



# OIL ANALYSIS REPORT

Sample Rating Trend

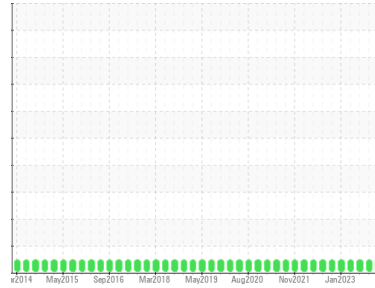
**NORMAL**



Area  
**[22092815]**  
Machine Id  
**132-900**

Component  
**Hydraulic System**

Fluid  
**ESSO NUTO H ISO 68 (227 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>WC0888586</b>	WC0840183	WC0813429
Sample Date	Client Info		<b>11 Jan 2024</b>	10 Oct 2023	12 Jul 2023
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	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	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >60	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<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>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m) 50	<b>32</b>	33	36
Phosphorus	ppm	ASTM D5185(m) 330	<b>330</b>	328	358
Zinc	ppm	ASTM D5185(m) 420	<b>335</b>	347	362
Sulfur	ppm	ASTM D5185(m) 3100	<b>7330</b>	6979	7008
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

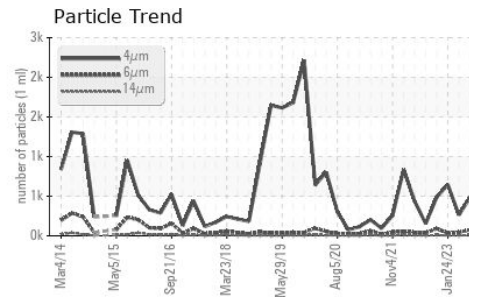
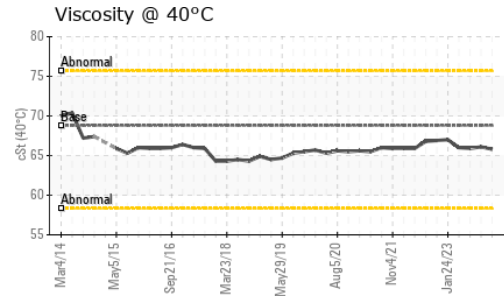
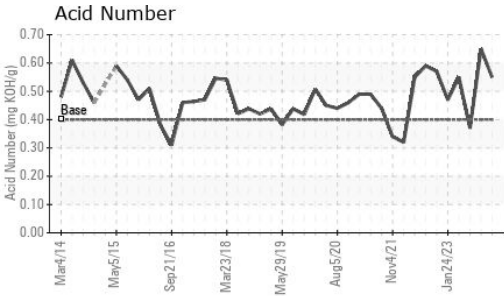
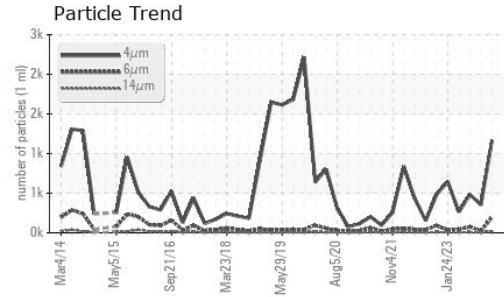
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>2</b>	2	2
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>1166</b>	352	482
Particles >6µm	ASTM D7647	>1300	<b>199</b>	24	75
Particles >14µm	ASTM D7647	>160	<b>17</b>	4	8
Particles >21µm	ASTM D7647	>40	<b>4</b>	1	3
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	<b>17/15/11</b>	16/12/9	16/13/10



# OIL ANALYSIS REPORT

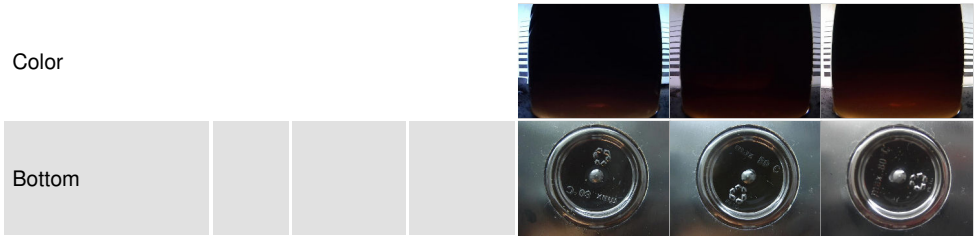


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	<b>0.55</b>	0.65	0.37

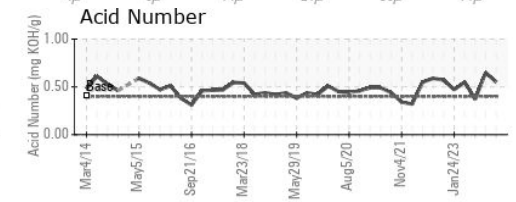
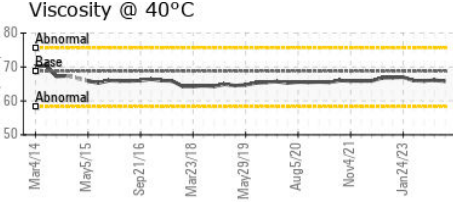
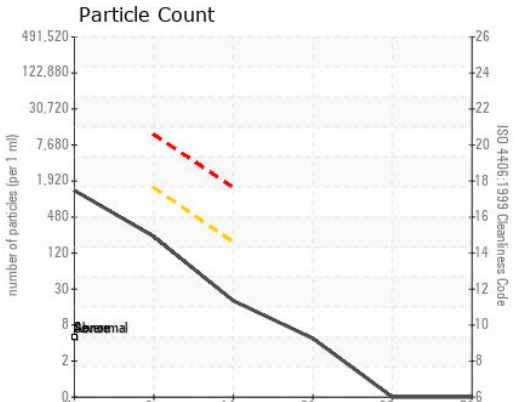
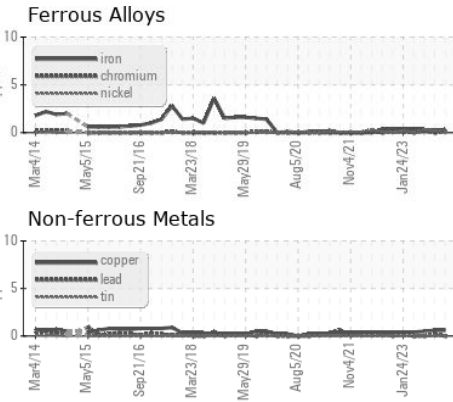
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	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*	>0.05	<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)	68.8	<b>65.8</b>	66.1	65.9

## SAMPLE IMAGES



## GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0888586  
 Lab Number : 02610609  
 Unique Number : 5711695  
 Test Package : IND 2

**ARAUCO - St. Stephen**  
 151 Church Street  
 St. Stephen, NB  
 CA E3L 3A6  
 Contact: Jim Sears  
 Jim.Sears@arauco.com  
 T: (506)465-2858  
 F: (506)465-2831

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.