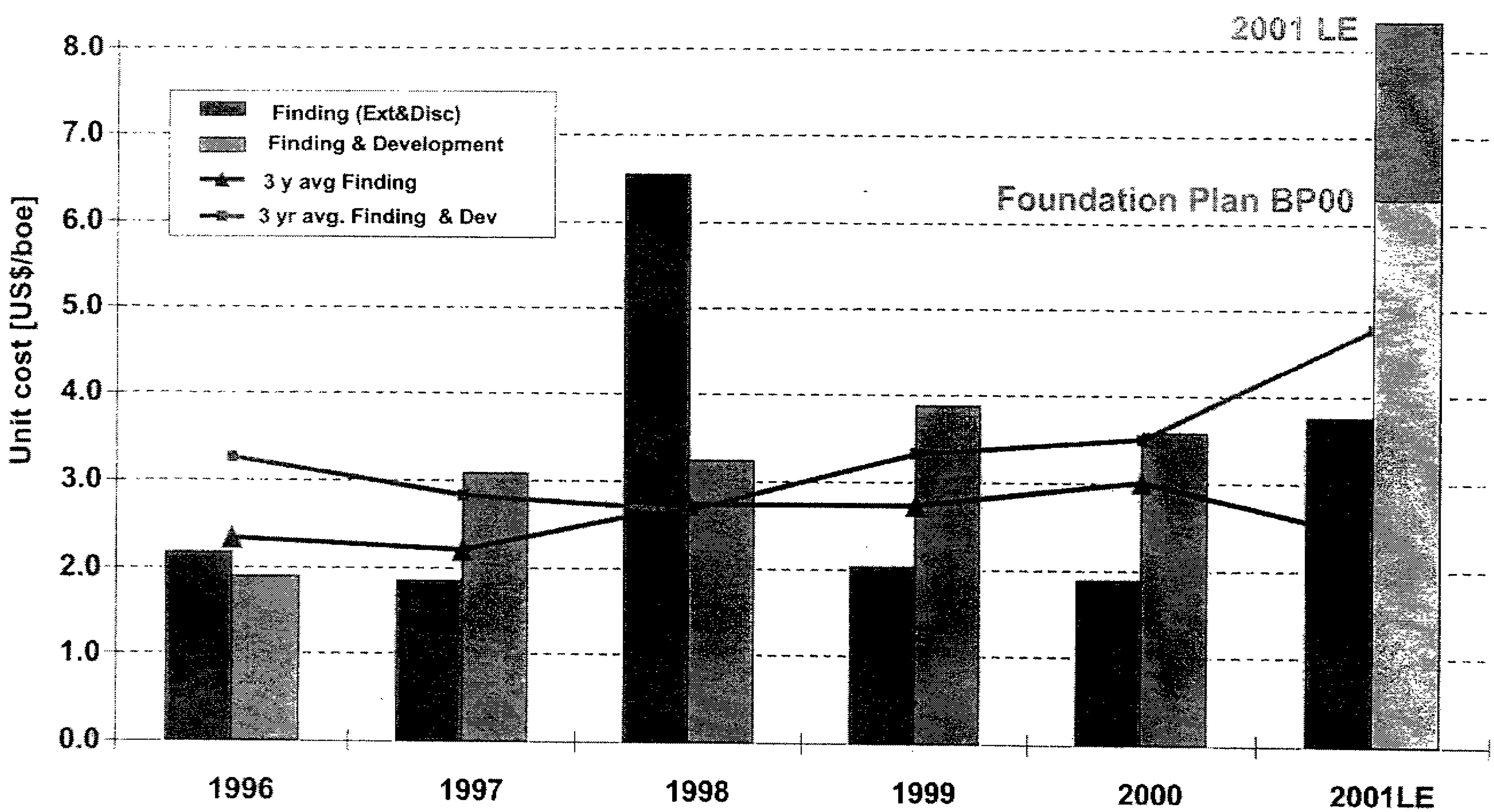
Table 2 *Total resource base at 1.1.2002. AOSP Mining reserves are included*

Figure 1: Total BOE Proved Reserves 2001



Including 6% through Sakhalin consolidation

Figure 2 : Finding and Development Cost



Group Companies Only

Figure 3 : 2001 Reserves Actual versus Target

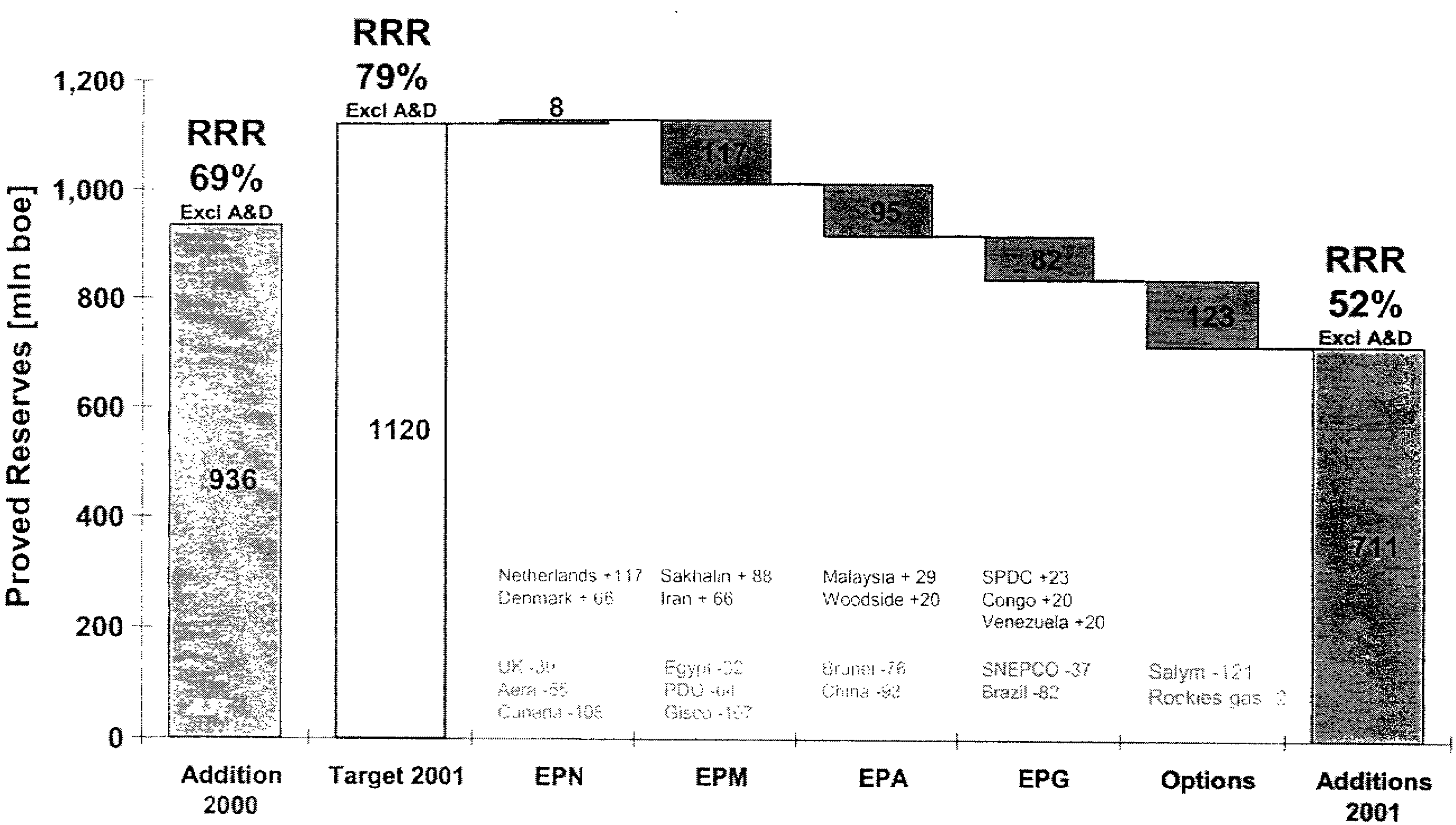


Figure 4 : Proved RRR (incl A&D)

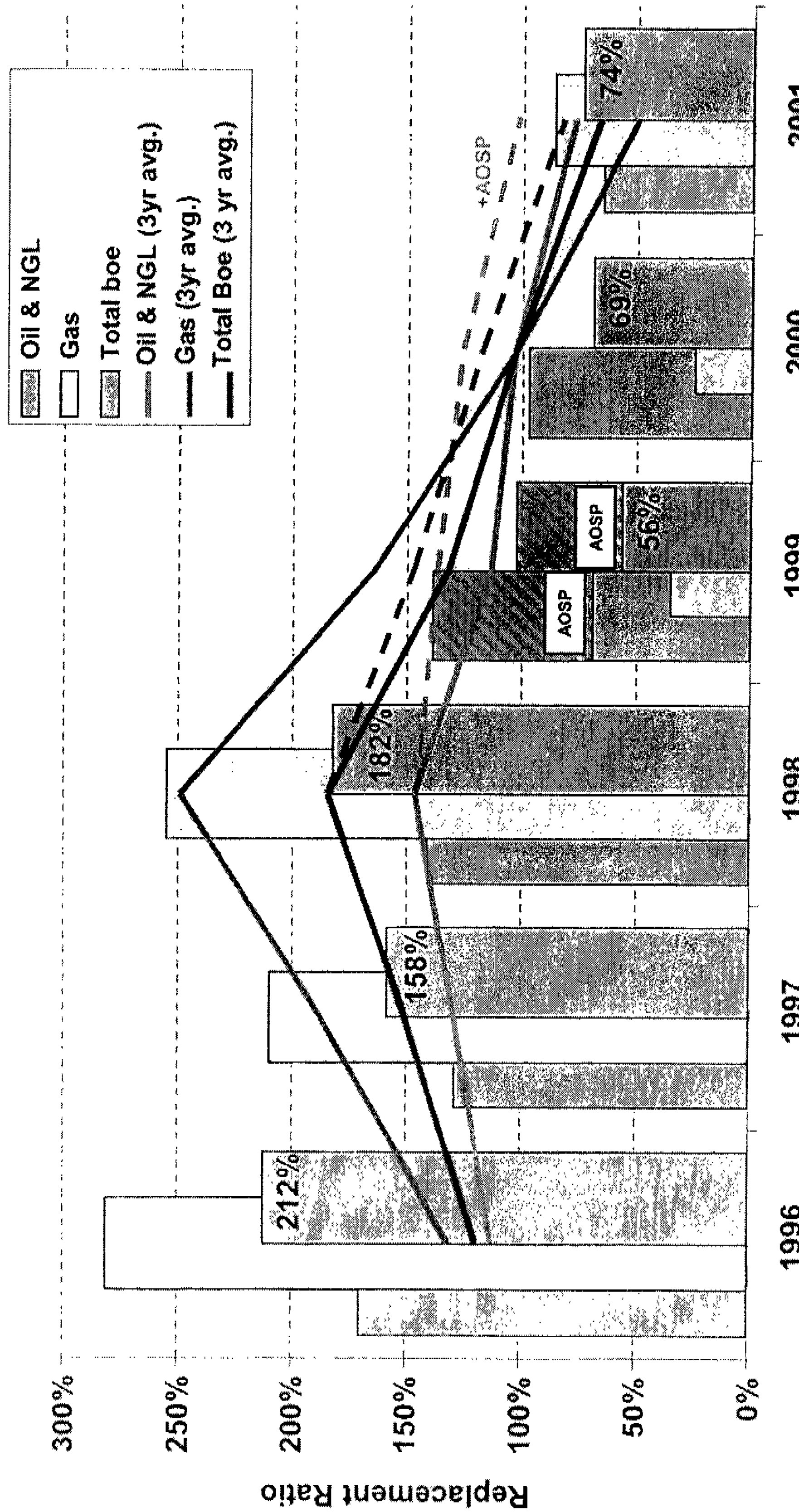
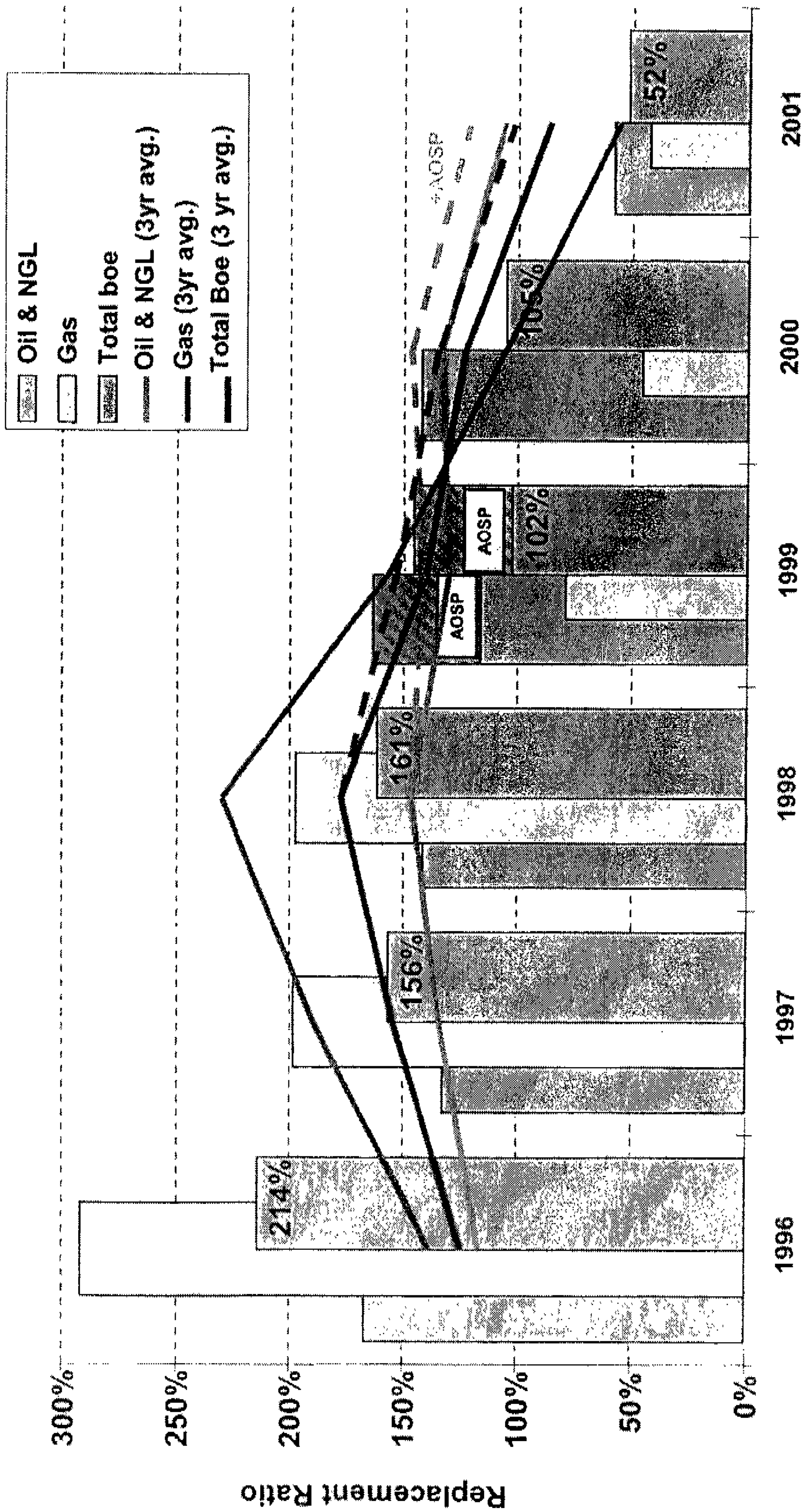


