



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Provincial Office and Natural Resources Office

March 30, 2023

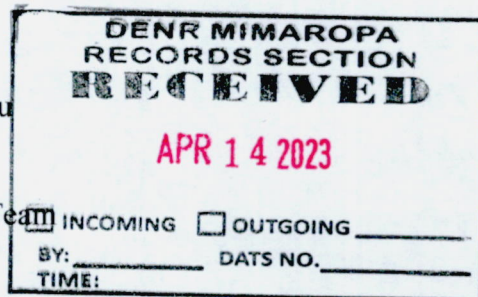
MEMORANDUM

FOR : **The Director**
Biodiversity Management Bureau

THRU : **Ms. Trina Apaya**
Team Leader, Initial Valuation Team
DENR-BMB

FROM : **The OIC, PENRO Oriental Mindoro**
Calapan City

SUBJECT : **RESULTS OF THE TOTAL PETROLEUM HYDROCARBON (TPH) TEST FOR CRAB SAMPLE IN BARANGAY BUHAY NA TUBIG, POLA, ORIENTAL MINDORO**



We are furnishing you the results of TPH for a crab sample that was taken in Brgy, Buhay na Tubig, Pola, Oriental Mindoro. The test was done by CRL Environmental Corporation and was initiated by the Regional Office. Based on the results, the following hydrocarbon chains were present.

- a. C10-C14 530 mg/kg
- b. C15-C28 4300 mg/kg
- c. C29-C36 5500 mg/kg

Attached are the details of the test for information and reference

ALAN L. YALLE



Cc: The Regional Executive Director
MIMAROPA Region

Fwd: Results of TPH in crab sample

1 message

Alan Valle <alanvalle011@gmail.com>

Thu, Mar 30, 2023 at 8:10 AM

To: ninamendoza0120@gmail.com

----- Forwarded message -----

From: **RED R4B Lormelyn Claudio** <leclaudio.mimaropa@gmail.com>
Date: Wed, Mar 29, 2023, 5:30 PM
Subject: Fwd: Results of TPH in crab sample
To: <merni@denr.gov.ph>, Alan Valle <alanvalle011@gmail.com>, <joeamil_salino@emb.gov.ph>, <micolandrito7715@yahoo.com.ph>, <jrleones@denr.gov.ph>

----- Forwarded message -----

From: <carmela.capule@crlabs.com>
Date: Mon, Mar 27, 2023, 5:53 PM
Subject: Results of TPH in crab sample
To: <leclaudio.mimaropa@gmail.com>
Cc: <joeamilsalino@yahoo.com>, <joeamil_salino@emb.gov.ph>

Dear RED Lormelyn Claudio,

Enclosed is the result of TPH for crab sample that was taken at Brgy. Buhay na Tubig, Pola, Oriental Mindoro.

Due to limitations on sampling and availability of species in the area, there was one crab that we spotted at the time of survey. See attached photo.

Based on the results, the ff. hydrocarbon chain breakdowns were present.

a. C10-C14	530 mg/kg
b. C15-C28	4300 mg/kg
c. C29-C36	5500 mg/kg

Note: C10-C14: Kerosene Range Organics, C15-C28: Diesel Range Organics; C29-C36: Oil/Residual Range Organics

Thank you.

Regards,

Carmela Capule

CRL Environmental Corporation/ASSET Laboratories



3 attachments



IMG_8172.JPG
6551K



IMG_8173.JPG
2912K



PH004876_FINAL_230327 1542H.PDF
2139K



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Clark Special Economic Zone, Clarkfield, Pampanga
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www.ph.assetlaboratories.com

March 27, 2023

Carmela Capule
CRL Environmental Corporation
Bldg. 2, Berthaphil Compound I, Berthaphil Inc.
Industrial Park Jose Abad Santos Ave., Clarkfield
CFZ
Pampanga, Philippines 2010

Work Order Number: PH004876

TEL: (6345) 599-3943

RE: P00136796

Attention: Carmela Capule

Enclosed are the final results for sample(s) received on March 15, 2023 by Analytical Support Services for Environmental Technologies, Inc.

The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable reference methods. Results relate only to the items tested and the sample(s) as received by the laboratory.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (045)-499-3038 if I can be of further assistance to your company.

Maria Carmela Q. Capule, Ph.D.

Laboratory Director

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Date: 27-Mar-23

CLIENT: CRLEN01
Project: P00136796
Lab Order: PH004876

CASE NARRATIVE

SAMPLE RECEIPT: Sample was received intact with proper chain of custody documentation.

HOLDING TIMES: Sample was received within holding time.

PRESERVATION: Sample requiring preservation was verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria except as noted in the report with data qualifiers.

Analytical Comment for EPA 8015C TPH_S: Batch 5482

%REC of n-octacosane in PH004876-001 exceeded acceptance criteria. Possibly due to matrix interference.

%REC of KRO and DRO in LCSD did not meet acceptance criteria. The associated Laboratory Control Sample (LCS) was acceptable.

COMMENTS: Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

DEFINITION OF TERMS:

PQL - Practical Quantitation Limit
DF - Dilution Factor
NR - Not Reported
SPK - Spike Amount
%RPD - Relative Percent Difference
%REC - Percent Recovery
MBLK - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
C10-C14 - Kerosene Range Organics
C15-C28 - Diesel Range Organics
C29-C36 - Oil/Residual Range Organics



Date: 27-Mar-23

CLIENT: CRL Environmental Corporation

Project: P00136796

Lab Order: PH004876

Contract No:

WORK ORDER SAMPLE SUMMARY

Lab Sample ID	Client Samp ID	Matrix	Collection Date	Date Received	Date Reported
PH004876-001	P00136796-01	Other Solid	03/10/2023 10:40AM	03/15/2023 4:40PM	03/27/2023 3:42PM
PH004876-002	TPH-MB	Other Solid	03/14/2023 12:00AM	03/15/2023 4:40PM	03/27/2023 3:42PM
PH004876-003	MO-KERO QCS1	Other Solid	03/14/2023 12:00AM	03/15/2023 4:40PM	03/27/2023 3:42PM
PH004876-004	MO-KERO QCS2	Other Solid	03/14/2023 12:00AM	03/15/2023 4:40PM	03/27/2023 3:42PM
PH004876-005	DRO QCS1	Other Solid	03/14/2023 12:00AM	03/15/2023 4:40PM	03/27/2023 3:42PM
PH004876-006	DRO QCS2	Other Solid	03/14/2023 12:00AM	03/15/2023 4:40PM	03/27/2023 3:42PM



ANALYTICAL SAMPLE RESULTS

Print Date: 27-Mar-23

CLIENT: CRL Environmental Corporation
Lab. Order: PH004876
Project: P00136796
Lab ID: PH004876-001A

Client Sample ID: P00136796-01
Collection Date: 3/10/2023 10:40AM
Matrix: Other Solid

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
NONHALOGENATED ORGANICS BY GAS CHROMATOGRAPHY			TestNo: EPA 8015C TPH			Prep-TestNo: EPA 3550C	
RunID: GC01_230317B	QC Batch: 05482		PrepDate: 03/14/2023			Analyst: ASSB	
C10 - C14	530	0	280		mg/Kg	10	3/17/2023 06:08 PM
C15 - C28	4300	0	280		mg/Kg	10	3/17/2023 06:08 PM
C29 - C36	5500	0	280		mg/Kg	10	3/17/2023 06:08 PM
Surr: n-Octacosane	244		50-150	S	%REC	10	3/17/2023 06:08 PM
Surr: p-Terphenyl	97.0		50-150		%REC	10	3/17/2023 06:08 PM

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out

PH004876_FINAL_230327 1542H



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www.ph.assetlaboratories.com

Date: 27-Mar-23

CLIENT: CRL Environmental Corporation

Work Order: PH004876

Project: P00136796

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015TPH_S

SampleID: PH004876-002A	SampleType: MBLK	TestCode: 8015TPH_S	Units: mg/Kg	PrepDate: 3/14/2023							
Client ID: MBLK	Batch ID: 05482	TestNo: EPA 8015C TPH	Prep-TestNo: EPA 3550C	Analysis Date: 3/17/2023							
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C10 - C14	0	25									J
C15 - C28	0	25									J
C29 - C36	0	25									J
Surr:n-Octacosane	7.75		7.980		97.2	50	150				
Surr:p-Terphenyl	8.00		7.980		100	50	150				

SamplD: PH004876-003A	SampType: LCS	TestCode: 8015TPH_S	Units: mg/Kg	PrepDate: 3/14/2023							
Client ID: LCS	Batch ID: 05482	TestNo: EPA 8015C TPH	Prep-TestNo: EPA 3550C	Analysis Date: 3/17/2023							
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C10 - C14	39	25	49.88	0	78.3	70	130				
C29 - C36	64	25	49.88	0	128	70	130				
Surr:n-Octacosane	7.48		7.980		93.7	50	150				
Surr:p-Terphenyl	7.57		7.980		94.9	50	150				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
Results are wet unless otherwise specified



Date: 27-Mar-23

CLIENT: CRL Environmental Corporation

Work Order: PH004876

Project: P00136796

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015TPH_S

SampleID: PH004876-005A	SampleType: LCS	TestCode: 8015TPH_S	Units: mg/Kg	PrepDate: 3/14/2023							
Client ID: LCS	Batch ID: 05482	TestNo: EPA 8015C TPH	Prep-TestNo: EPA 3550C	Analysis Date: 3/17/2023							
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C15 - C28	63	25	49.87	0	125	70	130				
Surr:n-Octacosane	7.12		7.980		89.2	50	150				
Surr:p-Terphenyl	7.25		7.980		90.8	50	150				

SampleID: PH004876-004A	SampleType: LCSD	TestCode: 8015TPH_S	Units: mg/Kg		PrepDate: 3/14/2023						
Client ID: LCSD	Batch ID: 05482	TestNo: EPA 8015C TPH	Prep-TestNo: EPA 3550C	Analysis Date: 3/17/2023							
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C10 - C14	35	25	49.87	0	69.3	70	130	39.03	12.2	20	S
C29 - C36	61	25	49.87	0	123	70	130	63.90	4.46	20	
Surr:n-Octacosane	7.24		7.979		90.7	50	150				
Surr:p-Terphenyl	7.37		7.979		92.3	50	150				

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified



Date: 27-Mar-23

CLIENT: CRL Environmental Corporation

Work Order: PH004876

Project: P00136796

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015TPH_S

SampleID: PH004876-006A	SampleType: LCSD	TestCode: 8015TPH_S	Units: mg/Kg	PrepDate: 3/14/2023							
Client ID: LCSD	Batch ID: 05482	TestNo: EPA 8015C TPH	Prep-TestNo: EPA 3550C	Analysis Date: 3/17/2023							
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C15 - C28	66	25	49.66	0	132	70	130	62.53	4.87	20	S
Surr:n-Octacosane	7.82		7.978		98.1	50	150				
Surr:p-Terphenyl	7.92		7.978		99.3	50	150				

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified



Please review the checklist below. Any NO and/or NA signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (+6345) 499-3038.

Sample Receipt Checklist

Cooler Received/Opened On:	15-March-2023	WorkOrder:	PH004876
Rep sample Temp (Deg C):	24.2	IR Gun ID:	1
Temp Blank:	☐ Yes ☒ No	Date and Time Received:	March 15, 2023 4:40 pm
Carrier name:	Hand Deliver		
Last 4 digits of Tracking No.:		Packing Material Used:	None
Cooling process:	☐ Ice ☐ Ice Pack ☐ Dry Ice	☐ Other ☒ None	
1. Shipping container/cooler in good condition?	☐ Yes ☐ No	☒ Not Present	
2. Custody seals intact, signed, dated on shipping container/cooler?	☐ Yes ☐ No	☒ Not Present	
3. Custody seals intact on sample bottles?	☐ Yes ☐ No	☒ Not Present	
4. Chain of custody present?	☒ Yes ☐ No		
5. Sampler's name present in COC?	☐ Yes ☒ No		
6. Chain of custody signed when relinquished and received?	☐ Yes ☒ No		
7. Chain of custody agrees with sample labels?	☒ Yes ☐ No		
8. Samples in proper container/bottle?	☒ Yes ☐ No		
9. Sample containers intact?	☒ Yes ☐ No		
10. Sufficient sample volume for indicated test?	☒ Yes ☐ No		
11. All samples received within holding time?	☒ Yes ☐ No		
12. Temperature of rep sample or Temp Blank within acceptable limit?	☐ Yes ☒ No	☐ NA	
13. Water - VOA vials have zero headspace?	☐ Yes ☐ No	☒ NA	
14. Water - pH acceptable upon receipt?	☐ Yes ☐ No	☒ NA	
Example: pH > 12 for (CN,S); pH<2 for Metals			
15. Did the bottle labels indicate correct preservatives used?	☐ Yes ☐ No	☒ NA	
16. Were there Non-Conformance issues at login?	☒ Yes ☐ No	☐ NA	
Was Client notified?	☐ Yes ☐ No	☒ NA	

Comments:

Check List Completed By:

John E. Galang

Reviewed By:

Jerald S. Puza



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PRC License No. 0012899

Maria Carmela Q. Capule Ph.D.
Laboratory Director
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