

TOC OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id

TOCAW46ZF-031824 - HYDRAULIC OIL

Component New (Unused) Oil Fluid

{not provided} (--- GAL)

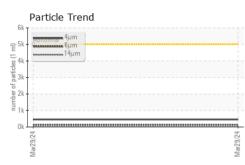
Recommendation

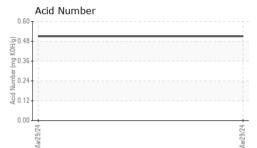
This is a baseline read-out on the submitted sample.

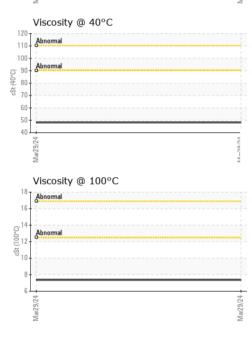
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TOC06136718		
Sample Date		Client Info		29 Mar 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	0		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>5	0		
Aluminum	ppm	ASTM D5185m	>5	0		
Lead	ppm	ASTM D5185m	>5	0		
Copper	ppm	ASTM D5185m	>5	0		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m		0		
Phosphorus	ppm	ASTM D5185m		424		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		2208		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0		
Sodium	ppm	ASTM D5185m		1		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304		NEG		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	456		
Particles >6µm		ASTM D7647	>1300	129		
Particles >14µm		ASTM D7647	>160	14		
Particles >21µm		ASTM D7647	>40	6		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/14/11		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.51		



OIL ANALYSIS REPORT







	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		
Mar29/24	Appearance	scalar	*Visual	NORML	NORML		
Marź	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual		NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D445		48.17		
	Visc @ 100°C	cSt	ASTM D445		7.36		
	Viscosity Index (VI)	Scale	ASTM D2270		114		
				11			
Mar29/24 -	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Mai2	Color					no image	no image
-	Bottom					no image	no image
	GRAPHS			•			
	Ferrous Alloys				Particle Count		
				491,5	20		ľ
. U. U.	8 iron			122,8	80 -		-2
	E 4			30,7	Severe		
	2						
	24			7.6 E	80 Abnormal		
	Mar29/24			Mar29/24 (per 1 ml	20		-1
	∠ Non-ferrous Meta	le		ticles A	80		1
	¹⁰ T			of pa			+1
	8 - copper			1 number	20-		-1
	E 6				30-		-1
Mar29/24	2				8		-1
War						1	
	Mar29/24			Mar29/24	2-		
				Mar	0411 611	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Number	ι τ _μ ε Ζ Ιμί	ουμ Πμ
	120 Abnormal			.0. .0. .0. .0.	⁶⁰ T		
	ာ ¹⁰⁰ Abnormal			Q Q.	48		
	2100 Abnomal			-0. 	3b 24		
	60-			O did Number	12		
	40			Acid	00		
	Mar29/24			Mar29/24	Mar29/24		
	Mai			Mai	Mai		
Laboratory Sample No. Lab Number Unique Number		Rece Teste Diagr	ived : 02 ed : 05	2 Apr 2024 5 Apr 2024 Apr 2024 - Jona	athan Hester		Iomas oil () Rj Parkw Franklin, US 461

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: RANDY BROWN - THOFRA

F: