

OIL ANALYSIS REPORT

Area
Chem-Ecol A2407050

Component
Cutting Fluid

CHEM-ECOL CUTTING OIL 250A (--- GAL)

Sample Rating Trend



Recommendation

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

Wear

Copper and iron ppm levels are noted.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Batch #		Client Info		3140-A		
Department		Client Info		Sales		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		07/10/2024		
Sample Number		Client Info		E30002603		
Sample Date		Client Info		09 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		

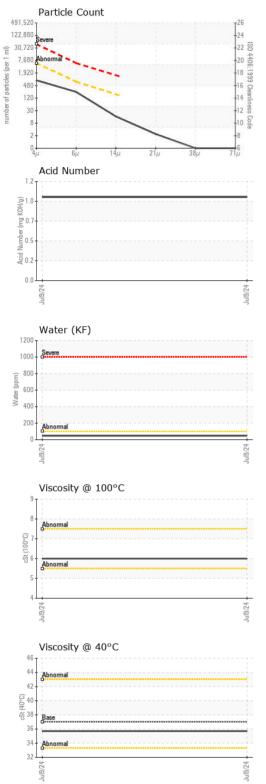
WEAR METALS		method		history2
Iron	ppm	ASTM D5185(m)	13	
Chromium	ppm	ASTM D5185(m)	0	
Nickel	ppm	ASTM D5185(m)	<1	
Titanium	ppm	ASTM D5185(m)	0	
Silver	ppm	ASTM D5185(m)	0	
Aluminum	ppm	ASTM D5185(m)	2	
Lead	ppm	ASTM D5185(m)	6	
Copper	ppm	ASTM D5185(m)	17	
Tin	ppm	ASTM D5185(m)	<1	
Antimony	ppm	ASTM 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)		110		
Calcium	ppm	ASTM D5185(m)		135		
Phosphorus	ppm	ASTM D5185(m)		589		
Zinc	ppm	ASTM D5185(m)		663		
Sulfur	ppm	ASTM D5185(m)		3226		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANT	<u> </u>	mothod	limit/bass	ourront	history	hioton/2

CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		4		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D6304*		0.004		
ppm Water	ppm	ASTM D6304*		47		



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FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	753		
Particles >6µm		ASTM D7647	>640	209		
Particles >14µm		ASTM D7647	>160	14		
Particles >21µm		ASTM D7647	>40	2		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	17/15/11		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		1.01		
VISUAL		method	limit/base	current	history1	history2
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*		NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D7279(m)	37	35.7		
Visc @ 100°C	cSt	ASTM D7279(m)		6.0		
Viscosity Index (VI)	Scale	ASTM D2270*		112		
SAMPLE IMAGES	6	method	limit/base	current	history1	history?
Color					no image	no image
				= =		
				max. 80°C		
Bottom					no image	no image



CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No. Lab Number : 02647490 Unique Number : 5813042

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : E30002603 Received : 11 Jul 2024

Tested : 12 Jul 2024 Diagnosed : 15 Jul 2024 - Tatiana Sorkina

Test Package : IND 2 (Additional Tests: KV100, PrtCount, TAN Man, VI) To discuss this sample report, contact Customer Service at 1-905-372-2251.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Environmental 360 Solutions Ltd.

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