



National Oil Spill Detection and Response Agency  
**JOINT INVESTIGATION VISIT (JIV) FORM**

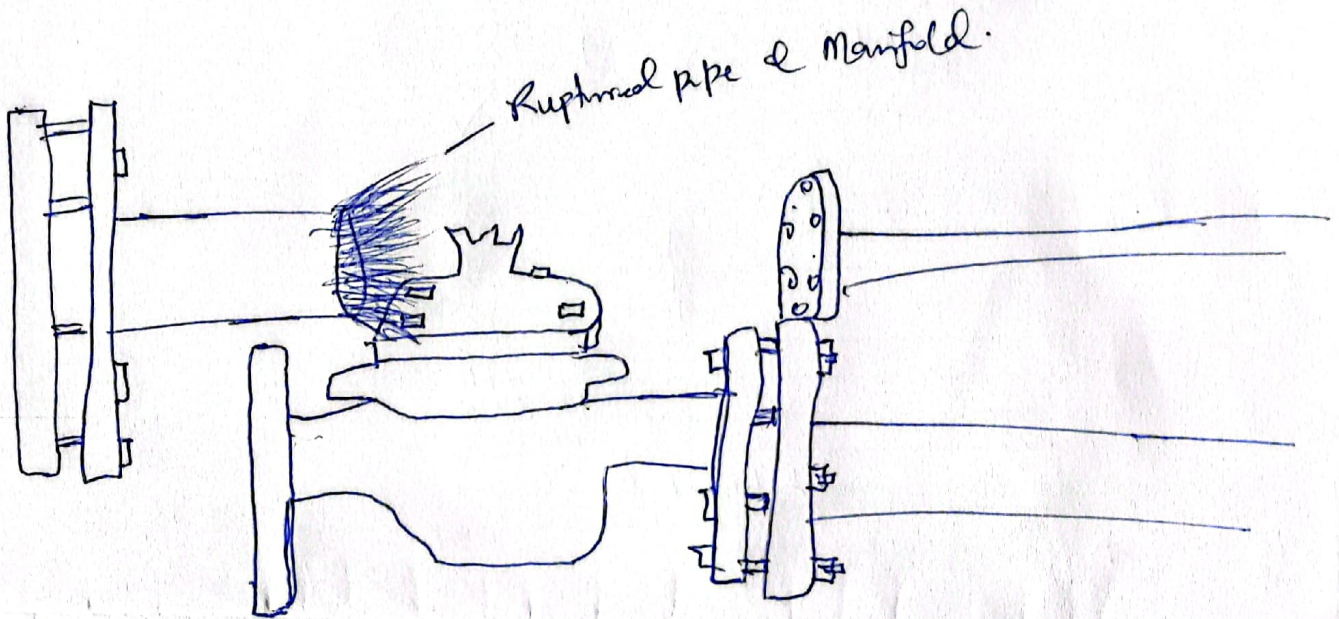
Note: This JIV Form is to be completed by all participating parties in the field

| Site Organization                |    | Mandatory Information Required                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                              |
|----------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company Name                     |    | FRONTIER OIL LIMITED                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                              |
| Incident Number                  |    | 2024/03/OS/001                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                              |
| Type of Complaint/Incident       |    | <input checked="" type="checkbox"/> Oil Pollution <input type="checkbox"/> Fire/Explosion <input type="checkbox"/> Drilling Mud/Chemical Pollution<br><input type="checkbox"/> Others (specify).....                                                                                                                                                        |                                                                                                                                                              |
| Incident Details                 |    |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |
| Date of Incident                 |    | 26-03-2024                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |
| Date first reported              |    | 26-03-2024                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |
| Date of first investigation      |    | 27-03-2024                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |
| Date of follow-up investigation  |    | DD: MM: YYYY                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                              |
| Time of investigation            |    | 1110HRS                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                              |
| Estimated quantity spilled       |    | 5 BBLs                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                              |
| Site Details                     |    |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |
| Facility Address                 |    | LOCATION 10 & 12                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                              |
| Position of Spill/Leak           |    |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |
| Location                         | 12 | GPS Coordinate                                                                                                                                                                                                                                                                                                                                              | N 4° 38' 41.78"<br>E 8° 2' 46.86"                                                                                                                            |
| Spill Area                       |    | <input checked="" type="checkbox"/> Land <input type="checkbox"/> Swamp <input type="checkbox"/> Fresh Water <input type="checkbox"/> Mangrove <input type="checkbox"/> Coastline<br><input type="checkbox"/> Nearshore <input type="checkbox"/> Offshore<br><input type="checkbox"/> Others observations around the spill point<br>(specify).....<br>..... |                                                                                                                                                              |
| Structural Controls in Place     |    | <input type="checkbox"/> Boom <input type="checkbox"/> Trenches <input type="checkbox"/> Bund wall <input type="checkbox"/> Sorbents<br><input type="checkbox"/> Others (specify).....                                                                                                                                                                      |                                                                                                                                                              |
| Circumstances Around Spill point |    |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |
| Visual Observation of Hole Point |    | <input type="checkbox"/> 12 O' Clock <input type="checkbox"/> 10 O' Clock <input type="checkbox"/> 2 O' Clock <input type="checkbox"/> 3 O' Clock<br><input type="checkbox"/> 4 O' Clock <input type="checkbox"/> 5 O' Clock <input type="checkbox"/> 6 O' Clock                                                                                            |                                                                                                                                                              |
| Type of Contaminant              |    | <input checked="" type="checkbox"/> Crude Oil <input type="checkbox"/> Condensate <input type="checkbox"/> Chemicals <input type="checkbox"/> Refined Products<br><input type="checkbox"/> Others (specify).....                                                                                                                                            |                                                                                                                                                              |
| Facility                         |    | <input type="checkbox"/> Pipeline <input type="checkbox"/> Flow line <input type="checkbox"/> Wellhead <input checked="" type="checkbox"/> Manifold <input type="checkbox"/> Flow Station <input type="checkbox"/> Rig<br><input type="checkbox"/> Storage Tank <input type="checkbox"/> Compressor Plant <input type="checkbox"/> Others (specify).....    |                                                                                                                                                              |
| Cause of spill                   |    | Company                                                                                                                                                                                                                                                                                                                                                     | Third Party Interference                                                                                                                                     |
|                                  |    | <input type="checkbox"/> Corrosion<br><input checked="" type="checkbox"/> Equipment Failure<br><input type="checkbox"/> Operational/Maintenance Error<br><input type="checkbox"/> Bund wall overflow                                                                                                                                                        | <input type="checkbox"/> Vandalization<br><input type="checkbox"/> Oil Theft<br><input type="checkbox"/> Illegal Refining<br><input type="checkbox"/> Others |
|                                  |    | Others<br><input type="checkbox"/> Accident<br><input type="checkbox"/> Mystery                                                                                                                                                                                                                                                                             |                                                                                                                                                              |

Additional Description of Spill Point

- |                                                      |                                                                   |
|------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Hacksaw Marks               | <input type="checkbox"/> Drilled Holes                            |
| <input type="checkbox"/> Hacksaw cut                 | <input type="checkbox"/> Blast                                    |
| <input type="checkbox"/> Theft (illegal bunkering)   | <input type="checkbox"/> Flare System/Bund wall failure           |
| <input type="checkbox"/> Valve failure               | <input type="checkbox"/> Saver pit overflow                       |
| <input type="checkbox"/> Missing Pipeline/Flowline   | <input type="checkbox"/> Third party tampering with valve setting |
| <input type="checkbox"/> Failed Clamp                | <input type="checkbox"/> Third party tampering with flange        |
| <input type="checkbox"/> Well head tampering         | <input type="checkbox"/> Inward dent                              |
| <input type="checkbox"/> Failed clamp                | <input type="checkbox"/> Surge vessel overflow                    |
| <input type="checkbox"/> Bulging outward             | <input type="checkbox"/> Relief valve failure                     |
| <input checked="" type="checkbox"/> Complete rupture | <input type="checkbox"/> Others (specify).....                    |

Graphic Description of Leak Point (sketches/illustrations)



| Impact of Incident                                      |                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Properties impacted by incident                         | <input type="checkbox"/> Farmland <input type="checkbox"/> Fish Pond <input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Fishing Net <input type="checkbox"/> Surface water<br><input type="checkbox"/> Venerable Objects <input type="checkbox"/> Others (specify).....                                    |
| Nature of impact                                        | <input checked="" type="checkbox"/> Oil stained vegetation <input type="checkbox"/> Oil stained fishing net <input type="checkbox"/> Dead floating fishes<br><input type="checkbox"/> Dead floating Crabs <input type="checkbox"/> Withering of vegetation<br><input type="checkbox"/> Others (specify).....                    |
| Distance from the nearest Receptors potentially at risk | <input type="checkbox"/> Farmlands [ ,m] <input type="checkbox"/> Build-up area [ ,m]<br><input type="checkbox"/> Fish Farm/Pond [ ,m] <input type="checkbox"/> Drinking water source [ ,m]<br><input type="checkbox"/> Farms <input type="checkbox"/> Fishing [ ,m] <input type="checkbox"/> Reserved and protected area [ ,m] |
| Delineation of impacted area                            | <input type="checkbox"/> Within Company's facility/ROW <input type="checkbox"/> Outside Company's facility/ROW                                                                                                                                                                                                                  |

| Extend of Impact |             |             |     |                |                |
|------------------|-------------|-------------|-----|----------------|----------------|
| S/N              | Northing    | Easting     | S/N | Northing       | Easting        |
| 1                | 51 35 48    | 39 42 20    | 12  | 51 34 49 SS    | 39 42 12 SS    |
| 2                | 51 35 43    | 39 42 09    | 13  | 51 35 51 SS    | 39 42 33 SS    |
| 3                | 51 35 34    | 39 42 02    |     | : DD : MM : SS | : DD : MM : SS |
| 4                | 51 35 19    | 39 41 94    |     | : DD : MM : SS | : DD : MM : SS |
| 5                | 51 35 12    | 39 41 91    |     | : DD : MM : SS | : DD : MM : SS |
| 6                | 51 34 91    | 39 41 76    |     | : DD : MM : SS | : DD : MM : SS |
| 7                | 51 34 80 SS | 39 41 71 SS |     | : DD : MM : SS | : DD : MM : SS |
| 8                | 51 34 74 SS | 39 41 61 SS |     | : DD : MM : SS | : DD : MM : SS |
| 9                | 51 34 63 SS | 39 41 64 SS |     | : DD : MM : SS | : DD : MM : SS |
| 10               | 51 34 41 SS | 39 41 80 SS |     | : DD : MM : SS | : DD : MM : SS |
| 11               | 51 34 53 SS | 39 41 00 SS |     | : DD : MM : SS | : DD : MM : SS |

|                              |                                            |
|------------------------------|--------------------------------------------|
| a) Community (indicate name) | b) Land (indicate area in m <sup>2</sup> ) |
| i. AQUA ISI EDON             | i. 3,902.5                                 |
| ii. DUNG UDONSAK             | ii.                                        |
| iii.                         | iii.                                       |
| iv.                          | iv.                                        |

| Creeks/Creek lets              |                                    |                 |                |
|--------------------------------|------------------------------------|-----------------|----------------|
| <input type="checkbox"/> Tidal | <input type="checkbox"/> Non Tidal |                 |                |
| NAME                           | DIRECTION OF SLICK                 | LENGTH OF SLICK | WIDTH OF SLICK |
|                                |                                    |                 |                |
|                                |                                    |                 |                |
|                                |                                    |                 |                |

| Swamp                          |                                    |                 |                |
|--------------------------------|------------------------------------|-----------------|----------------|
| <input type="checkbox"/> Tidal | <input type="checkbox"/> Non Tidal |                 |                |
| NAME                           | DIRECTION OF SLICK                 | LENGTH OF SLICK | WIDTH OF SLICK |
|                                |                                    |                 |                |
|                                |                                    |                 |                |
|                                |                                    |                 |                |

| River                          |                                    |                 |                |
|--------------------------------|------------------------------------|-----------------|----------------|
| <input type="checkbox"/> Tidal | <input type="checkbox"/> Non Tidal |                 |                |
| NAME                           | DIRECTION OF SLICK                 | LENGTH OF SLICK | WIDTH OF SLICK |
|                                |                                    |                 |                |
|                                |                                    |                 |                |
|                                |                                    |                 |                |

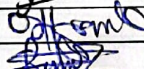
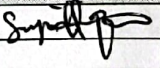
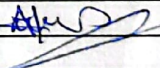
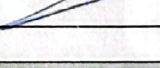
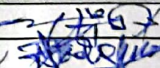
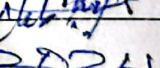
| Shoreline/water                |                    |                                    |                |
|--------------------------------|--------------------|------------------------------------|----------------|
| <input type="checkbox"/> Tidal |                    | <input type="checkbox"/> Non Tidal |                |
| NAME                           | DIRECTION OF SLICK | LENGTH OF SLICK                    | WIDTH OF SLICK |
|                                |                    |                                    |                |
|                                |                    |                                    |                |
|                                |                    |                                    |                |
|                                |                    |                                    |                |

|                           |                                                      |                                         |                                                                  |
|---------------------------|------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
| Photograph/Map/Chart Ref. | <input checked="" type="checkbox"/> Still Photograph | <input type="checkbox"/> Video coverage | <input type="checkbox"/> Mapping                                 |
| Samples taken             |                                                      |                                         |                                                                  |
| Investigation             | <input checked="" type="checkbox"/> Foot             | <input type="checkbox"/> Boat           | <input type="checkbox"/> Aircraft <input type="checkbox"/> Drone |

# REMARKS/RECOMMENDATION

IMPACTED AREA SHOULD BE CLEANED BY FRONTIER GUARDS IMMEDIATELY.

DATE/TIME INVESTIGATION ENDED 27/3/2024 1343 HRS

| Name and Signature of Participants |                  |                                                                                     |                          |                           |                                                                                       |
|------------------------------------|------------------|-------------------------------------------------------------------------------------|--------------------------|---------------------------|---------------------------------------------------------------------------------------|
| NOSDRA                             |                  |                                                                                     | Local Government Council |                           |                                                                                       |
| S/N                                | Name             | Signature                                                                           | S/N                      | Name                      | Signature                                                                             |
| 1.                                 | MR. MELVIS ODO   |  | 1.                       |                           |                                                                                       |
| 2.                                 | MR. FRANK ODO    |  | 2.                       |                           |                                                                                       |
| 3.                                 | KYANDE GABRIEL S |  | 3.                       |                           |                                                                                       |
| DPR                                |                  |                                                                                     | Company                  |                           |                                                                                       |
| 1.                                 | Okpani Gerald    |  | 1.                       | Veronica Napan            |  |
| 2.                                 |                  |                                                                                     | 2.                       | GEORGE ABEROUMU           |  |
| 3.                                 |                  |                                                                                     | 3.                       |                           |                                                                                       |
| State Ministry of Environment      |                  |                                                                                     | Community                |                           |                                                                                       |
| 1.                                 |                  |                                                                                     | 1.                       | Hon. Bula Ene             |  |
| 2.                                 |                  |                                                                                     | 2.                       | RS. Hon. Kenneth Opatogbo |  |
| 3.                                 |                  |                                                                                     | 3.                       | Paul Udoh Thomas          |  |

SECURITY  
 1. CSP. NNUDAM FREDACK 27/3/2024  
 2. Abasiakam Augustine DSS 27/04/24