

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id **642-12** Component **Diesel Engine** Fluid **DURALENE Dura-Syn DX-1 5W30 (8 QTS)**

RECOMMENDATION	Taat		Mathad	Limit/Aba	Cumant	Lliotom	Lliotom/Q
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		DC0033035 06 Feb 2024	DC0021331	DC0010946
	Sample Date Machine Age	mlo	Client Info Client Info		176162	10 Jun 2022 170346	23 Sep 2021 165018
	Oil Age	mls mls	Client Info		5816	5328	165018
	Filter Age	mls	Client Info		0	0	165018
	Oil Changed	11115	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	0	ATTENTION
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	22	27	16
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>4	0	0	<1
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	3	4	3
	Lead	ppm	ASTM D5185m	>40	0	<1	<1
	Copper	ppm	ASTM D5185m		3	4	2
	Tin	ppm	ASTM D5185m	>15	<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	10	8
	Potassium	ppm	ASTM D5185m		<1	<1	<1
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	12.9	12.7	12.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	24.9	23.8
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		11	29	29
	Boron		ASTM D5185m		29	30	19
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
	Molybdenum	ppm	ASTM D5185m		57	39	38
	Manganese	ppm	ASTM D5185m		2	<1	<1
	Magnesium	ppm	ASTM D5185m		440	366	394
	Calcium	ppm	ASTM D5185m		1214	1453	1481
	Phosphorus	ppm	ASTM D5185m		669	630	638
	Zinc	ppm	ASTM D5185m		764	764	737
	Sulfur	ppm	ASTM D5185m		2875	2901	2660
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	19.3	17.8

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

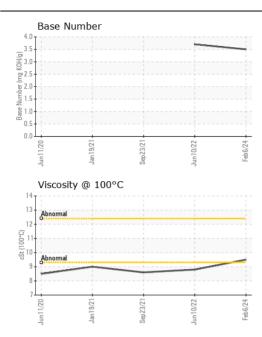
▲ 8.6

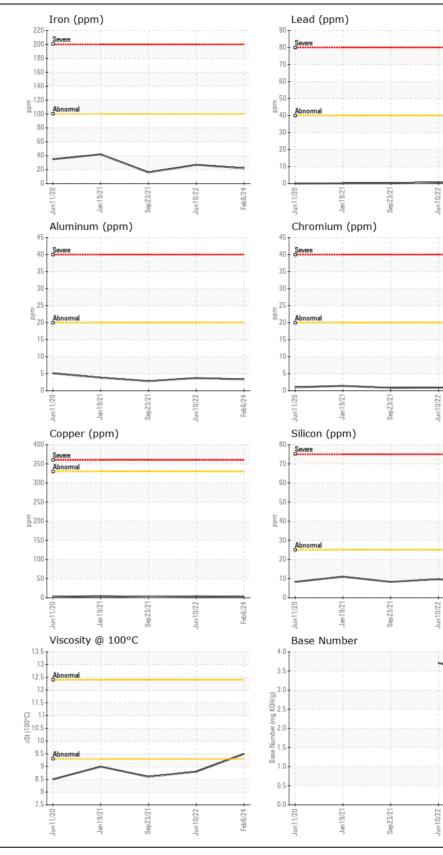
3.7

8.8

3.5

9.5





: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **NEW DIRECTION UTILITIES** Laboratory Sample No. : DC0033035 Received 21616 KELSO DR : 14 Feb 2024 Lab Number : 06089396 : 15 Feb 2024 HAGERSTOWN, MD Tested Unique Number : 10876841 : 15 Feb 2024 - Wes Davis US 21742 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. gary@newdirectionutilities.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)

Contact: GARY BLOYER T: (301)714-0083 F:

Page 2 of 2

Feb6/24 -

Feb6/24

=b6/24