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POTENTIAL EFFECT ON NATURAL GAS WELLS ON ALLUVIAL GROUNDWATER CONTAMINATION AT THE KANSAS CITY PLANT

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EXECUTIVE SUMMARY

This report is the result of a request for further information about several abandoned natural gas wells at the U.S. Department of Energy's Kansas City Plant (KCP). The request was prompted by an old map showing several, possibly eight, natural gas wells located under or near what is now the southeast corner of the Main Manufacturing Building at KCP. Volatile organic compound contamination in the alluvial aquifer surrounding the gas wells might possibly contaminate the bedrock aquifer if the gas wells still exist as conduits.

Several circumstances exist that make it doubtful that contamination is entering the bedrock aquifers: 1) because regional groundwater flow in the bedrock beneath the KCP is expected to be vertically upward, contaminants found in the alluvial aquifer should not migrate down the old wells; 2) because of the low hydraulic conductivity of the bedrock units, contaminant transport would be extremely slow if the contaminants were migrating down the wells; and 3) casing, apparently set through the alluvium in all of the wells, would have deteriorated and may have collapsed; if the casing collapsed, the silty clays in the alluvium would also collapse and seal the well.

No definitive information has been discovered about the exact location of the wells. No further search for or consideration of the old gas wells is recommended.

1. INTRODUCTION

1.1 PURPOSE AND SCOPE

This report is the result of a request for further information about several abandoned natural gas wells at the U.S. Department of Energy's (DOE) Kansas City Plant (KCP) (Fig. 1). The request was prompted by an old map showing several, possibly eight, natural gas wells located under or near what is now the southeast corner of the Main Manufacturing Building at KCP (Fig. 2). There is concern about possible transmission of contamination from the alluvial ground-water to deeper aquifers, with the old gas wells acting as conduits.

The investigation began with a search for the history of oil and gas exploration in the Kansas City area prior to construction of the plant in 1942. The search yielded information regarding: the identity of geologic formations that produced oil and gas in the area, the depth of the wells, their proximity to KCP, and the methods used for drilling and abandonment. Detailed information from the time period, especially about specific wells, was generally not documented. In order to address the likelihood of contaminant transport through the old wells, the investigation also included a review of pertinent data (the contaminants in the area, stratigraphy, hydrogeology) and interpretation of these data.

1.2 SITE DESCRIPTION

KCP is a government-owned manufacturing plant operated by Allied-Signal, Inc., on behalf of the DOE Kansas City Area Office. The site is located in Jackson County, Mo., in south Kansas City, northeast of the intersection of Bannister Road and Troost Avenue. It is bordered by Indian Creek to the south and the Blue River to the east. The facility occupies 113 acres within a 300 acre

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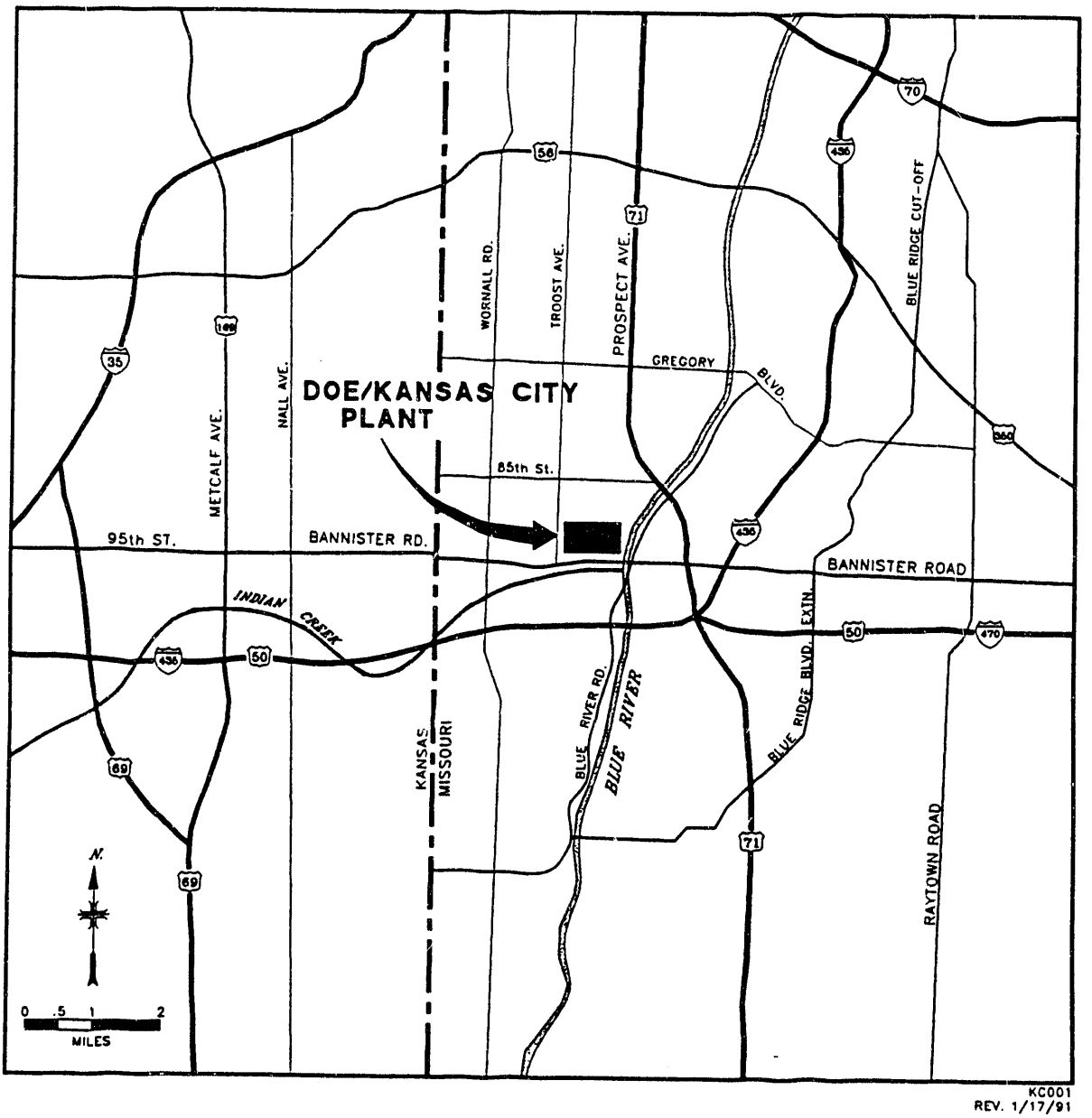

Fig. 1. Location of KCP in the greater Kansas City area.

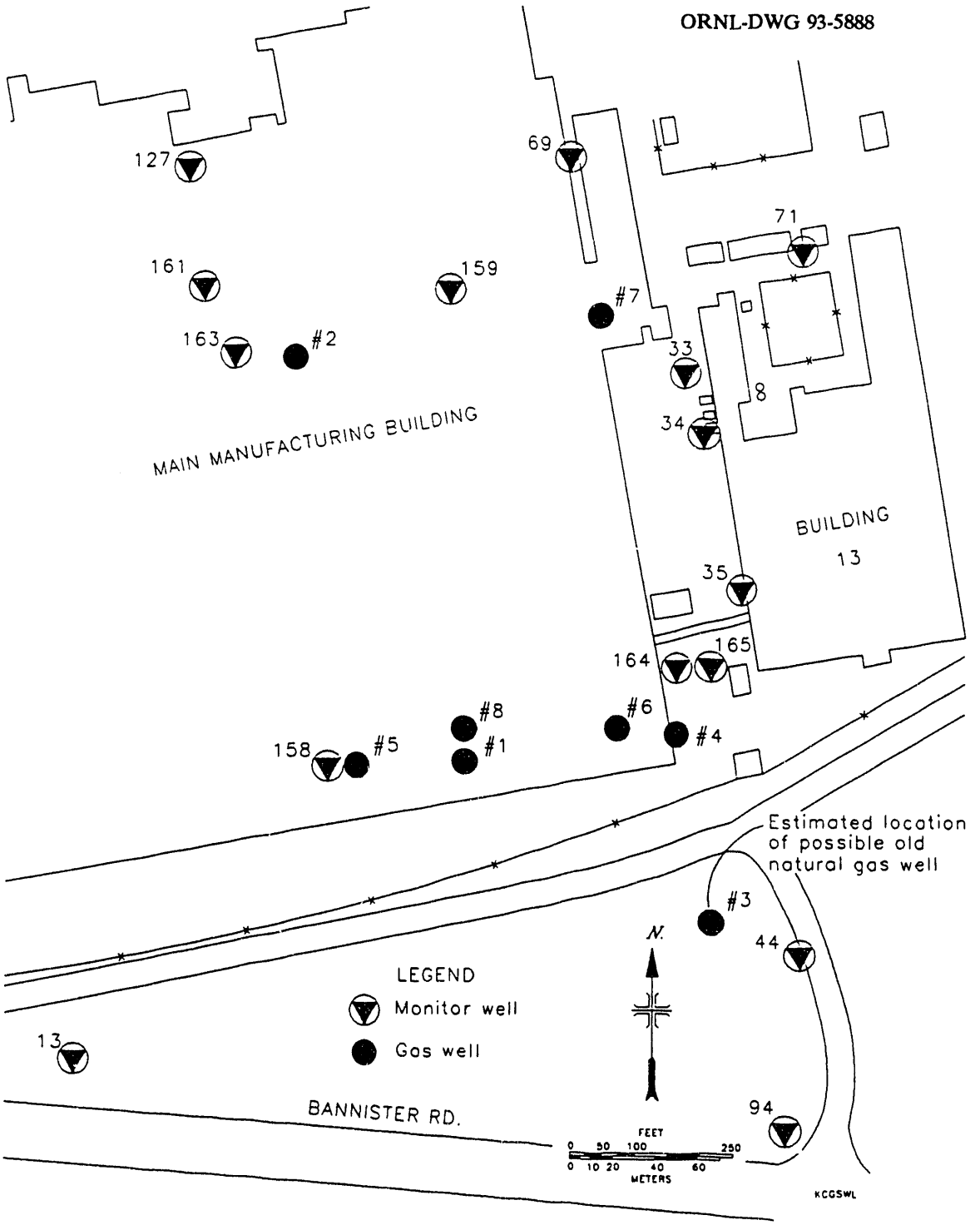

Fig. 2. Estimated location of old natural gas wells at KCP, based on old map found at KCP.

federal government complex. The facility, whose prime occupant is Allied-Signal, Inc., Kansas City Division, also houses the General Services Administration, the Marine Corps, and several other federal agencies. The Internal Revenue Service has a facility located directly east of the DOE facility.

The main building at the DOE/KCP was built to manufacture aircraft engines. The facility was built by the U.S. Navy for the Pratt & Whitney Corporation (KCD 1987). Building construction was initiated in mid-1942; engine manufacturing began in late 1943. Prior to 1942, the area was dedicated to agriculture, except for a brief period when it was occupied by an automobile racetrack.

Plant operations conducted in the early days of facility occupancy have resulted in groundwater contamination, which is being investigated and remediated under the auspices of the DOE's Environmental Restoration Program.

The old gas wells are closest to the TCE Still Area investigation site, one of several sites being investigated (U.S.DOE 1991c, 1990d). Several of the maps and figures used in this report are the result of investigations conducted in support of the TCE Still Area characterization.

2. ENVIRONMENTAL SETTING

Numerous documents describe the environmental setting of KCP. Korte et al. (1985) and Fleischhauer et al. (1986) described the initial phases of the site characterization. More recent information may be found in groundwater assessment plans for the contaminated sites (U.S.DOE 1990b, 1990c, 1990d, and 1990e) and in recent annual reports (U.S.DOE 1990a, 1991a).

2.1 GEOLOGY

Kansas City is located in the middle of a 150-mile-wide outcropping of Pennsylvanian rocks that extend in a north-south direction through western Missouri

and eastern Kansas. The area slopes gently toward the Forest City Basin in northwest Missouri. The average change in elevation in this area is 10 to 12 ft/mile.

Strata underlying the KCP consist of approximately 45 ft of unconsolidated Quaternary alluvium resting on some 2400 ft of Paleozoic strata. A Precambrian crystalline basement complex underlies the paleozoic section. Upper Pennsylvanian rocks of the Kansas City Group are exposed as bluffs along the valley margins. Figure 3 is a contour map of the top of the bedrock, showing the bluffs north of the plant and the gradual slope under the valley fill. A stratigraphic section showing the Pleasanton Group is shown in Fig. 4.

Bedrock beneath the alluvium is the Knobtown sandstone, followed by interbedded silty shale layers of the Pleasanton Group, the Hepler sandstone, more silty shale of the Pleasanton, and then the Marmaton Group at about 140 ft (from log of well KC84-23). Well KC84-23 was a bedrock well drilled to a depth of 140.7 ft in 1984, 1500 ft east of the southeast corner of the Main Manufacturing Building (Korte et al. 1985).

Both the Knobtown sandstone and shales of the Pennsylvanian Pleasanton Group (Fig. 5) directly contact the Blue River alluvium under KCP. The Knobtown is a marine sandstone ranging in thickness from approximately 5 to 10 ft. The Knobtown is present in the upper 30 ft of the Pleasanton Group except where it has been removed by Quaternary erosion (U.S.DOE 1984). The Hepler sandstone is present in the lower Pleasanton and also underlies KCP. The top of the Hepler sandstone is approximately 40 ft below the base of the alluvium and is hydraulically isolated from the overlying alluvium by impermeable shales of the Pleasanton Group.

The Marmaton Group of the middle Pennsylvanian consists of interbedded shales and limestones and is approximately 300 ft thick in eastern Kansas and western Missouri. Below the Marmaton lies the Cabaniss and Krebs Formations of the Cherokee Group. Each of these formations ranges from 100 to 180 ft thick (Heckel 1978).

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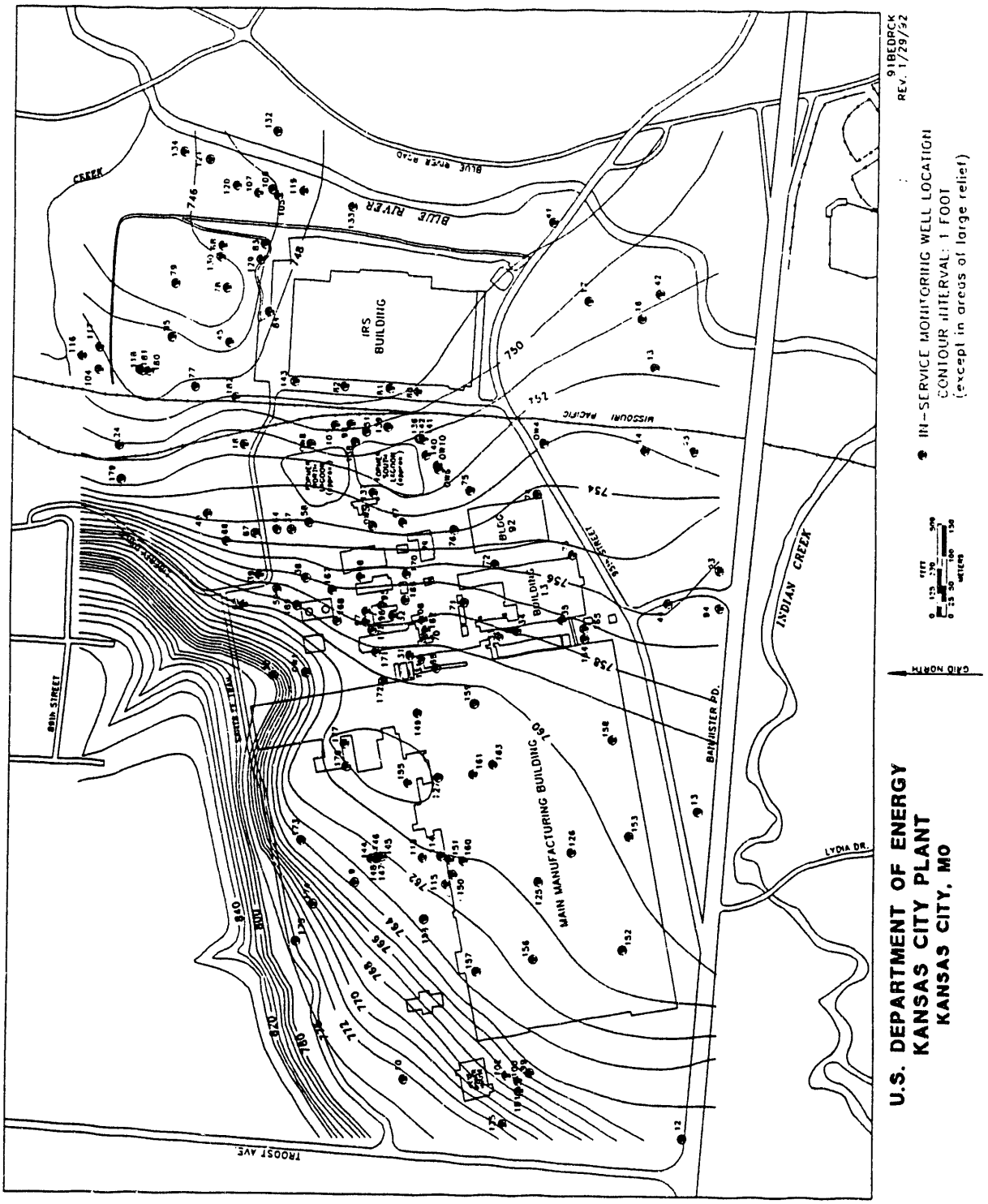

Fig. 3. Contour map of bedrock surface beneath KCP.

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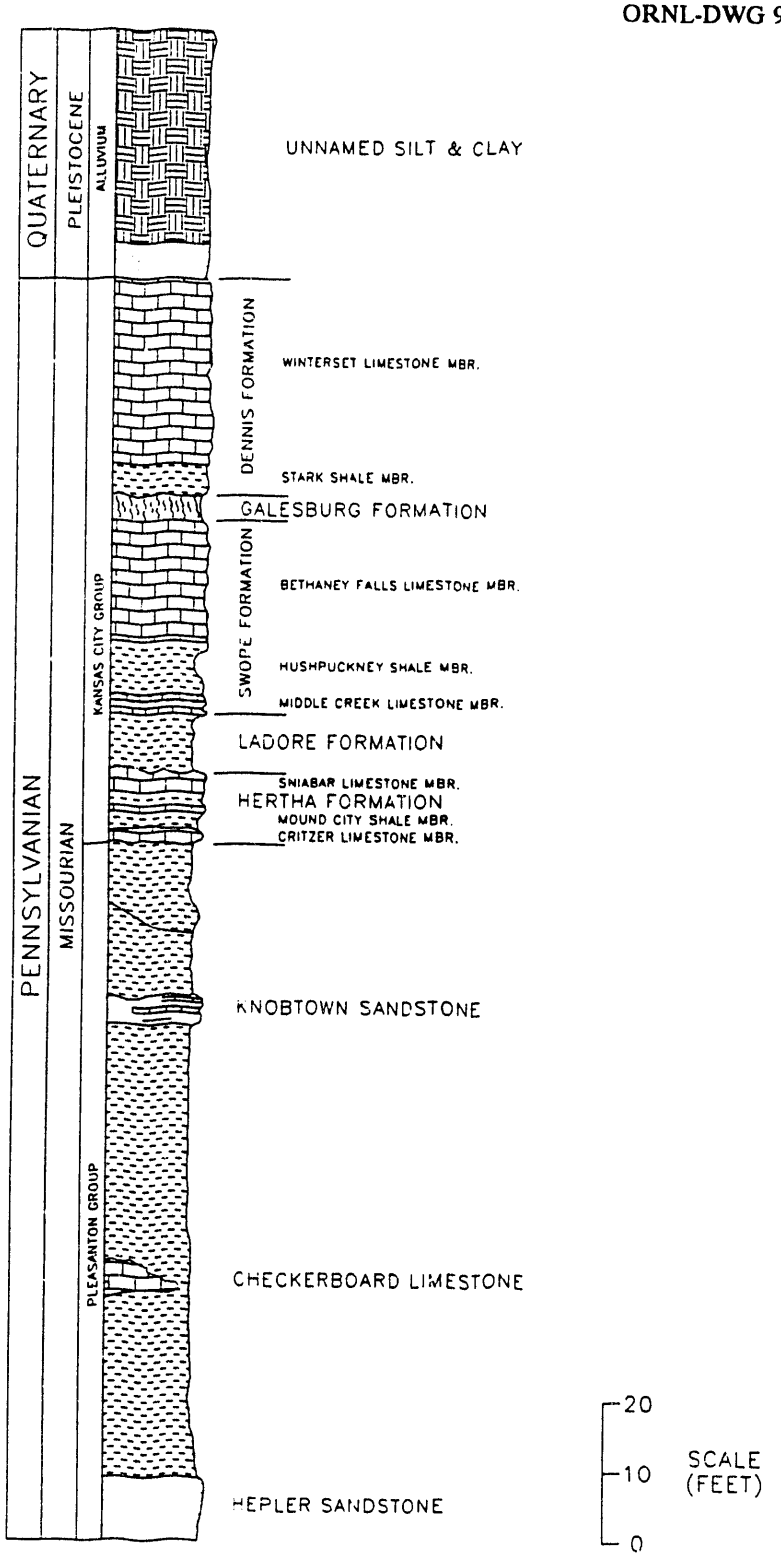

Fig. 4. Stratigraphic section of the Kansas City and Pleasanton Groups of Pennsylvanian using modern formation nomenclature.

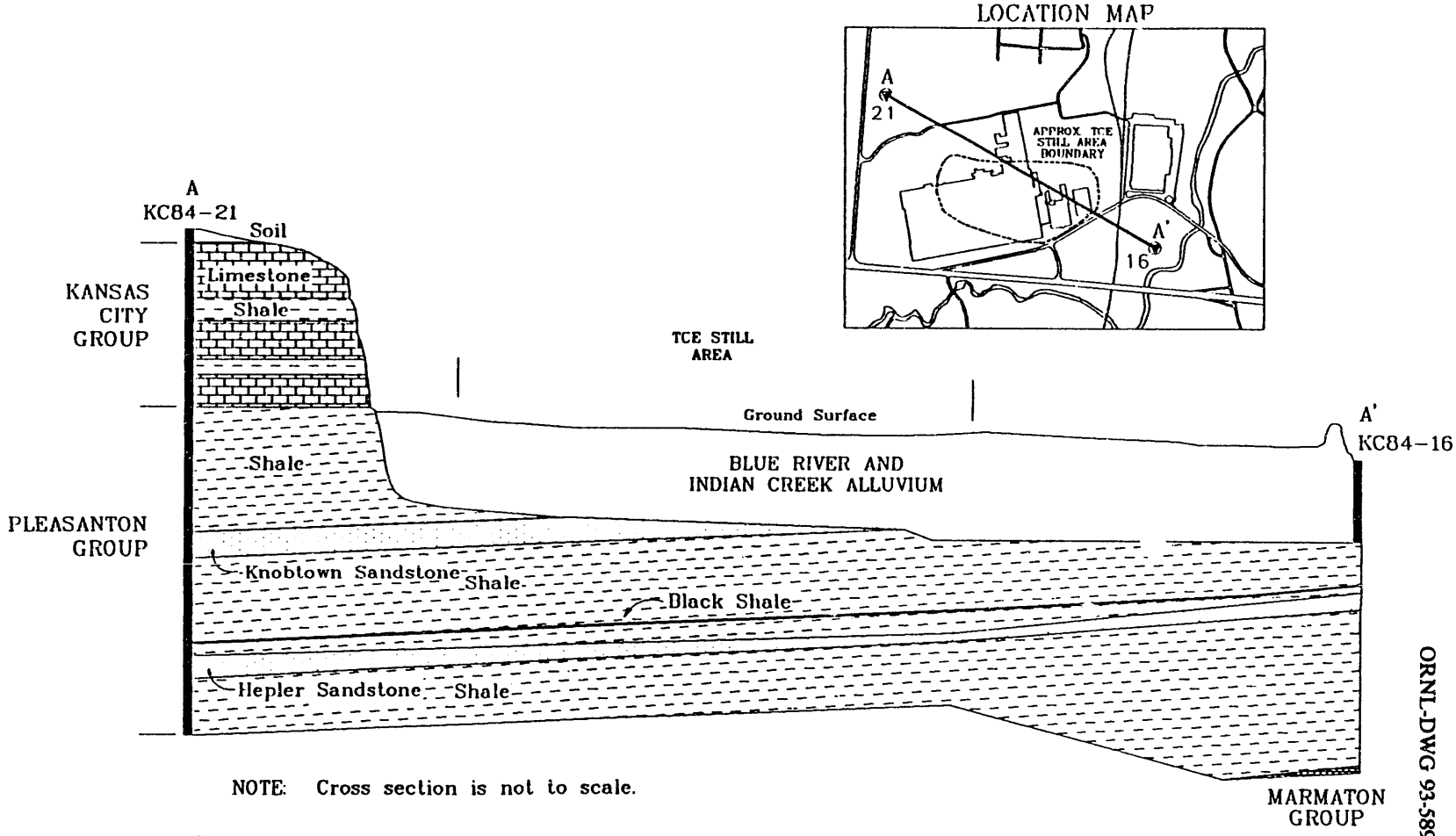

Fig. 5. Cross section of the Pleasanton and Kansas City Groups at KCP.

2.2 HYDROGEOLOGY

2.2.1 Hydrologic Units

The 45 ft of unconsolidated alluvium is generally divided into two units (upper and lower) for hydrologic purposes. The units are both silty clays exhibiting very low flow characteristics (Sect. 2.2.4) and are separated by a low permeability green clay.

The bedrock units beneath the alluvium are the Knobtown sandstone, shales, and the Hepler sandstone of the Pleasanton Group. Hydrologic properties of these units are described in Sect. 2.2.4. Water bearing properties of the Pleasanton Group are reported as low, with yields of 1 to 3 gal/min. Dissolved solids are mostly high (>1000 ppm) at all depths in the group (Gann et al. 1974).

Beneath the Hepler sandstones lie the Marmaton and Cherokee Groups of the Pennsylvanian. These groups have been characterized as low-yielding units for water (1 to 3 gal/min), yields adequate for domestic purposes only. Groundwater in the units is mineralized, and groundwater quality in Jackson County does not meet acceptable standards for drinking. Total dissolved solids range from 10,000 to 40,000 ppm; less than 1000 ppm is considered fresh water (Gann et al. 1974).

2.2.2 Area and Amounts of Recharge

KCP itself is mostly covered with pavement; therefore, little on-site recharge occurs. Several years of monitoring have demonstrated that water levels across KCP typically show minor variations, usually within two feet (U.S.DOE 1991a). The surrounding streams are the major discharge area for the alluvial aquifer (U.S.DOE 1992a). The amount of groundwater recharge from the alluvium to the underlying Paleozoic rocks is negligible in comparison to the total flow through the alluvium (U.S.DOE 1992a).

2.2.3 Groundwater Flow Directions

The potentiometric surface of the upper and lower more-permeable units of the alluvium beneath KCP indicate that regional groundwater flow within these units is to the south and east (radial) and that the Blue River and Indian Creek are gaining streams. Groundwater samples collected from bedrock wells installed down-dip from contaminant sources have remained clean (U.S.DOE 1991a). Figure 6 shows a potentiometric map of the lower completions of the alluvial monitoring wells at the plant.

2.2.4 Groundwater Flow Velocities

Alluvial

Four pumping tests have been performed at KCP: the green-clay aquifer test (U.S.DOE 1992a), the Northeast Area test (Madril et al. 1986), the Tank Farm Area test (U.S.DOE 1990c), and the South Lagoon test (U.S.DOE 1991b). Hydraulic conductivities and storage coefficients calculated from three of the aquifer tests (Northeast Area, Tank Farm Area, and South Lagoon Area) ranged from 0.6 to 2.3 ft/d and 5×10^{-4} to 2×10^{-3} respectively. The green-clay aquifer test was conducted to determine the degree to which a middle green-clay zone restricts the vertical movement of groundwater between the upper and lower alluvial units at KCP. Groundwater flow velocities calculated from the values reported above range from 0.023 ft/day to 0.053 ft/day. These relatively low flow velocities are reasonable for the fine-grain material comprising the alluvial aquifer at KCP.

Bedrock

Results from packer tests conducted on bedrock coreholes during previous investigations indicate hydraulic conductivities in bedrock below the measurable

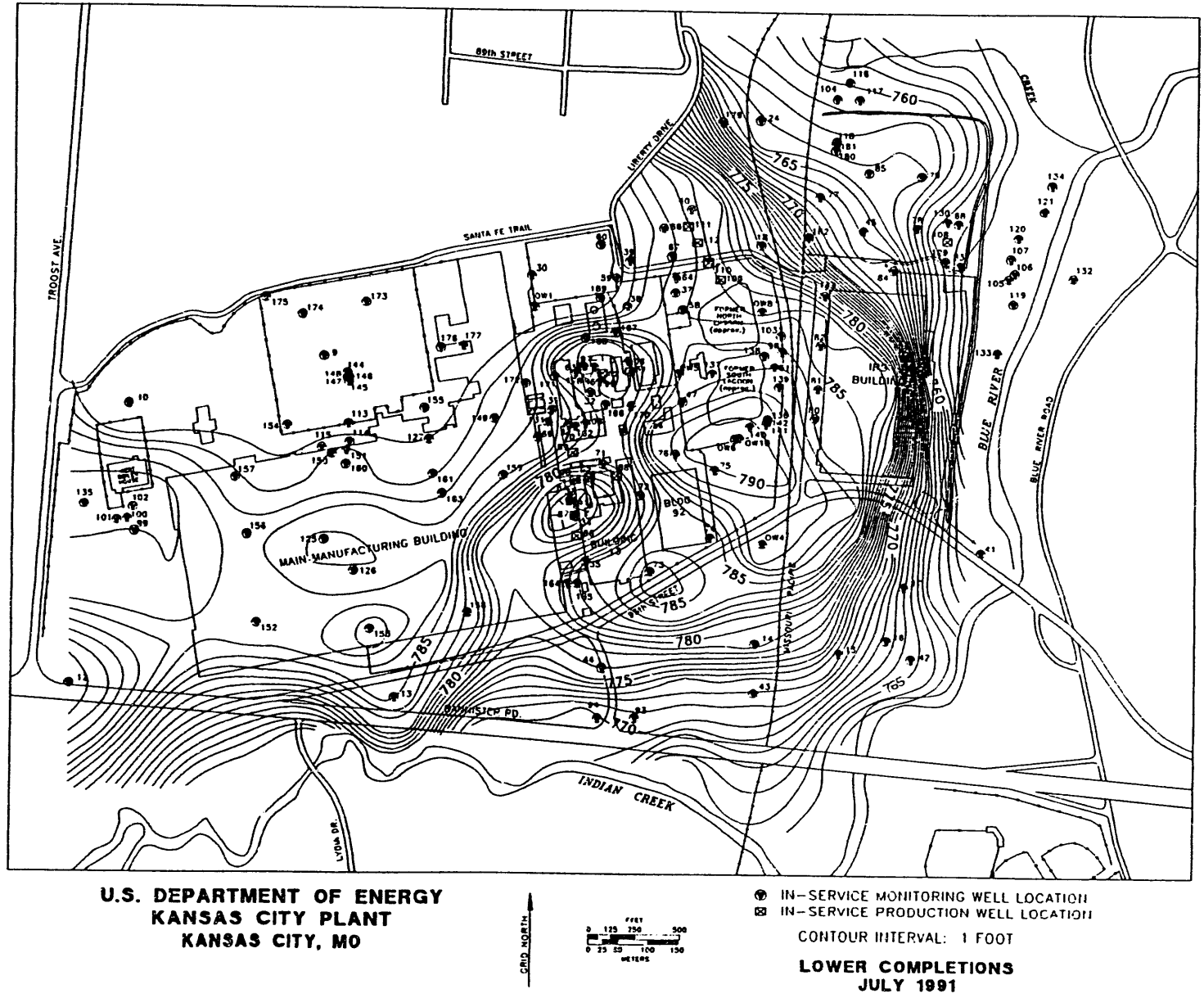

Fig. 6. Potentiometric map of the lower zone in the alluvial aquifer.

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range. Because packer tests can measure hydraulic conductivities in the range of 0.0001 ft/day, it is a safe assumption that the hydraulic conductivity of the Pleasanton shale is in the 0.00001 ft/day or lower range (U.S.DOE 1992b). Additionally, there is no indication of fractures in the shale. Consequently, the Pleasanton shale is an effective barrier to the vertical migration of groundwater.

The hydraulic conductivity of the Knobtown sandstone ranges from 0.005 to 0.04 ft/day. Because the unit is in hydraulic communication with the overlying alluvium, groundwater flow rates are of concern. Using the same range of hydraulic gradients as in the overlying alluvium (0.02 to 0.002) and an assumed effective porosity of 0.12, groundwater migrates at a rate of 0.24 to 2.4 ft/yr in the Knobtown sandstone (U.S.DOE 1990b).

As with the Pleasanton shales, the hydraulic conductivity in the Hepler sandstone was below the range at which packer tests can yield a reliable measurement. The Hepler sandstone exhibited no-flow conditions in well KC84-22 and 0.024 ft/day in well KC84-23. This evidence indicates that the Hepler is a low-permeable formation.

The hydraulic conductivity of the Hepler sandstone, combined with the fact that the Hepler sandstone is isolated from the alluvium by 35 ft of impermeable Pleasanton shale, suggests that contamination of this unit is not a concern. If a preferred pathway has been created by a gas well, the Hepler sandstone is not a conductive formation.

2.3 CONTAMINANTS OF CONCERN

The contaminant plume of concern is the solvent plume associated with the TCE Still Area. The three prominent contaminants in the plume are: trichloroethene (TCE), 1,2-dichloroethene (total) (1,2-DCE), and chloroethene. Figures 7, 8, and 9 are graphical depictions of the contaminant plume for each of the three

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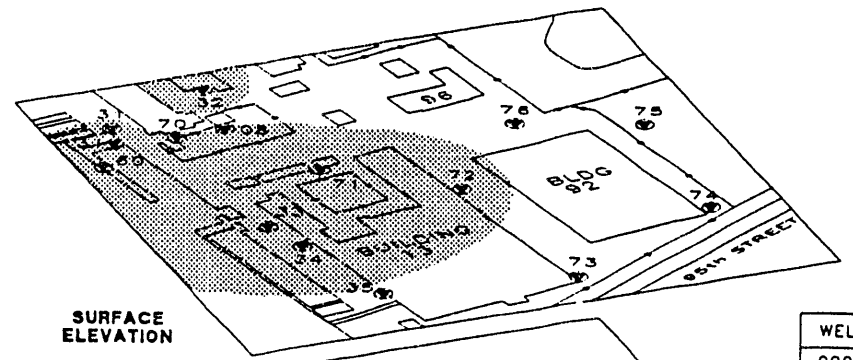
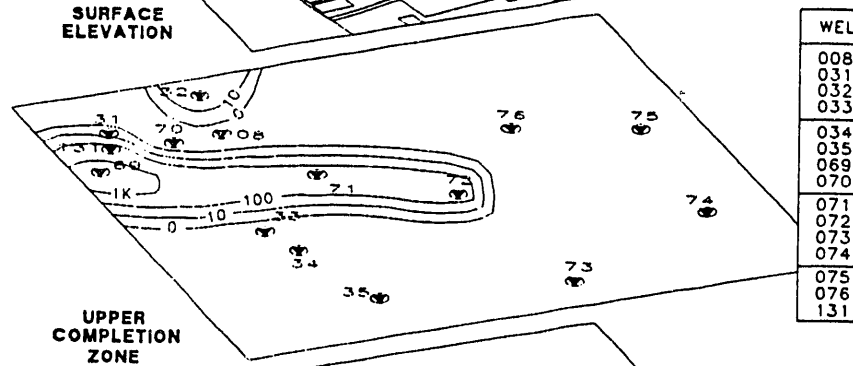
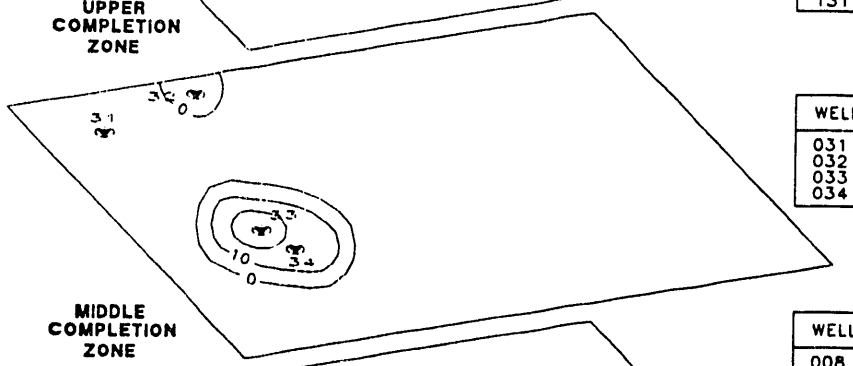




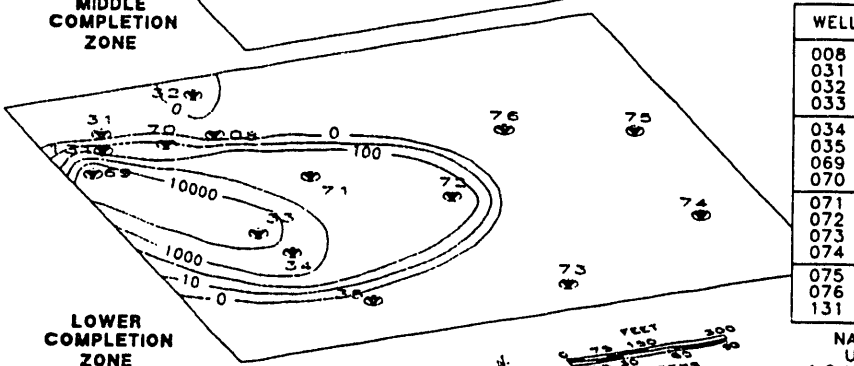
UPPER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	NA	5.0U	5.0U
031	NA	NA	8.0	NA
032	71.0	350.0	50.0	28.0
033	NA	NA	NA	NA
034	NA	NA	5.0U	NA
035	NA	NA	5.0U	5.0U
069	640.0	3300	1100	1600
070	NA	NA	5.0U	NA
071	NA	NA	NA	NA
072	NA	NA	196.0	NA
073	5.0U	5.0U	5.0U	5.0U
074	5.0U	5.0U	5.0U	5.0U
075	5.0U	5.0U	5.0U	5.0U
076	5.0U	5.0U	5.0U	5.0U
131	330.0	2400	580.0	1100



MIDDLE COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
031	NA	NA	5.0U	NA
032	5.0U	24.0	5.0U *	5.0U
033	NA	NA	870.0	NA
034	NA	NA	34.0	NA



LOWER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	5.0U	5.0U	5.0U
031	NA	NA	5.0U	NA
032	5.0	22.0	5.0U *	5.0U
033	54.0	95.0	24000	6900
034	4200	13000	2600	NA
035	5.0U	5.0U	5.0U	5.0U
069	11000	100000	26000	2000
070	NA	NA	33.0	NA
071	NA	NA	110.0	NA
072	NA	NA	330.0	NA
073	5.0U	5.0U	5.0U	5.0U
074	5.0U	5.0U	5.0U	5.0U
075	5.0U	5.0U	5.0U	5.0U
076	5.0U	5.0U	5.0U	5.0U
131	150.0	24.0	25.0	25.0

NA: NOT ANALYZED
U: UNDETECTED
1.0 U: DETECTION LIMIT/UNDETECTED
*: DATA POINT NOT USED IN CONTOURING

TCE

CONTOURED DATA DENOTED BY THICKENED RECTANGLES IN TABLES ABOVE.

LEGEND

- DATA CONTOUR (LOGARITHMIC CONTOUR INTERVAL IN ug/L)
- INFERRED ZERO CONCENTRATION LINE
- AREAL EXTENT OF CONTAMINANT
- MONITORING WELL LOCATION

Fig. 7. Depiction of the TCE plume in the TCE Still Area.

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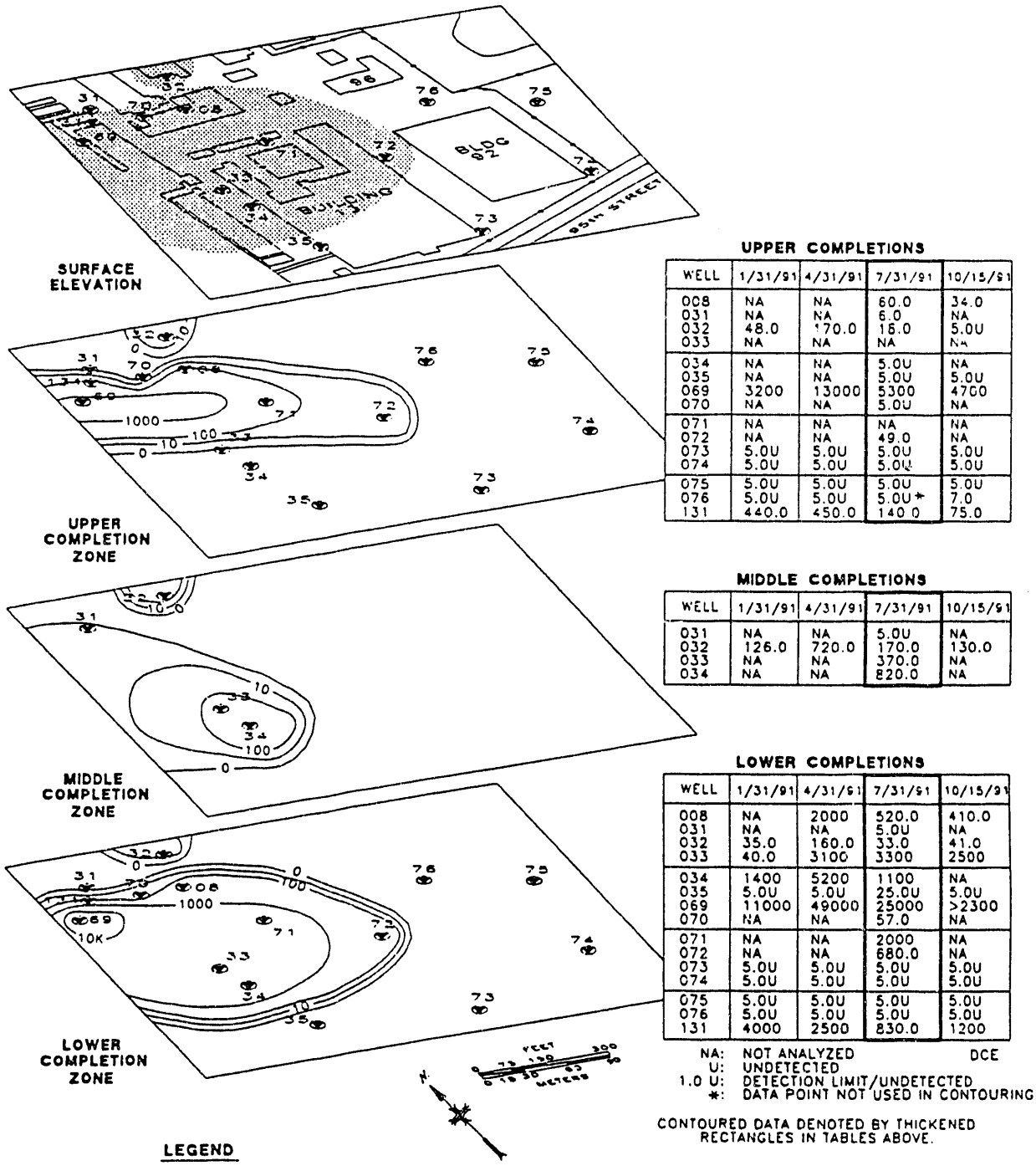

UPPER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	NA	60.0	34.0
031	NA	NA	6.0	NA
032	48.0	170.0	16.0	5.0U
033	NA	NA	NA	NA
034	NA	NA	5.0U	NA
035	NA	NA	5.0U	5.0U
069	3200	13000	5300	4700
070	NA	NA	5.0U	NA
071	NA	NA	NA	NA
072	NA	NA	49.0	NA
073	5.0U	5.0U	5.0U	5.0U
074	5.0U	5.0U	5.0U	5.0U
075	5.0U	5.0U	5.0U	5.0U
076	5.0U	5.0U	5.0U*	7.0
131	440.0	450.0	140.0	75.0

MIDDLE COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
031	NA	NA	5.0U	NA
032	126.0	720.0	170.0	130.0
033	NA	NA	370.0	NA
034	NA	NA	820.0	NA

LOWER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	2000	520.0	410.0
031	NA	NA	5.0U	NA
032	35.0	160.0	33.0	41.0
033	40.0	3100	3300	2500
034	1400	5200	1100	NA
035	5.0U	5.0U	25.0U	5.0U
069	11000	49000	25000	>2300
070	NA	NA	57.0	NA
071	NA	NA	2000	NA
072	NA	NA	680.0	NA
073	5.0U	5.0U	5.0U	5.0U
074	5.0U	5.0U	5.0U	5.0U
075	5.0U	5.0U	5.0U	5.0U
076	5.0U	5.0U	5.0U	5.0U
131	4000	2500	830.0	1200

NA: NOT ANALYZED
U: UNDETECTED
1.0 U: DETECTION LIMIT/UNDETECTED
*: DATA POINT NOT USED IN CONTOURING

DCE

CONTOURED DATA DENOTED BY THICKENED RECTANGLES IN TABLES ABOVE.

Fig. 8. Depiction of the DCE plume in the TCE Still Area.

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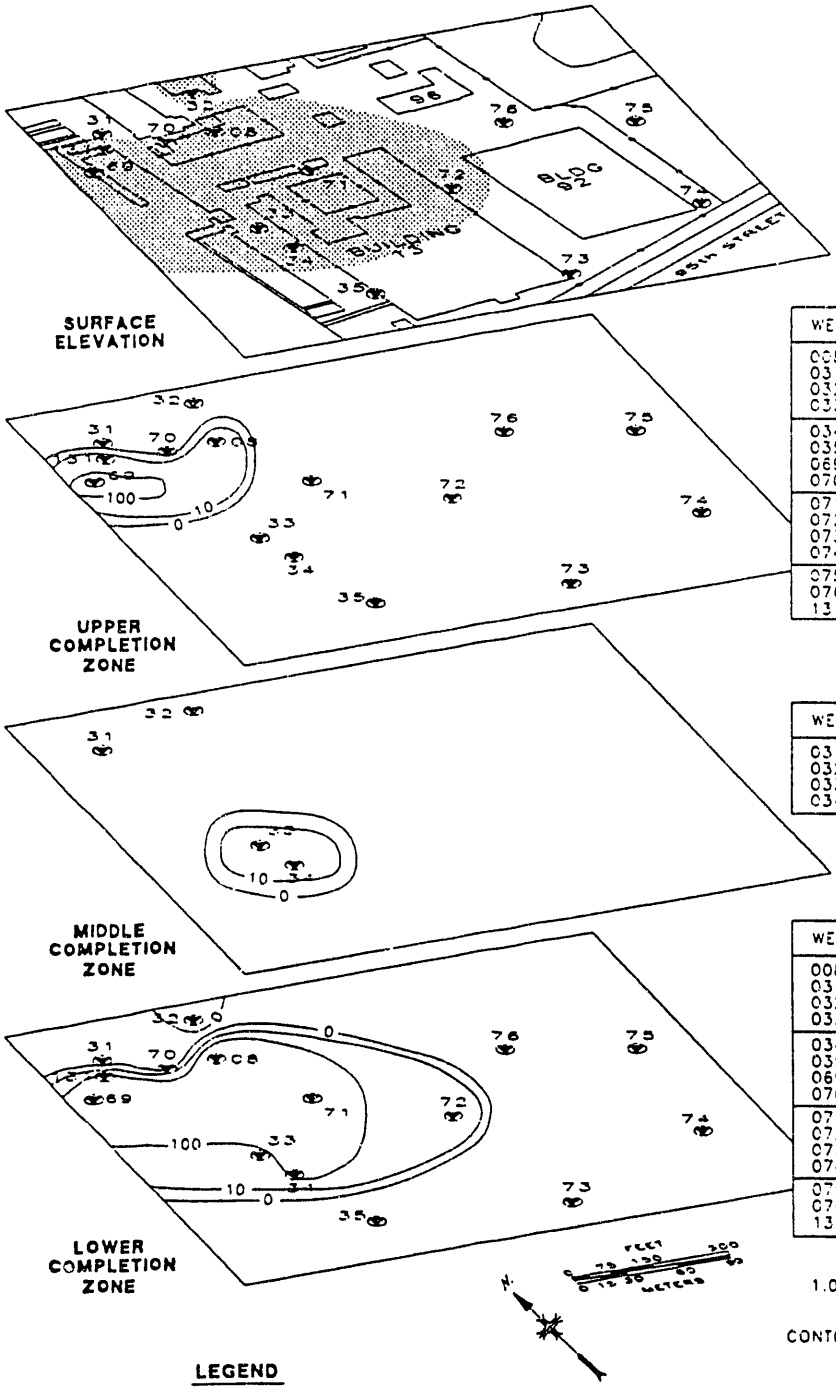

UPPER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	NA	40.0	70.0
031	NA	NA	10.0U	NA
032	10.0U	10.0U	10.0U	10.0U
033	NA	NA	NA	NA
034	NA	NA	10.0U	NA
035	NA	NA	10.0U	10.0U
069	260.0	2100	690.0	720.0
070	NA	NA	10.0U	NA
071	NA	NA	NA	NA
072	NA	NA	10.0U	NA
073	10.0U	10.0U	10.0U	10.0U
074	10.0U	10.0U	10.0U	10.0U
075	10.0U	10.0U	10.0U	10.0U
076	10.0U	10.0U	10.0U	10.0U
131	13.0	25.0	23.0	130.0

MIDDLE COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
031	NA	NA	10.0U	NA
032	6.0	19.0	10.0U*	10.0U
033	NA	NA	10.0	NA
034	NA	NA	76.0	NA

LOWER COMPLETIONS

WELL	1/31/91	4/31/91	7/31/91	10/15/91
008	NA	1000	120.0	280.0
031	NA	NA	10.0U	NA
032	10.0U	14.0	10.0U*	10.0U
033	10.0U	76.0	91.0	290.0
034	28.0	130.0	350.0	NA
035	10.0U	10.0U	10.0U	10.0U
069	33.0	4000	450.0	300.0
070	NA	NA	10.0U*	NA
071	NA	NA	135.0	NA
072	NA	NA	45.0	NA
073	10.0U	10.0U	10.0U	10.0U
074	10.0U	10.0U	10.0U	10.0U
075	10.0U	10.0U	10.0U	10.0U
076	10.0U	10.0U	10.0U	10.0U
131	800.0	220.0	10.0U*	360.0

NA: NOT ANALYZED
U: UNDETECTED
1.0 U: DETECTION LIMIT/UNDETECTED
*: DATA POINT NOT USED IN CONTOURING

CONTOURED DATA DENOTED BY THICKENED RECTANGLES IN TABLES ABOVE.

Fig. 9. Depiction of the chloroethene plume in the TCE Still Area.

major contaminants in the TCE Still Area. Note that monitoring well number 35, near the lower left corner of the maps, is immediately east of the southeast corner of the Main Manufacturing Building. Figure 2 shows the location of well 35 in relation to the possible location of the old gas wells. Other possible locations of the gas wells are discussed in Sect. 3.2; however, all locations are generally concentrated near the southeast corner of the main manufacturing building.

Other alluvial monitoring wells near the old gas well are shown in Fig. 2. Well KC88-94 contains no contamination. Well KC85-44 contained 76 μg/L of TCE in a sample collected in May 1986; annual samples collected since 1986 have shown no detectable contamination. The lower completion of well KC91-158 contained 6 μg/L of 1,2-DCE (total) in October 1992. Well KC91-164, both upper and lower completions, contained no contamination in January 1992. However, in April 1992, this well contained 9 μg/L and 32 μg/L of 1,2-DCE (total) in the upper and lower completions. Well KC91-165, 50 ft downgradient from KC91-164, contained up to 890 μg/L of 1,2-DCE (total) and 1300 μg/L of TCE in the lower completion. The upper completion of well KC91-165 contained 7 μg/L of 1,2-DCE (total).

Near the well labelled #2 (Fig. 2), wells KC91-159, KC91-161, and KC91-163 contain up to 1800 μg/L volatile organic compounds (VOCs). The upper completion of well KC91-159 contained 1800 μg/L of 1,2-DCE (total) in a sample collected in April 1992. The levels in other samples in all of the wells are generally below 300 μg/L of various VOCs.

The old natural gas well labelled #7 is in the TCE Still Area. Groundwater from well KC85-33 contained 24,000 μg/L of TCE in a sample collected in July 1991. This was the highest level reported in the area since sampling began in 1985. Other VOCs are also present at levels less than those reported above.

Historical sample results from these wells are presented in Appendix C.

3. OIL AND GAS EXPLORATION AND PRODUCTION

This section describes the history of oil and gas exploration and production in the Kansas City region near KCP, drilling and abandonment methods of the era, and known information about the natural gas wells at KCP.

3.1 HISTORY AND METHODS OF THE PRE-WORLD WAR II ERA

3.1.1 Regional History

According to McCourt (1917), drilling began around the Kansas City area in the 1860's. Oil seeps attracted exploration in the area east of Paola, Kansas. The first three wells drilled here were near Wea Creek (SW1/4, Sect. 15, T17S, R23E). The first two were 4-in. wells drilled to 100 ft; these wells were dry. The third well was drilled deeper (unspecified) and produced oil. Oil exploration was halted at the start of the Civil War. Figure 10 shows the Kansas City region, with township and range marks for location of various oil and gas fields. Figure 11 shows oil fields in Johnson County, Kans. as of 1954.

Drilling resumed in 1873 with Colonel Acers' "diamond" drilled hole. Total depth drilled was 737 ft; the well produced gas and salt water. "Diamond" drilling consisted of a string of hollow steel, flush-jointed rods screwed together in sections. This type of drilling allowed for the extraction of a core of the rock, making exact depths of formations and producing zones much easier to determine (McCourt 1917).

According to the University of Kansas (1908), gas was piped to a zinc smelter (location unspecified) in 1897 and to a Portland cement plant in 1899. The gas was used to power these industries. Oil had been used previously as a lubricator on freighters' wagons and for domestic medical remedies. According to this article, in the 1880s, gas wells had been producing for 15 to 20 years, but "possibly for a lack of care, water has drowned them, so that they have lost their value." By 1884,

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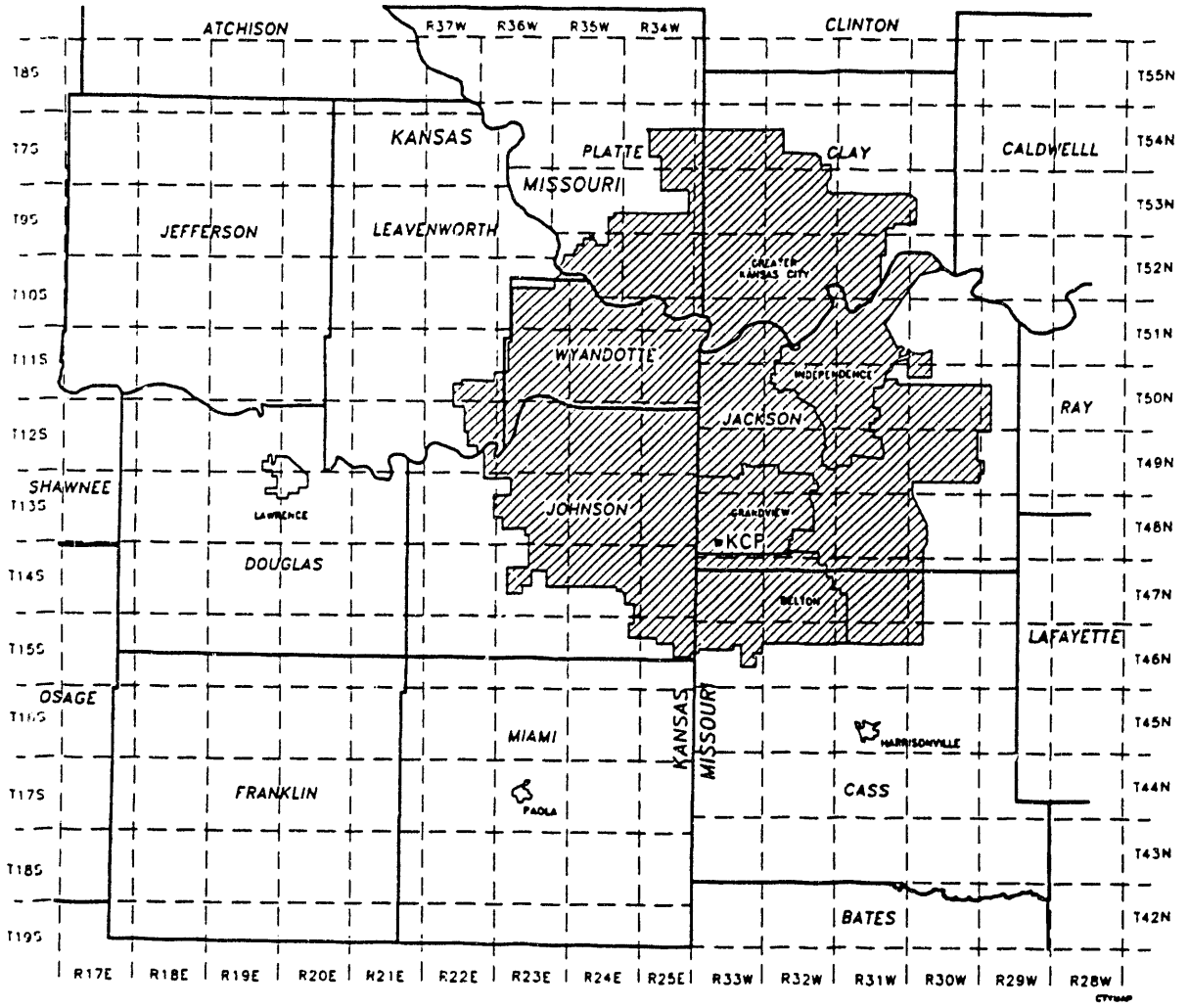

Fig. 10. Location of KCP within greater Kansas City, Jackson County, neighboring counties, and regional townships.

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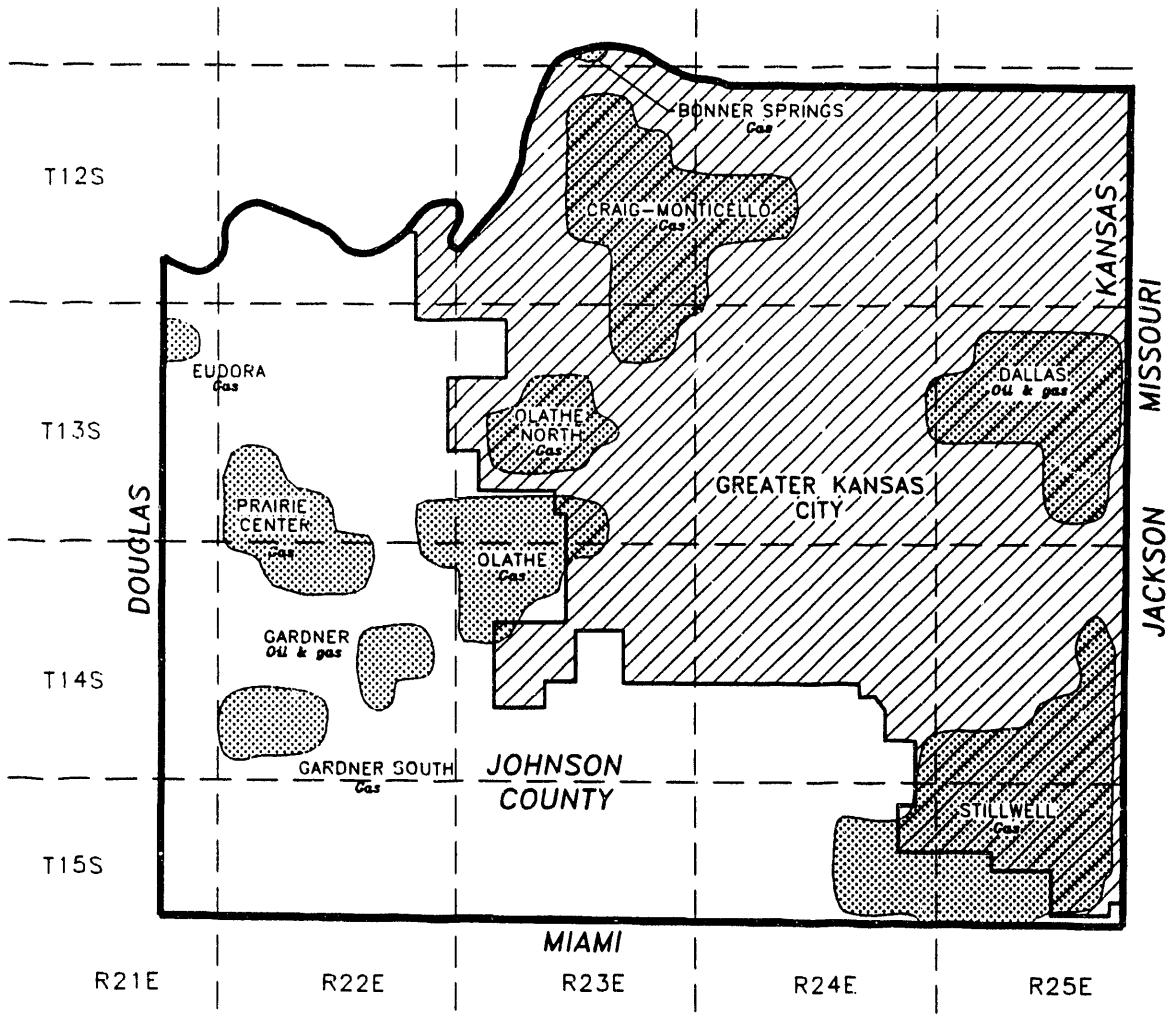

Fig. 11. Oil and gas fields in Johnson County, Kans., in 1954. *Source*: Jewett, John Mark, and Margaret O. Oros. [1954]. 1979. *Oil and Gas in Eastern Kansas with a 25-year Update by Margaret O. Oros.* Bulletin 104, reprint. Kansas Geological Survey, University of Kansas, Lawrence, Kans.

Paola, Kans., had piped gas 7 miles into town from the Paola field. By 1886, the field had a small refinery and, by 1889, was producing 500 barrels of oil (unit of time was not reported, i.e., per day, week, etc.). By 1910, petroleum exploration in Independence, Mo., and Montgomery County, Kans., had expanded. A Mr. Louis H. Knocke furnished Martin City, Mo., with gas from one well at the rate of 160,000 to 642,000 ft^3 per month.

Between 1902 and 1906, 15 wells were drilled west and north of Belton, Mo., which is located approximately 6 miles south-southeast of KCP. A Mr. Goodbar supplied approximately 25 families with natural gas from a well ¾ miles north of Belton. Improper casing techniques destroyed most wells because water and/or sand entered the wells (McCourt 1917). Whether the water was groundwater or surface water was not mentioned. Mineral baths were being developed during this time using water from non-producing gas wells; as a result, numerous wells were purposely drilled for brine or saltwater.

Promising discoveries close to the Kansas City market prompted wildcat operators to drill in Johnson County, Kans. Wells in Gardener (Sect. 14, T14S, R22E) produced from the Marmaton sandstone. The Craig-Monticello field produced gas from sandstones in the Pleasanton, Marmaton, and Cherokee Groups, with principal production from the upper Cherokee. The field is now used for underground gas storage. In Sect. 15, T12S, R23E, small gas fields were developed in the Knobtown sandstone in the upper part of the Pleasanton shale.

3.1.2 Local History

Geologic maps of Jackson County, Mo., from 1922 (Wilson 1922) show a town named Dallas close to the region currently covered by KCP (Fig. 12). Dallas appears on the map two miles south-southwest of the junction of Indian Creek and the Big Blue River. Numerous gas wells had been drilled in this area at the time of the publication (Wilson 1922). Gas was used for domestic and small manufacturing purposes. Depth to the oil and gas varied from 75 to 550 ft. Two lithologic logs were included in the article; however, no drilling or completion information was included. The author infers that 110 to 150 wells were drilled, of which 110 were

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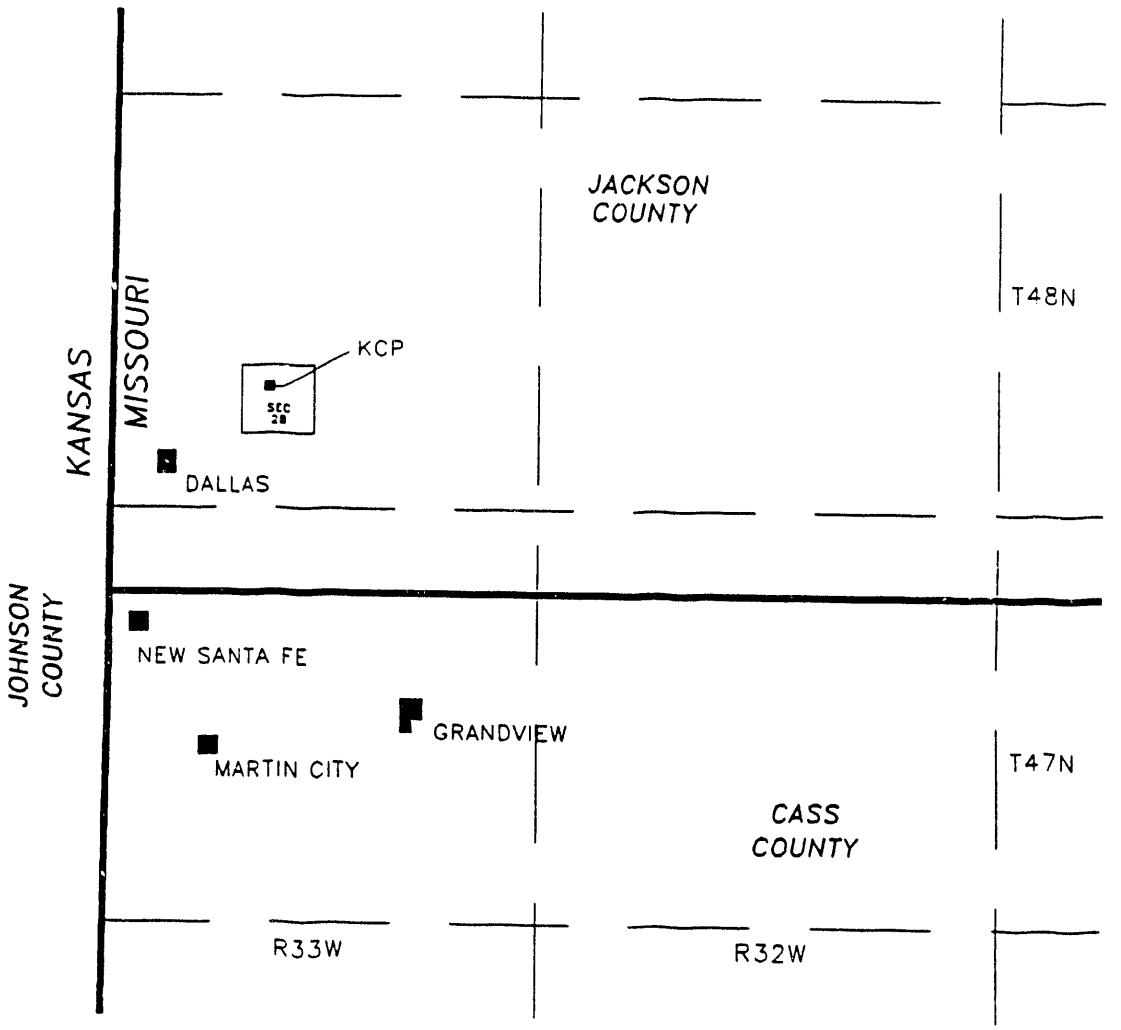

Fig. 12. Location of historical towns close to KCP.

productive; he further infers that numerous other dry wells were not recorded (Wilson 1922, pp 144-146). "A number of wells were drilled between Dallas and New Santa Fe" (Fig. 12).

At the close of 1927, the Dallas oil field (Miami County, Kans., Sect. 3, 4, 10, 11, 14, and 15, T13S, R25E), had approximately 75 wells. The principal oil-producing horizon was 60 ft of Bartlesville Sand in the upper Cherokee Group. Gas was also produced from a sand in the upper part of the Marmaton Formation. The field had been abandoned during the Civil War, but interest was renewed in 1927 (Kesler 1927).

In 1937, approximately 50 wells were drilled into the Sniabar member of the Hertha Formation, creating the Sniabar gas field in central Jackson County, Mo. This gas field was near Independence, Mo. (Bartle 1938).

McCourt (1917) listed eleven wells within a five-mile radius of the present location of KCP, all within Jackson County, Mo. The first of these wells was five miles south of KCP (SE1/4, Sect. 20, T47N, R33W), drilled in 1906 by L. H. Knocke. This well, and seven others completed in the area by 1909, produced natural gas from the middle of the Pleasanton Formation (150 ft), the base of the Henrietta Formation (257 ft), and several depths from the Cherokee shale (274 ft, 365 ft, and 547 ft). All depths are reported as feet-below-ground-surface. The best zone was at about 274 ft (Cherokee shale). The third well showed gas sand at 230 ft and oil sands at 287 ft and 421 ft: the first two "shows" were in the Pleasanton and the third in the Cherokee shale (this well was considered a dry hole). The fourth well shows oil sand at 248 ft in the Pleasanton Group and gas sand at 341 ft in the Henrietta Formation. This well was also considered a dry hole. The fifth well shows oil sand at 271 ft in the Pleasanton and gas shale (445 ft) and gas sand (494 ft) in the Cherokee shale.

One well was drilled at Swope Park in 1905 to produce water. Swope Park is approximately two miles northeast of KCP. The well produced gas from 304 to 315 ft. No lithologic log was shown. McCourt (1917) also indicates a well drilled at 85th St. and Holmes Ave. owned by E. Kellerstraus. No date, depth, or lithology information was available.

3.1.3 Drilling and Abandonment Methods

According to Moore and Haynes (1917), cable-tool rigs were frequently used in Kansas and Oklahoma to drill in hard rock formations. The driller would proceed until it was "advisable to case off a water or gas-bearing stratum. In comparatively shallow territory a portable machine of the *Star or Parkersburg* type was frequently used in the Kansas and Oklahoma fields" (Moore and Haynes 1917). These rigs could be moved easily if roads were bad, but were not adapted for handling heavy strings of cable, thus precluding deep drilling. Drilling consisted of dropping the bit and string of weight repeatedly to break the rock. Cuttings were bailed out of the well. When the well was completed or reached a pay zone in "close-textured reservoir rock, or when the production of a well had begun to decline, it was a common practice to **shoot** the well, a charge of nitroglycerin being generally used for the shooting" (Moore and Haynes 1917). The amount of explosive varied from a few quarts to 250 quarts.

Cable-tool drilling often included advancing a string of casing as the well was drilled. This casing was advanced as the bit drove deeper into the rock to prevent caving of sidewalls (UGS 1908). If the blocked water zone was under pressure, the casing was driven or set into a lower layer to securely shut off the water. Occasionally, mud-laden fluid was forced under pressure into the porous rock to form a seal. Further drilling required a smaller bit. Each heavy flow of water was cased off, with each casing set of smaller diameter than the previous casing. Casing was usually sheet-iron riveted pipe of various sizes and weights, depending on the depth of the well and water pressure.

Both cable-tool and rotary drilling rigs were in use in the late 1930s to early 1940s, according to geological logs from wells (Greene 1945). Typical completions with cable-tool rigs consisted of setting casing at various depths. Each casing interval was followed by smaller diameter casing. A typical well in Platte County, Mo., (drilled in August 1939) was completed by setting 12.5-in. casing to 150 ft, 10-in. casing to 931 ft, and 8-in. casing to 1103 ft. Total depth drilled was 1857 ft; the well was dry and was abandoned.

"The practice of drilling the well and setting the oil string od [*sic*] casing through the producing zone was universal in the field. Many of the holes were drilled to 100 ft below the deepest possible production in order to allow for flexibility in placing tubing to control gas-oil ratio." (Weeks and Alexander 1942). Producing practices at this time were to set 16-in. surface casing inside a 21-in. hole to approximately 100 ft, using 125 or more bags of cement. This was followed by setting 10 ¾-in. casing as intermediate protective casing in a 15-in. hole at depths up to and exceeding 2000 ft, using 1000 plus bags of cement. Early efforts with shorter protective string were unsatisfactory.

Abandonment of old wells was not documented in any of the literature reviewed. An oil field worker from the pre-World War II era stated that wells were frequently plugged with a cedar tree that had been stripped of its branches. The tree was driven into the hole or casing, followed by cuttings, soil, and/or mud. Although this seems outlandish from a modern perspective, the source was reliable [a Missouri Department of Natural Resources (MDNR) employee for several years], and the method would stop all flow from a low-pressure well. The tree trunk would swell from the moisture, and cedar is very resistant to degradation. Other abandonment procedures were undoubtedly used, probably including no action, leaving drilling mud in the well, and pumping cement into the hole.

The combinations of drilling methods, casing sizes, bit sizes, and cementing practices are limitless. The above examples are a few of the methods described in the literature reviewed; obviously, many combinations were available. Specific methods used in individual wells were commonly not documented. No regulations requiring such documentation were in place. If methods, producing depths, casing sizes, etc., were documented, the information was often a closely held secret; competitors could mobilize onto the neighboring property and drill a well a few feet away.

3.2 KCP NATURAL GAS WELLS

Information documenting the existence of the old natural gas wells is incomplete. Initial indication that the wells existed came from notes on an old KCP map. This map indicates the locations of 8 wells only near the southeast corner of the Main Manufacturing Building (Fig. 2). Two other sources of information were also discovered: a report by Joseph R. Clair (1943) and records from the MDNR. Clair lists information about seven wells; MDNR records indicate eight wells. Based on location maps (Fig. 2, 13, and 14), the three sources of information appear to be discussing the same wells. Locations were not surveyed but were usually marked by an "X" within a quarter section drawing. Therefore, the exact location of any well cannot be determined from the descriptions.

Very little information specific to the wells in question was discovered. Registration of wells prior to construction of the plant was apparently voluntary. It information about a well was provided, it was often only a general description of lithology and location.

3.2.1 Clair Report, 1943

KCP is located in Sect. 28, Township 48 North, Range 33 West, Jackson County, Mo. The Clair report (1943) contains two paragraphs of text about this township, data about six wells in Sect. 28, a map showing the probable location of seven wells (scale: 1 in. = 1 mile) in Sect. 28 (Fig. 13), and a detailed lithologic log from a well in Sect. 36 of the same township. The two paragraphs of text are:

> This area is unimportant commercially except for the Indian Creek pool in Sect. 28, Township 48 North, Range 33 West. The wells in this pool were all very small and lasted only a short time. The field lies at the junction of the valleys of Indian Creek and Big Blue River, hence drilling starts in beds stratigraphically below the Kansas City group. For this reason the producing horizon is closer to the surface than in pools under the upland areas. Nine wells have been drilled here, four of

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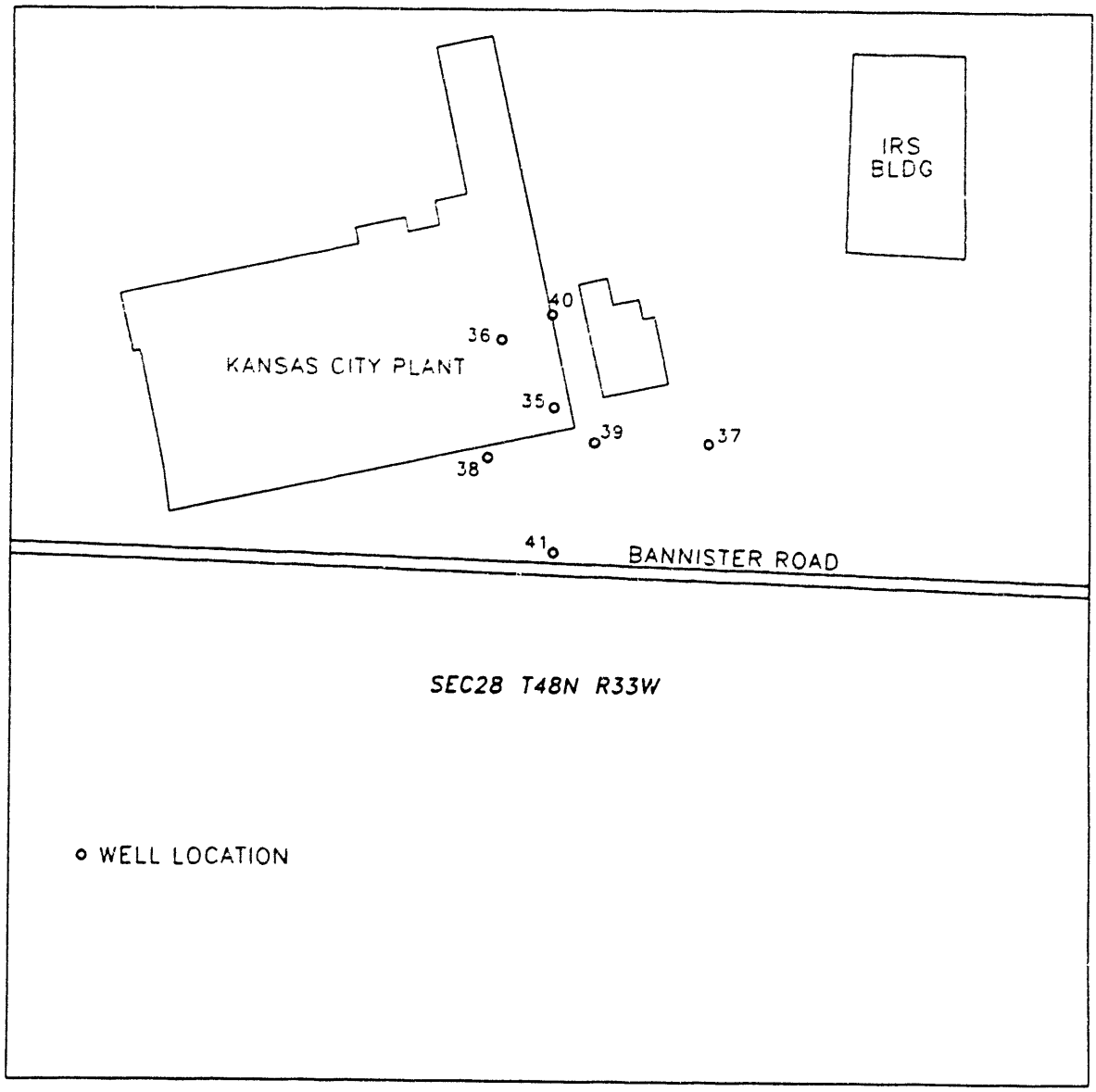

Fig. 13. Location of the seven wells shown on a Clair report map (1943), transposed on a modern map of KCP.

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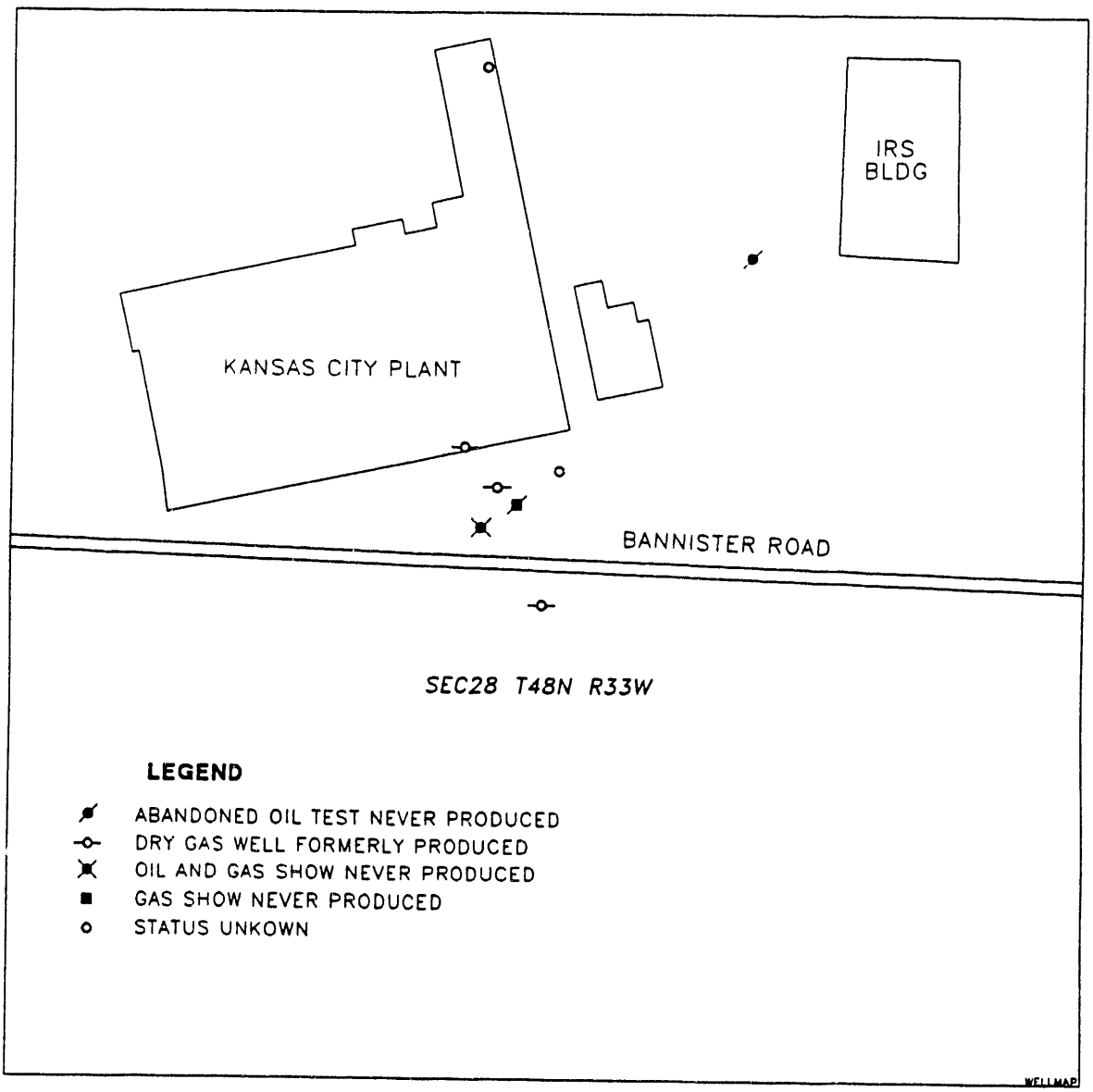

Fig. 14. Location of old wells shown on Missouri Geological Survey map (Netzler 1964) transposed onto modern map of KCP.

which were dry holes. No information is available on the production and the field is completely abandoned.

There are a number of other wells scattered over the region and several have produced gas. However, none has been of commercial size and they have only been used privately. The future of the region is not very promising and careful detailed mapping should precede any further drilling.

A table later in the same report lists six wells in Sect. 28.

