

OIL ANALYSIS REPORT



Machine Id LD 14 Component Gearbox

Fluid TULCO LUBSOIL INDUSTRIAL GEAR OIL 320 (--- QTS)

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	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO50002311		
Sample Date		Client Info		27 Mar 2024		
Machine Age	days	Client Info		7		
Oil Age	days	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		22		
Iron	ppm	ASTM D5185m	>200	20		
Chromium	ppm	ASTM D5185m	>15	0		
Nickel	ppm	ASTM D5185m	>15	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	0		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>200	0		
Tin	ppm	ASTM D5185m		<1		
Vanadium	ppm	ASTM D5185m	20	0		
Cadmium	ppm	ASTM D5185m		0		
	ppm			U		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	0		
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	10	0		
			10	0 0		
Barium	ppm	ASTM D5185m	10	0		
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	10	0 0		
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 <1		
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 <1 <1	 	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 <1 <1 <1	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 <1 <1 <1 <1 113	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125	0 0 <1 <1 <1 113 0	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125 5850 limit/base	0 0 <1 <1 <1 113 0 8102	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125 5850 limit/base	0 0 <1 <1 <1 113 0 8102 current	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125 5850 limit/base >50	0 0 <1 <1 <1 113 0 8102 <u>current</u> 5	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	125 5850 limit/base >50	0 0 <1 <1 <1 113 0 8102 <u>current</u> 5 <	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	125 5850 limit/base >50 >20	0 0 <1 <1 <1 113 0 8102 <u>current</u> 5 <1 0	 history1 	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	125 5850 imit/base >50 >20 imit/base	0 0 <1 <1 <1 113 0 8102 current 5 <1 0 current	 history1 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	125 5850 imit/base >50 >20 imit/base NONE	0 0 <1 <1 <1 113 0 8102 current 5 <1 0 current NONE	 history1 history1	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yisual	125 5850 imit/base >50 >20 imit/base NONE NONE	0 0 <1 <1 <1 113 0 8102 <u>current</u> 5 <1 0 <u>current</u> NONE NONE	 history1 history1 	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yisual	200 1125 5850 1000 5850 1000 200 1000 1000 1000 1000 1000 100	0 0 <1 <1 <1 0 8102 <u>current</u> 5 <1 0 <u>current</u> NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yuisual *Visual *Visual	125 5850 1000 5850 1000 520 20 1000 1000 1000 1000 1000	0 0 <1 <1 <1 0 8102 <u>current</u> 5 <1 0 <u>current</u> NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yisual *Visual *Visual *Visual *Visual	125 5850 1imit/base >50 20 1imit/base NONE NONE NONE NONE NONE NONE	0 0 <1 <1 <1 0 8102 <u>current</u> 5 <1 0 <u>current</u> NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual	125 5850 5850 250 20 20 10011/base 20 10011/base 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011	0 0 <1 <1 <1 0 8102 current 5 <1 0 current 0 NONE NONE NONE NONE NONE NONE NONE N	 <li< td=""><td> history2 history2 history2 </td></li<>	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	Introduction of the sector	0 0 <1 <1 <1 0 8102 current 5 <1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 <li< td=""><td> history2 history2 </td></li<>	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual *Visual	125 5850 5850 250 20 20 10011/base 20 10011/base 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011 10011	0 0 <1 <1 <1 0 8102 current 5 <1 0 current 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 	 history2 history2 history2



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