

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2741054 JIV report S/N:

0602

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

## A. GENERAL INFORMATION:

1. Fountain Incident Number: 2741054 2. Type of incident: OIL SPILL  
3. Name of Location: 16" EGBEMA - ASSA PIPELINE  
4. Name of nearest community: EKPEAGA 5. State: RIVERS 6. LGA: OGBA EGBEMA  
7. Production Facility/Installation: CRUDE OIL PIPELINE  
8. Asset Owner/Hub: THE SHELL PETROLEUM DEVELOPMENT COMPANY  
OF NIGERIA LIMITED / PIPELINE

## B. INCIDENT INFORMATION:

9. Details of incident  
a. Date Reported: 25<sup>TH</sup> SEPTEMBER 2020  
b. Start date/time of Investigation: 27<sup>TH</sup> SEPTEMBER 2020 / 15:05 HRS  
c. Investigation End date: 28<sup>TH</sup> SEPTEMBER 2020 Day(s) on site: TWO (2) 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             | <input checked="" type="checkbox"/> Sand bag(s)             |

Additional observations around the spill point:

A PAIR OF SHOE AND SAND BAGS WAS OBSERVED.

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

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Smooth round-edge hole                                | <input type="checkbox"/> Rough-edge hole      | <input type="checkbox"/> Hack saw cut                                      |
| <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 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"/> Tear ( _____ )  |   |  |
| <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  Others (including Mystery spills) \_\_\_\_\_

\*This can be: (a) Oil Spill (b) Drilling fluid/Chemical (c) Siltation (d) Water Leak (e) Fire (f) Non-leaking theft point removal

Version 2020/01

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

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g. Spill Point Coordinates (\*Incidents  $\leq 100m$  apart to be aggregated into one Joint Investigation Report)

h. Measuring unit

WAS 84

<b>Northing:</b> <u>LATITUDE</u>	<b>Easting:</b> <u>LONGITUDE</u>
<u>5.42114</u>	<u>6.77882</u>
<hr/>	<hr/>
<hr/>	<hr/>

## C. RISK ASSESSMENT

### 10. Details of Environment

i. Type of environment where spill occurred (select one):

- Land     
  Swamp     
  Water     
  Seasonal swamp     
  Shoreline/Waterfront

ii. Type of environment to which oil has spread:

- Land     
  Swamp     
  Waterbody (specify) \_\_\_\_\_

iii. Weather condition

- Dry     
  Wet     
  Windy     
  Hot

### 11. Distance to Sensitive habitat within 100m radius

- |   |   |     |   |                            |
|---|---|-----|---|----------------------------|
| <input type="checkbox"/> Government reserved and designated protected area                    | [ | ,m] | } | NONE SEEN WITHIN VICINITY  |
| <input type="checkbox"/> Drinking water source  | [ | ,m] |   |                            |
| <input type="checkbox"/> Surface water <input type="checkbox"/> Borehole                      | [ | ,m] |   |                            |
| <input type="checkbox"/> Built up Area  | [ | ,m] | } | NONE SEEN WITHIN VICINITY. |
| <input type="checkbox"/> Residential Area <input type="checkbox"/> Commercial/Industrial Area | [ | ,m] |   |                            |
| <input checked="" type="checkbox"/> Farmlands IMPACTED BY SPILL                               | [ | ,m] |   |                            |
| <input type="checkbox"/> Fish Farm/Pond   | [ | ,m] |   |                            |
| <input type="checkbox"/> Fishing net  | [ | ,m] |   |                            |
| <input type="checkbox"/> Others (specify) _____   | [ | ,m] |   |                            |

### 12. Containment measures put in place:

- Booms   
  Trench   
  Dyke   
  Pit   
  Natural depression   
  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:

REPAIR WORK COMPLETED.

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15. Was there any disruption to the investigation? [Y] NO

If yes to item 15 give brief description.

NOT APPLICABLE

16. Was JIV delayed? [Y] NO

Reason(s):

- Delayed Community Access Approval  Security Challenges  Access constraint due to terrain  
 Others (specify) NOT APPLICABLE

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

17. Structures / Properties

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

18. Crops/Economic Trees

S/N	Type of crops	Young	Medium	Matured	Quantity	Comments
1	<u>CASSAVA</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>FEW</u>	<u>IMPACTED BY SPILL</u>

