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Accreditation No: LAB 082

Awarded to

SGS Oil, Gas and Chemicals Testing Lab, Karachi, Pakistan.

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **27-11-2014** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2005**.

The accreditation requires regular surveillance, and is valid until **25-11-2020**.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

15-03-2018

Date

Director General

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Testing Laboratory.

Accreditation Scope SGS Oil, Gas and Chemicals Testing Lab, Karachi, Pakistan.

Permanent laboratory premises

Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
Ethanol	Oil, Gas & Chemicals	Esters as Ethyl Acetate	OGC/SGS ETOH 0001-10
		Aldehyde as Acetaldehyde	OGC/SGS ETOH 0001-10
		Total Higher Alcohols	OGC/SGS ETOH 0001-10
		Methanol	OGC/SGS ETOH 0001-10
		Furfural	OGC/SGS ETOH 0001-10
		Benzene	OGC/SGS ETOH 0001-10
		Crotonaldehyde	OGC/SGS ETOH 0001-10
		ISO-Propanol (IPA)	OGC/SGS ETOH 0001-10
		N Propanol	OGC/SGS ETOH 0001-10
		Iso-Butanol	OGC/SGS ETOH 0001-10
		N-Butanol	OGC/SGS ETOH 0001-10

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Iso-Amyl Alcohol	OGC/SGS ETOH 0001-10
		N-Amyl Alcohol	OGC/SGS ETOH 0001-10
		Sec Butanol	OGC/SGS ETOH 0001-10
		Tert Butanol	OGC/SGS ETOH 0001-10
		Acetal	OGC/SGS ETOH 0001-10
		Cyclohexane	OGC/SGS ETOH 0001-10
		Acetone	OGC/SGS ETOH 0001-10
		2 methyl-1-butanol	OGC/SGS ETOH 0001-10
		Strength by volume @ 20°C	OIML
		Acidity as Acetic Acid	ASTM D-1613- 06(2012)
		Water Content	ASTM E-203-08
		Hydrocarbons	OGC/2007/SOP-IEH/03
		Permanganate Time Test	ASTM D-1363- 06(2011)
		Curve	UV Spectrophotometer
		Copper as Cu	ASTM D1688-12

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Total Sulphur	ASTM D-5453-12
		Water Miscibility	ASTM D- 1722-09
		Lead as Pb	ASTM D3559-08
		Color	ASTM D-120905(2011)
		Chloride content	OGC/2207/80-CE/00
		pH	ASTM D-6423-08
		Odor	Organoleptic
		Density	ASTM D-4052-11
		Dry Matter	ASTM D-1353-13
		Absorbance @ 270nm	(UV Spectrophotometer)
		Absorbance @ 240nm	(UV Spectrophotometer)
		Absorbance @ 230nm	(UV Spectrophotometer)
Absorbance @ 220nm	(UV Spectrophotometer)		
GASOIL	Oil, Gas & Chemicals	Acid number	ASTM D664-11
		Ash content	ASTM D482-13

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Cetane Index	ASTM D976-06(2011)
		CFPP	ASTM D6371-05(2011)
		Cloud Point	ASTM D2500-11
		Color ASTM	ASTM D1500-12
		Conradson Carbon Residue on 10% distillation residue	ASTM D189- 06(2010)
		Copper corrosion 3hrs@50 oC	ASTM D130-12
		Density @ 15°C	ASTM D4052-11
		IBP	ASTM D86-12
		10 % Recovery	
		50 % Recovery	
		90 % Recovery	
		95 % Recovery	
		FBP	
		Flash Point PMcc	ASTM D93-13
		Kinematic viscosity	ASTM D445-14

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Viscosity Stabinger	ASTM D7042-14
		Nitrogen	ASTM D 4629-12
		Pour Point	ASTM D 97-12
		Sulphur content	ASTM D 5453-12
		Water content	ASTM D 6304-07
FUEL OIL	Oil, Gas & Chemicals	Acid Number	ASTM D664-11
		API Gravity	ASTM D1298-12
		Ash Content	ASTM D482-13
		Conradson Carbon Residue	ASTM D189-06(2010)
		Density at 15°C	ASTM D4052-11
		Flash Point PMcc	ASTM D93-13
		Heat of Combustion	ASTM D240-09
		Kinematic viscosity	ASTM D445-14
		Pour Point	ASTM D97-12
		Sediments by extraction	ASTM D473-07(2012)

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Total Sulphur Content	ASTM D5453-12
		Nickel	ASTM D5863-00(2011)
		Iron	ASTM D5863-00(2011)
		Sodium	ASTM D5863-00(2011)
		Vanadium	ASTM D5863-00(2011)
JET FUEL	Oil, Gas & Chemicals	Density at 15°C	ASTM D4052-11
		Saybolt color	ASTM D156-12
		Flash Point (Abel Cup)	IP 170
		Freezing Point	ASTM D2384-83(2014)
		IBP	ASTM D86-12
		10 % Recovery	
		50 % Recovery	
		90 % Recovery	
		95 % Recovery	
FBP			

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
LPG	Oil, Gas & Chemicals	Ethane	ASTM D2163-14
		Ethylene	ASTM D2163-14
		Propane	ASTM D2163-14
		Propylene	ASTM D2163-14
		Iso-butane	ASTM D2163-14
		n-butane	ASTM D2163-14
		Trans-2-butene	ASTM D2163-14
		1-butene	ASTM D2163-14
		Iso-butene	ASTM D2163-14
		Cis-2-butene	ASTM D2163-14
		Iso-pentane	ASTM D2163-14
		n-pentane	ASTM D2163-14
		1,3 butadiene	ASTM D2163-14
Hexane	ASTM D2163-14		
Natural gas / LNG	Oil, Gas & Chemicals	Methane	GPA 2261 (2013)

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Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
		Ethane	GPA 2261 (2013)
		Propane	GPA 2261 (2013)
		Iso-butane	GPA 2261 (2013)
		n-butane	GPA 2261 (2013)
		Iso-pentane	GPA 2261 (2013)
		n-pentane	GPA 2261 (2013)
		Hexane	GPA 2261 (2013)
		Nitrogen	GPA 2261 (2013)
		Carbon dioxide	GPA 2261 (2013)

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