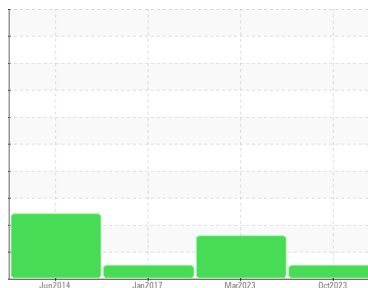




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**SYNOIL 825**  
 Machine Id  
**QUINCY 87342 - KARL KNAUZ MOTORS INC**  
 Component  
**Compressor**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All 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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>UCZ05995070</b>	UCZ05805168	UCZ04153263
Sample Date	Client Info			<b>26 Oct 2023</b>	07 Mar 2023	23 Jan 2017
Machine Age	hrs	Client Info		<b>48637</b>	48636	47267
Oil Age	hrs	Client Info		<b>0</b>	811	2000
Oil Changed	Client Info			<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
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>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	1	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	966	<b>192</b>	255	443
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m	1309	<b>334</b>	435	684

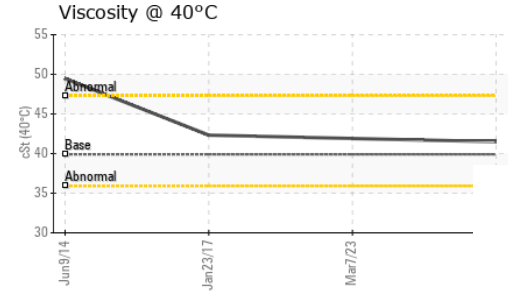
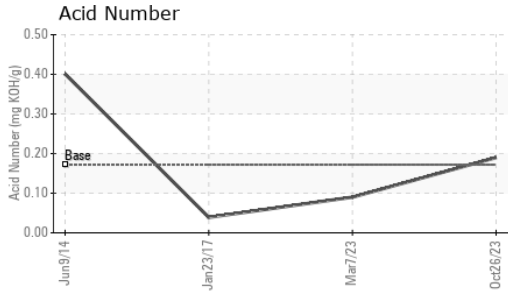
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	7
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.172	<b>0.19</b>	0.09	0.039

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>MODER</b>	MODER	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>	0.2%	NEG
Free Water	scalar	*Visual		<b>NEG</b>		

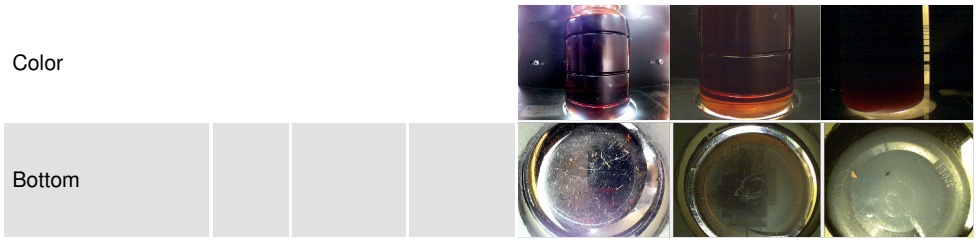


# OIL ANALYSIS REPORT

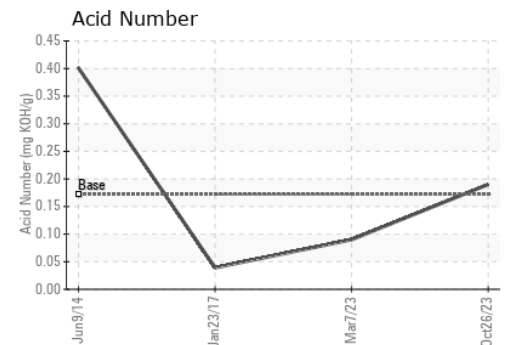
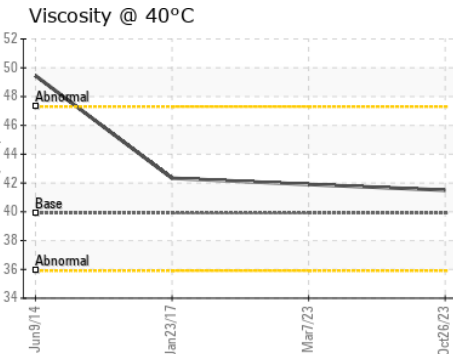
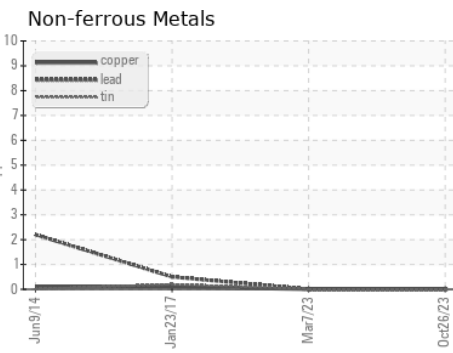
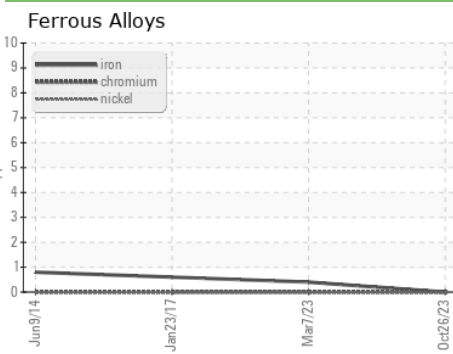


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	39.9	<b>41.5</b>	41.9	42.33

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : UCZ05995070 **Received** : 31 Oct 2023  
**Lab Number** : **05995070** **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10723430 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**ZORN COMPRESSOR EQUIPMENT**  
 227 AMBROSIO DR, SUITE A  
 GURNEE, IL  
 US 60031  
 Contact: Rachel Pesnikov  
 rachel.pesnikov@zornair.com  
 T: (847)599-1333  
 F: x:

Certificate L2367  
 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)