19. Fish/ Nets/Ponds

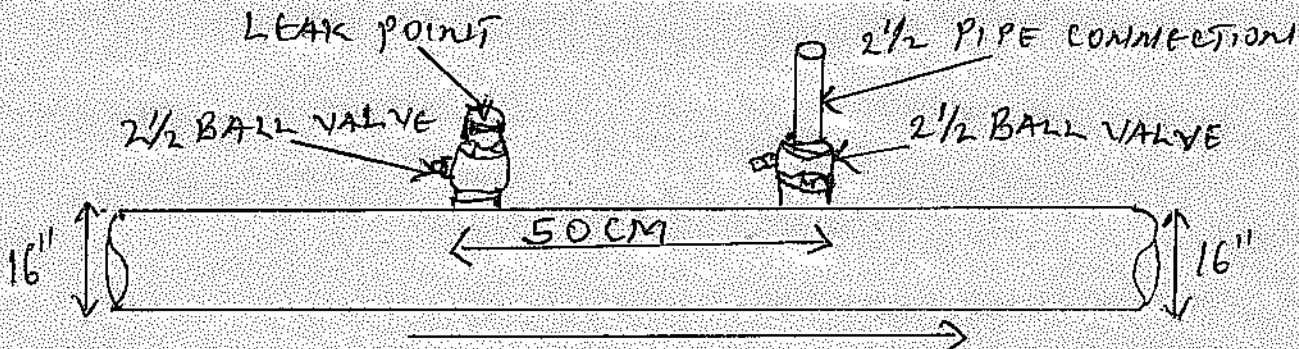
S/N	Fish/Nets/Ponds	Description	Quantity/Size	Comments
<u>NONE WITHIN AREA OF IMPACT</u>				

20. Others (Specify) e.g. Animal Traps

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

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

SECTION OF 16" EGBEMA - ASSA PIPELINE AT EKPEAGA SHOWING 2 NOS OF CRUDE OIL THEFTS POINTS INSTALLED AT 12 O'CLOCK POSITION BY UNIDENTIFIED PERSON(S).



FROM EGBEMA TO ASSA



APPENDIX A		
EGBEMA-ASSA DELIVERY LINE AT EKPEA		
INCIDENT NO: 2741054		
WGS 84		
POINT	EASTING	NORTHING
1	6.77636	5.42695
2	6.77635	5.42694
3	6.77639	5.42684
4	6.77638	5.42683
5	6.77642	5.42678
6	6.77645	5.42665
7	6.77648	5.4266
8	6.77647	5.42659
9	6.77657	5.42638
10	6.77679	5.42597
11	6.77675	5.42595
12	6.77676	5.4259
13	6.77682	5.4259
14	6.77693	5.42569
15	6.77688	5.42568
16	6.77692	5.42556
17	6.77695	5.4256
18	6.77706	5.42524
19	6.77732	5.42459
20	6.77816	5.42262
21	6.7784	5.42205
22	6.7784	5.42202
23	6.77851	5.42186
24	6.7784	5.42182
25	6.77795	5.42211
26	6.77631	5.42292
27	6.77595	5.42311
28	6.77597	5.42313
29	6.77591	5.4232
30	6.77586	5.42329
31	6.77577	5.42318
32	6.77566	5.42325
33	6.77565	5.42323
34	6.77572	5.42317
35	6.77591	5.42309
36	6.77726	5.42243
37	6.77792	5.42209
38	6.77849	5.42173
39	6.77858	5.42174
40	6.77869	5.42137

41	6.77871	5.42108
42	6.7788	5.42093
43	6.77892	5.42102
44	6.77875	5.42143
45	6.77874	5.42137
46	6.77882	5.42119
47	6.77877	5.42114
48	6.77872	5.42129
49	6.77864	5.42176
50	6.77842	5.42214
51	6.77845	5.42216
52	6.77843	5.4222
53	6.7784	5.42221
54	6.77789	5.42331
55	6.77792	5.42333
56	6.7778	5.42358
57	6.77771	5.42374
58	6.77752	5.42429
59	6.77749	5.42428
60	6.77688	5.42585
61	6.77682	5.42605
62	6.7768	5.42615
63	6.77668	5.42623
64	6.77652	5.4266
65	6.77646	5.42678
66	6.77649	5.42679
67	6.77647	5.42681
68	6.77644	5.42682

*AS*

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## G. INCIDENT INFORMATION:

### a. Impacted Area Details \*

- Total calculated area of impact (Ha) 0.55 Ha
- Impact within SPDC R.O.W YES
- Impact outside SPDC R.O.W YES

\* Round off to 2 decimal places if area is  $\geq 100 \text{ m}^2$  or to 4 decimal places if area is  $< 100 \text{ m}^2$  (e.g. 14.55, 0.0051, 0.0009)

\* Express in Hectares (Ha)

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

Recovered oil $V_{\text{rec}}$	<u>8</u>	Barrels
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Controlled recovery/evacuation from source with no impact to environment:

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

17.42 BARRELS

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

18 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 volume estimation or cause of spill:

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  $\text{m}^3$  to barrels is  $\text{Volume (m}^3) \times 6.29$ ; \*\*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 column 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]:
- The Shell Petroleum Development Company [SPDC]:
- *Separate DPR form has been filled out with same findings*
- *Separate NOSDRA form has been filled out with same findings*
- *Separate SME form has been filled out with same findings*

*Tick as applicable*

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f. Appendix 1: Overview sketch of the site

