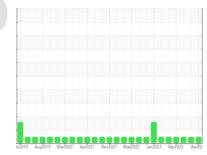


OIL ANALYSIS REPORT

G.LOPES CONSTRUCTION INC./Off-Road

Component
Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)



Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

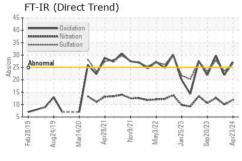
Fluid Condition

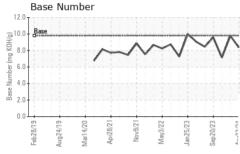
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

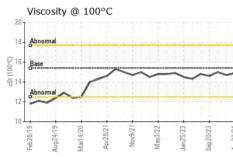
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0122605	PCA0018796	PCA0078194
Sample Date		Client Info		23 Apr 2024	07 Feb 2024	15 Nov 2023
Machine Age	hrs	Client Info		11001	11001	10557
Oil Age	hrs	Client Info		6464	6908	6801
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	20	5	20
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm		>2	0	0	0
Aluminum	ppm	ASTM D5185m		1	<1	1
Lead	ppm	ASTM D5185m	>40	7	5	12
Copper	ppm	ASTM D5185m		4	3	5
Tin	ppm		>15	0	<1	<1
Vanadium	ppm	ASTM D5185m	7 10	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method				history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 2	history1 8	history2 9
	ppm		0			
Boron	ppm	ASTM D5185m	0	2	8	9
Boron Barium		ASTM D5185m ASTM D5185m ASTM D5185m	0	2 0	8	9 <1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	2 0 67	8 0 61	9 <1 69
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	2 0 67 <1	8 0 61 1	9 <1 69 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	2 0 67 <1 1138	8 0 61 1 946	9 <1 69 0 1044
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	2 0 67 <1 1138 1361	8 0 61 1 946 1068	9 <1 69 0 1044 1183
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	2 0 67 <1 1138 1361 1216	8 0 61 1 946 1068 1052	9 <1 69 0 1044 1183 1076
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 ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	2 0 67 <1 1138 1361 1216	8 0 61 1 946 1068 1052 1270	9 <1 69 0 1044 1183 1076 1329
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	2 0 67 <1 1138 1361 1216 1443 3934	8 0 61 1 946 1068 1052 1270 2977	9 <1 69 0 1044 1183 1076 1329 3323
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	2 0 67 <1 1138 1361 1216 1443 3934 current	8 0 61 1 946 1068 1052 1270 2977 history1	9 <1 69 0 1044 1183 1076 1329 3323 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	2 0 67 <1 1138 1361 1216 1443 3934 current	8 0 61 1 946 1068 1052 1270 2977 history1	9 <1 69 0 1044 1183 1076 1329 3323 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	2 0 67 <1 1138 1361 1216 1443 3934 current 3	8 0 61 1 946 1068 1052 1270 2977 history1 0	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3	8 0 61 1 946 1068 1052 1270 2977 history1 0 1	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3 0	8 0 61 1 946 1068 1052 1270 2977 history1 0 1 <1	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3 0	8 0 61 1 946 1068 1052 1270 2977 history1 0 1 <1 history1 0.2	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20 limit/base	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3 0 current 0.3 11.9	8 0 61 1 946 1068 1052 1270 2977 history1 0 1 <1 history1 0.2 10.0	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3 history2 0.3 12.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 >30	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3 0 current 0.3 11.9 26.5	8 0 61 1 946 1068 1052 1270 2977 history1 0 1 <1 0.2 10.0 23.5	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3 history2 0.3 12.7 27.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 >30 limit/base	2 0 67 <1 1138 1361 1216 1443 3934 current 3 3 0 current 0.3 11.9 26.5	8 0 61 1 946 1068 1052 1270 2977 history1 0 1 <1 history1 0.2 10.0 23.5 history1	9 <1 69 0 1044 1183 1076 1329 3323 history2 4 2 3 history2 0.3 12.7 27.8 history2



OIL ANALYSIS REPORT





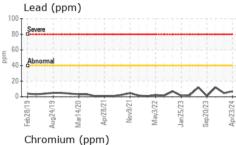


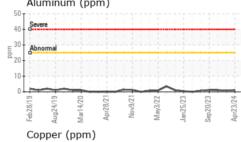
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

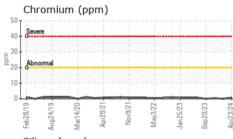
FLUID PROPI	EKIIES	method	ilmit/base		nistory i	nistoryz
Visc @ 100°C	cSt	ASTM D445	15.4	14.9	14.7	15.0

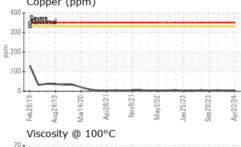
Iron ((ppm)						
200 Severe		1111					
E 150							
100 Abnorm	al	-	+++				-
50-	~^					~	
0 1 8/19	4/20	8/21	9/21	3/22	2/53	0/23	3/24
Feb28/19	Aug24/19 Mar14/20	Apr28/2	Nov9/2	May3/22	Jan25/23	Sep20/2	Apr23/24
Alumi	inum (pp	m)					

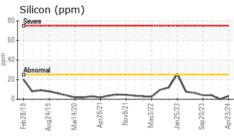
GRAPHS

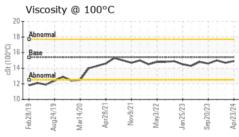


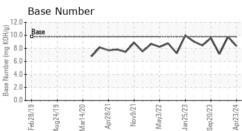
















Certificate 12367

Laboratory Sample No. Unique Number : 10997121

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0122605 Lab Number : 06161698

Test Package : MOB 2

Received : 26 Apr 2024 **Tested** Diagnosed

: 28 Apr 2024 : 29 Apr 2024 - Sean Felton 565 WINTHROP ST TAUNTON, MA US 02780

G LOPES CONSTRUCTION

Contact: BUTCH MCGRATH bmcgrath@glopes.com T:

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)

Report Id: GLOTAU [WUSCAR] 06161698 (Generated: 04/29/2024 13:38:50) Rev: 1

Submitted By: MATT MANOLI

F: