

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2681377 JIV report S/N: 0646

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

## A. GENERAL INFORMATION:

1. Fountain Incident Number: 2681377 2. Type of incident\* OIL SPILL  
3. Name of Location 18" ASA - RUMUEKPE PIPELINE  
4. Name of nearest community EGBEDA 5. State: RIVERS 6. LGA EMUOHA  
7. Production Facility/Installation OIL PIPELINE  
8. Asset Owner/Hub THE SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LIMITED (SPDC)/ PIPELINE

## B. INCIDENT INFORMATION:

### 9. Details of incident

- a. Date Reported: 6TH JULY 2020  
b. Start date/time of Investigation: 7TH JULY 2020/15:00HRS  
c. Investigation End date: 7TH JULY 2020 Day(s) on site: 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             | <input type="checkbox"/> Sand bag(s)                        |

Additional observations around the spill point:

### 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 ≤100m apart to be aggregated into one Joint Investigation Report)

h. Measuring unit WGS 84

Northing:	Easting:
5.24082	6.77024
5.24081	6.77024
/	/

## 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

- Government reserved and designated protected area [      ,m]
- Drinking water source [      ,m]
  - Surface water       Borehole
- Built up Area [      ,m]
  - Residential Area       Commercial/Industrial Area
- Farmlands [ 10 ,m]
- Fish Farm/Pond [      ,m]
- Fishing net [      ,m]
- 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:

SPILL RESPONSE / REPAIRS BY CLAMPING

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15. Was there any disruption to the investigation? [Y]  [N]

If yes to item 15 give brief description:

NOT APPLICABLE

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

Reason(s): NOT APPLICABLE

- Delayed Community Access Approval  Security Challenges  Access constraint due to terrain  
 Others (specify) \_\_\_\_\_

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
	<u>MAIZE</u>	<u>—</u>	<u>—</u>	<u>YES</u>	<u>—</u>	<u>IMPACTED</u>
	<u>VEGETABLE</u>	<u>—</u>	<u>—</u>	<u>YES</u>	<u>—</u>	<u>IMPACTED</u>
	<u>CASSAVA</u>	<u>—</u>	<u>YES</u>	<u>—</u>	<u>—</u>	<u>IMPACTED</u>

19. Fish/Nets/Ponds

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

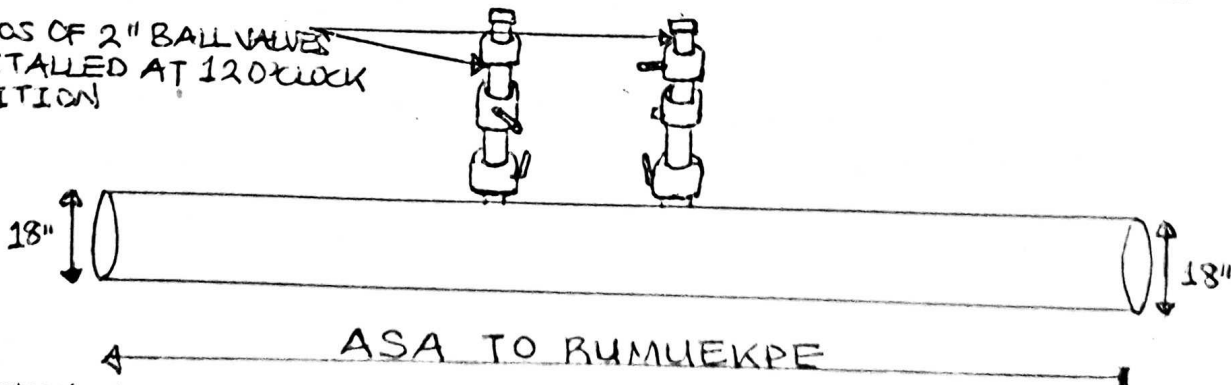
20. Others (Specify) e.g. Animal Traps

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)

A SECTION OF 18" ASA - RUMUEKPE PIPELINE AT EGBEDA  
SHOWING 2 NOS OF 2" BALL VALVES INSTALLED AT A 12  
O'CLOCK POSITION BY UNKNOWN PERSON(S)

2 NOS OF 2" BALL VALVES  
 INSTALLED AT 12 O'CLOCK  
 POSITION



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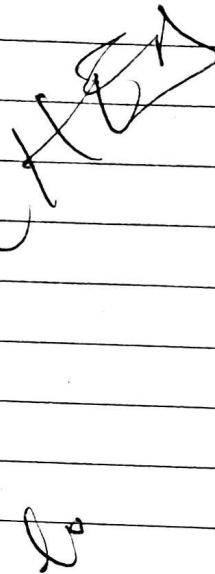
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**F: TABLE SHOWING SOME OF COORDINATES TAKEN DURING JIV FOR AREA CALCULATION**

21. Impacted area boundary Coordinates *(If more, Print and attach as Appendix)*

S/N	Northing	Easting

*SEE ATTACHED*



FID 26813577 18" ASSA TO RUMUEKPE PIPELINE AT EGBEDA

PNT_ISD	LAT	LONG
269	5.24078	6.77025
270	5.24079	6.77008
271	5.24082	6.77008
272	5.24086	6.77011
273	5.24098	6.77019
274	5.24115	6.77024
275	5.24119	6.77024
276	5.24138	6.77029
277	5.24184	6.77037
278	5.24199	6.77043
279	5.24202	6.77044
280	5.2421	6.77045
281	5.24219	6.77046
282	5.24221	6.77032
283	5.24223	6.77032
284	5.24221	6.77045
285	5.24242	6.77052
286	5.2425	6.77056
287	5.24256	6.77057
288	5.24259	6.77058
289	5.24285	6.77062
290	5.24299	6.77067
291	5.243	6.77068
292	5.24325	6.77073
293	5.2433	6.77074
294	5.24357	6.77082
295	5.24375	6.77085
296	5.24396	6.77089
297	5.24397	6.77091
298	5.24419	6.77096
299	5.24457	6.77105
300	5.24525	6.7712
301	5.24526	6.77121
302	5.2454	6.77124
303	5.24551	6.77127
304	5.24566	6.7713
305	5.24573	6.7713
306	5.24578	6.77131
307	5.24575	6.77133
308	5.24576	6.77141
309	5.24589	6.77148
310	5.24583	6.77151
311	5.24575	6.77151
312	5.2457	6.7715
313	5.2457	6.77155
314	5.24571	6.77158
315	5.24558	6.77159
316	5.24557	6.7715

*Fm-a*

317	5.24557	6.77146
318	5.24547	6.77144
319	5.24549	6.77136
320	5.2455	6.7713
321	5.24487	6.77115
322	5.24473	6.77115
323	5.245	6.7717
324	5.24515	6.77191
325	5.24519	6.77187
326	5.24528	6.77177
327	5.2453	6.7718
328	5.2452	6.77187
329	5.24515	6.77195
330	5.24503	6.77182
331	5.24496	6.77166
332	5.24489	6.7715
333	5.24478	6.77129
334	5.24463	6.77111
335	5.24437	6.77103
336	5.24432	6.77101
337	5.24414	6.77097
338	5.2439	6.77091
339	5.24367	6.77085
340	5.24364	6.77087
341	5.24361	6.77087
342	5.24356	6.77084
343	5.24351	6.77083
344	5.2435	6.77081
345	5.24323	6.77076
346	5.24264	6.77077
347	5.24258	6.77063
348	5.24253	6.77062
349	5.24243	6.77057
350	5.2422	6.77055
351	5.24217	6.77072
352	5.24216	6.7709
353	5.24213	6.77114
354	5.24214	6.77128
355	5.24212	6.77128
356	5.24211	6.77115
357	5.24214	6.77094
358	5.24216	6.77071
359	5.24215	6.77057
360	5.24204	6.77051
361	5.24184	6.77042
362	5.24178	6.77046
363	5.24166	6.77048
364	5.24161	6.77045
365	5.24157	6.77041
366	5.24135	6.77035

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367	5.24118	6.77035
368	5.24103	6.77034
369	5.24098	6.77031
370	5.24097	6.77033
371	5.24091	6.77031
SP 1	5.24082	6.77024
SPD 2	5.24081	6.77024

*Handwritten signature or initials*

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**G. INCIDENT INFORMATION:**

**a. Impacted Area Details \***

- Total calculated area of impact (Ha) 0.53 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 $V_{\text{rec}}$ :	75	Barrels
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Controlled recovery/evacuation from source with no impact to environment:

NIL	Barrels
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<p><b>c. Net Estimated Spilled Volume <math>V_{\text{Est}}(\text{bbbls})^*</math> =</b></p>	<p><b>186.00 BARRELS</b></p>
<p><b>Estimated Reported Volume** <math>V_{\text{rep}}(\text{bbbls}) =</math></b></p>	
<p><b>186 BARRELS</b></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  $\text{m}^3$  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

