



ASTM INTERNATIONAL
Helping our world work better



Committee D02 Proficiency Test Program In Service Oil Monitoring Sample ID: ISDO1807 July 2018

Report Issue Date: October 3, 2018





**Alphabetical Listing of Laboratories
Submitting Results for ISDO1807**

Lab Name (as given in Registration)	City	State/Province	Country
ALS Czech Republic	Prague		Czech Republic
ALS Tribology	Wellington		New Zealand
ALS Tribology - Atlanta GA	ATLANTA	GA	United States
ALS Tribology - Burlington	Burlington		Canada
ALS Tribology - Edmonton	EDMONTON		Canada
ALS Tribology - Kansas City KS	KANSAS CITY	KS	United States
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
Afton Chemical Corp - Richmond, VA	Richmond	VA	United States
Agat Laboratories - Calgary	CALGARY	AB	Canada
Alcontrol (Robertson) Laboratories	CONWY		United Kingdom
Alfred H Knight Zambia Ltd	PO BOX 20303, KITWE,COPPERBLT		Zambia
Als Tribology - Perth	Perth		Australia
Ameren Missouri	ST. LOUIS	MO	United States
Apl Gmbh	LANDAU		Germany
BP Petrolleri A S	Bursa	Gemlik	Turkey
Bufete De Mantenimiento Predic	CIUDAD DEL CARMEN CAMPECHE.		Mexico
Bureau Veritas - Hawthorne, CA	Hawthorne	CA	United States
Bureau Veritas - Rotterdam	Vondelingenplaat-Rotterdam		Netherlands
Bureau Veritas- Hoffman Estates, IL	Hoffman Estates	IL	United States
Bureau Veritas- Stafford, TX	STAFFORD	TX	United States
Bureau Veritas- Suwanee, GA	Suwanee	GA	United States
CEPIA	Marseille		France
Cashman Equipment	Sparks	NV	United States



ASTM INTERNATIONAL
Helping our world work better

Lab Name (as given in Registration)	City	State/Province	Country
Center for Reliability and Excellence	Mandaluyong City		Philippines
Chevron Oronite Technology - Netherlands	VONDELINGENPLAAT RT		Netherlands
Compania De Petroleos De Chile	Quintero		Chile
Constellation Power Source	BALTIMORE	MD	United States
Cosan Lubrificantes E Especialidades	Rio de Janeiro		Brazil
Cummins Inc	Columbus	IN	United States
Cummins Inc	LAKEWOOD	NY	United States
Dexsil Corp	Hamden	CT	United States
Dictuc S A	Antofagasta		Chile
Dla Maritime - Puget Sound	Silverdale	WA	United States
ENI IBERIA	Barcelona		Spain
ENOC Group	Fujairah		United Arab Emirates
ExxonMobil (China) Investment Co Ltd - Shanghai	Shanghai		China
Exxonmobil LOPB Pernis - Esso Nederland UO Lab	Vondelingenplaat (RT)		Netherlands
Focus Lab Ltd	Bangkok		Thailand
ICT Oil Labs Ltd	Kfar-Sava		Israel
Idemitsu Lubricants America Corp.	Jeffersonville	IN	United States
Inspectorate International Limited - Al-Jubail, Saudi Arabia	Al-Jubail		Saudi Arabia
Inspectorate International Ltd - Dubai	Dubai		United Arab Emirates
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 - Lima, Peru	LIMA		Peru
Intertek - Panama	PANAMA CITY		Panama
Intertek - Port Melbourne, Australia	Port Melbourne		Australia
Intertek - Rotterdam, Netherlands			Netherlands
Intertek - Sharjah, U.A.E.	Sharjah		United Arab Emirates
Intertek - Singapore	SINGAPORE		Singapore
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
Lubrication Engineers Inc	WICHITA	KS	United States
Lubrizol Additive (Zhuhai) Co, Ltd. - BTS	Zhuhai		China



ASTM INTERNATIONAL
Helping our world work better

Lab Name (as given in Registration)	City	State/Province	Country
Lubrizol Corp-Wickliffe	Wickliffe	OH	United States
Lubrizol Corporation - BTS Thane India - LU	Thane, Maharashtra		India
Luval S.A.	SANTIAGO		Chile
Maritec Pte Ltd	Singapore		Singapore
Maxxam Analytics Inc	EDMONTON		Canada
Mecoil Diagnosimeccaniche Srl	Firenze		Italy
Mol-Lub Ltd	Almasfuzito		Hungary
Oil Lab & Marine Surveyors Co.,Llc.	Sarjah		United Arab Emirates
Orient Oils (Private) Ltd	Karachi		Pakistan
P M D S	Haifa		Israel
Petron Corp	Mandaluyong City		Philippines
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
Pt. Tekenomiks Indonesia- Sangata	Sangata		Indonesia
Quaker State	Mexico, D.F.		Mexico
Runningland Metrology & Testing (Shanghai) Co.,Ltd.	Shanghai		China
SGS Colombia S.A. - Bogota	Cartagena	Bolivar	Colombia
Savant Inc	MIDLAND	MI	United States
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
Tekenomiks Indonesia	Balikpapan		Indonesia
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
Ultra Plus Lubes Pvt Ltd	Panvel, Navi Mumbai		India



ASTM INTERNATIONAL
Helping our world work better

Lab Name (as given in Registration)	City	State/Province	Country
Us Army Garrison-Michigan	Warren	MI	United States
Vhg Labs	Manchester	NH	United States
Wearcheck Canada Inc	Burlington		Canada
Wearcheck USA	CARY	NC	United States
Weir Marine Engineering	LASALLE		Canada
YPF SA	Buenos Aires - CABA		Argentina

ASTM Committee D-2 Interlaboratory Crosscheck Program
In-Service Oil Monitoring - luglio 2018 (ISDO1807)

Metodo	Parametro	U.M.	Media		Dev.St. RRT	z-score*
			Mecoil	RRT		
ASTM D664	TAN	mg KOH/g	2,7	2,8	0,6	-0,3
ASTM D2896(B)	TBN	mg KOH/g	10,6	10,4	0,6	0,3
ASTM D3828(B)	Flash Point	°C	205,0	200,3	7,9	0,6
ASTM D8400	Fuel dilution	mg/kg	0,0	0,0	0,0	0,0
ASTM D6595	Alluminio	mg/kg	0,0	0,9	0,5	-1,8
ASTM D6595	Argento	mg/kg	0,0	0,0	0,0	0,0
ASTM D6595	Bario	mg/kg	0,0	0,1	0,1	-0,1
ASTM D6595	Boro	mg/kg	40,3	43,2	4,1	-0,7
ASTM D6595	Calcio	mg/kg	1566,0	1438,4	142,6	0,9
ASTM D6595	Cromo	mg/kg	0,0	0,2	0,2	-1,0
ASTM D6595	Ferro	mg/kg	6,3	6,3	1,1	0,0
ASTM D6595	Fosforo	mg/kg	1395,0	1182,4	109,4	1,9
ASTM D6595	Magnesio	mg/kg	634,0	541,9	73,7	1,2
ASTM D6595	Manganese	mg/kg	0,0	0,1	0,2	-0,5
ASTM D6595	Molibdeno	mg/kg	42,7	47,3	6,0	-0,8
ASTM D6595	Nichel	mg/kg	0,0	0,1	0,1	0,0
ASTM D6595	Piombo	mg/kg	0,0	1,5	1,4	-1,1
ASTM D6595	Potassio	mg/kg	4,1	4,4	0,6	-0,5
ASTM D6595	Rame	mg/kg	0,5	0,7	0,3	-0,7
ASTM D6595	Silicio	mg/kg	4,3	4,2	0,8	0,1
ASTM D6595	Sodio	mg/kg	8,6	8,9	1,3	-0,2
ASTM D6595	Stagno	mg/kg	0,0	0,0	0,0	0,0
ASTM D6595	Titanio	mg/kg	0,0	0,0	0,0	0,0
ASTM D6595	Vanadio	mg/kg	0,0	0,5	0,6	0,0
ASTM D6595	Zinco	mg/kg	1424,0	1314,5	181,1	0,6
ASTM D7624	Nitrazione	Abs/0.1mm	8,8	8,3	1,2	0,4
ASTM D7414	Ossidazione	Abs/0.1mm	17,3	18,1	3,3	-0,2
ASTM D7415	Solfatazione	Abs/0.1mm	22,4	22,0	1,2	0,3
ASTM D7412	Antiusura	% peso	19,4	20,0	1,0	-0,6
ASTM D445	Visc. 100°C	cSt	15,4	15,1	0,2	1,6
ASTM D445	Visc. 40°C	cSt	116,8	116,5	1,1	0,2
ASTM D2270	Indice Viscosità		138,0	134,7	1,9	1,7
ASTM D7042	Visc. 100°C	cSt	15,4	15,2	0,1	1,3
ASTM D7042	Visc. 40°C	cSt	116,6	117,0	0,6	-0,6
ASTM D2270	Indice Viscosità		137,0	135,0	1,2	1,7
ASTM D6304(C)	Acqua, KF	mg/kg	104,0	219,1	119,3	-1,0

Firenze, 2 ottobre 2018

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).