MOB II

TULCO OILS 006 - National Division

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
JAL NM
Machine Id
MRC-205
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.

WEAR

The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

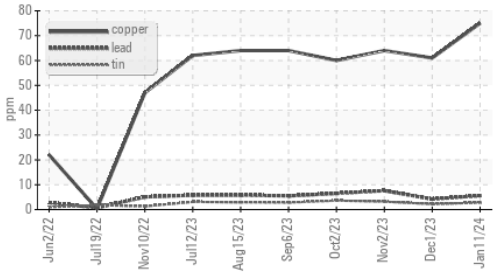
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

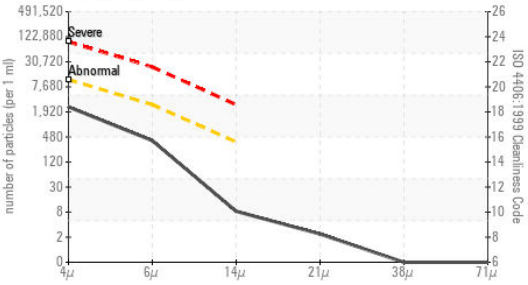
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**TO60002010**	TO60001904	TO60001636
Sample Date		Client Info		**11 Jan 2024**	01 Dec 2023	02 Nov 2023
Machine Age	hrs	Client Info		**22140**	21172	20477
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**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>50	**2**	0	<1
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m		**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	<1
Lead	ppm	ASTM D5185m	>25	**6**	4	8
Copper	ppm	ASTM D5185m	>50	▲ **75**	▲ 61	▲ 64
Tin	ppm	ASTM D5185m	>15	**3**	2	3
Vanadium	ppm	ASTM D5185m		**0**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	2
Potassium	ppm	ASTM D5185m	>20	**2**	0	<1
Water	%	ASTM D6304	>0.1	**0.005**	0.020	0.020
ppm Water	ppm	ASTM D6304	>1000	**51**	208	208.8
Particles >4µm		ASTM D7647	>10000	**2219**	7425	530
Particles >6µm		ASTM D7647	>2500	**344**	1642	162
Particles >14µm		ASTM D7647	>320	**7**	59	9
Particles >21µm		ASTM D7647	>80	**2**	10	3
Particles >38µm		ASTM D7647	>20	**0**	1	1
Particles >71µm		ASTM D7647	>4	**0**	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**18/16/10**	20/18/13	16/15/10
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m		**0**	5	3
Boron	ppm	ASTM D5185m	100	**76**	65	67
Barium	ppm	ASTM D5185m		**3**	0	0
Molybdenum	ppm	ASTM D5185m	1	**2**	<1	2
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	10	**8**	9	9
Calcium	ppm	ASTM D5185m	1150	**1215**	1068	1299
Phosphorus	ppm	ASTM D5185m	290	**311**	247	313
Zinc	ppm	ASTM D5185m	272	**316**	284	375
Sulfur	ppm	ASTM D5185m	1900	**2003**	1573	1973
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.643**	0.10	0.15
Visc @ 40°C	cSt	ASTM D445	122	**129**	129	128
Visc @ 100°C	cSt	ASTM D445	13	**13.3**	13.2	13.4
Viscosity Index (VI)	Scale	ASTM D2270	103	**97**	95	99

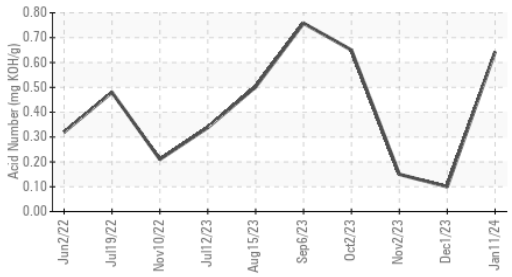
Non-ferrous Metals



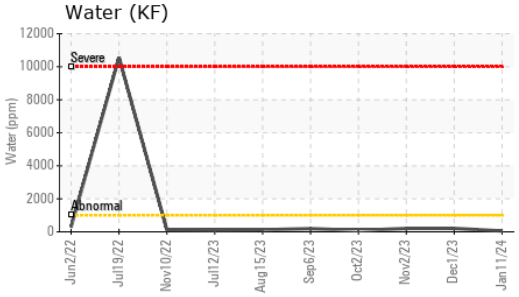
Particle Count



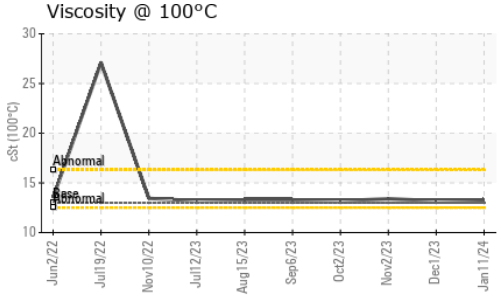
Acid Number



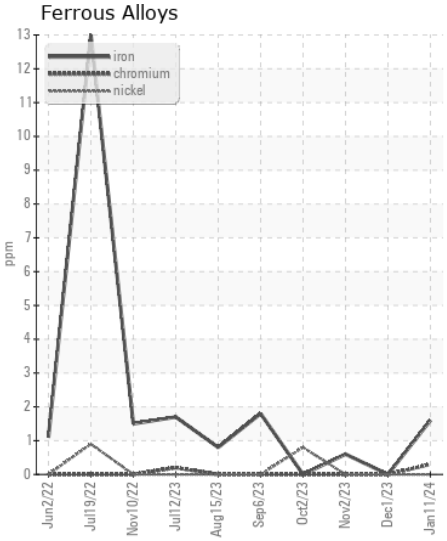
Water (KF)



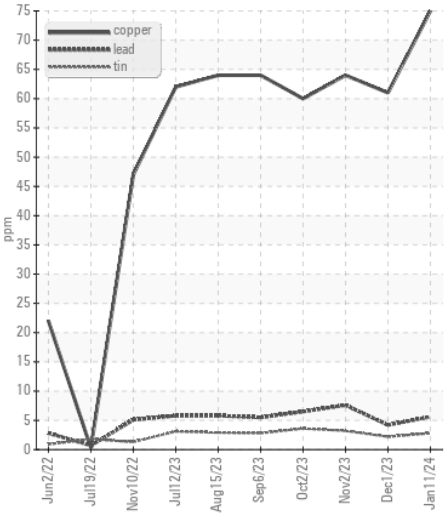
Viscosity @ 100°C



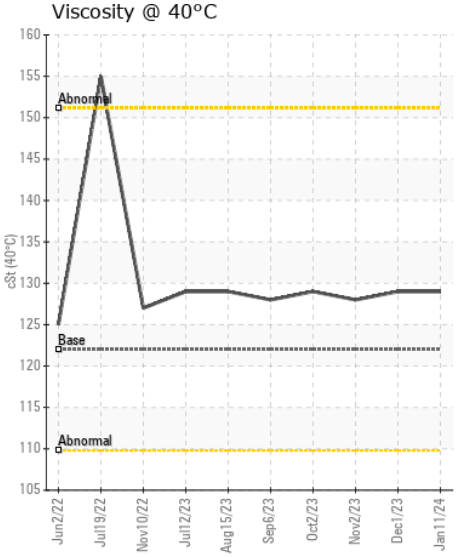
Ferrous Alloys



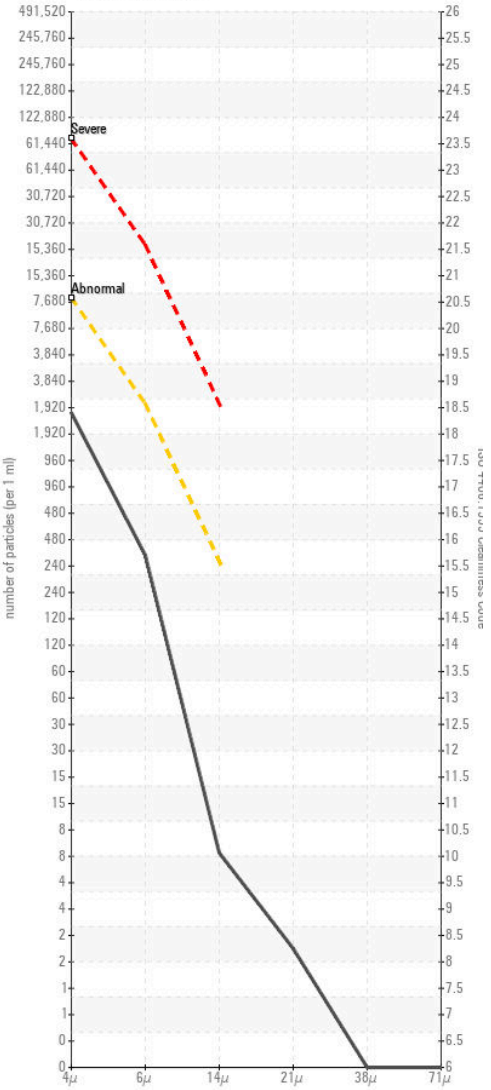
Non-ferrous Metals



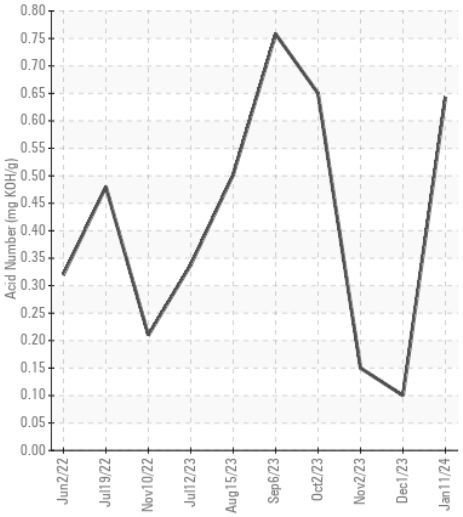
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60002010 **Recieved** : 17 Jan 2024
Lab Number : 06063644 **Diagnosed** : 19 Jan 2024
Unique Number : 10835026 **Diagnostician** : Don Baldridge
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)

MIDLAND - EOG RESOURCES INC.
5509 CHAMPIONS DRIVE
MIDLAND, TX
US 79706
Contact: HERMAN GARZA
herman_garza@eogresources.com
T: (432)686-3600
F: