



Area Chem-Ecol

A2406160

## **OIL ANALYSIS REPORT**



NORMAL

Hydraulic System Fluid CHEM-ECOL HYDRAULIC 46 AWD (--- GAL)

## DIAGNOSIS

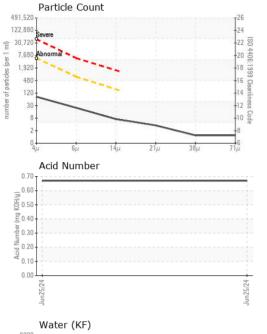
## Recommendation

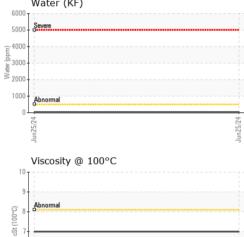
We certify that this oil is clean, that the additives are at acceptable levels, and that it is suitable for use.

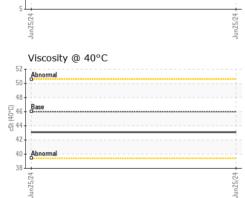
SAMPLE INFORM	<b>NATION</b>	method	limit/base	current	history1	history2
Batch #		Client Info		3127-A		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		06/25/2024		
Sample Number		Client Info		E30002472		
Sample Date		Client Info		25 Jun 2024		
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)	>20	2		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		<1		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	4		
Tin	ppm	ASTM D5185(m)	>20	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)		0		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		93		
Calcium	ppm	ASTM D5185(m)		87		
Phosphorus	ppm	ASTM D5185(m)		406		
Zinc	ppm	ASTM D5185(m)		505		
Sulfur	ppm	ASTM D5185(m)		996		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0		
Sodium	ppm	ASTM D5185(m)		1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D6304*	>0.05	0.001		
ppm Water	ppm	ASTM D6304*	>500	15		



## **OIL ANALYSIS REPORT**







FLUID CLEANLIN	IESS	method	limit/base	current	history1	histo
Particles >4µm		ASTM D7647	>5000	71		
Particles >6µm		ASTM D7647	>640	21		
Particles >14µm		ASTM D7647	>160	6		
Particles >21µm		ASTM D7647	>40	3		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647		1		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	13/12/10		
FLUID DEGRADA	TION	method	limit/base	current	history1	histo
Acid Number (AN)	mg KOH/g	ASTM D974*		0.67		
VISUAL		method	limit/base	current	history1	histo
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	histo
Visc @ 40°C	cSt	ASTM D7279(m)	46	43.1		
Visc @ 100°C	cSt	ASTM D7279(m)		7.0		
Viscosity Index (VI)	Scale	ASTM D2270*		121		
SAMPLE IMAGES	6	method	limit/base	current	history1	histo
				002472		
Color					no image	no ima
Datta				6 -3		
Bottom					no image	no ima



Abnorma

_	CALA	Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9				
	Accreditation 196, 100/0719	Sample No.	: E30002472	Received	: 27 Jun 2024		
8	ISO 17025:2017 Accredited Laboratory To discuss this Test denoted (	Lab Number	: 02644348	Tested	: 28 Jun 2024		
*		Unique Number	: 5801887	Diagnosed	: 02 Jul 2024 - Aylwin Lee		
Labora	Laboratory	Test Package	: IND 2 (Additional 7	Fests: KF, KV100, T	AN Man, VI )		
64	To discuss this sample report, contact Customer Service at 1-905-372-2251.						
21	Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.						
24	Validity of resu	Its and interpret	tation are based on th	ne sample and inforr	nation as supplied.		

Environmental 360 Solutions Ltd. 640 Victoria Street Cobourg, ON CA K9A 5H5 Contact: Tatiana Sorkina tsorkina@e360s.ca T: (800)263-3939 F: (905)373-4950

Report Id: CHECOB [WCAMIS] 02644348 (Generated: 07/02/2024 07:18:31) Rev: 1

Contact/Location: Tatiana Sorkina - CHECOB

Page 2 of 2