



## AMERICAN PETROLEUM INSTITUTE

### **Audit EP2015-1501**

#### **Audit - U.S. GLOBAL PETROLEUM - EVEREST FULL SYN MOTOR OIL 5W-30**

Engine Oils licensed under API's Engine Oil Licensing and Certification System (EOLCS) are purchased in the marketplace annually and audited to ensure the oils conform to program requirements. Audit candidates may be purchased in containers or drawn from bulk tanks (for example, those found at oil-change locations, service stations, and automotive service facilities). These candidates are chosen from a randomly-generated list of API-licensed oils, or, in the case of bulk engine oils, are purchased from randomly-selected locations. The licensed oils collected from the marketplace undergo a series of bench tests to ensure the oils meet the performance requirements specified in API Publication 1509 and the EOLCS Application for Licensure. Additionally, the labels from licensed oils purchased in containers are examined to make sure the API Marks—the API Service Symbol “donut” and Certification Mark “Starburst”—are properly displayed and convey accurate information to consumers. All information regarding the collection and examination of the sample, including receipts, images and other documentation, can be found by expanding the ‘Collection Company Results’ section. **API has completed our analysis of the product indicated below. We are pleased to report that this oil complies with the requirements of API's Engine Oil Program and no further action on your part is required at this time. API appreciates the actions that you have taken to ensure that this product satisfies the requirements of the EOLCS program.**

**Status:** Complete

**Brand Name:** [EVEREST FULL SYN](#)

**Viscosity Grade:** 5W-30

**Service Category & Designation:** SN Resource Conserving, ILSAC GF-5

**Blind Sample ID:** EP2015-1501

**Sample Type:** Packaged

**Date Sample Taken:** 12-Sep-2015

**Sample Trace Code:** MFG. 09/11/2015 BATCH#13390

#### **COLLECTION COMPANY RESULTS**

Results Received

If a dropdown arrow is present on the formulation shown below, it can be used to toggle through all formulations selected by API for this report. This includes (1) the originally selected formula

based on the formulations on file at the time of the audit and (2) any other formulations you have added as part a previous response to this audit. Be aware that findings may still be present on any newly-added formulation and that all findings must be responded to in order to put the audit into a responded state for API to review.

**Pick a Formulation:**

Test	Method	Reported	1509 Range	Expanded Range	Quick Test	Primary Test	Retest 1	Retest 2	Reference Test	Average
Visc @ 100C - ASTM D445	ASTM D445	10.9	9.30 - 12.49	9.23 - 12.58		10.69				10.69
CCS @ -30C - ASTM D5293	ASTM D5293	6300	<= 6600	<= 7082		5080				5080
MRV_Pumping @ -35C - ASTM D4684	ASTM D4684	25000	<= 60000	<= 81480		17900				17900
MRV_Yield Stress - ASTM D4684	ASTM D4684		< 0	< 35		<35				
HT/HS - ASTM D4683	ASTM D4683	3.1	>= 2.90	>= 2.80		3.23				3.23
NOACK - ASTM D5800_Method B	ASTM D5800_Method B	15	<= 15.00	<= 17.50		9.3				9.3
HT Foam-Stability - ASTM D6082	ASTM D6082		<= 0	<= 40		0				0
HT Foam-Tend - ASTM D6082	ASTM D6082		<= 100	<= 210		10				10
Zinc_Zn	ASTM D4951	0.085	0.0765 - 0.0978	0.0710 - 0.1048		0.0882				0.0882
Calcium_Ca	ASTM D4951	0.214	0.1926 - 0.2461	0.1859 - 0.2547		0.2175				0.2175
Magnesium_Mg	ASTM D4951		<= 0.0001	<= 0.0040		0.0009				0.0009

Test	Method	Reported	1509 Range	Expanded Range	Quick Test	Primary Test	Retest 1	Retest 2	Reference Test	Average
Sodium_Na	ASTM D4951		<= 0.0010	<= 0.0030		<0.0001				
Titanium_Ti	ASTM D4951		<= 0.0001	<= 0.0020		<0.0001				
Nitrogen_N - ASTM D5762	ASTM D5762	0.102	0.0918 - 0.1173	0.0679 - 0.1478		0.092				0.092
Boron_B	ASTM D4951	0.023	0.0207 - 0.0265	0.0172 - 0.0300		0.0238				0.0238
Molybdenum_Mo	ASTM D4951	0.0079	0.0067 - 0.0095	0.0056 - 0.0111		0.0083				0.0083
Phosphorus_P	ASTM D4951	0.077	0.0600 - 0.0800	0.0540 - 0.0880		0.0767				0.0767
Sulfur_S - ASTM D4951	ASTM D4951	0.3	<= 0.5000	<= 0.5610		0.3066				0.3066
Total Base Number - ASTM D2896	ASTM D2896	7.9	7.11 - 9.09	6.61 - 9.72		8.2				8.2
Aluminum_Al	ASTM D4951					0.0002				0.0002
Copper_Cu	ASTM D4951					<0.0001				
Silicon_Si	ASTM D4951					0.0005				0.0005
Silver_Ag	ASTM D4951					<0.0001				
Barium_Ba	ASTM D4951					<0.0001				

Test	Method	Reported	1509 Range	Expanded Range	Quick Test	Primary Test	Retest 1	Retest 2	Reference Test	Average
Cadmium_Cd	ASTM D4951					<0.0001				
Chromium_Cr	ASTM D4951					<0.0001				
Iron_Fe	ASTM D4951					<0.0001				
Potassium_K	ASTM D4951					<0.0001				
Manganese_Mn	ASTM D4951					<0.0001				
Nickel_Ni	ASTM D4951					<0.0001				
Lead_Pb	ASTM D4951					<0.0001				
Antimony_Sb	ASTM D4951					<0.0001				
Tin_Sn	ASTM D4951					<0.0001				
Vanadium_V	ASTM D4951					<0.0001				