

OIL ANALYSIS REPORT







Machine Id Component **Refrigeration Compressor** Eluid CAMCO 717 HT (130 GAL)

DIAGNOSIS

A Recommendation

We advise an early resample to confirm this situation.

A Wear

The iron level is abnormal.

Contamination

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

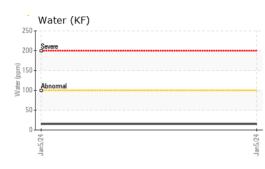
Fluid Condition

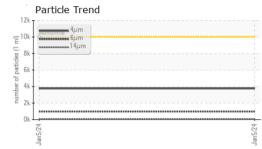
The AN level is above the recommended limit. Confirmed. Confirm oil type.

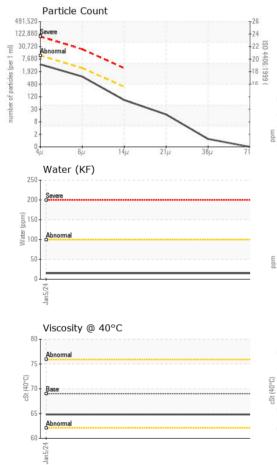
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0005259		
Sample Date		Client Info		05 Jan 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	4 7		
Chromium	ppm	ASTM D5185m	>2	0		
Nickel	ppm	ASTM D5185m		<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>3	<1		
Lead	ppm	ASTM D5185m	>2	0		
Copper	ppm	ASTM D5185m	>8	0		
Tin	ppm	ASTM D5185m	>4	<1		
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		0		
Magnesium	ppm	ASTM D5185m		2		
Calcium	ppm	ASTM D5185m		2		
Phosphorus	ppm	ASTM D5185m		54		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		248		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	1		
Water	%	ASTM D6304	>0.01	0.001		
ppm Water	ppm	ASTM D6304	>100	15		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	3762		
Particles >6µm		ASTM D7647	>2500	978		
Particles >14µm		ASTM D7647	>320	73		
Particles >21µm		ASTM D7647	>80	15		
Particles >38µm		ASTM D7647	>20	1		
Particles >71µm		ASTM D7647	>4	0		
Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/17/13		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.007	0.587		



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar '	Visual	NONE	NONE		
	Yellow Metal		*Visual	NONE	NONE		
	Precipitate		*Visual	NONE	NONE		
	Silt		*Visual	NONE	NONE		
	Debris	scalar '	*Visual	NONE	NONE		
	Sand/Dirt		*Visual	NONE	NONE		
Jan 5/24	Appearance	scalar '	*Visual	NORML	NORML		
	Odor	scalar '	*Visual	NORML	NORML		
	Emulsified Water	scalar '	*Visual	>0.01	NEG		
	Free Water	scalar '	*Visual		NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt /	ASTM D445	69	64.8		
	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Jan5,24	Color					no image	no image
26 -24 -22 52 -20 €	Bottom					no image	no image
+20 06:1999 -18 1999 -16 0	GRAPHS						
	A Ferrous Alloys				Particle Count		114
	50 iron			491,520	I		T ²
	40 chromium			122,880	Severe		-2
udd udd	20-			30,720			+2
21µ 38µ 71	10-			55,720	Abnormal		Z
				7,680	·		-2
	Jan5/24			Jan5/24 (per 1 ml)	\sim	•	1
				1202 420 420	1.		-2 -1 -1 -1 -1 -1
	Non-ferrous Metals	S		pitted 480			-1
	10 copper			jo jaj 120			+1
	0 - according lead						-1
E dd	4			30	-		-1
	2				-		-1
	0					1	
	Jan5/24			Jan5/24	•		
	ra P			۳ ۵	4μ 6μ 1	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Number	η <i>κ</i> 2.1μ	ουμ 11μ
	Abnormal			€0.60			
0	/5+			(B)HO3 0.48 (B)HO3 0.48 (B) 0.36 (B) 0.24 (B) 0.36 (B) 0.24 (B) 0.24 (B) 0.24 (B) 0.24 (B) 0.24 (B) 0.24 (B) 0.24 (B) 0.48 (B) 0.	+		
cSt (40°C)	70 - Base			Ē 0.36 ق			
	65 -			4 0.24			
	Abnormal				Base		
	Jan5/24			Jan5/24	Jan 5/24		
Sample No.	: WearCheck USA - 5 : USP0005259 F : 06058124 C	01 Madisc Recieved Diagnosec Diagnostic	:11. 1:18.	ry, NC 27513 Jan 2024 Jan 2024			AKE CRYST 200 499TH AV CRYSTAL, M US 5603

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

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