

# The Shell Petroleum Development Company of Nigeria Limited

## Internal Investment Proposal

### Summary Information

Directorate	Development		
Group equity interest	100% in SPDC, where SPDC is the operator of an unincorporated Joint Venture (JV) with a 30% interest.		
Other shareholders/partners	Nigerian National Petroleum Company (NNPC): 55%, Total: 10%, and Nigeria Agip Oil Company (NAOC):5% in SPDC JV		
Amount	US\$ 12.0 Mln 50/50 Level (IV) MOD OPEX Shell share (US\$ 40.0 Mln 100%JV) is requested for approval in this proposal.		
Project	<b>2010 and 2011 Corporate Well And Reservoir Surveillance</b>		
Main commitments	<b>SCOPE</b>	<b>100% JV (US\$ Mln)</b>	<b>Shell Share (US\$ Mln)</b>
	<b>OPEX (Well And Reservoir Surveillance)</b>		
	Bottom Holes Pressure (BHP)	10.0	3.0
	Carbon-Tracer Survey	4.0	1.2
	Multi-rate Test/Deliverability Test (MRT)	8.0	2.4
	Carbon-Oxygen	12.0	3.6
	Production Logging Tools (PLT)	4.0	1.2
	Production Volume Temperature (PVT)	2.0	0.6
	<b>Total</b>	<b>40.0</b>	<b>12.0</b>
Source and form of financing	This investment will be financed with JV Funding and Shell Share capital expenditure will be met by SPDC's own cash flow and/or the existing shareholder facility. Formal JV partners' approval will therefore be obtained		
Summary cash flow	Not Applicable to Cost-only project		
Summary economics	Summary economics*	NPV 7% (US\$ mln)	VIR 7%
	Base case (RV-RT)	-1.8	n/a

### *Section 1: The proposal (management summary)*

#### Management Summary

This investment proposal seeks organizational approval for Opex funding of US\$ 12.0 Mln Shell Share (US\$ 40.0 Mln 100% JV) to enable:

- Acquisition of 388 surveillance data in 2010 and 389 in 2011 in SPDC East, West and EA assets.

The surveillance programme is defined based on a ranking of priorities relating to:-

- Data required to close out reserves audit action points in consultation with the RE discipline chief.
- Data required to support development studies in the ODC.
- Data required to firm up well targets in planned wells on the drilling sequence.
- Data required to confirm wells on the STOG/CIW sequence.
- Data required to support discipline reviews (Horizontal well performance, bore hole failure, core data etc,etc)
- Data required to meet statutory DPR requirements.

An IP has never been written for this project until a recent review of the strategic importance and the significant Opex costs associated with these activities were carried out. The main bedrock of SPDC continuing in business is the effective management of our wells and reservoirs. It is in recognition of this that a separate body called “Well and Reservoir Management (WRM) was set up. A major input to the effectiveness of WRM is subsurface data acquisition and analysis. The corporate surveillance project fulfils this role. SPDC is also obligated to the Federal Government to yearly provide evidence of sound wells and reservoir management and this statutory role can only be demonstrated through acquisition and analysis of subsurface data for which this IP now seeks required funding.

This is a cost-only project and there is no direct additional production gain as a result of this activity but inferences drawn from the results of these activities results in production optimization/firm up production addition activities.

In summary, these planned activities are aimed at meeting statutory requirements, safe-guarding NFA production, unlocking oil and gas potential, building capability (including LEAN) and thus, embedding the improved processes for achieving and sustaining world class Well and Reservoir Management.

Risks to these projects are technical risks, security and community disturbances, for which mitigation plans, have been put in place. Proposed scope is technical, routine and in existing producing fields, where reasonable understanding exists with communities, all within SPDC approved HSE standards and Well Services execution capacity. Surplus back-up activities exist to replace those affected by technical complications and/or community disturbances.

#### 2009 Budget Performance

In 2009, an approved budget of US\$ 6.3 Mln Shell Share (US\$ 20.9Mln 100% JV) was provided for Corporate Surveillance. US\$ 5.7 Mln Shell Share (US\$ 19.1 Mln 100% JV) was spent to acquire 319 rigless subsurface data against a plan of 263. The total under spend of US\$ 0.53 Mln Shell Share (US\$ 1.78 Mln 100% JV) was not accrued to 2009 and not included in this IP.

Some high cost activities like Carbon Oxygen logs were not completely acquired due to contractual issues, but more Bottom hole pressures (BHPs) than planned were acquired because they are relatively low cost compared the carbon oxygen logs, hence the total surveys acquired were more than planned for the given budget.

The activities not executed in 2009 were moved to 2010 but have been re-screened and ranked with new opportunities for 2010. The list of opportunities is therefore regularly revised to remove or include new opportunities while ensuring all expenditures are within the approved budget for the business approved activities target.

In 2008, 305 subsurface data were acquired. A total sum of US\$ 3.5 Mln Shell Share (\$11.8 Mln 100% JV) was spent in acquiring the data while in 2009, 319 subsurface data were acquired. A total sum of US\$ 5.7 Mln Shell Share (US\$ 19.1Mln 100% JV) was spent in acquiring the data. Following this trend, 388 and 389 subsurface data have been planned to be acquired in 2010 and 2011

respectively. A total sum of US\$ 12.0 Mln Shell Share (US\$20.0 Mln 100% JV) for each year will be required in acquiring the data.

The portfolio being carried for 2010 and 2011 assumes that both the West and the East will be accessible. The opportunity database remains dynamic due to ongoing reviews, planned re-entries and additional new scope in both East and West (high flow line theft).

Tables below give a breakdown of the corporate surveillance activities plan for 2010 and 2011. A total sum of US\$ 12.0 Mln Shell Share (\$40.0 Mln 100% JV) will be required to fund the activity levels.

Table A1: Project Cost Phasing (100% JV - US\$ Mln, MOD):

Well and Reservoir Surveillance Cost	2010	2011	Total
100% JV	20	20	40
Shell Share	6	6	12

Table A2: 2010 Corporate Surveillance Plan

Count of Well/String	Team					
Data Type	TDLE	TDLW	TDSE	TDSO	TDSW	Total
C/O Log <sup>1</sup>	4	10	12	3	9	38
FG/BU/SG <sup>2</sup>	46	58	19	6	14	143
MRT <sup>3</sup>		2	3			5
PLT <sup>4</sup>	1			4		5
PVT <sup>5</sup>	4		6		6	16
SG	12	12	43	12	73	152
CO <sub>2</sub> <sup>6</sup> TRACER	6	14			4	24
Deliverability Test	4					4
Inj. Fall Off	1					1
<b>Total</b>	<b>78</b>	<b>96</b>	<b>83</b>	<b>25</b>	<b>106</b>	<b>388</b>

Table A3: 2011 Corporate Surveillance Plan

Count of Well/String	Team				
Data Type	TDLE	TDLW	TDSE	TDSW	Total
C/O Log	3		9	11	23
FG				3	3
FG/BU/SG	69	26	75	21	191
MRT		2			2
PLT	1			3	4
PVT				3	3
SG	14	5	39	95	153
Deliverability Test	6				6
Caliper Survey			1		1
Temp/Caliper Log	3				3
<b>Total</b>	<b>96</b>	<b>33</b>	<b>124</b>	<b>136</b>	<b>389</b>

1. Carbon Oxygen Log, 2. Flowing Gradient, Build Up, Static Gradient, 3. Multi Rate Test, 4. Production Logging Tool, 5. Pressure Volume Temperature, 6. Carbon Dioxide

The “Data Type” essentially gives the type of surveillance that will be acquired and the associated area team and number of type data.

## ***Section 2: Value proposition and strategic and financial context***

The corporate surveillance project:

- Supports SPDC data acquisition strategy required to close out reserves audit action points with external bodies,
- Supports Development studies in the Opportunity Development Centre,
- Firm up well targets in planned wells on the drilling sequence,
- Confirm wells on the STOG/CIW sequence,
- Support discipline reviews (Horizontal well performance, bore hole failure, core data etc, etc), and
- Meet statutory DPR requirements (maintain licence to operate).

## **Summary Economics**

The project base case was evaluated as a cost only to assess maximum exposure of the company. The project cost is treated as oil independent OPEX. No revenue stream has been included in this analysis.

A ‘high OPEX’ sensitivity of 10% cost over-run on base case OPEX was also evaluated.

The results of the economic evaluations, together with the assumptions are presented below.

**Table 3: Economics Indicators (Shell Share)**

PV Reference Date: 1/7/2010	NPV (\$/S \$ mln)		VIR	RTEP	UTC (RT \$/bbl or \$/mln btu)		Payout-Time (RT)	Maximum Exposure \$mln (RT)
Cash flow forward from: 1/1/2010	0%	7%	7%	%	0%	7%		
Base Case								
SV-RT (\$50/bbl)	-1.8	-1.8	n/a	n/a	n/a	n/a		
RV-RT (\$60/bbl)	-1.8	-1.8	n/a	n/a	n/a	n/a		1.8 (2011)
HV-RT (\$80/bbl)	-1.8	-1.8	n/a	n/a	n/a	n/a		
Sensitivities (using RV-RT)								
High Opex (+10%)		-2.0	n/a					2.0 (2011)

**Table 4: Key Project Parameter Data (Shell Share)**

Parameter	Unit	Bus Plan	Low	Mid	High	Comments
Opex (MOD)	US\$ mln	12.0	11.4	12.0	13.2	High/Low +10/-5%
Production Volume	mm boe	n/a	n/a	n/a	n/a	
Start Up Date	mmm-yy	Jan-10	Jun-10	Jan-10	Mar-10	
Production in first 12 months	mm boe	n/a	n/a	n/a	n/a	

## **Assumptions:**

- All costs are treated as oil independent OPEX.
- NDDC cost assumed at 3% of total expenditure.
- No revenue stream is included in this analysis.
- 2% of OPEX is treated as SCD and included in project cost

### ***Section 3: Risks, opportunities and alternatives***

#### *Community Interface*

These activities are covered under the global memorandum of understanding (GMOU) umbrella for those areas where they have been signed. For these, Cluster Development Boards (CDBs) and Community Trusts (CTs) will be informed accordingly of the activities involved.

Where there is no GMOU, steps will be taken to secure freedom to operate via homage payment and employment of community workers during the rigless well operations and to facilitate negotiations, community development support will be provided in line with SPCA guidelines. Where necessary to facilitate negotiations, community developments' support will be provided (football kits, plastic chairs, computers, etc.)

#### *Security and HSE management*

A project specific HSE plan will be developed and implementation actions agreed with key stakeholders, such that the associated activities are delivered under the current drive to achieve **'Goal Zero'**. Controls will be put in place to mitigate the identified hazards and effects, but these will be subjected to continual supervisory critique to ascertain their adequacy and effectiveness throughout the execution phase.

In addition to the project team latching into existing security arrangement in the area of operation, the LIO & Gas lift project activities will be supported by deployment of duly approved Site Specific Security Plan (SSSP) based on risk assessment of the area to mitigate and manage identified security threats/risks.

Furthermore, the Project Security Plan (PSP) will address and also recommend appropriate security emergency response controls to proactively manage potential incidents in the event of occurrence.

#### ***General***

As per SPDC procedures the contractor handling the any of the projects will develop a security plan, to be agreed to by the Contract Holder, and then sent to the Area Security Adviser for review. Thereafter, the reviewed plan will be sent to the Security Coordinator/Asset Manager for approval. It is only then that the contractor can mobilize to site to commence well operations.

#### **Risks and Mitigation**

Risk		Mitigation
Technical	Operational risks	388 surveillance activities planned for 2010 and 389 for 2011. Activities are technical and annual routine within SPDC overall standards and execution capacity. Surplus back-up surveillance candidates available to make up for the risks identified.
	Lower productivity	
Community disturbances	Delay in project execution	Focus on East Swamp and Western division reopening ongoing. Surveillance portfolio large to provide replacement candidates
Health, Safety & Security	Damage to the environment	Strict compliance with all SPDC HSE policies and procedures. Latch into existing security arrangement in the area of operation. Put in place Project Security Plan (PSP).
	Damage to Equipment	
	Loss of life/Insecurity	

### ***Opportunities***

The dynamic nature of the surveillance portfolio will enable additional opportunities to be included by the Value Realization teams during the course of the year. The Subsurface Operations Support team will execute these opportunities provided they meet or exceed base plan screening criteria. Due to multiple risks (access, technical, security, community) the initiative has been taken to prepare all outstanding opportunity proposals in order to mature the portfolio and allow execution on a first-come-first-serve basis pending overall readiness until the budget is exhausted or additional budget is secured.

### ***Alternatives***

The activities under discussion are core business activities in any E&P environment and as such there is no alternative for not executing them. For the surveillance opportunities, the Do-Nothing scenario will impact negatively on SPDC's wells and reservoir management target.

Proposed activities will lead to safeguarding NFA production, higher ultimate recoveries, higher well utilization and sustainability through capability building.

### ***Section 4: Corporate structure, and governance***

SPDC is the operator of an Unincorporated JV with 30% interest, with Under Operational Control (UOC) and Joint Controlled Assets (JCA).

This proposal is within the SPDC corporate structure and governance framework.

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

This project operates in line with SPDC processes and is supported by the relevant functions: Well Engineering; Well Services; Contracting & Procurement and Corporate Affairs Directorate. The proposal is consistent with SPDC's strategy to effectively manage the wells and reservoirs to continue to stay in business. The Finance, HSE/SCD, Supply Chain Management, Legal, Treasury and Tax Functions have provided functional support for this IP.

### ***Section 6: Project management, monitoring and review***

The execution of these activities will be fully coordinated by the WRM Business Improvement team, working with the respective Asset teams in line with the existing SPDC organisational model.

For all surveillance activities, a dedicated, 2-staff team working together with respective Asset teams and well completion and intervention team, will have single point accountability for driving execution, managing the budget, monitoring performance and achieving the surveillance target associated with this IP.

