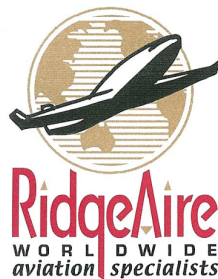


# N2130L

## 1976 Beech 58TC Baron

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# Blackstone Laboratories Oil Report LH Engine



MSN: TK-25

*Prepared by the worldwide aviation specialists at RidgeAire, Inc.*



# OIL REPORT

LAB NUMBER: S333317      UNIT ID: N2130L-LH  
 REPORT DATE: 12/26/2025      CLIENT ID: 128000  
 CODE: 20/1,193      PAYMENT: CC: Visa

<b>UNIT</b>	MAKE/MODEL: Continental TSIO-520-WB	OIL TYPE & GRADE: Aeroshell 15W/50
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 32 Hours
	ADDITIONAL INFO: Beech 58TC, S/N: 274261-R	

<b>CLIENT</b>	WAYNE DECOSTA	PHONE: (719) 380-8100
	GREAT WEST CONSTRUCTION	FAX: (719) 380-8804
	5935 TEMPLETON GAP RD	ALT PHONE: (719) 499-7581
	COLORADO SPRINGS, CO 80923	EMAIL: wayne@greatwestconstruction.com

**COMMENTS** WAYNE: We still have concerns for both engines. This left report shows small increases in aluminum, chrome, iron, and copper, and a notable increase in nickel (exhaust valve guides). Copper, from brass/bronze parts, is at its highest reading yet. We aren't seeing contamination like fuel, water, or excess dirt that would cause wear, and oil's viscosity is correct. If there's an EDM, watch for any erratic spikes or dips in temps. Monitor for any engine roughness, hard starts, or increases in oil use. Inspect both oil filters for metal. Borescope & check compressions.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	32	35	35	22	<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	1,507	1,475	1,836	1,359	
	Sample Date	12/9/2025	9/17/2025	7/18/2025	4/7/2025	
	Make Up Oil Added	4 qts	5 qts	7 qts		
<b>UNIT / LOCATION AVERAGES</b>						
ALUMINUM	22	31	19	26	53	10
CHROMIUM	15	11	9	11	9	11
IRON	107	108	102	90	106	54
COPPER	25	22	22	19	18	6
LEAD	4680	5069	5760	4357	4037	5164
TIN	4	4	4	4	5	1
MOLYBDENUM	11	13	10	11	16	6
NICKEL	74	74	56	60	78	18
MANGANESE	1	1	1	1	2	1
SILVER	1	0	0	0	0	0
TITANIUM	1	1	0	1	0	0
POTASSIUM	0	0	1	0	0	0
BORON	1	2	2	1	2	1
SILICON	9	11	12	9	12	9
SODIUM	2	2	3	2	2	1
CALCIUM	2	2	2	2	3	18
MAGNESIUM	0	1	1	1	2	1
PHOSPHORUS	1040	978	1049	972	903	352
ZINC	3	4	4	3	4	4
BARIUM	0	0	0	0	0	0

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	92.6	82-105	87.7	87.2	86.1
	cSt Viscosity @ 100°C	18.60	16.0-21.8	17.42	17.31	17.04
	Flashpoint in °F	490	>440	505	465	465
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5
	Antifreeze %	-		-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.3	<0.6	0.3	0.2	0.4
	TBN					
	TAN					
	ISO Code					

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com



# OIL REPORT

LAB NUMBER: S293177  
 REPORT DATE: 10/3/2025  
 CODE: 20/1,193

UNIT ID: N2130L-LH  
 CLIENT ID: 128000  
 PAYMENT: CC: Visa

<b>UNIT</b>	MAKE/MODEL: Continental TSIO-520-WB	OIL TYPE & GRADE: Aeroshell 15W/50
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 35 Hours
	ADDITIONAL INFO: Beech 58TC, S/N: 274261-R	

<b>CLIENT</b>	WAYNE DECOSTA	PHONE: (719) 380-8100
	GREAT WEST CONSTRUCTION	FAX: (719) 380-8804
	5935 TEMPLETON GAP RD	ALT PHONE: (719) 499-7581
	COLORADO SPRINGS, CO 80923	EMAIL: wayne@greatwestconstruction.com

**COMMENTS** WAYNE: Well, wear metals in the left engine's sample still look better now than they did in the 4/7/25 sample, but notice that copper went up and tin and nickel are still elevated. We are seeing similar results on the right side, so maybe some of the extra metal is just situational in nature. It'd be strange if both engines develop the same issues to a similar extent simultaneously, but it isn't impossible. Copper and tin are from bronze parts like bushings and bearings, and nickel is from the exhaust valve guides. More notes in the right engine's report.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	35	UNIT / LOCATION AVERAGES	35	22				<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	1,475		1,836	1,359				
	Sample Date	9/17/2025		7/18/2025	4/7/2025				
	Make Up Oil Added	5 qts		7 qts					
ALUMINUM	19	35	26	53				10	
CHROMIUM	9	11	11	9				11	
IRON	102	105	90	106				54	
COPPER	22	21	19	18				6	
LEAD	5760	5011	4357	4037				5163	
TIN	4	4	4	5				1	
MOLYBDENUM	10	13	11	16				6	
NICKEL	56	74	60	78				18	
MANGANESE	1	1	1	2				1	
SILVER	0	0	0	0				0	
TITANIUM	0	1	1	0				0	
POTASSIUM	1	0	0	0				0	
BORON	2	2	1	2				1	
SILICON	12	12	9	12				9	
SODIUM	3	2	2	2				1	
CALCIUM	2	2	2	3				18	
MAGNESIUM	1	1	1	2				1	
PHOSPHORUS	1049	958	972	903				357	
ZINC	4	4	3	4				4	
BARIUM	0	0	0	0				0	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	87.7	82-105	87.2	86.1		
	cSt Viscosity @ 100°C	17.42	16.0-21.8	17.31	17.04		
	Flashpoint in °F	505	>440	465	465		
	Fuel %	<0.5	<1.0	<0.5	<0.5		
	Antifreeze %	-		-	-		
	Water %	0.0	0.0	0.0	0.0		
	Insolubles %	0.3	<0.6	0.2	0.4		
	TBN						
	TAN						
	ISO Code						

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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