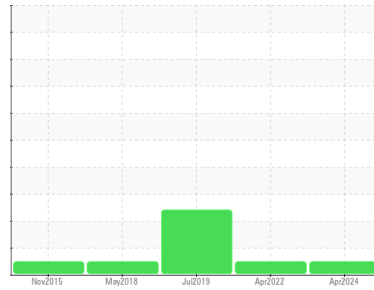


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
PRODUCTION
Machine Id
WIFAG TOWER 6
Component
Hydraulic System
Fluid
TULCO LUBSOIL SUPER HYDRAULIC AW 100 (90 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

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			TO50000816	TO5000705	TO5010100
Sample Date	Client Info			17 Apr 2024	20 Apr 2022	09 Jul 2019
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	4	0
Oil Changed	Client Info			N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	3	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	2	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	2	7	4
Copper	ppm	ASTM D5185m	>75	6	62	26
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

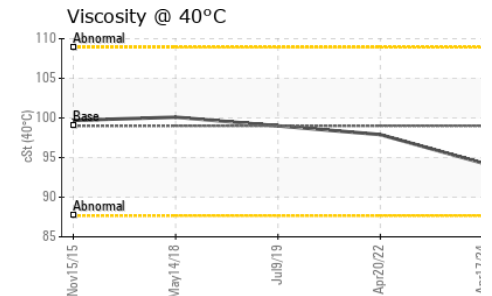
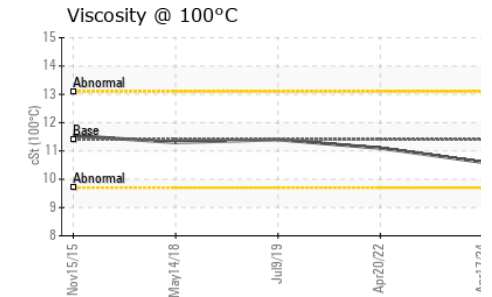
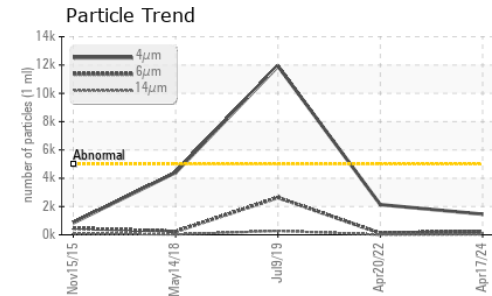
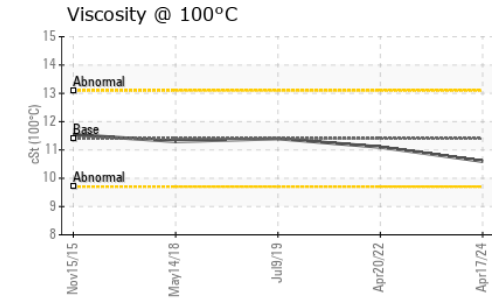
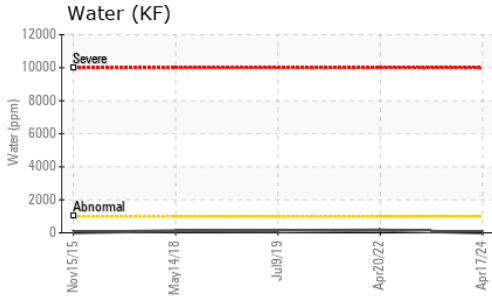
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	0
Barium	ppm	ASTM D5185m		<1	0	4
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		40	6	11
Calcium	ppm	ASTM D5185m		33	5	10
Phosphorus	ppm	ASTM D5185m	380	301	336	329
Zinc	ppm	ASTM D5185m	490	368	224	271
Sulfur	ppm	ASTM D5185m	2150	1874	1362	2083

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1	4	4
Sodium	ppm	ASTM D5185m		6	35	30
Potassium	ppm	ASTM D5185m	>20	4	19	14
Water	%	ASTM D6304	>0.1	0.001	0.016	0.010
ppm Water	ppm	ASTM D6304	>1000	5	160.3	100

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1456	2132	▲ 11923
Particles >6µm		ASTM D7647	>1300	248	113	▲ 2634
Particles >14µm		ASTM D7647	>160	24	8	▲ 278
Particles >21µm		ASTM D7647	>40	10	2	▲ 110
Particles >38µm		ASTM D7647	>10	1	0	▲ 17
Particles >71µm		ASTM D7647	>3	0	0	3
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/15/12	18/14/10	▲ 21/19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.6	0.35	0.31	0.295

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	LIGHT	▲ HEAVY
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	94.3	97.9
Visc @ 100°C	cSt	ASTM D445	11.4	10.6	11.1
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. : TO50000816 **Received** : 22 Apr 2024
Lab Number : **06155914** **Tested** : 23 Apr 2024
Unique Number : 10991337 **Diagnosed** : 23 Apr 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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 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)