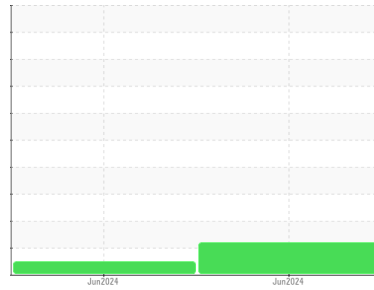




# OIL ANALYSIS REPORT

Area  
**Redpath Sugar - T02900**  
 Machine ID  
**A2406182**  
 Component  
**Turbine**  
 Fluid  
**R&O OIL ISO 46 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

**▲ Contamination**  
 Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Batch #	Client Info		<b>Mobile</b>	Mobile	---
Department	Client Info		<b>Production</b>	Production	---
Sample From	Client Info		<b>Machine</b>	Machine	---
Production Stage	Client Info		<b>Initial</b>	Final	---
Sent to WC	Client Info		<b>06/28/2024</b>	06/28/2024	---
Sample Number	Client Info		<b>E30002531</b>	E30002532	---
Sample Date	Client Info		<b>28 Jun 2024</b>	28 Jun 2024	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	---
Chromium	ppm	ASTM D5185(m) >4	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185(m)	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185(m) >5	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	---

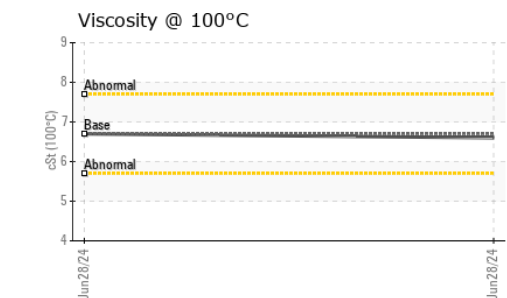
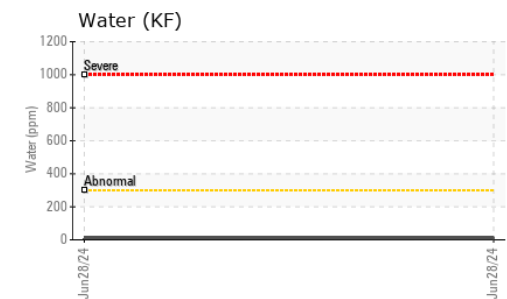
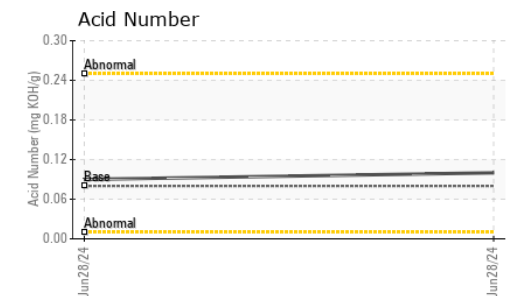
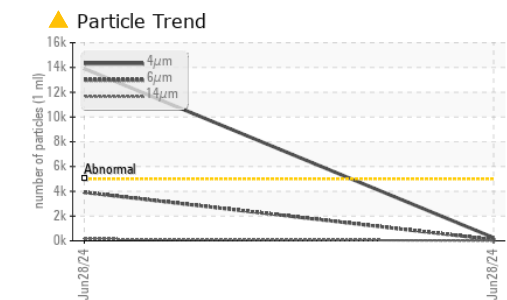
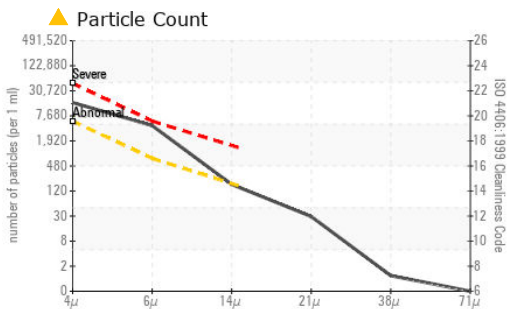
## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5	<b>0</b>	0	---
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m) 5	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m) 5	<b>0</b>	0	---
Calcium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	---
Phosphorus	ppm	ASTM D5185(m) 100	<b>28</b>	26	---
Zinc	ppm	ASTM D5185(m) 25	<b>1</b>	1	---
Sulfur	ppm	ASTM D5185(m) 1500	<b>91</b>	92	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>0</b>	0	---
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Water	%	ASTM D6304* >0.03	<b>0.001</b>	0.001	---
ppm Water	ppm	ASTM D6304* >300	<b>11</b>	13	---

# OIL ANALYSIS REPORT



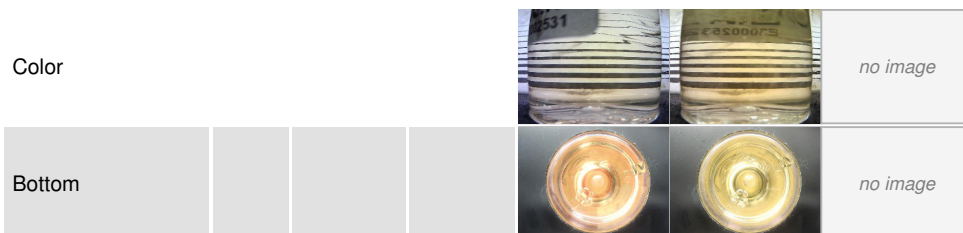
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ <b>13913</b>	248	---
Particles >6µm	ASTM D7647	>640	▲ <b>3913</b>	86	---
Particles >14µm	ASTM D7647	>160	<b>153</b>	7	---
Particles >21µm	ASTM D7647	>40	<b>26</b>	2	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	▲ <b>21/19/14</b>	15/14/10	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.08	<b>0.10</b>	0.09

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	Visual*	>0.03	<b>NEG</b>	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	<b>43.3</b>	43.1
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	<b>6.6</b>	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	97	<b>103</b>	108

SAMPLE IMAGES	method	limit/base	current	history1	history2
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**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : E30002531  
**Lab Number** : **02645479**  
**Unique Number** : 5803018  
**Test Package** : IND 2 ( Additional Tests: KV100, TAN Auto, VI )

**Environmental 360 Solutions Ltd.**  
 640 Victoria Street  
 Cobourg, ON  
 CA K9A 5H5  
 Contact: Tatiana Sorkina  
 tsorkina@e360s.ca  
 T: (800)263-3939  
 F: (905)373-4950

To discuss this sample report, contact Customer Service at 1-905-372-2251.  
 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.