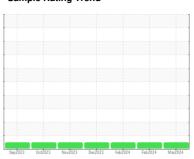


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

500044479

Component

Reservoir Hydraulic System

Fluid

BRAYCO (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

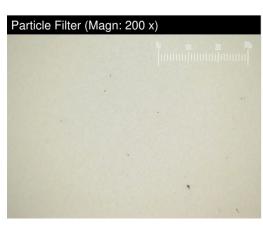
Contamination

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.

		Sep2023	Oct2023 Nov2023	Dec2023 Feb2024 Feb2024	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PH0002581	PH0001314	PH0002580
Sample Date		Client Info		28 Mar 2024	27 Feb 2024	01 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	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	0	0	0
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	1	0	<1
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>20	0	0	0
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		79	0	0
Barium	ppm	ASTM D5185m		0	21	0
Molybdenum	ppm	ASTM D5185m		19	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		100	0	1
Calcium	ppm	ASTM D5185m		1224	0	2
Phosphorus	ppm	ASTM D5185m		564	659	703
Zinc	ppm	ASTM D5185m		561	0	0
Sulfur	ppm	ASTM D5185m		1923	29	4
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	5	0	<1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	1	0	2
FLUID CLEANLIN	IESS _	method	limit/base	current	history1	history2



Silicon	ppm	ASTM D5185m	>15	5	0	<1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	1	0	2
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	804	392	173
Particles >6µm		ASTM D7647	>1300	180	114	81
Particles >14μm		ASTM D7647	>160	13	11	14
Particles >21µm		ASTM D7647	>40	4	3	5
Particles >38μm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11	16/14/11	15/14/11
FLUID DEGRADATION		method	limit/base	current	history1	history2

Acid Number (AN)

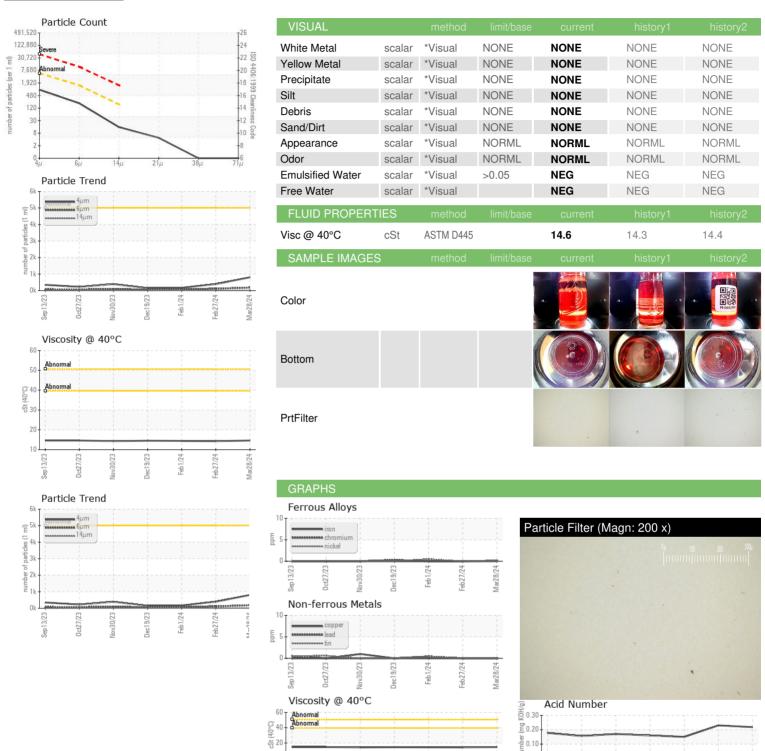
mg KOH/g ASTM D8045

.218

0.23 0.15



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PH0002581

Lab Number : 06133749 Unique Number: 10953214

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Diagnosed Test Package: PLANT (Additional Tests: PrtFilter)

Received

Tested

* - 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)

WOODWARD INC - DRAKE

1000 E DRAKE RD FORT COLLINS, CO

US 80525 Contact: ALMA TOVAR

alma.tovar@woodward.com

T: F:

0.00

: 29 Mar 2024

: 03 Apr 2024

: 03 Apr 2024 - Jonathan Hester