

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

**200-126** 

Component Hydraulic System

### TULCO LUBSOIL SUPER HYDRAULIC AW 46 (200 GAL)

#### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

#### Contamination

Moderate concentration of visible dirt/debris present in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO50002357		
Sample Date		Client Info		29 May 2024		
Machine Age	hrs	Client Info		4326		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	5		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 0 0	history1 	history2 
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0	history1  	history2  
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0 0	history1   	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 0 0 0 5	history1   	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 5 108	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 0 0 0 5 108 315	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 450 540	Current 0 0 0 0 5 108 315 380	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 450 540 1825	current           0           0           0           0           108           315           380           1033	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 450 540 1825 limit/base	current           0           0           0           0           0           108           315           380           1033	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base 450 540 1825 limit/base >15	current         0         0         0         0         5         108         315         380         1033         current         2	history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base 450 540 1825 limit/base >15	current         0         0         0         0         5         108         315         380         1033         current         2         2         2	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current         0         0         0         0         108         315         380         1033         current         2         2         0         0	history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current           0           0           0           0           108           315           380           1033           current           2           0           0           0	history1 history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D5185m	limit/base	current         0         0         0         0         5         108         315         380         1033         current         2         2         0         0.006         66	history1                              history1 </td <td>history2 history2 history2</td>	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D6304           ASTM D6304	limit/base 450 540 1825 limit/base >15 >20 >0.05 >500 limit/base	current         0         0         0         0         108         315         380         1033         current         2         0         0.006         66         current	history1                           history1 </td <td>history2 history2 history2 history2 history2 history2</td>	history2 history2 history2 history2 history2 history2



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SUAL		method	limit/base	current	history1	history2
ite Metal	scalar	*Visual	NONE	NONE		
ow Metal	scalar	*Visual	NONE	NONE		
cipitate	scalar	*Visual	NONE	NONE		
	scalar	*Visual	NONE	NONE		
oris	scalar	*Visual	NONE	🔺 MODER		
nd/Dirt	scalar	*Visual	NONE	NONE		
earance	scalar	*Visual	NORML	NORML		
or	scalar	*Visual	NORML	NORML		
ulsified Water	scalar	*Visual	>0.05	NEG		
e Water	scalar	*Visual		NEG		
	IES	method	limit/base	current	historv1	historv2
a 40°C	cSt	ASTM D445	46	15.9		
	081	ASTM D445	7	45.9		
	Col		100	100		
cosity index (VI)	Scale	ASTIVI DZZ/U	109	109		
AMPLE IMAGES	S	method	limit/base	current	history1	history2
or				a	no image	no image
om					no image	no image
RAPHS						
arrous Allovs						
iron chromium						
nickel						
	******	*******	24			
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copper						
tin						
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			May			
scosity @ 40°C				Acid Number		
			(B/HO	80 Base		
			Y D.	60		
ise			0. E	40		
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			A 40	9/24		
			May2	May2!		c c
			-	÷		-
Check USA - 50	1 Madisc	on Ave., Carv	. NC 27513		KLX ENFR	
002357	Rece	ived :11	Jun 2024			701 N MAI
6497	Teste	ed :13	Jun 2024		U	NON CITY, O
3958	Diagr	10sed : 13	Jun 2024 - Do	on Baldridge	L	IS 73090-965

Test Package : IND 2 ( Additional Tests: KF, KV100, VI ) 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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Certificate 12367

Contact: FRANKIE GOAD

frankie.goad@klx.com

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