



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
TWIN DISC MV JL BRADEN
Component
Port Reduction Gear
Fluid
VALVOLINE 15W40 (4 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0045607	MW0039003	MW0039160
Sample Date		Client Info		10 Jan 2024	30 Aug 2023	29 Jul 2022
Machine Age	hrs	Client Info		39217	37291	31164
Oil Age	hrs	Client Info		0	2000	1000
Filter Age	hrs	Client Info		0	2000	1000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<1	15	7
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	7
Aluminum	ppm	ASTM D5185m	>25	4	4	3
Lead	ppm	ASTM D5185m	>100	0	0	1
Copper	ppm	ASTM D5185m	>50	51	▲ 183	▲ 74
Tin	ppm	ASTM D5185m	>10	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

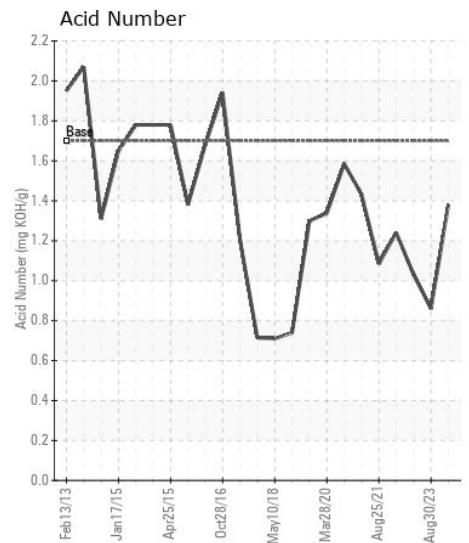
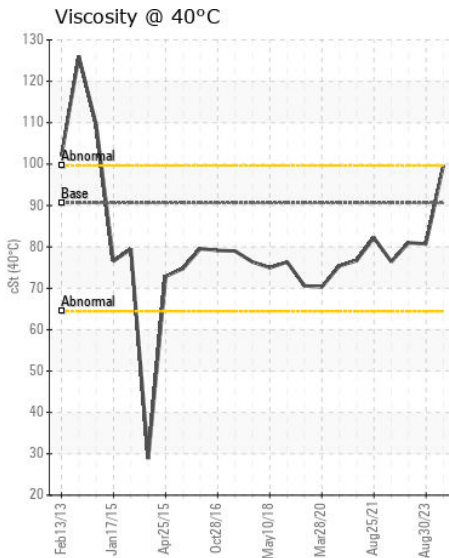
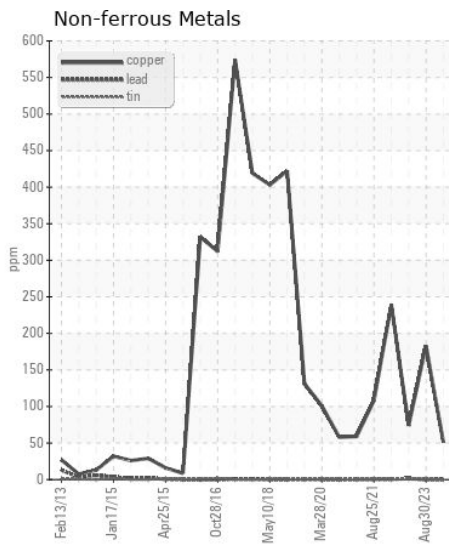
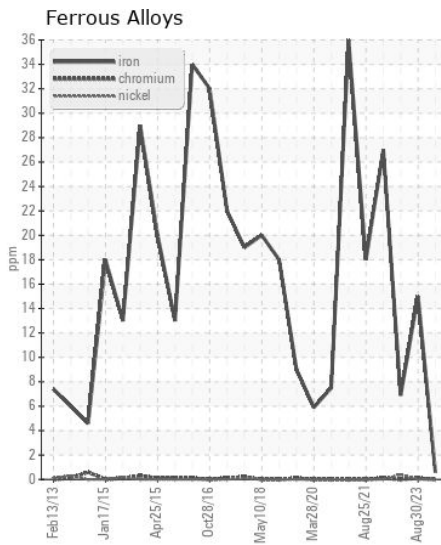
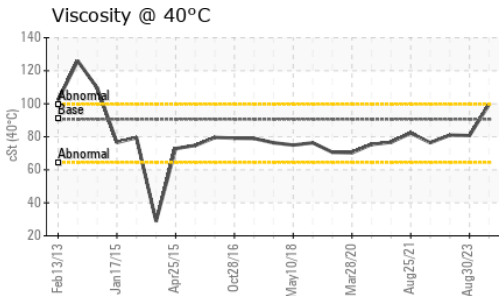
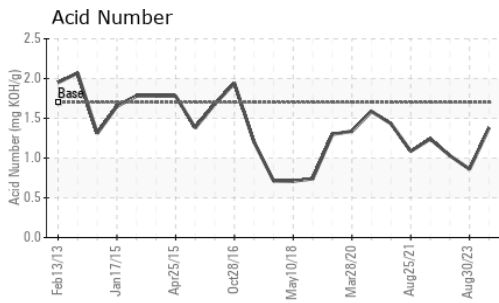
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	5	7	5
Potassium	ppm	ASTM D5185m	>20	0	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	▲ MODER
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	>0.1	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		0	1	2
Boron	ppm	ASTM D5185m	39	355	499	373
Barium	ppm	ASTM D5185m	1	0	2	8
Molybdenum	ppm	ASTM D5185m	49	117	159	131
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	616	645	790	640
Calcium	ppm	ASTM D5185m	1554	1417	2067	1446
Phosphorus	ppm	ASTM D5185m	899	690	976	683
Zinc	ppm	ASTM D5185m	1069	814	1076	811
Sulfur	ppm	ASTM D5185m	2624	2372	3674	2919
Acid Number (AN)	mg KOH/g	ASTM D8045	1.7	1.38	0.86	1.03
Visc @ 40°C	cSt	ASTM D445	90.6	99.7	80.7	81.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0045607 **Received** : 16 Jan 2024
Lab Number : 06062129 **Diagnosed** : 18 Jan 2024
Unique Number : 10833511 **Diagnostician** : Don Baldrige
Test Package : MAR 2

C & B MARINE
 50 E RIVERCENTER BLVD, SUITE 1180
 COVINGTON, KY
 US 41011
 Contact: DAVID WESTRICH
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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)