

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2277671 JIV report S/N: 0245

(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: 2277671 2. Type of incident\*: OIL SPILL  
3. Name of Location: 12" IMO RIVER - OGALE PIPELINE  
4. Name of nearest community: OGALE 5. State: RIVERS 6. LGA: ELEME  
7. Type of Production facility/Installation: OIL PIPELINE  
8. Asset owner/District: THE SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LIMITED (SPDC) / PIPELINE

## B. INCIDENT INFORMATION:

### 9. Details of incident

- a. Date of incident: 27<sup>TH</sup> FEBRUARY, 2019  
b. Start date/time of investigation: 1<sup>ST</sup> MARCH, 2019 / 14:00HRS  
c. Investigation End date: 1<sup>ST</sup> MARCH, 2019 Actual investigation duration, days: ONE (1) DAY  
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:

NOT APPLICABLE

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

- |                                                                    |                                                |                                                                            |
|--------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------|
| <input checked="" 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 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) \_\_\_\_\_

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2277671 JIV report S/N: 0246

g. Spill point coordinates

Measuring unit

Northing: <u>LATITUDE (WGS 84)</u> <u>4.83082 N</u>	Easting: <u>LONGITUDE (WGS 84)</u> <u>7.15543 E</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

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

Nil, m)  
 Nil, m)  
 Nil, m)  
 Nil, m)  
 Nil, m)  
 Nil, m)  
 NONE

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?

[N]

If yes to item 14, give brief description:

RECOVERY AND REPAIR ACTIVITIES ARE ONGOING

15. Was there any disruption to the investigation?

[Y]

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: 2277671 JIV report SN: 0246

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**

SN	Type of Structures	Description	Size	Number	Comments
NONE WITHIN AREA OF IMPACT					

**17. Crops/Economic Trees**

SN	Type of crops	Young	Medium	Matured	Quantity	Comments
NONE WITHIN AREA OF IMPACT						

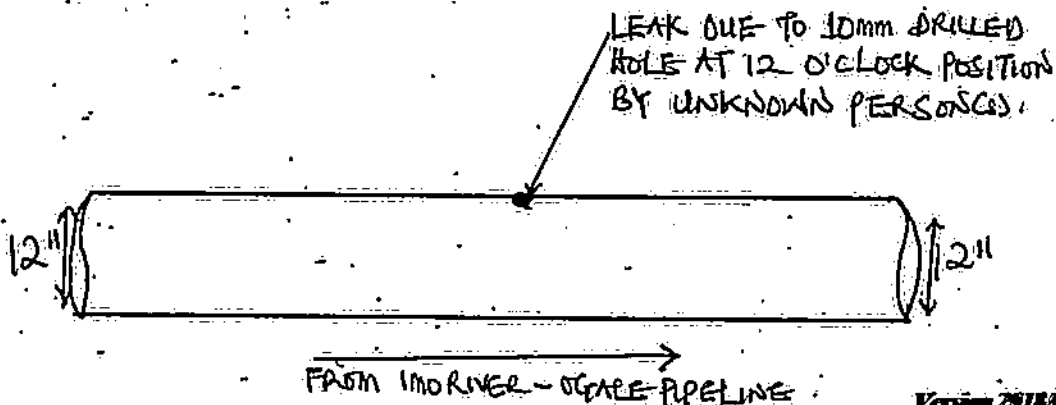
**18. Fishing Nets/Fish Ponds**

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

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

SN	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) A SECTION OF 12" INDIAN PIPELINE AT OGALE SHOWING 10MM DRILLED HOLE AT 12 O'CLOCK POSITION BY UNKNOWN PERSON(S).





## 2019\_2277671

PT_ID	LONG(WGS 84)	LAT. (WGS 84)
SP	7.15543	4.83082
581	7.15532	4.83014
580	7.15528	4.83004
579	7.15526	4.83005
578	7.15528	4.83026
577	7.15532	4.83039
576	7.15534	4.8304
575	7.15531	4.83059
574	7.15534	4.83067
573	7.15532	4.83083
572	7.15536	4.83087
571	7.15537	4.83095
570	7.15527	4.83101
569	7.15528	4.83104
568	7.15526	4.83107
567	7.15524	4.83105
566	7.15514	4.83112
566A	7.15517	4.83119
565	7.15502	4.83121
564	7.15496	4.83116
563	7.15492	4.83115
562	7.15494	4.83136
561	7.15497	4.83136
560	7.15496	4.83135
559	7.15503	4.83124
558	7.15507	4.83129
557	7.15508	4.83128
556	7.15509	4.83122
555	7.15538	4.8311
554	7.15538	4.83107
553	7.15545	4.83102
552	7.15547	4.83084
551	7.15556	4.83082
550	7.15553	4.83076
549	7.15546	4.83075
548	7.15542	4.83038
547	7.15539	4.83015



01-03-2019

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2277671 JIV report S/N: 0246

## G. INCIDENT INFORMATION:

### a. Impacted Area Details

- Total calculated area of impact 0.197 HA
- Impact within R.O.W. YES
- Impact outside R.O.W. YES

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

Recovered oil ( $V_{rec}$ ):	<u>5</u>	Barrels
------------------------------	----------	---------

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

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

c. Net Estimated Spilled Volume ( $V_{est}$ ) = 13.68 BARRELS

Estimated Reported Volume\*\* ( $V_{rep}$ ) = 14 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 volume 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 ( $m^3$ )  $\times$  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.

