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17 document bearing Bates production
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19 0541.)..... 387 18
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24 E-mail Chain, December 18, 2003.)..... 415 17
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5 (Darley Exhibit 25 for identification,
6 document bearing Bates production
7 number DARLEY 1097 through DARLEY
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From: VanBaren, Desiree D.
To: Brass, Lorin L.L.; Cook, Linda Z.; DARLEY, JOHN J.; Dubnicki, Carol C.; Gardy, D.; Megat, Zaharuddin Z.; ROTHERMUND, H.C.; Sprague, Robert R.; VANDEVIJVER, WALTER W.; Warren, Tim T.
CC: Bouchla, CHRYSSOULA C.; BROWN, Sue S.; BUEHLER, AGNES A.C.M.; Clyde, Fiona F.; Geerdink, Hennie H.; Middendorp, Ellen M.; SKINNER, MARION M.; VANWENT, R.; Voogt, Astrid A.
BCC:
Sent Date: 2001-06-07 14:09:05.000
Received Date: 2001-06-07 14:09:39.000
Subject: EXCOM EPT Highlights May 2001
Attachments: May01.doc

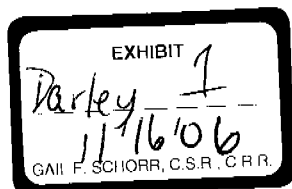
Dear All,

Please find attached EPT Highlights to be included in the EP Excom booklet.

Thanks,

Best Regards,

Desiree van Baren



EPT HIGHLIGHTS MAY 2001

EPT-A

PROCESS HIGHLIGHTS

"Ahead of the bit" rock sequence prediction using seismic wave-field modelling and real-time VSP processing

One of the key elements for the safe drilling of OKIOC's discovery well last year, was the acquisition of a Vertical Seismic Profiling (VSP) data set some 350 metres above the reservoir. This well, in the Northeast of the Caspian Sea, intersected the large Kashagan structure. The VSP survey allowed a very accurate, real-time prediction (ahead of the bit) of potentially over-pressured geological units. Subsequent penetration of these predicted units was within a few metres of the original prognosis. The combination of Shell's sophisticated seismic wave-field modelling and third-party VSP processing produced this very accurate look-ahead capability. The technique allowed timely verification of pre-defined casing points in a safety-critical situation.

New EPT-AGI focussed study process delivers integrated solution in record time

A very short time was available to submit a bid to the Egyptian government to acquire a producing asset. A four-week workshop involving over thirty staff from : SENV, SepTAR, SGS and partners, was held to generate ranked economic development scenarios for this asset. A subsequent VAR-2 review resulted in only minor modifications, and SENV was able to participate in this opportunity.

Stakeholder Management: A Partner Opts for SEPTAR Special-Core Analysis Expertise

Facing a Q3 2001 deadline to obtain accurate relative permeability data on a deepwater reservoir, BP-Angola staff accepted an offer from Shell Angola to obtain the data from SEPTAR. Special core analysts in SEPTAR had already established a good environment for this type of cooperation by publishing papers that illustrated the accuracy of their rapid, low-cost analytical method. A SEPTAR core analyst subsequently visited BP research staff to launch the joint project.

Simulation study of deep water disposal (DWD) in Marmul field (PDO)

The produced water at Marmul is currently being disposed in shallow sands, which has a high potential to contaminate potable water. PDO has, therefore, initiated a project that would allow the disposal of produced water into deep formations. Work with simulator PWRI-FRAC/ MoReS indicated that the well which is not injected at all must be suffering from well problems.

VIW workshop: Water Management in MRH

A value identification workshop on water management in MRH countries was organised by EPB to gain further insight into differentiating technology and expertise provided by the Water to Value (W2V) team that could facilitate the identification and maturation of new business opportunities in the area of water management.

The enabling key differentiators were identified as

- Optimisation of surface water handling facilities to remedy and prevent pollution
- De-salination of aquifer water with flare gas
- Reservoir modelling capabilities (inc. fracture and waterflood simulations)

Shell Oil / SepTar Fluids Team

With the upcoming new regulations coming from the MMS on the disposal of synthetic based cuttings in the Gulf of Mexico, the mud and cement process team has been charged with preparing for compliance. AWT did a complete rig audit at the end of last year on the state of the solids control equipment for our GOM fleet. We then built a Shell specific solids control school that would deal with MMS compliance and developing Best Management Processes on the rig. The class goes through the new regulations first to get everyone on board and then goes step by step through the solids control process and impacts on compliance. We also highlight the advantages that cleaner fluids have to drilling, but the compliance seems to hold their attention. The rigs have begun making necessary changes in their system and the crews are attending the meetings in higher than expected numbers. We are also seeing the vendors getting on board and sending in their people who deal with Shell to the schools. This is an excellent joint effort and will put Shell way ahead of the game when the new permits come out in August/September. Shell is pushing for early compliance.

Shell Internal Audit Result

The GameChanger Process audit was undertaken by Shell Finance Services to assess whether the framework of relevant business controls was fit for purpose and operating effectively. The audit also sought to identify control

EPT Highlights

May 2001

weaknesses and seek agreement for controls improvements. The overall assessment of the framework of business controls put in place to support STEP's GameChanger Process was "GOOD".

