



OIL REPORT

LAB NUMBER: L90689
 REPORT DATE: 1/7/2020
 CODE: 20/32

UNIT ID: N360GS
 CLIENT ID: 147303
 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Aerovee VW 2180 CC	OIL TYPE & GRADE: Valvoline VR1 20W/50
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 33 Hours
	ADDITIONAL INFO: Sonex A, S/N: 513	

CLIENT	SGRAEME SMITH	PHONE: (401) 864-1897
	PO BOX 512	FAX:
	NEWPORT, RI 02840	ALT PHONE:
		EMAIL: graeme@graemejwsmith.com

COMMENTS GRAEME: Thanks for the debris sent along with the sample. We can't positively identify it, but it didn't appear to be metallic, so it could just be some sort a sealer. It's definitely worth looking for at the next oil change, but we wouldn't consider it too worrisome at this point. Metals have gone up, though not too dramatically given that this was a longer oil run. While wear is still elevated, everything is relatively stable on a per-hour basis, so hard use (rather than an inherent problem) could be the driving force behind that. If compressions are good, just check back in 25 hours.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	33	UNIT / LOCATION AVERAGES	25	25				UNIVERSAL AVERAGES
	MI/HR on Unit	275		242	217				
	Sample Date	12/26/2019		10/5/2019	8/3/2019				
	Make Up Oil Added	1.25 qts		1 qt	1 qt				
ALUMINUM	61	55	42	62				18	
CHROMIUM	32	31	23	38				25	
IRON	205	199	162	230				74	
COPPER	22	23	17	29				8	
LEAD	4150	3867	2977	4475				2572	
TIN	1	1	1	2				1	
MOLYBDENUM	91	92	85	101				21	
NICKEL	2	2	2	3				1	
MANGANESE	5	5	4	7				2	
SILVER	2	1	0	0				0	
TITANIUM	47	47	44	51				10	
POTASSIUM	1	1	1	1				2	
BORON	225	224	219	229				55	
SILICON	40	46	39	59				21	
SODIUM	6	10	8	16				296	
CALCIUM	1624	1690	1541	1905				1923	
MAGNESIUM	1152	1222	1086	1427				302	
PHOSPHORUS	1458	1441	1402	1464				1162	
ZINC	1654	1707	1617	1850				1372	
BARIUM	0	0	0	0				0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	100.0	84-104	104.9	108.5			
	cSt Viscosity @ 100°C	20.35	16.5-21.5	21.51	22.33			
	Flashpoint in °F	445	>385	450	510			
	Fuel %	<0.5	<1.0	<0.5	<0.5			
	Antifreeze %	-		-	-			
	Water %	0.0	0.0	0.0	0.0			
	Insolubles %	0.5	<0.6	0.3	0.3			
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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