



GREASE ANALYSIS

Sample Rating Trend



NORMAL



Area

[4100882474]

Machine Id

SOUTH MINE POTENTIALLY MIXED GREASE

Component

Grease

Fluid

SHELL GADUS S2 V100 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Diagnostician's Note: I suspect that the concern arises from the color of the grease, which has changed from amber to a light red (the same color as the suspected grease contamination source). The NLGI grade, and texture and thickener additives match the sample of new unused Shell GADUS S2 V100 grease. Sample Form does not state what grease this is supposed to be, but if it is supposed to be Shell GADUS S2 V100 then it is. No contamination detected from the Shell SRS 2000 grease.

Wear

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 INFORMATION

Sample Number	Client Info	method	limit/base	current	history1	history2
Sample Date	Client Info			11 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Grease Age	hrs	Client Info		0	---	---
Grease Serviced	Client Info			N/A	---	---
Sample Status				NORMAL	---	---

CONTAMINATION

Water	method	limit/base	current	history1	history2
	WC Method	>0.1	NEG	---	---

WEAR METALS

PQ	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>250	214	---
Chromium	ppm	ASTM D5185(m)	>10	2	---
Nickel	ppm	ASTM D5185(m)	>5	0	---
Cadmium	ppm	ASTM D5185(m)		0	---
Titanium	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Lead	ppm	ASTM D5185(m)	>25	0	---
Copper	ppm	ASTM D5185(m)	>75	<1	---
Tin	ppm	ASTM D5185(m)	>5	0	---
Silver	ppm	ASTM D5185(m)	>5	0	---

ADDITIVES

Boron	method	limit/base	current	history1	history2
Magnesium	ppm	ASTM D5185(m)	0	<1	---
Manganese	ppm	ASTM D5185(m)	0	1	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---
Phosphorus	ppm	ASTM D5185(m)	0	0	---
Zinc	ppm	ASTM D5185(m)	0	1	---
Antimony	ppm	ASTM D5185(m)	0	0	---

THICKENER/SOAP

Aluminum	method	limit/base	current	history1	history2
Barium	ppm	ASTM D5185(m)	0	0	---
Calcium	ppm	ASTM D5185(m)	0	17	---
Sodium	ppm	ASTM D5185(m)	0	2	---
Lithium	ppm	ASTM D5185(m)	275	271	---
Sulfur	ppm	ASTM D5185(m)	900	847	---

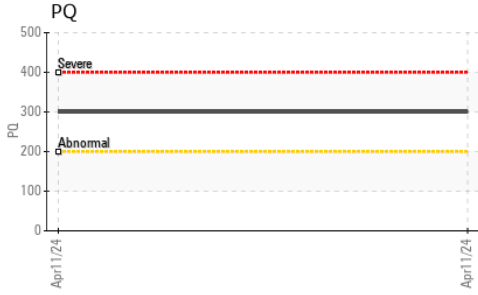
CONTAMINANTS

Silicon	method	limit/base	current	history1	history2
Potassium	ppm	ASTM D5185(m)	>150	<1	---
	ppm	ASTM D5185(m)		<1	---

GREASE CONDITION

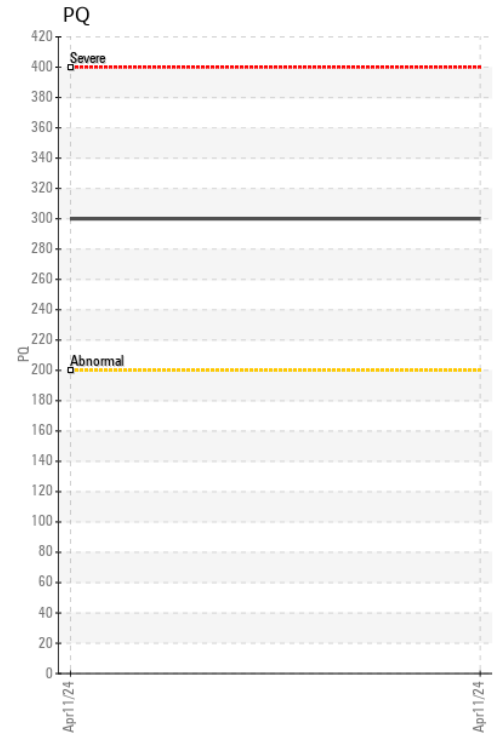
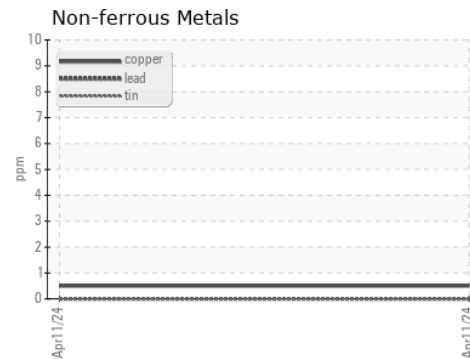
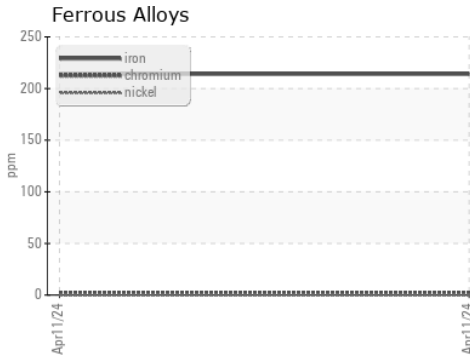
Grease Color	method	limit/base	current	history1	history2
Texture	Visual*	Brown	Brown	---	---
NLGI Consistency	In-house*		Buttery	---	---
	NLGI Scale	SKF Method*	3	3-4	---

GREASE ANALYSIS



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image
PrtFilter				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP **Received** : 12 Apr 2024
Lab Number : **02628628** **Tested** : 15 Apr 2024
Unique Number : 5761760 **Diagnosed** : 15 Apr 2024 - Bill Quesnel
Test Package : GRS 1 (Additional Tests: BottomAnalysis)

Vale - Copper Cliff Smelter
 COPPER CLIFF SMELTER WAREHOUSE, 155 BALSAM ST.
 COPPER CLIFF, ON
 CA P0M 1N0
 Contact: Andy Kozachanko
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 T: (705)682-6687
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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.