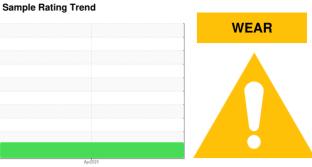


OIL ANALYSIS REPORT



Machine Id

BSAC WINDER CONE DRIVE

Gearbox

650 T CYL OIL (4 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Gear wear is indicated.

Contamination

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

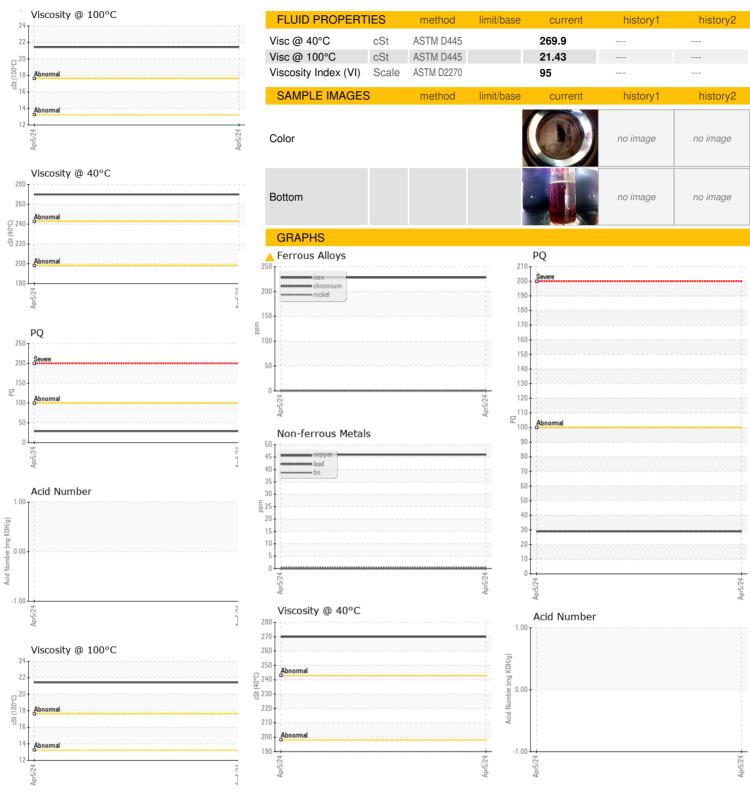
Fluid Condition

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

				Apr2024	<u></u>	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO60001949		
Sample Date		Client Info		05 Apr 2024		
Machine Age	yrs	Client Info		20		
Oil Age	yrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
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		29		
Iron	ppm	ASTM D5185m	>200	<u>^</u> 228		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	0		
Lead	ppm	ASTM D5185m	>50	0		
Copper	ppm	ASTM D5185m	>200	46		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVE C		una nella nell	lineit/lenen		la i a ta must	history.O
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Molybdenum Manganese		ASTM D5185m ASTM D5185m		0		
Molybdenum Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1		
Molybdenum Manganese Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1 78		
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1 78 39		
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1 78 39 40		
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1 78 39		
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 3 <1 78 39 40		
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		0 3 <1 78 39 40 5581	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 3 <1 78 39 40 5581	 	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m	>50	0 3 <1 78 39 40 5581 current	 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50	0 3 <1 78 39 40 5581 current <1	 history1	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50 >20	0 3 <1 78 39 40 5581 current <1 <1	 history1	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 limit/base	0 3 <1 78 39 40 5581 current <1 <1 0 current	history1 history1	history2 history2
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 method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>50 >20 limit/base NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE	history1 history1	history2 history2
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>50 >20 limit/base NONE NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE	history1 history1	history2 history2
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 ASTM D5185m ASTM D5185m Method *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE NONE	history1 history1	history2 history2
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 scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE NONE NONE NONE	history1 history1	history2 history2
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 scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE NONE NONE NONE NONE NONE MODER	history1 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	0 3 <1 78 39 40 5581 current <1 <1 0 current NONE NONE NONE NONE NONE NONE NONE NO	history1 history1	history2 history2



OIL ANALYSIS REPORT





Laboratory Sample No.

Lab Number : 06146182

: TO60001949

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Apr 2024 **Tested** : 18 Apr 2024

Unique Number : 10976260 Diagnosed : 18 Apr 2024 - Jonathan Hester Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

Certificate 12367 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.

3M BROWNWOOD 4501 US 377 SOUTH

BROWNWOOD, TX US 76801 Contact: RICKY GOTCHER

rgotcherjr@mmm.com T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: