



# Committee D02 Proficiency Test Program In Service Oil Monitoring Sample ID: ISDO2007 July 2020

Report Issue Date: October 9, 2020



**Alphabetical Listing of Laboratories  
Submitting Results for ISDO2007**

<b>Lab Name (as given in Registration)</b>	<b>City</b>	<b>State/Province</b>	<b>Country</b>
ALS Tribology - Stafford	Stafford		Australia
ALS Tribology - Atlanta GA	Norcross	GA	United States
ALS Tribology - Brazil	Contagem	MG	Brazil
ALS Tribology - Burlington	Burlington		Canada
ALS Tribology - Czech Republic	Praha 9		Czechia
ALS Tribology - Edmonton	Edmonton		Canada
ALS Tribology - Kansas City KS	KANSAS CITY	KS	United States
ALS Tribology - Muswellbrook	Muswellbrook		Australia
ALS Tribology - Perth	Perth		Australia
ALS Tribology - Phoenix AZ	PHOENIX	AZ	United States
ALS Tribology - Portland OR	PORTLAND	OR	United States
ALS Tribology - Valley View OH	VALLEY VIEW	OH	United States
ALS Tribology - Wellington	Wellington		New Zealand
ALS Tribology - Wetherill Park	Wetherill Park		Australia
Afton Chemical Corp - Richmond, VA	Richmond	VA	United States
Agat Laboratories - Calgary	CALGARY		Canada
Alcontrol (Robertson) Laboratories	CONWY		United Kingdom
Alfred H Knight Zambia Ltd	Kitwe		Zambia
Apl Gmbh	LANDAU		Germany
Bureau Veritas Canada - Edmonton PTC	Edmonton	Alberta	Canada
Bureau Veritas Saudi Arabia - Al-Jubail	Al-Jubail		Saudi Arabia
Bureau Veritas UAE - Dubai	Dubai		United Arab Emirates
Bureau Veritas USA - OCM Hawthorne, CA	Hawthorne	CA	United States
Bureau Veritas USA - OCM Hoffman Estates, IL	Hoffman Estates	IL	United States
Bureau Veritas USA - OCM Stafford, TX	STAFFORD	TX	United States
Bureau Veritas USA - OCM Suwanee, GA	Suwanee	GA	United States
CEPIA	Marseille		France
Cashman Equipment	Sparks	NV	United States
Center for Reliability and Excellence	Mandaluyong		Philippines
Chevron Oronite Technology - Netherlands	VONDELINGENPLAAT RT		Netherlands
Clark Laboratories Llc	JEFFERSON HILLS	PA	United States

<b>Lab Name (as given in Registration)</b>	<b>City</b>	<b>State/Province</b>	<b>Country</b>
Compania De Petroleos De Chile	Quintero		Chile
Compania De Petroleos de Chile COPEC S.A.	Antofagasta		Chile
Constellation Power Source	BALTIMORE	MD	United States
Cosan Lubrificantes E Especialidades	Rio de Janeiro		Brazil
Cummins Inc - Columbus	Columbus	IN	United States
DAF Trucks NV	EINDHOVEN		Netherlands
Dexsil Corp	Hamden	CT	United States
Dictuc S A	Antofagasta		Chile
Dla Maritime - Puget Sound	Silverdale	WA	United States
ENOC Group	Fujairah		United Arab Emirates
Empresa Nacional de Energia ENEX S.A.	Antofagasta		Chile
ExxonMobil (China) Investment Co Ltd - Shanghai	Shanghai		China
Exxonmobil LOPB Pernis - Esso Nederland UO Lab	Vondelingenplaat (RT)		Netherlands
Focus Lab Ltd	Bangkok		Thailand
Ford Motor Co	DEARBORN	MI	United States
I S P Salzbergen Gmbh & Co. UG	Salzbergen		Germany
ICONIC Lubrificantes S.A	Rio de Janeiro		Brazil
ICT Oil Labs Ltd	Kfar-Sava		Israel
Idemitsu Lubricants America Corp.	JEFFERSONVILLE	IN	United States
Imperial Oil	Sarnia		Canada
Intertek - ARL (Automotive Research)	SAN ANTONIO	TX	United States
Intertek - Aberdeen, United Kingdom	Aberdeen		United Kingdom
Intertek - Chicago (Romeoville), IL	ROMEOVILLE	IL	United States
Intertek - Farnborough, UK	Farnborough		United Kingdom
Intertek - Jakarta, Indonesia	Jakarta Timur 13710		Indonesia
Intertek - Lima, Peru	LIMA		Peru
Intertek - Mumbai, India	Mumbai		India
Intertek - Panama	PANAMA CITY		Panama
Intertek - Port Melbourne, Australia	Port Melbourne		Australia
Intertek - Sharjah, U.A.E.	Sharjah		United Arab Emirates
Intertek - West Thurrock	Grays		United Kingdom
Jet-Care International Inc	CEDAR KNOLLS	NJ	United States
KC Signum Oil Analysis Lab	Kansas City	KS	United States
LST - Organización Terpel S.A.	Bogota		Colombia
Laboratorio Lantos SA CUIT 33711421189	BUENOS AIRES	CABA	Argentina
Lubrication Engineers Inc	WICHITA	KS	United States
Lubrication Management S.L.	Elbar		Spain

