

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

(Note: As practicable as possible the JIV report is to be signed in the field by all the participating parties)

## A. GENERAL INFORMATION:

1. Spill incident Number: 2270440 2. Type of incident\*: OIL SPILL  
3. Name of Location 24" NKPOKU - BOMU PIPELINE  
BARAYIRA  
4. Name of nearest community MONHIA UEDUMBE State: RIVERS 6. LGA TAI  
7. Type of Production facility/Installation OIL PIPELINE  
8. Asset owner/District THE SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LIMITED / PIPELINE

## B. INCIDENT INFORMATION:

9. Details of incident  
a. Date of incident: 19<sup>TH</sup> FEBRUARY, 2019  
b. Start date/time of investigation: 19<sup>TH</sup> FEBRUARY, 2019 / 17:19 HRS  
c. Investigation End date: 20<sup>TH</sup> FEBRUARY, 2019 Actual investigation duration, days: TWO DAYS  
d. Description of spill point environment

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Firm soil                | <input checked="" type="checkbox"/> Loose soil | <input checked="" type="checkbox"/> Recently excavated area |
| <input type="checkbox"/> Under water              | <input type="checkbox"/> Swampy                | <input type="checkbox"/> Exposed pipe surface               |
| <input type="checkbox"/> Well Platform (on Water) | <input type="checkbox"/> Drill Rig             |   |

Additional observations around the spill point:

THE JOINT INVESTIGATION TEAM OBSERVED A FAILED 3" NIPPLE INSTALLED AT 12 O'CLOCK POSITION.

## e. Description of leak point (tick as applicable);

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Drilled hole   | <input type="checkbox"/> Hack saw cut          | <input type="checkbox"/> Tear (_____)                                      |
| <input type="checkbox"/> Complete Rupture                                     | <input type="checkbox"/> Inward dent           | <input type="checkbox"/> Well head tampering                               |
| <input checked="" type="checkbox"/> Failed Weld-on illegal hot tap valve      | <input type="checkbox"/> Failed Clamp          | <input type="checkbox"/> Missing Pipeline/Flowline                         |
| <input checked="" type="checkbox"/> Crude oil theft (illegal bunkering) point | <input type="checkbox"/> Saver-pit over flow   | <input type="checkbox"/> Third party tampering with Clamp                  |
| <input type="checkbox"/> Third party tampering with valve setting             | <input type="checkbox"/> Bulging Outward       | <input type="checkbox"/> Third party tampering with flange                 |
| <input type="checkbox"/> Flare System/Bund wall failure                       | <input type="checkbox"/> Cold vent             | <input type="checkbox"/> Surge vessel overflow                             |
| <input type="checkbox"/> Valve Failure  | <input type="checkbox"/> Relief valve failure  | <input type="checkbox"/> Accidental 3 <sup>rd</sup> party equipment impact |
| <input type="checkbox"/> Corrosion  | <input type="checkbox"/> Others(specify) _____ |  |

## f. Incident caused by:

- Third party interference (Sabotage ; crude theft ; Line theft ; Accidental 3<sup>rd</sup> party damage   
 Operational  Mystery spills  Others(specify) \_\_\_\_\_

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

g. Spill point coordinates

Measuring unit

WGS(84)

Northing:	Easting:
LATITUDE	LONGITUDE
4.76584	7.21892

## C. RISK ASSESSMENT

10. Type of environment:

- Land     
  Swamp     
  Water     
  Seasonal swamp     
  Shoreline/Waterfront

i. Type of environment to which oil has spread:

- Land     
  Swamp     
  Water     
  River (identify) \_\_\_\_\_

ii. Weather condition

- Rain     
  Sunny     
  Dry     
  Wet     
  Windy     
  Hot     
  Cool

11. Distance from the nearest sensitive habitat:

- |  |  |     |
|--|--|-----|
| <input type="checkbox"/> Government reserved and designated protected area |  | ,m] |
| <input type="checkbox"/> Drinking water source                             |  | ,m] |
| <input type="checkbox"/> Built up area                                     |  | ,m] |
| <input type="checkbox"/> Farmlands   |  | ,m] |
| <input type="checkbox"/> Fish Farm/Pond                                    |  | ,m] |
| <input type="checkbox"/> Fishing net                                       |  | ,m] |
| <input type="checkbox"/> Others (specify):                                 |  | ,m] |
- NONE SEEN  
 WITHIN VICINITY

12. Containment measures put in place:

- Booms     
  Trench     
  Dyke     
  Natural depression     
  Pit     
  None
- Others: \_\_\_\_\_

13. Any pictures or video coverage?

[Y]    [N]

14. Further response/repair initiated as at the time of JIV?

[Y]    [N]

If yes to item 14, give brief description:

REPAIR WORK ONGOING

15. Was there any disruption to the investigation?

[Y]    [N]

Version 2018/01

Distribution of copies: White (Asset Owner); Pink (DPR); Green (INOSDRA); Yellow (State Ministry of Environment); Blue (Host Community).

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

If yes to item 15 give brief description:

THERE WAS COMMUNITY DISTURBANCE ON 19<sup>TH</sup> FEBRUARY 2019.  
THE JOINT INVESTIGATION VISIT WAS COMPLETED ON 20<sup>TH</sup> FEBRUARY 2019.

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

**16. Structures / Properties**

S/N	Type of Structures	Description	Size	Number	Comments
	NONE WITHIN AREA OF IMPACT				

**17. Crops/Economic Trees**

S/N	Type of crops	Young	Medium	Matured	Quantity	Comments
	NONE WITHIN AREA OF IMPACT					

**18. Fishing Nets/Fish Ponds**

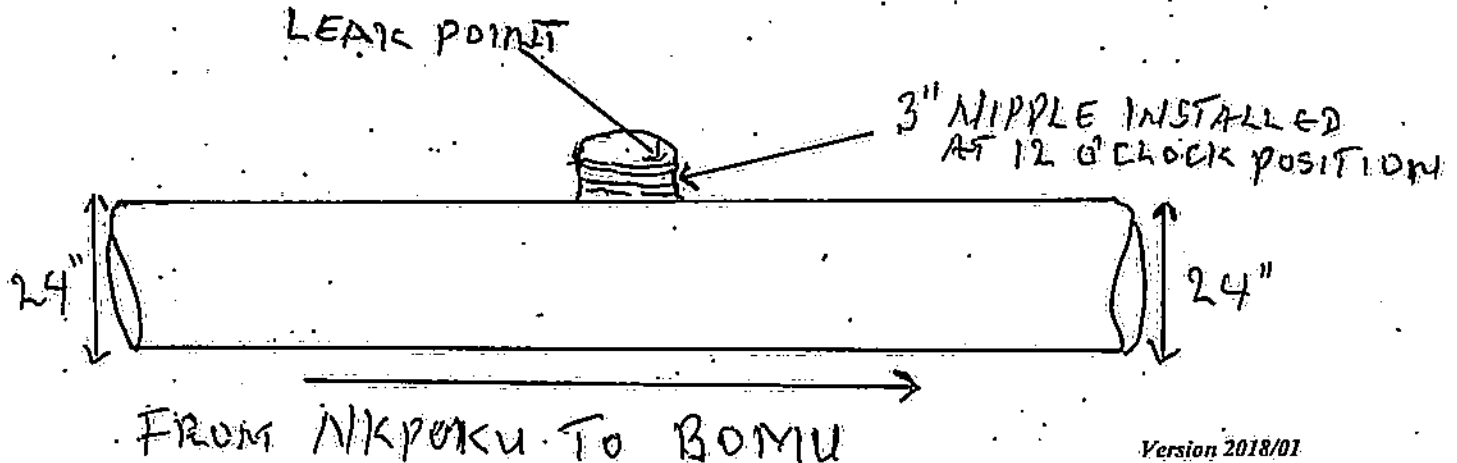
S/N	Nets/Ponds	Description	Quantity/Size	Comments
	NONE WITHIN AREA OF IMPACT			

