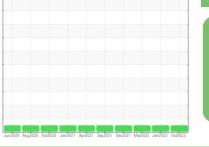


OIL ANALYSIS REPORT

Sample Rating Trend







Diesel Engine Fluid MOBIL DELVAC 1300 SUPER15W40 (--- QTS)

DIAGNOSIS

Machine Id **1849** Component

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Hours=4492)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

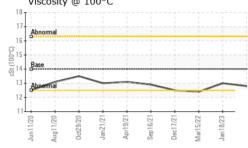
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL0030489	IL0026605	IL0024227
Sample Date		Client Info		09 Oct 2023	18 Jan 2023	15 Mar 2022
Machine Age	mls	Client Info		159962	139243	124083
Oil Age	mls	Client Info		20719	0	7532
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	41	44	13
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	6	<1	4
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m		3	9	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Antimony	ppm	ASTM D5185m			<1	
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	0	current 5	history1 124	history2 54
	ppm ppm		0			
Boron		ASTM D5185m ASTM D5185m ASTM D5185m	0	5 5 63	124 0 1	54 0 40
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	0	5 5 63 0	124 0 1 2	54 0 40 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	5 5 63 0 908	124 0 1 2 15	54 0 40 <1 519
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	5 5 63 0 908 1131	124 0 1 2 15 3878	54 0 40 <1 519 1645
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 0	5 5 63 0 908 1131 990	124 0 1 2 15 3878 1253	54 0 40 <1 519 1645 746
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	0 0 0	5 5 63 0 908 1131 990 1219	124 0 1 2 15 3878 1253 1505	54 0 40 <1 519 1645 746 858
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	5 5 63 0 908 1131 990	124 0 1 2 15 3878 1253	54 0 40 <1 519 1645 746
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	0 0 0	5 5 63 0 908 1131 990 1219	124 0 1 2 15 3878 1253 1505	54 0 40 <1 519 1645 746 858
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 Imit/base	5 5 63 0 908 1131 990 1219 3037	124 0 1 2 15 3878 1253 1505 3237 history1 10	54 0 40 <1 519 1645 746 858 2071 history2 6
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	0 0 0 0 Imit/base	5 63 0 908 1131 990 1219 3037 current	124 0 1 2 15 3878 1253 1505 3237 history1 10 9	54 0 40 <1 519 1645 746 858 2071 history2 6 2
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 method	0 0 0 0 iiiii/base >25	5 5 63 0 908 1131 990 1219 3037 current 7	124 0 1 2 15 3878 1253 1505 3237 history1 10	54 0 40 <1 519 1645 746 858 2071 history2 6
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 ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 iiiii/base >25	5 5 63 0 908 1131 990 1219 3037 current 7 <	124 0 1 2 15 3878 1253 1505 3237 history1 10 9	54 0 40 <1 519 1645 746 858 2071 history2 6 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	0 0 0 0 limit/base >25 >20	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current 0.7	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 10	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 2 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 history1	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 limit/base >25 >20 limit/base >3	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current 0.7	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 10	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 2 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 imit/base >25 >20 imit/base >20	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current 0.7 11.8	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 history1 0.4 8.3	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 2 history2 0.3 8.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current 0.7 11.8 22.8	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 10 9 <1 10 9 0.4 8.3 19.8	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 2 history2 0.3 8.5 23.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	5 5 63 0 908 1131 990 1219 3037 current 7 <1 6 current 0.7 11.8 22.8 current	124 0 1 2 15 3878 1253 1505 3237 history1 10 9 <1 history1 0.4 8.3 19.8 history1	54 0 40 <1 519 1645 746 858 2071 history2 6 2 2 history2 0.3 8.5 23.9 history2



OIL ANALYSIS REPORT

Base Number 12.0 10.0 Base Number (mg KOH/g) 7. 8. 7 8. 7 8. 7 8. 7 8. 7 8. 7 Ba 0.0 1/20 Aug11/20 Sep16/21 Dec17/21 0ct9/23 Apr19/21 /lar15/22 Jan 18/23 an21/2 Junl Viscosity @ 100°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.8	13.0	12.4
GRAPHS						

Ferrous Alloys 4! 40 35 30 e ²⁵ 15 10 Ę Ο Aug11/20 Jun11/20 Jan21/21 Dec17/21 Jan 18/23 Sep16/21 0ct9/23 0ct29/20 Mar15/22 Apr19/2 Non-ferrous Metals 10 lead Dec17/21 /ar15/22 an 18/73 0ct9/23 101z lun . L Bry Sep1 Viscosity @ 100°C Base Number 18 12.0 10. (mg KOH/g) 16 8 (cSt (100°C) 14 6.0 ber 4.0 13 Base 2 (12 0.0 Jun11/20 Aug11/20 -Sep16/21-0ct9/23 . Jun11/20 Aug11/20 -Jan21/21 Dec17/21 Jan21/21 Dec17/21-0ct9/23 Mar15/22 Jan 18/23 0ct29/20 Apr19/21 Apr19/21 Sep16/21 Mar15/22 Jan 18/23 **RUSH TRUCK LEASING - CHARLOTTE IDEALEASE** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received : 07 Nov 2023 1333 AMERON DR : IL0030489 Lab Number CHARLOTTE, NC :06000915 Diagnosed : 09 Nov 2023 : 10729275 Unique Number Diagnostician : Don Baldridge US 28206 Test Package : FLEET Contact: JERRY DIXON dixonj@rushenterprises.com

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.

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

T: (704)333-4507

F: (704)333-4508