Frontier Analysis, Ltd

TECHNICAL SERVICE RESPONSE NO.: UT076

Subject: Analysis of the Contents in an Oil Filter from a Vehicle Which Experienced a Close Encounter with a UFO (June 24, 2011, Leupp, Arizona)

Date: November 8, 2011

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Background/Objective:

On June 24, 2011, 1:21 a.m., the witness was driving eastbound from Flagstaff, AZ to Leupp AZ. The account in his words follows:

"While driving east bound from Flagstaff, AZ to Leupp, AZ, I noticed a red light in the sky. It was approximately 800 feet in the air and at first I assumed it was a helicopter because of the low flying distance. I rolled the window down to see if I could hear any type of noise; no sound was present. The time was 1:21 a.m.: and as I drove onward, the light descended and flew parallel to my vehicle and just about kept the same speed as my vehicle (65mph). The orb itself was red, and emitting a red glow – darker red in the center, brighter red around the edges. It was to the left of the vehicle, approximately 50 yards away. At this point I was feeling panicked, afraid and curious.

As the road turns, I broke sight of the light and while I was turning the bend, a bright light caught my attention in the corner of my eye. The orb, now bright white, and approximately 8 inches in diameter, was now flying alongside my vehicle, no more than 8-12 inches above the road. It was flying on the shoulder of the on-coming lane and kept perfect speed with my vehicle (65mpg). The time was now 1:24 a.m. While viewing this object, I had no feelings of emotion and I was calm and collected. No noise, besides engine noise was noted, the only notable difference was the presence of cell phone signal (there usually is none). It followed my vehicle for a quarter mile, and it sped up 2 car lengths in front of me and abruptly made a 90 degree turn, upward into the sky, at which point, I leaned forward to see it shoot across the sky, like a shooting star toward the East. It was not as bright when I saw it disappear in the sky.

I arrived at my destination at 1:36 a.m. As I was pulling into the driveway, my headlights shown upon a rabbit, sitting where I was about to park. I stopped within 3 feet of the rabbit, which did not move, flinch, and blink, of any sort. It was very large and from the ground to the top of the head (not including ear length) about the height of my hood (approximately 37 inches tall). Its width was approximately 20 inches wide and it was brown and white mixed color with

no distinct pattern or spots. Its eyes were black and it was sitting upright, like that of a cat. The ears were very stiff, long and together, and they were slanted back at an angle, like that of a jackrabbit. At this point, I began to panic, and I called a 2nd party to tell them of what I was seeing. The car remained running with the headlights on and I sat staring at this huge rabbit for about 5 minutes. After talking, I turned my engine and headlights off, and with the outside light from the house, I was able to keep eye contact with the rabbit as I exited the vehicle and proceeded to walk slowly around the rear of the vehicle and into the house, not breaking sight. The area seemed to be still and calm; I did not hear any unusual night noises (bugs chirping, dogs barking, etc.). Once inside, I remained on the phone until 2:12 a.m."

The witness determined that there were no magnetic effects on the car. The oil filter was removed and sent to this laboratory for analysis. The objective was to examine the oil filter contents for any anomalies which may have resulted from the close UFO encounter.

Conclusions:

- The used oil from the oil filter has normal additive depletion. There is no significant oxidation.

- A small amount of solids isolated from the oil filter paper consists mostly of sodium nitrate, and small amounts of inorganic sulfate and carbonate. The sodium nitrate is clearly a contaminant. Its source is unknown. Uses of this material include: oxidizing agent; solid rocket propellants; fertilizer; flux; glass manufacture; pyrotechnics; reagent; refrigerant; matches; dynamites; black powders; manufacture of sodium salts and nitrates; dyes; pharmaceuticals; an aphrodisiac; color fixative and preservative in cured meats, fish etc.; enamel for pottery; modifying burning properties of tobacco.[1] The inorganic sulfate and carbonate are normally found in used oils.

- Further investigation by the Field Investigator is suggested to determine the source of the sodium nitrate. If no reasonable explanation can be found, such as ruling out vehicle contact with the above-mentioned materials containing sodium nitrate, the source may be related to the UFO close encounter.

Procedure:

Sample: The oil filter was received on July 27, 2011. It was reported that the oil used in the vehicle was Valvoline® Max Life which is a synthetic blend. No information was provided as to the date of the last oil change. The filter housing was cut open to analyze the residual used oil and any solid material on filter paper. Following are photographs of the opened filter.

[1] Richard J. Lewis Sr., "Hawley's Condensed Chemical Dictionary,' Fourteenth Edition, John Wiley & Sons, Inc., 2002.

FT-IR (Fourier Transform – Infrared) spectra[2] were obtained from the used oil. Some of the filter paper was removed from the filter housing and hexane washed. Additional infrared spectra were then acquired from a hexane insoluble residue. All spectra were obtained on Thermo Electron's 360 Avatar FT-IR spectrometer. The Smart Herrick diamond sampling accessory was used for the hexane insolubles. The 'as received' used oil was sampled in a 0.1 mm KBr cell. The filter was also examined with a radiation meter.

Reference: A quart of Valvoline® Max-Life was purchased for reference. An infrared spectrum was obtained from the oil in a 0.1 mm KBr cell.

Results:

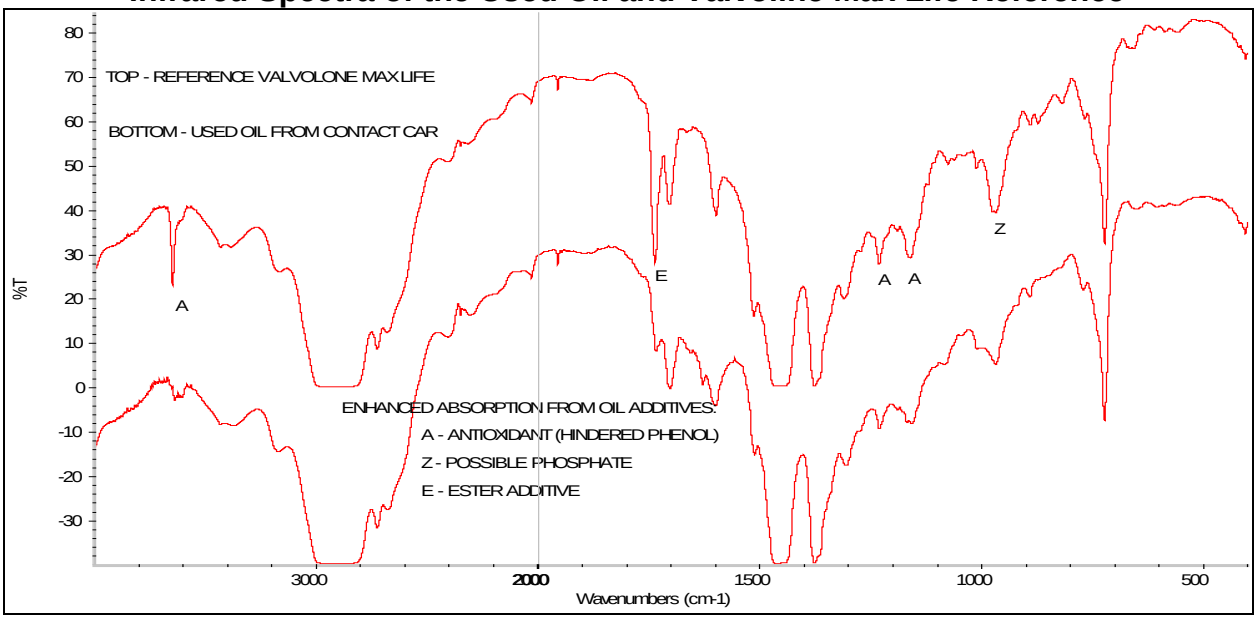
The results of the individual tests done on the oil filter contents follow. These results are summarized in the conclusions section on page 2 of this report. It should be noted at this point that no radiation above background was detected on the filter.

The Used Oil

Infrared analysis of the used oil from the filter shows all the same additives as in the reference Valvoline® Max Life. However, there are less additives in the used oil suggesting additive depletion. Specifically, comparison to the new oil reference, shows lesser amounts of additives such as hindered phenol antioxidant, possible zinc dithiophosphate wear additive, and an ester additive. This is typical of normal used oil. No significant oil oxidation is apparent. A spectrum of the used oil and the new oil follows.

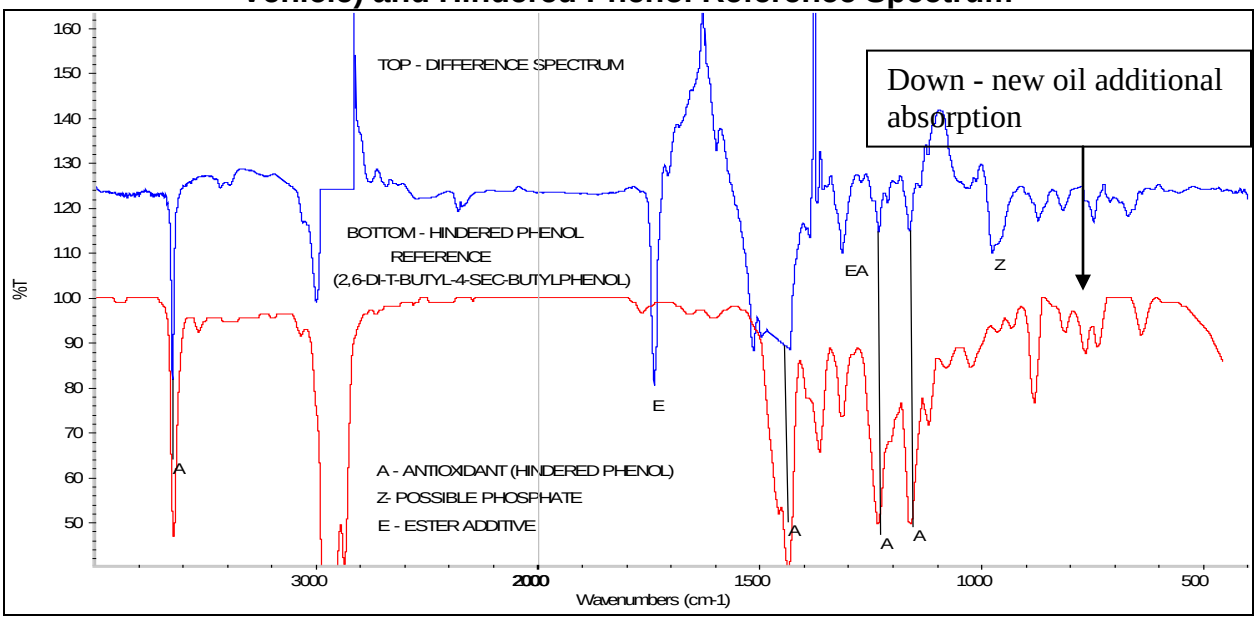
[2] **FT-IR (Fourier Transform Infrared Spectroscopy):** Infrared spectroscopy is used for the molecular structure identification and quantification of solids, liquids, and gases. An infrared spectrum is the result of light (in the 2 to 25 micron wavelength range) interacting with the vibrations of molecules. The particular set of vibrations of a molecule gives rise to specific spectral absorption bands, often referred to as the "fingerprint" spectrum.

