



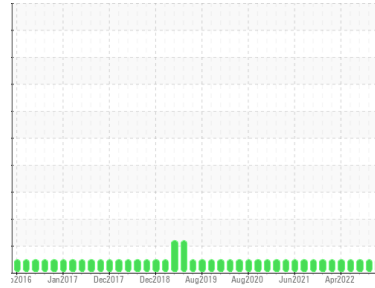
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SERVO VALVES [21817505]**  
 Machine Id  
**AF03-132-510 SST MAIN HYDRAULICS**  
 Component  
**Hydraulic System**  
 Fluid  
**ESSO NUTO H ISO 68 (3350 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 MILSTD1246 cleanliness code. The water content is negligible. 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>WC0799427</b>	WC0760269	WC0729478
Sample Date	Client Info		<b>05 Apr 2023</b>	20 Dec 2022	28 Sep 2022
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >40	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >60	<b>2</b>	1	4
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
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>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	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>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 50	<b>39</b>	42	18
Phosphorus	ppm	ASTM D5185(m) 330	<b>358</b>	366	349
Zinc	ppm	ASTM D5185(m) 420	<b>378</b>	388	241
Sulfur	ppm	ASTM D5185(m) 3100	<b>7077</b>	7189	6808
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

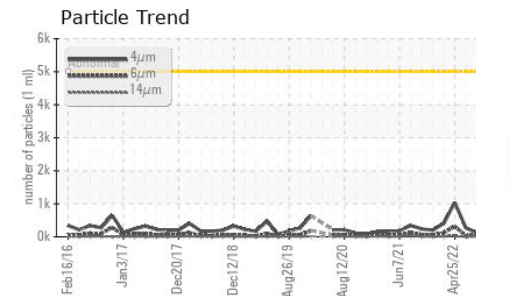
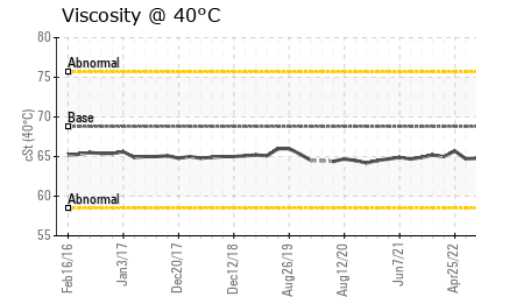
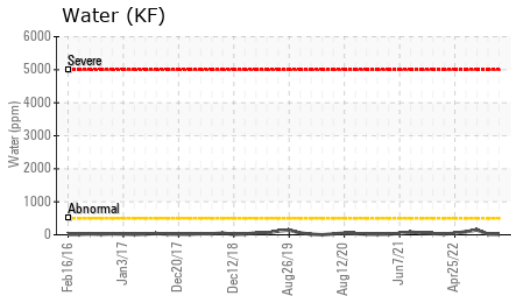
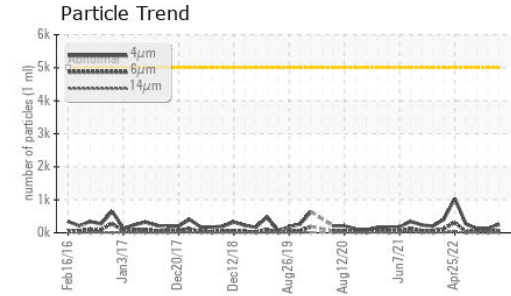
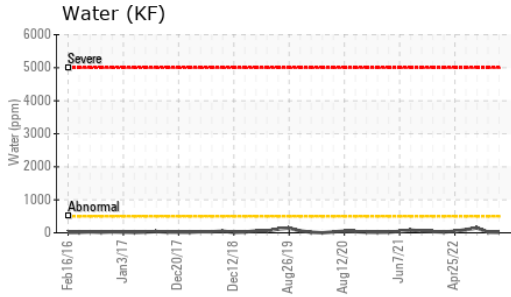
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>5</b>	4	17
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304* >0.05	<b>0.001</b>	0.002	0.014
ppm Water	ppm	ASTM D6304* >500	<b>12.7</b>	19.6	147.5

