

OIL ANALYSIS REPORT

Area **EDWARD PLANT** Machine Id **C-2163 (S/N XC0356)**

Refrigeration Compressor

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

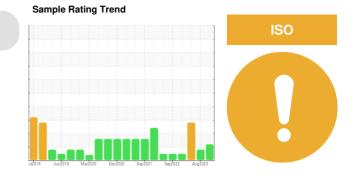
All component wear rates are normal.

Contamination

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

Fluid Condition

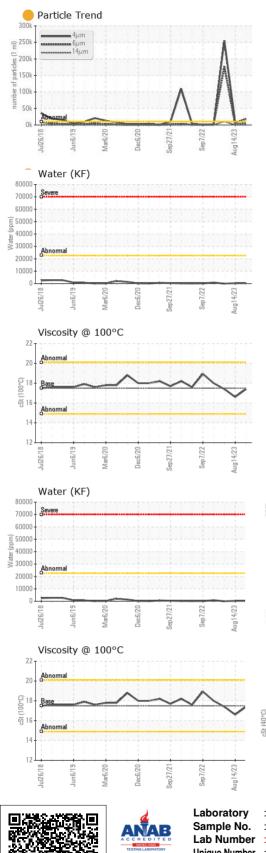
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO90003249	TO90002252	TO90002331
Sample Date		Client Info		14 Mar 2024	14 Aug 2023	15 Mar 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	6	1 3	3 6
Chromium	ppm	ASTM D5185m	>2	0	0	<1
Nickel	ppm	ASTM D5185m		1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>3	1	0	1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m		2	1	<1
Tin	ppm	ASTM D5185m	>4	2	4	3
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		3	2	6
Calcium	ppm	ASTM D5185m		20	63	59
Phosphorus	ppm	ASTM D5185m	1500	997	132	61
Zinc	ppm	ASTM D5185m		0	4	18
Sulfur	ppm	ASTM D5185m		25	84	68
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	3	11
Sodium	ppm	ASTM D5185m		2	1	0
Potassium	ppm	ASTM D5185m	>20	3	1	<1
Water	%	ASTM D6304	>2.26	0.032	0.029	0.00
ppm Water	ppm	ASTM D6304	>22600	326	291.0	0.00
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	e 17793	7120	🔺 255604
Particles >6µm		ASTM D7647	>2500	<mark> </mark> 4891	1694	1 77035
Particles >14µm		ASTM D7647	>320	170	62	1 0030
Particles >21µm		ASTM D7647	>80	18	9	655
Particles >38µm		ASTM D7647	>20	0	0	1
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	e 21/19/15	20/18/13	▲ 25/25/21
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.04	0.045	0.039	0.059

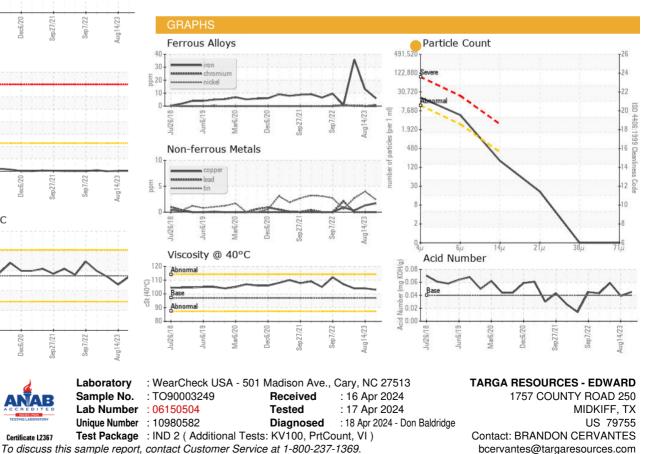


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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	>2.26	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	97	103	104	104
Visc @ 100°C	cSt	ASTM D445	17.5	17.4	16.6	17.4
Viscosity Index (VI)	Scale	ASTM D2270	198	185	173	184
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						

Bottom



* - 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)

Report Id: TAREDWA [WUSCAR] 06150504 (Generated: 04/18/2024 15:11:13) Rev: 1

Certificate 12367

Submitted By: ERIC THORNTON Page 2 of 2

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