



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
BIG DIPPER
Component
Main Hydraulic System
Fluid
ATF (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0057219	MW0065029	MW0052220
Sample Date		Client Info		21 May 2024	01 Feb 2024	11 Jul 2023
Machine Age	hrs	Client Info		0	29625	27426
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	4	6	2
Chromium	ppm	ASTM D5185m	>10	<1	1	1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	▲ MODER	NONE

CONTAMINATION

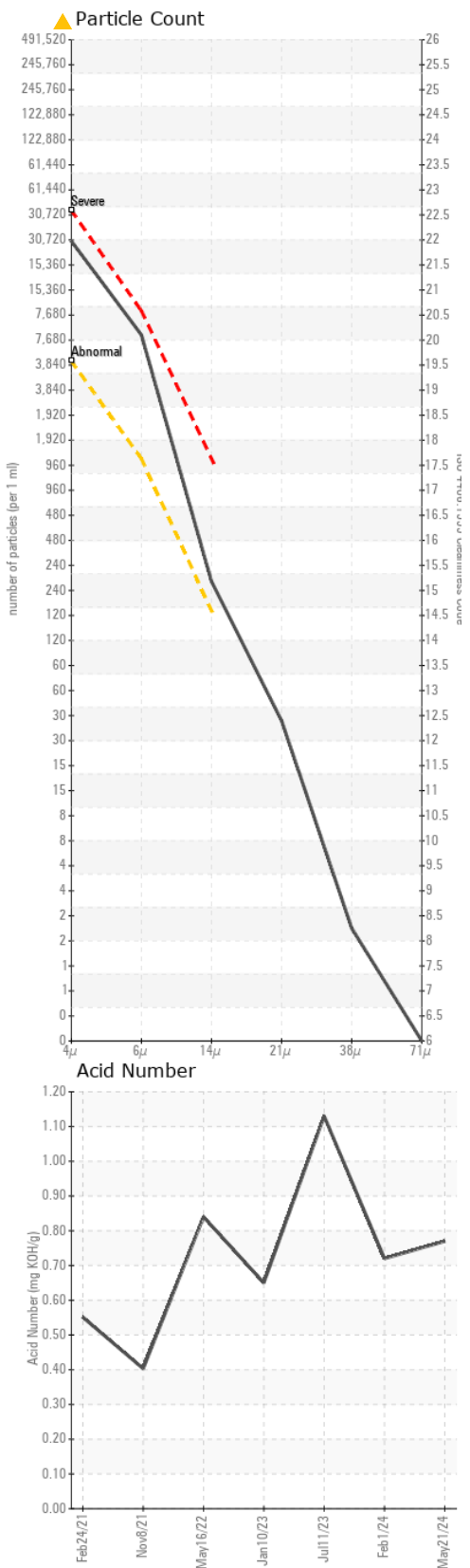
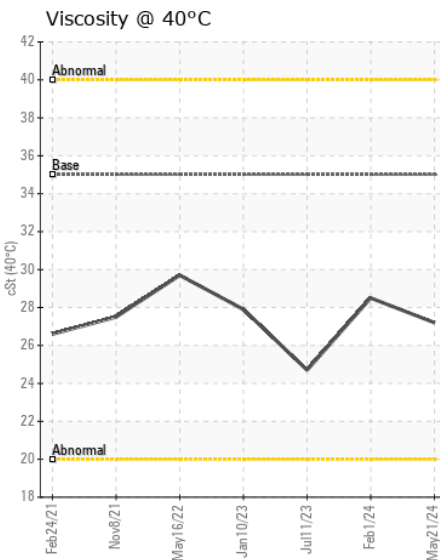
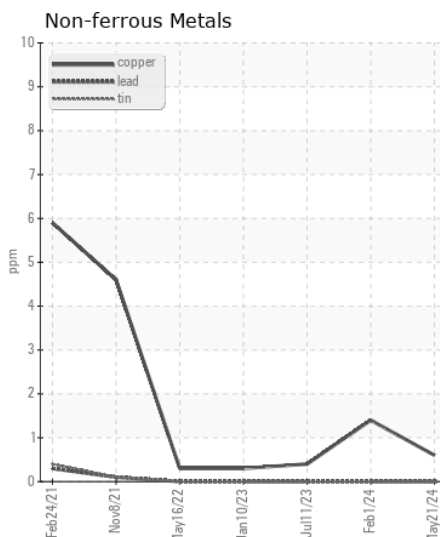
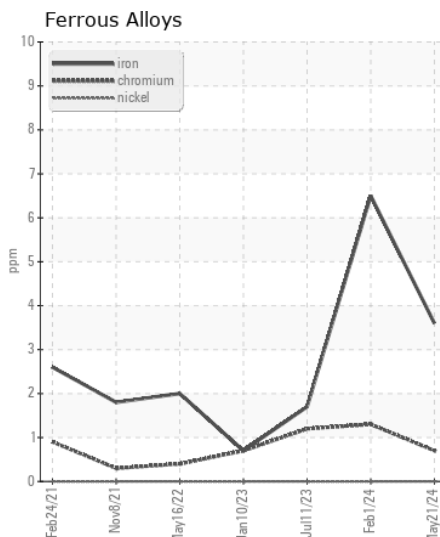
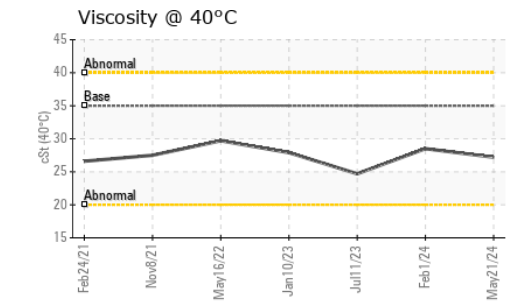
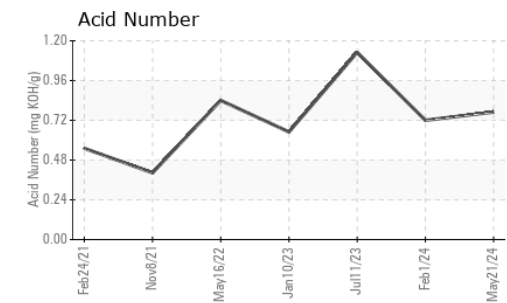
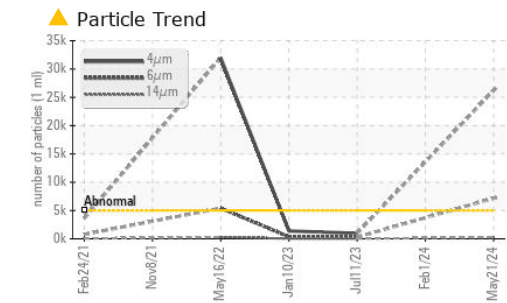
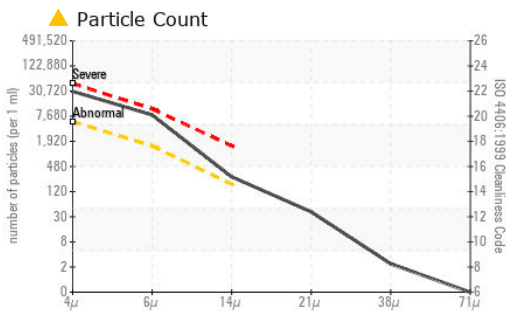
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>15	12	3	2
Potassium	ppm	ASTM D5185m	>20	2	2	0
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 26185	---	978
Particles >6µm		ASTM D7647	>1300	▲ 7169	---	284
Particles >14µm		ASTM D7647	>160	▲ 239	---	20
Particles >21µm		ASTM D7647	>40	35	---	5
Particles >38µm		ASTM D7647	>10	2	---	1
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/15	---	17/15/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	5	3
Boron	ppm	ASTM D5185m		54	82	50
Barium	ppm	ASTM D5185m		91	114	97
Molybdenum	ppm	ASTM D5185m		3	3	5
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		<1	1	<1
Calcium	ppm	ASTM D5185m		16	40	30
Phosphorus	ppm	ASTM D5185m		157	204	171
Zinc	ppm	ASTM D5185m		28	27	26
Sulfur	ppm	ASTM D5185m		618	825	776
Acid Number (AN)	mg KOH/g	ASTM D8045		0.77	0.72	1.13
Visc @ 40°C	cSt	ASTM D445	35.0	27.2	28.5	24.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0057219
Lab Number : 06214614
Unique Number : 11087478
Test Package : MAR 2

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 P.O. BOX 2889
 ST. LOUIS, MO
 US 63111
 Contact: BRIAN GRIEWING
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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)