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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	0	National Petroleum Com ny (NAOC: 5%) in SPDC	1 2 \), Total: 10%, N	Nigeria Agip Oil			
Business or Function	Explor	ation & Production (EP)						
Amount	US\$ 6.3	3 mln Shell share (i.e. US\$	21.1 mln 100% JV), 50/50, MOD).			
Project	Apara d	& Akpor Wells Decommis	ssioning and Location	on Restoration	Project			
2012 commitments \$ mln (MOD)		Description		JVUS \$mln (100%)	US \$mln (Shell Share)			
See Table 1 for expenditure	1	EIA Studies		133,000.00	39,900.00			
phasing.	2	Borrow Pit Decommission	ing 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		vestment will be financed by SPDC's own cash flow						
Summary cash flow	mary cash flow							
Summary	Shell	Share, RT-11	NPV7% (USD mln)	VIR7%	RTEP			
economics		case	NA	NA	NA			

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

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 Apara 1, Apara 2, Apara 4, Apara 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 Apara 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 Apara 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 Apara 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.

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

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

		2012	2013	TOTAL
s/no	Activity	F\$	F\$	F\$
1	EIA Studies	133,000.00	0	133,000.00
2	Borrow Pit Decommissioning studies	337,000.00	0	337,000.00
3	Apara 1 Decommissioning and Restoration	2,658,009.90	0	2,658,009.90
4	Apara 2 Decommissioning and Restoration	2,852,259.90	0	2,852,259.90
5	Apara 4 Decommissioning and Restoration	2,852,259.90	0	2,852,259.90
6	Apara 7 Decommissioning and Restoration	2,658,009.90	0	2,658,009.90
7	Apara 3 Decommissioning and Restoration	0	3,566,259.90	3,566,259.90
8	Apara 8 Decommissioning and Restoration	0	8,403,347.40	8,403,347.40
9	Apara 9 Decommissioning and Restoration	0	4,986,778.65	4,986,778.65
10	Apara 10 Decommissioning and Restoration	0	5,952,909.90	5,952,909.90
11	Akpor 1 Decommissioning and Restoration	3,114,958.35	0	3,114,958.35
12	Akpor 2 Decommissioning and Restoration	3,195,043.95	0	3,195,043.95
13	Akpor 3 Decommissioning and Restoration*	1,087,962	2,028,326.46	3,116,288.91
14	GMOU	569,000.00	487,284.31	1,056,284.31
15	VAT & NCD	1,649,378.14	1,043,566.51	2,692,944.65
		21,106,882.44	26,468,473.18	47,575,355.62

*

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

About 41% (\$19.34mln) of the total project cost of \$47.6mln will be spent in Decommissioning and Restoration of Apara 8, Apara 9 and Apara10. These wells have large borrow pits that need to be properly decommissioned to forestall future liabilities to SPDC JV. It is therefore proposed to conduct further detailed studies on acceptable options for decommissioning of these wells. \$337,000 is budgeted for this study in 2012 and it is hoped that the outcome of proposed Borrow Pit remediation studies will reduce volume, content, and cost uncertainties for decommissioning and Restoration of associated Wellsite borrow pits. Also learning's from this pilot 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 1958 – 1962 and since then company ownership and structure has changed many times. Project team was unable to sight the initial Project Investment Proposals for Akpor and Apara fields. However, wells Decommissioning and Location Restoration costs have become a mandatory part of the required Investment proposals documentation since the formation of NAPPIMS. The operating philosophy being that the D&R costs are already part of the project economics during the field Operating Phase and SPDC JV make provisions for the final D&R of wells when they are no longer in use.

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

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 call 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. These unorganized settlement could lead to potential community problems especially if the occupants are not the original owners of the land. This situation call 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 call 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 call 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.

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

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 advice.

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, Supply Chain Management, Legal, and Treasury/Tax functions will provide functional support for this proposal.

Section 6: Project management, monitoring and review

The Front end project team for Pilot Wells Decommissioning and Restoration project was constituted as an integrated team of ten (10) staff that delivered the project plan and proposed this note for decision. The Well's Abandonment Execution team Lead is accountable for driving execution, managing the approved 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 Apara 1, Apara 2, Apara 4, Apara 7, Apara 3, Apara 8, and Akpor 1 (7 wells) wells.

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

An estimated cost of \$26.47mln will be provided as part of BP12 for project completion.

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.

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

SPDC PILOT DECOMMISSIONING AND LOCATION RESTORATION PROJECT

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

Section 12: Key Parameters

Section 13: Signatures

Front End Project Manager (UIG/T/DET)

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 Apara 1, Apara 2, Apara 4, Apara 7, Akpor 1, and Akpor 2 wells (6 wells).

This note for decision is submitted to UIG I	Directors for approval.
Supported by:	For shareholder approval:
	O: 1 : D (IIIO /III/D)
Isaac, Iyamu (UIG/T/W)	Ojulari, Bayo (UIG/T/D)
Date/	Date/
Bos, Bernard (FUI/F)	
Date/	
Initiator:	
Nwankwo, Cosmas	

APPENDIX: PROJECT PROPOSAL SHEETS

		COST ESTIMATES FOR D&R C	F APARA	1	
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
		Mobilisation to site			92,263.00
<u>N</u>		Earthworks			9,932.00
ON ₹ĀT		Install/Recover Durabase mats at Location			35,143.00
LOCATION PREPARATION	4	Demobilisation	-		11,599.00
LOC		Total Location Prep cost			148,937.00
	1	HWU	25000	25	625000
	2		120000	1	120000
		E-Line unit & PC and tools rental	7000	10	
		E-Line service charges - cutting services	21500	5	107500
	5	Cementing Unit rentals	7800	20	156000
(5)	6	Cement Chemicals	300	200	60000
WELL ENGINEERING	7	Bridge Plug	40000	1	40000
EER	8	Production Casing Cutter	40000	1	40000
<u>Z</u>	9	Intermediate Casing Cutter	40000	1	40000
Ë	10	Surface Casing Cutter	40000	1	40000
Ę.	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	2000
	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
Ō	1	Mobilisation to site			92,262.00
NINC	2	Earthworks			54,099.00
N 11SSI	3	Demobilisation			11,599.00
LOCATION DECOMMISSIONING		Total Location Decommissioning cost			157,960.00
	1	Mobilisation to site			92,262.00
Z	2				17,180.00
LOCATION RESTORATION	3	Demobilisation			11,599.00
LOC RES'		Total Location Restoration cost			121,041.00
_ L NG					
Id /					
BORROW PIT DECOMISSIONING					
			1		
		Total Decommisioning Cost			
		Total D&R Cost			2531438
IAL		Overheads (5%)			126572
TOTAL		Total Well Abandonment Cost (excl. VAT)			2658010
		Total Well Abandonment Cost (incl. VAT & NCD)			2,817,490.49

	COST ESTIMATES FOR D&R OF APARA 2					
	S.N.	Activity / Favinment / Concumpling	Unit Rate	Otv	Total Cost	
		Activity / Equipment / Consumables Mobilisation to site	Offic Rate	Qty	Total Cost	
7		Earthworks			92,263.00	
_ <u>_</u>		Install/Recover Durabase mats at Location			9,932.00	
IO I		Demobilisation			35,143.00	
OCATION PREPARATION	- 4	Demobilisation			11,599.00	
LO P.R		Total Location Prep cost			148,937.00	
	1	HWU	25000		675000	
		Brine services	120000			
		E-Line unit & PC and tools rental	7000			
		E-Line service charges - cutting	21500	5		
		E-Line service charges - CBL	60000		60000	
		Cementing Unit	7800			
ក្ន		Cement Chemicals	300			
IN IN		Bridge Plug	40000		40000	
N		Production Casing Cutter	40000		40000	
اق		Intermediate Casing Cutter	40000		40000	
L E		Surface Casing Cutter	40000		40000	
WELL ENGINEERING		Logistic support - vaccum truck, trucks, crane etc	4000			
>		Ancilliary equipments - tanks, office caravan, lightening etc	5000			
		WHM / WL services	5000			
		Accomodation and catering	150			
		Diesel (5000ltrs/d at \$1.1)	5500			
		Security cost for camp and site	8000			
	18	FTO	20000	1	20000	
		Total Well Abandonment Cost			2288500	
Ŋ N	1	Mobilisation to site			92,262.00	
INOISS	2	Earthworks			54,099.00	
-OCATION DECOMMISSIONING	3	Demobilisation			11,599.00	
LOC		Total Location Decommissioning cost			157,960.00	
	1	Mobilisation to site			92,262.00	
_		Earthworks			17,180.00	
NOF	_					
LOCATION	3	Demobilisation			11,599.00	
LOC		Total Location Restoration cost			121,041.00	
_U						
L N						
M IOIS						
BORROW PIT DECOMISSIONING						
BOF						
DE				l		
		Total Decommisioning Cost			O	
		Total D&R Cost			2716438	
, AF		Overheads (5%)			135822	
TOTAL		Total Well Abandonment Cost (excl. VAT)		İ	2852260	
·		Total Well Abandonment Cost (incl. VAT & NCD)			3,023,395.49	

		COST ESTIMATES FOR D&R C	F APAF	RA 3	
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
	1	Mobilisation to site			92,263.00
NO	2	Earthworks			9,932.00
NC ATIO	3	Install/Recover Durabase mats at Location			35,143.00
ATIC AR	4	Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost			148,937.00
	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
NG	7	Bridge Plug and fishing equipment	340000	1	340000
ERI	8	Production Casing Cutter	40000	1	40000
I N	9	Intermediate Casing Cutter	40000	1	40000
NE	10	Surface Casing Cutter	40000	1	40000
WELL ENGINEERING	11	Logistic support - vaccum truck, trucks,crane etc	4000	35	140000
WE		Ancilliary equipments - tanks, office caravan, lightening etc	5000	35	175000
		WHM / WL services	5000	10	50000
	14	Accomodation and catering	150	1750	262500
	15	Diesel (5000ltrs/d at \$1.1)	5500	35	192500
		Security cost for camp and site	8000	35	280000
		FTO	20000	1	20000
		Total Well Abandonment Cost			2968500
ING	1	Mobilisation to site			92,262.00
-OCATION DECOMMISSIONING	2	Earthworks			54,099.00
OCATION	3	Demobilisation			11,599.00
LOC/		Total Location Decommissioning cost			157,960.00
	1	Mobilisation to site			92,262.00
_	2	Earthworks			17,180.00
LOCATION RESTORATION	3	Demobilisation			11,599.00
LOCA		Total Location Restoration cost			121,041.00
BORROW PIT DECOMISSIONING					
BORROW PIT					
Sov Issi					
ORF					
B(
		Total Decommisioning Cost			0
		Total D&R Cost		}	3396438
TOTAL		Overheads (5%)			169822
5		Total Well Abandonment Cost (excl. VAT)			3566260
		Total Well Abandonment Cost (incl. VAT & NCD)			3,780,235.49

		COST ESTIMATES FOR D&R O	F APARA	4	
	S.N.	Activity / Equipment / Consumables	Unit Rate	Qty	Total Cost
	1			/	92,263.00
z	2				9,932.00
z E		Install/Recover Durabase mats at Location			35,143.00
ARA		Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost	İ		148,937.00
	1	HWU	25000	27	
			25000	27	675000
		Brine services	120000	1	120000
		E-Line unit & PC and tools rental	7000	10	70000
		E-Line service charges - cutting	21500	5	107500
		E-Line service charges - CBL	60000	1	60000
		Cementing Unit	7800	20	156000
WELL ENGINEERING	7		300	200	60000
Ë		Bridge Plug	40000	1	40000
Z		Production Casing Cutter	40000	1	40000
SNS		Intermediate Casing Cutter	40000	1	40000
=======================================		Surface Casing Cutter	40000	1	40000
ΝEI		Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
		Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
		WHM / WL services	5000	10	50000
		Accomodation and catering	150	1350	202500
		Diesel (5000ltrs/d at \$1.1)	5500	27	148500
		Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
Ξ	1	Mobilisation to site			92,262.00
SSIOI	2	Earthworks			54,099.00
NO!	3	Demobilisation			11,599.00
LOCATION DECOMMISSIONI NG		Total Location Decommissioning cost			157,960.00
	1				
		Mobilisation to site			92,262.00
N O	2	Earthworks			17,180.00
ATION FORATION	3	Demobilisation			11,599.00
LOCA		Total Location Restoration cost			121,041.00
T ING					
BORROW PIT DECOMISSIONING	-		+		
RO'	-		+		
S O S					
B DEC		Total Decommisioning Cost	+		0
		Total D&R Cost			2716438
AL		Overheads (5%)	1		135822
TOTAL		Total Well Abandonment Cost (excl. VAT)	†		2852260
i-		Total Well Abandonment Cost (incl. VAT & NCD)	1		3,023,395.49

		COST ESTIMATES FOR D&R C	OF APAI	RA 7	
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
	1	Mobilisation to site			92,263.00
z	2	Earthworks			9,932.00
Z F	3	Install/Recover Durabase mats at Location			35,143.00
ATIC	4	Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost			148,937.00
	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
well engineering	7	Bridge Plug	40000	1	40000
ERI	8	Production Casing Cutter	40000	1	40000
Z Z	9	Intermediate Casing Cutter	40000	1	40000
N.	10	Surface Casing Cutter	40000	1	40000
7	11	Logistic support - vaccum truck, trucks, crane etc	4000	25	100000
WE	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
		FTO	20000	1	20000
		Total Well Abandonment Cost			2103500
5	1	Mobilisation to site			92,262.00
Ž	2	Earthworks			54,099.00
NI MISSIO	3	Demobilisation			11,599.00
LOCATION DECOMMISSIONING		Total Location Decommissioning cost			157,960.00
	1	Mobilisation to site			92,262.00
7	2	Earthworks			17,180.00
LOCATION RESTORATION	3	Demobilisation			11,599.00
		Total Location Restoration cost			121,041.00
BORROW PIT DECOMISSIONING					
BORROW PIT COMISSIONIN				İ	
3RO MIS:				İ	
BOF					
DĒ		Total Decommisioning Cost		1	0
		Total D&R Cost			2531438
Ŋ.		Overheads (5%)	1		126572
TOTAL		Total Well Abandonment Cost (excl. VAT)			2658010
_		Total Well Abandonment Cost (incl. VAT & NCD)			2,817,490.49

		COST ESTIMATES FOR D&R C	OF APAF	RA 8	
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
		Mobilisation to site		, , ,	92,263.00
z		Earthworks			9,932.00
2 F.		Install/Recover Durabase mats at Location			35,143.00
LOCATION PREPARATION		Demobilisation			11,599.00
LOC/ PREF		Total Location Prep cost			148,937.00
	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
ā	8	Bridge Plug	40000	1	40000
WELL ENGINEERING		Production Casing Cutter	40000	1	40000
Ä		Intermediate Casing Cutter	40000	1	40000
و		Surface Casing Cutter	40000		40000
Ē		Logistic support - vaccum truck, trucks,crane etc	4000	28	112000
/ELI		Ancilliary equipments - tanks, office caravan, lightening etc	5000		140000
>		WHM services	2000		20000
		Accomodation and catering	150	_	210000
		Diesel (5000ltrs/d at \$1.1)	5500		154000
		Security cost for camp and site	8000		224000
		FTO	20000		20000
		Total Well Abandonment Cost			2253500
Z	1	Mobilisation to site			92,262.00
SSIO	2	Earthworks			54,099.00
NON	,	Demobilisation			11,599.00
LOCATION DECOMMISSIONI NG			†		
jΩZ	_	Total Location Decommissioning cost			157,960.00
		Mobilisation to site			92,262.00
N O	2	Earthworks			17,180.00
CATION	3	Demobilisation			11,599.00
LOCA		Total Location Restoration cost			121,041.00
BORROW PIT DECOMISSIONING					
	1	Estimated Borrow Pit Remediation costs	+		5,321,750.00
B. DEC	<u> </u>	Total Decommisioning Cost	+		5,321,750
		Total D&R Cost			8003188
A		Overheads (5%)			400159
TOTAL		Total Well Abandonment Cost (excl. VAT)	1		8403347
		Total Well Abandonment Cost (incl. VAT & NCD)			8,907,548.24

	COST ESTIMATES FOR D&R OF APARA 9					
	S.N.	Activity / Equipment / Consumables	Unit Ra	Qty	Total Cost	
	1	Mobilisation to site			92,263.00	
z	2	Earthworks			9,932.00	
Z E	3	Install/Recover Durabase mats at Location			35,143.00	
TIO AR/		Demobilisation			11,599.00	
LOCATION PREPARATION		Total Location Prep cost			148,937.00	
	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	
		Cementing Unit	7800	20	156000	
		Cement Chemicals	300	200	60000	
Ŋ		Bridge Plug	40000	1	40000	
WELL ENGINEERING		Production Casing Cutter	40000	1	40000	
N N		Intermediate Casing Cutter	40000	1	40000	
NG		Surface Casing Cutter	40000	1	40000	
i i		Logistic support - vaccum truck, trucks,crane etc	4000	25	100000	
WEL		Ancilliary equipments - tanks, office caravan, lightening etc	5000	25	125000	
_		WHM services	2000	10	20000	
		Accomodation and catering	150	1350	202500	
		Diesel (5000ltrs/d at \$1.1)	5500	25	137500	
		Security cost for camp and site	8000	25	200000	
		FTO	20000	1	20000	
	17	Total Well Abandonment Cost	20000		2103500	
_	1	Mobilisation to site			92,262.00	
NO		Earthworks			54,099.00	
NC						
LOCATION DECOMMISSIONI NG	3	Demobilisation Total Location Decommissioning cost			11,599.00 157,960.00	
	4					
		Mobilisation to site Earthworks			92,262.00	
LOCATION RESTORATION		Demobilisation			17,180.00 11,599.00	
OCATI						
		Total Location Restoration cost			121,041.00	
BORROW PIT DECOMISSIONING	1	Estimated Borrow Pit Remediation costs			2,217,875.00	
RO\ IISSI						
ORI OM						
B		Total Decommissioning Cost			2 247 0	
		Total Decommisioning Cost			2,217,875	
ا بـ ا		Total D&R Cost			4749313	
TOTAL		Overheads (5%)			237466	
		Total Well Abandonment Cost (excl. VAT)			4986779	
		Total Well Abandonment Cost (incl. VAT & NCD)			5,285,985.37	

