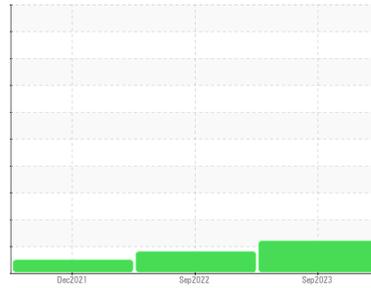




# PROBLEM SUMMARY

Area  
**RIPPEY [200005325]**  
 Machine Id  
**82220 SITE 18**  
 Component  
**Hydraulic System**  
 Fluid  
**SHELL TELLUS S4 VX 32 (60 LTR)**

Sample Rating Trend

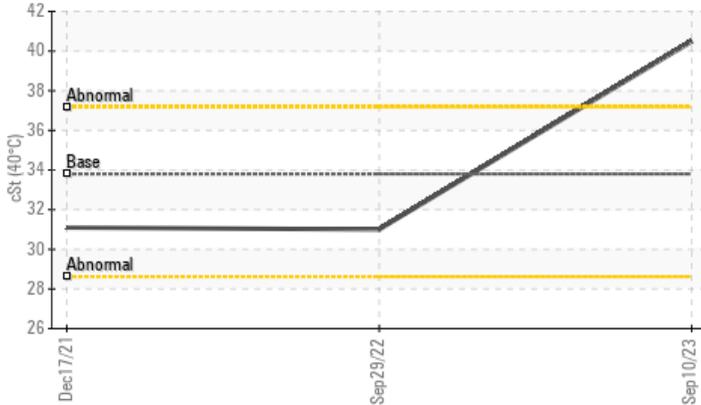


## VISCOSITY

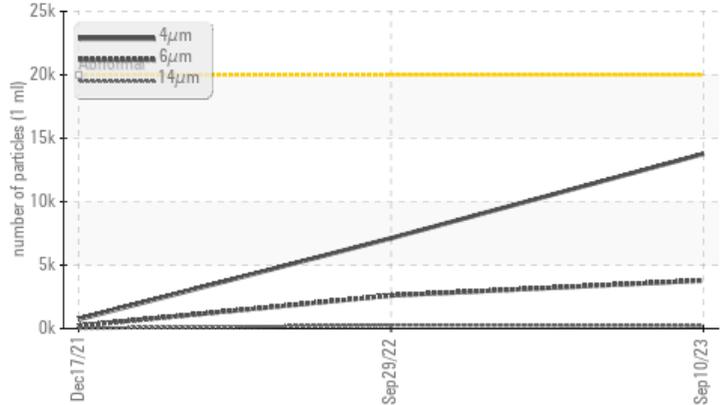


### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Particle Trend



### RECOMMENDATION

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

### PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ATTENTION	NORMAL
Particles >6µm	ASTM D7647	>2500	▲ 3794	▲ 2607	219
Oil Cleanliness	ISO 4406 (c)	>21/18/15	▲ 21/19/15	▲ 20/19/15	17/15/12
Visc @ 40°C	cSt	ASTM D445	33.8	▲ 40.49	31.0
				31.0	31.1

Customer Id: NORDEX  
 Sample No.: NX05999816  
 Lab Number: 05999816  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 29 Sep 2022 Diag: Angela Borella

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 17 Dec 2021 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



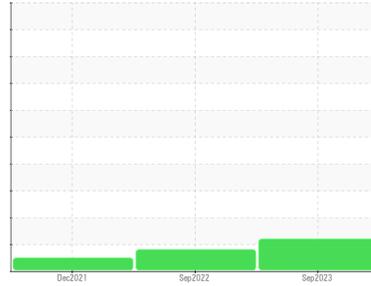


# OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

Area  
**RIPPEY [200005325]**  
 Machine Id  
**82220 SITE 18**  
 Component  
**Hydraulic System**  
 Fluid  
**SHELL TELLUS S4 VX 32 (60 LTR)**



## 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>NX05999816</b>	NX05672218	NX05440132
Sample Date	Client Info		<b>10 Sep 2023</b>	29 Sep 2022	17 Dec 2021
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>ATTENTION</b>	ATTENTION	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>13</b>	7	21
Iron	ppm	ASTM D5185m >20	<b>1</b>	2	0
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >20	<b>1</b>	1	1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	<1
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>	1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>2</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>552</b>	596	603
Zinc	ppm	ASTM D5185m	<b>166</b>	115	101
Sulfur	ppm	ASTM D5185m	<b>648</b>	540	515

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>6</b>	3	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Water	%	ASTM D6304 >0.05	<b>0.011</b>	0.010	0.003
ppm Water	ppm	ASTM D6304 >500	<b>113.7</b>	105.3	25.8

