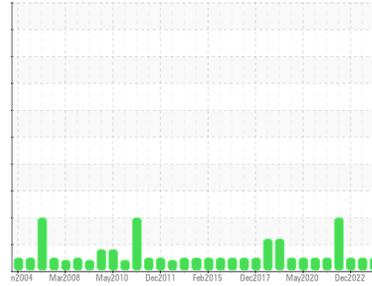




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[22046361]
 Machine Id
170-103

Component
Hydraulic System
 Fluid
ESSO NUTO H ISO 68 (27 GAL)

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			WC0870406	WC0799420	WC0749132
Sample Date	Client Info			07 Dec 2023	19 Jun 2023	19 Dec 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	2	1	1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	0	0
Copper	ppm	ASTM D5185(m)	>20	8	6	5
Tin	ppm	ASTM D5185(m)	>20	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

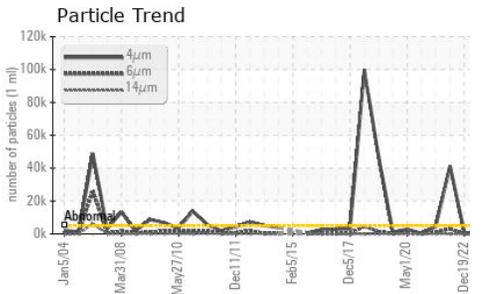
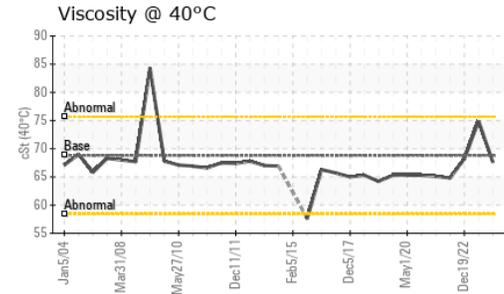
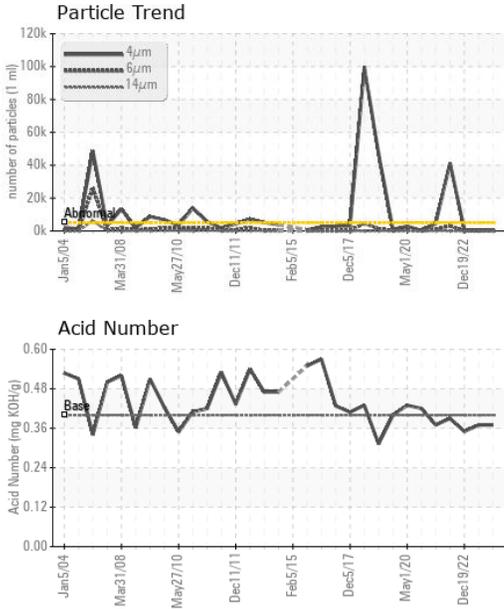
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	1	<1	1
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	0
Calcium	ppm	ASTM D5185(m)	50	47	49	49
Phosphorus	ppm	ASTM D5185(m)	330	319	355	362
Zinc	ppm	ASTM D5185(m)	420	400	409	400
Sulfur	ppm	ASTM D5185(m)	3100	6994	7136	7118
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	2	2
Sodium	ppm	ASTM D5185(m)		<1	<1	0
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	621	111	716
Particles >6µm		ASTM D7647	>1300	209	33	54
Particles >14µm		ASTM D7647	>160	21	7	3
Particles >21µm		ASTM D7647	>40	5	3	2
Particles >38µm		ASTM D7647	>10	1	0	1
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/15/12	14/12/10	17/13/9



OIL ANALYSIS REPORT

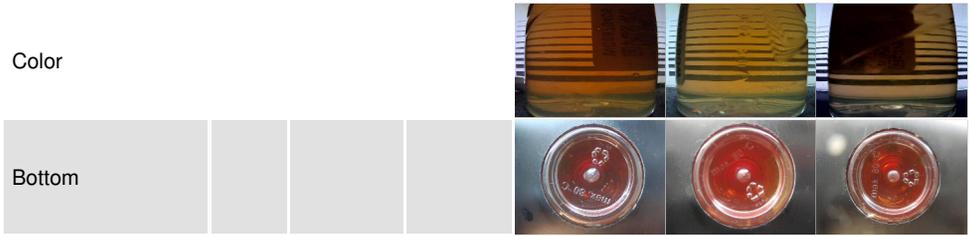


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.37	0.37	0.35

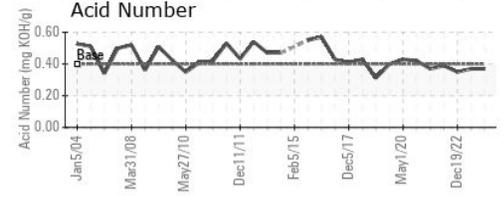
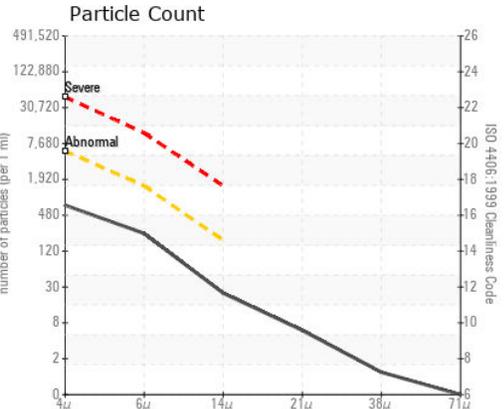
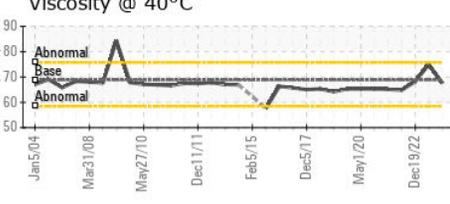
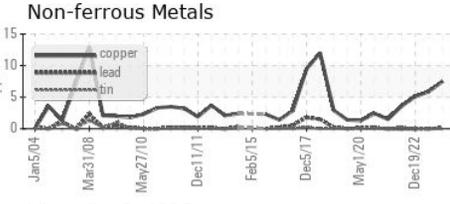
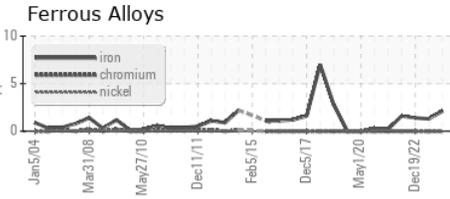
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	67.6	74.9	68.2

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0870406
Lab Number : 02603199
Unique Number : 5696284
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.