

24/02 '04 21:08 FAX 11055

DAVIS POLK & WARDWELL

2017

EXCOM 1999 Proved Reserves
31st January 2000

Most confidential

Proved Oil/NGL Reserves Issues

- **Nigeria SPNEPO - Deepwater**
 - Book 1999 Ehra discovery (Exxon block) + 24.0
 - **Nigeria SPDC - Shallow Offshore**
 - Book EA/EJA Alternative Funding/FID + 30.0
 - **Nigeria SPDC - Onshore**
 - Do not book proposed increase MOU - 50.0
 - Limit plateau proved forecast upto 1,400 b/d
 - Licence expiry 30 June 2019
 - **Abu Dhabi**
 - Reduce proved reserves - 6.5
 - Delay growth scenario by 2 years
 - Licence expiry Jan 2014
- Total - 2.5 mln m3**

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2018

EXCOM 1999 Proved Reserves
31st January 2000

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Proved Gas Reserves Issues

• Canada		
- Include Gas Royalties in Cash in line with Group Guidelines	+ 13.8	
• Australia		
- Do not book increase Gorgon (20%) Increase market take-up	+ 0.0	
• USA		
- Exclude own use gas volumes in line with Group Guidelines		
Shell Oil	- 1.8	
Area	- 4.1	
Altura	- 0.6	
	- 6.5	
Total	+ 7.3 mrd sm3	

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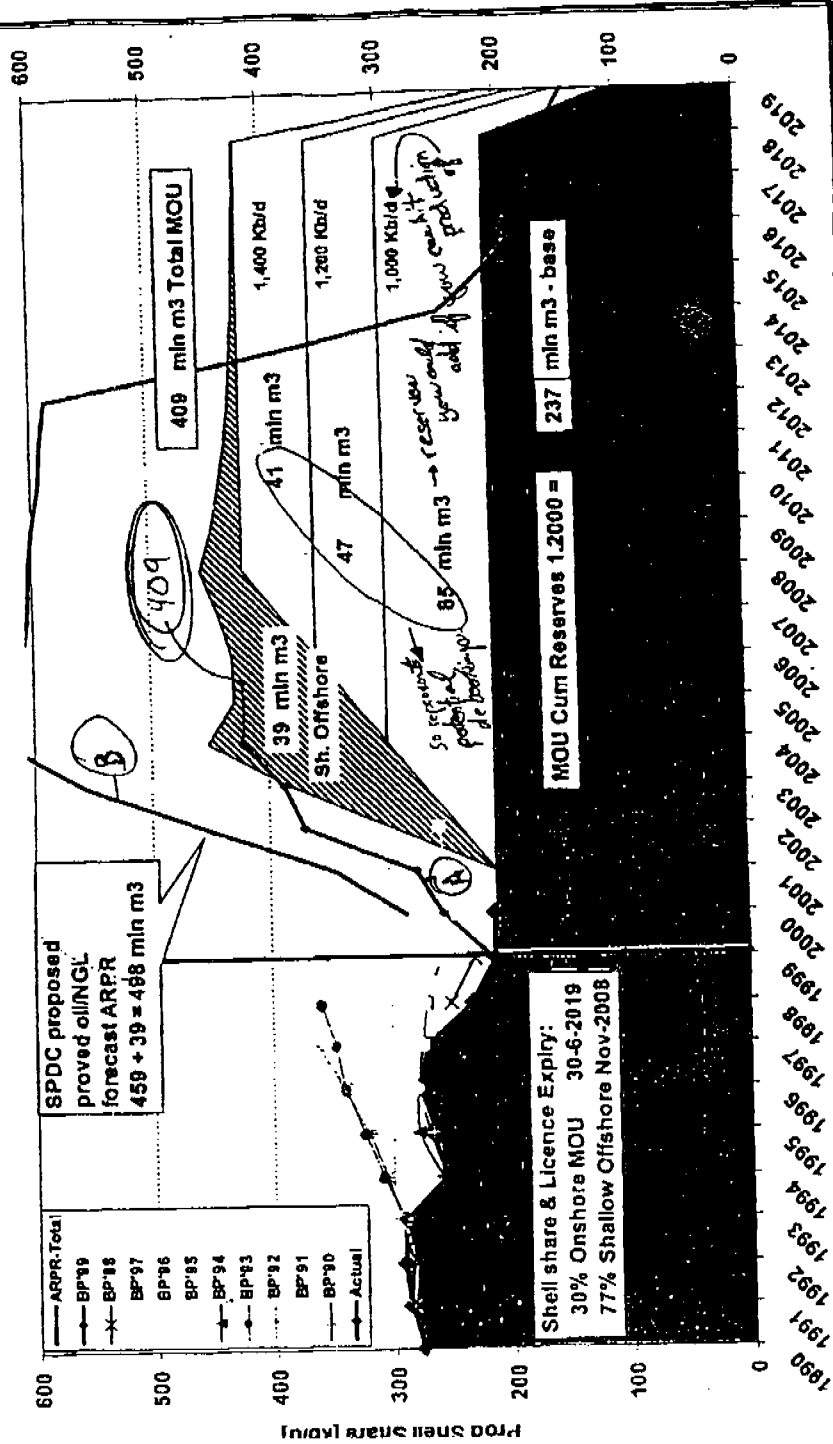
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018

EXCOM 1998 Proved Reserves
31st January 2000

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Nigeria SPDC - Proved Forecast



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020

EXCOM 1999 Proved Reserves
31st January 2000

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BP'99 - SPDC Reserves Management

- **SEC Reserves Audit - August 1999**
 - Audit highlighted the issue of proved reserves forecast
 - Proved oil forecast assumes doubling of SPDC production levels
 - If growth does not materialise significant risk of de-booking proved reserves
 - Formal licence extension beyond 2019 would mitigate issue.
- **SPDC BP'99 resource plan repeatedly challenged**
 - Not taken up by SPDC at the time
 - Issue only fully recognized at end 1999

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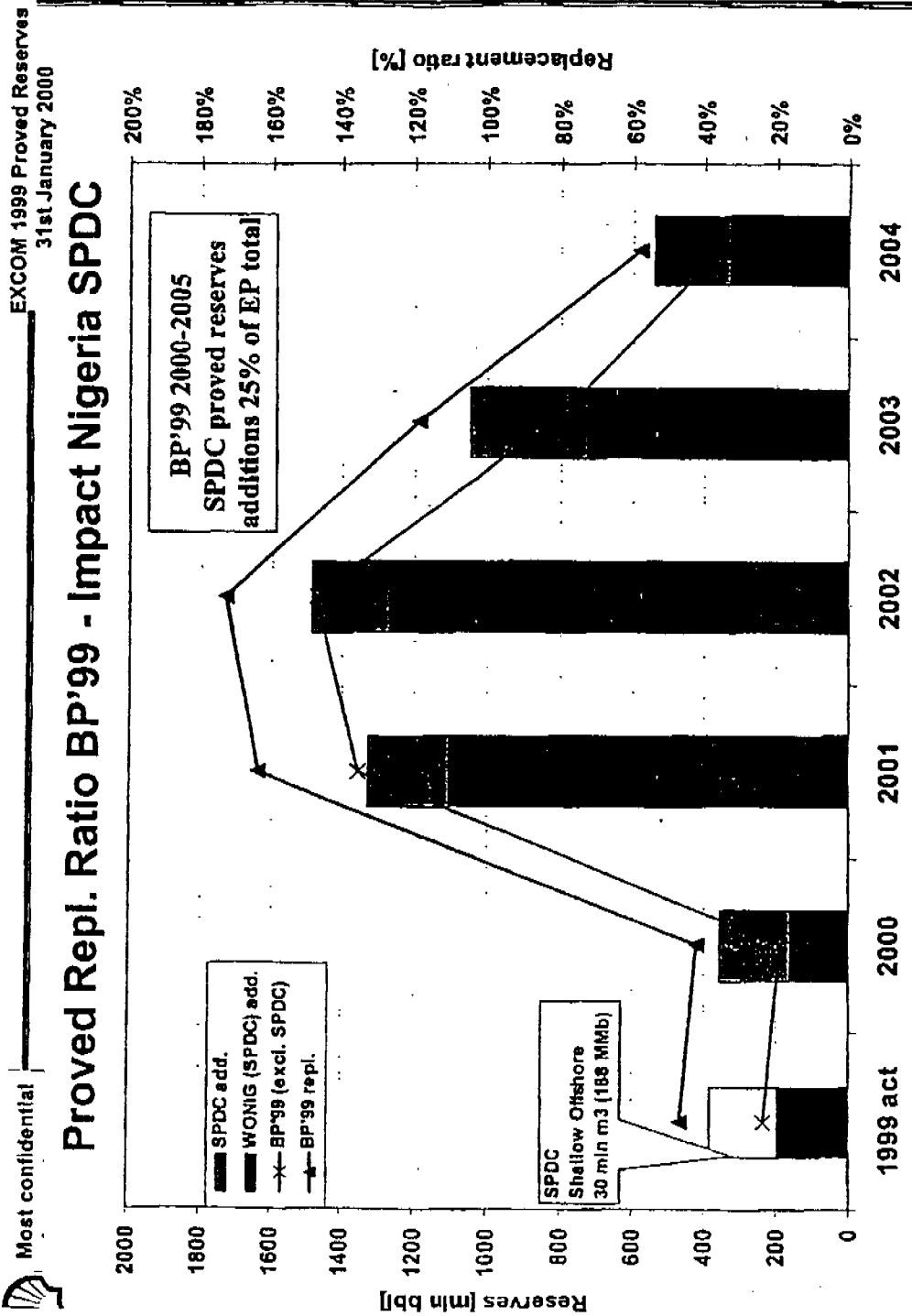
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021



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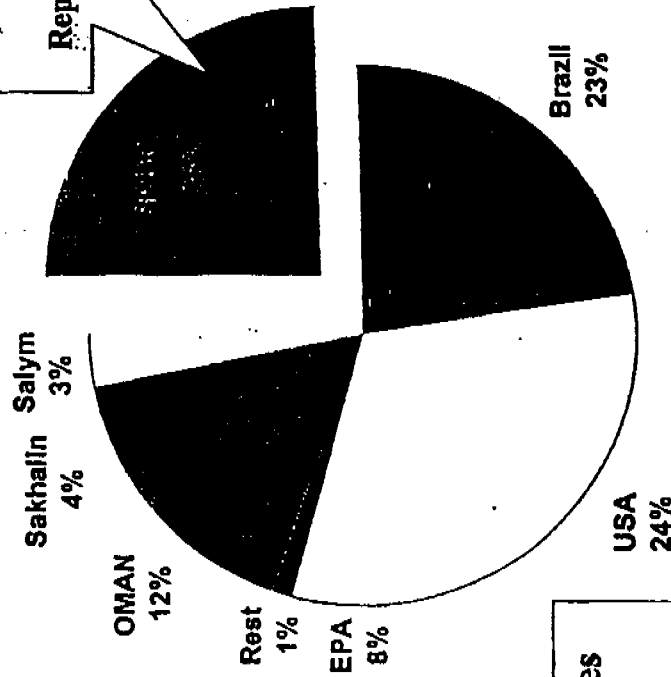
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022

EXCOM 1999 Proved Reserves
31st January 2000

BP'99 Proved Reserves Additions 2000-2004

Excl SPDC 2000-2004
Oil/NGL
Replacement Ratio 85%



Total Proved Reserves
Addition 756 mln m3
(4755 mln bbl)
112% replacement ratio

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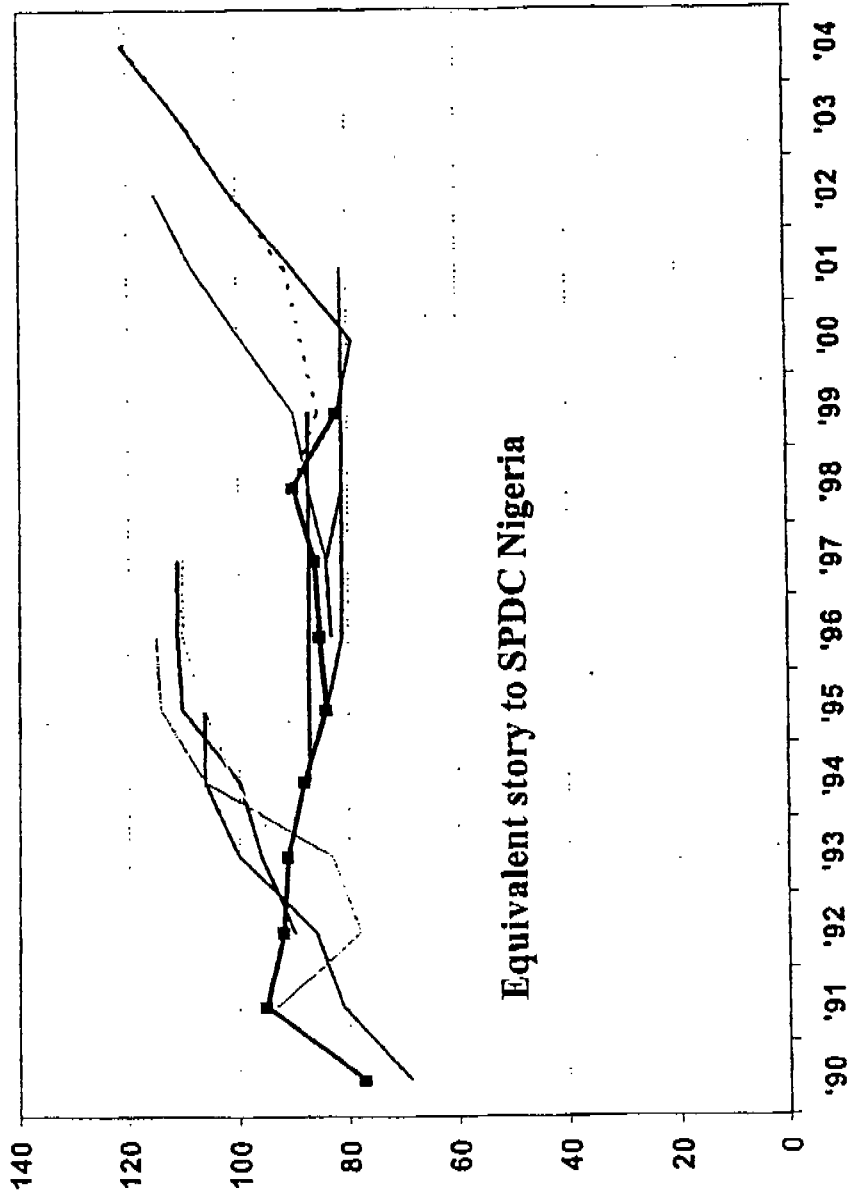
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EXCOM 1999 Proved Reserves
31st January 2000

Abu Dhabi Oil Production

Most confidential



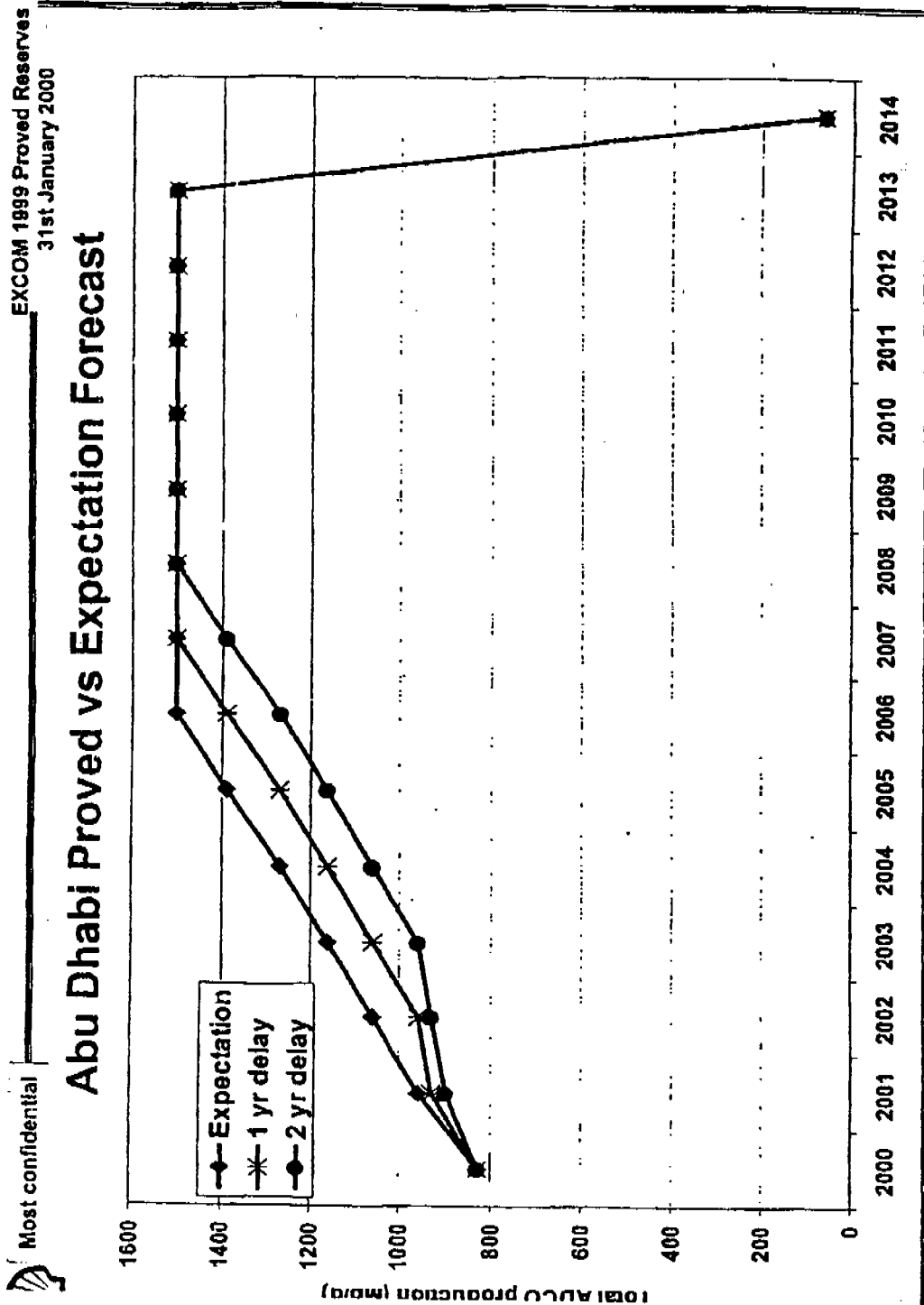
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025

EXCOM 1999 Proved Reserves
31st January 2000

ARPR versus Nov'99 Monthly LE

Country	Note	GAS (mrd sm3)				ARPR actual	ARPR Target	BP'99 LE	BP'99 LE	BP'99 Target	ARPR actual	ARPR Target	BP'99 LE	BP'99 LE	BP'99 Target
		ARPR actual	NOV'99 LE	BP'99 LE	BP'99 Target										
Netherlands		1.7	0.3	2.4	2.4	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
UK		3.0	9.3	3.1	2.6	-3.1	2.4	5.6	4.4	4.4	-3.1	2.4	5.6	4.4	4.4
Norway		26.3	26.8	26.8	3.1	-0.7	1.1	1.4	0.2	0.2	-0.7	1.1	1.4	0.2	0.2
Denmark		0.8	0.8	-2.7	0.0	10.4	3.6	4.0	2.7	2.7	10.4	3.6	4.0	2.7	2.7
Germany		2.1	0.6	1.3	3.0	-0.3	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	0.0
Rest of EPE		0.4	0.4	0.1	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
USA		-6.5	-3.9	-4.0	7.2	-20.3	-26.5	-34.4	1.1	1.1	-20.3	-26.5	-34.4	1.1	1.1
Canada		15.7	-3.1	0.0	0.0	-4.9	-11.2	-10.6	0.0	0.0	-4.9	-11.2	-10.6	0.0	0.0
Total EPN		42.6	31.1	26.8	12.3	-27.3	-32.4	-34.1	8.4	8.4	-27.3	-32.4	-34.1	8.4	8.4
Oman (PDO/GISCO)		-12.4	2.9	6.0	0.0	23.6	21.9	21.1	15.8	15.8	23.6	21.9	21.1	15.8	15.8
Egypt		2.0	-1.8	-1.7	0.0	0.3	1.8	3.3	1.4	1.4	0.3	1.8	3.3	1.4	1.4
Syria		-2.2	0.0	0.0	0.0	1.1	1.5	0.0	1.1	1.1	1.1	1.5	0.0	1.1	1.1
Russia		0.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0
Pakistan		1.3	1.3	2.7	1.3	-5.2	-0.8	2.4	0.0	0.0	-5.2	-0.8	2.4	0.0	0.0
Rest of EPM		-1.7	0.0	3.0	0.0	18.9	-24.3	26.8	18.1	18.1	18.9	-24.3	26.8	18.1	18.1
Total EPM		-12.1	2.4	10.0	2.3	18.9	-24.3	26.8	18.1	18.1	18.9	-24.3	26.8	18.1	18.1
Australia		-9.0	6.7	11.4	0.0	3.6	0.9	3.4	0.0	0.0	3.6	0.9	3.4	0.0	0.0
Brunei		3.7	0.0	0.7	0.0	9.1	6.1	7.8	5.2	5.2	9.1	6.1	7.8	5.2	5.2
New Zealand		1.9	1.7	-0.6	1.7	1.6	0.0	-0.1	0.0	0.0	1.6	0.0	-0.1	0.0	0.0
Philippines		-19.8	-19.8	-21.8	-19.8	-3.6	-3.6	-4.1	-3.7	-3.7	-3.6	-3.6	-4.1	-3.7	-3.7
Malaysia		7.3	7.5	3.8	6.7	2.2	1.7	1.5	1.2	1.2	2.2	1.7	1.5	1.2	1.2
Thailand		-0.1	0.6	0.1	0.1	2.5	1.4	2.1	0.4	0.4	2.5	1.4	2.1	0.4	0.4
China		0.0	0.0	0.0	0.0	1.1	0.2	0.6	0.0	0.0	1.1	0.2	0.6	0.0	0.0
Rest of EPA		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total EPA		-15.8	-3.4	-6.4	-11.1	16.6	6.7	11.2	4.1	4.1	16.6	6.7	11.2	4.1	4.1
Nigeria (SPDC)		4.7	0.3	0.3	0.0	30.5	56.8	43.0	16.9	16.9	30.5	56.8	43.0	16.9	16.9
Nigeria (SNEPCO)		-1.6	0.0	0.0	0.0	21.0	17.5	11.0	0.0	0.0	21.0	17.5	11.0	0.0	0.0
Gabon						4.9	0.0	0.6	4.0	4.0	4.9	0.0	0.6	4.0	4.0
Venezuela						-1.5	-2.2	-1.8	1.4	1.4	-1.5	-2.2	-1.8	1.4	1.4
Argentina		1.1	1.1	3.8	0.0	-0.2	1.2	-2.6	0.0	0.0	-0.2	1.2	-2.6	0.0	0.0
DR Congo (Zaire)						-1.0	0.0	-4.1	-4.1	-4.1	-1.0	0.0	-4.1	-4.1	-4.1
Rest of EPG		0.0	0.0	0.0	0.0	-0.4	0.0	-0.4	0.0	0.0	-0.4	0.0	-0.4	0.0	0.0
Total EPG		4.2	1.4	4.1	0.0	53.4	73.3	46.6	21.2	21.2	53.4	73.3	46.6	21.2	21.2
TOTAL		19.9	31.6	34.6	3.6	61.3	71.9	60.6	61.6	61.6	61.3	71.9	60.6	61.6	61.6

NOV LE'99 not accurately reflecting final reserves position ARPR'2000

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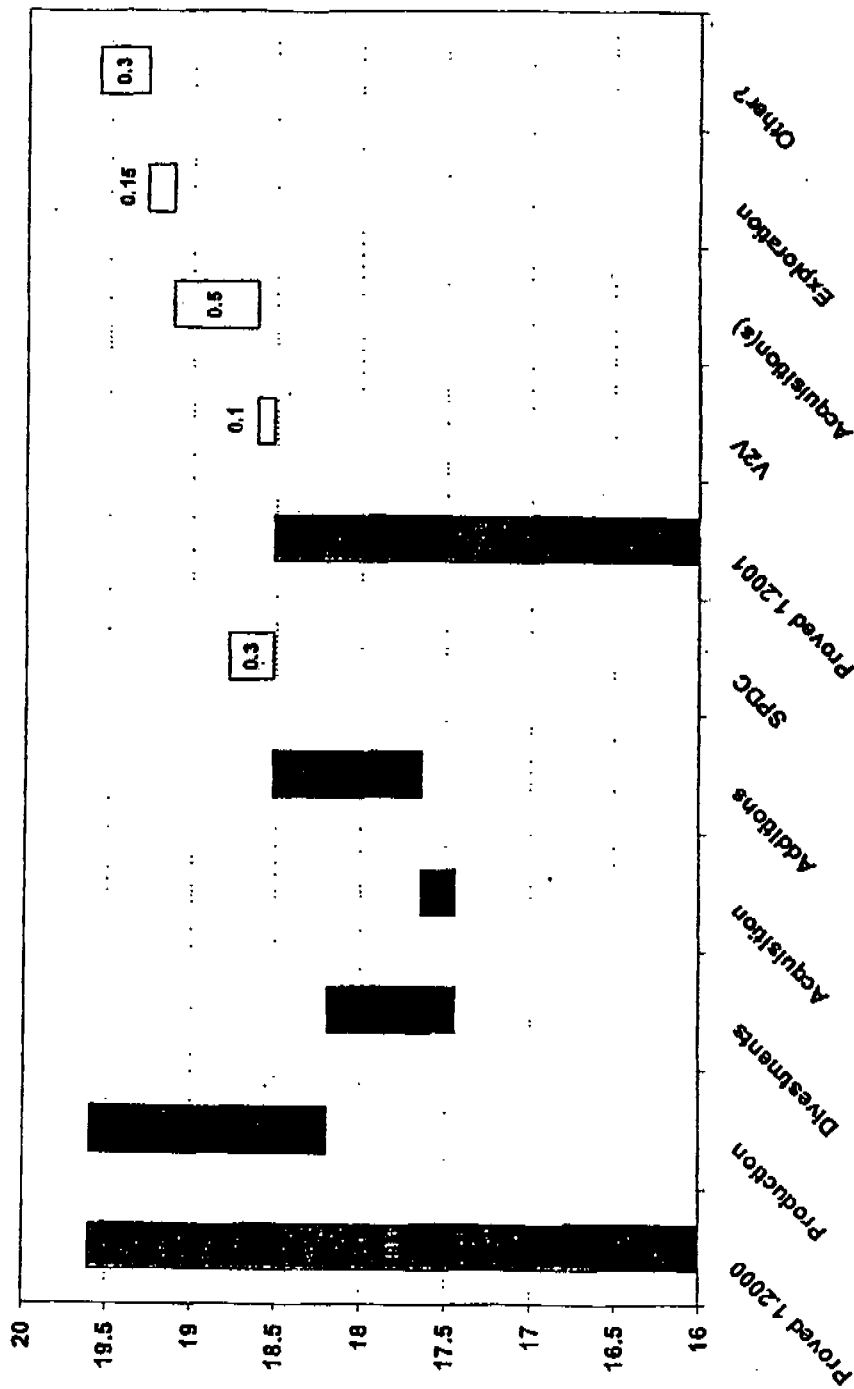
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EXCOM 1999 Proved Reserves
31st January 2000

Proved Reserves Replacement 2000

Most confidential



SCA00002796

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81

From: Aalbers, Remco RD SEPIV-EPB-P
Sent: Wednesday, February 2, 2000 4:11 AM
To: Graham, Sheila S SDA-FP/44
Subject: RE: Australia - Gorgon proved Reserves

Sheila,

Many thanks for the quick response.

