

# JOINT INVESTIGATION REPORT

INCIDENT NO: 2839807 JIV report S/N: 0665

(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: 2839807 2. Type of incident\*: OIL SPILL  
3. Name of Location: 14" OKOROA RUMUEKPE TRUNKLINE  
4. Name of nearest community: UKPELIEDS, State: RIVERS 6. LGA: AHOADA WEST  
7. Production Facility/Installation: OIL PIPELINE  
8. Asset Owner/Hub: THE SHELL PETROLEUM DEVELOPMENT COMPANY

## B. INCIDENT INFORMATION:

9. Details of incident  
a. Date Reported: 23RD JANUARY, 2021  
b. Start date/time of Investigation: 25/01/2021 14:05 HRS  
c. Investigation End date: 25/01/2021 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

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

h. Measuring unit

WGS 84

Northings: LATITUDE	Easting: LONGITUDE
5.0908153	6.5306941

## 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 [ 25 ,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 CONTAINMENT / REPAIR 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>NONE WITHIN AREA OF IMPACT</u>					

19. Fish/Nets/Ponds

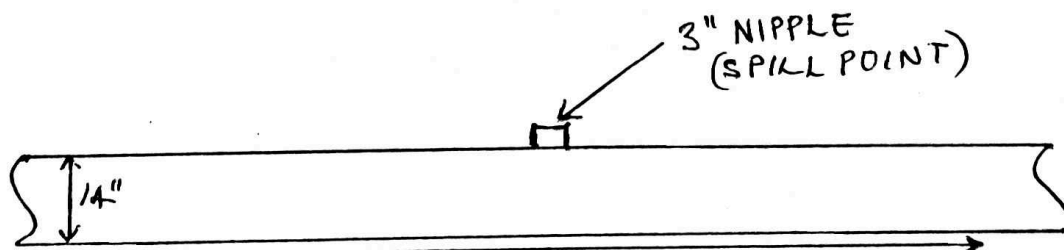
S/N	Fish/Nets/Ponds	Description	Quantity/Size	Comments
	<u>NONE WITHIN AREA OF IMPACT</u>			

20. Others (Specify) 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 3" 14" OKORDIA - RUMUEKPE PIPELINE AT UKPELEDE SHOWING A 3" NIPPLE INSTALLED AT 12 O'CLOCK POSITION BY UNKNOWN PERSON(S).



OKORDIA TO RUMUEKPE

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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 LIST		

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## G. INCIDENT INFORMATION:

### a. Impacted Area Details \*

- Total calculated area of impact (Ha) 0.19 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>NIL</u>	Barrels
----------------------------------	------------	---------

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

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

### c. Net Estimated Spilled Volume $V_{\text{Est}}(\text{bbls})^* =$

4.62 BARRELS

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

5 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:

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 Volume ( $\text{m}^3$ ) 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 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 | <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:

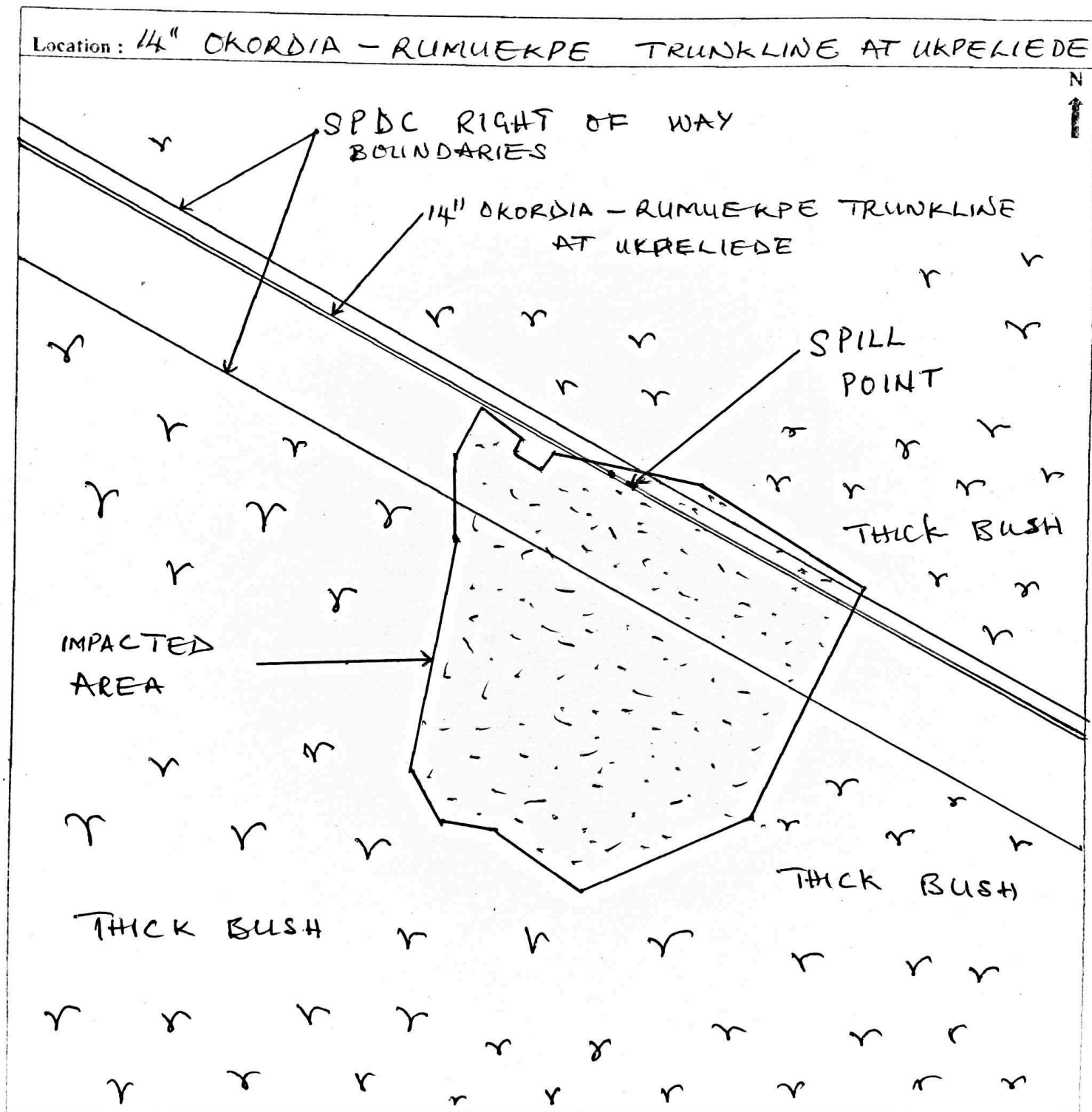
- Host Community: ☒
- Department of Petroleum Resources [DPR]: ☐
- National Oil Spill Detection and Response Agency [NOSDRA]: ☒
- State Ministry of Environment [SME]: ☒
- The Shell Petroleum Development Company [SPDC]: ☒
- *Separate DPR form has been filled out with same findings* ☐
- *Separate NOSDRA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



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