



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
54481 - ABC MINNEAPOLIS
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0803570	WC0646162	WC0689668
Sample Date		Client Info		05 Jun 2023	11 Oct 2022	07 Jun 2022
Machine Age	mls	Client Info		61756	0	36643
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	4	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	3	2	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	<1	1	1
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

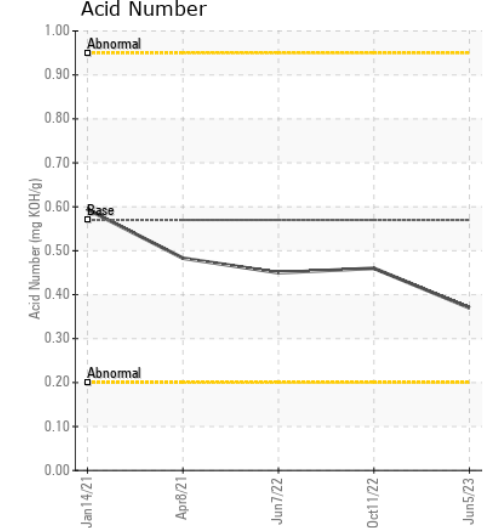
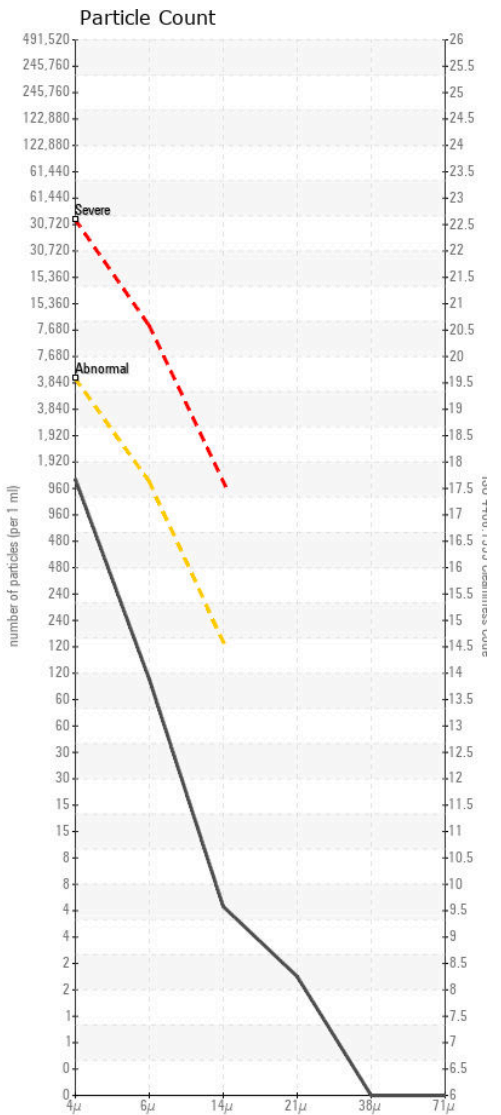
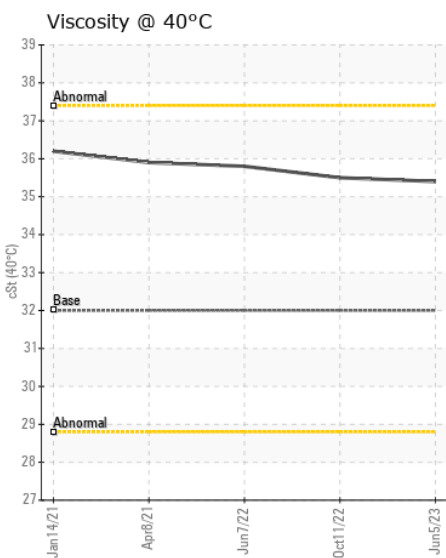
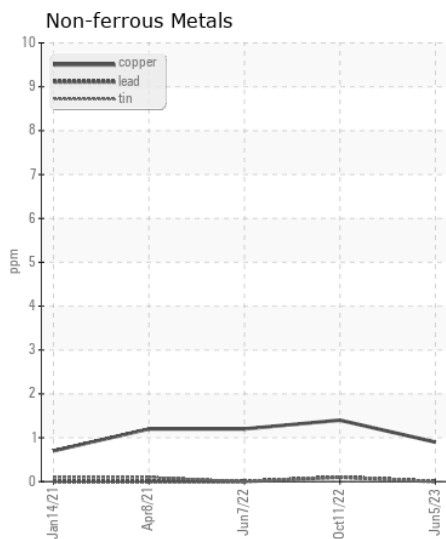
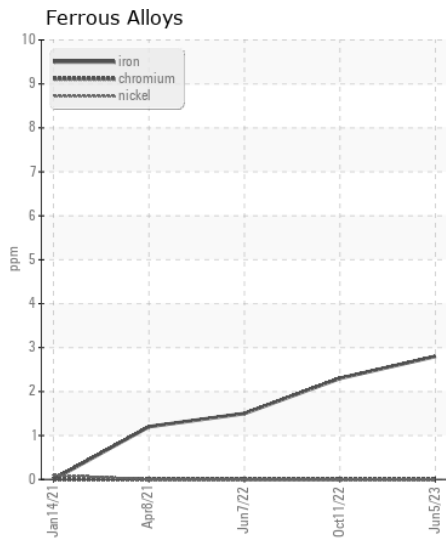
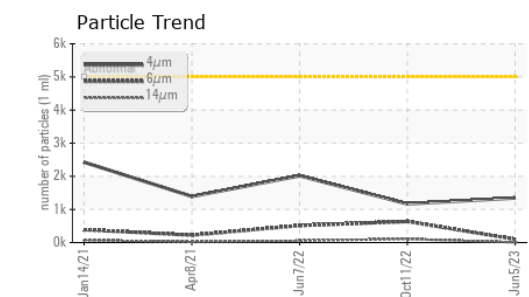
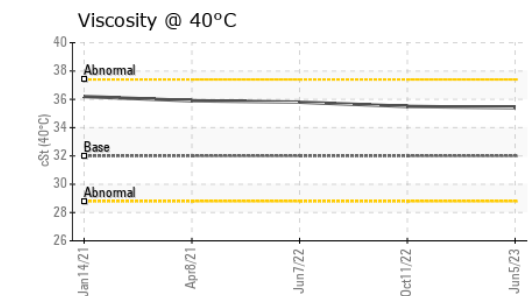
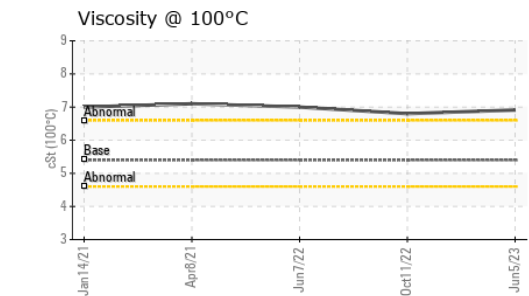
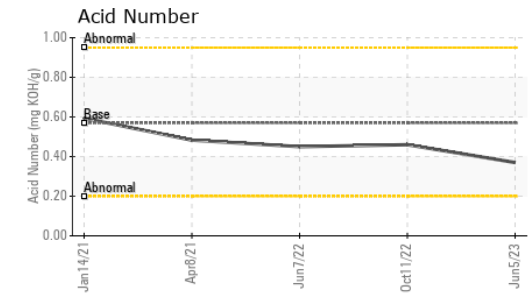
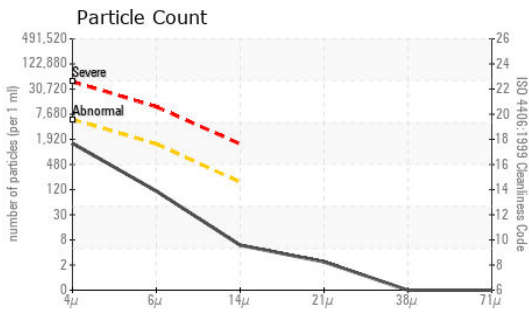
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	<1	0
Potassium	ppm	ASTM D5185m	>20	0	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	1345	1168	2017
Particles >6µm		ASTM D7647	>1300	98	636	515
Particles >14µm		ASTM D7647	>160	5	108	54
Particles >21µm		ASTM D7647	>40	2	36	13
Particles >38µm		ASTM D7647	>10	0	6	2
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/14/10	17/16/14	18/16/13
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	▲ MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	<1
Boron	ppm	ASTM D5185m	5	0	0	2
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	25	0	<1	0
Calcium	ppm	ASTM D5185m	200	86	44	49
Phosphorus	ppm	ASTM D5185m	300	361	359	369
Zinc	ppm	ASTM D5185m	370	479	462	457
Sulfur	ppm	ASTM D5185m	2500	5171	5865	5968
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.37	0.46	0.45
Visc @ 40°C	cSt	ASTM D445	32	35.4	35.5	35.8
Visc @ 100°C	cSt	ASTM D445	5.4	6.91	6.8	7
Viscosity Index (VI)	Scale	ASTM D2270	102	159	153	160



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0803570 **Received** : 27 Jun 2023
Lab Number : 05885111 **Diagnosed** : 03 Jul 2023
Unique Number : 10535594 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KV100, V1)

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)

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