

## **OIL ANALYSIS REPORT**



### Machine Id Component Hydraulic System Fluid BIO FLO HDFU 46 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

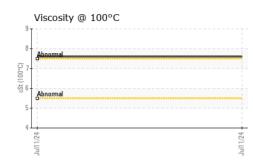
#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

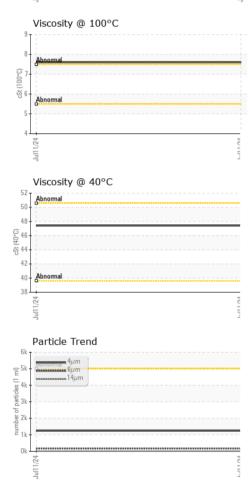
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO60002685		
Sample Date		Client Info		11 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m	0	0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead		ASTM D5185m	>20	0		
	ppm	ASTM D5185m		۰ <1		
Copper Tin	ppm	ASTM D5185m ASTM D5185m	>20	<1 0		
	ppm		>20			
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		1		
Calcium	ppm	ASTM D5185m		93		
Phosphorus	ppm	ASTM D5185m		324		
Zinc	ppm	ASTM D5185m		525		
Sulfur	ppm	ASTM D5185m		883		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.05	NEG		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1239		
Particles >6µm		ASTM D7647	>1300	171		
Particles >14µm		ASTM D7647	>160	13		
Particles >21µm		ASTM D7647	>40	3		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.45		



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	VISUAL		method	limit/base			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		
/24	Appearance	scalar	*Visual	NORML	NORML		
Jul11/24	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
	Free Water	scalar	*Visual	20.00	NEG		
	FLUID PROPERT			limit/boog			
			method	limit/base		history1	history2
	Visc @ 40°C	cSt	ASTM D445		47.4		
	Visc @ 100°C	cSt	ASTM D445		7.6		
	Viscosity Index (VI)	Scale	ASTM D2270		126		
24	SAMPLE IMAGES	5	method	limit/base	e current	history1	history2
	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				Particle Count		
C 1 1				491,5	520 T		[ <sup>2</sup>
-	8 iron			122,8	380 -		-2
	a 4			30,7	Severe		-2
	2 -				/20		T <sup>2</sup>
	0 2 2			54 E 7,6	680 Abnormal		-2
	Jul11/24			Juli 1/24 particles (per 1 ml)	920-		-11
				J (cles			
	Non-ferrous Metal	S		f parti	+80-		-1
	8 copper			ther of	120-		-1
	E 6 - sessesses lead			number	30-		-1
N CI 1	4						
	2				8-		
	1/24			1/24	2-		-8
	Jul11/24			Jul 1	0		
,	Viscosity @ 40°C				Acid Number	4μ 21μ	38µ 71µ
	55 T			(P) 0	.50 T		
5	_ 50 Abnormal			(mg KOH/g)	.40		
0.00V	50 + <b>P</b> 000000000000000000000000000000000000			Ĕ0	.30		
	a Abnormal			0 Number (	.20		
	35			Acid N	.00		
5	Jul11/24			Jul11/24	Jul11/24		
C. 1 1	Jull			llul	Jult		
		1 Madiso	n Ave Carv	, NC 27513	}	DICKSON TE	STING CO IN
Sample No. : Lab Number : Unique Number :	11127960 IND 2 ( Additional Tes	Recei Teste Diagn ts: KF, K	ved : 17 d : 19 iosed : 19 V100, VI)	' Jul 2024 ) Jul 2024 Jul 2024 - Do	on Baldridge	SO	6 PALMER A\ UTH GATE, C US 9020 JESUS ZAVAL

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

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Contact/Location: JESUS ZAVALA - DICSOUTO

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