It must be assumed that these six wells in Sect. 28 are part of the seven shown on the map in the report (Fig. 13) and part of the nine discussed in the text. The company for these wells is listed as "Dr. H. H. Francis", the farm and well numbers are listed as "Butler Old Speedway No. 1, 2, 3, 5, 7, and 8". (The KCP site was formerly the location of a racetrack.) All of the wells are located in Sect. 28, T48N, R33W. Data for the six wells are excerpted from the table and shown below:

Map No. of well	Surf. elev.	Total depth	Depth base Lex. cap	Elev. base Lex. cap	Type of well
35	799	570	181	618	Gas
36	798	207	195	607	Gas
37	800	218	206	594	Gas
38	798	241	200	598	Dry
40	799	203	198	601	Gas
41	799	201	198	601	Gas

The "Lex. cap" used in the table as a depth reference is the Myrick Station limestone of the Pawnee Formation. Used as a marker bed, this limestone was readily identifiable because of the underlying Lexington coal. The Lexington coal

horizon lies 100 to 210 ft below the Knobtown sandstone (Clair 1943). This correlates well with the depth of the "Lex. cap" in the table, allowing for 10 to 40 ft of alluvium on the Knobtown sandstone. Further assumptions can be made from the information above. The depth of well 35, 570 ft, indicates that there was apparently little or no show of gas or oil in the lower 300 to 400 ft of the hole since subsequent wells were not drilled beyond approximately 240 ft. Gas production was probably in the Lexington coal or a formation immediately above it since all of these wells contacted the coal but none were drilled much deeper.

A single well log from Sect. 36 of the same township was provided in the Clair report (1943). The log is reproduced in Appendix A. This well would be located approximately three miles east-southeast of KCP, with a surface elevation about 230 ft above the elevation of KCP. Due to the relatively flat-lying formations, the top 230 ft of this lithology would not be present in a well drilled at KCP. Interesting notes from the lithologic log are: the Knobtown sandstone was probably thinly bedded with limestone and shale, and the sand went unrecognized; the Lexington cap rock was struck at 430 ft; two gas-producing horizons were noted in the Henrietta Group (445 ft and 474 ft); there were two other "shows" of gas and/or oil; and there was no indication of gas or oil below 546 ft. No bit sizes or casing information were provided.

3.2.2 Information from MDNR, 1992

Records retained by the MDNR also provided some information about eight wells drilled in Sect. 28 of the same township. This information was forwarded to KCP by Bruce Stuart, MDNR, for use in this report.

The records included a Missouri Geological Survey 7.5 minute topographic map of the Grandview Quandragle, Mo.-Kans. quadrangle (Netzler 1964). This map shows the locations of seven wells in Sect. 28 near KCP; Fig. 14 shows the locations of these wells transposed on a modern KCP map. These locations do not match the locations of the wells from the Clair map (1943) or the locations on the old KCP map. However, the locations from all maps are in the same area.

Locations of the wells were reported to the state only by quarter section and were not surveyed.

The wells on the map are apparently the same wells discussed in the Clair report (1943); MDNR also had copies of old lithologic logs from these wells, listing the owner and well numbers. Seven of these were the same as those in the Clair report (1943). These wells were owned by Dr. H. H. Francis, and the firm was "Butler Old Speedway" or just "Old Speedway". One other well in Sect. 28 is also included. The owner was "Ruf Drlg. Co.," and the farm was "Butler & Reynolds". All of the Dr. H. H. Francis wells were drilled in the fall of 1933; the Ruf Drlg. Co. well was drilled in June 1936.

Because the eight lithologic logs are nearly illegible, highlights from each of the eight logs are provided below. The comments shown by the depths are notable remarks from each log. Exact quotes are shown; question marks were used where a word was unreadable. No information was reported about abandonment or plugging of the wells. Our comments appear in brackets.

3.2.3 Information from KCP Employee

A KCP employee who had been at the plant since 1949 recalled information about one of the old gas wells. This employee is now retired. During the late 1950s or early 1960s, one of the old wells was leaking gas. A contractor (Apparently Layne-Western) sealed the well using "present" technology (Floyd Bowlin, Allied Signal, Inc., Kansas City, Mo., personal communication to D. E. Brown, Allied Signal, Inc., 1992). The leaking well was located near the "Q-tunnel head house". A well near the Q-tunnel head house would match the location of well #7 from the old KCP map (Fig. 2) and well #40 from Clair (1943) (Fig. 13). The area near the Q-tunnel head house is covered with asphalt and/or concrete; no surface expression of the well is present.

Owner: Ruf Drlg. Co. Farm: Butler & Reynolds Well No. 1
Date: June 3, 1936 Casing record: set 6 1/4" at 50' Elevation: 798

Depth	
49	Mud and gravel, Water - set 6 1/4" at 50'
198	Lime (Lex. Cap)
201	Shale, black about 8 to 10,000 gas
265	Sand - oil showing
314	Sand, broken, dark, oil show
340	shale, TD with 6 1/4" bit

[The well was drilled to total depth with a 6 1/4" bit, indicating that no further casing was set below the 50 ft of surface casing. The lithology was based on the driller's log.]

Owner: H. H. Francis Farm: Old Speedway Well No. 1

Date: August 1933

[Remarks are mostly unreadable; some interpretation was required for the following highlights.]

Depth	
0 - 171 ft	unreadable
181	went about 3???????
188	Lexington Coal ???????? full of salt water
206	Oil showing
277	Squirrel
307	oil showing
347	oil ???????? showing
389	4 7/8" casing ?????????
570	Burgess oil showing
	TD
	To be termed as gas well

[The "Squirrel" is probably the Squirrel sand in the upper Cherokee Group; the "Burgess" is probably the Burgess sand of the lower Cherokee Group.]

Owner: H. H. Francis Farm: Butler (Speedway) Well No. 2
Date: August 1933 Driller: Rand G. Bradford? Elevation: 798.0

Depth	
10 - 50	rivermud
	heavy water
93	black ???? gas ???????
200	black. Lex. coal horizon
207	bottom of sand - oil sand
	TD
	Packer set at 194'

Owner: Dr. H. H. Francis Farm: Butler (Speedway) Well No. 3
Date: 1933 Driller: Raymond Bradford ? Elevation: 799.5

Depth	
20 - 41	river mud sand
41	water 41' of 8 1/4" pipe
	set 80 ' of 8 1/4" pipe
148	dark gray measured hole
212	little gas - water
218	sand oil [last entry, apparent TD at 218 ft]

Owner: (unreadable) Farm: Old Speedway Well No. 5
Date: Fall 1933 Elevation: 798.3

Depth	
0 - 147	[no entries]
147	set 6 1/4"
192	sand
202	gas bubbles
241	no gas [last entry, apparent TD]

Owner: Francis Dr. Farm: Old Speedway Well No. 6
Date: Fall 1933 Driller: Ed Feyh (contr) Elevation: 799

Depth	
0 - 33	soil and clay
42	41' of 8 1/4"
187	[last entry, apparent TD]

[There were no entries on this log other than those shown, plus some intermediate depths with no comments.]

Owner: Dr. Francis Farm: Old Speedway Well No. 7
Date: Fall 1933 Driller: Ed Feyh (contr) Elevation: 799

Depth	
10	soil
203	[last entry, apparent TD]

[The only comments on this log were references to color; no lithology was described.]

Owner: Dr. Francis Farm: Old Speedway Well No. 8
Date: Fall 1933 Driller: Ed Feyh (contr.) Elevation: 798.6

Depth	
42	41' of 8 1/4" pipe
161	162 163 Little gas-water
170	packer set 169 1/2
171	gas
???	gas
183	water
201	[last entry, apparent TD]

---

4. DISCUSSION

Eight abandoned gas wells are reported to be located on KCP property. No abandonment records exist for the wells. The best case scenario assumes that the wells were plugged, and no hydraulic connection between water table and bedrock aquifers could exist. The worst case scenario assumes that the gas wells were not properly plugged or have not collapsed and act as conduits between the alluvial and the bedrock aquifers. Some conclusions that can be drawn from the available data are presented below.

4.1 HYDROLOGIC

If a downward, vertical hydraulic gradient is present between the alluvial and bedrock aquifers in the vicinity of the abandoned gas wells, groundwater from the alluvial aquifer would migrate down the abandoned gas wells and discharge to the bedrock. Conversely, if an upward vertical hydraulic gradient is present between the bedrock and alluvial aquifers in the vicinity of the abandoned gas wells, groundwater from the bedrock would discharge to the alluvial aquifer. Therefore, in the absence of any well abandonment information, the question of whether contaminated groundwater from the alluvial aquifer is discharging to the bedrock aquifer through the abandoned gas wells can be answered by determining the direction of the vertical hydraulic gradient between these aquifers in the vicinity of the abandoned gas wells.

No bedrock monitoring wells are located in the immediate vicinity of the abandoned gas wells from which water-level elevation data can be obtained and compared with existing alluvial water-level data to determine the direction of the vertical hydraulic gradient between the two aquifers. However, examination of bedrock stratigraphy and regional direction of dip provides some insight into the probable direction of the vertical hydraulic gradient in the vicinity of the abandoned gas wells.

Regional groundwater flow in the bedrock beneath KCP is controlled by bedrock dip direction and stratigraphic sequence. Bedrock beneath the KCP dips gently to the northwest (Fig. 5). Bedrock units below the Knobtown sandstone subcrop or outcrop east of KCP. Recharge occurs where bedrock units subcrop or outcrop. Groundwater in the more-permeable bedrock units flows down-dip from the recharge zones and becomes confined by the overlying less-permeable shale units. A short distance down-dip, along the flowpath, the groundwater potentiometric surface of the bedrock unit intersects the groundwater potentiometric surface of the alluvium, resulting in an upward vertical hydraulic gradient.

Water-level data is available for bedrock monitoring well KC84-023, screened in the Hepler sandstone. Alluvial monitoring wells KC84-015, KC84-016, KC84-017, and KC85-042 are located adjacent to KC84-023 (Fig. 3). Historical water-level data for these wells are presented in Appendix B. Comparison of average water-level elevations for the five wells demonstrates that the hydraulic gradient is upward between the alluvial and Hepler sandstone aquifers. The abandoned gas wells were completed in bedrock units located below the Hepler sandstone. Because the recharge areas for these units are located further east than the Hepler recharge area, the vertical hydraulic gradient between these lower bedrock units and the alluvium should also be upward. Consequently, because of the upward vertical hydraulic gradient, contaminants found in the alluvial aquifer could not migrate down the abandoned gas wells and contaminate the bedrock aquifer.

4.2 STRATIGRAPHIC

The Knobtown and Hepler sandstones are both low-permeable formations (Sect. 2.2.3). The Pleasanton shale has been shown to be nearly impermeable and unfractured. Horizontal migration of contaminants in any of these formations would be extremely slow; vertical migration would be even slower. If contaminants were intermixing with bedrock groundwater as a result of one of the gas wells, transport would be minimal.

The first 100 ft or more of the underlying formations are represented by the Pleasanton Group, which are relatively impermeable and would act as barriers to further transport. Below the Pleasanton Group lie 150 to 300 ft of the Marmaton Group, which consists of limestone and shale with the Lexington coal and one sand lens near the middle. The Lexington coal was not present in the well in Sect. 36, but the cap rock (Myrick limestone) was logged (Appendix A). [Note: Between 1943 and the early 1960s, formations in the Henrietta and Cherokee Groups were apparently regrouped and the former Henrietta Group was renamed the Marmaton Group. Modern designations are used in this report, but the well logs use the designations accepted at the time the well was drilled.] Below the Marmaton lie 300 to 400 ft of the Cherokee Group. In the well in Sect. 36, the Cherokee consisted of mostly shales with a few sand and limestone layers (Clair 1943). Therefore, most of the first several hundred feet of stratum underlying the plant are relatively impermeable, with scattered more-permeable zones. The shales and limestones of these groups are relatively unfractured.

4.3 HISTORICAL

The logs from the wells owned by Dr. H. H. Francis (Sect. 3.2.2) show that casing was set through the alluvium in most of the wells. Casing was probably set in all of the wells. However, this information was not recorded on the logs or the logs are unreadable. Thus, a physical barrier was installed that would slow the flow of contaminants from the alluvial groundwater. The quality of the barrier at the time of installation is unknown. Casing which remained in the ground would have deteriorated and may have collapsed. If casing through the alluvium has collapsed, the wells have undoubtedly sealed with the silty clays common in the alluvial system.

The wells were apparently producing natural gas from depths of approximately 200 ft. According to Clair (1943), they were not prolific and were abandoned only a few years after drilling. Since the wells produced only small quantities of gas for a few years, the gas was probably at low pressure. After a well was

abandoned, water would effectively seal off the low pressure gas from migrating to the surface. Collapse of a well would place a final seal on the gas-producing horizons.

4.4 RECOMMENDATIONS

No search for or further consideration of the old gas wells is recommended. The most likely scenario is that the wells were either sealed or have collapsed. Furthermore, the hydrology of the area probably creates an upward vertical flow. Even if the wells do remain open, the upward vertical gradient prevents contaminants from migrating down the well annulus.

Most of the possible locations of the old gas wells are presently covered with structures or parking lots. Locations not covered by structures have been heavily disturbed several times during activities at the KCP. These activities include rerouting of Indian Creek, burial of numerous utilities, construction and subsequent demolition of the lagoons, and modification of traffic patterns and parking lots.

Discussions with geophysicists indicate that geophysical techniques would probably not locate the wells (J. E. Nyquist, Oak Ridge National Laboratory, Oak Ridge, Tenn., personal communication to N. E. Korte, Oak Ridge National Laboratory, Grand Junction, Colo., 1992), especially without accurate information about the location of the old wells. Three sources of information (KCP map, Clair [1943], and MDNR) place the wells within several hundred feet of each other. Although this is valuable information indicating that the wells existed near the plant, it is insufficient when attempting to locate some remnant of a well using a remote sensing technique such as geophysics. The profusion of buried and aboveground utilities make geophysical techniques difficult at best, and without some knowledge of the target, the problem becomes insurmountable.

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ACRONYMS AND INITIALISMS

1,2-DCE	1,2-dichloroethene
DOE	Department of Energy
KCP	Kansas City Plant
MDNR	Missouri Department of Natural Resources
TCE	trichloroethene
VOC	volatile organic compound

APPENDIX A

Lithologic log of a well in Sect. 36,
T48N, R33W, Jackson County, Missouri

Log of Russell et al. No. 1, Bannister. Location: Southwest corner NW. 1/4 NE. 1/4 NE. 1/4 sec. 36, T. 48 N., R. 33 W. Jackson County, Missouri. Elevation: 1,028.5 feet. Completed: Dec. 4, 1934.

Stratum	Thickness, ft	Depth, ft
Quaternary system:		
Soil, yellow	16	16
Gravel and water	2	18
Pennsylvanian system:		
Kansas City Group:		
Lime	4	22
Shale, blue	4	26
Lime, light	7	33
Shale, blue	12	45
Lime, light	10	55
Shale, dark	12	67
Shale, red	8	75
Lime, light	6	81
Shale, dark	4	85
Lime, light	16	101
Shale, blue	25	126
Lime, light (Winterset)	44	170
Shale, dark	4	174
Lime, light (Bethany Falls)	16	190
Shale, black	4	194
Lime, light (Hertha)	14	208
Pheasanton Formation:		
Shale, black	3	211
Lime, light	11	222

Log of Russell et al. No. 1, Bannister. Location: Southwest corner NW. 1/4 NE. 1/4 NE. 1/4 sec. 36, T. 48 N., R. 33 W. Jackson County, Missouri. Elevation: 1,028.5 feet. Completed: Dec. 4, 1934.

Stratum	Thickness, ft	Depth, ft
Shale, light	89	311
Lime, light	4	315
Sand (Wayside), show of oil	14	329
Shale, blue	56	385
Henrietta Group:		
Lime, light	10	395
Shale, dark	10	405
Lime, light	5	410
Shale, light	5	415
Shale, dark	11	426
Lime, light (Lexington cap rock)	4	430
Shale, sandy	5	435
Sand, 80,000 ft^3 gas	10	445
Shale, light	15	460
Shale, pink	4	464
Shale, dark	8	472
Shale, black, 100,000 ft^3 gas	2	474
Shale, light	16	490
Cherokee Group: **Henrietta-Cherokee contact (approx.):**		
Shale, black	10	500
Shale, light	13	513
Sand (Squirrel, show of gas and oil)	33	546
Shale, dark	104	650
Shale, white, soft	15	665

Log of Russell et al. No. 1, Bannister. Location: Southwest corner NW. 1/4 NE. 1/4 NE. 1/4 sec. 36, T. 48 N., R. 33 W. Jackson County, Missouri. Elevation: 1,028.5 feet. Completed: Dec. 4, 1934.

Stratum	Thickness, ft	Depth, ft
Shale, blue	5	670
Shale, white	4	674
Lime	4	678
Sand and water, stands 500 ft from top	8	686
Shale, dark	22	708
Shale, light	17	725
Sand (black slate one ft)	7	732
Shale, gray	13	745
Shale, dark sandy	49	794
Lime, dark, hard	3	797
Shale, dark, sandy, hard	18	815
Mississippian system: **Meramec Group:** **Warsaw Formation:**		
Limestone, gray, white, dense to crystalline, shaly and glauconitic in lower part	98	913
Osage Group: **Keokuk and Burlington Formations:**		
Limestone, gray, white, cherty, crystalline, thin dolomite limestone beds in upper part	173	1,086
Sedalia-Reeds Spring Formation:		
Limestone, dolomite, tan white to gray, cherty	166	1,252
Fern Glen Formation:		
Limestone, gray, dense	20	1,272
Kinderhook Group: **Northview Formation:**		
Shale, green, calcareous	10	1,282

Log of Russell et al. No. 1, Bannister. Location: Southwest corner NW. 1/4 NE. 1/4 NE. 1/4 sec. 36, T. 48 N., R. 33 W. Jackson County, Missouri. Elevation: 1,028.5 feet. Completed: Dec. 4, 1934.

Stratum	Thickness, ft	Depth, ft
Chouteau Formation:		
Limestone, dolomite, gray, dense	12	1,294
Devonian system:		
Limestone, gray white to brown, dense to lithographic, sandy at base	80	1,374
Ordovician system: **Black River (Decorah Formation?):**		
Limestone, gray-white, densely crystalline, argillaceous	29	1,403
St. Peter Formation:		
Sandstone, white	73	1,476
Shale, green	13	1,489
Canadian (of E. O. Ulrich) system: **Jefferson City Formation:**		
Dolomite, gray-white to buff, cherty, argillaceous	174	1,663
Roubidoux Formation:		
Dolomite, gray-white, cherty, sandy, distinct sandstone at base	147	1,810
Ozarkian (of E. O. Ulrich) system: **Gasconade Formation:**		
Dolomite, gray-white, cherty; base not reached	10	1,820

APPENDIX B

Well Water-Level Elevations

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KCB4-009-L

COORDINATES

North: 310051.30
East : 843734.06

MEASUREMENT PERIOD

From : 12/10/84
To : 07/14/92

WATER LEVEL ELEVATION STATISTICS

Mean : 792.95
Std : 0.28
Var : 0.08
High : 793.36
Low : 792.23
Range: 1.13
Size : 40

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	793.36	1	85
2	793.36	1	85
3	793.30	2	85
4	793.30	2	85
5	793.30	2	85
6	793.30	2	85
7	793.30	3	85
8	793.30	3	85
9	793.30	3	85
10	793.13	4	86
11	793.09	4	86
12	793.09	1	87
13	793.09	2	87
14	793.07	2	86
15	793.03	4	86
16	793.03	3	90
17	793.01	4	85
18	793.00	4	85
19	793.00	3	87
20	792.99	1	91
21	792.94	3	91
22	792.92	3	85
23	792.91	2	86
24	792.88	2	86
25	792.88	3	87
26	792.86	4	85
27	792.86	3	86
28	792.82	1	86
29	792.82	3	86
30	792.80	4	85
31	792.80	1	86
32	792.75	1	85
33	792.73	3	92
34	792.64	1	91
35	792.59	1	86
36	792.59	1	85
37	792.55	1	85
38	792.55	2	87
39	792.40	4	84
40	792.23	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-009-M

COORDINATES

North: 310051.30
East : 843734.06

MEASUREMENT PERIOD

From : 12/10/84
To : 07/11/91

WATER LEVEL ELEVATION STATISTICS

Mean : 792.88
Std : 0.18
Var : 0.03
High : 793.14
Low : 792.31
Range: 0.83
Size : 41

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	793.14	1	85
2	793.14	1	85
3	793.12	4	86
4	793.10	2	86
5	793.06	4	85
6	793.06	1	87
7	793.06	2	87
8	793.06	4	85
9	793.04	4	86
10	793.04	4	86
11	792.97	3	85
12	792.97	2	85
13	792.97	2	85
14	792.97	2	85
15	792.97	3	87
16	792.92	2	86
17	792.92	3	90
18	792.89	3	86
19	792.89	3	87
20	792.87	3	86
21	792.87	1	85
22	792.87	3	85
23	792.87	2	86
24	792.86	1	91
25	792.85	2	85
26	792.85	3	85
27	792.85	3	85
28	792.85	4	85
29	792.85	4	85
30	792.85	1	86
31	792.85	3	86
32	792.80	3	91
33	792.76	1	85
34	792.76	1	86
35	792.75	1	88
36	792.74	1	86
37	792.68	1	85
38	792.66	4	84
39	792.62	1	91
40	792.39	2	87
41	792.31	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-009-U

COORDINATES

North: 310051.30
East : 843734.06

MEASUREMENT PERIOD

From : 12/10/84
To : 07/13/92

WATER LEVEL ELEVATION STATISTICS

Mean : 792.87
Std : 0.18
Var : 0.03
High : 793.13
Low : 792.31
Range: 0.82
Size : 42

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	793.13	1	85
2	793.13	1	85
3	793.09	4	85
4	793.09	2	86
5	793.09	4	86
6	793.09	4	85
7	793.07	4	86
8	793.04	4	86
9	793.00	2	87
10	793.00	3	85
11	792.98	1	87
12	792.96	2	85
13	792.96	2	85
14	792.96	2	85
15	792.96	3	85
16	792.96	3	86
17	792.96	3	87
18	792.93	3	90
19	792.92	3	85
20	792.92	3	86
21	792.90	1	85
22	792.90	3	85
23	792.90	2	86
24	792.87	1	91
25	792.86	2	86
26	792.86	3	87
27	792.84	2	85
28	792.82	4	85
29	792.82	3	91
30	792.79	1	85
31	792.79	1	86
32	792.77	3	86
33	792.76	1	88
34	792.75	4	85
35	792.75	1	86
36	792.73	1	86
37	792.72	3	92
38	792.71	4	84
39	792.67	1	85
40	792.58	1	91
41	792.32	2	87
42	792.31	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-015

COORDINATES

North: 309563.74
East : 844588.69

MEASUREMENT PERIOD

From : 12/10/84
To : 03/26/91

WATER LEVEL ELEVATION STATISTICS

Mean : 765.23
Std : 1.31
Var : 1.72
High : 768.14
Low : 762.84
Range: 5.30
Size : 34

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	768.14	1	87
2	767.83	1	85
3	767.83	1	85
4	767.22	4	86
5	766.83	2	87
6	766.70	1	87
7	766.14	4	86
8	766.03	1	85
9	765.68	2	85
10	765.58	2	86
11	765.53	2	85
12	765.51	4	85
13	765.43	3	87
14	765.41	2	85
15	765.29	3	85
16	765.24	1	85
17	765.20	4	85
18	765.10	1	86
19	765.03	2	87
20	764.89	2	85
21	764.83	3	85
22	764.79	4	84
23	764.78	1	86
24	764.53	3	85
25	764.51	3	86
26	764.39	3	86
27	764.35	3	87
28	764.33	2	86
29	764.12	1	85
30	763.91	1	88
31	763.53	4	87
32	763.27	1	91
33	763.05	4	88
34	762.84	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-016

COORDINATES

North: 309584.99
East : 844667.94

MEASUREMENT PERIOD

From : 12/10/84
To : 03/26/91

WATER LEVEL ELEVATION STATISTICS

Mean : 763.75
Std : 1.88
Var : 3.55
High : 772.75
Low : 761.64
Range: 11.11
Size : 41

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	772.75	2	86
2	766.74	1	85
3	766.74	1	85
4	765.89	4	86
5	765.41	4	86
6	765.34	2	87
7	765.22	1	87
8	764.55	4	86
9	764.43	1	85
10	764.05	2	85
11	763.95	2	86
12	763.93	4	85
13	763.80	4	85
14	763.78	2	85
15	763.74	2	85
16	763.68	1	85
17	763.57	3	87
18	763.47	3	85
19	763.41	4	85
20	763.34	1	86
21	763.30	2	85
22	763.28	2	87
23	763.05	3	85
24	763.01	1	86
25	762.99	1	86
26	762.89	3	85
27	762.84	2	86
28	762.84	3	86
29	762.84	1	87
30	762.82	4	84
31	762.80	1	85
32	762.78	3	85
33	762.74	3	86
34	762.72	3	87
35	762.72	3	86
36	762.48	2	88
37	762.43	1	88
38	762.01	4	87
39	761.92	1	91
40	761.70	4	88
41	761.64	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-017

COORDINATES

North: 309672.79
East : 844696.00

MEASUREMENT PERIOD

From : 12/10/84
To : 03/26/91

WATER LEVEL ELEVATION STATISTICS

Mean : 775.42
Std : 1.01
Var : 1.01
High : 776.99
Low : 773.23
Range: 3.76
Size : 42

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	776.99	4	85
2	776.99	4	85
3	776.94	4	86
4	776.94	2	87
5	776.82	4	86
6	776.76	1	85
7	776.76	1	85
8	776.40	4	85
9	776.32	3	87
10	776.24	4	85
11	776.15	1	87
12	776.13	2	87
13	776.11	1	85
14	776.07	2	85
15	775.88	1	85
16	775.88	4	86
17	775.69	1	86
18	775.63	4	84
19	775.59	2	85
20	775.47	2	85
21	775.46	1	87
22	775.34	2	85
23	775.32	3	87
24	775.17	1	85
25	775.13	3	85
26	775.05	3	85
27	775.05	1	86
28	775.01	2	88
29	774.90	1	88
30	774.80	3	85
31	774.76	3	85
32	774.65	1	86
33	774.63	2	86
34	774.56	2	86
35	774.49	2	86
36	774.34	3	86
37	774.28	3	86
38	774.24	3	86
39	774.08	4	87
40	773.85	4	89
41	773.42	1	91
42	773.23	4	88

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC84-023

COORDINATES

North: 309694.49
East : 844609.48

MEASUREMENT PERIOD

From : 12/10/84
To : 08/04/87

WATER LEVEL ELEVATION STATISTICS

Mean : 777.79
Std : 1.25
Var : 1.56
High : 778.28
Low : 771.41
Range: 6.87
Size : 29

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	778.28	2	87
2	778.27	1	87
3	778.20	1	85
4	778.20	3	87
5	778.20	3	87
6	778.18	2	85
7	778.16	2	85
8	778.16	1	86
9	778.16	2	86
10	778.12	1	85
11	778.12	2	85
12	778.12	2	86
13	778.12	3	86
14	778.12	4	86
15	778.10	4	85
16	778.05	1	85
17	778.05	3	85
18	778.05	1	85
19	778.01	1	85
20	778.01	3	86
21	778.01	4	86
22	777.99	2	87
23	777.85	4	85
24	777.78	3	85
25	777.74	1	87
26	777.49	4	84
27	777.45	3	85
28	777.41	1	86
29	771.41	2	85

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC85-042

COORDINATES

North: 309556.07
East : 844708.91

MEASUREMENT PERIOD

From : 06/25/85
To : 07/24/92

WATER LEVEL ELEVATION STATISTICS

Mean : 759.76
Std : 0.91
Var : 0.83
High : 763.11
Low : 758.49
Range: 4.62
Size : 35

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	763.11	2	87
2	760.95	4	86
3	760.78	4	85
4	760.78	4	85
5	760.70	1	87
6	760.65	2	86
7	760.63	4	86
8	760.61	4	86
9	760.28	2	85
10	760.28	3	85
11	760.11	3	85
12	760.11	4	85
13	759.95	4	85
14	759.74	3	86
15	759.65	3	86
16	759.61	3	87
17	759.53	1	86
18	759.51	3	85
19	759.50	2	86
20	759.49	3	85
21	759.49	1	86
22	759.43	2	86
23	759.43	2	87
24	759.41	3	86
25	759.30	1	86
26	759.28	3	87
27	759.28	1	87
28	758.97	2	88
29	758.95	1	88
30	758.88	3	88
31	758.85	4	87
32	758.78	4	88
33	758.72	3	92
34	758.54	1	91
35	758.49	4	89

02/05/93

KANSAS CITY DOE PLANT
WELL WATER LEVEL ELEVATIONS

WELL KC89-123

COORDINATES

North: 310066.02
East : 843716.17

MEASUREMENT PERIOD

From : 12/16/89
To : 10/09/92

WATER LEVEL ELEVATION STATISTICS

Mean : 789.17
Std : 3.41
Var : 11.61
High : 792.32
Low : 780.42
Range: 11.90
Size : 13

SORTED WATER LEVEL ELEVATIONS

RANK	ELEV	QTR	YEAR
1	792.32	2	92
2	792.24	1	92
3	792.02	4	92
4	790.82	2	91
5	790.76	1	91
6	790.53	4	91
7	790.24	1	90
8	789.95	4	89
9	789.36	3	91
10	789.06	3	90
11	786.95	1	91
12	784.54	4	90
13	780.42	2	90

APPENDIX C

Analytical Data from Selected Wells

APPENDIX C

Analytical Data from Selected Wells

Explanations:

- All concentrations are micrograms per liter (μg/L).
- NA = not analyzed
- U = compound was analyzed for but not dectected.
  The number is the dection limit for the sample.

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	4.8	37.0	11.6	8.4	U	U	U	U
1,1-DICHLOROETHENE	2.8U	31.4	U	6.5	U	U	920.0	U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	U	U	U	U	U	U	U	U
1,2-DICHLOROETHENE (total)	9.2	73.7	23.4	21.0	30.0	32.1	U	39.0
1,2-DICHLOROPROPANE	U	U	U	U	U	U	U	U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA	U	U
2-CHLOROETHYLVINYL ETHER	U	U	U	U	U	U	U	U
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	U	U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	U	U
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA
ACROLEIN	U	U	U	U	U	U	NA	NA
ACRYLONITRILE	U	U	U	U	U	U	NA	NA
BENZENE	U	U	U	U	U	U	U	U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	U	U	U	U	U	U	U	U
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	U	U
CARBON TETRACHLORIDE	U	U	U	U	U	U	U	U
CHLOROBENZENE	U	U	U	U	U	U	U	U
CHLORODIBROMOMETHANE	U	U	U	U	U	U	U	U
CHLOROETHANE	U	U	U	U	U	U	U	U
CHLOROETHENE	U	60.3	42.5	83.7	91.2	75.3	50.0	55.0
CHLOROFORM	U	U	U	U	U	U	U	U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROBROMOMETHANE	U	U	U	U	U	U	U	U
DICHLORODIFLUOROMETHANE	U	U	U	U	U	U	NA	NA
ETHYLBENZENE	U	U	U	U	U	U	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
FLUOROTRICHLOROMETHANE	U	U	U	U	U	U	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
METHYL BROMIDE	U	U	U	U	U	U	U	U
METHYL CHLORIDE	U	10.0U	U	U	U	U	U	U
METHYLENE CHLORIDE	U	2.8U	2.8U	20.8	6.5	U	U	U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	U	U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	U	4.1U	U	U	U	U	U	U
TOLUENE	U	U	U	U	U	U	U	U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	N
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
TRICHLOROETHENE	1186.0	2680.0	655.0	343.0	420.0	291.0	260.0	180.0
VINYL ACETATE	NA	NA	NA	NA	NA	NA	U	U
XYLENES (total)	NA	NA	NA	NA	NA	NA	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KCES-033-L

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	04/28/88	08/01/88	10/31/88	02/15/89
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
1,1,2-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
1,1,2-TRICHLORCTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	3.0	1.0U	3.0	1.0	2.0U	1.0	1.0U	5.0U
1,1-DICHLOROETHENE	1.0	2.0	1.0	1.0U	2.0U	1.0U	1.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
1,2-DICHLOROETHENE (total)	37.0	56.0	57.0	44.0	34.0	21.0	18.0	15.0
1,2-DICHLOROPROPANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
2-CHLOROETHYLVINYL ETHER	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
ACETONE	NA	NA	NA	NA	NA	NA	NA	10.0U
ACROLEIN	NA	NA	NA	NA	NA	NA	NA	100.0U
ACRYLONITRILE	NA	NA	NA	NA	NA	NA	NA	100.0U
BENZENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CARBON DISULFIDE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CARBON TETRACHLORIDE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CHLOROBENZENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CHLORODIBROMOMETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CHLOROETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
CHLOROETHENE	36.0	58.0	36.0	60.0	34.0	39.0	36.0	22.0
CHLOROFORM	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROBROMOMETHANE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	04/28/88	08/01/88	10/31/88	02/15/89
FLUOROTRICHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
METNYL BROMIDE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
METHYL CHLORIDE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
METHYLENE CHLORIDE	U	1.0U	3.0	1.0U	2.0U	1.0U	1.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
TOLUENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	N
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U
TRICHLOROETHENE	160.0	71.0	3.0	250.0	260.0	120.0	100.0	79.0
VINYL ACETATE	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	10.0U
XYLENES (total)	U	1.0U	1.0U	1.0U	2.0U	1.0U	1.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KCES-033-L

Constituent ug/L	Sample Date 05/01/89	07/28/89	10/26/89	02/04/90	04/28/90	07/26/90	10/10/90	01/11/91
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,1,1-TRICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
1,1,2-TRICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	5.0U	5.0U
1,1-DICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	8.0
1,1-DICHLOROETHENE	5.0U *	5.0U	5.0U	7.0U	7.0U	7.0U	5.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	5.0U	5.0U	5.0U	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	5.0U	5.0U	5.0U	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	5.0U	5.0U	5.0U	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,2-DICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
1,2-DICHLOROETHENE (total)	10.0 *	8.0	8.0	NA	NA	NA	84.0	40.0
1,2-DICHLOROPROPANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	5.0U	5.0U	5.0U	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
2-BUTANONE	10.0U *	10.0U	10.0U	NA	NA	NA	10.0U	5.0U
2-CHLOROETHYLVINYL ETHER	10.0U *	10.0U	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
2-HEXANONE	10.0U *	10.0U	10.0U	NA	NA	NA	5.0U	5.0U
4-CHLOROTOLUENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
4-METHYL-2-PENTANONE	10.0U *	10.0U	10.0U	NA	NA	NA	5.0U	5.0U
ACETONE	10.0U *	10.0U	10.0U	NA	NA	NA	10.0U	10.0U
ACROLEIN	100.0U *	100.0U	NA	NA	NA	NA	NA	NA
ACRYLONITRILE	100.0U *	100.0U	NA	NA	NA	NA	NA	NA
BENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
BROMOBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
BROMOFORM	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
CARBON DISULFIDE	5.0U *	5.0U	5.0U	NA	NA	NA	NA	NA
CARBON TETRACHLORIDE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
CHLOROBENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
CHLORODIBROMOMETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
CHLOROETHANE	10.0U *	10.0U	10.0U	4.0U	4.0U	4.0U	10.0U	10.0U
CHLOROETHENE	11.0 *	10.0U	10.0	15.0	4.0U	10.0	35.0	10.0U
CHLOROFORM	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	9.0	10.0	7.0	NA	NA
CIS-1,3-DICHLOROPROPENE	5.0U *	5.0U	5.0U	NA	NA	NA	5.0U	5.0U
DIBROMOMETHANE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
DICHLOROBROMOMETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	8.0U	8.0U	8.0U	NA	NA
ETHYLBENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 05/01/89	07/28/89	10/26/89	02/04/90	04/28/90	07/26/90	10/10/90	01/11/91
FLUOROTRICHLOROMETHANE	10.0U *	10.0U	NA	4.0U	4.0U	4.0U	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	5.0U	5.0U	5.0U	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
M-XYLENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
METHYL BROMIDE	10.0U *	10.0U	10.0U	4.0U	4.0U	4.0U	5.0U	10.0U
METHYL CHLORIDE	10.0U *	10.0U	10.0U	4.0U	4.0U	4.0U	10.0U	10.0U
METHYLENE CHLORIDE	5.0U *	5.0U	5.0U	15.0U	15.0U	15.0U	5.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
N-PROPYLBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
NAPHTHALENE	NA	NA	NA	14.0U	14.0U	14.0U	NA	NA
O-XYLENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
P-XYLENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
STYRENE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	5.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
TETRACHLOROETHENE	5.0U *	5.0U	5.0U	4.0U	4.0U	4.0U	9.0	5.0U
TOLUENE	5.0U *	5.0U	0.4	4.0U	4.0U	4.0U	5.0U	5.0U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	NA
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	4.0U	4.0U	4.0U	NA	NA
TRANS-1,3-DICHLOROPROPENE	5.0U *	5.0U	5.0U	NA	NA	NA	5.0U	5.0U
TRICHLOROETHENE	40.0 *	35.0	34.0	33.0	22.0	31.0	470.0	54.0
VINYL ACETATE	10.0U *	10.0U	10.0U	NA	NA	NA	NA	NA
XYLENES (total)	5.0U *	5.0U	5.0U	NA	NA	NA	15.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 04/23/91	07/26/91	10/11/91
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA
1,1,1-TRICHLOROETHANE	5.0U	5.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U	9.0	5.0U
1,1,2-TRICHLOROETHANE	5.0U	5.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U	5.0U	5.0U
1,1-DICHLORDETHANE	5.0U	5.0U	5.0U
1,1-DICHLOROETHENE	13.0	31.0	10.0
1,1-DICHLOROPROPENE	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA
1,2-DICHLOROBENZENE	NA	5.0U	5.0U
1,2-DICHLOROETHANE	5.0U	5.0U	5.0U
1,2-DICHLOROETHENE (total)	3100.0	3300.0	2500.0
1,2-DICHLOROPROPANE	5.0U	5.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA
1,3-DICHLOROBENZENE	NA	5.0U	5.0U
1,3-DICHLOROPROPANE	NA	NA	NA
1,4-DICHLOROBENZENE	NA	5.0U	5.0U
2,2-DICHLOROPROPANE	NA	NA	NA
2-BUTANONE	5.0U	5.0U	5.0U
2-CHLOROETHYLVINYL ETHER	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA
2-HEXANONE	5.0U	5.0U	5.0U
4-CHLOROTOLUENE	NA	NA	NA
4-METHYL-2-PENTANONE	5.0U	5.0U	5.0U
ACETONE	10.0U	10.0U	10.0U
ACROLEIN	NA	NA	NA
ACRYLONITRILE	NA	NA	NA
BENZENE	5.0U	5.0U	5.0U
BROMOBENZENE	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA
BROMOFORM	5.0U	5.0U	5.0U
CARBON DISULFIDE	NA	5.0U	5.0U
CARBON TETRACHLORIDE	5.0U	5.0U	5.0U
CHLOROBENZENE	5.0U	5.0U	5.0U
CHLORODIBROMOMETHANE	5.0U	5.0U	5.0U
CHLOROETHANE	10.0U	10.0U	10.0U
CHLOROETHENE	76.0	91.0	290.0
CHLOROFORM	5.0U	5.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U
DIBROMOMETHANE	NA	NA	NA
DICHLOROBROMOMETHANE	5.0U	5.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA
ETHYLBENZENE	5.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-L

Constituent ug/L	Sample Date 04/23/91	07/26/91	10/11/91
FLUOROTRICHLOROMETHANE	NA	10.0U	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA
M-XYLENE	NA	NA	NA
METHYL BROMIDE	10.0U	10.0U	10.0U
METHYL CHLORIDE	10.0U	10.0U	10.0U
METHYLENE CHLORIDE	5.0U	5.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA
NAPHTHALENE	NA	NA	NA
O-XYLENE	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA
P-XYLENE	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA
STYRENE	5.0U	5.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA
TETRACHLOROETHENE	110.0	240.0	220.0
TOLUENE	5.0U	5.0U	5.0U
TPH	NA	NA	NA
TPHH	NA	NA	NA
TPHL	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U
TRICHLOROETHENE	95.0	24000.0	6900.0
VINYL ACETATE	NA	NA	NA
XYLENES (total)	5.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KCBS-033-M

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	8.2	14.5	4.7U	4.7U	U	U	U	U
1,1-DICHLOROETHENE	7.6	19.1	5.0	3.9	U	U	U	U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	U	U	U	U	U	U	U	U
1,2-DICHLOROETHENE (total)	11.3	22.8	11.9	13.9	32.2	26.7	57.0	74.0
1,2-DICHLOROPROPANE	U	U	U	U	U	U	U	U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA	U	U
2-CHLOROETHYLVINYL ETHER	U	U	U	U	U	U	U	U
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	U	U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	U	U
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA
ACROLEIN	U	U	U	U	U	U	NA	NA
ACRYLONITRILE	U	U	U	U	U	U	NA	NA
BENZENE	U	U	U	4.4U	U	U	U	U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	U	U	U	U	U	U	U	U
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	U	U
CARBON TETRACHLORIDE	U	U	U	U	U	U	U	U
CHLOROBENZENE	U	U	U	U	U	U	U	U
CHLORODIBROMOMETHANE	U	U	U	U	U	U	U	U
CHLOROETHANE	U	U	U	U	U	U	U	U
CHLOROETHENE	10.0U	32.6	10.5	24.0	34.1	29.8	7.0	16.0
CHLOROFORM	U	U	U	U	U	U	U	U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROBROMOMETHANE	U	U	U	U	U	U	U	U
DICHLORODIFLUOROMETHANE	U	U	U	U	U	U	NA	NA
ETHYLBENZENE	U	U	U	U	U	U	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-M

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
FLUOROTRICHLOROMETHANE	U	U	U	U	U	U	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
METHYL BROMIDE	U	U	U	U	U	U	U	U
METHYL CHLORIDE	U	U	U	U	U	U	U	U
METHYLENE CHLORIDE	U	2.8U	U	7.9	4.8	U	U	U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	U	U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	U	4.1U	U	U	U	U	U	U
TOLUENE	U	U	U	U	U	U	U	U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	N
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
TRICHLOROETHENE	81.5	24.4	11.7	9.6	9.2	8.4	U	37.0
VINYL ACETATE	NA	NA	NA	NA	NA	NA	U	U
XYLENES (total)	NA	NA	NA	NA	NA	NA	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-M

