

OIL ANALYSIS REPORT



Machine Id LD 5 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.

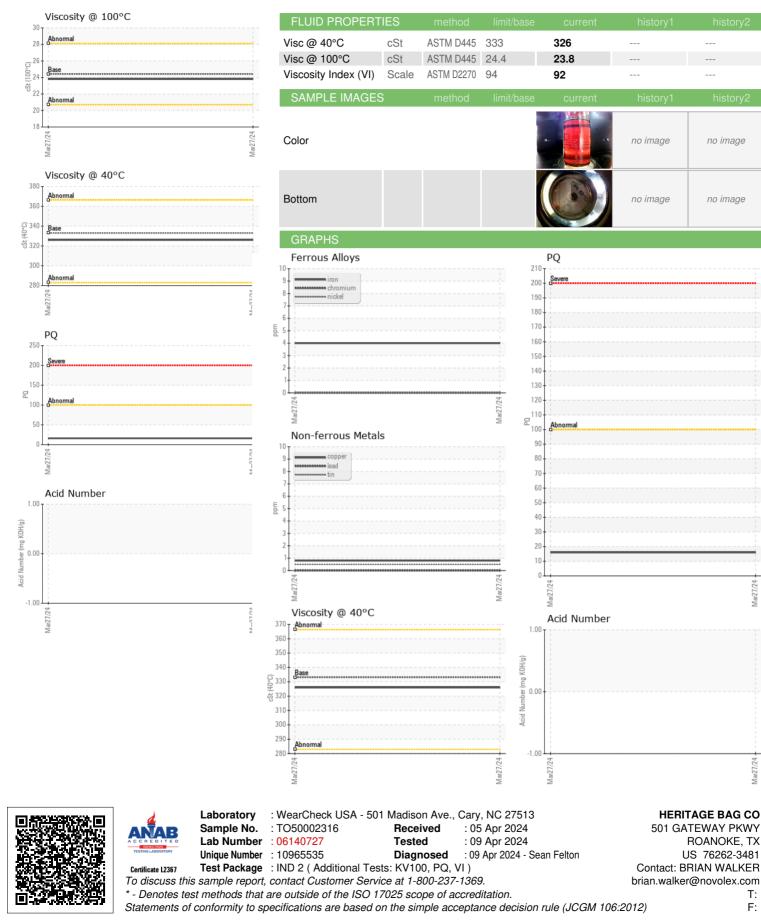
Fluid Condition

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

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO50002316		
Sample Date		Client Info		27 Mar 2024		
Machine Age	mths	Client Info		2		
Oil Age	mths	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		16		
Iron	ppm	ASTM D5185m	>200	4		
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	<1		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>200	۰ <1		
Tin		ASTM D5185m	>25	<1		
Vanadium	ppm	ASTM D5185m	>20	< 1 0		
	ppm					
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current		history2
					,	
Boron	ppm	ASTM D5185m	10	0		
	ppm ppm	ASTM D5185m ASTM D5185m	10			
Boron			10	0		
Boron Barium	ppm	ASTM D5185m	10	0 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	10	0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 <1 <1 0	 	
Boron 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 0 118	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125	0 0 <1 <1 0 118 0	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125 5850	0 0 <1 <1 0 118 0 8000		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	125 5850 limit/base	0 0 2 3 3 4 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 history1	 history2
Boron 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 2 3 3 4 1 3 0 118 0 8000 8000 0 2 0 2 0 2 0 2 0 2 0 2 2 2 2	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	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 2 3 3 4 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	125 5850 limit/base >50 >20	0 0 2 3 3 4 1 0 118 0 8000 8000 2 0 1 1 3 1 3 1 0 0 1 1 0 0 1 1 0 0 0 0 0	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	125 5850 imit/base >50 >20 imit/base NONE	0 0 0 <1 <1 0 118 0 8000 <u>current</u> 1 <1 0 <u>current</u> NONE	 history1 history1	 history2 history2
Boron 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 0 <1 <1 0 118 0 8000 current 1 <1 0 current NONE NONE	 history1 history1	 history2 history2
Boron 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	Interpretation of the second secon	0 0 0 <1 <1 0 118 0 8000 current 1 <1 0 current 0 current NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL VISUAL Vhite Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yuisual *Visual *Visual	125 5850 5850 350 350 350 350 350 350 350 350 350 3	0 0 0 <1 <1 0 118 0 8000 current 1 <1 <1 0 current NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yuisual *Visual *Visual *Visual *Visual	125 5850 5850 250 250 20 20 10012 NONE NONE NONE NONE NONE NONE NONE	0 0 0 (1 (1) (1) (1) (1) (1) (1) (1) (1) (1)	 history1 history1 history1 	 history2 history2 history2
Boron 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 Yisual *Visual *Visual *Visual *Visual *Visual	Introduction of the section of th	0 0 0 <1 <1 0 118 0 8000 current 1 <1 0 current 0 vone NONE NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2 history2
Boron 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	I25 5850 5850 20 Imit/base >50 S0 Imit/base NONE	0 0 0 <1 <1 0 118 0 8000 current 1 3 0 current 1 0 current 1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 	 history2 history2
Boron 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 D	Introduction of the sector	0 0 0 <1 <1 0 118 0 8000 current 1 1 <1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 	history2 history2
Boron 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	I25 5850 5850 20 Imit/base >50 S0 Imit/base NONE	0 0 0 <1 <1 <1 0 118 0 8000 current 1 <1 <1 0 current 1 <1 0 v current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 	history2 history2



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