



opment Through Participation

# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

# CAPE TOWN INFORMATION-SHARING MEETING

Date: 11 November 2013

Time: 17h30

Venue: Granger Bay Hotel School

No.	Item	Action
1.	INTRODUCTION AND OBJECTIVES OF THE MEETING	
1.1	Nomi Muthialu (NM) of NMA Effective Social Strategists (NMA) welcomed everyone to the meeting and provided a brief background to the project (list of attendees is attached). She said that Shell South Africa Exploration B.V. (Shell) was granted an Exploration Right for the Orange Basin Deep Water Licence Area in February 2012 and subsequently undertook a seismic survey in terms of their approved Environmental Management Programme (EMPr). Based on an analysis of the seismic data, Shell proposes to drill one or possibly two exploration wells. She outlined the legislative requirements that Shell is required to comply with and said that CCA Environmental (CCA), in association with NMA, has been appointed by Shell to undertake the required environmental processes.	Note
1.2	NM explained that the objectives of the meeting were to provide an opportunity for interested and affected parties (I&APs) to be involved in the project, provide a description of the proposed exploration drilling and Impact Assessment process, detail the legislative processes that Shell is required to comply with, ensure that all potential key environmental issues and impacts are identified, and to identify any potential environmental issues and impacts requiring further investigation.	
2.	PRESENTATIONS: PROJECT OVERVIEW	
2.1	Piet Lambregts (PL) of Shell presented an overview of the project covering the location of the licence area, a geological section of the Orange Basin, the seismic surveys that have been undertaken, the well location, drilling programme and drilling procedure as well as the sea and land based support likely to be required during implementation. (Refer to Appendix B).	Note
2.2	Jeremy Blood (JB) of CCA presented an overview of the impact assessment process covering the legislative requirements, impact assessment focus areas and subsequent specialist studies that will be undertaken. He also presented an overview of the public participation process that was being followed for the basic assessment and amendment of the existing EMPr. (Refer to Appendix B).	14016
3.	QUESTION AND ANSWER SESSION	
3.1	Karl Otto (KO) of the South African Maritime Safety Authority (SAMSA) noted that the maritime coordination centre needs to be informed of the transport of workers to and from the drilling vessel during operation, so they can assist in an emergency.	Shell
3.2	KO wanted to know if there is a pollution plan for the project.	
3.2.1	PL responded that oil spill and emergency response plans need to be in place before implementation begins. The basic assessment currently being undertaken will guide these plans.	Shell
3.2.2	Peter Mijsbergh (PM) of Shell added that all legislative requirements will be adhered to and that SAMSA will be included in the plans where required. He said CCA will include this in their assessment.	CCA

3.3	KO informed the meeting that the 500 metre exclusion zone that will be in place around the drilling vessel will need to be promulgated in conjunction with the South African Navy Hydrographic Office. He said traffic numbers and notices to mariners need to be communicated to SAMSA.	Note
3.3.1	Jonathan Crowther (JC) of CCA concurred and added that generally a standard navigation warning is sent out as part of the operational plan.	Note
3.4	KO explained that SAMSA need to know what vessels are operating where because they are responsible for notifying marine traffic. KO also noted that SAMSA has a good idea of the number and direction of vessel traffic in the project area, should this be required for the assessment.	Nete
3.5	Jake Laubscher (JL) of 6 Sigma Naval Architects asked if there would be service delivery opportunities to support the drilling operations.	Note
3.5.1	PL replied that there will not be many service delivery opportunities although some of the supporting services could be sourced from South Africa. He said there will be more opportunities if the drill ship is used rather than the semi-submersible drill rig.	Shell
3.5.2	Janine Nel (JN) of Shell added that the contact details of Shell's tender department can be made available once an Environmental Authorisation is received.	Note
3.6	KO wanted to know if the data from the seismic survey is available to the public.	
3.6.1	PL explained that the speculative data is the property of the survey contractor and Shell is only leasing it from them. He added that the data was given to Petroleum Agency South Africa (PASA). Mthozami Xiphu (MX) of South African Oil & Gas Alliance (SAOGA) said that after four years it will become the property of the state and therefore available to the public.	Note
3.6.2	KO noted that the seismic survey was done in the South African 200 mile Exclusive Economic Zone (EEZ) so according to him, technically all the data belongs to the state.	Note
3.7	MX enquired whether Shell need the drill cuttings for analysis and information purposes.	
3.71	PL responded that Shell don't use the drill cuttings from the first stage of drilling in preparing the well once the Blow-out Preventer (BOP) is installed but added that other companies could be interested in data obtained from them. He said the data from these cuttings is of no real interest to oil companies.	
4.	WAY FORWARD AND CLOSURE	
4.1	NM thanked all for attending. She noted that participants had until 2 December 2013, when the current 30-day comment period closes, to submit further comments on the project. She referred to the comments sheet included with the Background Information Document (BID) distributed at the meeting and invited participants to complete these and hand them in after the meeting or to send them through to NMA.	Note
4.2	She outlined the process to be followed going forward which is that the specialist consultants will conduct their specialist studies. She said the draft Basic Assessment Report (BAR) and draft EMPr Addendum will be prepared and made available for public scrutiny during a further 40-day comment period. A second round of information sharing meetings will take place during the 40-day comment period between February and March next year. NM then closed the meeting.	Note

ATTACHMENT A

# LIST OF ATTENDEES

No.	Name		Organisation
1.	Anschen Friederichs	(AF)	Sunbird Energy
2.	Adrian Strydom	(AS)	South African Oil & Gas Alliance
3.	Claude Vanqa	(CV)	Shell South Africa Exploration B.V.
4.	Ebrahim Takolia	(ET)	South African Oil & Gas Alliance
5.	Gheneez Munian	(GM)	Shell South Africa Exploration B.V.
6.	Jeremy Blood	(JB)	CCA Environmental
7.	Jonathan Crowther	(JC)	CCA Environmental
8.	Jan Willem Eggink	(JE)	Shell South Africa Exploration B.V.
9.	Jake Laubscher	(JL)	6 Sigma Naval Architects
10.	Janine Nel	(JN)	Shell South Africa Exploration B.V.
11.	Karl Otto	(KO)	South African Maritime Safety Authority
12.	Mandy Kula	(MK)	CCA Environmental
13.	Mthozami Xiphu	(MX)	South African Oil & Gas Alliance
14.	Nomi Muthialu	(NM)	NMA Effective Social Strategists
15.	Nigel Rossouw	(NR)	Shell South Africa Exploration B.V.
16.	Oliver Tasbert	(OT)	Shell South Africa Exploration B.V.
17.	Piet Lambregts	(PL)	Shell South Africa Exploration B.V.
18.	Peter Mijsbergh	(PM)	Shell South Africa Exploration B.V.
19.	Pieter Mocke	(PMo)	NMA Effective Social Strategists
20.	Sarah Wilkinson	(SH)	Capricorn Fisheries Monitoring CC

# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE COAST OF SOUTH AFRICA

	NMA Eff	ective So	cial Strategists			Attendar	ce Register
Date	11 November 2013	Time	17h30 - 20h00	Venue:	Granger Bay Hotel School Beach Road, Mouille Point	Туре	Information Sharing Meeting

No.	Individual Details	Address	Contact Details	Signature
	Name & Surname:	Physical:	Tel :	
	Janine Nel		Fax :	
	Company/Organisation:	Postal:	Cell :	
	Shell		E-mail :	
	Name & Surname:	Physical:	Tel :	
	Jeremy Blood		Fax :	
	Company/Organisation:	Postal:	Cell :	
	CCA		E-mail :	
	Name & Surname:	Physical:	Tel :	
	Nigel Rossound		Fax :	
	Company/Organisation:	Postal:	Cell :	
	Shell		E-mail :	
	Name & Surname:	Physical:	Tel :	
	Piet Lambregus		Fax :	
	Company/Organisation:	Postal:	Cell :	
	Shell		E-mail :	
	Name & Surname:	Physical:	Tel :	
	Claude Vanga		Fax :	
	Company/Organisation:	Postal:	Cell :	
	Shell		E-mail :	4



Development Through Participation

No.	Individual Details	Address	Contact Details	Signature
	Name & Surname:	Physical:	Tel 021: 938 3310	
	Karl OTTO		Fах :	(P)
	Company/Organisation:	Postal:	cell :0828122991	T
	SAMSA		E-mail : Kotto@ samsa.	otg. 29.
-	Name & Surname:	Physical:	Tel : 021-4014140	12
	Anschen Fairparchis	BUTTE IB, NAUTINA, THE WATERCLUB	Fax :031-4014198	
	Company/Organisation:	Postal:	Cell :0834427650	
	SUNBIND ENERLY		E-mail : pfareonicus@Sunt	sidering y. com.
	Name & Surname:	Physical:	Tel : 0823047177	
	Ebraham Tcholus	4/60,0 Strar, Capa Town	Fax :	etalolia D
	Company/Organisation:	Postal: cy abet	Cell :	ctaloluil suoja-uz-za
	SA OILE Gr Allince		E-mail :	~
21	Name & Surname:	Physical:	Tel :	-mxiphu@
	ONTHOZANAY KIPHU	ι,	Fax :	Sacqa, org 20
	Company/Organisation:	Postal:	Cell :0824536745	2 0
	SA OIL YGAS ALLIANCE		E-mail :	V
	Name & Surname:	Physical:	Tel :	
	OLIVER TABER.		Fax :	
	Company/Organisation:	Postal:	Cell :	
	SHEIL		E-mail :	~
-	Name & Surname:	Physical:	Tel :	
	Pieter Mocne		Fax :	
1	Company/Organisation:	Postal:	Cell :	
	AMM		E-mail :	1 2

0.	Individual Details	Address		Contact Details	Signature
	Name & Surname:	Physical:	Tel	:02/46/11/8	
	MANDY RUCA		Fax	:	Cart
	Company/Organisation:	Postal: 1.0. BUX 10/45	Cell	•	1 W
	CEA	CALGON SOUTHE	E-mail	: MANDY ECCACINUTION ME	tol.co.24 Ma
	Name & Surname:	Physical:	Tel	:021461-1118	A IT
	Jonathan Crowther		Fax	• • •	1 the M
	Company/Organisation:	Postal: PO. Box 10145	Cell	:082 177/477	Monthe
	CEA	CALEDON SCENARE	E-mail	: jonathue season	formetal. co
	Name & Surname:	Physical: Media City	Tel	:0828028249	0
	Peter MysBeegh	10 Rup VASUA LA GAMA	Fax	:	Sa
	Company/Organisation:	Postal: Doct CPT	Cell	:	0
-	SHell		E-mail	: P. Misserrer	Hell. Con
	Name & Surname:	Physical:	Tel	: P. Misserto: :021 4756226	
	SARAH WILKINSON	UNIT IS, FOREEGATE SQUARE.	Fax	:	
	Company/Organisation:	Postal:	Cell	:	
	CLAPFISH SA	A	E-mail	:Surah@caphsh.	co.24.
	Name & Surname:	Physical: SAOGA	Tel	:	00
	ADRIAN STRYLOM	4 LOOP ST. CT:	Fax		All
	Company/Organisation:	Postal: 604-4 LoopST	Cell	:0837787	13 XIV-
		CAPE TOW	E-mail	: ASTRYD on @S	acide. are
	Name & Surname:	Physical:	Tel	:	11 0
	Nomi Muthialu		Fax	• •	
	Company/Organisation:	Postal:	Cell	: /	IN
	AMA		E-mail	••••••••••••••••••••••••••••••••••••••	1

No.	Individual Details	Address	Contact Details	Signature
	Name & Surname:	Physical:	Tel :	
	Jan WillemEggink		Fax :	
	Company/Organisation:	Postal:	Cell :	
	shell		E-mail :	
	Name & Surname:	Physical:	Tel :	
	Gheneez Munian		Fax :	
	Company/Organisation:	Postal:	Cell :	
	shell		E-mail :	/
	Name & Surname:	Physical:	Tel :	
	Jake Laubscher		Fax :	
	Company/Organisation:	Postal:	Cell :	
	6 Sipma Naval Are	injects	E-mail :	
	Name & Surname:	Physical:	Tel :	
			Fax :	
	Company/Organisation:	Postal:	Cell :	
			E-mail :	
	Name & Surname:	Physical:	Tel :	
			Fax :	
	Company/Organisation:	Postal:	Cell :	
			E-mail :	
	Name & Surname:	Physical:	Tel :	
			Fax :	
	Company/Organisation:	Postal:	Cell :	
			E-mail :	

# ATTACHMENT B

# PRESENTATIONS



### PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

### **Information-Sharing Meetings**

# Cape Town and Saldanha 11 and 12 November 2013



# AGENDA

- 1. Introduction and Objectives of the Meeting (NMA)
- 2. Presentations
  - Project Overview (Shell)
  - Impact Assessment Overview (CCA)
- 3. Question and Answer Session (All)
- 4. Summary of Outcomes (NMA / CCA)
- 5. Way Forward and Closure (NMA)

### **MEETING PROCEDURES**

- Please turn off cell phones
- Points of clarity only during presentations
- Please identify yourself and which organisation you represent (if applicable)
- Please sign the Attendance Register
- Meeting is being recorded
- Notes being taken



### **GROUND RULES**

- Only one person speaks at a time, no one to interrupt whilst someone else is speaking (Avoid side conversations please!).
- Signal the facilitator and wait to be acknowledged.
- Everybody agrees to make a strong effort to keep on track with the agenda and move deliberations forward.
- Each person reserves the right to disagree with proposals and may offer alternatives.
- Avoid "grandstanding" (i.e. extended comments / speaking) so that every one has a fair chance to speak.

### **GENERAL INTRODUCTION**

- 1. Shell was granted an Exploration Right for the Orange Basin Deep Water Licence Area in February 2012
- 2. Shell undertook a seismic survey in terms of their approved EMPr
- 3. Based on analysis of the seismic data, Shell proposes to drill one or possibly two exploration wells
- 4. Shell is required to comply with the requirements of:
  - MPRDA (No. 28 of 2002): EMPr Addendum
  - NEMA (No. 107 of 1998): Basic Assessment
- 5. CCA, in association with NMA, has been appointed by Shell to undertake the required environmental processes

## **OBJECTIVES OF MEETING**

- 1. Inform I&APs about the legislative processes that Shell is required to comply with
- 2. Provide a description of the proposed exploration drilling and the Impact Assessment process
- Provide I&APs a with reasonable opportunity to be involved in the study
- 4. Ensure that all potential key environmental issues and impacts are identified
- 5. Identify any potential environmental issues and impacts requiring further investigation



### PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF **SOUTH AFRICA**

Information-sharing Meetings Cape Town & Saldanha 11 & 12 November 2013

### **DEFINITIONS AND CAUTIONARY NOTE**

rm "rearres" in this presentation means SEC proved oil and gas rearres. Item "reasones" in this presentation includes quantities of oil and gas not yet classified as SEC proved oil and gas reserves. Resources are ca The Grieners 27 and 25 chainians. rm Organic in this presentation includes SEC proved oil and gas reserves excluding charges resulting from acquisitions, divestments and year-Dur use of iety of Petr ur use of th

ies in which Royd Dach Skell pic directly and indirectly overs investments are separate entities. In his presentation "Skell", "Skell group" and "Royd, as used for commentions where references are made to Royd Dath Skell pic and a subdiatries in general Likevia, the worth "wey", "at and "group" "Skaldarian", "Skell and "Skell Data Skell Dath Skell pic and a subdiatries in general Likevia, the worth "wey", "at and "group" "Skaldarian", "Skell Dath Skell Data Skell Data Skell Data Skell Pice Skell Data Skell Data Skell pic Carbot and a control Companies one which Skell has joint control are generally referred to "pictor waterst" and companies over which Skell has specificated and up instructed on a directed to a subschell" in this presentation, where the matter of and the start start start and the start start and the start start start start and the start nnies in which Re

A series around a series of any series of a series ubject to

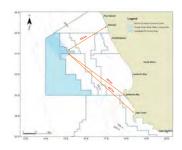
We may have used certain terms, such as resources, in this presentation that United States securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider doubly the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.scc.gov. You can also advian these from from the SEC variable of the SEC website www.scc.gov.

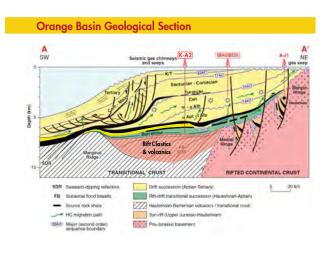
#### **Project Overview**

- 1. Licence Area
- 2. Orange Basin geology section
- 3. Seismic acquisition
- Well location 4.
- Drilling programme 5.
- 6. Drilling procedure
- 7. Sea- and land-based support

#### License area

- 1. Licence area is ~37 290 km<sup>2</sup> in extent.
- The eastern border of the 2. licence area is located between 150 km and 300 km off coast roughly between Saldanha Bay and Kleinzee.
- Water depths range from 3. 500 m to 3 500 m.





### Seismic Acquisition

A 3D seismic survey was undertaken in an 8,000 1. km<sup>2</sup> portion of the licence area, which was completed in February 2013.

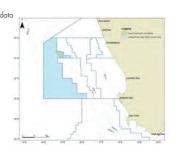






### License area

- 1. Area of interest:
  - 900 km² in extent.
  - 1,500 m to 2,100 m water depth. Final well location will be
- Final well loc based on:
  - further analysis of the 3D seismic data
  - the geological target; and
    seafloor obstacles



### **Drilling procedure**

1. Initial (riserless) drilling:

- A conductor pipe is jetted / drilled and cemented into place up to a depth of ~75 m.

- Below the conductor pipe, a top hole is drilled up to a depth of ~1 000 m, and casing pipe is run and cemented into place.

- A water-based mud (WBM) is used to maintain well pressure, cool and lubricate the drill bit and lift rock cuttings from the hole.

- Rock cuttings and WBM are discarded on the seafloor.



# Drilling Programme

- 1. Shell is proposing to drill one or possibly two wells
- 2. Depending on the success of the first well, a second well may be drilled to establish the resource quantity and flow rate.
- 3. Drilling is expected to take place in a future summer window period, between November to April
- 4. Well drilling would take in the order of 3 months to complete
- The second well would be drilled at least one year after completion of the first well
- 6. Drilling unit: semi-submersible drilling unit or a drill-ship



### Drilling procedure (cont.)

2. Next stage of drilling:

- A BOP and riser are run and installed on the wellhead.

- This stage of drilling would be undertaken using a synthetic-based mud (SBM).

 Drilling operations are the same as for the top hole, only the SBM and rock cuttings are circulated back to the drilling unit. The mud is treated before being recirculated.

- Cuttings are treated and discharged overboard.

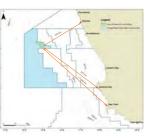


### Sea and land-based support

- The logistics shore base would be located in either Cape Town or Saldanha Bay.
- Personnel would be transported to the drilling unit by helicopter from Kleinzee.



3. Fixed-wing flights would be used between Kleinzee and Cape Town







# IMPACT ASSESSMENT OVERVIEW

- 1. Legislative requirements
- 2. Impact assessment process
- 3. Impact assessment focus area
- 4. Specialist studies

# LEGISLATIVE REQUIREMENTS



- Mineral and Petroleum Resources Development Act, 2002:
  Shell has an Exploration Right and approved EMPr for seismic surveys and well drilling in the Licence Area
- Approved EMPr needs to be amended
- 2. National Environmental Management Act, 1998:
  - NEMA provides for the control of certain listed activities, which are prohibited until environmental authorisation is obtained from DEA
  - The proposed drilling operation requires that a Basic Assessment be undertaken
- 3. Current study process aims to dovetail the NEMA & MPRDA requirements

### **IMPACT ASSESSMENT PROCESS**

- 1. Application Form submit to DEA to register the project
- 2. First round of public consultation:
  - Identify key stakeholders and I&APs
  - Authority meetings with PASA, DEA and DAFF

  - Posters placed in Saldanha, Vredenburg, Lamberts Bay, Springbok, Kleinzee and Port Nolloth
  - BID distributed for a 30-day comment period (closes 2 Dec)
  - Information-sharing meetings in Cape Town & Saldanha

### IMPACT ASSESSMENT PROCESS (cont.)

- 3. Compile specialist studies
- 4. Compile Draft BAR and Draft EMPr Addendum
- 5. Second round of public consultation (Jan Mar 2014):
  - Release draft reports for a 40-day comment period
  - Advertise (incl. posters) availability of draft reports and Information-feedback Meetings
  - Written notification (incl. Exec Summ) to registered I&APs
  - Information-feedback meetings in Cape Town & Saldanha

### **IMPACT ASSESSMENT PROCESS (cont.)**

- 6. Compile Final BAR and Final EMPr Addendum
- 7. Submit Final EMPr Addendum to PASA (120 days)
- 8. Third round of public consultation (Apr May 2014):
  - Release Final BAR for a 30-day comment period
  - Posters placed in Saldanha, Vredenburg, Lamberts Bay, Springbok, Kleinzee and Port Nolloth
  - Written notification (incl. Exec Summ) to registered I&APs
- 6. Submit Final BAR (with any comments) to DEA (76 days)
- 7. Distribute DEA decision and statutory appeal period

# IMPACT ASSESSMENT FOCUS AREA

#### 1. Key focus areas that will be addressed include:

- Disposal of cuttings
- Temporary loss of access to fishing grounds and abandonment / suspension of wellheads on the seafloor
- Temporary interference with marine traffic
- Potential hydrocarbon spills (i.e. small accidental spills from normal operations to large spills from unplanned failure events such as well blow-outs)



# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA







opment Through Participation

# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

# SALDANHA BAY INFORMATION-SHARING MEETING

Date: 12 November 2013

Time: 17h30

Venue: Protea Hotel Saldanha Bay

No.	Item	Action
1.	INTRODUCTION AND OBJECTIVES OF THE MEETING	
1.1	Nomi Muthialu (NM) of NMA Effective Social Strategists (NMA) welcomed everyone to the meeting and provided a brief background to the project (list of attendees is attached). She said that Shell South Africa Exploration B.V. (Shell) was granted an Exploration Right for the Orange Basin Deep Water Licence Area in February 2012 and subsequently undertook a seismic survey in terms of their approved Environmental Management Programme (EMPr). Based on an analysis of the seismic data, Shell proposes to drill one or possibly two exploration wells. She outlined the legislative requirements that Shell is required to comply with and said that CCA Environmental (CCA), in association with NMA, has been appointed by Shell to undertake the required environmental processes.	Note
1.2	NM explained that the objectives of the meeting were to provide an opportunity for interested and affected parties (I&APs) to be involved in the project, provide a description of the proposed exploration drilling and Impact Assessment process, detail the legislative processes that Shell is required to comply with, ensure that all potential key environmental issues and impacts are identified, and to identify any potential environmental issues and impacts requiring further investigation.	
2.	PRESENTATIONS: PROJECT OVERVIEW	
2.1	Piet Lambregts (PL) of Shell presented an overview of the project covering the location of the licence area, a geological section of the Orange Basin, the seismic surveys that have been undertaken, the well location, drilling programme and drilling procedure as well as the sea and land based support likely to be required during implementation. (Refer to Appendix B).	Note
2.2	Jeremy Blood (JB) of CCA presented an overview of the impact assessment process covering the legislative requirements, impact assessment focus areas and subsequent specialist studies that will be undertaken. He also presented an overview of the public participation process that was being followed for the basic assessment and amendment of the existing EMPr. (Refer to Appendix B).	
3.	QUESTION AND ANSWER SESSION	
3.1	Andre Theart (AT) of ArcelorMittal asked why the Blow-out Preventer (BOP) is needed during drilling operations.	
3.1.1	PL explained that drilling operations are designed according to the estimated pressure that would be experienced. He said the BOP acts as a safeguard in case the actual pressure experienced is more than what was estimated. He added that an oil spill plan would be finalised before drilling operations commence. He said this would include a capping devise situated in Saldanha Bay which would be used to close the well should the BOP fail.	
3.2	Titiana Stefanus-Zincke of Oceana Group noted that the 6-year period CapFish will look at during their specialist study may need to be extended. She said trends can be identified when looking at older fisheries data, say from the 1990s.	

3.2.1	JB acknowledged the comment and noted that CapFish would obtain additional data from the Department of Agriculture, Forestry and Fisheries (DAFF) for their specialist study. He said CCA would investigate this further.	CCA
3.3	Elmien de Bruyn (EdB) of Duferco Steel Processing noted that some of their products get exported but the project would have no impact on their industry.	
4.	WAY FORWARD AND CLOSURE	
4.1	NM thanked all for attending. She noted that participants had until 2 December 2013, when the current 30-day comment period closes, to submit further comments on the project. She referred to the comments sheet included with the Background Information Document (BID) distributed at the meeting and invited participants to complete these and hand them in after the meeting or to send them through to NMA.	
	She outlined the process to be followed going forward which is that the specialist consultants will conduct their specialist studies. She said the draft Basic Assessment Report (BAR) and draft EMPr Addendum will be prepared and made available for public scrutiny during a further 40-day comment period. A second round of information sharing meetings will take place during the 40-day comment period between February and March next year.	
4.2	Nigel Rossouw (NR) of Shell invited attendees to discuss any further issues with the project team after the meeting or to submit these to NMA using the contact details provided.	Note
4.3	Janine Nel (JN) of Shell informed attendees that there is an Orange Basin webpage on the Shell South Africa website where more information on the project could be found. (Navigate to About Shell > Our Business > Upstream > Orange Basin).	
4.4	NM closed the meeting.	

