

## **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id 627 Component Gasoline Engine Fluid DURON 0W20 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

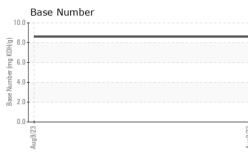
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

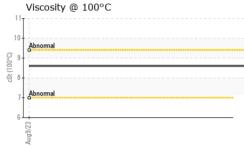
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		AK0000117		
Sample Date		Client Info		09 Aug 2023		
Machine Age	mls	Client Info		359483		
Oil Age	mls	Client Info		1100		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0		
Glycol		WC Method		NEG		
			12 11 11			
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	<1		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>2	<1		
Aluminum	ppm	ASTM D5185m	>40	<1		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>155	<1		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60 <1 948		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60 <1 948 1069	  	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60 <1 948 1069 1033	   	
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	limit/base	0 <1 60 <1 948 1069 1033 1244	    	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 60 <1 948 1069 1033 1244 3725		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	limit/base	0 <1 60 <1 948 1069 1033 1244 3725 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	limit/base	0 <1 60 <1 948 1069 1033 1244 3725 current 3	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 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 ASTM D5185m	limit/base >30 >400	0 <1 60 <1 948 1069 1033 1244 3725 current 3 3 3	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20	0 <1 60 <1 948 1069 1033 1244 3725 current 3 3 3 3	      history1  	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base	0 <1 60 <1 948 1069 1033 1244 3725 current 3 3 3 3 3	     history1   history1	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base	0 <1 60 <1 948 1069 1033 1244 3725 current 3 3 3 3	     history1   history1	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >400 >20 limit/base >20	0 <1 60 <1 948 1069 1033 1244 3725 <i>current</i> 3 3 3 3 <i>current</i> 0.1 4.6	      history1   history1  	      history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	imit/base >30 >400 >20 Imit/base >20 >30	0 <1 60 <1 948 1069 1033 1244 3725 <i>current</i> 3 3 3 3 <i>current</i> 0.1 4.6 23.4 <i>current</i>	      history1  history1  history1  history1	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	Imit/base >30 >400 >20 Imit/base >20 ≥20 ≥20 ≥20 ≥20 ≥20	0 <1 60 <1 948 1069 1033 1244 3725 <b>current</b> 3 3 3 3 3 <b>current</b> 0.1 4.6 23.4	       history1  history1  history1	     history2  history2  history2  history2



# **OIL ANALYSIS REPORT**

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V	ISUAL		method	limit/bas	e curre	ent history1	history2
Wh	nite Metal	scalar	*Visual	NONE	NONE		
Yel	llow Metal	scalar	*Visual	NONE	NONE		
Pre	ecipitate	scalar	*Visual	NONE	NONE		
Silt		scalar	*Visual	NONE	NONE		
Deb	bris	scalar	*Visual	NONE	NONE		
Sar	nd/Dirt	scalar	*Visual	NONE	NONE		
	pearance	scalar	*Visual	NORML	NORM		
Ode		scalar	*Visual	NORML	NORM	L	
	ulsified Water	scalar	*Visual	>0.2	NEG		
Fre	e Water	scalar	*Visual		NEG		
F	LUID PROPER	TIES	method	limit/bas	e curre	ent history1	history2
Vis	c @ 100°C	cSt	ASTM D445	5	8.6		
10 8 6 4 2	copper lead tin			Aug9/23			
	iscosity @ 100°C	2			Base Nu	mber	
10.5					9.0		
- I -	Abnormal				8.0		
9-				NON Y	57.0 2 6.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5		
cSt (100°C)					5.0-		
だ。 7.5					4.0		
	Abnormal			000	2.0		
6.5 -					1.0-		
646				23	0.0		
Aug9/23				Aug9/23	Aug9/23		
. :AK er :059 per :106	923044	501 Madis Received Diagnose Diagnost	l :14 ed :15	Cary, NC 275 Aug 2023 Aug 2023 Aug 2023 San Felton	513		COMPANY IN 0 S LUBE WA JASPER, US 475-



Test Package : FLEET Certificate L2367 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) Contact: Eric Arvin

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