Figure 5 : Proved RRR (excl. A&D)



RJW00851025

Figure 6 : Majors Proved Reserves Replacement Ratio [boe]

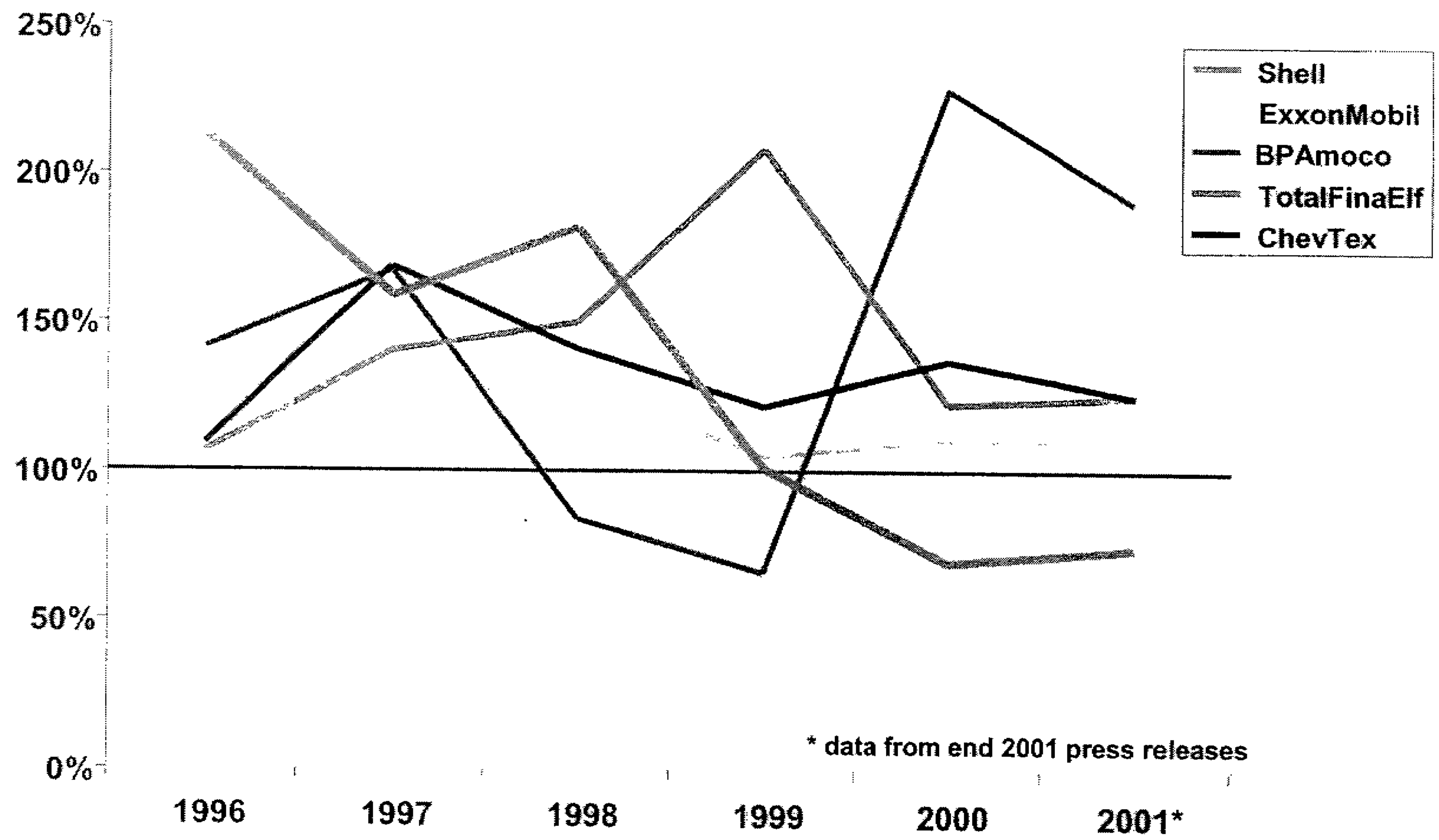
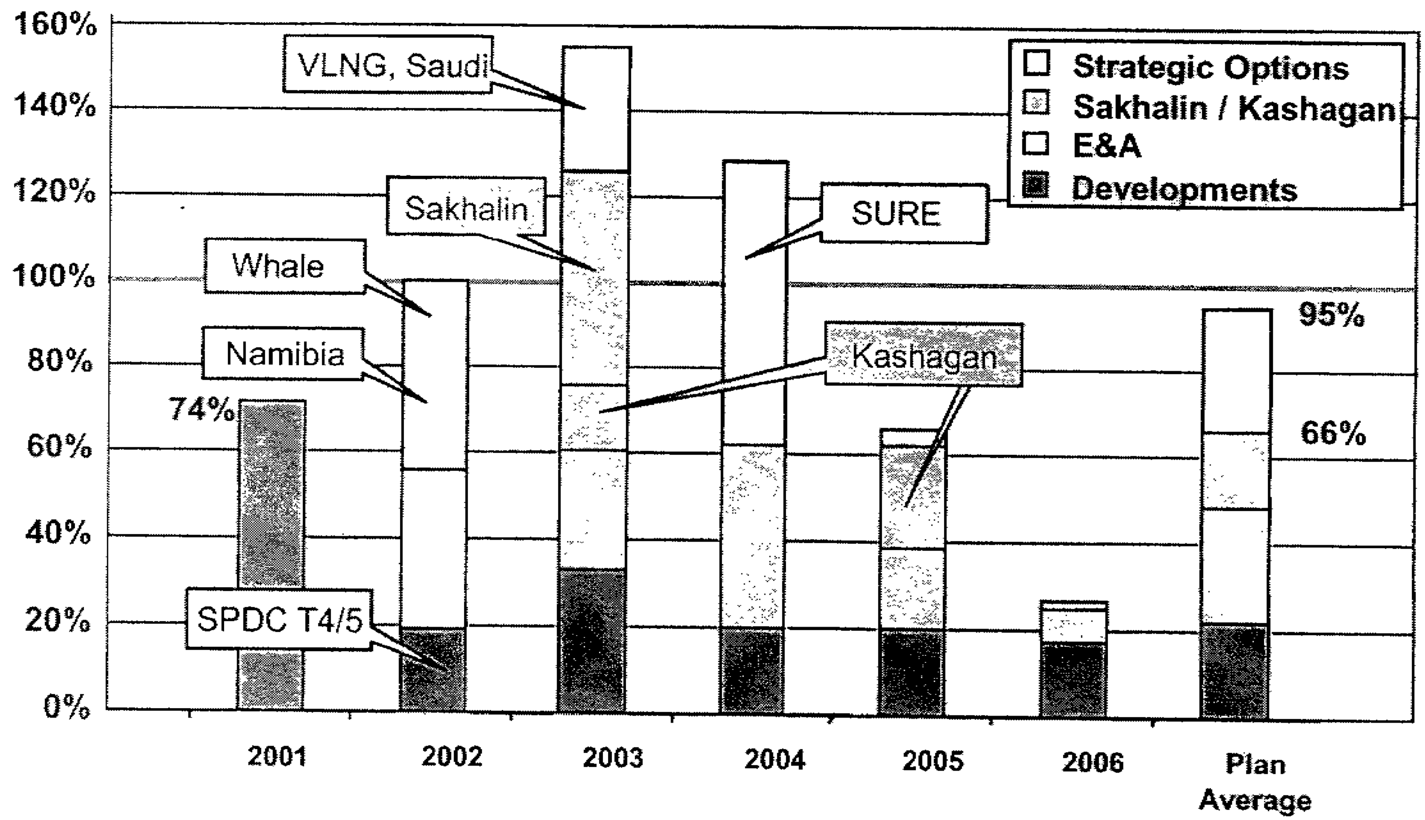


Figure 7 : BP'01 Planned Reserves Replacement



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10
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Reserves presentation

- **Proved reserves 31.12.2001**
  - Overview
  - Main changes
  - Variances vs Target
- **Main issues**
  - New fields
  - End of License
  - SEC guidelines
- **Way forward**
  - Target 2002
  - Reserves roadmap

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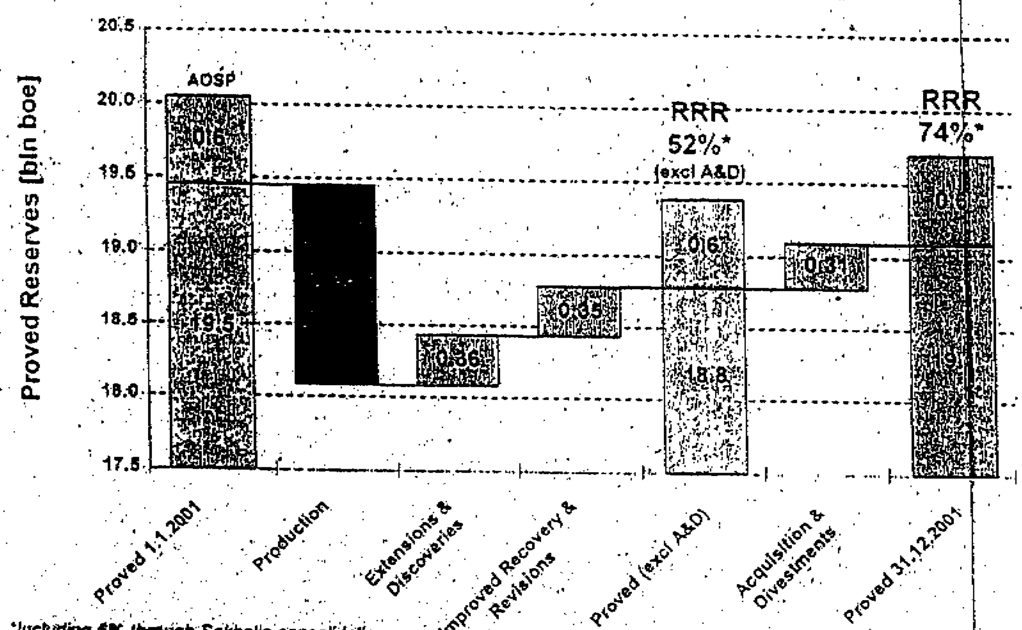
Total BOE Proved Reserves 2001



*Including 6% through Sakhalin consolidation.

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MAIN CHANGES

			OIL/GAS
• **Extensions & Discoveries:**		**+357 mln boe**	**191/166**
– USA	+205	Holstein, Kepler, etc	
– UK	+44	Penguins, Carrack, etc	
– Brunei	+37	Bugan, Seria	
• **Acquisitions & Divestments:**		**+307 mln boe**	**59/248**
– NZ, Brunei	+296	Fletcher, with 44 still to be divested	
– USA	+64	Pinedale	
– Pakistan, Argentina, TMR	-59		
• **Revisions & Improved Recovery:**		**+354 mln boe**	**279/75**
– Netherlands	+130	Groningen	
– Denmark	+113	Halfdan, Dan West	
– Sakhalin	+88	Consolidation (45% Ashtok)	
– Canada	-50	Sable	
– New Zealand	-51	Maui –91 + pre-paid gas + Kapuni	
– Oman Gisco	-107	Accelerated repayments	
• **Production:**		**1377 mln boe**	**810/567**
• **Developed Reserves Additions**		**1187 mln boe**	**671/447**
– Australia, Philippines, Argentina, SPDC, Iran, Denmark, UK, USA			

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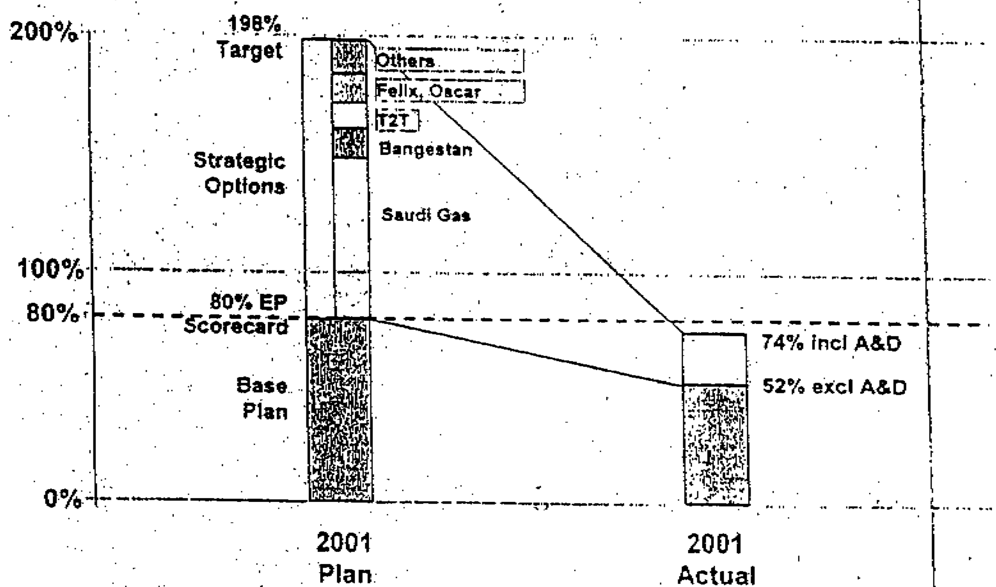
2001 RRR Target vs Actual



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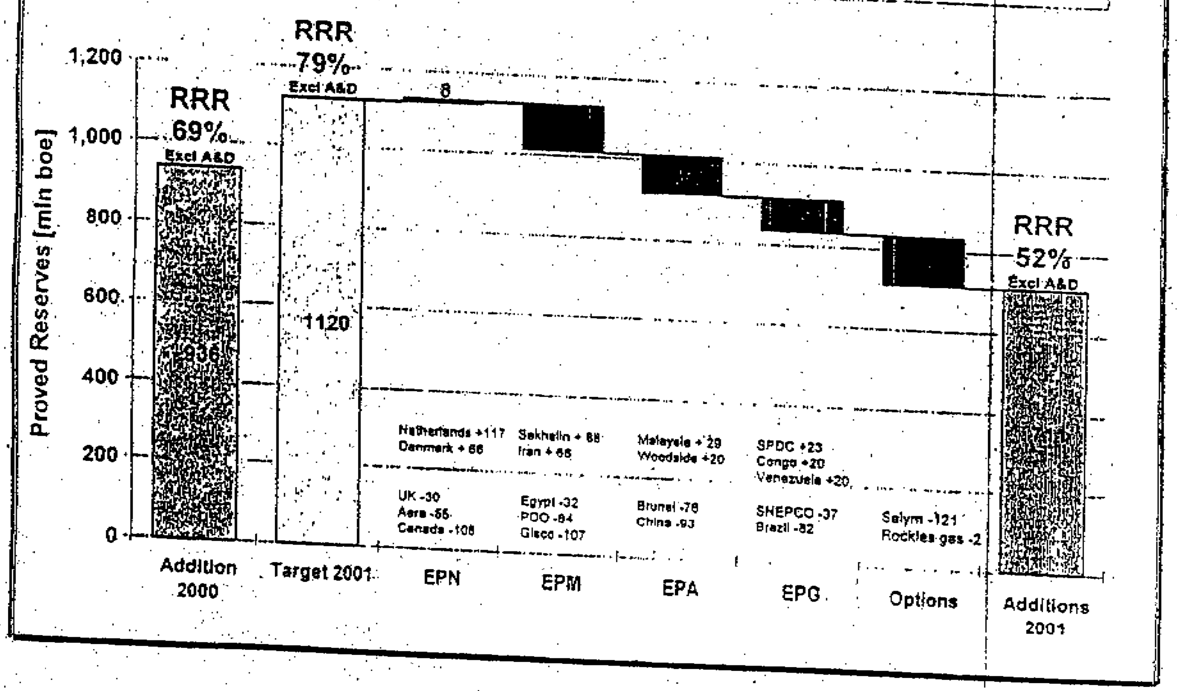
2001 Reserves Actual versus Target



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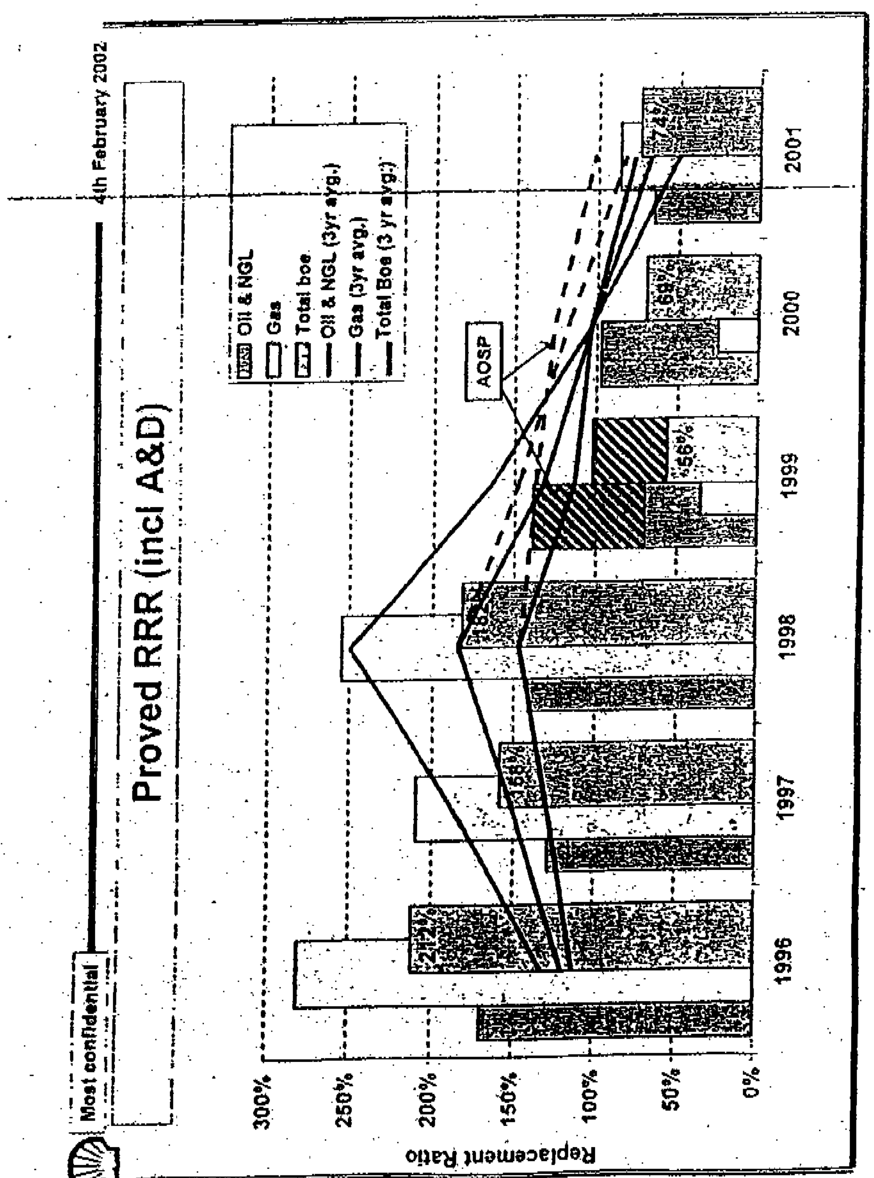

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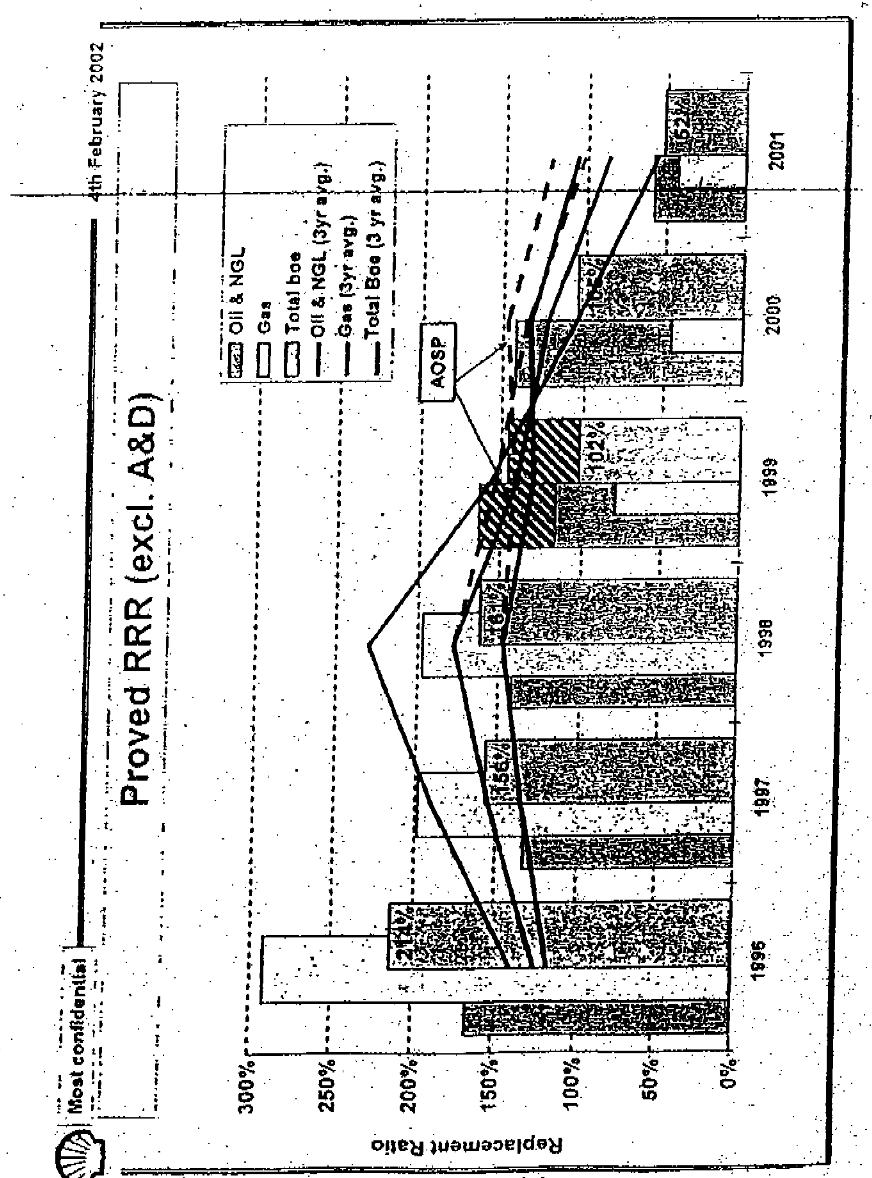

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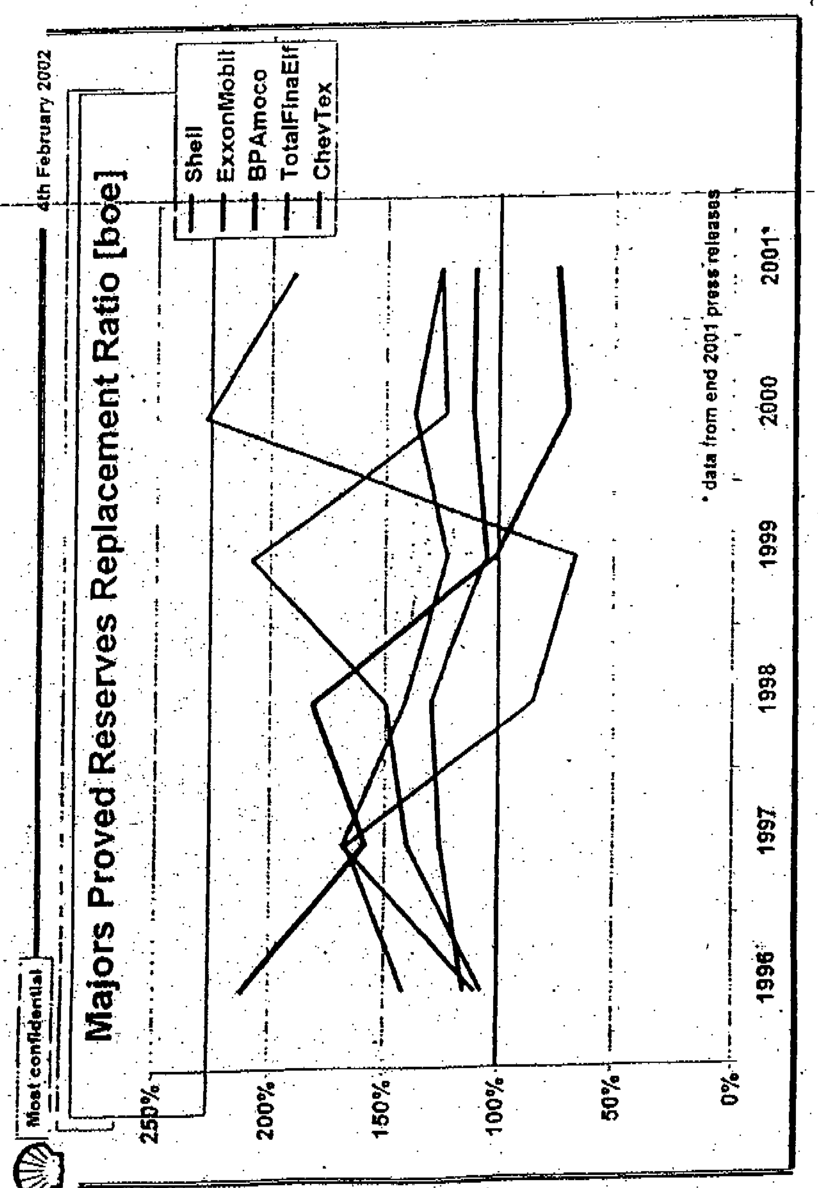
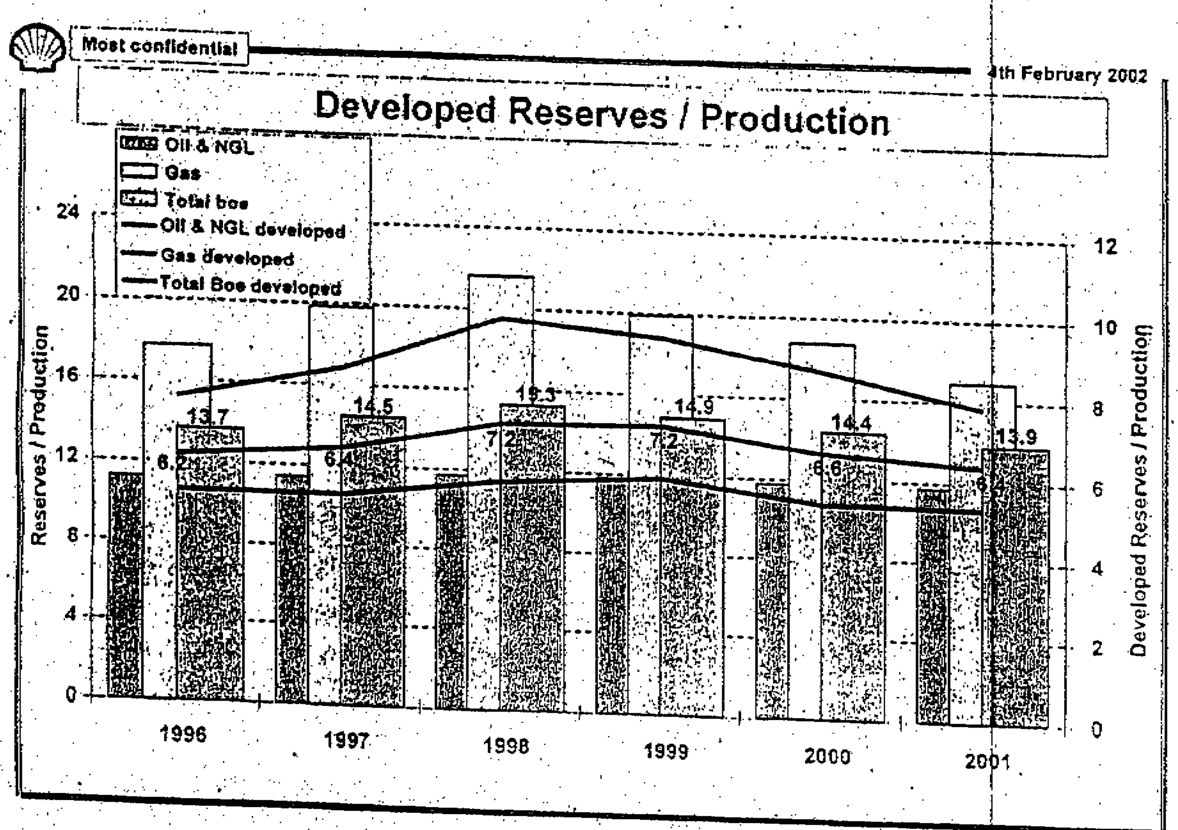
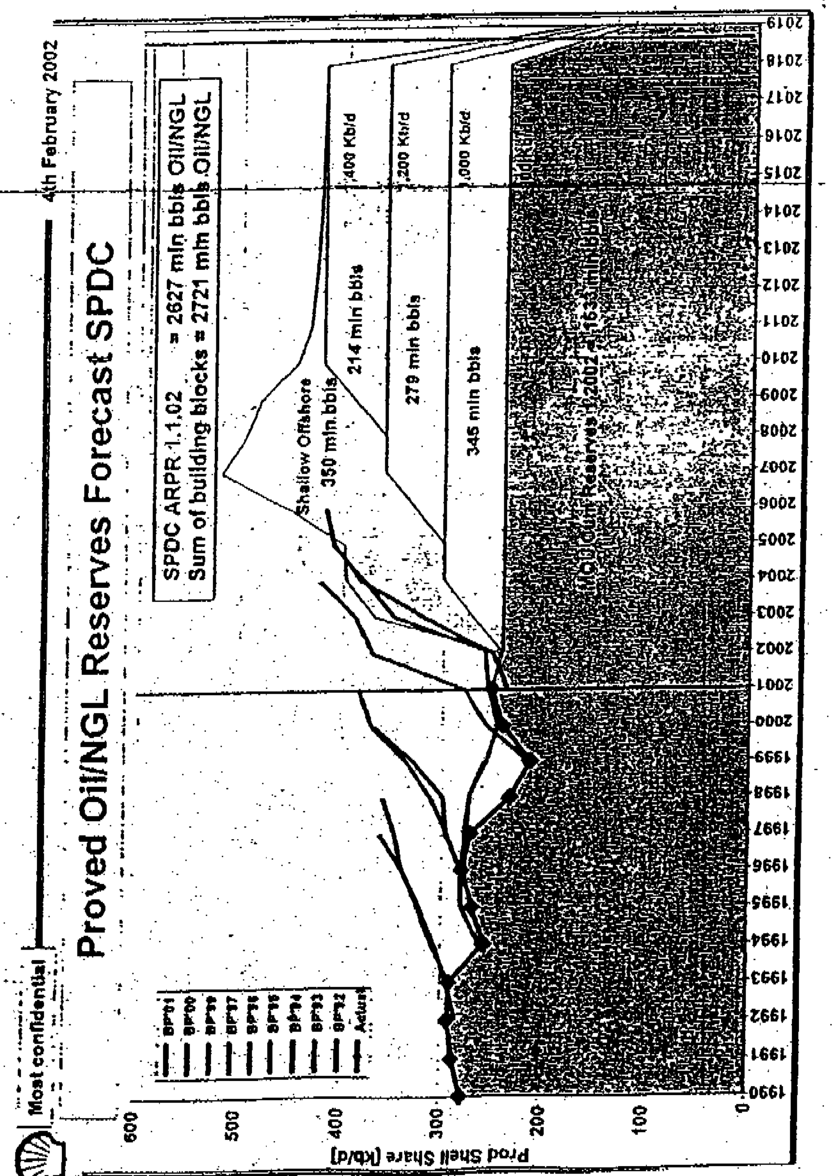
V00010194


Most confidential
4th February 2002
Majors Proved Reserves Replacement Ratio [boe]
Shell
ExxonMobil
BPAmoco
TotalFinaElf
ChevTex
250%
200%
150%
100%
50%
0%
1996
1997
1998
1999
2000
2001*
* data from end 2001 press releases

V00010195


Most confidential
4th February 2002
Developed Reserves / Production
Oil & NGL
Gas
Total boe
Oil & NGL developed
Gas developed
Total Boe developed
Reserves / Production
Developed Reserves / Production
24
20
16
12
8
4
0
12
10
8
6
4
2
0
13.7
6.2
14.5
6.4
15.3
7.2
14.9
7.2
14.4
6.6
13.9
6.4
1996
1997
1998
1999
2000
2001



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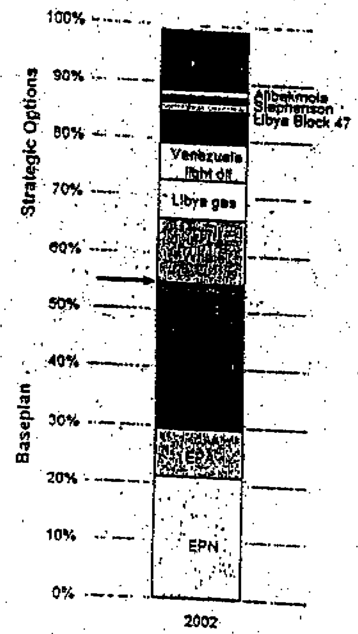
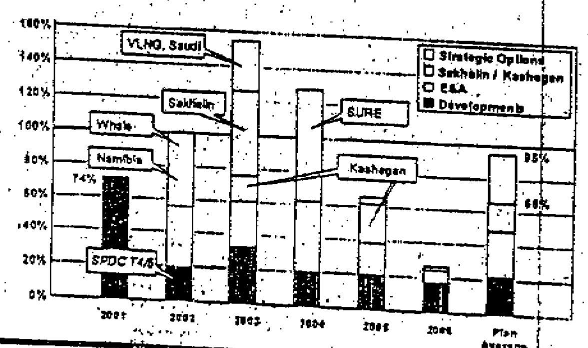
2002 RRR Target of 100%: a Challenge



- LE Baseplan Variances
  - Oman no booking: -70 mln bbls
  - Brazil, Angola freeze: -70 mln bbls
  - SNEPCO: +50 mln bbls
  - Canada, T4/5 not in target: + 100 mln bbls
- Almost 50% from Strategic Options New Business and Frontier
  - KUDU: not proven technique
  - Whale, Libya: MRH access
  - WE Pipeline?



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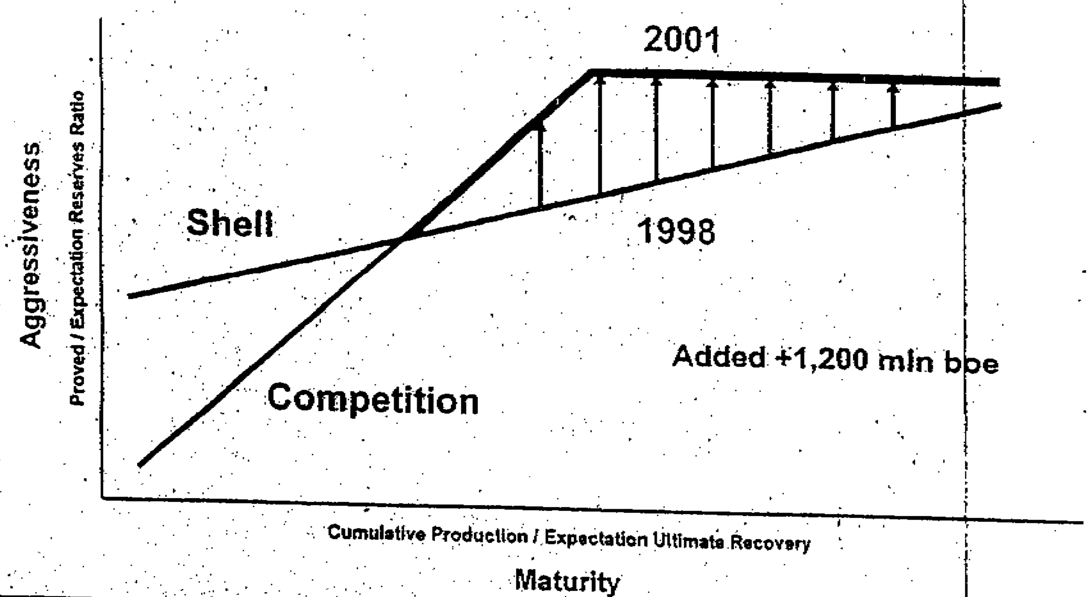
Mature Fields : OUs Follow Guidelines Universally



V00010199

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New Fields : Guidelines currently too lenient

- **SEC clarifications**
  - insisting on full project maturity
  - company commitment
  - absence of possible show stoppers
- **New Fields** -800 mln boe
  - Gorgon
  - Ormen Lange
  - Block 18
  - Vincent/Enfield
  - Waddenzee
- **End of License** -1,300 mln boe
  - Oman
  - Abu Dhabi
  - SPDC

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2002+ RRR Management

- **Shell guidelines need sharpening / clarifying**
  - New Fields
  - End of License
  - Commercial versus Economic
- **Raise awareness of SEC clarifications**
  - OUs / RBA Focal points / EPT / SDS
  - Establish links between EPB-P, HMF and V2V
  - Reserves summit Q2 '02 – EPB-P & Auditor to host
- **Tie Projects to Maturation at Capital Allocation**
  - Incomplete OU returns in 2001
  - For 2002: full picture of resource maturation linked to projects
- **Roadmap for Big Ticket Bookings**
  - Kudu, Train 4/5, Whale, West-East-pipeline, Kashagan, Sakhalin LNG

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BACK-UP

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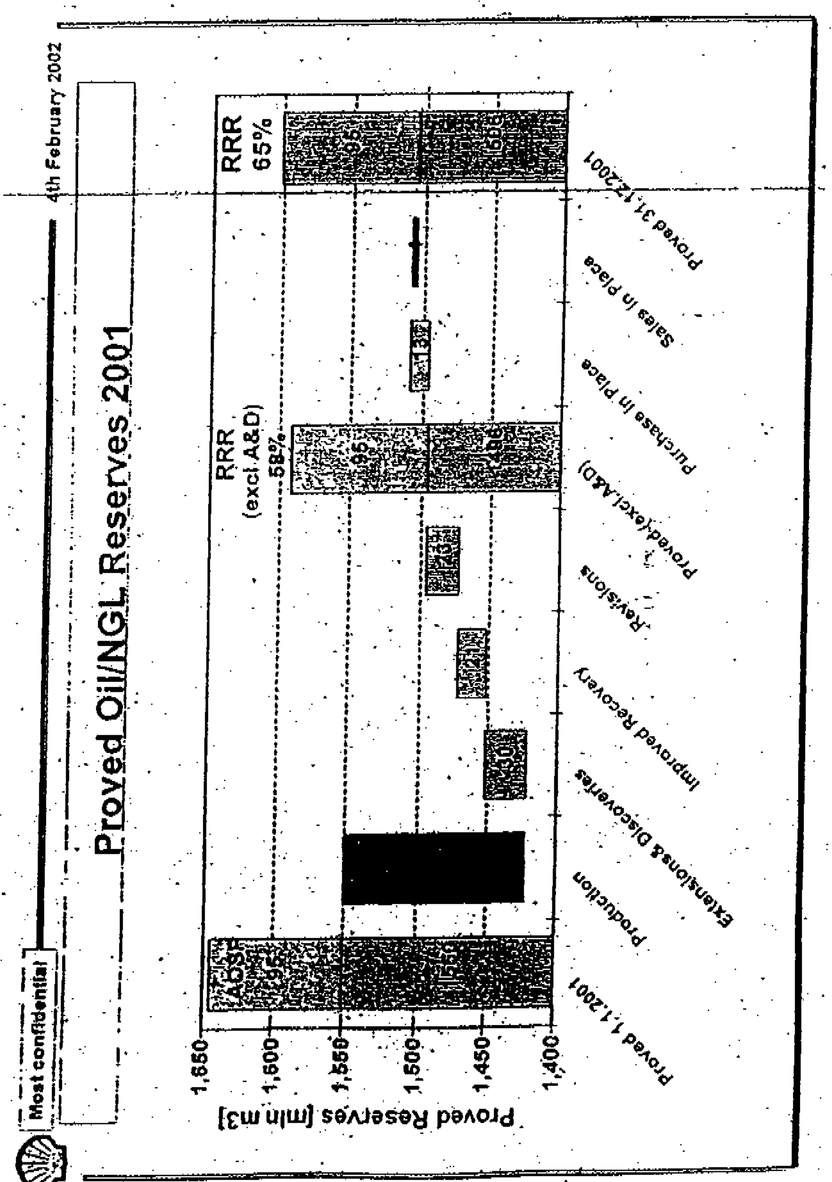

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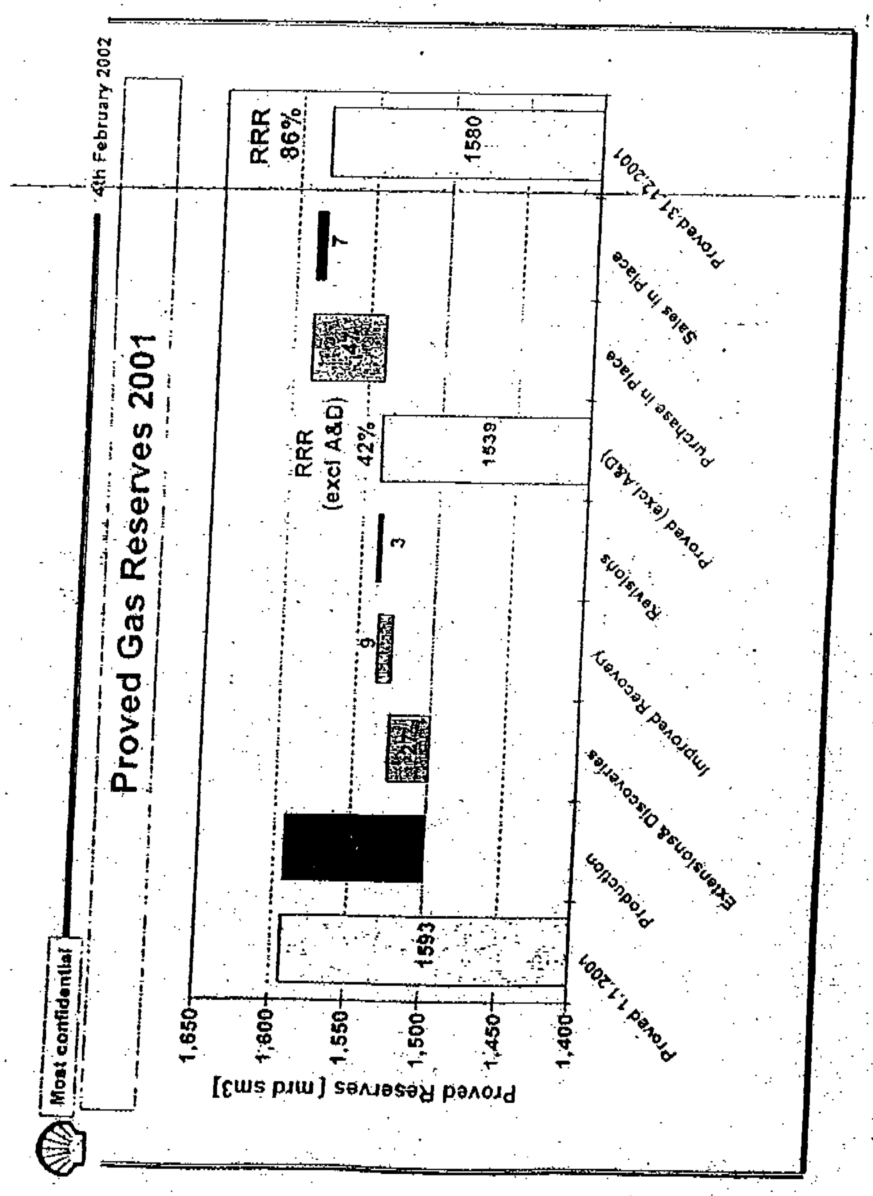
Most confidential
4th February 2002
Proved Gas Reserves 2001
RRR
86%
RRR
(excl A&D)
42%
1593
6
3
1539
7
1580
1,650
1,600
1,550
1,500
1,450
1,400
Proved Reserves [mrd sm3]
Proved 1.1.2001
Production
Extensions& Discoveries
Improved Recovery
Revisions
Proved (excl.A&D)
Purchase in Place
Sales in Place
Proved 31.12.2001

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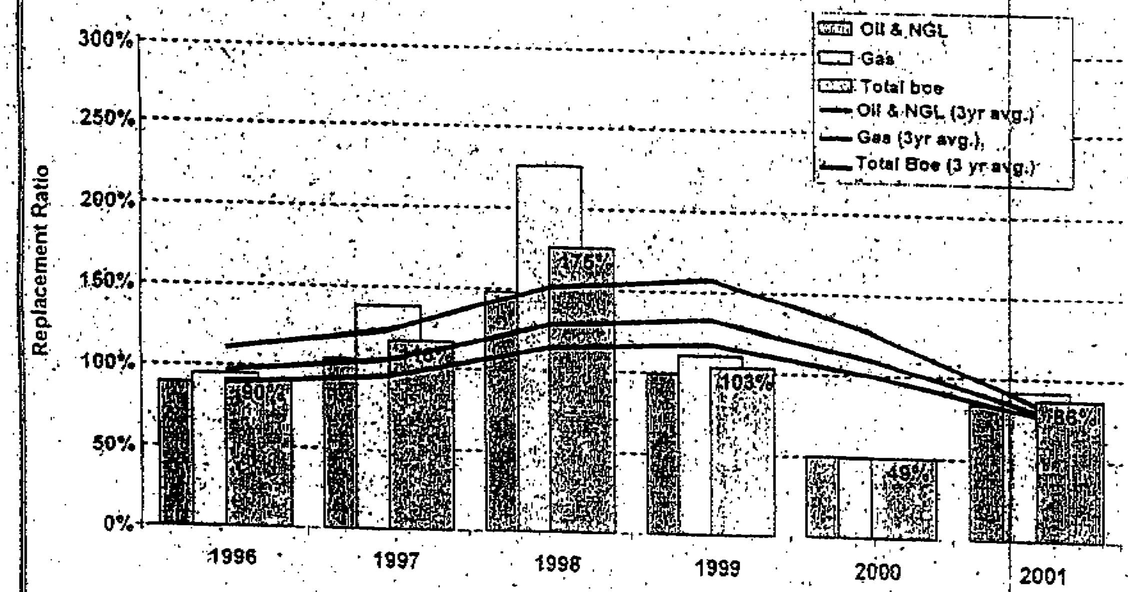
4th February 2002

Proved Developed RRR



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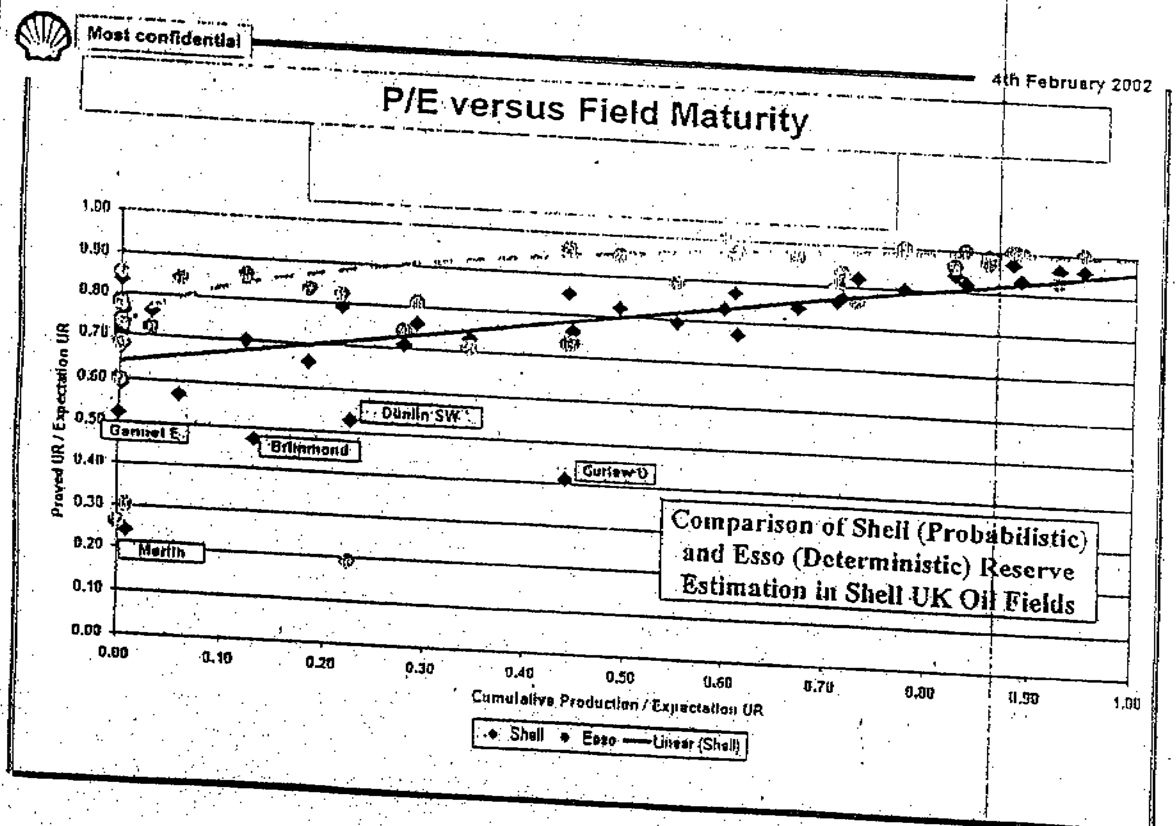
V00010205


Most confidential
4th February 2002
P/E versus Field Maturity
Proved UR / Expectation UR
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Cumulative Production / Expectation UR
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.00
Gannet E.
Brimmond
Dunlin SW
Curlew D
Merlin
Comparison of Shell (Probabilistic) and Esso (Deterministic) Reserve Estimation in Shell UK Oil Fields
Shell
Esso
Linear (Shell)

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New Fields : Guidelines currently too lenient

SEC clarifications in 2001 clearly insist on full project maturity, company commitment and absence of possible show stoppers

Item	SEC	Group
'Proved Area'	Not below 'Lowest Known Hydrocarbons' (LKH) level in reservoir; Laterally confined to 'legal location' (US only – min. well spacing), unless seismic amplitude and log support; Proven producibility from production test or analogue log and core data; Proven continuity of production.	Below LKH OK if supported by pressure evidence (not always from same reservoir); Laterally confined to fault block or other area with continuous good quality seismic amplitudes (BTC method preferred); Producibility from production test or wireline test or log and/or core analogy. Group practice still probabilistic P85 estimates in some cases.
'Improved Recovery'	Successful pilot project in that specific rock volume in the field	Assessment of uncertainties (VOI) Confirmed in analogous reservoirs; Project FID available/expected without pilot
'Reasonable Certainty'	Requires a serious commitment to develop (AFE, FID, MOU or contracts, firm plans); No 'reasonable doubt' (show stoppers!) Market must be 'reasonably certain'.	'Technically and commercially mature' (economic viability not necessary!); In principle a successful VAR3 or FID; 'Reasonable expectation that a plan can be matured with time'; Commitment by including development or its preparation in Business Plan; Market (expected to be) available

4th February 2002

New Fields – Reserves at Risk

- Australia (SDA) – Gorgon - 550 mln boe
  - Market SE Asia
- Norway – Ormen Lange - 100 mln boe
  - Instability
- Angola – Block 18 - 75 mln boe
  - VAR3: Marginal economics, gas disposal solution
- Australia (WEL) – Vincent/Enfield - 50 mln boe
  - No economic development
- Netherlands – Waddenzee - 25 mln boe
  - Government

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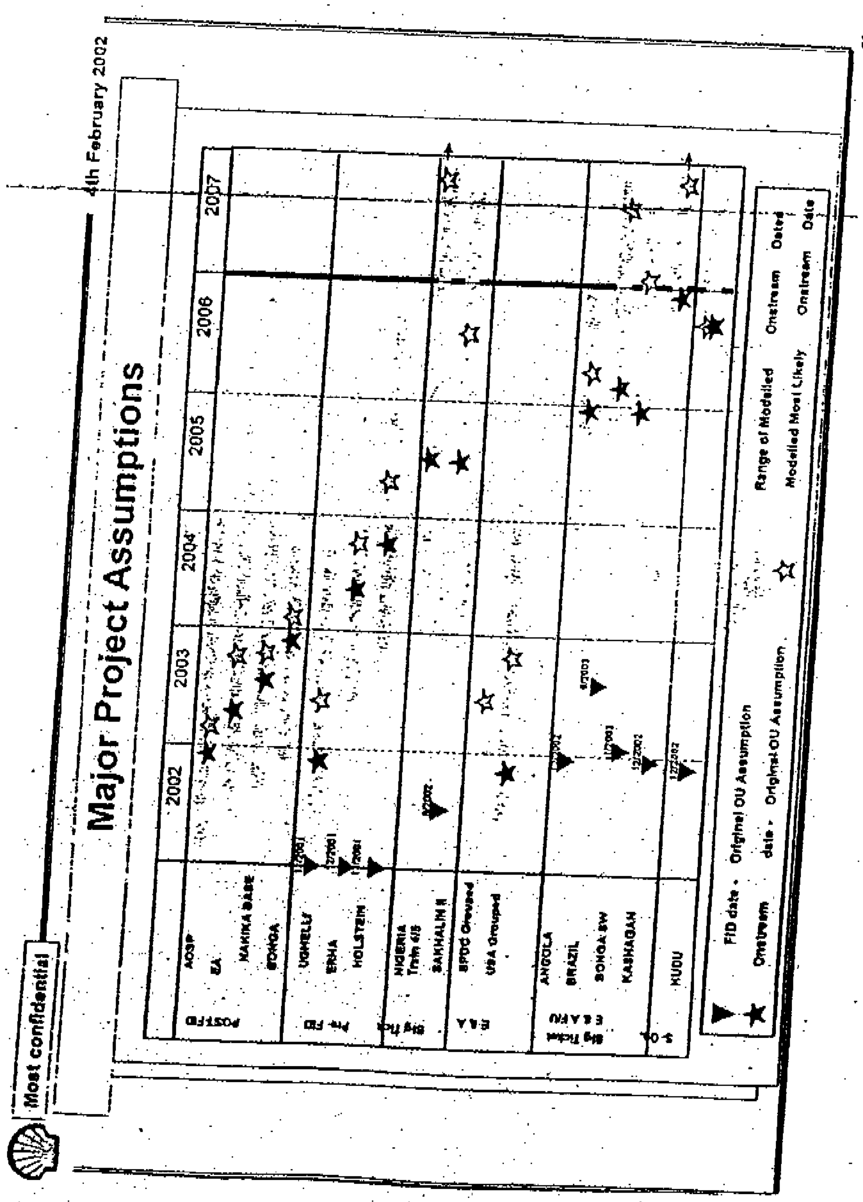
End Licence – Reserves at Risk

- **SPDC, PDO and SAD represent 18% of EP production, here proved reserves can no longer be booked due to license constraints**
- **Oman PDO (2012)**
  - Proved forecast assumes flat 850 kbpd production
    - Exploration & Improved Recovery +48 mln bbls
    - Adjusted short-term forecast -53 mln bbls
  - RISK: production adjustment becomes long-term **-100 mln bbls**
- **Abu Dhabi (2014)**
  - Proved forecast includes 50% growth to 1,500 kbbpd plateau
    - NGL of GASCO included (+15 kbpd) + 37 mln bbls
    - 50% increase delayed from 2006 to 2010: - 30 mln bbls
  - RISK: production stays flat **- 200 mln bbls**
- **Nigeria SPDC (2019)**
  - Proved forecast includes 70% growth to 1,400 kbpd plateau
    - Gas getting hooked up +35 mln boe
    - Oil/NGL forecast under pressure -12 mln boe
  - RISK: production stays flat **- 1,000 mln bbls**


Major Project Assumptions
4th February 2002
Most confidential
2002
2003
2004
2005
2006
2007
POSTFID
ACGP
EA
NAKIKA BASE
BONGA
Pre-FID
UGHELLI
ERHA
HOLSTEIN
NIGERIA Train 4/5
SAKHALIN II
SPDC Grouped
USA Grouped
ANGOLA
BRAZIL
BONGA SW
KASHAGAN
KUDU
FID date - Original OU Assumption
Onstream date - Original OU Assumption
Range of Modelled Onstream Dates
Modelled Most Likely Onstream Date

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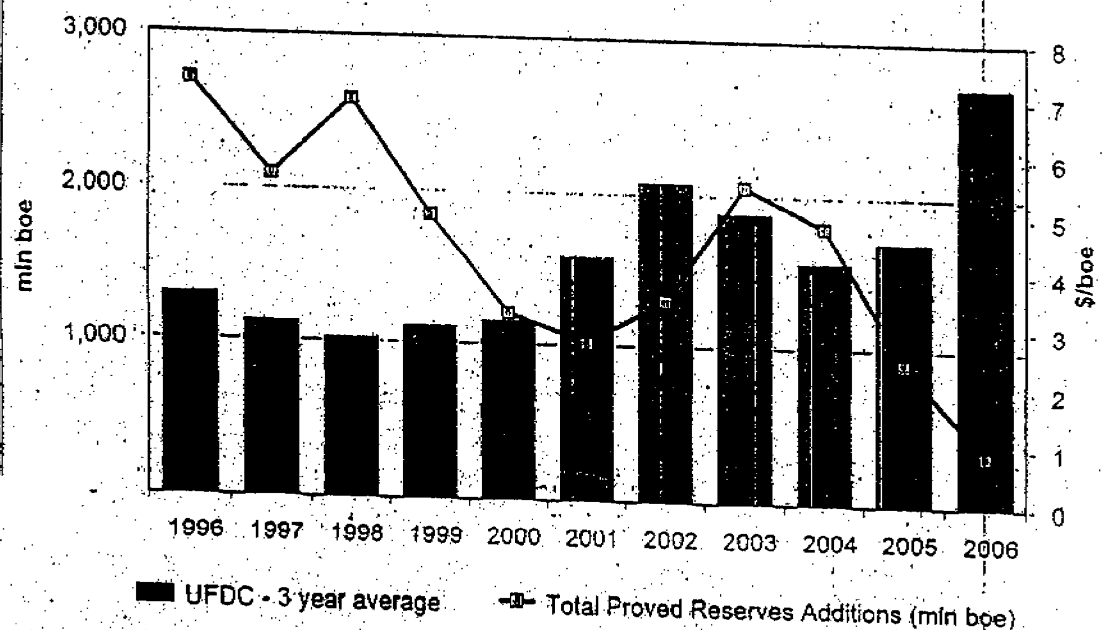
Unit Finding and Development Costs - Proved Reserves



V00010211

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Van der Laan, Marian M SI-MGDWV/DIRMB

From: Brass, Lorin LL SIEP-EPB
Sent: 18 July 2002 11:40
To: Van De Vijver, Walter SI-MGDWV
Cc: Van der Laan, Marian M SI-MGDWV/DIRMB
Subject: RE: CMD Reserves Outlook: Revisions

Will do. We'll put it in your inbox tomorrow.

-----Original Message-----
From: Van De Vijver, Walter SI-MGDWV
Sent: 18 July 2002 08:42
To: Brass, Lorin LL SIEP-EPB
Cc: Van der Laan, Marian M SI-MGDWV/DIRMB
Subject: RE: CMD Reserves Outlook: Revisions

Lorin,

I trust the note has now gone in as electronically signed off.
At CMD I want to see a presentation that simplifies some of the messages:

- 2002-2006+ FID's that already have proved reserves (summary) and impact on F&D unit costs and how we benefited in prior years
- what we are doing to raise reserves basis both expectation and proved:
  - E&A
  - Acq.
  - revisions
  - T& OE drive (waterfloods etc)
  - license issues
  - new projects
  - big ticket items NBD
  etc (oil sands ...)
- based on what we know today"range of RRR in 2002 and 2003

Please share draft with me.

Thanks,

-----Original Message-----
From: Brass, Lorin LL SIEP-EPB
Sent: 17 July 2002 21:23
To: Van De Vijver, Walter SI-MGDWV
Subject: FW: CMD Reserves Outlook: Revisions

Walter, FYI.

-----Original Message-----
From: Pay, John JR SIEP-EPB-P
Sent: 17 July 2002 19:54
To: Brass, Lorin LL SIEP-EPB
Cc: Harper, Malcolm M SIEP-EPB-P; Nauta, Jaap J SIEP-EPB-P
Subject: CMD Reserves Outlook: Revisions

Lorin

The following revisions were incorporated into the final draft:

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11
Brass

- 2002 LE data from EPMIS - no major surprises. The total (organic + A&D) is down 2% to 141%, with some redistribution between the two categories following clarification of the UK (Goldeneye) and New Zealand situations.

- 2003: I had deferred Bonga SW out of 2002, but forgotten to bring it in to 2003. This gives 72 mln boe increase for 2003, raising unconstrained RRR to 99%. Small resulting changes to UFDC. All relevant tables and plots have been updated accordingly.

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Treatment Requested

HAG00082964

- As requested, a page has been added listing the Forward Actions (section 5 of the note).

