

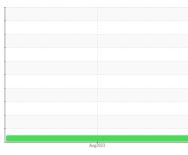
Chem-Ecol

A2308124

## **OIL ANALYSIS REPORT**

## Sample Rating Trend







Component Unknown Component Fluid CHEM-ECOL WAYLUBE 220 (--- GAL)

## DIAGNOSIS

Recommendation

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

Wear

{not applicable}

Contamination {not applicable}

Fluid Condition {not applicable}

SAMPLE INFORM	<b>/IATION</b>	method	limit/base	current	history1	history2					
Sample Number		Client Info		E30000042							
Sample Date		Client Info		23 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)		<1							
Chromium	ppm	ASTM D5185(m)		0							
Nickel	ppm	ASTM D5185(m)		0							
Titanium	ppm	ASTM D5185(m)		0							
Silver	ppm	ASTM D5185(m)		0							
Aluminum	ppm	ASTM D5185(m)		<1							
Lead	ppm	ASTM D5185(m)		0							
Copper	ppm	ASTM D5185(m)		0							
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)		0							
Molybdenum	ppm	ASTM D5185(m)		0							
Manganese	ppm	ASTM D5185(m)		0							
Magnesium	ppm	ASTM D5185(m)		<1							
Calcium	ppm	ASTM D5185(m)		2							
Phosphorus	ppm	ASTM D5185(m)		191							
Zinc	ppm	ASTM D5185(m)		7							
Sulfur		ASTM D5185(m)		, 1931							
Lithium	ppm	ASTM D5185(m) ASTM D5185(m)		<1							
	ppm	ASTIM D0100(III)		<1							
CONTAMINANTS	;	method	limit/base	current	history1	history2					
Silicon	ppm	ASTM D5185(m)		2							
Sodium	ppm	ASTM D5185(m)		1							
Potassium	ppm	ASTM D5185(m)	>20	0							
Water	%	ASTM D6304*		0.002							
ppm Water	ppm	ASTM D6304*		17.9							
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2					
Particles >4µm		ASTM D7647	>5000	114							
Particles >6µm		ASTM D7647	>1300	36							
Particles >14µm		ASTM D7647	>160	6							
Particles >21µm		ASTM D7647	>40	3							
Particles >38µm		ASTM D7647	>10	2							
Particles >71µm		ASTM D7647	>3	2							
Oil Cleanliness		ISO 4406 (c)	>19/17/14	14/12/10							



## **OIL ANALYSIS REPORT**

1.20-	Water		FLUID DEGRADA	TION	method	limit/base	current	history1	history2
0.96-	Severe	-	Acid Number (AN)	mg KOH/g	ASTM D974*		0.86		
-0.72			VISUAL		method	limit/base	current	history1	history2
∛ ≥°0.48			White Metal	scalar	Visual*	NONE	NONE		
0.24			Yellow Metal	scalar	Visual*	NONE	NONE		
	Abnormal	-	Precipitate	scalar	Visual*	NONE	NONE		
0.00-	1/23	/23	Silt	scalar	Visual*	NONE	NONE		
	Aug23/23	Aug23/23	Debris	scalar	Visual*	NONE	NONE		
		-	Sand/Dirt	scalar	Visual*	NONE	NONE		
24-	Viscosity @ 100°C		Appearance	scalar	Visual*	NORML	NORML		
22-			Odor	scalar	Visual*	NORML	NORML		
	Abnormal	-	Emulsified Water	scalar	Visual*		NEG		
- 20 St (100°C) 18			Free Water	scalar	Visual*		NEG		
	<b>.</b> .		FLUID PROPERT	IES	method	limit/base	current	history1	history2
16-	Abnormal		Visc @ 40°C	cSt	ASTM D7279(m)	220	214		
14-	23 + -	23	Visc @ 100°C	cSt	ASTM D7279(m)		19.1		
	Aug23/23	Aug23/23	Viscosity Index (VI)	Scale	ASTM D2270*		100		
	Particle Trend	4	SAMPLE IMAGES	3	method	limit/base	current	history1	history2
6k -	4μm						and the second		
(m l) 4k 4k 3k	Automatica βμm	-	Color					no image	no image
ber of partic									
un 1k -			Bottom					no image	no image
U.	Aug23/23	Aug23/23							
	Aug	Bng	GRAPHS						
	Viscosity @ 100°C		Ferrous Alloys			401 520	Particle Count		20
24-	24		10 iron			491,520			T <sup>26</sup>
22-	Abnormal	mqq	5 - nickel			122,880	Severe		-24
20 ·						30,720			-22
- 20 20 20 18			3/23			Aug23/23 . s (per 1 ml) 026'1	Abnormal		-20 0 440
	Absorral		Aug23/23			ZBng 1,920	-	•	-20 50 4406:1999 -18 0ee
16-	Abnormal		Non-ferrous Metal	s		Aug23/23 1.920 1.921 1.920 480 480			-16 Clea
14-	- 22/		10 copper						-14 nings
	Aug23/23	bpm	5 - exercise lead			a 120 agune 30			-12 Ode
			0			8			-10
250-	Viscosity @ 40°C		Aug23/23			Aug23/23			-8
240-	Abnormal		Aug			Aug.	4u 6u 1	4μ 21μ	38µ 71µ
230		2	Viscosity @ 40°C		Acid Number	τμ 21μ	50µ 11µ		
230 - (0-0+) 220 -	Base		Acid Number						
ಸ್ 210-		t (40°C) t	20 Base			<u>ل</u> ا الح الح			
200-	Abnormal	2 cst				23 Acid Number (			
190-			+108 3/53			3/23	3/23		3/23 -
	4ug23/23		Aug23/23			Aug23/23 Ac	Aug23/23		Aug23/23
	CALA Sample No. Iso 17025:2017 Accredited Unique Numbe	r er ge rt, co pe o	: 02578552 I : 5631612 I : IND 2 ( Additional To ontact Customer Servi f accreditation, (m) m	Received Diagnose Diagnose ests: KF, ice at 1-8 ethod mo	d : 25 / ed : 30 / ician : Tati KV100, PrtC 00-268-2131 odified, (e) te	Aug 2023 Aug 2023 iana Sorkina Count, TAN M 1. sted at extern	lan, VI ) nal lab.	640 Contact: T tsork T:	Solutions Ltd. Victoria Street Cobourg, ON CA K9A 5H5 Tatiana Sorkina tina@e360s.ca (800)263-3939 (905)373-4950
		Juli		ampic a					

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