If you manage to find out later (during the year) what Exxon/Mobil and Texaco carry would be interested in that info!

Remco

-----Original Message-----

From: Graham, Sheila SDA-FP/44
Sent: Wednesday, 02 February, 2000 9:27 AM
To: Aalbers, Remco SEPIV-EPB-P
Subject: RE: Australia - Gorgon proved Reserves
Sensitivity: Confidential

Remco,

Please treat this information as confidential and unofficial:

Chevron do not carry any proved reserves for Gorgon, only possible reserves. We are therefore more optimistic than Chevron.

Mobil/Exxon: Due to the reorganisation we were unable to find out how they are treating the reserves.

At this stage we have no strong relationships with Texaco which would allow us to ask such a question.

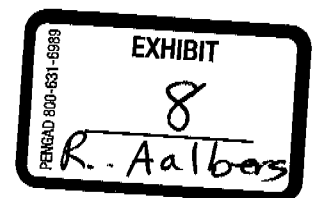
Regards, Sheila

-----Original Message-----

From: Aalbers, Remco RD SEPIV-EPB-P
Sent: Tuesday, February 01, 2000 7:08 PM
To: Graham, Sheila S SDA-FP/44
Subject: RE: Australia - Gorgon proved Reserves
Sensitivity: Confidential

Sheila,

Great!



PER00020037

Remco

-----Original Message-----

From: Graham, Sheila SDA-FP/44
Sent: Tuesday, 01 February, 2000 11:48 AM
To: Aalbers, Remco SEPIV-EPB-P
Cc: Jager, Robert SEPI-EPA; McKay, Aidan SEPIV-EPB-P; Blaauw, Robert SDA-EP; Chittleborough, Mark SDA-DCC
Subject: RE: Australia - Gorgon proved Reserves
Sensitivity: Confidential

Remco,

WAPET are carrying the reserves as proved however they are only operator-we have no idea about the other partners. The SDA asset manager Mark Chittleborough will try to find out before your opening of business tomorrow- its now 6.45pm Perth time and hence impossible to contact partners and let you know today. Hope this is OK.

Regards, Sheila

-----Original Message-----

From: Aalbers, Remco RD SEPIV-EPB-P
Sent: Tuesday, February 01, 2000 5:25 PM
To: Graham, Sheila S SDA-FP/44
Cc: Jager, Robert RJ SEPI-EPA; McKay, Aidan A SEPIV-EPB-P; Blaauw, Robert R SDA-EP
Subject: Australia - Gorgon proved Reserves
Importance: High
Sensitivity: Confidential

Sheila,

Following the Excom on Monday (31/1) I would like URGENTLY to find out if SDA know what the other GORGON partners in WAPET (Chevron?) are going to do for proved reserves booking 1.1.2000.

Do you know - or can you find out? Do they carry Gorgon in proved reserves or not.

ExCom seem concerned that the Group is more conservative than Competition.

Would it be possible to let me know today?

Regards,

Remco

Unknown

From: Darley, John J SIEP-EPT
Sent: 28 January 2004 09:45
To: Coopman, Frank F SIEP-EPF
Subject: FW: Gorgon Reserves

Frank,

As discussed.

-----Original Message-----

From: Regtien, Jeroen SIEP-EPT-LS
Sent: 09 January 2004 16:52
To: Darley, John J SIEP-EPT
Subject: Gorgon Reserves

John,

With all the disappointing news today and finally understanding the full scope of your recent work I went back to my files to check the facts on Gorgon. I found the following relevant documents:

1. E-mail from me to Anton Barendregt on the scope of the audit, highlighting our intention to debook Gorgon (June 2000)
2. Internal SDA message restating the intention that Gorgon should be de-booked (September 2000)
3. Final report from SEC Reserves Audit, which clear statement by the auditor that Gorgon bookings should be maintained (See Point 3 of Main Observations), (November 2000)

If it is no longer material or relevant, please discard.

Regards,

Jeroen



RE: SEC Reserves
Audit - Austr...



RE: Gorgon
Reserves vs SFR

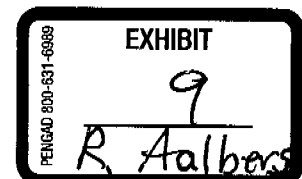


SDA - Reserves
Audit.ZIP

Jeroen Regtien
Manager TLT Support Team

Shell International Exploration and Production B.V.
Volmerlaan 8, Postbus 60, 2280 AB Rijswijk, The Netherlands

tel: +31 70 447 3419
fax: +31 70 447 2004
mobile: +316 1104 7403



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V00072583

e-mail: j.regtien@shell.com

Unknown

From: Barendregt, Anton AA SEPIV-EPB-GRA
Sent: 05 June 2000 16:35
To: Regtien, Jeroen JMM SDA-EP/2
Subject: RE: SEC Reserves Audit - Australia 1 of 1

Jeroen,

Many thanks for your message. I'll read through your documents and I'll revert with questions if I have any. I'll also let you know which fields I'd like to have a closer look at.

I've got copies of your end-1999 submissions and note.

Anton

-----Original Message-----

From: Regtien, Jeroen SDA-EP/2
Sent: 25 May 2000 11:21
To: Barendregt, Anton SEPIV-EPB-GRA
Subject: FW: SEC Reserves Audit - Australia 1 of 1

resend due to size limitation error.

-----Original Message-----

From: Regtien, Jeroen SDA-EP/2
Sent: Thursday, May 25, 2000 5:13 PM
To: Barendregt, Anton SEPIV-EPB-GRA
Cc: Blaauw, Robert SDA-EP; Graham, Sheila SDA-FP/421
Subject: RE: SEC Reserves Audit - Australia

Anton,

We confirm your proposal to hold the audit in the week of October 9th. We are making the necessary arrangements to comply with the proposed structure of the audit and are already making arrangements with our Operators Chevron and Woodside to schedule interviews with field teams.

I would like to point out a possible sensitivity. As you may have heard in the press, Shell has recently made a significant but unsolicited business proposal to Woodside to sell SDA's plus some international assets in return for an increase in its shareholding in Woodside from 34% to 60% (ref attached). The proposal is being studied by Woodside and external advisers are involved. This means that the book value of SDA's and Woodside's assets is quite significant and as such a Shell Group audit on SDA assets operated (but co-owned) by Woodside could be a sensitivity. In that light we have explained to Woodside that the upcoming audit is part of a 5 year rolling plan, was scheduled long before the merger proposal was made and that the audit is with respect to SDA's reserves base only and not those of our Operators. Woodside has in the meantime indicated it will cooperate and Woodside's reserves coordinator Jan van Elk will coordinate from their end.

Some basic information on SDA:

- SDA has a large number of assets operated by Woodside (majority), Chevron (a few) and ourselves (small proportion, exploration permits only).
- Apart from Robert Blaauw (E&P Manager), Sheila Graham (Economist and reserves Coordinator) and myself (Development Manager) SDA does no longer have any petroleum engineering staff. We rely on Operators (Woodside, Chevron) and use technical and value assurance services from SIEP/SepTAR as and when required.
- We distinguish between a Direct interest (where we have equity in the permits) and Indirect interest (through our 34% shareholding in Woodside). Attached you will find two workbooks containing the submissions for both direct and indirect interests. The 'Field Data' sheet contains an overview of developed and undeveloped reserves by field.
- The majority of the assets operated by Woodside are covered by both a direct and indirect SDA interest, except the Legendre Field, in which we only have an indirect interest.
- The North West Shelf area is huge and comprises many oil fields (Wanaea, Cossack, Lambert, Hermes) and

- gas fields (Rankin, Goodwyn, Angel, Perseus, Egret).
- The Laminaria/Corallina field has come into production November 1999 and we are watching the pressure profile with great interest.
- With respect to Chevron operated assets, the giant Gorgon field is classified as proved undeveloped and we intend to downgrade that to SFR during the upcoming ARPR cycle. Also, the Thevenard and Barrow oil assets have been sold per 1/6/2000 to Santos as part of a portfolio rationalisation.

Closer to the audit date we would like to have an indication of the fields you want to investigate in more detail as the allocated time would not be sufficient to cover them all. This would allow our operators Woodside and Chevron to make the appropriate staff and data available in a timely fashion.

Will you receive a copy of our ARPR explanatory note and formal ARPR submission to the Group from Remco Aalbers or do you expect a copy from us?

Looking forward to your response,

Jeroen Regtien

Unknown

From: Chittleborough, Mark SDA-DCG
Sent: 19 September 2000 09:52
To: Regtien, Jeroen SDA-EP/2; Graham, Sheila SDA-FP/421
Cc: Blaauw, Robert SDA-EP
Subject: RE: Gorgon Reserves vs SFR

No problem with your approach. On Domgas we have recently signed an MOU and CA - whilst not bankable, it does demonstrate some action in the commercial area to support booking.

-----Original Message-----

From: Regtien, Jeroen SDA-EP/2
Sent: Tuesday, 19 September 2000 16:48
To: Graham, Sheila SDA-FP/421
Cc: Chittleborough, Mark SDA-DCG; Blaauw, Robert SDA-EP
Subject: RE: Gorgon Reserves vs SFR

Sheila,

My view is that we come to our own understanding first within the current guidelines. We then check with Barendregt who has got Gorgon reserves on his audit programme anyhow. Afterwards we can then discuss the matter with Aalbers.

My proposal to treat the Gorgon reserves is based on the following:

- We have booked the Gorgon volumes as reserves in 1998(?) following the certification by NSAI and whilst very close to signing an LOI with Korean LNG customers. The Asian crisis has evaporated the market and we do currently not have an outlook to signed LOIs or SPAs. Recent Domgas options fell through, we are now restarting a greenfield LNG effort
- We have a Gorgon case in our BP which meets screening criteria
- The Sunrise project is further in its commercialisation process (LOIs, VAR) and has no proved reserves in the books
- None of the JV partners has booked the Gorgon volumes as proved reserves.

I therefore recommend and am prepared to defend downgrading Gorgon from the proved undeveloped reserves category to SFR (commercial/proved techniques).

I realise this may carry some sensitivity in SIEP, but it was extensively discussed at the ASR and SDA was actioned to develop a plan to downgrade Gorgon reserves. I accept that timing may have to be discussed with SIEP and suggest Robert contacts Jager.

I also note that Remco may not have realised in his response that Barendregt is visiting in October anyhow for the audit, and may have thought we are bypassing him.

Looking forward to your response,

Jeroen

-----Original Message-----

From: Graham, Sheila SDA-FP/421
Sent: Tuesday, September 19, 2000 3:37 PM
To: Regtien, Jeroen SDA-EP/2; Chittleborough, Mark SDA-DCG
Subject: FW: Gorgon Reserves vs SFR
Importance: High

Gentlemen,
 FYI, lets discuss and I will reply on Thursday.

Sheila

-----Original Message-----

From: Aalbers, Remco RD SIEP-EPB-P
Sent: Saturday, 16 September 2000 1:08

To: Graham, Sheila S SDA-FP/421; Maarse, Wim W SDA-FP/4
Cc: Jager, Rob RJ SEPI-EPA; McKay, Aidan A SIEP-EPB-P; Branson, David D SIEP-EPB-P
Subject: Gorgon Reserves vs SFR
Importance: High

Wim, Sheila,

I picked up the following comment on Gorgon reserves vs SFR in your BP'00 clarifications. This is a very important and sensitive point from both a principle point as well as in light of the Groups proved RRR target. The discussion should be with both Rob and myself, not with Anton Barendregt. Could you please clarify what your plans/issues/timing vs Gorgon reserves.

Q SFR Maturation zero?

We are acutely aware of our reserves replacement and SFR maturation KPIs. As you no doubt are aware, lack of a gas market makes it very difficult if not impossible to move our gas/condensate scope from SFR to reserves. Most of our oil opportunities have not made it through CA and hence no scope maturation can be expected. In actual fact if we decide to move Gorgon back to SFR (not included in BP as discussion is required with Barendregt). The SFR maturation will be negative.

Met vriendelijke groeten / With kind regards.

Remco D. Aalbers

Group Hydrocarbon Resource Coordinator
& Senior Economist

EPB-P SEPIV BV

Tel. +31 (0)70 - 377 2001 (fax: 2460)

e-mail: remco.rd.aalbers@sepivbv.shell.com

DB 06688

DRAFT NOTE - 21 Nov 2000

CONFIDENTIAL

From: Anton A. Barendregt Group Reserves Auditor, SIEP - EPB - GRA

To: Lorin Brass Director, Business Development, SIEP - EPB
Alan Parsley CEO, Shell Development Australia (SDA)

Copy: Robert Blaauw E&P Manager, SDA
David Christie Finance Manager, SDA
Wim Hein Grasso Commercial Director, SDA
Jeroen Regtien Development Manager, SDA
(circulation) SIEP - EPF: Gardy, van Nues
(circulation) SIEP - EPB-P: Bell, McKay, Aalbers
Rob Jager Business Advisor, SIEP (EPA)
Egbert Eeftink Director, KPMG Accountants NV
Stephen L. Johnson PriceWaterhouseCoopers

SEC PROVED RESERVES AUDIT - SHELL DEVELOPMENT AUSTRALIA, 9-13 Oct 2000

I have audited the proved reserves submissions of SDA for the year 1999 and the processes that were followed in their preparation. These submissions present the SDA contribution to the Group's externally reported Proved and Proved Developed Reserves and associated changes as at 31 December 1999.

The audit followed the procedures laid down in the "Petroleum Resource Volume Guidelines, SIEP 99-1100/1101" (based, inter alia, on FASB Statement 69). It included a verification of the technical and commercial maturity of the reported reserves, a verification that margins of uncertainty were appropriate, that Group share and net sales volumes had been calculated correctly and that reported reserves changes were classified correctly. The last previous SEC proved reserves audit for SDA was carried out in 1996. The audit took the form of technical discussions with staff from Woodside Energy Ltd (the operator for a large part of the assets with SDA interest) and detailed discussions about the reserves reporting process with SDA staff.

Total booked Group share proved reserves at the end of 1999 were 44 mln m3 of oil + NGL (of which 20 mln m3 developed) and 217 bln sm3 of gas (of which 27 bln sm3 developed). 1999 Reserves replacement ratios were 48% for oil+NGL and -340% for gas.

The audit commended the high quality technical work that had been carried out by Woodside, particularly in assessing the subsurface uncertainties and in evaluating the ranges of in-place and reserves estimates. Intensive SIEP assistance through VAR- and other reviews was noted. Maintaining the preliminarily booked volume of Gorgon gas reserves (first done at 1.1.1999) was supported on the grounds that a gas market was highly likely to be established in due course and that it must be considered likely that an extension of the current 5-year Retention Lease will be granted in 2002. Proved reserves in some mature fields (N-Rankin, Goodwyn and the four oil fields) should be increased to expectation levels, in line with the guidelines. This could increase Group entitlement by some 12 mln m3oe. Concern was expressed about the lack of a concisely documented audit trail, which hampered a proper assessment of the reasons for the end-1999 reserves changes.

The audit finding is that the SDA statements fairly represent the Group entitlements to Proved Reserves at the end of 1999. There is a possibility of a small (appr. 4%) understatement of entitlement reserves due to the reporting of P85 (proven) reserves instead of expectation reserves in mature fields. The overall opinion from the audit regarding the state of SDA's 1999 Proved Reserves submission, taking account of the scoring in Attachment 3, is therefore satisfactory.

A summary of the findings and observations is included in the Attachments.

A.A. Barendregt

Attachments 1, 2, 3

DB 06689

SDA - Reserves Audit

21/03/04

V00072589

SEC PROVED RESERVES AUDIT - SDA, 9-13 Oct 2000

MAIN OBSERVATIONS

1. SDA report their Group share reserves in two separate submissions. The first contains the 'direct' share of SDA in the successive licences and ventures in which Shell have an interest, together with other co-venturers. The second submission relates to the 34.27% shareholding that Shell have in Woodside Petroleum Ltd, who are co-venturer and operator in many of the fields in which SDA have an interest. The effect is an increase in the net reported share of the Woodside operated fields.
2. Commendation is made of the excellent quality of the technical work carried out by Woodside Energy Ltd in assessing the subsurface risks and in evaluating and quantifying the probability ranges of the in-place and reserves estimates. The fact that production history in the mature fields largely confirmed the original estimates provides evidence for this quality. Woodside can be commended for a significant improvement of their internal work processes in this respect. It was also noted that co-venturer support, e.g. through regular peer reviews and SIEP reviews (VARs and others) helped to further contribute to this success.
3. Some 10 Tcf (or 86 bln m3 Group share) of proved gas reserves have been booked for the giant Gorgon field since 1.1.1999. This was done on the strength of work done by the operator (WAPET, later Chevron) showing that development of this field through an LNG facility (stand-alone or, preferably, shared with the existing Woodside / North West Shelf LNG facility) was commercially robust. An important challenge is finding a buyer in a market that is fully supplied until 2005 and in which there is still significant competition thereafter. In the long term, however, there can be little doubt that a market will be found for this gas in the East- or South Asian rim. Hence, the Group reserves reporting guidelines do in principle allow this gas to be reported as reserves.

The outstanding issue is whether the stated Gorgon reserves can be shown to be producible within the prevailing production licence. Gorgon is presently held under a Retention Lease, renewable for successive periods of 5 years under the condition that the field can be considered likely to become commercially viable within the next 15 years and that the lessee is actively pursuing the evaluation of commercial viability, including the conclusion of long term sales contracts. The current Retention Lease expires in 2002. Although there is little doubt that, on the strength of the significant technical and commercial work done to date, an extension of the Retention Lease will be granted, there is no formal right to this extension. Hence the Group guidelines are not fully clear on this issue.

The practical way forward (and recommendation from this audit) is to maintain the presently booked volume of Gorgon reserves (even when the actual volume has been superseded by a 20% larger volume, following new technical work) and not book any increases until either the Retention Lease has been extended or until e.g. a letter of intent with a prospective buyer has been signed.

4. Group reserves guidelines prescribe that externally reported 'Proved' reserves should be made equal to expectation volumes (in stead of P85 proven or Low volumes) in mature fields, i.e. fields with significant production in relation to their ultimate recovery. Hence, the externally reported proved reserves in N-Rankin, Wanaea and Cossack (and possibly Goodwyn plus, in the near future, Laminaria and Corallina) should be taken as equal to expectation reserves. The same reserves should then also be applied for asset depreciation calculations for Group accounting.
5. One of the requirements of a reserve audit is that OU Group share submissions can be reconciled with reserves volumes and changes in individual fields. The audit should also establish that Group share reserves changes have been reported in the correct category (revisions, field extensions and discoveries, purchases / sales in place etc.). This process was greatly hampered by the lack of a concise audit note, with full detail at field level and by the lack of a proper record of 1999 produced volumes by individual fields. As a result, only a very partial match could be obtained with individual field volumes and changes as reported by Woodside and Chevron, see Attachments 2.1-2.4. Bottom-line corrections, not necessarily linked to individual fields (e.g. those made for the revised Woodside share in Domgas sales), could (and should) also be addressed in such a note.

New guidelines for preparing a proper audit trail have recently been published on the SIEP-EPB web site. It is the strong opinion of the auditor that a good audit trail will not only facilitate the auditor's task but also, and more importantly, will greatly enhance clarity and transparency of the reserves reporting process in the OU organisation. This will undoubtedly lead to less staff time being required during staff handovers, queries etc.

6. GHVs are measured and a record is maintained at field level (and apparently even lower) by Woodside, who do the calculation of Nm3 from sm3 volumes for NWS fields. An attempt was made at reconciling the

SDA Nm3 submission with individual field's and Gorgon GHVs, but the resulting average GHV did not seem to match with the average GHV implied by the submission (Att. 2.4).

7. Asset depreciation for Group accounts is done correctly through proved developed reserves depletion (proved total reserves for the full North Rankin facilities, which act as a hub for the entire NWS offshore gas system). Correct reserves values are being used, but no copy could be found of the formal end-1999 note of advice to Finance with the proper new reserves volumes to be used.
8. Full monthly production and sales statistics (100% field volumes) are received by fax from Woodside, who are the only operator at present with fields in production in SDA-held acreage. A selection of these figures (e.g. totals by assets only, not fields) is manually transcribed into the Finance system for monthly / quarterly reporting. A parallel system (also with manual input) is maintained by the Development Manager for e.g. KPI and MIS reporting. There would appear to be opportunities for synergy and rationalisation, also through electronic transfer of data. Incorporation of data at field level could help the end-year audit trail.

Recommendations

1. Maintain the presently booked volume of Gorgon reserves until a clearly positive event (extension of the Retention Lease or LOI with a buyer) has occurred.
2. Raise externally proved and proved developed reserves in N-Rankin and Wanaea / Cossack, plus possibly those in Goodwyn and Laminaria / Corallina to expectation levels, in line with Group guidelines.
3. Prepare a proper audit trail note, in line with published guidelines, for the 1.1.2001 reserves reporting cycle.
4. Consider possible synergy and rationalisation between production / sales reporting through Finance and the Development function.

DB 06691

SDA - Reserves Audit

21/03/04

V00072591

Jespers, Bea B SIEP-EPS-P

From: Hammer, Helge A. [Helge A. Hammer /o=SAL/c=AU/a=OTC/p=SHELL/ff=Hammer\, Helge\ SAL-UTY]
Sent: 02 February 1998 00:32
To: AALBERS, R.D.
Cc: JESPER, B.L.; SWINKELS, W.J.A.; VANDERMEIJEN, H.A.J.; Strobl, Wolfgang J.
Subject: RE: Australia - reserves query

Remco,

The increase of proven gas reserves: 13.8 tcf
 Main elements:
 Gorgon: from 0 to 9.8 tcf
 New fields NWS: 0 to 2.3 tcf
 North Rankin / Perseus: 12.6 to 14.7 tcf (+2.1)
 Goodwyn: 4.5 to 3.8 tcf (-0.7)

The increase in expectation gas reserves: 7.1 tcf
 Main elements:
 Gorgon: +2.4 tcf
 New fields NWS: +2.8 tcf
 North Rankin / Perseus: +2.6 tcf
 Goodwyn: - 0.6 tcf

As you can see, the big change is in the Gorgon field, where we had 0 tcf proven gas, and now carry 9.8 tcf. The zero from last year is a strange number since the field already had several appraisal wells and successful tests. It must have been pending a revision which has now been implemented. By the way, a certification of the proven gas reserves in Gorgon has just started (a few weeks ago). The work is carried out by Netherland Sewell who has also certified gas reserves for Shell in Nigeria (Bonny project). The volume estimates in the ARPR are based on a fully probabilistic approach (GEOCAP/MORRES) done by RTS/SDA.

Regards,
 Helge

From: AALBERS, RD SIEP-EPS-SE
Sent: Saturday, 31 January 1998 0:09
To: Hammer, Helge SAL-UTY
Cc: JESPER, BL SIEP-EPS-SE; SWINKELS, WJA SIEP-EPT-AM; VAN DER MEIJEN, HAJ SIEP-EPA
Subject: Australia - reserves query

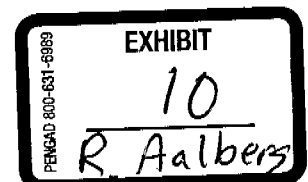
Helge,

Just one further clarification regarding your reserves.

Comparing the increase in Proven vs Expectation reserves for Australia direct I notice that the proven increase is significantly more than the expectation. Could you please give me some details why this is?

Regards,

Remco D. Aalbers



Jespers, Bea B SIEP-EPS-P

From: AALBERS, R.D. [R.D. AALBERS /EPS-SE,OPENMAIL/o=SIEP/c=NL/a=400NET/p=SHELL]
Sent: 12 February 1998 16:52
To: Hammer, Helge A.
Cc: JESPERS, B.L.; SWINKELS, W.J.A.
Subject: RE: Australia - Disc & Rev. II

Helge,

Thanks for your data. Looks OK now; thanks for indicating the add field for 1996, assume it was drilled year end?

The total does not have to add up to the total resource base as you mention as it only reflects those field(s) discovered in the ten year window.

Remco

ANNUAL REVIEW OF PETROLEUM RESOURCES AS AT 1.1.1998
FOR SHELL DEVELOPMENT AUSTRALIA

SDA's share of oil reserves declined from 129 to 117 million bbl during 1997. Gas and NGL reserves increased significantly from 5.7 to 7.0 tcf and from 108 to 154 million bbl, respectively.

The main changes since the 1.1.97 ARPR are:

OIL

The oil reserves in the Laminaria field has been revised downwards by 28.0 million bbl (100% share) as a result of new 3D seismic and reservoir modelling work.

In Corallina, the reserves have increased by 13.1 million bbl also as a result of a 3D seismic interpretation.

The Cornea discovery has been classified as SFR unproved techniques, since a valid production test not yet has been achieved. The risked SFR has been estimated at 94 million bbl.

A possible future reserves increase of 28 million bbl in the Barrow Island field has been included in SFR proved techniques, pending internal SDA review. The scope estimate is based on production performance extrapolation.

GAS / NGL

The gas in place estimate for Goodwyn has been reassessed leading to a reduction in the gas reserves of 0.46 tcf.

For North Rankin and Perseus, an increase of 3.04 tcf has been estimated as a consequence of reservoir modelling and simulation work.

Nine smaller gas fields on the North West Shelf (Dixon, Keast, Dockrell, Lambert Deep, Rankin, Sculptor, Searipple, Tidepole and Wilcox) have been transferred from Commercial SFR to reserves. The fields form part of the NWS development plan, and contain 2.78 tcf of gas. Several of the fields are rich in condensate rich gas leading to a significant increase in NGL reserves of 107 million bbl.

A technical revision of the Gorgon field (by RTS/SDA) has resulted in an increase of the gas reserves of 2.39 tcf. Based on new PVT analysis, a higher condensate gas ratio has been estimated, resulting in condensate reserves increasing by 103 million bbl.

The dependencies between the NWS gas fields have been assessed and a probabilistic addition has been carried out. This has been done on the basis that the NWS fields are developed collectively under one project. 2.30 tcf of additional proven gas reserves result from the probabilistic addition. For the purpose of reserves reporting, this volume has been added back to the individual fields.

Woodside's documentation of reserves suffers from the following weaknesses:

- The absence of a split in developed and undeveloped categories
- The absence of field specific average heating values needed to normalise volumes for Group reporting

From: Aalbers, Remco RD SIEP-EPB-P
Sent: Thursday, September 21, 2000 12:03 PM
To: Graham, Sheila S SDA-FP/421
Cc: Jager, Rob RJ SEPI-EPA; Regtien, Jeroen JMM SDA-EP/2; Chittleborough, Mark ML SDA-DCG
Subject: RE: Gorgon Reserves vs SFR

Sheila,

Thanks for your note, discussed the issue with Rob Jager and would like to summarise as follows:
 Anton Barendregt is the Group Reserves Auditor and he will come to SDA to check the 1.1.2000 proved reserves position. Although he is a ex-Shell R.E he has an independant position and reports his findings directly to the Group External Auditors PKMG and PWC. KPMG in January do the 'reserves check' and rely on Anton for the technical opinion.