Infrared Spectra of the Used Oil and Valvoline Max Life Reference



A difference spectrum generated between the top used and bottom new reference oil enhances additive differences and also is included below. A reference of a hindered phenol, a known oil additive, is included for comparison.

Infrared Difference Spectrum (New Valvoline Max Life versus Used Oil from Vehicle) and Hindered Phenol Reference Spectrum

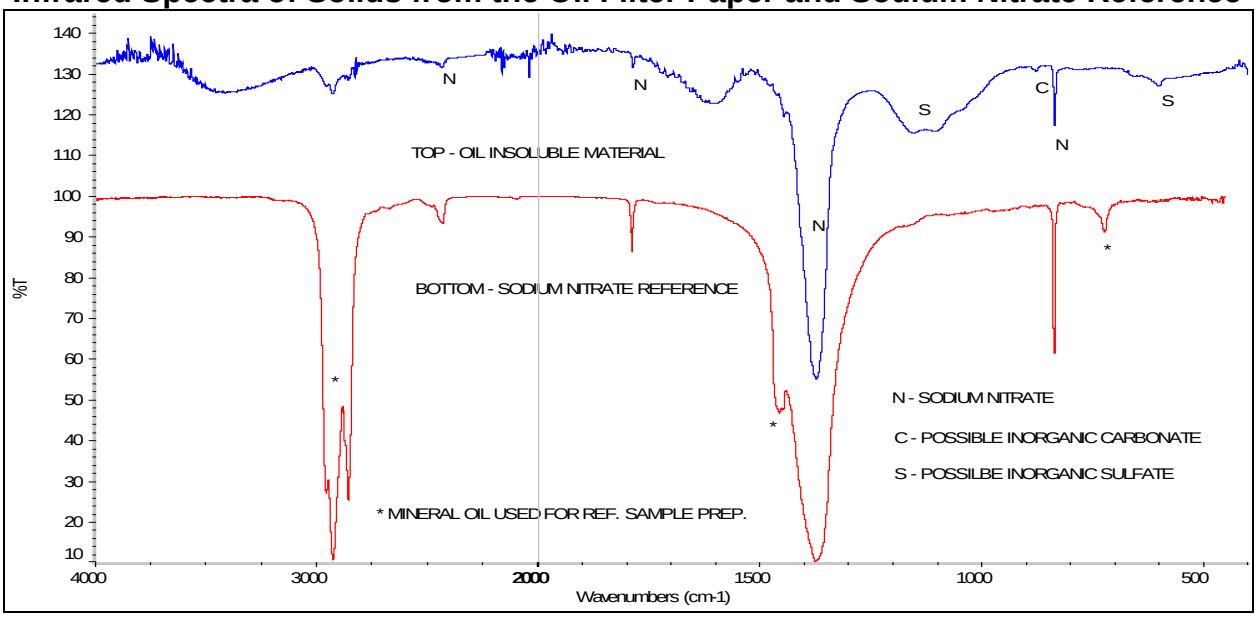


Solids from the Oil Filter Paper

Small amounts of hexane insoluble solids were isolated from the oil filter paper. An infrared spectrum identifies them as mostly sodium nitrate and small amounts of possible inorganic carbonate and sulfate. Sodium nitrate is clearly an outside

contaminant, and its source is unknown. The carbonate and sulfate are normal used oil degradation products. Following are spectra of the insolubles and a reference of sodium nitrate for comparison.

Infrared Spectra of Solids from the Oil Filter Paper and Sodium Nitrate Reference



File: UT076

Phyllis A. Budinger