# BLACKSTONE LABORATORIES

# OIL REPORT

**LAB NUMBER:** D62963 **UNIT ID:** C5
**REPORT DATE:** 1/8/2009 **CLIENT ID:**
**CODE:** 20/286 **PAYMENT:**

**UNIT**

MAKE/MODEL: GM LS-1 5.7L 346 CI V-8
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO: Corvette 350HP

OIL TYPE & GRADE: Mobil 1 5W/30
OIL USE INTERVAL: 2,415 Miles

**CLIENT**

ALVIN HALL

PHONE:
FAX:
ALT PHONE:
EMAIL:

**COMMENTS**

ALVIN: We've found that storing a car doesn't really hurt it, as long as you drive it some. There's not a way for moisture to get inside the block and corrode parts; what happens instead is the oil gets acidic and that can affect the bearings. But your bearings are fine, so you're driving enough to stave off any problems. The TBN read 9.5, a very good reading. Copper is still coming down from when the engine was brand-new, and you should find more improvements there in the future. The other metals are steady and normal. No fuel/antifreeze found. Looking good as of 12/12/08.

**ELEMENTS IN PARTS PER MILLION**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MI/HR on Oil | 2,415 | UNIT / LOCATION AVERAGES | 4,472 | 5,162 | 4,328 | 2,400 | | UNIVERSAL AVERAGES |
| MI/HR on Unit | 19,150 | | 16,434 | 12,000 | 6,828 | 2,400 | | |
| Sample Date | 12/12/08 | | 10/28/04 | 08/30/02 | 06/01/01 | 02/01/01 | | |
| Make Up Oil Added | 1 qt | | 1 qt | 1.5 qts | 1 qt | 0 qts | | |
| | | | | | | | | |
| ALUMINUM | 3 | 4 | 3 | 4 | 3 | 6 | | 4 |
| CHROMIUM | 2 | 2 | 2 | 3 | 2 | 1 | | 1 |
| IRON | 10 | 18 | 13 | 17 | 18 | 33 | | 15 |
| COPPER | 67 | 127 | 77 | 94 | 118 | **281** | | 35 |
| LEAD | 3 | 3 | 5 | 2 | 2 | 5 | | 7 |
| TIN | 0 | 3 | 1 | 4 | 4 | **8** | | 2 |
| MOLYBDENUM | 12 | 5 | 1 | 3 | 3 | 5 | | 65 |
| NICKEL | 1 | 1 | 1 | 2 | 2 | 1 | | 1 |
| MANGANESE | 1 | 3 | 1 | 1 | 2 | 9 | | 3 |
| SILVER | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| TITANIUM | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| POTASSIUM | 3 | 1 | 0 | 1 | 0 | 0 | | 1 |
| BORON | 71 | 72 | 62 | 66 | 69 | 93 | | 69 |
| SILICON | 8 | 45 | 9 | 16 | **41** | **151** | | 10 |
| SODIUM | 6 | 8 | 7 | 8 | 8 | 11 | | 7 |
| CALCIUM | 1075 | 978 | 820 | 1010 | 919 | 1067 | | 2361 |
| MAGNESIUM | 1434 | 1421 | 1423 | 1720 | 1518 | 1009 | | 272 |
| PHOSPHORUS | 653 | 668 | 643 | 685 | 654 | 703 | | 745 |
| ZINC | 773 | 814 | 778 | 895 | 802 | 820 | | 892 |
| BARIUM | 0 | 1 | 0 | 0 | 0 | 4 | | 0 |

**PROPERTIES**

| | | Values Should Be* | | | | | |
|---|---|---|---|---|---|---|---|
| SUS Viscosity @ 210°F | 59.2 | 55-62 | 60.9 | 61.3 | 60.4 | 58.3 | |
| cSt Viscosity @ 100°C | 10.00 | 8.8-11.1 | 10.46 | 10.58 | 10.32 | 9.72 | |
| Flashpoint in °F | 440 | >365 | 400 | 440 | 390 | 395 | |
| Fuel % | <0.5 | <2.0 | <0.5 | <0.5 | 0.5 | 0.5 | |
| Antifreeze % | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | |
| Water % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Insolubles % | 0.3 | <0.6 | 0.3 | 0.3 | 0.4 | 0.2 | |
| TBN | 9.5 | | | | | | |
| TAN | | | | | | | |
| ISO Code | | | | | | | |

*THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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