



OIL REPORT

LAB NUMBER: N60794 UNIT ID: N653GS
 REPORT DATE: 7/8/2021 CLIENT ID: 36294
 CODE: 80/16 PAYMENT: CC: AmEx (Bulk)

UNIT	MAKE/MODEL: Continental IO-360-ES	OIL TYPE & GRADE: Aeroshell 15W/50
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 31 Hours
	ADDITIONAL INFO: Cirrus SR20, S/N 360222	

CLIENT	RANDY ELLS	PHONE: (317) 769-4487
	FIRST WING JET CENTER	FAX: (317) 769-3207
	11329 E STATE RD. 32	ALT PHONE:
	ZIONSVILLE, IN 46077	EMAIL: jcarroll@firstwing.com, rells@firstwing.com

COMMENTS
 RANDY: Silicon is lower this time, which suggests a harmless sealer washing out. If an air filtration issue was addressed, then that could also be why silicon tested lower this time -- either way, it's headed in a good direction so we'll look for another decrease in the future. Wear metals are looking good for a 31-hour OCI and the lead level (primarily from 100LL blow-by) speaks to good combustion. There isn't any moisture or fuel to address and the oil filter kept solids to a minimal 0.1%. Nice report, N653GS.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	31	UNIT / LOCATION AVERAGES	15	17	UNIVERSAL AVERAGES
	MI/HR on Unit	481		416	369	
	Sample Date	6/4/2021		4/28/2020	3/22/2018	
	Make Up Oil Added					
ALUMINUM	6	4	7	2		5
CHROMIUM	4	9	7	4		7
IRON	31	49	46	22		49
COPPER	9	5	12	5		5
LEAD	2248	5820	2078	2562		5224
TIN	2	1	3	0		1
MOLYBDENUM	2	4	4	1		3
NICKEL	3	11	4	5		8
MANGANESE	1	1	2	0		1
SILVER	0	0	0	0		0
TITANIUM	0	0	0	0		0
POTASSIUM	1	1	1	0		1
BORON	1	1	0	0		1
SILICON	60	8	94	7		8
SODIUM	3	1	3	1		1
CALCIUM	140	8	108	0		30
MAGNESIUM	4	0	4	0		1
PHOSPHORUS	1092	99	318	1236		453
ZINC	41	6	60	11		7
BARIIUM	0	0	0	0		0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	87.6	82-105	86.0	91.7
	cSt Viscosity @ 100°C	17.39	16.0-21.8	17.01	18.39
	Flashpoint in °F	475	>440	470	455
	Fuel %	<0.5	<1.0	<0.5	<0.5
	Antifreeze %	-		-	-
	Water %	0.0	0.0	0.0	0.0
	Insolubles %	0.1	<0.6	0.2	0.3
	TBN				
	TAN				
	ISO Code				

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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Customer Name: MONTGOMERY AVIATION (IN)	Tail Number: N653GS	Comp Serial No: 360222
Address: 11329 East Street Road 32 Zionsville IN 46077 USA	Aircraft Make: Cirrus	Comp Name: Single Engine
Phone: 3177694487	Aircraft Model: SR 20	Comp Make: Continental
Fax: 3177694116	Serial No:	Comp Model: IO-360ES6
	UIN: 01DED58	

Sample No.	44150154251	44150128377	44150104453	44150080826	44150056174	44150029582
Date Sampled	20-Feb-17	30-Dec-15	01-Dec-14	04-Nov-13	08-Oct-12	01-Sep-11
Date Tested	03-Mar-17	11-Jan-16	05-Dec-14	11-Nov-13	17-Oct-12	12-Sep-11
Oil Brand	Shell	Shell	Shell	Shell	Shell	Shell
Oil Type	Aeroshell W	Aeroshell W	Aeroshell W	Aeroshell W	Aeroshell W	Aeroshell W
Oil Grade	SAE 15W50	SAE 15W50	SAE 15W50	SAE 15W50	SAE 15W50	SAE 15W50
Oil Hrs	17	16	34	32	12	21
Oil Added		16	34	32	12	21
Hrs Since New		334	318	284	52	240
Rebuild Hrs					52	240
Metals (ppm)						
Aluminium (Al)	3	4	3	2	3	5
Iron (Fe)	29.62	40.22	25.65	18.49	20.98	22.00
Copper (Cu)	5.33	7.19	6.72	6.88	6.02	9.96
Nickel (Ni)	7	9	7	4	4	6
Chromium (Cr)	6	9	6	4	4	8
Silver (Ag)	<1	<1	<1	<1	<1	<1
Contaminants (ppm)						
Silicon (Si)	9	7	6	5	8	4

LEGEND



Sample No. Diagnosis/Recommendations

44150154251	All values appear normal.
44150128377	All values appear normal.
44150104453	All values appear normal.
44150080826	All values appear normal.
44150056174	No abnormal wear detected for new engine. Resample next oil change to check wear trend.
44150029582	All values appear normal.