

Phone conversation

August 17th

Set up Tuesday Aug 24th

0700 work at Soul Sprint

South Sprint Facility, North Padre Island, Texas
Groundwater Sampling Event

Prepared for

Locin Oil Company, LLC

by J. Connor Consulting, Inc.

July 27, 2004

Introduction

In January of 1998, ARCADIS Geraghty & Miller conducted a groundwater sampling event at the South Sprint Facility, which was owned by Enron Oil and Gas. This event was conducted at the request of the property owner, the National Park Service (NPS), to determine the presence or absence of free phase and dissolved hydrocarbons in the shallow aquifer at the site.

The sample results showed evidence of various dissolved hydrocarbons, including benzene, ethylbenzene, toluene, total xylenes and total petroleum hydrocarbons (TPH). The NPS requested that cleanup levels be set below levels set forth in the Safe Drinking Water Act. There were several benzene hits that were above the cleanup level; therefore the NPS could not consider the site clean.

Field observations also indicated the presence of free phase hydrocarbons in several of the wells.

It has been over four years since the last groundwater sampling effort. Locin Oil Company (Locin) has recently purchased this production facility. Acting in good faith, Locin has initiated communication with the NPS to determine if any additional remedial activities are necessary at the site. The NPS has requested that additional groundwater sampling be conducted to determine if contaminants still exist in the shallow aquifer, or if natural attenuation has reduced the levels of contaminants below levels set forth in the Safe Drinking Water Act.

Locin has obtained the services of J. Connor Consulting, Inc. to conduct a groundwater sampling event at the site. Southern Ecology of Corpus Christi, TX will assist in the collection of samples.

Field Activities

Well Observations and Measurements

Each well to be sampled at the site will be examined to determine if they are intact and unobstructed from organic material. All wells that are intact and unobstructed will be measured for total depth, water depth and size of the phase-separated hydrocarbon layer (PSH) using an oil/water interface probe. The oil/water interface probe will be decontaminated in between each well using a laboratory grade cleaner such as Alconox and deionized water. The observations and measurements will be recorded in the field log book.

Groundwater Sampling

Samples will be collected from eight wells at the site. If any of these wells are found to be damaged or obstructed, samples will be collected from nearby suitable wells.

Prior to sampling, each well will be purged with dedicated disposable bailers. Well volumes will be calculated, and an equivalent of three wetted casing volumes will be purged prior to sampling. Purge water will be discarded in the onsite produced water tank and will be properly disposed of by Locin. If a well does not recharge after purging one well volume, it will be allowed to rest for 24 hours and sampling will occur on the following day.

When the wells are ready to be sampled, field parameters will be collected from each well, including conductivity, pH and temperature. The conductivity and pH meters will be calibrated in the field according to the manufacturers' instructions.

A sample will be collected from well OW - 12, because it is upgradient and was found in 1998 not to have contamination. This sample will be used as a background sample. A sample will also be collected at well OW - 11, because it is downgradient, and beyond the wells found to be contaminated. This sample will show whether or not the plume has migrated farther

downgradient. A sample will also be collected at OW – 14 because it is downgradient of the tank battery and was previously found to have hydrocarbons below detection limits.

Samples will also be collected from wells OW – 8, OW – 10, OW – 2, OW – 13, P – 16, P – 8, P – 13 and OW – 6. These wells surrounding the old pit area were selected because they showed various levels of contaminants from the 1998 sample results.

Wells OW – 17, OW – 16 and RW – 6 will also be sampled to determine the presence or absence of contamination in the vicinity of the tank battery.

All samples will be collected using dedicated disposable bailers and analyzed for benzene, toluene, ethylbenzene, total xylenes and TPH. Samples will be collected and shipped using standard chain of custody and a third party EPA – approved laboratory will be used. All sample locations are indicated on the attached site drawing.

RE: Review of the South Sprint Facility, North Padre Island, Texas Groundwater, sampling Event prepared for Locin Oil Company by J Conner Consulting (July 27, 2004).

We have reviewed the subject proposal as well as all of the relevant history cornering the South Spring Facility that is available in our files. Our records concerning this site appear to pretty much end in June, 1999 with a proposed Remedial Action/Closure and Monitoring Plan that was developed by ARCADIS Gerahty&Miller. Our records indicate that this plan was never implemented.

Comments on the your current proposal:

1. Introduction, 2nd paragraph: "The sample results showed evidenced of various contaminants, including benzene, ethyl benzene, toluene, xylenes, and total petroleum hydrocarbons" Please note that the presence of both dissolved and free-phase hydrocarbons have been documented at the site. Determination of both should be conducted by Locin.

2. Field Activities: Wells to be sampled: The proposed sampling strategy is focused around the old pit area where fairly high concentration of hydrocarbons and were founds as well as about 1 foot of product. However, Soil vapor BTEX analysis conducted in 1994 by Amoco detected high concentrations at the tank battery on the north boundary of the production facility. We would propose that the following wells also be sampled:

OW-8 - This well had the highest concentration of hydrocarbons during initial sampling.

OW-10 - Downgradient of OW-8

OW- 17, OW-16 and RW-6 -To test for contamination around the tank battery.

OW-14 - Downgradient of tank battery and hydrocarbon concentrations were found to be below detection limits in previous sampling efforts.

3. Page 3, 1st paragraph, Last sentence: "If new sample results indicate contaminant levels lower than the Safe Drinking Water Act, then the site will be considered Clean by the NPS" I strongly recommend striking this sentence. While this may in fact meet our target groundwater attainment levels, it does not indicate what would be done for any soil contamination during closure.

The NPS would like to see Locin and J O Connor adopt Geraghty and Miller remedial Action Plan relative to the proposed methods for soil and groundwater sampling and analysis. A portion of the original review comments from our contaminants specialist follow:

"I have reviewed the subject remedial Action Plan prepared by Geraghty and Miller for Enron Oil and Gas Company. I have, overall, found the proposal to be complete, and comprehensively addresses all critical aspects of the remediation and monitoring. I believe that we can accept it conditioned on the following: I believe that e can accept it conditioned on the following: (1) The final approval of the soil-bioremedial process should be deferred until after results of the initial groundwater and soil sampling effort as described on page 4 are known (note: groundwater samples should also be evaluated for the presence of free-phase hydrocarbons here), And (2) Adjustment for the target soil and groundwater attainment levels to concentrations that reflect previous requirements at Yarborough Pass and the Safe Drinking Water Act. "