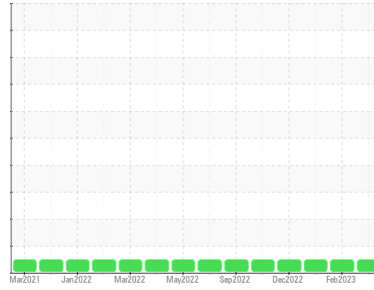


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**C-3001**  
Machine Id  
**C-3001 (S/N TM18053)**  
Component  
**Refrigeration Compressor**  
Fluid  
**MOBIL DTE 846 (--- LTR)**

**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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO60001022</b>	TO10000425	TO60000006
Sample Date	Client Info			<b>08 Jan 2024</b>	14 Feb 2023	23 Jan 2023
Machine Age	hrs	Client Info		<b>12608</b>	12136	11615
Oil Age	hrs	Client Info		<b>12608</b>	12136	11615
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>1</b>	2	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

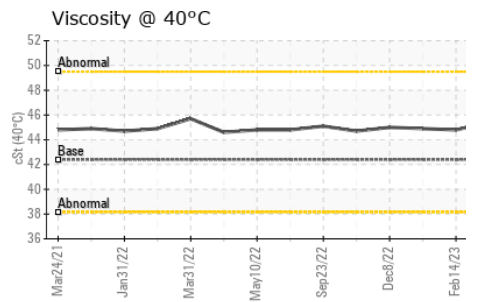
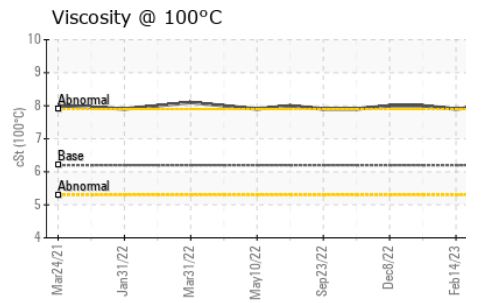
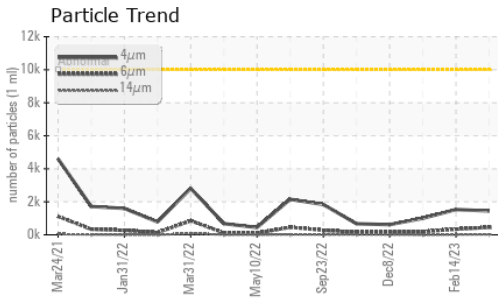
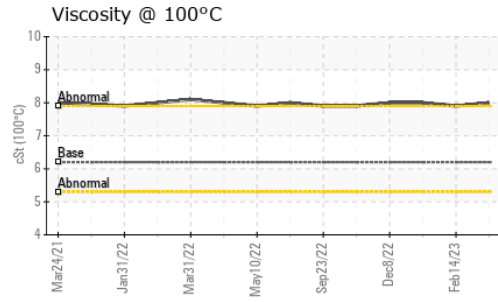
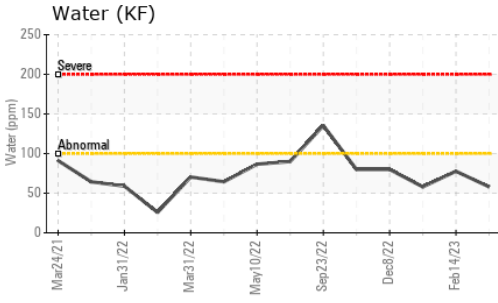
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>3</b>	4	12
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>8</b>	17	16
Phosphorus	ppm	ASTM D5185m		<b>630</b>	723	704
Zinc	ppm	ASTM D5185m		<b>21</b>	26	24
Sulfur	ppm	ASTM D5185m		<b>697</b>	997	840

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>0</b>	0	1
Sodium	ppm	ASTM D5185m		<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water	%	ASTM D6304	>0.01	<b>0.005</b>	0.007	0.005
ppm Water	ppm	ASTM D6304	>100	<b>58</b>	77.7	58.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>1444</b>	1532	1001
Particles >6µm		ASTM D7647	>2500	<b>453</b>	345	190
Particles >14µm		ASTM D7647	>320	<b>26</b>	19	5
Particles >21µm		ASTM D7647	>80	<b>6</b>	2	0
Particles >38µm		ASTM D7647	>20	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>18/16/12</b>	18/16/11	17/15/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		<b>1.444</b>	1.367	1.638

# OIL ANALYSIS REPORT

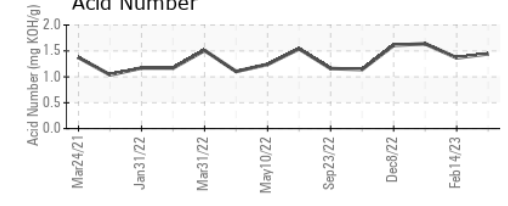
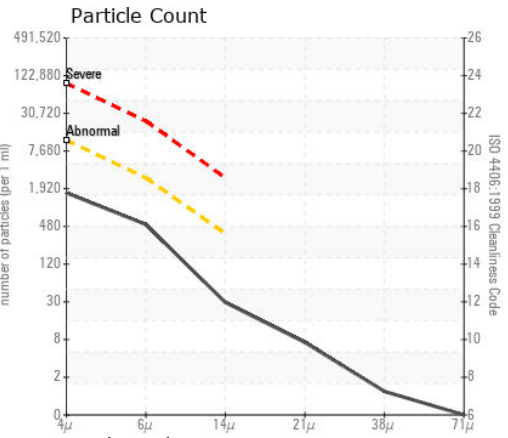
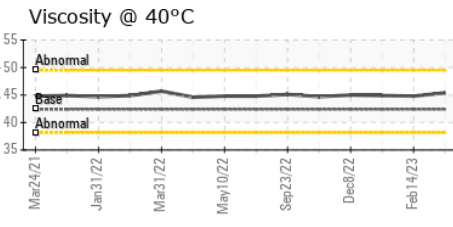
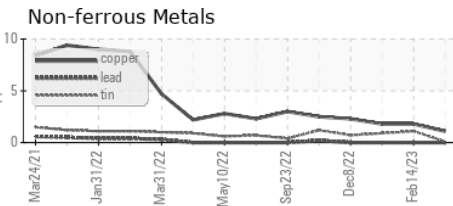
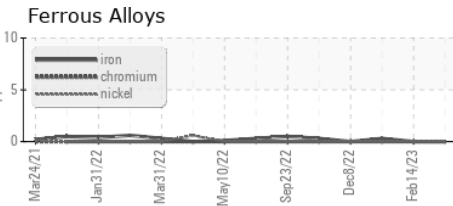


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	42.4	<b>45.4</b>	44.8	44.9
Visc @ 100°C	cSt	ASTM D445	6.2	<b>8</b>	7.9	8
Viscosity Index (VI)	Scale	ASTM D2270	106	<b>149</b>	148	151

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60001022 **Recieved** : 11 Jan 2024  
**Lab Number** : **06058171** **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829553 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**TRANSCONTINENTAL GAS PIPELINE - CARLSTADT**  
 718 PATTERSON PLANK RD  
 CARLSTADT, NJ  
 US 07072  
 Contact: **RICHIE GUIMOND**  
 richie.guimond@williams.com  
 T: (830)267-1263  
 F:

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)