

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2032009 JIV report S/N: 1019

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

## A. GENERAL INFORMATION:

1. Spill incident Number: 2032009 2. Type of incident\* OIL SPILL  
3. Name of Location AGBAYA WELL I WELLHEAD  
AGBAYAMA /  
4. Name of nearest community OGBOTOBO 5. State: BAYELSA 6. LGA EKEREMO  
7. Type of Production facility/Installation WELLHEAD  
8. Asset owner/District THE SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LTD  
(SPDC)/SWAMP WEST

## B. INCIDENT INFORMATION:

### 9. Details of incident

- a. Date of incident: 1ST MARCH 2018  
b. Start date/time of investigation: 3RD MARCH 2018/1345 HRS  
c. Investigation End date: 3RD MARCH 2018 Actual investigation duration, days: ONE (1) 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 type="checkbox"/> Exposed pipe surface    |
| <input checked="" type="checkbox"/> Well Platform (on Water) | <input type="checkbox"/> Drill Rig  |  |

Additional observations around the spill point: THE TEAM OBSERVED A TAMPERED WELL HEAD. (WELLHEAD SURVEY CAP WAS 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 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) \_\_\_\_\_

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

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g. Spill point coordinates

h. Measuring unit

WGS 84

Northing: <u>LATITUDE</u>	Easting: <u>LONGITUDE</u>
<u>04.9408965</u>	<u>05.5352883</u>
/	/

**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] | }               | NONE SEEN |
| <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] | 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:

SPILL RESPONSE

15. Was there any disruption to the investigation?

[Y]  [N]

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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
NONE WITHIN AREA OF IMPACT					

17. Crops/Economic Trees

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

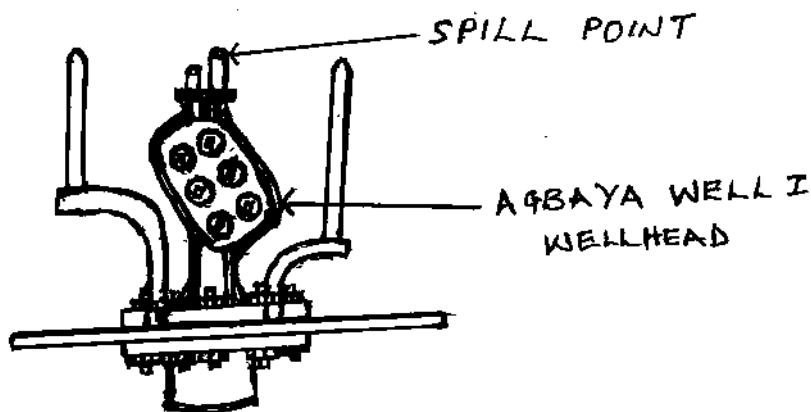
18. Fishing Nets/Fish Ponds

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 detail report of the leak point should be contained in the leak report, overview sketch of the site should be added as an appendix I) A SECTION OF AGBAYA WELL I WELLHEAD AT AGBAYAMA/OGBOTORO SHOWING SPILL POINT



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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	Easting

ESTIMATION OF AREA  
OF IMPACT WAS BASED ON  
OVERFLY PICTURES TAKEN  
AT SITE

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**G. INCIDENT INFORMATION:**

**a. Impacted Area Details**

- Total calculated area of impact 0.0509 HA (AREA OF IMPACT BASED ON OVERFLY PICTURES)
- 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
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Controlled recovery/evacuation from source with no impact to environment:

<u>NIL</u>	Barrels
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**c. Net Estimated Spilled Volume  $V_{Est}$  (bbls)\* =**

6.99 BARRELS

**Estimated Reported Volume\*\*  $V_{Rpt}$  (bbls) =**

7 BARRELS

**\*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:

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: ( $m^3$ ) 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.

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## 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
- ii. Investigation of the incident site showed that there is residual impact on site requiring further works

## 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

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f. Appendix 1: Overview sketch of the site

