

### **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

Machine Id

# TKS PRESS 1 UNIT 6

Component Hydraulic System

TULCO LUBSOIL SUPER HYDRAULIC AW 68 (50 GAL)

#### DIAGNOSIS

#### 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

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

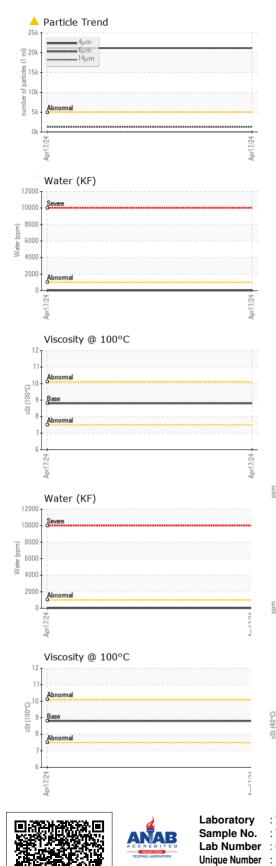
#### Fluid Condition

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

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		TO50000867		
Sample Date		Client Info		17 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	17		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	4		
Copper	ppm	ASTM D5185m	>75	43		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		3		
Calcium	ppm	ASTM D5185m		4		
Phosphorus	ppm	ASTM D5185m	425	172		
Zinc	ppm	ASTM D5185m	500	182		
Sulfur	ppm	ASTM D5185m	1900	4983		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	19		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	<1		
Water	%	ASTM D6304	>0.1	0.001		
ppm Water	ppm	ASTM D6304	>1000	5		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<u> </u>		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>160	28		
Particles >21µm		ASTM D7647	>40	9		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647		0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>A</b> 22/18/12		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	0.39		



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
_	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
Apr17/24	Appearance	scalar	*Visual	NORML	NORML		
Apr	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	<b>FIES</b>	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	67.4	67.1		
	Visc @ 100°C	cSt	ASTM D445	8.8	8.8		
	Viscosity Index (VI)	Scale	ASTM D2270	102	103		
	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Apr17/24		-					
Αp	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				A Particle Count		
Apr17/24	20			491,5			T <sup>2</sup>
Api	15 - chromium			122,8	80-		-2
	톱 10 nickel			30,7	Severe		
	5 -			30,7	20		+2
	0 4:		*****	± € 7,6	80 Abnormal		-2
	Apr17/24			Apr17/24 . (per 1 ml)	20		-1
				A <sub>I</sub> cles (p	×.		-2 -11 -11 -11 -11 -11
	Non-ferrous Meta	ls		Apr17/24 1 dpr17/24 6'1 ml)	80		1
	40 - copper			per o	20-		-1
	E 30 - tin				30-		
Υ.C.	8 20						
	10				8-		-1
5 Pr. A	124			1/24	2-		-8
L Freed	Apr17//			Apr17/24	0		
C Same	₩					14μ 21μ	38µ 71µ
E truy					Acid Number		
E truy	✓ Viscosity @ 40°C						
€ tA	Viscosity @ 40°C			KOH/6	Base		
ΕτΑ	Viscosity @ 40°C			.u Physical Control Co	60		
Ε.τ.τ.λ	Viscosity @ 40°C			mber (mg KOH/c	60		
Ε τΑ.	Viscosity @ 40°C			.0 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	60		
E trat	Viscosity @ 40°C			Apr17/24	Base 60 40 20 50 50 40 40 50 50 50 50 50 50 50 50 50 50 50 50 50		
F 1					Acid Number	14µ 21µ	38µ

\* - 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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