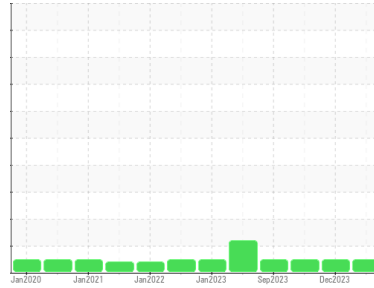




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**MIXERS**  
 Machine Id  
**M-512**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 630 (4 GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) 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>WC0896656</b>	WC0871620	WC0871616
Sample Date	Client Info			<b>12 Jan 2024</b>	05 Dec 2023	23 Oct 2023
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>0</b>	0	3
Oil Changed	Client Info			<b>N/A</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>34</b>	133	118
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	1	1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	0	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	4
Calcium	ppm	ASTM D5185m		<b>4</b>	2	1
Phosphorus	ppm	ASTM D5185m		<b>447</b>	518	491
Zinc	ppm	ASTM D5185m		<b>0</b>	0	3
Sulfur	ppm	ASTM D5185m		<b>128</b>	969	207

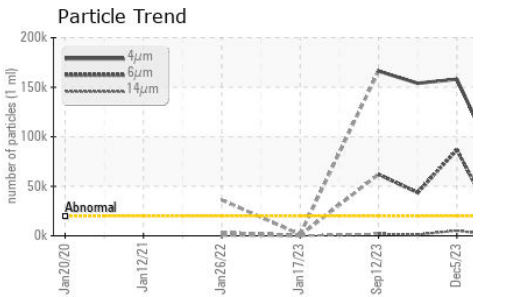
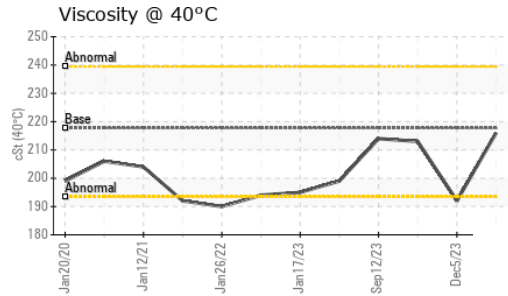
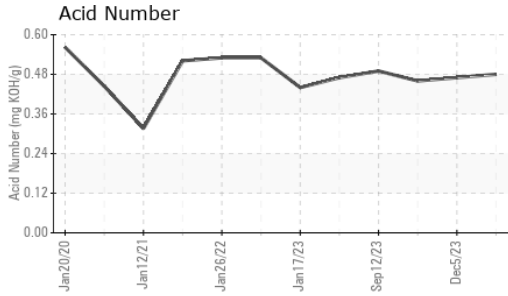
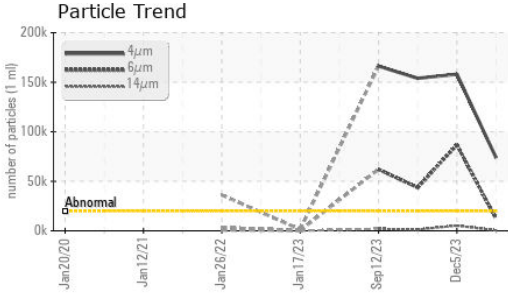
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>19</b>	18	17
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>73794</b>	158096	153973
Particles >6µm		ASTM D7647	>5000	<b>11997</b>	86738	43621
Particles >14µm		ASTM D7647	>640	<b>383</b>	5238	1135
Particles >21µm		ASTM D7647	>160	<b>68</b>	1088	216
Particles >38µm		ASTM D7647	>40	<b>1</b>	12	4
Particles >71µm		ASTM D7647	>10	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>23/21/16</b>	24/24/20	24/23/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.48</b>	0.47	0.46



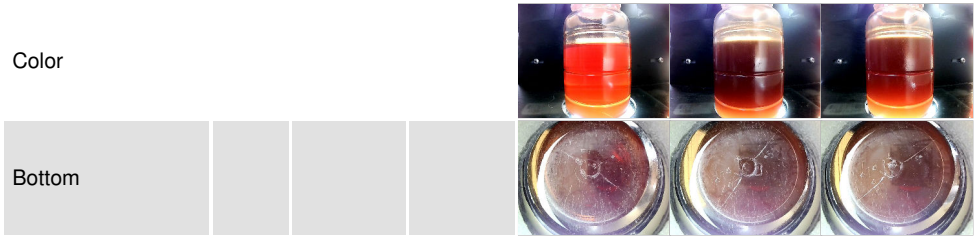
# OIL ANALYSIS REPORT



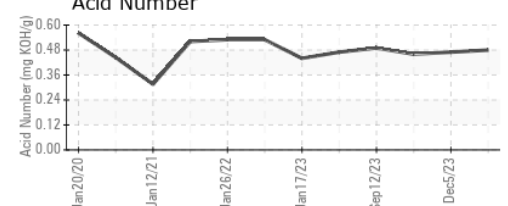
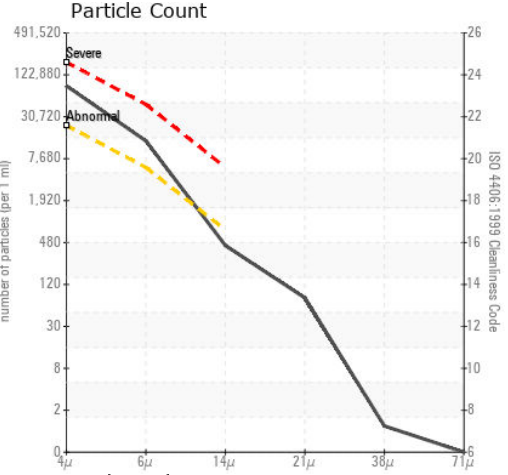
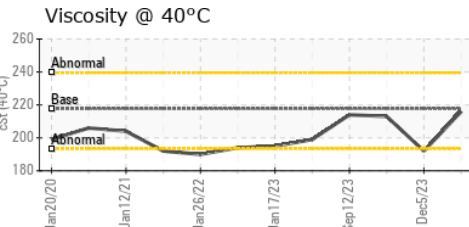
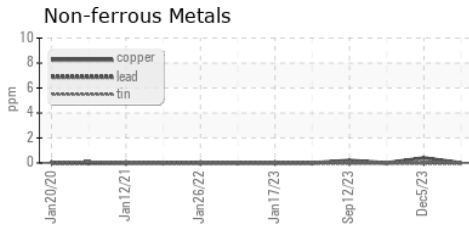
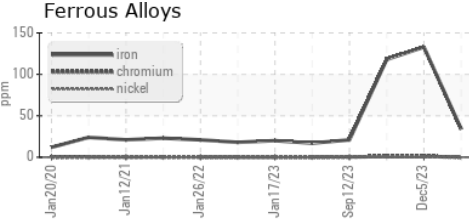
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	LIGHT
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	217.7	216	192	213

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0896656 **Received** : 17 Jan 2024  
**Lab Number** : 06062608 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10833990 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**POET BIOREFINING - Groton**  
 40425 133RD STREET  
 GROTON, SD  
 US 57445-6400  
 Contact: GAVIN KRUEGER  
 Gavin.Krueger@POET.COM  
 T: 6(05) 846-6863  
 F: (605)397-2754

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)