Lab Name (as given in Registration)	City	State/Province	Country
Lubrizol Additive (Zhuhai) Co, Ltd. - BTS	Zhuhai		China
Lubrizol Corp-Wickliffe	Wickliffe	OH	United States
Lubrizol Corporation - BTS Thane India - LU	Thane, Maharashtra		India
Lubrizol Corporation UK	Derby		United Kingdom
Luval S.A.	SANTIAGO		Chile
Maritec Pte Ltd	Singapore		Singapore
Mecoil Diagnosimeccaniche Srl	Firenze		Italy
Mol-Lub Ltd	ALMASFUZITO		Hungary
Navistar	MELROSE PARK	IL	United States
Northland Products	WATERLOO	IA	United States
Oil Analysis Laboratories	Colwyn Bay		United Kingdom
Orient Oils (Private) Ltd	Karachi		Pakistan
P M D S	Haifa		Israel
PTT Oil and Retail Business Company Limited	Bangkok		Thailand
Petron Corp	Mandaluyong City		Philippines
Petronas Lubrificantes do Brasil S A	Contagem, Minas Gerais		Brazil
Polaris Laboratories	HOUSTON	TX	United States
Polaris Laboratories Llc	INDIANAPOLIS	IN	United States
Polaris Laboratories Poland	Indianapolis	IN	United States
Polaris Labs	Indianapolis	IN	United States
Polaris Labs	SALT LAKE CITY	UT	United States
Polaris Tribology Laboratory Central America, S.A.	Indianapolis	IN	United States
Pt. Tekenomiks Indonesia- Sangata	Sangata		Indonesia
SGS - Herguth Labs Inc - Vallejo, CA	VALLEJO	CA	United States
SGS - Naperville, IL	Naperville	IL	United States
SGS Belgium	Gent		Belgium
SGS Colombia S.AS. - Bogota	Cartagena	Bolivar	Colombia
Savant Inc	MIDLAND	MI	United States
Servicios Tribologicos - Collahuasi	Antofagasta		Chile
Shanghai Orient Intertek Testing Services Co.,Ltd.	Shanghai		China
Socotec Uk	Doncaster		United Kingdom
Soltrak S.A:	Callao		Peru
Southwest Research Institute	San Antonio	TX	United States
T V A Central Labs Services	CHATTANOOGA	TN	United States
Techenomics Australia	Mayfield East		Australia
Techenomics Mongolia Llc	Ulaanbaatar		Mongolia
Tekenomiks Indonesia	Balikpapan		Indonesia

Lab Name (as given in Registration)	City	State/Province	Country
Terpel Comercial del Peru S R L	Lima		Peru
The Fluid Life Corp - Brantford	BRANTFORD		Canada
The Fluid Life Corporation - Bloomington	BLOOMINGTON	MN	United States
The Fluid Life Corporation - Edmonton	Edmonton		Canada
Total Belgium N V	Ertvelde		Belgium
Tribocare FZC	Sharjah		United Arab Emirates
Tribocare Pte Ltd		singapore	Singapore
Trico Corporation	Pewaukee	WI	United States
Ultra Plus Lubes Pvt Ltd	Panvel, Navi Mumbai		India
Us Army Garrison-Michigan	Warren	MI	United States
Valvoline Co	LEXINGTON	KY	United States
Viswalab Singapore Pte Ltd	Singapore		Singapore
Wearcheck Canada Inc	Burlington		Canada
Wearcheck USA	CARY	NC	United States
Weir Marine Engineering	LASALLE		Canada
Xinxiang Richful Lube Additive Co., Ltd.	Xinxiang		China
YPF SA	Buenos Aires - CABA		Argentina

## ASTM Committee D-2 Interlaboratory Crosscheck Program

In-Service Oil Monitoring - luglio 2020 (ISDO2007)

Metodo	Parametro	U.M.	Media		Dev.St.	
			Mecoil	RRT	RRT	z-score*
ASTM D8045	AN	mg KOH/g	<b>0,98</b>	<b>1,58</b>	0,6	-1,1
ASTM D2896(B)	TBN	mg KOH/g	<b>8,8</b>	<b>9,2</b>	0,3	-1,3
ASTM D7094 (corr. D93) Flash Point		°C	<b>149</b>	<b>151</b>	7,6	-0,2
ASTM D8004 (corr. GC) Gasolio FDM		% peso	<b>0,0</b>	<b>0,0</b>	0,0	0,0
ASTM D6595	Alluminio	mg/kg	<b>0,0</b>	<b>2,1</b>	1,0	-2,2
ASTM D6595	Argento	mg/kg	<b>0,0</b>	<b>0,0</b>	0,1	-0,6
ASTM D6595	Bario	mg/kg	<b>0,0</b>	<b>0,2</b>	0,4	-0,5
ASTM D6595	Boro	mg/kg	<b>28</b>	<b>35</b>	5,3	-1,3
ASTM D6595	Calcio	mg/kg	<b>3508</b>	<b>3299</b>	479,7	0,4
ASTM D6595	Cromo	mg/kg	<b>0,0</b>	<b>0,5</b>	0,3	-1,6
ASTM D6595	Ferro	mg/kg	<b>11,6</b>	<b>12,0</b>	1,6	-0,3
ASTM D6595	Fosforo	mg/kg	<b>0</b>	<b>6</b>	9,0	-0,7
ASTM D6595	Magnesio	mg/kg	<b>16</b>	<b>16</b>	1,9	0,1
ASTM D6595	Manganese	mg/kg	<b>0,0</b>	<b>0,0</b>	0,0	0,0
ASTM D6595	Molibdeno	mg/kg	<b>33</b>	<b>38</b>	3,6	-1,4
ASTM D6595	Nichel	mg/kg	<b>0,0</b>	<b>0,2</b>	0,2	-1,0
ASTM D6595	Piombo	mg/kg	<b>3,0</b>	<b>4,0</b>	1,8	-0,6
ASTM D6595	Potassio	mg/kg	<b>1,5</b>	<b>1,7</b>	0,7	-0,3
ASTM D6595	Rame	mg/kg	<b>8,6</b>	<b>10,2</b>	0,9	-1,7
ASTM D6595	Silicio	mg/kg	<b>2,5</b>	<b>4,4</b>	1,0	-1,9
ASTM D6595	Sodio	mg/kg	<b>10,0</b>	<b>9,3</b>	1,3	0,5
ASTM D6595	Stagno	mg/kg	<b>0,0</b>	<b>0,1</b>	0,4	-0,3
ASTM D6595	Titanio	mg/kg	<b>0,0</b>	<b>0,0</b>	0,0	-0,8
ASTM D6595	Vanadio	mg/kg	<b>0,0</b>	<b>0,1</b>	0,2	-0,6
ASTM D6595	Zinco	mg/kg	<b>5</b>	<b>6</b>	1,1	-0,6
ASTM D7624-proc.A	Nitrazione	Abs/cm	<b>8,8</b>	<b>6,1</b>	0,9	-0,2
ASTM D7624-proc.B	Nitrazione	Abs/cm	<b>5,0</b>	<b>6,1</b>	3,5	-0,3
ASTM D7414-proc.A	Ossidazione	Abs/cm	<b>8,7</b>	<b>8,5</b>	0,8	0,2
ASTM D7414-proc.B	Ossidazione	Abs/cm	<b>3,4</b>	<b>6,1</b>	2,6	-1,1
ASTM D7415-proc.A	Solfatazione	Abs/cm	<b>16,1</b>	<b>16,4</b>	1,3	-0,3
ASTM D7415-proc.B	Solfatazione	Abs/cm	<b>0,0</b>	<b>3,1</b>	2,6	-1,2
ASTM D7412	Antiusura	Abs/0.1mm	<b>0,0</b>	<b>9,0</b>	4,6	-2,0
ASTM E2412 modif.	Soot	% peso	<b>11,7</b>	<b>12,3</b>	2,0	-0,3
ASTM E2412 modif.	Glicole	% peso	<b>0,0</b>	<b>0,0</b>	0,0	0,0
ASTM E2412 modif.	Acqua FTIR	% peso	<b>0,0</b>	<b>0,0</b>	0,0	-0,9
ASTM D445	Visc. 40°C	cSt	<b>117,2</b>	<b>116,0</b>	0,8	1,6
ASTM D445	Visc. 100°C	cSt	<b>13,62</b>	<b>13,46</b>	0,1	1,4
ASTM D2270 (D445)	Indice di viscosità		<b>113</b>	<b>113</b>	1,9	0,0
ASTM D7042	Visc. 40°C	cSt	<b>117,3</b>	<b>115,8</b>	1,1	1,4
ASTM D7042	Visc. 100°C	cSt	<b>13,55</b>	<b>13,54</b>	0,1	0,1
ASTM D2270 (D7042)	Indice di viscosità		<b>112</b>	<b>114</b>	2,3	-0,7
ASTM D6304(C)	Acqua, KF	mg/kg	<b>205</b>	<b>209</b>	105,8	0,0

Firenze, 22 Ottobre 2020

Dott. Alessandro Paccagnini  
Responsabile Laboratorio  
Mecoil Diagnosi Meccaniche Srl

\* "The z-score column reports each lab's deviation in units of standard deviations. The z-score is the ratio of the deviation to the standard deviation. A z-score greater than 2 - or less than negative 2 - should cause a laboratory to review their test data for any possible systematic error. Z-scores outside this range should occur only about one time in twenty, if a laboratory has average capability running the method. Laboratories should strive to obtain z-score values close to zero."

(da ASTM ISDO1703 Report Introduction).