Version 2018/01

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

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2277671 JIV report S/N: 0246

## 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 JIV 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"/>                                                |

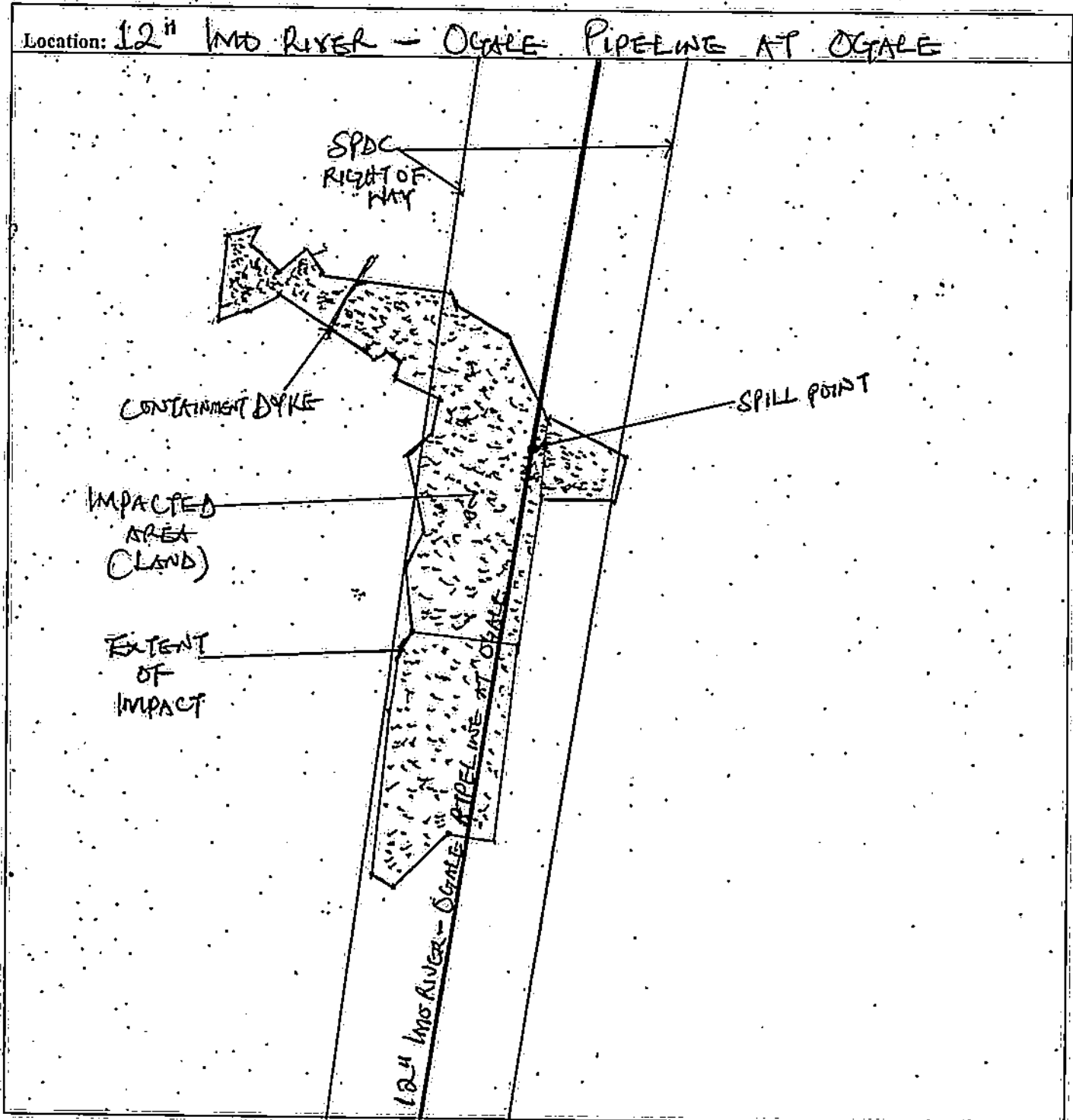
## e. Representatives

- 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: 2277671 JIV report S/N: 0245

f. Appendix 1: Overview sketch of the site



Version 2018/01

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