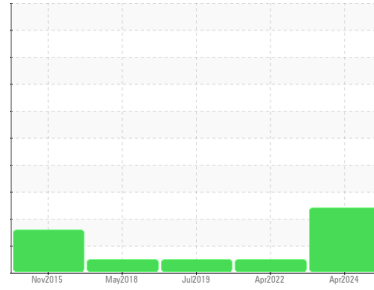


OIL ANALYSIS REPORT

Sample Rating Trend



Area
PRODUCTION
 Machine Id
WIFAG TOWER 8
 Component
Hydraulic System
 Fluid
TULCO LUBSOIL SUPER HYDRAULIC AW 100 (90 GAL)

DIAGNOSIS

Recommendation
 We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear
 All component wear rates are normal.

Contamination
 There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible.

Fluid Condition
 The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		TO50000808	TO5000707	TO5010832
Sample Date	Client Info		17 Apr 2024	20 Apr 2022	09 Jul 2019
Machine Age	yrs	Client Info	6	0	0
Oil Age	yrs	Client Info	0	4	0
Oil Changed	Client Info		Not Chngd	Not Chngd	N/A
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	<1	<1
Aluminum	ppm	ASTM D5185m >10	0	<1	0
Lead	ppm	ASTM D5185m >10	1	2	<1
Copper	ppm	ASTM D5185m >75	10	10	4
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

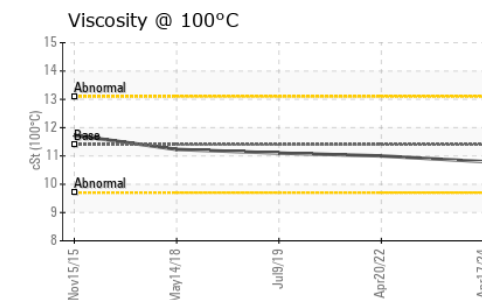
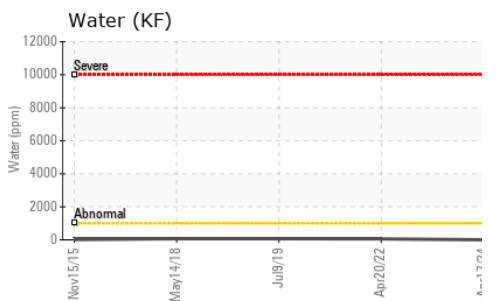
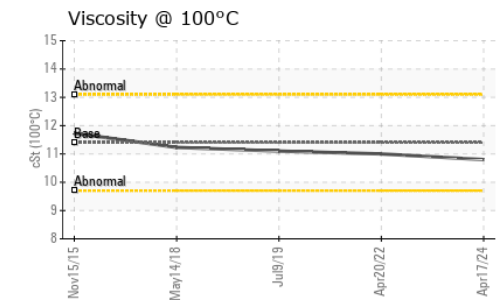
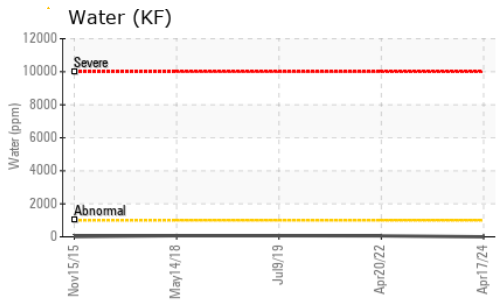
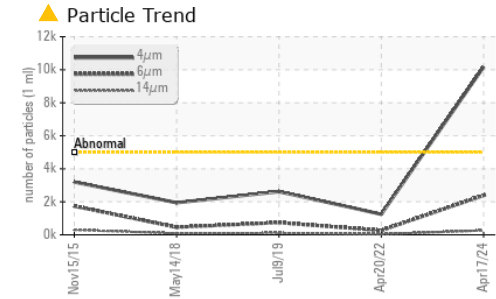
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	3	0	2
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	10	11	13
Calcium	ppm	ASTM D5185m	27	27	40
Phosphorus	ppm	ASTM D5185m 380	314	338	338
Zinc	ppm	ASTM D5185m 490	383	411	392
Sulfur	ppm	ASTM D5185m 2150	1898	1285	1960

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	4	4	4
Sodium	ppm	ASTM D5185m	4	3	3
Potassium	ppm	ASTM D5185m >20	2	3	2
Water	%	ASTM D6304 >0.1	0.00	0.006	0.007
ppm Water	ppm	ASTM D6304 >1000	0	61.9	70

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 10167	1246	2618
Particles >6µm	ASTM D7647	>1300	● 2393	269	739
Particles >14µm	ASTM D7647	>160	● 267	35	110
Particles >21µm	ASTM D7647	>40	▲ 110	13	52
Particles >38µm	ASTM D7647	>10	● 18	1	11
Particles >71µm	ASTM D7647	>3	1	0	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/18/15	17/15/12	19/17/14

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.6	0.38	0.38	0.329

OIL ANALYSIS REPORT

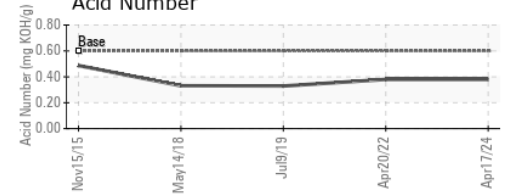
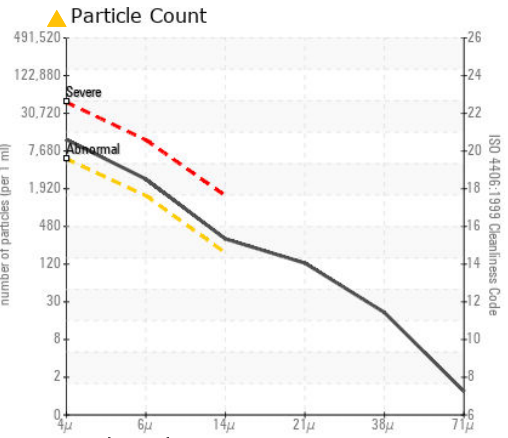
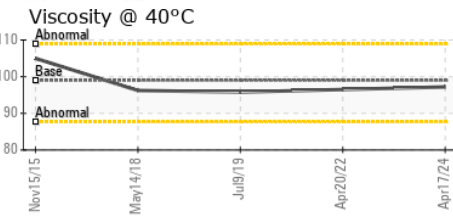
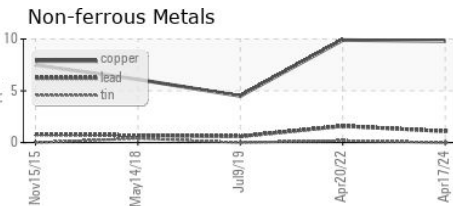
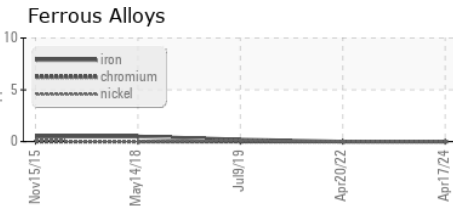


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	99	97.2	96.5
Visc @ 100°C	cSt	ASTM D445	11.4	10.8	11.0
Viscosity Index (VI)	Scale	ASTM D2270	101	94	98

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000808 **Received** : 22 Apr 2024
Lab Number : 06155916 **Tested** : 23 Apr 2024
Unique Number : 10991339 **Diagnosed** : 23 Apr 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

DALLAS MORNING NEWS
 3900 W PLANO PKWY
 PLANO, TX
 US 75075
 Contact: KENNY CLARK
 kclark@dallasnews.com
 T: (214)977-6929
 F: (214)977-6888

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)