



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
TKS PRESS 3 UNIT 11-12
 Component
Hydraulic System
 Fluid
TULCO LUBSOIL SUPER HYDRAULIC AW 68 (50 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO50000787	TO5000738	TO5000986
Sample Date		Client Info		17 Apr 2024	20 Apr 2022	23 Jul 2019
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	3	0
Filter Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	17	16	13
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>10	<1	1	<1
Lead	ppm	ASTM D5185m	>10	8	8	7
Copper	ppm	ASTM D5185m	>75	80	99	82
Tin	ppm	ASTM D5185m	>10	2	2	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

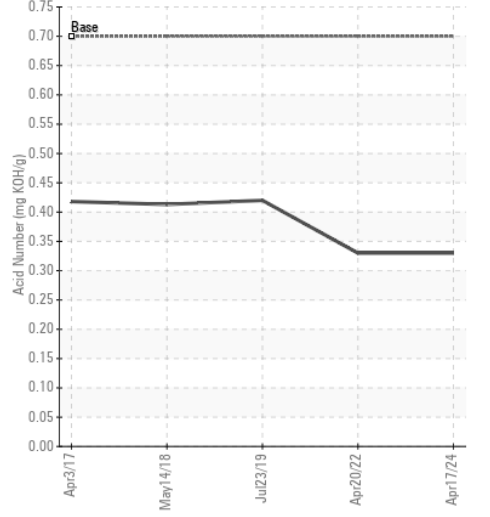
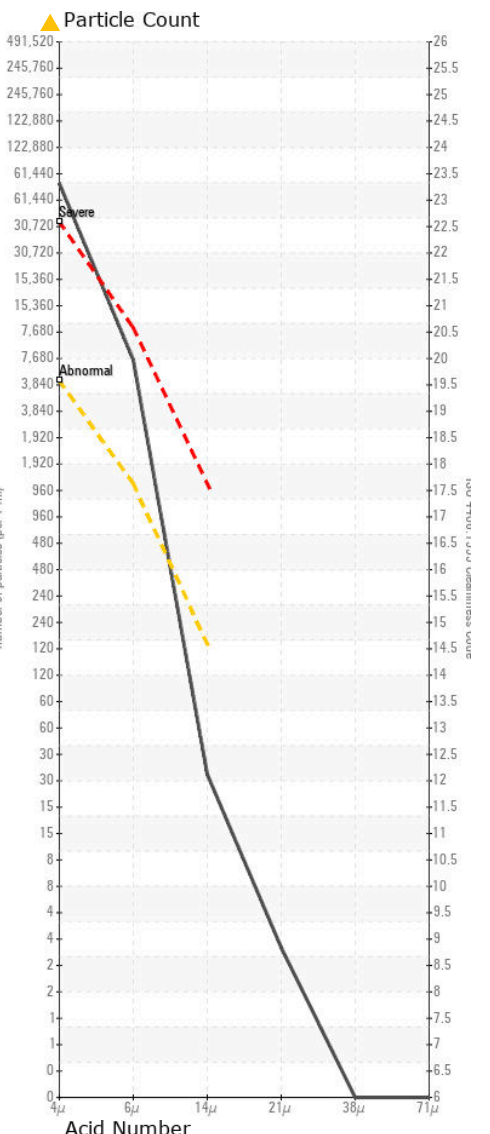
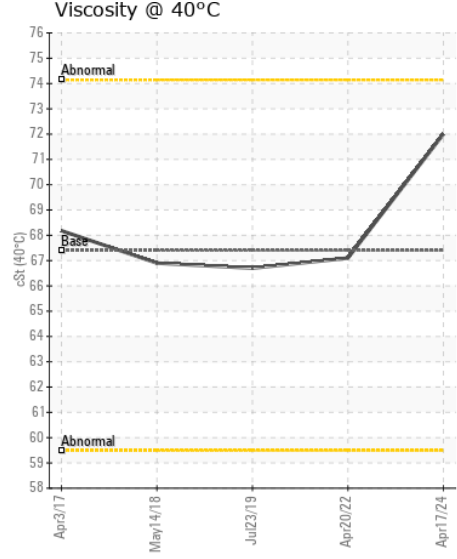
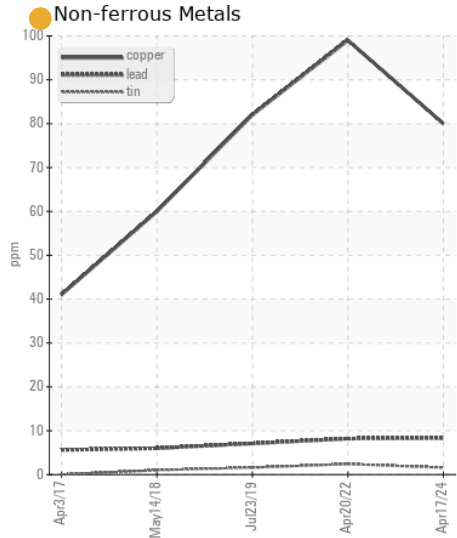
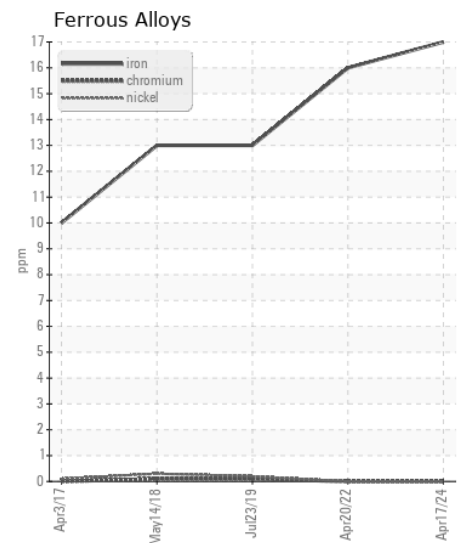
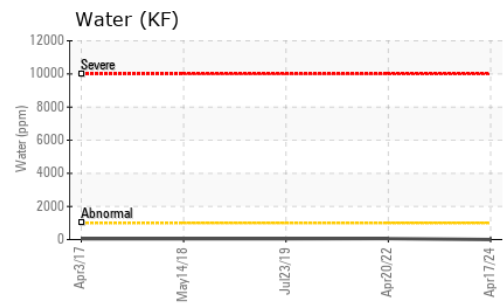
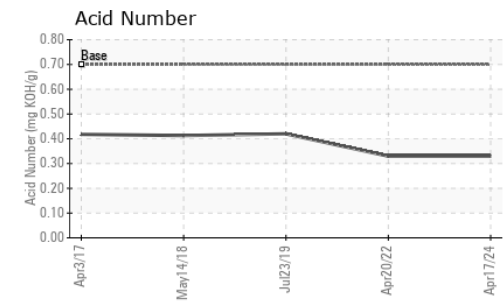
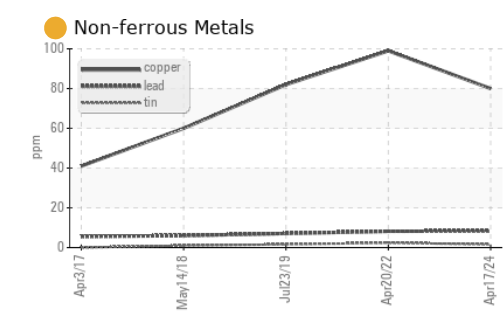
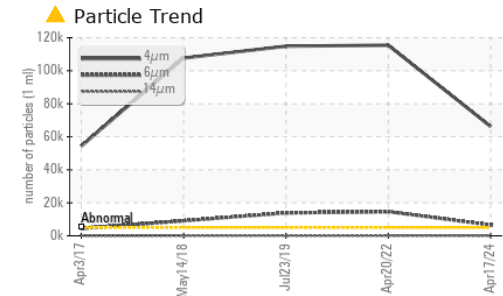
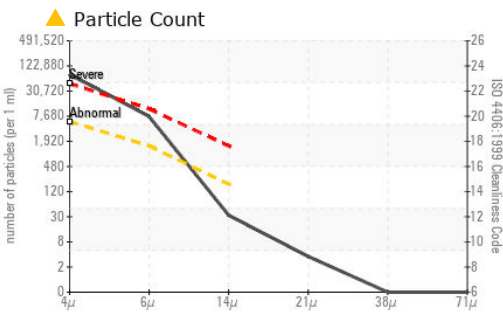
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	15	14	19
Potassium	ppm	ASTM D5185m	>20	2	5	2
Water	%	ASTM D6304	>0.1	0.00	0.006	0.005
ppm Water	ppm	ASTM D6304	>1000	0	61.9	50
Particles >4µm		ASTM D7647	>5000	66228	115453	114849
Particles >6µm		ASTM D7647	>1300	6573	14632	13900
Particles >14µm		ASTM D7647	>160	29	67	71
Particles >21µm		ASTM D7647	>40	3	5	12
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/20/12	24/21/13	24/21/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		1	1	2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		2	4	5
Calcium	ppm	ASTM D5185m		3	3	4
Phosphorus	ppm	ASTM D5185m	425	156	174	206
Zinc	ppm	ASTM D5185m	500	141	159	204
Sulfur	ppm	ASTM D5185m	1900	5188	3464	5288
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	0.33	0.33	0.420
Visc @ 40°C	cSt	ASTM D445	67.4	72.0	67.1	66.7
Visc @ 100°C	cSt	ASTM D445	8.8	8.6	8.7	8.7
Viscosity Index (VI)	Scale	ASTM D2270	102	88	101	102



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000787
Lab Number : 06155906
Unique Number : 10991329
Test Package : IND 2 (Additional Tests: KF, KV100, VI)
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 24 Apr 2024 - Don Baldrige
 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)

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