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	07/26/90	07/26/91
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	4.0U	NA
1,1,1-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
1,1,2-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	5.0U
1,1-DICHLOROETHANE	2.0	44.0	2.0	1.0U	4.0U	5.0U
1,1-DICHLOROETHENE	U	2.0	1.0U	6.0	7.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	4.0U	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	5.0U	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	4.0U	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	5.0U	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	5.0U	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	4.0U	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	4.0U	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	4.0U	5.0U
1,2-DICHLOROETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
1,2-DICHLOROETHENE (total)	50.0	1.0U	35.0	28.0	NA	370.0
1,2-DICHLOROPROPANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	5.0U	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	4.0U	5.0U
1,3-DICHLOROPROPANE	NA	NA	NA	NA	4.0U	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	4.0U	5.0U
2,2-DICHLOROPROPANE	NA	NA	NA	NA	4.0U	NA
2-BUTANONE	U	1.0U	1.0U	1.0U	NA	5.0U
2-CHLOROETHYLVINYL ETHER	U	1.0U	1.0U	1.0U	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	4.0U	NA
2-HEXANONE	U	1.0U	1.0U	1.0U	NA	5.0U
4-CHLOROTOLUENE	NA	NA	NA	NA	4.0U	NA
4-METHYL-2-PENTANONE	U	1.0U	1.0U	1.0U	NA	5.0U
ACETONE	NA	NA	NA	NA	NA	10.0U
ACROLEIN	NA	NA	NA	NA	NA	NA
ACRYLONITRILE	NA	NA	NA	NA	NA	NA
BENZENE	U	1.0U	1.0U	1.0U	4.0U	5.0U
BROMOBENZENE	NA	NA	NA	NA	4.0U	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	4.0U	NA
BROMOFORM	U	1.0U	1.0U	1.0U	4.0U	5.0U
CARBON DISULFIDE	U	1.0U	1.0U	1.0U	NA	5.0U
CARBON TETRACHLORIDE	U	1.0U	1.0U	1.0U	4.0U	5.0U
CHLOROBENZENE	U	1.0U	1.0U	1.0U	4.0U	5.0U
CHLORODIBROMOMETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
CHLOROETHANE	U	1.0U	1.0U	1.0U	4.0U	10.0U
CHLOROETHENE	18.0	18.0	9.0	15.0	11.0	10.0
CHLOROFORM	U	1.0U	1.0U	1.0U	4.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	30.0	NA
CIS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	NA	5.0U
DIBROMOMETHANE	NA	NA	NA	NA	4.0U	NA
DICHLOROBROMOMETHANE	U	1.0U	1.0U	1.0U	4.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	8.0U	NA
ETHYLBENZENE	U	1.0U	1.0U	1.0U	4.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-M

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	07/26/90	07/26/91
FLUOROTRICHLOROMETHANE	NA	NA	NA	NA	4.0U	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	5.0U	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	4.0U	NA
M-XYLENE	NA	NA	NA	NA	4.0U	NA
METHYL BROMIDE	U	1.0U	1.0U	1.0U	4.0U	10.0U
METHYL CHLORIDE	U	1.0U	1.0U	1.0U	4.0U	10.0U
METHYLENE CHLORIDE	U	1.0U	3.0	1.0U	15.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	NA	4.0U	NA
N-PROPYLBENZENE	NA	NA	NA	NA	4.0U	NA
NAPHTHALENE	NA	NA	NA	NA	14.0U	NA
O-XYLENE	NA	NA	NA	NA	4.0U	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	4.0U	NA
P-XYLENE	NA	NA	NA	NA	4.0U	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	4.0U	NA
STYRENE	U	1.0U	1.0U	1.0U	4.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA	4.0U	NA
TETRACHLOROETHENE	U	1.0U	1.0U	1.0U	4.0U	5.0U
TOLUENE	U	1.0U	1.0U	1.0U	4.0U	5.0U
TPH	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA
TPHL	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	4.0U	NA
TRANS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	NA	5.0U
TRICHLOROETHENE	U	1.0U	1.0	2.0	4.0U	870.0
VINYL ACETATE	U	1.0U	1.0U	1.0U	NA	NA
XYLENES (total)	U	1.0U	1.0U	1.0U	NA	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROETHANE	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	5.5	4.7U	U	U	U	U	U	U
1,1-DICHLOROETHENE	4.0	2.8U	U	U	U	U	U	U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	U	U	U	U	U	U	U	U
1,2-DICHLOROETHENE (total)	8.2	13.8	8.7	U	U	5.0	18.0	16.0
1,2-DICHLOROPROPANE	U	U	U	U	U	U	U	U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA	U	U
2-CHLOROETHYLVINYL ETHER	U	U	U	U	U	U	U	U
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	U	U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	U	U
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA
ACROLEIN	U	U	U	U	U	U	NA	NA
ACRYLONITRILE	U	U	U	U	U	U	NA	NA
BENZENE	U	U	U	4.4U	U	U	U	U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	U	U	U	U	U	U	U	U
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	U	U
CARBON TETRACHLORIDE	U	U	U	U	U	U	U	U
CHLOROBENZENE	U	U	U	U	U	U	U	U
CHLORODIBROMOMETHANE	U	U	U	U	U	U	U	U
CHLOROETHANE	U	U	U	U	U	U	U	U
CHLOROETHENE	10.0U	U	U	U	10.0U	U	U	U
CHLOROFORM	U	2.4	2.3	4.7	5.4	5.8	4.0	2.0
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROBROMOMETHANE	U	U	U	U	U	U	U	U
DICHLORODIFLUOROMETHANE	U	U	U	U	U	U	NA	NA
ETHYLBENZENE	U	U	U	U	U	U	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent ug/L	Sample Date 06/13/85	07/28/85	10/27/85	01/31/86	05/07/86	08/04/86	10/27/86	02/04/87
FLUOROTRICHLOROMETHANE	U	U	U	U	U	U	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
METHYL BROMIDE	U	U	U	U	U	U	U	U
METHYL CHLORIDE	U	U	U	U	U	U	U	U
METHYLENE CHLORIDE	U	5.1	13.6	8.0	U	U	U	U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	U	U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	U	5.1	4.1U	4.1U	U	U	U	U
TOLUENE	U	U	U	U	U	U	U	U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	N
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U
TRICHLOROETHENE	63.7	160.0	84.4	52.7	70.7	55.0	38.0	37.0
VINYL ACETATE	NA	NA	NA	NA	NA	NA	U	U
XYLENES (total)	NA	NA	NA	NA	NA	NA	U	U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	04/28/88	08/01/88	10/31/88	02/15/89
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,1,2-TRICHLOROETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	1.0	1.0U	2.0	12.0	1.0U	1.0U	1.0U	5.0U
1,1-DICHLOROETHENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,2-DICHLOROETHENE (total)	14.0	16.0	26.0	49.0	11.0	7.0	15.0	8.0
1,2-DICHLOROPROPANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
2-CHLOROETHYLVINYL ETHER	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
ACETONE	NA	NA	NA	NA	NA	NA	NA	10.0U
ACROLEIN	NA	NA	NA	NA	NA	NA	NA	100.0U
ACRYLONITRILE	NA	NA	NA	NA	NA	NA	NA	100.0U
BENZENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CARBON DISULFIDE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CARBON TETRACHLORIDE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CHLOROBENZENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CHLORODIBROMOMETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CHLOROETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
CHLOROETHENE	2.0	1.0U	18.0	3.0	2.0	3.0	7.0	10.0U
CHLOROFORM	2.0	1.0	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROBROMOMETHANE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent ug/L	Sample Date 05/01/87	08/01/87	10/29/87	01/31/88	04/28/88	08/01/88	10/31/88	02/15/89
FLUOROTRICHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
METHYL BROMIDE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
METHYL CHLORIDE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
METHYLENE CHLORIDE	U	1.0U	3.0	28.0	1.0U	1.0U	1.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	1.0	1.0U	1.0	1.0U	1.0U	1.0U	1.0U	5.0U
TOLUENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	NA
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U
TRICHLOROETHENE	33.0	23.0	23.0	32.0	12.0	4.0	11.0	6.0
VINYL ACETATE	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	10.0U
XYLENES (total)	U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent	Sample Date				
ug/L	05/01/89	07/28/89	10/26/89	02/04/90	07/26/90
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	4.0U	4.0U
1,1,1-TRICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
1,1,2,2-TETRACHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
1,1,2-TRICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	5.0U *	5.0U	7.0	18.0	21.0
1,1-DICHLOROETHENE	5.0U *	5.0U	5.0U	7.0U	7.0U
1,1-DICHLOROPROPENE	NA	NA	NA	4.0U	4.0U
1,2,3-TRICHLOROBENZENE	NA	NA	NA	5.0U	5.0U
1,2,3-TRICHLOROPROPANE	NA	NA	NA	4.0U	4.0U
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	5.0U	5.0U
1,2,4-TRICHLOROBENZENE	NA	NA	NA	5.0U	5.0U
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	4.0U	4.0U
1,2-DIBROMOETHANE	NA	NA	NA	4.0U	4.0U
1,2-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U
1,2-DICHLOROETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
1,2-DICHLOROETHENE (total)	12.0 *	5.0	6.0	NA	NA
1,2-DICHLOROPROPANE	5.0U *	5.0U	5.0U	4.0U	4.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	5.0U	5.0U
1,3-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U
1,3-DICHLOROPROPANE	NA	NA	NA	4.0U	4.0U
1,4-DICHLOROBENZENE	NA	NA	NA	4.0U	4.0U
2,2-DICHLOROPROPANE	NA	NA	NA	4.0U	4.0U
2-BUTANONE	10.0U *	10.0U	10.0U	NA	NA
2-CHLOROETHYLVINYL ETHER	10.0U *	10.0U	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	4.0U	4.0U
2-HEXANONE	10.0U *	10.0U	10.0U	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	4.0U	4.0U
4-METHYL-2-PENTANONE	10.0U *	10.0U	10.0U	NA	NA
ACETONE	10.0U *	10.0U	10.0U	NA	NA
ACROLEIN	100.0U *	100.0U	NA	NA	NA
ACRYLONITRILE	100.0U *	100.0U	NA	NA	NA
BENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U
BROMOBENZENE	NA	NA	NA	4.0U	4.0U
BROMOCHLOROMETHANE	NA	NA	NA	4.0U	4.0U
BROMOFORM	5.0U *	5.0U	5.0U	4.0U	4.0U
CARBON DISULFIDE	5.0U *	5.0U	1.0	NA	NA
CARBON TETRACHLORIDE	5.0U *	5.0U	5.0U	4.0U	4.0U
CHLOROBENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U
CHLORODIBROMOMETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
CHLOROETHANE	10.0U *	10.0U	10.0U	4.0U	4.0U
CHLOROETHENE	10.0U *	10.0U	10.0U	4.0U	4.0U
CHLOROFORM	5.0U *	5.0U	5.0U	4.0U	4.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	6.0	6.0
CIS-1,3-DICHLOROPROPENE	5.0U *	5.0U	5.0U	NA	NA
DIBROMOMETHANE	NA	NA	NA	4.0U	4.0U
DICHLOROBROMOMETHANE	5.0U *	5.0U	5.0U	4.0U	4.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	8.0U	8.0U
ETHYLBENZENE	5.0U *	5.0U	5.0U	4.0U	4.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-033-U

Constituent ug/L	Sample Date 05/01/89	07/28/89	10/26/89	02/04/90	07/26/90
FLUOROTRICHLOROMETHANE	10.0U *	10.0U	NA	4.0U	4.0U
HEXACHLOROBUTADIENE	NA	NA	NA	5.0U	5.0U
ISOPROPYLBENZENE	NA	NA	NA	4.0U	4.0U
M-XYLENE	NA	NA	NA	4.0U	4.0U
METHYL BROMIDE	10.0U *	10.0U	10.0U	4.0U	4.0U
METHYL CHLORIDE	10.0U *	10.0U	10.0U	4.0U	4.0U
METHYLENE CHLORIDE	5.0U *	5.0U	5.0U	15.0U	15.0U
N-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U
N-PROPYLBENZENE	NA	NA	NA	4.0U	4.0U
NAPHTHALENE	NA	NA	NA	14.0U	14.0U
O-XYLENE	NA	NA	NA	4.0U	4.0U
P-ISOPROPYLTOLUENE	NA	NA	NA	4.0U	4.0U
P-XYLENE	NA	NA	NA	4.0U	4.0U
SEC-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U
STYRENE	5.0U *	5.0U	5.0U	4.0U	4.0U
TERT-BUTYLBENZENE	NA	NA	NA	4.0U	4.0U
TETRACHLOROETHENE	5.0U *	5.0U	5.0U	4.0U	4.0U
TOLUENE	5.0U *	5.0U	5.0U	4.0U	4.0U
TPH	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA
TPHL	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	4.0U	4.0U
TRANS-1,3-DICHLOROPROPENE	5.0U *	5.0U	5.0U	NA	NA
TRICHLOROETHENE	15.0 *	5.0U	2.0	4.0U	4.0U
VINYL ACETATE	10.0U *	10.0U	10.0U	NA	NA
XYLENES (total)	5.0U *	5.0U	5.0U	NA	NA

KANSAS CITY : SELECTED ANALYSIS FROM KC85-044

Constituent ug/L	Sample Date 07/28/85	01/31/86	05/07/86	08/04/86	02/04/87	10/31/88	02/11/89	07/18/90
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,1,1-TRICHLOROETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,1,2-TRICHLOROETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,1-DICHLOROETHENE	U	U	U	U	U	1.0U	5.0U	7.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	5.0U
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	5.0U
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	5.0U
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,2-DICHLOROETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,2-DICHLOROETHENE (total)	U	U	U	U	1.0	1.0U	5.0U	NA
1,2-DICHLOROPROPANE	U	U	U	U	U	1.0U	5.0U	4.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	5.0U
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	4.0U
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	4.0U
2-BUTANONE	NA	NA	NA	NA	U	1.0U	10.0U	NA
2-CHLOROETHYLVINYL ETHER	U	U	U	U	U	1.0U	10.0U	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	4.0U
2-HEXANONE	NA	NA	NA	NA	U	1.0U	10.0U	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	4.0U
4-METHYL-2-PENTANONE	NA	NA	NA	NA	U	1.0U	10.0U	NA
ACETONE	NA	NA	NA	NA	NA	NA	10.0U	NA
ACROLEIN	U	U	U	U	NA	NA	100.0U	NA
ACRYLONITRILE	U	U	U	U	NA	NA	100.0U	NA
BENZENE	U	U	U	U	U	1.0U	5.0U	4.0U
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	NA	NA	4.0U
BROMOFORM	U	U	U	U	U	1.0U	5.0U	4.0U
CARBON DISULFIDE	NA	NA	NA	NA	U	1.0U	5.0U	NA
CARBON TETRACHLORIDE	U	U	U	U	U	1.0U	5.0U	4.0U
CHLOROBENZENE	U	U	U	U	U	1.0U	5.0U	4.0U
CHLORODIBROMOMETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
CHLOROETHANE	U	U	U	U	U	1.0U	10.0U	4.0U
CHLOROETHENE	U	U	U	U	U	1.0U	10.0U	4.0U
CHLOROFORM	U	U	6.7	U	U	1.0U	5.0U	4.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	4.0U
CIS-1,3-DICHLOROPROPENE	U	U	U	U	U	1.0U	5.0U	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	4.0U
DICHLOROBROMOMETHANE	U	U	U	U	U	1.0U	5.0U	4.0U
DICHLORODIFLUOROMETHANE	U	U	U	U	NA	NA	NA	8.0U
ETHYLBENZENE	U	U	U	U	U	1.0U	5.0U	4.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-044

Constituent ug/L	Sample Date 07/28/85	01/31/86	05/07/86	08/04/86	02/04/87	10/31/88	02/11/89	07/18/90
FLUOROTRICHLOROMETHANE	U	U	U	U	NA	NA	10.0U	4.0U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	5.0U
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	4.0U
METHYL BROMIDE	U	U	U	U	U	1.0U	10.0U	4.0U
METHYL CHLORIDE	U	U	U	U	U	1.0U	10.0U	4.0U
METHYLENE CHLORIDE	5.8	7.3	U	6.1	U	1.0U	5.0U	15.0U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	14.0U
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	4.0U
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	4.0U
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	4.0U
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
STYRENE	NA	NA	NA	NA	U	1.0U	5.0U	4.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	4.0U
TETRACHLOROETHENE	U	U	U	U	U	1.0U	5.0U	4.0U
TOLUENE	U	U	U	U	U	1.0U	5.0U	4.0U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	N
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	4.0U
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	1.0U	5.0U	NA
TRICHLOROETHENE	4.3	U	76.2	U	U	1.0U	5.0U	4.0U
VINYL ACETATE	NA	NA	NA	NA	U	1.0U	10.0U	NA
XYLENES (total)	NA	NA	NA	NA	U	1.0U	5.0U	NA

KANSAS CITY : SELECTED ANALYSIS FROM KC85-044

Constituent ug/L	Sample Date 10/06/90	07/25/91	10/10/91
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA
1,1,1-TRICHLOROETHANE	5.0U	5.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U	5.0U	5.0U
1,1,2-TRICHLOROETHANE	5.0U	5.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U	5.0U	5.0U
1,1-DICHLOROETHANE	5.0U	5.0U	5.0U
1,1-DICHLOROETHENE	5.0U	5.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA
1,2-DICHLOROBENZENE	NA	5.0U	5.0U
1,2-DICHLOROETHANE	5.0U	5.0U	5.0U
1,2-DICHLOROETHENE (total)	5.0U	5.0U	24.0
1,2-DICHLOROPROPANE	5.0U	5.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA
1,3-DICHLOROBENZENE	NA	5.0U	5.0U
1,3-DICHLOROPROPANE	NA	NA	NA
1,4-DICHLOROBENZENE	NA	5.0U	5.0U
2,2-DICHLOROPROPANE	NA	NA	NA
2-BUTANONE	10.0U	5.0U	5.0U
2-CHLOROETHYLVINYL ETHER	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA
2-HEXANONE	5.0U	5.0U	5.0U
4-CHLOROTOLUENE	NA	NA	NA
4-METHYL-2-PENTANONE	5.0U	5.0U	5.0U
ACETONE	10.0U	10.0U	10.0U
ACROLEIN	NA	NA	NA
ACRYLONITRILE	NA	NA	NA
BENZENE	5.0U	5.0U	5.0U
BROMOBENZENE	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA
BROMOFORM	5.0U	5.0U	5.0U
CARBON DISULFIDE	NA	5.0U	5.0U
CARBON TETRACHLORIDE	5.0U	5.0U	5.0U
CHLOROBENZENE	5.0U	5.0U	5.0U
CHLORODIBROMOMETHANE	5.0U	5.0U	5.0U
CHLOROETHANE	10.0U	10.0U	10.0U
CHLOROETHENE	10.0U	10.0U	10.0U
CHLOROFORM	5.0U	5.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U
DIBROMOMETHANE	NA	NA	NA
DICHLOROBROMOMETHANE	5.0U	5.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA
ETHYLBENZENE	5.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC85-044

Constituent ug/L	Sample Date 10/06/90	07/25/91	10/10/91
FLUOROTRICHLOROMETHANE	NA	10.0U	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA
M-XYLENE	NA	NA	NA
METHYL BROMIDE	5.0U	10.0U	10.0U
METHYL CHLORIDE	10.0U	10.0U	10.0U
METHYLENE CHLORIDE	5.0U	5.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA
NAPHTHALENE	NA	NA	NA
O-XYLENE	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA
P-XYLENE	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA
STYRENE	5.0U	5.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA
TETRACHLOROETHENE	5.0U	5.0U	5.0U
TOLUENE	5.0U	5.0U	5.0U
TPH	NA	NA	NA
TPHH	NA	NA	NA
TPHL	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U
TRICHLOROETHENE	5.0U	5.0U	5.0U
VINYL ACETATE	NA	NA	NA
XYLENES (total)	15.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC88-094-L

