



John Guenza – Project Manager
Erik Appel – Staff Geologist

- AHTNA Government Services Corporation (AGSC) is an Alaskan Native American Owned, 8(a) Corporation. AGSC performs Environmental, Engineering, and Consulting services.
- AGSC has been performing operations and maintenance activities at the Former Fort Ord Groundwater Treatment Plants (Operable Unit 2 and Sites 2/12) since March 2002.

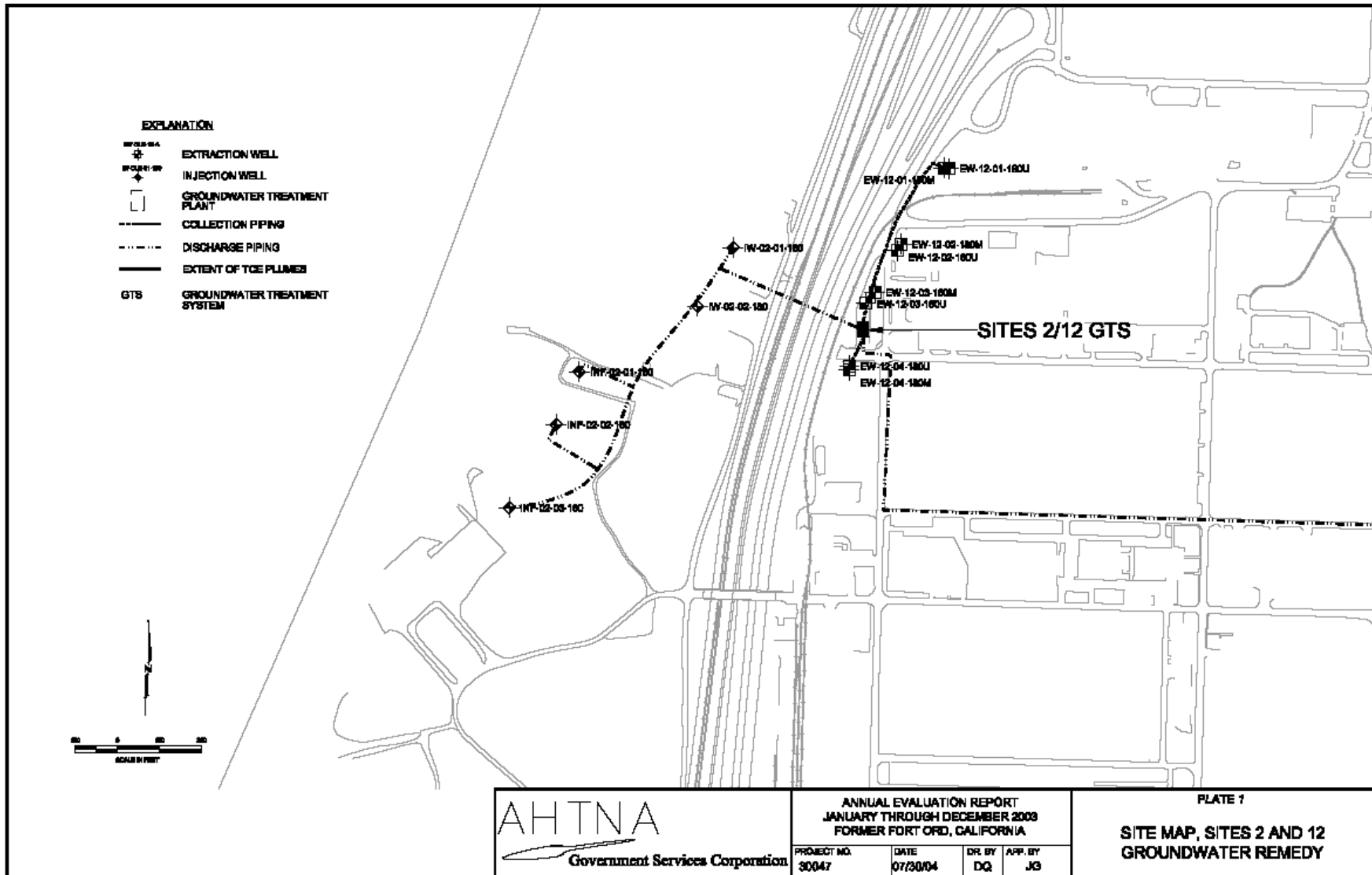
Photo of Site 2/12 GWTP (Exterior)



