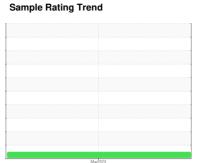


OIL ANALYSIS REPORT

^DT







Machine Id
SW 12
Component
Gearbox

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.

20 (QTS)			,	Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO50002309		
Sample Date		Client Info		27 Mar 2024		
Machine Age	mths	Client Info		8		
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		34		
Iron	ppm	ASTM D5185m	>200	45		
Chromium	ppm	ASTM D5185m	>15	<1		
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	1		
Tin	ppm	ASTM D5185m	>25	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES			limit/base			D
ADDITIVES		method			history1	nistory∠
	mag				history1	history2
Boron	ppm	ASTM D5185m	10	0	•	
Boron Barium	ppm	ASTM D5185m ASTM D5185m		0 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 4		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 0 <1 4 6		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 4 6 119		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10	0 0 0 <1 4 6		
Boron 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 ASTM D5185m ASTM D5185m	125	0 0 0 <1 4 6 119		
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 ASTM D5185m ASTM D5185m	10 125 5850 limit/base	0 0 0 <1 4 6 119 0 8738		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	10 125 5850 limit/base	0 0 0 <1 4 6 119 0 8738 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	10 125 5850 limit/base >50	0 0 0 <1 4 6 119 0 8738		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	10 125 5850 limit/base >50	0 0 0 <1 4 6 119 0 8738 current 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	10 125 5850 limit/base >50 >20	0 0 0 <1 4 6 119 0 8738 current 2 3		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	10 125 5850 limit/base >50 >20 limit/base	0 0 0 <1 4 6 119 0 8738 current 2 3 3		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 method *Visual	10 125 5850 limit/base >50 >20 limit/base NONE	0 0 0 -<1 4 6 119 0 8738 current 2 3 3		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 method *Visual *Visual	10 125 5850 limit/base >50 >20 limit/base NONE NONE	0 0 0 -<1 4 6 119 0 8738 current 2 3 3 current NONE		history2 history2
Boron 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 method *Visual *Visual	10 125 5850 limit/base >50 >20 limit/base NONE NONE NONE	0 0 0 -<1 4 6 119 0 8738 current 2 3 3 current NONE NONE		history2 history2
Boron 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 method *Visual *Visual *Visual *Visual	10 125 5850 limit/base >50 >20 limit/base NONE NONE NONE NONE	0 0 0 -<1 4 6 119 0 8738 current 2 3 3 current NONE NONE		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 Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	10 125 5850 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE	0 0 0 0 <1 4 6 119 0 8738 current 2 3 3 current NONE NONE NONE		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	10 125 5850 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	0 0 0 0 <1 4 6 119 0 8738 current 2 3 3 current NONE NONE NONE NONE NONE NONE NONE NON	history1	history2 history2

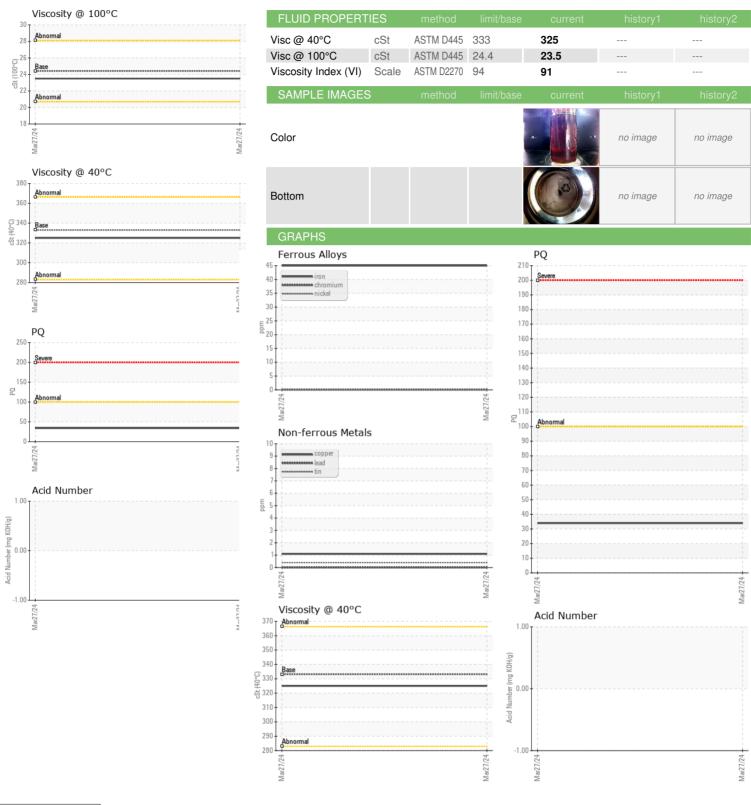
BRIAN WALKER - HERROATX

NEG

scalar *Visual



OIL ANALYSIS REPORT





Certificate 12367

Laboratory

Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06140729

: TO50002309 Unique Number : 10965537

Received : 05 Apr 2024 **Tested** : 09 Apr 2024 Diagnosed

: 09 Apr 2024 - Sean Felton

Test Package : IND 2 (Additional Tests: KV100, PQ, VI) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: BRIAN WALKER brian.walker@novolex.com T:

HERITAGE BAG CO

ROANOKE, TX

US 76262-3481

501 GATEWAY PKWY

* - 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)

F: