

# **OIL ANALYSIS REPORT**

### Sample Rating Trend





#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

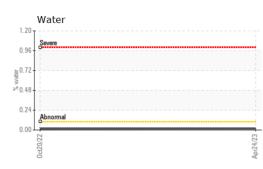
## Fluid Condition

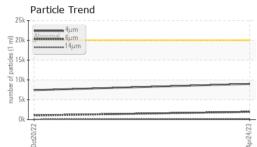
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

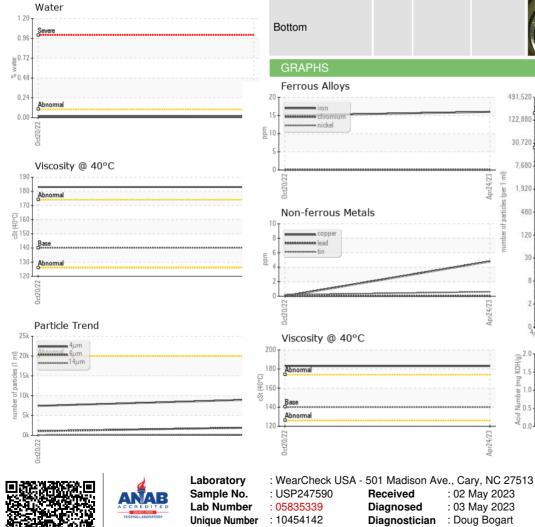
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP247590	USP234450	
Sample Date		Client Info		24 Apr 2023	20 Oct 2022	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	16	15	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	<1	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>100	0	0	
Copper	ppm	ASTM D5185m		5	0	
Tin	ppm	ASTM D5185m	>10	۲ ۲	<1	
Vanadium	ppm	ASTM D5185m	210	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	150	159	160	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		2	2	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	10	<1	0	
Calcium	ppm	ASTM D5185m	70	5	6	
Phosphorus	ppm	ASTM D5185m	2000	1011	989	
Zinc	ppm	ASTM D5185m	50	33	32	
Sulfur	ppm	ASTM D5185m	20000	18106	21487	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	19	15	
Sodium	ppm	ASTM D5185m		4	5	
Potassium	ppm	ASTM D5185m	>20	6	2	
Water	%	ASTM D6304	>0.1	0.017	0.016	
ppm Water	ppm	ASTM D6304	>1000	179.0	161.8	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	8994	7432	
Particles >6µm		ASTM D7647	>5000	1948	1051	
Particles >14µm		ASTM D7647	>640	199	69	
Particles >21µm		ASTM D7647	>160	54	16	
Particles >38µm		ASTM D7647	>40	6	0	
Particles >71µm		ASTM D7647	>10	0	0	
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/18/15	20/17/13	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		1.68	1.77	



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	140	183	183	
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color						no image
Bottom						no image
GRAPHS						
Ferrous Alloys			491,52	Particle Coun	t	т26
iron			101,02	Severe		120
nickel			122,88	0		-24
•			30,72	0 Abnormal		-22
			7.00			
	******	***********	7,68 E		<b>`</b>	-20 -20 -20 -20 -20 -20 -20 -20 -20 -20
0ct20/22			Apr24/23 (per 1 ml			-18 5
Non-ferrous Meta	le		V saloiti 48		<b>*</b>	+18 0 +18 0 +16 0 +14 0 -14 0 -12 0
			of par			
copper			Apr24/23 164 1 ml) 172 173	0-		-14 6
tin				0-		-12
				8-		-10
0ct20/22			Apr24/23	2 -		
			Apri	0	14. 21.	28
Viscosity @ 40°C				<sup>6</sup> نه Acid Number	14µ 21µ	38µ 71µ
I []			(B/H	0		1
D - Abnormal			Q 1.	5		
0-			Le la	0-		
Base	*****	******	.1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	5		
Abnormal						
22			33	22		2

Apr24/23 -

: 02 May 2023

: 03 May 2023

Diagnostician : Doug Bogart

KraftHeinz - Mason City - Plant 8360 1022 12TH ST MASON CITY, IA US 50401 Contact: Service Manager

Test Package : IND 2 To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Received

Diagnosed

Apr24/23 -

Certificate L2367

Contact/Location: Service Manager - KRAMASIOW

T: F: (641)421-2936