

# PROFORMANCE<sup>®</sup>

## THRILL RIDES 0437 HUMMER



Phil Lewis  
Statewide Oils (Mobil 1)

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### THE GOOD, THE BAD AND THE OILY!!

Dear Phil,

Proformance operate a business in Australia where we take customers for High Speed Thrill Rides in 750HP H1 Racing Hummers at speeds up to 200KPH (125MPH). Let me tell you, there is nothing more frustrating than having a bunch of paying customers standing around while we wait for inferior engine oil to cool down and thicken up so we can run our engine without the risk of damage!

Failed engine and drive-train components bring our business to an abrupt and costly halt while we try to repair the engine and have the vehicle ready for our next customer day!

With so many different engine oils on the market and so many companies claiming theirs are each the best product, it really is a field full of landmines for a business like ours! We tried all sorts of different oils from all sorts of manufactures, each of which claimed their oil was superior to the others.

What the oil company reps were not aware of is that our Race Trucks are each fitted with a Digital Dash that has an inbuilt data-logger sampling at 100 times per second. Our Data-loggers record Engine Revs, Throttle Position, Acceleration, Engine Temp, Oil Temp, Load, Air Fuel Ratio and of course OIL PRESSURE. We download the data-logger data each event to compare components, and oils against each other. This really sorted the "pretend" products from the "Real Stuff".

In late 2008 we accepted a sponsorship offer by a well known Oil company in Australia (you will find their logos on many Drag Cars across Australia). Unfortunately when we tested their "Top of the Range", "Fully Synthetic Oil", our data-logger graphs clearly showed that their "synthetic oils" performed worse than the No Name Brand oil that we purchase from our local IGA during our "Engine Break-in Period"!

The Synthetic Oil we were supplied as part of a sponsorship deal went into the engine nice and thick, but our Laptop Graphs showed that at soon as the engine was at operating temperature (15 mins or so), our oil pressure dropped to unacceptably low levels even at high revs. All of a sudden our oil light began to flicker on and off at idle when our now "warm" engine was idling. Further investigation revealed that the "Fully Synthetic Rubbish" we were provided simply turned into a very thin golden liquid that had a viscosity similar to water. It even splashed like water as it was emptied from the sump into a catch tray.

The following graph clearly shows the oil pressure (Black) starts at 70PSI (at idle) and begins to drop as soon as engine temperature reaches about 35°C. The oil pressure continued to drop over the first 700 seconds until the engine sits at 90°C. On average the oil pressure was between 30 and 35 PSI for the last 400 seconds of our customer run.

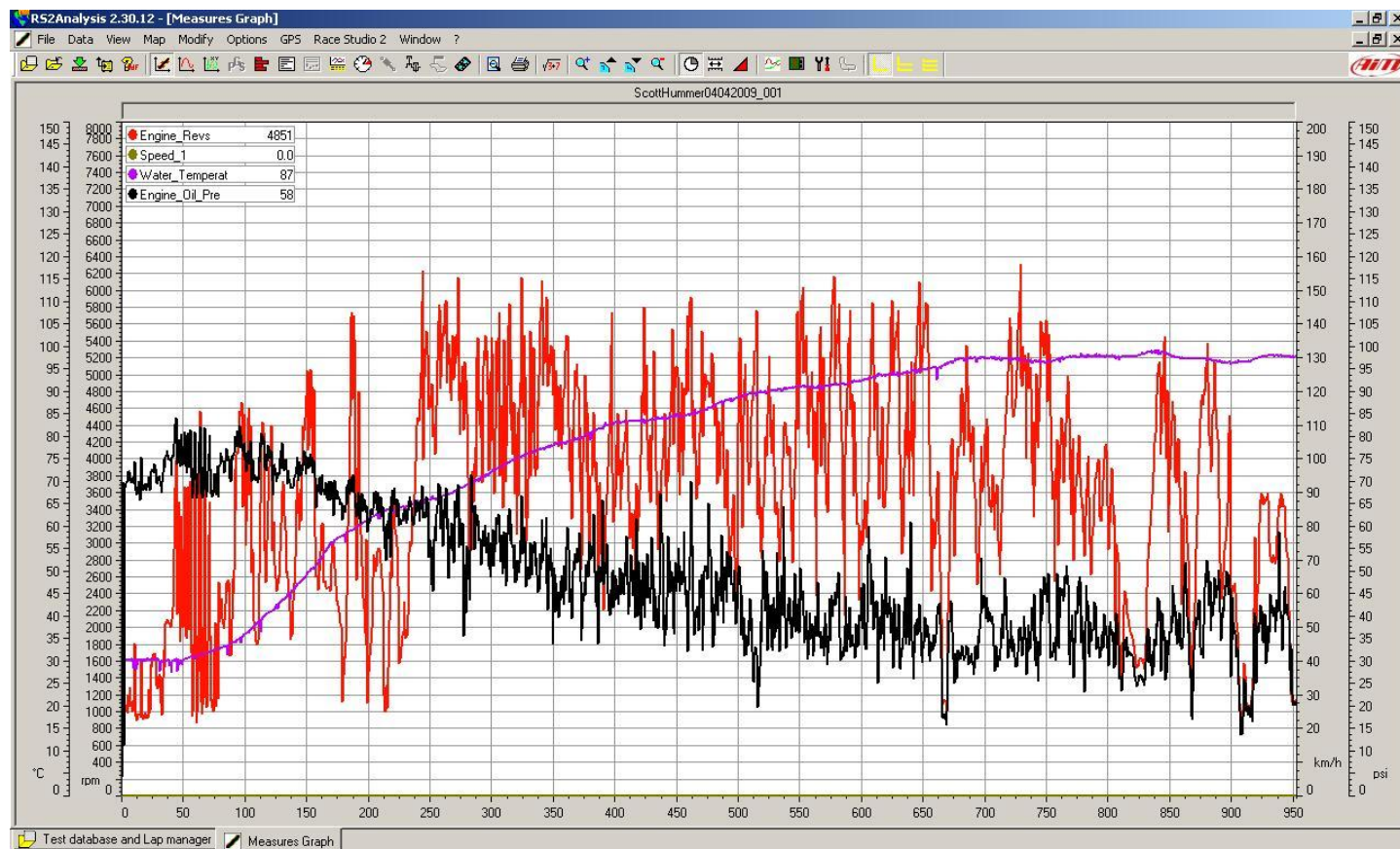


Figure 1– Oil Pressure (Brand XX, Synthetic Oil), Temperature & Engine Revs

As we all know, oil pressure is only one part of the puzzle, but for our pit crew, seeing our oil pressures drop with engine temperature so quickly and watching the oil splash like water as is entered the catch tray was nothing short of SCARY. Our sponsor did an immediate back flip and offered us some very heavy 60 weight (NON SYNTHETIC) oil as an alternative, dismissing his range of Synthetic oils completely.

After analysing all the Data of all the different oils we have used, we noticed that the good old 20W50 or 20W60 oil we bought from the local IGA for breaking in our engines seemed to hold up for a few hours of abuse just as well as any Synthetic or Race oil we had used previously and we chose to simply pay \$20 for a 5 litre container and change it every event.

Whilst we were showing our Fleet of H1 Racing Hummers at Perth Motor Show, we were approached by a lad wearing a Mobil 1 Shirt and I quickly assumed he was another “Smooth Talking Oil Company Sales Rep”. Before the poor lad could even introduce himself, I quickly cut him off mid sentence shouting at him – *“We have heard it all before mate, Go Away!”*

The poor Mobil 1 representative was a bit amazed at my abrupt response, but I began to explain that we have been provided with all sorts of “High Performance” & “Racing” products that were clearly in packaging marked with the words “High Performance” and/or “RACING”, but were never intended for or suitable racing use at all. I went on to explain that many products and oils did not stand up to our extreme demands and that failed “race” (I use that word in jest) components, drive train components and poor lubricants had resulted in significant engine and drive train damage, significant loss of income and enormous repair bills. I went on to explain that we make money by taking people for rides in race trucks and if they brake we LOSE money – it’s that simple.

Mobil 1 requested an appointment for one of their senior engineers to visit our premises and discuss our previous problems and the poor oil pressures we experienced. The engineer suggesting that the Mobil 1 products are the only True Fully Synthetic Oil manufactured from a Group 4 Based stock and showed us a lot of important information and facts proving that many (Most) other synthetic oils are produced from Group 3 Base Stock which is HALF THE PRICE of the Group 4 Base Oil used by Mobil 1.

This was the solution we had been looking for to prevent us having to change our oil every weekend! We tried the Mobil oil in our Race Engine and achieved fantastic oil pressure from start up which continued even at extreme temperatures.

No More Flickering oil lights at idle when the engine had been thrashed hard for 30 minutes solid!

The Graph below clearly shows the Mobil1 Synthetic Oil provides a more consistent oil pressure (Black) then the other brand of Synthetic Oil we were using. If you draw an average line through the oil pressure from 200 seconds to 48 seconds, the oil pressure sits around 45-50PSI. When we inspected the hot Mobil1 Synthetic Oil, it looked like oil, thick!

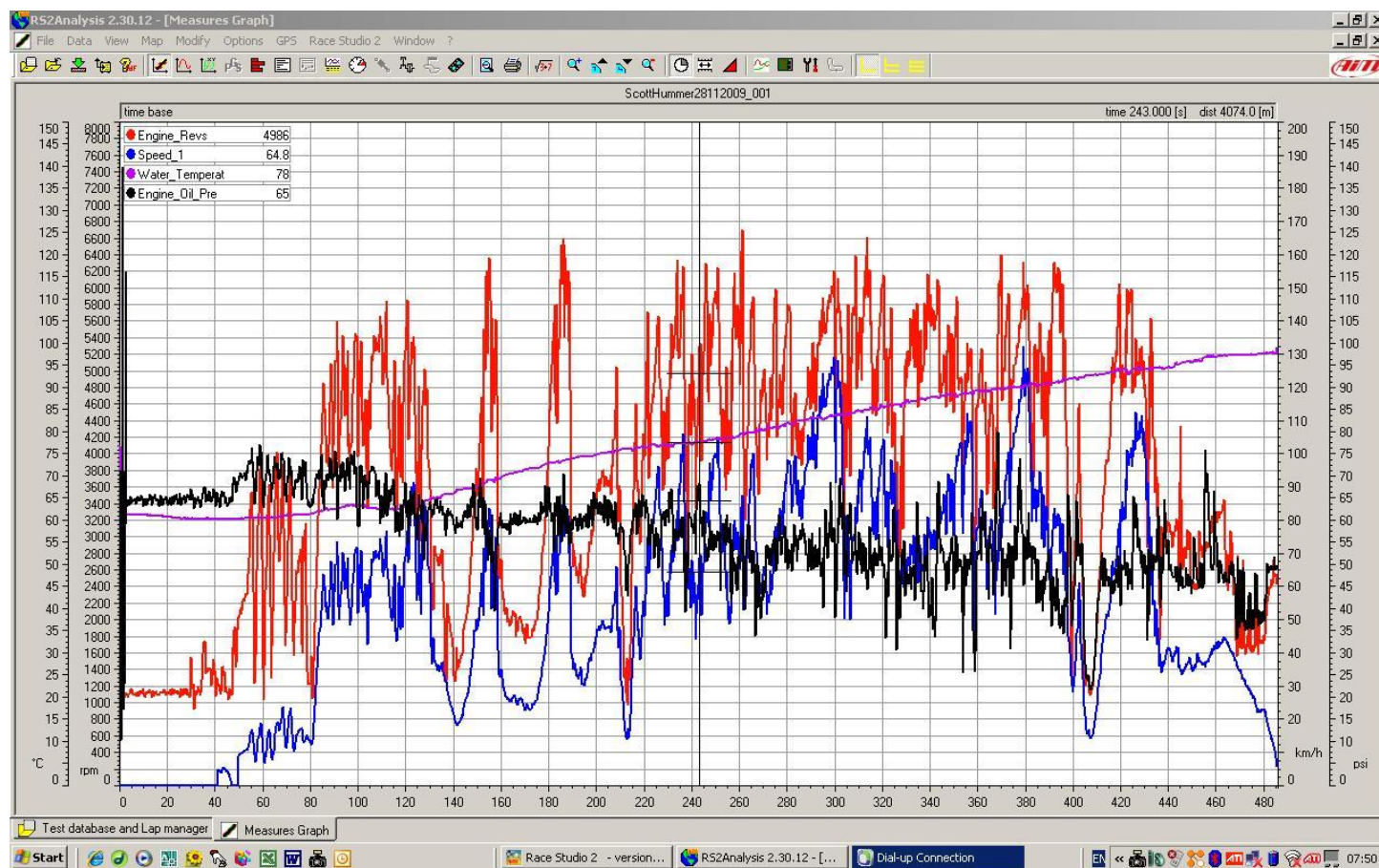


Figure 2– Oil Pressure (Mobil1 Fully Synthetic Oil), Temperature & Engine Revs

Since converting to the superior from Mobil 1, we have absolutely no issues with our engine oil pressure in our race engine **and we have the data to prove it!** Our data-loggers do not stretch the truth like many, many sales reps and after the fantastic results we saw on our laptop screens, we have since changed all our vehicles over to Mobil 1 Synthetic Lubricants.

We now exclusively use Mobil Synthetic Oils/lubricants in the following applications:

- Race Truck
  - 350 Small Block Chevrolet Nascar Engine
  - Holinger 6 Speed Racing Transmission
  - Transfer Case
  - Front and Rear Differentials
  - Shock Absorbers
- Race Hummer
  - 750HP 509 Big Block Race Engine
  - Holinger 6 Speed Racing Transmission
  - Transfer Case
  - Front and Rear Differentials
  - Reduction Gearboxes (x 4 per Vehicle)
- Diesel Hummers (x 5)
  - Engine (Diesel)
  - 4l85E Automatic Transmissions
  - Transfer Case
  - Front and Rear Differentials
  - Reduction Gearboxes (x 4 per Vehicle)
- Freightliner Prime Mover/Race Truck Transporter
  - Engine (Diesel)
  - Eaton Road Ranger 18 Speed Transmissions
  - Rear Differentials
  - Hubs/Bearings
- After spending \$6500 on a brand new Honda Inverter/Generator, we made the decision to run Mobil1 in this as well!

I can confidently say that if a person wants the best oil for their street car, performance car, truck or race vehicle, they can't use a better oil than Mobil 1 – PERIOD (I guess this is why so many V8 Supercars use the stuff!)

Since dealing with Statewide Oils for our Mobil 1 products, we have now discovered they are really a one stop shop for all things liquid! We are now using their Cutting Fluids in our CNC machines Degreasing Liquids in our workshops, Detergents, Brake Fluids, Hand Cleaners – you name it, we get it all from Statewide Oils.

With so many products on the market that just don't live up to the marketing Hype and suppliers that promise the world and deliver nothing but headaches, I would be more than happy to recommend Mobil 1 products and Statewide Oils any of your customers that are perhaps "not quite decided" on their purchase.

If you have a customer that would like to visit our premises and perhaps even view the data and graphs we have collected, please contact me to arrange an appointment.

**Congratulations on absolutely fantastic product and great service!**

Scott Bryce

PROFORMANCE HUMMER THRILL RIDES

