

## Machine Id WEST KARNES VRU 4 (S/N 5258X1182) Component Compressor Fluid TULCO LUBSOIL 2150 SYNTHETIC 150 (--- GAL)

## RECOMMENDATION

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.



All component wear rates are normal.

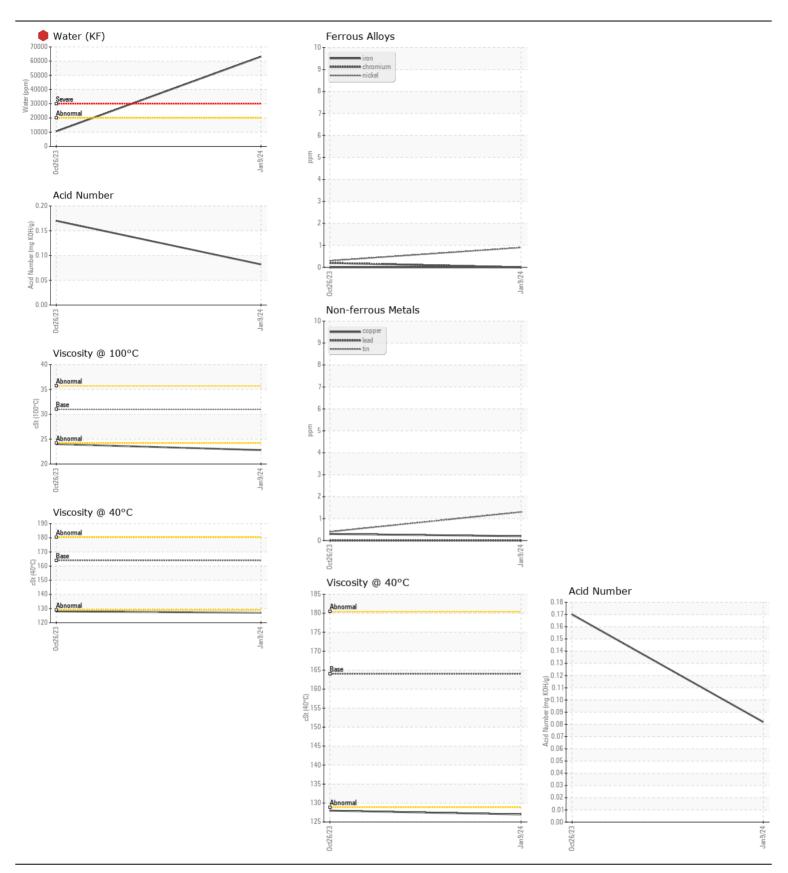
## CONTAMINATION

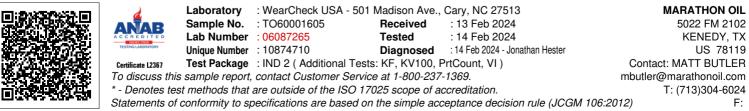
There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Teet		Method	Limit/Abn	0	Listand	Lister 0
Test	UOM		LIMIUADO	Current	History1	History2
Sample Number		Client Info		TO60001605	TO60001620	
Sample Date		Client Info		09 Jan 2024	26 Oct 2023	
Machine Age	hrs	Client Info		35792	0	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Filter Changed		Client Info		N/A	N/A	
Sample Status				SEVERE	NORMAL	
				•	_	
Iron	ppm	ASTM D5185m	>50	0	0	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m		<1	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	1	1	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>50	<1	<1	
Tin	ppm	ASTM D5185m	>15	1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
0'''			05	•		
Silicon	ppm	ASTM D5185m	>25 >20	0 3	0	
Potassium Water	ppm	ASTM D5185m		6.315	_	
	%	ASTM D6304 ASTM D6304	>2.0 >20000	63155	1.055 10557.1	
ppm Water Particles >4µm	ppm	ASTM D6304 ASTM D7647	>20000		3279	
Particles >6µm		ASTM D7647 ASTM D7647	>2500		540	
Particles >14µm		ASTM D7647 ASTM D7647	>320		32	
Particles >21µm		ASTM D7647	>80		9	
Particles >38µm		ASTM D7647	>20		0	
Particles >71µm		ASTM D7647	>4		0	
Oil Cleanliness		ISO 4406 (c)	>20/18/15		19/16/12	
Silt	scalar	*Visual	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	>2.0	NEG	NEG	
Sodium	ppm	ASTM D5185m		0	2	
Boron	ppm	ASTM D5185m		3	0	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	<1	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m		2	0	
Calcium	ppm	ASTM D5185m		1	0	
Phosphorus	ppm	ASTM D5185m		2	15	
Zinc	ppm	ASTM D5185m		0	0	
Sulfur	ppm	ASTM D5185m		113	1134	
Acid Number (AN)	mg KOH/g	ASTM D8045	101	0.082	0.17	
Visc @ 40°C	cSt	ASTM D445	164	127	128	
Visc @ 100°C	cSt	ASTM D445	31	22.8	24.0	
Viscosity Index (VI)	Scale	ASTM D2270	233	210	220	

## **FLUID CONDITION**

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





Contact/Location: MATT BUTLER - MARKENTX