

# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460 JIV report S/N: No: 0000311

(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: 1844460 2. Type of incident\* OIL SPILL  
3. Name of Location BENISEDE WELL - 16T WELLHEAD  
4. Name of nearest community OJOBO 5. State: BAYELSA 6. LGA EKEREMOR  
7. Type of Production facility/Installation WELLHEAD  
8. Asset owner/District THE SHELL PETROLEUM DEVELOPMENT COMPANY OF

B. INCIDENT INFORMATION: NIGERIA LIMITED / SWAMP WEST

## 9. Details of incident

- a. Date of incident: 22<sup>ND</sup> APRIL, 2017  
b. Start date/time of investigation: 4<sup>TH</sup> MAY, 2017 AT 1130HRS  
c. Investigation End date: 4<sup>TH</sup> MAY, 2017 Actual investigation duration, days: ONE DAY  
d. Description of spill point environment

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

Additional observations around the spill point: ON ASSESSMENT, THE JOINT INVESTIGATION TEAM OBSERVED THAT THE SURVEY CAP ON THE NON-FLOWING STRING OF BENISEDE WELL - 16T WELLHEAD HAS BEEN REMOVED BY UNKNOWN PERSONS.

## 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 checked="" type="checkbox"/> Well head tampering                    |
| <input type="checkbox"/> Failed Weld on illegal hot tap valve                            | <input type="checkbox"/> Failed Clamp,        | <input type="checkbox"/> Missing Pipeline/Flowline                         |
| <input 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 checked="" type="checkbox"/> Others (specify) <u>THEFT OF WELLHEAD SURVEY CAP</u> |   |  |

## f. Incident caused by:

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

\*This can be: a) Oil Spill b) Drilling fluid/Chemical c) Situation d) construction e) Encroachment f) Fire.

# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460 JIV report S/N: Nº 0000311

g. Spill point coordinates

h. Measuring unit WGS 84 (DECIMAL - DEGREE)

Northing:	Easting:
<u>5.010982</u>	<u>5.691343</u>
<del> </del>	<del> </del>
<del> </del>	<del> </del>

**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

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

} NONE WITHIN  
THE VICINITY

12. Containment measures put in place;

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

13. Any pictures or video coverage?

[N]

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

[Y]

If yes to item 14, give brief description:

NOT APPLICABLE

15. Was there any disruption to the investigation?

[Y]

# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460 JIV report S/N: Nº 0000311

If yes to item 15 give brief description: NOT APPLICABLE

**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
	<u>NONE WITHIN AREA OF IMPACT</u>				

**17. Crops/Economic Trees**

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

**18. Fishing Nets/Fish Ponds**

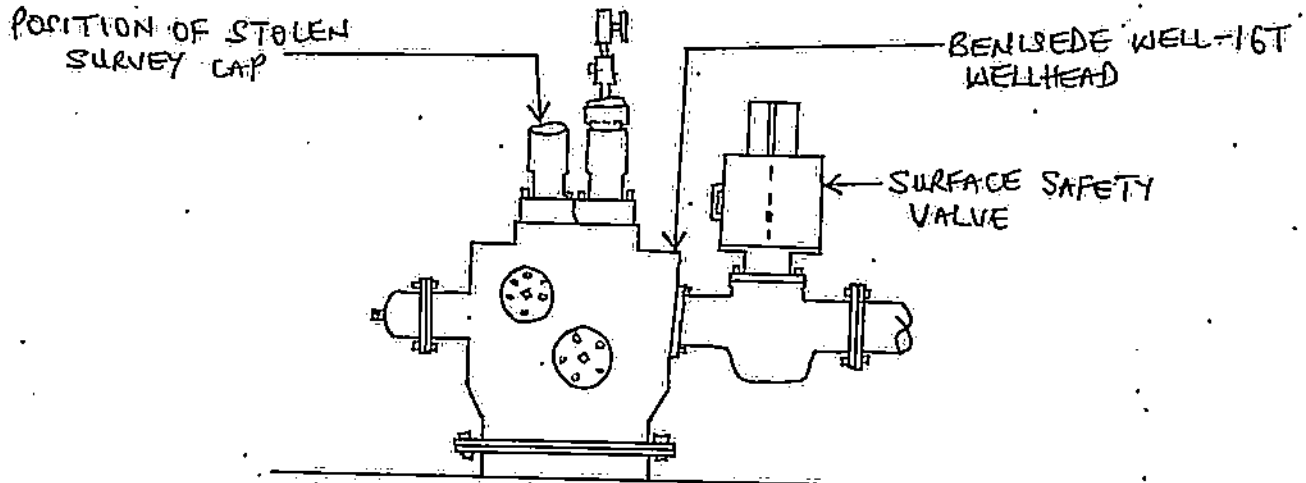
S/N	Nets/Ponds	Description	Quantity/Size	Comments
	<u>NONE WITHIN AREA OF IMPACT</u>			

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

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

**E. GRAPHIC DESCRIPTION OF LEAK POINT** (while detail 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 BENISEDE WELL - 1ST WELLHEAD AT OJOBO AXIS. SHOWING POSITION OF STOLEN SURVEY CAP



# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460

JIV report S/N:

No 0000311

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

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

WGS 84 (DECIMAL - DEGREE)

S/N	Northing	Easting
	5.01098	5.69124
	5.01103	5.69133
	5.01097	5.69138
	5.01092	5.69125
	5.01095	5.69123
	5.01096	5.69125

# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460 JIV report S/N:

Nº 9000311

## G. INCIDENT INFORMATION:

### a. Impacted Area Details

- Total calculated area of impact 0.0103 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 $V_{rec}$ :	<u>NIL</u>	Barrels
---------------------------	------------	---------

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

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

### c. Net Estimated Spilled Volume $V_{sp}$ (bbls)\* =

0.6 BBL

Estimated Reported Volume\*\*  $V_{rep}$  (bbls) = 0.6 BBL

#### \*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 in the box below:

NOT APPLICABLE

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  $m^3$  to barrels is Volume (m3) 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 6e (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: 1844460 JIV report S/N: N<sup>o</sup> 0000311

## 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

<p>This report was filled, agreed and signed by the following joint investigation team representatives:</p> <ul style="list-style-type: none"><li>• Host Community: <input checked="" type="checkbox"/></li><li>• Department of Petroleum Resources [DPR]: <input checked="" type="checkbox"/></li><li>• National Oil Spill Detection and Response Agency [NOSDRA]: <input checked="" type="checkbox"/></li><li>• State Ministry of Environment [SME]: <input checked="" type="checkbox"/></li><li>• Asset Owner: <input checked="" type="checkbox"/></li><li>• Signatories agree with reported findings: <input checked="" type="checkbox"/></li><li>• Separate DPR form has been filled out with same findings: <input checked="" type="checkbox"/></li></ul> <p style="text-align: right;"><i>Tick as applicable</i></p>
---

# JOINT INVESTIGATION REPORT

INCIDENT NO: 1844460 JIV report S/N: Nº 0000311

f. Appendix 1: Overview sketch of the site

