

Machine Id **441371** Component **Diesel Engine** Fluid **MOBIL DELVAC 1300 SUPER 15W40 (24 QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.	Sample Number		Client Info		IL0033972	IL0030522	IL0026559
	Sample Date		Client Info		05 Jul 2024	16 Nov 2023	08 May 2023
	Machine Age	mls	Client Info		172160	152533	138243
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>90	49	18	13
	Chromium	ppm	ASTM D5185m	>20	1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	0	0	0
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	11	6	4
	Lead	ppm	ASTM D5185m	>40	<1	0	0
	Copper	ppm	ASTM D5185m	>330	10	4	2
	Tin	ppm	ASTM D5185m	>15	<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION Sodium and/or potassium levels are high. Test for glycol is negative.	Silicon	ppm	ASTM D5185m	>25	13	7	6
	Potassium	ppm	ASTM D5185m	>20	A 84	11	8
	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol	%	*ASTM D2982		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>6	0.9	0.5	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	13.2	9.4	8.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	20.3	18.6
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		20	2	0
	Boron	ppm	ASTM D5185m	0	6	4	10
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	68	62	59
	Manganese	ppm	ASTM D5185m		1	0	<1
	Magnesium	ppm	ASTM D5185m	0	934	922	930
	Calcium	ppm	ASTM D5185m		1165	1032	1222
	Phosphorus	ppm	ASTM D5185m		949	1004	1026
	Zinc	ppm	ASTM D5185m		1262	1208	1267
	Sulfur	ppm	ASTM D5185m		3420	3319	3799
	Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	17.1	16.4
	Base Number (BN)				6.3	8.9	8.3
	Vine @ 100°C	0°+		11	10.0	10.0	10.6

Visc @ 100°C cSt

12.6

12.8

12.9

ASTM D445 14

