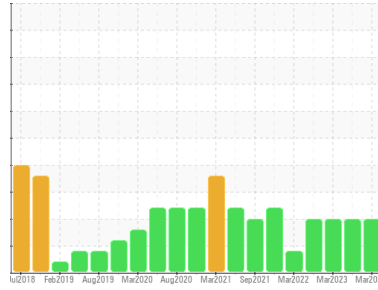


# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**JOYCE PLANT**  
 Machine Id  
**C-204 (S/N 10241E76329867)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**TULCO LUBSOIL SYN RL WI 100 (250 GAL)**

## DIAGNOSIS

- Recommendation**  
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**  
The iron level is abnormal.
- Contamination**  
There is a high amount of silt (particulates < 14 microns in size) present in the oil.
- 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			<b>TO90003253</b>	TO90002256	TO90002335
Sample Date	Client Info			<b>14 Mar 2024</b>	14 Aug 2023	15 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<b>▲ 120</b>	▲ 79	▲ 69
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>1</b>	0	1
Lead	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>2</b>	<1	0
Tin	ppm	ASTM D5185m	>4	<b>4</b>	4	3
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>3</b>	2	1
Magnesium	ppm	ASTM D5185m		<b>2</b>	1	3
Calcium	ppm	ASTM D5185m		<b>4</b>	3	15
Phosphorus	ppm	ASTM D5185m	1500	<b>667</b>	449	391
Zinc	ppm	ASTM D5185m		<b>59</b>	53	63
Sulfur	ppm	ASTM D5185m		<b>29</b>	818	44

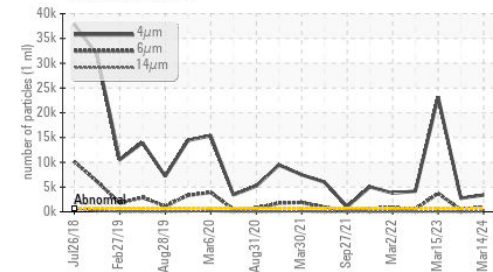
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>5</b>	6	6
Sodium	ppm	ASTM D5185m		<b>10</b>	10	9
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	1
Water	%	ASTM D6304	>2.26	<b>0.013</b>	0.065	0.00
ppm Water	ppm	ASTM D6304	>22600	<b>136</b>	657.1	0.00

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>640	<b>▲ 3393</b>	▲ 2740	▲ 23184
Particles >6µm		ASTM D7647	>320	<b>▲ 935</b>	● 388	▲ 3725
Particles >14µm		ASTM D7647	>80	<b>58</b>	15	53
Particles >21µm		ASTM D7647	>20	<b>10</b>	4	6
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>16/15/13	<b>▲ 19/17/13</b>	▲ 19/16/11	▲ 22/19/13

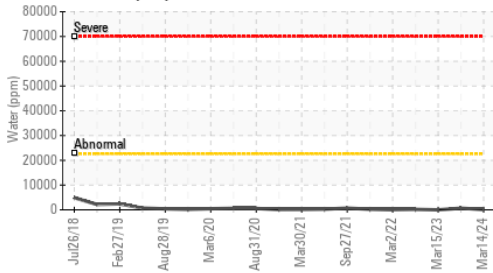
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.04	<b>0.229</b>	0.107	0.088

# OIL ANALYSIS REPORT

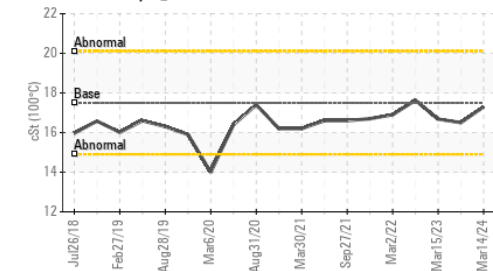
## Particle Trend



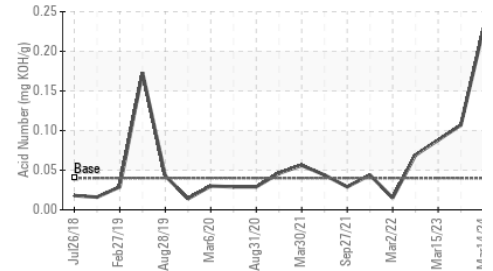
## Water (KF)



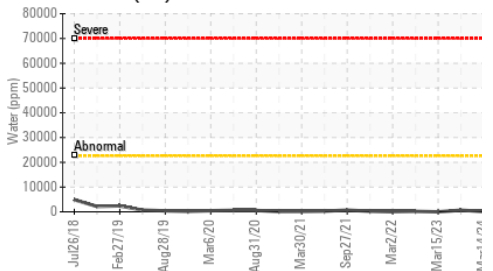
## Viscosity @ 100°C



## Acid Number



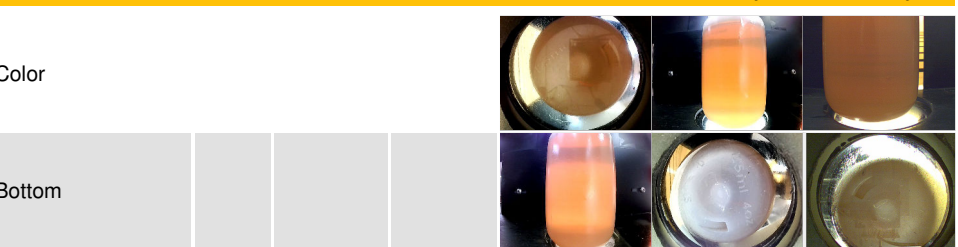
## Water (KF)



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.26	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

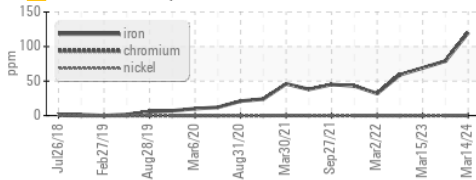
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	97	107	102
Visc @ 100°C	cSt	ASTM D445	17.5	17.3	16.5
Viscosity Index (VI)	Scale	ASTM D2270	198	177	175

## SAMPLE IMAGES

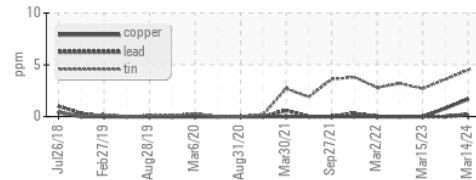


## GRAPHS

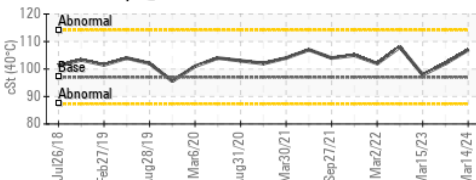
### Ferrous Alloys



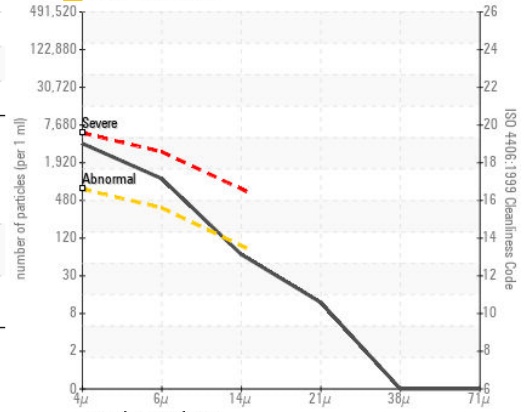
### Non-ferrous Metals



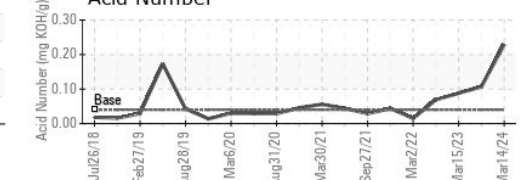
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90003253 **Received** : 16 Apr 2024  
**Lab Number** : 06150510 **Tested** : 17 Apr 2024  
**Unique Number** : 10980588 **Diagnosed** : 18 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**TARGA RESOURCES - JOYCE**  
 1757 COUNTY ROAD 250  
 MIDKIFF, TX  
 US 79755  
 Contact: LLOYD FITTS  
 lfitts@targaresources.com  
 T: (432)770-7923  
 F:

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)