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RE-EVALUATION OF GROUNDWATER CONDITIONS AND CONCEPTUAL MODEL DEVELOPMENT REPORT

MISSOURI ELECTRIC WORKS (MEW) SITE
824 SOUTH KINGSHIGHWAY
CAPE GIRARDEAU, MISSOURI

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Project: 093-001

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EXECUTIVE SUMMARY

From September 1999 to September 2000, the groundwater monitoring wells at the site, located at 824 South Kingshighway, Cape Girardeau, Missouri, were periodically gauged for depth to water. In June and September of 2000, the Site groundwater monitoring wells were purged and groundwater samples were collected. Unfiltered groundwater samples were analyzed for general minerals, common parameters and organic compounds, including polychlorinated biphenyls (PCBs). Filtered groundwater samples were analyzed for PCBs. Sediment samples and pre-purge groundwater samples were collected from three wells: Wells MW-5, MW-11 and MW-11A. The sediment samples and pre-purge groundwater samples were analyzed for PCBs. In June of 2000, field mapping of fractures in rock outcrop in the area was conducted, as well as a very low frequency (VLF) geophysical survey. The fracture data was used to develop an initial model of the rock fractures beneath the site. This data was then used to develop a conceptual model.

An analyses of the groundwater elevation data, laboratory analytical results and fracture analyses resulted in the following key findings:

1) Groundwater flow was consistently towards the southeast during the year of gauging, with gradients ranging from 0.006 feet/foot to 0.015 feet/foot.

2) Concentrations of chemicals of concern (COCs) were detected in groundwater samples collected from groundwater monitoring wells during this investigation. Benzene was detected in one well, Well MW-3, at 11 micrograms per liter (ug/L). The Site clean up goal for benzene in groundwater is 5 ug/L. Chlorobenzene was detected in three wells, Wells MW-3, MW-5 and MW-11, at 710 ug/L, 21 ug/L and 68 ug/L, respectively. The Site clean up goal for chlorobenzene in groundwater is 20 ug/L. COCs above the cleanup goals were not detected in groundwater samples from the two off-site groundwater monitoring wells: Wells MW-7 and MW-8.

3) PCBs were detected in groundwater samples from Wells MW-5 and MW-11 during this investigation. In both cases PCBs were predominantly (greater than a three to one ratio) adsorbed to sediment particles and dissolved phase (unfiltered) concentrations were either below the detection limit of 1.0 ug/L or between 2.0 and 4.5 ug/L. The Site clean up goal for PCB in groundwater is 0.5 ug/L.

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4) All except two of the compounds [bis(2-ethylhexyl) phthalate and phenol] detected in the groundwater samples during this investigation are tetrachloroethene (PCE), 1,1,1-TCA (1,1,1-trichloroethane) and 1,2,4-trichlorobenzene (1,2,4-TCB) and their breakdown products: trichloroethene (TCE), 1,1-dichlorobenzene (1,1-DCA), 1,4-dichlorobenzene (1,4-DCB), chlorobenzene and benzene.

5) 1,1,1-TCA, 1,1-DCA, 1,2,4-TCB, 1,3-DCB, 1,4-DCB, bis(2-ethylhexyl) phthalate, and phenol were detected at concentrations below the clean up goals. TCE and PCE, detected in groundwater in 1990 and 1991, were not detected in 2000.

6) Based on the analytical results of groundwater samples from the two off-site wells (Wells MW-7 and MW-8), the only COC that has migrated off-site is 1,2,4-trichlorobenzene, which was detected at Well MW-7 at 40 ug/L, which is below the Site clean up goal of 70 ug/L. Based on the presence of breakdown products of TCE; 1,1,1-TCA; trichlorobenzene; and groundwater quality sample results, it appears that biodegradation of COCs in groundwater is occurring.

7) The bedrock fracturing analysis and modeling performed as part of this study indicates that the bedrock beneath the Site area can be described as having three layers:

   1. An upper weathered zone or epikarst, extending throughout the upper 50 feet (15.2 m) of the bedrock and characterized by large linear solution channels spaced approximately 20 feet (6.1 m) apart on average, with sinkholes occurring regularly, often at the intersections of channels;
   2. A discreetly fractured intermediate bedrock zone, extending from a general depth of 50 feet (15.2 m) to approximately 150 feet (45.7 m), characterized by persistent vertical fractures spaced approximately 100 feet (30.5 m) to 150 feet (45.7 m) apart on average, with limited solution channels; and
   3. A deep zone with occasional discrete vertical fractureS having spacing greater than 150 feet (45.7 m).

PCB and chlorobenzene, a component of askarel fluid, has been introduced to some depth in the bedrock either by enhanced transport (adsorbed to sediment particles) within the solution-enhanced fracture features or by flushing of PCB-impacted sediment during drilling. It appears likely that PCBs are adsorbed to sediment particles resting within quiescent solution features at depth. A preliminary estimate of the total mass of PCB which may be in bedrock at depth beneath the Site is on the order of less than one kilogram.

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Under these conditions and based on presently available information, the likelihood of continuing lateral PCB migration away from the Site is considered to be low. Under natural conditions, groundwater flow velocities within the fractures and solution channels in the bedrock, are expected to be too low to mobilize significant sediment transport. In addition, the fracture network at the depths of concern is likely too tortuous and discontinuous to prove an effective transport pathway.

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LIST OF ABBREVIATIONS

AES	Analytical Environmental Services, Inc.
AMSL	Above Mean Sea Level
ASTs	Above Ground Storage Tanks
bgs	Below Ground Surface
BOD	Biochemical Oxygen Demand
COCs	Chemicals of Concern
COD	Chemical Oxygen Demand
CVOCs	Chlorinated Volatile Organic Compounds
DCA	Dichloroethane
DCB	Dichlorobenzene
DO	Dissolved Oxygen
EM	Electro-magnetic
EPA	United States Environmental Protection Agency
GPS	Global Positioning System
GPR	Ground Penetrating Radar
HaSP	Health and Safety Plan
K	Hydraulic conductivity
km	Kilometer
Komex	Komex•H2O Science•Inc
MDNR	Missouri Department of Natural Resources
MEW	Missouri Electric Works
m/s	meters per second
NAPL	Non-Aqueous Phase Liquid
PCBs	Poly-Chlorinated Bi-phenyls
ppm	Parts Per Million
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SAP	Sampling and Analysis Plan
STFD	Site Trust Fund Donors
TCA	Trichloroethane
TCB	Trichlorobenzene
TDS	Total Dissolved Solids
EarthTech	The Earth Technology Company
TOC	Total Organic Carbon

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LIST OF ABBREVIATIONS (CONTINUED)

TS	Total Solids
TSS	Total Suspended Solids
SVOC	Semi-Volatile Organic Compound
USGS	United States Geological Survey
USTs	Underground Storage Tanks
VLF	Very-Low Frequency

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1.0 INTRODUCTION

This document has been prepared for Missouri Electric Works (MEW), Site Trust Fund Donors (STFD) and Ameren Services by Komex•H2O Science•Inc. (Komex). This report is based on work performed in accordance with the Work Plan (Komex, 1999a), an addendum to the work plan (Komex, 2000), the project-specific Sampling and Analysis Plan (SAP) (Komex, 1999b), Quality Assurance Project Plan (QAPP) (Komex, 1999c), and Health and Safety Plan (HaSP) (Komex, 1999d).

This report summarizes groundwater conditions at the MEW site (referred to hereafter as "the Site"), located at 824 South Kingshighway, Cape Girardeau, Missouri (Figure 1). During previous investigations at the Site, poly-chlorinated biphenyl compounds (PCBs) and chlorinated volatile organic compounds (CVOCs) were detected in groundwater. This report is intended to establish the current concentrations of chemicals of concern (COCs) in groundwater. In addition, a hydrogeological model of potential movement of COCs in groundwater is presented for consideration in developing a scope of work for the remedial design investigation.

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2.0 SITE DESCRIPTION

The MEW property is located on a 6.4-acre (2.6 hectare [ha]) tract of land adjacent to Missouri State Highway 61 in a commercial area of Cape Girardeau, Missouri (Figure 1) and is located 1.5 miles (2.4 kilometer [km]) west of the Mississippi River, above the river's flood plain. Runoff channels are located near the north, south and east boundaries of the property and they eventually drain into the Cape LaCroix Creek, approximately 0.7 miles (1.1 km) east of the property. The creek then drains into the Mississippi River. The property is bounded on the north and east by retail and office properties and on the south by retail properties.

MEW has been at the present location since 1953. Until 1990, MEW sold, serviced and remanufactured transformers, electric motors and electrical equipment controls. During past operations, MEW recycled materials from old equipment, selling copper wire and using dielectric fluid from transformers. The salvaged transformer oil was filtered through Fuller's Earth for reuse. Approximately 90 percent of the oil was recycled and approximately 16,000 transformers were repaired or scrapped at the property until it closed. The total volume of transformer oil that was not recycled during this period has been estimated at 28,000 gallons (105,992 liters).

PCBs have been identified in soils at the MEW property from the surface to more than 24 feet (7.3 m) below ground surface (bgs). Adjacent properties appear to have been impacted primarily from storm water run-off. The Site comprises all areas on and off the MEW property that have been impacted by PCBs above the action limit of 10 parts per million (ppm) to a depth of four feet (1.2 m) bgs, and above 100 ppm at depths greater than four feet (1.2 m) bgs. The total surface area of the Site is approximately 6.8 acres (2.76 ha). In addition to PCBs, low concentrations of chlorinated volatile organic compounds (CVOCs), including methylene chloride, chlorobenzene and 1,1,1-trichloroethane (1,1,1-TCA), have been found in soil at the Site. Treatment of PCB-impacted soil by thermal desorption at the Site was finished in September 2000 (Hockel, pers. comm., 2000).

Groundwater investigations have previously been conducted at the Site, including two investigations in 1989 and 1990 by The Earth Technology Company (generally referred to as EarthTech) of Houston, Texas. There are currently ten ground water monitoring wells at the Site (Figure 2, Table 1). In 1999, twelve monitoring wells existed at the Site. Two wells (Wells MW-B and MW-6), less than 30 feet (9 m) deep, intersected little or no water and eight wells, all less than 65 feet (20 m) deep, were installed in the first significant groundwater zone

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encountered. One well, MW-11 is installed to a depth of 120 feet (36.6 m) and one well, MW-11A, is 405 feet (123 m) deep. On September 30, 2000, two of these wells (MW-B and MW-8) were abandoned.

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3.0 OBJECTIVES

The scope of work described herein is intended to achieve the following objectives with respect to groundwater at the Site:

- Confirm the presence and concentrations of COCs;
- Evaluate whether the extent of COCs is stable, expanding or shrinking based on COC types and concentrations;
- Investigate the possibility that during the installation of the monitoring wells PCB impacted sediment at the surface was transported downward by drilling operations and is the source of dissolved PCB in groundwater; and
- Develop a hydrogeological model of the bedrock fractures and solution voids that can be used to guide remedial design investigation efforts.

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4.0 DESCRIPTION OF INVESTIGATION

The objectives of this phase of work were achieved through the following tasks:

- Site reconnaissance and field mapping;
- Fractured rock lineament study;
- Groundwater monitoring and sampling;
- Sediment sampling from groundwater wells;
- Laboratory analyses of groundwater and sediment samples;
- Initial fracture modeling;
- Initial conceptual model development; and
- Reporting.

All tasks were performed in substantial accordance with the SAP, QAPP and HaSP to ensure data collected is of sufficient quality and was collected in a safe manner.

4.1 GROUNDWATER MONITORING AND SAMPLING

4.1.1 Initial Groundwater Monitoring and Sampling

The existing groundwater monitoring wells at the Site were monitored for water levels periodically starting in September 1999 (Table 2).

On June 19 to 22, 2000, accessible monitoring wells at the Site were purged and sampled. The wells sampled were:

- MW-3;
- MW-5;
- MW-6A;
- MW-7;
- MW-9;
- MW-10;
- MW-11; and
- MW-11A.

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In June, Well MW-4 was not gauged or sampled because it was buried beneath a soil pile and Well MW-8 was not gauged or sampled because the well box was damaged. However, on September 26, 2000, Wells MW-4 and MW-8 were purged and sampled.

Prior to groundwater sampling, the wells were purged of groundwater using a submersible pump or bailer until the hydro-geochemical parameters (pH, temperature, electrical conductivity, turbidity and dissolved oxygen) had stabilized to within 10 percent, or a maximum of five casing volumes had been removed or until dry. The wells were then allowed to recover to 80% pre-purged volume, or for two hours in the event of slow recovery. Groundwater samples were then collected using disposable polypropylene bailers. For each sampling episode, an equipment blank, field blank, trip blank, and one duplicate sample was collected and transported to the laboratory, Analytical Environmental Services in Atlanta, with the samples. Groundwater sampling field forms are provided in Appendix A.

4.1.2 Second Groundwater Sampling Event

After the initial sampling event laboratory data had been reviewed, the second sampling event was conducted. For this event, wells MW-11, MW-11A and MW-5, as prescribed in the work plan, were sampled prior to purging and after purging. The samples were analyzed for PCBs only (unfiltered and filtered), except for MW-11A. During the first sampling event, insufficient water was collected for the full suite of inorganic analyses, so the full suite was collected during the second sampling event after purging. The samples were transported to the laboratory, Analytical Environmental Services, in Atlanta. Groundwater sampling field forms are provided in Appendix A.

4.1.3 Sediment Sampling from Groundwater Wells

In addition to collecting groundwater samples during the second sampling event, sediment samples were collected from the bottom of the three wells. Sediment was collected by lowering a stainless steel bailer to the bottom of the wells, surging the well and placing sediment recovered into glass jars. This procedure worked well for wells MW-11 and MW-11A, however, insufficient sediment was recovered from well MW-5 to collect sediment. Instead, approximately half of a gallon (1.9 L) of purged water was transported to the laboratory where the sediment was filtered out of the water for analyses.

4.1.4 Laboratory Program

During the initial groundwater sampling event, one groundwater sample from each monitoring well, one duplicate from MW-11, and quality assurance/quality control (QA/QC) samples were transported to Analytical Environmental Services, Inc. (AES), a State-certified hazardous waste testing laboratory.

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The groundwater samples obtained during the initial sampling event were analyzed for the following using the appropriate United States Environmental Protection Agency (EPA) methods as detailed in Appendix C of the QAPP:

- CVOCs in accordance with EPA Method 8260B;
- Semi-volatile organic compounds (SVOCs) in accordance with EPA Method 8270B;
- PCBs in accordance with EPA Method 8082 (unfiltered and filtered);
- Common cations - calcium, iron, magnesium, manganese, sodium and potassium;
- Common anions - chloride, sulfate, sulfide, nitrate, nitrite, phosphate and fluoride;
- Water quality parameters - total dissolved solids (TDS), total suspended solids (TSS), total solids (TS), total organic carbon (TOC), alkalinity, hardness, pH, dissolved oxygen (DO), chemical oxygen demand (COD); and,
- Biological enumerations - total heterotrophic plate count and biochemical oxygen demand (BOD).

Groundwater samples (unfiltered and filtered) from the second sampling event and sediment samples were analyzed for PCBs in accordance with EPA Method 8082.

The initial sampling event QA/QC samples were analyzed for the following using the appropriate EPA methods as detailed in Appendix C of the QAPP:

- CVOCs in accordance with EPA Method 8260B;
- SVOCs in accordance with EPA Method 8270B; and
- PCBs in accordance with EPA Method 8082 (unfiltered).

The second sampling event QA/QC samples were analyzed for the following using the appropriate EPA methods as detailed in Appendix C of the QAPP:

- PCBs in accordance with EPA Method 8082 (unfiltered).

In addition, duplicate samples of groundwater were collected during the initial and second groundwater sampling events.

There was insufficient sediment to collect duplicate sediment samples.

Laboratory test results, including chain-of-custody forms and laboratory QA/QC data are provided in Appendix B.

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4.2 FIELD MAPPING

4.2.1 Field Mapping

Local outcrops and exposures of Plattin Formation within one mile (1.6 km) of the Site were mapped in detail by Dr. Paul Hardisty of Komex, between June 6 and 8, 2000. Five locations were mapped, surrounding the Site in each cardinal direction. The location type, distance from the Site, and latitude –longitude are as follows:

1. Road cut outcrop, approximately 3300 feet (1 km) WNW of the Site (37° 17′ 19″ N – 089° 33′ 56″ W);
2. Road cut outcrop, approximately 825 feet (250 m) N of the Site (37° 17′ 25″ N – 089° 33′ 06″ W);
3. Pavement in field, approximately 0 feet (1 km) E of site (37° 17′ 15″ N – 089° 32′ 52″ W),
4. South East Missouri Stone Quarry, approximately 1.25 miles (2 km) S of site: (37° 15′ 52″ N – 089° 33′ 20″ W); and
5. Lone Star Quarry, approximately one mile (1.6 km) SE of site.

Particular attention was placed on structure, fracturing and karst development in the Plattin Formation bedrock, and the manifestation of surface lineaments and sinkhole features. Fracture orientation, length, density and character data were collected for development of a rock-fracture model for the Site. Over 120 individual fractures were mapped and measured during the three field days. Mapping points were located in the field using a handheld Global Positioning System (GPS) unit, air-photos and local topographic maps. This information has been used to develop a conceptual model of groundwater flow and COC transport .

4.2.2 VLF Survey

In addition to the field mapping, a simple geophysical technique, very low frequency (VLF) electro-magnetics (EM), was used in an attempt to locate buried lineaments. The VLF survey was conducted at four on-site transects. A VLF meter measures the displacement in VLF EM waves transmitted from submarine tracking stations around the world. These displacements can be indicative of subsurface lineaments such as faults, solution features or major fracture traces. The technique is simple, quick, inexpensive, and requires no detailed data compression and analysis like other geophysical techniques such as seismic or ground penetrating radar (GPR). The VLF survey is described in Section 5.2.

4.3 INVESTIGATION OF PREVIOUSLY COLLECTED CORES

The rock cores that were collected in 1991 during the drilling of the deep wells may have been lost and are not available for examination.

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4.4 FRACTURED ROCK LINEAMENT STUDY

Using the information provided from the tasks above, structure and lineaments within one mile (1.6 km) of the Site were identified, and major trends evaluated. This information was compared with and integrated with the field mapping data. This type of study is useful in providing confirmation of major observed structural trends and confidence in those interpretations.

4.5 INITIAL FRACTURE MODELING

The fracture data collected from outcrop mapping and fracture lineament studies and the available literature were then used to assist in developing an initial model of the likely patterns of fracturing in bedrock beneath the Site. FracMan, a commercially distributed software package for analysis of fracture data, was used to produce statistical representation of bedrock fracture patterns beneath the Site, and visual models of expected conditions. The resulting models, presented below, were calibrated against observed data, and used to predict fracture orientations and densities.

4.6 INITIAL CONCEPTUAL MODEL DEVELOPMENT

Based on the data collected as described above, an initial conceptual model was developed. It should be noted that the conceptual model was developed using fundamental hydrogeologic and physio-chemical principles. As such, it is not a numerical model and no modeling code was used that provides a numerical platform for predictive simulations. It is intended as a first step to assist decision-makers in their understanding of site hydrogeology and COC fate and transport, and help identify any supplemental work that may be necessary to clarify or further this understanding.

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5.0 INVESTIGATION RESULTS

5.1 GROUNDWATER MONITORING AND SAMPLING

5.1.1 Groundwater Elevation and Flow Conditions

Table 2 presents groundwater elevation data collected from September 1999 to September 2000. Figure 3 shows hydrographs for monitoring wells at the Site and daily precipitation at the Cape Girardeau airport. Figures 4A through 4E show the groundwater potentiometric surface maps interpreted from data collected on the following dates (hydraulic gradient in brackets):

- September 23, 1999 (0.010 feet/foot southeast);
- December 1, 1999 (0.009 feet/foot southeast);
- April 6, 2000 (0.009 feet/foot southeast);
- June 19, 2000 (0.015 feet/foot southeast); and
- September 26, 2000 (0.006 feet/foot southeast).

Groundwater potentiometric elevations have ranged between 377.4 and 386.6 feet (115.0 and 117.8 m) above mean sea level (AMSL) since September, 1999. Surface elevation at the Site is approximately 420 feet (128 m) AMSL.

5.1.2 *Inorganic Analytical Results*

Several inorganic analyses was performed on groundwater samples (Section 4.4.2). Results are presented in Table 3A. Figure 5 shows a Piper diagram of the data and Figure 6 shows Stiff diagrams for each well. All the groundwater samples collected at the Site can be categorized as a calcium-bicarbonate, typical of groundwater in limestone, but with TDS lower in Wells MW-11 and MW-11A than the other wells, possibly because Wells MW-11 and MW-11A are deeper than the other wells. The high proportion of calcium and bicarbonate concentrations compared to other constituents in the shallow aquifer indicate that dissolution of limestone and calcite in the soil is occurring more rapidly than in deeper parts of the aquifer. This is expected, as a result of infiltration of atmospheric CO_2 dissolved in precipitation, reaching the upper shallow groundwater, and creating acidic conditions promoting dissolution of carbonates. The sources of dissolved carbon dioxide are microbes in the soil and the atmosphere (Freeze and Cherry, 1979).

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5.1.3 Biological Analytical Results

Table 3B presents total heterotrophic plate counts and BOD. Samples from Well MW-11 show significantly higher heterotrophic plate counts than samples from other wells.

5.1.4 Organic Analytical Results

Several organic chemicals have been detected in groundwater at the Site. Table 3C and Table 3D present analytical results for groundwater samples from previous investigations. The results of laboratory analyses of groundwater samples for organic compounds for this investigation are tabulated in Table 3E and presented on Figure 7. Compounds not detected at the Site are not included in Table 3E, except for TCE and PCE. Laboratory analytical results are provided in Appendix B. The following compounds were detected in groundwater at the Site in the June and September 2000 sampling events:

- 1,1,1-Trichloroethane (1,1,1-TCA);
- 1,1-Dichloroethane (1,1-DCA);
- Benzene;
- Chlorobenzene;
- 1,2,4-Trichlorobenzene (1,2,4-TCB);
- 1,3-Dichlorobenzene (1,3-DCB);
- 1,4-Dichlorobenzene (1,4-DCB);
- Bis(2-ethylhexyl)phthalate;
- Phenol; and
- Polychlorinated biphenyls (PCBs - Aroclor 1260).

Dissolved organic compounds were not detected in groundwater samples collected from Wells MW-6A, MW-8 and MW-9.

5.1.5 QA/QC Results

Table 3G presents laboratory results for organic analyses of QA/QC samples. All results were below detection limits except for three detections of acetone and one detection of methylene chloride (at 37 mg/L) in an equipment blank collected after pumping from Well MW-11 and before pumping from Well MW-11A. Acetone is a common laboratory contaminant and is not believed to be present at the site. Methylene chloride is a common lab contaminant and it was not detected in any other samples and, therefore, it is believed that the detection was a result of laboratory contamination of the de-ionized water used for collecting the equipment blank.

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5.2 FIELD MAPPING

5.2.1 VLF SURVEY

Figure 8 shows VLF survey line locations. Figure 9 shows VLF data for two of the survey lines. The results of the other three survey lines showed no variation in the in-phase and quadrature signals (i.e. they remained at zero for the entire line). The response measured for the first two lines is most likely due to the presence of a subsurface gas line which runs north-south across the site. While not precluding the existence of bedrock fractures, the VLF survey did not detect any naturally occurring subsurface features.

5.2.2 Background

Over 120 individual fractures were mapped at five locations surrounding the Site. The outcrop locations are shown in Figure 10. All of the outcrop studied were composed of Plattin Formation, which is the unit which directly underlies the Site and site vicinity. The Ordovician Plattin Formation is composed of light-gray, thickly bedded, slightly fossiliferous and slightly dolimitic limestone. It reaches a maximum thickness of 440 feet (135 m) in the Cape Girardeau area (Satterfield, 1989), and is the chief groundwater-bearing unit in the study area.

In this area, the Plattin Formation is generally characterized as being pervaded by networks of solution channels which are fed by streams and surface water. The Plattin Formation at the site is unconformably overlain by approximately 15 to 24 feet (4.5 to 7.3 m) of loess sediments (EarthTech, 1990). The upper 50 to 100 feet (15 to 31 m) of the Plattin Formation are often heavily weathered and fractured (EarthTech, 1990), and exhibit considerable lateral variation. A conceptual stratigraphic section through the Site is provided in the EarthTech (1990) report.

The EarthTech drilling program results are summarized in EarthTech (1990). They describe the following key observations:

- The top of the Plattin Formation Limestone was encountered at approximately the same depth in the majority of the boreholes advanced. In the 1990 drilling program, 4 of the 5 wells encountered the top of bedrock at between 8 and 13 feet (2.4 to 4 m) bgs (below ground surface). Bedrock in these boreholes was described as highly weathered. One borehole encountered much more competent bedrock at a depth of 37.5 feet (11 m).
- During drilling into the bedrock past a depth of approximately 50 feet bgs (15 m), lost circulation was a typical problem. In Well MW-10, for example, lost circulation resulted in the accumulation of approximately 17 feet (5.2 m) of cuttings in the bottom of the borehole. Similar problems were noted in drilling of the deeper series of boreholes for Well MW-11 (EarthTech, 1991). Geological logs note varying rock quality with depth.

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- The deepest well, Well MW-11A, installed in 1991 by EarthTech (1991), was advanced to a depth of 405 feet (123 m) bgs. Samples of sediment and water were collected from open boreholes during this program and one monitoring well (Well MW-11) was installed to a depth of 131 feet (40 m). PCBs were detected in 7 of 10 water samples collected during this program. A "mud sample" collected from a solution cavity at 315 feet (95.5 m) bgs in borehole MEW-SB-12-02 contained 470 ug/kg PCBs. However, these samples were not collected using discrete depth sampling equipment.

5.2.3 Fractures and Solution Cavities

Figure 11 shows the appearance of typical Plattin Formation at road cut and quarry face locations. The following key observations on fracturing and solution features can be concluded from simple field observation:

- Fracturing in the Plattin Formation in the Site area is quite consistent in terms of density, fracture orientation and behavior with depth. Fracturing in the Plattin Formation in the project region is predominantly vertical. Bedding plane fractures are relatively rare, almost always sealed with calcite and other mineral infilling, and unlikely to act as groundwater flow conduits.
- Vertical fracture density and spacing decrease markedly with depth. Linear fracture spacing in the upper 50 feet (15 m) of the Plattin Formation averages approximately 25 feet (7 m). Between 50 and 175 feet (15 to 50 m) bgs, fracture spacing is approximately 100 feet (31 m). Below 175 feet (53 m), vertical fractures are rare and sporadic.
- Within the upper 50 feet (15 m) of the ground surface, the Plattin Formation is consistently highly weathered and tan to buff-colored, indicative of historic water flow and mineral deposition. Vertical fractures in this near surface zone are often of large aperture (typically 1.6 feet [0.5 m], but as much as 3.3 feet [1 m]) and are usually infilled with brown loess sediments.
- Below 50 feet (approximately 15 m) in the Site area, the bedrock retains its un-weathered massive gray color and texture. Here, vertical fractures are rarely infilled with loose sediments, but are more often characterized by varying levels of calcite and other mineral deposition.
- Dissolution of limestone by acidic meteoric waters, as discussed in the hydrochemistry section of this report, has resulted in the large open vertical features discussed above. In some cases, solution cavities extend beyond the 50 foot (15 m) depth, and into the deeper massive bedrock. *Solution cavities associated with vertical fractures were observed in both* quarries. Some degree of dissolution-related opening of deep vertical fractures was noted on most of the vertical fractures mapped at depths between 50 and 175 feet (15 and 50

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m), but rarely below. No solution cavities associated with horizontal fractures were observed, as confirmed by the South East Missouri State Quarry Manager (D. Winters, pers. comm., 2000).

Fracture data recorded through field mapping of fractures at outcrop and quarry faces are presented in Table 4. These data were analyzed explicitly using FRACMAN, a fracture network model. This analysis assists in the refinement of a conceptual model of COC migration from the Site and to explain the relevance of the observed chemical data.

5.3 FRACTURE NETWORK ANALYSIS

5.3.1 Approach

The orientation and size of 123 fractures was measured at five outcrop locations in the local area around the Site. These locations included two road cuts, a pavement outcrop and two quarries (Lone Star quarry and South east Missouri state quarry), as described above.

Measurements from each location were compared to ensure that no significant regional deformation was present and that all results were comparable. A statistical analysis of fracture orientation was then performed, allowing the development of statistically similar fracture networks using the fracture modeling software FRACMAN. The networks developed were then compared to photographs of the rock outcrops and refined, until a good agreement between the two was reached.

5.3.2 Model Method

Fracture networks statistically similar to those measured close to the Site, were generated and visualized using the FRACMAN computer software package, (Golder Associates, 1998). The package requires statistical input on the distribution parameters for orientation, length and density of each of the fracture sets as well as information on which zone of the bedrock will be affected.

Fractures are assumed to be elliptical in shape and are modeled as hexagons to make computation more efficient. The generation of each fracture begins with the software choosing a random point within the zone of fracturing. Various distribution models are available to choose this initial point, but throughout this modeling a fractal box model with a dimension of 2.95 was used. This ensured that the fractures were generated relatively evenly across the fracture volume, which is consistent with the regular joint type fracturing seen in the field. The

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point generated then becomes a point somewhere on the fracture surface. Fracture orientation and size is assigned according to the probability distributions given during the input stage. This process continues with the generation of addition fractures until the appropriate density has been reached.

5.3.3 Model Parameters

Fracture orientation

The observed distribution of fracture orientations, and the statistical simulation of that distribution, are shown in Figure 12. The statistical simulation was generated assuming two approximately perpendicular fracture sets, each having a normal distribution about the mean orientation. The properties of the two simulated fracture sets are:

Name	Mean Strike	Standard deviation	Percentage of Fractures
Set 1	076°	20	66
Set 2	145°	8	33

The data collected indicates that two much smaller fracture sets with mean strikes of 035° and 115° may also be present. However the small number of fractures within these sets leaves a great deal of uncertainty and they were therefore assumed to be outliers of the two principle sets. Table 4 includes a full list of all of the measured fracture orientations and lengths.

Fracture dip

All measured fractures were within a few degrees of vertical and, given the difficulty in measuring dips at such high angles, they were all assigned a dip of 90°. During the development of a statistical model of fracture geometry the angle of dip was assumed to have a normal distribution with an arbitrary standard deviation of 0.5. This produced fractures with a dip generally within 1° of 90°.

Vertical distribution

Field observations and photographs show that fracture density around the Site is far higher in the upper 33 feet (10 m) of the bedrock, with only a few large fractures penetrating below 82 feet (25 m). Therefore, during modeling the fractures have been developed in two phases. During the first phase, shallow fractures from each of the principle sets are generated from a point in the upper 33 feet (10 m) of the fractured block, whilst in the second, larger fractures are generated from a point within the upper 165 feet (50 m) of the fractured block.

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Fracture length

Most of the fractures measured in the field extend beyond their visible length with few visible terminations. The distribution of fracture length and the vertical distribution of fractures were therefore difficult to assess statistically. Instead, measured lengths were used together with modeling to ensure that the distributions chosen appeared realistic. Experimenting with modeled fracture length distributions and comparing the results with photographs of the bedrock showed that a log normal distribution provided the most realistic representation. The statistical distribution values used are shown below and the resulting distribution is shown in Figure 13.

Position	Mean Length	Arithmetic Standard Deviation
Shallow (<33 feet [<10 m])	65.5 feet (20 m)	5
Deep (<164 feet [<50 m])	196.5 feet (60 m)	10

Fracture density

Fracture density is assigned using the P_{32} parameter, which represents the surface area of fractures to be found in a given volume of rock. This can be derived from the mean fracture spacing using the following formula (Golder Associates, 1998):

$$P_{32} = \frac{C_p}{F_s}$$

Where:

P_{32} = Surface area per unit rock volume (feet^2/feet^3 or m^2/m^3),

F_s = Average fracture spacing of the set (feet or m),

C_p = Constant (unitless).

C_p depends on the orientation of the outcrop along which fracture spacing was measured when compared to the orientation of the fractures. It will generally fall between 1 and 3 and in most uniform fracture distributions it will have a value of 2.0 (Golder Associates, 1998).

Average fracture spacing in shallow bedrock outcrop was approximately 16.5 feet (5 m), equating to a P_{32} of 0.12 feet^2/feet^3 (0.4 m^2/m^3). In deeper bedrock this increased to around 98.5 feet (30 m) giving a P_{32} of 0.02 feet^2/feet^3 (0.06 m^2/m^3). Experimentation with generating fracture networks showed that the most realistic results could be achieved by applying this fracture density to the largest fracture set. The density of the second set was then calculated

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from the relative size of its population. This gave a total fracture density of 0.18 $feet^2/feet^3$ (0.6 m^2/m^3) in the upper 33 feet (10 m) and 0.018 $feet^2/feet^3$ (0.06 m^2/m^3) in the lower 164 feet (50 m).

5.3.4 Modeling Results

Figure 14 allows a comparison of the measured fracture distribution with one of the simulated distributions and the statistical description used to generate the modeled set. The two sets have similar features and many of the differences can be accounted for by the natural variation in statistically similar populations. It is still uncertain as to whether or not the potential additional fracture sets at 035° and 115° could also be accounted for by this natural variation.

Figure 15 shows a comparison of fracture traces in a photograph of a quarry wall close to the Site with vertical trace planes of a generated fracture network. Fracture traces are shown in red and the level of the benching in the quarry is shown in yellow. Irregularities in the quarry wall and the effects of perspective cause the essentially planar fracture surfaces to appear curved and irregular in the photograph. Despite this it is possible to see that the generated fractures have a similar length and vertical distribution to those seen in the field.

Figure 16 shows three FRACMAN realizations of rock fracturing in the Site area. Each is a statistical simulation, based on the developed fracture statistics, and which honor and incorporate all the field-measured data. These Monte-Carlo simulations are all equally valid representations of the data and provide a picture of what the fracture network looks like in the Site area. Each block is 328 feet (100 m) on each side.

5.3.5 Summary

Statistical modeling of measured fractures at outcrops close to the Site can be used to generate realistic fracture networks. Fracturing in the area is dominated by two principal fracture sets, both of which are vertical and whose poles are orientated at 076° and 145°. No horizontal fractures or open bedding planes were seen in the field.

Fracturing is most intense in the upper 31 feet (10 m) of bedrock with a P_{32} of 0.18 $feet^2/feet^3$ (0.6 m^2/m^3). In the deeper bedrock this decreases by an order of magnitude, although average fracture length increases significantly. Fracture length throughout the bedrock appears to follow a lognormal distribution.

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6.0 DISCUSSION OF INVESTIGATION RESULTS

6.1 GROUNDWATER LABORATORY ANALYSES RESULTS

During previous sampling events in 1989 and 1990 (EarthTech, 1990; 1991), PCE was detected in Well MW-4 (12 ug/L), TCE was detected in Wells MW-3 (estimated at 4 ug/L), MW-4 (estimated at 3 ug/L), MW-7 (9 ug/L), MW-10 (17 ug/L) and MW-11 (8 ug/L), and 1,1,1-TCA was detected in MW-10 (6 ug/L). Additionally, TCE was detected in groundwater samples collected during the drilling for Wells MW-11 (10 ug/L) and MW-11A (9 ug/L). Also detected during the 1989 and 1990 sampling events were some of the breakdown products of TCE and 1,1,1-TCA. Figure 17 illustrates products of biotic and abiotic transformations of selected chlorinated solvents dissolved in groundwater (modified from Pankow and Cherry, 1996). All transformations shown are biotic, except 1,1,1-TCA to 1,1-DCE, which is abiotic. Daughter products all have higher mobility in groundwater than the corresponding parent product.

During previous sampling events in 1989 and 1990, 1,1-DCA, a breakdown product of 1,1,1-TCA, was detected in Wells MW-3 (18 ug/L), MW-4 (6 ug/L), MW-5 (12 ug/L), MW-7 (7 ug/L) and MW-10 (estimated at 3 ug/L). 1,1-DCA was also detected in groundwater collected during the drilling of Wells MW-11 (6 ug/L) and MW-11A (6 ug/L) (EarthTech, 1990; 1991).

During previous sampling events in 1989 and 1990, 1,2-DCE, a breakdown product of TCE, was detected in Wells MW-3 (52 ug/L), MW-5 (41 ug/L), MW-7 (11 ug/L) and MW-11 (12 ug/L). 1,2-DCE was also detected in groundwater collected during the drilling of Wells MW-11 (14 ug/L) and MW-11A (12 ug/L) (EarthTech, 1990; 1991).

Of the compounds discussed above, only 1,1,1-TCA and 1,1-DCA were detected in groundwater at the Site during the June and September 2000 sampling events. 1,1,1-TCA was detected at a concentration of 7.9 ug/L in Well MW-10. 1,1-DCA was detected at a concentration of 5.6 ug/L at Well MW-4 and 6.2 ug/L at Well MW-10.

Chlorobenzenes (tetrachlorobenzene, trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene and chlorobenzene) were detected in groundwater samples collected at the Site in 1989 and 1990 (EarthTech, 1990; 1991). They were detected in Wells MW-3, MW-6A, MW-7 and MW-11. The biodegradation pathways of chlorobenzenes are fairly straightforward: the daughter product has one less chlorine than the parent (e.g. the daughter product of dichlorobenzene is chlorobenzene) (Masunaga, et al, 1996).

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Trichlorobenzene is a component of transformer fluid called askarel (EPA, 1994). Therefore, it is highly likely that the dissolved chlorobenzenes at the Site are related to the presence of PCB at the Site.

During the June and September 2000 sampling events, dissolved chlorobenzenes were present in groundwater samples from all monitoring wells sampled at the Site except Wells MW-4, MW-6A, MW-8 and MW-9.

Dissolved benzene was detected in groundwater samples from Well MW-3 during the 1989, 1990 and 2000 sampling events. Well MW-3 is also the well that has had the highest concentrations of dissolved chlorobenzene. The benzene in Well MW-3 may be the degradation product of chlorobenzene.

Based on the analytical results of groundwater samples from the two off-site wells (Wells MW-7 and MW-8), the only COC that has migrated off-site is 1,2,4-trichlorobenzene, which was detected in Well MW-7 at 40 ug/L, which is below the Site clean up goal of 70 ug/L. Based on the presence of breakdown products of TCE, 1,1,1-TCA and trichlorobenzene, it appears that biodegradation of COCs in groundwater is occurring.

Dissolved PCB (Arochlor 1260) was detected in groundwater samples collected in 1991 from Well MW-11 (69 ug/L), as well as in groundwater samples collected during the drilling of Well MW-11 (5 to 10 ug/L) and Well MW-11A (2 to 300 ug/L). Two of the samples collected during drilling of Well MW-11A were centrifuged and the resulting solid and liquid were analyzed separately. One sample from 222 feet to 230 feet (67.7 m to 70.1 m) bgs had a concentration of 300 ug/kg of PCB in the solids and 7.9 ug/L in the liquid. The other sample, from 310 feet to 315 feet (94.5 m to 96.0 m) bgs had a concentration of 470 ug/kg of PCB in the solids and 2 ug/L in the liquid. (EarthTech, 1990; 1991)

6.2 SEDIMENT LABORATORY ANALYSES RESULTS

Sediment samples were collected from Wells MW-5, MW-11 and MW-11A and analyzed for PCBs. All three sediment samples had detected concentrations of PCB: 5,500 ug/kg at Well MW-5; 1,700 ug/kg at Well MW-11; and 49,000 ug/kg at Well MW-11A. The higher concentration in Well MW-11A is likely due in part to the higher fractional organic carbon: 10.8 percent for Well MW-11A compared to 2.61 percent for Well MW-5 and 3.73 percent for Well MW-11.

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6.3 HYDROGEOLOGY

The observations discussed in Section 5 in conjunction with the chemical data collected during this and previous investigations are summarized in the following sections. In addition, the results of the previous 1990 and 1991 drilling programs are further evaluated.

6.3.1 Preliminary Conceptual Model of Rock Fracturing and Solution

Based on the field observations and numerical analysis of the fracture data presented above, a preliminary conceptual model of bedrock fracturing and solution features has been developed. The model describes three major layers or zones, characterized by the density and persistence of fracturing and the relative weathering of the bedrock matrix (Figure 18):

LAYER	DEPTH	FRACTURE SPACING	ROCK DESCRIPTION	SOLUTION FEATURES
Upper Weathered Zone	Surface to 49 feet (15 m)	16.5 to 26.2 feet (5 to 8 m)	Highly weathered, tan colored, large 1.5 to 3.2 feet (0.5 to 1 m) wide fractures or channels, loess in-filled.	Sink-holes common at intersections.
Discretely Fractured Zone	49 to 164 feet (15 to 50 m)	100 to 164 feet (30 to 50 m)	Un-weathered massive gray limestone matrix. Major persistent fractures, lengths of approximately 100 to 130 feet (30 to 40 m) common.	Solution features common along major vertical fractures. No solution along bedding plane fractures.
Occasionally Fractured Zone	Below 164 feet (50 m)	Greater than 164 feet (50 m)	Un-weathered and rarely fractured massive limestone. Large average fracture length.	Relatively few solution features.

