



LABORATORY REPORT

PREPARED FOR:

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Project Number: IITL#112670
Purchase Order: 2042-1

PROJECT TITLE:

Determination of extractable organics on black plastic piece.

INTRODUCTION:

The purpose of the analysis was to test one sample for extractable organics using Fourier-Transform Infrared Spectroscopy (FTIR). The sample was identified as "Black plastic soaked in mold release remover."

SUMMARY AND CONCLUSIONS:

The results are summarized in Table 1 in the RESULTS section.

TEST PROCEDURES:

The sample was rinsed with 3M solvent Novec 71IPA DL into previously cleaned aluminum pans and allowed to gently evaporate over low heat. Once all of the solvent had been evaporated, the remaining residue was reconstituted with the 3M solvent and analyzed using the attenuated total reflectance accessory to the FTIR.

Reference standard curves have been established for silicone, amides and phthalates (DOP). Each sample spectrum was examined for the presence of the peaks seen in the silicone reference spectra of the materials of concern. If all of the peaks are present in the sample spectrum, then the concentration is determined by comparing the absorbance of one of the bands to a Beer's Law curve generated from standards of varying concentrations.

A blank was prepared along with the sample in the same manner as described above to show that the aluminum pans used in the analysis did not contain any residual extractable organics.

RESULTS:

The amounts of extractable organics detected in each sample are listed in the table below.

Table 1 Extractable Organics.

Sample ID	Sample Size (g)	Silicone ($\mu\text{g/g}$)	Amides ($\mu\text{g/g}$)	DOP ($\mu\text{g/g}$)
Black Plastic Piece	5.522	ND	ND	ND

Notes:

The minimum detection limit for silicone, amides and DOP is 0.0091 $\mu\text{g/g}$.

ND= None Detected.

DISCUSSION:

Figure 1 compares the sample spectra to a reference spectrum of silicone.

Figure 2 compares the sample spectra to a reference spectrum of DOP.

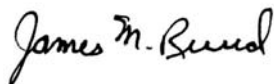
Figure 3 compares the sample spectra to a reference spectrum of amide.

Figure 4 compares the extract from the Black Plastic Piece to a reference spectrum of Dioctyl Adipate. The extract appears to be Dioctyl Adipate

SAMPLE DISPOSITION AND DATA STORAGE:

The samples from this project will be stored for at least 3 months from the date of this report. Samples may then be discarded unless instructions for return or other disposition are received. All data will be kept on file for 3 years. Additional report copies can be obtained upon request.

Submitted by:



James M. Ruud
Analytical Chemist

Reviewed by:



Gary Smith
President and Owner

INNOVATECH LABS, LLC

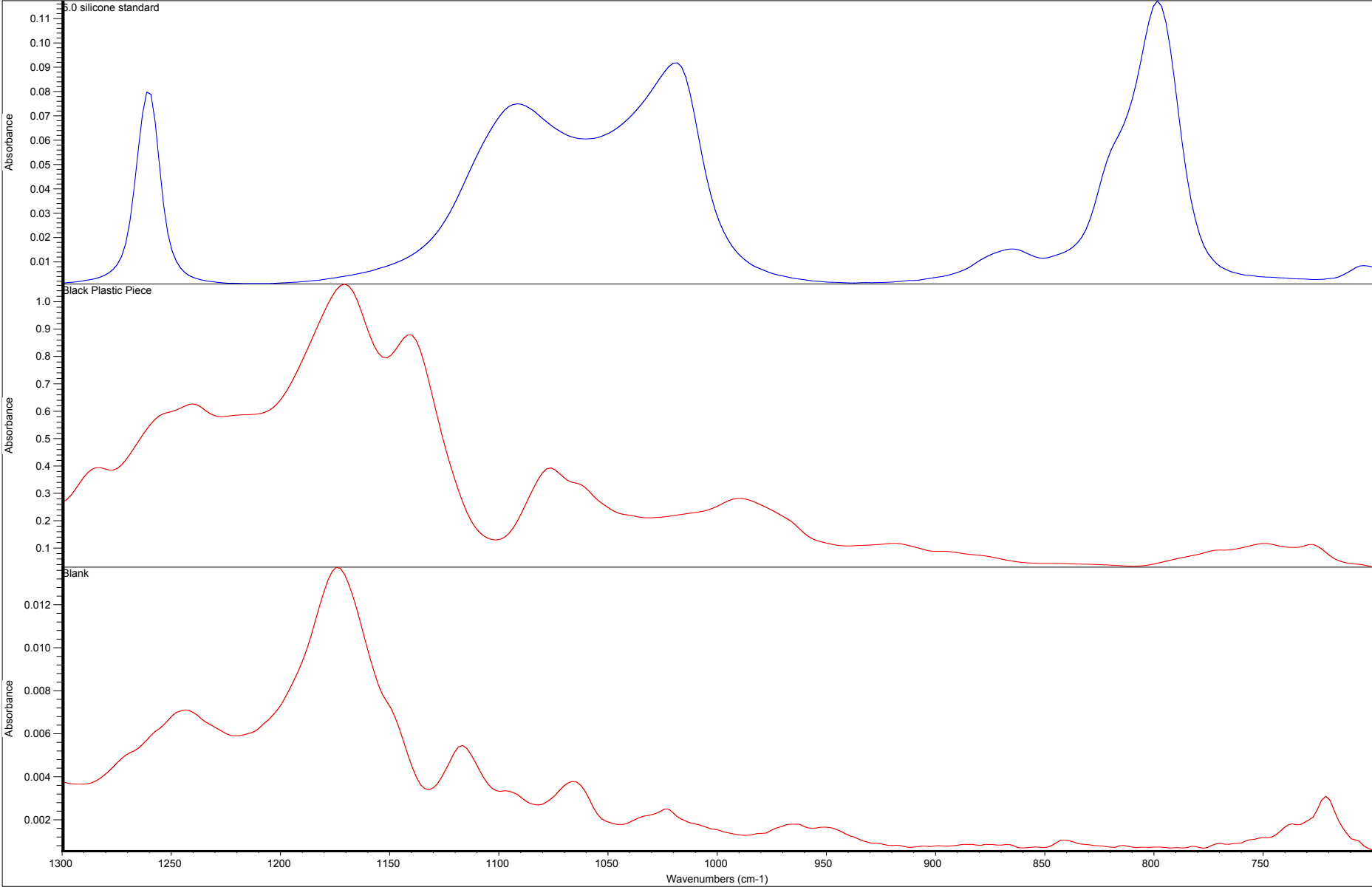


FIGURE: #1

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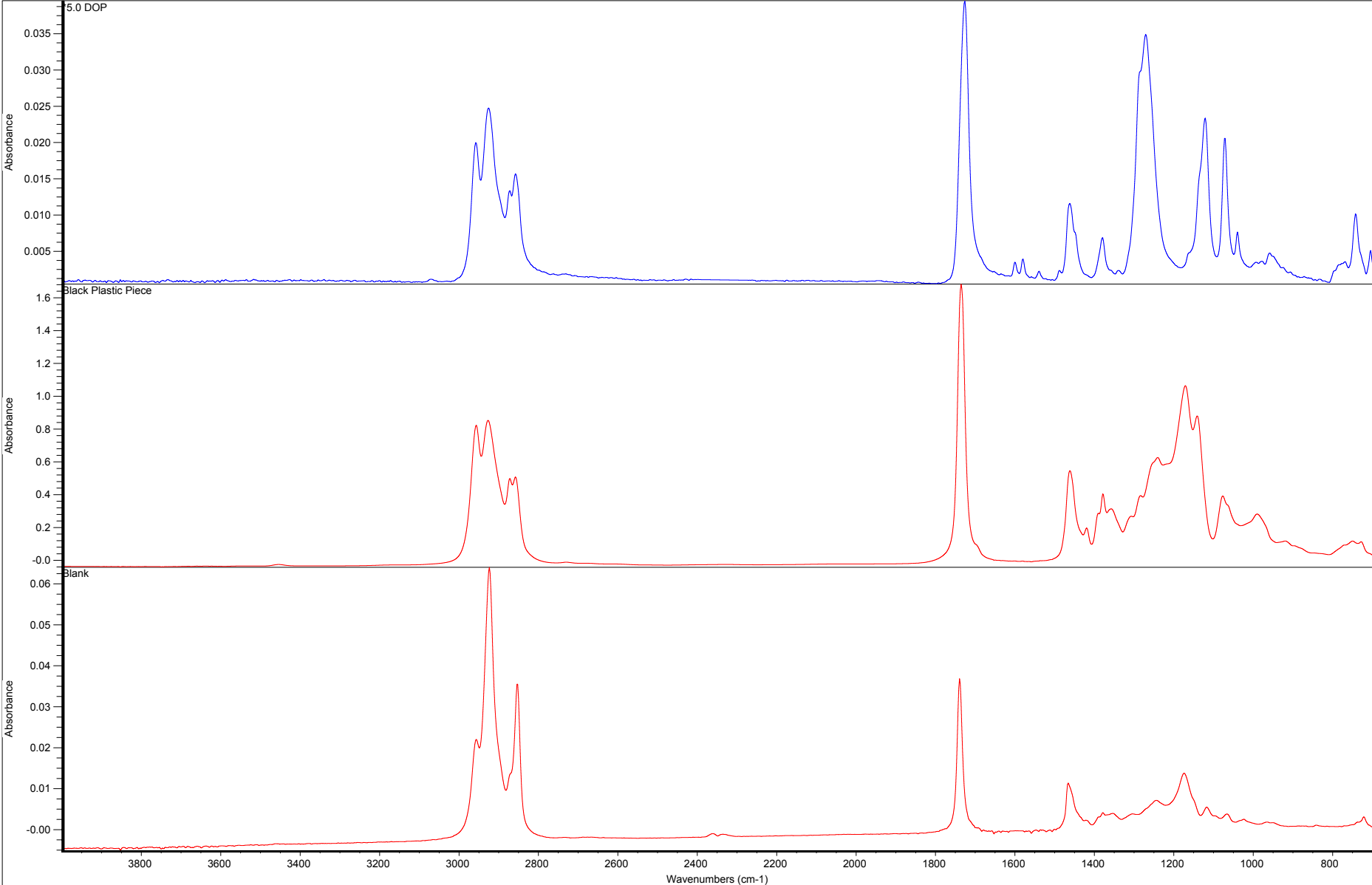


FIGURE: #2

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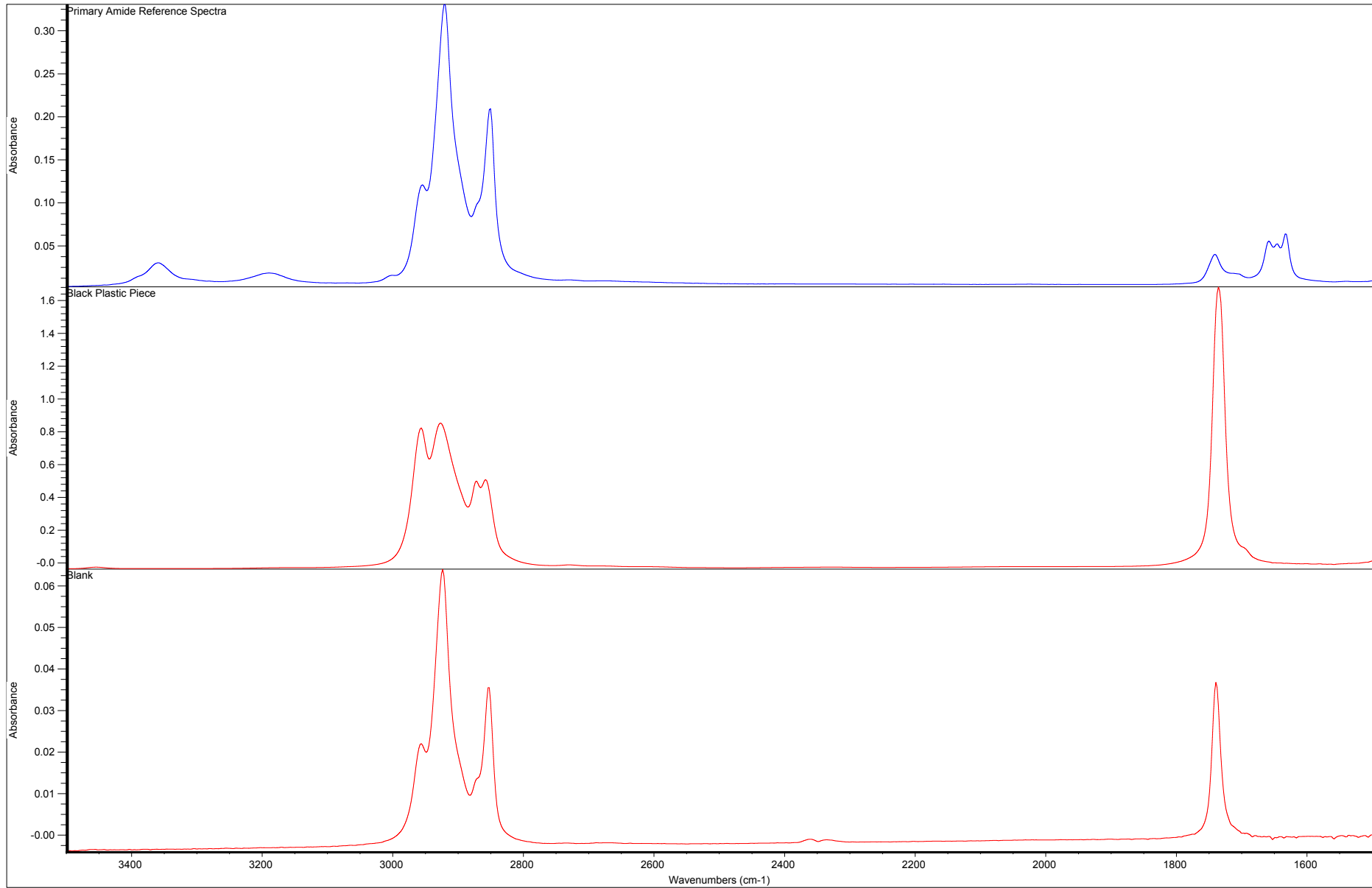


FIGURE: #3

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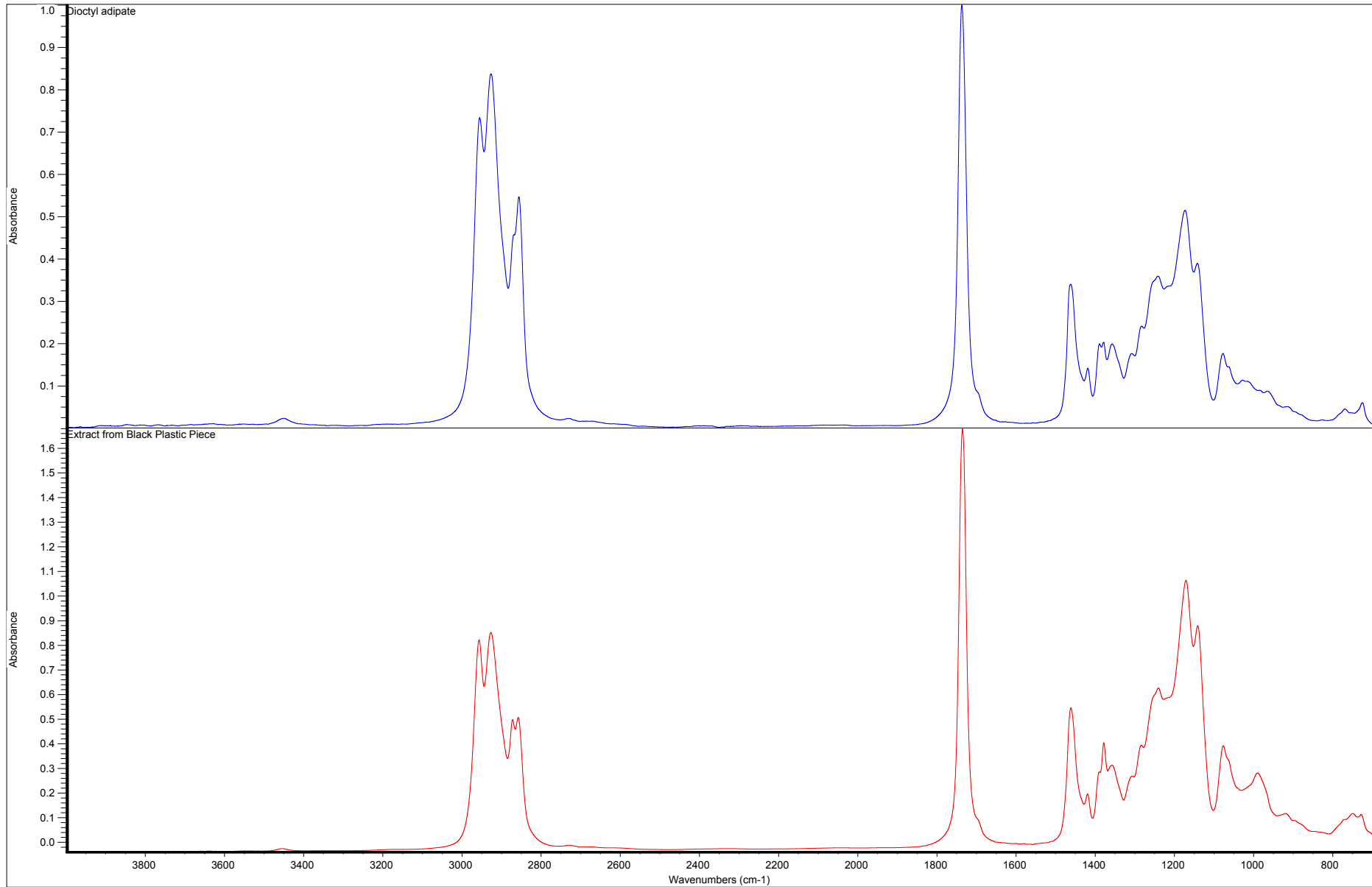


FIGURE: #4