



No. 01585

**A. GENERAL INFORMATION:**

1. Spill incident Number: 655576
2. Name of Location 24" TRANS RAMOS PIPELING
3. Name of nearest community ODIMODI
4. State DELTA LGA BURUTU
5. Type of Production facility/Installation TRUNKLINE Asset owner /District PIPELING

**B. INCIDENT INFORMATION:**

6. Details of incident
- a. Date of incident 29-04-2011 AT 1130HRS
- b. Date/Period of investigation, 19-05-2011 AT 1330HRS
- c. Description of spill point environment

- Firmed soil [Y] [N]
- Loose soil [V] [N]
- Previously excavated area [Y] [N]
- Under water [Y] [N]
- Swampy [V] [N]
- Exposed pipe surface [Y] [V]

- d. Description of leak point (tick as applicable);
- Drilled hole, [Y] [N]
  - Hack saw cut, [Y] [N]
  - Explosive tear, [Y] [N]
  - Complete Rupture [Y] [N]
  - Inward dent, [Y] [N]
  - Well head tampering [Y] [N]
  - Failed Weld-on illegal hot tap valve, [Y] [N]
  - Missing pipeline (flowline) [Y] [N]
  - Crude oil theft (illegal bunkering) point, [V] [N]
  - Third party tampering with Clamp Bolt/Nut, [Y] [N]
  - Third party tampering with valve setting, [V] [N]
  - Third party tampering with flange Nuts/bolts, [V] [N]
  - Corrosion, [Y] [N]
- Type: \_\_\_\_\_
- Saver-pit over flow, [Y] [N]
  - Surge vessel overflow, [Y] [N]
  - Outward dent [Y] [N]
  - Others (specify). \_\_\_\_\_ [Y] [N]

e. Spill point coordinates

Northing: (1) 134635 mN Easting: 329289 mE  
 (2) 134636 mN 329288 mE  
 (3) 134643 mN 329313 mE  
 (4) 134639 mN 329314 mE



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C. RISK/DAMAGE ASSESSMENT

7. Type of environment of spill site:

- Land
- Swamp
- water

Type of environment of which oil has spread: **NO OIL SPILLED ON THE ENVIRONMENT AS AT JIV TIME.**

- Land
- Swamp
- water

8. Distance from the nearest sensitive habitat

- Government reserved and designated protected area [ ,m]
- Drinking water source [ ,m]
- Built up area [ ,m]
- Farmlands [ ,m]
- Fish Farm/Pond [ ,m]
- Fishing net [ 250,m]
- Others (specify). **FISHING CAMP**

9. Containment measures put in place;

- Booms [Y] [~~N~~ NOT APPLICABLE]
- Trench [Y] [~~N~~]
- Dyke [Y] [~~N~~]

Others: \_\_\_\_\_

10. Any pictures or video coverage? [] [N]

11. Was there any disruption to the investigation? [Y] []

If yes give brief description:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