		COST ESTIMATES FOR D&R OF	APARA	10	
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days	Total Cost
	1	Mobilisation to site			92,263.00
_	2	Earthworks			9,932.00
o z E	3	Install/Recover Durabase mats at Location			35,143.00
ATIOI ARA		Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost			148,937.00
	1	HWU	25000	27	675000
		Brine services	120000	1	120000
	3	E-Line unit & PC and tools rental	7000	10	70000
		E-Line service charges - cutting	21500	5	107500
		E-Line service charges - CBL	60000	1	60000
	7	Cementing Unit Cement Chemicals	7800	20	156000
WELL ENGINEERING	,	Bridge Plug	300 40000	200	60000 40000
IEER		Production Casing Cutter	40000	1	40000
NIÐ		Intermediate Casing Cutter	40000	1	40000
EN		Surface Casing Cutter	40000	1	40000
VELI	12	Logistic support - vaccum truck, trucks,crane etc	4000	27	108000
>		Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
		WHM/WL services	5000	10	50000
		Accomodation and catering Diesel (5000ltrs/d at \$1.1)	150 5500	1350 27	202500 148500
		Security cost for camp and site	8000	27	216000
		FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
ING	1	Mobilisation to site			92,262.00
NOI	2	Earthworks			54,099.00
ION	3	Demobilisation			11,599.00
LOCATION DECOMMISSIONING		Total Location Decommissioning cost			157,960.00
	1				
NOI	1	Mobilisation to site Earthworks			92,262.00 17,180.00
LOCATION		Demobilisation			11,599.00
LOC^ RESTI		Total Location Restoration cost			121,041.00
N PIT	1	Estimated Borrow Pit Remediation costs			2,953,000.00
OCIATED BORROW DECOMISSIONING					
TED B)MISS					
ASSOCIATED BORROW PIT DECOMISSIONING					
AS		Total December to the Cont			2 052 253
	1	Total DS-B Cost			2,953,000
7.		Total D&R Cost Overheads (5%)			5669438 283472
TOTAL		Total Well Abandonment Cost (excl. VAT)			5952910
		Total Well Abandonment Cost (incl. VAT & NCD)			6,310,084.49

		COST ESTIMATES FOR D&R OF AKPOR 1			
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Day	Total Cost
	1	Mobilisation to site			92,263.00
Z	2	Earthworks			9,932.00
Z F	3	Install/Recover Durabase mats at Location			35,143.00
AR/	4	Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost			148,937.00
	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
_U	7	Cement Chemicals	300	200	60000
N N	8	Bridge Plug	40000	1	40000
WELL ENGINEERING	9	Production Casing Cutter	40000	1	40000
15	10	Intermediate Casing Cutter	40000	1	40000
<u> </u>	11	Surface Casing Cutter	40000	1	40000
1111		Logistic support - vaccum truck, trucks,crane etc	4000	27	108000
>		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
		Security cost for camp and site	8000	27	216000
		FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
_	1	Mobilisation to site			89,848.00
AD UCT	2				52,082.00
RO STR	_	Base Preparation			96,660.00
ESS	3				11,599.00
ACCESS ROAD RECONSTRUCT ON		Total Access Road Prep cost			250,189.00
4 8 0	1				
Z	1	Mobilisation to site			92,262.00
MC.	2				54,099.00
LOCATION DECOM.	3				11,599.00
		Total Location Decommissioning cost			157,960.00
_ <u>6</u>	1	Mobilisation to site			92,262.00
ION	2	Earthworks			17,180.00
LOCATIO	3	Demobilisation			11,599.00
LOCATION RESTORATION		Total Location Restoration cost			121,041.00
ا کا					
-Id '					
BORROW PIT					
JRR.					
BORROW PIT DECOMISSIONING					
		Total Decommisioning Cost			C
		Total D&R Cost			2966627
TOTAL		Overheads (5%)			148331
2		Total Well Abandonment Cost (excl. VAT)			3114958
		Total Well Abandonment Cost (incl. VAT & NCD)			3,301,855.85