Photo of Site 2/12 GWTP (Interior)



Sites 2/12 GWTP - Layout



AHTNA
 Government Services Corporation

ANNUAL EVALUATION REPORT
 JANUARY THROUGH DECEMBER 2003
 FORMER FORT ORD, CALIFORNIA

| | | | |
|----------------------|------------------|--------------|---------------|
| PROJECT NO. 30047 | DATE 07/30/04 | DR. BY DQ | APP. BY JB |
|----------------------|------------------|--------------|---------------|

PLATE 1
 SITE MAP, SITES 2 AND 12
 GROUNDWATER REMEDY

Background

- The Sites 2/12 groundwater contamination was first recognized in 1989 following the installation and sampling of monitoring wells
- Additional investigation reports served as the basis for the Sites 2/12 system design

Background (cont.)

- Monitoring and reporting of chemicals of concern (COCs) in groundwater and water level elevations from up to 45 monitoring wells at Sites 2 and 12 has occurred quarterly since 1992 as part of base wide monitoring activities.
- There are about ten years of groundwater monitoring data to support the original interpretations of groundwater flow and COC plume distribution used for remediation system design.

Background (cont.)

- The original source of the plume is assumed to be historical use and improper disposal of solvents in the Site 12 area.
- The Upper 180-foot Aquifer COC plume appears to have originated in the Site 12 area and to have been transported by groundwater flow about 3,000 feet to the southwest passing beneath Highway 1 and into the Site 2 area.

Background (cont.)

- The Sites 2/12 groundwater remedy is defined by the *Base wide Remedial Investigation Sites Record of Decision (RI Sites ROD; Army, 1997)*.
 - Consists of a groundwater pump and treatment system designed to remediate groundwater containing COCs above aquifer cleanup levels (ACLs).

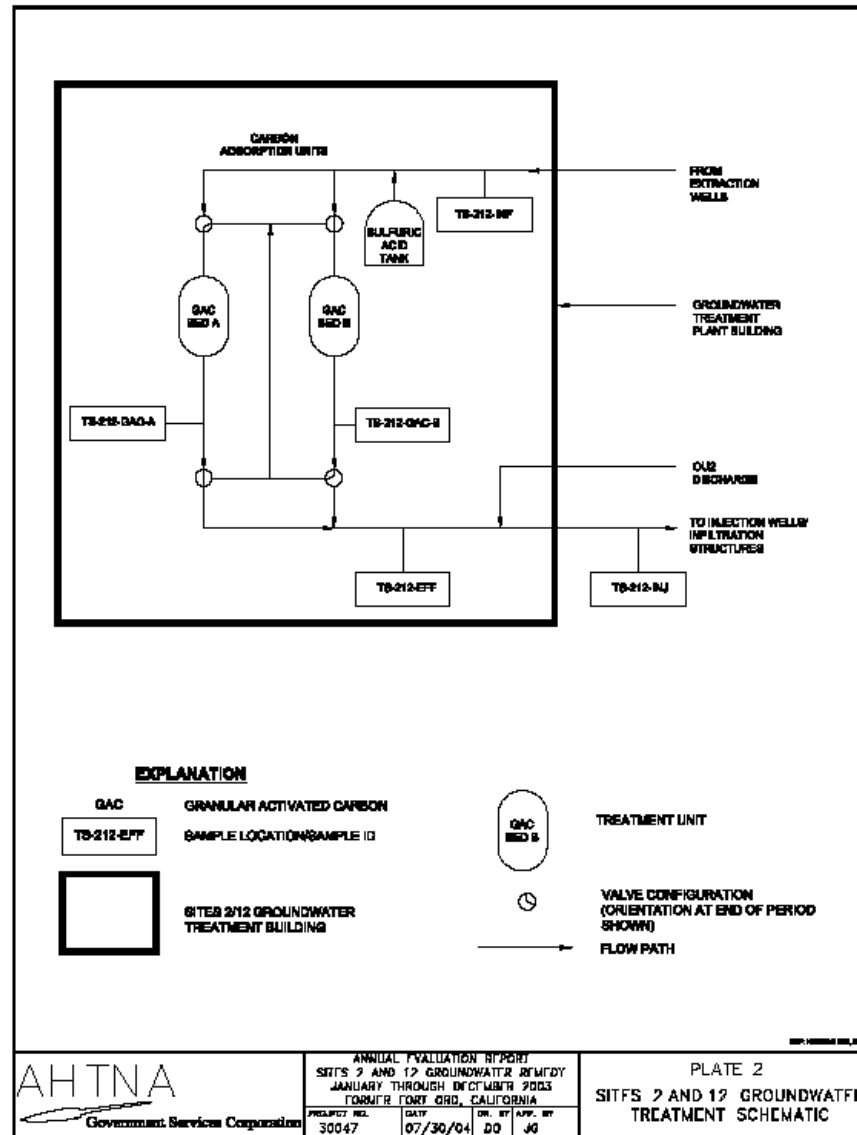
Background (cont.)

