

NAME OF FEE	Amount	
	(PhP)	(US Dollar)
FEES COLLECTED BY ENERGY RESEARCH TESTING LABORATORY SERVICES (ERTLS)		
A. GEOSCIENTIFIC RESEARCH AND TESTING LABORATORY		
Oil and Gas Section		
COST ANALYSIS		
Laboratory Services		
A. CRUDE OIL		
1. C12+ Components of Whole Oil/Saturate Fraction		3,950.00
2. Extractable Organic Matter (EOM)		5,220.00
3. Liquid Chromatography Separation of EDM/Whole Oil Into Saturates, Aromatics and NSO Aromatics and NSO		4,050.00
4. Fractional Distillation of Crude Oil		1,880.00
5. Separation of Crude Oil/Petroleum for Water & Separation		600.00
6. Degree API Gravity of Oil Containing Water & Sediments		590.00
7. Degree API Gravity (no sample prep)		450.00
B. SOURCE ROCK AND CUTTINGS		
1. Determination of Total Organic/Inorganic Carbon		3,050.00
2. Pyrolysis of Source Rock		2,700.00
3. Sample Preparation for Wet Cuttings		540.00
4. Sample Prep for Dry Cuttings		450.00
C. NATURAL GAS & BIOGAS		
1. Analysis of C1-C4 Gases		3,500.00
2. Analysis of Inorganic Gases plus Methane (N2, H2, Ar, O2, He & C1)		3,350.00
3. Determination of CO2 & H2S Gases		1,250.00
D. GAS CONDENSATE		
1. Determination of Carbon dioxide (CO2)**		1,400.00
2. Determination of Hydrogen sulfide (H2S)**		1,560.00
E. BIODIESEL/CME		
1. Simultaneous Determination of FAME & Methyl Laureate (C12) in Biodiesel (B100) Biodiesel (B100) ** Succeeding Run		5,800.00
2. Determination of Methyl Laureate (C12) in Biodiesel (B100)** Succeeding Run**		3,380.00
3. Determination of Fatty acid Methyl Esters (FAME) in Biodiesel (B100)** Succeeding Run**		3,750.00
4. Determination of Mono, Di, TriGlyceride, Free Glycerin, & Total Glycerin in Biodiesel (B100)** Succeeding Run**		1,950.00
5. Determination of Methanol in Biodiesel (B100)** Succeeding Run**		4,200.00
6. Determination of Linolenic Acid (C18) in Biodiesel (B100)** Succeeding Run**		2,500.00
7. Determination of Total Glycerin in Biodiesel (B100)		7,500.00
8. Determination of Total Acid Number in Biodiesel (B 100)		4,450.00
9. Determination of Total Acid Number in Biodiesel (B100)**		3,350.00
10. Determination of Free Glycerin in Biodiesel (B100)		2,150.00
		4,320.00
		2,100.00
		2,750.00
		1,625.00
		2,100.00
		1,250.00
F. BIOETHANOL		
1. Determination of Ethanol & Methanol Purity in Denatured Fuel Ethanol** Succeeding Run		3,200.00
2. Determination of Total Acid (as Acetic Acid) In Bioethanol**		1,650.00
		550.00
G. ISOTOPE ANALYSIS		
1. Measurement of C13 Isotope In Gas Sample ** Succeeding Run**		9,950.00
2. Measurement of O18 Isotope In Water Sample ** Succeeding Run**		5,350.00
		10,100.00
		5,350.00
H. TETRAFLUOROETHANE		
1. Determination of Tetrafluoroethane (R134a)** With Standard		3,320.00
Without Standard		3,100.00
** New Equipment and new laboratory services offered by the section		
GEOSCIENTIFIC RESEARCH AND TESTING LABORATORY		
Geological Section		
COST ANALYSIS		
Laboratory Services		
PROCESSING/SAMPLE PREPARATION		
1 Plain Slabbing/Cutting		300.00
2 Polished Slab**		400.00
3 Core Plugging**		500.00

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4 Normal Thin Section (For consolidated rock sample)	1,200.00	
5 Impregnated Thin Section (For poorly consolidated/unconsolidated rock or ditch sample)	1,500.00	
6 Impregnated Thin Section using Blue Dye	1,800.00	
7 Polished Thin Section (For consolidated rock sample)	1,500.00	
8 Impregnated Polished Thin Section** (For poorly consolidated/unconsolidated rock or ditch sample)	1,700.00	
9 Polished Slab Section** (For consolidated rock sample)	950.00	
10 Impregnated / Mounted Polished Section** (For poorly consolidated/unconsolidated rock or ditch sample)	1,700.00	
11. Drying of samples (Ditch cuttings)**	1,100.00	
11 Washed Residue	400.00	
12 Nannofossil Smear Slide	400.00	
13 Large/Oriented Foraminifera	600.00	
ANALYSIS		
1) Megascopic/hand specimen rock identification	500.00	
2) Petrographic	1,500.00	
3) Micropaleontologic (Foraminifera)	1,900.00	
4) Micropaleontologic (Nannofossil)**	1,500.00	
5) Micropaleontologic (Large/Oriented Foraminifera)	1,400.00	
OTHER SERVICES		
1) Staining with Alizarin Red-S and Potassium Ferricyanide** (Per Sample)	100.00	
2) Photomicrography using Stereomicroscope 1-5 Final shots** (Per Shot)	400.00	
3) Photomicrography using Polarizing Microscope** (Per Shot)	500.00	
4) Biostratigraphic Report of well** (Technical report presenting the interpretation of result based on the combined petrological and micropaleontological analyses of well samples; including correlation of 2 or more wells) (First 5,000 feet) (For succeeding 1,000 feet or a fraction thereof; 10% of computed cost)	48,000.00 4,800.00	
** New Laboratory Services to be offered by the section		
GEOSCIENTIFIC RESEARCH AND TESTING LABORATORY		
Geothermal - Coal Section		
COST ANALYSIS		
Laboratory Services		
A. Geothermal water analysis		
Alkalinity	500.00	
Arsenic (As)	900.00	
Boron (B)	600.00	
Bromide (Br) & Iodide (I)	2150.00	
Cadmium	400.00	
Calcium (Ca)	400.00	
Cesium (Cs)**	400.00	
Chemical Oxygen Demand	850.00	
Chloride (Cl)	550.00	
Hexavalent Chromium (Cr(VI))	450.00	
Copper (Cu)	400.00	
Iodide (I)	1700.00	
Iron (Fe)	400.00	
Lead (Pb)	400.00	
Lithium (Li)	400.00	
Magnesium (Mg)	400.00	
Manganese (Mn)	400.00	
Mercury (Hg)	1500.00	
Nickel (Ni)	400.00	
pH	350.00	
Potassium (K)	450.00	
Rubidium (Rb)**	400.00	
Silica (SiO ₂)	700.00	
Silver (Ag)	400.00	
Sodium (Na)	400.00	
Specific Conductivity	250.00	
Sulfate (SO ₄)	700.00	
Total Dissolved Solids	250.00	
Total Suspended Solids	450.00	
Zinc (Zn)	400.00	

mg

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B. Gas condensate analysis		
Sample Preparation (Alkaline Condensate)		300.00
Carbon Dioxide (CO ₂) (Alkaline Condensate)		600.00
Hydrogen Sulfide (H ₂ S)(Alkaline Condensate)		750.00
C. Geochemical analysis (soil & sediment)		
Sample Preparation - Inclusive of air drying, crushing pulverising and sieving		250.00
Copper (Cu)		800.00
Iron (Fe)		800.00
Lead (Pb)		800.00
Nickel (Ni)		800.00
Silver (Ag)		900.00
Zinc (Zn)		800.00
Coal		
Laboratory Services (Sample Preparation/ Test/ Analysis)		
1. Sample Preparation		650.00
2. Sieve Analysis (Per Size)		200.00
3. Hardgrove Grindability Index, HGI		1,200.00
4. Proximate Analysis		2,000.00
Residual Moisture, RM		400.00
Ash, A		850.00
Volatile Combustible Matter, VCM		750.00
5. Calorific Value, CV (Coal)		1,500.00
6. Calorific Value, CV (Oil)		1,900.00
7. Total Sulfur, S		1,250.00
8. Forms of Sulfur (Pyritic, Organic, Sulfate, including Total Sulfur)		3,800.00
9. Carbon, Hydrogen and Nitrogen, CHN (Coal)		3,650.00
10. Carbon, Hydrogen and Nitrogen, CHN (Oil)		4,950.00
11. Mercury Analysis		2,700.00
12. Mineral Analysis		5,300.00
13. Ash Fusion Temperature, AFT (Reducing)		5,500.00
14. Ash Fusion Temperature, AFT (Oxidizing)		5,350.00
15. Washability Test (Per Medium Density)		4,050.00
GEOSCIENTIFIC RESEARCH AND TESTING LABORATORY		
Processed Fuels Section		
COST ANALYSIS		
LABORATORY SERVICES		
API Gravity at 60 °F (BFO only)		600.00
Aromatics, % volume **		4,600.00
Aromatics with Oxygenates, % volume **		6,100.00
Ash, % mass		1,900.00
Ash (Sulfated), % mass		1,900.00
Carbon Residue (MCRT), % mass **		1,100.00
Carbon Residue 10% Dist'n. Residue (MCRT), % mass **		2,600.00
Carbon Residue (Conradson), % mass		1,100.00
Carbon Residue 10% Distillation Residue (Conradson), % mass		2,600.00
Cloud Point, °C		1,100.00
Cetane Number **		10,600.00
Cetane Number, Calculated(Density+Distillation Characteristic)		2,300.00
Color, ASTM		500.00
Copper Corrosion Test		1,700.00
Density/Specific Gravity (Densitometer) **		600.00
Diesel Analyzer **		
Density		1,000.00
FAME		
Cetane Number (Indicative)		
Density/Specific Gravity at 15 °C (ASTM D 4052)**		600.00
Distillation Characteristics, °C		1,700.00
Distillation Temperature(AET), °C**		2,800.00
FAME (Fatty Acid Methyl Ester), Volume % **		1,400.00
Flash Point (COC), °C		1,400.00
Flash Point (PM), °C		1,000.00
Gasoline Analyzer **		1,000.00
Density		
Benzene		
Aromatics		
Oxygenates		
Insolubles, % mass		
Pentane		1,700.00
Toluene		1,800.00
Lead in Gasoline, g/L (XRF)		2,100.00
Octane Number, RON		
Engine		10,400.00

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NAME OF FEE	Amount	
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Portable		
Oxidation Stability, hrs.**	1,000.00	
Pour Point, °C	4,600.00	
Sediment by Extraction, % volume	1,100.00	
Sulfur, % mass (XRF)	2,200.00	
Sulfur, % mass (UVF)**	2,100.00	
Kinematic Viscosity, mm ² /s	2,300.00	
Viscosity Index	1,100.00	
Vapor Pressure, kPa**	1,800.00	
Water by Distillation, % volume	900.00	
Water by Karl Fischer, % volume**	1,000.00	
Water and Sediments, % volume	1,300.00	
Wear Metals / Trace metals, % volume (per metal)**	1,100.00	
	800.00	
Remarks:		
** New Laboratory Services to be offered by the section		
50% discount for the first 10 samples submitted by students, provided they will be presenting a certification letter from their school		
B. LIGHTING AND APPLIANCE TESTING DIVISION		
A. Appliance and Equipment Testing		
Appliance Section		
Air Conditioners	12,400.00	
Refrigerators		
complete tests	24,000.00	per test sample
partial	14,200.00	
Television	4,700.00	
Clothes washers	21,400.00	
Validation of energy labels		
Air Conditioners	200.00	
Refrigerators	200.00	
Inspection of generic models/exempted products	600.00	
Witness Testing		
Local		
1. Fixed (processing fee) for A/C and ref	500.00	
2. Variable, per man-hour (period of stay of staff on site)	500.00	
Cooking Stove	6,500.00	
B. Calibration/Instrumentation and Control Section		
Calibration of Platinum Resistance Thermometer (PRT)	4,900.00	
Calibration of each additional temperature point for PRT	980.00	
Calibration of Liquid-In-Gas (LIG) Thermometer	1,650.00	
Calibration of each additional temperature point for Liquid In Glass (LIG)	600.00	
Calibration of Digital/BI-metal Thermometer/RTD/Thermocouple	1,950.00	
Calibration of each additional temperature point for Digital/BI-metal Thermometer/RTD/Thermocouple	390.00	
Calibration of Oven/Furnace	2,300.00	
Calibration of each additional temperature for Oven/Furnace	460.00	
Calibration of Digital Power Meter (DPM)	4,900.00	
Calibration of each additional point for (DPM)	350.00	
Calibration of Digital Multimeter (DMM) up to 4 1/2 Digits Res.	3,250.00	
Calibration of each additional point for DMM	200.00	
Calibration of AC/DC Voltmeters	1,950.00	
Calibration of each additional point for AC/DC Voltmeters	390.00	
Calibration of AC/DC Ammeters	2,100.00	
Calibration of each additional point for AC/DC Ammeters	420.00	
Calibration of Ohmmeter	1,950.00	
Calibration of each additional point for Ohmmeter	390.00	
Calibration of Resistors	1,350.00	
Calibration of each additional point for Resistors	300.00	
Calibration of Clamp meter	2,050.00	
Calibration of each additional point for Clamp meter	410.00	
C. Lighting Section		
Compact Fluorescent Lamps (5 to 60 wattage range) at 100 hrs. life test/20 pcs. of samples	15,100.00	
Compact Fluorescent Lamps (5 to 60 wattage range) at 1,900 hrs. life test/20 pcs. of samples	20,500.00	
(Lumen maintenance cost per batch)	35,600.00	
(Life test every next 1000 hrs.)	3,000.00	
Linear and Circular Fluorescent Lamps (10 to 22 wattage range) at 100 hours life test/10 pcs. of samples	7,620.00	

Amoy