ATTACHMENT A

# LIST OF ATTENDEES

No.	Name		Organisation
1.	Andre Theart	(AT)	ArcelorMittal
2.	Claude Vanqa	(CA)	Shell South Africa Exploration B.V.
3.	Elmien de Bruyn	(EdB)	Duferco Steel Processing
4.	Greg Marshall	(GM)	Sea Harvest
5.	Jeremy Blood	(JB)	CCA Environmental
6.	Janine Nel	(JN)	Shell South Africa Exploration B.V.
7.	Mandy Kula	(MK)	CCA Environmental
8.	Nomi Muthialu	(NM)	NMA Effective Social Strategists
9.	Nigel Rossouw	(NR)	Shell South Africa Exploration B.V.
10.	Piet Lambregts	(PL)	Shell South Africa Exploration B.V.
11.	Peter Mijsbergh	(PM)	Shell South Africa Exploration B.V.
12.	Pieter Mocke	(PMo)	NMA Effective Social Strategists
13.	Titiana Stefanus-Zincke	(TSZ)	Oceana Group

# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE COAST OF SOUTH AFRICA

	NMA Effective Soc	ial Strategists		NMA Effective Social Strategists				e Register	
Date	12 November 2013 Time	17h30 – 20h00	Venue:	Protea 51 Ma	Hotel in Road, Saldar	nha	Туре	Information	Sharing Meeting
No.	Individual Details		Ad	dress			Contact D	etails	Signature
	Name & Surname:	Physical:	Unita	5 3	obury	Tel	: 021	4611118	
	Jeremy Blood	hav	9		J Sa	Fax		4611120	
U B	Company/Organisation:	Postal:	PO'BO	+ 10	145	Cell			
	ICA	Cal	o dan	Sa.		E-mail	:jereny	Occaen	connental co
	Name & Surname:	Physical:	9th Plas	, Oce	and those	Tel		4101600	
	Titanin Statanus- Linc	ke 25 Jan	Smith So	12	ape Tom	Fax	•		No
	Company/Organisation:	Postal:	and a second date of the second s		1	Cell	:0828	534084	A
						E-mail	/ )	ias. Oxean	, co.2n
	Name & Surname:	Physical:				Tel	:		
	Peter Misbergh					Fax	:		A
	Company/Organisation:	Postal:				Cell	:		Ven
- 16	SHell					E-mail	:`		
	Name & Surname:	Physical:				Tel			
	Nigel RUSSULN					Fax	:		
	Company/Organisation:	Postal:				Cell	:		
	shell					E-mail	:		
	Name & Surname:	Physical:				Tel	:		
	list Lambregts	S				Fax	1		-
	Company/Organisation:	Postal:				Cell	÷		
	Shell			n <u>nn</u>		E-mail	:		

;



# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE COAST OF SOUTH AFRICA

141

NMA Effective Social Strategists								Attendance Register				
Date	12 November 2013	Time	17h30 – 20h00	Venue:	Protea 51 Main	Hotel n Road, Salda	anha	Туре	Information S	Sharing Meeting		
No.	Individual Details			Address				Contact Details Si				
	Name & Surname:		Physical:	Physical: Saldanha Steel		Tel	: 022	7094358	11			
	André Thea	, it		0			Fax	: 022	7092138	Aut		
	Company/Organisation:	e	Postal:	rivate	Bay	X []	Cell	: 083	4634077	-11		
	Arcelormittal.			aldan!			E-mail	: andre	thea A arcel	pomittal.con		
	Name & Surname:		Physical:	Physical: 1 Retossium Street		Tel	: 022	7697127	2			
	Elmien de Bruyn		5	aldant	na		Fax	:022	709734a	K		
-	Company/Organisation:		Postal:	P.Bog	x 12	Saldanha	Cell	:083 =	308 5938	Duy		
	anterco Steel Placessing		19 -	7395			E-mail	: elmie	adbedsp.co.	201		
	Name & Surname:		Physical:	GOVERNI	MENT J	ETTY	Tel	:022.70	14166	1		
	GREG MARSHALL		fishme	fishma CHARBOUR, SADAMHA			Fax	:02270	144239	6 au		
	Company/Organisation:		Postal: P.	Postal: P. O. Box S2			Cell	: 082 9	5619604 (	SI		
5	SEA HARVEST GRA. (PTV) CTD		SALD	SALDANHA			E-mail	:gregm	@seaharvest.	w. 29		
	Name & Surname:		Physical:	Physical:			Tel					
	Mandy Kula					Fax	:		1.1.5			
	Company/Organisation:		Postal:	Postal:		Cell	•					
	CCA		E-mail									
	Name & Surname:		Physical:	Physical:			Tel :					
	Peiter Mocke			Postal:		Fax						
	Company/Organisation:	Postal:	Cell			Cell :						
	NMA		E-mail :									



lo.	Individual Details	Address		Contact Details	Signature
	Name & Surname:	Physical:	Tel	:	
	Claude Vanga		Fax	:	
	Company/Organisation:	Postal:	Cell	:	
	Shell		E-mail	:	
	Name & Surname:	Physical:	Tel	•	
	Nomi Muthialy		Fax	•	A
	Company/Organisation:	Postal:	Cell	•	
	NMA		E-mail		
4	Name & Surname:	Physical:	Tel	:	
-	Janine Nel		Fax	:	
	Company/Organisation:	Postal:	Cell	:	_
	Shell		E-mail	÷	
	Name & Surname:	Physical:	Tel		
			Fax	:	
	Company/Organisation:	Postal:	Cell	:	
			E-mail	3	
	Name & Surname:	Physical:	Tel	:	
			Fax	:	
	Company/Organisation:	Postal:	Cell	:	
			E-mail	:	
	Name & Surname:	Physical:	Tel	:	
			Fax		
	Company/Organisation:	Postal:	Cell	•	
			E-mail	:	

20 m

# ATTACHMENT B

# PRESENTATIONS



### PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

### **Information-Sharing Meetings**

# Cape Town and Saldanha 11 and 12 November 2013



# AGENDA

- 1. Introduction and Objectives of the Meeting (NMA)
- 2. Presentations
  - Project Overview (Shell)
  - Impact Assessment Overview (CCA)
- 3. Question and Answer Session (All)
- 4. Summary of Outcomes (NMA / CCA)
- 5. Way Forward and Closure (NMA)

# **MEETING PROCEDURES**

- Please turn off cell phones
- Points of clarity only during presentations
- Please identify yourself and which organisation you represent (if applicable)
- Please sign the Attendance Register
- Meeting is being recorded
- Notes being taken



### **GROUND RULES**

- Only one person speaks at a time, no one to interrupt whilst someone else is speaking (Avoid side conversations please!).
- Signal the facilitator and wait to be acknowledged.
- Everybody agrees to make a strong effort to keep on track with the agenda and move deliberations forward.
- Each person reserves the right to disagree with proposals and may offer alternatives.
- Avoid "grandstanding" (i.e. extended comments / speaking) so that every one has a fair chance to speak.

### **GENERAL INTRODUCTION**

- 1. Shell was granted an Exploration Right for the Orange Basin Deep Water Licence Area in February 2012
- 2. Shell undertook a seismic survey in terms of their approved EMPr
- 3. Based on analysis of the seismic data, Shell proposes to drill one or possibly two exploration wells
- 4. Shell is required to comply with the requirements of:
  - MPRDA (No. 28 of 2002): EMPr Addendum
  - NEMA (No. 107 of 1998): Basic Assessment
- 5. CCA, in association with NMA, has been appointed by Shell to undertake the required environmental processes

## **OBJECTIVES OF MEETING**

- 1. Inform I&APs about the legislative processes that Shell is required to comply with
- 2. Provide a description of the proposed exploration drilling and the Impact Assessment process
- Provide I&APs a with reasonable opportunity to be involved in the study
- 4. Ensure that all potential key environmental issues and impacts are identified
- 5. Identify any potential environmental issues and impacts requiring further investigation



### PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF **SOUTH AFRICA**

Information-sharing Meetings Cape Town & Saldanha 11 & 12 November 2013

### **DEFINITIONS AND CAUTIONARY NOTE**

rm "rearres" in this presentation means SEC proved oil and gas rearres. Item "reasones" in this presentation includes quantities of oil and gas not yet classified as SEC proved oil and gas reserves. Resources are ca The Grieners 27 and 25 chainians. rm Organic in this presentation includes SEC proved oil and gas reserves excluding charges resulting from acquisitions, divestments and year-Dur use of iety of Petr ur use of th

ies in which Royd Dach Skell pic directly and indirectly overs investments are separate entities. In his presentation "Skell", "Skell group" and "Royd, as used for commentions where references are made to Royd Dath Skell pic and a subdiatries in general Likevia, the worth "wey", "at and "group" "Skaldarian", "Skell and "Skell Data Skell Dath Skell pic and a subdiatries in general Likevia, the worth "wey", "at and "group" "Skaldarian", "Skell Dath Skell Data Skell Data Skell Data Skell Pice Skell Data Skell Data Skell pic Carbot and a control Companies one which Skell has joint control are generally referred to "pictor waterst" and companies over which Skell has specificated and up instructed on a directed to a subschell" in this presentation, where the matter of and the start start start and the start start and the start start start start and the start nnies in which Re

A series around a series of any series of a series ubject to

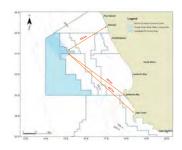
We may have used certain terms, such as resources, in this presentation that United States securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider doubly the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.scc.gov. You can also advian these from from the SEC variable of the SEC website www.scc.gov.

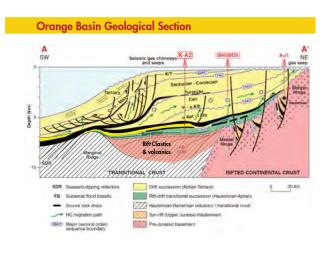
#### **Project Overview**

- 1. Licence Area
- 2. Orange Basin geology section
- 3. Seismic acquisition
- Well location 4.
- Drilling programme 5.
- 6. Drilling procedure
- 7. Sea- and land-based support

#### License area

- 1. Licence area is ~37 290 km<sup>2</sup> in extent.
- The eastern border of the 2. licence area is located between 150 km and 300 km off coast roughly between Saldanha Bay and Kleinzee.
- Water depths range from 3. 500 m to 3 500 m.





