

OIL ANALYSIS REPORT

Sample Rating Trend



MIXERS [MIXERS] M283

Fluid KENDALL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Area

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

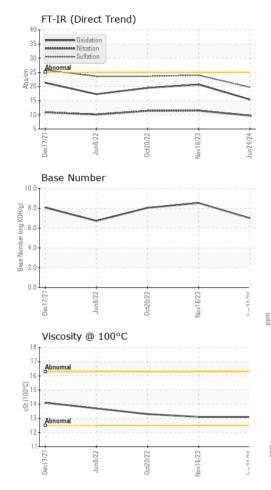
Fluid Condition

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

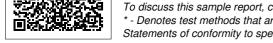
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0098498	LP0001113	WC0721593
Sample Date		Client Info		24 Jun 2024	16 Nov 2023	20 Oct 2022
Machine Age	hrs	Client Info		35127	34793	33835
Oil Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	15	42	29
Chromium	ppm	ASTM D5185m	>20	<1	2	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	. 0	1	2	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	
Lead	ppm	ASTM D5185m	>40	0	6	6
Copper	ppm	ASTM D5185m		1	2	3
Tin	ppm	ASTM D5185m	>15	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	<1 0	0
Cadmium	ppm	ASTM D5185m		0		0
				•	0	÷
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		6.3		-	-
Boron Barium		method	6.3 0.6	current	history1	history2
Boron	ppm	method ASTM D5185m	6.3	current 49	history1 31	history2 18
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	6.3 0.6	current 49 0	history1 31 0	history2 18 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	6.3 0.6 0.4 277	current 49 0 84 <1 100	history1 31 0 91	history2 18 0 48
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6.3 0.6 0.4 277 1514	current 49 0 84 <1 100 2203	history1 31 0 91 <1	history2 18 0 48 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6.3 0.6 0.4 277 1514 634	current 49 0 84 <1 100 2203 1044	history1 31 0 91 <1 196 2181 1066	history2 18 0 48 <1 871 1241 1069
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514	current 49 0 84 <1 100 2203 1044 1242	history1 31 0 91 <1 196 2181	history2 18 0 48 <1 871 1241
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6.3 0.6 0.4 277 1514 634	current 49 0 84 <1 100 2203 1044	history1 31 0 91 <1 196 2181 1066	history2 18 0 48 <1 871 1241 1069
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743	current 49 0 84 <1 100 2203 1044 1242 4055 current	history1 31 0 91 <1 196 2181 1066 1375	history2 18 0 48 <1 871 1241 1069 1281 3716 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592	current 49 0 84 <1 100 2203 1044 1242 4055 current 5	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 2777 1514 634 743 2592 limit/base	current 49 0 84 <1 100 2203 1044 1242 4055 current	history1 31 0 91 <1 196 2181 1066 1375 3653 history1	history2 18 0 48 <1 871 1241 1069 1281 3716 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 2777 1514 634 743 2592 limit/base	current 49 0 84 <1 100 2203 1044 1242 4055 current 5	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 2777 1514 634 743 2592 limit/base >25	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 5 5 5 5 5 5 5 40	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592 limit/base >25 >20	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 5 5 5 0.4	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1 0.7	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3 2 history2 0 0.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592 limit/base >25 >20	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 <1 ourrent 0 0.4 9.7	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1 0.7 11.5	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3 2 history2 0.6 11.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592 limit/base >25 >20 limit/base >3	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 5 5 5 0.4	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1 0.7	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3 2 history2 0 0.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592 imit/base >25 20 imit/base >20	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 <1 ourrent 0 0.4 9.7	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1 0.7 11.5	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3 2 history2 0.6 11.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	6.3 0.6 0.4 277 1514 634 743 2592 Imit/base >25 20 Imit/base >3 >20 >3 >20	current 49 0 84 <1 100 2203 1044 1242 4055 current 5 5 5 5 0.4 9.7 19.7	history1 31 0 91 <1 196 2181 1066 1375 3653 history1 10 24 3 history1 0.7 11.5 24.0	history2 18 0 48 <1 871 1241 1069 1281 3716 history2 5 3 2 history2 0.6 11.4 23.6



OIL ANALYSIS REPORT



Certificate 12367 Certificate	: PCA0098498 : 06225579 : 11103776 : MOB 2	Recei Teste Diagr	Madison Ave., Cary, NC 27513 Received : 01 Jul 2024 Tested : 03 Jul 2024 Diagnosed : 03 Jul 2024 - Wes Dav e at 1-800-237-1369. 25 scope of accreditation.			CONSTRUCTION SERVICES 2420 BOSTON RD WILBRAHAM, MA US 01095 Contact: Michael Dupuis mdupuis@cs-ma.us T: (413)733-6331		
		Dec) 17.1	0ct20/22 +	Nov16/23		0-	0ct20/22	Nov16/23
		16 30 00 14 4 4 4 4 4 4 4 4 4 4 4 4 4			.8 6.			\frown
		Viscosity @ 100	J-C			Base Numbe	۲ ۲	· · · · · · · · · · · · · · · · · · ·
				Nov1	Jun24/24		_	Nov1
		Dec17/21	0ct20/22	Nov16/23	4/24	Dec17/21	0ct20/22 +	Nov16/23 + -
		100-			2	Abnormal		
		돌 200 -			<u>E</u> 4	0-		
		400 Severe			6	Severe	1	
		ے ۔ Copper (ppm)	ŏ	No	Ju	Silicon (ppm		N T
		Dec17/21	0ct20/22 -	Nov16/23 -	Jun24/24	Dec17/21	0ct20/22 -	Nov16/23
0ct20/22	Nov16/23	10			1	0		
0/22 -	6/23 A n.n.	20 - Abnormal			und 2	0 0 - Abnormal		
		50 40 Severe	1	1	5	Severe		
		 Aluminum (ppr		Z		_ Chromium (j	_	z -
		Dec17/21	0ct20/22	Nov16/23	Jun24/24	Dec17/21 Jun8/22	0ct20/22	Nov16/23
		50			2	0		
00	N -	E 150 - Abnormal			4 e			
0ct20/22 -	Nov16/23	200 - Severe			8			
	Iron (ppm)			10	Lead (ppm)			
		GRAPHS						
		Visc @ 100°C	cSt	ASTM D445		13.1	13.1	13.3
		Free Water	scalar	*Visual method	limit/base	NEG current	NEG history1	NEG history2
		Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
0ct20/22	Nov16/23 Jun24/24	Appearance Odor	scalar scalar	*Visual *Visual	NORML	NORML NORML	NORML	NORML NORML
22 -	23	Sand/Dirt	scalar	*Visual	NONE NORML	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
		Yellow Metal Precipitate	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE
		White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
d)		VISUAL		method	limit/base	current	history1	history2



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Submitted By: Michael Dupuis

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