



OIL REPORT

LAB NUMBER:
 REPORT DATE: 6/18/2015
 CODE: 20/648

UNIT ID:
 CLIENT ID:
 PAYMENT:

UNIT	EQUIP. MAKE/MODEL: Porsche 3.6L H-6	OIL TYPE & GRADE: Total Quartz 5W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 4,237 Miles
	ADDITIONAL INFO:	

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS Wear metals are a bit high in this sample from your 02 Carrera, although only aluminum was far enough out of line to deserve a highlight. The other metals all read less than twice the average levels (averages are based on ~3,900 miles c oil use). Aluminum is typically from the pistons, although there could be other sources as well. We also found high sodium, but with no potassium, we don't think that's coolant; more likely it's residual additive from a past oil. The TBN is strong at 6.3, and the particle count is clean at 18/17/15, but check back to monitor aluminum.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	4,237	UNIT / LOCATION AVERAGES					UNIVERSAL AVERAGES
	MI/HR on Unit	100,484						
	Sample Date	6/1/2015						
	Make Up Oil Added	0 qts						
ALUMINUM	34	3					4	
CHROMIUM	1	1					1	
IRON	20	16					11	
COPPER	13	16					9	
LEAD	1	3					4	
TIN	2	0					1	
MOLYBDENUM	9	1					79	
NICKEL	0	1					1	
MANGANESE	1	0					1	
SILVER	0	0					0	
TITANIUM	1	0					0	
POTASSIUM	1	1					2	
BORON	34	42					110	
SILICON	5	4					7	
SODIUM	107	5					14	
CALCIUM	2716	2594					2585	
MAGNESIUM	34	234					138	
PHOSPHORUS	906	918					921	
ZINC	1052	1092					1064	
BARIIUM	0	0					0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	66.4	65-78	PARTICLE COUNT	ISO CODE (2)	18/14
	cSt Viscosity @ 100°C	11.99	11.6-15.3		NAS 1638 Class	10
	Flashpoint in °F	390	>375		ISO CODE (3)	18/17/15
	Fuel %	<0.5	<2.0		>= 2 Micron	4,040
	Antifreeze %	?	0.0		>= 5 Micron	1,496
	Water %	0.0	<0.1		>= 10 Micron	414
	Insolubles %	TR	<0.6		>= 15 Micron	160
	TBN	6.3	>1.0		>= 25 Micron	38
	TAN				>= 50 Micron	3
	ISO Code	18/17/15			>= 100 Micron	0

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE