

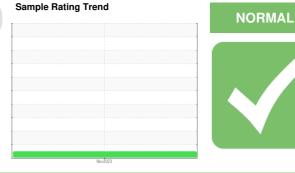
GREASE ANALYSIS

FRONTIER II [200006776] 53WEA86927

Component

Grease

NOT GIVEN (--- LTR)



Recommendation

No corrective action is recommended at this time.

All component wear rates are normal.

Grease Condition

The condition of the grease is acceptable for the time in service.

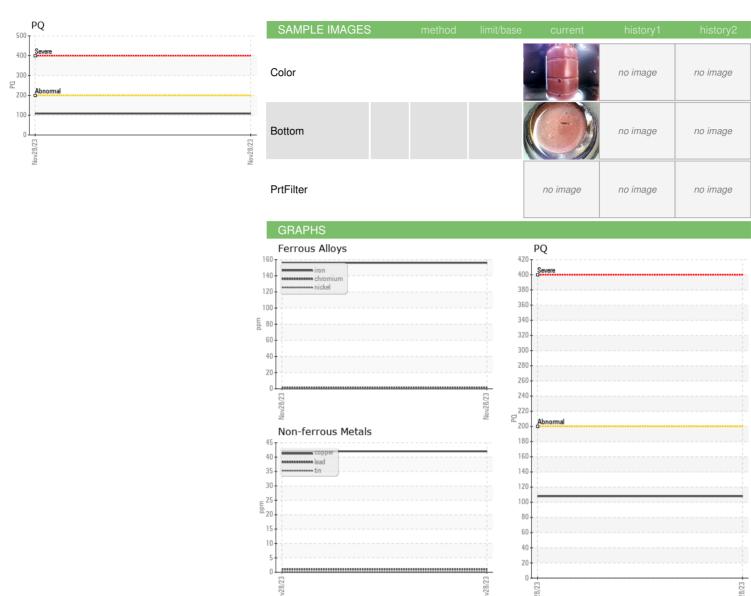
Contaminants

There is no indication of any contamination in the grease.

Sample Number Client Info NX06026956	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 Grease Age hrs Client Info 0 Grease Serviced Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 PQ ASTM D5185m >20 WEAR METALS method method method	Sample Number		Client Info		NX06026956		
Grease Age hrs Client Info N/A Grease Serviced Client Info N/A Sample Status Client Info N/A CONTAMINATION method limit/base current history1 history2 WEAR METALS method 10 2	Sample Date		Client Info		28 Nov 2023		
Client Info	Machine Age	hrs	Client Info		0		
Sample Status	Grease Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 >200 108 Iron ppm ASTM D5185m >250 156 Chromium ppm ASTM D5185m >10 2 Nickel ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m 2 Vanadium ppm ASTM D5185m 25 1 Vanadium ppm ASTM D5185m >25 1 Vanadium ppm ASTM D5185m >5 0 Cadeium ppm ASTM D5185m >5 0 </th <th>Grease Serviced</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th></th> <th></th>	Grease Serviced		Client Info		N/A		
Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 >200 108 Iron ppm ASTM D5185m >250 156 Chromium ppm ASTM D5185m >10 2 Nickel ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <25 1 Vanadium ppm ASTM D5185m >25 1 Lead ppm ASTM D5185m >5 0 Copper ppm ASTM D5185m >5 0	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 >200 108 Iron ppm ASTM D5185m >250 156 Chromium ppm ASTM D5185m >10 2 Nickel ppm ASTM D5185m 2 Cadmium ppm ASTM D5185m 2 Vanadium ppm ASTM D5185m 2 Vanadium ppm ASTM D5185m 25 1 Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m 212 ADDITIVES me	CONTAMINATION		method	limit/base	current	history1	history2
PQ ASTM D8184 branch >200 108 Iron ppm ASTM D5185m >250 156 Chromium ppm ASTM D5185m >10 2 Nickel ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m 2 Titanium ppm ASTM D5185m 25 1 Vanadium ppm ASTM D5185m >25 1 Vanadium ppm ASTM D5185m >25 1 Lead ppm ASTM D5185m >5 0 Copper ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m 212 ADDITIVES method limit/base current history1 history2 </th <th>Water</th> <th></th> <th>WC Method</th> <th>>0.1</th> <th>NEG</th> <th></th> <th></th>	Water		WC Method	>0.1	NEG		
Iron	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 2 Nickel ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m 2 Titanium ppm ASTM D5185m 2 Vanadium ppm ASTM D5185m >25 1 Vanadium ppm ASTM D5185m >25 1 Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m 2 1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0	PQ		ASTM D8184	>200	108		
Nickel ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m 2 Titanium ppm ASTM D5185m 2 Vanadium ppm ASTM D5185m 25 1 Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m 212 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 1 Manganese ppm ASTM D5185m 4647 Phosphorus ppm	Iron	ppm	ASTM D5185m	>250	156		
Cadmium ppm ASTM D5185m 2 Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>10	2		
Titanium ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m 2 Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 <1	Nickel	ppm	ASTM D5185m	>5	0		
Vanadium ppm ASTM D5185m 2 Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >75 42 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 <1	Cadmium	ppm	ASTM D5185m		2		
Lead ppm ASTM D5185m >25 1 Copper ppm ASTM D5185m >75 42 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 <1	Titanium	ppm	ASTM D5185m		<1		
Copper ppm ASTM D5185m >75 42 Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 <1	Vanadium	ppm	ASTM D5185m		2		
Tin ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 212 Magnesium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 20 Calcium ppm ASTM D518	Lead	ppm	ASTM D5185m	>25	1		
Silver ppm ASTM D5185m >5 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 212 Magnesium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 3887 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>75</td> <th>42</th> <td></td> <td></td>	Copper	ppm	ASTM D5185m	>75	42		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 212 Magnesium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887 </td <td>Tin</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>5</td> <th>0</th> <td></td> <td></td>	Tin	ppm	ASTM D5185m	>5	0		
Boron ppm ASTM D5185m 212 Magnesium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Silver	ppm	ASTM D5185m	>5	<1		
Magnesium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	ADDITIVES		method	limit/base	current	history1	history2
Manganese ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Boron	ppm	ASTM D5185m		212		
Molybdenum ppm ASTM D5185m 4647 Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Magnesium	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 886 Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Manganese	ppm	ASTM D5185m		1		
Zinc ppm ASTM D5185m 235 THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Molybdenum	ppm	ASTM D5185m		4647		
THICKENER/SOAP method limit/base current history1 history2 Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Phosphorus	ppm	ASTM D5185m		886		
Aluminum ppm ASTM D5185m 0 Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Zinc	ppm	ASTM D5185m		235		
Barium ppm ASTM D5185m 14 Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	THICKENER/SOA	Р	method	limit/base	current	history1	history2
Calcium ppm ASTM D5185m 20 Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Aluminum	ppm	ASTM D5185m		0		
Sodium ppm ASTM D5185m 20 Lithium ppm ASTM D5185m 3887	Barium	ppm	ASTM D5185m		14		
Lithium ppm ASTM D5185m 3887	Calcium	ppm	ASTM D5185m		20		
The state of the s	Sodium	ppm	ASTM D5185m		20		
Sulfur ppm ASTM D5185m 6184	Lithium	ppm	ASTM D5185m		3887		
	Sulfur	ppm	ASTM D5185m		6184		
CONTAMINANTS method limit/base current history1 history2	CONTAMINANTS		method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m >150 91	Silicon	ppm	ASTM D5185m	>150	91		
Potassium ppm ASTM D5185m 6	Potassium	ppm	ASTM D5185m		6		



GREASE ANALYSIS







Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Unique Number : 10776747

: NX06026956 : 06026956

Recieved Diagnosed

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: 06 Dec 2023 : 26 Dec 2023 Diagnostician : Doug Bogart Test Package : GRS 1 (Additional Tests: KV40, SCREEN)

NORDEX USA - Chicago 300 SOUTH WACKER DRIVE, SUITE 1500 CHICAGO, IL US 60606

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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.

Contact/Location: DEVIN LINEHAN - NORDEX