



NOTE FOR DECISION
SPDC PILOT DECOMMISSIONING AND LOCATION
RESTORATION PROJECT

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The Shell Petroleum Development Company (Nigeria) LTD

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The Shell Petroleum Development Company of Nigeria Limited

Summary Information

Business unit and company	The Shell Petroleum Development Company of Nigeria Limited (SPDC)			
Group equity interest	100% in SPDC, whereas SPDC is the Joint Venture (JV) operator of an unincorporated JV with a 30% interest.			
Other shareholders / partners	Nigeria National Petroleum Company (NNPC: 55%), Total: 10%, Nigeria Agip Oil Company (NAOC: 5%) in SPDC-JV.			
Business or Function	Exploration & Production (EP)			
Amount	US\$ 6.3 mln Shell share (i.e. US\$ 21.1 mln 100% JV), 50/50, MOD.			
Project	Apara & Akpor Wells Decommissioning and Location Restoration Project			
2012 commitments \$ mln (MOD)		Description	JVUS \$mln (100%)	US \$mln (Shell Share)
See Table 1 for expenditure phasing.	1	EIA Studies	133,000.00	39,900.00
	2	Borrow Pit Decommissioning studies	337,000.00	101,100.00
	3	Apara 1 Decommissioning and Restoration	2,658,009.90	797,402.97
	4	Apara 2 Decommissioning and Restoration	2,852,259.90	855,677.97
	5	Apara 4 Decommissioning and Restoration	2,852,259.90	855,677.97
	6	Apara 7 Decommissioning and Restoration	2,658,009.90	797,402.97
	7	Akpor 2 Decommissioning and Restoration	3,195,043.95	1,069,877.97
	8	Akpor 1 Decommissioning and Restoration	3,114,958.35	934,487.51
	9	Akpor 3 Decommissioning and Restoration	1,087,962	215,023.94
	10	GMOU	569,000.00	170,700.00
	11	VAT & NCD	1,649,378.14	494,813.44
		21,106,882.44	6,332,064.73	
Source and form of financing	This investment will be financed from JV funding. Shell share Opex expenditure will be met by SPDC’s own cash flow and/or the existing shareholder facility.			
Summary cash flow	Not applicable			
Summary economics	Shell Share, RT-12	NPV7% (USD mln)	VIR7%	RTEP
	Base case	0.96	NA	-

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Section 1: The proposal (management summary)

This Investment Proposal approval for funding of US\$ 6.3 mln Shell share (i.e. US\$ 21.1 mln 100% JV) is required for the decommissioning and restoration of Apra 1, Apra 2, Apra 4, Apra 7, Akpor 1, and Akpor 2 wells (6 wells).

In July 2011, a Front End Project team was set up to study and mature Wells Decommissioning and Restoration efforts in SPDC as part of sustainable development efforts for management of disused wellsites.

The Decommissioning and Restoration (D&R) of eleven wells in Apra and Akpor fields is being undertaken as a pilot and this pilot experience will be used to design long term strategy for Decommissioning and Restoration of some 400 disused wellsites in SPDC. These disused sites continue to create Health, safety, security, and environmental (HSSE) exposure and hence the need to properly Decommission and restore them.

The Akpor field came on stream in August 1974 and produced until December 1987 when the last well quit production. The Apra field on the other hand produced from December 1961 to February 1997 when production ceased. Akpor expectation oil and non associated gas reserves are 3.6MMstb and 5.2Bscf while Apra expectation oil and non associated gas reserves are 23.5MMstb and 97Bscf respectively as at 1/1/2011. The proposed Wellsite Decommissioning and Restoration pilot will be used to acquire data prior to decommissioning. These data will be used for further study of these fields and depending on the economics of such future study, strategic decisions will be made on these fields. These decisions could include the use of technology for development of the remaining hydrocarbon, where economic, from locations other than the existing wellsites which are now being decommissioned for HSSE reasons.

An Environmental Evaluation Report will be executed as part of the D&R activities with the objective of determining the condition of the environment, ascertaining likely impacts these facilities have had on the environment, assessing the severity of such impacts, mitigating measures for the identified adverse impacts, and developing a management plan for monitoring the effectiveness of designed mitigation measures.

The estimated D&R pilot project will cost \$47. 6mln over the 2012 – 2013 business planning period.

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Table 1: SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT Phasing (US \$ MOD JV 100%)

s/no	Activity	2012 F\$	2013 F\$	TOTAL F\$
1	EIA Studies	133,000		133,000
2	Borrow Pit Decommissioning studies	337,000		337,000
3	Apara 1 Decommissioning and Restoration	2,658,010		2,658,010
4	Apara 2 Decommissioning and Restoration	2,852,260		2,852,260
5	Apara 4 Decommissioning and Restoration	2,852,260		2,852,260
6	Apara 7 Decommissioning and Restoration	2,658,010		2,658,010
7	Apara 3 Decommissioning and Restoration	0	3,566,260	3,566,260
8*	Apara 8 Decommissioning and Restoration	0	3,081,597	3,081,597
9*	Apara 9 Decommissioning and Restoration	0	2,768,909	2,768,909
10*	Apara 10 Decommissioning and Restoration	0	2,999,910	2,999,910
11	Akpor 1 Decommissioning and Restoration	3,114,958	0	3,114,958
12	Akpor 2 Decommissioning and Restoration	3,195,044	0	3,195,044
13**	Akpor 3 Decommissioning and Restoration	1,087,962	2,028,326	3,116,288
14	GMOU	569,000	316,564	885,564
15	VAT & NCD	1,649,378	895,937	2,545,315
		21,106,882	15,657,504	36,764,386

* Apara 8, Apara 9 and Apara 10 has associated borrow pits and the cost of decommissioning these borrow pits as at FID was \$10.5mln

** Six (6) wells : Apara 1, Apara 2, Apara 4, Apara 7, Akpor 1, and Akpor 2 wells will be decommissioned in 2012. The seventh well Akpor 3 will be started in 2012 but completed in 2013. Only about 30% of this well's D&R cost will be committed in 2012.

Section 2: Value proposition and strategic and financial context

Apara 8, Apara 9 and Apara 10 have large borrow pits that need to be properly decommissioned to forestall future liabilities to SPDC JV. The cost of decommissioning these borrow pits was estimated at \$10.5 mln. A detailed study on acceptable options for decommissioning of these wells was therefore planned at a cost of \$337,000. The study is currently ongoing and it is anticipated that the outcome of the study will reduce volume, content, and cost uncertainties for decommissioning and Restoration of associated Wellsite borrow pits. Further progress on the decommissioning of these borrow pit will be represented to the DRB once the borrow pit content and volume study is completed. Also learning's from the Decommissioning and Restoration of these pilot (11 wells) will aid in negotiating future long term contracts for management of huge portfolio of disused wells in SPDC.

Summary Economics

The initial Apara and Akpor wells were drilled between 1958 and 1962 and since then company ownership and structure have changed many times. It is assumed that the D&R costs were part of the project economics and contributed to the valuation that led to the investment decision at the time. The Project team was unable to sight the initial Investment Proposals for Akpor and Apara fields. However, wells Decommissioning and Restoration costs have become a mandatory part of the total costs for Investment proposals evaluation since the formation of NAPIMS.

The Shell Share post-tax NPV7 of the 2012 D&R expenditure is \$0.96mln RT12.

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Section 3a : Wells Decommissioning and Restoration Risks, opportunities and alternatives

Risks / Mitigation	The possibility of fire outbreak in these well locations is high. Most of the well heads have been tampered with and hence one cannot eliminate the presence of free hydrocarbon in the environment. With houses built around the area and occupants bringing all sorts of sources of ignition close to the well heads one would worry that there could be fire and explosion one day. This situation calls for urgent action, hence the need to properly Decommission and restore these wellsites.
Risks / Mitigation	With high demand for land in Portharcourt, squatters started to use these disused sites for habitation. This unorganized settlement could lead to potential community problems especially if the occupants are not the original owners of the land. This situation calls for urgent action, hence the need to properly Decommission wellsite location, receive D&R certificate from regulators, and dispose or return land to original owners.
Risks / Mitigation	Most of the borrow pits that were dug several years ago by SPDC have been turned to dumpsites for all sorts of waste materials (hazardous and nonhazardous) by the villagers. Looking at the depth of these pits it is possible that the ground water level has been reached. This situation calls for urgent action, hence the need to urgently conduct studies to ascertain environmental impact and design acceptable means of borrow pit decommissioning and location remediation.
Risks / Mitigation	The situation around the well heads is that the entire perimeter fences are all broken down and people have built houses within and around the well head area. The well head cellars are filled with rain water and are potential drowning hazards especially for those that have houses around the well head area. This situation calls for urgent action, hence the need to properly Decommission wellsite location or repair broken down perimeter fences.
Opportunity	This pilot project provides SPDC with a learning opportunity on Decommissioning and Location restoration. With over 500 disused wells in SPDC, this learning opportunity will help in long term D&R management in SPDC.

Section 3b : Pilot Wells Decommissioning and Restoration Risks, opportunities and alternatives

Risks / Mitigation	The possibility of FTO related community problems is considered high. Oil producing communities derive some community assistance during oil generation opportunities. Well decommission is a non oil generation activity and hence some of the sustainable development support from SPDC JV may not be available and this could create some FTO related issues. Community town hall sessions would be used to clarify project objective and expectations, and reduce the risk.
Risks / Mitigation	The possibility of budget overrun also exists as this is the first SPDC JV attempt at fully integrated Wells Decommissioning and Location Restoration project. Supervision and project management guidelines will be implemented to reduce this risk. Any overspend will be approved through the DRB and the respective budgeting team.

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Section 4: Corporate structure, and governance

The existing corporate structure and arrangements of SPDC-JV (with SPDC as operator) will be used as the vehicle for the investment and operations. An SPDC Decision Review Board (DRB) will continue to advise.

Section 5: Functional Support and consistency with Group and Business Standards

This proposal complies with the Group Business Principles, policies and standards. This project has benefited from full functional support covering ESHIA, Well Engineering, Civil Engineering, HSE, Remediation and SCD. Besides contributing to SPDC's Goal Zero commitment, the project is part of SPDC JV Exploration and Production program which requires that Wells and Facilities are properly decommissioned after use. Additionally, there will be a focus on Nigerian Content Development (NCD). The Finance, Contracting & Procurement, Legal, and Treasury/Tax functions will provide functional support for this proposal.

Section 6: Project management, monitoring and review

The Pilot Wells Decommissioning and Restoration project was constituted as an integrated team of ten (10) staff. The FEPM will hand over the project execution to SPDC East Land Asset team for single point accountability for driving execution, managing the budget, monitoring performance and achieving the promises associated with this Decision.

Key decisions have been reviewed and are supported by the Decision Review Board (DRB) at the Decision Gate 4 (DG4) of February 2010.

Section 7: Budget provision

In BP11, the D&R project is in the base programme as SPDC incremental. Project feasibility, detailed Project Execution Plan and JV approval was also secured in 2011 and whilst awaiting final approval, a provision of F\$29.13mln was made in the 2011 JV Budget to cover the decommissioning and restoration of Apra 1, Apra 2, Apra 4, Apra 7, Akpor 1, and Akpor 2 wells will be decommissioned in 2012. The seventh well Akpor 3 will be started in 2012 but completed in 2013. Only about 30% of this well's D&R cost will be committed in 2012.

The commercial cost template for the deployment of Hydraulic Workover Unit has been approved by SPDC and NAPIMS. Commercial bid is being awaited from vendor and it is anticipated that contract will be awarded by June 2012.

During the SPDC DRB FID engagement in February 2012, the decommissioning of Apra 8 well was phased to 2013 in order to benefit from the anticipated cost reduction based on 2012 borrow pit study.

An estimated cost of \$27mln will be provided as part of BP12 for project completion. This cost is made up of \$16mln for well Decommissioning and Restoration and \$11mln for Decommissioning and Restoration of associated borrow pits.

Section 8: Group financial reporting impact

The post-tax expenditure related to this decision will have limited impact on group financial results.

Section 9: Disclosure

Material disclosures, if any, will be done in line with the Group and SPDC Disclosure policies and guidelines.

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Section 10: Financing

The project will be funded with JV funding and Shell share capital expenditure will be met by SPDC's own cash call.

Section 11: Taxation

The income tax from the project will be in accordance with Petroleum Profit Tax Rate and relevant income tax applicable.

Section 12: Key Parameters

This Note for Decision seeks approval for US\$ 6.3 mln Shell share (i.e. US\$ 21.1 mln 100% JV) for the decommissioning and restoration of Apra 1, Apra 2, Apra 4, Apra 7, Akpor 1, and Akpor 2 wells (6 wells).

Section 13: Signatures

This note for decision is submitted to UIG Directors for approval.

Supported by:

For shareholder approval:

.....

Isaac, Iyamu (UIG/T/W)

Date/...../.....

.....

Ojulari, Bayo (UIG/T/D)

Date/...../.....

.....

Bos, Bernard (FUI/F)

Date/...../.....

Initiator:

Nwankwo, Cosmas

Front End Project Manager (UIG/T/DET)

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APPENDIX : PROJECT PROPOSAL SHEETS

<u>COST ESTIMATES FOR D&R OF APARA1</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	25	625000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting services	21500	5	107500
	5	Cementing Unit rentals	7800	20	156000
	6	Cement Chemicals	300	200	60000
	7	Bridge Plug	40000	1	40000
	8	Production Casing Cutter	40000	1	40000
	9	Intermediate Casing Cutter	40000	1	40000
	10	Surface Casing Cutter	40000	1	40000
	11	Logistic support - vaccum truck, trucks,crane etc	4000	25	100000
	12	Ancilliary equipments - tanks,office caravan,lightening etc	5000	25	125000
	13	WHM services	2000	10	20000
	14	Accomodation and catering	150	1350	202500
	15	Diesel (5000ltrs/d at \$1.1)	5500	25	137500
	16	Security cost for camp and site	8000	25	200000
	17	FTO	20000	1	20000
		Total Well Abandonment Cost			2103500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2531438
		Overheads (5%)			126572
		Total Well Abandonment Cost (excl. VAT)			2658010
		Total Well Abandonment Cost (incl. VAT & NCD)			2,817,490.49

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<u>COST ESTIMATES FOR D&R OF APARA 2</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancillary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accommodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2716438
		Overheads (5%)			135822
		Total Well Abandonment Cost (excl. VAT)			2852260
		Total Well Abandonment Cost (incl. VAT & NCD)			3,023,395.49

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<u>COST ESTIMATES FOR D&R OF APARA 3</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	35	875000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	Cementing Unit	7800	20	156000
	6	Cement Chemicals	300	200	60000
	7	Bridge Plug and fishing equipment	340000	1	340000
	8	Production Casing Cutter	40000	1	40000
	9	Intermediate Casing Cutter	40000	1	40000
	10	Surface Casing Cutter	40000	1	40000
	11	Logistic support - vaccum truck, trucks,crane etc	4000	35	140000
	12	Ancilliary equipments - tanks,office caravan,lightening etc	5000	35	175000
	13	WHM / WL services	5000	10	50000
	14	Accomodation and catering	150	1750	262500
	15	Diesel (5000ltrs/d at \$1.1)	5500	35	192500
	16	Security cost for camp and site	8000	35	280000
	17	FTO	20000	1	20000
		Total Well Abandonment Cost			2968500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			3396438
		Overheads (5%)			169822
		Total Well Abandonment Cost (excl. VAT)			3566260
		Total Well Abandonment Cost (incl. VAT & NCD)			3,780,235.49

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<u>COST ESTIMATES FOR D&R OF APARA 4</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accomodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2716438
		Overheads (5%)			135822
		Total Well Abandonment Cost (excl. VAT)			2852260
		Total Well Abandonment Cost (incl. VAT & NCD)			3,023,395.49

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	<u>COST ESTIMATES FOR D&R OF APARA 7</u>				
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	25	625000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	Cementing Unit rentals	7800	20	156000
	6	Cement Chemicals Per Barrel	300	200	60000
	7	Bridge Plug	40000	1	40000
	8	Production Casing Cutter	40000	1	40000
	9	Intermediate Casing Cutter	40000	1	40000
	10	Surface Casing Cutter	40000	1	40000
	11	Logistic support - vaccum truck, trucks,crane etc	4000	25	100000
	12	Ancilliary equipments - tanks,office caravan,lightening etc	5000	25	125000
	13	WHM services	2000	10	20000
	14	Accomodation and catering	150	1350	202500
	15	Diesel (5000ltrs/d at \$1.1)	5500	25	137500
	16	Security cost for camp and site	8000	25	200000
	17	FTO	20000	1	20000
		Total Well Abandonment Cost			2103500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2531438
		Overheads (5%)			126572
		Total Well Abandonment Cost (excl. VAT)			2658010
		Total Well Abandonment Cost (incl. VAT & NCD)			2,817,490.49

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<u>COST ESTIMATES FOR D&R OF APARA 8</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	28	700000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	28	112000
	13	Ancillary equipments - tanks, office caravan, lightening etc	5000	28	140000
	14	WHM services	2000	10	20000
	15	Accommodation and catering	150	1400	210000
	16	Diesel (5000ltrs/d at \$1.1)	5500	28	154000
	17	Security cost for camp and site	8000	28	224000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2253500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
	1	Estimated Borrow Pit Remediation costs			5,321,750.00
		Total Decommissioning Cost			5,321,750
TOTAL		Total D&R Cost			8003188
		Overheads (5%)			400159
		Total Well Abandonment Cost (excl. VAT)			8403347
		Total Well Abandonment Cost (incl. VAT & NCD)			8,907,548.24

NOTE FOR DECISION

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

<u>COST ESTIMATES FOR D&R OF APARA 9</u>					
	S.N.	Activity / Equipment / Consumables	Unit Ra	Qty	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	25	625000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	Cementing Unit	7800	20	156000
	6	Cement Chemicals	300	200	60000
	7	Bridge Plug	40000	1	40000
	8	Production Casing Cutter	40000	1	40000
	9	Intermediate Casing Cutter	40000	1	40000
	10	Surface Casing Cutter	40000	1	40000
	11	Logistic support - vaccum truck, trucks, crane etc	4000	25	100000
	12	Ancilliary equipments - tanks, office caravan, lightening etc	5000	25	125000
	13	WHM services	2000	10	20000
	14	Accommodation and catering	150	1350	202500
	15	Diesel (5000ltrs/d at \$1.1)	5500	25	137500
	16	Security cost for camp and site	8000	25	200000
	17	FTO	20000	1	20000
		Total Well Abandonment Cost			2103500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
	1	Estimated Borrow Pit Remediation costs			2,217,875.00
		Total Decommissioning Cost			2,217,875
TOTAL		Total D&R Cost			4749313
		Overheads (5%)			237466
		Total Well Abandonment Cost (excl. VAT)			4986779
		Total Well Abandonment Cost (incl. VAT & NCD)			5,285,985.37

NOTE FOR DECISION

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

<u>COST ESTIMATES FOR D&R OF APARA 10</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancillary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accommodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
ASSOCIATED BORROW PIT DECOMMISSIONING					
	1	Estimated Borrow Pit Remediation costs			2,953,000.00
		Total Decommissioning Cost			2,953,000
TOTAL		Total D&R Cost			5669438
		Overheads (5%)			283472
		Total Well Abandonment Cost (excl. VAT)			5952910
		Total Well Abandonment Cost (incl. VAT & NCD)			6,310,084.49

NOTE FOR DECISION

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

<u>COST ESTIMATES FOR D&R OF AKPOR 1</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accomodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
ACCESS ROAD RECONSTRUCTION	1	Mobilisation to site			89,848.00
	2	Earthworks			52,082.00
		Base Preparation			96,660.00
	3	Demobilisation			11,599.00
		Total Access Road Prep cost			250,189.00
LOCATION DECOM.	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMMISSIONING					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2966627
		Overheads (5%)			148331
		Total Well Abandonment Cost (excl. VAT)			3114958
		Total Well Abandonment Cost (incl. VAT & NCD)			3,301,855.85

NOTE FOR DECISION

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

<u>COST ESTIMATES FOR D&R OF AKPOR 2</u>					
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Day	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accomodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
ACCESS ROAD RECONSTRUCTION	1	Mobilisation to site			89,848.00
	2	Earthworks			65,525.00
		Base Preparation			159,489.00
	3	Demobilisation			11,599.00
		Total Access Road Prep cost			326,461.00
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOM.					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			3042899
		Overheads (5%)			152145
		Total Well Abandonment Cost (excl. VAT)			3195044
		Total Well Abandonment Cost (incl. VAT & NCD)			3,386,746.59

NOTE FOR DECISION

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

COST ESTIMATES FOR D&R OF AKPOR 3					
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days / C	Total Cost
LOCATION PREPARATION	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
	3	Install/Recover Durabase mats at Location			35,143.00
	4	Demobilisation			11,599.00
		Total Location Prep cost			148,937.00
WELL ENGINEERING	1	HWU	25000	27	675000
	2	Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
	4	E-Line service charges - cutting	21500	5	107500
	5	E-Line service charges - CBL	60000	1	60000
	6	Cementing Unit	7800	20	156000
	7	Cement Chemicals	300	200	60000
	8	Bridge Plug	40000	1	40000
	9	Production Casing Cutter	40000	1	40000
	10	Intermediate Casing Cutter	40000	1	40000
	11	Surface Casing Cutter	40000	1	40000
	12	Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
	13	Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
	15	Accomodation and catering	150	1350	202500
	16	Diesel (5000ltrs/d at \$1.1)	5500	27	148500
	17	Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
ACCESS ROAD RECONSTRUCTION	1	Mobilisation to site			89,848.00
	2	Earthworks			43,683.20
		Base Preparation			106,326.00
	3	Demobilisation			11,599.00
		Total Access Road Prep cost			251,456.20
LOCATION DECOMMISSIONING	1	Mobilisation to site			92,262.00
	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
		Total Location Decommissioning cost			157,960.00
LOCATION RESTORATION	1	Mobilisation to site			92,262.00
	2	Earthworks			17,180.00
	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOM.					
		Total Decommissioning Cost			0
TOTAL		Total D&R Cost			2967894
		Overheads (5%)			148395
		Total Well Abandonment Cost (excl. VAT)			3116289
		Total Well Abandonment Cost (incl. VAT & NCD)			3,303,266.24