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>250</b>	111	130
Particles >6µm	ASTM D7647	>1300	<b>67</b>	34	45
Particles >14µm	ASTM D7647	>160	<b>5</b>	5	5
Particles >21µm	ASTM D7647	>40	<b>1</b>	1	1
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)	>19/17/14	<b>15/13/10</b>	14/12/10	14/13/10



# OIL ANALYSIS REPORT

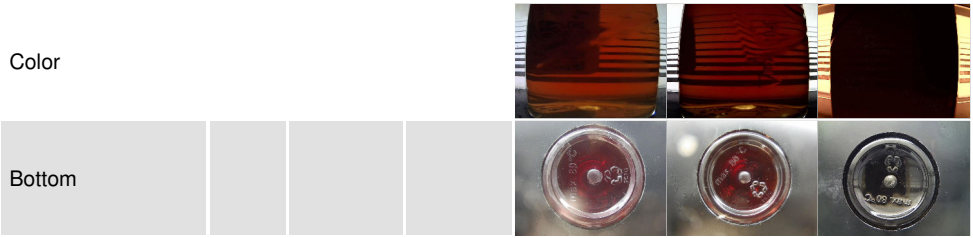


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	<b>0.44</b>	0.45	0.53

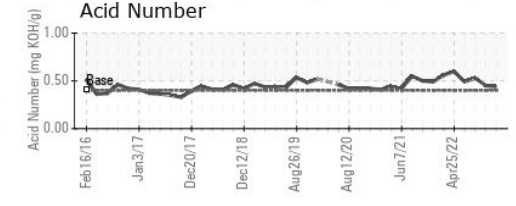
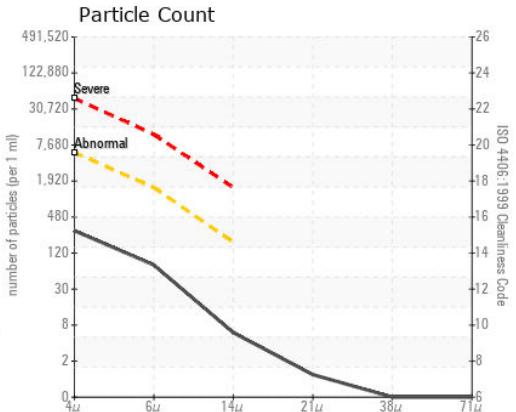
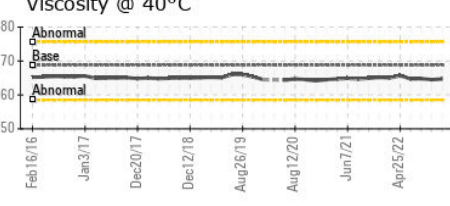
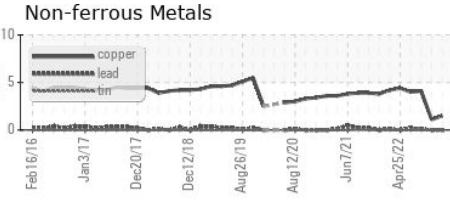
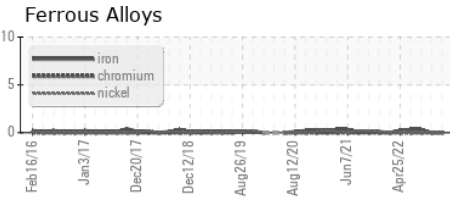
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	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*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	<b>64.7</b>	64.5	64.8

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0799427 **Received** : 19 Apr 2023  
**Lab Number** : **02552307** **Diagnosed** : 20 Apr 2023  
**Unique Number** : 5565322 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )

**ARAUCO - St. Stephen**  
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 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.