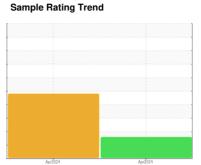
GREASE ANALYSIS





Machine Id

1350 (S/N 71356) Grease

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please submit a sample of the new (unused) grease to establish a baseline.

All component wear rates are normal.

Grease Condition

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

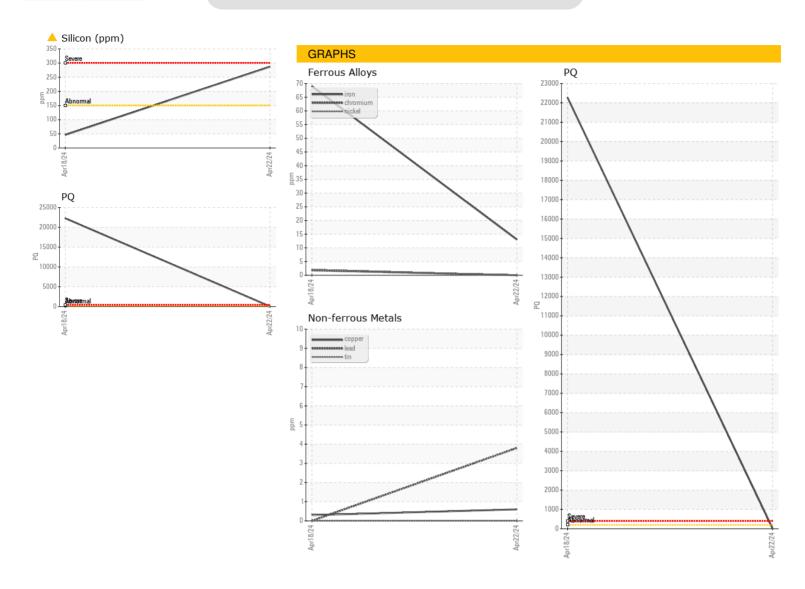
Contaminants

Elemental level of silicon (Si) above normal.

			Apr2024	Apr2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		LH0258672	LH0258673	
Sample Date		Client Info		22 Apr 2024	18 Apr 2024	
Machine Age	hrs	Client Info		0	0	
Grease Age	hrs	Client Info		0	0	
Grease Serviced	1110	Client Info		N/A	N/A	
Sample Status				ABNORMAL	SEVERE	
WEAR METALS		method	limit/base	current	history1	history2
		ASTM D8184				
PQ	10.10.100		>200	21	▲ 22269	
Iron	ppm	ASTM D5185m	>250	13	69	
Chromium	ppm	ASTM D5185m	>10	0	2	
Nickel	ppm	ASTM D5185m	>5	0	2	
Cadmium	ppm	ASTM D5185m		<1	0	
Titanium	ppm	ASTM D5185m		<1	<1	
Vanadium	ppm	ASTM D5185m	0.7	<1	0	
Lead	ppm	ASTM D5185m	>25	4	0	
Copper	ppm	ASTM D5185m	>75	<1	<1	
Tin	ppm	ASTM D5185m	>5	0	0	
Silver	ppm	ASTM D5185m	>5	<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		112	4	
Magnesium	ppm	ASTM D5185m		4	3	
Manganese	ppm	ASTM D5185m		<1	<1	
Molybdenum	ppm	ASTM D5185m		843	2	
Phosphorus	ppm	ASTM D5185m		103	10	
Zinc	ppm	ASTM D5185m		72	22	
THICKENER/SOA	\P	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m		23	10	
Barium	ppm	ASTM D5185m		40	3	
Calcium	ppm	ASTM D5185m		788	63	
Sodium	ppm	ASTM D5185m		7	50	
Lithium	ppm	ASTM D5185m		302	8	
Sulfur	ppm	ASTM D5185m		3357	140	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>150	<u> </u>	46	
Potassium	ppm	ASTM D5185m	7.00	3	20	
Water	%	ASTM D6304	>0.1	NEG	NEG	
SAMPLE IMAGES		method	limit/base			hiotonyO
SAIVIPLE IIVIAGES	•	metriod	IIIIII/base	current	history1	history2
Color						no image
Bottom						no image

LIFRHFRR

GREASE ANALYSIS





Certificate 12367

Laboratory

Sample No. : LH0258672 Lab Number : 06156543 Unique Number : 10991966

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

Received : 22 Apr 2024 Tested Diagnosed Test Package : CONST (Additional Tests: KF, PQ)

: 29 Apr 2024 : 29 Apr 2024 - Doug Bogart

7075 BENNINGTON ST HOUSTON, TX US 77028 Contact: DANIEL LACASA

LIEBHERR CRANE INC

daniel.lacasa@liebherr.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: (713)636-4039