		COST ESTIMATES FOR D&R O	F AKPC	<u>R 2</u>	
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Day	Total Cost
	1	Mobilisation to site			92,263.00
7	2	Earthworks			9,932.00
N D	3	Install/Recover Durabase mats at Location			35,143.00
TIO ARA	4	Demobilisation			11,599.00
LOCATION PREPARATION		Total Location Prep cost			148,937.00
	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
(D	7	Cement Chemicals	300	200	60000
NING	8	Bridge Plug	40000	1	40000
EE	9	Production Casing Cutter	40000	1	40000
WELL ENGINEERING	10	Intermediate Casing Cutter	40000	1	40000
L EN	11	Surface Casing Cutter	40000	1	40000
VEL	12	Logistic support - vaccum truck, trucks,crane etc	4000	27	108000
>		Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
	14	WHM / WL services	5000	10	50000
		Accomodation and catering	150	1350	202500
		Diesel (5000ltrs/d at \$1.1)	5500	27	148500
		Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
9 E		Mobilisation to site			89,848.00
RO/	2	Earthworks			65,525.00
ESS	3	Base Preparation Demobilisation			159,489.00
ACCESS ROAD RECONSTRUCT ON	3	Total Access Road Prep cost			11,599.00 326,461.00
SSIONING		Mobilisation to site			92,262.00
SIOI	2	Earthworks			54,099.00
	3	Demobilisation			11,599.00
LOCATION DECOMM		Total Location Decommissioning cost			157,960.00
	1	Mobilisation to site			92,262.00
NO	2	Earthworks			17,180.00
ION	3	Demobilisation			11,599.00
LOCATION RESTORATION		Total Location Restoration cost			121,041.00
BORROW PIT DECOM.					
BOR P DEC		Total Decommisioning Cost			0
		Total D&R Cost			3042899
TOTAL		Overheads (5%)			152145
10		Total Well Abandonment Cost (excl. VAT)			3195044
		Total Well Abandonment Cost (incl. VAT & NCD)			3,386,746.59

		COST ESTIMATES FOR D&R (OF AKPO	OR 3	
	S.N.	Activity / Equipment / Consumables	Unit Rate	No of Days / 0	Total Cost
	1	Mobilisation to site			92,263.00
	2	Earthworks			9,932.00
NO	3	Install/Recover Durabase mats at Location			35,143.00
ION RAT		Demobilisation			
LOCATION PREPARATION	- 4	Total Location Prep cost			11,599.00 148,937.00
1	1	HWU	25000	27	675000
		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
		E-Line service charges - CBL	60000	1	60000
		Cementing Unit	7800	20	156000
Ŋ		Cement Chemicals	300	200	60000
ERII		Bridge Plug	40000	1	40000
WELL ENGINEERING		Production Casing Cutter Intermediate Casing Cutter	40000 40000	1	40000 40000
ENG		Surface Casing Cutter	40000	1	40000
ELL		Logistic support - vaccum truck, trucks, crane etc	4000	27	108000
≶		Ancilliary equipments - tanks, office caravan, lightening etc	5000	27	135000
		WHM / WL services	5000	10	50000
	15	Accomodation and catering	150	1350	202500
		Diesel (5000ltrs/d at \$1.1)	5500	27	148500
		Security cost for camp and site	8000	27	216000
	18	FTO	20000	1	20000
		Total Well Abandonment Cost			2288500
NO		Mobilisation to site			89,848.00
AD JCT	2	Earthworks			43,683.20
ACCESS ROAD RECONSTRUCTION		Base Preparation			106,326.00
ESS	3	Demobilisation			11,599.00
ACC		Total Access Road Prep cost			251,456.20
	1	Mobilisation to site			92,262.00
N	2	Earthworks			54,099.00
ATIO JMIN	3	Demobilisation			11,599.00
LOCATION DECOMMISSIO NING		Total Location Decommissioning cost			157,960.00
	1				92,262.00
NO ATIO	2	Earthworks			17,180.00
LOCATION RESTORATION	3	Demobilisation			11,599.00
LOCATION RESTORATI		Total Location Restoration cost			121,041.00
3ORROW PIT DECOM.					
BORF					_
		Total Decommisioning Cost Total D&R Cost			2967894
٦٢		Overheads (5%)			148395
TOTAL		Total Well Abandonment Cost (excl. VAT)			3116289
		Total Well Abandonment Cost (incl. VAT & NCD)			3,303,266.24