VAS team

EPA: B11 FDP VAR 4; West-East pipeline VAR 1; Sitikit VAR 2;
 EPG: Onshore exploration portfolio VAR E; Cawthorne Channel VAR 4 f.u.; Onshore Exploration portfolio VAR E; Bonny integrated development VAR 4; Erha project VAR 3; Otumara AGG VAR 2.
 EPM: GPC Arca B VAR 2; Sakhalin II phase 2 VAR 3 f.u.;
 EPN: Honeycomb VAR 2
 Other: Far East/Australasia cluster VAR E; Nigeria LNG Plus VAR 2/3; Middle East VAR E.

TECHNOLOGY HIGHLIGHTS

Cauldron 3D Modeling impacts Woodside's Mauritania Exploration effort

Last year, a Cauldron3D basin modeling simulation made by Woodside and peer reviewed by SEPTAR had been performed at an early stage of a greenfield exploration project in Mauritania. The Cauldron 3D results played a high profile role in the location and design of the 3D seismic survey and subsequent prospect and lead ranking. A recent well (Chinguetti-1) has intersected several oil bearing sandstones and confirmed the excellent predictive capabilities of Cauldron3D.

Feasibility of chemical water shut-off treatments in Kapuni gas wells in STOS

In Shell New Zealand (STOS), the occurrence of high water production in some gas producers has started to adversely effect well productivity. In order to avoid early abandonment of the well due to high water cut, STOS wish to apply selective chemical shut off of the water.

To that end the feasibility of chemical water shut-off treatments in three Kapuni wells (KA-11, 12 & 14) was investigated. The high water cuts in KA-11 & 14 were found to be coming from the edge water while that of KA-12 was cascading down from an upper aquifer through fractures. A self-selective chemical system such as the newly developed polymer - zirconium system was recommended for the reduction of water inflow in KA-11 & -14. Special gel system such as the Marcit gel system that could easily be bull-headed was recommended as a viable option for shutting-off water in KA-12. The Marcit gel will only enter the fracture path and not the rock matrix, thereby eliminating formation impairment.

Fahud asset study achievements

A Fahud Asset Study was closed out. The work focused on the thick Natih E layer in which a waterflood development scheme is currently being implemented to increase and accelerate recovery compared to the ongoing gas-oil-gravity-drainage process.

The results include a new coupled fracture and matrix model. The predictive capability of this fracture model was successfully tested against several newly drilled wells. PDO estimates the impact from these studies as follows:

1. Increased POS from 40% to 60% for 2001 and 2002 reserve bookings, thereby increasing the risk volume of reserves by 1.9 mln m3
2. Better targeting of appraisal wells leading to estimated 25% reduction in total well cost equal to some 3.7 mln \$
3. Similar improvements (not yet quantified) are to be achieved by PDO's Geosolutions Team implementing the SEPTAR tools and methodology to the remaining waterflood scope areas/layers of the Fahud Field. Current scope volume for this is estimated at 11 mln m3 (riskd) reserves.

Big win for both SEPTAR, BSP

A 7 well horizontal well completion campaign with BSP was concluded. The campaign enabled training 2 additional AWI team members in open hole gravel pack design and onsite supervision. It also set a Shell record for gravel placed in a horizontal well at 139,000 lbs. in a 930m (2,900 ft) of open hole interval with only 50% fluid returns. The campaign has significantly expanded the envelop of opportunities for the technology, with significant improvement of well economics for the user.

Cableless Gas Lift Valve

The Champion 311 well has been completed and installed the first oil producing cableless gas lift system. This involved a revolutionary design of a gas lift valve that has a high turndown ratio, infinite position control, redundant position indication, and erosion resistant flow pathways.

Strategos Summit held in May

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GameChanger Team members attended Gary Hamel's Innovation Internal Markets Summit. A number of companies' innovation teams attended. GameChanger was presented as one of the "best in class" case studies on how to do front-end innovation in a large company.

EPT-D

HSE

It is with deep regret that we report a fatality on the Brutus Project on Friday May 18, 2001. A rigger, employed by Heerema Offshore, was crushed under a 3 ton beam whilst preparing for its offloading from the supply boat to the Hermod crane vessel. The Hermod is currently at the Brutus location driving piles in preparation for the arrival of the TLP. A full investigation was launched the same day and will be completed within the month of the incident.

Care for People

The SDS Care for People programme was rolled out to all staff during a full 'SDS' day engagement session. The plan addresses key issues and concerns raised by staff in the Shell People Survey and focus groups, such as communication, work/life balance, personal development, coaching and leadership. The plan describes the desired stage for SDS by mid 2002 and action steps needed to reach it. The 'SDS' day further served to enhance overall affiliation of staff to both Shell's global DW business as well as to the SDS/STEP organisation. An external motivational speaker addressed the customer care issues and a fair with 25 booths allowed staff to learn and share about both the business as well as the care for people programme. Reactions of staff to the event were very positive.

Capital to Value

Brutus – GoM

- The Brutus project commenced offshore installation with Heerema's derrick barge "Hermod". Pile driving is complete and the tendons are now being installed in preparation for the arrival of the TLP.
- The platform commissioning at Corpus Christi is complete and the TLP sailed for its offshore location on Saturday May 26, 2001.

Nakika – GoM

- The Na Kika hull design was completed at ABB for a total cost that was 21% below target cost. This was an exceptional achievement given that the original target was set at a 20% reduction in cost for an equivalent design based upon Brutus experience. The saving is \$0.5 million.
- A design breakthrough in riser configuration eliminated the need for buoyancy on all risers. An earlier design already reduced the buoyancy requirement delivering a saving of \$ 10 million; this additional work allowed to take out a further \$ 5 million.

Serrano/Oregano- GoM

- The Oregano Electrically Heated Flowline and Riser were successfully installed on Auger.

Finset - GoM

- The Einset project successfully passed VAR4.

Manatee - GoM

- The Manatee project passed VAR3. The Manatee project comprises a two-well subsea system tied back to the Bullwinkle platform through the existing Angus subsea infrastructure. The project team was recognised by the VAR reviewers for using value engineering, peer assists, and benchmarking, all of which in manner considered as "best practices" and to be carried forward to future system selection efforts.

Volume to Value

Bonga field – Nigeria

The second Bonga development well has penetrated the primary objectives almost exactly as prognosed, encountering a total of 86 feet of high quality oil bearing sand at two levels. The well is now being deepened to further appraise the infield opportunity proven up by the first development well.

Bonga SW – Nigeria

Exploration well Bonga SW found significant hydrocarbons, vindicating the seismic interpretation and prognosis. A Project Acceleration Team is being put in place to mature an appraisal well location for drilling in Q3 2001, and to move this project as rapidly as possible through the VAR tollgates to FID.

Exploration Blocks Brazil

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A successful VAR "1 1/2" was held to review exploration well results to date, proposed appraisal drilling activities, an progress on work towards development project feasibility as well as to provide a justification for extension of the rig contract. Recommendations were identified for continued activities leading to VAR2 in mid 2002.

Erha – Nigeria

- The IPR (Exxon equivalent to VAR3) and Shell's VAR3 for the Erha Project took place by a joint Exxon-Shell review team. The VAR recommendations are being studied for implementation; no showstoppers were identified to reaching FID by end 2001.
- The Erha-3 appraisal well has spud to confirm reservoir extent and continuity. Several SDS recommendations, amounting to savings of some US \$3.0 million were incorporated by ExxonMobil in the final drilling program.

Deepwater Knowledge Sharing

SDS maintains an active community network to capture, share and apply learnings on all aspects of the global deepwater business. Examples of recent knowledge sharing events are:

- The **Pan Atlantic Cretaceous Workshop**, organised jointly with Shell Canada, focused on all aspects of geology, geophysics, and play development for the active plays in Canada, Norway, Morocco, Gulf of Mexico, Brazil, Gabon, Nigeria, Angola and the "white zone". Thirty-six Shell staff participated in the workshop.
- The **Shell Geochemical Workshop** attracted over 40 staff from around the globe and focused on exploration, fluid sampling & production geochemistry; basin modeling & technology; and the current state of the geochemical skillpool.
- SDS also hosted the **Global Development Planing Workshop**. Attended by development planners and managers from 10 operating and service units, the objectives were to foster community networks and contacts within the deepwater arena, find areas of common concerns and ensure dissemination of best practices and new technologies and techniques. Building on a key issue from previous workshops, significant time was devoted to discussing Shell's role as a non-operating partner.

Global DW rig fleet management

The projected deepwater rig idle time in 2001 remains at around 5%, pending fixing the STENA TAY programme beyond August. Opportunities for the TAY include appraisal work for Shell Brasil or for Petrobras; both opportunities are being actively worked to ensure timely resolution. The financial exposure of 5% idle time corresponds to \$ 44 million, including an under-recovery (realised rate vs. contractual costs) of \$ 17 million for SEAPOS.

EPT-V**Well Dynamics**

The Well Dynamics joint venture between Shell and Halliburton formally closed on 22 May, with document signings, cash transfers, and board meetings thereafter.

STIP/Twister

The STIP and Twister deals between Shell and Beacon and 3i Group were signed in May. Petronas has approved the purchase of the first Twister unit. The formal purchase agreement process is in progress.

SubSea Pump

Offshore rig testing for the Subsea Pump joint Venture, DeepEdge Technologies LLC, has confirmed the durability of the pumps and the capability of the separation process. The general patent TH0940 was issued in April and notice of patent allowance for the gas separation process, TH0940Y, has been received.

Momotombo Field, Nicaragua

Negotiations with the Ormat have been discontinued regarding Shell's potential participation in Momotombo geothermal field asset ownership, due to inability to reach mutually acceptable. Alternative options to partner in an operating geothermal venture are being investigated.

Offshore Technology Conference (OTC)

OTC attendance and discussions surfaced a number of potential new venture leads from external technology sources. In particular: eSeis (new seismic algorithms), SpaceData (satellite seismic data transfer), EDTII (advanced

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mud systems), Magwell (flow assurance) and Oxford Technology (wearable computers).

STV/STIP review

A short workshop, involving staff from STV, STIP, SEPTAR and STEP LT was held to identify issues associated with technology commercialisation, and agree a constructive way forward to address issues.

Following the workshop, a small team has been assigned the task to confirm Shell's overall objectives with respect to technology commercialisation and to recommend the appropriate structure to achieve this. A key objective is to remove the sources of misalignment in goals and responsibilities. The team will be led by Erik Vollebregt with representation from STV and SEPTAR. The team will submit their recommendations to the Technology Commercialisation Council (TCC) by end June.

E2Tech Governance

Baker Hughes has tendered a valid, legally binding offer to purchase Shell's 50% share of e2Tech. Shell has until 30 June to respond to Baker with a decision to either sell its shares or buy Baker's 50% shares for the stated offering price. STV is leading the assessment of strategic and financial issues, and will make appropriate recommendation (inclusive of way-forward strategy) to STEP management the first week of June.

EPT-C**Atlas – Improving the Way We Support the Business**

- The ATLAS Production environment is now "live" and is being populated with data converted from the legacy systems.
- Classroom training has commenced and feedback from attendees is very positive.
- Legacy phase out plans are nearing completion (cutover plans are being drawn up for roughly 40 legacy systems and 50 new interfaces).

Experimental support – helping keep costs down

EPT-CS assisted several SepTAR Wells Cluster teams in successfully carrying out a borehole strengthening treatment on Ursa A-11. Savings of over one-third on materials costs compared to what third party service companies would have charged.

Rijswijk Redevelopment Phase III 502F

The Phase III 502F for the Rijswijk redevelopment project has been approved and signed. This 502F covers all additional activities required to redevelop the site (excluding the Learning Centre) into a world class EP Global Office. The Phase III 502F has a value of approximately US\$ 138 million.

Contracting Process Workout

At a recent two-day "workout" workshop (initiated by SepTAR Wells cluster), customers and C&P process owner reviewed opportunities for efficiency improvements which will be implemented upon incorporation in the Manual of Authorities. The estimated manpower cost of actions implementation is US\$ 22,000, whilst the expected savings in the Wells Cluster due to efficiency improvements is US\$ 60,000. Similar benefits are foreseen in other SepTAR clusters.

EPT Rijswijk Office Supplies Ordered through Internet

As a result of a recent Shell Nederland tender, the regional contract for office supplies (previously held by Ahrend) was awarded to Corporate Express in April. Ordering now takes place through the Internet, allowing efficiency improvement in ordering & invoice processing. Some 70 staff have used the new service so far. It is planned to migrate this service to the Trade Ranger e-procurement system in future.

2000 Settlement WBSO subsidy

For the first time in four years the final settlement of the WBSO subsidy resulted in a higher subsidy amount than we originally applied for. This indicates that we are utilising this subsidy opportunity better than in the past. An additional subsidy of US\$ 200,000 will be received.

C&F Stress Survey

A survey addressing stress levels in C&F (excluding the Site Services groups) was conducted in February. Results indicate levels of stress higher than industry norms. A recommendation was made to conduct workshops to identify interventions and action plans. The findings and recommendation of the survey have since been discussed by the C&F Leadership Team, and with C&F staff at our May communications sessions.

EPT Highlights

May 2001

GI-D Approved Photocopiers

Shell has a global contract with RICOH for copying machines. The copiers can be operated as part of the computing network thereby reducing the number of network printers and copiers required. This will save the Belaire site some US\$150,000 to US\$ 300,000 annually when implemented.

2001 Q1 Quarterly Business Reviews

First Quarter business reviews were held with each of the Directorates within STEP. A major emphasis on this quarter's scorecard focused on "Care for People" issues and scorecards.

Proposed action plans were discussed within each directorate to address relevant business issues such as strategy issues, stress levels, billable hours/timewriting practices, service level agreements, etc.

EPT-ER

1. New Shell Technology Briefs "Time Lapse Reservoir Imaging" and "Wells getting Smart" have been prepared for use at OTC and subsequently.
2. Discussions have been held with London Science Museum on proposed sponsorship of exhibits at their new 'Antenna' area. Information has been received regarding an opportunity to place Shell solar and wind exhibits at the new permanent Energy exhibit which will be passed to Shell renewables.
3. Forthcoming visits to STEP Rijswijk include:
BAPETCO June 25th

EPT-HR&S**1. HSE Review in STEP**

An HSE review of activities in STEP shows progress since the audit of September 2000 and the assessment is that HSE can now be said to be fully in place, with a level of 2.5 having been obtained on the Assessment Questionnaire. However particular improvements are still identified as being necessary in the areas of Visible Leadership, Contractor Management, Incident investigation and follow-up as well as implementation of Sustainable Development plans. The review will be used as a basis for development of Volume II Business Plans.

2. VAR leaders SD Workshop

A successful workshop was held with VAR leaders, BIM's and other Sep'tAR staff, together with HSE & SD specialists, to raise understanding and more clearly define the features to address in projects and ventures at the various VAR stages.

The output will be refined and used by VAR team leaders, prior to incorporating in an updated VAR guidance document

Unknown

From: RAMBOUSEK, JIM J.C.
Sent: 18 September 2001 05:14
To: DARLEY, JOHN J.
Subject: FW: REALISING THE LIMIT



REALISING THE
LIMIT.doc

ohn,

This is for your information. Alf and I worked this up late yesterday to meet a 5 PM deadline for Dominique and Walter. RTL group is at a workshop in eastern Holland.

Jim

> -----Original Message-----

> From: Thorkildsen, Alf A.

> Sent: 17 September 2001 16:57

> To: Gardy, D.

> Cc: RAMBOUSEK, JIM J.C.

> Subject: REALISING THE LIMIT

>

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> Dominique,

>

> Please let us discuss if we should put part of this into the speech.

>

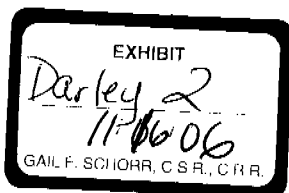
> I assume that you will give me a call back.

>

> Alf

>

DARLEY 0020



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Treatment Requested

REALISING THE LIMIT

DRILLING THE LIMIT

Drilling the limit will save some 400mill dollars as compared to a baseline in 1998. The main areas to be benefited are Sepco, Deepwater, Expro with some in PDO, and SPDC.

PRODUCING THE LIMIT

The PTL activities this year is estimated to contribute 100kboe /d which are in addition to the forecast coming from the Operating Unit at the time the PTL team start their work. Producing the Limit is normally realised over a two year period. The main areas to be benefited will be Nigeria, Oman and Sepco.

A further 100kboe/d will be identified for implementation by the end of 2002

VOLUME TO VALUE

Volumes to value is projected to identify 1000mill boe from discovered fields this year. This will be mainly categorised as scope for recovery resources with some being recorded to expectation and some to proven. The main areas for increased scope volumes are Nigeria, Expro and Sepco.

CAPITAL TO VALUE

Savings from the capital to value programme will identify potential cost reductions of some 250 million dollars this year. The savings come from improving conceptual design mainly prior to FID. The savings quoted is over the life of the project.

DARLEY 0021

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Treatment Requested

V00320021

Unknown

From: VanderSchoot, Ad A.
Sent: 19 October 2001 16:27
To: ANTHEUNIS, DAN D.; DARLEY, JOHN J.; PERCIVAL, IAIN I.D.R.; SULLIVAN, PAUL P.R.
Cc: Crocker, John J.M.; EVANS, STUART S.; MANN, PAUL P.J.; RUIJTENBERG, P.A.;
 VanderSchoot, Ad A.; Willis, ROB R.
Subject: Visit report Oman

John et al,

Please find attached a first impression of last weeks visit to Oman. The trip turned out to be very useful in terms of understanding/framing the issues, establish common ground, getting to know the players, engagement with the asset teams and joint development of a firm planning. At the end of our visit - during the close out presentation - I sensed a strong commitment from PDO at all levels and a high expectation that Septar will deliver!

A list of concrete follow up action items / reworked planning / who does what and when, will be issued shortly through Rob Willis/Piet Ruijtenberg.
 regards, Ad

Visit report Oman**Purpose**

Selection and scooping of projects that Septar will execute jointly with PDO

Visitors from Septar

- Piet Ruijtenberg
- Stuart Evans (V2V)
- Piet Ruijtenberg (EPT-AGI LT)
- Rob Willis (EPT-AGI Oman Country FP)
- Tom Hyde (EPT-AGI Technical Process Consultant, Petrophysics)
- Francis Clayton (EPT-AGI Technical Process Consultant, Production Technology)
- Rick Carter (EPT-AGI Technical Process Consultant, Production Geology)
- Phil Tudhope (SGSi, Field Engineering)
- Mike Tavener (SGSi, Field Engineering)
- Ad Van Der Schoot (BIM)

Report

We started of with a framing workshop, followed by detailed in-depth engagements with asset teams in the PDO organization. We covered all projects that PDO had been proposed according to two ranking criteria: securing NFA and developing new oil, mainly for the period 2002/2003.

During the visit Abdulla Lamki provided a third criterion: assessment of risk associated with both NFA and new oil in 2002/2003. He was very supportive of the Septar effort (he said he got more value for money out of Septar than the contractors) and at the same time was critical about his own staff as far as understanding of the real underlying problems is concerned (and then he referred to the absence of a risk/robustness assessment of the PDO portfolio).

Asset teams were very open and constructive and a good insight could be obtained regarding needs and urgency of the projects that had been pre-selected by PDO.

It became clear that in several of these projects PDO staff is struggling to maintain a good understanding of their fields. Hence some found it difficult to clearly articulate the problem on a field basis.

We agreed with PDO that a three-fold approach would be followed

- 1) A series of projects have been defined that will deliver proper field development plans. The first three were

agreed with PDO (1. Amin, 2. NIMR G, 3. Zauliyah), another 3 will be defined shortly. The first two projects will kick off immediately; the Zauliyah will start in January 2002 when additional appraisal wells will provide extra information. Since these projects will last well into the second half of 2002, we will try to identify early gains during execution of the projects, so that these hopefully can go into the 2003 business plan.

- 2) A series of "quick hits" have been identified. Quick hits are meant as project kick offs for the projects mentioned under 1), whilst at the same time they try to identify early gains which may effect the 2002 programme.
More extended (up to several weeks) quick hits can be used as deliverables in itself for smaller projects, which are in need for a specific help. Examples are Nimr C and Karim-West. For instance the Nimr C field could use some weeks of help to match static and dynamic reservoir model.
A key characteristic of these quick hits is that they have an immediate effect on the 2002 production levels.
- 3) A robustness check of the PDO portfolio (the major fields). This is really a review by some 2-3 experts (PG, RE disciplines) who will deliver a report within a very short period of time (weeks). PDO is likely to look to Septar for the resourcing of this task.

For all communication and project co-ordination related to those projects, the T-50 projects and the Carbonate BAA studies it was agreed that Rob Willis in EPT-AGI would be the focal point.

Action list

Rob Willis/Piet Ruijtenberg will provide a detailed action list. By the end of next week (Omani working week, hence COB Wednesday) PDO and Septar will have produced a complete schedule of activities and follow up action items.

Attachment

The attachment shows some of the most relevant viewgraphs presented at the close out session in PDO. Only the projects that start immediately have been planned, the other ones will follow shortly (before COB next week).



Visit report.ppt

Ad van der Schoot

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Tel: +3170311 3095
Email: a.vanderschoot@siep.shell.com
Internet: <http://www.shell.com/eandp-en>

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DARLEY 0023

SEPTAR Visit PDO 13th-17th October 2001
PDO - SEPTAR Projects

BACKGROUND

Shareholders meeting focus on

- robustness of 2002/3 plan
- and production enhancement opportunities
- SEPTAR committed 10 people, possibly increasing to 25
- PDO steer resulted in draft project plan (15 fields)
- Visit team review:
 - Opportunity framing day (alignment PDO / SEPTAR)
 - Gain overview of the projects

DARLEY 0024

OPPORTUNITY STATEMENT

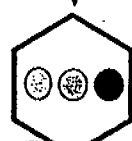
With the joint PDO/SIEP projects, we have the opportunity to accelerate the improvement of our understanding of PDO's reserves base and production potential, resulting in an acceptable and achievable medium term production forecast

This will assist in formulating 2002 and 2003 opportunities and creating field development showcases that should facilitate staff development resulting in a sustainable way of working and regaining shareholder confidence.

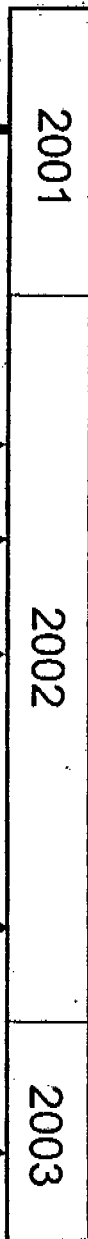
DARLEY 0025



NFA
Robustness



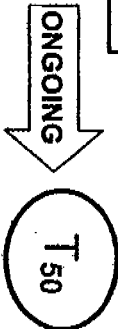
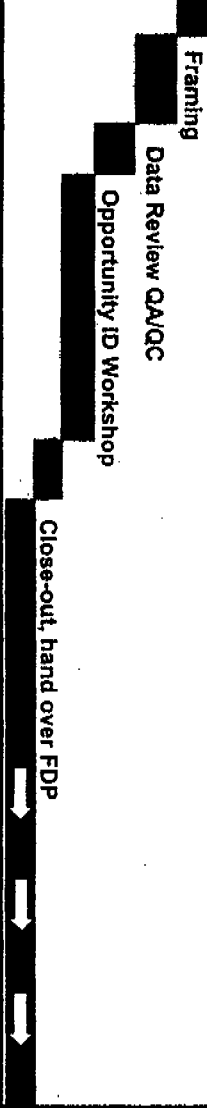
PDO Short Term Drilling Sequence / Activity Plan



W1 W2 W3

Opportunity ID W/S

Rolling Projects Plan - Flexible with Embedment



DARLEY 0026

SEPTAR Visit PDO 13th-17th October 2001

PDO - SEPTAR Projects

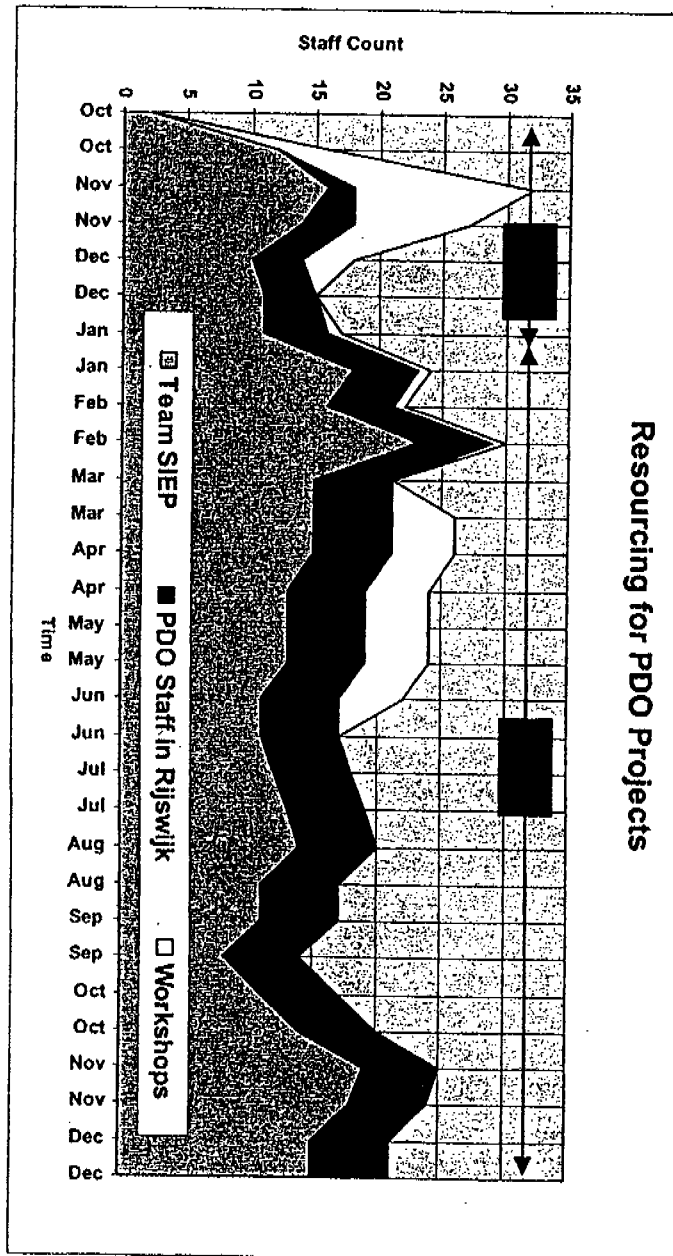
Status 17th October

- First two projects identified: Amin, Nimr G
- Third project probably Zauliyah (Marmul AK ?)
- NFA robustness work; outcome used for re-ranking
- Focused studies on Karim-W & Nimr-C by year end
- PTL type exercises on Burhaan/Musallim
- SIEP staff identified for first two projects
- More PDO staff still to be identified
- Typical project cost \$2.9m

(SIEP Staff ; PDO staff charge; VR charges; some software)

Field		2001					2002											
		Oct	Oct	Nov	Nov	Dec	Dec	Jan	Jan	Feb	Feb	Mar	Mar	Apr	Apr	May	May	Jun
Amin	Project	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5
Nimr G	Project	1	5	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5
Zaitiyah	Project						2	5	7			7	7	7	7	7	7	7
Marmul AK	Project											7	7	7	7	7	7	7
Fahud EFG?	Project																	
Nimr C?	Project																	
Amal W?	Project																	
Lekhwair U Shuait	Project																	
Karim W?	Project																	
Birba?	Project																	
Focused Support																		
Nath Full Field	PP Support																	
Nimr C	RE/PG Model			2														
Lekhwair T50	Screening Workshop																	
Karim W	Pilot Water Flood		2	2	4													
PTL Workshop																		
Mussalim																		
Burhaan																		
Carbonate Technical Screening Workshops																		
Qam Alam Carb Fields																		

DARLEY 0028



DARLEY 0029

PDO/SEPTAR PROJECTS

NFA ROBUSTNESS WORK

- Top 5 or 6 fields (new oil? Drillex?)
- End 2001, endorsement 2002 plan (not new opportunities)
- If plan not robust outline way forward
- Externally sourced (maybe PDO PT, PP)
- Will become part of program build process (internal VAR team)
- Limited involvement from PDO asset teams (Morn/evening meeting)
- Hands on working of the data
- Develop criteria (consistent approach)

FOIA Confidential
Treatment Requested

V00320030

DARLEY 0030

Unknown

From: Lawal, Jimi O.
Sent: 21 February 2002 16:53
To: Brass, Lorin L.L.; Cook, Linda Z.; DARLEY, JOHN J.; Dubnicki, Carol C.;
matthias.bichsel@sepiv.shell.com; SPRAGUE, ROBERT M.; VANDEVIJVER, WALTER W.;
WARD, BRIAN B.J.; Warren, Tim T.
Cc: Gardy, D.; Khan, Rahim R.
Subject: 2001 EP Appraisal Document

Importance: High
Sensitivity: Confidential

Ladies & Gentlemen,

Attached please find the final full version of the 2001 Appraisal document. We have also dispatched to you the paper copy. Please note that the version sent to London yesterday for onward distribution to members of the CMD did not include Appendix IV.

Regards,
Jimi Lawal
Finance & Business Analyst
Shell International Exploration and Production B.V.
Carel van Bylandtlaan 30, Postbus 663, 2501 CR The Hague, The Netherlands
Tel: +3170377 2462 Fax: 2460 Other Tel: mobile: +31 652521015



ASR_ExCom
2001.pdf

DARLEY 0031

PROJECT REALISATION
MINI-FRD

EXHIBIT

Darley 3

11/16/06

GAIL F. SCHORR, C.S.I., C.R.R.

FOIA Confidential
Treatment Requested

RJW00221173

DARLEY, JOHN J.

From: Hasan, Mahdi S.M. /777124
Sent: 28 September 2001 23:14
To: Darley, John J.
Cc: Bichsel, Matthias M. /777264
Subject: Project Delivery Study



Project delivery
study.doc

John,

Attached is the tidied up Terms of Reference. I have added:

1. Heinz' comment about validating how a solution sits with local needs
2. Clarified that study will focus on Project Delivery with Exploration, Sub-surface and Production Operations staying where is
3. Team members are required 75% of time.

Other editorials are just to add clarity.

The people you need to write to, asking for 75% of their staff's time are:

For Bob Jefferis (SEPCo): Raoul Restucci & Dave Lawrence

For Peter Wyatt: Ron van den Berg & John Barry

For Jay Smith & me! : Matthias Bichsel & yourself!

(ps I have told Matthias that I will be difficult about releasing Jay and myself)!!!

I have spoken to Bob, Peter and Jay so it will not come as a surprise to them. I am sending them an advance copy of the TOR.

If you copy me in on the emails, I will follow up with the detailed arrangements with the individuals.

Thanks

Mahdi

Study on Major (Greenfield) Project Delivery in E&P

Purpose of Study

The purpose of the study is to respond to the question "What will it take to achieve a consistent and improving project delivery performance right across E&P that is similar to the record achieved in Deepwater projects by SDS?"

Deliverable from the Study

- ***Present an understanding of the principal contributors*** in the Shell Deepwater Services set up that has enabled:
 - Consistent and repeated project delivery to cost and schedule promises
 - Cost & schedule targets for major projects being consistently and significantly improved from project to project
 - Leverage and transfer of knowledge from project to project to create a "single learning curve" and associated cost, schedule and operational improvements
 - Technology development targeted to business objectives and its rapid deployment to keep Shell's development frontier at the leading edge
 - Repeated and consistent creation of new ground-breaking concepts such as Min DVA, pipe-in-pipe and heated pipelines, flow assurance technology, etc
- ***Present the organisational philosophy*** and the related skills development and skills management strategy that has supported this project delivery performance
- ***Analyse and describe*** how the principles and fundamental work processes of the SDS project delivery experience and inter-relationships with OUs can provide the basis for a major (greenfield) project delivery strategy and organisation that is applicable across all of Shell E&P.
- ***Recommend:***
 - Organisational, governance and relationship models that will achieve the above (between a Project delivery centre of excellence, asset holding OUs and Excom in its governance role of both).
 - The people's skill development plan, including skills' mentors, to formalise the competence required for project management and to establish project delivery as a key contributor within the EP value chain.
 - An outline of the Change Management Plan to communicate and achieve acceptance of the recommended model.
 - An outline plan and schedule of how transition to the new model may be undertaken including the plan for how the "Whole System" design (particularly strategy and systems) will be developed.

Methodology and Focus of the Study

A 3-person study team (devoting 75% of its time through the study period) will work in an FRD style and be supported throughout by an "as required" Steering Group of senior people to act as mentors and sounding boards. Interim presentations will be according to need (individually or collectively and in one location meeting or virtually) with the final presentation to the full Steering Committee.

The team will:

- Use available data from SDS of its strategy (without spending time on proving performance through benchmarking data) and establish applicability to the new environment.
- Interview stakeholders in Excom and EPLF to establish needs, opportunities and constraints applicable to various models being studied.
- Examine organisational models, analyse each for how well it achieves the key elements that lead to an SDS-type project delivery performance, check each one's alignment with the Shell Group E&P Governance model and examine how it responds to needs such as local licence conditions, compliance with stakeholder aspirations such as local content, etc
- The study will focus on capability for delivering engineering projects. To this end, it will examine how each model will interface with the other EP value chain contributors within the OUs (e.g. Exploration and sub-surface responsibility, Production Operations, etc).

Study Schedule

Kick off study team: Mon 8 Oct 2001
 Final presentation: Mon 12 Nov 2001

Teams

Study Team: Peter Wyatt, Nigeria Project Review Consultant - (Team Leader)
 Bob Jefferis, Development Manager SEPCo
 Jay Smith, Process Manager SDS

Team Mentor/Coach: Mahdi Hasan, Vice President SDS

Steering Team	John Darley, Director STEP	Raoul Restucci, CEO SEPCo
	Heinz Rothermund, RBD	Zaharuddin Megat, RBD
	Carol Dubnicki, HR Director	Ron v. d. Berg, MD SCINS
	Mahdi Hasan, VP SDS	

Estimated Cost

The estimated cost of the study (Time writing by the team, travel costs and other incidentals) is \$ 400,000. (The cost estimate is based on the team's base location being New Orleans during the study period).

To VPR Forum members:

Following the recent decision to cancel the October VPR forum meeting, we have reviewed the way forward and would like to share the following outline.

1. At the EXCOM Away-day on September 14, the need to enhance the EP project management capability (along with the need to strengthen the profile and identity for all EP discipline skills) was firmly endorsed. Mahdi Hasan is being asked to address this issue in time for the Forthcoming December 2001 EPLF.
2. First priority is to confirm/validate the VPR role and objectives in its contribution to the strategy that may emerge from the above study, and thereafter obtain EXCOM / EPLF support for this role and commitment to make it work.
 - The basis for the role definition will be the FRD output / workplan for the VPR as defined over 2 years some 18 months ago (??)
 - Mahdi is charged to prepare a sharply focussed document which can be used as the basis for a discussion with VPR forum members who will be attending the Surface Odyssey event in November 2001. We will not look for "formal" endorsement at that event (since we may or may not have a representative selection of forum members), but we will use available forum members as a sounding board and look for input/challenge to the proposed VPR role.
 - We will ask the START team to provide a resource to help frame the VPR role (in a session to be attended by yourself, myself myself, Robin Hutchinson, and + others as necessary).
3. In parallel to the VPR role definition, we will also look to the possibility of strengthening the C2V team by combining resources within EP part of the SGS team. START.
 - Dave Sands will be asked to come up with a formal proposal for the future organisation of the C2V team to be assessed by Mahdi, Dan A., Boersma, Frith and myself.
 - The proposal will also be shared with VPR forum members at the Surface Odyssey in November.
4. EPLF commitment will be required (to formally endorse the nomination of key representatives to the VPR forum in its then defined role to help improve EP-wide project delivery performance).