D. TYPE/NUMBERS OF PROPERTIES, IF ANY, FOUND WITHIN THE AREA OF SPREAD OF OIL

A. Structures / Properties

S/N	Type of Structures	Description	Size	Number	Comments
	<b>NOT APPLICABLE</b>				



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B. Crops/Economic Trees

S/N	Types of crops	Young	Medium	Matured	Quantity	Comments
	<b>NOT APPLICABLE</b>					

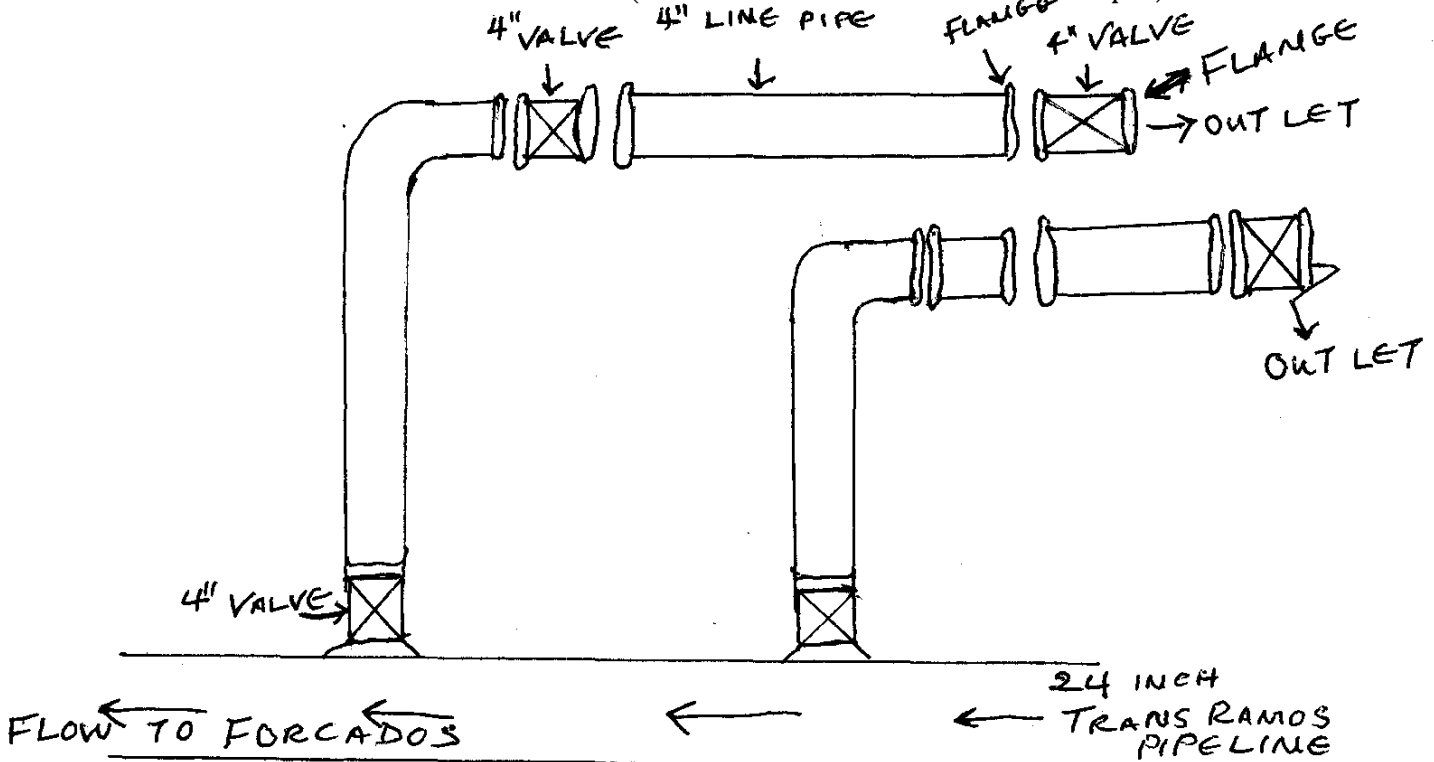
C. Fish/Nets/Ponds

S/N	Fish/Nets/Ponds	Description	Quantity/Size	Comments
	<b>NOT APPLICABLE</b>			

D. Others (Specify) i.e. Animal Traps

S/N	Others	Description	Quantity/Size	Comments
	<b>NOT APPLICABLE</b>			

E. GRAPHIC DESCRIPTION OF LEAK POINT (Details should be contained in leak repair report)



NOTE: THE FLANGES ARE FASTEN WITH BOLTS AND NUTS AT EACH POINTS TO THE VALVES





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**G. INCIDENT INFORMATION:**

**17 Impacted Area Details**

- a. Total calculated area of impact NIL
- Impact within SPDC R.O.W NIL
  - Impact outside R.O.W NIL

**18 Volume of oil recovered before completion of JIV ( $V_{rec}$ ):**

Recovered oil  $V_{rec}$ : 

	barrels
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**NOT APPLICABLE**

**19. Computation of the residual volume on site**

a. Computation of the volume of pooled free phase oil (on land or confined water body).

- i. Area ( $m^2$ ) occupied by pool of free phase oil \_\_\_\_\_
- ii. Average Depth (m) of pool of free phase oil \_\_\_\_\_
- iii.

Volume of pooled of free phase oil.  $V_{pool}$ : 

	barrels
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**NOT APPLICABLE**

b. Computation of volume of infiltrated oil in the soil (V-3).

- i Area ( $m^2$ ) covered by the oil: \_\_\_\_\_
- ii Average Depth (m) below ground surface of infiltration of oil: \_\_\_\_\_
- iii Soil type: \_\_\_\_\_
- iv.  $p_e$  (effective porosity of the soil): \_\_\_\_\_
- v.

Volume of infiltrated oil.  $V_{inf}$ : 

	barrels
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**NOT APPLICABLE**

**20. Computation of volume of oil on open water based on standard coloration.**

	Thickness (mm)	Percentage coverage	Volume (m3)
Barely Visible	0.00004		
Silvery	0.00008		
Slight Colour	0.00015		
Bright Colour	0.0003		
Dull	0.001		
Dark	0.002		
Black oil	0.1		
Emulsion (30% Oil)	1		

Percent Total

100%

Total Volume

bbl

**NOT APPLICABLE**

Spill Factors from USCG FOG (2000 Edition)



Volume of oil on open water $V_{wat}$ :		barrels
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21. Calculation of evaporated volume:

- i. Oil type: \_\_\_\_\_
- ii. E-Factor: \_\_\_\_\_
- iii.

*NOT APPLICABLE*

Volume of evaporated oil: $V_{vap}$ :		barrels
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Oil Type		Bonny Light	Bonny Medium
		E-Factor	E-Factor
Period Since Oil Spill	<1 day	10%	5%
	1-7 days	25%	15%
	>7 days	40%	25%

9. Gross Total Estimated Spilled Volume  $V_{Est}(bbls) = V_{vap}(bbls) + V_{wat}(bbls) + V_{inf}(bbls) + V_{pool}(bbls) + V_{recJ}(bbls)$

$V_{Est}(bbls) =$  *NIL*

10. Net Total Estimated Spilled Volume  $V_{Est}(bbls) = V_{vap}(bbls) + 0.6 * V_{wat}(bbls) + V_{inf}(bbls) + V_{pool}(bbls) + V_{recJ}(bbls)$

$V_{Est}(bbls) =$  *NIL*

\* Calculation of the respective estimated volume is to done using the new spill estimation software on site  
 \* Conversion of m3 to barrel is Total volume VT (m3) x6.29  
 \* Emulsification factor for spill on water to consider is 60% of volume of oil.

This report was filled and signed on the 19/05/2011 at incident site by joint investigation representative from

- Host Community
- Department of Petroleum Resources [DPR]:  *ABSENT*
- National Oil Spill Detection and Response Agency [NOSDRA]:
- State Ministry of Environment [SME]:
- Nigeria Police Force [NPF]:  *ABSENT*
- Shell Petroleum Development Company [SPDC]:

*Tick as applicable*