The WRM BI and the Subsurface Operations Support teams both reside in the Development Directorate and report directly to the SPDC Asset Development Manager with interface with other departments in SPDC and the Shell group. As such, direct cooperation with the Asset Development/Value Realization teams is guaranteed. Strong operational ties exist with the Well Completion and Intervention team and the Engineering Hub teams. Keen interest and support from the Production Directorate is secured through a common objective: to produce more oil. The Corporate Affairs Directorate is instrumental in creating the community relations that allow the team to operate in the swamps and on land.

Hence, the teams will report weekly and monthly to ADM management and there will be regular reviews with internal stakeholders (C&WI, Engineering etc) to monitor project health

### ***Section 7: Budget provision***

The BP09 requested budget for the LIO project has been adjusted to US\$ 12.0 Mln Shell Share (\$40.0 Mln 100% JV) in line with JV support for the 2010 and 2011 planning year with each year accounting for \$6.0 Mln Shell Share. The agreed annual budget will not be exceeded.

### ***Section 8: Group financial reporting impact***

*The post-tax expenditure related to this IP will be evaluated after the completion of economics.*

### ***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 from SPDC's own generation of funds and existing shareholder facility assuming the balance of the shareholder facility remains above zero; otherwise it will be subject to a separate Group Financing Proposal.

### ***Section 11: Taxation***

Taxation will be in accordance with SPDC's general tax for Capex and Opex activities.

### ***Section 12: Key Parameters***

The following are the main aspect of this proposal:

Approval for the amount of US\$ 12.0 Mln OPEX Shell Share 50/50, MOD, (US\$ 40.0 Mln 100% JV) to:

- Acquire 388 surveillance data for WRM Business Improvement in 2010 at a planned cost of \$6.0Mln Shell Share.
- Acquire 389 surveillance data for WRM Business Improvement in 2011 at a planned cost of \$6.0Mln Shell Share.
- Meet statutory requirement on reservoir monitoring and thus maintain our license to operate.

### ***Section 13: Signatures***

This Proposal is submitted to EPG Regional Development General Manager for approval.

Supported by:

.....

***Goke Akinrinmade***

**Asset Dev. Mgr**

EPG-TDS

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

***Utunedi Erome***

***Project Initiator***

EPG-TDSS

Supported by:

.....

***Van Velden, Rob***

***Regional BF - Tech.  
Disciplines***

SPDC-EPF-G-T

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

For Business approval:

.....

***Bayo Ojulari***

***(General Manager, Development,  
EPG-TD)***

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

## Appendix-1: Baseline List of Corporate Surveillance Projects for 2010

S/N	Well/String	Data Type	Acquisition Method	S/N	Well/String	Data Type	Acquisition Method
1	ADNE001S	FG/BU/SG	Slick line	71	OBN54	C/O log	Electric line
2	ADNE004L	FG/BU/SG	Slick line	72	OTAM002	C/O log	Electric line
3	AFAM007T	FG/BU/SG	Slick line	73	UMUE004T	SG	Slick line
4	AFAM008T	SG	Slick line	74	UMUE004T	SG	Slick line
5	AFAM008T	SG	Slick line	75	UMUE008L	FG/BU/SG	Slick line
6	AFAM008T	Deliverability Test	Slick line	76	UMUE010L	FG/BU/SG	Slick line
7	AFAM23	PVT	Sep. Sampling	77	UMUE010L	C/O log	Electric line
8	AGBD011T	CO2 TRACER	Tracer Tools	78	UMUE022T	SG	Slick line
9	AGBD030L	FG/BU/SG	Slick line	79	AFIE0011	C/O log	Electric Line
10	AGBD033L	FG/BU/SG	Slick line	80	AFIE012L	SG	Slick line
11	AGBD034L	FG/BU/SG	Slick line	81	ERMU001L	SG	Slick line
12	AGBD034S	FG/BU/SG	Slick line	82	ERMU002L	SG	Slick line
13	AGBD039L	FG/BU/SG	Slick line	83	ERMU008L	SG	Slick line
14	AGBD040L	CO2 TRACER	Tracer Tools	84	ERMU012L	SG	Slick line
15	AGBD040S	FG/BU/SG	Slick line	85	ERMU012S	FG/BU/SG	Slick line
16	AHIA003L	FG/BU/SG	Slick line	86	EVWR001S	FG/BU/SG	Slick line
17	AHIA005L	FG/BU/SG	Slick line	87	EVWR011L	FG/BU/SG	Slick line
18	DBUC015T	FG/BU/SG	Slick line	88	EVWR013L	FG/BU/SG	Slick line
19	ELWA015L	FG/BU/SG	Slick line	89	KOKR038T	FG/BU/SG	Slick line
20	ELWA015S	FG/BU/SG	Slick line	90	OBEEN003L	FG/BU/SG	Slick line
21	ELWA018L	FG/BU/SG	Slick line	91	OBEEN010S	FG/BU/SG	Slick line
22	ELWA018S	FG/BU/SG	Slick line	92	OBEEN014L	FG/BU/SG	Slick line
23	ETEL6T	FG/BU/SG	Slick line	93	OBEEN024L	FG/BU/SG	Slick line
24	GBAR0012T	PVT	Surface	94	OLOM 04L	CO2 TRACER	Tracer Tools
25	IMOR0030S	FG/BU/SG	Slick line	95	OLOM 05S	CO2 TRACER	Tracer Tools
26	IMOR0031S	FG/BU/SG	Slick line	96	OLOM 07S	CO2 TRACER	Tracer Tools
27	IMOR007L	FG/BU/SG	Slick line	97	OLOM 21L	CO2 TRACER	Tracer Tools
28	IMOR028S	FG/BU/SG	Slick line	98	OLOM 27L	CO2 TRACER	Tracer Tools
29	IMOR045L	FG/BU/SG	Slick line	99	OLOM 35S	CO2 TRACER	Tracer Tools
30	IMOR064L	FG/BU/SG	Slick line	100	OLOM001L	FG/BU/SG	Slick line
31	IMOR10L	CO2 TRACER	Tracer Tools	101	OLOM002L	FG/BU/SG	Slick line
32	IMOR65L	CO2 TRACER	Tracer Tools	102	OLOM003L	FG/BU/SG	Slick line
33	IMOR65S	CO2 TRACER	Tracer Tools	103	OLOM004S	FG/BU/SG	Slick line
34	ISIM 004T	FG/BU/SG	Slick line	104	OLOM008L	CO2 TRACER	Tracer Tools
35	ISIM001L	FG/BU/SG	Slick line	105	OLOM011L	FG/BU/SG	Slick line
36	ISIM002S	FG/BU/SG	Slick line	106	OLOM016L	CO2 TRACER	Tracer Tools
37	KOCR022T	SG	Slick line	107	OLOM016S	CO2 TRACER	Tracer Tools
38	KOCR025T	C/O log	Electric line	108	OLOM017L	FG/BU/SG	Slick line
39	MINI001L	SG	Slick line	109	OLOM022L	FG/BU/SG	Slick line
40	MINI001S	FG/BU/SG	Slick line	110	OLOM025T	SG	Slick line
41	MINI002T	SG	Slick line	111	OLOM028L	FG/BU/SG	Slick line
42	MINI003L	PLT	Electric line	112	OLOM029L	FG/BU/SG	Slick line
43	MINI004L	SG	Slick line	113	OLOM031L	FG/BU/SG	Slick line
44	MINI004S	SG	Slick line	114	OLOM031S	SG	Slick line
45	MINI008T	FG/BU/SG	Slick line	115	OLOM032S	FG/BU/SG	Slick line
46	MINI009T	FG/BU/SG	Slick line	116	OLOM032S	CO2 TRACER	Tracer Tools
47	NKAL 005L	FG/BU/SG	Slick line	117	OLOM034L	FG/BU/SG	Slick line
48	NKAL 011S	PVT	Surface	118	OLOM034S	FG/BU/SG	Slick line
49	NKAL 014L	PVT	Surface	119	OLOM035S	FG/BU/SG	Slick line
50	NUNR006S	FG/BU/SG	Slick line	120	OLOM036S	FG/BU/SG	Slick line
51	NUNR012L	SG	Slick line	121	OLOM04L	CO2 TRACER	Tracer Tools
52	OBEA023T	SG	Slick line	122	OLOM04S	CO2 TRACER	Tracer Tools
53	OBEI006T	FG/BU/SG	Slick line	123	OVHO001	C/O log	Electric Line
54	OBN002T	FG/BU/SG	Slick line	124	OVHO002	C/O log	Electric Line
55	OBN005S	FG/BU/SG	Slick line	125	OVHO005	C/O log	Electric Line
56	OBN024S	FG/BU/SG	Slick line	126	OVHO007	C/O log	Electric Line
57	OBN026T	FG/BU/SG	Slick line	127	OWEH001S	FG/BU/SG	Slick line
58	OBN027S	FG/BU/SG	Slick line	128	OWEH003L	SG	Slick line
59	OBN028L	FG/BU/SG	Slick line	129	OWEH004S	FG/BU/SG	Slick line
60	OBN031T	INJ. FALL OFF	Slick line	130	OWEH006L	FG/BU/SG	Slick line
61	OBN035S	FG/BU/SG	Slick line	131	OWEH007S	SG	Slick line
62	OBN035S	FG/BU/SG	Slick line	132	OWEH010S	SG	Slick line
63	OBN043T	Deliverability Test	Slick line	133	OWEH011S	FG/BU/SG	Slick line
64	OBN044T	Deliverability Test	Slick line	134	SAPL010L	FG/BU/SG	Slick line
65	OBN045L	FG/BU/SG	Slick line	135	SAPL017T	MRT	Slick line
66	OBN045S	FG/BU/SG	Slick line	136	SAPL018T	MRT	Slick line
67	OBN046T	Deliverability Test	Slick line	137	UGHE005L	FG/BU/SG	Slick line
68	OBN051L	FG/BU/SG	Slick line	138	UGHE006S	FG/BU/SG	Slick line
69	OBN051S	FG/BU/SG	Slick line	139	UGHE009L	FG/BU/SG	Slick line
70	OBN055L	CO2 TRACER	Tracer Tools	140	UGHE009S	FG/BU/SG	Slick line



