

WEAR **ABNORMAL** NORMAL CONTAMINATION FLUID CONDITION NORMAL

Machine Id 759M Diesel Engine

PETRO CANADA DURON SHP 15W40 (36 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info	and a second sec	GFL0110064	,	GFL0085033
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		08 Feb 2024	25 Sep 2023	17 Aug 2023
	Machine Age	hrs	Client Info		18945	17954	17618
	Oil Age	hrs	Client Info		991	17954	17618
	Filter Age	hrs	Client Info		0	17954	0
	Oil Changed		Client Info		Not Changd	Changed	Changed
	Filter Changed		Client Info		Not Changd	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>75	9 3	9	44
Cylinder, crank, or cam shaft wear is indicated.	Chromium	ppm	ASTM D5185m	>5	2	<1	2
	Nickel	ppm	ASTM D5185m	>4	<1	0	<1
	Titanium	ppm	ASTM D5185m	>2	0	0	<1
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>15	14	2	10
	Lead	ppm	ASTM D5185m	>25	28	<1	11
	Copper	ppm	ASTM D5185m	>100	7	4	3
	Tin	ppm	ASTM D5185m	>4	3	<1	1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	12	8	11
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	6	1
	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>6	0.5	0.1	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	14.9	5.8	12.4
	Sulfation	Abs/.1mm	*ASTM D7415	>30	32.7	17.8	27.6
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		34	🔺 132	22
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.	Boron	ppm	ASTM D5185m		8	10	48
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		82	65	74
	Manganese	ppm	ASTM D5185m		1	1	<1
	Magnesium	ppm	ASTM D5185m		1326	965	1051
	Calcium	ppm	ASTM D5185m		1506	1096	1370
	Phosphorus	ppm	ASTM D5185m		1429	1047	1152
	Zinc	ppm	ASTM D5185m		1772	1270	1443
	Sulfur	ppm	ASTM D5185m		3047	3140	3723
	Oxidation	Abs/.1mm	*ASTM D7414		39.3	13.8	30.6
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.3	8.9	6.1
		- 02		4 - 4		- 4 -	1 - 0

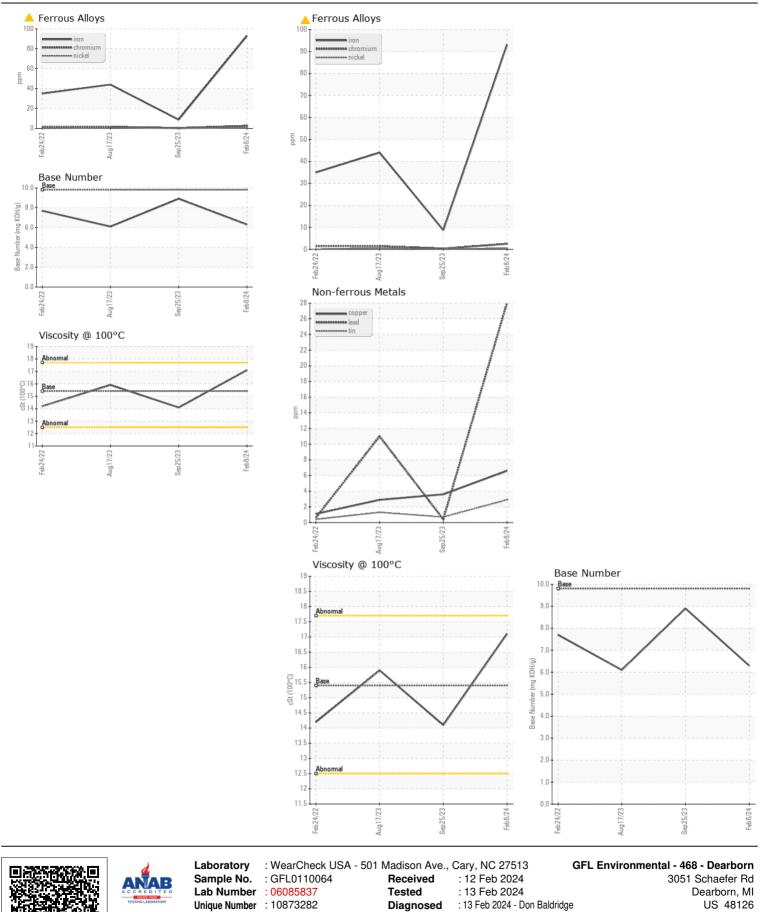
Visc @ 100°C cSt

14.1

17.1

ASTM D445 15.4

15.9



 Certificate 12367
 Test Package
 : FLEET

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 * - 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:

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