



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**5509 CHAMPIONS DR**  
 Machine Id  
**MRC-294**  
 Component  
**Compressor**  
 Fluid  
**TULCO LUBSOIL GEO XL LOW ASH 40 (--- 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		<b>TO60002164</b>	TO60001986	TO60001922
Sample Date		Client Info		<b>05 Feb 2024</b>	10 Jan 2024	02 Dec 2023
Machine Age	hrs	Client Info		<b>10147</b>	9409	8060
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status				<b>ABNORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

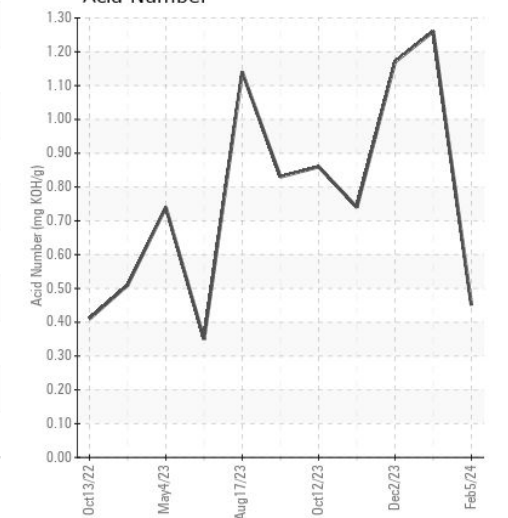
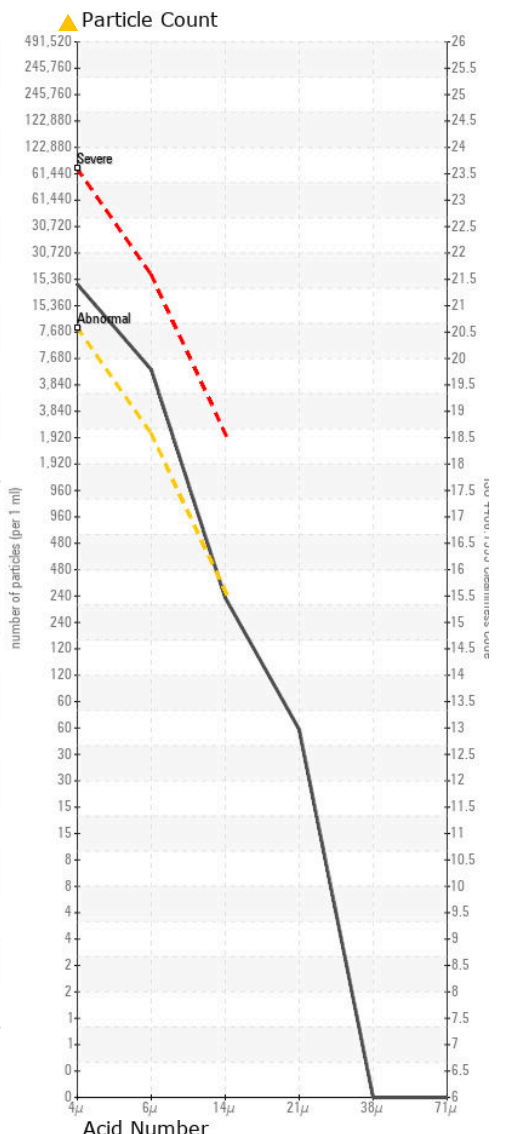
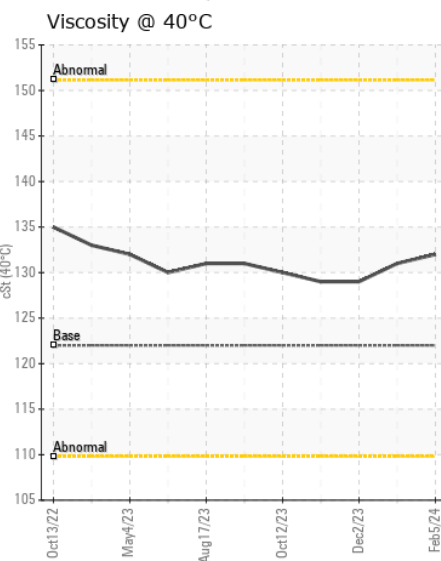
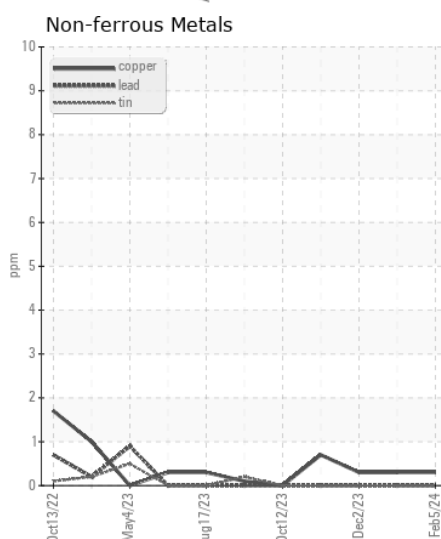
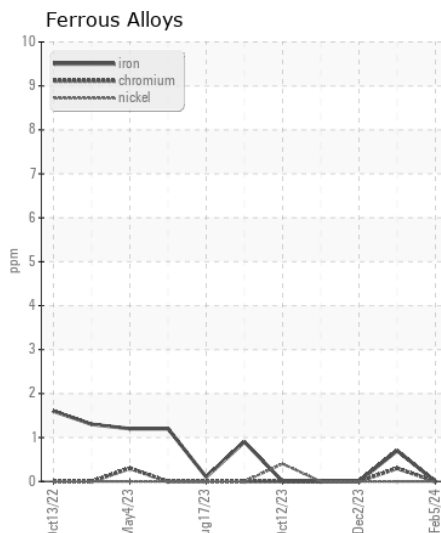
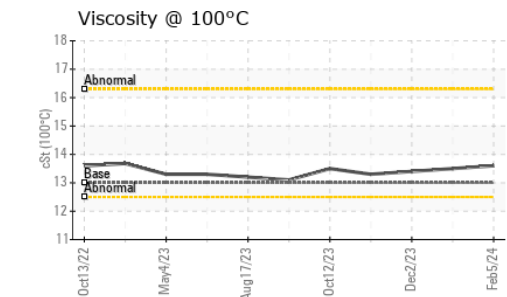
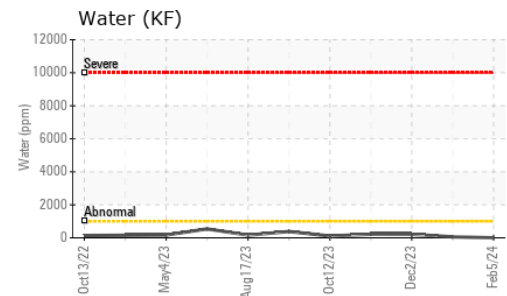
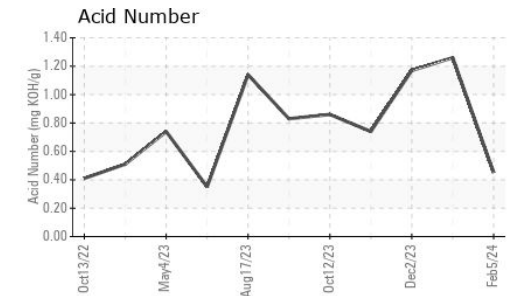
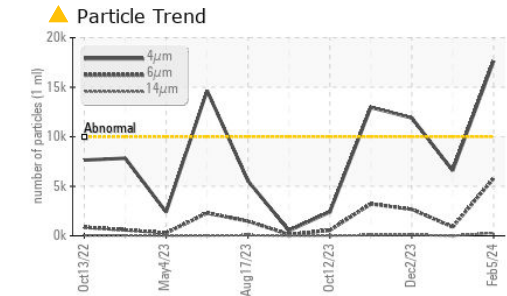
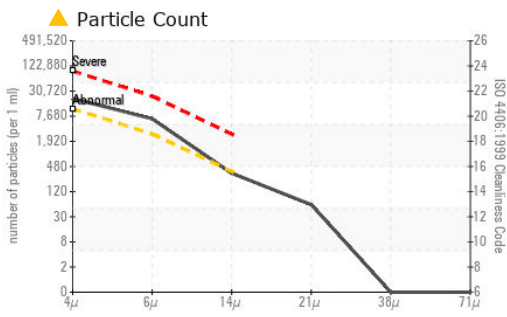
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	11
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	0
Water	%	ASTM D6304	>0.1	<b>0.00</b>	0.005	0.021
ppm Water	ppm	ASTM D6304	>1000	<b>0</b>	59	212
Particles >4µm		ASTM D7647	>10000	<b>▲ 17645</b>	6588	▲ 11903
Particles >6µm		ASTM D7647	>2500	<b>▲ 5783</b>	896	▲ 2675
