

## **OIL ANALYSIS REPORT**



### Machine Id

#### T259 Component Gearbox

#### Fluid

TULCO LUBSOIL 4220 SYN GEAR 220 (150 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

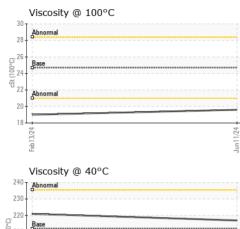
#### Fluid Condition

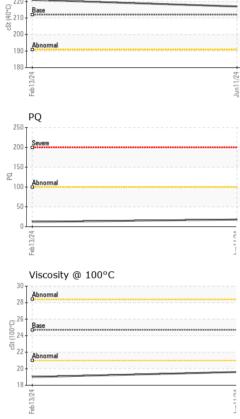
The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		TO10003548	TO50002069	
Sample Date		Client Info		11 Jun 2024	13 Feb 2024	
Machine Age	hrs	Client Info		5222	4470	
Oil Age	hrs	Client Info		752	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		18	12	
Iron	ppm	ASTM D5185m	>200	123	101	
Chromium	ppm	ASTM D5185m	>15	<1	1	
Nickel	ppm	ASTM D5185m	>15	<1	2	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	<1	
Aluminum	ppm	ASTM D5185m	>25	4	5	
Lead	ppm	ASTM D5185m	>100	6	10	
Copper	ppm	ASTM D5185m	>200	2	4	
Tin	ppm	ASTM D5185m	>25	<1	2	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	2	
Barium	ppm	ASTM D5185m		1	7	
Molybdenum	ppm	ASTM D5185m		334	430	
Manganese	ppm	ASTM D5185m		1	2	
Magnesium	ppm	ASTM D5185m		1	1	
Calcium	ppm	ASTM D5185m		2	4	
Phosphorus	ppm	ASTM D5185m	230	762	810	
Zinc	ppm	ASTM D5185m		47	33	
Sulfur	ppm	ASTM D5185m	2530	26386	26551	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4	9	
Sodium	ppm	ASTM D5185m		3	0	
Potassium	ppm	ASTM D5185m	>20	2	1	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.380	1.25		

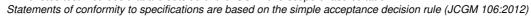


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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE	NONE	
1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Jun 11/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Junl	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	212	217	221	
	Visc @ 100°C	cSt	ASTM D445	24.7	19.6	19.0	
	Viscosity Index (VI)	Scale	ASTM D2270	146	102	96	
	SAMPLE IMAGES		method	limit/base	current	history1	history2
Jun 11/24			mounou				There is a
a,	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
5	Ferrous Alloys				PQ		
NCI 1	<sup>150</sup> T			220	T ;		
AC 111	150 100			200	PQ		
1 A.C. 1 P	150 iron				T ;		
	100 50			200	T ;		
100 F	100 E 50 0			200 180 160	T ;		
Limit 4.04	100 E 50 0			200 180 160 427 140	Severa		
Limit 104	150 100 50 0 472 EF	5		200 180 160	T ;		
Lunt 104	100 100 50 6 100 100 100 100 100 100 100	s		200 180 140 120 120 120	Severa		
Limit 104	150 100 50 0 +ZE 192 Non-ferrous Metal	S		200 180 160 67 140 120 100	Severa		
2 Int 100	Non-ferrous Metal	S		200 180 160 140 140 120 100 80	Severe Abnormal		
-110A	Non-ferrous Metal	S		200 180 160 160 140 120 100 	Severe Abnormal		
Lucitta A	Non-ferrous Metal	S		200 180 160 477(140 120 100 80 60 40 20 0	dbnormal		
Internet to A	Non-ferrous Metal	S		200 180 160 477(140 120 100 80 60 40 20 0	dbnormal		
In the second	Non-ferrous Metal	S		200 180 160 140 120 100 80 60 40 20	Severe Abnormal		
Luctions	Viscosity @ 40°C	S		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	dbnormal		
Limit to A	Non-ferrous Metal	S		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	Abnormal		
Interest	Non-ferrous Metal	5		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	Abnormal		
Line & Date	Non-ferrous Metal	5		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	Abnormal		
Line 14 DAR	Non-ferrous Metal	5		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	Abnomal Abnomal		
Limit trade	Non-ferrous Metal	5		200 180 160 42/11 <sup>10</sup> 80 60 40 40 40 40 40 40 40 40 40 40 40 40 40	Abnormal		
Instant	Non-ferrous Metal	S		200 180 160 160 170 120 100 60 40 40 20 60 40 20 60 40 40 20 60 60 40 60 60 60 60 60 60 60 60 60 60 60 60 60	Abnomal Abnomal		
Unique Numbe ificate L2367 Test Package	Non-ferrous Metal	1 Madiso Rece Teste Diagr ts: KV10	ived : 12 d : 14 nosed : 14 0, PQ, VI )	, NC 27513 2 Jun 2024 - Ange	Abnormal Abnormal Acid Number	5104 L Contact: D	GY SERVICE ESTES PKW ONGVIEW, T US 756 USTIN TRES .trest@klx.cc



Submitted By: LESTER GRAY

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