



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**VRV-2 (S/N 5258X644)**  
 Component  
**Compressor**  
 Fluid  
**TULCO LUBSOIL LPG WS 150 (--- GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

**WEAR**

All component wear rates are normal.

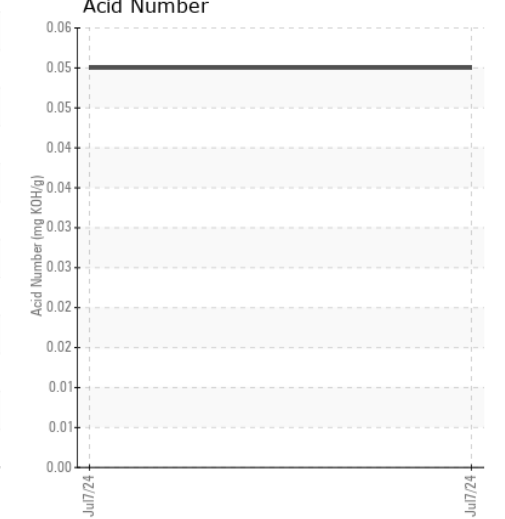
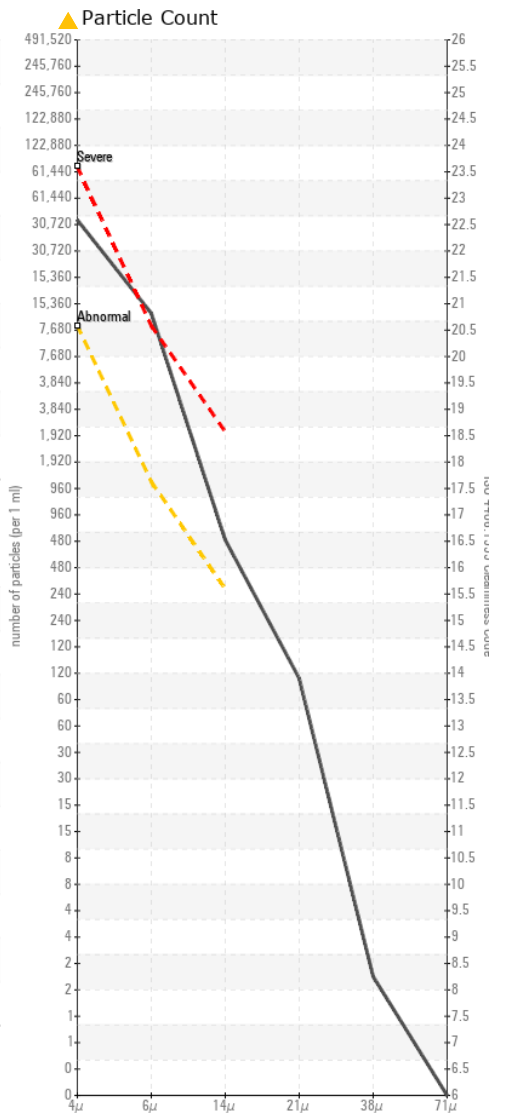
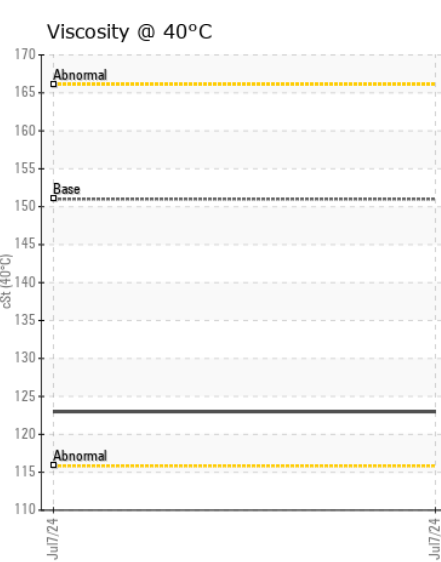
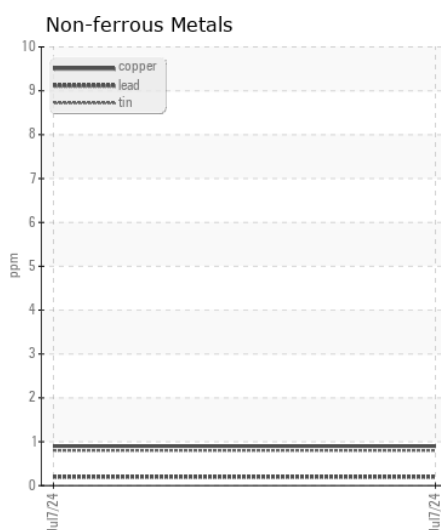
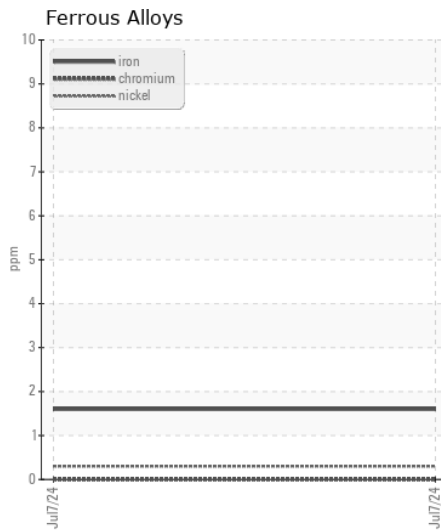
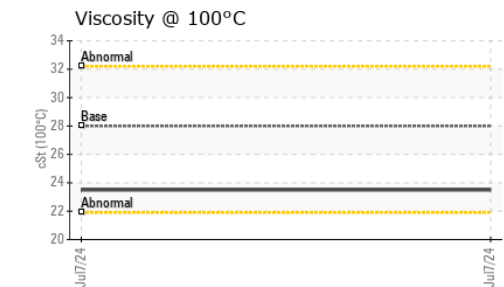
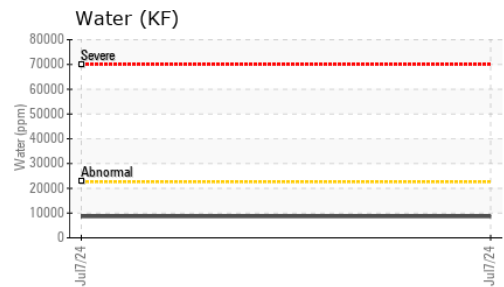
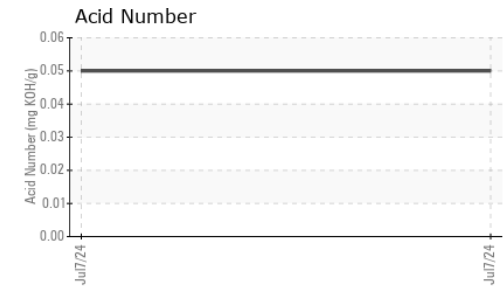
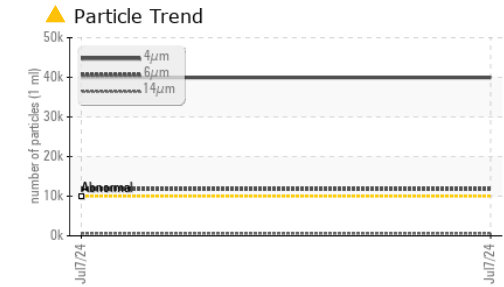
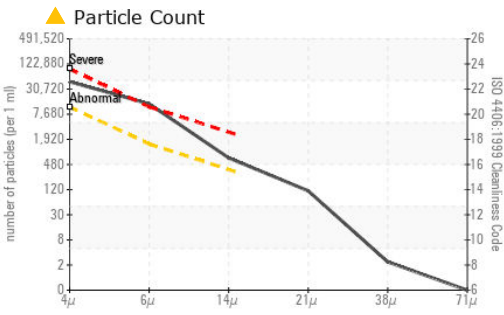
**CONTAMINATION**

