

Chem-Ecol

A2308062

# **OIL ANALYSIS REPORT**

### Sample Rating Trend







Component Unknown Component Fluid CHEM-ECOL TOOL OIL 1002 (--- GAL)

#### DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

## Wear

Copper ppm levels are noted.

Contamination {not applicable}

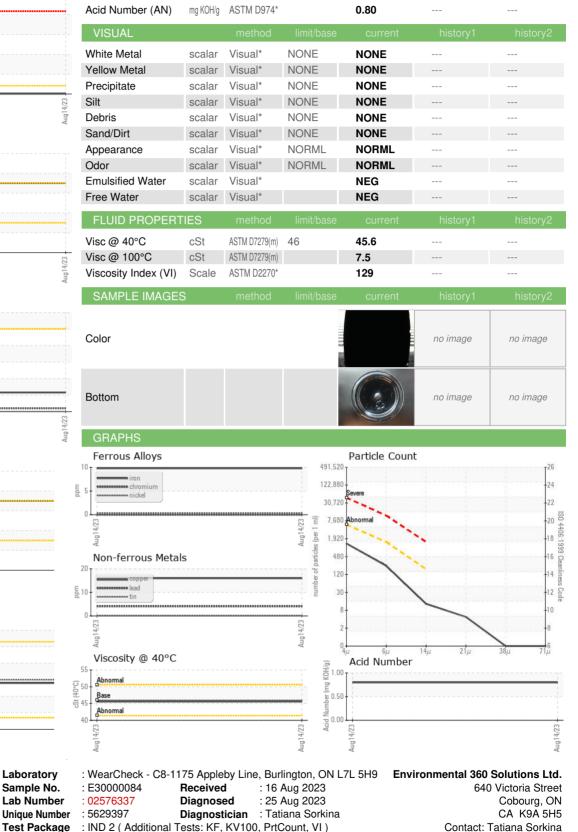
Fluid Condition {not applicable}

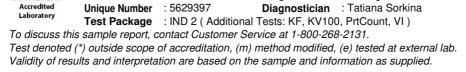
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		E30000084		
Sample Date		Client Info		14 Aug 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
	_			-		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		10		
Chromium	ppm	ASTM D5185(m)		0		
Nickel	ppm	ASTM D5185(m)		<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)		1		
Lead	ppm	ASTM D5185(m)		4		
Copper	ppm	ASTM D5185(m)		16		
Tin	ppm	ASTM D5185(m)		0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		13		
Calcium	ppm	ASTM D5185(m)		67		
Phosphorus	ppm	ASTM D5185(m)		281		
Zinc	ppm	ASTM D5185(m)		244		
Sulfur	ppm	ASTM D5185(m)		25166		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		2		
Sodium	ppm	ASTM D5185(m)		5		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D6304*		0.003		
ppm Water	ppm	ASTM D6304*		37.5		
FLUID CLEANLIN	VESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1160		
Particles >6µm		ASTM D7647	>1300	206		
Particles >14µm		ASTM D7647 ASTM D7647	>160	11		
Particles >21µm		ASTM D7647 ASTM D7647		4		
Particles >38µm		ASTM D7647 ASTM D7647	>40	4		
Particles >71µm		ASTM D7647 ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)		0 17/15/11		
		130 4400 (C)	>19/17/14	17/13/11		
04.17) David				0	· • • •	



# **OIL ANALYSIS REPORT**

Abnormal	FLUID DEGRADATION	N
memal       White Metal         Precipitate       Siti         Debris       Sand/Dirt         Appearance       Odor         memal       FLUID PROPERTI         Visc @ 40°C       Visc @ 100°C         Visc @ 100°C       Visc @ 100°C         Scosity @ 100°C       SAMPLE IMAGES         Scosity @ 100°C       Bottom         Scosity @ 100°C       Source         Scosity @ 100°C       Stand         Scosity @ 40°C       Stand         Scosity @ 40°C       Stand         Scosity @ 40°C       Stand         Stand	Acid Number (AN) mg KC	DH/g
semal       Yellow Metal         Precipitate       Sitt         Debris       Sand/Dirt         Appearance       Odor         Codor       Emulsified Water         Free Water       Fluid Properties         Strick @ 100°C       Visc @ 40°C         Visc @ 100°C       Visc @ 100°C         Strick @ 100°C       SAMPLE IMAGES         Color       Bottom         GRAPHS       Ferrous Alloys         Strick @ 40°C       Side         wormal       Non-ferrous Metals         wormal       Viscosity @ 40°C         wormal       Viscosity @ 40°C         wormal       String @ 40°C         wormal       Viscosity @ 40°C	VISUAL	
nemal       Precipitate         scosity @ 100°C       Sit         nemal       Debris         sand/Dirt       Appearance         Odor       Emulsified Water         Free Water       Full D PROPERTI         Visc @ 40°C       Visc @ 100°C         unitiant       Color         Scosity @ 100°C       Bottom         scosity @ 100°C       Ferrous Alloys         scosity @ 100°C       Scosity @ 40°C         nemal       Viscosity @ 40°C         nemal       Viscosity @ 40°C         nemal       Viscosity @ 40°C         Scosity @ 40°C       Standal Scosity @ 40°C	White Metal scal	lar
scosity @ 100°C scosity @ 100°C	Yellow Metal scal	lar
scosity @ 100°C memal scosity @ 100°C scosity @ 100°C	Precipitate scal	lar
Sand/Dirt Appearance Odor Emulsified Water Free Water Free Water Free Water Free Water Visc @ 40°C Visc @ 100°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom Sample IMAGES Ferrous Alloys Ferrous Alloys Siscosity @ 100°C Monmal Scosity @ 40°C		lar
Appearance Odor Emulsified Water Free Water Free Water Fluid PROPERTI Visc @ 40°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Scosity @ 100°C normal Non-ferrous Metals Scosity @ 40°C Scosity @ 40°C	Debris scal	lar
Appearance Odor Emulsified Water Free Water Free Water Free Water Free Water Fluid PROPERTI Visc @ 40°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Metals Scosity @ 100°C a Scosity @ 40°C Scosity @ 40°C a Scosity @ 40°C	Sand/Dirt scal	lar
normal Emulsified Water   normal Free Water   Fill D PROPERTI   Visc @ 40°C   Visc @ 100°C   40°   40°   40°   40°   5cosity @ 100°C   5cosity @ 40°C	Appearance scal	lar
Free Water FLUID PROPERTI Visc @ 40°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Scosity @ 100°C Non-ferrous Metals Scosity @ 40°C Non-ferrous Metals Scosity @ 40°C	Odor scal	lar
Internet   Secosity @ 100°C   Secosity @ 40°C	Emulsified Water scal	lar
Image: Secosity @ 40°C       Visc @ 40°C         Image: Secosity @ 100°C       SAMPLE IMAGES         Image: Secosity @ 100°C       Color         Image: Secosity @ 100°C       Bottom         Image: Secosity @ 100°C       GRAPHS         Image: Secosity @ 100°C       Ferrous Alloys         Image: Secosity @ 40°C       Image: Secosity @ 40°C         Image: Secosity @ 40°C       Secosity @ 40°C	Free Water scal	lar
Visc @ 100°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Cosity @ 100°C Comma Cosity @ 100°C	FLUID PROPERTIES	
visc @ 100°C Viscosity Index (VI) SAMPLE IMAGES Color Bottom Bottom GRAPHS Ferrous Alloys Ferrous Alloys Non-ferrous Metals	Visc @ 40°C cSt	
Image: Secosity @ 40°C       Yiscosity Index (VI)         Image: Secosity @ 40°C       Secosity @ 40°C         Image: Secosity @ 40°C       Secosity @ 40°C      <	N/ 0.40000 01	
rticle Trend  SAMPLE IMAGES  Color  Color  Bottom  GRAPHS  Ferrous Alloys  Ferrous Alloys  Ferrous Alloys  Ferrous Metals  Scosity @ 40°C  Monda  Scosity @ 40°C  Set  Scosity @ 40°C  Scosity @ 40°C  Set Scosity @ 40°C  Set Scosity @ 40°C  Scosity @	Viscosity Index (VI) Sca	le
Color Graphs Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Cosity @ 100°C Cosity @ 40°C Cosity @ 40°C Cosity @ 40°C		
cosity @ 100°C mai cosity @ 40°C mai cosity @ 40°C mai cosity @ 40°C cosity @ 40°C cosity @ 40°C	Color	
cosity @ 100°C mmal cosity @ 40°C cosity @ 40°C commal commal cosity @ 40°C		
bnomal bnomal bnomal iscosity @ 40°C bnomal bnomal bnomal bnomal	GRAPHS	
scosity @ 40°C		
bnormal bno	10 T	
scosity @ 40°C		
iscosity @ 40°C		
scosity @ 40°C	Aug	
scosity @ 40°C		
iscosity @ 40°C	copper	
normal Viscosity @ 40°C	E 10	
scosity @ 40°C mormal see		
bnormal ase bnormal	4/23	
ase Solutions of the second s	Aug1	
ase Q: 50 Q: 50 Base X: 45 Abnormal Base Abnormal		
승 50 - Base 영 45 - Abnormal		
bnormal Abnormal	0 50 ± 0 0 € Base	
40 40	₹ 45 - Abnormal	
	40	
Aug 14/2	14/2	





Contact/Location: Tatiana Sorkina - CHECOB

tsorkina@e360s.ca

T: (800)263-3939

F: (905)373-4950

ISO 17025:2017

Sample No.

Lab Number