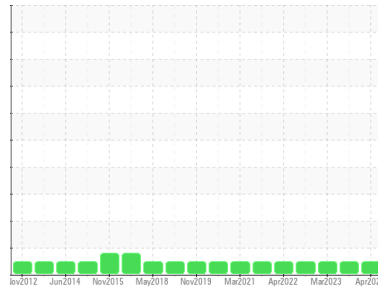




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**ROTH ROCK [200005321]**  
 Machine Id  
**09WEA81553**  
 Component  
**Hydraulic System**  
 Fluid  
**SHELL TELLUS S4 VX 32 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system 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>NX016949</b>	NX012193	NX012213
Sample Date	Client Info			<b>22 Apr 2024</b>	12 Oct 2023	22 Mar 2023
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
PQ		ASTM D8184		<b>14</b>	16	12
Iron	ppm	ASTM D5185m	>20	<b>6</b>	0	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</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>	0	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	8
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>527</b>	516	498
Zinc	ppm	ASTM D5185m		<b>116</b>	134	142
Sulfur	ppm	ASTM D5185m		<b>1073</b>	893	918

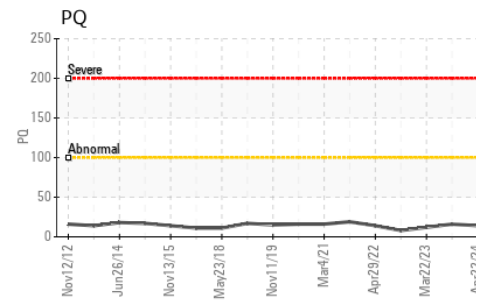
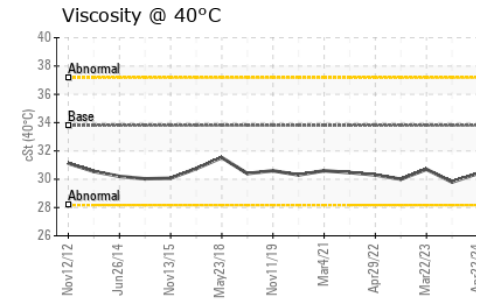
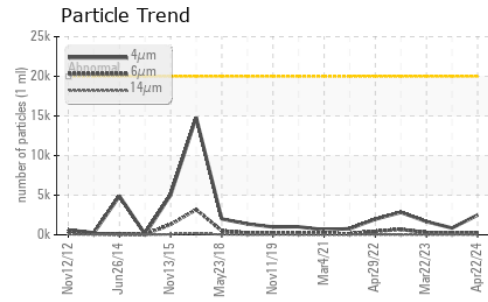
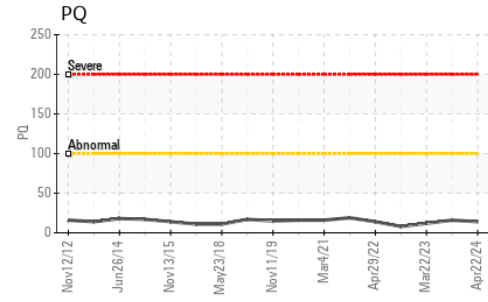
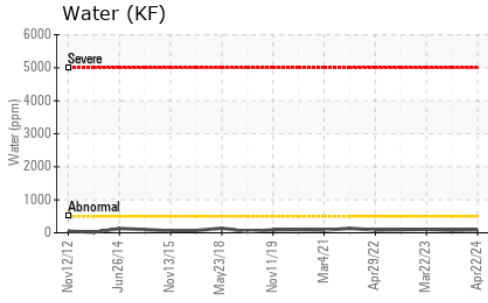
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>4</b>	4	4
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.009</b>	0.007	0.010
ppm Water	ppm	ASTM D6304	>500	<b>95</b>	75	105.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>2498</b>	858	1665
Particles >6µm		ASTM D7647	>2500	<b>279</b>	208	295
Particles >14µm		ASTM D7647	>320	<b>17</b>	27	16
Particles >21µm		ASTM D7647	>80	<b>7</b>	13	6
Particles >38µm		ASTM D7647	>20	<b>0</b>	2	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/18/15	<b>18/15/11</b>	17/15/12	18/15/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.23</b>	0.18	0.19