Using this model, the results of the 1990 drilling program conducted by EarthTech can be put into context. EarthTech (1990) describe how four of the five boreholes advanced in that program encountered bedrock at approximately the same depth. One borehole, however, encountered bedrock at a significantly greater depth and the rock encountered at that location was relatively un-weathered. Using the model described in the table above, the probability of encountering a fracture or intersection sinkhole in the Upper Zone can be predicted by comparing areas of rock and fracture and assuming a simple orthogonal fracture system with square rock blocks. This calculation yields a probability of 23.5 percent, assuming vertical boreholes, and not angled boreholes, are being advanced. In other words, drilling at random locations across the Site, we can expect that approximately one of every four or five boreholes advanced will be within a loess-filled fracture, and thus will encounter bedrock at a much greater depth than the other boreholes. This is what occurred during the 1990 drilling and helps to provide confidence in the validity of the model.

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The probability of encountering a major vertical fracture or solution cavity within the deeper discretely fractured zone decreases to approximately 1.5 percent or less, or approximately one in 67 vertical boreholes advanced. Of course, if drilling locations are chosen based on critical site information, such as the location of a major depression, sink-hole or location where dissolved COCs appear to disappear (possibly a major vertical flow conduit), this probability will rise considerably.

6.3.2 Groundwater Flow

In the Site area, groundwater occurs within the Plattin Formation relatively near the surface at a depth of approximately 40 feet (12.2 m). Local surface water features recharge the bedrock aquifer (EarthTech, 1991). Groundwater flow characteristics within the Plattin Formation are likely governed to a large extent by the nature of the fracturing and dissolution, which provides a strong secondary permeability to the rock.

No data were available on the permeability of the rock matrix. However, a series of four packer tests were performed on selected short (six foot [1.8 m]) intervals in borehole BH4 by EarthTech (1991). These test showed that bulk hydraulic conductivity (K) varied by up to two orders of magnitude (10^{-5} to 10^{-7} meters per second [m/s] or 0.26 to 0.0026 feet/day), depending on depth. Predictably, intervals described on the borehole logs as composed of solid rock had values in the lower range, while the packer test across small voids yielded higher K values. EarthTech (1991) also conducted slug tests on six boreholes and found K values varying over the same range. These type of short-duration tests, in general, provide information on the hydraulic properties of a relatively small volume of aquifer immediately adjacent the borehole, and in fractured rock systems, on the "quick-flow" high permeability features of the system (Powers and Shevernell, 2000). An understanding of the hydraulic properties of a larger volume of the aquifer will require testing by other methods such as longer-term aquifer tests, tracer tests, or well hydrograph analysis.

The data available, however, can be rationalized in terms of the preliminary conceptual model. As indicated by the data, the three identified bedrock zones will have differing average bulk hydraulic properties, based on the degree and character of fracturing and solution features present. Available hydraulic property data can be assigned to conceptual model layers as follows:

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LAYER	DEPTH	BULK HYDRAULIC CONDUCTIVITY	CONTROLLING FACTORS	GROUNDWATER FLOW PROPERTIES
Upper Weathered Zone	Surface to 49 feet (15 m)	10^{-6} TO 10^{-7} m/s (0.026 to 0.0026 feet/day)	Highly fractured, but large fractures or channels filled with loess silt, which governs bulk hydraulic conductivity.	Equivalent porous medium behavior
Discretely Fractured Zone	49 to 164 feet (15 to 50 m)	10^{-5} to 10^{-7} m/s (0.26 to 0.0026 feet/day)	Hydraulic conductivity dominated by widely-spaced major fractures and associated solution features	Discrete fractured system governs flow
Occasionally Fractured Zone	Below 164 feet (50 m)	No data	Large-scale bulk hydraulic conductivity dominated by few features. Locally, hydraulic conductivity can be very low.	Deep system quiescent, other than occasional major feature.

This conceptual model could form the basis of a groundwater flow model, which could then be used to examine likely COC transport behavior. However, it should be stressed that at this point, the models presented herein are conceptual in nature and are based only on the limited data currently available. No new hydraulic data were collected by Komex during its short field program.

6.4 COC TRANSPORT

The observations described above, the results of the groundwater sampling program, the fracture network modeling, and the resulting initial conceptual models of bedrock hydrogeology at the Site, provide a basis for a discussion of some of the likely mechanisms of COC transport at the Site.

The presence of relatively water soluble CVOCs in shallow groundwater at the Site seems to be consistent with the general model of the subsurface. Separate phase oils and solvents released at the surface migrate downwards through the thin overburden, and in some cases, find their way into one or more vertical loess-filled fractures. Thus, the downward migration, as a separate phase, continues until the available volume of liquid is redistributed as residual saturation in the pore spaces of the sediment. Immobile at that point, the residual NAPLs (non-aqueous phase liquids) acts as a source of dissolved phase organic compounds, which dissolve by down-ward percolating rainwater and snow-melt. This mechanism delivers a steady flux of dissolved phase compounds to the groundwater surface, some 40 feet (12.2 m) below the ground surface. Due to the relatively low permeability of the sediments in-filling the fractures in the upper zone, this process is likely slow, but steady, and the overall mass fluxes of various

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compounds to groundwater are expected to be small. The relatively low concentrations of CVOCs and benzene found in groundwater at the Site is consistent with this hypothesis. In this context the soil remediation program, which has recently been performed, is expected to have a significant positive impact on groundwater quality at the Site. By removing the bulk of NAPL in the shallow soils, much of the source of continuing dissolved phase flux to the groundwater has been removed.

6.4.1 Deep Emplacement Mechanisms - PCBs

The presence of PCBs at depths of up to 405 feet (123 m) (the deepest extent of investigation to date) is more difficult to explain. However, there are several mechanisms which could explain PCB migration to these depths. PCBs are very weakly water-soluble, but highly sorptive. Thus, their migration as dissolved phase, in the manner of the compounds discussed above (such as benzene), is unlikely, especially through a silt and clay-filled fracture system. PCBs will tend to adsorb onto particles of clay and organic material, precluding significant migration in the dissolved phase. The data collected during this phase of the investigation sampling confirms this. PCB detected in groundwater was concentrated in the sediment suspended within the groundwater column or at the bottom of the wells, and dissolved phase concentrations were very low. EarthTech (1991) observations also confirm this.

The possible mechanisms for PCB enhanced colloidal transport (the migration through groundwater of PCBs attached to small suspended sediment particles of solid [colloids]) are:

- Sediment particles with sorbed PCB from the zone of NAPL-impacted soil are washed down from the upper fractured and solution-enhanced zone, and move vertically downward under the natural hydraulic gradient, enter a major vertical fracture, and come to rest eventually in one of the solution cavities associated with the vertical fracture. This is considered relatively unlikely for two reasons: 1) Sediment particles with sorbed PCB would have to migrate their way through the silty-clay sediments which in-fill the large vertical fractures in the upper zone. This winnowing process would require large volumes of percolating water and relatively high flow velocities to mobilize the particles. 2) Particles would then have to find a major vertical feature in the intermediate zone (discretely fractured zone), and then come out of suspension within a void, where quiescent conditions existed. If NAPL migration occurred to a significant depth within a vertical open surface fracture, this scenario would be much more likely. At this stage of the investigation, there is little data to confirm or deny deep penetration of NAPL within loess-filled upper bedrock fractures.

- Sediment particles with sorbed PCB disturbed during drilling are flushed to depth and redistributed into voids and solution cavities, especially during lost-circulation events. As

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described above, lost-circulation problems during the EarthTech (1990) drilling program resulted in significant accumulations of drill-cut sediments in the bottom of boreholes. It is entirely possible that sediment particles with sorbed PCB found in voids in Well MW-11 and Borehole MEW-SB-12-02 at 315 feet (96 m) depth, for example (470 ug/kg PCB in sediment) were introduced through the drilling process.

6.4.2 Lateral Migration Potential – PCBs

If it is assumed that PCBs attached to small particles of silt have come to rest within cavities in the deeper bedrock beneath the Site, the following observations regarding lateral PCB transport can be made:

- Given the low fracture density of the deep bedrock, and the observed infrequency of major flow channels and solution features, the probability of significant PCB migration from the Site to off-site receptors is considered to be low. Colloidal transport requires relatively high groundwater flow velocities, which are unlikely except in significant solution features. The low fracture density also means that the probability that connected pathways exist for this type of enhanced transport is low. Fractures are few and far between, and thus significant pathways would be tortuous and statistically discontinuous.

- Low concentrations of PCB (less than 4.5 ug/L) observed in groundwater samples collected from wells at the Site, indicate that PCBs attached to sediment particles in solution cavities at depth (regardless of emplacement mechanism) are likely not mobile under prevailing groundwater conditions, or do not have a pathway significant enough to move them away from the Site. The data indicate that some PCBs attached to sediment particles have come to rest in a few scattered solution cavities at some depth beneath the Site in relatively unfractured bedrock (likely at fracture intersection points). Given the data available, the likelihood that these particles are mobile is considered to be low.

- Even if the PCB-laden particles were mobile, the sparse fracture density and lack of significant flow pathways would suggest that PCB migration is unlikely to reach off-site receptors at significant concentrations. The PCBs are highly sorbed to the particles and the small volume sediment to which PCB is actually attached is not expected to generate significant dissolved phase concentrations of PCBs.

- Given field observations, the fracture network model developed, and the interpretation provided in this report, the maximum likely volume of silt with sorbed PCB existing at depth beneath the Site can be estimated. This is based on the assumption that a 1.5 foot (0.5 m) diameter vertical fracture-intersection solution cavity exists at each major intermediate and

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deep bedrock fracture location beneath the known area of PCB impacted surface soil identified during the soil remediation program. A maximum length of 31 feet (100 m) is assumed, based on the field data. Assuming a maximum of nine intersections, the maximum likely volume of sediment particles with sorbed PCB in bedrock under the Site is 102 cubic yards (78 m^3). Given the average concentration of PCBs in silt of approximately 350 ug/kg, a maximum likely mass of PCB in solution cavities beneath the Site is approximately 0.056 pounds (0.027 kilograms). This conservative figure is likely a significant over-estimate of the actual mass of PCB existing in bedrock beneath the Site. This further reinforces the conclusions discussed above concerning the low probability of significant off-site migration potential and impact.

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7.0 SUMMARY

From September 1999 to September 2000, the groundwater monitoring wells at the site, located at 824 South Kingshighway, Cape Girardeau, Missouri, were periodically gauged for depth to water. In June and September of 2000, the Site groundwater monitoring wells were purged and groundwater samples were collected. Unfiltered groundwater samples were analyzed for general minerals, common parameters and organic compounds, including PCBs. Filtered groundwater samples were analyzed for PCBs. Sediment samples and pre-purge groundwater samples were collected from three wells: Wells MW-5, MW-11 and MW-11A. The sediment samples and pre-purge groundwater samples were analyzed for PCBs. In June of 2000, field mapping of fractures in rock outcrop in the area was conducted, as well as a VLF geophysical survey. The fracture data was used to develop an initial model of the rock fractures beneath the site. This data was then used to develop a conceptual model.

An analyses of the groundwater elevation data, laboratory analytical results and fracture analyses resulted in the following key findings:

1) Groundwater flow was consistently towards the southeast during the year of gauging, with gradients ranging from 0.006 feet/foot to 0.015 feet/foot.

2) Concentrations of COCs were detected in groundwater samples collected from groundwater monitoring wells during this investigation. Benzene was detected in one well, Well MW-3, at 11 ug/L. The Site clean up goal for benzene in groundwater is 5 ug/L. Chlorobenzene was detected in three wells, Wells MW-3, MW-5 and MW-11, at 710 ug/L, 21 ug/L and 68 ug/L, respectively. The Site clean up goal for chlorobenzene in groundwater is 20 ug/L. COCs above the cleanup goals were not detected in groundwater samples from the two off-site groundwater monitoring wells: Wells MW-7 and MW-8.

3) PCBs were detected in groundwater samples from Wells MW-5 and MW-11 during this investigation. In both cases PCBs were predominantly (greater than a three to one ratio) adsorbed to sediment particles and dissolved phase (unfiltered) concentrations were either below the detection limit of 1.0 ug/L or between 2.0 and 4.5 ug/L. The Site clean up goal for PCB in groundwater is 0.5 ug/L.

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4) All except two of the compounds [bis(2-ethylhexyl) phthalate and phenol] detected in the groundwater samples during this investigation are PCE, 1,1,1-TCA, and 1,2,4-TCB and their breakdown products: TCE, 1,1-DCA, 1,4-DCB, chlorobenzene and benzene.

5) 1,1,1-TCA, 1,1-DCA, 1,2,4-TCB, 1,3-DCB, 1,4-DCB, bis(2-ethylhexyl) phthalate, and phenol were detected at concentrations below the clean up goals. TCE and PCE, detected in groundwater in 1990 and 1991, were not detected in 2000.

6) Based on the analytical results of groundwater samples from the two off-site wells (Wells MW-7 and MW-8), the only COC that has migrated off-site is 1,2,4-trichlorobenzene, which was detected at Well MW-7 at 40 ug/L, which is below the Site clean up goal of 70 ug/L. Based on the presence of breakdown products of TCE; 1,1,1-TCA; trichlorobenzene; and groundwater quality sample results, it appears that biodegradation of COCs in groundwater is occurring.

7) The bedrock fracturing analysis and modeling performed as part of this study indicates that the bedrock beneath the Site area can be described as having three layers:

   4. An upper weathered zone or epikarst, extending throughout the upper 50 feet (15.2 m) of the bedrock and characterized by large linear solution channels spaced approximately 20 feet (6.1 m) apart on average, with sinkholes occurring regularly, often at the intersections of channels;
   5. A discreetly fractured intermediate bedrock zone, extending from a general depth of 50 feet (15.2 m) to approximately 150 feet (45.7 m), characterized by persistent vertical fractures spaced approximately 100 feet (30.5 m) to 150 feet (45.7 m) apart on average, with limited solution channels; and
   6. A deep zone with occasional discrete vertical fractures having spacing greater than 150 feet (45.7 m).

PCB and chlorobenzene, a component of askarel fluid, has been introduced to some depth in the bedrock either by enhanced transport (adsorbed to sediment particles) within the solution-enhanced fracture features or by flushing of PCB-impacted sediment during drilling. It appears likely that PCBs are adsorbed to sediment particles resting within quiescent solution features at depth. A preliminary estimate of the total mass of PCB which may be in bedrock at depth beneath the Site is on the order of less than one kilogram.

Under these conditions and based on presently available information, the likelihood of continuing lateral PCB migration away from the Site is considered to be low. Under natural

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conditions, groundwater flow velocities within the fractures and solution channels in the bedrock, are expected to be too low to mobilize significant sediment transport. In addition, the fracture network at the depths of concern is likely too tortuous and discontinuous to prove an effective transport pathway.

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Break6_003902

8.0 RECOMMENDATIONS FOR ADDITIONAL WORK

The groundwater design investigation required by the Consent Decree and Record of Decision (ROD) is intended to accomplish the following:

- Identify the vertical extent of COCs;
- Confirm the presence or absence of a continuous aquiclude within the upper 200 to 300 feet (61 to 91.5 m) of bedrock;
- Perform pumping tests to evaluate the flow rates and hydraulic conductivity of the aquifer;
- Confirm the groundwater flow direction in the aquifer; and
- Identify other data that will be necessary for the design of a groundwater remediation system.

Once the design investigation has been performed, the results of the investigation will be used to develop a groundwater treatment feasibility report. This report will evaluate remedial technologies including an analysis of the effectiveness and applicability in accordance with the criteria in 40 Code of Federal Regulations (CFR) 300.430.

Based on the objectives of the design investigation and the results of the recently performed investigation, the next phase of the investigation should include the following:

- An assessment of the horizontal and vertical extent of PCB and other dissolved phase COCs down gradient of known locations of dissolved phase COC within the bedrock. However, it is a possibility that drilling deeper may inadvertently lead to deeper migration of PCB and other COCs;
- An evaluation of the bulk equivalent hydraulic properties on a scale sufficient for groundwater modeling of the Site and an evaluation of the level of heterogeneity in hydraulic properties vertically and areally; and
- An evaluation of the likely behavior of COCs in the bedrock, both as dissolved phase and adsorbed phase migration by enhanced transport, through groundwater fate and transport modeling.

Therefore, the next phase of the design investigation should include the following elements:

- Drilling one vertical test well at a location near the site boundary and down gradient of Wells MW-5 and MW-11. This well would be used to verify the hypothesis of vertical

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migration of contaminants, provide further areal delineation of COCs within bedrock, evaluate the presence or absence of PCB in sediment at depth in bedrock down gradient of Wells MW-5 and MW-11, and refine and perfect drilling and completion techniques for the subsequent wells.

- Installation of three angled monitoring wells down gradient of Wells MW-5 and MW-11. Angled wells ensure intersection of vertical fractures and solution features. These wells would be constructed with screens intersecting specific zones and used to monitor water quality, flow velocity and other key parameters across discrete zones of interest.

- Installation of three vertical wells in the immediate vicinity of Wells MW-5 and MW-11. These nested wells would be installed at a single location, with screened intervals at discrete depths within each of the three zones (upper, middle and lower). These wells would provide the platform for aquifer testing and measurement of vertical and areal response to groundwater pumping. It is important to note that wells outside the MW-5 and MW-11 well cluster should not be pumped as this may mobilize and spread COCs.

- Borehole advancement and well construction methodology needs to include an assessment of the potential for redistribution of COCs during drilling and well construction. Telescoping the casing and sealing off the upper zones may be necessary to reduce the mobilization of COCs. Sediment returns should be carefully monitored and sampled for laboratory analyses.

- Boreholes should be cored. The boreholes should also be logged using geophysical tools, including acoustic digital borehole televiewer. This information will be critical for proper construction of the wells to allow the sampling of discrete horizons.

- An aquifer testing program using the nested cluster of vertical wells should be performed. The tests should be designed to establish the bulk aquifer parameters for the three zones and the depth intervals between the three zones. In addition, monitoring of other wells at the Site during the tests will provide information on the horizontal and vertical influences of pumping on different horizons and features.

- A numeric fate and transport model should be developed which incorporates the results of the conceptual hydrogeological model and bedrock fracture model already developed. The model would be used to examine the potential for future off-site migration of COCs, develop an understanding of the risk posed by the presence of the COCs and the potential effects of a number of remedial strategies.

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Break6_003904

7.0 DISCLAIMER

This draft report has been prepared by Komex for the exclusive use of MEW STFD, as it pertains to the MEW site in Cape Girardeau, Missouri. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists, hydrogeologists and engineers practicing in this field. No other warranty, express or implied, is offered as to the professional advice in this work plan.

Opinions and recommendations contained in this work plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this work plan.

The purpose of a geologic/hydrogeologic/water quality investigation is to reasonably characterize existing subsurface conditions at the Site. In performing such an investigation, it is understood that no investigation is thorough enough to describe all subsurface conditions of interest at a given site. If conditions have not been identified during the investigation, such a finding should not, therefore, be construed as a guarantee of the absence of such conditions at the Site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

With regard to geologic/hydrogeologic/water quality conditions, our professional opinions are based in part on interpretation of data from discrete sampling locations. It should be noted that actual conditions at unsampled locations may differ from those interpreted from sampled locations.

Respectfully Submitted,
KOMEX• H2O SCIENCE• INC

for

Paul E. Hardisty, Ph.D.
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Dean Mitchell
Geologist/Field Manager

MEW Site File
Break6_003905

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MEW Site File
Break6_003907

TABLE 1
GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
Missouri Electric Works, Cape Girardeau

Well ID	Date Installed	Top of Casing Elevation (feet AMSL)	Total Depth (Approximate) (feet BGS)	Casing Diameter (inches)	Screened Interval (feet BGS)
MW-B	NA	NA	NA	2	NA
MW-3	NA	420.06	41	2	NA
MW-4	NA	422.78	58	2	NA
MW-5	NA	419.52	42	2	NA
MW-6	NA	424.11	28	2	NA
MW-6A	3/1/1990	424.22	46	2	35 to 45
MW-7	3/1/1990	403.76	33	2	21 to 31
MW-8	3/1/1990	401.74	21	2	21 to 31
MW-9	3/1/1990	423.74	31	2	38 to 48
MW-10	3/1/1990	422.78	63	2	50 to 60
MW-11	January 1991	420.20	120	2	115 to 120
MW-11A	June 1991	421.92	405	Telescoping	No Screen

Notes:
1) AMSL = Above Mean Sea Level.
2) BGS = Below Ground Surface.
3) NA = Not available.
4) MW-B was abandoned on September 30, 2000.
5) MW-4 was covered by a soil pile during surface soil remediation.
6) MW-7 was lowered on September 26, 2000. The elevation prior to lowering was 405.86 feet AMSL.
7) MW-8 was abandoned on September 30, 2000. Before abandonment, the elevation was changed to 399.98 feet AMSL.
8) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered. The survey elevation prior to damage was 423.15 feet AMSL.

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Break6_003908

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-3	9/8/1999	420.06	41.75	378.31
	9/9/1999	420.06	41.85	378.21
	9/15/1999	420.06	42.00	378.06
	9/21/1999	420.06	42.11	377.95
	9/22/1999	420.06	42.09	377.97
	9/23/1999	420.06	42.05	378.01
	9/29/1999	420.06	42.01	378.05
	9/30/1999	420.06	42.00	378.06
	10/5/1999	420.06	42.00	378.06
	10/12/1999	420.06	40.61	379.45
	10/13/1999	420.06	40.72	379.34
	10/14/1999	420.06	40.85	379.21
	10/15/1999	420.06	40.89	379.17
	10/19/1999	420.06	41.19	378.87
	11/3/1999	420.06	41.90	378.16
	11/19/1999	420.06	42.14	377.92
	11/23/1999	420.06	41.91	378.15
	12/1/1999	420.06	42.10	377.96
	12/13/1999	420.06	38.44	381.62
	12/17/1999	420.06	38.80	381.26
	12/20/1999	420.06	39.50	380.56
	1/4/2000	420.06	35.35	384.71
	1/6/2000	420.06	37.50	382.56
	1/13/2000	420.06	39.65	380.41
	1/17/2000	420.06	39.91	380.15
	1/24/2000	420.06	40.31	379.75
	2/2/2000	420.06	40.76	379.30
	2/10/2000	420.06	41.02	379.04
	4/6/2000	420.06	38.55	381.51
	4/21/2000	420.06	39.95	380.11
	4/25/2000	420.06	39.75	380.31
	4/26/2000	420.06	39.74	380.32
	4/27/2000	420.06	39.67	380.39
	5/1/2000	420.06	39.84	380.22
	5/4/2000	420.06	39.81	380.25
	5/9/2000	420.06	39.44	380.62
	5/10/2000	420.06	39.41	380.65
	5/11/2000	420.06	39.42	380.64
	5/19/2000	420.06	40.14	379.92
	6/2/2000	420.06	39.81	380.25
	6/19/2000	420.06	40.50	379.56
	6/22/2000	420.06	38.32	381.74
	9/26/2000	420.06	41.01	379.05

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003909

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-4	9/26/2000	422.78	43.25	379.53
MW-5	9/8/1999	419.52	41.15	378.37
	9/9/1999	419.52	41.20	378.32
	9/15/1999	419.52	41.36	378.16
	9/21/1999	419.52	41.55	377.97
	9/22/1999	419.52	41.49	378.03
	9/23/1999	419.52	41.44	378.08
	9/29/1999	419.52	41.36	378.16
	9/30/1999	419.52	41.36	378.16
	10/5/1999	419.52	41.34	378.18
	10/12/1999	419.52	40.02	379.50
	10/15/1999	419.52	40.22	379.30
	10/19/1999	419.52	40.55	378.97
	11/3/1999	419.52	41.25	378.27
	11/19/1999	419.52	41.50	378.02
	11/23/1999	419.52	41.31	378.21
	12/1/1999	419.52	41.50	378.02
	12/13/1999	419.52	38.27	381.25
	12/17/1999	419.52	38.31	381.21
	12/20/1999	419.52	38.95	380.57
	1/4/2000	419.52	35.25	384.27
	1/6/2000	419.52	37.55	381.97
	1/13/2000	419.52	39.10	380.42
	1/17/2000	419.52	39.35	380.17
	1/24/2000	419.52	39.77	379.75
	2/2/2000	419.52	40.20	379.32
	2/10/2000	419.52	40.45	379.07
	4/6/2000	419.52	38.06	381.46
	4/21/2000	419.52	39.39	380.13
	4/25/2000	419.52	39.15	380.37
	4/26/2000	419.52	39.12	380.40
	4/27/2000	419.52	39.12	380.40
	5/1/2000	419.52	39.27	380.25
	5/4/2000	419.52	39.25	380.27
	5/9/2000	419.52	38.90	380.62
	5/10/2000	419.52	38.85	380.67
	5/11/2000	419.52	38.85	380.67
	5/19/2000	419.52	39.56	379.96
	6/2/2000	419.52	39.21	380.31
	6/19/2000	419.52	39.92	379.60
	6/22/2000	419.52	37.77	381.75
	6/30/2000	419.52	37.91	381.61
	7/14/2000	419.52	39.62	379.90
	9/26/2000	419.52	40.39	379.13

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003910

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-6	9/26/2000	424.11	28.20	395.91
MW-6A	9/8/1999	424.22	45.71	378.51
	9/9/1999	424.22	45.71	378.51
	9/15/1999	424.22	45.85	378.37
	9/21/1999	424.22	45.95	378.27
	9/22/1999	424.22	45.95	378.27
	9/23/1999	424.22	45.94	378.28
	9/29/1999	424.22	45.83	378.39
	9/30/1999	424.22	45.84	378.38
	10/5/1999	424.22	45.87	378.35
	10/12/1999	424.22	44.56	379.66
	10/13/1999	424.22	44.65	379.57
	10/14/1999	424.22	44.76	379.46
	10/15/1999	424.22	44.84	379.38
	10/19/1999	424.22	45.11	379.11
	11/3/1999	424.22	45.85	378.37
	11/19/1999	424.22	46.09	378.13
	11/23/1999	424.22	46.05	378.17
	12/1/1999	424.22	46.10	378.12
	12/17/1999	424.22	43.20	381.02
	12/20/1999	424.22	43.71	380.51
	1/4/2000	424.22	42.50	381.72
	1/6/2000	424.22	42.51	381.71
	1/13/2000	424.22	43.91	380.31
	1/17/2000	424.22	44.17	380.05
	1/24/2000	424.22	44.54	379.68
	2/2/2000	424.22	45.00	379.22
	2/10/2000	424.22	45.26	378.96
	4/6/2000	424.22	43.07	381.15
	4/21/2000	424.22	44.25	379.97
	4/25/2000	424.22	44.00	380.22
	4/26/2000	424.22	44.02	380.20
	4/27/2000	424.22	44.03	380.19
	5/1/2000	424.22	44.13	380.09
	5/4/2000	424.22	44.17	380.05
	5/9/2000	424.22	43.81	380.41
	5/10/2000	424.22	43.79	380.43
	5/11/2000	424.22	43.79	380.43
	5/19/2000	424.22	44.29	379.93
	6/2/2000	424.22	43.85	380.37
	6/16/2000	424.22	44.44	379.78
	6/19/2000	424.22	42.56	381.66
	6/30/2000	424.22	42.54	381.68
	7/14/2000	424.22	44.13	380.09
	9/26/2000	424.22	44.65	379.57

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003911

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-7	9/8/1999	405.86	28.21	377.65
	9/9/1999	405.86	28.24	377.62
	9/15/1999	405.86	28.40	377.46
	9/21/1999	405.86	28.42	377.44
	9/22/1999	405.86	28.42	377.44
	9/23/1999	405.86	28.40	377.46
	9/29/1999	405.86	28.33	377.53
	9/30/1999	405.86	28.31	377.55
	10/5/1999	405.86	28.25	377.61
	10/12/1999	405.86	26.80	379.06
	10/13/1999	405.86	27.00	378.86
	10/14/1999	405.86	27.11	378.75
	10/15/1999	405.86	27.21	378.65
	10/19/1999	405.86	27.46	378.40
	11/3/1999	405.86	28.16	377.70
	11/19/1999	405.86	28.41	377.45
	11/23/1999	405.86	28.15	377.71
	12/1/1999	405.86	28.32	377.54
	12/13/1999	405.86	25.32	380.54
	12/17/1999	405.86	25.37	380.49
	12/20/1999	405.86	25.91	379.95
	1/4/2000	405.86	24.65	381.21
	1/6/2000	405.86	24.66	381.20
	1/13/2000	405.86	25.95	379.91
	1/17/2000	405.86	26.19	379.67
	1/24/2000	405.86	26.55	379.31
	2/2/2000	405.86	27.00	378.86
	2/10/2000	405.86	27.25	378.61
	4/6/2000	405.86	24.91	380.95
	4/21/2000	405.86	26.20	379.66
	4/25/2000	405.86	25.75	380.11
	4/26/2000	405.86	25.89	379.97
	4/27/2000	405.86	25.76	380.10
	5/1/2000	405.86	26.02	379.84
	5/4/2000	405.86	25.87	379.99
	5/9/2000	405.86	25.59	380.27
	5/10/2000	405.86	25.41	380.45
	5/11/2000	405.86	25.55	380.31
	5/19/2000	405.86	26.42	379.44
	6/2/2000	405.86	26.13	379.73
	6/16/2000	405.86	26.84	379.02
	6/19/2000	405.86	24.83	381.03
	6/30/2000	405.86	24.76	381.10
	7/14/2000	405.86	26.55	379.31
	9/26/2000	405.86	26.85	379.01

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003912

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-8	9/26/2000	399.98	21.60	378.38
MW-9	9/8/1999	423.74	40.72	383.02
	9/9/1999	423.74	40.80	382.94
	9/15/1999	423.74	41.02	382.72
	9/21/1999	423.74	41.21	382.53
	9/22/1999	423.74	41.24	382.50
	9/23/1999	423.74	41.24	382.50
	9/29/1999	423.74	41.44	382.30
	9/30/1999	423.74	41.44	382.30
	10/5/1999	423.74	41.56	382.18
	10/12/1999	423.74	41.04	382.70
	10/13/1999	423.74	40.86	382.88
	10/14/1999	423.74	40.19	383.55
	10/15/1999	423.74	40.81	382.93
	10/19/1999	423.74	40.92	382.82
	11/3/1999	423.74	41.61	382.13
	11/19/1999	423.74	42.00	381.74
	11/23/1999	423.74	42.12	381.62
	12/1/1999	423.74	42.21	381.53
	12/13/1999	423.74	40.40	383.34
	12/17/1999	423.74	38.50	385.24
	12/20/1999	423.74	38.05	385.69
	1/4/2000	423.74	39.31	384.43
	1/6/2000	423.74	37.10	386.64
	1/13/2000	423.74	37.81	385.93
	1/17/2000	423.74	38.31	385.43
	1/24/2000	423.74	39.60	384.14
	2/2/2000	423.74	40.47	383.27
	2/10/2000	423.74	40.64	383.10
	4/6/2000	423.74	38.29	385.45
	4/21/2000	423.74	39.81	383.93
	4/25/2000	423.74	40.12	383.62
	4/26/2000	423.74	40.17	383.57
	4/27/2000	423.74	40.10	383.64
	5/1/2000	423.74	40.14	383.60
	5/4/2000	423.74	40.40	383.34
	5/9/2000	423.74	40.13	383.61
	5/10/2000	423.74	40.30	383.44
	5/11/2000	423.74	40.06	383.68
	5/19/2000	423.74	40.46	383.28
	6/2/2000	423.74	40.43	383.31
	6/16/2000	423.74	40.71	383.03
	6/19/2000	423.74	39.13	384.61
	6/30/2000	423.74	39.12	384.62
	7/14/2000	423.74	39.94	383.80
	9/26/2000	423.74	42.13	381.61

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003913

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-10	9/8/1999	423.15	43.59	379.56
	9/9/1999	423.15	43.59	379.56
	9/15/1999	423.15	43.80	379.35
	9/21/1999	423.15	43.91	379.24
	9/22/1999	423.15	43.95	379.20
	9/23/1999	423.15	43.93	379.22
	9/29/1999	423.15	43.89	379.26
	9/30/1999	423.15	43.90	379.25
	10/5/1999	423.15	43.94	379.21
	10/13/1999	423.15	43.00	380.15
	10/14/1999	423.15	42.62	380.53
	10/15/1999	423.15	42.78	380.37
	10/19/1999	423.15	42.91	380.24
	11/3/1999	423.15	43.81	379.34
	11/19/1999	423.15	44.24	378.91
	11/23/1999	423.15	44.11	379.04
	12/1/1999	423.15	44.21	378.94
	12/13/1999	423.15	42.05	381.10
	12/17/1999	423.15	40.75	382.40
	12/20/1999	423.15	40.84	382.31
	1/4/2000	423.15	41.71	381.44
	1/6/2000	423.15	40.16	382.99
	1/13/2000	423.15	41.09	382.06
	1/17/2000	423.15	41.45	381.70
	1/24/2000	423.15	42.25	380.90
	2/2/2000	422.78	42.76	380.02
	2/10/2000	422.78	42.71	380.07
	4/6/2000	422.78	39.90	382.88
	4/21/2000	422.78	41.55	381.23
	4/25/2000	422.78	41.66	381.12
	4/26/2000	422.78	41.61	381.17
	4/27/2000	422.78	41.59	381.19
	5/1/2000	422.78	41.59	381.19
	5/4/2000	422.78	41.71	381.07
	5/9/2000	422.78	41.31	381.47
	5/10/2000	422.78	41.35	381.43
	5/11/2000	422.78	41.20	381.58
	5/19/2000	422.78	41.78	381.00
	6/2/2000	422.78	41.41	381.37
	6/16/2000	422.78	42.10	380.68
	6/19/2000	422.78	40.63	382.15
	6/30/2000	422.78	40.50	382.28
	7/14/2000	422.78	41.57	381.21
	9/26/2000	422.78	43.11	379.67

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003914

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-11	9/8/1999	420.20	43.01	377.19
	9/15/1999	420.20	43.21	376.99
	9/21/1999	420.20	43.30	376.90
	9/22/1999	420.20	43.29	376.91
	9/23/1999	420.20	43.28	376.92
	9/29/1999	420.20	43.15	377.05
	9/30/1999	420.20	43.18	377.02
	10/5/1999	420.20	43.20	377.00
	10/12/1999	420.20	41.85	378.35
	10/13/1999	420.20	41.95	378.25
	10/14/1999	420.20	42.05	378.15
	10/15/1999	420.20	42.12	378.08
	10/19/1999	420.20	42.41	377.79
	11/3/1999	420.20	43.11	377.09
	11/19/1999	420.20	43.34	376.86
	11/23/1999	420.20	41.31	378.89
	12/1/1999	420.20	43.31	376.89
	12/13/1999	420.20	40.61	379.59
	12/17/1999	420.20	40.40	379.80
	12/20/1999	420.20	40.95	379.25
	1/4/2000	420.20	39.91	380.29
	1/6/2000	420.20	39.81	380.39
	1/13/2000	420.20	41.03	379.17
	1/17/2000	420.20	41.25	378.95
	1/24/2000	420.20	41.62	378.58
	2/2/2000	420.20	42.05	378.15
	2/10/2000	420.20	42.30	377.90
	4/6/2000	420.20	40.02	380.18
	4/21/2000	420.20	41.24	378.96
	4/25/2000	420.20	41.05	379.15
	4/26/2000	420.20	41.04	379.16
	4/27/2000	420.20	40.99	379.21
	5/1/2000	420.20	41.11	379.09
	6/2/2000	420.20	40.64	379.56
	6/16/2000	420.20	41.30	378.90
	6/22/2000	420.20	39.10	381.10
	6/30/2000	420.20	39.29	380.91
	7/14/2000	420.20	40.94	379.26
	9/26/2000	420.20	41.65	378.55

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003915

TABLE 2
GROUNDWATER ELEVATION DATA
Missouri Electric Works, Cape Girardeau

Well ID	Date Monitored	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-11A	9/9/1999	421.92	40.21	381.71
	9/15/1999	421.92	40.51	381.41
	9/21/1999	421.92	40.65	381.27
	9/22/1999	421.92	40.66	381.26
	9/23/1999	421.92	40.66	381.26
	9/29/1999	421.92	40.72	381.20
	9/30/1999	421.92	40.76	381.16
	10/5/1999	421.92	40.84	381.08
	10/12/1999	421.92	40.40	381.52
	10/13/1999	421.92	40.42	381.50
	10/15/1999	421.92	40.32	381.60
	10/19/1999	421.92	40.25	381.67
	11/3/1999	421.92	40.65	381.27
	11/19/1999	421.92	43.86	378.06
	11/23/1999	421.92	43.94	377.98
	12/1/1999	421.92	44.03	377.89
	12/13/1999	421.92	43.13	378.79
	12/17/1999	421.92	42.32	379.60
	12/20/1999	421.92	42.21	379.71
	1/4/2000	421.92	42.25	379.67
	1/6/2000	421.92	42.50	379.42
	1/13/2000	421.92	41.87	380.05
	1/17/2000	421.92	41.95	379.97
	1/24/2000	421.92	42.20	379.72
	2/2/2000	421.92	42.60	379.32
	2/10/2000	421.92	42.89	379.03
	4/6/2000	421.92	40.64	381.28
	4/21/2000	421.92	41.59	380.33
	4/25/2000	421.92	41.75	380.17
	4/26/2000	421.92	41.81	380.11
	4/27/2000	421.92	41.81	380.11
	5/1/2000	421.92	41.84	380.08
	5/4/2000	421.92	41.96	379.96
	5/9/2000	421.92	41.78	380.14
	5/10/2000	421.92	41.76	380.16
	5/11/2000	421.92	41.75	380.17
	5/19/2000	421.92	41.91	380.01
	6/2/2000	421.92	41.95	379.97
	6/19/2000	421.92	42.35	379.57
	6/22/2000	421.92	41.86	380.06
	7/14/2000	421.92	42.63	379.29
	9/26/2000	421.92	43.44	378.48

Notes:
1) AMSL = Above Mean Sea Level.
2) BTOC = Below Top of Casing.
3) On February 2, 2000, the well head of MW-10 was damaged and the top of casing was lowered.

MEW Site File
Break6_003916

MEW Site File
Break6_003917

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS
Inorganic Compounds
Missouri Electric Works, Cape Girardeau

Analyte	Method	Well I.D.	MW-3	MW-4	MW-5	MW-6A	MW-7	MW-8	MW-9	MW-10	MW-11	MW-11 (Duplicate)	MW-11A
		Date Sampled	6/20/2000	9/26/2000	6/20/2000	6/19/2000	6/20/2000	9/26/2000	6/19/2000	6/20/2000	6/22/2000	6/22/2000	9/29/2000
Sodium	SW6010B	mg/L	16.7	51.6	27.1	34.8	52.2	84.9	11.3	11.4	19.1	14.2	9.16
Potassium	SW6010B	mg/L	1.40	5.82	3.86	2.32	4.23	8.19	3.80	3.36	7.12	9.69	18.0
Calcium	SW6010B	mg/L	91.4	227.0	232	172	163	367	115	126	20.7	30.9	74.2
Magnesium	SW6010B	mg/L	8.20	37.1	13.9	13.5	23.9	58.4	8.58	6.12	2.50	5.64	20.4
Iron	SW6010B	mg/L	4.81	2.66	54.9	9.51	10.8	153	58.6	4.66	9.30	18.0	13.1
Manganese	SW6010B	mg/L	1.78	0.144	1.76	0.437	0.690	3.72	0.992	0.114	0.179	0.309	0.159
Fluoride	E340.2	mg/L	0.200	0.480	<0.200	0.260	0.280	0.220	0.240	0.220	0.490	0.330	0.340
Chloride	E325.2	mg/L	11.7	106.0	11.1	6.27	54.6	25.8	23.2	35.1	15.9	12.9	3.98
Sulfate	E375.4	mg/L	13.7	357.0	26.5	32.2	48.8	49.6	12.6	24.7	14.5	10.0	14.5
Sulfide	E376.2	mg/L	<1.00	<1.00	<1.00	<1.00	<1.00	10.4	<1.00	<1.00	<1.00	<1.00	<1.00
Alkalinity as $CaCO_3$	E310.1	mg/L	281	251	299	480	395	914	251	302	64.0	76.0	268
Dissolved Oxygen	E360.1	mg/L	5.87	9.57*	7.23	5.90	2.72	8.18	7.80	3.44	8.25	8.03	8.32
Specific Conductance	E120.1	umhos/cm	558	1510	564	689	1090	1150	489	699	174	138	310
pH	E120.1	pH units	7.70	6.95*	7.82	7.05	7.64	7.00	7.33	7.43	9.82	9.97	8.48

Notes:
1) TDS = Total dissolved solids.
2) TSS = Total suspended solids.
3) COD = Chemical oxygen demand.
4) * = Analyzed after established holding time due to shipping delay.

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS
Inorganic Compounds
Missouri Electric Works, Cape Girardeau

Analyte	Method	Well I.D.	MW-3	MW-4	MW-5	MW-6A	MW-7	MW-8	MW-9	MW-10	MW-11	MW-11 (Duplicate)	MW-11A
		Date Sampled	6/20/2000	9/26/2000	6/20/2000	6/19/2000	6/20/2000	9/26/2000	6/19/2000	6/20/2000	6/22/2000	6/22/2000	9/29/2000
Hardness (Ca + Mg)	M2340B	mg/L	262	720	637	484	505	1130	323	340	62.1	100	269
TDS	E160.1	mg/L	343	1170	359	435	670	692	356	468	137	126	224
TSS	E160.2	mg/L	140	92.0	678	596	836	4720	1410	115	162	404	129
Total Residue	E160.3	mg/L	500	<5.00	1,100	1,100	1,600	<5.00	1,700	600	<5.00	<5.00	<5.00
Nitrite	E353.2	mg/L	<0.0500	0.234	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Nitrate	E353.2	mg/L	<0.0500	9.61	<0.0500	<0.0500	1.92	0.662	<0.0500	1.09	0.287	0.136	<0.0500
Total Phosphorous	E365.1	mg/L	<0.0500	0.161	0.480	0.129	<0.0500	3.56	1.84	<0.0500	<0.0500	0.176	0.081
COD	E410.4	mg/L	34.7	30.6	99.0	<10.0	13.0	38.7	<10.0	29.2	27.5	28.8	29.1

Notes:
1) TDS = Total dissolved solids.
2) TSS = Total suspended solids.
3) COD = Chemical oxygen demand.
4) * = Analyzed after established holding time due to shipping delay.

TABLE 3B
GROUNDWATER ANALYTICAL RESULTS
Biological Analyses
Missouri Electric Works, Cape Girardeau

Well ID	Date Sampled	Heterotrophic Plate Count SM9215B (number/L)	BOD E405.1 (mg/L)
MW-3	20-Jun-2000	4,500	10.5
MW-4	26-Sep-2000	11,000*	NA
MW-5	20-Jun-2000	3,000	28.3
MW-6A	19-Jun-2000	15,400	NA
MW-7	20-Jun-2000	3,800	5.10
MW-8	26-Sep-2000	210,000	<5.00
MW-9	19-Jun-2000	8,900	NA
MW-10	20-Jun-2000	350	7.40
MW-11	22-Jun-2000	1,056,000	<5.00
MW-11 (Duplicate)	22-Jun-2000	3,096,000	9.2
MW-11A	29-Sep-2000	100,000	5.76

Notes:
1) BOD = Biochemical Oxygen Demand.
2) * = Analyzed after established holding time due to shipping delay.
3) NA = Not analyzed.

MEW Site File
Break6_003919

MEW Site File
Break6_003920

TABLE 3C
GROUNDWATER ANALYTICAL RESULTS
Organic Compounds - Previous Investigations
Missouri Electric Works, Cape Girardeau

Well ID	Date Sampled	1,1,1-TCA (ug/L)	TCE (ug/L)	PCE (ug/L)	1,1-DCA (ug/L)	trans-1,2-DCE (ug/L)	Benzene (ug/L)	Chloro-benzene (ug/L)	Trichloro-benzene (ug/L)	Tetrachloro-benzene (ug/L)	1,2-DCB (ug/L)	1,3-DCB (ug/L)	1,4-DCB (ug/L)	PCB (Arochlor 1260) (ug/L)
MW-3	November 1989	-	-	-	16	52	-	86	-	-	-	-	-	<0.5
	March 1990	-	4J	-	18	52	6J	112	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	35	-	240	78.0	16.0	58.5	9.0	6.5	NA
(Duplicate)	January 1991	<5.0	<5.0	-	8	20	-	94	<1.0	<1.0	<10.0	<10.0	<10.0	NA
MW-4	March 1990	-	3J	12	6	-	-	-	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	<5.0	-	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	-
MW-5	November 1989	-	-	-	12	41	-	111	-	-	-	-	-	<0.5
	January 1991	<5.0	<5.0	-	5	9	-	29	<1.0	<1.0	<10.0	<10.0	<10.0	NA
MW-6A	March 1990	-	-	-	-	-	-	-	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	<5.0	-	<5.0	1.0	1.0	<10.0	<10.0	<10.0	NA
MW-7	March 1990	-	9	-	7	11	-	-	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	<5.0	-	<5.0	65.5	5.1	<10.0	<10.0	<10.0	NA
MW-8	March 1990	-	-	-	-	-	-	-	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	<5.0	-	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	NA
MW-9	March 1990	-	-	-	-	-	-	-	-	-	-	-	-	-
	January 1991	<5.0	<5.0	-	<5.0	<5.0	-	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	NA
MW-10	March 1990	-	17	-	3J	-	-	-	-	-	-	-	-	-
	January 1991	6	17	-	<5.0	<5.0	-	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	NA
MW-11	January 1991	<5	8	-	<5	12	-	36	26.2	<1.0	76	22	19	69

Notes:
1) Data from Hydrogeological Investigation Report, Missouri Electric Works Site, by The Earth Technology Corporation, 1990 and Supplemental Hydrogeological Investigation Report, Missouri Electric Works Site, by The Earth Technology Corporation, 1991
2) J = Result was below detection limit and is an estimate.
3) - = Analyte was below detection limit.
4) NA= Not analyzed.
5) TCA = Trichloroethane.
6) TCE = Trichloroethene.
7) PCE = Tetrachloroethene.
8) DCA = Dichloroethane.
9) DCE = Dichloroethene.
10) DCB = Dichlorobenzene.

TABLE 3D
GROUNDWATER ANALYTICAL RESULTS
Organic Compounds - Samples Collected During Drilling
Missouri Electric Works, Cape Girardeau

Boring I.D.	DEPTH (FEET)	1,1,1-TCA (ug/L)	TCE (ug/L)	Bromodi-chloromethane (ug/L)	1,1-DCA (ug/L)	trans-1,2-DCE (ug/L)	Chloro-benzene (ug/L)	Trichloro-benzene (ug/L)	Tetrachloro-benzene (ug/L)	1,2-DCB (ug/L)	1,3-DCB (ug/L)	1,4-DCB (ug/L)	PCB (Arochlor 1260) (ug/L)
MEW-SB-11-01	81	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	<0.1
	124	**6**	<5.0	**5**	<5.0	<5.0	<5.0	<1.0	<1.0	<10.0	<10.0	<10.0	<0.1
MEW-SB-11-04	57	**8**	**10**	<5.0	**6**	**14**	**154**	**18.4**	**112**	**67.4**	**20.9**	**18.8**	**5-10**
	111	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**28.5**	<1.0	**9.1**	**3.7**	**5.7**	<0.1
MEW-SB-12-02	222-230	**5**	**9**	<5	**5**	**12**	**14**	<0.25	<0.25	**4**	<6	**10**	**300**
(Centrifuged)	222-230	<5	**7**	<5	**6**	**10**	**16**	<0.25	<0.25	**4**	<6	**10**	**7.9**
	310-315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**470 ug/kg**
(Centrifuged)	310-315	<5	<5	<5	<5	**7**	**10**	**19**	<0.05	**4**	<1.2	**15**	**0.92**
	319-405	<5	<5	<5	<5	<5	<5	<0.05	<0.05	<1.2	<1.2	<1.4	**2**

Notes:
1) Data from Supplemental Hydrogeological Investigation Report, Missouri Electric Works Site, by The Earth Technology Corporation, 1991.
2) A well was not installed in borehole MEW-SB-11-01.
3) Well MW-11 was installed in borehole MEW-SB-11-04.
4) Borehole MEW-SB-12-02 (Well MW-11A) was cased to 400 feet, but no screen was installed.
5) TCA = Trichloroethane.
6) TCE = Trichloroethene.
7) DCA = Dichloroethane.
8) DCE = Dichloroethene.
9) DCB = Dichlorobenzene.
10) NA = Not analyzed.

TABLE 3E
GROUNDWATER ANALYTICAL RESULTS
Organic Compounds - This Investigation
Missouri Electric Works, Cape Girardeau

Well ID	Date Sampled	1,1,1-TCA 8260B (ug/L)	TCE 8260B (ug/L)	PCE 8260B (ug/L)	1,1-DCA 8260B (ug/L)	Benzene 8260B (ug/L)	Chloro-benzene 8260B (ug/L)	1,2,4-TCB 8270C (ug/L)	1,3-DCB 8270C (ug/L)	1,4-DCB 8270C (ug/L)	Bis(2-ethlhexyl) phthalate 8270C (ug/L)	Phenol 8270C (ug/L)	PCB (Aroclor 1260) 8082 (unfiltered) (ug/L)	PCB (Aroicor 1260) 8082 (filtered) (ug/L)
MW-3	20-Jun-2000	<5.0	<5.0	<5.0	<5.0	**11**	**710**	<10	**15**	**37**	**21**	<10	<1.0	<2.0
MW-4	26-Sep-2000	<5.0	<5.0	<5.0	**5.6**	<5.0	<5.0	<10	<10	<10	<10	<10	<1.0	<1.0
MW-5	20-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	**21**	<10	<10	<10	<10	<10	**68**	<2.0
MW-5 *	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	**6.6**	<1.0
MW-5	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	**80**	<1.0
MW-6A	19-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<10	<1.0	<1.0
MW-7	20-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**40**	<10	<10	<10	<10	<1.0	<2.0
MW-8	26-Sep-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<10	<1.0	<1.0
MW-9	19-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<10	<1.0	<1.0
MW-10	20-Jun-2000	**7.9**	<5.0	<5.0	**6.2**	<5.0	<5.0	**23**	<10	<10	**16**	<10	<1.0	<2.0
MW-11	22-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	**24**	<10	**17**	**32**	<10	<10	**110**	**4.5**
MW-11 (D)	22-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	**68**	<10	**16**	**30**	<10	<10	**25**	**2.0**
MW-11 *	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	**6.2**	**2.1**
MW-11	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	**20**	**4.5**
MW-11 (D)	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	**18**	**2.0**
MW-11A	22-Jun-2000	<5.0	<5.0	<5.0	<5.0	<5.0	**19**	**6.3**	<10	<10	<10	<10	<1.4	<1.0
MW-11A *	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	<1.0	<1.0
MW-11A	29-Sep-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	**23**	<1.0	<1.0
MCL	-	200	5	5	-	5	100	70	-	750	-	-	0.5	-

Notes:
1) TCA = Trichloroethane
2) TCE = Trichloroethene.
3) PCE = Tetrachloroethene.
4) DCA = Dichloroethane.
5) TCB = Trichlorobenzene.
6) DCB = Dichlorobenzene.
7) NA = Not analyzed.
8) MCL = *Maximum Contaminant Levels in drinking water (State and Federal)*.
9) - = No MCL reported.
10) D = Duplicate sample.
11) * = Pre-purge sample.
12) The EPA record of decision (ROD) (EPA/ROD/R07-90/038) indicates cleanup goals of State and Federal MCLs, except for chlorobenzene (20 ug/L).

TABLE 3F
SEDIMENT ANALYTICAL RESULTS
This Investigation
Missouri Electric Works, Cape Girardeau

Well ID	Date Sampled	PCB (Arolcor 1260) EPA 8082 (ug/kg)	Detection Limit (ug/kg)	Fractional Organic Carbon (%)	Detection Limit (%)
MW-5	27-Sep-2000	**5,500**	330	2.61	0.0580
MW-11	27-Sep-2000	**1,700**	170	3.73	0.0580
MW-11A	29-Sep-2000	**49,000**	3,300	10.8	0.0580

MEW Site File
Break6_003923

TABLE 3G
GROUNDWATER ANALYTICAL RESULTS
Organic Compounds - QA/QC Results
Missouri Electric Works, Cape Girardeau

Sample I.D.	Date Sampled	1,1,1-TCA 8260B (ug/L)	1,1-DCA 8260B (ug/L)	Acetone 8260B (ug/L)	Benzene 8260B (ug/L)	Chloro-benzene 8260B (ug/L)	Methylene Chloride 8260B (ug/L)	1,2,4-TCB 8270C (ug/L)	1,3-DCB 8270C (ug/L)	1,4-DCB 8270C (ug/L)	Bis(2-ethlhexyl) phthalate 8270C (ug/L)	PCB (Aroicor 1260) 8082 (unfiltered) (ug/L)
Equipment Blank	22-Jun-2000	<5.0	<5.0	**64**	<5.0	<5.0	<5.0	<10	<10	<10	<10	<1.0
Field Blank	22-Jun-2000	<5.0	<5.0	**75**	<5.0	<5.0	<5.0	<10	<10	<10	<10	<1.0
Trip Blank	22-Jun-2000	<5.0	<5.0	**79**	<5.0	<5.0	<5.0	<10	<10	<10	<10	<1.0
Trip Blank	26-Sep-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<1.0
Trip Blank	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Field Blank	27-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Equipment blank	28-Sep-2000	<5.0	<5.0	<5.0	<5.0	<5.0	**37,000**	<10	<10	<10	<10	<1.0
Trip Blank	29-Sep-2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Equipment blank	29-Sep-2000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<10	<10	<1.0

Notes:
1) TCA = Trichloroethane.
2) DCA = 1,1-Dichloroethane.
3) TCB = Trichlorobenzene.
4) DCB = Dichlorobenzene.
5) NA = Not analyzed.

TABLE 4
FIELD MEASURED FRACTURE DATA
Missouri Electric Works, Cape Girardeau

Fracture Strike (Dip)	Vertical Fracture Length (LV) (m)	Horizontal Fracture Length (LH) (m)	Fracture Spacing (Rock block length) (m)	Aperture (b) (m)	Comments
Road cut #1					Matrix-hard grey 1st, vfg, massive, occril calcite veins. Ord. Plattin Fm., sli dolomite Approximate Elevation: 137 Feet AMSL
045 (90)	+>5			0.5	
035	+>5			0.5	
045			2	0.5	
(sinkhole)			5		2 m diameter (sinkhole)
046			5		
051			4		
055				0.5	
054			3		
075			3	0.5	
054			5	1	
052			6	2	
045			4		3 m diameter sinkhole (3 m deep)
055			6		
053			9		
053			4		
053			3		
053			5		
053			8		
053			9		
053			6		
053			5		
Road Cut #2					
139	+5		10	2	
161	+4			1	
059	9		9		
059			8		
059			2		
158	+2		3		
080	+3				
170	+2		1		
170			9		
168	1		4	0.4	
000	+4				
064	3		3		
064			2.5		

Notes:
1) AMSL = Above Mean Sea Level.
2) See Figure 10 for outcrop locations.

MEW Site File
Break6_003925

TABLE 4
FIELD MEASURED FRACTURE DATA
Missouri Electric Works, Cape Girardeau

Fracture Strike (Dip)	Vertical Fracture Length (LV) (m)	Horizontal Fracture Length (LH) (m)	Fracture Spacing (Rock block length) (m)	Aperture (b) (m)	Comments
Road Cut #2 (Continued)					
055	6			0.5	
156	2		6	0.3	
065	16		6		
025	+3		2	0.5	
165	+6		5	0.5	
158	+4		12	0.5	
000	+3		2		
000	+3		5		
058	+5		5		
169	+3		3		
169			8		
169			3		
149	+3		12	0.5	
061	10				
139	+5		5		
170	+50			1.5	
065	6				
142	+3,5		6	1.5	
015	+3			2	
025	+3		3		
025	+3		6		
155	+4			1	
068	+3,5		3.5		
129	+5		5		
166	+2,5		2		
166			10		
176	+2,5		20	0.5	
Pavement					Approximate Elevation: 117 Feet AMSL
160	9				
126	12				
025	10				

MEW Site File
Break6_003926

Notes:
1) AMSL = Above Mean Sea Level.
2) See Figure 10 for outcrop locations.

TABLE 4
FIELD MEASURED FRACTURE DATA
Missouri Electric Works, Cape Girardeau

Fracture Strike (Dip)	Vertical Fracture Length (LV) (m)	Horizontal Fracture Length (LH) (m)	Fracture Spacing (Rock block length) (m)	Aperture (b) (m)	Comments
East Missouri State Quarry					Approximate Elevation: 230 Feet AMSL
175	15				
071	1				
162	6				
162	3		5		
162			12		
037	10	35	27		
168	35	50			major feature
150	35	120	20		major feature, weeping
021	45		28	0.08	
020	45		37		
020	35		35		
020	60		65		250 gpm flow at 200 foot level
024	70		10	1	
125	60	28	28		
055	70	10			
067	70	38			
160	70	50	25		major feature mud-filled
035	73		35	10	
030	6	12			
152	3	5			
030			10		
000	6	18			
130	6	10			
024		8	10		
160		9			
044	3			1.5	
042	3			2	
045				0.4	infilled with mud

MEW Site File
Break6_003927

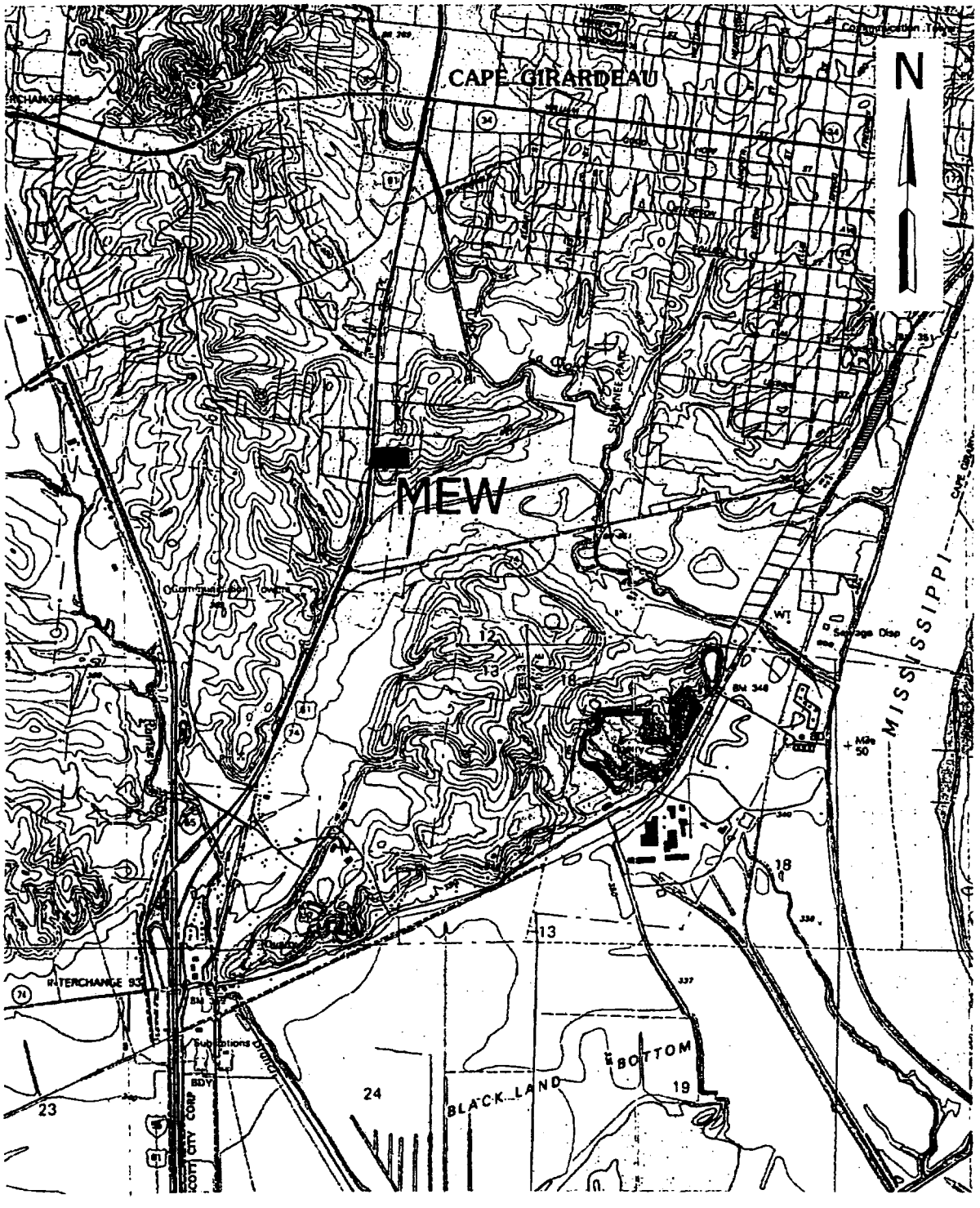
Notes:
1) AMSL = Above Mean Sea Level.
2) See Figure 10 for outcrop locations.

TABLE 4
FIELD MEASURED FRACTURE DATA
Missouri Electric Works, Cape Girardeau

Fracture Strike (Dip)	Vertical Fracture Length (LV) (m)	Horizontal Fracture Length (LH) (m)	Fracture Spacing (Rock block length) (m)	Aperture (b) (m)	Comments
Lone Star Quarry (120 Foot Bench, North Face)					
160	35		5		
170	35		15		
195 (70 S)	70	500			*major fault*
020					
150	10	10	10		truncated by 050 facture
050	10	10	10		
165	35		45	0.5	
175	35				
010	25				*truncated*
062	35				
102					cemented

Notes:
1) AMSL = Above Mean Sea Level.
2) See Figure 10 for outcrop locations.

MEW Site File
Break6_003928



NOTES:
1) BASE MAP FROM USGS 7.5 MINUTE CAPE GIRARDEAU QUADRANGLE (1965, REVISED 1993).
2) ALL LOCATIONS ARE APPROXIMATE.

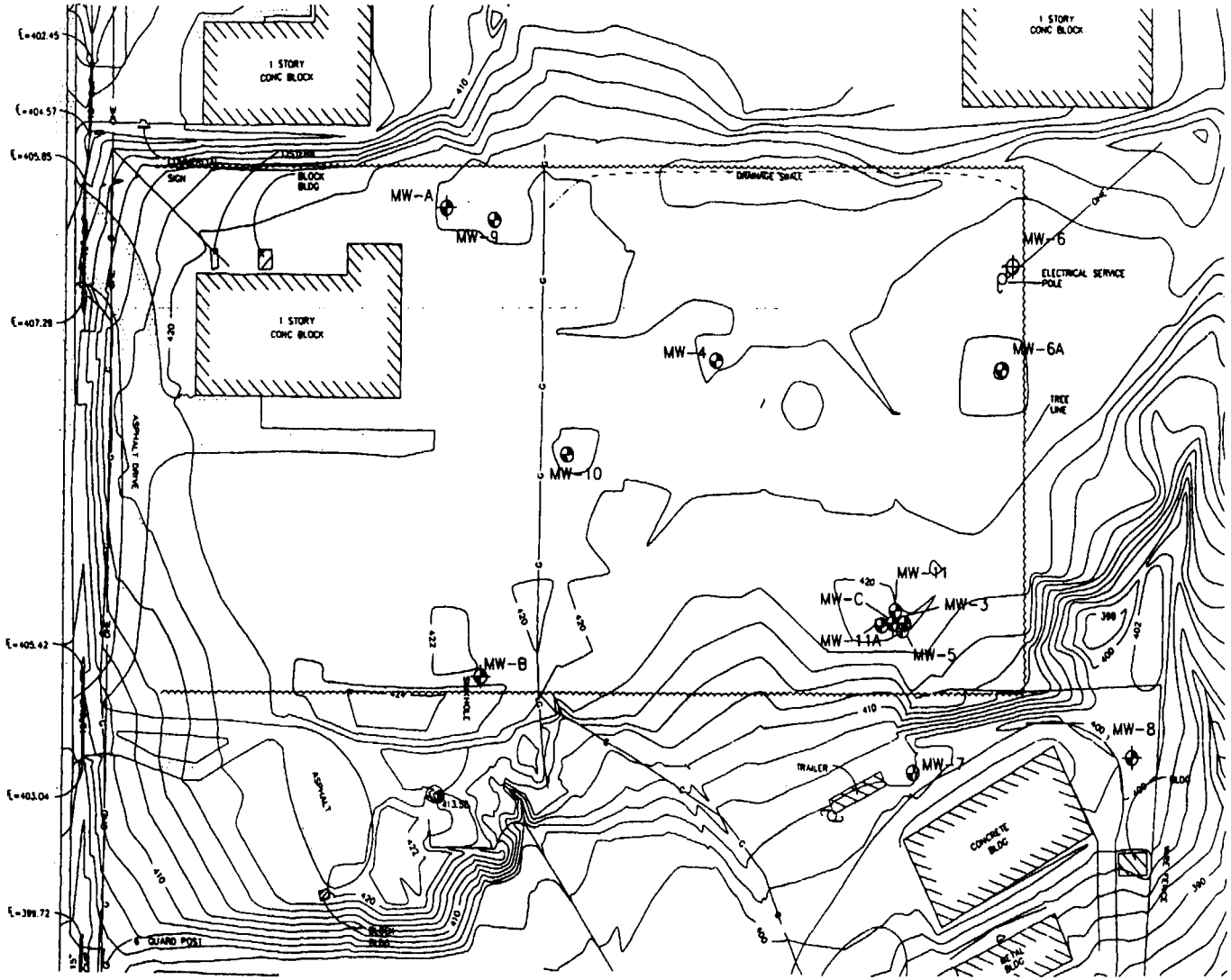
APPROXIMATE SCALE IN MILES

0 0.5 1

DRAWN BY: KDM	APPROVED BY: KDM	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 11/17/00	DATE: 11/17/00		PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
EDITED BY:	SCALE: 1 inch = 0.5 miles		TITLE: SITE LOCATION MAP
DATE:		PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.	FILENAME: FIGURE_1.CDR / FIGURE No: 1

MEW Site File
Break6_003929

MEW Site File
Break6_003930



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- ABANDONED WELL

NORTH

0 80 160

Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

MW-B and MW-8 abandoned September 2000.

DRAWN BY: MLA	APP'D BY: JJJC
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/14/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

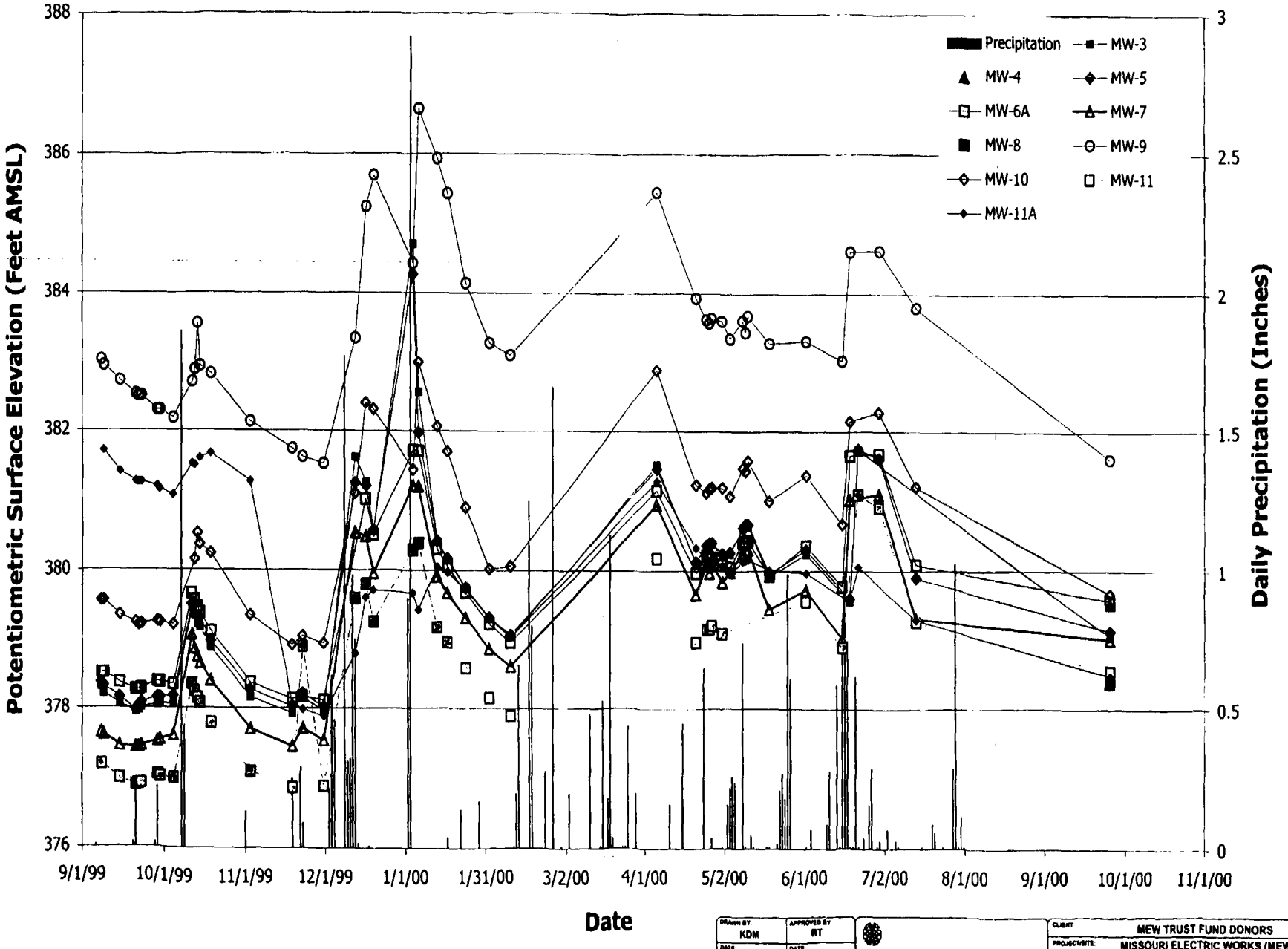
CLIENT: MEW SITE TRUST FUND DONORS

PROJECT/SITE: 093-001
MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO

TITLE: SITE PLAN

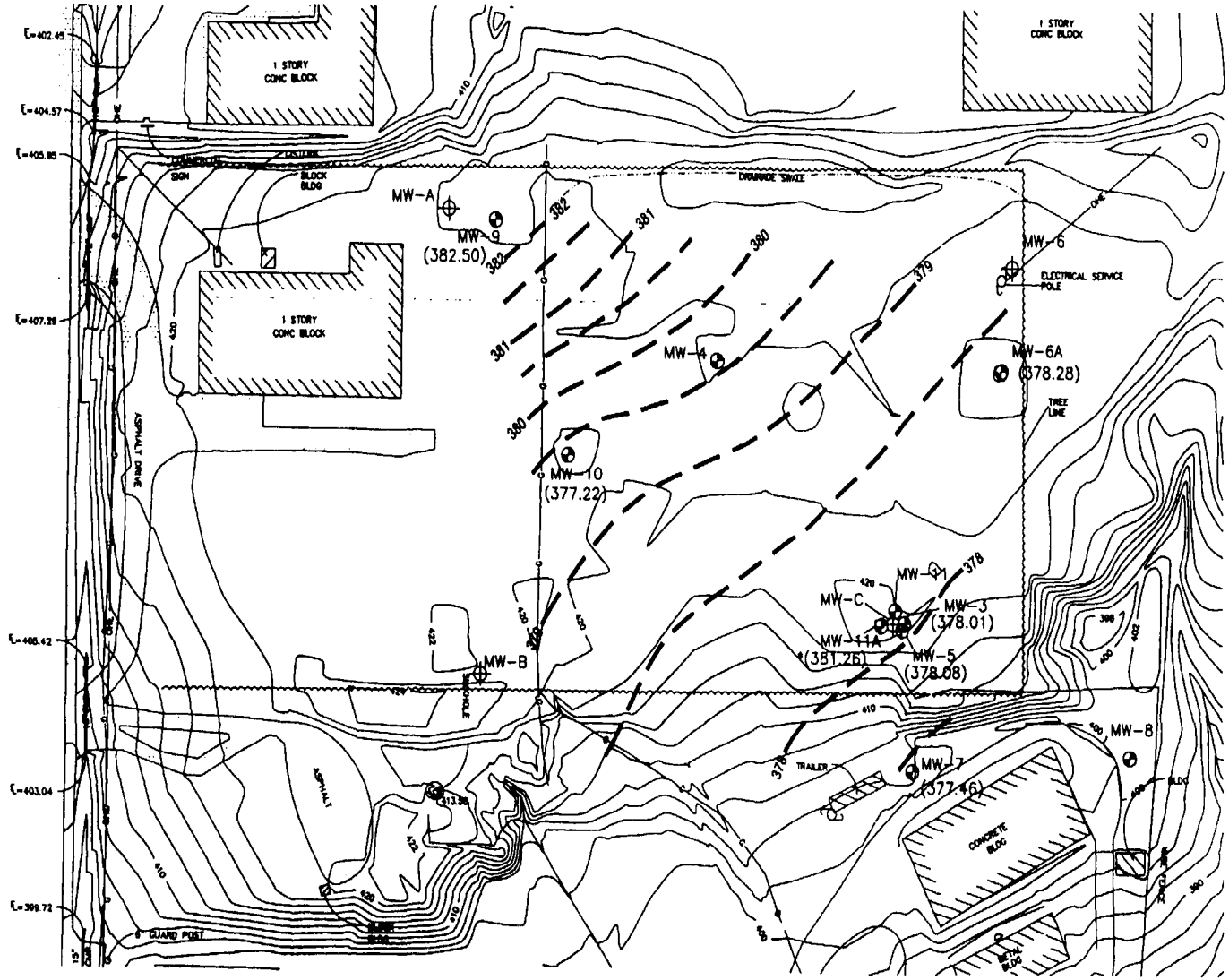
REV: 1 DWG/FIGURE No.: 2

MEW Site File
Break6_003931



DRAWN BY: KDM	APPROVED BY: RT	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 7/27/00	DATE: 11/18/00	PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.	PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
EDITED BY: KDM	SCALE: -		TITLE: HYDROGRAPHS AND PRECIPITATION DATA
DATE: 10/18/00			FILENAME: FIGURE_1.COR — FIGURE No. 3

MEW Site File
Break6_003932



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- (382.50) GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL)
- 382 — — GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL) – LOCATION APPROXIMATE

NORTH

0 80 160

Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

MW-B and MW-8 abandoned September 2000.

* Not included in contouring.

DRAWN BY: MLA	APP'D BY: JJJC
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/27/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS

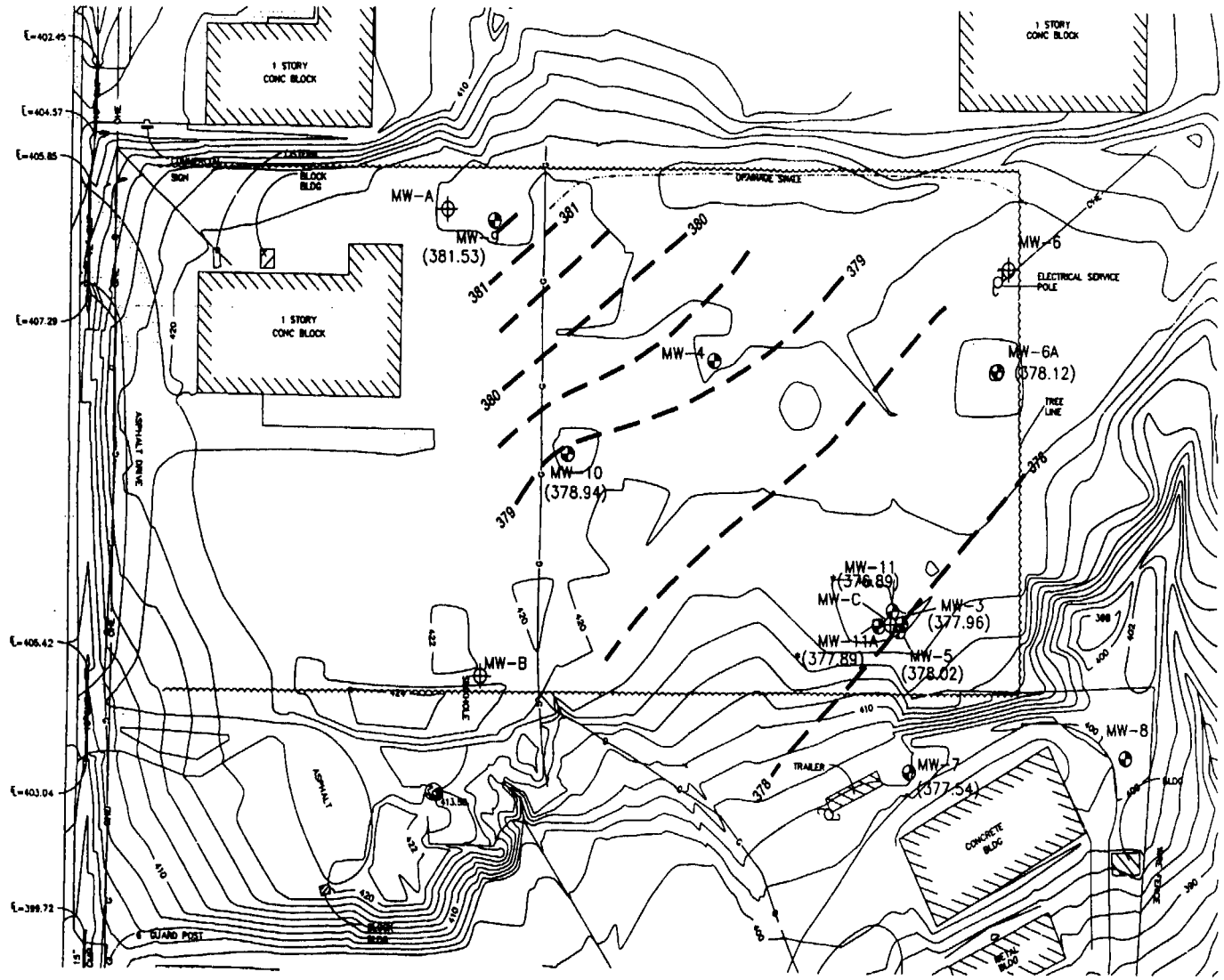
PROJECT/SITE: 003-001
MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO

TITLE: GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP- SEPTEMBER 23, 1999

REV: 1

DWG/FIGURE No.: 4A

MEW Site File
Break6_003933



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- (380.00) — — GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL)

NORTH

0 80 160
Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

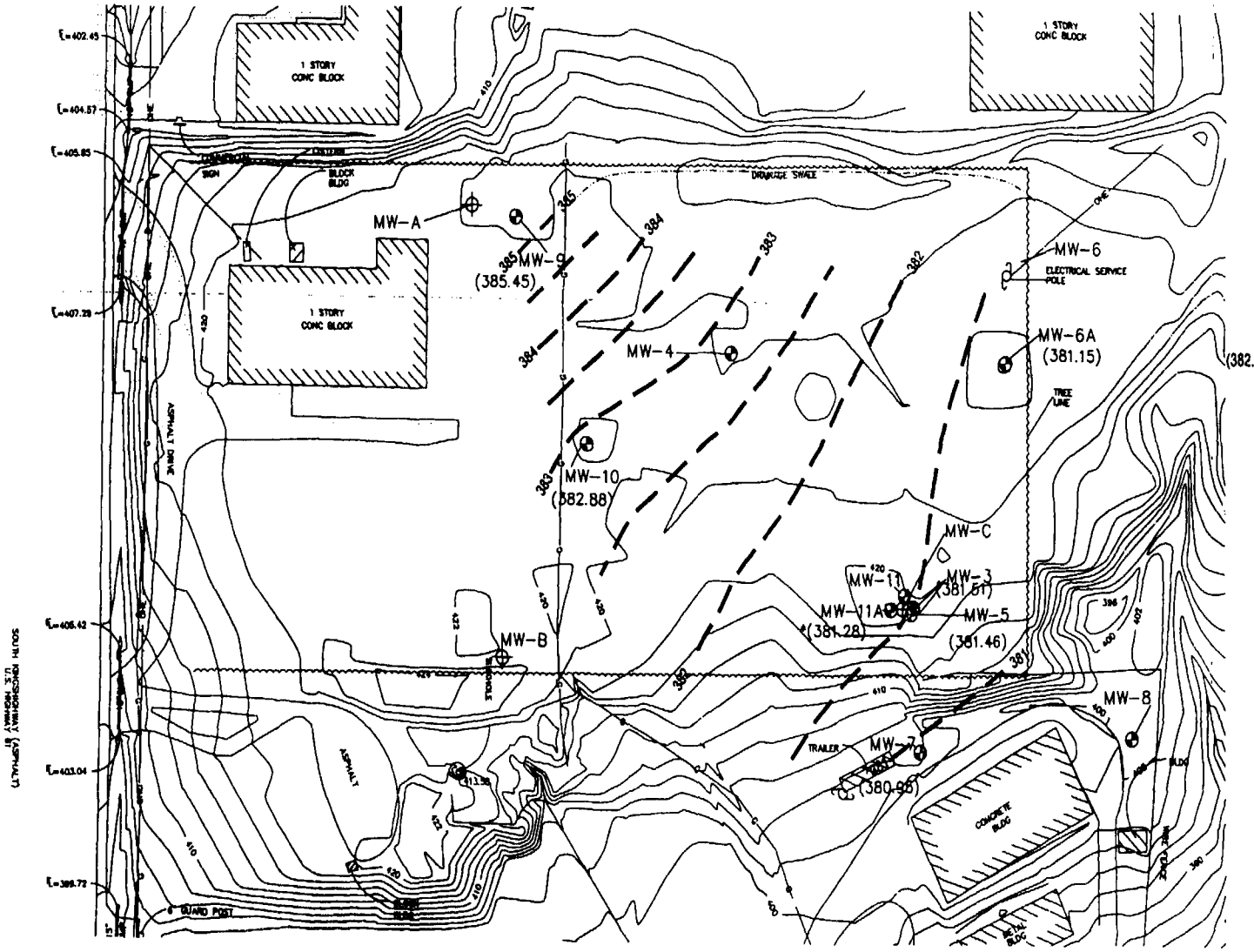
MW-B and MW-8 abandoned September 2000.
* Not included in contouring.

DRAWN BY: MLA	APP'D BY: JJJC
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/27/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS
PROJECT/SITE: 093-001
MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO
TITLE: GROUND WATER POTENTIOMETRIC SURFACE CONTOUR MAP - DECEMBER 1, 1999
REV: 1
DWG/FIGURE No.: 4B

MEW Site File
Break6_003934



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- (382.50) GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL) – LOCATION APPROXIMATE

NORTH

0 80 160
Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

MW-B and MW-8 abandoned September 2000.

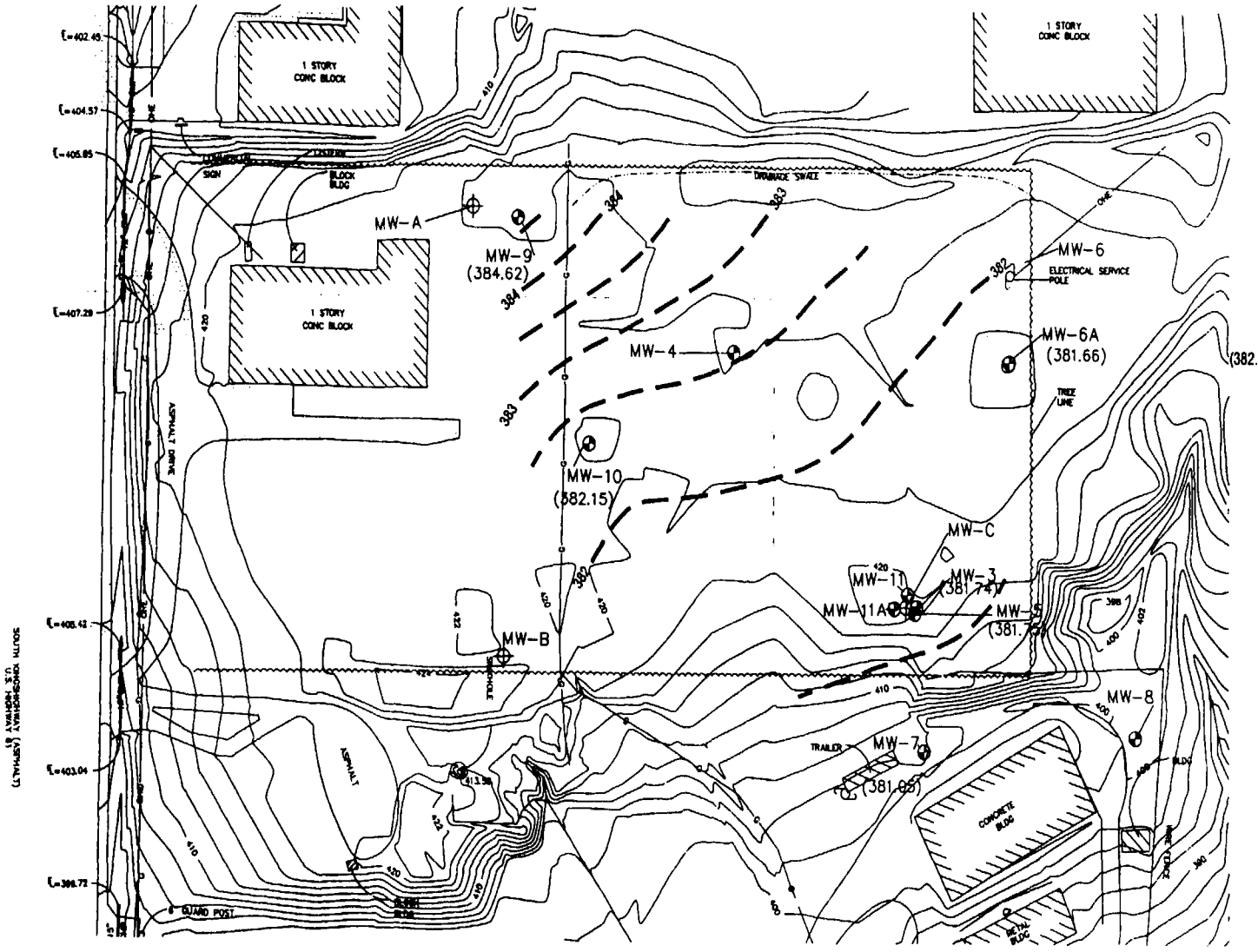
* Not included in contouring.

DRAWN BY: MLA	APP'D BY: JJJC
DATE: 06/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/14/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS
PROJECT/SITE: 093-001 MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO
TITLE: GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP - APRIL 6, 2000
REV: 1
DWG/FIGURE No.: 4C

MEW Site File
Break6_003935



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- (382.50) GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL) – LOCATION APPROXIMATE

NORTH

0 80 160
Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

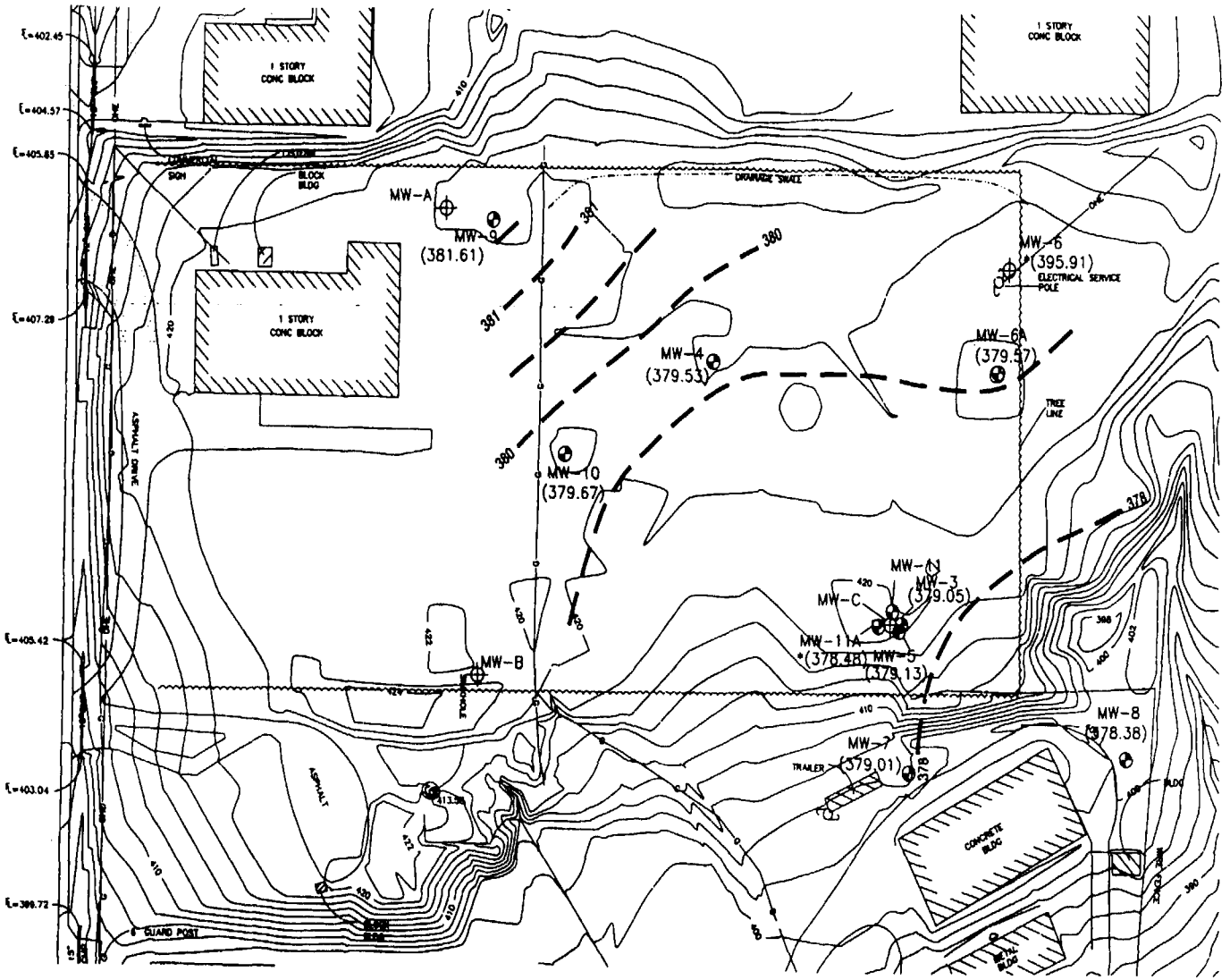
MW-B and MW-8 abandoned September 2000.

DRAWN BY: MLA	APP'D BY: JJJC
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/27/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS
PROJECT/SITE: 093-001
MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO
TITLE: GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP- JUNE 19, 2000
REV: 1
DWG/FIGURE NO.: 4D

MEW Site File
Break6_003936



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL
- (382.50) GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL)
- 382 — — GROUNDWATER POTENTIOMETRIC ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL) – LOCATION APPROXIMATE

NORTH

0 80 160

Approximate Scale in Feet

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:

MW-B and MW-8 abandoned September 2000.

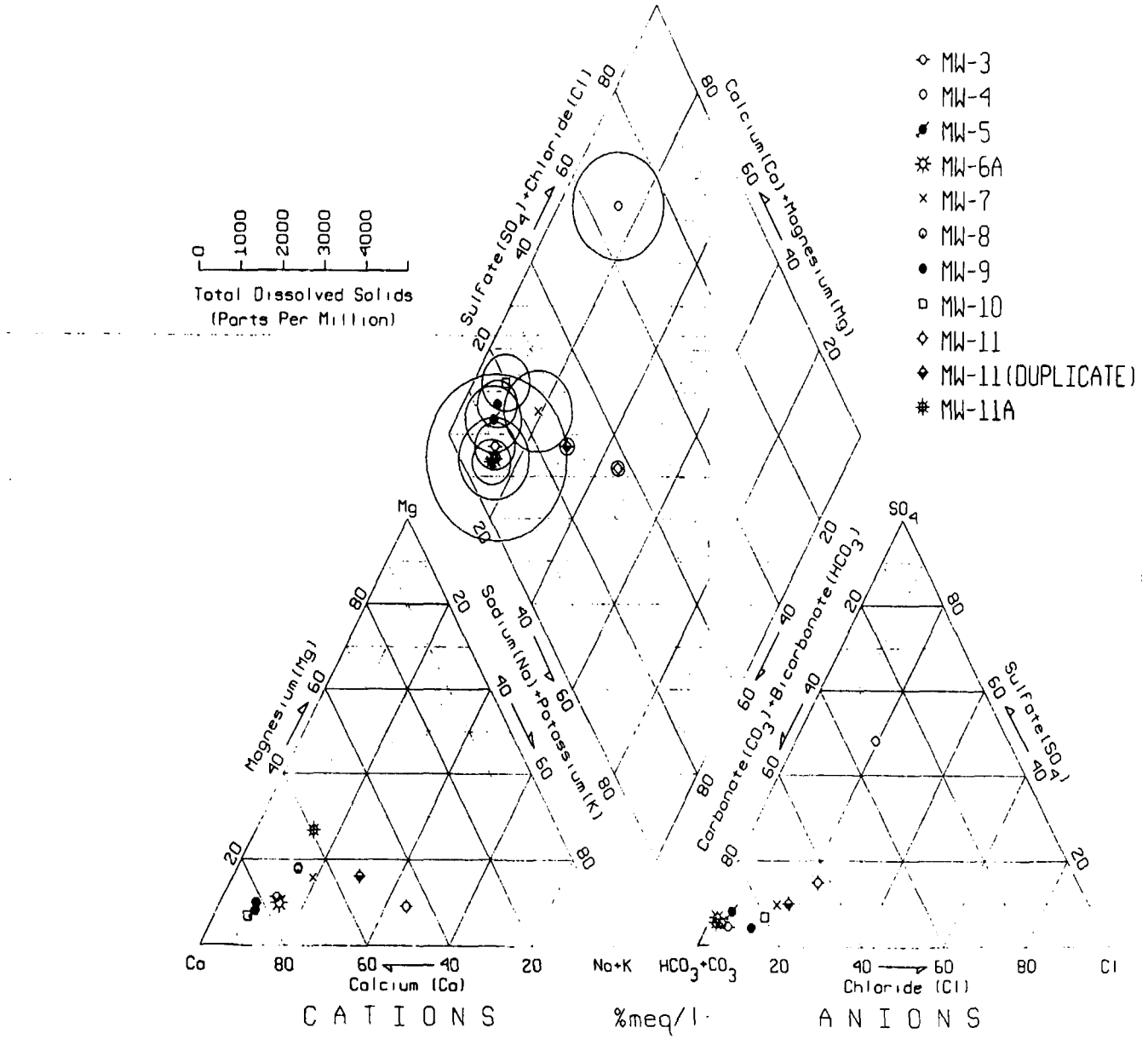
* Not included in contouring.

DRAWN BY: MLA	APP'D BY: JJC
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/27/00	

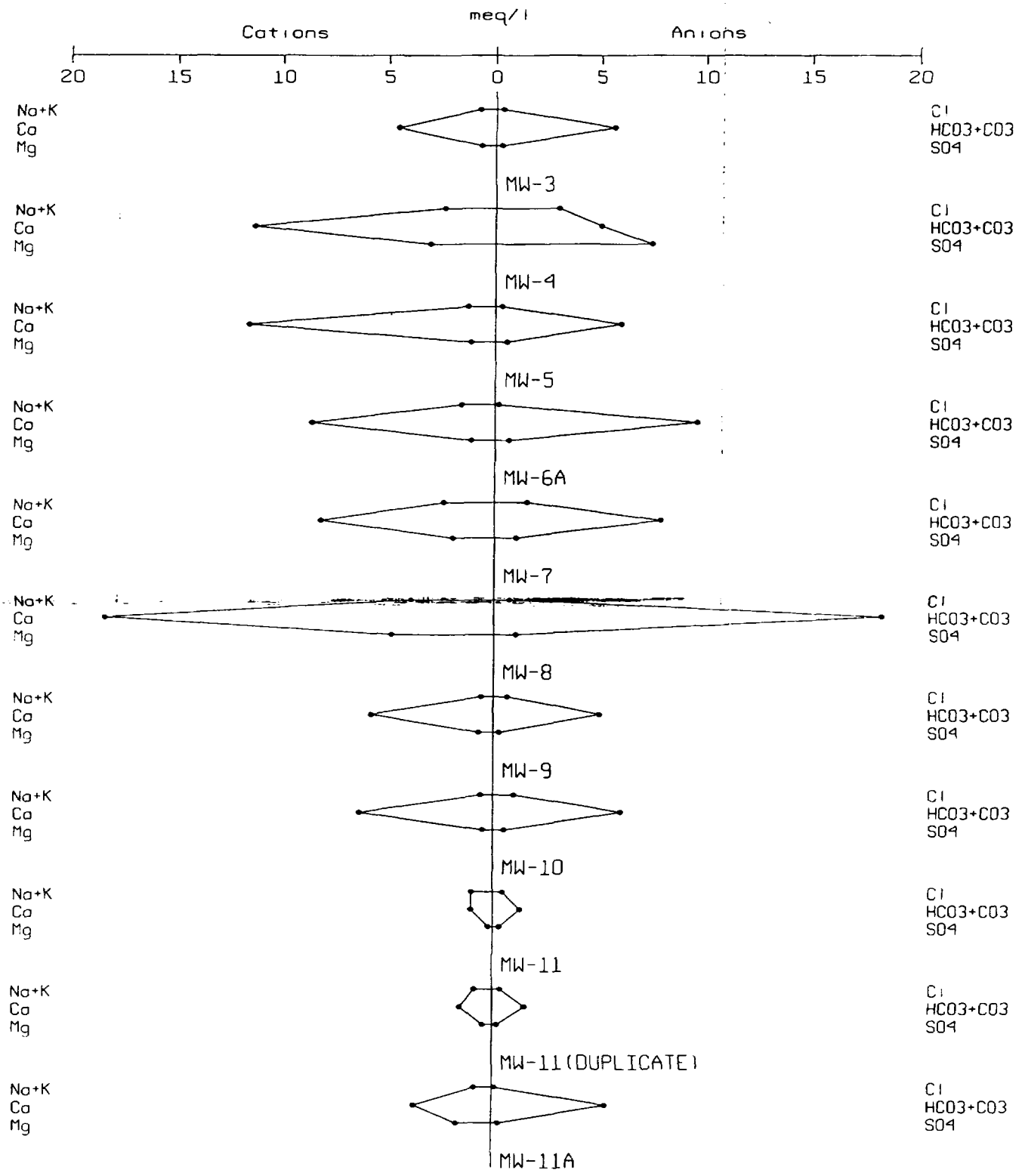
KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS
PROJECT/SITE: 093-001 MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO
TITLE: GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP- SEPTEMBER 26, 2000
REV: 1
DWG/FIGURE No.: 4E

MEW Site File
Break6_003937



DRAWN BY: KDM	APPROVED BY: RT	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 7/27/00	DATE: 11/18/00	PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT	PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
REVISED BY: KDM	SCALE: -		TITLE: PIPER DIAGRAM
DATE: 10/18/00			FILENAME: FIGURE_1.CDR — FIGURE No: 5



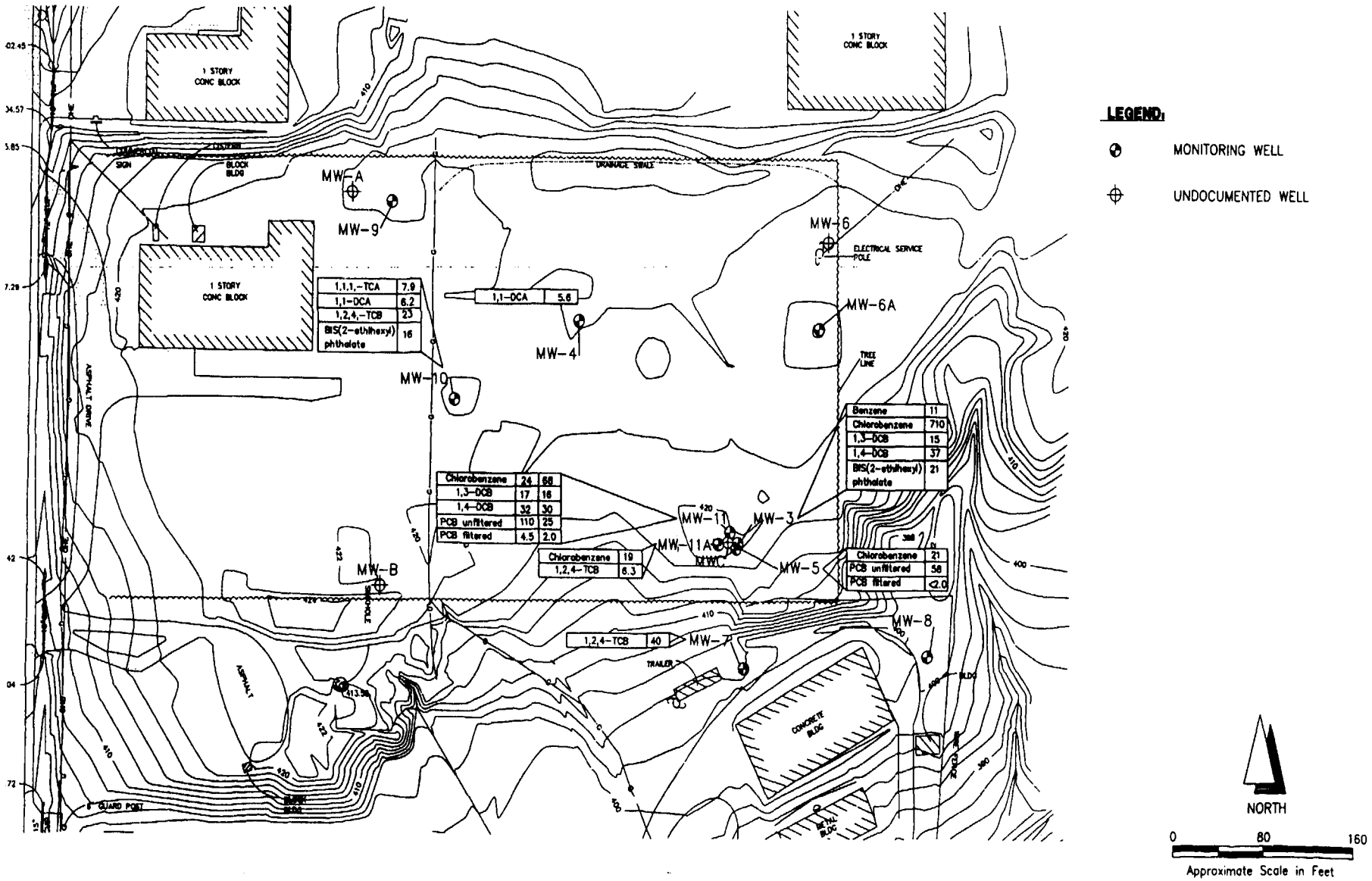
MEW Site File
Break6_003938

NOTES:	DRAWN BY: KDM	APPROVED BY: RT	KOMEX ENVIRONMENT AND WATER RESOURCES
	DATE: 7/26/00	DATE: 11/18/00	PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT
	REVISED BY: KDM	SCALE: -	
	DATE: 10/18/00		

CLIENT:	MEW TRUST FUND DONORS
PROJECT/SITE:	MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
TITLE:	STIFF DIAGRAMS
FILENAME: FIGURE_6.CDR	FIGURE No: 6

MEW Site File

Break6_003939



LEGEND:

- MONITORING WELL
- UNDOCUMENTED WELL

REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:
Only detected compounds are shown.
No compounds were detected in wells MW-6A, MW-8, and MW-9.
All concentrations are in ug/L.
MW-4 and MW-8 sampled in September 2000.
All other wells sampled in June 2000.
MW-6 and MW-8 were not sampled due to insufficient water.
MW-B and MW-8 abandoned September 2000.

DRAWN BY: MLA	APP'D BY: KDM
DATE: 08/13/99	DATE:
EDITED BY: EL	SCALE: 1" = 80'
DATE: 11/14/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT: MEW SITE TRUST FUND DONORS

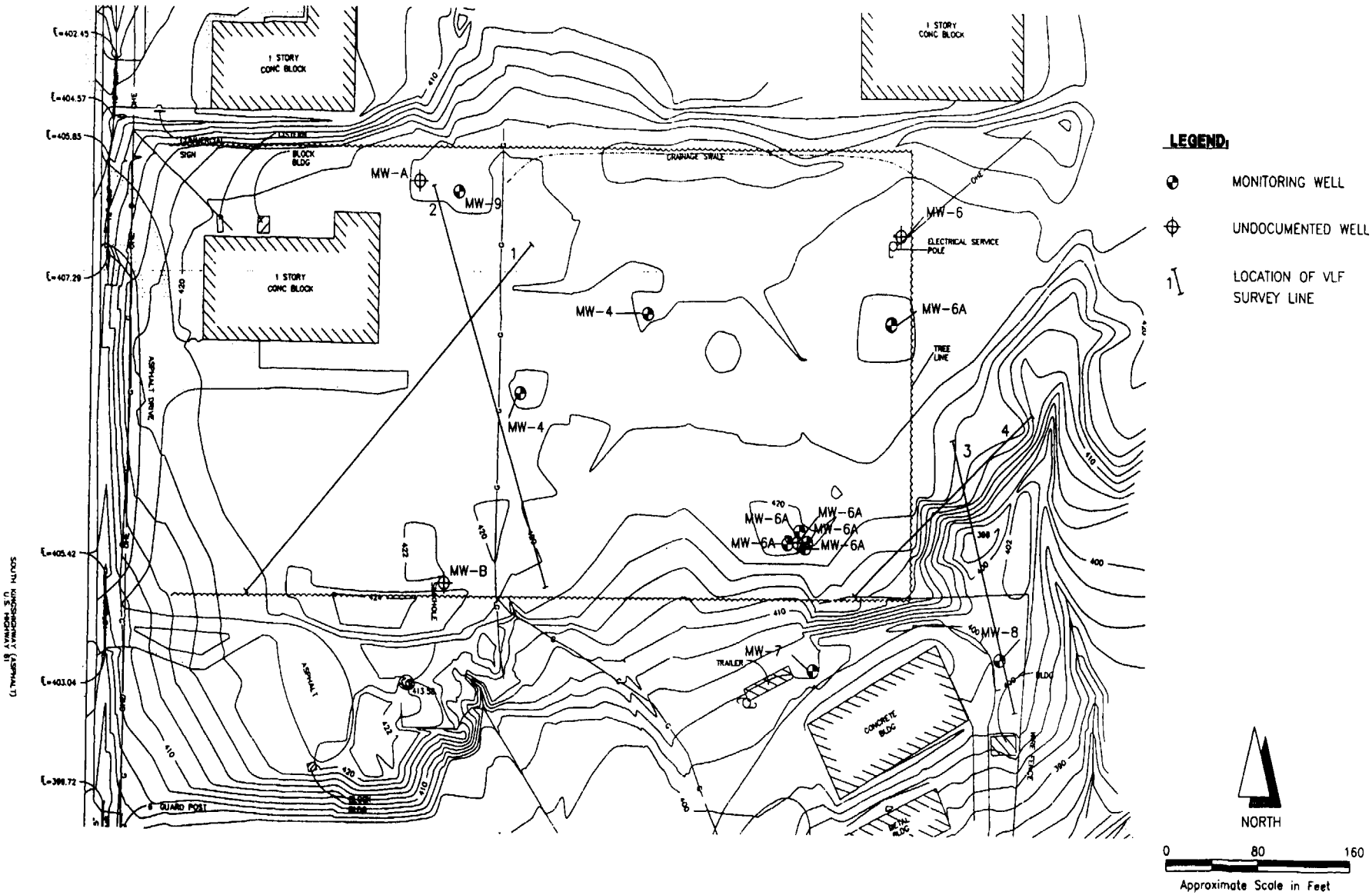
PROJECT/SITE: 093-001
MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO

TITLE: ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER - INITIAL SAMPLING EVENT

REV: 1 DWG/FIGURE No.: 7

MEW Site File

Break6_003940



REV	DESCRIPTION	DATE	REV BY	CHK'D BY

NOTES:
VLF Survey conducted on June 23, 2000

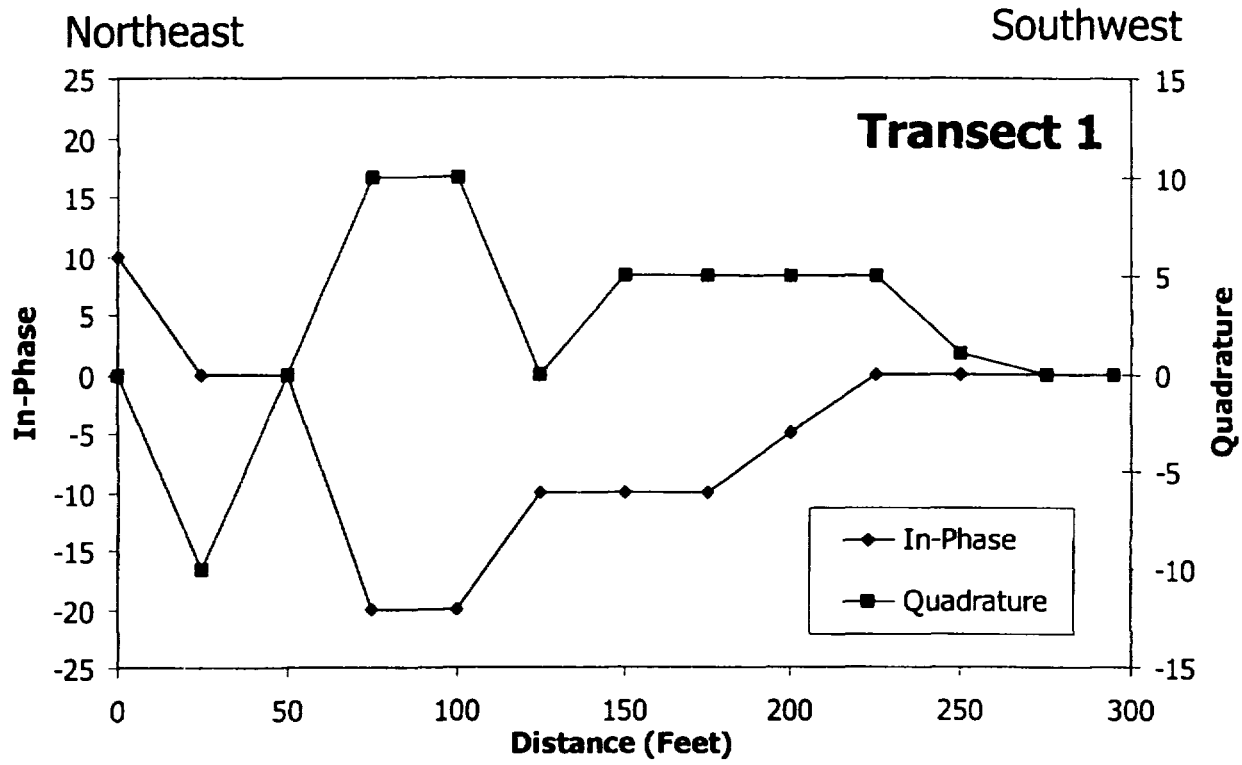
MW-B and MW-8 abandoned September 2000.

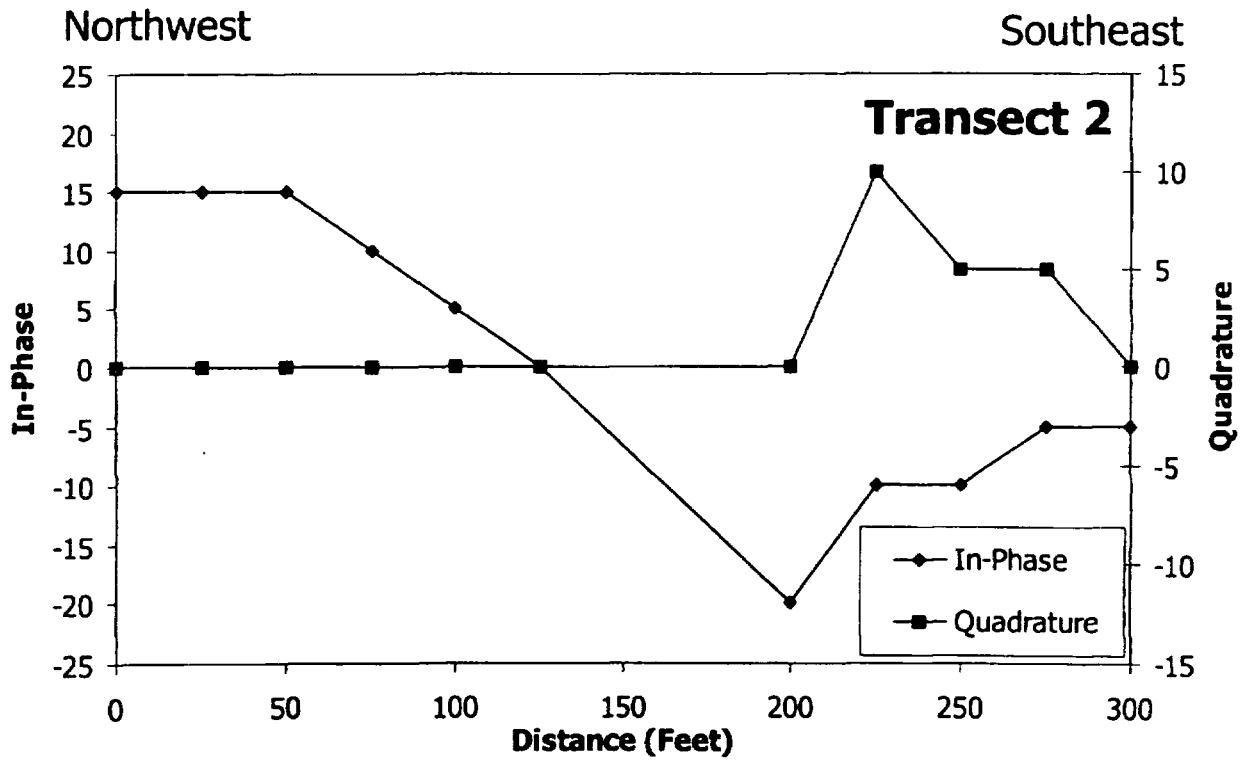
DRAWN BY: MLA	APP'D BY: JJJC
DATE: 08/13/99	DATE:
EDITED BY: CIR	SCALE: 1" = 80'
DATE: 11/14/00	

KOMEX
ENVIRONMENT AND WATER RESOURCES

CLIENT:	MEW SITE TRUST FUND DONORS
PROJECT/SITE:	093-001 MISSOURI ELECTRIC WORKS (MEW) - CAPE GIRARDEAU, MO
TITLE:	VLF GEOPHYSICAL LINE LOCATIONS
REV: 1	DWG/FIGURE No.: 8

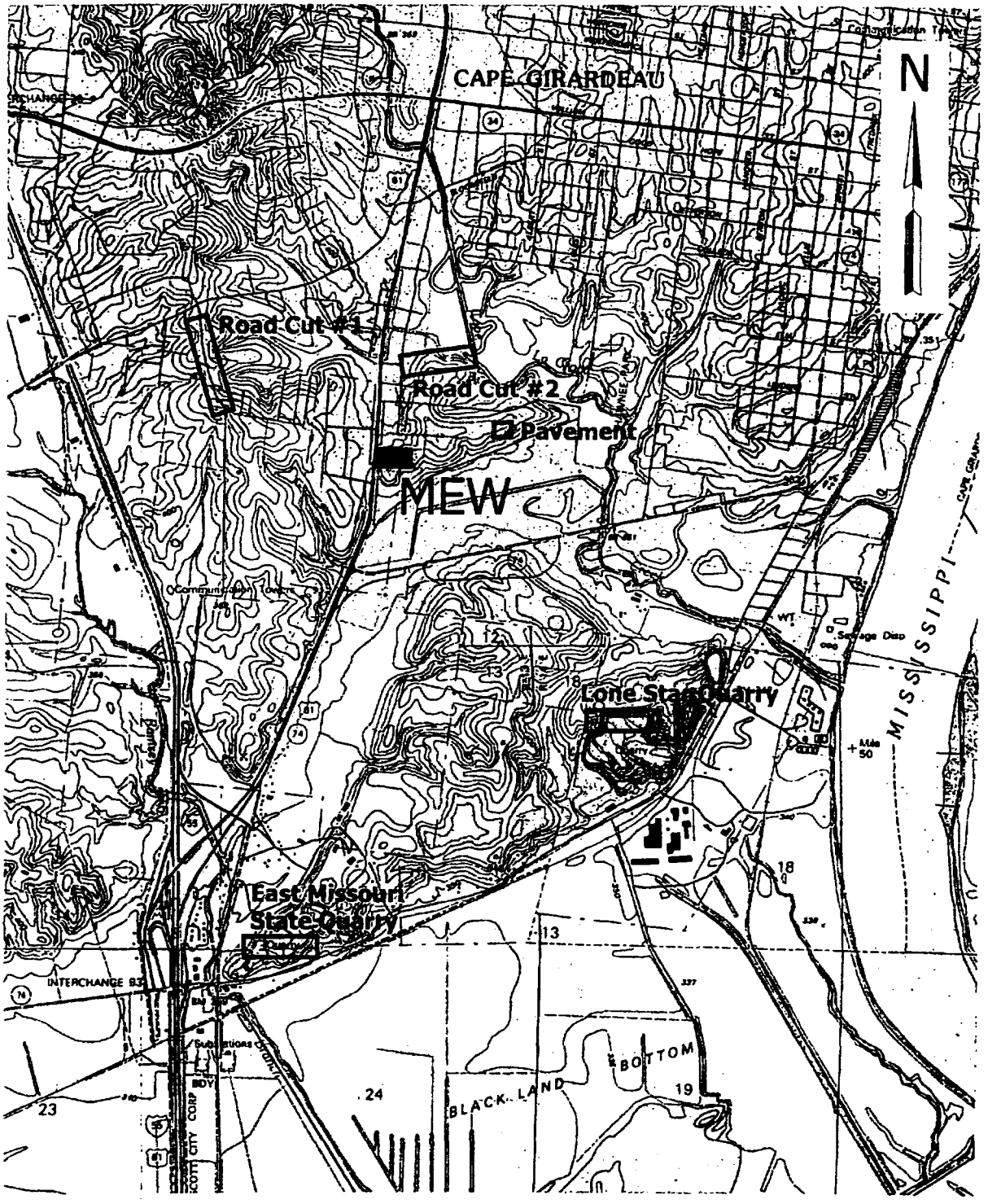
H2O projects on 'Komex1' \090-099\093001\AutoCad\MEW-VLF-GEO-LINE-LOC.dwg





MEW Site File
Break6_003941

DRAWN BY: KDM	APPROVED BY: KDM	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 11/17/00	DATE: 11/17/00		PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
EDITED BY:	SCALE: -		TITLE: VLF SURVEY RESULTS
DATE:		PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.	FILENAME: FIGURE_9.CDR / FIGURE No: 9



NOTES:
1) BASE MAP FROM USGS 7.5 MINUTE CAPE GIRARDEAU QUADRANGLE (1965, REVISED 1993).
2) ALL LOCATIONS ARE APPROXIMATE.

APPROXIMATE SCALE IN MILES

0 0.5 1

DRAWN BY: KDM	APPROVED BY: KDM
DATE: 11/17/00	DATE: 11/17/00
EDITED BY:	SCALE: 1 inch = 0.5 miles
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT: MEW TRUST FUND DONORS

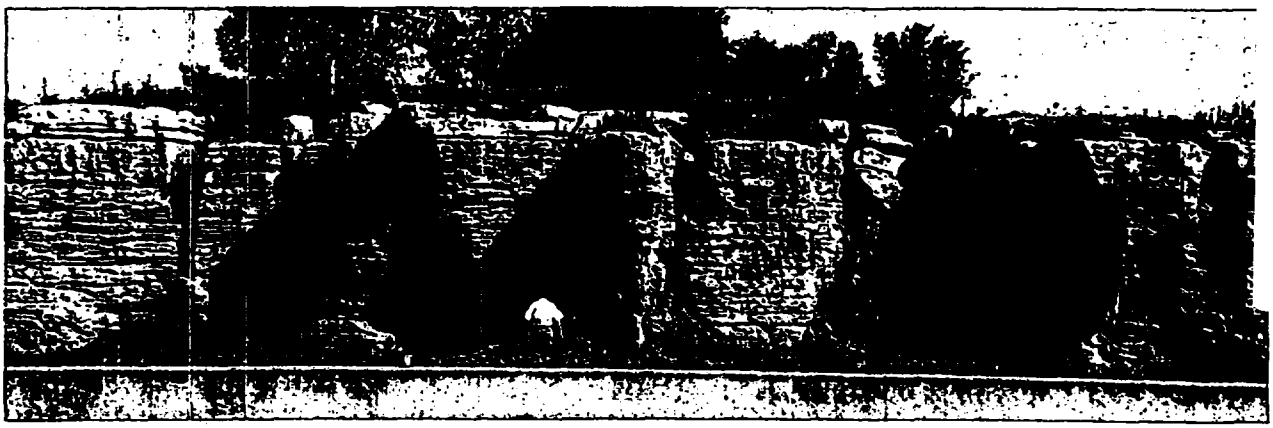
PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO

TITLE: OUTCROP LOCATION MAP

FILENAME: FIGURE_10.CDR

FIGURE No: 10

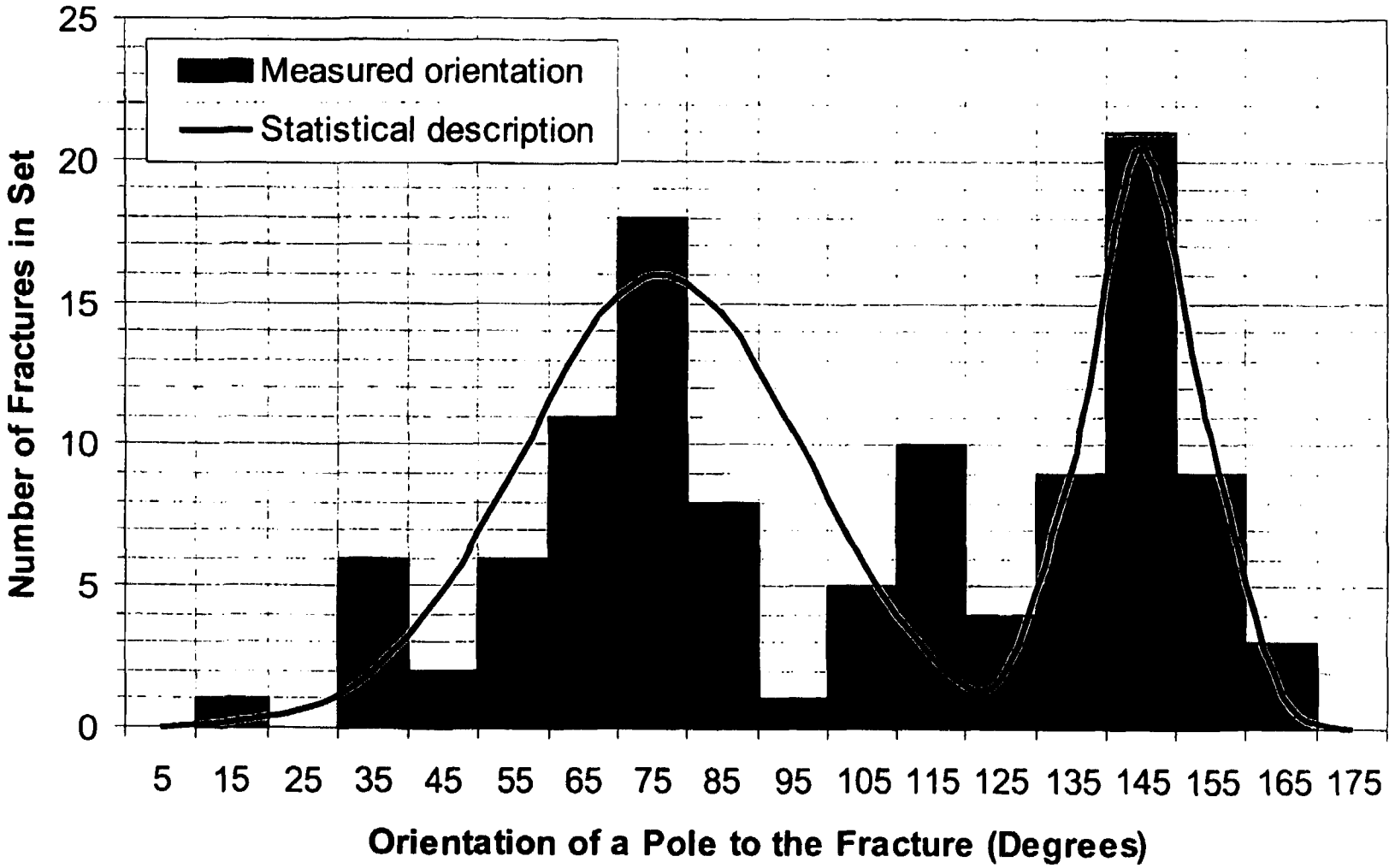
MEW Site File
Break6_003942



DRAWN BY: KDM	APPROVED BY: KDM	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 11/17/00	DATE: 11/17/00		PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
EDITED BY:	SCALE: -		TITLE: PHOTOS OF TYPICAL PLATTIN FORMATION EXPOSURES
DATE:		PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.	FILENAME: FIGURE_11.CDR / FIGURE No: 11

MEW Site File
Break6_003943

MEW Site File
Break6_003944



NOTES:

DRAWN BY: KDM	APPROVED BY: PEH
DATE: 8/18/00	DATE: 8/18/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT: MEW TRUST FUND DONORS

PROJECT/SITE: MISSOURI ELECTRICAL WORKS (MEW) CAPE GIRARDEAU, MO

TITLE: MEASURED FRACTURE DISTRIBUTION AND STATISTICAL DESCRIPTION

FILENAME: FIGURE_12.CDR

FIGURE No: 12

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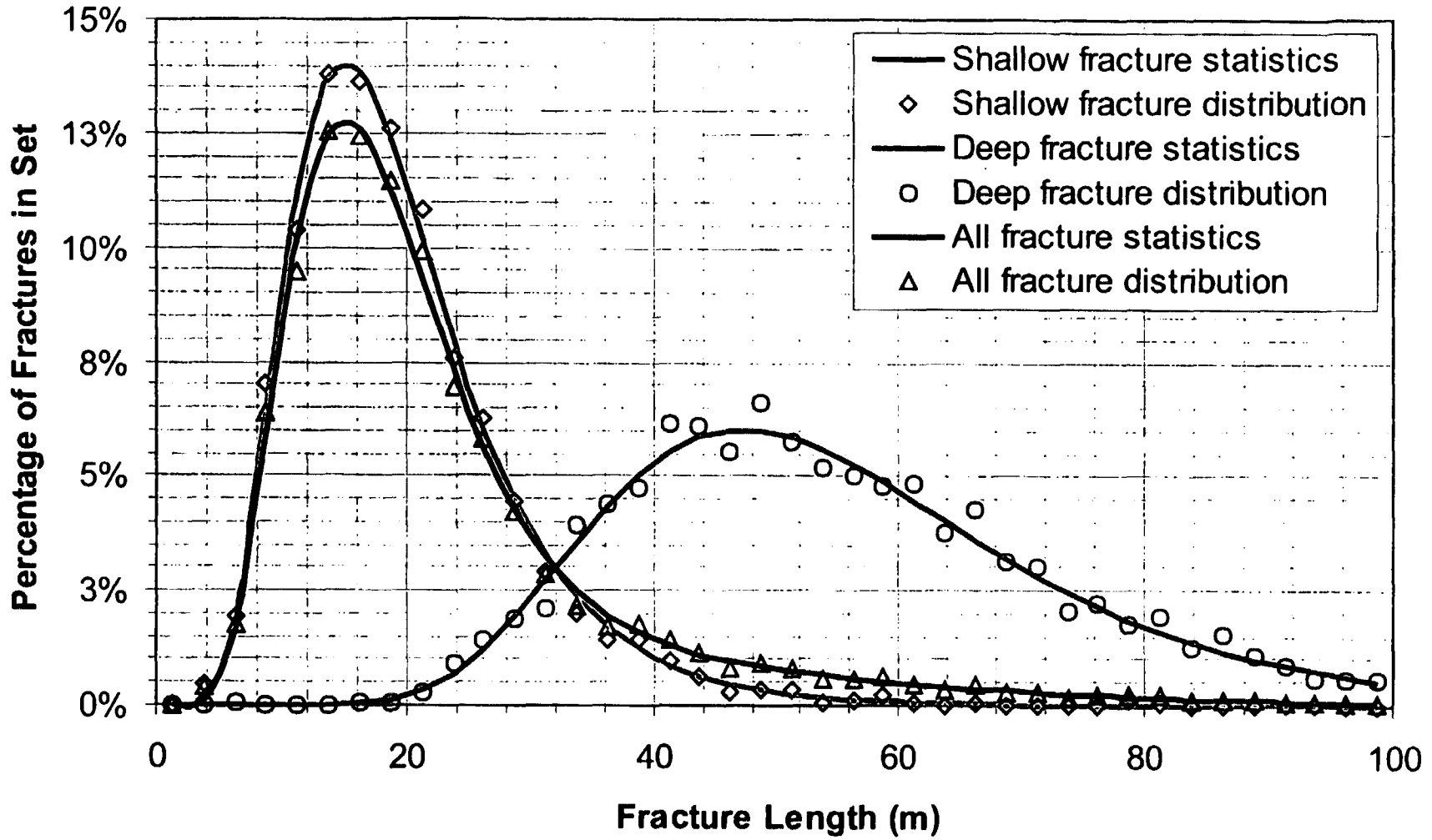
MEW Site File
Break6_003945



NOTES:

DRAWN BY: KDM	APPROVED BY: PEH
DATE: 8/18/00	DATE: 8/18/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT:	MEW TRUST FUND DONORS
PROJECT/SITE:	MISSOURI ELECTRICAL WORKS (MEW) CAPE GIRARDEAU, MO
TITLE:	MEASURED AND MODELED FRACTURE LENGTH DISTRIBUTION
FILENAME: FIGURE_13.CDR	FIGURE No: 13

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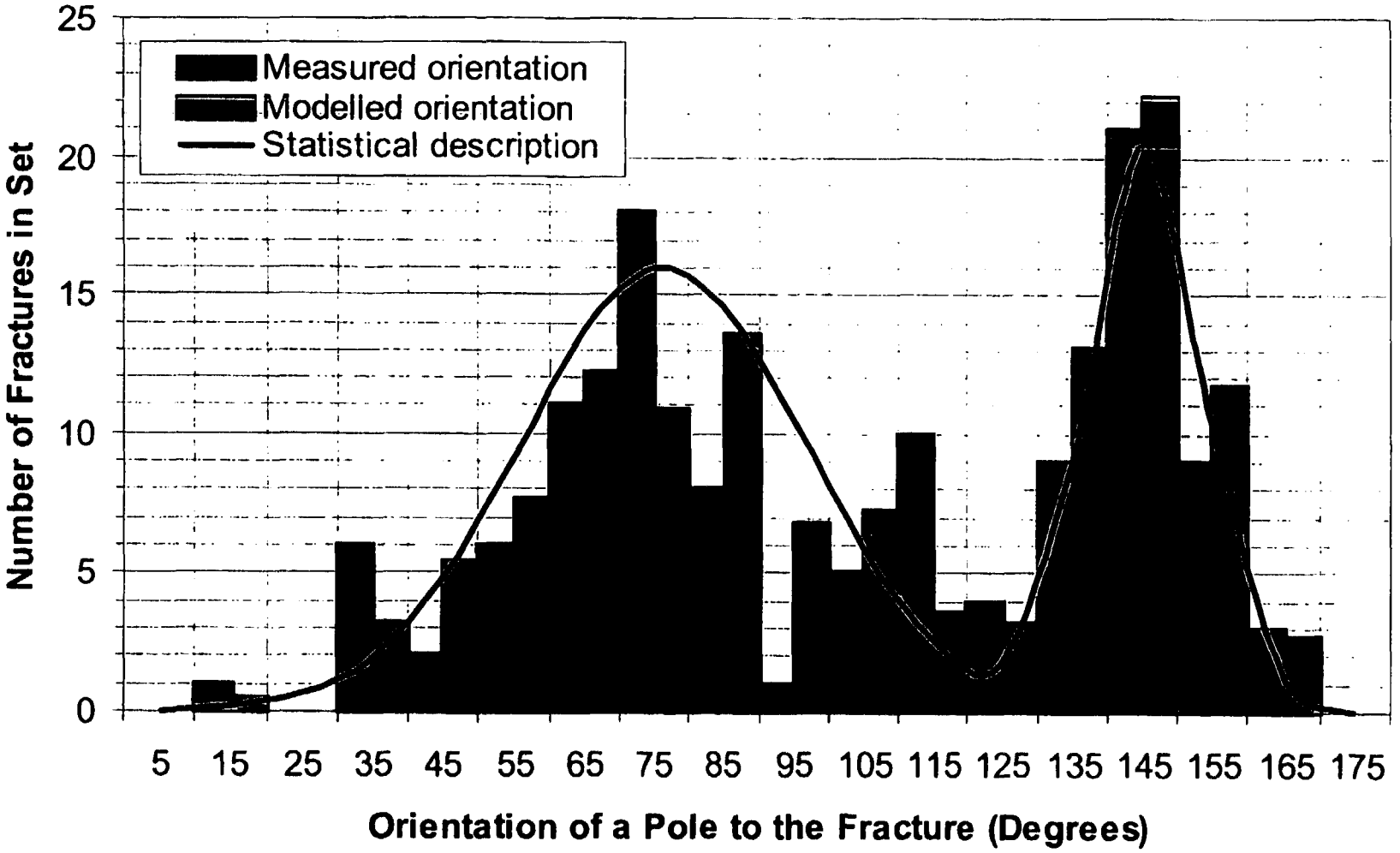
MEW Site File
Break6_003946



NOTES:

DRAWN BY: KDM	APPROVED BY: PEH
DATE: 8/18/00	DATE: 8/18/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT:	MEW TRUST FUND DONORS
PROJECT/SITE:	MISSOURI ELECTRICAL WORKS (MEW) CAPE GIRARDEAU, MO
TITLE:	MEASURED AND MODELED FRACTURE ORIENTATION DISTRIBUTION
FILENAME: FIGURE_14.CDR	FIGURE No: 14

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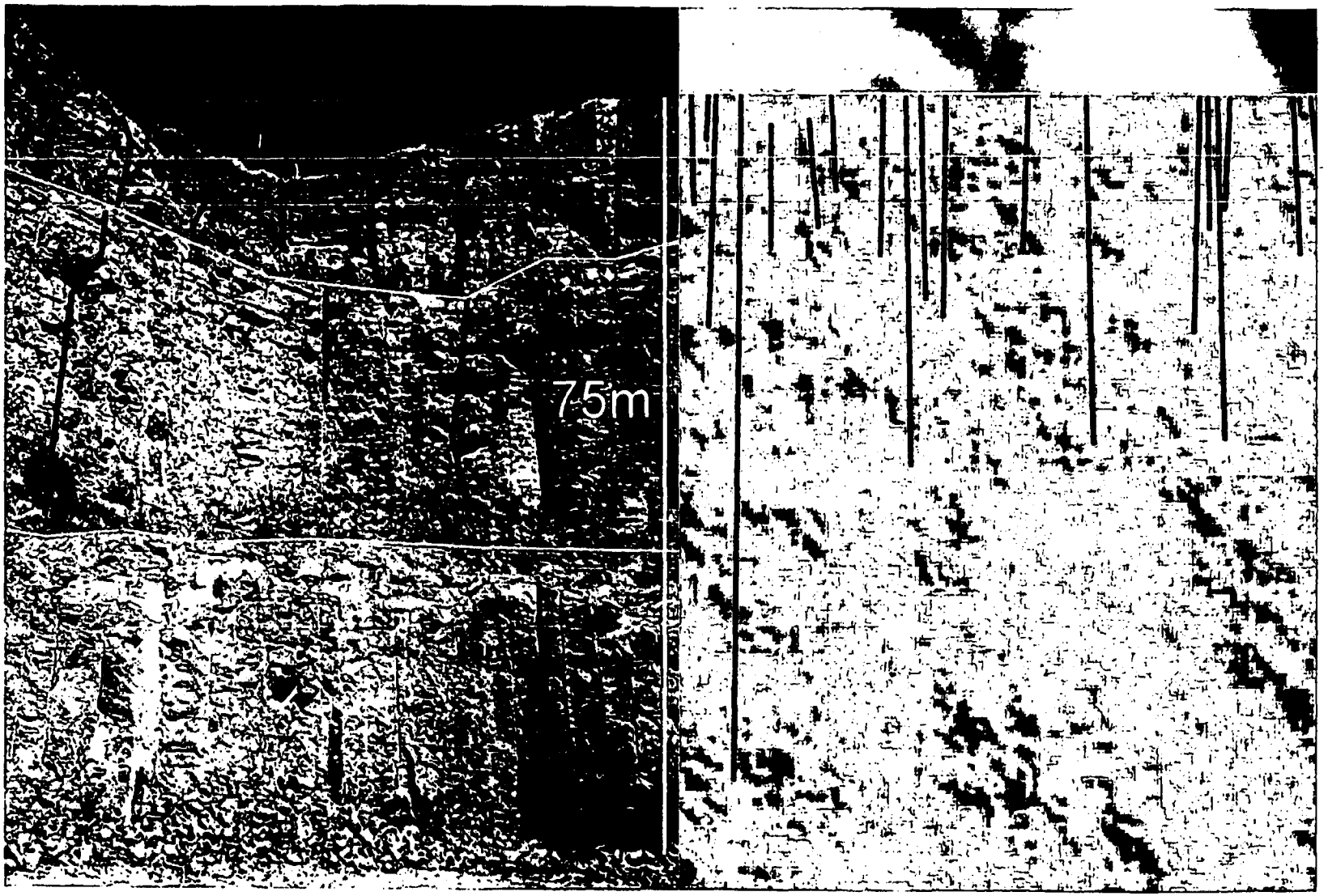
MEW Site File
Break6_003947



NOTES:

DRAWN BY: KDM	APPROVED BY: PEH
DATE: 11/16/00	DATE: 11/16/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT:	MEW TRUST FUND DONORS
PROJECT/SITE:	MISSOURI ELECTRICAL WORKS (MEW) CAPE GIRARDEAU, MO
TITLE:	REAL AND MODELED VERTICAL TRACE PLANES
FILENAME: FIGURE_15.CDR	FIGURE No: 15

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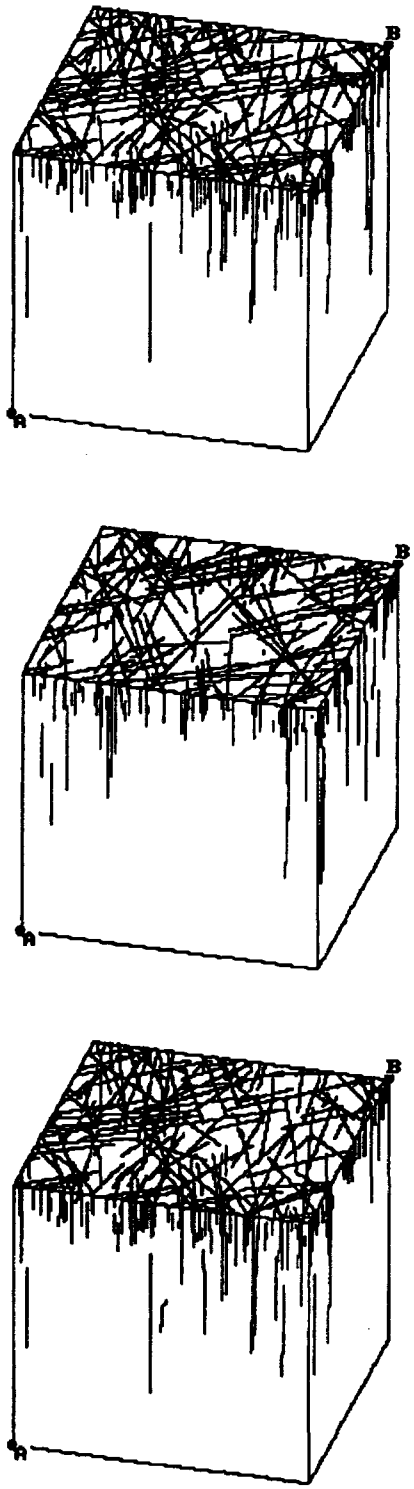


Blocks are 328 feet
(100 m) on each side.

MEW Site File
Break6_003948

DRAWN BY: KDM	APPROVED BY: KDM
DATE: 11/27/00	DATE: 11/27/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

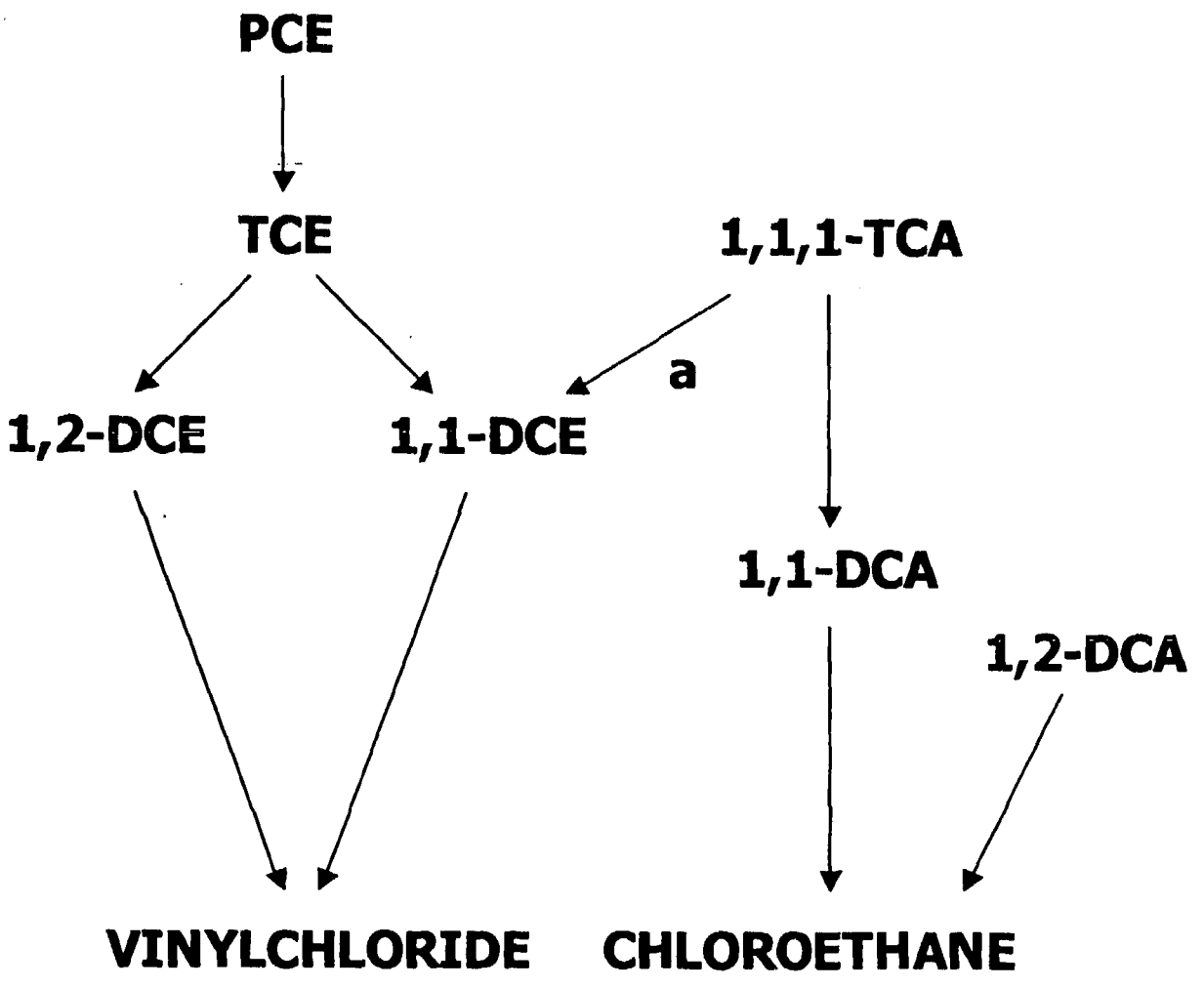
CLIENT: MEW TRUST FUND DONORS

PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW)
CAPE GIRARDEAU, MO

TITLE: FRACTURE NETWORK REALIZATIONS

FILENAME: FIGURE_14.CDR

FIGURE No: 16



NOTES:
a = abiotic
PCE = Tetrachloroethene
TCE = Trichloroethene
TCA = Trichloroethane
DCE = Dichloroethene

Modified from Pankow and Cherry (1996).

DRAWN BY: KDM	APPROVED BY: KDM
DATE: 11/7/00	DATE: 11/7/00
EDITED BY:	SCALE: -
DATE:	

KOMEX
ENVIRONMENT AND WATER RESOURCES

PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.

CLIENT: MEW TRUST FUND DONORS
PROJECT/SITE: MISSOURI ELECTRICAL WORKS (MEW) CAPE GIRARDEAU, MO
TITLE: BIOTIC AND ABIOTIC TRANSFORMATIONS OF SELECTED CHLORINATED SOLVENTS
FILENAME: FIGURE_17.CDR
FIGURE No: 17

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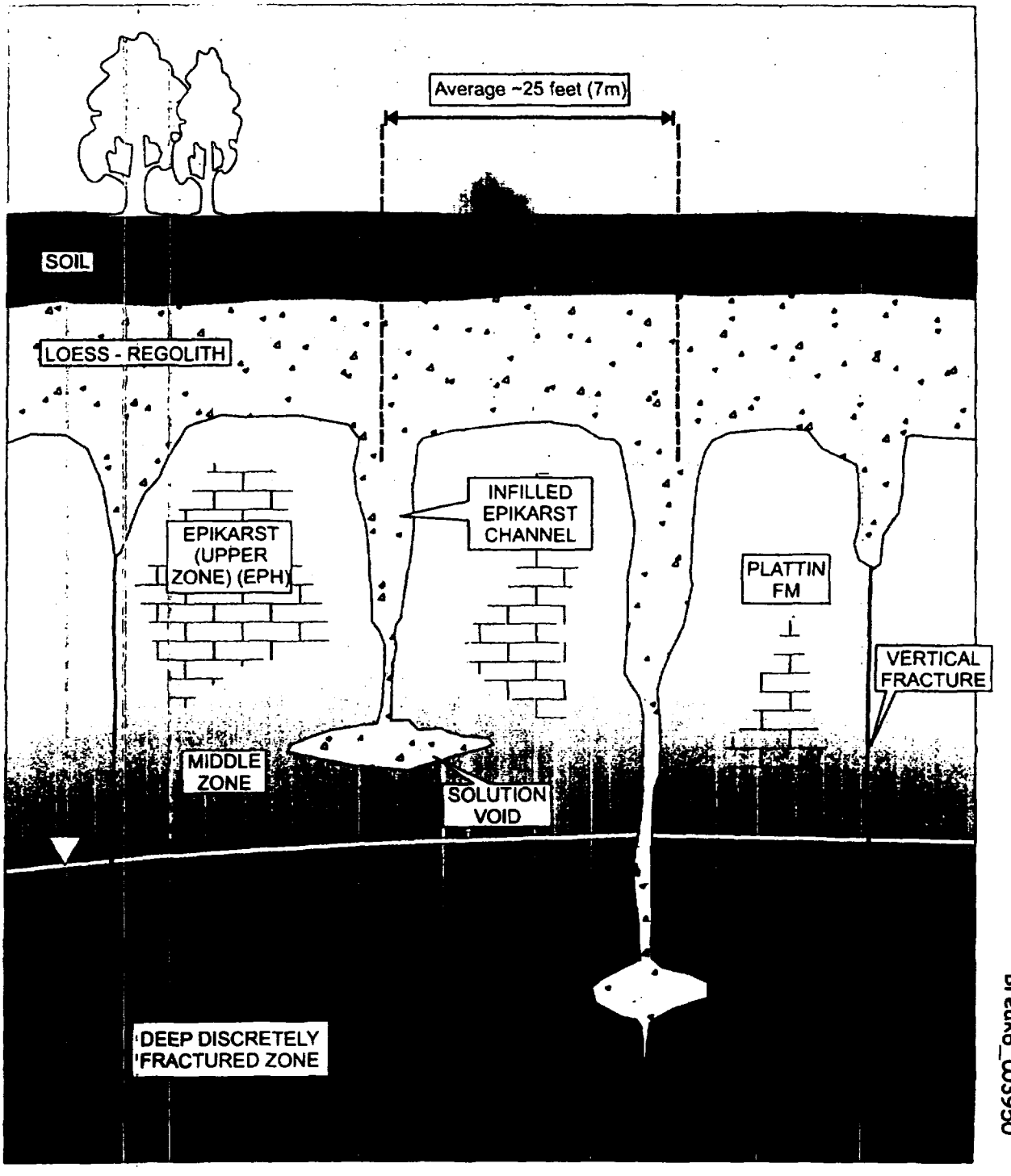

MEW Site File
Break6_003950

DRAWN BY: KDM	APPROVED BY: PEH	KOMEX ENVIRONMENT AND WATER RESOURCES	CLIENT: MEW TRUST FUND DONORS
DATE: 2/6/01	DATE: 2/7/01		PROJECT/SITE: MISSOURI ELECTRIC WORKS (MEW) CAPE GIRARDEAU, MO
EDITED BY:	SCALE:		TITLE: GEOLOGICAL CONCEPTUAL MODEL
DATE:		PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS NOT ENTERED INTO A CONTRACT.	FILENAME: FIGURE_18.CDR / FIGURE No: 18

APPENDIX A: WELL SAMPLING FORMS

MEW Site File
Break6_003951

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/19/00	
Project No.:	93-01	Time: 1000	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS		WELL NO: MW 9	
DATES	Casing Type: PVC	Screen Type:	
Constructed:	Diameter: 2"	Diamter:	
Developed:	Length:	Length:	
Last Sampled:	T.D.:	Slot Size:	

LOCATION SKETCH:

WELL CONDITION: 39.15	Water Depth:	
G.S. Elev.:	Water Depth: 40.50 TOC	F.P. Thickness:
T.C. Elev.:	Water Column: 9.41	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: GRUNFOS Purge Vol.: 5

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct. (µMhos)	Turbid. (ns/L)	D.O.	ORP	Sample No.	REMARKS
1048		~1gpm	1gal	24	7.09	550	33	8.2			slightly turbid + sheen
		~1gpm	3gal	21	7.57	250	31	4.6			stop pump,
1102			4gal	26	7.67	300	147	6.0			restart
1107		<1gpm	5gal	22	5.62	470	>200	2.9			
1115			8gal	24	5.30	490	>200	5.2			~~pumping~~ dry, purged stopped
1120			9gal.	23	5.18	480	>200	5.2			

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
		disp. teflon	see work plan	
		bailer		

ADDITIONAL INFORMATION:

bar. press. 29.82 inches 757.4 mm

MEW Site File
Break6_003952

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/19 /00
Project No.:	93-01	Time: 1240
Employee Name:	KDM	Page of

WELL CONSTRUCTION DETAILS		WELL NO: MW6A
DATES	Casing Type: PVC	Screen Type:
Constructed:	Diameter: 2"	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 47.5	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth: 42.56	F.P. Thickness:
T.C. Elev.:	Water Column: ~5'	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: hand bail	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: µMhos mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1255				19	5.02	600	16.9	6.5			initial
1301		0.5		17.5	5.05	600	>200	6.0			
1308		1		19	5.09	600	>200	6.0			going dry
1315		1.5		19	4.99	600	>200	6.0			-slow recharge
1320		2		19	4.97	600	>200	6.2			
1323	42.57										

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
		disposable	see work plan	
		teflon bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003953

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/20 /00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS		WELL NO: MW10
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 63	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth: 40.63	F.P. Thickness:
T.C. Elev.:	Water Column: 22.4'	Water Odor:
W.L. Elev:	Casing Volume: 3.6 gal	Turbidity:

Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft

Well Purging Method: bail Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: µmhos mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
753			0	20		440	3	8.2			pH meter broken
0810			3	18	NA	550	10	3.7			
0822			6	18		600	15	2.4			
0843	43'		10	18		600	14	6.4			
0853			12.5	17.5		600	—	7			
0900			15	18		600	—	6.7			
0908	41.6										take sample

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
	0908	disp - teflon bailer		see workplan

ADDITIONAL INFORMATION:

MEW Site File
Break6_003954

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/20/00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS		WELL NO: MW 7
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 32.8	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth: 24.83	F.P. Thickness:
T.C. Elev.:	Water Column: 8'	Water Odor:
W.L. Elev:	Casing Volume: 1.5	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: hand bail Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: mmhos mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1014			0	18	6.80	975	3	2.8			
1022			2.0	17	6.78	900	12	2.2			
1026			4.0	16.7	6.78	925	26	2.2			
1032			6.0	16.7	6.78	950	32	2.2			
1036			7.5	16.7	6.78	950	20	2.2			
1050	24.89										

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
	1050	disposable	See work plan	
		teflon bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003955

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

Project Name:	MEW	Date: 6/ 20 /00	
Project No.:	93-01	Time: 1300	
Employee Name:	KDM	Page	of

KOMEX • H2O SCIENCE • INC

NSTRUCTION DETAILS	WELL NO: MW 5		
Casing Type:		Screen Type:	
Diameter:		Diamter:	
Length:		Length:	
T.D.:	42.5	Slot Size:	

LOCATION SKETCH:

NDITION:	Water Depth:		
Water Depth:	37.77	F.P. Thickness:	
Water Column:	~~4.5~~	Water Odor:	~~4.7~~
Casing Volume:	4	Turbidity:	
.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft			
ing Method:	hand bail	Purge Vol.:	

RGING AND RECOVERY ANALYSIS: mmhos mg/L

W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
		0	19.5	NA	480	NA	3.5			
		0.5	17.8	7.47	460	muddy	4.0			
		1	17.7	7.19	470	"	2.0			
		1.5	17.7	7.7	460	"	2.1			
		2	16.8	7.4	455	"	3.5			going dry
		2.5	18.3	7.2	440	"	6.0			
		3	18.3	7.3	450	"	7.0			
		3.5	18.4	7.3	460	"	8.0			dry
		~~4.5~~								
38.4										
38.25										

NG INFORMATION:

No.	Time	Sampling Method	Container	Analysis Required
		disposable teflon bailer	see work plan	

NAL INFORMATION:

MEW Site File
Break6_003956

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date:	6/ 20 /00
Project No.:	93-01	Time:	1400
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS		WELL NO: MW3
DATES	Casing Type: PVC	Screen Type:
Constructed:	Diameter: 2"	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 59.5	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth: 38.32	F.P. Thickness:
T.C. Elev.:	Water Column: 21.2	Water Odor:
W.L. Elev:	Casing Volume: 3.5	Turbidity:

Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft

Well Purging Method: hand bailer Purge Vol.: 17.5

WELL PURGING AND RECOVERY ANALYSIS: µmhos mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1400			0	18.3	7.1	440	NA	2.4			
1410			2.5	17.9	7.2	445	NA	4.5			
1425			5	18.2	6.8	450	"	2.5			
1440			10	17.5	6.8	450	"	3.6			muddy
1455			12.5	16.9	6.8	450	"	7.5			
1500			15	16.6	6.9	440	"	8.0			going dry
			~~17.5~~								
1600	38.97										

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
		disp. teflon	see work	plan
		bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003957

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

Project Name:	MEW	Date: 6/21/00
Project No.:	93-01	Time: 0900
Employee Name:	KDM	Page 1 of 2

KOMEX • H2O SCIENCE • INC

NSTRUCTION DETAILS — **WELL NO: MW11A**

Casing Type:	Screen Type:
Diameter:	Diamter:
Length:	Length:
T.D.:	Slot Size:

LOCATION SKETCH:

NDITION: **Water Depth:**

Water Depth: 41.86	F.P. Thickness:
Water Column:	Water Odor:
Casing Volume: 60	Turbidity:

16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft

ing Method: grundfos pump — Purge Vol.: 300

RGING AND RECOVERY ANALYSIS: 11.5 mg/L

W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
	~4 gpm	10	17.5		1125	136	1.4			
	~3.5	40	17.6	11.9	1200	19.5	1.3			
>100'	~2.5									water has
	~2 gpm									decaying fish
	<2 gpm									odor
		55	18	11.3	550	32	1.35			pump rate
		85	19.1	11.1	320	55	1.5			slowing down ~0.5 gpm
shut down pump to allow recovery										
restart pump.										
shut off pump - only getting small amt. H2O										
restart pump			19.3	11.8	1250	4.5	1.7			~1 gpm

G INFORMATION:

o.	Time	Sampling Method	Container	Analysis Required

AL INFORMATION:

MEW Site File
Break6_003958

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

Project Name:	MEW	Date: 6/21 /00
Project No.:	93-01	Time:
Employee Name:	KDM	Page 2 of 2

KOMEX • H2O SCIENCE • INC

ONSTRUCTION DETAILS — WELL NO: MW 11 A

Casing Type:	Screen Type:
Diameter:	Diamter:
Length:	Length:
T.D.:	Slot Size:

ONDITION: — Water Depth:

Water Depth:	F.P. Thickness:
Water Column:	Water Odor:
Casing Volume:	Turbidity:

.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft

ging Method: Purge Vol.:

LOCATION SKETCH:

URGING AND RECOVERY ANALYSIS:

W.L.	Purge Rate	Vol.	Temp.	pH	Conduct. (mmhos)	Turbid.	D.O. (mg/L)	ORP	Sample No.	REMARKS
	100	~~95~~	19.2	12.0	1400	4.0	1.75			slowing down
		110	19.3	11.9	1350	5.0	1.4			
		120	23.5	11.3	1200	5.7	1.8			shut off pump
turn on pump again							~~7.5~~			
			21	11.8	1400	4.0	3.5			slow rate
shut off pump - v. low flow										
100										
	~~4~~ 1 gpm		18.4	11.5	1225	4.3	~~[illegible]~~ 1.8			
		130	20.5	11.3	1300	3.0	1.8			
only a trickle - shut off pump.										

G INFORMATION:

lo.	Time	Sampling Method	Container	Analysis Required
		stainless	see work plan	
		steel		
		bailer		

AL INFORMATION:

only enough sample collected for VOC & PCB ~~analysis~~ analysis

MEW Site File
Break6_003959

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/ 22 /00
Project No.:	93-01	Time:
Employee Name:	KDM	Page of

WELL CONSTRUCTION DETAILS		WELL NO: MW 11
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 134	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth: 39.10	F.P. Thickness:
T.C. Elev.:	Water Column: 100	Water Odor:
W.L. Elev:	Casing Volume: 16	Turbidity:

Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft

Well Purging Method: 2" grundfos pump Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: micros mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1111			0.5	27	9.85	250	8	3.1			
1116			1	23	8.9	145	8	2.8			dry
			~~30~~								
			~~35~~								
			~~40~~								
			~~50~~								
			~~60~~								
			~~70~~								

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
		disposable	See work plan	
		teflon bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003960

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date:	9/26/00
Project No.:	93-01	Time:	1050
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO: MW 4	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter: 2"	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 59'	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth: 42.35	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column: 17'	Water Odor:
W.L. Elev:	Casing Volume: 2.7	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: C° mS/cm NTU mg/l

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1056			0.3 gal	17	6.9	2.3	11	10.5			
			0.75	17	7.0	2.3	—	10.7			
			2	17	7.0	2.3	—	11.3			
			4	17	7.1	2.1	35	12.9			
			6	17	7.2	2.0	18	12.1			
			8	17	7.2	1.8	14	11.2			
1140			10	17	7.2	1.8	12	11.1			
1150	43'										

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
Sample	1150	disposable		see work plan
		teflon bailer		

ADDITIONAL INFORMATION:

- hand bail
- casing is slightly bent

MEW Site File
Break6_003961

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

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Project Name:	MEW	Date:	9/26/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS WELL NO: MW8		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 31.8	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth: 21.6	F.P. Thickness:
T.C. Elev.:	Water Column: 10	Water Odor:
W.L. Elev:	Casing Volume: 1.6 gal	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: hand bail Purge Vol.: 7.5

WELL PURGING AND RECOVERY ANALYSIS: mS/cm

Time	W.L.	Purge Rate	Vol. gal	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1445			0.3	16	7.1	1.5	28	10.9			
			1	16	7.2	1.3	–	10.9			
			2	15.7	7.1	1.28	–	10.9			
			2.5	15.5	7.16	1.25	–	11.1			v. turbid
			3.5	15.3	7.19	1.25		11.4			
			5.0	15.1	7.21	1.25		11.6			
1502			6.0	15.1	7.21	1.23		11.8			
			7.0	15.0	7.22	0.995		11.9			
1514			8.0	15.4	7.26	0.972		12.4			
1720	26.85	← sample									

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
MW8-9-26-00		disp. teflon bailer	See work plan	

ADDITIONAL INFORMATION:

MEW Site File
Break6_003962

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date:	9/27/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO: MW 11	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 120	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth: 41.65	F.P. Thickness:
T.C. Elev.:	Water Column: 80	Water Odor:
W.L. Elev:	Casing Volume: 12.8 gal	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: Grunfos Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: mS/cm mg/L

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1029		2 gpm	0	19.5	7.96	0.251		9.29			
1034			8	18.6	8.40	0.237	315	—			
1036			10	17.5	8.44	0.232	713	10.2			
		1 gpm	12	17.9	8.42	0.236	651	10.1			
		0.25 gpm	13	17.5	8.72	0.220	>1000	10.4			
1046			14	18.8	9.06	0.204	"	9.87			shut off
1115			restart pump ~2 gpm								
1117		2 gpm	18	20.3	8.77	0.236	>1000	10.6			
1119		>1 gpm	19	18.6	8.86	0.215	"	11.3			
1123		0.25	20	19.3	8.51	0.249		10.9			
1128			21	19.2	8.25	0.20		11.0			dry shut off

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
pre purge sample taken			MW11-	9-27-00-A 3 1 l amber
	DTW = 42'			
post purge:		disposable	see	work plan
		teflon bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003963

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date:	9/27/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS WELL NO: MWS		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 42.5	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth: 40.39	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: hand bail with stainless steel bailer. Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: mS/cm

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1056			0.1	16.1	7.34	0.466	274	12.0			no sediment
1100			0.75	15.9	7.5	0.471	>1000	12.3			dry - v little
~~1115~~			~~[illegible]~~								sediment.

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
pre purge		sample taken	MWS-9-27-00-A	2 1 l amber
post purge: disposable teflon bailer			see	COC

ADDITIONAL INFORMATION:

MEW Site File
Break6_003964

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date:	9/28 /00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	1 of 5

WELL CONSTRUCTION DETAILS	WELL NO: MW 11 A	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.: 475	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth: 43.44	F.P. Thickness:
T.C. Elev.:	Water Column: 375	Water Odor:
W.L. Elev:	Casing Volume: 240 gal.	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	grundfos	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS: ms/cm ms/c

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
0936		~1 gpm	0	17.2	11.68	0.365	132	9.56			start pumping
0941			5 gal.	17.6	11.80	0.393	22	9.46			
0952			10 gal	18.3	11.82	0.395	17	9.38			
0957			15	18.0	11.87	0.404	7	9.86			
1003			20	18.7	11.83	0.394	5	3.98			
1010			25	18.9	11.79	0.405	12	10.0			
1015			30	18.8	11.83	0.406	20	10.02			
1020			35	18.9	11.84	0.406	41	10.18			
1027			40	19.4	11.83	0.401	35	10.11			
1034			45	20.2	11.81	0.401	26	9.99			
1045			50	21.6	11.79	0.397	21	9.82			WL: 110'

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003965

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/ 28/00
Project No.:	93-01	Time:
Employee Name:	KDM	Page 2 of 5

WELL CONSTRUCTION DETAILS WELL NO: MW11A		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:		Water Depth:
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column: 375	Water Odor:
W.L. Elev:	Casing Volume: 240	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: grundfos	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1050		~1gpm	55	20.8	11.75	0.405	16	10.22			
1055			60	20.4	11.79	0.402	25	10.57			
1102			65	19.5	11.87	0.401	12	11.43			DTW 130.7'
1110			70	22.0	11.74	0.399	26	10.2			
1120		~.5 gpm	75	22.2	11.77	0.400	12	10.4			153'
1130			80	21.4	11.82	0.400	35	11.0			
1140			85	21.5	11.77	0.407	35	11.1			173.5'
1150			90	23.0	11.73	0.397	38	10.4			
1200			shut-off - generator running out of gas								201.5'
1230		~1gpm	95	28.4	11.56	0.396	101	8.70			197'
1250			115	22.7	11.68	0.384	92	10.9			

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003966

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/28 /00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page 3 of 5	

WELL CONSTRUCTION DETAILS **WELL NO:** MW11A		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: pump / stainless steel bailer Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1300		1 gpm	125	24.7	11.5	0.396	57	9.98			
1310			135	22.9	11.7	0.385	70	10.8			
1320		.5 gpm	140	21.8	11.8	0.406	65	11.4			
1325		pump	stopped	producing		→ DTW	241'				
1415	start bailing with rig at 7' stainless steel bailer										
1445			165	17.7	11.5	0.294	218	13.6			260'
1535			175	17.5	10.5	0.204	39	13.5			
1555			185	16.8	10.4	0.202	283	14.1			
1610											take break
1620	start again										
1630			195	16.5	10.0	0.215	112	13.2			

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003967

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/28 /00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page 4 of 5	

WELL CONSTRUCTION DETAILS WELL NO: MW1A		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: Stainless steel bailer Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

	Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
	1645			205	16.2	10.0	0.224	176	14.9			
	1705			215	17.1	9.2	0.296	150	11.9			~ 300'
1/29/00	0730	DTW TOC		~ 255'								
	0731	start bailing										
	0750			225	14.3	12.1	1.49	92	10.3			
	0810			235	14.5	12.2	1.21	16	10.6			
	~~0870~~	0850		245	14.6	8.6	0.373	12	10.7			
	0900			260	15.2	8.2	0.386	15	11.2			
	0920			270	15.2	8.6	0.378	25	11.8			
	0940			280	15.2	8.3	0.342	37	11.7			

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003968

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/29/00
Project No.:	93-01	Time:
Employee Name:	KDM	Page 5 of 5

WELL CONSTRUCTION DETAILS WELL NO: MW11A		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method: stainless steel bailer Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS
1000			290	15.8	7.93	6.376	43	11.9			stop bailing
		DTW 325									

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required
		stainless	see work plan	(complete suite)
		steel bailer		

ADDITIONAL INFORMATION:

MEW Site File
Break6_003969

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003970

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003971

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003972

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003973

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003974

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003975

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003976

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003977

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003978

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 9/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003979

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	*Casing Type:*	*Screen Type:*
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003980

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/ /00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page of	

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003981

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003982

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003983

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003984

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/ /00	
Project No.:	93-01	Time:	
Employee Name:	KDM	Page of	

WELL CONSTRUCTION DETAILS	WELL NO:	
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	Water Depth:	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003985

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H 2 O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003986

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

LOCATION SKETCH:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003987

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003988

MONITORING WELL SAMPLING FORM

Environmental and Water Resources
5500 BOLSA AVENUE, SUITE 105
HUNTINGTON BWEACH, CA 92649
TEL.: (714) 379-1157

KOMEX • H2O SCIENCE • INC

Project Name:	MEW	Date: 6/	/00
Project No.:	93-01	Time:	
Employee Name:	KDM	Page	of

WELL CONSTRUCTION DETAILS **WELL NO:**		
DATES	Casing Type:	Screen Type:
Constructed:	Diameter:	Diamter:
Developed:	Length:	Length:
Last Sampled:	T.D.:	Slot Size:

LOCATION SKETCH:

WELL CONDITION:	**Water Depth:**	
G.S. Elev.:	Water Depth:	F.P. Thickness:
T.C. Elev.:	Water Column:	Water Odor:
W.L. Elev:	Casing Volume:	Turbidity:
Note: 2" = 0.16 g/ft; 4" = 0.65 g/ft; and 6" = 1.5 g/ft		

Well Purging Method:	Purge Vol.:

WELL PURGING AND RECOVERY ANALYSIS:

Time	W.L.	Purge Rate	Vol.	Temp.	pH	Conduct.	Turbid.	D.O.	ORP	Sample No.	REMARKS

SAMPLING INFORMATION:

Sample No.	Time	Sampling Method	Container	Analysis Required

ADDITIONAL INFORMATION:

MEW Site File
Break6_003989

APPENDIX B: ANALYTICAL LABORATORY DATA

MEW Site File
Break6_003990

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

June 30, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0006335

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 2 samples on 6/20/00 10:08:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_003991

RECEIVED
JUL 24 2000

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

MEW Site File
Break6_003992

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: Dean Mitchell

Phone Number: 714-379-1157
Fax Number: 714-379-1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW9-061900	(2) 40mL HCl	19 June 00			X			8260B	
	1 litre glass amber		1500					8270C	
	"	Note:						8082 PCBs	24 HR TOT
	"	Sample time						8082 dissolved PCBs	
	"	is incorrect						Extra	
	500 mL HNO3	on bottles						6010B	
	"							SM 2340B	
	1 litre plastic					325.2		375.4 340.2 353.2	
	"					160.1		160.2 160.3 310.1 150.1 360.1	ORP
	500 mL H_2SO_4							353.2 365.3	Nitrate/Phosphate
	250 mL H_2SO_4							410.4	COD
	(2) 40 mL Glass amber								Methane
	500 mL NaOH							376.1	Sulfide
	120 mL sterile wt preserv				✓	Total		heterotrophic	SM9215B
	"					Total		hydrocarbon degraders	

Relinquished By: Dean Mitchell — Date/Time: 1630 June 19, 00 — Received for Lab By: [signature] — Date/Time: 6/20/00 11:08 am
Received By: to FedEx — Date/Time:
Relinquished By: — Date/Time:
Received: — Date/Time:

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_003993

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave. #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: Dean Mitchell

Phone Number: 714-379-1157
Fax Number: 714-379-1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW6A-06	1900 (2) 40mL HCl	19 June 00			X			8260B	
	1 liter Glass Amber		1300					8270C	
	"							8082 PCB's	24HR TOT
	"							8082 dissolved PCB's	please filter first
	"							extra	
	500mL HNO3							6010B	Ca Fe Mg Mn Na K
	" "							SM2340B	hardness
	1 Litre plastic							325.2 375.4 340.2 353.2	Cl Sulfate, Fluoride, Nitrite
	" " "					160.1		160.2 160.1 160.3 310.1	~~Sulfate~~ 150.1 360.1 ORP
	500 mL H_2SO_4							353.2 365.3	Nitrate, Phosph.
	250 mL H_2SO_4							410.4	COD
	(2) 40mL Glass amber								methane
	500 mL NaOH							376.1	Sulfide
	120mL Sterile preserv.						Total	heterotrophic	SM9215B
	" " " "						Total	hydrocarbon degraders	"

Relinquished By: Dean Mitchell — Date/Time: 1630 June 19/00
Received By: To Fed Ex — Date/Time:
Relinquished By: — Date/Time:
Received By: — Date/Time:

Received for Lab By: — Date/Time: 6/20/00 10:08 am

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 6/20/00 10:08:00 AM

Work Order Number 0006335

Received by MH

Checklist completed by W. Karanc (Signature) 6/20/00 (Date)

Reviewed by (Initials) 6/20/00 (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_003994

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
2-Butanone	BRL	10		µg/L	1	6/22/00 3:23:00 AM
2-Hexanone	BRL	10		µg/L	1	6/22/00 3:23:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/22/00 3:23:00 AM
Acetone	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Benzene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Bromoform	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Bromomethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Chloroethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Chloroform	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Chloromethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Methylene chloride	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Styrene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Toluene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Trichloroethene	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	6/22/00 3:23:00 AM
Surr: 4-Bromofluorobenzene	84.8	70-122		%REC	1	6/22/00 3:23:00 AM
Surr: Dibromofluoromethane	107	67-133		%REC	1	6/22/00 3:23:00 AM
Surr: Toluene-d8	101	80-121		%REC	1	6/22/00 3:23:00 AM

MEW Site File
Break6_003995

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 9:14:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 9:14:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 9:14:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 9:14:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 9:14:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 9:14:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 9:14:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 9:14:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 9:14:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 9:14:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 9:14:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_003996

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 9:14:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 9:14:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 9:14:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 9:14:00 AM
Surr: 2,4,6-Tribromophenol	85.1	10-123		%REC	1	6/24/00 9:14:00 AM
Surr: 2-Fluorobiphenyl	82.3	43-116		%REC	1	6/24/00 9:14:00 AM
Surr: 2-Fluorophenol	59.6	21-110		%REC	1	6/24/00 9:14:00 AM
Surr: 4-Terphenyl-d14	54.9	33-141		%REC	1	6/24/00 9:14:00 AM
Surr: Nitrobenzene-d5	70.1	35-114		%REC	1	6/24/00 9:14:00 AM
Surr: Phenol-d5	46.8	10-94		%REC	1	6/24/00 9:14:00 AM

MEW Site File
Break6_003997

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/21/00 2:53:00 PM
Surr: Decachlorobiphenyl	41.1	30-150		%REC	1	6/21/00 2:53:00 PM
Surr: Tetrachloro-m-xylene	106	30-150		%REC	1	6/21/00 2:53:00 PM

MEW Site File
Break6_003998

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 5:31:00 PM
Surr: Decachlorobiphenyl	118	30-150		%REC	1	6/26/00 5:31:00 PM
Surr: Tetrachloro-m-xylene	117	30-150		%REC	1	6/26/00 5:31:00 PM

MEW Site File
Break6_003999

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	172	0.100		mg/L	1	6/21/00 2:04:00 PM
Iron	9.51	0.100		mg/L	1	6/21/00 2:04:00 PM
Magnesium	13.5	0.100		mg/L	1	6/21/00 2:04:00 PM
Manganese	0.437	0.00500		mg/L	1	6/21/00 2:04:00 PM
Potassium	2.32	0.500		mg/L	1	6/21/00 2:04:00 PM
Sodium	34.8	1.00		mg/L	1	6/21/00 2:04:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium/Magnesium (As CaCO3)	484	1.00		mg/L CaCO3	1	6/21/00 9:38:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

** - Value exceeds Maximum Contaminant Level*

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004000

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: TG
Specific Conductance	689	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: TG
pH	7.05	0.0100		pH Units	1	6/20/00 6:45:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: LV
Residue, Dissolved (TDS)	435	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: LV
Residue, Suspended (TSS)	596	10.0		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: TG
Residue, Total	1,100	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		**E310.1**				Analyst: TG
Alkalinity, Total (As CaCO3)	480	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		**E325.2**				Analyst: TL
Chloride	6.27	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: RS
Fluoride	0.260	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: VS
Oxygen, Dissolved	5.90	1.00		mg/L	1	6/21/00 11:45:00 AM
SULFATE		**E375.4**				Analyst: RS
Sulfate	32.2	10.0		mg/L	10	6/22/00 9:34:17 AM

MEW Site File
Break6_004001

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	0.129	0.0500		mg/L	1	6/23/00 7:00:00 PM

MEW Site File
Break6_004002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 1:00:00 PM
Lab ID:	0006335-001H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		**E410.4**				Analyst: **LV**
Chemical Oxygen Demand	BRL	10.0		mg/L	1	6/21/00 5:00:00 PM

MEW Site File
Break6_004003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW6A-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	*6/19/00 1:00:00 PM*
Lab ID:	0006335-001J	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		E376.2				Analyst: LV
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
2-Butanone	BRL	10		µg/L	1	6/22/00 4:08:00 AM
2-Hexanone	BRL	10		µg/L	1	6/22/00 4:08:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/22/00 4:08:00 AM
Acetone	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Benzene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Bromoform	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Bromomethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Chloroethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Chloroform	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Chloromethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Methylene chloride	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Styrene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Toluene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Trichloroethene	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	6/22/00 4:08:00 AM
Surr: 4-Bromofluorobenzene	84.1	70-122		%REC	1	6/22/00 4:08:00 AM
Surr: Dibromofluoromethane	108	67-133		%REC	1	6/22/00 4:08:00 AM
Surr: Toluene-d8	101	80-121		%REC	1	6/22/00 4:08:00 AM

MEW Site File
Break6_004005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 8:42:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 8:42:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 8:42:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 8:42:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 8:42:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 8:42:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 8:42:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 8:42:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 8:42:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 8:42:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 8:42:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004006

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 8:42:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 8:42:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 8:42:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 8:42:00 AM
Surr: 2,4,6-Tribromophenol	83.8	10-123		%REC	1	6/24/00 8:42:00 AM
Surr: 2-Fluorobiphenyl	84.0	43-116		%REC	1	6/24/00 8:42:00 AM
Surr: 2-Fluorophenol	57.6	21-110		%REC	1	6/24/00 8:42:00 AM
Surr: 4-Terphenyl-d14	61.6	33-141		%REC	1	6/24/00 8:42:00 AM
Surr: Nitrobenzene-d5	70.5	35-114		%REC	1	6/24/00 8:42:00 AM
Surr: Phenol-d5	68.3	10-94		%REC	1	6/24/00 8:42:00 AM

MEW Site File
Break6_004007

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/21/00 3:23:00 PM
Surr: Decachlorobiphenyl	39.6	30-150		%REC	1	6/21/00 3:23:00 PM
Surr: Tetrachloro-m-xylene	89.8	30-150		%REC	1	6/21/00 3:23:00 PM

MEW Site File
Break6_004008

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 6:02:00 PM
Surr: Decachlorobiphenyl	110	30-150		%REC	1	6/26/00 6:02:00 PM
Surr: Tetrachloro-m-xylene	117	30-150		%REC	1	6/26/00 6:02:00 PM

MEW Site File
Break6_004009

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: SS
Calcium	115	0.100		mg/L	1	6/21/00 2:09:00 PM
Iron	58.6	0.100		mg/L	1	6/21/00 2:09:00 PM
Magnesium	8.58	0.100		mg/L	1	6/21/00 2:09:00 PM
Manganese	0.992	0.00500		mg/L	1	6/21/00 2:09:00 PM
Potassium	3.80	0.500		mg/L	1	6/21/00 2:09:00 PM
Sodium	11.3	1.00		mg/L	1	6/21/00 2:09:00 PM
HARDNESS		**M2340 B**				Analyst: SS
Hardness, Calcium/Magnesium (As CaCO3)	323	1.00		mg/L CaCO3	1	6/21/00 9:38:00 AM

MEW Site File
Break6_004010

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: TG
Specific Conductance	489	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: TG
pH	7.33	0.0100		pH Units	1	6/20/00 6:45:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: LV
Residue, Dissolved (TDS)	356	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: LV
Residue, Suspended (TSS)	1,410	10.0		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: TG
Residue, Total	1,700	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		**E310.1**				Analyst: TG
Alkalinity, Total (As CaCO3)	251	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		**E325.2**				Analyst: TL
Chloride	23.2	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: RS
Fluoride	0.240	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: VS
Oxygen, Dissolved	7.80	1.00		mg/L	1	6/21/00 11:45:00 AM
SULFATE		**E375.4**				Analyst: RS
Sulfate	12.6	10.0		mg/L	10	6/22/00 9:34:17 AM

MEW Site File
Break6_004011

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	1.84	0.0500		mg/L	1	6/23/00 7:00:00 PM

MEW Site File
Break6_004012

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	BRL	10.0		mg/L	1	6/21/00 5:00:00 PM

MEW Site File
Break6_004013

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW9-061900
Lab Order:	0006335	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/19/00 3:00:00 PM
Lab ID:	0006335-002J	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: LV
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004014

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123609-1**

P.O. No. 000339
July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006335-001K, 06/19/2000, 13:00, received 06/21/2000
MW6A

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	15400	1	no/mL

MEW Site File
Break6_004015

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123609-2**

P.O. No. 000339
July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006335-002K, 06/19/2000, 15:00, received 06/21/2000

MW9

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	8900	1	no/mL

MEW Site File
Break6_004016

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

June 30, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0006361

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 2 samples on 6/21/00 10:10:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004017

RECEIVED
JUL 24 2000

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004018

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW7-062000	(2) 40 mL HCl	20 June 00			X			8260B	
	1 litre glass amber		1050					8270B	
	"							8082 PCBs	~~[illegible]~~ standard
	"							8082 dissolved PCB	filter first
	"							extra	
	500 mL HNO_3							6010B	Ca Fe Mg Mn Na K
	"							SM 2340B	hardness
	1 litre plastic						325.2	375.4 340.2 350.2	Cl sulfate fluoride nitrate
	"					160.1	160.2	160.3 310.1 150.1 360.1	TDS
	500 mL H_2SO_4						353.2	365.3	Nitrate / phosphate
	250 mL "							410.4	COD
	(2) 40 mL Glass amber								methane
	500 mL NaOH						376.1		sulfide
	120 mL sterile w/ preserv					Total heterotrophs			SM 9215B
	" " " " "					Total hydrocarbon degraders			"

Relinquished By: Dean Mitchell
Date/Time: 20 June 00 1730
Received By: to FedEx
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Received for Lab By: [signature]
Date/Time: 6/21/00 10:10

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

MEW Site File
Break6_004019

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave. #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW5-062000	(2) 40mL glass amber HCl	20 Jun 00			X			8260B	
	1 litre glass amber		1600					8270B	
	"							8082 PCBs	[redacted] Standard TOT
	"							8082 dissolved PCBs	filter first
	"							extra	
	500 mL HNO3							6010B	Ca Fe Mg Mn Na K
	"							SM 2340B	hardness
	1 litre plastic					325.2	375.4 340.2 353.2		Cl sulfate fluoride Nitrate
	"					160.1	160.2 160.3 310.1 150.1		TDS, TSS pH
	500 mL plastic H2SO4						353.2 365.3		nitrate/phosphate
	250 " " "						410.4		COD
	(2) 40mL Glass amber								methane
	500 mL plastic NaOH						376.1		sulfide
	120 mL sterile w/preserv					Total heterotrophs			SM 9215B
	" " " " "					Total hydrocarbon degraders			"

Relinquished By: Dean Mitchell
Date/Time: 20 Jun 00 1730
Received for Lab By:
Date/Time: 6/21/00 10:10
Received By: to FedEx
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 1010 6/21/00

Work Order Number 0006361

Received by YN

Checklist completed by [signature] 6-21-00 (Signature / Date)

Reviewed by [signature] 6/21/00 (Initials / Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004020

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
2-Butanone	BRL	10		µg/L	1	6/23/00 4:51:00 PM
2-Hexanone	BRL	10		µg/L	1	6/23/00 4:51:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/23/00 4:51:00 PM
Acetone	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Benzene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Bromoform	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Chloroform	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Styrene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Toluene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/23/00 4:51:00 PM
Surr: 4-Bromofluorobenzene	87.1	70-122		%REC	1	6/23/00 4:51:00 PM
Surr: Dibromofluoromethane	108	67-133		%REC	1	6/23/00 4:51:00 PM
Surr: Toluene-d8	102	80-121		%REC	1	6/23/00 4:51:00 PM

MEW Site File
Break6_004021

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	40	10		µg/L	1	6/24/00 1:40:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 1:40:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 1:40:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 1:40:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 1:40:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 1:40:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 1:40:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 1:40:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 1:40:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 1:40:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 1:40:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 1:40:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004022

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 1:40:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 1:40:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 1:40:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 1:40:00 AM
Surr: 2,4,6-Tribromophenol	70.0	10-123		%REC	1	6/24/00 1:40:00 AM
Surr: 2-Fluorobiphenyl	83.9	43-116		%REC	1	6/24/00 1:40:00 AM
Surr: 2-Fluorophenol	46.7	21-110		%REC	1	6/24/00 1:40:00 AM
Surr: 4-Terphenyl-d14	53.4	33-141		%REC	1	6/24/00 1:40:00 AM
Surr: Nitrobenzene-d5	72.3	35-114		%REC	1	6/24/00 1:40:00 AM
Surr: Phenol-d5	52.9	10-94		%REC	1	6/24/00 1:40:00 AM

MEW Site File
Break6_004023

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 8:05:00 PM
Surr: Decachlorobiphenyl	82.3	30-150		%REC	1	6/26/00 8:05:00 PM
Surr: Tetrachloro-m-xylene	139	30-150		%REC	1	6/26/00 8:05:00 PM

MEW Site File
Break6_004024

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 8:36:00 PM
Surr: Decachlorobiphenyl	40.5	30-150		%REC	1	6/26/00 8:36:00 PM
Surr: Tetrachloro-m-xylene	39.8	30-150		%REC	1	6/26/00 8:36:00 PM

MEW Site File
Break6_004025

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	163	0.100		mg/L	1	6/22/00 3:34:00 PM
Iron	10.8	0.100		mg/L	1	6/22/00 3:34:00 PM
Magnesium	23.9	0.100		mg/L	1	6/22/00 3:34:00 PM
Manganese	0.690	0.00500		mg/L	1	6/22/00 3:34:00 PM
Potassium	4.23	0.500		mg/L	1	6/22/00 3:34:00 PM
Sodium	52.2	1.00		mg/L	1	6/22/00 3:34:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium (As CaCO3)	406	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Calcium/Magnesium (As CaCO3)	505	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Magnesium	98.5	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM

MEW Site File
Break6_004026

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: **TG**
Specific Conductance	1,090	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: **TG**
pH	7.64	0.0100		pH Units	1	6/21/00 6:30:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: **LV**
Residue, Dissolved (TDS)	670	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: **LV**
Residue, Suspended (TSS)	836	10.0		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: **TG**
Residue, Total	1,600	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		**E310.1**				Analyst: **TG**
Alkalinity, Total (As CaCO3)	395	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		**E325.2**				Analyst: **TL**
Chloride	54.6	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: **RS**
Fluoride	0.280	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: **VS**
Oxygen, Dissolved	2.72	1.00		mg/L	1	6/21/00 1:30:00 PM
SULFATE		**E375.4**				Analyst: **RS**
Sulfate	48.8	10.0		mg/L	10	6/22/00 9:34:17 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: **VS**
Biochemical Oxygen Demand	5.10	5.00		mg/L	1	6/27/00 8:15:00 AM

MEW Site File
Break6_004027

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	1.92	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	BRL	0.0500		mg/L	1	6/28/00 11:30:00 AM

MEW Site File
Break6_004028

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	0006361-001H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	13.0	10.0		mg/L	1	6/24/00 5:00:00 PM
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: RS
Organic Carbon, Total	6.01	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004029

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW7-062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 10:50:00 AM
Lab ID:	*0006361-001J*	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: **LV**
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004030

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
2-Butanone	BRL	10		µg/L	1	6/23/00 5:35:00 PM
2-Hexanone	BRL	10		µg/L	1	6/23/00 5:35:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/23/00 5:35:00 PM
Acetone	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Benzene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Bromoform	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Chlorobenzene	21	5.0		µg/L	1	6/23/00 5:35:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Chloroform	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Styrene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Toluene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/23/00 5:35:00 PM
Surr: 4-Bromofluorobenzene	86.6	70-122		%REC	1	6/23/00 5:35:00 PM
Surr: Dibromofluoromethane	110	67-133		%REC	1	6/23/00 5:35:00 PM
Surr: Toluene-d8	104	80-121		%REC	1	6/23/00 5:35:00 PM

MEW Site File
Break6_004031

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 2:12:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 2:12:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:12:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 2:12:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:12:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 2:12:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 2:12:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 2:12:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 2:12:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:12:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 2:12:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004032

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 2:12:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 2:12:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 2:12:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 2:12:00 AM
Surr: 2,4,6-Tribromophenol	87.3	10-123		%REC	1	6/24/00 2:12:00 AM
Surr: 2-Fluorobiphenyl	81.6	43-116		%REC	1	6/24/00 2:12:00 AM
Surr: 2-Fluorophenol	31.6	21-110		%REC	1	6/24/00 2:12:00 AM
Surr: 4-Terphenyl-d14	49.2	33-141		%REC	1	6/24/00 2:12:00 AM
Surr: Nitrobenzene-d5	77.9	35-114		%REC	1	6/24/00 2:12:00 AM
Surr: Phenol-d5	10.0	10-94		%REC	1	6/24/00 2:12:00 AM

MEW Site File
Break6_004033

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 9:06:00 PM
Aroclor 1260	68	5.0		µg/L	5	6/27/00 9:00:00 AM
Surr: Decachlorobiphenyl	46.6	30-150		%REC	1	6/26/00 9:06:00 PM
Surr: Tetrachloro-m-xylene	90.5	30-150		%REC	1	6/26/00 9:06:00 PM

MEW Site File
Break6_004034

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 9:37:00 PM
Surr: Decachlorobiphenyl	39.9	30-150		%REC	1	6/26/00 9:37:00 PM
Surr: Tetrachloro-m-xylene	42.3	30-150		%REC	1	6/26/00 9:37:00 PM

MEW Site File
Break6_004035

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: SS
Calcium	232	0.100		mg/L	1	6/22/00 3:39:00 PM
Iron	54.9	0.100		mg/L	1	6/22/00 3:39:00 PM
Magnesium	13.9	0.100		mg/L	1	6/22/00 3:39:00 PM
Manganese	1.76	0.00500		mg/L	1	6/22/00 3:39:00 PM
Potassium	3.86	0.500		mg/L	1	6/22/00 3:39:00 PM
Sodium	27.1	1.00		mg/L	1	6/22/00 3:39:00 PM
HARDNESS		**M2340 B**				Analyst: SS
Hardness, Calcium (As CaCO3)	580	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Calcium/Magnesium (As CaCO3)	637	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Magnesium	57.4	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM

MEW Site File
Break6_004036

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		E120.1				Analyst: TG
Specific Conductance	564	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		E150.1				Analyst: TG
pH	7.82	0.0100		pH Units	1	6/21/00 6:30:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: LV
Residue, Dissolved (TDS)	359	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		E160.2				Analyst: LV
Residue, Suspended (TSS)	678	10.0		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		E160.3				Analyst: TG
Residue, Total	1,100	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		E310.1				Analyst: TG
Alkalinity, Total (As CaCO3)	299	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		E325.2				Analyst: TL
Chloride	11.1	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		E340.2				Analyst: RS
Fluoride	BRL	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		E360.1				Analyst: VS
Oxygen, Dissolved	7.23	1.00		mg/L	1	6/21/00 1:30:00 PM
SULFATE		E375.4				Analyst: RS
Sulfate	26.5	10.0		mg/L	10	6/22/00 9:34:17 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		E405.1				Analyst: VS
Biochemical Oxygen Demand	28.3	5.00		mg/L	1	6/27/00 8:15:00 AM

MEW Site File
Break6_004037

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	0.480	0.0500		mg/L	1	6/28/00 11:30:00 AM

MEW Site File
Break6_004038

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	99.0	10.0		mg/L	1	6/24/00 5:00:00 PM
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: RS
Organic Carbon, Total	15.7	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004039

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *03-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5 -062000
Lab Order:	0006361	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/20/00 4:00:00 PM
Lab ID:	0006361-002J	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: LV
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004040

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123597-3**

P.O. No. 000342
July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006361-001K, 06/20/2000, 10:50, received 06/21/200
MW 7

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	3800	1	no/mL

MEW Site File
Break6_004041

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123597-4**

P.O. No. 000342
July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006361-002K, 06/20/2000, 16:00, received 06/21/200

MW 5

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	3000	1	no/mL

MEW Site File
Break6_004042

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

July 11, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW

Order No.: 0006423

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 7 samples on 6/23/00 10:20:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004043

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004044

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: ~~[illegible]~~ 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required						Comments/Special Instructions
MW22A-062200	(2) 40 mL glass amber HCl	22 June 00			✓			8260B						+ specific conductance
	1 litre glass amber		1600					8270C						
	"							8082 PCBs						~~[illegible]~~ ~~[illegible]~~ KDM
	"							8082 dissolved PCBs						filter first
	"							extra						
	500 mL plastic HNO3							6010B						Ca Fe Mg Mn Na K
	"							SM2340B						hardness
	1 litre plastic						325.2	375.4	376.2	353.2				Cl sulfate fluoride nitrite
	"						160.1	160.2	160.3	310.1	150.1	360.1		+ ORP
	500 mL plastic H2SO4							353.2	365.3					Nitrate phosphate
	250 " " "								410.4					COD + BOD
	~~(2) 40 mL glass amber~~ KDM													~~methane~~ KDM
	500 mL plastic NaOH								376.1					sulfide
	120 mL sterile w/ preserv.					Total heterotrophs								SM9215B
	" " " " "					~~Total heterotrophic plate counts~~								KDM

Relinquished By: Dean Mitchell
Date/Time: 22 June 00 1730
Received for Lab By: [signature]
Date/Time: 6/23/00 1020
Received By: to FedEx
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

MEW Site File
Break6_004045

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Solsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW11-062260	(2) 40mL glass amber HCl	22 Jun 00			X			8260B	+ specific conductance
	1 litre glass amber		1370					8270C	
	"							8082 PCBs	~~34 METOT~~ KDM
	"							8082 dissolved PCBs	filter first
	"							extra	
	500 mL plastic HNO3							6010B	Ca Fe Mg Mn Na K
	"							SM2340B	hardness
	1 litre plastic					325.2	325.4 376.1 353.2		chloride fluoride nitrite
	"					160.1	160.2 160.3 310.1 150.1 360.1		TDS
	500 mL H2SO4						353.2 365.3		nitrate/phosphate
	250 " "						410.4		COD + BOD
	(2) 40mL Glass amber								methane
	500 mL plastic NaOH						376.1		sulfide
	120 mL sterile wt preserv.					Total heterotrophs			SM9215B
	" " " " "					~~Total hydrocarbons degradation~~			KDM

Relinquished By: Dean Mitchell
Date/Time: 22 Jun 00 1700
Received By: to Fed Ex
Date/Time:
Relinquished By:
Date/Time:
Received [redacted]
Date/Time: [redacted]

Received for Lab By: [signature]
Date/Time: 6/23/00 1020

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other: [redacted]

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004046

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93.01
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW11A-062200-301	1 L AMBER	22 Jun 00					1	8082	
MW11A-062200-101	1 L AMBER						1	8082	
TB-062200	1 L AMER						2	8082	
MW11A-062200-301	40 L VOA						2	8260B	
MW11A-062200-101	40 L VOA						2	8260B	
TB-062200	40 L VOA						2	8260B	
MW11A-062200	1 L AMBER						2	8082 unfiltered + extra	

Relinquished By: Dean Mitchell Date/Time: 22 Jun 00 1730
Received By: to FedEx Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Received for Lab By: Date/Time 6/23/00 10 am

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004047

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379 1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MATRIX SPIKE	1 L AMBER	22 June 00					4		
MATRIX SPIKE DUP	1 L AMBER		1330				3		
	(MATRIX SPIKES ARE FROM MW11)								
MW11A-062200	1 L Amber		1630				4	8082 (filtered & [illegible])	8270 C (unfiltered)
	40 mL VOA		"				2	KDM	8260 B

Relinquished By: [signature] Dean Mitchell — Date/Time: 22 June 00
Received By: to Fed Ex — Date/Time: 1730
Relinquished By: — Date/Time:
Received [illegible] — Date/Time: [illegible]

Received for Lab By: [signature] — Date/Time: 6/23/00 1020

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other: [illegible]

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 6/23/00 10:20:00 AM

Work Order Number 0006423

Received by YN

Checklist completed by M. Karanc (Signature) 6/23/00 (Date)

Reviewed by JW 6/23 (Initials) (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004048

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 1:24:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 1:24:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 1:24:00 PM
Acetone	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Chlorobenzene	68	5.0		µg/L	1	6/30/00 1:24:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 1:24:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-122		%REC	1	6/30/00 1:24:00 PM
Surr: Dibromofluoromethane	108	67-133		%REC	1	6/30/00 1:24:00 PM
Surr: Toluene-d8	101	80-121		%REC	1	6/30/00 1:24:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004049

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
1,3-Dichlorobenzene	16	10		µg/L	1	6/27/00 3:23:00 PM
1,4-Dichlorobenzene	30	10		µg/L	1	6/27/00 3:23:00 PM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/27/00 3:23:00 PM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/27/00 3:23:00 PM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2-Chloronaphthalene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2-Chlorophenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2-Methylnaphthalene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2-Methylphenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
2-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:23:00 PM
2-Nitrophenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/27/00 3:23:00 PM
3-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:23:00 PM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/27/00 3:23:00 PM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 3:23:00 PM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
4-Chloroaniline	BRL	10		µg/L	1	6/27/00 3:23:00 PM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 3:23:00 PM
4-Methylphenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
4-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:23:00 PM
4-Nitrophenol	BRL	25		µg/L	1	6/27/00 3:23:00 PM
Acenaphthene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Acenaphthylene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Anthracene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Benz(a)anthracene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Benzo(a)pyrene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004050

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Chrysene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Dibenzofuran	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Diethyl phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Dimethyl phthalate	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Fluoranthene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Fluorene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Hexachlorobenzene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Hexachlorobutadiene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Hexachloroethane	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Isophorone	BRL	10		µg/L	1	6/27/00 3:23:00 PM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/27/00 3:23:00 PM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Naphthalene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Nitrobenzene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Pentachlorophenol	BRL	25		µg/L	1	6/27/00 3:23:00 PM
Phenanthrene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Phenol	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Pyrene	BRL	10		µg/L	1	6/27/00 3:23:00 PM
Surr: 2,4,6-Tribromophenol	77.8	10-123		%REC	1	6/27/00 3:23:00 PM
Surr: 2-Fluorobiphenyl	68.4	43-116		%REC	1	6/27/00 3:23:00 PM
Surr: 2-Fluorophenol	37.5	21-110		%REC	1	6/27/00 3:23:00 PM
Surr: 4-Terphenyl-d14	37.7	33-141		%REC	1	6/27/00 3:23:00 PM
Surr: Nitrobenzene-d5	73.7	35-114		%REC	1	6/27/00 3:23:00 PM
Surr: Phenol-d5	75.0	10-94		%REC	1	6/27/00 3:23:00 PM

MEW Site File
Break6_004051

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/27/00 9:19:00 PM
Aroclor 1260	25	1.0		µg/L	1	6/27/00 9:19:00 PM
Surr: Decachlorobiphenyl	42.0	30-150		%REC	1	6/27/00 9:19:00 PM
Surr: Tetrachloro-m-xylene	71.2	30-150		%REC	1	6/27/00 9:19:00 PM

MEW Site File
Break6_004052

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	7/10/00 7:39:00 PM
Aroclor 1260	2.0	1.0		µg/L	1	7/10/00 7:39:00 PM
Surr: Decachlorobiphenyl	48.4	30-150		%REC	1	7/10/00 7:39:00 PM
Surr: Tetrachloro-m-xylene	137	30-150		%REC	1	7/10/00 7:39:00 PM

MEW Site File
Break6_004053

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **MJ**
Calcium	30.9	0.100		mg/L	1	6/28/00 1:20:00 PM
Iron	18.0	0.100		mg/L	1	6/28/00 1:20:00 PM
Magnesium	5.64	0.100		mg/L	1	6/28/00 1:20:00 PM
Manganese	0.309	0.00500		mg/L	1	6/28/00 1:20:00 PM
Potassium	9.69	0.500		mg/L	1	6/28/00 1:20:00 PM
Sodium	14.2	1.00		mg/L	1	6/28/00 1:20:00 PM
HARDNESS		**M2340 B**				Analyst: **MJ**
Hardness, Calcium (As CaCO3)	77.1	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM
Hardness, Calcium/Magnesium (As CaCO3)	100	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM
Hardness, Magnesium	23.2	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM

MEW Site File
Break6_004054

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: TG
Specific Conductance	138	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: LO
pH	9.97	0.0100		pH Units	1	6/23/00 5:00:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: LV
Residue, Dissolved (TDS)	126	5.00		mg/L	1	6/28/00 4:10:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: LV
Residue, Suspended (TSS)	404	20.0		mg/L	1	6/24/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: LV
Residue, Total	BRL	5.00		wt%	1	6/29/00 11:30:00 AM
ALKALINITY		**E310.1**				Analyst: TG
Alkalinity, Total (As CaCO3)	76.0	3.00		mg/L	1	6/26/00 2:50:00 PM
CHLORIDE		**E325.2**				Analyst: TL
Chloride	12.9	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: RS
Fluoride	0.330	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: VS
Oxygen, Dissolved	8.03	1.00		mg/L	1	6/26/00 2:45:00 PM
SULFATE		**E375.4**				Analyst: RS
Sulfate	10.0	10.0		mg/L	10	6/26/00 9:02:16 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: VS
Biochemical Oxygen Demand	9.20	5.00		mg/L	1	6/29/00 8:00:00 AM

MEW Site File
Break6_004055

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	7/1/00 12:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	0.136	0.0500		mg/L	1	7/1/00 12:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	0.176	0.0500		mg/L	1	7/5/00 2:00:00 PM

MEW Site File
Break6_004056

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		**E410.4**				Analyst: LV
Chemical Oxygen Demand	28.8	10.0		mg/L	1	6/26/00 5:30:00 PM
TOTAL ORGANIC CARBON (TOC)		**E415.1**				Analyst: RS
Organic Carbon, Total	10.1	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004057

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 4:00:00 PM
Lab ID:	0006423-001I	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: **LV**
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004058

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 2:09:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 2:09:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 2:09:00 PM
Acetone	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Chlorobenzene	24	5.0		µg/L	1	6/30/00 2:09:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 2:09:00 PM
Surr: 4-Bromofluorobenzene	86.8	70-122		%REC	1	6/30/00 2:09:00 PM
Surr: Dibromofluoromethane	106	67-133		%REC	1	6/30/00 2:09:00 PM
Surr: Toluene-d8	99.3	80-121		%REC	1	6/30/00 2:09:00 PM

MEW Site File
Break6_004059

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JZ**
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
1,3-Dichlorobenzene	17	10		µg/L	1	6/27/00 3:56:00 PM
1,4-Dichlorobenzene	32	10		µg/L	1	6/27/00 3:56:00 PM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/27/00 3:56:00 PM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/27/00 3:56:00 PM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2-Chloronaphthalene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2-Chlorophenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2-Methylnaphthalene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2-Methylphenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
2-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:56:00 PM
2-Nitrophenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/27/00 3:56:00 PM
3-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:56:00 PM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/27/00 3:56:00 PM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 3:56:00 PM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
4-Chloroaniline	BRL	10		µg/L	1	6/27/00 3:56:00 PM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 3:56:00 PM
4-Methylphenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
4-Nitroaniline	BRL	25		µg/L	1	6/27/00 3:56:00 PM
4-Nitrophenol	BRL	25		µg/L	1	6/27/00 3:56:00 PM
Acenaphthene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Acenaphthylene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Anthracene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Benz(a)anthracene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Benzo(a)pyrene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004060

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Chrysene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Dibenzofuran	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Diethyl phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Dimethyl phthalate	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Fluoranthene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Fluorene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Hexachlorobenzene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Hexachlorobutadiene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Hexachloroethane	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Isophorone	BRL	10		µg/L	1	6/27/00 3:56:00 PM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/27/00 3:56:00 PM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Naphthalene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Nitrobenzene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Pentachlorophenol	BRL	25		µg/L	1	6/27/00 3:56:00 PM
Phenanthrene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Phenol	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Pyrene	BRL	10		µg/L	1	6/27/00 3:56:00 PM
Surr: 2,4,6-Tribromophenol	92.7	10-123		%REC	1	6/27/00 3:56:00 PM
Surr: 2-Fluorobiphenyl	79.3	43-116		%REC	1	6/27/00 3:56:00 PM
Surr: 2-Fluorophenol	39.4	21-110		%REC	1	6/27/00 3:56:00 PM
Surr: 4-Terphenyl-d14	34.4	33-141		%REC	1	6/27/00 3:56:00 PM
Surr: Nitrobenzene-d5	91.1	35-114		%REC	1	6/27/00 3:56:00 PM
Surr: Phenol-d5	43.2	10-94		%REC	1	6/27/00 3:56:00 PM

MEW Site File
Break6_004061

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: BW
Aroclor 1016	BRL	1.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/28/00 9:50:00 PM
Aroclor 1260	110	5.0		µg/L	5	6/28/00 12:17:00 PM
Surr: Decachlorobiphenyl	38.4	30-150		%REC	1	6/28/00 9:50:00 PM
Surr: Tetrachloro-m-xylene	75.7	30-150		%REC	1	6/28/00 9:50:00 PM

MEW Site File
Break6_004062

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	7/10/00 8:10:00 PM
Aroclor 1260	4.5	1.0		µg/L	1	7/10/00 8:10:00 PM
Surr: Decachlorobiphenyl	30.6	30-150		%REC	1	7/10/00 8:10:00 PM
Surr: Tetrachloro-m-xylene	101	30-150		%REC	1	7/10/00 8:10:00 PM

MEW Site File
Break6_004063

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **MJ**
Calcium	20.7	0.100		mg/L	1	6/28/00 1:34:00 PM
Iron	9.30	0.100		mg/L	1	6/28/00 1:34:00 PM
Magnesium	2.50	0.100		mg/L	1	6/28/00 1:34:00 PM
Manganese	0.179	0.00500		mg/L	1	6/28/00 1:34:00 PM
Potassium	7.12	0.500		mg/L	1	6/28/00 1:34:00 PM
Sodium	19.1	1.00		mg/L	1	6/28/00 1:34:00 PM
HARDNESS		**M2340 B**				Analyst: **MJ**
Hardness, Calcium (As CaCO3)	51.8	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM
Hardness, Calcium/Magnesium (As CaCO3)	62.1	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM
Hardness, Magnesium	10.3	1.00		mg/L CaCO3	1	6/28/00 5:00:00 PM

MEW Site File
Break6_004064

Qualifiers:

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J - Analyte detected below quantitation limits
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R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		E120.1				Analyst: TG
Specific Conductance	174	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		E150.1				Analyst: LO
pH	9.82	0.0100		pH Units	1	6/23/00 5:00:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: LV
Residue, Dissolved (TDS)	137	5.00		mg/L	1	6/28/00 4:10:00 PM
RESIDUE, SUSPENDED (TSS)		E160.2				Analyst: LV
Residue, Suspended (TSS)	162	10.0		mg/L	1	6/24/00 4:40:00 PM
RESIDUE, TOTAL		E160.3				Analyst: LV
Residue, Total	BRL	5.00		wt%	1	6/29/00 11:30:00 AM
ALKALINITY		E310.1				Analyst: TG
Alkalinity, Total (As CaCO3)	64.0	3.00		mg/L	1	6/26/00 2:50:00 PM
CHLORIDE		E325.2				Analyst: TL
Chloride	15.9	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		E340.2				Analyst: RS
Fluoride	0.490	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		E360.1				Analyst: VS
Oxygen, Dissolved	8.25	1.00		mg/L	1	6/26/00 2:45:00 PM
SULFATE		E375.4				Analyst: RS
Sulfate	14.5	10.0		mg/L	10	6/26/00 9:02:16 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		E405.1				Analyst: VS
Biochemical Oxygen Demand	BRL	5.00		mg/L	1	6/29/00 8:00:00 AM

MEW Site File
Break6_004065

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		**E353.2**				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	7/1/00 12:00:00 PM
NITROGEN, NITRATE (AS N)		**E353.2**				Analyst: TL
Nitrogen, Nitrate (as N)	0.287	0.0500		mg/L	1	7/1/00 12:00:00 PM
TOTAL PHOSPHORUS		**E365.1**				Analyst: TL
Phosphorus, Total (As P)	BRL	0.0500		mg/L	1	7/5/00 2:00:00 PM

MEW Site File
Break6_004066

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	27.5	10.0		mg/L	1	6/26/00 5:30:00 PM
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: RS
Organic Carbon, Total	7.88	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004067

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-002I	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		E376.2				Analyst: LV
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004068

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200-301
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-003A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: MJL
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 2:53:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 2:53:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 2:53:00 PM
Acetone	75	5.0		µg/L	1	6/30/00 2:53:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 2:53:00 PM
Surr: 4-Bromofluorobenzene	84.7	70-122		%REC	1	6/30/00 2:53:00 PM
Surr: Dibromofluoromethane	107	67-133		%REC	1	6/30/00 2:53:00 PM
Surr: Toluene-d8	101	80-121		%REC	1	6/30/00 2:53:00 PM

MEW Site File
Break6_004069

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200-301
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-003B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: BW
Aroclor 1016	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/27/00 10:22:00 PM
Surr: Decachlorobiphenyl	62.8	30-150		%REC	1	6/27/00 10:22:00 PM
Surr: Tetrachloro-m-xylene	104	30-150		%REC	1	6/27/00 10:22:00 PM

MEW Site File
Break6_004070

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200-101
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-004A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: MJL
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 3:37:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 3:37:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 3:37:00 PM
Acetone	64	5.0		µg/L	1	6/30/00 3:37:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 3:37:00 PM
Surr: 4-Bromofluorobenzene	85.4	70-122		%REC	1	6/30/00 3:37:00 PM
Surr: Dibromofluoromethane	107	67-133		%REC	1	6/30/00 3:37:00 PM
Surr: Toluene-d8	101	80-121		%REC	1	6/30/00 3:37:00 PM

MEW Site File
Break6_004071

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200-101
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-004B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		***SW8082***				*Analyst:* ***BW***
Aroclor 1016	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/27/00 10:53:00 PM
Surr: Decachlorobiphenyl	43.6	30-150		%REC	1	6/27/00 10:53:00 PM
Surr: Tetrachloro-m-xylene	107	30-150		%REC	1	6/27/00 10:53:00 PM

MEW Site File
Break6_004072

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-005A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 4:21:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 4:21:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 4:21:00 PM
Acetone	79	5.0		µg/L	1	6/30/00 4:21:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 4:21:00 PM
Surr: 4-Bromofluorobenzene	85.2	70-122		%REC	1	6/30/00 4:21:00 PM
Surr: Dibromofluoromethane	107	67-133		%REC	1	6/30/00 4:21:00 PM
Surr: Toluene-d8	100	80-121		%REC	1	6/30/00 4:21:00 PM

MEW Site File
Break6_004073

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-005B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/27/00 11:24:00 PM
Surr: Decachlorobiphenyl	58.1	30-150		%REC	1	6/27/00 11:24:00 PM
Surr: Tetrachloro-m-xylene	105	30-150		%REC	1	6/27/00 11:24:00 PM

MEW Site File
Break6_004074

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-006A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1221	BRL	2.9		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1232	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1242	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1248	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1254	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Aroclor 1260	BRL	1.4		µg/L	1	6/27/00 11:55:00 PM
Surr: Decachlorobiphenyl	34.4	30-150		%REC	1	6/27/00 11:55:00 PM
Surr: Tetrachloro-m-xylene	54.8	30-150		%REC	1	6/27/00 11:55:00 PM

MEW Site File
Break6_004075

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200
Lab Order:	0006423	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	6/22/00
Lab ID:	0006423-006B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	7/10/00 8:42:00 PM
Surr: Decachlorobiphenyl	38.4	30-150		%REC	1	7/10/00 8:42:00 PM
Surr: Tetrachloro-m-xylene	94.6	30-150		%REC	1	7/10/00 8:42:00 PM

MEW Site File
Break6_004076

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200
Lab Order:	0006423	**Tag Number:**	MS/MSD
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-007A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
2-Butanone	BRL	10		µg/L	1	6/30/00 5:05:00 PM
2-Hexanone	BRL	10		µg/L	1	6/30/00 5:05:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/30/00 5:05:00 PM
Acetone	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Benzene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Bromoform	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Chlorobenzene	19	5.0		µg/L	1	6/30/00 5:05:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Chloroform	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Chloromethane	6.3	5.0		µg/L	1	6/30/00 5:05:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Styrene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Toluene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/30/00 5:05:00 PM
Surr: 4-Bromofluorobenzene	86.6	70-122		%REC	1	6/30/00 5:05:00 PM
Surr: Dibromofluoromethane	109	67-133		%REC	1	6/30/00 5:05:00 PM
Surr: Toluene-d8	102	80-121		%REC	1	6/30/00 5:05:00 PM

MEW Site File
Break6_004077

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200
Lab Order:	0006423	**Tag Number:**	MS/MSD
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-007B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	6/28/00 12:26:00 AM
Aroclor 1260	55	5.0		µg/L	5	6/28/00 10:43:00 AM
Surr: Decachlorobiphenyl	45.3	30-150		%REC	1	6/28/00 12:26:00 AM
Surr: Tetrachloro-m-xylene	57.4	30-150		%REC	1	6/28/00 12:26:00 AM
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JZ**
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/27/00 4:28:00 PM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/27/00 4:28:00 PM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2-Chloronaphthalene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2-Chlorophenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2-Methylnaphthalene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2-Methylphenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
2-Nitroaniline	BRL	25		µg/L	1	6/27/00 4:28:00 PM
2-Nitrophenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/27/00 4:28:00 PM
3-Nitroaniline	BRL	25		µg/L	1	6/27/00 4:28:00 PM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/27/00 4:28:00 PM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 4:28:00 PM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
4-Chloroaniline	BRL	10		µg/L	1	6/27/00 4:28:00 PM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/27/00 4:28:00 PM
4-Methylphenol	BRL	10		µg/L	1	6/27/00 4:28:00 PM
4-Nitroaniline	BRL	25		µg/L	1	6/27/00 4:28:00 PM
4-Nitrophenol	BRL	25		µg/L	1	6/27/00 4:28:00 PM
Acenaphthene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Acenaphthylene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Anthracene	BRL	10		µg/L	1	6/27/00 4:28:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004078

Analytical Environmental Services, Inc.

Date: *14-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-062200
Lab Order:	0006423	**Tag Number:**	MS/MSD
Project:	Ameren-MEW	**Collection Date:**	6/22/00 1:30:00 PM
Lab ID:	0006423-007B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Benzo(a)pyrene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Carbazole	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Chrysene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Dibenzofuran	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Diethyl phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Dimethyl phthalate	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Fluoranthene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Fluorene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Hexachlorobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Hexachlorobutadiene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Hexachloroethane	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Isophorone	BRL	10		µg/L	1	6/27/00 4:28:00 PM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/27/00 4:28:00 PM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Naphthalene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Nitrobenzene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Pentachlorophenol	BRL	25		µg/L	1	6/27/00 4:28:00 PM
Phenanthrene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Phenol	260	100		µg/L	10	6/28/00 12:29:00 PM
Pyrene	BRL	10		µg/L	1	6/27/00 4:28:00 PM
Surr: 2,4,6-Tribromophenol	98.3	10-123		%REC	1	6/27/00 4:28:00 PM
Surr: 2-Fluorobiphenyl	82.4	43-116		%REC	1	6/27/00 4:28:00 PM
Surr: 2-Fluorophenol	18.2	21-110		%REC	1	6/27/00 4:28:00 PM
Surr: 4-Terphenyl-d14	46.7	33-141		%REC	1	6/27/00 4:28:00 PM
Surr: Nitrobenzene-d5	103	35-114		%REC	1	6/27/00 4:28:00 PM
Surr: Phenol-d5	23.1	10-94		%REC	1	6/27/00 4:28:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004079

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123700-1**

July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006423-001J, 06/22/2000, 16:00, received 06/23/2000
MW22A (MW11 DUP)

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	3096000	1	no/mL

MEW Site File
Break6_004080

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123700-2**

July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006423-002J, 06/22/2000, 13:30, received 06/23/2000
MW11

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	1056000	1	no/mL

MEW Site File
Break6_004081

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

July 17, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: MEW / 93-01 Order No.: 0006360

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 2 samples on 6/21/00 10:10:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

RECEIVED
JUL 24 2000

MEW Site File
Break6_004082

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004083

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW3-062000	(2) 40 mL amber HCl	20 Jun 00			X			8260B	
	1 litre glass amber		1630					8270B	
	"							8082 PCBs	24 HR TOT
	"							8082 dissolved PCB	filter first
	"							extra	
	500 mL HNO_3							6010B	Ca Fe Mg Mn Na K
	"							SM2340B	hardness
	1 litre plastic						325.2	375.4 340.2 353.2	Cl sulfate fluoride nitrite
	"						160.1	160.2 160.3 310.1 150.1 360.1	TDS
	500 mL H_2SO_4							353.2 365.3	Nitrate/Phos
	250 mL H_2SO_4							410.4	COD
	(2) 40 mL Glass amber								methane
	500 mL plastic NaOH							376.1	sulfide
	120 mL sterile wt preserv.					Total		heterotrophs	SM 9215B
	" " " "					Total		hydrocarbon degraders	"

Relinquished By: Dean Mitchell — Date/Time: 20 Jun 1730 — Received for Lab By: [signature] — Date/Time: 6/21/00 10:10
Received By: to Fed Ex — Date/Time:
Relinquished By: — Date/Time:
Received By: — Date/Time:

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

MEW Site File
Break6_004084

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: " " 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW-10-062000	(2) 40 mL amber HCl	20 June 00			X			8260B	
	1 litre glass amber		0910					8270B	
	"							8082 PCBs	[redacted]
	"							8082 dissolved PCB	filter first
	"							extra	
	500 mL HNO3							6010B	Ca Fe Mg Mn Na K
	"							SM 2340B	hardness
	1 litre plastic							325.2 375.4 340.2 352.2	Cl sulfate fluoride nitrate
	"							160.1 160.2 160.3 310 1521	360.1 TDS TSS
	500 mL plastic H2SO4							353.2 365.3	Nitrate/phosphate
	250 mL " "							410.4	COD
	(2) 40 mL Glass amber								methane
	500 mL plastic NaOH							376.1	sulfide
	120 mL sterile wt preserv.					Total		heterotrophs	SM 9215B
	" " " " "					Total		hydrocarbon degraders	"

Relinquished By: Dean Mitchell
Received By: to FedEx
Relinquished By:
Received By:

Date/Time: 20 June 00 ~~1430~~
Date/Time:
Date/Time:
Date/Time:

Received for Lab By: [illegible]
Date/Time: 6/21/00 10:10

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 1010 6/21/00

Work Order Number 0006360

Received by YN

Checklist completed by U. Karacic (Signature) 6/21/00 (Date)

Reviewed by (Initials) 6/21/00 (Date)

Matrix: Carrier name FedEx

	Yes	No	Not Presen
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shippping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☑	☐	☐
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	☑	☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004085

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	7.9	5.0		µg/L	1	6/24/00 5:32:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
1,1-Dichloroethane	6.2	5.0		µg/L	1	6/24/00 5:32:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
2-Butanone	BRL	10		µg/L	1	6/24/00 5:32:00 PM
2-Hexanone	BRL	10		µg/L	1	6/24/00 5:32:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/24/00 5:32:00 PM
Acetone	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Benzene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Bromoform	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Chloroform	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Styrene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Toluene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/24/00 5:32:00 PM
Surr: 4-Bromofluorobenzene	87.1	70-122		%REC	1	6/24/00 5:32:00 PM
Surr: Dibromofluoromethane	110	67-133		%REC	1	6/24/00 5:32:00 PM
Surr: Toluene-d8	104	80-121		%REC	1	6/24/00 5:32:00 PM

MEW Site File
Break6_004086

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	*6/20/00 9:10:00 AM*
Lab ID:	0006360-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	23	10		µg/L	1	6/24/00 2:44:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 2:44:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 2:44:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:44:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 2:44:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:44:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 2:44:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 2:44:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 2:44:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 2:44:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 2:44:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 2:44:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Bis(2-ethylhexyl)phthalate	16	10		µg/L	1	6/24/00 2:44:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 2:44:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004087

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 2:44:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 2:44:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 2:44:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 2:44:00 AM
Surr: 2,4,6-Tribromophenol	90.0	10-123		%REC	1	6/24/00 2:44:00 AM
Surr: 2-Fluorobiphenyl	77.0	43-116		%REC	1	6/24/00 2:44:00 AM
Surr: 2-Fluorophenol	62.3	21-110		%REC	1	6/24/00 2:44:00 AM
Surr: 4-Terphenyl-d14	64.6	33-141		%REC	1	6/24/00 2:44:00 AM
Surr: Nitrobenzene-d5	70.7	35-114		%REC	1	6/24/00 2:44:00 AM
Surr: Phenol-d5	22.8	10-94		%REC	1	6/24/00 2:44:00 AM

MEW Site File
Break6_004088

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 6:33:00 PM
Surr: Decachlorobiphenyl	31.1	30-150		%REC	1	6/26/00 6:33:00 PM
Surr: Tetrachloro-m-xylene	56.1	30-150		%REC	1	6/26/00 6:33:00 PM

MEW Site File
Break6_004089

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 7:04:00 PM
Surr: Decachlorobiphenyl	31.0	30-150		%REC	1	6/26/00 7:04:00 PM
Surr: Tetrachloro-m-xylene	30.6	30-150		%REC	1	6/26/00 7:04:00 PM

MEW Site File
Break6_004090

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	126	0.100		mg/L	1	6/22/00 3:30:00 PM
Iron	4.66	0.100		mg/L	1	6/22/00 3:30:00 PM
Magnesium	6.12	0.100		mg/L	1	6/22/00 3:30:00 PM
Manganese	0.114	0.00500		mg/L	1	6/22/00 3:30:00 PM
Potassium	3.36	0.500		mg/L	1	6/22/00 3:30:00 PM
Sodium	11.4	1.00		mg/L	1	6/22/00 3:30:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium/Magnesium (As CaCO3)	340	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM

MEW Site File
Break6_004091

Qualifiers:

ND - Not Detected at the Reporting Limit
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* - Value exceeds Maximum Contaminant Level
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R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: TG
Specific Conductance	699	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: TG
pH	7.43	0.0100		pH Units	1	6/21/00 6:30:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: LV
Residue, Dissolved (TDS)	468	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: LV
Residue, Suspended (TSS)	115	5.00		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: TG
Residue, Total	600	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		**E310.1**				Analyst: TG
Alkalinity, Total (As CaCO3)	302	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		**E325.2**				Analyst: TL
Chloride	35.1	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: RS
Fluoride	0.220	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: VS
Oxygen, Dissolved	3.44	1.00		mg/L	1	6/21/00 1:30:00 PM
SULFATE		**E375.4**				Analyst: RS
Sulfate	24.7	10.0		mg/L	10	6/22/00 9:34:17 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: VS
Biochemical Oxygen Demand	7.40	5.00		mg/L	1	6/27/00 8:15:00 AM

MEW Site File
Break6_004092

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	1.09	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	BRL	0.0500		mg/L	1	6/28/00 11:30:00 AM

MEW Site File
Break6_004093

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		**E410.4**				Analyst: LV
Chemical Oxygen Demand	29.2	10.0		mg/L	1	6/24/00 5:00:00 PM
TOTAL ORGANIC CARBON (TOC)		**E415.1**				Analyst: RS
Organic Carbon, Total	10.1	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004094

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW-10-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 9:10:00 AM
Lab ID:	0006360-001J	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: **LV**
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004095

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: MJL
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
2-Butanone	BRL	10		µg/L	1	6/24/00 6:16:00 PM
2-Hexanone	BRL	10		µg/L	1	6/24/00 6:16:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	6/24/00 6:16:00 PM
Acetone	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Benzene	11	5.0		µg/L	1	6/24/00 6:16:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Bromoform	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Bromomethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Chlorobenzene	710	50		µg/L	10	6/26/00 12:19:00 PM
Chloroethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Chloroform	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Chloromethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Methylene chloride	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Styrene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Toluene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Trichloroethene	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	6/24/00 6:16:00 PM
Surr: 4-Bromofluorobenzene	88.2	70-122		%REC	1	6/24/00 6:16:00 PM
Surr: 4-Bromofluorobenzene	89.7	70-122		%REC	10	6/26/00 12:19:00 PM
Surr: Dibromofluoromethane	107	67-133		%REC	1	6/24/00 6:16:00 PM
Surr: Dibromofluoromethane	103	67-133		%REC	10	6/26/00 12:19:00 PM
Surr: Toluene-d8	98.6	80-121		%REC	10	6/26/00 12:19:00 PM
Surr: Toluene-d8	102	80-121		%REC	1	6/24/00 6:16:00 PM

MEW Site File
Break6_004096

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: JZ
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
1,3-Dichlorobenzene	15	10		µg/L	1	6/24/00 7:07:00 AM
1,4-Dichlorobenzene	37	10		µg/L	1	6/24/00 7:07:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	6/24/00 7:07:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	6/24/00 7:07:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2-Chlorophenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2-Methylphenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
2-Nitroaniline	BRL	25		µg/L	1	6/24/00 7:07:00 AM
2-Nitrophenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	6/24/00 7:07:00 AM
3-Nitroaniline	BRL	25		µg/L	1	6/24/00 7:07:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	6/24/00 7:07:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 7:07:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
4-Chloroaniline	BRL	10		µg/L	1	6/24/00 7:07:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	6/24/00 7:07:00 AM
4-Methylphenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
4-Nitroaniline	BRL	25		µg/L	1	6/24/00 7:07:00 AM
4-Nitrophenol	BRL	25		µg/L	1	6/24/00 7:07:00 AM
Acenaphthene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Acenaphthylene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Anthracene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Benz(a)anthracene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Bis(2-ethylhexyl)phthalate	21	10		µg/L	1	6/24/00 7:07:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	6/24/00 7:07:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004097

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Carbazole	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Chrysene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Dibenzofuran	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Diethyl phthalate	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Fluoranthene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Fluorene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Hexachloroethane	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Isophorone	BRL	10		µg/L	1	6/24/00 7:07:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	6/24/00 7:07:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Naphthalene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Nitrobenzene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Pentachlorophenol	BRL	25		µg/L	1	6/24/00 7:07:00 AM
Phenanthrene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Phenol	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Pyrene	BRL	10		µg/L	1	6/24/00 7:07:00 AM
Surr: 2,4,6-Tribromophenol	86.9	10-123		%REC	1	6/24/00 7:07:00 AM
Surr: 2-Fluorobiphenyl	85.4	43-116		%REC	1	6/24/00 7:07:00 AM
Surr: 2-Fluorophenol	64.0	21-110		%REC	1	6/24/00 7:07:00 AM
Surr: 4-Terphenyl-d14	53.7	33-141		%REC	1	6/24/00 7:07:00 AM
Surr: Nitrobenzene-d5	75.2	35-114		%REC	1	6/24/00 7:07:00 AM
Surr: Phenol-d5	22.3	10-94		%REC	1	6/24/00 7:07:00 AM

MEW Site File
Break6_004098

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/22/00 1:17:00 PM
Surr: Decachlorobiphenyl	30.8	30-150		%REC	1	6/22/00 1:17:00 PM
Surr: Tetrachloro-m-xylene	38.9	30-150		%REC	1	6/22/00 1:17:00 PM

MEW Site File
Break6_004099

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	6/26/00 7:35:00 PM
Surr: Decachlorobiphenyl	37.7	30-150		%REC	1	6/26/00 7:35:00 PM
Surr: Tetrachloro-m-xylene	40.1	30-150		%REC	1	6/26/00 7:35:00 PM

MEW Site File
Break6_004100

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	91.4	0.100		mg/L	1	6/22/00 3:17:00 PM
Iron	4.81	0.100		mg/L	1	6/22/00 3:17:00 PM
Magnesium	8.20	0.100		mg/L	1	6/22/00 3:17:00 PM
Manganese	1.78	0.00500		mg/L	1	6/22/00 3:17:00 PM
Potassium	1.40	0.500		mg/L	1	6/22/00 3:17:00 PM
Sodium	16.7	1.00		mg/L	1	6/22/00 3:17:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium (As CaCO3)	228	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Calcium/Magnesium (As CaCO3)	262	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM
Hardness, Magnesium	33.8	1.00		mg/L CaCO3	1	6/22/00 9:59:00 AM

MEW Site File
Break6_004101

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: **TG**
Specific Conductance	558	1.00		µmhos/cm	1	6/27/00 8:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: **TG**
pH	7.70	0.0100		pH Units	1	6/21/00 6:30:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: **LV**
Residue, Dissolved (TDS)	343	5.00		mg/L	1	6/22/00 2:00:00 PM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: **LV**
Residue, Suspended (TSS)	140	5.00		mg/L	1	6/21/00 4:40:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: **TG**
Residue, Total	500	20.0		mg/L	1	6/22/00 8:40:00 AM
ALKALINITY		**E310.1**				Analyst: **TG**
Alkalinity, Total (As CaCO3)	281	3.00		mg/L	1	6/21/00 12:30:00 PM
CHLORIDE		**E325.2**				Analyst: **TL**
Chloride	11.7	1.00		mg/L	1	6/27/00 5:30:00 PM
FLUORIDE		**E340.2**				Analyst: **RS**
Fluoride	0.200	0.200		mg/L	1	6/29/00 4:30:00 PM
DISSOLVED OXYGEN		**E360.1**				Analyst: **VS**
Oxygen, Dissolved	5.87	1.00		mg/L	1	6/21/00 1:30:00 PM
SULFATE		**E375.4**				Analyst: **RS**
Sulfate	13.7	10.0		mg/L	10	6/22/00 9:34:17 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: **VS**
Biochemical Oxygen Demand	10.5	5.00		mg/L	1	6/27/00 8:15:00 AM

MEW Site File
Break6_004102

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: TL
Nitrogen, Nitrate (as N)	BRL	0.0500		mg/L	1	6/26/00 5:00:00 PM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	BRL	0.0500		mg/L	1	6/28/00 11:30:00 AM

MEW Site File
Break6_004103

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002H	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	34.7	10.0		mg/L	1	6/24/00 5:00:00 PM
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: RS
Organic Carbon, Total	9.90	1.00		mg/L	1	6/23/00 9:33:24 AM

MEW Site File
Break6_004104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Jul-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW3-062000
Lab Order:	0006360	**Tag Number:**	
Project:	MEW / 93-01	**Collection Date:**	6/20/00 4:30:00 PM
Lab ID:	0006360-002J	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: **LV**
Sulfide	BRL	1.00		mg/L	1	6/27/00 6:00:00 PM

MEW Site File
Break6_004105

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim

P.O. No. 000342

Report No. **123597-1**

July 7, 2000

Sample Description

Analytical Environmental Services Inc.

Water, grab, 0006360-001K, 06/20/2000, 9:10, received 06/21/200

MW10

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	350	1	no/mL

MEW Site File
Break6_004106

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Attention: Mr. Matt Yildirim
Report No. **123597-2**

P.O. No. 000342
July 7, 2000

Sample Description

Analytical Environmental Services Inc.
Water, grab, 0006360-002K, 06/20/2000, 16:30, received 06/21/200
MW 3

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	4500	1	no/mL

MEW Site File
Break6_004107

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 09, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW

Order No.: 0009464

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 2 samples on 9/27/00 9:55:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004108

RECEIVED
OCT 23 2000

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004109

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW8-9.26-00	40 mL VOA	9-26-00	1715		X	HCl	2		8260B 0009464-001
	1 L ~~amber~~ AMBER					No	1		8270C
	1L AMBER						1		PCB 8082 unfiltered
	1L AMBER						1		PCB 8082 made to be lab filtered
	1L AMBER						1		extra
	500 mL plastic					HNO_3	1	6010B Ca Fe Mg	Mn Na K
	1 L plastic					No	1	Chloride 325.2	Sulfate 375.4 Fluoride 340.2
	~~500 mL plastic~~							Nitrate 353.2	~~Sulfate~~ Ammonia + specific conductance
	500 mL plastic					NaOH	1	376.1 sulfide	
	" "					H_2SO_4	1	Nitrite 353.2 total	Phosphorous 365.3
	1 L plastic					No	1	TDS 160.1	TSS 160.2 TS 160.3
							Al	Kalinity 310.1	pH 150.1 DO 360.1 ORP
	500 mL plastic					HNO_3		Hardness	Sn 2340B
	250 mL Plastic					H_2SO_4	1	COD 410.4 +	BOD
	120 mL Sterile						1	Total heterotrophic	Plate Count Sm9215B

Relinquished By: Christopher Dean Mitchell
Date/Time: 9/26/00 1800
Received for Lab By: M. Kararic
Date/Time: 9/27/00 9:55
Received By: FED EX
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

Misplaced

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004110

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave. #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required								Comments/Special Instructions
TB-9-26-00	40-L VOA	9-26-00	1800				2									8260B 0009464-2

Relinquished By: [signature] Dean Mitchell Date/Time: 9-26-00 1800
Received By: FEDEX Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Received for Lab By: M. Karana Date/Time: 9/27/00 9:55
Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/27/00 9:55:00 AM

Work Order Number 0009464

Received by MK

Checklist completed by M. Karanic (Signature) 9/27/00 (Date)

Reviewed by [illegible] (Analyst) 9/27/00 (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004111

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				**Analyst: MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
2-Butanone	BRL	10		µg/L	1	9/30/00 11:30:00 PM
2-Hexanone	BRL	10		µg/L	1	9/30/00 11:30:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	9/30/00 11:30:00 PM
Acetone	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Benzene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Bromoform	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Bromomethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Chloroethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Chloroform	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Chloromethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Methylene chloride	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Styrene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Toluene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Trichloroethene	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	9/30/00 11:30:00 PM
Surr: 4-Bromofluorobenzene	83.2	70-122		%REC	1	9/30/00 11:30:00 PM
Surr: Dibromofluoromethane	98.4	67-133		%REC	1	9/30/00 11:30:00 PM
Surr: Toluene-d8	98.3	80-121		%REC	1	9/30/00 11:30:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004112

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/2/00 7:56:00 PM
Surr: Decachlorobiphenyl	33.0	30-150		%REC	1	10/2/00 7:56:00 PM
Surr: Tetrachloro-m-xylene	62.5	30-150		%REC	1	10/2/00 7:56:00 PM
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JZ**
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
1,2-Dichlorobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
1,3-Dichlorobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
1,4-Dichlorobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	9/30/00 4:07:00 AM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2,4-Dichlorophenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2,4-Dimethylphenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2,4-Dinitrophenol	BRL	25		µg/L	1	9/30/00 4:07:00 AM
2,4-Dinitrotoluene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2,6-Dinitrotoluene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2-Chloronaphthalene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2-Chlorophenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2-Methylnaphthalene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2-Methylphenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
2-Nitroaniline	BRL	25		µg/L	1	9/30/00 4:07:00 AM
2-Nitrophenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	9/30/00 4:07:00 AM
3-Nitroaniline	BRL	25		µg/L	1	9/30/00 4:07:00 AM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	9/30/00 4:07:00 AM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	9/30/00 4:07:00 AM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
4-Chloroaniline	BRL	10		µg/L	1	9/30/00 4:07:00 AM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	9/30/00 4:07:00 AM
4-Methylphenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
4-Nitroaniline	BRL	25		µg/L	1	9/30/00 4:07:00 AM
4-Nitrophenol	BRL	25		µg/L	1	9/30/00 4:07:00 AM
Acenaphthene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Acenaphthylene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Anthracene	BRL	10		µg/L	1	9/30/00 4:07:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004113

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Benzo(a)pyrene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Benzo(b)fluoranthene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Benzo(k)fluoranthene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Butyl benzyl phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Carbazole	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Chrysene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Di-n-butyl phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Di-n-octyl phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Dibenzofuran	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Diethyl phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Dimethyl phthalate	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Fluoranthene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Fluorene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Hexachlorobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Hexachlorobutadiene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Hexachloroethane	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Isophorone	BRL	10		µg/L	1	9/30/00 4:07:00 AM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	9/30/00 4:07:00 AM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Naphthalene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Nitrobenzene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Pentachlorophenol	BRL	25		µg/L	1	9/30/00 4:07:00 AM
Phenanthrene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Phenol	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Pyrene	BRL	10		µg/L	1	9/30/00 4:07:00 AM
Surr: 2,4,6-Tribromophenol	57.5	10-123		%REC	1	9/30/00 4:07:00 AM
Surr: 2-Fluorobiphenyl	44.8	43-116		%REC	1	9/30/00 4:07:00 AM
Surr: 2-Fluorophenol	31.6	21-110		%REC	1	9/30/00 4:07:00 AM
Surr: 4-Terphenyl-d14	59.3	33-141		%REC	1	9/30/00 4:07:00 AM
Surr: Nitrobenzene-d5	38.7	35-114		%REC	1	9/30/00 4:07:00 AM
Surr: Phenol-d5	24.2	10-94		%REC	1	9/30/00 4:07:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004114

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	Client Sample ID:	MW8-9-26-00
Lab Order:	0009464	Tag Number:	
Project:	Ameren-MEW	Collection Date:	9/26/00 5:15:00 PM
Lab ID:	0009464-001C	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/2/00 8:23:00 PM
Surr: Decachlorobiphenyl	69.2	30-150		%REC	1	10/2/00 8:23:00 PM
Surr: Tetrachloro-m-xylene	117	30-150		%REC	1	10/2/00 8:23:00 PM

MEW Site File
Break6_004115

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	367	0.100		mg/L	1	9/28/00 6:16:00 PM
Iron	153	0.100		mg/L	1	9/28/00 6:16:00 PM
Magnesium	58.4	1.00		mg/L	10	9/29/00 11:38:00 AM
Manganese	3.72	0.00500		mg/L	1	9/28/00 6:16:00 PM
Potassium	8.19	0.500		mg/L	1	9/28/00 6:16:00 PM
Sodium	84.9	1.00		mg/L	1	9/28/00 6:16:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium/Magnesium (As CaCO3)	1,130	1.00		mg/L CaCO3	1	9/28/00 9:00:00 AM

MEW Site File
Break6_004116

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: **LV**
Specific Conductance	1,150	1.00		µmhos/cm	1	9/29/00 4:00:00 PM
HYDROGEN ION (PH)		**E150.1**				Analyst: **TL**
pH	7.00	0.0100		pH Units	1	9/27/00 5:40:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: **LV**
Residue, Dissolved (TDS)	692	5.00		mg/L	1	10/1/00 9:47:46 AM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: **LV**
Residue, Suspended (TSS)	4,720	20.0		mg/L	1	9/28/00 5:00:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: **TG**
Residue, Total	BRL	5.00		wt%	1	10/3/00 5:00:00 PM
ALKALINITY		**E310.1**				Analyst: **TG**
Alkalinity, Total (As CaCO3)	914	3.00		mg/L	1	10/3/00 3:10:00 PM
CHLORIDE		**E325.2**				Analyst: **MLW**
Chloride	25.8	10.0		mg/L	10	10/2/00 9:09:49 AM
FLUORIDE		**E340.2**				Analyst: **MLW**
Fluoride	0.220	0.200		mg/L	1	10/2/00 9:09:49 AM
DISSOLVED OXYGEN		**E360.1**				Analyst: **TG**
Oxygen, Dissolved	8.18	1.00		mg/L	1	9/27/00 6:00:00 PM
SULFATE		**E375.4**				Analyst: **MLW**
Sulfate	49.6	10.0		mg/L	10	10/2/00 9:09:49 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: **VS**
Biochemical Oxygen Demand	BRL	5.00		mg/L	1	10/2/00 10:00:00 AM

MEW Site File
Break6_004117

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		E376.2				Analyst: LO
Sulfide	10.4	10.0		mg/L	10	9/28/00 2:30:00 PM

MEW Site File
Break6_004118

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW8-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:15:00 PM
Lab ID:	0009464-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2		*		Analyst: MLW
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	9/28/00 1:10:24 AM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: MLW
Nitrogen, Nitrate (as N)	0.662	0.0500		mg/L	1	9/28/00 1:10:24 AM
TOTAL PHOSPHORUS		E365.1				Analyst: TL
Phosphorus, Total (As P)	3.56	0.0500		mg/L	1	10/2/00 12:00:00 PM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: LV
Chemical Oxygen Demand	38.7	10.0		mg/L	1	10/2/00 5:30:00 PM

MEW Site File
Break6_004119

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E --Value above quantitation range

Analytical EnvironmentaLServices, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-9-26-00
Lab Order:	0009464	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 6:00:00 PM
Lab ID:	0009464-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: MJL
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
2-Butanone	BRL	10		µg/L	1	10/1/00 12:13:00 AM
2-Hexanone	BRL	10		µg/L	1	10/1/00 12:13:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/1/00 12:13:00 AM
Acetone	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Benzene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Bromoform	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Bromomethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Chloroethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Chloroform	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Chloromethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Methylene chloride	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Styrene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Toluene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Trichloroethene	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	10/1/00 12:13:00 AM
Surr: 4-Bromofluorobenzene	82.9	70-122		%REC	1	10/1/00 12:13:00 AM
Surr: Dibromofluoromethane	98.0	67-133		%REC	1	10/1/00 12:13:00 AM
Surr: Toluene-d8	98.4	80-121		%REC	1	10/1/00 12:13:00 AM

MEW Site File
Break6_004120

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Heterotrophic Plate Count
SM 9215B

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: Admin
Date Received: 09/27/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Report Date
0009464-001H	MW8-9-26-00	210000	no/mL	10	9/26/00	10/9/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004121

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Oxidation-Reduction Potential

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: LO
Date Received: 09/27/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Date Analyzed
0009464-001E	MW8-9-26-00	189	mV	N/A	9/26/00	9/28/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004122

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 09, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0009494

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 4 samples on 9/28/00 10:15:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

RECEIVED
OCT 16 2000

MEW Site File
Break6_004123

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MEW Site File
Break6_004124

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: KOMEX
Address: 5500 Bolsa Ave. #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: 714-379-1160
Project Name: MEW
Project Number: 93-01
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
3494									
MW5-9-27-00-301	1 l amber	9-27-00	1000		X		2	PCB's 8082 unfiltered + 1 extra	
2 MW11A-9-27-00-A	1 l amber	9-27-00			X		3	PCB's 8082 (one filtered, one unfiltered + 1 extra)	
3 MW11-9-27-00-A	1 l amber	9-27-00			X		3	PCB's 8082 (one filtered, one unfiltered + 1 extra)	
1 MW5-9-27-00-A	1 l amber	9-27-00			X		3	PCB's 8082 (1 filtered, 1 unfiltered + 1 extra)	

Relinquished By: D. Mitchell
Received By: FEDEX
Relinquished By:
Received By:

Date/Time: 9/27/00 1700
Date/Time:
Date/Time:
Date/Time:

Received for Lab By: [signature]
Date/Time: 9-28-00 10:15am
Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/28/00 10:15:00 AM

Work Order Number 0009494

Received by MH

Checklist completed by [signature] 9.28-00 (Signature / Date)

Reviewed by [initials] 9-28-00 (Initials / Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: Custody Seals intact on bubble bags that samples were in

Corrective Action _____

MEW Site File
Break6_004125

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-27-00-301
Lab Order:	0009494	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 10:00:00 AM
Lab ID:	0009494-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/3/00 7:56:00 PM
Surr: Decachlorobiphenyl	38.5	30-150		%REC	1	10/3/00 7:56:00 PM
Surr: Tetrachloro-m-xylene	63.4	30-150		%REC	1	10/3/00 7:56:00 PM

MEW Site File
Break6_004126

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	Client Sample ID:	MW11A-9-27-00-A
Lab Order:	0009494	Tag Number:	1 L Amber
Project:	Ameren-MEW	Collection Date:	9/27/00
Lab ID:	0009494-002A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/3/00 8:23:00 PM
Surr: Decachlorobiphenyl	69.7	30-150		%REC	1	10/3/00 8:23:00 PM
Surr: Tetrachloro-m-xylene	73.1	30-150		%REC	1	10/3/00 8:23:00 PM

MEW Site File
Break6_004127

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-27-00-A
Lab Order:	0009494	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/27/00
Lab ID:	0009494-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Aroclor 1260	BRL	1.0		µg/L	1	10/4/00 11:30:00 AM
Surr: Decachlorobiphenyl	66.9	30-150		%REC	1	10/4/00 11:30:00 AM
Surr: Tetrachloro-m-xylene	98.4	30-150		%REC	1	10/4/00 11:30:00 AM

MEW Site File
Break6_004128

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-9-27-00-A
Lab Order:	0009494	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00
Lab ID:	0009494-003A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/3/00 9:17:00 PM
Aroclor 1260	6.2	1.0		µg/L	1	10/3/00 9:17:00 PM
Surr: Decachlorobiphenyl	31.5	30-150		%REC	1	10/3/00 9:17:00 PM
Surr: Tetrachloro-m-xylene	61.0	30-150		%REC	1	10/3/00 9:17:00 PM

MEW Site File
Break6_004129

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-9-27-00-A
Lab Order:	0009494	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/27/00
Lab ID:	0009494-003B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/3/00 9:44:00 PM
Aroclor 1260	2.1	1.0		µg/L	1	10/3/00 9:44:00 PM
Surr: Decachlorobiphenyl	33.0	30-150		%REC	1	10/3/00 9:44:00 PM
Surr: Tetrachloro-m-xylene	60.3	30-150		%REC	1	10/3/00 9:44:00 PM

MEW Site File
Break6_004130

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-27-00-A
Lab Order:	0009494	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00
Lab ID:	0009494-004A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 2:33:00 PM
Aroclor 1260	6.6	1.0		µg/L	1	10/5/00 2:33:00 PM
Surr: Decachlorobiphenyl	40.6	30-150		%REC	1	10/5/00 2:33:00 PM
Surr: Tetrachloro-m-xylene	52.9	30-150		%REC	1	10/5/00 2:33:00 PM

MEW Site File
Break6_004131

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *09-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-27-00-A
Lab Order:	0009494	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/27/00
Lab ID:	0009494-004B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/3/00 10:11:00 PM
Surr: Decachlorobiphenyl	55.0	30-150		%REC	1	10/3/00 10:11:00 PM
Surr: Tetrachloro-m-xylene	66.6	30-150		%REC	1	10/3/00 10:11:00 PM

MEW Site File
Break6_004132

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 11, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0009539

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 1 sample on 9/30/00 10:30:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

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OCT 16 2000

MEW Site File
Break6_004133

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MEW Site File
Break6_004134

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1157
Project Name: MGW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required							Comments/Special Instructions
MWS-9.28-00-S	1 gal. jar	9-27-00	1100		x	No	1				0009539-001				Please filter & analyse sediment for PCBs 8082 and Total organic carbon if possible. Do not analyze water.

