

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **6613** Component **Diesel Engine** Fluid **{not provided} (--- GAL)**

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

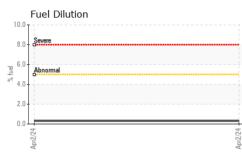
Fluid Condition

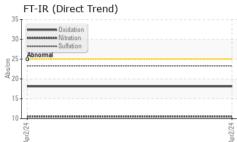
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

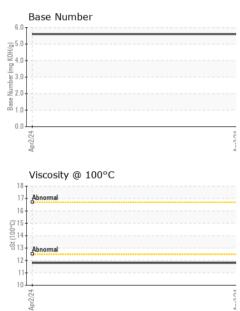
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0891559		
Sample Date		Client Info		02 Apr 2024		
Machine Age	mls	Client Info		15000		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
-	_		11 11 11			
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	82		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	24		
Lead	ppm	ASTM D5185m	>40	2		
Copper	ppm	ASTM D5185m	>330	14		
Tin	ppm	ASTM D5185m	>15	3		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 37	history1	history2
	ppm ppm		limit/base		, in the second s	
Boron		ASTM D5185m	limit/base	37		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	37 2		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	37 2 2		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	37 2 2 4		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	37 2 2 4 814		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	37 2 2 4 814 1443	 	
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 ASTM D5185m	limit/base	37 2 2 4 814 1443 793	 	
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 ASTM D5185m	limit/base	37 2 2 4 814 1443 793 917		
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 ASTM D5185m	limit/base	37 2 2 4 814 1443 793 917 3427		
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	limit/base	37 2 2 4 814 1443 793 917 3427 current		
Boron 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 method ASTM D5185m	limit/base	37 2 2 4 814 1443 793 917 3427 2427 current 18	 history1 	 history2
Boron 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 ASTM D5185m method ASTM D5185m	limit/base >25 >20	37 2 2 4 814 1443 793 917 3427 current 18 4	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	37 2 2 4 814 1443 793 917 3427 <u>current</u> 18 4 80	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5	37 2 2 4 814 1443 793 917 3427 current 18 4 80 0.3	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5 limit/base >3	37 2 2 4 814 1443 793 917 3427 <i>current</i> 18 4 80 0.3 <i>current</i>	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i ppm i %	ASTM D5185m ASTM D3524 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3	37 2 2 4 814 1443 793 917 3427 <i>current</i> 18 4 80 0.3 <i>current</i> 0.4	 history1 history1 	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3 >20	37 2 2 4 814 1443 793 917 3427 <i>current</i> 18 4 80 0.3 <i>current</i> 0.4 10.5	 history1 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >20 >5 limit/base >3 >20 >3 >20 >3	37 2 2 4 814 1443 793 917 3427 current 18 4 80 0.3 current 0.4 10.5 23.3	 history1 history1 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >20 >3 limit/base	37 2 2 4 814 1443 793 917 3427 current 18 4 80 0.3 current 0.4 10.5 23.3	 history1 history1 history1	 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT







-	VISUAL		method	limit/base	e current	history1	histor
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	TIES	method	limit/base	e current	history1	histor
	Visc @ 100°C	cSt	ASTM D445		11.8		
	GRAPHS						
1	Ferrous Alloys						
<u>.</u>	80						
	70 - newspace chromium						
-4.	60 -						
	50 - 40 -						
	30						
	20						
	Apr2/24 -			Apr2/24 -			
	Apr			Apr			
_	Non-ferrous Meta	als					
100	14 copper			-			
	12 - Lead						
	10 -						
	E 8						
	4						
	2-						
				2/24			
	Apr2/24			Apr2/24			
VCC	Viscosity @ 100°	С			Base Number		
	6.0 T						
	17 - Abnormal				5.0-		
	16-			Base Number (mg KOH/g)	4 0		
	(15) 000 14 13 Abnormal			M Bu			
	E) 14			nber (3.0		
	0			e Nun	2.0		
	12			Base	1.0-		
	11-						
	10			24	0.0 45		
	Apr2/24			Apr2/24	Apr2/24		
	4			4			
y	: WearCheck USA - 5	01 Madias		NC 27512		OURCE SE - J	
у 0.	: WC0891559	Rece		9 Apr 2024			00 RAVINE
	: 06143597	Teste		5 Apr 2024			SON CITY
ber	. 00140337	10310					



Unique Number : 10968405 Diagnosed : 15 Apr 2024 - Jonathan Hester Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel) Contact: BRANDON IRISH Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. brandon.irish@omnisource.com * - 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)

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