Laboratory	**Alchemie Gases & Chemicals Pvt. Ltd., T-112, MIDC, Tarapur, (M.S) Dist: Thane, Maharashtra**			
Accreditation Standard	**ISO/IEC 17025: 2005**			
Discipline	**Chemical Testing**	**Issue Date**	**23.04.2014**	
Certificate Number	**T-1754**	**Valid Until**	**22.04.2016**	
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	**PETROLEUM PRODUCTS**			
1.	**Natural Gas Mixture Upto C6**	Nitrogen	ISO 6974-1 : 2012	0.1 to 12%
		Carbon Dioxide	ISO 6974-2 : 2012	0.05 to 8%
		Methane	IS 15130 (Part 5) : 2002 /	64 to 100%
		Ethane	ISO 6974-5 : 2000	0.1 to 14%
		Propane		0.05 to 8%
		Iso-Butane		0.01 to 1.2%
		N-Butane		0.01 to 1.2%
		Neo-Pentane		0.005 to 0.50%
		Iso-Pentane		0.005 to 0.50%
		N-Pentane		0.005 to 0.50%
		N-Hexane		0.005 to 0.50%
2.	**Natural Gas Mixture Upto C10**	2,2-Dimethylbutane	ISO 23874:2006	0.0001 to 0.10%
		Cyclo pentane		0.0001 to 0.10%
		2-Methylpentane		0.0001 to 0.10%
		3-Methylpentane		0.0001 to 0.10%
		N-Hexane		0.0001 to 0.50%
		Benzene		0.0001 to 0.10%
		Cyclohexane		0.0001 to 0.10%
		N-Heptane		0.0001 to 0.10%
		Toluene		0.0001 to 0.10%
		Methylcyclohexane		0.0001 to 0.10%
		N-Octane		0.0001 to 0.05%
		N-Nonane		0.0001 to 0.02%
		N-Decane		0.0001to 0.005%

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	**Natural Gas Mixture**	Net Calorific Value Gross Calorific Value Relative Density Gas Density Wobbe Index	IS 14504:1998 / ISO 6976:1995	Calculation of Physical properties
4.	**Natural Gas Mixture**	Net Heating value Gross Heating Value Net Dry BTU Gross Dry BTU	ASTM D 3588 : 98 (RA-2003)	Calculation of Physical properties
5.	**Gas Mixture in Air / Nitrogen**	Methane	In-house Method As per SOP AGCPL/QSP/27 (Issue No 01, Issue Date :11.05.2014.)	0.5 % to 2.6 %
		Propane	In-house Method As per SOP AGCPL/QSP/28 (Issue No 01, Issue Date :11.05.2014.)	0.2 % to 1.3 %
		Carbon Monoxide	In-house Method As per SOP AGCPL/QSP/29 (Issue No 01, Issue Date :11.05..2014.)	0.005 % to 0.5 %
		Oxygen	In-house Method As per SOP AGCPL/QSP/30 (Issue No 01, Issue Date :11.05.2014.)	17.0 % to 22.0 %

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Helium	In-house Method As per SOP AGCPL/QSP/31 (Issue No 01, Issue Date :11.05.2014.)	8.0 % to 10.0 %
		Carbon Dioxide	In-house Method As per SOP AGCPL/QSP/32 (Issue No 01, Issue Date :11.05.2014.)	4.0 % to 8.0 %
		Nitric Oxide	In-house Method As per SOP AGCPL/QSP/33 (Issue No 01, Issue Date :11.05.2014.)	0.005 % to 0.1 %

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Rini Narayan
Accreditation Officer - I

John Varughese
Technical Manager