

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id LIEBHERR 39 Component Hydraulic System

CONOCO MEGAFLOW AW 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 INFOR	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PE0003211				
Sample Date		Client Info		11 Jun 2024				
Machine Age	hrs	Client Info		19410				
Oil Age	hrs	Client Info		500				
Oil Changed		Client Info		N/A				
Sample Status				NORMAL				
CONTAMINATION		method	limit/base	current	history1	history2		
Water		WC Method	>0.1	NEG				
WEAR METALS		method	limit/base	current	history1	history2		
PQ		ASTM D8184		18				
Iron	ppm	ASTM D5185m	>20	<1				
Chromium	ppm	ASTM D5185m	>10	0				
Nickel	ppm	ASTM D5185m	>10	0				
Titanium	ppm	ASTM D5185m		<1				
Silver	ppm	ASTM D5185m		0				
Aluminum	ppm	ASTM D5185m	>10	0				
Lead	ppm	ASTM D5185m	>10	0				
Copper	ppm	ASTM D5185m	>75	3				
Tin	ppm	ASTM D5185m	>10	0				
Vanadium	ppm	ASTM D5185m		<1				
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		<1				
Manganese	ppm	ASTM D5185m		0				
Magnesium	ppm	ASTM D5185m		0				
Calcium	ppm	ASTM D5185m		103				
Phosphorus	ppm	ASTM D5185m		371				
Zinc	ppm	ASTM D5185m		266				
Sulfur	ppm	ASTM D5185m		1512				
CONTAMINANT	S	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>20	<1				
Sodium	ppm	ASTM D5185m		2				
Potassium	ppm	ASTM D5185m	>20	0				
FLUID CLEANLI	NESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>20000	783				
Particles >6µm		ASTM D7647	>5000	323				
Particles >14µm		ASTM D7647	>640	40				
Particles >21µm		ASTM D7647	>160	10				
Particles >38µm		ASTM D7647	>40	1				
				-				

ASTM D7647 >10

ISO 4406 (c) >21/19/16

0

17/16/12

Particles >71µm

Oil Cleanliness



OIL ANALYSIS REPORT

250 т	PQ	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
200	Severe	Acid Number (AN)	mg KOH/g	ASTM D8045	0.38	0.30		
150-		VISUAL		method	limit/base	current	history1	history2
문 100-	Abnormal	White Metal	scalar	*Visual	NONE	NONE		
50-		Yellow Metal	scalar	*Visual	NONE	NONE		
0		Precipitate	scalar	*Visual	NONE	NONE		
0-	Jun11/24 -	Silt	scalar	*Visual	NONE	NONE		
	Jun	Debris	scalar	*Visual	NONE	LIGHT		
	Particle Trend	Sand/Dirt	scalar	*Visual	NONE	NONE		
25k	4μm	Appearance	scalar	*Visual	NORML	NORML		
Ê 20k	Ahnamala, 6μm	Odor Emulsified Water	scalar scalar	*Visual *Visual	NORML	NORML NEG		
1 [) səj 15k -		Free Water	scalar	*Visual	>0.1	NEG		
jo 10k -		FLUID PROPER		method	limit/base		history1	history2
jaq min 5k -		Visc @ 40°C	cSt	ASTM D445	46	current 42.0	nistoryi	nistoryz
Ok	4- 							
	Jun 11/24	SAMPLE IMAGE	5	method	limit/base	current	history1	history2
52 50	Viscosity @ 40°C Abnormal	Color				a.	no image	no image
48 - (Jo 46 - tz 44 - 42 -	Base	Bottom					no image	no image
40 38	Abnormal	GRAPHS						
	Jun11/24	Ferrous Alloys				Particle Count		11.227
	ی PQ	E 5			491,520 122,880 30,720	Severe Abnormal		-26 -24 -22
200 - 150 - 문	Severe	Jun11/24			7,680 (m 1,920 1,920 480			-20 ISO 4406-1999 Cleantiness -18 -1999 Cleantiness -16 -114 -114
100-		Non-ferrous Meta	ls					-16 Clear
50-		copper			ja 120			-14 Iness
01	24	톱 5 - tin tin			an 19			-12 6
	Jun 11/24				8			+10
		74 L 0		**********************	47 2		/	
^{25k} T	Particle Trend	Jun11/2 ⁴			2/11unf			
〒20k	Abnormat. 6µm	Viscosity @ 40°C			4	ہوں Acid Number	14μ 21μ	38µ 71µ
u [] sapitized jo 10k - jo 10k - 5k -	14µm	55 Abnormal			(B) 0.40 (B) 0.30 B) 0.20 aquino 0.20 MU	Base		
ta 10L		50 - Base 6 - 45 - Base 7 45 - Abnormal			¥ 0.30			
mper		40 Abnomal			5 U.20			
		35						
0k I	1/24	Jun 11/24			Jun11/24	Jun11/24		Jun11/24
	Jun11/24	٦r			ηſ	٦u		μh
	Laboratory Sample No. Lab Number Unique Number Unique Number To discuss this sample report * - Denotes test methods that Statements of conformity to sp	: 11076116 : CONST (Additional ⁻ , contact Customer Serv are outside of the ISO	Rece Teste Diagr Tests: ICF vice at 1-8 17025 sco	ived : 13 id : 14 nosed : 15 P, KV40, PQ, 800-237-1369 ope of accrea	3 Jun 2024 Jun 2024 Jun 2024 - Don PrtCount, SC 9. <i>litation.</i>	REEN)	333 RONI Contact: CH chaddawson@s	NELL CRANE LEE LANE NW OLYMPIA, WA US 98502 IAD DAWSON snellcrane.com T: F:

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