

No.	Parameter	Method / Reference	Sample Type
1	Composition (C1-C6) of Natural Gas	ASTM D1945-14 (Reapproved 2019)	Gas
2	Heating value and Specific Gravity, Relative Density from Component of Gas (By Calculation)	ASTM D3588-98 (Reapproved 2017)	Gas
3	Impurity Hydrocarbon (ppm) in Gas	ASTM D2712-23	Gas
4	Hydrocarbon Impurities in Ethylene	ASTM D6159-17	Gas
5	Butadiene Purity and Hydrocarbon Impurit	ASTM D2593-19	Gas
6	Noncondensable Gas (H ₂ , O ₂ , N ₂ , CO)	ASTM D2504-88 (Reapproved 2015)	Gas
7	CO ₂ in Gas	ASTM D2505-88 (Reapproved 2015)	Gas
8	Sulfur Compounds in Gas	ASTM D5504-12	Gas
9	Trace COS in Propylene	ASTM D5303-92 (Reapproved 2012)	Gas
10	Sulfur Compounds in Natural Gas by FPD	ASTM D5504-12	Gas
11	Oxygenates by GC/FID	ASTM D7423-23	Gas
12	Benzene/Toluene/Xylene in Gas	ASTM D5580-15	Gas
13	Total Sulfur in Gas	ASTM D6667-14 (Reapproved 2019)	Gas
14	Moisture in Gas	ASTM D5454 – 11e1	Gas
15	Mercury in Gas	ASTM D5954-98 (Reapproved 2014) e1	Gas
16	Total VOCs	USEPA Method 21	Gas
17	Oil in Gas	Scrubbing & IR Method	Gas
18	Metal in Gas hydrocarbon	Scrubbing & ICP-OES	Gas
19	Residues in LPG	ASTM D2158-11	Gas
20	TBC in Light Hydrocarbons	ASTM D1157-91 (Reapproved 2019)	Gas
21	Carbonyls As CH ₃ CHO in Mixed C4	ASTM D4423-23	Gas

No.	Parameter	Method / Reference	Sample Type
22	Peroxide in Light Hydrocarbons	ASTM E299-17a	Gas
23	Non-volatile Residue in Butadiene	ASTM D1025-10(Reapproved 2015) e1	Gas
24	Phosphine (By Detector Tube)	ASTM D 4490-96 (Reapproved 2016)	Gas
25	Ammonia (By Detector Tube)	ASTM D 4490-96 (Reapproved 2016)	Gas
26	Hydrogen Sulfide (H ₂ S) (By Detector Tube)	ASTM D 4490-96 (Reapproved 2016)	Gas
27	Peroxide as H ₂ O ₂ (By Detector Tube)	ASTM D 4490-96 (Reapproved 2016)	Gas
28	Acetaldehyde (By Detector Tube)	ASTM D 4490-96 (Reapproved 2016)	Gas
29	Butadiene Dimer	ASTM D2426-23	Gas
30	Total sulfur	ASTM D6667-21	Gas
31	Chloride in GAS Hydrocarbon and LPG	ASTM D5808-20	Gas
32	Carbonyl in 1,3 Butadiene	ASTM D4423-10	Gas
33	Chloride in Gas	ASTM D5808-18	Gas
34	Calculation for Specific Gravity, Density from Comp	ASTM D3588-98(Reapproved 2017)	Gas
35	Total Inhibitor Content (TBC) of Light Hydrocarbon	ASTM D1157-91 (Reapproved 2019)	Gas