

## **Supporting Documentation for a Modified List of Contaminants of Concern**

**Spill #484495**

**Badger Wash Federal #1-32**

**Grynberg Petroleum Company**

### **Previous Background samples:**

SS18@5' (above standards for EC and Selenium)

SS19@1' (below standards for EC and Selenium)

In Document #403422219, the list of contaminants of concern was modified to include: TPH (GRO, DRO, ORO), EC, Organic Compounds in Soils and Selenium. This was based on analytical results of the above listed background samples. Since then, additional background soil samples have been collected.

### **New Background samples:**

SS18@2.5' (below standard for EC, above standard for Selenium)

SS19@2.5' (below standard for EC, above standard for Selenium)

### **EC Discussion:**

Based on multiple depths (1' bgs, 2.5' bgs, and 5' bgs) and multiple locations (SS18 and SS19) of background samples, it appears that background concentrations of EC are variable. Background concentrations of EC are both below and above the applicable Table 915 screening level, without regard to depth.

Additional delineation soil samples were also collected since Doc #403422219. SS15, which was previously impacted at 5 feet bgs with TPH at >4,000 mg/kg, as well as benzene and several other organic compounds, was sampled at 6 feet bgs. TPH and all organic compounds in soil were non-detect for the 6-foot sample. However, the EC concentration in SS15@5' was below the standard, and SS15@6' was above the standard for EC.

There does not appear to be a correlation between a spill/release and the EC concentrations found in the soil. The concentrations of EC in areas of a known spill (SS15) appear to mirror the variability of the background samples (SS18 and SS19) more than they appear to indicate a spill/release. Using science, the Operator cannot find a correlation between the concentration of EC and a spill/release. Using science, the Operator can find a correlation between the concentration of EC and background conditions. As such, the Operator respectfully requests to remove EC from the list of contaminants of concern.

### **Selenium Discussion:**

The highest Selenium concentrations from the 2.5-foot bgs depth and the 5-foot bgs depth are 1.09 mg/kg and 1.39 mg/kg, respectively. All Selenium exceedances from delineation soil samples are within 25% of these background concentrations. As such, the Operator respectfully requests to remove Selenium and EC from the list of contaminants of concern.