Particles >14µm		ASTM D7647	>320	<b>292</b>	9	100
Particles >21µm		ASTM D7647	>80	<b>52</b>	1	11
Particles >38µm		ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>▲ 21/20/15</b>	20/17/10	▲ 21/19/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	0	4
Boron	ppm	ASTM D5185m	100	<b>36</b>	60	82
Barium	ppm	ASTM D5185m		<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m	1	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	10	<b>6</b>	4	5
Calcium	ppm	ASTM D5185m	1150	<b>1274</b>	1207	1286
Phosphorus	ppm	ASTM D5185m	290	<b>307</b>	323	293
Zinc	ppm	ASTM D5185m	272	<b>329</b>	285	302
Sulfur	ppm	ASTM D5185m	1900	<b>4341</b>	4459	3360
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.451</b>	1.26	1.17
Visc @ 40°C	cSt	ASTM D445	122	<b>132</b>	131	129
Visc @ 100°C	cSt	ASTM D445	13	<b>13.6</b>	13.5	13.4
Viscosity Index (VI)	Scale	ASTM D2270	103	<b>98</b>	97	98



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60002164 **Received** : 13 Feb 2024  
**Lab Number** : 06087273 **Tested** : 14 Feb 2024  
**Unique Number** : 10874718 **Diagnosed** : 14 Feb 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100, PrtCount, VI )  
 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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