



OIL REPORT

LAB NUMBER: J88213
 REPORT DATE: 1/4/2018
 CODE: 1/685

UNIT ID: 56831
 CLIENT ID: XXXXXXXXXX
 PAYMENT: Verbal, R.

UNIT	MAKE/MODEL: GM 5.3L V-8 EcoTec3 L83	OIL TYPE & GRADE: Napa 0W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 5,677 Miles
	ADDITIONAL INFO: 2016 Tahoe	

CLIENT	R. CUMMINS	PHONE: (415) 986-8238
	HUBB FILTERS, INC - CALIFORNIA	FAX:
	233 TAMALPAIS DR	ALT PHONE:
	STE B	EMAIL: rcummins@hubbfilters.com
	CORTE MADERA, CA 94925	

COMMENTS R. CUMMINS: Sample notes: Hubb filter #3302, sample 2. Wear metals are close to our averages for this type of GM engine, and that's exactly what we hoped for since averages are based on a similar interval of about 6,700 miles. There's nothing that looks like poor wear or a problem in this report. The oil filter has done a good job with insolubles so far during this run - they're acceptable at 0.4%. The TBN tested at 3.4, showing some additive left in reserve (we consider 1.0 too low). Viscosity is normal for used 0W/20. This oil is still in serviceable condition and can see more use.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	5,677	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	34,765						
	Sample Date	12/15/2017						
	Make Up Oil Added	0 qts						
ALUMINUM	6	6					4	
CHROMIUM	2	2					1	
IRON	34	36					23	
COPPER	49	71					44	
LEAD	0	0					0	
TIN	1	1					0	
MOLYBDENUM	54	33					78	
NICKEL	0	0					0	
MANGANESE	6	20					6	
SILVER	0	0					0	
TITANIUM	10	5					0	
POTASSIUM	1	4					2	
BORON	33	22					50	
SILICON	21	35					15	
SODIUM	110	223					29	
CALCIUM	1852	1842					1584	
MAGNESIUM	167	88					379	
PHOSPHORUS	677	630					643	
ZINC	805	746					748	
BARIUM	0	0					0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	56.0	46-57				
	cSt Viscosity @ 100°C	9.07	6.0-9.7				
	Flashpoint in °F	430	>385				
	Fuel %	<0.5	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	<0.1				
	Insolubles %	0.4	<0.6				
	TBN	3.4	>1.0				
	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