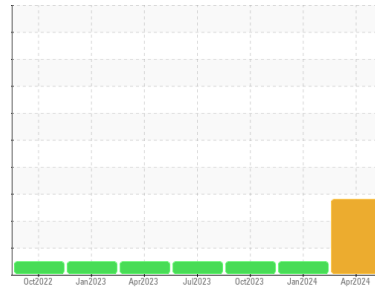




# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id  
**STARLINE REGIONAL (S/N 5117)**  
 Component  
**Reciprocating Compressor**  
 Fluid  
**ROYCO RED (50 GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

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

### Contamination

There is a moderate amount of particulates present in the oil.

### 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>WC0869394</b>	WC0869395	WC0749114
Sample Date	Client Info		<b>16 Apr 2024</b>	19 Jan 2024	09 Oct 2023
Machine Age	hrs	Client Info	<b>0</b>	200	200
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<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		<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>▲ 139</b>	12	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>2</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>162</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>3</b>	0	4
Calcium	ppm	ASTM D5185m		<b>10</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>496</b>	925	1412
Zinc	ppm	ASTM D5185m		<b>125</b>	629	1228
Sulfur	ppm	ASTM D5185m		<b>553</b>	1340	2622

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	4
Sodium	ppm	ASTM D5185m		<b>5</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Water	%	ASTM D6304	>0.1	<b>NEG</b>	NEG	0.009
ppm Water	ppm	ASTM D6304	>1000	<b>---</b>	---	94.5

## FLUID CLEANLINESS

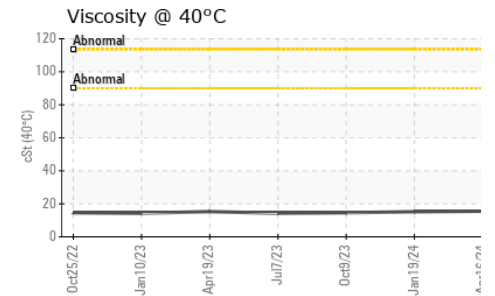
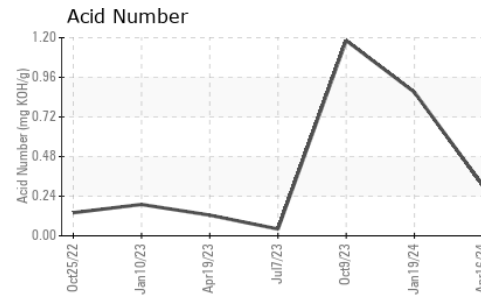
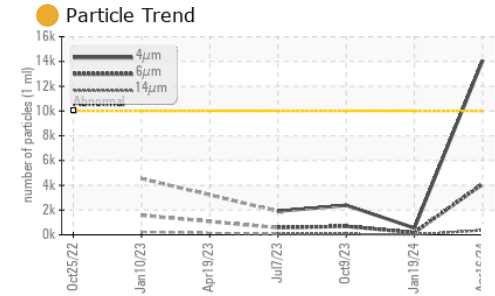
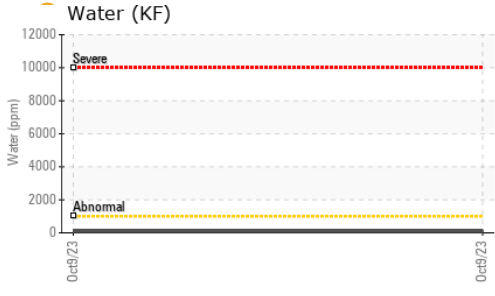
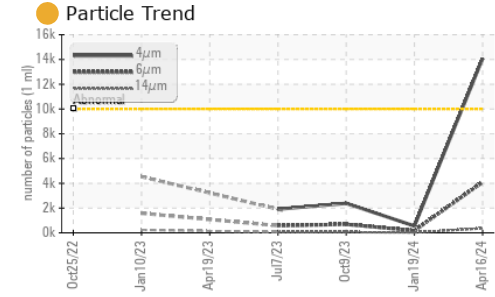
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>● 14077</b>	553	2383
Particles >6µm	ASTM D7647	>2500	<b>● 4095</b>	180	687
Particles >14µm	ASTM D7647	>320	<b>● 357</b>	26	53
Particles >21µm	ASTM D7647	>80	<b>● 102</b>	8	12
Particles >38µm	ASTM D7647	>20	<b>8</b>	0	1
Particles >71µm	ASTM D7647	>4	<b>1</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>● 21/19/16</b>	16/15/12	18/17/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.307</b>	0.87	1.183



