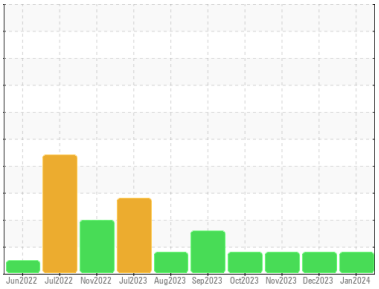
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
JAL NM
Machine Id
MRC-205
Component
Compressor
Fluid
TULCO LUBSOIL GEO XL LOW ASH 40 (--- GAL)

DIAGNOSIS

▲ 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.

SAMPLE INFORMATION		method	limit/base	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
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
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
Cadmium	ppm	ASTM D5185m		**0**	0	0

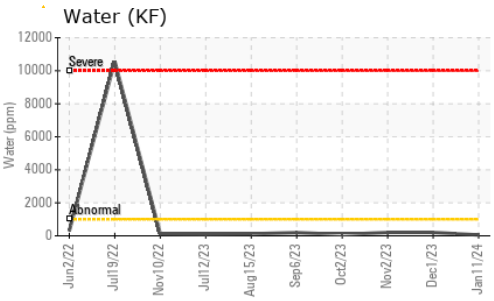
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	100	**76**	65	67
Barium	ppm	ASTM D5185m		**3**	0	0
Molybdenum	ppm	ASTM D5185m	1	**2**	<1	2
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	10	**8**	9	9
Calcium	ppm	ASTM D5185m	1150	**1215**	1068	1299
Phosphorus	ppm	ASTM D5185m	290	**311**	247	313
Zinc	ppm	ASTM D5185m	272	**316**	284	375
Sulfur	ppm	ASTM D5185m	1900	**2003**	1573	1973

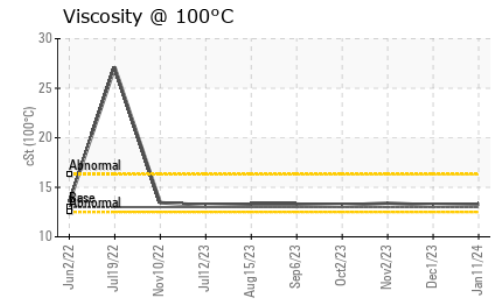
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	2
Sodium	ppm	ASTM D5185m		**0**	5	3
Potassium	ppm	ASTM D5185m	>20	**2**	0	<1
Water	%	ASTM D6304	>0.1	**0.005**	0.020	0.020
ppm Water	ppm	ASTM D6304	>1000	**51**	208	208.8

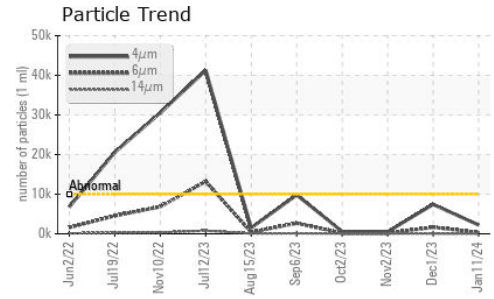
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**2219**	7425	530
Particles >6µm		ASTM D7647	>2500	**344**	1642	162
Particles >14µm		ASTM D7647	>320	**7**	59	9
Particles >21µm		ASTM D7647	>80	**2**	10	3
Particles >38µm		ASTM D7647	>20	**0**	1	1
Particles >71µm		ASTM D7647	>4	**0**	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**18/16/10**	20/18/13	16/15/10

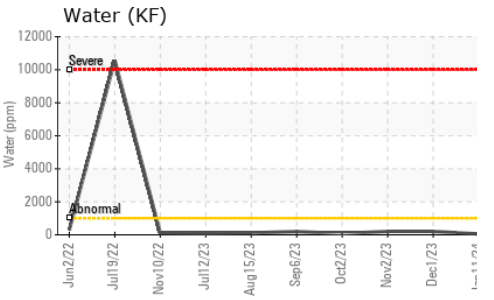
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.643**	0.10	0.15

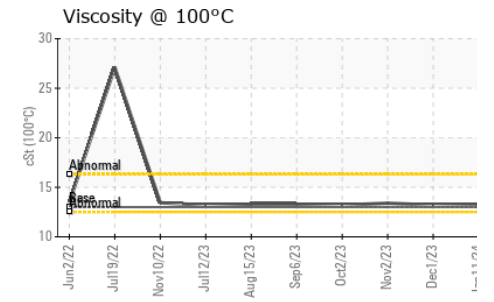
OIL ANALYSIS REPORT









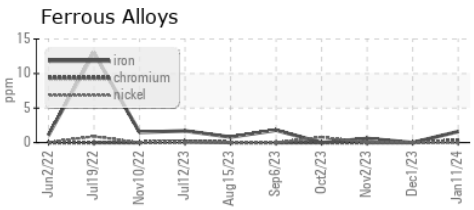


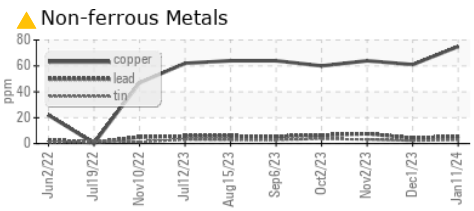
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

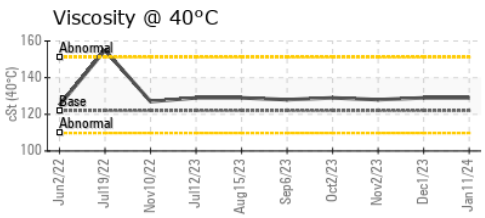
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	122	**129**	129	128
Visc @ 100°C	cSt	ASTM D445	13	**13.3**	13.2	13.4
Viscosity Index (VI)	Scale	ASTM D2270	103	**97**	95	99

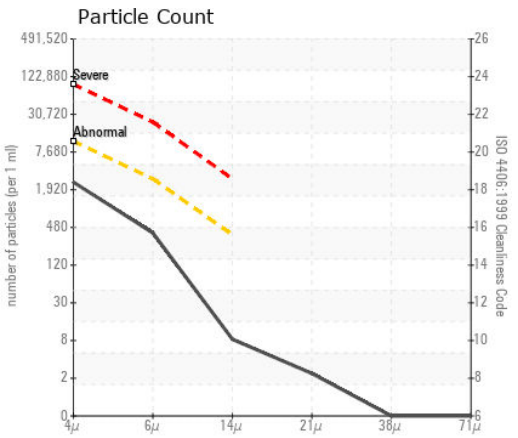
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

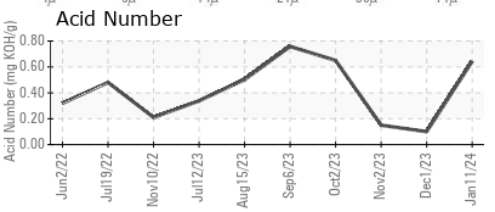
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60002010
Lab Number : 06063644
Unique Number : 10835026
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

Received : 17 Jan 2024
Tested : 19 Jan 2024
Diagnosed : 19 Jan 2024 - Don Baldridge

Certificate L2367

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: