



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
CUST 219B
Component
Gearbox
Fluid
TULCO LUBSOIL 4460 SYN GEAR 460 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO10003197	TO10001940	TO10001192
Sample Date		Client Info		22 Feb 2024	03 Mar 2023	19 Oct 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		121	12	7
Iron	ppm	ASTM D5185m	>200	20	11	10
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	<1	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	0
Lead	ppm	ASTM D5185m	>100	2	2	2
Copper	ppm	ASTM D5185m	>200	5	3	2
Tin	ppm	ASTM D5185m	>25	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

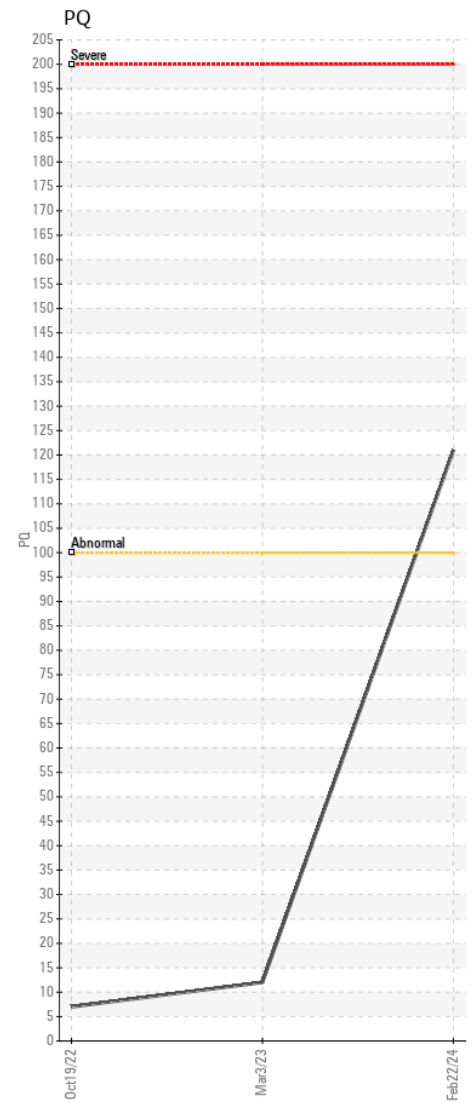
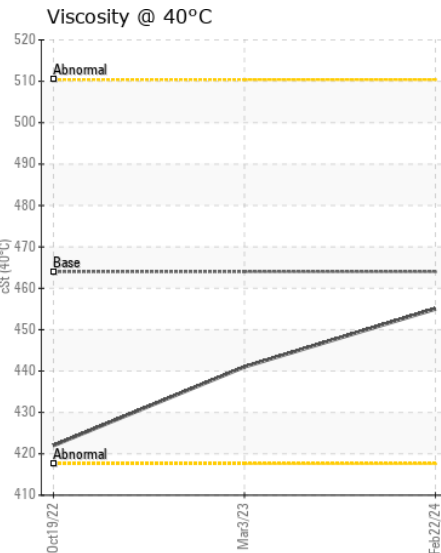
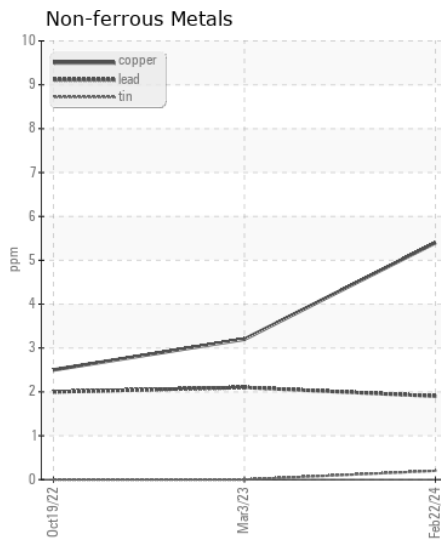
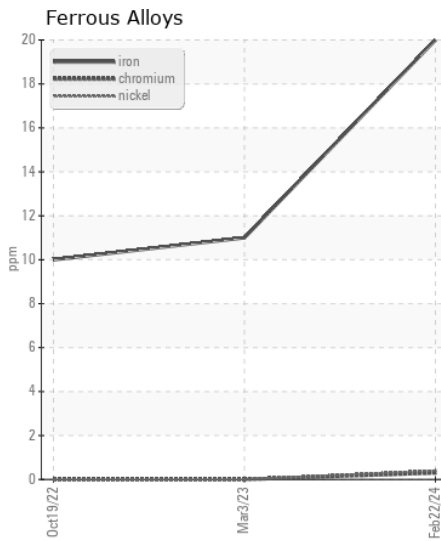
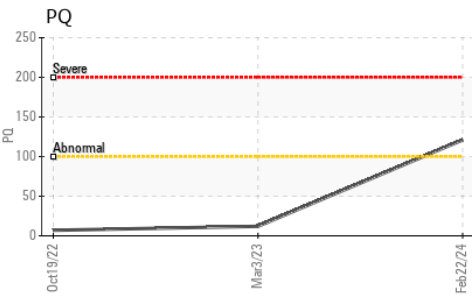
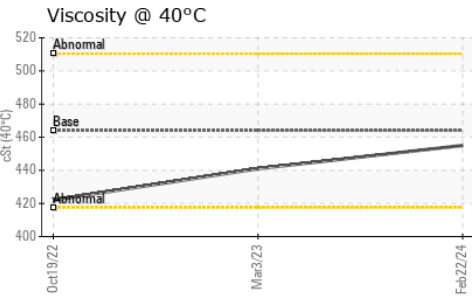
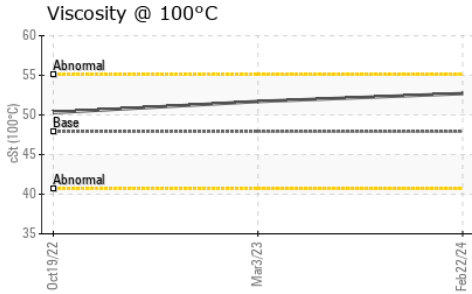
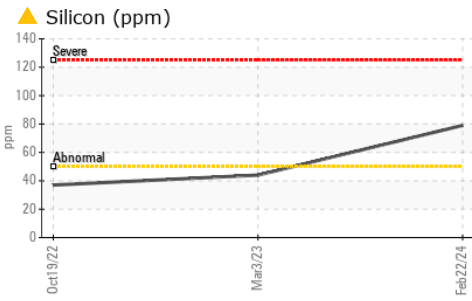
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>50	▲ 79	44	37
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	<1	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	<1	0
Calcium	ppm	ASTM D5185m		4	2	2
Phosphorus	ppm	ASTM D5185m		412	498	433
Zinc	ppm	ASTM D5185m		2	0	0
Sulfur	ppm	ASTM D5185m		2754	2730	3589
Visc @ 40°C	cSt	ASTM D445	464	455	441	422
Visc @ 100°C	cSt	ASTM D445	47.9	52.7	51.7	50.3
Viscosity Index (VI)	Scale	ASTM D2270	153	180	181	182



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003197 **Received** : 28 Feb 2024
Lab Number : 06103315 **Tested** : 01 Mar 2024
Unique Number : 10901545 **Diagnosed** : 01 Mar 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

BERRY STRETCH
 3137 HWY 69A
 PRYOR, OK
 US 74361
 Contact: Service Manager

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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