

CASE STUDY: BIOLOGIX SALT BINDER CHESAPEAKE MIGHTY MOUSER #3 SPILL

Introduction

The product for this application is BIOLOGIX SALT BINDER. BIOLOGIX SALT BINDER is a proprietary humidified soil extract with the nine essential soil microbes included in the formulation. The product works by providing an organic substructure with an extremely high ion exchange capacity that the Na⁺⁺ and Cl⁻ ions can bind and be charged neutralized (via an ionic bond). The carbon chain then becomes a food supply for the natural soil and product's **adjunct microbes, which over time dissipates the salts**. A specialized blend of enzymes significantly increase the degradation process by facilitating the transfer and uptake of nutrient by the microbial population.

Application

The area outside the Mighty Mouser tank battery had been contaminated with multiple barrels of salt water that was tested at approximately 22,570 ppm chlorides. The patches of soil were then treated with BIOLOGIX SALT BINDER in March of 2007. After 30 days, samples were taken from the site in April of 2007. We allowed the product to continue to work in the soil without re-treating for another 30 days and samples were again taken from the same test site in May of 2007. The chloride levels and total soluble salt levels (ppm) of each were tested are listed below:

SAMPLE	CHLORIDES	T. SOLUBLE SALT
Beginning Sample (prior to any NanoBind treatment)	22,570	49,400
April 30, 2007 30 days after initial treatment	4,240	10,800
June 1, 2007 Approximately 60 days after treatment	730	2,580

Another application of the BIOLOGIX SALT BINDER was done on May 25, 2007, the same day the June 1, 2007 samples were taken. The application took place after the samples were drawn. Samples will again be drawn in 30 days to further test the effectiveness of SB-I. As you can see from the above data, the chlorides were neutralized, and were reduced 97% with one treatment. And the TSS levels were reduced 95% to acceptable levels.



Head Office
780.962.7991
10436 - 255 Street
Acheson, AB T7X 6B4
deltaremediation.com

Environmental Services
Petroleum Laboratory
Gas Engineering
www.oilab.com



5120 N. Santa Fe
Oklahoma City, OK 73118
Ph. (405) 528-TEST(8378)
Fax (405) 962-1870

Laboratory Report # 96446

April 30, 2007

JENKINS & PRICE, INC.
ATTN: SETH JENKINS
4328 W OWEN K. GARRIOTT
END, OK 73703

ONE SOIL SAMPLE
PROJECT: CHESAPEAKE
REF: NIGHTY MOUSE # 3

DATE RECEIVED: 04/27/07
DATE ANALYSED: 04/30/07

ANALYSIS (in mg/Kg):

	<u>UNTREATED</u>	<u>TREATED</u>
CHLORIDES	22,570	4,240
T. SOLUBLE SALTS	49,400	10,800


CERTIFIED BY: SURESH JOSHI
CHEMIST/ANALYST



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5120 N. Santa Fe
Oklahoma City, OK 73118
Ph. (405) 528-TEST(8378)
Fax (405) 902-1870

Laboratory Report # 96570

June 1, 2007

JENKINS & PRICE, INC.
ATTN: SETH JENKINS
4328 W OWEN K. GARRIOTT
ENID, OK 73703

ONE SOIL SAMPLE
PROJECT: CHESAPEAKE MIGHTY MOUSER

DATE SAMPLED: 05/25/07
DATE ANALYSED: 06/01/07

ANALYSIS (in mg/Kg):

<u>SAMPLE ID</u>	<u>CHLORIDES</u>	<u>T. SOLUBLE SALTS</u>
#3	730	2,580


CERTIFIED BY: GURESH JOSHI
CHEMIST/ANALYST



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