Relinquished By: Dean Mitchell — Date/Time: 9-29-00 1700
Received By: " " — Date/Time:
Relinquished By: — Date/Time:
Received By: — Date/Time:

Received for Lab By: [signature] — Date/Time: 9/30/00 10:30

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/30/00 10:30:00 AM

Work Order Number 0009539

Received by AH

Checklist completed by [signature] 9/30/00 (Signature / Date)

Reviewed by mmy 9/30/00 (Initials / Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004135

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-28-00-S
Lab Order:	0009539	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/27/00 11:00:00 AM
Lab ID:	0009539-001A	**Matrix:**	SEDIMENT

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: BW
Aroclor 1016	BRL	33		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1221	BRL	66		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1232	BRL	33		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1242	BRL	33		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1248	BRL	33		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1254	BRL	33		µg/Kg	1	10/6/00 2:00:00 AM
Aroclor 1260	5,500	330		µg/Kg	10	10/6/00 1:21:00 PM
Surr: Decachlorobiphenyl	85.2	30-150		%REC	1	10/6/00 2:00:00 AM
Surr: Tetrachloro-m-xylene	57.1	30-150		%REC	1	10/6/00 2:00:00 AM
FOC/FOM		**D2974**				Analyst: LO
Fractional Organic Carbon	2.61	0.0580		%	1	10/10/00 10:30:00 AM
Fractional Organic Matter	4.49	0.100		%	1	10/10/00 10:30:00 AM

MEW Site File
Break6_004136

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 11, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0009498

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 2 samples on 9/28/00 10:05:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004137

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OCT 23 2000

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MEW Site File
Break6_004138

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
009498									
MW4-9-26-00	40 mL VOA	9-26-00	1050		X	HCl	2		8260B
	1 L amber					No	1		8270C
	1 L amber						1	PCB	8082 unfiltered
	1 L amber						1	PCB	8082 needs to be lab filtered
	1 L amber						1		extra
	500 mL plastic HNO3					HNO3	1	6010B Ca Fe Mg Mn	Na K
	1 L plastic					NO	1	Chloride 325.2 Sulfate 375.4	Fluoride 340.2
								Nitrite 352.3 ~~Sulfate~~	TDS & specific conductance
	500 mL plastic					NaOH	1	376.1 Sulfide	
	" " "					H2SO4	1	Nitrite 353.2 Total	Phosph. 365.3
	1 L plastic					NO	1	TDS 160.1 TSS 160.2	TS 160.3
	~~500 mL plastic~~ KDM							Alkalinity 310.1 pH 150.1	DO 360.1 ORP
	500 mL plastic					HNO3	1	Hardness SM 2340B	
	250 mL Plastic					H2SO4	1	COD 410.4 + BOD	
	120 mL Sterile						1	Total Heterotrophic	plate count SM 9215B

Relinquished By: Dean Mitchell
Date/Time: 9/26/00 1800
Received for Lab By: [illegible]
Date/Time: 9-28-00 10:15am
Received By: FED EX
Date/Time:
Method of Shipment:
Relinquished By:
Date/Time:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Received By:
Date/Time:
Courier Service:
Other:

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004139

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-3791157
Fax Number: 714 3791160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required								Comments/Special Instructions
9498 ~~[illegible]~~ Kom																
52 TB-9.26-00	1L AMBER	9-26-00					1									8270B
			1700				1									PCBs 8082
																unfiltered

Relinquished By: [signature] Dean Mitchell Date/Time: 9/26/00 1800
Received By: FedEx Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Received for Lab By: [signature] Date/Time: 9-28-00 10:15am

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/28/00 10:05:00 AM

Work Order Number 0009498

Received by MK

Checklist completed by M. Kararic (Signature) 9/28/00 (Date)

Reviewed by MMY (Initials) 9/28/00 (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004140

Analytical Environmental Services, Inc. **Date:** *13-Oct-00*

CLIENT: Komex.H2O Science, Inc.
Project: Ameren-MEW
Lab Order: 0009498

CASE NARRATIVE

Samples were shipped on 9/26/00, but not received at the laboratory until 9/28/00 due to an error with Fedex. The airbill became detached during transit. Therefore, pH, dissolved oxygen and heterotrophic plate count were received outside of established holding times.

MEW Site File
Break6_004141

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: **MJL**
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,1-Dichloroethane	5.6	5.0		µg/L	1	10/2/00 2:37:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
2-Butanone	BRL	10		µg/L	1	10/2/00 2:37:00 PM
2-Hexanone	BRL	10		µg/L	1	10/2/00 2:37:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/2/00 2:37:00 PM
Acetone	210	5.0		µg/L	1	10/2/00 2:37:00 PM
Benzene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Bromoform	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Bromomethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Chloroethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Chloroform	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Chloromethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Methylene chloride	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Styrene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Toluene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Trichloroethene	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	10/2/00 2:37:00 PM
Surr: 4-Bromofluorobenzene	80.5	70-122		%REC	1	10/2/00 2:37:00 PM
Surr: Dibromofluoromethane	97.4	67-133		%REC	1	10/2/00 2:37:00 PM
Surr: Toluene-d8	98.3	80-121		%REC	1	10/2/00 2:37:00 PM

MEW Site File
Break6_004142

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	Client Sample ID:	MW4-9-26-00
Lab Order:	0009498	Tag Number:	
Project:	Ameren-MEW	Collection Date:	9/26/00 10:50:00 AM
Lab ID:	0009498-001B	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 1:12:00 PM
Surr: Decachlorobiphenyl	48.0	30-150		%REC	1	10/5/00 1:12:00 PM
Surr: Tetrachloro-m-xylene	88.4	30-150		%REC	1	10/5/00 1:12:00 PM
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JZ**
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
1,2-Dichlorobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
1,3-Dichlorobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
1,4-Dichlorobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	10/4/00 8:49:00 PM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2,4-Dichlorophenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2,4-Dimethylphenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2,4-Dinitrophenol	BRL	25		µg/L	1	10/4/00 8:49:00 PM
2,4-Dinitrotoluene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2,6-Dinitrotoluene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2-Chloronaphthalene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2-Chlorophenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2-Methylnaphthalene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2-Methylphenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
2-Nitroaniline	BRL	25		µg/L	1	10/4/00 8:49:00 PM
2-Nitrophenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	10/4/00 8:49:00 PM
3-Nitroaniline	BRL	25		µg/L	1	10/4/00 8:49:00 PM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	10/4/00 8:49:00 PM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	10/4/00 8:49:00 PM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
4-Chloroaniline	BRL	10		µg/L	1	10/4/00 8:49:00 PM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	10/4/00 8:49:00 PM
4-Methylphenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
4-Nitroaniline	BRL	25		µg/L	1	10/4/00 8:49:00 PM
4-Nitrophenol	BRL	25		µg/L	1	10/4/00 8:49:00 PM
Acenaphthene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Acenaphthylene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Anthracene	BRL	10		µg/L	1	10/4/00 8:49:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - *Analyte detected below quantitation limits*

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004143

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Benzo(a)pyrene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Benzo(b)fluoranthene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Benzo(k)fluoranthene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Butyl benzyl phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Carbazole	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Chrysene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Di-n-butyl phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Di-n-octyl phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Dibenzofuran	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Diethyl phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Dimethyl phthalate	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Fluoranthene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Fluorene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Hexachlorobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Hexachlorobutadiene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Hexachloroethane	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Isophorone	BRL	10		µg/L	1	10/4/00 8:49:00 PM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	10/4/00 8:49:00 PM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Naphthalene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Nitrobenzene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Pentachlorophenol	BRL	25		µg/L	1	10/4/00 8:49:00 PM
Phenanthrene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Phenol	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Pyrene	BRL	10		µg/L	1	10/4/00 8:49:00 PM
Surr: 2,4,6-Tribromophenol	96.7	10-123		%REC	1	10/4/00 8:49:00 PM
Surr: 2-Fluorobiphenyl	81.9	43-116		%REC	1	10/4/00 8:49:00 PM
Surr: 2-Fluorophenol	25.4	21-110		%REC	1	10/4/00 8:49:00 PM
Surr: 4-Terphenyl-d14	77.9	33-141		%REC	1	10/4/00 8:49:00 PM
Surr: Nitrobenzene-d5	78.6	35-114		%REC	1	10/4/00 8:49:00 PM
Surr: Phenol-d5	21.3	10-94		%REC	1	10/4/00 8:49:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004144

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 11:57:00 AM
Surr: Decachlorobiphenyl	85.8	30-150		%REC	1	10/5/00 11:57:00 AM
Surr: Tetrachloro-m-xylene	102	30-150		%REC	1	10/5/00 11:57:00 AM

MEW Site File
Break6_004145

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	227	0.100		mg/L	1	9/29/00 1:53:00 PM
Iron	2.66	0.100		mg/L	1	9/29/00 1:53:00 PM
Magnesium	37.1	0.100		mg/L	1	9/29/00 1:53:00 PM
Manganese	0.144	0.00500		mg/L	1	9/29/00 1:53:00 PM
Potassium	5.82	0.500		mg/L	1	9/29/00 1:53:00 PM
Sodium	51.6	1.00		mg/L	1	9/29/00 1:53:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium/Magnesium (As CaCO3)	720	1.00		mg/L CaCO3	1	9/29/00 9:00:00 AM

MEW Site File
Break6_004146

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: **LV**
Specific Conductance	1,510	1.00		µmhos/cm	1	9/29/00 4:00:00 PM
HYDROGEN ION (PH)		**E150.1**				Analyst: **TL**
pH	6.95	0.0100		pH Units	1	9/28/00 3:30:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: **LV**
Residue, Dissolved (TDS)	1,170	5.00		mg/L	1	10/1/00 9:47:46 AM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: **LV**
Residue, Suspended (TSS)	92.0	5.00		mg/L	1	9/30/00 2:30:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: **TG**
Residue, Total	BRL	5.00		wt%	1	10/3/00 5:00:00 PM
ALKALINITY		**E310.1**				Analyst: **TG**
Alkalinity, Total (As CaCO3)	251	3.00		mg/L	1	10/3/00 3:10:00 PM
CHLORIDE		**E325.2**				Analyst: **MLW**
Chloride	106	100		mg/L	100	10/2/00 9:09:49 AM
FLUORIDE		**E340.2**				Analyst: **MLW**
Fluoride	0.480	0.200		mg/L	1	10/2/00 9:09:49 AM
DISSOLVED OXYGEN		**E360.1**				Analyst: **TG**
Oxygen, Dissolved	9.57	2.00		mg/L	1	9/29/00 5:55:00 PM
SULFATE		**E375.4**				Analyst: **MLW**
Sulfate	357	100		mg/L	100	10/2/00 9:09:49 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: **VS**
Biochemical Oxygen Demand	18.5	5.00		mg/L	1	10/3/00 9:00:00 AM

MEW Site File
Break6_004147

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		E376.2				Analyst: VS
Sulfide	BRL	1.00		mg/L	1	10/5/00 12:30:00 PM

MEW Site File
Break6_004148

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW4-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 10:50:00 AM
Lab ID:	0009498-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: **MLW**
Nitrogen, Nitrite (as N)	0.234	0.0500		mg/L	1	10/2/00 2:41:59 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: **MLW**
Nitrogen, Nitrate (as N)	9.61	0.500		mg/L	10	10/2/00 2:41:59 PM
TOTAL PHOSPHORUS		E365.1				Analyst: **TL**
Phosphorus, Total (As P)	0.161	0.0500		mg/L	1	10/2/00 12:00:00 PM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: **LV**
Chemical Oxygen Demand	30.6	10.0		mg/L	1	10/2/00 5:30:00 PM

MEW Site File
Break6_004149

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *11-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-9-26-00
Lab Order:	0009498	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/26/00 5:00:00 PM
Lab ID:	0009498-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 4:45:00 PM
Surr: Decachlorobiphenyl	33.5	30-150		%REC	1	10/5/00 4:45:00 PM
Surr: Tetrachloro-m-xylene	51.0	30-150		%REC	1	10/5/00 4:45:00 PM

MEW Site File
Break6_004150

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Oxidation-Reduction Potential

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: LO
Date Received: 09/28/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Date Analyzed
0009498-001E	MW4-9-26-00	309	mV	N/A	9/26/00	9/29/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004151

Laboratory Report

Analytical Environmental Services Inc.
3781 Presidential Pkwy.
Suite 111
Atlanta, GA 30340

Analytical Method	Analyte	Result	Detection Limit	Units
	Microbiology			
SM 9215 B	Heterotrophic Plate Count	11000	10	no/mL

MEW Site File
Break6_004152

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
81 Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Heterotrophic Plate Count
SM 9215B

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: Admin
Date Received: 09/28/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Report Date
0009498-001H	MW4-9-26-00	11000	no/mL	10	9/26/00	10/5/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004153

MEW Site File
Break6_004154

COPY

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

COPY

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW7-9-26-00	40 mL VOA	9-26-00	1050		x	HCl	2	0009498-1-H	8260B
	1 L amber					NO	1		8270C
	1 L amber						1	PCB	8082 unfiltered
	1 L amber						1	PCB	8082 needs to be lab filtered
	1 L amber						1		extra
	500 mL plastic HNO3					HNO3	1	6010B Ca Fe Mg Mn Na K	
	1 L plastic					NO	1	Chloride 325.2 Sulfate 375.4 Fluoride 340.2	
								Nitrate 352.2 [illegible]	KDM + Specific conductance
	500 mL plastic					NaOH	1	376.1 Sulfide	
	" " "					H2SO4	1	Nitrite 353.2 Total Phosph. 365.3	
	1 L plastic					NO	1	TDS 160.1 TSS 160.2 TS 160.3	
	~~[illegible]~~ KDM							Alkalinity 310.1 pH 150.1 DO 360.1 ORP	
	500 mL plastic					HNO3	1	Hardness SM 2340B	
	250 mL Plastic					H2SO4	1	COD 410.4 + BOD	
	120 mL Sterile						1	Total Hetero trophic plate count SM 9215B	

Relinquished By: Dean Mitchell [signature] Date/Time: 9/26/00 1800
Received By: FEDEX Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Received for Lab By: [signature] Date/Time: 9-28-00 10:15am

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 13, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0009538

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 5 samples on 9/30/00 10:30:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004155

RECEIVED
OCT 23 2000

3781 PRESIDENTIAL PARKWAY, SUITE 111 • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770) 457-8188

MEW Site File
Break6_004156

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested:
- ☒ Standard-3-5 Business Days (for most analyses)
- ○ Same Day Rush
- ○ Next Business Day Rush
- ○ 2 Business Day Rush
- ○ Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW11A-9-29-00-B	40 mL VOA	9-29-00	1300			HCl	2	VOCs 8260B	0009538001
	1 l glass amber					No	1	SVOCs 8270C	
	"						1	8082 PCBs - unfiltered	
	"						1	8082 PCBs - filter first	
	"						1	extra	
	500 mL plastic					HNO_3		6010B: Ca Fe Mg Na Mn K	
	"					"		SM 2340B hardness	
	1 l plastic					No		325.2 Chloride 375.4 Sulfate 340.2 Fluoride	
								353.2 Nitrite + specific conductance	
	1 l plastic					No		160.1 TDS, 160.2 TSS, 160.3 TS, 310.1 alkalinity	
								150.1 pH, 360.1 DO, SM ORP	
	500 mL plastic					H_2SO_4		353.2 Nitrate	
	500 mL plastic					NaOH		376.1 Sulfide	
	250 mL					H_2SO_4		410.4 COD + BOD	
	120 mL plastic							Total heterotrophic plate count SM 9215B	

Relinquished By: D. Mitchell
Date/Time: 9-29-00 1700
Received By: FEDEX
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Received for Lab By:
Date/Time: 9/30/00 10:30

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004157

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: 714-379-1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW11A-9-28-00-101	1 l amber	9-28-00	0800		X		2	PCBs 8082 unfiltered	-002
MW11A-9-28-00-101	40-L VOA				X		2	VOCs 8260B	
TB-9-29-00	40-L VOA	9-29-00	0800		X		2	VOCs 8260B	-003
TB-9-29-00	1 l amber	"	"		X		1	PCBs 8082 unfiltered	
MW11A-9-29-00-101	1 l amber	"	1500		X		1	PCBs 8082 unfiltered	-004
MW11A-9-29-00-101	40mL VOA	"	"		X		2	VOCs 8260B	
MW11A-9-29-00-S	8oz jar	"	1350		X		1	PCBs 8082 + TOC	-005

0009538

Relinquished By: D. Mitchell
Date/Time: 9-29-00 1700
Received for Lab By:
Date/Time: 9/30/00 1030
Received By: FEDEX
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Method of Shipment:
(Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/30/00 10:30:00 AM

Work Order Number 0009538

Received by AH

Checklist completed by [signature] (Signature) 9/30/00 (Date)

Reviewed by MMM (Initials) 9/30/00 (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

MEW Site File
Break6_004158

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: FV
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
2-Butanone	BRL	10		µg/L	1	10/4/00 5:35:00 AM
2-Hexanone	BRL	10		µg/L	1	10/4/00 5:35:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/4/00 5:35:00 AM
Acetone	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Benzene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Bromoform	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Bromomethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Chloroethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Chloroform	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Chloromethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Methylene chloride	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Styrene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Toluene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Trichloroethene	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	10/4/00 5:35:00 AM
Surr: 4-Bromofluorobenzene	78.3	70-122		%REC	1	10/4/00 5:35:00 AM
Surr: Dibromofluoromethane	102	67-133		%REC	1	10/4/00 5:35:00 AM
Surr: Toluene-d8	96.8	80-121		%REC	1	10/4/00 5:35:00 AM

MEW Site File
Break6_004159

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 6:33:00 PM
Surr: Decachlorobiphenyl	74.0	30-150		%REC	1	10/5/00 6:33:00 PM
Surr: Tetrachloro-m-xylene	90.5	30-150		%REC	1	10/5/00 6:33:00 PM
TCL-SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JZ**
1,2,4-Trichlorobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
1,2-Dichlorobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
1,3-Dichlorobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
1,4-Dichlorobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2,4,5-Trichlorophenol	BRL	25		µg/L	1	10/6/00 1:39:00 PM
2,4,6-Trichlorophenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2,4-Dichlorophenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2,4-Dimethylphenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2,4-Dinitrophenol	BRL	25		µg/L	1	10/6/00 1:39:00 PM
2,4-Dinitrotoluene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2,6-Dinitrotoluene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2-Chloronaphthalene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2-Chlorophenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2-Methylnaphthalene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2-Methylphenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
2-Nitroaniline	BRL	25		µg/L	1	10/6/00 1:39:00 PM
2-Nitrophenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
3,3'-Dichlorobenzidine	BRL	10		µg/L	1	10/6/00 1:39:00 PM
3-Nitroaniline	BRL	25		µg/L	1	10/6/00 1:39:00 PM
4,6-Dinitro-2-methylphenol	BRL	25		µg/L	1	10/6/00 1:39:00 PM
4-Bromophenyl phenyl ether	BRL	10		µg/L	1	10/6/00 1:39:00 PM
4-Chloro-3-methylphenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
4-Chloroaniline	BRL	10		µg/L	1	10/6/00 1:39:00 PM
4-Chlorophenyl phenyl ether	BRL	10		µg/L	1	10/6/00 1:39:00 PM
4-Methylphenol	BRL	10		µg/L	1	10/6/00 1:39:00 PM
4-Nitroaniline	BRL	25		µg/L	1	10/6/00 1:39:00 PM
4-Nitrophenol	BRL	25		µg/L	1	10/6/00 1:39:00 PM
Acenaphthene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Acenaphthylene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Anthracene	BRL	10		µg/L	1	10/6/00 1:39:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004160

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	Client Sample ID:	MW11A-9-29-00-B
Lab Order:	0009538	Tag Number:	
Project:	Ameren-MEW	Collection Date:	9/29/00 1:00:00 PM
Lab ID:	0009538-001B	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Benzo(a)pyrene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Benzo(b)fluoranthene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Benzo(g,h,i)perylene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Benzo(k)fluoranthene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Bis(2-chloroethoxy)methane	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Bis(2-chloroethyl)ether	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Bis(2-chloroisopropyl)ether	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Bis(2-ethylhexyl)phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Butyl benzyl phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Carbazole	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Chrysene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Di-n-butyl phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Di-n-octyl phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Dibenz(a,h)anthracene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Dibenzofuran	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Diethyl phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Dimethyl phthalate	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Fluoranthene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Fluorene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Hexachlorobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Hexachlorobutadiene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Hexachlorocyclopentadiene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Hexachloroethane	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Indeno(1,2,3-cd)pyrene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Isophorone	BRL	10		µg/L	1	10/6/00 1:39:00 PM
N-Nitrosodi-n-propylamine	BRL	10		µg/L	1	10/6/00 1:39:00 PM
N-Nitrosodiphenylamine	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Naphthalene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Nitrobenzene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Pentachlorophenol	BRL	25		µg/L	1	10/6/00 1:39:00 PM
Phenanthrene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Phenol	23	10		µg/L	1	10/6/00 1:39:00 PM
Pyrene	BRL	10		µg/L	1	10/6/00 1:39:00 PM
Surr: 2,4,6-Tribromophenol	91.9	10-123		%REC	1	10/6/00 1:39:00 PM
Surr: 2-Fluorobiphenyl	85.7	43-116		%REC	1	10/6/00 1:39:00 PM
Surr: 2-Fluorophenol	29.5	21-110		%REC	1	10/6/00 1:39:00 PM
Surr: 4-Terphenyl-d14	91.6	33-141		%REC	1	10/6/00 1:39:00 PM
Surr: Nitrobenzene-d5	74.4	35-114		%REC	1	10/6/00 1:39:00 PM
Surr: Phenol-d5	75.4	10-94		%REC	1	10/6/00 1:39:00 PM

MEW Site File
Break6_004161

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001C	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Aroclor 1260	BRL	1.0		µg/L	1	10/4/00 11:03:00 AM
Surr: Decachlorobiphenyl	77.2	30-150		%REC	1	10/4/00 11:03:00 AM
Surr: Tetrachloro-m-xylene	94.8	30-150		%REC	1	10/4/00 11:03:00 AM

MEW Site File
Break6_004162

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001D	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
METALS, TOTAL		**SW6010B**				Analyst: **SS**
Calcium	74.2	0.100		mg/L	1	10/2/00 6:13:00 PM
Iron	13.1	0.100		mg/L	1	10/2/00 6:13:00 PM
Magnesium	20.4	0.100		mg/L	1	10/2/00 6:13:00 PM
Manganese	0.159	0.00500		mg/L	1	10/2/00 6:13:00 PM
Potassium	18.0	0.500		mg/L	1	10/2/00 6:13:00 PM
Sodium	9.16	1.00		mg/L	1	10/2/00 6:13:00 PM
HARDNESS		**M2340 B**				Analyst: **SS**
Hardness, Calcium/Magnesium (As CaCO3)	269	1.00		mg/L CaCO3	1	10/2/00 6:13:00 PM

MEW Site File
Break6_004163

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001E	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SPECIFIC CONDUCTANCE		**E120.1**				Analyst: LV
Specific Conductance	310	1.00		µmhos/cm	1	10/6/00 10:40:00 AM
HYDROGEN ION (PH)		**E150.1**				Analyst: LV
pH	8.48	0.0100		pH Units	1	9/30/00 3:00:00 PM
RESIDUE, DISSOLVED (TDS)		**E160.1**				Analyst: LV
Residue, Dissolved (TDS)	224	5.00		mg/L	1	10/1/00 9:47:46 AM
RESIDUE, SUSPENDED (TSS)		**E160.2**				Analyst: LV
Residue, Suspended (TSS)	129	5.00		mg/L	1	10/2/00 4:15:00 PM
RESIDUE, TOTAL		**E160.3**				Analyst: TG
Residue, Total	BRL	5.00		wt%	1	10/3/00 5:00:00 PM
ALKALINITY		**E310.1**				Analyst: TG
Alkalinity, Total (As CaCO3)	268	3.00		mg/L	1	10/3/00 3:10:00 PM
CHLORIDE		**E325.2**				Analyst: MLW
Chloride	3.98	1.00		mg/L	1	10/2/00 9:09:49 AM
FLUORIDE		**E340.2**				Analyst: MLW
Fluoride	0.340	0.200		mg/L	1	10/2/00 9:09:49 AM
DISSOLVED OXYGEN		**E360.1**				Analyst: LV
Oxygen, Dissolved	8.32	2.00		mg/L	1	9/30/00 2:00:00 PM
SULFATE		**E375.4**				Analyst: MLW
Sulfate	14.5	10.0		mg/L	10	10/2/00 9:09:49 AM
BIOCHEMICAL OXYGEN DEMAND (BOD)- 5 DAY		**E405.1**				Analyst: TG
Biochemical Oxygen Demand	5.76	5.00		mg/L	1	10/5/00 12:00:00 PM

MEW Site File
Break6_004164

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001F	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFIDE		**E376.2**				Analyst: **VS**
Sulfide	BRL	1.00		mg/L	1	10/5/00 12:30:00 PM

MEW Site File
Break6_004165

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-B
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:00:00 PM
Lab ID:	0009538-001G	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITROGEN, NITRITE (AS N)		E353.2				Analyst: **MLW**
Nitrogen, Nitrite (as N)	BRL	0.0500		mg/L	1	10/2/00 2:41:59 PM
NITROGEN, NITRATE (AS N)		E353.2				Analyst: **MLW**
Nitrogen, Nitrate (as N)	BRL	0.0500		mg/L	1	10/2/00 2:41:59 PM
TOTAL PHOSPHORUS		E365.1				Analyst: **TL**
Phosphorus, Total (As P)	0.0809	0.0500		mg/L	1	10/5/00 5:40:00 PM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: **LV**
Chemical Oxygen Demand	29.1	10.0		mg/L	1	10/6/00 5:30:00 PM

MEW Site File
Break6_004166

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-28-00-101
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/28/00 8:00:00 AM
Lab ID:	0009538-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 2:06:00 PM
Surr: Decachlorobiphenyl	36.9	30-150		%REC	1	10/5/00 2:06:00 PM
Surr: Tetrachloro-m-xylene	113	30-150		%REC	1	10/5/00 2:06:00 PM

MEW Site File
Break6_004167

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-28-00-101
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/28/00 8:00:00 AM
Lab ID:	0009538-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: FV
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
2-Butanone	BRL	10		µg/L	1	10/4/00 2:38:00 AM
2-Hexanone	BRL	10		µg/L	1	10/4/00 2:38:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/4/00 2:38:00 AM
Acetone	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Benzene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Bromoform	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Bromomethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Chloroethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Chloroform	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Chloromethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Methylene chloride	37,000	1,000		µg/L	200	10/4/00 6:05:00 PM
Styrene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Toluene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Trichloroethene	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	10/4/00 2:38:00 AM
Surr: 4-Bromofluorobenzene	83.5	70-122		%REC	1	10/4/00 2:38:00 AM
Surr: 4-Bromofluorobenzene	80.8	70-122		%REC	200	10/4/00 6:05:00 PM
Surr: Dibromofluoromethane	101	67-133		%REC	1	10/4/00 2:38:00 AM
Surr: Dibromofluoromethane	103	67-133		%REC	200	10/4/00 6:05:00 PM
Surr: Toluene-d8	98.0	80-121		%REC	200	10/4/00 6:05:00 PM
Surr: Toluene-d8	97.9	80-121		%REC	1	10/4/00 2:38:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

MEW Site File
Break6_004168

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	Client Sample ID:	TB-9-29-00
Lab Order:	0009538	Tag Number:	
Project:	Ameren-MEW	Collection Date:	9/29/00 8:00:00 AM
Lab ID:	0009538-003A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS	**SW8260B**					Analyst: FV
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,1-Dichloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
2-Butanone	BRL	10		µg/L	1	10/2/00 10:05:00 PM
2-Hexanone	BRL	10		µg/L	1	10/2/00 10:05:00 PM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/2/00 10:05:00 PM
Acetone	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Benzene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Bromodichloromethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Bromoform	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Bromomethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Carbon disulfide	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Chlorobenzene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Chloroethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Chloroform	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Chloromethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Dibromochloromethane	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Ethylbenzene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Methylene chloride	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Styrene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Tetrachloroethene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Toluene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Trichloroethene	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Vinyl chloride	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Xylenes, Total	BRL	5.0		µg/L	1	10/2/00 10:05:00 PM
Surr: 4-Bromofluorobenzene	84.6	70-122		%REC	1	10/2/00 10:05:00 PM
Surr: Dibromofluoromethane	98.9	67-133		%REC	1	10/2/00 10:05:00 PM
Surr: Toluene-d8	99.4	80-121		%REC	1	10/2/00 10:05:00 PM

MEW Site File
Break6_004169

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-9-29-00
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 8:00:00 AM
Lab ID:	0009538-003B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/6/00 5:16:00 PM
Surr: Decachlorobiphenyl	85.4	30-150		%REC	1	10/6/00 5:16:00 PM
Surr: Tetrachloro-m-xylene	115	30-150		%REC	1	10/6/00 5:16:00 PM

MEW Site File
Break6_004170

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-101
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 3:00:00 PM
Lab ID:	0009538-004A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Aroclor 1260	BRL	1.0		µg/L	1	10/6/00 12:21:00 PM
Surr: Decachlorobiphenyl	59.5	30-150		%REC	1	10/6/00 12:21:00 PM
Surr: Tetrachloro-m-xylene	118	30-150		%REC	1	10/6/00 12:21:00 PM

MEW Site File
Break6_004171

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-101
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 3:00:00 PM
Lab ID:	0009538-004B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS		**SW8260B**				Analyst: FV
1,1,1-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,1,2,2-Tetrachloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,1,2-Trichloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,1-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,1-Dichloroethene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,2-Dichloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,2-Dichloropropane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
2-Butanone	BRL	10		µg/L	1	10/4/00 3:23:00 AM
2-Hexanone	BRL	10		µg/L	1	10/4/00 3:23:00 AM
4-Methyl-2-pentanone	BRL	10		µg/L	1	10/4/00 3:23:00 AM
Acetone	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Benzene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Bromodichloromethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Bromoform	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Bromomethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Carbon disulfide	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Carbon tetrachloride	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Chlorobenzene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Chloroethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Chloroform	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Chloromethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
cis-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Dibromochloromethane	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Ethylbenzene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Methylene chloride	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Styrene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Tetrachloroethene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Toluene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
trans-1,3-Dichloropropene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Trichloroethene	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Vinyl chloride	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
1,2-Dichloroethene, Total	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Xylenes, Total	BRL	5.0		µg/L	1	10/4/00 3:23:00 AM
Surr: 4-Bromofluorobenzene	81.9	70-122		%REC	1	10/4/00 3:23:00 AM
Surr: Dibromofluoromethane	98.7	67-133		%REC	1	10/4/00 3:23:00 AM
Surr: Toluene-d8	98.8	80-121		%REC	1	10/4/00 3:23:00 AM

MEW Site File
Break6_004172

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *13-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11A-9-29-00-S
Lab Order:	0009538	**Tag Number:**	
Project:	Ameren-MEW	**Collection Date:**	9/29/00 1:50:00 PM
Lab ID:	0009538-005A	**Matrix:**	SEDIMENT

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	33		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1221	BRL	67		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1232	BRL	33		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1242	BRL	33		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1248	BRL	33		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1254	BRL	33		µg/Kg	1	10/6/00 2:29:00 AM
Aroclor 1260	49,000	3,300		µg/Kg	100	10/6/00 2:48:00 PM
Surr: Decachlorobiphenyl	81.3	30-150		%REC	1	10/6/00 2:29:00 AM
Surr: Tetrachloro-m-xylene	59.6	30-150		%REC	1	10/6/00 2:29:00 AM
FOC/FOM		**D2974**				Analyst: **LO**
Fractional Organic Carbon	10.8	0.0580		%	1	10/4/00 5:00:00 PM

MEW Site File
Break6_004173

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Oxidation-Reduction Potential

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: LO
Date Received: 09/30/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Date Analyzed
0009538-001E	MW11A-9-29-00-B	-137	mV	N/A	9/29/00	10/2/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004174

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 17, 2000

Dear Dean Mitchell:

Please disregard analytical result for Heterotrophic Plate Count (SM 9215B), sample ID MW11A-9-29-00-B (AES Sample ID 0009538-001H), and find attached corrected analytical report.

If you have any questions regarding this test result, please fell free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004175

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MEW Site File
Break6_004176

COPY

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
37[illegible] Presidential Parkway, Suite 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

COPY

Company Name: Komex
Address: 5500 Bolsa Ave #105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714 379 1157
Fax Number: 714 379 1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested:
- ☒ Standard-3-5 Business Days (for most analyses)
- ○ Same Day Rush
- ○ Next Business Day Rush
- ○ 2 Business Day Rush
- ○ Other

Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
MW11A-9-29-00-B	40 mL VOA	9-29-00	1500			HCl	2	VOCs 8260B	010 9538-001 A
	1 l glass amber					No	1	SVOCs 8270 C	1B
	"						1	8082 PCBs - unfiltered	1B
	"						1	8082 PCBs - filter first	1D 1C
	"						1	extra	1D 1C
	500 mL plastic					HNO_3		6010B: Ca Fe Mg Na Mn K	1E 1C
	"					"		SM 2340B hardness	
	1 l plastic					No		325.2 Chloride 375.4 Sulfate 340.2 Fluoride	1F
								353.2 Nitrite + specific conductance	
	1 l plastic					No		160.1 TDS, 160.2 TSS, 160.3 TS, 310.1 alkalinity	
								150.1 pH, 360.1 DO, SM ORP	
	500 mL plastic					H_2SO_4		353.2 Nitrate	1C
	500 mL plastic					NaOH		376.1 Sulfide	1F
	250 mL					H_2SO_4		410.4 COD + BOD	
	120 mL plastic							Total heterotrophic plate count SM 9215B	

Relinquished By: D. Mitchell
Date/Time: 9-29-00 1700
Received for Lab By: [signature]
Date/Time: 9/30/00 10:30
Received By: FEDEX
Date/Time:
Relinquished By:
Date/Time:
Received By:
Date/Time:

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service:
Other:

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
781 Presidential Parkway, Ste. 111
Atlanta, Georgia 30340
Ph. (770) 457-8177

Heterotrophic Plate Count
SM 9215B

Client Name: Komex
Project Name: MEW
Project Number: 9301
P.O. Number: N/A

Matrix : Water
Analyst: Admin
Date Received: 09/30/00

Laboratory I.D.	Client Sample I.D.	Results	Units	MDL[1]	Date Collected	Report Date
0009538-001H	MW11A-9-29-00-B	100000	no/mL	100	9/29/00	10/12/00

[1] MDL - Method Detection Limit
ND = Not Detected at the method detection limit

MEW Site File
Break6_004177

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 17, 2000

Dean Mitchell
Komex.H2O Science, Inc.
5500 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649
TEL: (714) 379-1157
FAX (714) 379-1160

RE: Ameren-MEW Order No.: 0009495

Dear Dean Mitchell:

Analytical Environmental Services, Inc. received 5 samples on 9/28/00 10:15:00 AM for the analyses presented in the following report.

No problems were encountered during analyses. Additionally, all results for the associated quality control samples were within EPA and/or AES established limits except where noted in the project Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mehmet Yildirim
Laboratory Manager

MEW Site File
Break6_004178

RECEIVED
OCT 23 2000

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3781 Presidential Parkway, S[illegible] 111, Atlanta, GA 30340
(770) 457-8177 / Toll-Free (800) 972-4889 / fax: (770) 457-8188

MEW Site File
Break6_004179

CHAIN OF CUSTODY RECORD

CHEMICAL ANALYSIS

Company Name: Komex
Address: 5500 Bolsa Ave#105
City, State, Zip: Huntington Beach CA 92649
Contact Person: Dean Mitchell
Sampler's Name: " "

Phone Number: 714-379-1157
Fax Number: 714-379-1160
Project Name: MEW
Project Number: 9301
Purchase Order #:

Turnaround Time Requested:
- [x] Standard-3-5 Business Days (for most analyses)
- [ ] Same Day Rush
- [ ] Next Business Day Rush
- [ ] 2 Business Day Rush
- [ ] Other

	Sample ID #	Sample Description/Location	Collected: Date	Collected: Time	Composite	Grab	Preservative	No. of Containers	Analysis/Method Required	Comments/Special Instructions
003495-										
01	TB-9-27-00	1 l amber	9-27-00	0800		X				
02	MW11-9-27-00-B	1 l amber		1500		X		3	PCBs 8082 (one filtered, one unfiltered, 1 extra)	
03	MW22-9-27-00	1 l amber		1510		X		3	PCBs 8082 (one filtered, one unfiltered, 1 extra)	
04	MW5-9-27-00-B	1 l amber		1415		X		3	PCBs 8082 (one filtered, one unfiltered, 1 extra)	
05	MW11-9-27-00-S	8oz glass (Sediment sample)		1330		X			PCBs 8082	

Relinquished By: D. Mitchell [signature] Date/Time: 9/27/00 1740
Received By: FEDEX Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Received for Lab By: [signature] Date/Time: 9-28-00 10:15am

Method of Shipment: (Circle One) Hand-delivered FEDEX UPS U.S.Mail
Courier Service: Other:

[illegible]

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client Name KOMEX

Date and Time Received 9/28/00 10:15:00 AM

Work Order Number 0009495

Received by MH

Checklist completed by Dking (Signature) 9.28.00 (Date)

Reviewed by JWR (Initials) 9/28/00 (Date)

Matrix:

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Presen ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: 1 Bottle broken for 0009495-003A + 004A

Add TOC to soil sample MW-11-9-27-00-S as per Dean Mitchell phone call on 9/28/00 am. MMW

Corrective Action _____

MEW Site File
Break6_004180

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	TB-9-27-00
Lab Order:	0009495	**Tag Number:**	TRIP BLANK
Project:	Ameren-MEW	**Collection Date:**	9/27/00 8:00:00 AM
Lab ID:	0009495-001A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: BW
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Aroclor 1260	BRL	1.0		µg/L	1	10/5/00 11:24:00 AM
Surr: Decachlorobiphenyl	70.1	30-150		%REC	1	10/5/00 11:24:00 AM
Surr: Tetrachloro-m-xylene	104	30-150		%REC	1	10/5/00 11:24:00 AM

MEW Site File
Break6_004181

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-9-27-00-B
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 3:00:00 PM
Lab ID:	0009495-002A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 11:51:00 AM
Aroclor 1260	20	1.0		µg/L	1	10/5/00 11:51:00 AM
Surr: Decachlorobiphenyl	39.7	30-150		%REC	1	10/5/00 11:51:00 AM
Surr: Tetrachloro-m-xylene	41.5	30-150		%REC	1	10/5/00 11:51:00 AM

MEW Site File
Break6_004182

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-9-27-00-B
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 3:00:00 PM
Lab ID:	0009495-002B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/11/00 3:07:00 PM
Aroclor 1260	4.5	1.0		µg/L	1	10/11/00 3:07:00 PM
Surr: Decachlorobiphenyl	27.2	30-150	S	%REC	1	10/11/00 3:07:00 PM
Surr: Tetrachloro-m-xylene	48.2	30-150		%REC	1	10/11/00 3:07:00 PM

MEW Site File
Break6_004183

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22-9-27-00
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 3:10:00 PM
Lab ID:	0009495-003A	***Matrix:***	*AQUEOUS*

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 4:18:00 PM
Aroclor 1260	18	1.0		µg/L	1	10/5/00 4:18:00 PM
Surr: Decachlorobiphenyl	47.3	30-150		%REC	1	10/5/00 4:18:00 PM
Surr: Tetrachloro-m-xylene	58.7	30-150		%REC	1	10/5/00 4:18:00 PM

MEW Site File
Break6_004184

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW22-9-27-00
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 3:10:00 PM
Lab ID:	0009495-003B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/4/00 10:36:00 AM
Aroclor 1260	2.0	1.0		µg/L	1	10/4/00 10:36:00 AM
Surr: Decachlorobiphenyl	41.0	30-150		%REC	1	10/4/00 10:36:00 AM
Surr: Tetrachloro-m-xylene	52.6	30-150		%REC	1	10/4/00 10:36:00 AM

MEW Site File
Break6_004185

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-27-00-B
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 2:15:00 PM
Lab ID:	0009495-004A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1221	BRL	2.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1232	BRL	1.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1242	BRL	1.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1248	BRL	1.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1254	BRL	1.0		µg/L	1	10/5/00 12:45:00 PM
Aroclor 1260	80	5.0		µg/L	5	10/5/00 3:20:00 PM
Surr: Decachlorobiphenyl	31.0	30-150		%REC	1	10/5/00 12:45:00 PM
Surr: Tetrachloro-m-xylene	39.7	30-150		%REC	1	10/5/00 12:45:00 PM

MEW Site File
Break6_004186

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW5-9-27-00-B
Lab Order:	0009495	**Tag Number:**	1 L Amber
Project:	Ameren-MEW	**Collection Date:**	9/27/00 2:15:00 PM
Lab ID:	0009495-004B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1221	BRL	2.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1232	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1242	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1248	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1254	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Aroclor 1260	BRL	1.0		µg/L	1	10/4/00 1:47:00 AM
Surr: Decachlorobiphenyl	47.0	30-150		%REC	1	10/4/00 1:47:00 AM
Surr: Tetrachloro-m-xylene	63.0	30-150		%REC	1	10/4/00 1:47:00 AM

MEW Site File
Break6_004187

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Analytical Environmental Services, Inc.

Date: *17-Oct-00*

CLIENT:	Komex.H2O Science, Inc.	**Client Sample ID:**	MW11-9-27-00-S
Lab Order:	0009495	**Tag Number:**	Sediment sample
Project:	Ameren-MEW	**Collection Date:**	9/27/00 1:30:00 PM
Lab ID:	0009495-005A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
POLYCHLORINATED BIPHENYLS		**SW8082**				Analyst: **BW**
Aroclor 1016	BRL	33		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1221	BRL	67		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1232	BRL	33		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1242	BRL	33		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1248	BRL	33		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1254	BRL	33		µg/Kg	1	10/2/00 7:29:00 PM
Aroclor 1260	1,700	170		µg/Kg	5	10/3/00 12:09:00 PM
Surr: Decachlorobiphenyl	75.4	30-150		%REC	1	10/2/00 7:29:00 PM
Surr: Tetrachloro-m-xylene	77.3	30-150		%REC	1	10/2/00 7:29:00 PM
FOC/FOM		**D2974**				Analyst: **LO**
Fractional Organic Carbon	3.73	0.0580		%	1	10/4/00 5:00:00 PM

MEW Site File
Break6_004188

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range