

JOINT INVESTIGATION REPORT

INCIDENT NO: 1486279 JIV report S/N: Nº 0000052

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

A. GENERAL INFORMATION:

1. Spill incident Number: 1486279 2. Type of incident* ASSET DAMAGE.
3. Name of Location DIABU CREEK WELL 13T WELL HEAD.
4. Name of nearest community PEREMABIRI 5. State: BAYELSA 6. LGA SOUTHERN TIANI
7. Type of Production facility/Installation WELL HEAD
8. Asset owner/District SPDC / LAND 2.

B. INCIDENT INFORMATION:

9. Details of incident
a. Date of incident: 22ND AUGUST, 2015
b. Start date/time of investigation: 4TH SEPTEMBER 2015 / 13:39pm.
c. Investigation End date: 4TH SEPTEMBER, 2015 Actual investigation duration, days: ONE (1) DAY.
d. Description of spill point environment
☐ Firm soil ☐ Loose soil ☐ Recently excavated area
☐ Under water ☐ Swampy ☐ Exposed pipe surface
☒ Well Platform (on Water) ☐ Drill Rig

Additional observations around the spill point:

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

- | | | |
|--|---|--|
| ☐ Drilled hole | ☐ Hack saw cut | ☐ Tear (_____), |
| ☐ Complete Rupture | ☐ Inward dent, | ☐ Well head tampering |
| ☐ Failed Weld-on illegal hot tap valve | ☐ Failed Clamp, | ☐ Missing Pipeline/Flowline |
| ☐ Crude oil theft (illegal bunkering) point, | ☐ Saver-pit over flow | ☐ Third party tampering with Clamp |
| ☐ Third party tampering with valve setting | ☐ Bulging Outward | ☐ Third party tampering with flange, |
| ☐ Flare System/Bund wall failure | ☐ Cold vent | ☐ Surge vessel overflow, |
| ☐ Valve Failure | ☐ Relief valve failure | ☐ Accidental 3 rd party equipment impact |
| ☒ Others(specify) <u>CAMERON CONTROL UNIT WAS REMOVED BY UNKNOWN PERSON.</u> | | |

f. Incident caused by:

- ☒ Third party interference (Sabotage ☐; crude theft ☐; Line theft ☐; Accidental 3rd 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.

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g. Spill point coordinates

h. Measuring unit

Northings:	Easting:
<u>LAT.</u>	<u>LONG.</u>
<u>4.649534</u>	<u>6.07930</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 [,m]
☐ Drinking water source [,m]
☐ Built up area NONE + SEEN [,m]
☐ Farmlands WITHIN VICINITY [,m]
☐ Fish Farm/Pond [,m]
☐ Fishing net [,m]
☐ Others (specify).

12. Containment measures put in place;

☐ Booms ☐ Trench ☐ Dyke ☐ Natural depression ☐ Pit ☒ None

☐ Others: NOT APPLICABLE

13. Any pictures or video coverage?

[☒] [☐]

14. Further response/repair initiated as at the time of JIV?

[☐] [☒]

If yes to item 14, give brief description:

REPAIR WORK PLANNED

15. Was there any disruption to the investigation?

[☐] [☒]

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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

S/N	Type of Structures	Description	Size	Number	Comments
		<u>NOT APPLICABLE</u>			

17. Crops/Economic Trees

S/N	Type of crops	Young	Medium	Matured	Quantity	Comments
		<u>NOT APPLICABLE</u>				

18. Fishing Nets/Fish Ponds

S/N	Nets/Ponds	Description	Quantity/Size	Comments
		<u>NOT APPLICABLE</u>		

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

S/N	Others	Description	Quantity/Size	Comments
		<u>NOT APPLICABLE</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)

SECTION OF DIBBU CRACK WHEEL 1ST WHEELHEAD AT PERIMABIAI SHOWING POSITION OF MISSING CAMERON CONTROL UNIT.



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

20. Impacted area boundary Coordinates (If more, Print and attach as an appendix)

[illegible]

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G. INCIDENT INFORMATION:

a. Impacted Area Details

- Total calculated area of impact NIL
- Impact within R.O.W NIL
- Impact outside R.O.W NIL

b. Volume of oil recovered before completion of JIV (V_{recJ}):

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

<u>NIL</u>	Barrels
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c. Net Estimated Spilled Volume $V_{Est}(bbls)^* =$

NIL

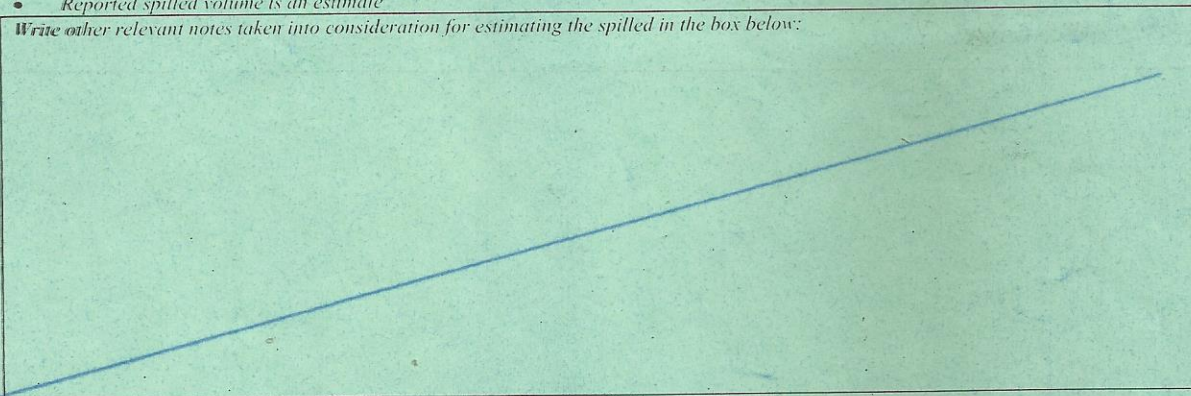
Estimated Reported Volume $V_{rep}(bbls) =$

NIL

*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 in the box below:



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 = 0.35 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.

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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]: ☒
- Asset Owner: ☒
- Signatories agree with reported findings: ☒
- Separate DPR form has been filled out with same findings: ☒

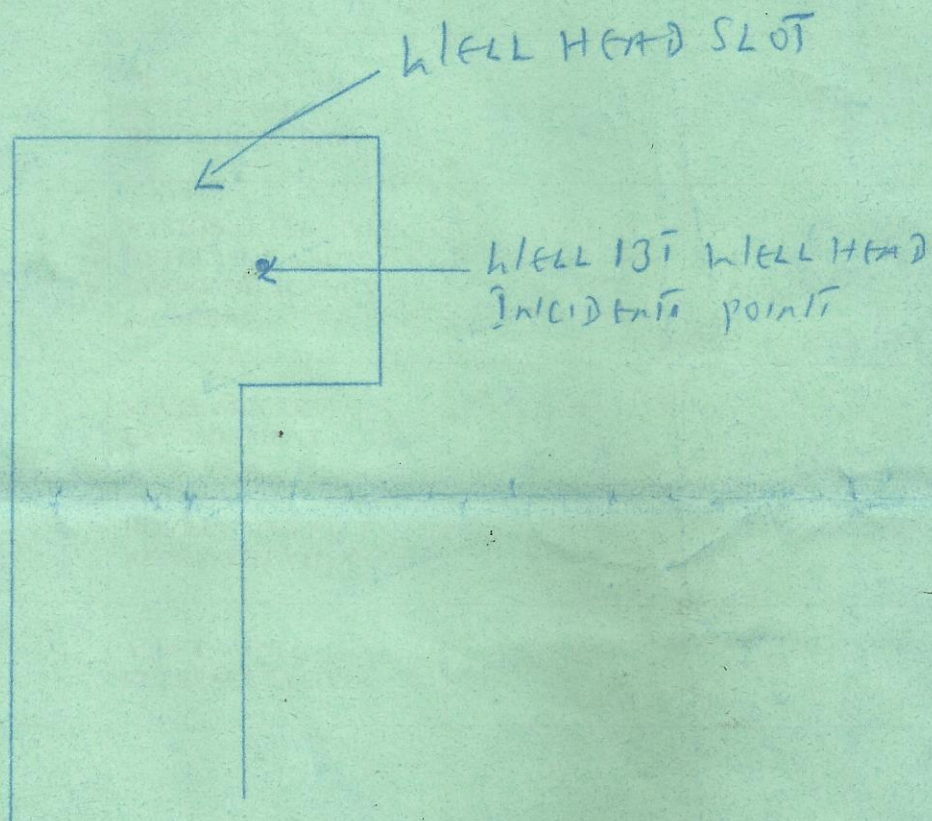
Tick as applicable

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f. Appendix 1: Overview sketch of the site

Location: DABU CREEK W/ELL 13T W/ELL HEAD AT PEREMABIRI

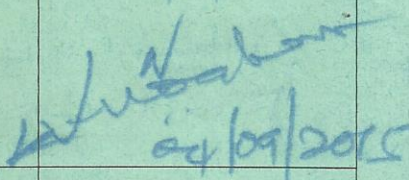
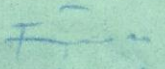
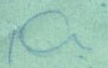
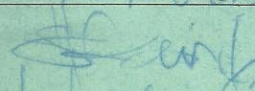
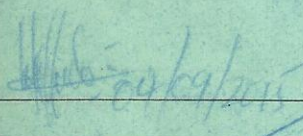


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g. SIGNATORIES: JOINT INVESTIGATION TEAM MEMBERS

Having read through the JIT report, the following representatives append their respective signatures in agreement with the content therein:

S/N	Name	Members present	Designation	Signature/Date and Time
1	CHIBUIKE CHIBUZO	DEPARTMENT OF PETROLEUM RESOURCES (DPR)	HSE	 04/09/15
2	KONS ABAM	NATIONAL OIL SPILL DETECTION AND RESPONSE AGENCY (NOSDRA)	SES	 04/09/2015
3	Timi Timi TARUMARI	STATE MIN. OF ENVIRONMENT	R/E Crutator	 04/9/15
4	Chief Noel Imgbila	HOST COMMUNITY REPRESENTATIVE	Chief Perennial	 7-9-2015
5	KALIN, STI	ASSET OWNER REPRESENTATIVE	FL	 1/9/15
6	IME EFFION	NDE	CPL	 04/09/2015