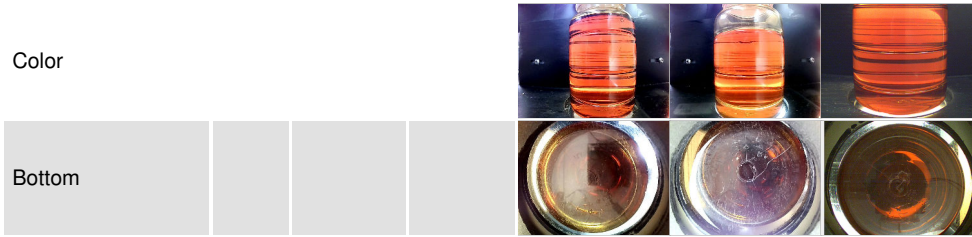
# OIL ANALYSIS REPORT



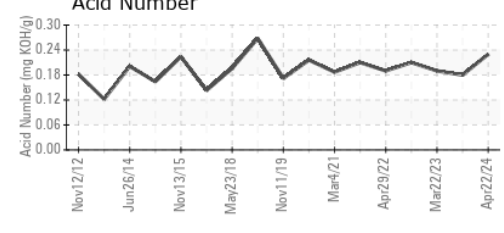
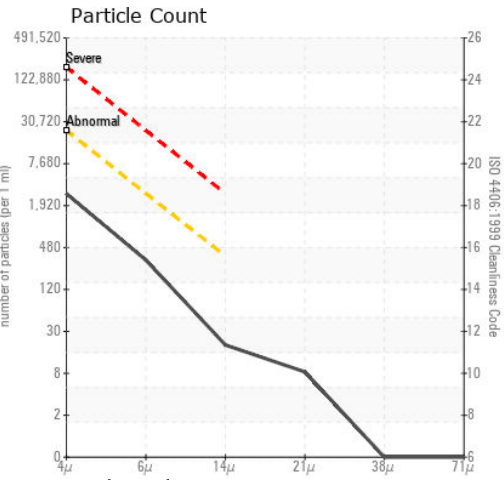
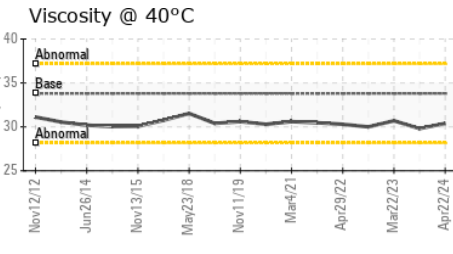
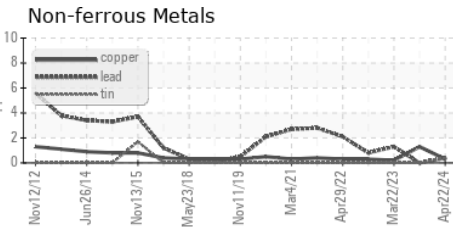
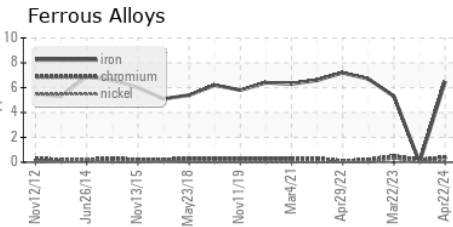
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	33.8	30.4	29.8	30.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NX016949      **Received** : 17 May 2024  
**Lab Number** : **06182818**      **Tested** : 22 May 2024  
**Unique Number** : 11034144      **Diagnosed** : 22 May 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PQ )

**NORDEX USA - ROTH ROCK**  
 300 SOUTH WACKER DRIVE, SUITE 1500  
 CHICAGO, IL  
 US 60606  
 Contact: ADAY MAGEC  
 aday.magec@gestampren.com

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)

F: (312)386-7102