

**1.**

**CIAPOL analysis of 22.08.2006**

### RESULTS OF ANALYSIS OF CIAPOL SAMPLE

The sample taken by CIAPOL on 21.08.2006 on board the vessel PROBO KOALA following the odour disseminated in the town of Abidjan, has been analysed by the SIR Laboratory today, 22.08.06, and has provided the following results:

<b>Analysis</b>	<b>Measurement</b>	<b>Result</b>	<b>Unit</b>
H2S content	H2S content	<b>6129</b>	mg/kg
Density at 15°C	Density at 15°C	<b>750.6</b>	kg/m <sup>3</sup>
Mercaptan sulphur	Mercaptan sulphur	<b>1287</b>	mg/kg
Sulphur and lead content LABX3500	Sulphur content	<b>2.18</b>	% mass
FIA olefins	FIA olefins	<b>2.5</b>	% volume
FIA paraffins	FIA paraffins	<b>51.4</b>	% volume
FIA aromatics	FIA aromatics	<b>46.1</b>	% volume

It is clear that this sample is similar to an Oil Product with a density of 750.6 kg/m<sup>3</sup>, very close to Petrol, with a very high hydrogen sulphide content, a toxic substance which, at this dose, may cause immediate death if inhaled.

MINISTRY OF STATE  
DEPARTMENT OF THE  
ENVIRONMENT

REPUBLIC OF THE IVORY COAST

CENTRE IVOIRIEN ANTIPOLLUTION (CIAPOL)

**LCE SUB-DEPT**

N° 44/MINEME/CIAPOL/DIR/S-DIR/Kym

Abidjan, 8.12.2005

ANALYSIS REPORT

Name and address of client: <b>CIAPOL ON BEHALF OF THE TOMMY COMPANY</b>	Client reference number: XX
Tel: 23 46 69 66/43	Laboratory reference number:
Reason for analysis: Nature of sample: Date and time of sampling: Place of sampling: Sampler: Date of sample's arrival in laboratory: Date and time of start of sampling:	<b>Dumping of chemical products</b> Liquid slops from vessel 21 August 2006 <b>Akouedo Dump, Abidjan</b> <b>CIAPOL</b> 21 August 2006 at 12.00 21 August 2006 at 12.00

PARAMETERS	UNITS	RESULTS	METHODOLOGY	*Dumping regulations (SIIC)
		Ech.		
<u>Physical-chemical parameters</u>				
PH	°C	10.5	Multi-parametric sounding	5.5 – 9.5
T	mg/l	28.2	Multi-parametric sounding	40
DCO	mg/l	> 10,000	Volumetry	500
DBO	mg/l	N.D	5 day incubation	150
(illegible)	mg/l	N.D	Filtration on GFC paper and gravimetry	150
Sulphurs	mg/l	> 10,000	Spectrophotometry	
Total phosphorus	mg/l	N.D	Spectrophotometry	50
<u>Organic micro-pollutants</u>				

Organo-chloride compounds	mg/l	250	Mineralization and chlorimetric analysis – LD 2000 method	<50 (PCB)
---------------------------	------	-----	---	-----------

\* *Authorised concentrations.* The values quoted and referred to in the regulations relate to the lowest daily flows.

N.B: Not determined.

**Comment:**

The values obtained do not comply with the standards fixed by the Ivorian regulations for the parameters analysed. Given the strong, irritating odour given off the liquid waste must not be dumped in the open without prior specific treatment.

*Report produced on 22 August 2006*

*Results communicated on 24 August 2006*

**Dr OFFROUE Koffi Sebastien**