**19. Others (Specify) i.e. Animal Traps**

S/N	Others	Description	Quantity/Size	Comments
	NONE WITHIN AREA OF IMPACT			

**E. GRAPHIC DESCRIPTION OF LEAK POINT** (while detailed report of the leak point should be contained in the leak report, overview sketch of the site should be added as an appendix 1)

SECTION OF 24" NIKPOKU - BOMU PIPELINE AT BARAYIRA / NOMWA  
MEDIUM SHOWING CRUDE OIL THEFT AT 12 O'CLOCK POSITION.



# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

F: TABLE SHOWING SOME OF COORDINATES TAKEN DURING JIV FOR AREA CALCULATION

20. Impacted area boundary Coordinates (If more, Print and attach as an appendix)

S/N	Northing	LATITUDE (WGS 84)	Easting	LONGITUDE (WGS 84)
		4.76587		7.21893
		4.76584		7.21895
		4.76581		7.21895
		4.76580		7.21894
		4.76585		7.21889

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

**G. INCIDENT INFORMATION:**

**a. Impacted Area Details**

- Total calculated area of impact 0.0027 HA
- Impact within R.O.W YES
- Impact outside R.O.W NO

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

Recovered oil $V_{rec}$ :	Barrels
<u>NIL</u>	

Controlled recovery/evacuation from source with no impact to environment:

<u>NIL</u>	Barrels
------------	---------

<p><b>c. Net Estimated Spilled Volume <math>V_{est}</math> (bbls)*=</b></p> <p style="text-align: center; font-size: 1.2em;"><u>0.49 BARREL</u></p>	
<p><b>Estimated Reported Volume** <math>V_{rep}</math> (bbls)=</b></p> <p style="text-align: center; font-size: 1.2em;"><u>0.5 BARREL</u></p>	

**\*Notes:**

- Volume estimation was done using an excel based tool (see attached for details on the calculation).
- Reported spilled volume is an estimate

Write other relevant notes taken into consideration for estimating the spilled volume in the box below:

Calculation of the respective estimated volume is to be done on site as far as practicable using the new spill volume estimation software on site; Conversion of m<sup>3</sup> to barrels is Volume (m<sup>3</sup>) x 6.29; \*\*Round up estimated volume to next whole number using the following rules:

- Any spill volume in excess of 1 bbl is rounded up to the next whole number.
- Any spill volume in less than 1 bbl is rounded up to the next 0.1 bbl.

Examples:      Calculated volume = 15.3 bbl      ——— Reported volume = 16 bbl  
                     Calculated volume = 0.35 bbl      ——— Reported volume = 0.4 bbl  
                     Calculated volume = 0.01 bbl      ——— Reported volume = 0.1 bbl.

Wherever this estimation tool is not applicable please refer to paragraph 6c (Deviations) of the JIV procedure to use appropriate steps for volume estimation; record the calculation in a plain sheet of paper and attach to the JIV report.

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

## d. General Status of the site

- |  |
|--|
| i. Joint investigation of the incident site found that there is no residual impact after the initial response and JIT therefore recommend that the site be closed out <input type="checkbox"/> |
| ii. Investigation of the incident site showed that there is residual impact on site requiring further works <input checked="" type="checkbox"/>  |

## e. Representatives

This report was filled, agreed and signed by the following joint investigation team representatives:

- Host Community:
- Department of Petroleum Resources (DPR):
- National Oil Spill Detection and Response Agency (NOSDRA):
- State Ministry of Environment (SME):
- Asset Owner:
- Signatories agree with reported findings:
- Separate DPR form has been filled out with same findings

*Tick as applicable*

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2270440 JIV report S/N: 0239

f. Appendix I: Overview sketch of the site

