

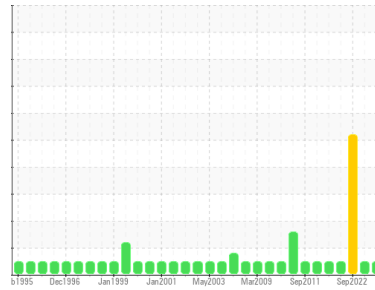


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

Area  
**81 FINISHING & WAREHOUSE**  
 Machine Id  
**Tying Machine Hyd. Pump #1 & Reservoir (S/N 812106)**  
 Component  
**Hydraulic System**  
 Fluid  
**ESSO NUTO H ISO 68 (25 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	<b>WC</b>	WC0789947	WC
Sample Date	Client Info	<b>03 Oct 2023</b>	27 Mar 2023	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	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>20	<b>&lt;1</b>	<1	▲ 21
Chromium ppm ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel ppm ASTM D5185(m)	>10	<b>0</b>	0	<1
Titanium ppm ASTM D5185(m)		<b>0</b>	0	0
Silver ppm ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum ppm ASTM D5185(m)	>10	<b>0</b>	0	<1
Lead ppm ASTM D5185(m)	>10	<b>2</b>	<1	1
Copper ppm ASTM D5185(m)	>75	<b>8</b>	7	36
Tin ppm ASTM D5185(m)	>10	<b>0</b>	<1	2
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>0</b>	<1	▲ 24
Barium ppm ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum ppm ASTM D5185(m)	0	<b>0</b>	0	0
Manganese ppm ASTM D5185(m)		<b>0</b>	0	<1
Magnesium ppm ASTM D5185(m)	5	<b>0</b>	0	0
Calcium ppm ASTM D5185(m)	50	<b>50</b>	52	2
Phosphorus ppm ASTM D5185(m)	330	<b>344</b>	371	364
Zinc ppm ASTM D5185(m)	420	<b>410</b>	412	▲ 16
Sulfur ppm ASTM D5185(m)	3100	<b>5620</b>	5770	▲ 14175
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>&lt;1</b>	<1	<1
Sodium ppm ASTM D5185(m)		<b>&lt;1</b>	<1	0
Potassium ppm ASTM D5185(m)	>20	<b>0</b>	<1	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		<b>653</b>	1471	70033
Particles >6µm ASTM D7647	>1300	<b>136</b>	438	■ 12275
Particles >14µm ASTM D7647	>160	<b>7</b>	20	127
Particles >21µm ASTM D7647	>40	<b>2</b>	5	17
Particles >38µm ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness ISO 4406 (c)	>--/17/14	<b>17/14/10</b>	18/16/11	■ 23/21/14

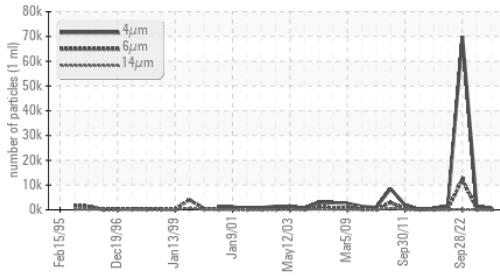
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D974*	.40	<b>0.48</b>	0.30	0.68

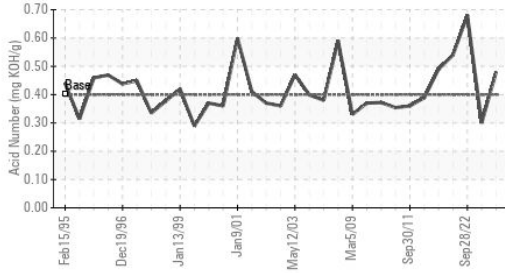


# OIL ANALYSIS REPORT

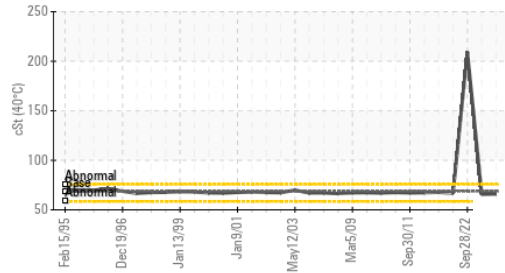
**Particle Trend**



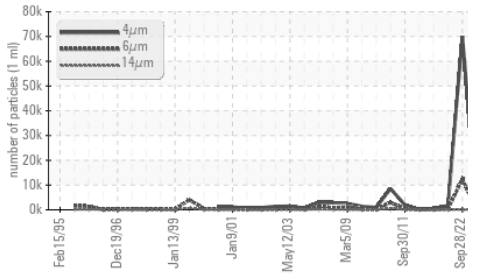
**Acid Number**



**Viscosity @ 40°C**



**Particle Trend**

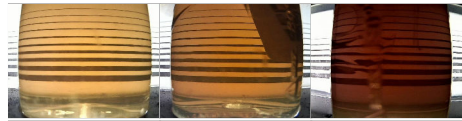


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	66.0	65.6 ▲ 209

SAMPLE IMAGES	method	limit/base	current	history1	history2
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**Color**

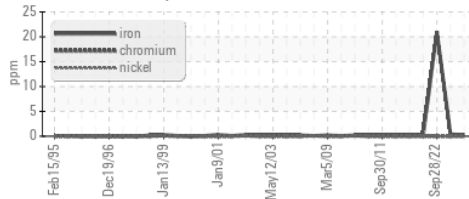


**Bottom**

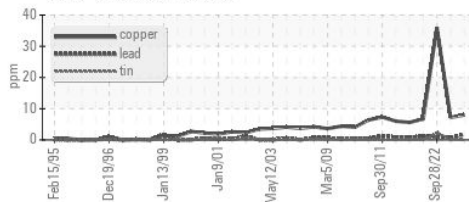


## GRAPHS

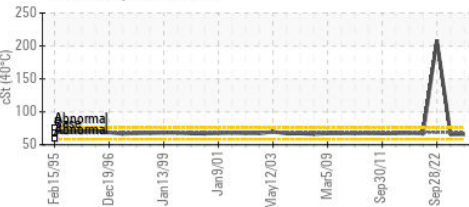
**Ferrous Alloys**



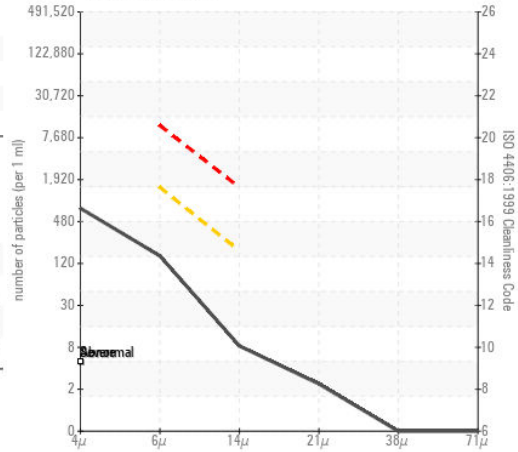
**Non-ferrous Metals**



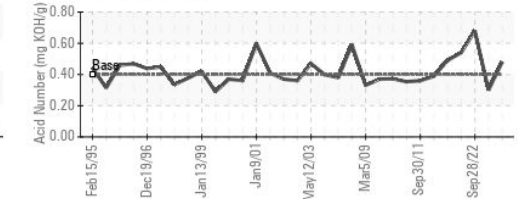
**Viscosity @ 40°C**



**Particle Count**



**Acid Number**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC  
**Lab Number** : 02587986  
**Unique Number** : 5657052  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**AV GROUP NB INC.**  
 103 PINDER ROAD,, NACKAWIC MILL  
 NACKAWIC, NB  
 CA E6G 1W4  
 Contact: Basil Fadulalla  
 basil.fadulalla@adityabirla.com

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.

T:  
F: