



Water and Waste Water

	Analysis Parameters	Test Method
1	pH	APHA 4500-H+
2	Color	ASTM D 1209
3	Turbidity	APHA 2130 B
4	Conductivity	APHA 2510 B
5	Suspended Solids (SS)	APHA 2540 D
6	Total Dissolved Solids (TDS)	APHA 2540 C
7	Total Solids (TS)	APHA 2540 B
8	Total Hardness as CaCO ₃	APHA 2340 C
9	Total Alkalinity as CaCO ₃	APHA 2320 B
10	Oil & Grease	APHA 5520 C
11	Dissolved Oxygen (DO)	APHA 4500 G
12	Biochemical Oxygen Demand (BOD)	APHA 5210 B
13	Chemical Oxygen Demand (COD)	APHA 5220 D
14	Total Organic Carbon (TOC)	APHA 5310 B
15	Total Kjeldahl Nitrogen (TKN)	APHA 4500-N _{org}
16	Chloride (Cl ⁻)	APHA 4500-Cl ⁻ B
17	Dissolved Iron (Fe ⁺)	APHA 3113 B
18	Copper (Cu)	APHA 3111 B
19	Zinc (Zn)	APHA 3111 B
20	Vanadium	APHA 3500-V B
21	Mercury (Hg)	USEPA 7473
22	Silica (SiO ₂)	APHA 4500-SiO ₂ B/D
23	Phosphate	APHA 4500-P C
24	Organic Phosphate	Titration
25	Ortho Phosphate	Titration
26	Nitrite	APHA 4500-NO ₂ ⁻
27	Water Content	ASTM 6304



Field Analysis (Emission & Safety)

	Analysis Parameters	Test Method
1	Dew Point	Moisture Censor
2	Mercury in Ambient/Drum	Hg Portable Analyzer
3	Total VOC	PID Censor
4	NO _x in Emission	EPA's CTM-030, -034
5	SO _x in Emission	EPA's CTM-030, -034
6	CO in Emission	EPA's CTM-030, -034
7	H ₂ S in Emission	EPA's CTM-030, -034
8	O ₂ in Emission	EPA's CTM-030, -034
9	NH ₃ in Emission	Chemical-Color Reaction

Quality of Gas & Hydrocarbon Products

	Analysis Parameters	Test Method
1	Hydrocarbon (ppm) in CO ₂ Gas	ASTM D 1945
2	Natural Gas Composition	ASTM D 1945
3	CO ₂ Composition	ASTM D 1945
4	Methane Gas Composition (C1)	ASTM D 1945
5	Ethane Gas Composition (C2)	ASTM D 1945
6	Propane Gas Composition (C3)	ASTM D 1945
7	LPG Composition	ASTM D 2163
8	NGL Composition	ASTM D 1945
9	PONA in NGL	ASTM D 6293
10	Low CO ₂ in Natural Gas, C1, C2, C3, LPG	ASTM D 2505
11	H ₂ O/Dew Point in Natural Gas, C1, C2, C3, LPG	Moisture Censor
12	Hg in Natural Gas, C1, C2, C3, LPG	UOP 938
13	Hg in NGL	UOP 938
14	Pb in NGL	IFP 9406
15	As in NGL	IFP 9312
16	Chloride in NGL	ASTM D 5808
17	Color in NGL	ASTM D 1209
18	Specific Gravity - Propane	ASTM D 1657
19	Specific Gravity - LPG	ASTM D 1657
20	Specific Gravity - NGL	ASTM D 1298
21	Density - NGL	ASTM D 4052
22	BTX in Gas	ASTM D 5580
	Benzene, Toluene, and Xylene	
23	BTX in Gas	ASTM D 5580
	Benzene, Toluene, and Xylene	



Quality of Gas & Hydrocarbon Products

	Analysis Parameters	Test Method
24	Vapour pressure - Propane, LPG	ASTM D 1267
25	Reid Vapour pressure - NGL	ASTM D 6378
26	Dryness - Propane	ASTM D 2713
27	Distillation - NGL	ASTM D 86
28	Copper Strip - Propane	ASTM D 1838
29	Copper Strip - LPG	ASTM D 1838
30	Residue - Propane	ASTM D 2158
31	Residue - LPG	ASTM D 2158
32	Weathering - Propane	ASTM D 1837
33	Weathering (Volatility) - LPG	ASTM D 1837
34	H ₂ O in Liquid Petroleum Product	ASTM D 6304
35	Total Sulfur in Natural Gas, C1, C2, C3, LPG	ASTM D 6667
36	Total Sulfur in NGL	ASTM D 5453
37	H ₂ S in Natural Gas, C1, C2, C3, LPG	ASTM D 5504
38	COS in Natural Gas, C1, C2, C3, LPG	ASTM D 5504

Remark :

1. PTT Co., Ltd. Reserves the right to change prices and methods without prior notice.
2. Urgent Services are available for certain tests with surcharges. For future information, kindly please contact officers using the provided contact number.