I trust you will forward the above to Walter if necessary,

John Pay
Group Hydrocarbon Resource Coordinator
Shell International Exploration and Production B.V.
Carel van Bylandtlaan 30, Postbus 663, 2501 CR The Hague, The Netherlands

Tel: +31 (70) 377 7405 **Other Tel:** +31 (0)6 5252 1964
Email: john.r.pay@ope.shell.com
Internet: http://www.shell.com/eandp-en

Copper, Femke F SI-MGDSEC

From: Van der Laan, Marian M SI-MGDWV/DIRMB
Sent: 18 July 2002 10:58
To: Copper, Femke F SI-MGDSEC
Subject: FW: CMD Reserves Outlook

-----Original Message-----
From: Pay, John JR SIEP-EPB-P
Sent: 17 July 2002 19:42
To: Gibbs, Debbie D SIG-GPT
Cc: Van der Laan, Marian M SI-MGDWV/DIRMB; Harper, Malcolm M SIEP-EPB-P; Nauta, Jaap J SIEP-EPB-P; Brass, Lorin LL SIEP-EPB; Powell, Ceri CM SIEP-EPB
Subject: CMD Reserves Outlook

Debbie

I understand that Malcolm has discussed with you an addition to the list of favours that we owe you by arranging for 12 colour copies of the attached note, plus their cover letters, to be delivered to DCS by Thursday noon.

I have checked on two separate printers here that the print is correctly formatted, with no hanging headers or single lines displaced on to the following page. Nevertheless, perhaps you could quickly check a test print before proceeding with the remaining copies and give me a call if anything looks odd. There should be 22 pages in total, excluding the cover note.

With many thanks in advance for this,

John Pay
Group Hydrocarbon Resource Coordinator
Shell International Exploration and Production B.V.
Carel van Bylandtlaan 30, Postbus 663, 2501 CR The Hague, The Netherlands

Tel: +31 (70) 377 7405 **Other Tel:** +31 (0)6 5252 1964
Email: john.r.pay@ope.shell.com
Internet: http://www.shell.com/eandp-en

CMD Reserves Outlook Final.doc...

CMD Reserves Outlook Cover Let...

NOTE TO CMD

Subject : RESERVES OUTLOOK

Date : 18th July 2002

FROM : MGDWV

TO : CMD

Please find attached a comprehensive note on the reserves position in EP.

Key objectives of this note are 1) to provide full transparency on the nature of our resource base, 2) to outline the challenges we face in maturing volumes to proved reserves, and 3) to indicate actions that will enhance performance.

Obviously reserves should be seen in the overall cycle of capital efficiency (F&D cost) and production growth and this will be further addressed in our upcoming business plan.

Supported by ______________________
W. van de Vijver

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Note for Discussion

RESERVES OUTLOOK

Executive Summary

Shell faces a challenge to achieve 100% organic Proved Reserves Replacement Ratio (RRR) over the coming years - particularly during 2002 and 2003 – and simultaneously to achieve its 3% p.a. production growth target whilst maintaining expenditure restraint.

One third of the total commercial hydrocarbon resource base of 76 billion boe is currently positioned beyond licence expiry. Other technical and commercial constraints further reduce the Scope For Recovery (SFR) portfolio that is available for maturation to Proved Reserves over the medium term, with the result that only 60 – 70% of production is likely to be replaced organically (i.e. excluding A&D) during the Plan Period. This equates to a shortfall of 2 - 3 billion boe Proved Reserves additions.

Until recently, the outlook for organic RRR in 2002 was bleak, at some 40%, but the Kashagan Declaration of Commerciality paves the way for around 380 million boe to be booked this year, raising the organic LE to 68%. This is some 440 million boe short of full organic Proved Reserves replacement, and there are only limited options available with which to materially reduce this shortfall. The Enterprise acquisition raises the total LE (including A&D) to 139%, potentially also providing organic upside (up to 4% RRR).

Accelerating the booking of Kashagan to 2002 weakens the outlook for 2003 to some 70% organic RRR - some 480 million boe short of full organic Proved Reserves replacement, with further downside in the event that Sakhalin does not go ahead. No mature projects are currently planned with Proved Reserves bookings in 2004 that could offer firm acceleration potential to cover the 2003 shortfall.

The OUs will continue to focus on the maturation of reserves, supported by input from RtL and T&OE initiatives. However, given the magnitude of the Plan Period shortfall, and the intangible nature of much of the Ultimate Recovery gains that we are aiming for, it is imperative that we press ahead with additional measures that will help to address the situation. One option for the short term could be the retention of Sakhalin as a consolidated entity, although this would serve only to temporarily mask our underlying problem. Clear focus must therefore remain on unlocking reserves beyond licence, particularly in SPDC, Abu Dhabi and possibly Oman, with every opportunity being taken to table this issue in negotiations with host governments.

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1. Hydrocarbon Resource Base

At 1.1.2002, the Group's commercial discovered resource base was 51 billion boe (risked expectation basis, including oil sands and shales: Attachment 1a). This is believed to compare with ca. 70 and 60 billion boe for ExxonMobil and BP respectively, leaving us the least favourably positioned of the three to replace production. Nevertheless, when the (risked) Undiscovered SFR portfolio is added in, the total rises to 76 billion boe, indicating a total resource life at current production rates in excess of 50 years. On the face of it, there appears to be little cause for concern in terms of reserves replenishment.

However, one third of the commercial resource base is locked beyond the lifetime of current licences (Attachment 1b) and is largely inaccessible for the Proved Reserves inventory until licence extension is secured. In principle, projects could be executed to accelerate at least a portion of these resources to the within-licence period, but scope is severely limited in the two OUs that together account for 75% of the volumes concerned, SPDC and Abu Dhabi. In both cases production must increase substantially simply to produce the within-licence Proved Reserves that have already been booked. New bookings in these OUs will not be feasible at least until such production growth has occurred.

Consequently, licence expiry reduces the effective commercial resource base in the meantime from 76 to 50 billion boe. This licence-constrained volume includes 1.9 billion boe recovery from oil sands and shales, most or all of which is classified as mining resources under SEC rules. It also includes the consolidated volumes for Sakhalin - deconsolidation to 40% Group share will cause a reduction of 2.3 billion boe in the resource inventory (Attachment 1c).

Of the balance remaining after taking these factors into account (45 billion boe), approximately 10 billion boe can be classed as "challenging", being subject to commercial or technical risk (e.g. Pacific region gas market, heavy oil), or relying on substantial increases in production rate in order to be realized (notably SPDC and Abu Dhabi, Attachment 1d). In addition, reserves in Oman would be under threat if production rates cannot be sustained. Attachments 1e and 1f provide further detail on Reserves Life per OU, while Attachment 1g summarizes the main issues by OU.

In summary, although there is clear potential for longer-term growth, the effective resource base on which we rely for organic Proved Reserves Replacement over the next few years is restricted. As will be shown below, these restrictions make their presence felt in our ability to replace reserves in the short- to medium-term. Consequently our continuing production growth target will come under threat over time.

2. Outlook for 2002 and 2003

2.1 2002 Latest Estimate

Compared with the 2001 Business Plan (56% organic RRR) downward revisions to the 2002 LE have outweighed the positives of Angola Block 18 and the deferment of Sakhalin dilution (Attachment 2a). However, declaration of commerciality on Kashagan and the expected first phase of development FID should allow 380 million boe to be booked in 2002. On this basis the organic LE is 68%, above plan, although it should be noted that Kashagan was carried as a separate "big ticket" item in the Business Plan.

UFDC[1] would be approximately US$ 9.4 per boe, including Kashagan. Even if reserves could be fully replaced, the figure would reduce only to US$ 6.4 per boe, significantly above the US$ 3 – 5 per boe "comfort zone". BP, if they deliver on external reserves replacement promises, are likely to be at the lower end of that UFDC range, while ExxonMobil's recent performance (to 2001) is towards its upper limit.

Enterprise clearly dominates the A&D picture, driving a net RRR from A&D of 71%. Of the 600 mln boe Strategic Options originally in the plan for 2002 (a 42% contribution to total RRR), only 180 mln boe remain in the LE, mainly a risked volume associated with the "Whale" coded project which realistically is now unlikely to be secured this year.

2.2 2002 Upside

The focus on project delivery continues, augmented by T&OE (although quick wins are elusive at this early stage).

Further upside may stem from organic revisions to the acquired Enterprise portfolio. Review of their practices shows that they were conservative in their approach to SEC reserves declarations compared with Shell. Application of the Shell guidelines should yield a few tens of millions of barrels, possibly with more to come from the natural flow of revisions within the portfolio. The OU integration teams will pay particular attention to this as the year progresses. In the meantime, and subject to confirmation by receipt of more detailed plan data, it is assumed that Enterprise will provide some 50 million boe Proved Reserves additions in 2002 and in each successive year of the Plan Period.

With these upsides, and neglecting Strategic Options, the total LE (including A&D) for the year would exceed 140% RRR, of which 72%+ would be organic.

[1] Unit Finding and Development Cost. Based on plan Capex and Expex, including estimates for Enterprise. UFDC figures are essentially similar whether expressed on GA or OA basis.

2.3 2003

The following is based on the Capital Allocation project definitions that are "current" and under discussion at the Capex and Expex Workshops, July 2002. As such, and since the Business Plan is some distance from being finalized, the view is subject to revision.

The unconstrained portfolio of "organic" projects available to be ranked for the 2003 plan would deliver 1530 mln boe Proved Reserves additions during the year (Attachment 2b), yielding 99% RRR and a UFDC of ca. US$ 7.7 per boe. The initial outlook is that this will reduce to somewhere in the range 45 – 70% RRR after the application of expenditure constraints, the bulk of the range being driven by the inclusion or otherwise of Sakhalin[2]. The upper end of the RRR range equates to a shortfall of some 480 million boe compared with full organic Proved Reserves replacement.

Again taking the upper end of the RRR range for illustration, this would correspond to a UFDC of approximately US$ 9.3 per boe, US$ 1.6 per boe higher than for the unconstrained portfolio. This figure is broadly in line with the expected result for 2002 and is still well above the level that our main competitors are likely to achieve. The increase in UFDC on applying expenditure constraints is explained by the fact that many of the projects that are likely to rank into the final programme have already had their corresponding reserves booked.

2.4 2003 Upside

Backfilling 2003 by accelerating bookings from later years might be feasible. However, currently there are no firm big-tickets of a size to compare with Sakhalin and Kashagan. Many of the projects that appear to make attractive targets for acceleration (due to their large associated resource volumes) are currently phased later because of overriding critical path constraints, not the least of which being completion of E&A activities in several cases (Attachment 2c).

There is scope to manage the overall situation for 2003 without accelerating from 2004 (Attachment 2d), with the two major potential contributors being project "Whale" and the retention of Sakhalin on a consolidated basis. Securing the former is not under our direct control, and the project probably would not qualify as "organic" growth. The latter (Sakhalin), whilst essentially being a "paper" gain, would in effect solve our reserves replacement issues at least until the end of 2004. Unpalatable though this might be in terms of financial performance and market exposure, acceleration of other projects could also be achieved only at a cost and with less assurance of delivery in view of POS (to FID) at this stage.

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[2] Net of the effect of eventual deconsolidation to 40% Group share.

2.5 T&OE: Status of Global Hydrocarbon Resource Base Review

The Global Hydrocarbon Resource Base Review has been in progress for several weeks now. Its objective is to gain improved insight into the technical state of the Group's hydrocarbon resource base and the scope to improve recovery efficiency. The results and findings will drive future Technical and Operational Excellence initiatives.

Data is being gathered on all the major fields in the Group. At this stage the focus is on inventorising and categorising the major elements of the resource base with a view to identifying opportunities for improved recovery through comparative benchmarking and comparison with best practice. For example, it is expected to confirm that waterfloods in medium- to complex environments present both significant exposure and opportunity, albeit in the longer rather than the immediate short-term.

To date, twenty-two OUs have been engaged in the information and data gathering. On-site reviews have been completed on six of the twelve largest OUs – the remaining six will be completed by the end of July. Many issues related to the maturation of volumes into reserves and production have been identified from which a collective picture will emerge.

As part of the process, OUs are being challenged on their progress against plan for 2002 and 2003 reserves additions, and being offered support where required. However, at this stage it seems unlikely that this review will identify material opportunities to enhance the 2002 reserves replacement situation, although any opportunities uncovered on an exception basis will be pursued.

Data analysis and reporting will be completed in August/September. This is expected to identify Global Themes for the development and integration of best practice into OUs and help to ensure that the skills and technologies available within the Group are aligned with the OUs, projects and recovery processes from which we have the most to gain.

3. Outlook For Remainder of Plan Period

3.1 Historical Context

Over the last decade, Proved RRR has averaged 102%, 94% being "Core Organic" (i.e. derived from pre-existing business – Attachment 3a). Major revisions had been made in 1990 (Proved RRR of *330%*), on the back of which very few revisions were made in the subsequent five years – the majority of additions during this period came from E&A. 1996 – 1998 were the only recent years in which organic RRR exceeded 100%, the additions preparing Shell for its concerted effort to grow production in 2000 and beyond.

With the benefit of hindsight, some of the organic revisions made in recent years now appear somewhat aggressive: principally Australia (Gorgon, struggling to reach maturity) and SPDC (bookings continued on the back of expected production growth that has still to materialize, contributing to a bow-wave problem in the remainder of the licence). Factoring these out (Attachment 3b), the effective total Proved RRR over the last 10 years would be reduced from 102% to 88%. The underlying organic Proved RRR contribution from pre-existing businesses was 81%, of which 45% came from revisions and improved recovery and the remaining 36% from discoveries and extensions.

These observations help to set the scene for assessing performance going forward.

3.2 Plan Period

The following is based on the preliminary Capital Allocation ranking process and considerable further work remains to be done, particularly on building the programme for 2004 and beyond. Whilst changes in the detail can be expected as this takes place, they are unlikely to materially affect the broader conclusions.

The portfolio of projects submitted for Capital Allocation would deliver Proved RRR in the range 59 - 83% averaged over the Plan Period (2003 – 2007), the exact position in the range being determined primarily by expenditure constraints that have yet to be applied to 2004 and beyond. The upper end of this range would equate almost identically to actual "Core Organic" performance over the last 10 years (Attachments 3c and 3d).

Assuming a final outcome for the Plan in the range 60 - 70% RRR on average, this would clearly be well short of full organic reserves replacement, the deficit equating to 2 - 3 billion boe in Proved Reserves Additions. On this basis, and with corresponding expenditure likely to continue at or close to current ceilings, UFDC is unlikely to be brought significantly below US$ 7 per boe.

Consequently, for the short to medium term at least, we continue to rely on the delivery of new business to the portfolio to underpin long-term growth, whether this be from delivery of Strategic Options, A&D, or the release of licence-locked reserves.

3.3 Upside Potential

The additional 2 - 3 billion boe that is likely to be required to bridge the gap to 100% organic reserves replacement over the Plan Period represents a challenging target. Notwithstanding the continued efforts of the OUs to improve on production and recovery efficiency, augmented by RtL and T&OE, it is clear that we will rely on major initiatives to ensure that this target can be met. Of most significance are:

Licence Extensions

Estimates of the volumes that could materialize during the Plan Period are speculative. However, given that the total prize is a 26 billion boe resource volume, even a relatively modest "win" could make a major contribution to Plan Period organic RRR. Unlocking 10% of the licence-locked Expectation Reserves would yield a corresponding Proved Reserves addition in the order of 500 million boe, with the advantage that such a gain would hopefully be achieved at relatively low cost. Consequently the ongoing efforts to tap into this resource must continue, with every opportunity being taken to table the matter and apply leverage to our advantage in negotiations with host governments.

SPDC: End of Reserves Moratorium

So far, it has been assumed that the moratorium on new Proved Reserves bookings in SPDC Nigeria will remain in place throughout the Plan Period. However, if production growth is achieved as currently planned, scope may emerge to relax this. Without wishing to understate the challenges that we face in this regard, the total unconstrained SPDC portfolio of projects submitted for Capital Allocation has the potential to yield a further 970 million boe Proved Reserves over the Plan Period, generating a 13% p.a. average additional contribution to RRR and shaving US$ 1.0 per boe from average Group UFDC. To reiterate, however, we can only begin to tap into this additional volume after having first secured the production growth that is required to realize the reserves that have been booked already.

Sakhalin: Retain Consolidated

Discussed above (section 2.4). Of the total 2.3 billion boe resource base that would continue to be reflected in our consolidated accounts, some 900 million boe would come into the Proved Reserves inventory during the Plan Period, providing an average 12% p.a. contribution to RRR and a $US 0.4 per boe reduction in average UFDC.

4. External Storyline

4.1 2001 Investor Relations

Presentations to investors in 2001 highlighted the revised 3% a.a.i. hydrocarbon production growth rate 2000 – 2005, implying (if not specifically stating) that this would be achieved organically. We did not explicitly commit ourselves on RRR, but it has been noted externally that a figure of 140% p.a. would be required if we were to achieve this sustained rate of production growth and leave reserves life intact. Thanks mainly to bookings in 1996 – 1998, our oil reserves life of 12 years is now exactly in line with our peers, while our position in long-term gas extends reserves life on a boe basis to 14 years.

Inevitably the external community has detected from our relatively poor Proved RRR, and the resulting weakened UFDC performance, a risk that Shell will struggle to deliver its production growth target.

In discussing resource volumes, Shell has stressed that the total contribution of additions (particularly discoveries) to the "expectation" hydrocarbon resource base is a more reliable barometer for growth potential, thereby already distancing itself from the Proved RRR measure.

4.2 2002 Latest Estimate and Forward Plan

Notwithstanding the efforts that will continue to be made to improve on the outlook for 2002, we must prepare to deal with the fact that organic Proved RRR might not exceed 68% (with Kashagan), although 75% could be within reach after pursuit of possible gains from the Enterprise portfolio and other upsides in the overall portfolio.

A&D, of which by far the biggest contributor clearly is Enterprise, provides an additional 73% RRR and brings the total above 140%, even if no Strategic Options are secured. This figure is consistent with our stated production growth ambition, if stated on a total basis.

Looking forward through the Plan Period, it is unlikely that the average organic Proved RRR will rise much above 70%, implying (with current expenditure ceilings) an average UFDC in the order of US$ 7 per boe.

4.3 2002 Investor Relations Script

In relation to RRR (and indirectly to production growth and UFDC performance), the following messages are proposed:

- Continue to stress the strength of the total resource base.

- Continue to highlight the major projects fuelling growth in the short and long-term.

- If required, acknowledge that organic RRR is less than 100% but distance ourselves from it as a reliable "instantaneous" measure of growth potential.

- Again if required, note that Shell has experienced prolonged periods throughout its recent history during which organic Proved RRR was less than 100% and yet has continued to deliver world-class technical and financial performance.

- Link the high Proved RRR of the late 1990s to our stated 3% a.a.i. production growth target for 2000 – 2005, the one presaging the other. We continue with the process of actively managing our portfolio and taking stock of opportunities for further growth beyond that. However we will not pursue growth to the detriment of business value and shareholder return. Profitability is the key focus: the quality of the (booked) barrel is what counts.

- Build on the RtL messages already delivered externally by elaborating on the focus that T&OE will bring to improving production, reserves, cost and skills deployment. This will inevitably enhance the performance of our existing asset base and, we expect, position us even more favourably as partner and operator of choice in new ventures.

5. Forward Actions

The following are receiving attention for addressing the short to medium term situation on reserves replacement:

- T&OE: The much-increased focus on production and recovery efficiency improvements must inevitably yield results. Additional resources have been deployed on the Global Hydrocarbon Resource Base Review, and in addition opportunities for "quick wins" are actively being sought.

- Licence extensions: Particularly SPDC, Abu Dhabi and Oman, but also smaller opportunities in Syria, Denmark (although Shell is not concessionaire) and Venezuela. Every opportunity to leverage access to post-licence volumes will be explored.

- Russia: Opportunities to bolster our portfolio in Russia are being pursued (e.g. Salym, Zapo).

- Oil sands: Scope to increase the proved volumes associated with the Athabasca project, and potential future expansions, is being investigated.

- E&A follow-up: Ways to increase the pace at which E&A discoveries are matured and commercialized to proved volumes will be pursued with high priority.

- OU Initiatives: Identification and pursuit of opportunities within the established core business portfolio continue with high priority, assisted by RtL and T&OE as required. "Major" gains (100 million boe and higher) are likely to be few and far between, however examples such as Groningen upside (2003?) hold real promise.

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Attachment 1a

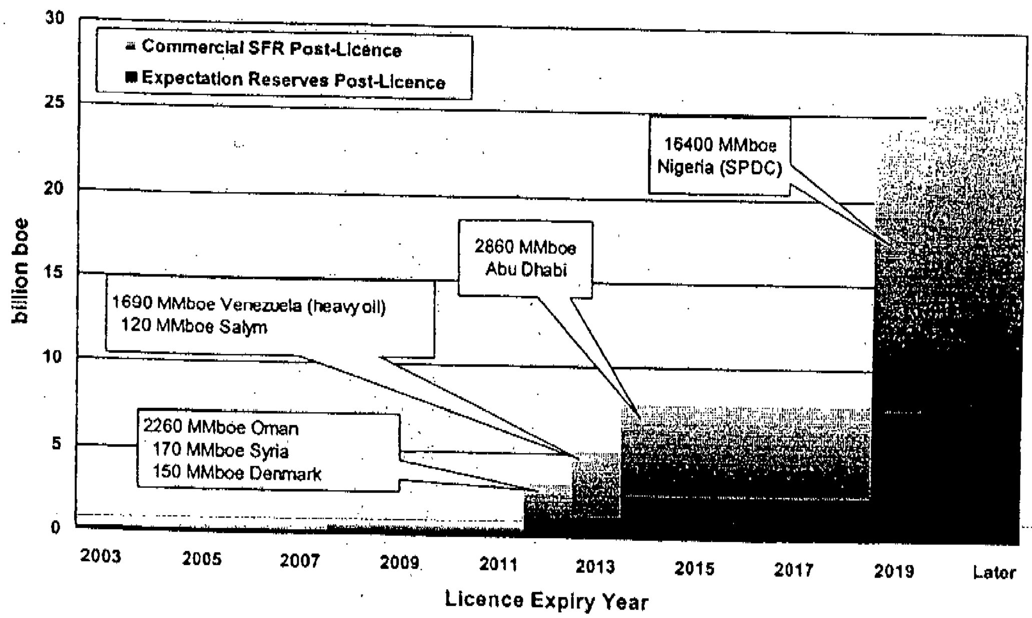
Inventory of Group Resources at 1.1.2002 (billion boe)

Category	Oil / NGL	Gas	Total
Proved Developed Reserves	4.3	4.4	8.8
Proved Undeveloped Reserves	5.7	5.2	10.9
Probable Reserves	6.8	6.2	13.0
SFR Proved Techniques	8.0	6.0	14.0
SFR Unproved Techniques	3.5	0.4	3.9
Total Commercial Resources, Discovered	**28.4**	**22.3**	**50.6**
SFR Undiscovered	14.1	11.3	25.5
Total Commercial Resources	**42.5**	**33.6**	**76.1**
SFR Non-Commercial	7.0	2.4	9.4
Total Resources	**49.5**	**36.0**	**85.5**

Includes Oil Sands and Oil Shales. Rounding effects may be apparent

Attachment 1b

Resources Locked beyond Licence Expiry



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Attachment 1c

Firm Constraints on Within-Licence Resources (at 1.1.2002)

Million boe		Proved Res.	Prob. Res.	Disc. SFR	Undisc. SFR	Total
Oil Sands and Shales: no (eventual) contribution to SEC Proved Reserves						
Canada	Muskeg River Mine	600	299	83		982
Shell Oil	Oil shales			745		745
Corresponding Gas Volumes				*175*		*175*
Total		**600**	**300**	**1000**		**1900**
Sakhalin: Reduction applicable on deconsolidation to 40%						
Oil		117	55	310	20	497
NGL				162	21	183
Gas				1456	172	1630
Total		**120**	**60**	**1930**	**210**	**2310**

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Attachment 1d

Possible Constraints on Within-Licence Resources (at 1.1.2002)

Million boe		Proved Res.	Prob. Res.	Disc. SFR	Undisc. SFR	Total
Gas: (Potentially) Stranded SFR						
Australia	Greater Sunrise			555		555
	Scot Reef / Brecknock			736		736
	Other			384	403	787
Canada	MacKenzie Delta (infrastructure)			152	46	198
Namibia	Kudu (likely to be deleted at 1.1.2003)			431	577	1010
Corresponding NGL Volumes				*234*	*44*	*278*
Total				**2490**	**1070**	**3560**
Heavy Oil: SFR difficult to commercialize						
Brazil	All fields and prospects			200	573	773
Canada	Peace River			999		999
	MacKenzie Delta			31	94	125
UK	Atlantic Margin				93	93
Venezuela	Urdaneta West			123		123
Corresponding Gas Volumes				*10*	*118*	*128*
Total				**1360**	**880**	**2240**
Oil Reserves that rely upon significant increase in production rate						
Nigeria (SPDC)		955	838			1793
Abu Dhabi		136				136
Australia (WPL)		11	20			30
Total		**1100**	**860**			**1960**
Gas Reserves that rely upon significant increase in production rate						
Nigeria (SPDC)		302	376			678
Norway		208	86			294
Malaysia		337	114			451
Brunei		65	272			337
Denmark			9			9
Total		**910**	**860**			**1770**
Gas: Reserves (Possibly) Prematurely Booked						
Australia	Gorgon	525	222			747
Norway	Ormen Lange	102	73			175
Corresponding NGL Volumes		*39*	*10*			*49*
Total		**670**	**310**			**970**

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