### Seismic Acquisition

A 3D seismic survey was undertaken in an 8,000 1. km<sup>2</sup> portion of the licence area, which was completed in February 2013.

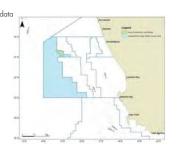






### License area

- 1. Area of interest:
  - 900 km² in extent.
  - 1,500 m to 2,100 m water depth. Final well location will be
- Final well loc based on:
  - further analysis of the 3D seismic data
  - the geological target; and
    seafloor obstacles



#### Drilling procedure

- 1. Initial (riserless) drilling:
  - A conductor pipe is jetted / drilled and cemented into place up to a depth of ~75 m.
  - Below the conductor pipe, a top hole is drilled up to a depth of ~1 000 m, and casing pipe is run and cemented into place.
  - A water-based mud (WBM) is used to maintain well pressure, cool and lubricate the drill bit and lift rock cuttings from the hole.
  - Rock cuttings and WBM are discarded on the seafloor.



### Drilling Programme

- 1. Shell is proposing to drill one or possibly two wells
- 2. Depending on the success of the first well, a second well may be drilled to establish the resource quantity and flow rate.
- 3. Drilling is expected to take place in a future summer window period, between November to April
- 4. Well drilling would take in the order of 3 months to complete
- The second well would be drilled at least one year after completion of the first well
- 6. Drilling unit: semi-submersible drilling unit or a drill-ship



### Drilling procedure (cont.)

- 2. Next stage of drilling:
  - A BOP and riser are run and installed on the wellhead.
  - This stage of drilling would be undertaken using a synthetic-based mud (SBM).
  - Drilling operations are the same as for the top hole, only the SBM and rock cuttings are circulated back to the drilling unit. The mud is treated before being recirculated.
  - Cuttings are treated and discharged overboard.

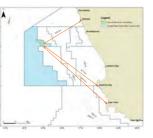


### Sea and land-based support

- The logistics shore base would be located in either Cape Town or Saldanha Bay.
- Personnel would be transported to the drilling unit by helicopter from Kleinzee.



3. Fixed-wing flights would be used between Kleinzee and Cape Town







# IMPACT ASSESSMENT OVERVIEW

- 1. Legislative requirements
- 2. Impact assessment process
- 3. Impact assessment focus area
- 4. Specialist studies

### LEGISLATIVE REQUIREMENTS



- Mineral and Petroleum Resources Development Act, 2002:
  Shell has an Exploration Right and approved EMPr for seismic surveys and well drilling in the Licence Area
- Approved EMPr needs to be amended
- 2. National Environmental Management Act, 1998:
  - NEMA provides for the control of certain listed activities, which are prohibited until environmental authorisation is obtained from DEA
  - The proposed drilling operation requires that a Basic Assessment be undertaken
- 3. Current study process aims to dovetail the NEMA & MPRDA requirements

### **IMPACT ASSESSMENT PROCESS**

- 1. Application Form submit to DEA to register the project
- 2. First round of public consultation:
  - Identify key stakeholders and I&APs
  - Authority meetings with PASA, DEA and DAFF

  - Posters placed in Saldanha, Vredenburg, Lamberts Bay, Springbok, Kleinzee and Port Nolloth
  - BID distributed for a 30-day comment period (closes 2 Dec)
  - Information-sharing meetings in Cape Town & Saldanha

### IMPACT ASSESSMENT PROCESS (cont.)

- 3. Compile specialist studies
- 4. Compile Draft BAR and Draft EMPr Addendum
- 5. Second round of public consultation (Jan Mar 2014):
  - Release draft reports for a 40-day comment period
  - Advertise (incl. posters) availability of draft reports and Information-feedback Meetings
  - Written notification (incl. Exec Summ) to registered I&APs
  - Information-feedback meetings in Cape Town & Saldanha

### **IMPACT ASSESSMENT PROCESS (cont.)**

- 6. Compile Final BAR and Final EMPr Addendum
- 7. Submit Final EMPr Addendum to PASA (120 days)
- 8. Third round of public consultation (Apr May 2014):
  - Release Final BAR for a 30-day comment period
  - Posters placed in Saldanha, Vredenburg, Lamberts Bay, Springbok, Kleinzee and Port Nolloth
  - Written notification (incl. Exec Summ) to registered I&APs
- 6. Submit Final BAR (with any comments) to DEA (76 days)
- 7. Distribute DEA decision and statutory appeal period

# IMPACT ASSESSMENT FOCUS AREA

#### 1. Key focus areas that will be addressed include:

- Disposal of cuttings
- Temporary loss of access to fishing grounds and abandonment / suspension of wellheads on the seafloor
- Temporary interference with marine traffic
- Potential hydrocarbon spills (i.e. small accidental spills from normal operations to large spills from unplanned failure events such as well blow-outs)



# PROPOSED EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

