## Knauss, Elizabeth

From: Eitan Misulovin <eitan.misulovin@gmail.com>

Sent: Tuesday, September 06, 2016 2:42 PM

To: Knauss, Elizabeth

**Cc:** nmkla@nmkresouces.com; Christopher Harris; Noble, Ron

Subject: Re: Used Oil Shipment - NMK Lab File 13105 Sample NL16-9 REF# TBN

Dear Elizabeth,

In reply to your email, please find the below responses:

One of the issues I note is the arsenic result, which was reported as "PPB (mg/kg)". A result in mg/kg is parts per million, not parts per billion. It was noted that this test was performed by an outside laboratory, but I could not find a reference to the method number IAC-027. Please check this reported result, and provide additional information on this test method.

- NMK has confirmed that the units listed for the arsenic in their report were, indeed, based on <u>ppm</u> and not <u>ppb</u>. The test run was conducted by Inspectorate America Corp (the outside laboratory running this test) — this is an ICP internal inspection method for metals, which Inspectorate has stated is equivalent to IP-501.

The sample was noted as a composite, but no chain of custody record was provided. Who collected the sample, how was it collected and how was it composited? If it was collected in accordance with an ASTM method, please provide the method number.

- The sample was collected at load directly by Inspectorate America Corp, in accordance with API MPMS Chapter 8, and a composite of that sample (meaning a volumetric composite of each compartment of the barge) was sent by that lab directly to NMK Resources via courier. To be very clear, neither Pinnacle nor any other third party had any custody or control of this material at any time.

Method IP 501 is listed as reporting results for aluminum, silicon, sodium, vanadium, nickel, iron, calcium, zinc and phosphorus, not lead, cadmium or chromium. What quality assurance procedures were conducted to confirm the method's precision and accuracy for these additional parameters?

- According to NMK Resources, their machinery is typically calibrated using a standard for 16 elements, including cadmium, chromium and lead. Once they establish a good calibration curve, then they run testing on the samples received.

The ASTM 7536 method referenced indicates that the reported result is outside the method's normal sensitivity range. Was the sample diluted prior to analysis?

- There was no additional material added to the sample prior to testing.

Kindly confirm receipt and approval.

Thanks, Eitan On Sep 6, 2016, at 11:54 AM, Knauss, Elizabeth < Elizabeth. Knauss@dep.state.fl.us> wrote:

Dear Mr. Misulovin:

I have a couple of questions regarding the analyses and the qualifications of the testing lab. Will you confirm that the lab can discuss the results with me? Although the lab does not appear to have NELAP certification, I see it is accredited by the Customs and Border Protection Service for testing petroleum products.

One of the issues I note is the arsenic result, which was reported as "PPB (mg/kg)". A result in mg/kg is parts per million, not parts per billion. It was noted that this test was performed by an outside laboratory, but I could not find a reference to the method number IAC-027. Please check this reported result, and provide additional information on this test method.

The sample was noted as a composite, but no chain of custody record was provided. Who collected the sample, how was it collected and how was it composited? If it was collected in accordance with an ASTM method, please provide the method number.

Method IP 501 is listed as reporting results for aluminum, silicon, sodium, vanadium, nickel, iron, calcium, zinc and phosphorus, not lead, cadmium or chromium. What quality assurance procedures were conducted to confirm the method's precision and accuracy for these additional parameters?

The ASTM 7536 method referenced indicates that the reported result is outside the method's normal sensitivity range. Was the sample diluted prior to analysis?

Thank you,

Elizabeth Knauss Environmental Consultant Southwest District Florida Department of Environmental Protection 813/470-5902

**From:** Eitan Misulovin [mailto:eitan.misulovin@gmail.com]

Sent: Tuesday, September 06, 2016 10:46 AM

To: Knauss, Elizabeth < Elizabeth. Knauss@dep.state.fl.us >

Cc: Christopher Harris <gallating@aol.com>; Noble, Ron <Ronald.Noble@bipc.com>

**Subject:** Re: Used Oil Shipment

Dear Elizabeth.

Your below email is well received. Attached hereto, please find a copy of the certified lab's report showing the analysis results for the petroleum loaded on board the HMS 2607.

Kindly confirm receipt and send confirmation.

## Thanks, Eitan

