

OIL ANALYSIS REPORT

Area [604347836 SR] K REFINER 5 (S/N 20061348)

Hydraulic System

AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

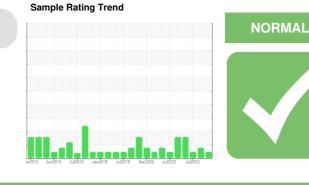
All component wear rates are normal.

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.



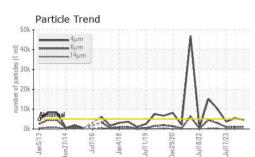
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0854396	WC0854147	WC0605540	
Sample Date		Client Info		28 Jun 2024	14 Dec 2023	17 Jul 2023	
Machine Age	hrs	Client Info		0	0	0	
Oil Age	hrs	Client Info		0	0	0	
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd	
Sample Status				NORMAL	ATTENTION	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2	
Water		WC Method	>0.05	NEG	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<1	0	0	
Chromium	ppm	ASTM D5185m	>20	0	0	0	
Nickel	ppm	ASTM D5185m	>20	0	<1	0	
Titanium	ppm	ASTM D5185m		0	0	<1	
Silver	ppm	ASTM D5185m		0	0	<1	
Aluminum	ppm	ASTM D5185m	>20	0	<1	<1	
Lead	ppm	ASTM D5185m	>20	0	0	0	
Copper	ppm	ASTM D5185m	>20	0	0	<1	
Tin	ppm	ASTM D5185m	>20	0	0	0	
Vanadium	ppm	ASTM D5185m		0	0	<1	
Cadmium	ppm	ASTM D5185m		0	0	<1	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	0	0	0	
Barium	ppm	ASTM D5185m	5	0	0	0	
Molybdenum	ppm	ASTM D5185m	5	0	0	0	
Manganese	ppm	ASTM D5185m		0	<1	<1	
Magnesium	ppm	ASTM D5185m	25	<1	1	1	
Calcium	ppm	ASTM D5185m	200	3	6	2	
Phosphorus	ppm	ASTM D5185m	300	199	214	285	
Zinc	ppm	ASTM D5185m	370	<1	4	66	
Sulfur	ppm	ASTM D5185m	2500	2148	1902	2267	
CONTAMINANTS	\$	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	1	2	<1	
Sodium	ppm	ASTM D5185m		<1	0	0	
Potassium	ppm	ASTM D5185m	>20	0	1	<1	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647	>5000	4661	5367	3735	
Particles >6µm		ASTM D7647	>1300	1128	941	953	
Particles >14µm		ASTM D7647	>160	53	23	46	
Particles >21µm		ASTM D7647	>40	10	10	9	
Particles >38µm		ASTM D7647	>10	3	2	1	
Particles >71µm		ASTM D7647	>3	0	0	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	20/17/12	19/17/13	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.85	0.80	0.67	
1.26.04) Boy: 1	- 0	Contact/Location: TONY FIORE - MARSCHI					

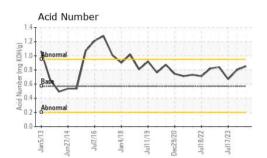
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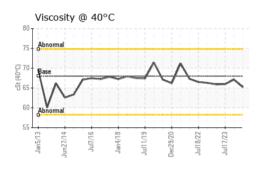
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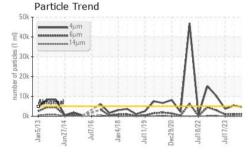


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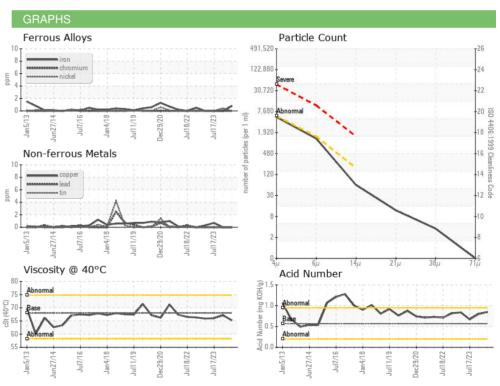








VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	65.2	67.1	66.0
SAMPLE IMAGES	\$	method	limit/base	current	history1	history2
Color						
Bottom						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 MARS CHOCOLATE Sample No. : WC0854396 Received : 16 Jul 2024 2019 NORTH OAK PARK Lab Number : 06237739 Tested : 17 Jul 2024 CHICAGO, IL US 60707 Unique Number : 11126573 Diagnosed : 18 Jul 2024 - Jonathan Hester Test Package : IND 2 Contact: TONY FIORE Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tony.fiore@effem.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (773)745-2279 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

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