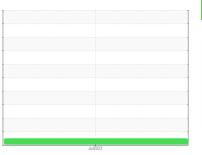


## **OIL ANALYSIS REPORT**

(62517Z) S0916A-Suamico **MACK 925047** 

Component Front Center Diesel Engine

PETRO CANADA DURON SHP 15W40 (42 QTS)



Sample Rating Trend



NORMAL

DIAGNOSIS	SAMPLE INFOR	RMA <u>TIO</u> N	method	limit/base	e current	history1	history2
ecommendation	Sample Number		Client Info		GFL0074827		
esample at the next service interval to monitor.	Sample Date		Client Info		05 Jul 2023		
ear	Machine Age	hrs	Client Info		14847		
component wear rates are normal.	Oil Age	hrs	Client Info		488		
ntamination	Oil Changed		Client Info		Changed		
ere is no indication of any contamination in the	Sample Status				NORMAL		
· · · · · · · · · · · · · · · · · · ·	CONTAMINA	TION	method	limit/base	e current	history1	history2
id Condition	Fuel		WC Method	>3.0	<1.0		
BN result indicates that there is suitable Alinity remaining in the oil. The condition of the	Glycol		WC Method	20.0	NEG		
s suitable for further service.	WEAR META	LS	method	limit/base	e current	history1	history2
	Iron	ppm	ASTM D5185m	>120	9		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver		ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
		ppm			2		
	Lead	ppm	ASTM D5185m				
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	Cadmium	ppm	ASTM D5185m		0		
	ADDITIVES		method	limit/base	e current	history1	history2
	Boron	ppm	ASTM D5185m		12		
	Barium	ppm	ASTM D5185m	0	0		
	Molybdenum	ppm	ASTM D5185m	60	63		
	Manganese	ppm	ASTM D5185m	0	0		
	Magnesium	ppm	ASTM D5185m	1010	960		
	Calcium	ppm	ASTM D5185m	1070	1117		
	Phosphorus	ppm	ASTM D5185m	1150	971		
	Zinc	ppm	ASTM D5185m	1270	1232		
	Sulfur	ppm	ASTM D5185m	2060	3286		
	CONTAMINA	NTS	method	limit/base	e current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	2		
	Sodium	ppm	ASTM D5185m		3		
	Potassium	ppm	ASTM D5185m	>20	0		
	INFRA-RED		method	limit/base	e current	history1	history2
	Soot %	%	*ASTM D7844	>4	0.3		
	Nitration	Abs/cm	*ASTM D7624		9.8		
	Sulfation	Abs/.1mm	*ASTM D7415		23.7		
	FLUID DEGRA		method	limit/base	e current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9		

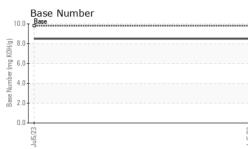
Base Number (BN) mg KOH/g ASTM D2896 9.8

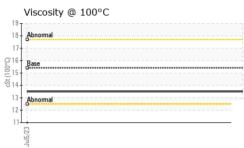
8.5



## **OIL ANALYSIS REPORT**

VISUAL





	Whit	e Metal	scalar	*Visual	NONE	NONE		
		w Metal	scalar	*Visual	NONE	NONE		
		ipitate	scalar	*Visual	NONE	NONE		
	Silt	pitato		*Visual	NONE	NONE		
			scalar					
	Debr		scalar	*Visual	NONE	NONE		
		d/Dirt	scalar	*Visual	NONE	NONE		
Jul5/23		earance	scalar	*Visual	NORML	NORML		
~	Odo		scalar	*Visual	NORML	NORML		
	Emu	Isified Water	scalar	*Visual	>0.2	NEG		
	Free	Water	scalar	*Visual		NEG		
	FL	UID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc	@ 100°C	cSt	ASTM D445	15.4	13.5		
_	G	RAPHS						
	Fer	rous Alloys						
_	<sup>10</sup> T							
	8	iron chromium						
	8-	nickel						
	6							
	bbm							
	4							
	2							
	2-							
	() Lipson							
	Jul5/23				Jul5/23			
					,			
	No 10 T	n-ferrous Meta	ls					
		copper						
		copper						
	8	lead						
	8-	lead						
	6 -	lead						
	8	lead						
	6 -	lead						
	6 -	lead						
	6	lead						
	6	lead			23			
	6	lead			Jul5/23			
	6	tin tin			Jul5/23			
	6	lead				Base Number	r	
	6 2 2 5 2 5 2 9 7 9	tin tin	c			Base Number	r	
	6 2 2 5 2 5 2 9 7 9	ecosity @ 100°(	C		10	0 - Base	r	
	6 4 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	C		10	0 - Base	r	
	6 4 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	c		10	0 - Base	r	
	6 4 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	C		10	0 - Base 0	r	
	Uis 19 18 4 4 2 0 C(2)(9) 19 18 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	C		10	0 - Base 0	r	
	Uis 19 18 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	c		10 (0/HOX 00 pag	0 - Base 0	r	
	udd 4 2 0 18 18 18 10 10 10 10 10 15 12	accosity @ 100°(	C		10 (0,HO) 8 HO) 9 Mu baquur 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 - Base 0	r	
	Uis 19 19 10 10 10 10 10 10 10 10 10 10	accosity @ 100°(	C		10 (b)HOX 6 Bu) Ja quint Bu) Ja	0 - Base 0	r	
	Uis 19 19 10 10 10 10 10 10 10 10 10 10	accosity @ 100°(	C		10 (b)HOX 6 Bu) Ja quint Bu) Ja	0 - Base 0	r	
	Uis 19 18 4 4 4 4 4 4 4 4 4 4 4 4 4	accosity @ 100°(	C		10 (0,HO) 8 HO) 9 Mu baquur 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 - Base 0	r	
	Uid 4 2 0 CC/SIM 19 18 Abn 17 16 Bas 12 11 CC/SIM 13 4 13 4 14 13 4 15 14 15 14 15 15 14 15 15 15 15 15 15 15 15 15 15	accosity @ 100°(		son Ave Ca	10 (0)HOX 60 Base Number 2 8 8 8 9 9 0 0		r	
У	Vis 19 18 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0	accosity @ 100°(			10 (0)HOX 60 Base Number 2 8 8 8 9 9 0 0		nvironmental - 9	916A - Suamia Deerfield Ave
	Vis 19 10 10 10 10 10 10 10 10 10 10	accosity @ 100°(	501 Madis	<b>d</b> : 12	10 (6)(HO) 6 (6)(HO) 80 (10)(HO) 80 (10)(H			916A - Suamio
y o. oer	Vis 19 16 4 2 0 CC CC 19 18 4 10 16 10 10 15 14 13 4 11 CC CC 19 14 13 4 14 15 14 15 14 15 15 14 15 15 15 15 15 15 15 15 15 15	arCheck USA - .0074827	501 Madia	d : 12 ed : 17	10 (9)HOX 60 (9)HOX 60 (10) 4 (10) 4	3 GFL E	2300	9 <b>16A - Suami</b> d Deerfield Ave Suamico, N US 543
y o. Der nber age	Vis 19 19 18 4 2 Vis 19 18 4 4 4 2 Vis 19 18 4 4 10 10 10 10 10 10 10 10 10 10	arCheck USA - .0074827 95998 51808	501 Madia Received Diagnost	d : 12 ed : 17 tician : We	10 (PHO) 6 (PHO) 6 (PHO) 4 (PHO) 4	3 GFL E	2300 Contact: NICHO	9 <b>16A - Suami</b> d Deerfield Ave Suamico, N US 543

\* - 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)

Certificate L2367

Submitted By: NICHOLAS WEIDNER

T:

F: