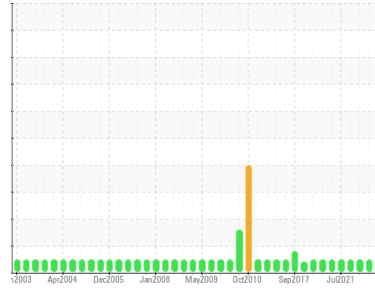




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**#2 Cond.Extraction Pump Lube Oil (S/N 44200-VSD-2)**  
 Component  
**Speed Reducer**  
 Fluid  
**MOBIL ATF D/M (254 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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>WC0831828</b>	WC0774128	WC0714815
Sample Date	Client Info			<b>10 Jul 2023</b>	21 Jan 2023	06 Sep 2022
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>NORMAL</b>	NORMAL	NORMAL

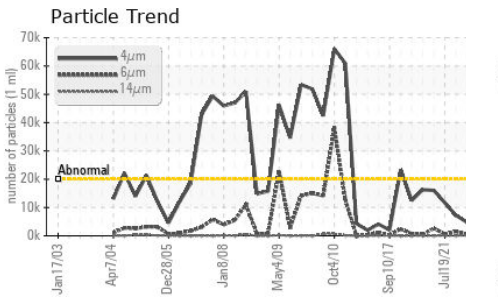
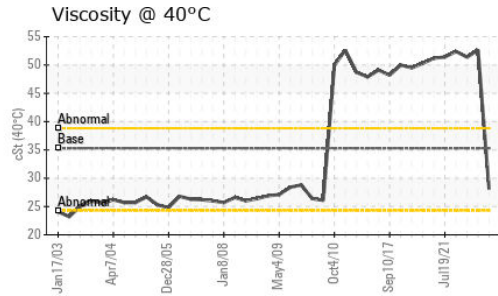
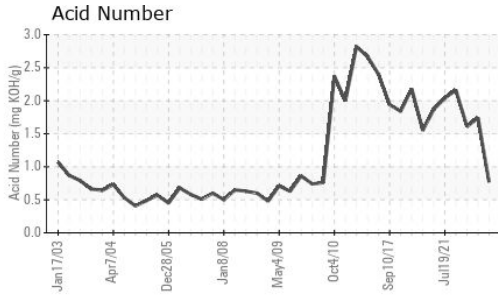
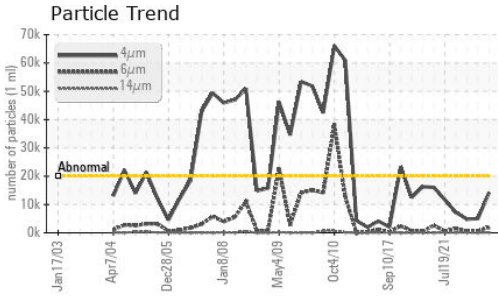
CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	<b>16</b>	8	9
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>100	<b>&lt;1</b>	3	<1
Copper	ppm	ASTM D5185(m)	>50	<b>1</b>	10	10
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	1	1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>80</b>	81	84
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>6</b>	11	10
Calcium	ppm	ASTM D5185(m)		<b>388</b>	3514	3808
Phosphorus	ppm	ASTM D5185(m)		<b>294</b>	1181	1237
Zinc	ppm	ASTM D5185(m)		<b>104</b>	1337	1400
Sulfur	ppm	ASTM D5185(m)		<b>1799</b>	5905	6027
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>5</b>	9	10
Sodium	ppm	ASTM D5185(m)		<b>2</b>	5	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>14235</b>	5023	4766
Particles >6µm		ASTM D7647	>5000	<b>1884</b>	737	672
Particles >14µm		ASTM D7647	>640	<b>109</b>	29	113
Particles >21µm		ASTM D7647	>160	<b>24</b>	5	36
Particles >38µm		ASTM D7647	>40	<b>2</b>	0	2
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/18/14</b>	20/17/12	19/17/14

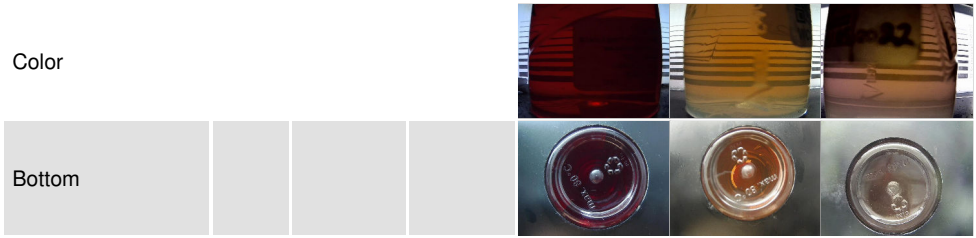


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.77</b>	1.74	1.61

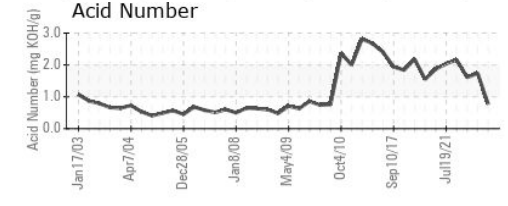
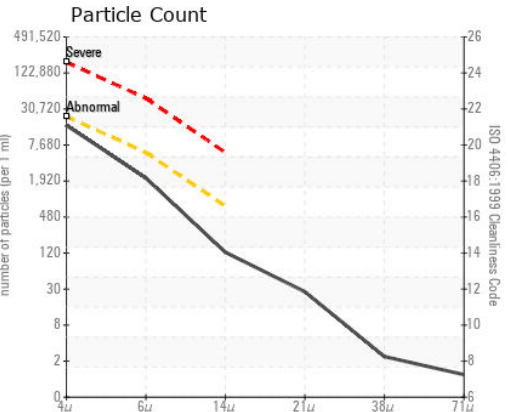
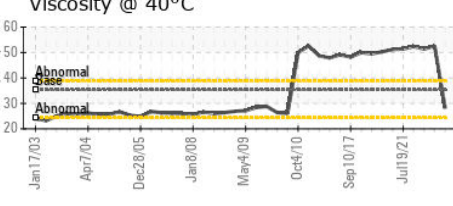
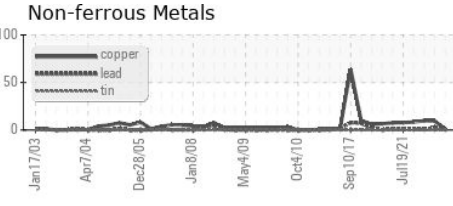
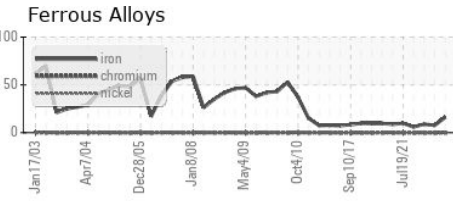
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	35.3	<b>28.1</b>	52.6	51.4

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0831828 **Received** : 19 Dec 2023  
**Lab Number** : **02604140** **Diagnosed** : 20 Dec 2023  
**Unique Number** : 5697225 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Ontario Power Generation**  
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 ATIKOKAN, ON  
 CA P0T 1C0  
 Contact: Chris Perrier  
 christopher.perrier@opg.com  
 T: (807)597-3545  
 F: (807)597-1198

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.