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		TO10002679	---	---
Sample Date		Client Info		07 Jul 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>50	2	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>25	<1	---	---
Copper	ppm	ASTM D5185m	>50	<1	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	<1	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Water	%	ASTM D6304	>2.26	0.862	---	---
ppm Water	ppm	ASTM D6304	>22600	8622	---	---
Particles >4µm		ASTM D7647	>10000	▲ 39935	---	---
Particles >6µm		ASTM D7647	>1300	▲ 11769	---	---
Particles >14µm		ASTM D7647	>320	▲ 607	---	---
Particles >21µm		ASTM D7647	>80	▲ 99	---	---
Particles >38µm		ASTM D7647	>20	2	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/17/15	▲ 22/21/16	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>2.26	NEG	---	---
Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m	0	<1	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	0	0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	0	<1	---	---
Calcium	ppm	ASTM D5185m	0	0	---	---
Phosphorus	ppm	ASTM D5185m	0	1	---	---
Zinc	ppm	ASTM D5185m	0	0	---	---
Sulfur	ppm	ASTM D5185m	0	225	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.05	---	---
Visc @ 40°C	cSt	ASTM D445	151	123	---	---
Visc @ 100°C	cSt	ASTM D445	28	23.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270	224	223	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10002679 **Received** : 05 Jul 2024  
**Lab Number** : 06229198 **Tested** : 09 Jul 2024  
**Unique Number** : 11112691 **Diagnosed** : 09 Jul 2024 - Don Baldridge  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**KINDER MORGAN**  
 26166 HWY 23  
 PORT SULPHUR, LA  
 US 70083  
 Contact: Service Manager

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)

T:  
F: