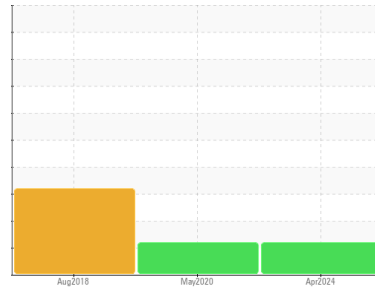




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**IMM229 (S/N S81114007K1)**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE 10 EXCEL 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

The copper level is abnormal. All other component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0805802</b>	WC0409234	WCI2331457
Sample Date	Client Info		<b>26 Apr 2024</b>	04 May 2020	05 Aug 2018
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>9</b>	4	3
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>▲ 22</b>	<b>▲ 36</b>	<b>▲ 42</b>
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m	<b>21</b>	19	16
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>104</b>	105	90
Phosphorus	ppm	ASTM D5185m	<b>430</b>	405	365
Zinc	ppm	ASTM D5185m	<b>53</b>	39	59
Sulfur	ppm	ASTM D5185m	<b>1609</b>	1320	2057

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	<1

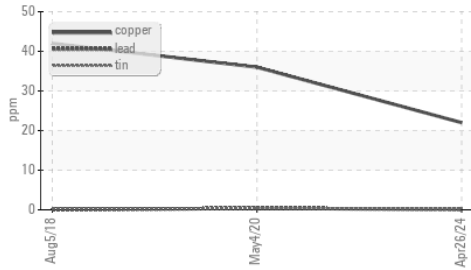
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>---</b>	---	<b>▲ 19291</b>
Particles >6µm	ASTM D7647	>1300	<b>---</b>	---	<b>▲ 4651</b>
Particles >14µm	ASTM D7647	>160	<b>---</b>	---	<b>▲ 685</b>
Particles >21µm	ASTM D7647	>40	<b>---</b>	---	<b>▲ 241</b>
Particles >38µm	ASTM D7647	>10	<b>---</b>	---	<b>▲ 17</b>
Particles >71µm	ASTM D7647	>3	<b>---</b>	---	<b>0</b>
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>---</b>	---	<b>▲ 21/19/17</b>

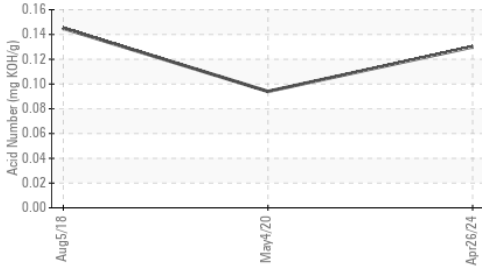


# OIL ANALYSIS REPORT

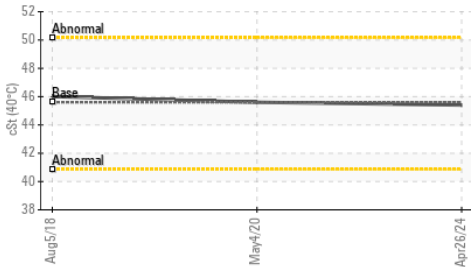
### ▲ Non-ferrous Metals



### Acid Number



### Viscosity @ 40°C

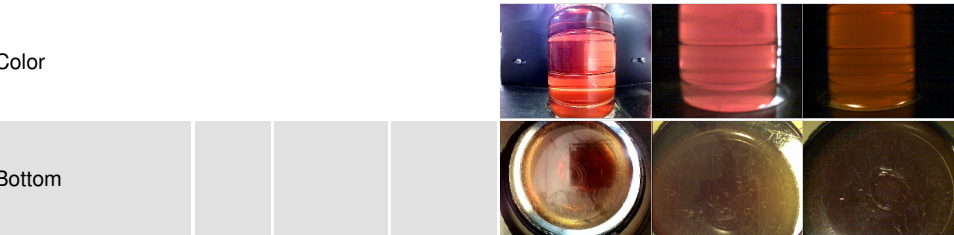


FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.13</b>	0.094	0.145

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

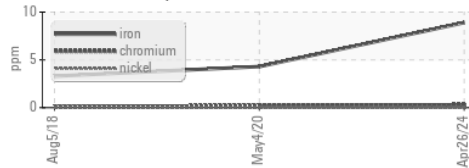
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>45.4</b>	45.6	● 46.01

### SAMPLE IMAGES

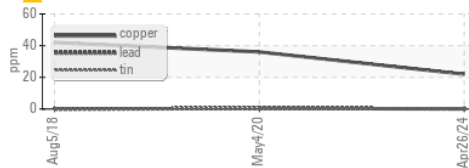


### GRAPHS

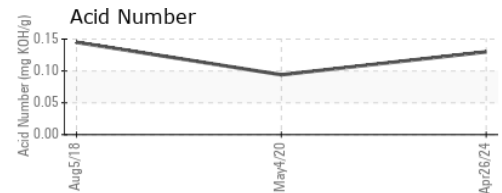
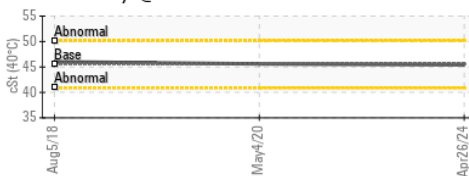
#### Ferrous Alloys



#### ▲ Non-ferrous Metals



#### Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0805802  
**Lab Number** : **06210717**  
**Unique Number** : 11083581  
**Test Package** : IND 2

**Received** : 14 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Angela Borella

**Sumitomo Electric Wiring Systems**  
 2687 Old Gallatin Road, Plant 5  
 Scottsville, KY  
 US 42164  
 Contact: BILLY CARDER  
 bcarder@sewsus.com  
 T: (270)237-5419  
 F: (270)237-9476

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)