When Anton is "down under" in October SDA should justify why they had Gorgon proved reserves on the books 1.1.2000 and that there is (still, despite the setback from the Asian crissis) a reasonable expectation of future market to justify those volumes. Also they need to support the fact that no add volumes were booked - despite WAPET re-evaluation. This is not the point to start discussing on de-booking to SFR. I understand from Rob that there are several options being worked at the moment to place Gorgon gas volumes either to extended NWS (3 add trains) or to a SMDS scheme plus add-on. Expectation is that in the next two-three years final descisions will be made. On that basis there still seems to be a defendable market expectation and the last thing the Group wants is to debook 100 mrd sm3 to SFR only to rebook that in two years time.

Any discussion on this issue should be treated very carefully - it would have a very negative impact on the Group's Reserve Replacement Ratio.

A clear summary on the position of Gorgon gas, possible market assumptions etc would be most useful but should be discussed via RBA and EPB and not via the Group Auditor at this point in time. If we understand the position clearly we might ask for his opinion at a later date. Any plan to debook - if required - would need to be cleared with ExCom directly as it has a very large impact on the Group reserves position. Hopefully all efforts are there to ensure we can keep Gorgon reserves justifiably on the books.

Met vriendelijke groeten / With kind regards.

Remco D. Aalbers

Group Hydrocarbon Resource Coordinator

& Senior Economist

EPB-P SEPIV BV

Tel. +31 (0)70 - 377 2001 (fax: 2460)

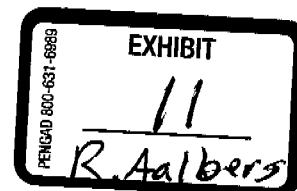
e-mail: remco.rd.aalbers@sepivbv.shell.com

-----Original Message-----

From: Graham, Sheila SDA-FP/421
Sent: Thursday, 21 September 2000 9:57
To: Jager, Rob SEPI-EPA; Aalbers, Remco SEPIV-EPB-P
Cc: Regtien, Jeroen SDA-EP/2; Chittleborough, Mark SDA-DCG
Subject: RE: Gorgon Reserves vs SFR

Gentlemen,

As Rob indicated, indeed we are currently collating data on Gorgon with the view to making a



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recommendation on Reserves v's SFR for review by all interested parties by the end of October.
Anton Barendrechts name was mentioned as Gorgon is already on the agenda for Anton's audit of SDA
next month.

Regards, Sheila

-----Original Message-----

From: Jager, Rob RJ SEPI-EPA

Sent: Wednesday, 20 September 2000 20:43

To: Aalbers, Remco RD SIEP-EPB-P; Graham, Sheila S SDA-FP/421; Maarse,
Wim W SDA-FP/4

Cc: Branson, David D SIEP-EPB-P; Jager, Rob RJ SEPI-EPA; McKay, Aidan A
SIEP-EPB-P

Subject: RE: Gorgon Reserves vs SFR

Remco, as you are aware, this is a (rather complicated) legacy issue.
We agreed for the 01/01/00 ARPR to leave Gorgon in proven reserves, but
to include the results of Gorgon redetermination to SFR. It is my
understanding that this is the way it is currently reflected in the
Business plan.

At the ASR SDA were requested to develop, for our review and
endorsement, a plan (and its impact) for the (phased) movement of Gorgon
proven reserves to SFR and I understand it is this process that SDA wish
to discuss with the reserves auditor. I see no particularly problem with
this particularly as we ultimately need to satisfy the auditor with the
chosen approach.

Trust this meets with your thoughts.

Regards Rob J.

101366818: RE: Australia - Gorgon Reserves to SFR ????

Page 1 of 3

From: Platenkamp, Roelof RJ SEPIV-EPB-P
To: Aalbers, Remco RD SEPIV-EPB-P
CC: McKay, Aidan A SEPIV-EPB-P
BCC:
Sent Date: 2000-01-07 08:53:13.000
Received Date: 2000-01-07 08:53:13.000
Subject: RE: Australia - Gorgon Reserves to SFR ????
Attachments:

Remco,

thanks for alerting me-if we do make changes it should be the ARPR in 2001 and we need to prepare the Excom somewhere mid year-by then e should also understand the situation, we will have a gas strategy (as well as a group strategy) and it might be clearer what the impact would be.

Kind regards,
 Roelof

-----Original Message-----

From: Aalbers, Remco RD SEPIV-EPB-P
Sent: Friday, January 07, 2000 9:02 AM
To: Platenkamp, Roelof RJ SEPIV-EPB-P
Cc: McKay, Aidan A SEPIV-EPB-P
Subject: Australia - Gorgon Reserves to SFR ????
Importance: High

Roelof,

Attached Email from SDA to EPA regarding the Gorgon reserves.

If SDA were to reclassify Gorgon reserves the impact on proved reserves would also be 50% (some 105.8 mrd sm3!). On total Group this would be a reduction of some 6%!! This needs careful consideration before decided either way!

Proved reserves were first booked for Gorgon in 1997 - for 1.1.1998 - expectation reserves were carried before that date already.

Australia Gas reserves have bene an issue with KPMG/PWC for the last tow years and especially after the Asian crisis - "is there a market for the gas". Plans for some six additional LNG trains have been shelved since - now one or two trains at best??

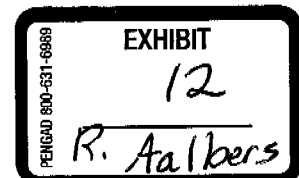
The note form SDA is not very clear on the economics/market issue and I will try to get some more info!

Regards,

Remco

-----Original Message-----

From: Graham, Sheila SDA-FP/44



PBW0002283
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101366818: RE: Australia - Gorgon Reserves to SFR ????

Page 2 of 3

Sent: Friday, 07 January , 2000 3:05 AM
To: Jager, Robert SEPI-EPA
Cc: Blaauw, Robert SDA-EP; Aalbers, Remco SEPIV-EPB-P
Subject: FW: ARPR update

attachment might help!!!

-----Original Message-----

From: Graham, Sheila SDA-FP/44
Sent: Friday, January 07, 2000 10:04 AM
To: Jager, Robert SEPI-EPA
Cc: Blaauw, Robert SDA-EP; Aalbers, Remco SEPIV-EPB-P
Subject: RE: ARPR update

Rob,

I have nearly finalised the reserves, attached is a final draft for the updated figures for our proved and expectation reserves. Basically Gorgon accounts for 122 10⁹ sm³ out of 235 10⁹ sm³, Shell share of expectation reserves or just over 50%.

I have tried to find out when Gorgon was initially booked as reserves, or moved from SFR, but our detailed records only go back to 1995 where it was registered as reserves. I have also asked the Hague if they have any details, but they do not keep (or are supplied with) detailed records per field.

Gorgon was certified by external reserves certifiers, NSAI in December 98 and our reserves reporting end last year was consistent with the certified numbers. During the last year WAPET have done extensive static and dynamic modelling and the reserves have increased by approx 20% on last years figures.

Based on the above, and also the comment in the reserves guidelines not to change categories without considerable justification, SDA's recommendation is to leave Gorgon in reserves. If by the end of October 2000 there is still no LOI in sight then I feel the issue should be revisited at an early stage so all parties can put forward their viewpoint in a timely manner.

Regards, Sheila

-----Original Message-----

From: Jager, Robert RJ SEPI-EPA
Sent: Friday, December 24, 1999 6:54 PM
To: Graham, Sheila S SDA-FP/44
Cc: Blaauw, Robert R SDA-EP; Jager, Robert RJ SEPI-EPA
Subject: ARPR update

Sheila, further to our discussion last week regarding the ARPR update and in particular the change you were suggesting in respect to Gorgon reserves (from proven to SFR-uncommercial - which at least seemed logical to me) I am keen to check with the relevant bodies here what the possible fall out from such a change could/would be (before it happens) Accordingly I would appreciate you providing some early information on the "size" (both total and relative) this change.

Regards

PBW0002284
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101366818: RE: Australia - Gorgon Reserves to SFR ????

Page 3 of 3

Rob J. Jager
Manager Business Advisory Unit - Australia
Shell EP International BV
Carel van Bylandtlaan 23
2501 CK The Hague
Tel : +31 70 377 4475
Fax : +31 70 377 3889
Email : r.j.jager@sepi.shell.com

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From: Hines, Ian IM SIEP-EPT-DE
To: Newberry, Derek D SIEP-EPT-DE
CC: Wilhelm, Chandler CT SIEP-EPT-DE
BCC:
Sent Date: 2000-09-07 11:04:46.000
Received Date: 2000-09-07 11:04:46.000
Subject: FW: Reserves
Attachments: Angola-Brazil reserves note.doc

Gents,

I may have misunderstood the process, but my understanding was that a discovery only indicated scope for recovery and was not bookable until supported by a viable development. This gives us a measure of the challenge ahead in managing our senior management's expectations!

Ian Hines
Development Planning
Shell Deepwater Services
Woodcreek, Rm 2462, Houston
Tel: 281 544 2281
Fax: 281 544 2269

-----Original Message-----

From: Parry, Gordon G SIEP-EPG
Sent: Thursday, September 07, 2000 1:38 AM
To: Hines, Ian IM SIEP-EPT-DE
Subject: FW: Reserves

-----Original Message-----

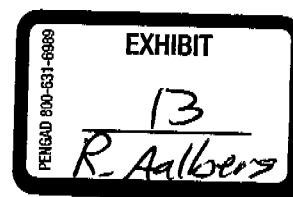
From: PARRY, G.
Sent: Wednesday, September 06, 2000 4:56 PM
To: Inglis, Robert R.B. /SIEP /SDAN-AM; Simon, Grigore G. /SIEP /SDAN-AM; Osborne, Peter L. /SDANG /GM
Cc: Aalbers, Remco R.D. /SIEP /EPB-P; KOOL, W.M. /SEPI /EPG; KAKOK, S. /SEPI /EPG; MINDERHOUD, M. /SEPI /EPG
Subject: Reserves

Gents,

I attach the final version of the note requested by Heinz at the last EPG meeting regarding reserves booking in Angola and Brazil.

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SMJ00034872



788301

This note was forwarded to Phil Watts who remarked, quote

"It is critical that the Angola reserves are booked this year or our EP scorecard will be shot" unquote

Heinz's subsequent comment to me was, quote:

" Herewith Phil's reactions. We must pull this off aggressively! And we need one well, at least, as appraisal, whatever the purists say! "

unquote

Let's be guided accordingly!

Gordon

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SMJ00034873

Jespers, Bea BL SIEP-EPB-P

From: Aalbers, Remco RD SIEP-EPB-P
 Sent: Monday, October 30, 2000 8:52 AM
 To: McKay, Aidan A SIEP-EPB-P
 Cc: Jespers, Bea BL SIEP-EPB-P
 Subject: FW: Angola - Reserves LE 3Q00

fyi

-----Original Message-----

From: Rothermund, HC SEPI-EPG
 Sent: Sunday, October 29, 2000 17:27
 To: Bichsel, Matthias M SIEP-EPT-D
 Cc: Aalbers, Remco RD SIEP-EPB-P; Lovelock, Susan S SEPI-EPG;
 Minderhoud, Martijn M SEPI-EPG; Parry, Gordon G SIEP-EPG; Simon, Grigore
 G SIEP-SDAN-AM; Warren, Tim TN SIEP-EPT
 Subject: Angola - Reserves LE 3Q00

Matthias,

Below please find a good summary by Sue Lovelock and Remco Aalbers on the reserves situation in Angola. As mentioned to you on earlier occasions, there is a critical need for EP to be in a position to book these reserves in 2000. SDS plays a key role in this. Grateful you keep very close to this.

Regards
 Heinz

-----Original Message-----

From: Aalbers, Remco R.D.
 Sent: 27 October 2000 17:27
 To: ROTHERMUND, H.C.
 Cc: LOVELOCK, S.; Simon, Grigore G.; PARRY, G.
 Subject: Angola - Reserves LE 3Q00

Heinz,

Understand from Sue that you would like to get an update on the Angola reserves position. She had to leave before the numbers were finalised so she asked me to send this.

Regards,
 Remco

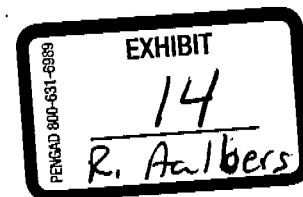
=====

Proved Reserves LE - 293 mln bbl
 This number is LE Shell PSC entitlement for the first hub
 (Plutonio/Galio/Paladio/Cromio/Cobalto).

Plutonio estimates are under downward pressure as technical evaluation continues in Houston, in this case static modeling. Revision here may drop proved reserves to 265 mln bbl (being challenged). There is still some additional upside for Cobalto (if no gas is encountered) of 30 mln bbl, the well is currently being drilled, resulting in an upward range for proved reserves of 295 mln bbl. LE is still achievable.

Booking of any reserves is based on commerciality and here team is making progress. Positive NPV looks possible, (although peer review in Houston still in progress). Although current position does not meet screening VIR (which is being worked), this alone would not prevent reserves booking, which is based on commerciality test. Notional Development Plan is part of model, so in progress. Angola Team will maintain pressure on SDS in Houston.

We understand that BPA is not under any pressure to book further reserves this year, so will not book Block 18 reserves. Their target remains FID date (Sanction in BP's terminology), which overall is still good news for Shell. It would have been helpful if they also booked Blk



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SMJ00033605

18, but understand we have deviated from partners before in our booking of proved reserves.

Another booking test is move from exploration licence to production licence. Team have reviewed PSC. View is that as long as venture declares commercial project within 24 months from formal notice of discovery there is automatic right to 25 year production licence. Formal Notices will no doubt be required, but there seems nothing legal to prevent reserves booking. Production term is long enough to support booking of reserves. Proved reserves booking will be visible externally and therefore available to Angolan Govt etc. We would not necessarily want to have this be seen as trigger FID for production licence and be committed to development expenditure. This is issue raised before, but not concluded - we really need to watch carefully. Will take up with team, Gordon and Martijn on return.

SFR Maturation to expectation reserves LE - 367 mln bbl

Expectation reserves of 367 mln bbl is for 1st hub and includes same fields as above. Similar to proved reserves there is pressure on the Plutonio expectation estimate which might drop to SFR maturation to 328 mln bbl, again possible upside for Cobalto of some 40 mln bbl to 368 mln bbl.

Given move within same year from SFR maturation to proved reserves we will get some bbls in both SFR maturation and proved reserves additions. Good news.

Susan Lovelock

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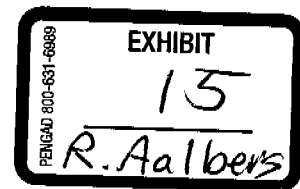
From: McKay, Aidan A SIEP-EPB-P
Sent: 02 October 2001 17:02
To: Platenkamp, Roelof RJ SIEP
Subject: FW: Roelof_career_ender.ppt : 26th June 2000 Excom Presentation - State of the Portfolio



Roelof_career_ender.ppt

Roelof,
as promised, its funny in a way as at the time (if you remember)
we humourously agreed to call it the career ender given the likely
response you would recieve. In hindsight, it was Freudian in the
extreme.

Aidan



DB 07471

Excom Early Look Business Plan 2000

- **Flaws in the Capital Allocation Process**
- **The Capex requirements**
- **The Over-promise on delivery**
- **The Way Ahead**

FOIA Confidential
Treatment Requested

V00120308

DB 07472

The Good News

- High quality internally consistent data submissions
- Abundance of projects competing for funds:
 - 1.9 bln US\$ Exploration
 - 7.0 bln US\$ Production

DB 07473

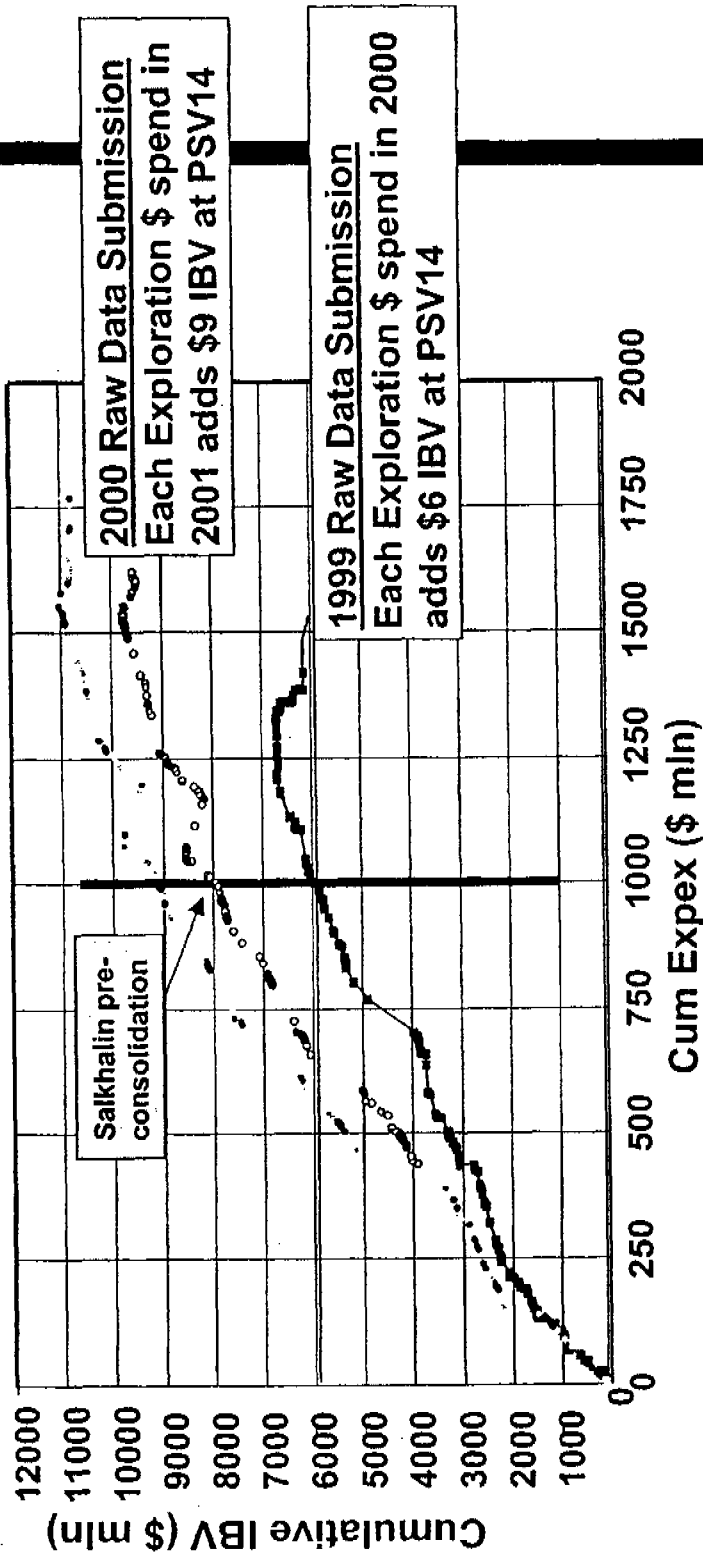
The Bad News

- Projects appear over-optimistic both in Exploration and Production
- The Capital Allocation Process appears to be flawed with overstatements of key parameters to secure funds

We run the risk of initiating an Over-promise Under-delivery Cycle.....

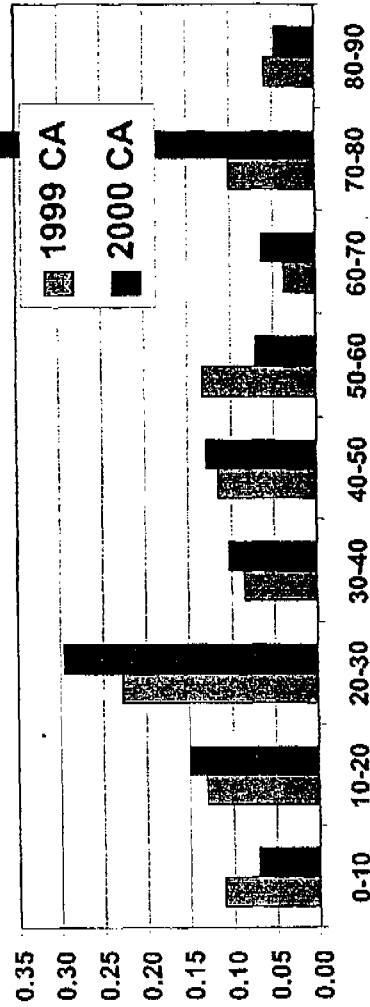
DB 07474

Exploration-Overstated Value?



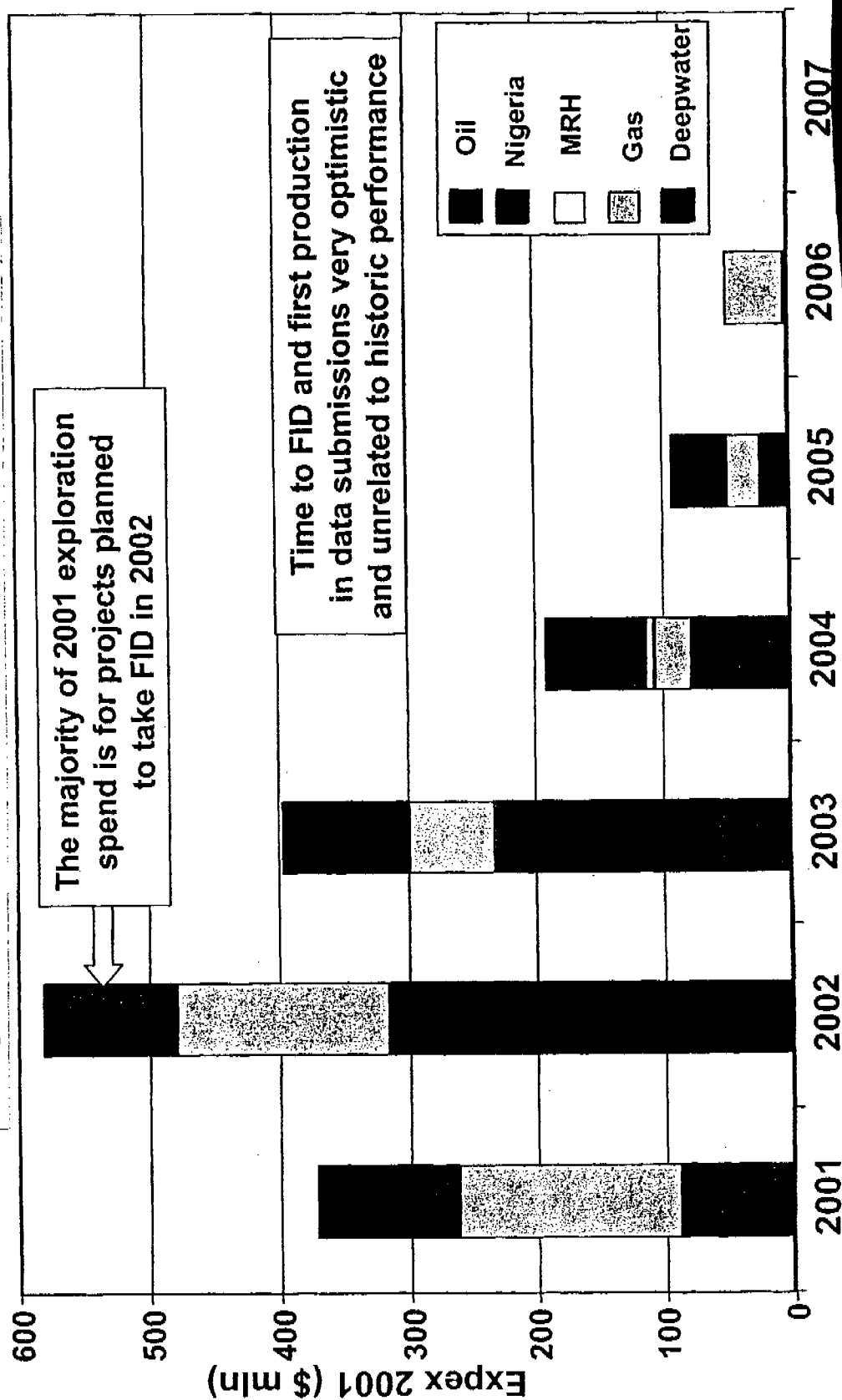
Pos to FID shows
no major differences
in 99 submission to
2000

Expe Spend
(Normalised)



DB 07475

Exploration: Overstated Delivery?



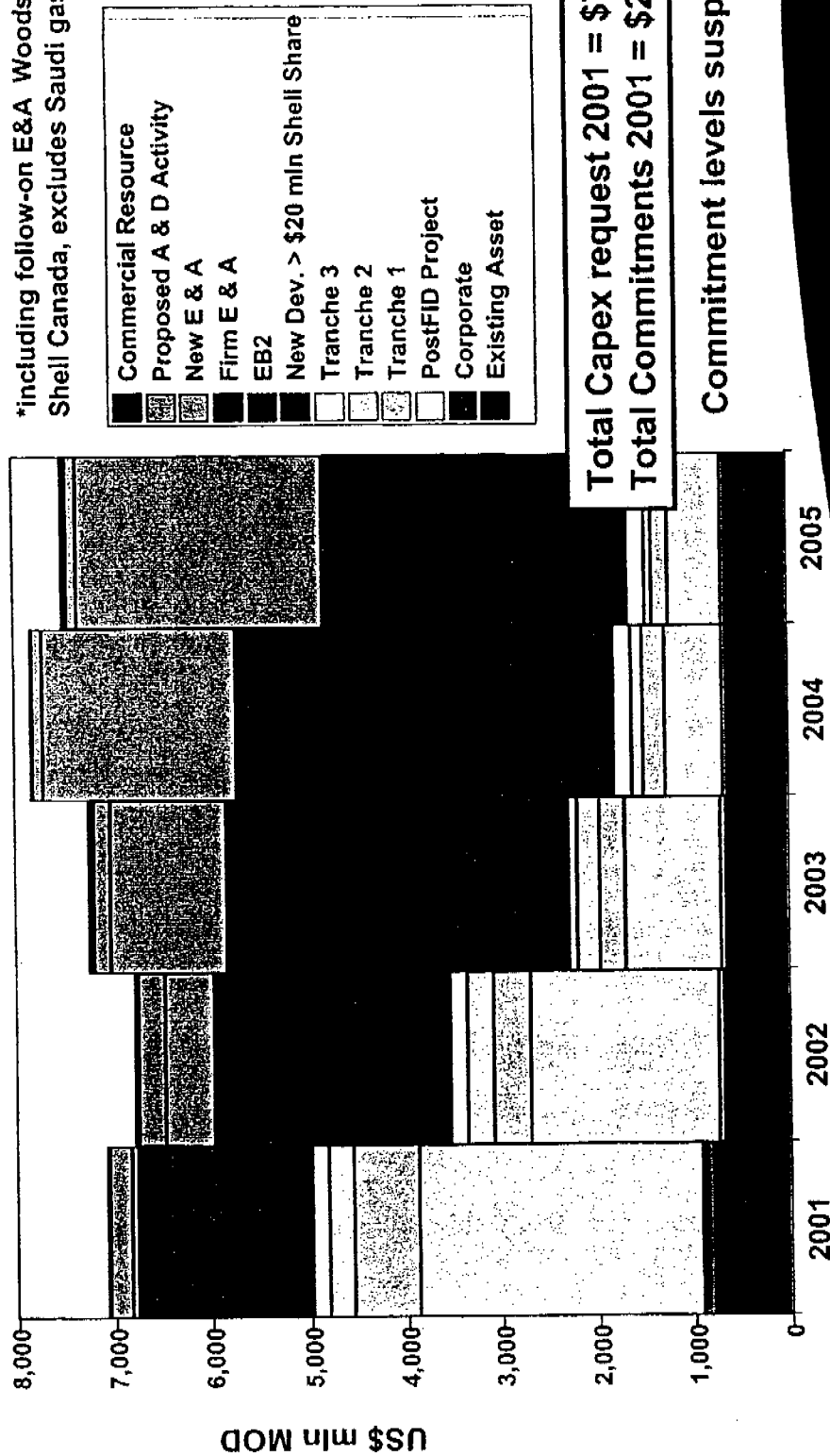
DB 07476

CAPEX REQUEST 2001-2005

Raw Data Submission

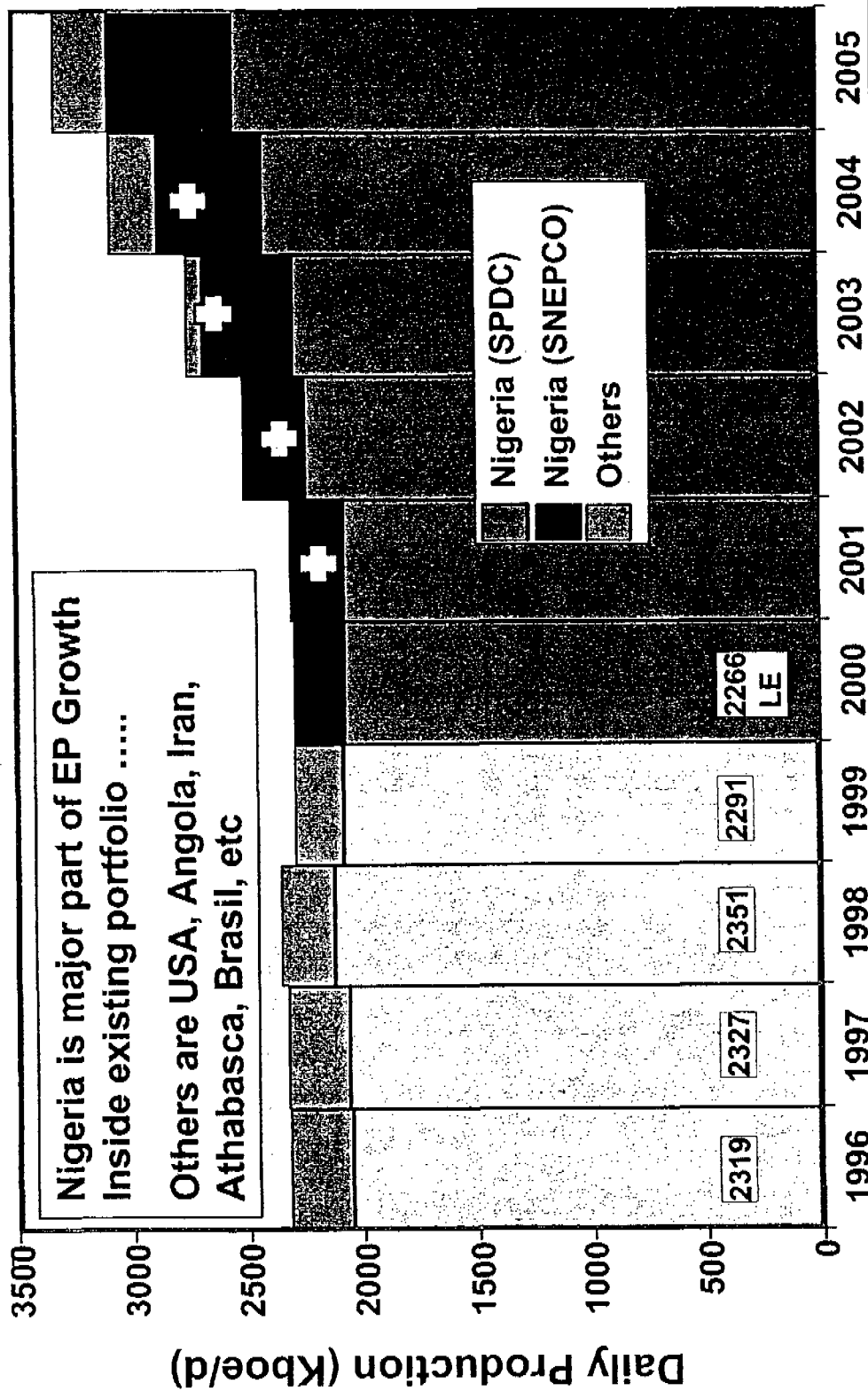
Proposed spend is ca \$7 bln per year over the Plan Period*

*including follow-on E&A Woodside, and Shell Canada, excludes Saudi gas



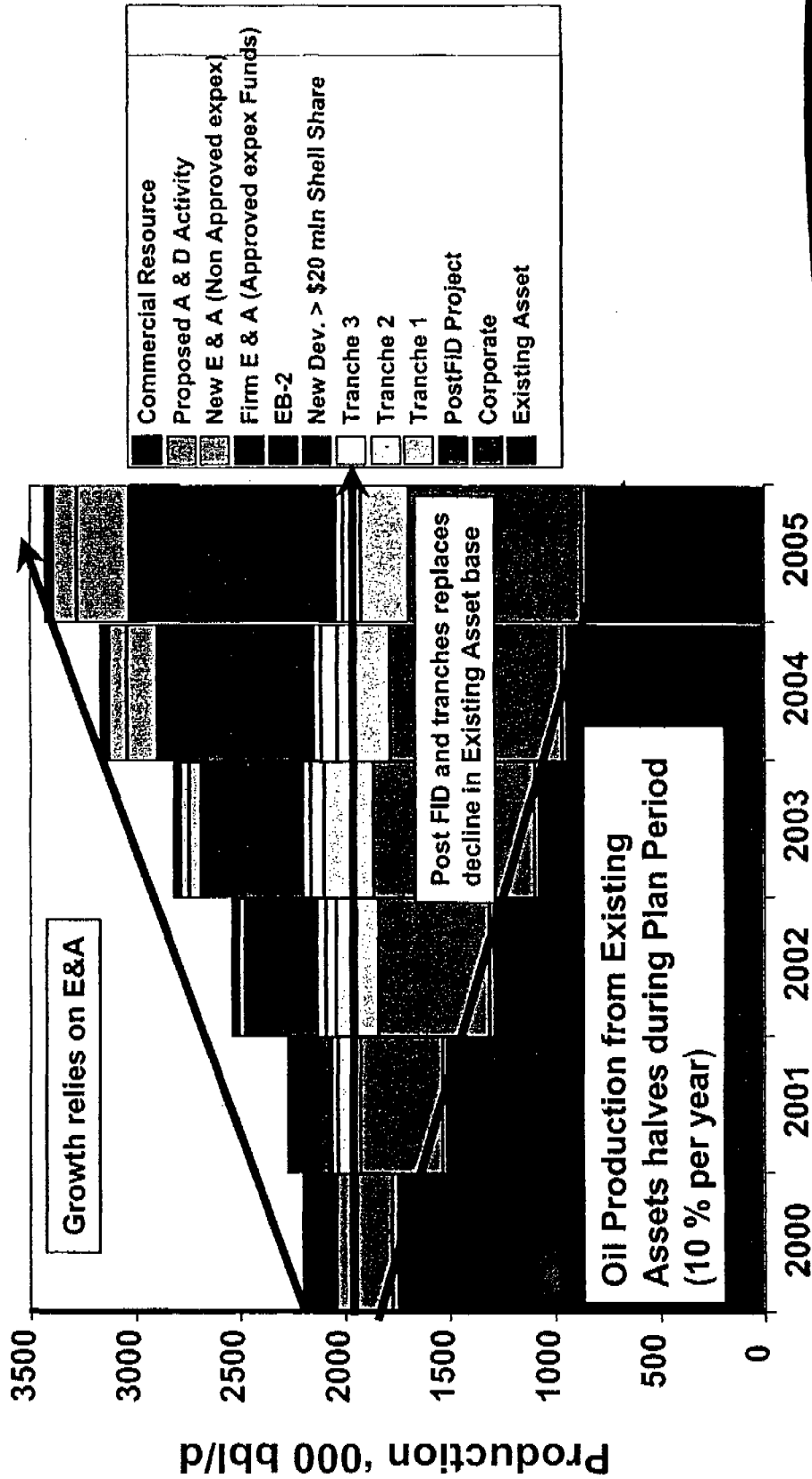
DB 07477

Production: Can we deliver on this promise?



DB 07478

OIL PRODUCTION 2001-2005 Raw Data Submission



Production Forecast per Region and CA Cat - Raw data.rep

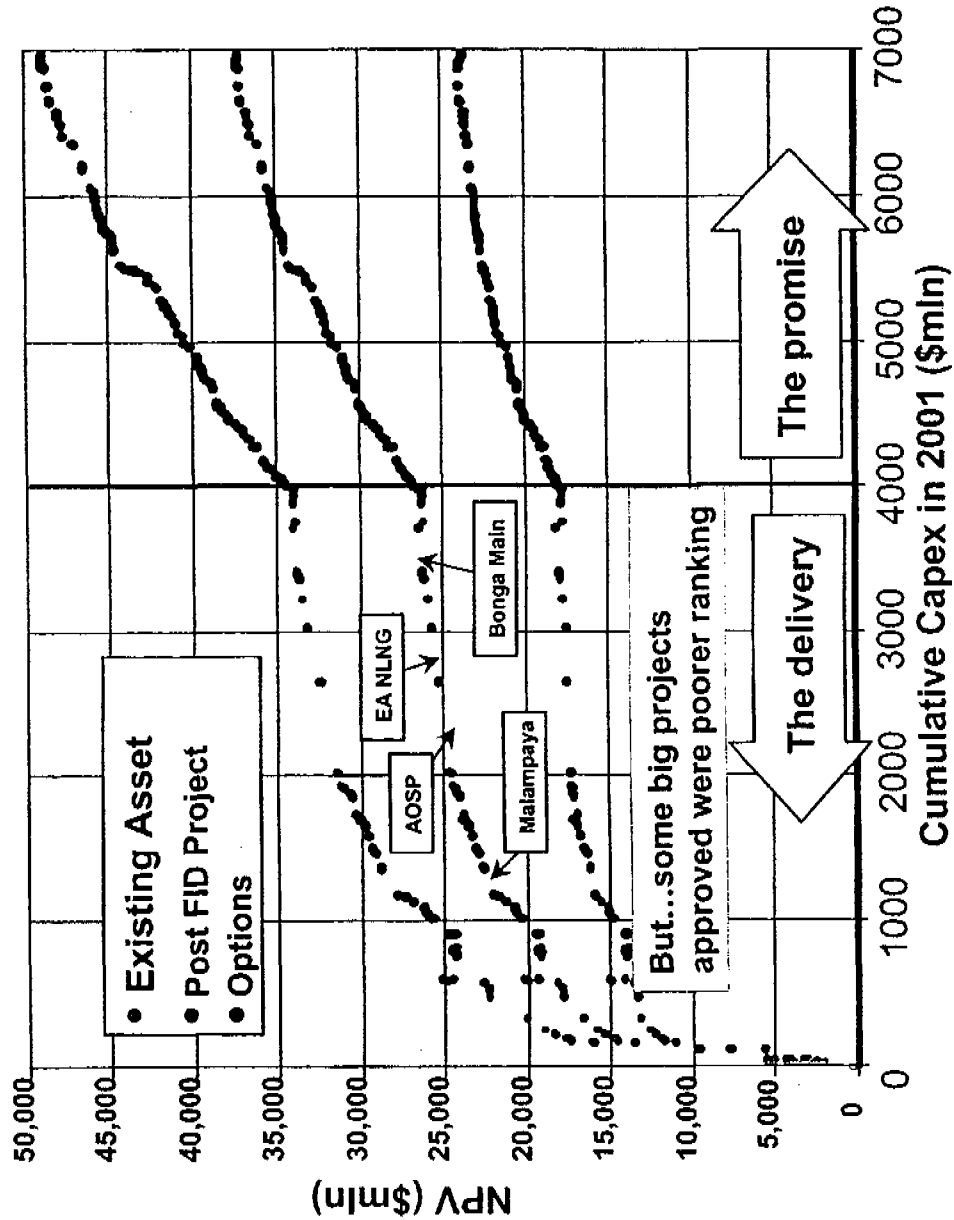
DB 07479

Major Concerns

- Existing Assets require 800 Million US\$ in 2001 without adding production...
- Most large post-FID projects indicate underdelivery compared with 1999
- New projects have very aggressive FID dates (36 FIDs in 2001 excluding big tickets e.g. Saudi Gas) and possibly overstated value promises
- E&A Follow Up extremely optimistic when compared with history
- Not enough funds for promising projects and strategic options

DB 07480

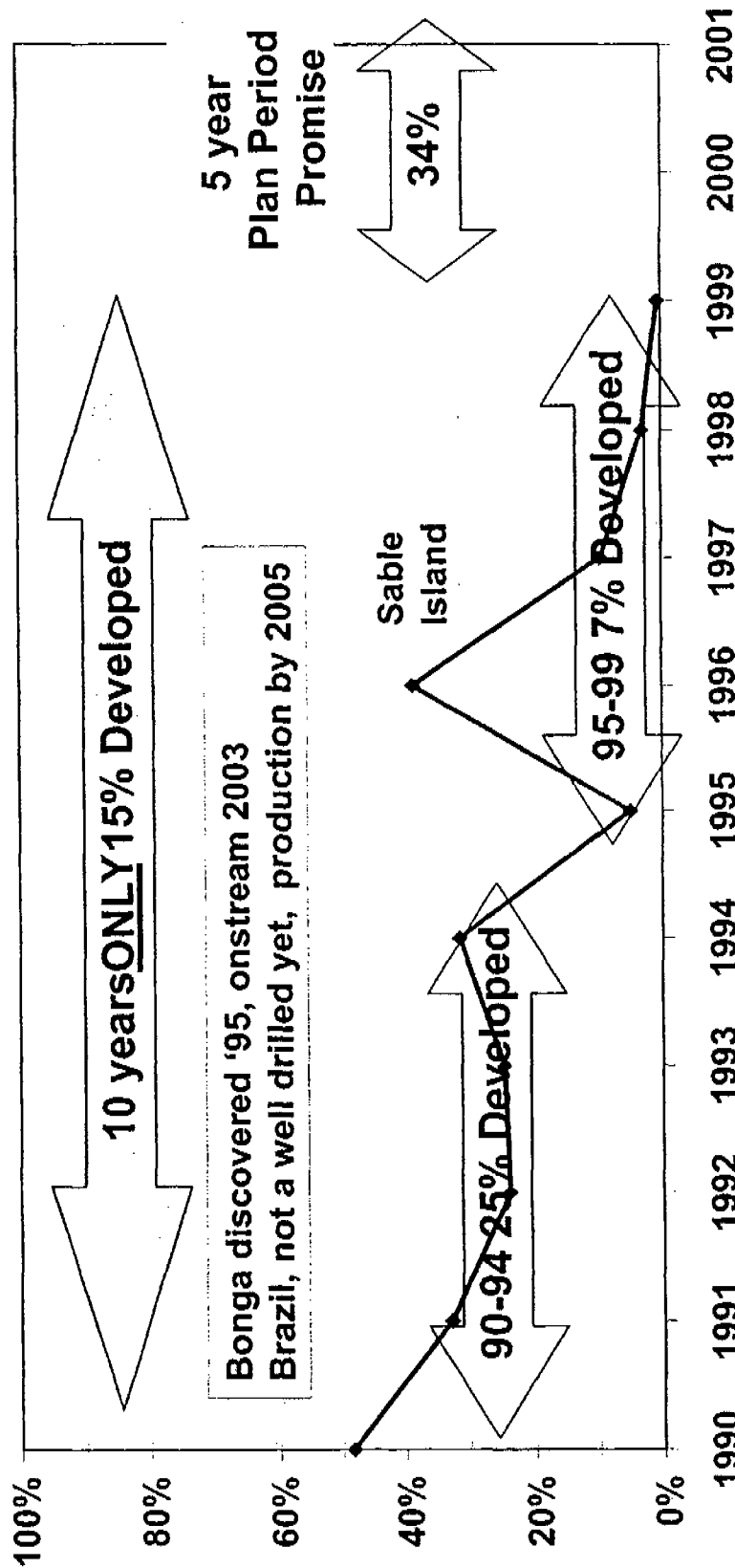
CAPEX CREAMING CURVE



Historical performance raises questions over ambitious future promises

DB 07481

Exploration Discoveries 1990-1999 Development Percentage @1.1.2000



>> 34% Development percentage Exploration discoveries

within 5 years has not been achieved to date

Plan Excl. Sakhalin & OKIOC

DB 07482

MAJOR PROJECT FIDs 2000 from BP'99

Country	Projects with FIDs in 2000	BP '99 Timing	CA 2000 Timing
Shell Malaysia (total)	KN ROUND 2	01-2000	1999
Shell Malaysia (total)	KN S1S2	01-2000	1999
Shell Iran	Soroosh /Nowrooz	01-2000	11-1999
Shell USA	Oregano	05-2000	04-2000
Shell USA	Serrano	05-2000	04-2000
Shell USA	Na Kika	05-2000	07-2000
Shell USA	North Marlin	04-2000	07-2000
Norske Shell	Garn West	03-2000	04-2000
Shell UK Expro	Mandarin	10-2000	09-2000
SPDC	Bonny Terminal Refurbishment	07-2000	07-2000
SPDC	Cawthorne Channel	09-2000	10-2000

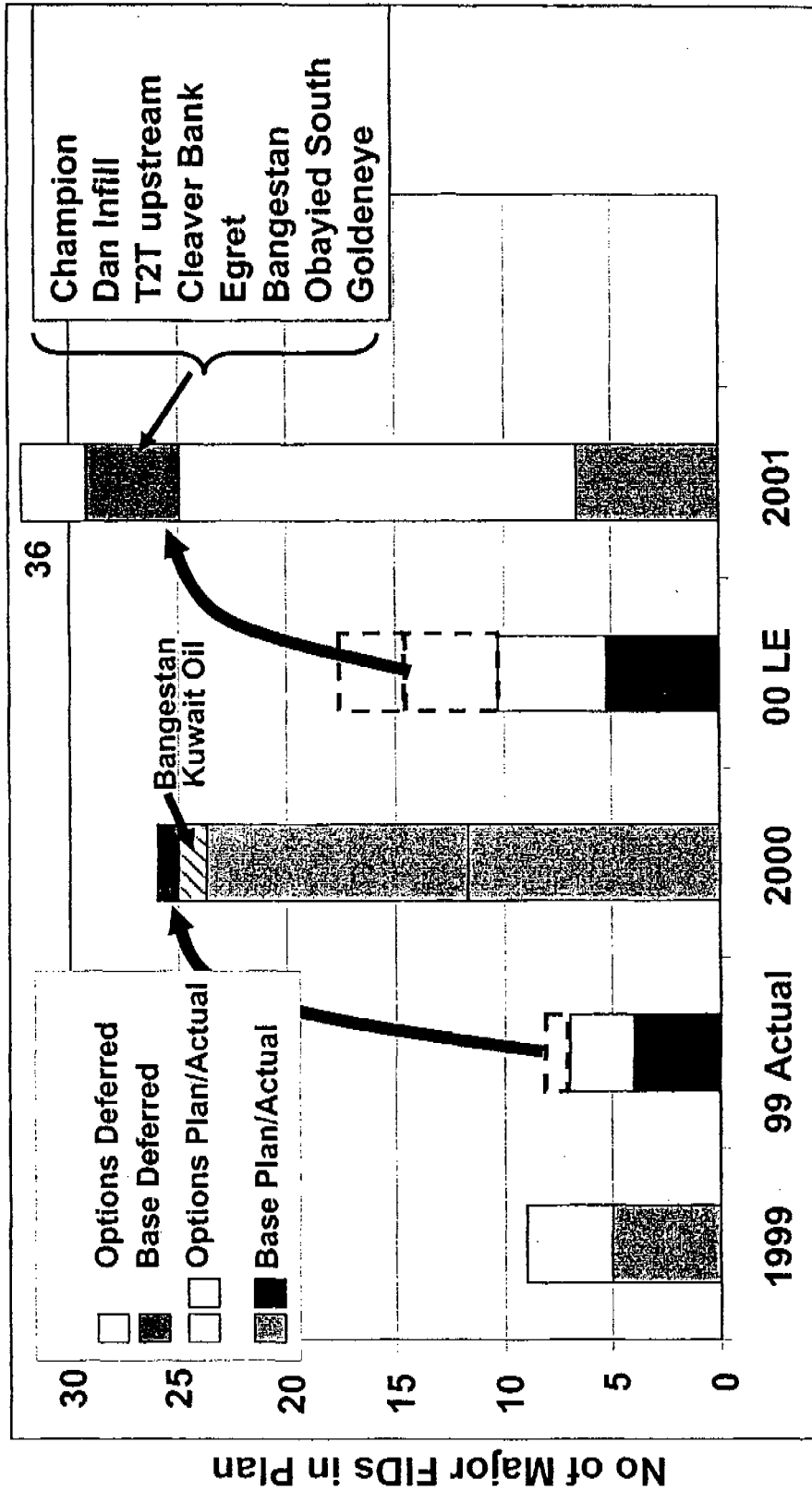
On-time

Brunei Shell	Champion West Existing Facilities	12-2000	01-2001
SOGU	Dan Infill and Debotlenecking	03-2000	03-2001
Shell Egypt N.V.	Obayed South Devt	11-2000	07-2001
Shell UK Expro	Goldeneye	10-2000	12-2001
Turkmenistan, Uzbekistan	Uzbekistan Alan & Kandym	07-2000	01-2001
Shell Australia	NWS LNG Expansion U/S	03-2000	01-2004
Shell Australia	ALNG LNG Train 1 U/S	09-2000	01-2004
Brunei Shell	Egret Development	10-2000	01-2004
Shell UK Expro	Cleaver Bank High	10-2000	10-2001
Shell Capsa	Cerro Tuyunti Sth.	11-2000	?
A/S Norske Shell	Sogn Gloa Development	09-2000	?
Shell Devt. Pakistan B.V.	Kirthar Block : Bhitt dev	03-2000	?

Slipped

DB 07483

MAJOR PROJECT FIDs 2000 from BP'99



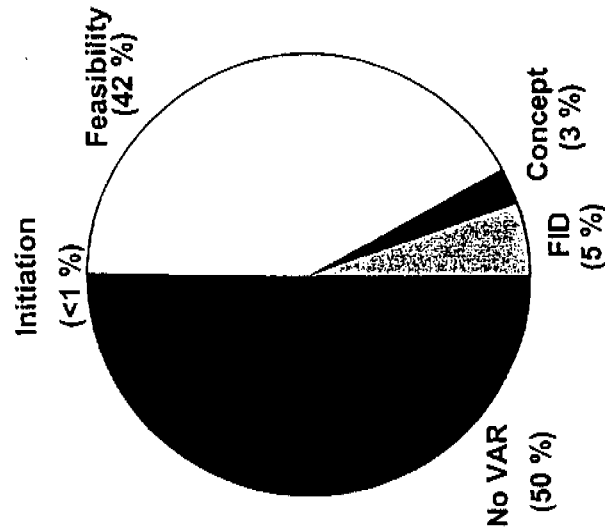
- 12 major Base Plan projects planned for FID in 2000 (BP 99) - 5 will now take FID
- 13 major Options projects planned for FID in 2000 (BP 99) - 6 will now take FID

DB 07484

MAJOR PROJECTS WITH PROMISES OF FID IN 2001.....

Country	Project	2001 2001-2005	
		Capex	Capex (Risky)
Australia (Direct)	Gorgon SMDS Upstream	0	46
Brunei	Champion West Central Platform Dev	1	75
Brunei	East Gas Expansion	4	38
Brunei	Egret Development. Phase 1	3	40
Denmark	Halfdan Phase III	102	475
Denmark	Halfdan Phase II	41	65
Denmark	GSA4	13	75
Denmark	Dan Infill and Debottlenecking	8	42
Denmark	Skjold Phase II	32	32
Egypt	Obayed South & Compression I	26	85
Malaysia	96 PSC : BT/SF Stage IVC(SF30) WI Int.	1	31
New Zealand	Pohokura Development	3	26
Nigeria (SNEPCO)	Erha Main	48	902
Nigeria (SNEPCO)	EWTF (Extended Well Test Facility)	118	128
Nigeria (SPDC)	92 Offshore Pipeline AF - NLNG 1-5	87	184
Nigeria (SPDC)	49 UGHELLI	24	122
Nigeria (SPDC)	66 OTUMARA - NLNG 4/5	16	117
Nigeria (SPDC)	67 SAPELE	1	90
Nigeria (SPDC)	45 OGUTA	3	77
Nigeria (SPDC)	61 BONNY - NLNG 3	1	29
Nigeria (SPDC)	98 WAGP	22	22

VAR coverage in 2001
on Total Capex



Total Capex from 2001 FID
projects amounts to \$4 bln in
plan period

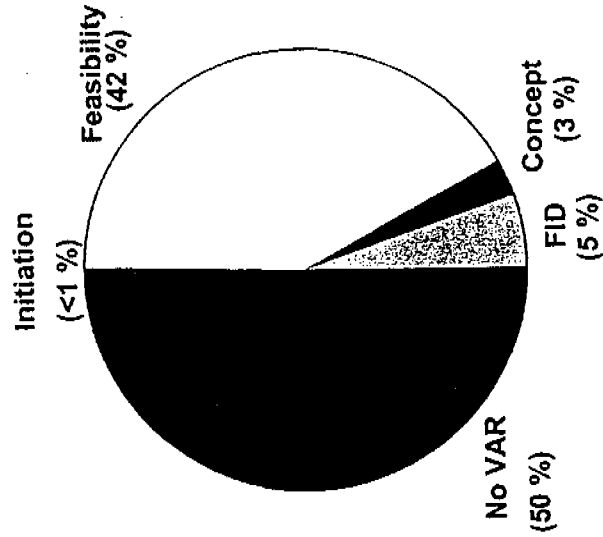
DB 07485

36 Projects with >20 mln spend excluding Major Options e.g. Bangeestan, Saudi Gas

MAJOR PROJECTS WITH FID IN 2001 - continued

Country	Project	2001 Capex	2001-2005 Capex (Risky)
Norway	Kollsnes and Vestprossess Upgrade	0	53
Philippines	Malampaya Oil Rim Devt - unrisked	6	83
Russia (Rest of)	Salym	29	129
Syria	Souedie	0	26
UK	Goldeneye	7	151
UK	Loyal Phase II (W.o.S)	31	65
UK	Puffin Field Development	9	62
UK	Schiehallion Extension Claw	9	57
UK	Scoter	0	55
UK	Schiehallion North Channel	0	21
USA	Holstein	26	327
USA	Habanero	0	39
USA	Manatee	14	33
USA	Alex Gas Devt Phase 2	22	22
Venezuela	02 - 05 Further Dev. (1)	0	64

VAR coverage in 2001
on Total Capex



Total Capex from 2001 FID
projects circa \$4 bln in
plan period

DB 07486

36 Projects with >20 mln spend excluding Major Options e.g. Bangeestan, Saudi Gas