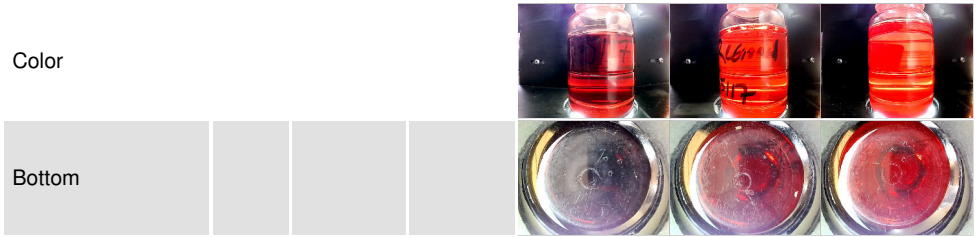
# OIL ANALYSIS REPORT



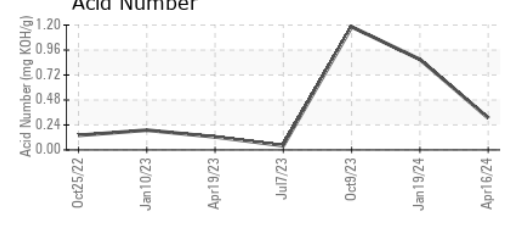
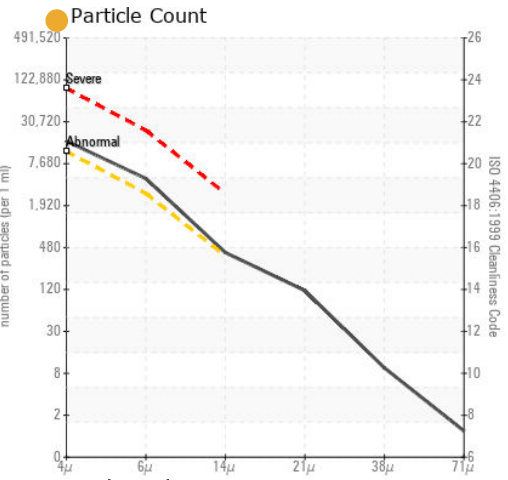
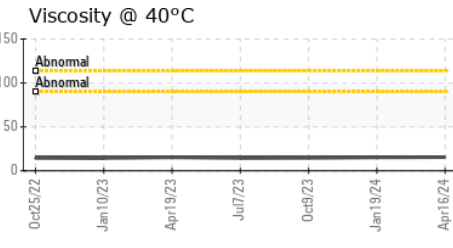
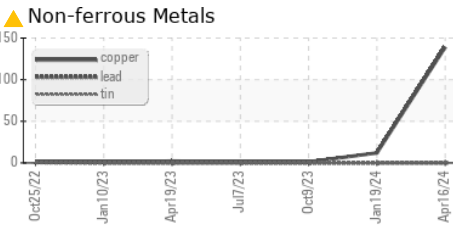
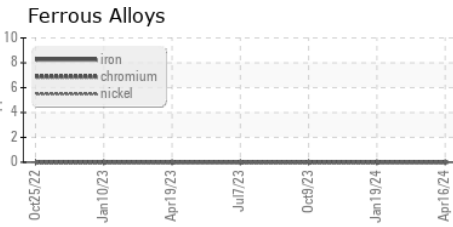
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	15.5	15.2	14.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0869394  
**Lab Number** : 06159533  
**Unique Number** : 10994956  
**Test Package** : PLANT

**AAR LANDING GEAR SERVICES**  
 9371 NW 100TH STREET  
 MIAMI, FL  
 US 33178  
 Contact: SANDRA LOPEZ  
 sandra.lopez@aarcorp.com  
 T: (305)887-4027  
 F: (305)887-6930

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)