- Groundwater extraction and treatment first occurred at Sites 2/12 on April 13, 1999
- Continuous groundwater extraction and treatment began on May 3, 1999

Background (cont.)

- System includes:
 - eight extraction wells at Site 12
 - groundwater treatment plant
 - five Upper 180-foot Aquifer recharge structures (two injection wells and three infiltration galleries)
 - Upper 180-foot Aquifer extraction wells

How Does It Work?



Cleanup Facts

- The plant was designed to extract groundwater from Site 12 at rate of about 300 gallons per minute (gpm) then recharge the Upper 180-foot Aquifer at a total system rate of about 600 gpm.
- The extra 300 gpm of recharge water is provided by the Operable Unit 2 system—the other big, Fort Ord plant.
- This extraction/recharge system is designed to reverse the natural westerly groundwater flow gradient, move the flow toward the east, and send groundwater flowing from Site 2 back to the extraction wells.

Background (cont.)

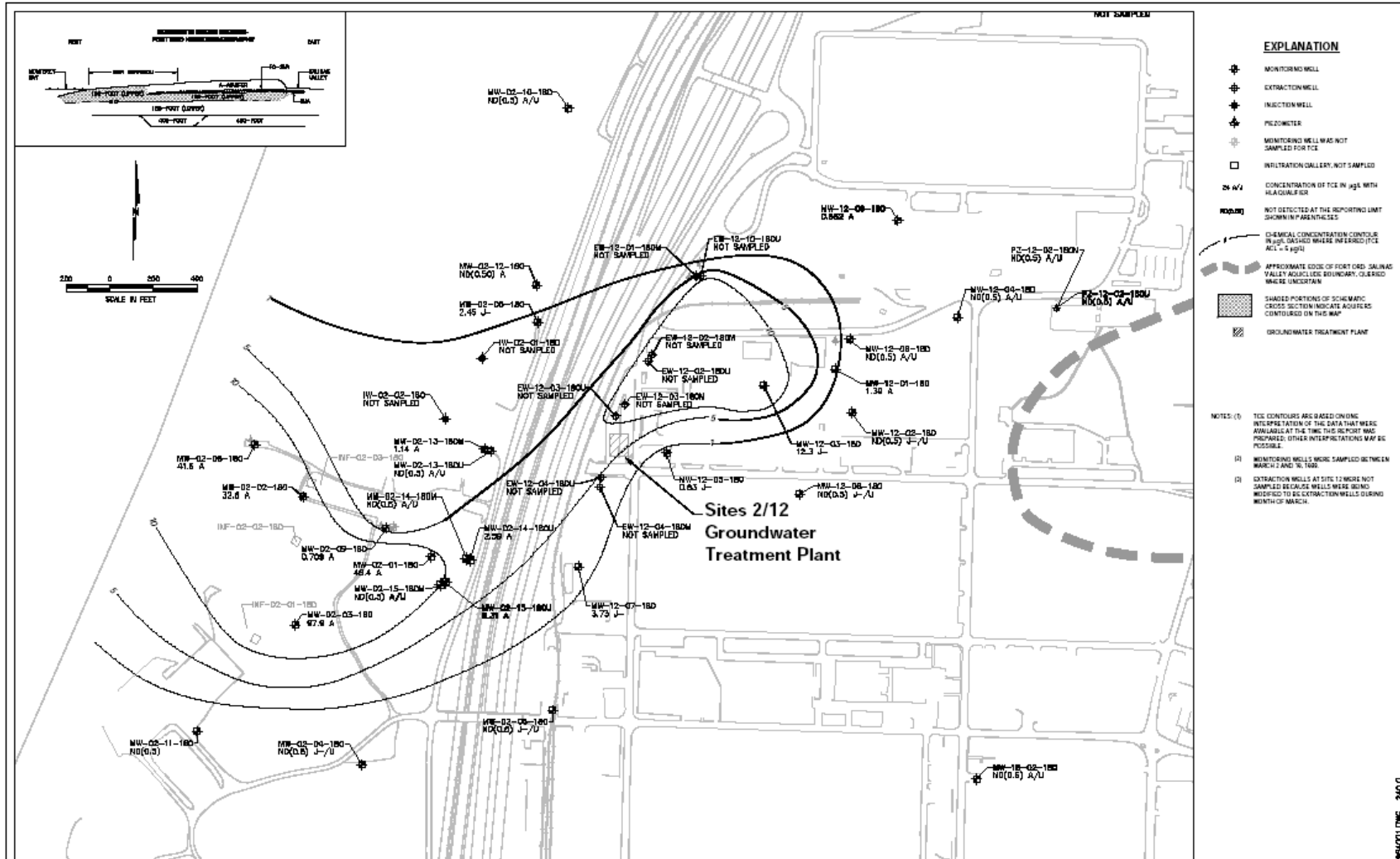
- The extraction capacity of the eight extraction wells was designed to allow for maximum system operation flexibility in the event that extraction at a well would need to be reduced or discontinued, the loss of extraction capacity could be compensated for by turning up the extraction rate at another well.
- The performance goal of the groundwater remedy is to facilitate groundwater extraction and hydraulic capture of the COC plume while maintaining a groundwater mound to minimize saltwater intrusion at Site 2.

Trends

- Significant decrease in COC concentrations since beginning of pumping and treatment in 1999.
- Groundwater treatment has removed approximately (through June 2003):
 - Total Gallons Groundwater treated = ***584.1 million gallons***
 - Total Mass COCs removed = ***276 pounds***

“Before Treatment”

Pre-Treatment Aquifer Conditions – 1999



| NO. | DATE | REVISIONS | PLA FILE NO. | PROJECT NO. | APPROVED | APPROVAL DATE | DRAWN BY |
|-----|------|-----------|--------------|-------------|----------|---------------|----------|
| | | | | 50804 00132 | | | PH |



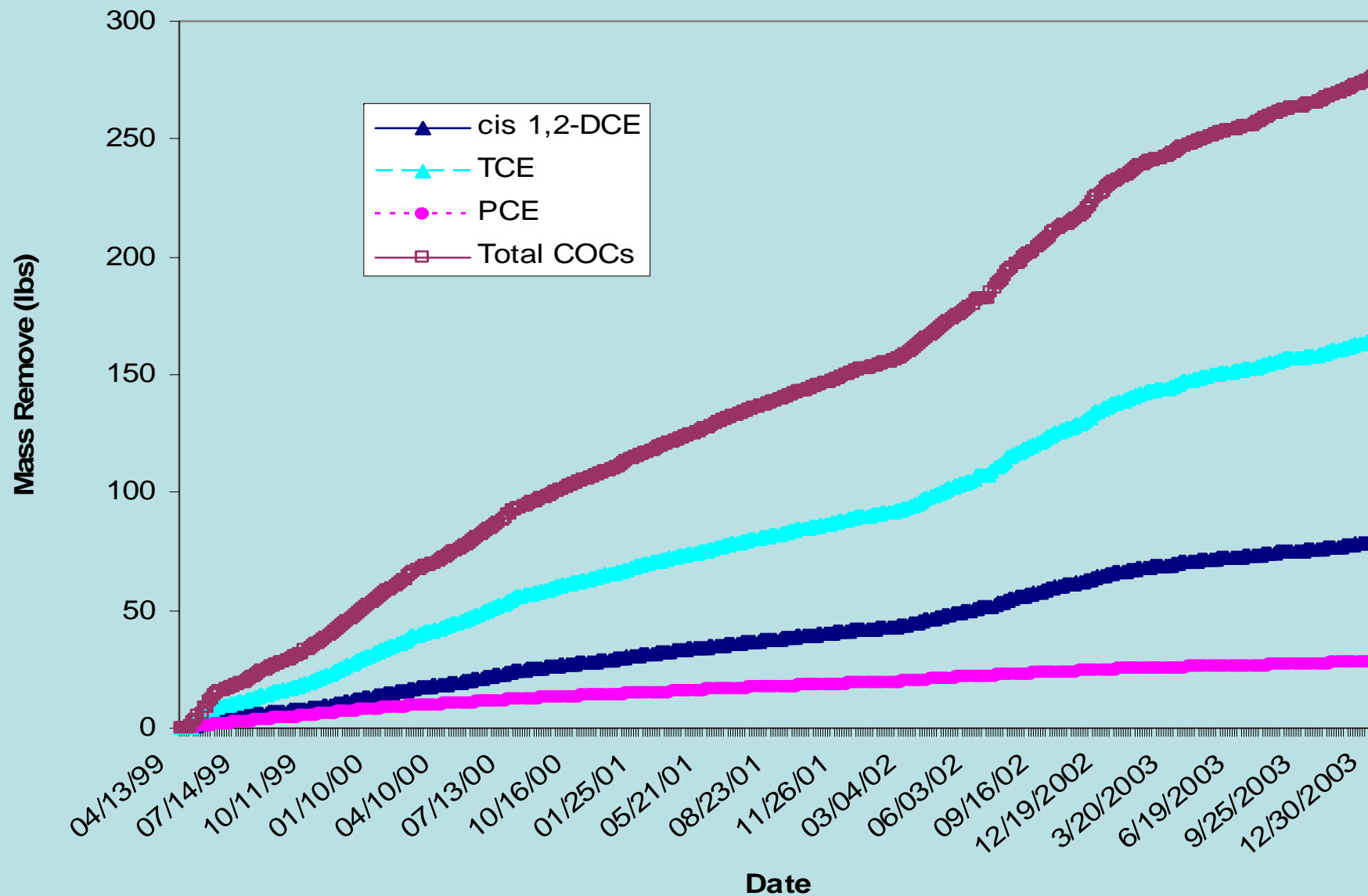
Annual Evaluation Report
October 2000 through December 2001
Sites 2 and 12 Groundwater Remedy
Former Fort Ord, California

Sites 2 and 12 TCE Concentrations - March 1999
Upper 180-Foot Aquifer

PLATE: 7

ES&S/0001.DWG 24x0 2000/03/11/2000

What has been removed as of December 2003



What's Going On Right Now

- Continuing Pump and Treat Operations
- Most recently published report:
January through June 2004 Semi-Annual Operations Data Summary Report, September 9, 2004

What's Next

- Continuing Pump and Treat Operations
- Upcoming report evolutions include:
 - **July through December 2004 Semi-Annual Operations Data Summary Report, ETA – March 1, 2005**
 - **January through December 2004 Annual Evaluation Report, ETA – April 1, 2005**