

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2365359 JIV report S/N: 1030011

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

## A. GENERAL INFORMATION:

1. Fountain Incident Number: 2365359 2. Type of incident: OIL SPILL  
3. Name of Location: 18" ASSA-RUMUEKPE PIPELINE  
4. Name of nearest community: IGBEDA 5. State: RIVERS 6. LGA: EMOHUA  
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 Reported: 3RD JUNE, 2019  
b. Start date/time of investigation: 4TH JUNE, 2019 / 15:23 HRS  
c. Investigation End date: 5TH JUNE, 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 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:

NOT APPLICABLE

## 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 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"/> 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) construction e) Encroachment f) Fire, g) non leaking Theft point removal  
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# JOINT INVESTIGATION REPORT

INCIDENT NO: 2365359 JIV report S/N: 1030011

g. Spill point coordinates

(WGS84)

h. Measuring unit

Northing: <u>LAT.</u>	Easting: <u>LONG.</u>
<u>5.24059</u>	<u>6.770449</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 to Sensitive habitat within 100m radius

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

[ ,m] } NONE SEEN  
 [ ,m] } WITHIN  
 [ ,m] } VICINITY  
 [ ,m]  
 [ ,m]

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:

REPAIR AND RECOVERY ACTIVITIES ONGOING

15. Was there any disruption to the investigation?

[Y]       [N]

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If yes to item 15 give brief description:

NOT APPLICABLE

16. Was JIV delayed?  [Y]  [N]

If yes to item 16 give brief description: 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	Quantity	Comments
<u>NONE WITHIN AREA OF IMPACT</u>						

18. Crops/Economic Trees

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

19. Fish/Nets/Ponds

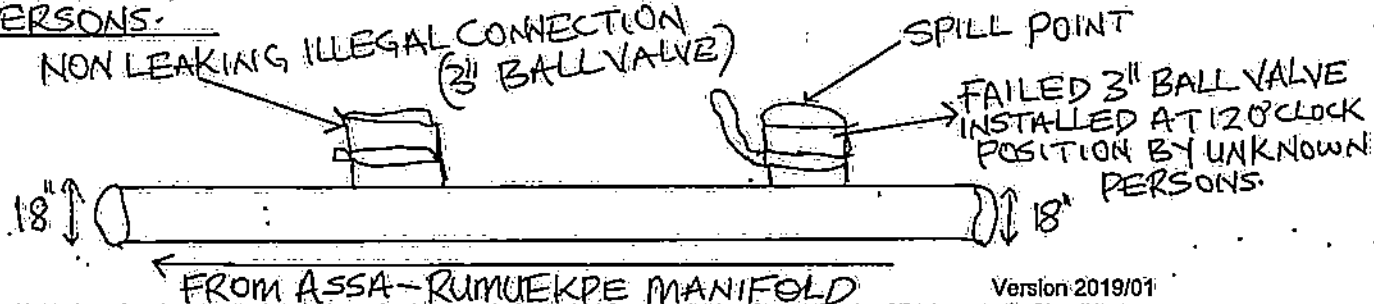
S/N	Fish/Nets/Ponds	Description	Quantity/Size	Comments
<u>NONE WITHIN AREA OF IMPACT</u>				

20. 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)

A SECTION OF 18" ASSA-RUMUEKPE PIPELINE AT EGBEDA SHOWING 1 FAILED 3" BALL VALVE AND 1 NON LEAKING INSTALLED AT 12 O'CLOCK POSITION BY UNKNOWN PERSONS.





PNT_ID	LAT	LONG
SP	5.24059	6.770149
996	5.240488	6.770091
997	5.240571	6.77012
998	5.240586	6.770132
999	5.240599	6.770107
1000	5.240637	6.770095
1001	5.240611	6.770173
1002	5.240541	6.770154
1003	5.240512	6.770137
1004	5.240486	6.770158
1005	5.240406	6.770174
1006	5.240407	6.770186
1007	5.240394	6.770177
1008	5.240367	6.770154
1009	5.240357	6.770127
1010	5.240321	6.770141
1011	5.240302	6.770156
1012	5.240306	6.77012
1013	5.240272	6.770044
1014	5.240465	6.770212
1015	5.240443	6.770273
1016	5.240436	6.770294
1017	5.240465	6.770321
1018	5.240478	6.770307
1019	5.240456	6.770261
1020	5.240483	6.770211

JIV ALONG 18" ASSA-RUMUEKOE PIPE LINE AT EGGBEDA  
CORD.IN WGS 84



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INCIDENT NO: 2365359 JIV report S/N: 1030011

**G. INCIDENT INFORMATION:**

**a. Impacted Area Details**

- Total calculated area of impact: 0.035506 HA
- Impact within SPDC R.O.W: YES
- Impact outside SPDC R.O.W: YES!

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

Recovered oil $V_{rec}$ :	<u>56</u>	Barrels
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Controlled recovery/evacuation from source with no impact to environment:

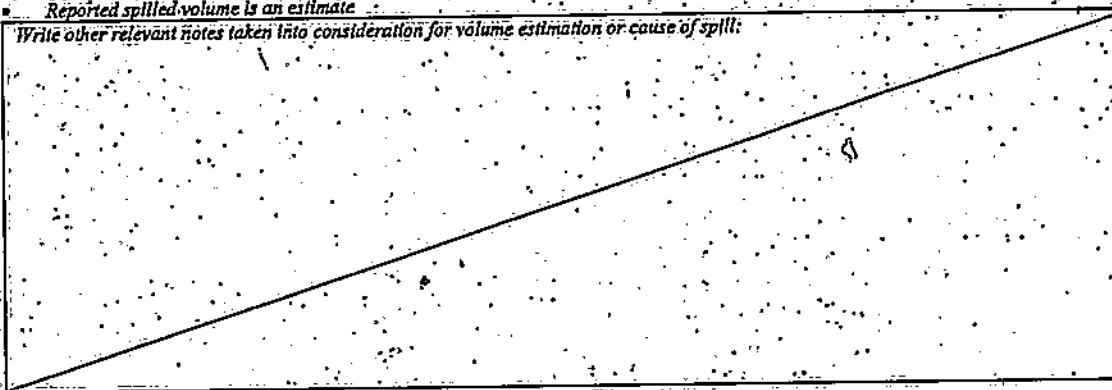
<u>NIL</u>	Barrels
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<p><b>c. Net Estimated Spilled Volume <math>V_{Est}</math> (bbls)* =</b> <u>60 BARRELS</u></p> <p style="text-align: right; margin-right: 20px;"><i>Sum of</i></p> <p style="text-align: right; margin-right: 20px;"><u>68.78 BARRELS</u></p>
<p><b>Estimated Reported Volume** <math>V_{rep}</math> (bbls) =</b> <u>69 BARRELS</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 volume estimation or cause of spill:



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 = 0.33 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.

Version 2019/01

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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 JIF 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:

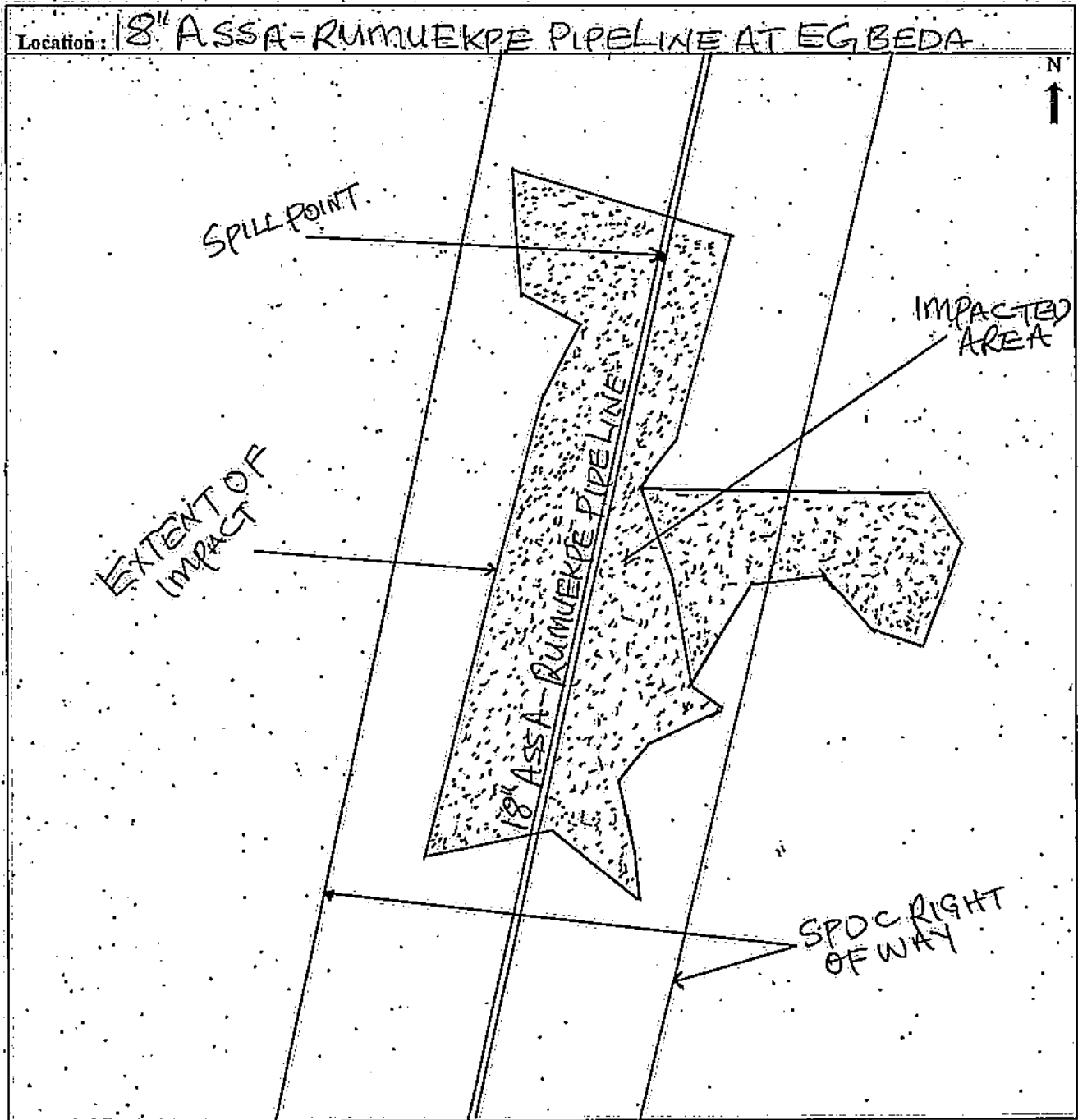
- Host Community:
- Department of Petroleum Resources [DPR]:
- National Oil Spill Detection and Response Agency [NOSDRA]:
- State Ministry of Environment [SME]:
- Shell Petroleum Development Company [SPDC]:
- *Separate DPR form has been filled out with same findings*

*Tick as applicable*

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f. Appendix I: Overview sketch of the site



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