S/N	Well/String	Data Type	Acquisition Method	S/N	Well/String	Data Type	Acquisition Method
141	UGHE025T	FG/BU/SG	Slick line	211	BONN006	C/O log	Electric Line
142	UGHW007S	FG/BU/SG	Slick line	212	BONN009	C/O log	Electric Line
143	UGHW011L	FG/BU/SG	Slick line	213	BONN010L	SG	Slick line
144	UGHW020L	FG/BU/SG	Slick line	214	BONN010S	SG	Slick line
145	UGHW026S	FG/BU/SG	Slick line	215	BONN012	C/O log	Electric Line
146	UGHW028S	FG/BU/SG	Slick line	216	BONN012S	SG	Slick line
147	UTOR005L	FG/BU/SG	Slick line	217	BONN013T	SG	Slick line
148	UTOR006L	FG/BU/SG	Slick line	218	BONN016L	SG	Slick line
149	UTOR006S	FG/BU/SG	Slick line	219	BONN016S	SG	Slick line
150	UTOR007L	FG/BU/SG	Slick line	220	BONN018L	SG	Slick line
151	UTOR009T	FG/BU/SG	Slick line	221	BONT002L	SG	Slick line
152	UTOR012L	FG/BU/SG	Slick line	222	BONT002S	SG	Slick line
153	UTOR012S	FG/BU/SG	Slick line	223	CAWC001L	SG	Slick Line
154	UZRE001S	FG/BU/SG	Slick line	224	CAWC001S	SG	Slick Line
155	UZRE003L	FG/BU/SG	Slick line	225	CAWC006T	SG	Slick Line
156	UZRE003S	FG/BU/SG	Slick line	226	CAWC010L	SG	Slick Line
157	UZRE004L	FG/BU/SG	Slick line	227	CAWC010L	C/O log	Electric Line
158	UZRE008L	FG/BU/SG	Slick line	228	CAWC010S	SG	Slick Line
159	UZRE019L	FG/BU/SG	Slick line	229	CAWC012L	SG	Slick Line
160	UZRE019S	FG/BU/SG	Slick line	230	CAWC016	C/O log	Electric Line
161	UZRE022L	FG/BU/SG	Slick line	231	CAWC017T	SG	Slick Line
162	UZRE022S	FG/BU/SG	Slick line	232	CAWC018T	C/O log	Electric Line
163	UZRW002L	FG/BU/SG	Slick line	233	CAWC018T	FG/BU/SG	Slick Line
164	UZRW005S	SG	Slick line	234	CAWC021L	FG/BU/SG	Slick Line
165	UZRW007L	FG/BU/SG	Slick line	235	CAWC021S	FG/BU/SG	Slick Line
166	UZRW007S	FG/BU/SG	Slick line	236	CAWC022L	C/O log	Electric Line
167	UZRW010S	SG	Slick line	237	CAWC023L	C/O log	Electric Line
168	OLOM 07L	CO2 TRACER	Tracer Tools	238	CAWC028T	FG/BU/SG	Slick Line
169	OLOM022L	CO2 TRACER	Tracer Tools	239	CAWC029T	FG/BU/SG	Slick Line
170	KOKR007	C/O log	Electric Line	240	CAWC033L	SG	Slick Line
171	KOKR009	C/O log	Electric Line	241	CAWC035S	SG	Slick Line
172	KOKR010	C/O log	Electric Line	242	CAWC039L	SG	Slick Line
173	OVHO010	C/O log	Electric Line	243	CAWC039S	SG	Slick Line
174	OVHO011	C/O log	Electric Line	244	CAWC040L	SG	Slick Line
175	AKOS002	C/O log	Electric Line	245	CAWC040S	SG	Slick Line
176	AKOS002L	SG	Slick line	246	CAWC042T	FG/BU/SG	Slick Line
177	AKOS003L	FG/BU/SG	Slick line	247	CAWC044S	SG	Slick Line
178	AKOS003S	FG/BU/SG	Slick line	248	CAWC049S	SG	Slick Line
179	AKOS004L	SG	Slick line	249	CAWC051T	FG/BU/SG	Slick Line
180	AKOS004S	SG	Slick line	250	CAWC052L	C/O log	Electric Line
181	AKOS005S	SG	Slick line	251	CAWC09T	C/O log	Electric Line
182	AKOS006T	SG	Slick line	252	CAWC18T	PVT	Other
183	AKOS007L	FG/BU/SG	Slick line	253	CAWC21L	PVT	Other
184	AKOS007S	SG	Slick line	254	CAWC28T	PVT	Other
185	AKOS009S	SG	Slick line	255	CAWC29T	PVT	Other
186	AKOS010S	SG	Slick line	256	CAWC42T	PVT	Other
187	AKOS011	C/O log	Electric Line	257	CAWC4T	PVT	Other
188	AKOS011L	SG	Slick line	258	EA 51	FG/BU/SG	Slick line
189	AKOS011S	SG	Slick line	259	EA21	SG	Slick line
190	AKOS013L	SG	Slick line	260	EA23	SG	Slickline
191	AKOS013S	SG	Slick line	261	EA24	C/O log	Slickline
192	AKOS014L	SG	Slick line	262	EA24	SG	Slickline
193	AKOS014S	SG	Slick line	263	EA25	PLT	CT
194	AKOS10L	SG	Slick line	264	EA25	SG	Slick line
195	ALAK003L	FG/BU/SG	Slick line	265	EA26	FG/BU/SG	Slickline
196	ALAK003S	FG/BU/SG	Slick line	266	EA32	SG	Slickline
197	ALAK007L	FG/BU/SG	Slick line	267	EA32	PLT	CT
198	ALAK007S	FG/BU/SG	Slick line	268	EA33	C/O log	Slick line
199	ALAK009T	MRT	Slick line	269	EA35	SG	Slick line
200	ALAK011T	FG/BU/SG	Slick line	270	EA36	SG	Slickline
201	ALAK016T	SG	Slick line	271	EA37	SG	Slickline
202	ALAK019T	SG	Slick line	272	EA42	PLT	CT
203	ALAK021T	SG	Slick line	273	EA42	SG	Slick line
204	ALAK022T	FG/BU/SG	Slick line	274	EA46	SG	Slick line
205	ALAK023T	MRT	Slick line	275	EA47	FG/BU/SG	Slick line
206	ALAK025T	FG/BU/SG	Slick line	276	EA48	PLT	CT
207	ALAK027L	FG/BU/SG	Slick line	277	EA49	FG/BU/SG	Slick line
208	ALAK031L	FG/BU/SG	Slick line	278	EA50	FG/BU/SG	Slick line
209	ALAK034T	MRT	Slick line	279	EA53	C/O log	Slickline
210	AWOB009L	SG	Slick line	280	EA53	SG	Slickline

S/N	Well/String	Data Type	Acquisition Method
281	EA-54	FG/BU/SG	Slickline
282	EA-54	SG	Slick line
283	AFRE-004S	SG	Slick line
284	AFRE-007L	SG	Slick line
285	AFRE-014L	SG	Slick line
286	AFRE-014S	SG	Slick line
287	AGBA-0001L	SG	Slick line
288	AJUI-001L	SG	Slick line
289	AJUI-001S	SG	Slick line
290	AKON-001L	SG	Slick line
291	AKON-001S	SG	Slick line
292	BATA-006L	SG	Slick line
293	BENS-006S	SG	Slick line
294	BENS-010	C/O log	Electric line
295	BENS-010L	SG	Slick line
296	BENS-010L	SG	Slick line
297	BENS-011S	SG	Slick line
298	BENS-013T	SG	Slick line
299	BENS-017L	SG	Slick line
300	BENS-017S	SG	Slick line
301	BENS-019L	SG	Slick line
302	ESCB-001L	FG/BU/SG	Slick line
303	ESCB-001S	FG/BU/SG	Slick line
304	ESCB-002	C/O log	Electric line
305	ESCB-002L	SG	Slick line
306	ESCB-003T	FG/BU/SG	Slick line
307	ESCB-004S	SG	Slick line
308	ESCB-005L	PVT	Sep. Sampling
309	ESCB-006	C/O log	Electric line
310	ESCB-006L	SG	Slick line
311	ESCB-006S	SG	Slick line
312	ESCB-010L	SG	Slick line
313	ESCB-011S	SG	Slick line
314	ESCB-013S	PVT	Other
315	ESCB-013S	FG/BU/SG	Slick line
316	ESCB-014	C/O log	Electric line
317	ESCB-014S	SG	Slick line
318	FORC-002L	SG	Slick line
319	FORC-005S	SG	Slick line
320	FORC-015S	SG	Slick line
321	FORC-015S	SG	Slick line
322	FORC-023L	SG	Slick line
323	FORC-025T	SG	Slick line
324	FORC-026S	SG	Slick line
325	FORC-027L	SG	Slick line
326	FORC-027S	SG	Slick line
327	FORC-028L	SG	Slick line
328	FORC-028S	PVT	Sep. Sampling
329	FORC-029L	SG	Slick line
330	FORC-029S	SG	Slick line
331	FORC-030L	FG/BU/SG	Slick line
332	FORC-032	C/O log	Electric line
333	FORC-032L	PVT	Sep. Sampling
334	FORC-032S	SG	Slick line
335	FORC-033L	SG	Slick line
336	FORC-041S	SG	Slick line
337	FORC-046	C/O log	Electric line
338	FORC-046L	SG	Slick line
339	FORC-046S	SG	Slick line
340	FORC-054L	SG	Slick line
341	FORC-058S	C/O log	Slick line
342	FORC-059S	SG	Slick line
343	FORC-061S	PVT	Other
344	FORC-065S	PVT	Sep. Sampling
345	FORC-066L	SG	Slick line
346	FORC-066S	SG	Slick line
347	FORC-075T	SG	Slick line
348	FORC-084L	SG	Slick line
349	FORC-084S	SG	Slick line
350	FORC-088T	FG/BU/SG	Slick line
351	FORC-103L	SG	Slick line

S/N	Well/String	Data Type	Acquisition Method
352	FORC-103S	SG	Slick line
353	FORC-109T	FG/BU/SG	Slick line
354	FORC-111T	FG/BU/SG	Slick line
355	FORC-113T	FG/BU/SG	Slick line
356	FORC-114L	FG/BU/SG	Slick line
357	FORC-119S	SG	Slick line
358	FORC-124S	FG/BU/SG	Slick line
359	FORC-126S	FG/BU/SG	Slick line
360	FORC-136T	FG/BU/SG	Slick line
361	FORC-152T	FG/BU/SG	Slick line
362	JONC-016L	SG	Slick line
363	JONC-019T	SG	Slick line
364	JONC-023S	SG	Slick line
365	JONC-031L	SG	Slick line
366	JONC-036L	SG	Slick line
367	JONC-037T	SG	Slick line
368	JONC-040L	SG	Slick line
369	JONC-041L	SG	Slick line
370	KANB-003L	SG	Slick line
371	KANB-004L	SG	Slick line
372	KANB-006T	SG	Slick line
373	KANB-007S	SG	Slick line
374	OGBO-008T	SG	Slick line
375	OGBO-014T	SG	Slick line
376	OPNO-001L	SG	Slick line
377	OPNO-005S	SG	Slick line
378	OPOM-001	C/O log	Electric line
379	OPOM-001S	SG	Slick line
380	OPUK-011S	SG	Slick line
381	OPUK-012S	SG	Slick line
382	OPUK-017L	SG	Slick line
383	OPUK-018S	SG	Slick line
384	TUNU-002	C/O log	Electric line
385	OTUM002L	CO2 TRACER	Tracer Tools
386	OTUM002S	CO2 TRACER	Tracer Tools
387	OTUM009L	CO2 TRACER	Tracer Tools
388	OTUM012L	CO2 TRACER	Tracer Tools

## Appendix-2: Baseline List of Corporate Surveillance Projects for 2011

S/N	Well/String	Data Type	Acquisition Method	S/N	Well/String	Data Type	Acquisition Method
1	ADIB010S	FG/BU/SG	Slick line	71	OBN039T	FG/BU/SG	Slick line
2	ADIB025L	FG/BU/SG	Slick line	72	OBN043T	Deliverability Test	Slick line
3	ADNE001S	FG/BU/SG	Slick line	73	OBN044T	Deliverability Test	Slick line
4	AFAM008T	Deliverability Test	Slick line	74	OBN046T	Deliverability Test	Slick line
5	AFAM022T	Deliverability Test	Slick line	75	OBN048L	SG	Slick line
6	AGBD004L	FG/BU/SG	Slick line	76	OBN048L	SG	Slick line
7	AGBD032L	FG/BU/SG	Slick line	77	OBN051L	FG/BU/SG	Slick line
8	AGBD047L	FG/BU/SG	Slick line	78	OBN051L	FG/BU/SG	Slick line
9	AGBD047S	FG/BU/SG	Slick line	79	OBN051S	FG/BU/SG	Slick line
10	AGBD052L	FG/BU/SG	Slick line	80	OBN053T	FG/BU/SG	Slick line
11	AGBD052S	FG/BU/SG	Slick line	81	OBN053T	SG	Slick line
12	AGBD058L	FG/BU/SG	Slick line	82	OBN055S	FG/BU/SG	Slickline
13	AHIA003L	FG/BU/SG	Slick line	83	OBN034	C/O Log	Electric line
14	AHIA005L	FG/BU/SG	Slick line	84	OGUT002S	FG/BU/SG	Slick line
15	DBUC001S	FG/BU/SG	Slick line	85	OGUT013T	FG/BU/SG	Slick line
16	DBUC013T	SG	Slick line	86	OGUT026T	FG/BU/SG	Slick line
17	DBUC015T	FG/BU/SG	Slick line	87	OGUT027S	FG/BU/SG	Slick line
18	EGBW021	PLT	Electric line	88	OTAM005S	FG/BU/SG	Slick line
19	ELEW016	C/O Log	Electric line	89	SAPL017T	MRT	Slick line
20	ELWA015L	FG/BU/SG	Slick line	90	SAPL018T	MRT	Slick line
21	ELWA018S	FG/BU/SG	Slick line	91	UGHW028S	FG/BU/SG	Slick line
22	IMOR001T	FG/BU/SG	Slick line	92	ERMU014S	SG	Slick line
23	IMOR005L	FG/BU/SG	Slick line	93	OBN024L	FG/BU/SG	Slick line
24	IMOR007L	FG/BU/SG	Slick line	94	UGHE006S	FG/BU/SG	Slick line
25	IMOR019L	FG/BU/SG	Slick line	95	UGHE005L	FG/BU/SG	Slick line
26	IMOR019S	FG/BU/SG	Slick line	96	UGHW007S	FG/BU/SG	Slick line
27	IMOR019S	FG/BU/SG	Slick line	97	UGHW026S	FG/BU/SG	Slick line
28	IMOR020L	FG/BU/SG	Slick line	98	UZRE003S	FG/BU/SG	Slick line
29	IMOR020S	FG/BU/SG	Slick line	99	UZRE022S	FG/BU/SG	Slick line
30	IMOR022S	SG	Slick line	100	UZRW007S	FG/BU/SG	Slick line
31	IMOR022S	SG	Slick line	101	EVWR010S	FG/BU/SG	Slick line
32	IMOR029L	SG	Slick line	102	UZRW014L	SG	Slick line
33	IMOR030S	FG/BU/SG	Slick line	103	OLOM003L	FG/BU/SG	Slick line
34	IMOR031S	FG/BU/SG	Slick line	104	OWEH006L	FG/BU/SG	Slick line
35	IMOR036S	FG/BU/SG	Slick line	105	AKOS003S	FG/BU/SG	Slick line
36	IMOR044L	FG/BU/SG	Slickline	106	AKOS003L	FG/BU/SG	Slick line
37	IMOR044S	FG/BU/SG	Slickline	107	AKOS007L	FG/BU/SG	Slick line
38	IMOR045L	FG/BU/SG	Slick line	108	AKOS006T	SG	Slick line
39	IMOR049S	SG	Slick line	109	AKOS010S	SG	Slick line
40	IMOR053L	FG/BU/SG	Slick line	110	AKOS004S	SG	Slick line
41	IMOR056L	FG/BU/SG	Slickline	111	AKOS004L	SG	Slick line
42	IMOR058T	FG/BU/SG	Slickline	112	AKOS013S	SG	Slick line
43	IMOR060T	FG/BU/SG	Slickline	113	AKOS013L	SG	Slick line
44	IMOR063T	FG/BU/SG	Slickline	114	AKOS002L	SG	Slick line
45	IMOR064L	FG/BU/SG	Slick line	115	ALAK003L	FG/BU/SG	Slick line
46	KOCR019T	SG	Slick line	116	ALAK003S	FG/BU/SG	Slick line
47	KOCR025T	FG/BU/SG	Slick line	117	ALAK007L	FG/BU/SG	Slick line
48	MINI003	C/O Log	Electric line	118	ALAK007S	FG/BU/SG	Slick line
49	NUNR003L	FG/BU/SG	Slick line	119	ALAK009T	SG	Slick line
50	NUNR003S	FG/BU/SG	Slick line	120	ALAK021T	SG	Slick line
51	NUNR006L	FG/BU/SG	Slick line	121	ALAK023T	SG	Slick line
52	NUNR006S	FG/BU/SG	Slick line	122	ALAK034T	SG	Slick line
53	NUNR017S	FG/BU/SG	Slick line	123	ALAK031L	FG/BU/SG	Slick line
54	OBEA023T	Deliverability Test	Slick line	124	ALAK011T	FG/BU/SG	Slick line
55	OBN:018S	SG	Slick line	125	ALAK016T	SG	Slick line
56	OBN:024S	FG/BU/SG	Slick line	126	ALAK022T	FG/BU/SG	Slick line
57	OBN:025T	FG/BU/SG	Slick line	127	ALAK025T	FG/BU/SG	Slick line
58	OBN005L	FG/BU/SG	Slickline	128	ALAK019T	SG	Slick line
59	OBN005S	FG/BU/SG	Slick line	129	ALAK027L	FG/BU/SG	Slick line
60	OBN006S	SG	Slick line	130	AWOB009L	SG	Slick line
61	OBN007L	FG/BU/SG	Slick line	131	AWOB002T	Caliper survey	Electric line
62	OBN007L	SG	Slick line	132	AWOB003S	FG/BU/SG	Slick line
63	OBN008L	FG/BU/SG	Slick line	133	AWOB007S	FG/BU/SG	Slick line
64	OBN018S	SG	Slick line	134	AWOB007L	FG/BU/SG	Slick line
65	OBN021T	FG/BU/SG	Slickline	135	AWOB004S	SG	Slick line
66	OBN022T	Temp/Caliper log	Slick line	136	AWOB009S	FG/BU/SG	Slick line
67	OBN025T	FG/BU/SG	Slick line	137	AWNW001L	FG/BU/SG	Slick line
68	OBN026T	FG/BU/SG	Slick line	138	AWNW001S	FG/BU/SG	Slick line
69	OBN030T	Temp/Caliper log	Slick line	139	BELE001L	FG/BU/SG	Slick line
70	OBN031T	Temp/Caliper log	Slick line	140	BELE001S	FG/BU/SG	Slick line

S/N	Well/String	Data Type	Acquisition Method	S/N	Well/String	Data Type	Acquisition Method
141	BELE002T	FG/BU/SG	Slick line	211	KRAK008S	FG/BU/SG	Slick line
142	BELE003S	FG/BU/SG	Slick line	212	KRAK014S	FG/BU/SG	Slick line
143	BELE004T	FG/BU/SG	Slick line	213	KRAK016L	FG/BU/SG	Slick line
144	BELE005L	FG/BU/SG	Slick line	214	KRAK016S	FG/BU/SG	Slick line
145	BELE006L	FG/BU/SG	Slick line	215	ODEC002L	FG/BU/SG	Slick line
146	BELE007L	FG/BU/SG	Slick line	216	ODEC002S	FG/BU/SG	Slick line
147	BELE007S	FG/BU/SG	Slick line	217	ODEC004L	FG/BU/SG	Slick line
148	BELE008T	FG/BU/SG	Slick line	218	ODEC004S	FG/BU/SG	Slick line
149	BELE010L	FG/BU/SG	Slick line	219	ODEC007L	FG/BU/SG	Slick line
150	BELE010S	FG/BU/SG	Slick line	220	ODEC007S	FG/BU/SG	Slick line
151	BELE011T	FG/BU/SG	Slick line	221	ODEC008L	FG/BU/SG	Slick line
152	BONN010L	SG	Slick line	222	ODEC009L	FG/BU/SG	Slick line
153	BONN010S	SG	Slick line	223	ODEC009S	FG/BU/SG	Slick line
154	BONN012S	SG	Slick line	224	ORUB004T	FG/BU/SG	Slick line
155	BONN013T	SG	Slick line	225	ORUB007L	FG/BU/SG	Slick line
156	BONN016L	SG	Slick line	226	ORUB007S	FG/BU/SG	Slick line
157	BONN016S	SG	Slick line	227	ORUB010L	SG	Slick line
158	BONN018L	SG	Slick line	228	ORUB010S	SG	Slick line
159	BONN006T	FG/BU/SG	Slick line	229	FORC-025T	SG	Slick line
160	BONN009T	FG/BU/SG	Slick line	230	FORC-066L	SG	Slick line
161	BONN011L	FG/BU/SG	Slick line	231	FORC-027L	SG	Slick line
162	BONN011S	FG/BU/SG	Slick line	232	JONC-037T	PVT	Other
163	BONN012L	FG/BU/SG	Slick line	233	AJAT-001L	SG	Slick line
164	BONN018S	FG/BU/SG	Slick line	234	FORC-033L	SG	Slick line
165	BONN019S	FG/BU/SG	Slick line	235	FORC-103S	SG	Slick line
166	BONT002L	SG	Slick line	236	FORC-002L	SG	Slick line
167	BONT002S	SG	Slick line	237	FORC-046L	SG	Slick line
168	CAWC039S	SG	Slick Line	238	FORC-114L	FG/BU/SG	Slick line
169	CAWC006T	SG	Slick Line	239	FORC-109T	FG/BU/SG	Slick line
170	CAWC021S	FG/BU/SG	Slick Line	240	FORC-111T	FG/BU/SG	Slick line
171	CAWC028T	FG/BU/SG	Slick Line	241	FORC-113T	FG/BU/SG	Slick line
172	CAWC012S	SG	Slick Line	242	ESCB-002L	SG	Slick line
173	CAWC051T	FG/BU/SG	Slick Line	243	ESCB-001S	FG/BU/SG	Slick line
174	CAWC012L	SG	Slick Line	244	ESCB-004S	SG	Slick line
175	CAWC013L	SG	Slick Line	245	ESCB-006	C/O log	Electric line
176	CAWC018T	FG/BU/SG	Slick Line	246	FORC-126S	FG/BU/SG	Slick line
177	CAWC029T	FG/BU/SG	Slick Line	247	FORC-023L	SG	Slick line
178	CAWC040L	SG	Slick Line	248	FORC-005S	SG	Slick line
179	CAWC039L	SG	Slick Line	249	FORC-152T	FG/BU/SG	Slick line
180	CAWC021L	FG/BU/SG	Slick Line	250	FORC-088T	FG/BU/SG	Slick line
181	CAWC042T	FG/BU/SG	Slick Line	251	FORC-075T	SG	Slick line
182	CAWC035S	SG	Slick Line	252	FORC-084L	SG	Slick line
183	CAWC001L	SG	Slick Line	253	FORC-046	C/O log	Electric line
184	CAWC033L	SG	Slick Line	254	FORC-030L	FG/BU/SG	Slick line
185	CAWC048T	SG	Slick Line	255	FORC-136T	FG/BU/SG	Slick line
186	CAWC010L	SG	Slick Line	256	FORC-032S	SG	Slick line
187	CAWC033	C/O Log	Electric Line	257	FORC-103L	SG	Slick line
188	CAWC023	C/O Log	Electric Line	258	FORC-015S	SG	Slick line
189	CAWC037	C/O Log	Electric Line	259	FORC-028S	PVT	Other
190	CAWC048T	C/O Log	Electric Line	260	FORC-065S	PVT	Other
191	CAWC005S	C/O Log	Electric Line	261	FORC-029S	SG	Slick line
192	CAWC051T	C/O Log	Electric Line	262	FORC-041S	SG	Slick line
193	CAWC004T	C/O Log	Electric Line	263	AFRE-007L	SG	Slick line
194	CAWC047S	C/O Log	Electric Line	264	AFRE-014S	SG	Slick line
195	CAWC023L	C/O Log	Electric Line	265	OTUM-007L	C/O log	Electric line
196	EKUL005L	FG/BU/SG	Slick line	266	OTUM-039	C/O log	Electric line
197	EKUL009T	FG/BU/SG	Slick line	267	BENS-010	C/O log	Electric line
198	EKUL015S	FG/BU/SG	Slick line	268	JONC-012L	FG/BU/SG	Slick line
199	EKUL026L	FG/BU/SG	Slick line	269	JONC-019T	FG/BU/SG	Slick line
200	EKUL031S	FG/BU/SG	Slick line	270	JONC-023L	FG/BU/SG	Slick line
201	EKUL034L	FG/BU/SG	Slick line	271	JONC-046T	FG/BU/SG	Slick line
202	EKUL034S	FG/BU/SG	Slick line	272	AJAT-001L	SG	Slick line
203	EKUL035S	FG/BU/SG	Slick line	273	AKON-001L	SG	Slick line
204	EKUL039L	FG/BU/SG	Slick line	274	KANB-004S	SG	Slick line
205	EKUL239S	FG/BU/SG	Slick line	275	KANB-007L	SG	Slick line
206	KRAK013L	FG/BU/SG	Slick line	276	KANB-003S	SG	Slick line
207	KRAK014L	FG/BU/SG	Slick line	277	KANB-005S	SG	Slick line
208	KRAK011S	SG	Slick line	278	AGBA-0001L	SG	Slick line
209	KRAK013S	FG/BU/SG	Slick line	279	OGBO-001T	SG	Slick line
210	KRAK008L	FG/BU/SG	Slick line	280	OGBO-008T	SG	Slick line

S/N	Well/String	Data Type	Acquisition Method
281	OTUM-050T	SG	Slick line
282	OTUM-025L	FG/BU/SG	Slick line
283	OTUM-021S	SG	Slick line
284	OTUM-034S	SG	Slick line
285	OTUM-028S	SG	Slick line
286	OTUM-049T	SG	Slick line
287	OTUM-042L	SG	Slick line
288	ESCB-003T	SG	Slick line
289	JONC-034S	SG	Slick line
290	JONC-031L	SG	Slick line
291	JONC-040L	FG/BU/SG	Slick line
292	JONC-027L	SG	Slick line
293	JONC-035L	SG	Slick line
294	OTUM-006L	SG	Slick line
295	OTUM-057T	FG/BU/SG	Slick line
296	OTUM-036L	SG	Slick line
297	OTUM-007L	SG	Slick line
298	OTUM-043L	FG	Slick line
299	JONC-046T	SG	Slick line
300	JONC-042S	SG	Slick line
301	JONC-047T	PLT	Electric line
302	OTUM-030S	FG	Slick line
303	SAGR-003L	SG	Slick line
304	OTUM-048T	FG	Slick line
305	OTUM-044L	FG/BU/SG	Slick line
306	OPUK-013S	SG	Slick line
307	OPUK-017S	SG	Slick line
308	OPUK-033S	SG	Slick line
309	OPUK-030S	SG	Slick line
310	SEIB-002S	SG	Slick line
311	SEIB-003L	SG	Slick line
312	SEIB-003	C/O log	Electric line
313	TUNU-002	C/O log	Electric line
314	AJUI-001L	SG	Slick line
315	BATA-009T	FG/BU/SG	Slick line
316	BATA-006S	FG/BU/SG	Slick line
317	EGWA-014	C/O log	Electric line
318	EGWA-020	C/O log	Electric line
319	ODID-005T	SG	Slick line
320	ODID-007L	SG	Slick line
321	ODID-015L	SG	Slick line
322	ODID-019L	SG	Slick line
323	ODID-024L	SG	Slick line
324	ODID-030L	SG	Slick line
325	OPOM-001	C/O log	Electric line
326	OPOM-001S	SG	Slick line
327	OPUK-018L	SG	Slick line
328	OPUK-017L	SG	Slick line
329	FORC-058S	C/O log	Slick line
330	BATA-012T	PLT	Electric line
331	EGWA-001S	SG	Slick line
332	ODID-032T	SG	Slick line
333	ODID-037L	SG	Slick line
334	ODID-041L	SG	Slick line
335	BENS-006S	SG	Slick line
336	BENS-019L	SG	Slick line
337	BENS-017S	SG	Slick line
338	BENS-010L	SG	Slick line
339	OPNO-003L	SG	Slick line
340	TUNU-004L	PLT	Electric line
341	TUNU-002L	SG	Slick line
342	TUNU-004L	SG	Slick line
343	TUNU-013T	SG	Slick line
344	TUNU-012S	SG	Slick line
345	TUNU-007T	SG	Slick line
346	TUNU-006T	SG	Slick line
347	EGWA-009T	SG	Slick line
348	EGWA-008T	SG	Slick line
349	EGWA-019L	SG	Slick line
350	EGWA-025S	SG	Slick line
351	EGWA-029S	SG	Slick line

S/N	Well/String	Data Type	Acquisition Method
352	EGWA-033S	SG	Slick line
353	ODID-046S	SG	Slick line
354	FORC-072T	FG/BU/SG	Slick line
355	FORC-028S	SG	Slick line
356	FORC-026S	SG	Slick line
357	FORC-029L	SG	Slick line
358	FORC-046S	SG	Slick line
359	FORC-140T	SG	Slick line
360	AFRE-004S	SG	Slick line
361	AFRE-014L	SG	Slick line
362	FORC-121G	SG	Slick line
363	OPUA-003S	SG	Slick line
364	SAGR-003L	SG	Slick line
365	AGBD066S	FG/BU/SG	Slick line
366	OBN054T	SG	Slick line
367	IMOR019L	FG/BU/SG	Slick line
368	OBN055L	FG/BU/SG	Slickline
369	IMOR064S	FG/BU/SG	Slickline
370	ADNE004L	FG/BU/SG	Slick line
371	IMOR023L	FG/BU/SG	Slick line
372	IMOR057L	FG/BU/SG	Slickline
373	AFIE018T	SG	Slick line
374	AFIE004L	SG	Slick line
375	AFIE002L	SG	Slick line
376	AFIE038L	FG/BU/SG	Slick line
377	AFIE012S	FG/BU/SG	Slick line
378	AFIE035S	FG/BU/SG	Slick line
379	AFIE037S	FG/BU/SG	Slick line
380	AFIE006L	FG/BU/SG	Slick line
381	AFIE027L	FG/BU/SG	Slick line
382	ERMU007S	FG/BU/SG	Slick line
383	ERMU008S	FG/BU/SG	Slick line
384	ERMU019S	FG/BU/SG	Slick line
385	ERMU010L	FG/BU/SG	Slick line
386	EVWR011S	FG/BU/SG	Slick line
387	EVWR004S	FG/BU/SG	Slick line
388	EVWR008L	FG/BU/SG	Slick line
389	KOKR019S	FG/BU/SG	Slick line