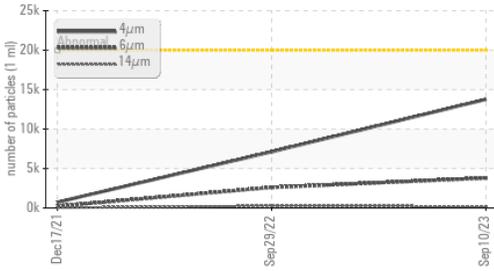
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>13773</b>	7121	728
Particles >6µm	ASTM D7647	>2500	<b>▲ 3794</b>	▲ 2607	219
Particles >14µm	ASTM D7647	>320	<b>201</b>	259	23
Particles >21µm	ASTM D7647	>80	<b>38</b>	51	6
Particles >38µm	ASTM D7647	>20	<b>1</b>	2	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/18/15	<b>▲ 21/19/15</b>	▲ 20/19/15	17/15/12

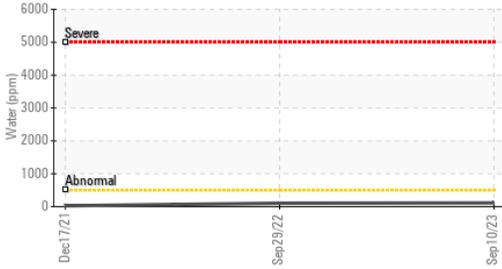


# OIL ANALYSIS REPORT

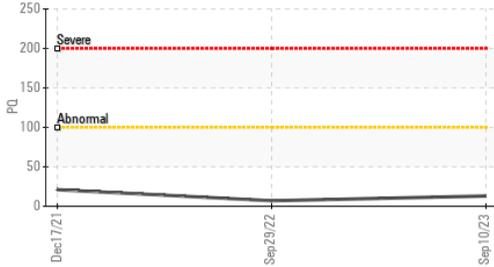
## Particle Trend



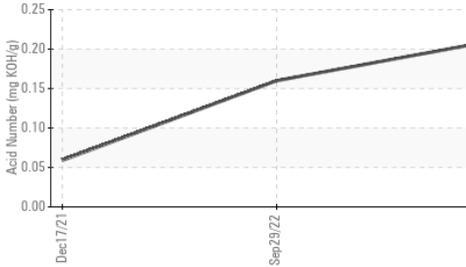
## Water (KF)



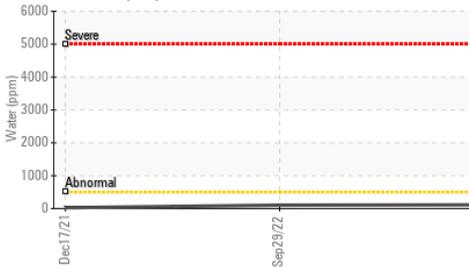
## PQ



## Acid Number



## Water (KF)



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.21</b>	0.16	0.059

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 D445	33.8	<b>▲ 40.49</b>	31.0	31.1

## SAMPLE IMAGES

Color

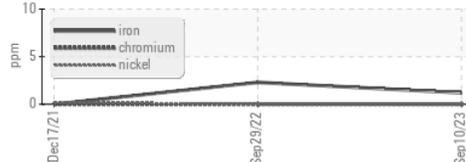


Bottom

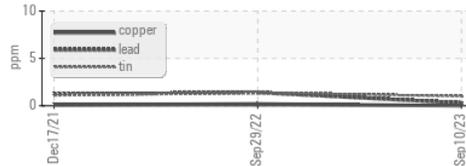


## GRAPHS

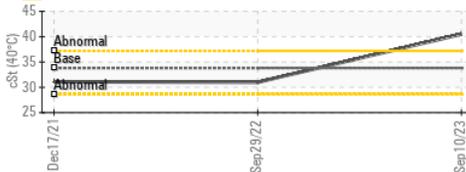
### Ferrous Alloys



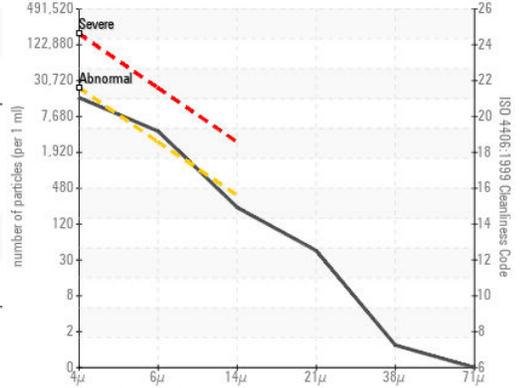
### Non-ferrous Metals



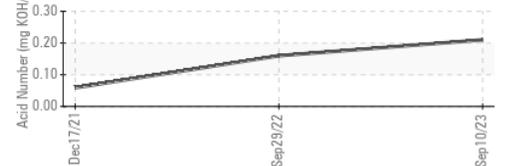
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NX05999816 **Received** : 06 Nov 2023  
**Lab Number** : 05999816 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 10728176 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PQ )

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)

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