Constituent ug/L	Sample Date 10/31/88	02/11/89	04/26/89	07/26/89	10/24/89	01/30/90	04/24/90	10/06/90
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,1,1-TRICHLOROETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,1,2-TRICHLOROETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	NA	NA	NA	NA	NA	5.0U
1,1-DICHLOROETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,1-DICHLOROETHENE	1.0U	5.0U	5.0U *	5.0U	5.0U	7.0U	7.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	5.0U	5.0U	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	5.0U	5.0U	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	5.0U	5.0U	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,2-DICHLOROETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,2-DICHLOROETHENE (total)	1.0U	5.0U	5.0U *	5.0U	5.0U	NA	NA	5.0U
1,2-DICHLOROPROPANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	5.0U	5.0U	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
2-BUTANONE	1.0U	10.0U	10.0U *	10.0U	50.0	NA	NA	10.0U
2-CHLOROETHYLVINYL ETHER	1.0U	10.0U	10.0U *	10.0U	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
2-HEXANONE	1.0U	10.0U	10.0U *	10.0U	10.0U	NA	NA	5.0U
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
4-METHYL-2-PENTANONE	1.0U	10.0U	10.0U *	10.0U	20.0	NA	NA	5.0U
ACETONE	NA	10.0U	10.0U *	10.0U	10.0U	NA	NA	10.0U
ACROLEIN	NA	100.0U	100.0U *	100.0U	NA	NA	NA	NA
ACRYLONITRILE	NA	100.0U	100.0U *	100.0U	NA	NA	NA	NA
BENZENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
BROMOBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
BROMOFORM	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
CARBON DISULFIDE	1.0U	5.0U	5.0U *	5.0U	5.0U	NA	NA	NA
CARBON TETRACHLORIDE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
CHLOROBENZENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
CHLORODIBROMOMETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
CHLOROETHANE	1.0U	10.0U	10.0U *	10.0U	10.0U	4.0U	4.0U	10.0U
CHLOROETHENE	1.0U	10.0U	10.0U *	10.0U	10.0U	4.0U	4.0U	10.0U
CHLOROFORM	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
CIS-1,3-DICHLOROPROPENE	1.0U	5.0U	5.0U *	5.0U	5.0U	NA	NA	5.0U
DIBROMOMETHANE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
DICHLORODBROMOMETHANE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	8.0U	8.0U	NA
ETHYLBENZENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC88-094-L

Constituent ug/L	Sample Date 10/31/88	02/11/89	04/26/89	07/26/89	10/24/89	01/30/90	04/24/90	10/06/90
FLUOROTRICHLOROMETHANE	NA	10.0U	10.0U *	10.0U	NA	4.0U	4.0U	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	5.0U	5.0U	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
M-XYLENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
METHYL BROMIDE	1.0U	10.0U	10.0U *	10.0U	10.0U	4.0U	4.0U	5.0U
METHYL CHLORIDE	1.0U	10.0U	10.0U *	10.0U	10.0U	4.0U	4.0U	10.0U
METHYLENE CHLORIDE	1.0U	5.0U	5.0U *	5.0U	5.0U	15.0U	15.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
NAPHTHALENE	NA	NA	NA	NA	NA	14.0U	14.0U	NA
O-XYLENE	NA	NA	NA	NA	NA	4.0U	[illegible]	[illegible]
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	4.0U	[illegible]	[illegible]
P-XYLENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
STYRENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
TETRACHLOROETHENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
TOLUENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
TPH	NA	NA	NA	NA	NA	NA	NA	NA
TPHH	NA	NA	NA	NA	NA	NA	NA	NA
TPHL	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	4.0U	4.0U	NA
TRANS-1,3-DICHLOROPROPENE	1.0U	5.0U	5.0U *	5.0U	5.0U	NA	NA	5.0U
TRICHLOROETHENE	1.0U	5.0U	5.0U *	5.0U	5.0U	4.0U	4.0U	5.0U
VINYL ACETATE	1.0U	10.0U	10.0U *	10.0U	10.0U	NA	NA	NA
XYLENES (total)	1.0U	5.0U	5.0U *	5.0U	5.0U	NA	NA	15.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC88-094-L

Constituent ug/L	Sample Date 01/16/91	04/25/91	07/20/91	10/11/91
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	5.0U	5.0U	5.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U	5.0U	5.0U	5.0U
1,1,2-TRICHLOROETHANE	5.0U	5.0U	5.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U	5.0U	5.0U	5.0U
1,1-DICHLOROETHANE	5.0U	5.0U	5.0U	5.0U
1,1-DICHLOROETHENE	5.0U	5.0U	5.0U	5.0U
1,1-DICHLOROPROPENE	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	5.0U	5.0U
1,2-DICHLOROETHANE	5.0U	5.0U	5.0U	5.0U
1,2-DICHLOROETHENE (total)	5.0U	5.0U	5.0U	5.0U
1,2-DICHLOROPROPANE	5.0U	5.0U	5.0U	5.0U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	5.0U	5.0U
1,3-DICHLOROPROPANE	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	5.0U	5.0U
2,2-DICHLOROPROPANE	NA	NA	NA	NA
2-BUTANONE	5.0U	5.0U	5.0U	5.0U
2-CHLOROETHYLVINYL ETHER	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA
2-HEXANONE	5.0U	5.0U	5.0U	5.0U
4-CHLOROTOLUENE	NA	NA	NA	NA
4-METHYL-2-PENTANONE	5.0U	5.0U	5.0U	5.0U
ACETONE	10.0U	10.0U	10.0U	10.0U
ACROLEIN	NA	NA	NA	NA
ACRYLONITRILE	NA	NA	NA	NA
BENZENE	5.0U	5.0U	5.0U	5.0U
BROMOBENZENE	NA	NA	NA	NA
BROMOCHLOROMETHANE	NA	NA	NA	NA
BROMOFORM	5.0U	5.0U	5.0U	5.0U
CARBON DISULFIDE	NA	NA	5.0U	5.0U
CARBON TETRACHLORIDE	5.0U	5.0U	5.0U	5.0U
CHLOROBENZENE	5.0U	5.0U	5.0U	5.0U
CHLORODIBROMOMETHANE	5.0U	5.0U	5.0U	5.0U
CHLOROETHANE	10.0U	10.0U	10.0U	10.0U
CHLOROETHENE	10.0U	10.0U	10.0U	10.0U
CHLOROFORM	5.0U	5.0U	5.0U	5.0U
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U	5.0U
DIBROMOMETHANE	NA	NA	NA	NA
DICHLOROBROMOMETHANE	5.0U	5.0U	5.0U	5.0U
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA
ETHYLBENZENE	5.0U	5.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC88-094-L

Constituent ug/L	Sample Date 01/16/91	04/25/91	07/20/91	10/11/91
FLUOROTRICHLOROMETHANE	NA	NA	10.0U	10.0U
HEXACHLOROBUTADIENE	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA
M-XYLENE	NA	NA	NA	NA
METHYL BROMIDE	10.0U	10.0U	10.0U	10.0U
METHYL CHLORIDE	10.0U	10.0U	10.0U	10.0U
METHYLENE CHLORIDE	5.0U	5.0U	5.0U	5.0U
N-BUTYLBENZENE	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA
STYRENE	5.0U	5.0U	5.0U	5.0U
TERT-BUTYLBENZENE	NA	NA	NA	NA
TETRACHLOROETHENE	5.0U	5.0U	5.0U	5.0U
TOLUENE	5.0U	5.0U	5.0U	5.0U
TPH	NA	NA	NA	NA
TPHH	NA	NA	NA	NA
TPHL	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	5.0U	5.0U	5.0U	5.0U
TRICHLOROETHENE	5.0U	5.0U	5.0U	5.0U
VINYL ACETATE	NA	NA	NA	NA
XYLENES (total)	5.0U	5.0U	5.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KCBS-094-U

Constituent ug/L	Sample Date 04/25/90	07/19/90	10/06/90
1,1,1,2-TETRACHLOROETHANE	4.0U	4.0U	NA
1,1,1-TRICHLOROETHANE	4.0U	4.0U	5.0U
1,1,2,2-TETRACHLOROETHANE	4.0U	4.0U	5.0U
1,1,2-TRICHLOROETHANE	4.0U	4.0U	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	NA	NA	5.0U
1,1-DICHLOROETHANE	4.0U	4.0U	5.0U
1,1-DICHLOROETHENE	7.0U	7.0U	5.0U
1,1-DICHLOROPROPENE	4.0U	4.0U	NA
1,2,3-TRICHLOROBENZENE	5.0U	5.0U	NA
1,2,3-TRICHLOROPROPANE	4.0U	4.0U	NA
1,2,3-TRIMETHYLBENZENE	5.0U	5.0U	NA
1,2,4-TRICHLOROBENZENE	5.0U	5.0U	NA
1,2-DIBROMO-3-CHLOROPROPANE	4.0U	4.0U	NA
1,2-DIBROMOETHANE	4.0U	4.0U	NA
1,2-DICHLOROBENZENE	4.0U	4.0U	NA
1,2-DICHLOROETHANE	4.0U	4.0U	5.0U
1,2-DICHLOROETHENE (total)	NA	NA	5.0U
1,2-DICHLOROPROPANE	4.0U	4.0U	5.0U
1,3,5-TRIMETHYLBENZENE	5.0U	5.0U	NA
1,3-DICHLOROBENZENE	4.0U	4.0U	NA
1,3-DICHLOROPROPANE	4.0U	4.0U	NA
1,4-DICHLOROBENZENE	4.0U	4.0U	NA
2,2-DICHLOROPROPANE	4.0U	4.0U	NA
2-BUTANONE	NA	NA	10.0U
2-CHLOROETHYLVINYL ETHER	NA	NA	NA
2-CHLOROTOLUENE	4.0U	4.0U	NA
2-HEXANONE	NA	NA	5.0U
4-CHLOROTOLUENE	4.0U	4.0U	NA
4-METHYL-2-PENTANONE	NA	NA	5.0U
ACETONE	NA	NA	19.0
ACROLEIN	NA	NA	NA
ACRYLONITRILE	NA	NA	NA
BENZENE	4.0U	4.0U	5.0U
BROMOBENZENE	4.0U	4.0U	NA
BROMOCHLOROMETHANE	4.0U	4.0U	NA
BROMOFORM	4.0U	4.0U	5.0U
CARBON DISULFIDE	NA	NA	NA
CARBON TETRACHLORIDE	4.0U	4.0U	5.0U
CHLOROBENZENE	4.0U	4.0U	5.0U
CHLORODIBROMOMETHANE	4.0U	4.0U	5.0U
CHLOROETHANE	4.0U	4.0U	10.0U
CHLOROETHENE	4.0U	4.0U	10.0U
CHLOROFORM	4.0U	4.0U	5.0U
CIS-1,2-DICHLOROETHENE	4.0U	4.0U	NA
CIS-1,3-DICHLOROPROPENE	NA	NA	5.0U
DIBROMOMETHANE	4.0U	4.0U	NA
DICHLOROBROMOMETHANE	4.0U	4.0U	5.0U
DICHLORODIFLUOROMETHANE	8.0U	8.0U	NA
ETHYLBENZENE	4.0U	4.0U	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC88-094-U

Constituent ug/L	Sample Date 04/25/90	07/19/90	10/06/90
FLUOROTRICHLOROMETHANE	4.0U	4.0U	NA
HEXACHLOROBUTADIENE	5.0U	5.0U	NA
ISOPROPYLBENZENE	4.0U	4.0U	NA
M-XYLENE	4.0U	4.0U	NA
METHYL BROMIDE	4.0U	4.0U	5.0U
METHYL CHLORIDE	4.0U	4.0U	10.0U
METHYLENE CHLORIDE	15.0U	15.0U	5.0U
N-BUTYLBENZENE	4.0U	4.0U	NA
N-PROPYLBENZENE	4.0U	4.0U	NA
NAPHTHALENE	14.0U	14.0U	NA
O-XYLENE	[illegible]	[illegible]	[illegible]
P-ISOPROPYLTOLUENE	4.0U	4.0U	NA
P-XYLENE	4.0U	4.0U	NA
SEC-BUTYLBENZENE	4.0U	4.0U	NA
STYRENE	4.0U	4.0U	5.0U
TERT-BUTYLBENZENE	4.0U	4.0U	NA
TETRACHLOROETHENE	4.0U	4.0U	5.0U
TOLUENE	4.0U	4.0U	5.0U
TPH	NA	NA	NA
TPHH	NA	NA	NA
TPHL	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	4.0U	4.0U	NA
TRANS-1,3-DICHLOROPROPENE	NA	NA	5.0U
TRICHLOROETHENE	4.0U	4.0U	5.0U
VINYL ACETATE	NA	NA	NA
XYLENES (total)	NA	NA	15.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-158-L

Constituent	Sample Date
ug/L	10/07/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	6.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
',3-DICHLOROBENZENE	5.0U
.,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-158-L

Constituent	Sample Date
ug/L	10/07/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-158-U

Constituent	Sample Date
ug/L	10/07/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
IS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-158-U

Constituent	Sample Date
ug/L	10/07/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-L

Constituent	Sample Date
ug/L	10/07/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	8.0
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	22.0
1,1-DICHLOROETHENE	9.0
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	250.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
',3-DICHLOROBENZENE	5.0U
,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-L

Constituent	Sample Date
ug/L	10/07/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	21.0
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-U

Constituent	Sample Date
ug/L	10/07/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	21.0
1,1-DICHLOROETHENE	21.0
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	210.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
.,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-U

Constituent	Sample Date
ug/L	10/07/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	14.0
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-L

Constituent	Sample Date
ug/L	04/15/92
1,1,1-TRICHLORDETHANE	5.0
1,1,2,2-TETRACHLORDETHANE	5.0J
1,1,2-TRICHLORDETHANE	5.0J
1,1,2-TRICHLORDTRIFLUORDETH	5.0J
1,1-DICHLORDETHANE	9.0
1,1-DICHLORDETHENE	120.0
1,2-DICHLORDBENZENE	5.0J
1,2-DICHLORDETHANE	5.0J
1,2-DICHLORDETHENE (total)	150.0
1,2-DICHLORDPROPANE	5.0J
1,3-DICHLORDBENZENE	5.0J
1,4-DICHLORDBENZENE	5.0J
2-BUTANONE	5.0J
2-HEXANONE	5.0J
4-METHYL-2-PENTANONE	5.0J
ACETONE	10.0J
BENZENE	5.0J
BROMOFORM	5.0J
CARBON DISULFIDE	5.0J
CARBON TETRACHLORIDE	5.0J
CHLORDBENZENE	5.0J
CHLORDDIBROMOMETHANE	5.0J
CHLORDETHANE	10.0J
CHLORDETHENE	10.0J
CHLOROFORM	5.0J
CIS-1,3-DICHLOROPROPENE	5.0J
DICHLORDBROMOMETHANE	5.0J
ETHYLBENZENE	5.0J
FLUORDTRICHLOROMETHANE	10.0J
METHYL BROMIDE	10.0J
METHYL CHLORIDE	10.0J
METHYLENE CHLORIDE	5.0J
STYRENE	5.0J
TETRACHLORDETHENE	5.0J
TOLUENE	5.0J
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0J
TRICHLORDETHENE	15.0
XYLENES (total)	5.0J

KANSAS CITY : SELECTED ANALYSIS FROM KC91-159-U

Constituent	Sample Date
ug/L	04/15/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	19.0
1,1-DICHLOROETHENE	17.0
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	1800.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	30.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-161-L

Constituent	Sample Date
ug/L	04/14/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	10.0
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	200.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	6.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-161-U

Constituent	Sample Date
ug/L	04/14/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	210.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-L

Constituent	Sample Date
ug/L	10/08/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	32.0
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	190.0
1,1-DICHLOROETHENE	91.0
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	12.0
1,2-DICHLOROETHENE (total)	290.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
1,3-DICHLOROBENZENE	5.0U
1,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	48.0
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-L

Constituent	Sample Date
ug/L	10/08/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	37.0
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-U

Constituent	Sample Date
ug/L	10/08/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	8.0
1,2-DICHLOROETHENE (total)	290.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
',3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	90.0
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
"IS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-U

Constituent	Sample Date
ug/L	10/08/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	11.0
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-L

Constituent	Sample Date
ug/L	04/14/92
1,1,1-TRICHLOROETHANE	23.0
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUORDETH	5.0U
1,1-DICHLOROETHANE	120.0
1,1-DICHLOROETHENE	100.0
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	1400.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	36.0
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	26.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-163-U

Constituent	Sample Date
ug/L	04/14/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	220.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	110.0
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	12.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-L

Constituent	Sample Date
ug/L	10/11/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
1,3-DICHLOROBENZENE	5.0U
1,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-L

Constituent ug/L	Sample Date 10/11/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-U

Constituent	Sample Date
ug/L	10/11/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
,,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-U

Constituent	Sample Date
ug/L	10/11/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
[illegible]	
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-L

Constituent	Sample Date
ug/L	01/10/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2,4-TRICHLOROBENZENE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BENZIDINE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
NAPHTHALENE	NA
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-U

Constituent	Sample Date
ug/L	01/10/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2,4-TRICHLOROBENZENE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BENZIDINE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
NAPHTHALENE	NA
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-L

Constituent	Sample Date
ug/L	04/27/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	32.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-164-U

Constituent	Sample Date
ug/L	04/27/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	9.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-L

Constituent ug/L	Sample Date 10/11/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA
1,2-DIBROMOETHANE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	160.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
1,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0J
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	29.0
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
IS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-L

Constituent	Sample Date
ug/L	10/11/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	160.0
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-U

Constituent	Sample Date
ug/L	10/11/91
1,1,1,2-TETRACHLOROETHANE	NA
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,1-DICHLOROPROPENE	NA
1,2,3-TRICHLOROBENZENE	NA
1,2,3-TRICHLOROPROPANE	NA
1,2,3-TRIMETHYLBENZENE	NA
1,2,4-TRICHLOROBENZENE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	8.0
1,2-DICHLOROPROPANE	5.0U
1,3,5-TRIMETHYLBENZENE	NA
,3-DICHLOROBENZENE	5.0U
,3-DICHLOROPROPANE	NA
1,4-DICHLOROBENZENE	5.0U
2,2-DICHLOROPROPANE	NA
2-BUTANONE	5.0U
2-CHLOROETHYLVINYL ETHER	NA
2-CHLOROTOLUENE	NA
2-HEXANONE	5.0U
4-CHLOROTOLUENE	NA
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
ACROLEIN	NA
ACRYLONITRILE	NA
BENZENE	5.0U
BROMOBENZENE	NA
BROMOCHLOROMETHANE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,2-DICHLOROETHENE	NA
CIS-1,3-DICHLOROPROPENE	5.0U
IBROMOMETHANE	NA
DICHLOROBROMOMETHANE	5.0U
DICHLORODIFLUOROMETHANE	NA
ETHYLBENZENE	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-U

Constituent	Sample Date
ug/L	10/11/91
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
ISOPROPYLBENZENE	NA
M-XYLENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
N-BUTYLBENZENE	NA
N-PROPYLBENZENE	NA
NAPHTHALENE	NA
O-XYLENE	NA
P-ISOPROPYLTOLUENE	NA
P-XYLENE	NA
SEC-BUTYLBENZENE	NA
STYRENE	5.0U
TERT-BUTYLBENZENE	NA
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPH	NA
TPHH	NA
TPHL	NA
TRANS-1,2-DICHLOROETHENE	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
VINYL ACETATE	NA
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-L

Constituent ug/L	Sample Date 01/10/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	6.0
1,1-DICHLOROETHENE	5.0U
1,2,4-TRICHLOROBENZENE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	400.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BENZIDINE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	100.0
METHYLENE CHLORIDE	5.0U
NAPHTHALENE	NA
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	260.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-U

Constituent	Sample Date
ug/L	01/10/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2,4-TRICHLOROBENZENE	NA
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	7.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BENZIDINE	NA
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
HEXACHLOROBUTADIENE	NA
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
NAPHTHALENE	NA
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-L

Constituent	Sample Date
ug/L	04/27/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	8.0
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	890.0
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	180.0
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	1300.0
XYLENES (total)	5.0U

KANSAS CITY : SELECTED ANALYSIS FROM KC91-165-U

Constituent	Sample Date
ug/L	04/27/92
1,1,1-TRICHLOROETHANE	5.0U
1,1,2,2-TETRACHLOROETHANE	5.0U
1,1,2-TRICHLOROETHANE	5.0U
1,1,2-TRICHLOROTRIFLUOROETH	5.0U
1,1-DICHLOROETHANE	5.0U
1,1-DICHLOROETHENE	5.0U
1,2-DICHLOROBENZENE	5.0U
1,2-DICHLOROETHANE	5.0U
1,2-DICHLOROETHENE (total)	5.0U
1,2-DICHLOROPROPANE	5.0U
1,3-DICHLOROBENZENE	5.0U
1,4-DICHLOROBENZENE	5.0U
2-BUTANONE	5.0U
2-HEXANONE	5.0U
4-METHYL-2-PENTANONE	5.0U
ACETONE	10.0U
BENZENE	5.0U
BROMOFORM	5.0U
CARBON DISULFIDE	5.0U
CARBON TETRACHLORIDE	5.0U
CHLOROBENZENE	5.0U
CHLORODIBROMOMETHANE	5.0U
CHLOROETHANE	10.0U
CHLOROETHENE	10.0U
CHLOROFORM	5.0U
CIS-1,3-DICHLOROPROPENE	5.0U
DICHLOROBROMOMETHANE	5.0U
ETHYLBENZENE	5.0U
FLUOROTRICHLOROMETHANE	10.0U
METHYL BROMIDE	10.0U
METHYL CHLORIDE	10.0U
METHYLENE CHLORIDE	5.0U
STYRENE	5.0U
TETRACHLOROETHENE	5.0U
TOLUENE	5.0U
TPHH	NA
TPHL	NA
TRANS-1,3-DICHLOROPROPENE	5.0U
TRICHLOROETHENE	5.0U
XYLENES (total)	5.0U

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