



# OIL REPORT

LAB NUMBER: J95399

UNIT ID: N593MS-LH

REPORT DATE: 2/6/2018

CLIENT ID: 94166

CODE: 63/37

PAYMENT: CC: MC (Bulk)

UNIT	MAKE/MODEL: Continental TSIO-360-EB1B	OIL TYPE & GRADE: Phillips (AC) 20W/50 Type M (Mineral
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 50 Hours
	ADDITIONAL INFO: Piper PA34-200T, E/N: 265934R, Mixed Chrome + Steel cyls	

CLIENT	FRANS DEBLOIS	PHONE: (301) 641-4657
	DEBLOIS AEROSPACE LLC	FAX:
	7940 AIRPARK RD - HANGAR "B"	ALT PHONE: (301) 641-1547
	MONTGOMERY COUNTY AIRPARK	EMAIL: frans@debloisaerospace.com
	GAITHERSBURG, MD 20879	

COMMENTS	FRANS: These engines have improved some this time around, though they aren't wearing alike so we won't try to compare them. We're assuming this engine just started flying again after a period of inactivity, so considering how much corrosion could be present, these numbers aren't too bad. Short oil changes should help clear some of the metal out of the system - aluminum is from pistons (or corrosion in the case) and chrome shows cylinder and maybe ring wear, assuming there are still chrome cylinders on board. Nickel could be from replacement cylinders or valve guide wear.
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	MI/HR on Oil	50	UNIT / LOCATION AVERAGES	70	25	49		46	UNIVERSAL AVERAGES
	MI/HR on Unit	2,240		2,150				1,612	
	Sample Date	6/15/2017		4/20/2015	4/13/2004	12/5/2003	8/19/2003	4/21/2003	
	Make Up Oil Added						8 qts		
ELEMENTS IN PARTS PER MILLION	ALUMINUM	24	9	28	9	11	8	7	4
	CHROMIUM	31	28	60	24	27	22	22	8
	IRON	81	104	167	116	150	74	74	55
	COPPER	8	4	16	3	4	3	3	5
	LEAD	6160	5864	8914	5259	7060	5935	6078	5457
	TIN	1	1	4	0	0	1	1	1
	MOLYBDENUM	9	6	7	6	6	5	5	3
	NICKEL	35	30	56	32	32	21	27	12
	MANGANESE	1	2	3	2	3	1	1	1
	SILVER	0	0	0	0	0	0	0	0
	TITANIUM	0	0	2	0	0	0	0	0
	POTASSIUM	1	1	1	2	0	1	0	1
	BORON	0	0	2	0	0	0	0	1
	SILICON	18	10	14	9	8	6	4	5
	SODIUM	1	1	2	1	0	1	1	1
	CALCIUM	8	1	4	0	0	1	1	0
	MAGNESIUM	1	0	0	0	0	0	0	2
	PHOSPHORUS	123	487	1486	756	774	213	133	865
	ZINC	8	4	12	3	4	3	3	6
	BARIUM	0	0	0	0	0	0	0	0

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	89.8	82-105	89.3	93.9	94.6	92.7	90.4
	cSt Viscosity @ 100°C	17.93	16.0-21.8	17.81	18.91	19.07	18.62	18.07
	Flashpoint in °F	445	>425	410	480	460	485	505
	Fuel %	<0.5	<1.0	1.0	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	-		-	-	-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.6	0.5	0.5	0.6	0.5
	TBN							
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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