A PRELIMINARY HYDROGEOLOGIC INVESTIGATION OF PEOPLES AVENUE LANDFILL AND INTERSTATE POLLUTION CONTROL (IPC) ROCKFORD, ILLINOIS

US EPA RECORDS CENTER REGION 5
531218

II-T1800 11975

TDD R05-8303-1G

APRIL 30, 1986

PREPARED BY: KEVIN PHILLIPS

VOLUME 1 OF 3

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1.0 INTRODUCTION

This report details a groundwater investigation at two sites in Northern Illinois.

1.1 Purpose

Pursuant to Technical Direction Document (TDD) R5-8303-1G, a preliminary hydrogeologic field investigation of the contaminated groundwater problem at Peoples Avenue and IPC has been completed. The objectives of this study were to identify contaminants present in the groundwater, determine the lateral and vertical extent of contamination, identify and delineate potential source(s), observe groundwater flow characteristics, and collect data to evaluate these sites using the Hazard Ranking System (HRS) model for possible inclusion in the National Priorities List (NPL).

1.2 Problem

Peoples Avenue Landfill (Peoples Avenue) and Interstate Pollution Control (IPC) AKA Roto-Rooter are two sites located next to each other in a heavily industrialized section of Rockford Illinois.

IPC operated as a hazardous waste storage facility from 1974-1982. Wastes stored here consisted primarily of waste oils, solvents and plating wastes containing cyanide. IEPA and National Enforcement Investigations Center (NEIC) documents indicated a history of poor hazardous waste management practices which included operating an unlined impoundment, leaking storage tanks, and leaking drums. Samples taken from monitoring wells in and around IPC indicated that groundwater contamination had also occured here. At the time it was unknown whether this was due to events at IPC or prior landfilling operations at Peoples Avenue across the street. In addition to finding the source of contamination, the hydrologic effects of a large pond (just north of IPC) and the lack of an adequate upgradient well needed to be addressed.

Peoples Avenue was a sanitary landfill which operated from 1947 to 1972. During this time, Peoples Avenue accepted all types of

municipal solid waste and hazardous wastes generated by the machine tool and fastener industries in Rockford. These wastes were thought to include cyanide bearing plating waste, heavy metals, and toxic and ignitable solvents. Inspections by the Illinois Department of Public Health (IDPH) and later the Illinois E.P.A. (IEPA) found that deterioration of nearby groundwater had occurred, but the extent and source of contamination could not be determined.

2.0 SITE DESCRIPTION

2.1 Location and Physiography

Peoples Avenue Landfill and Interstate Pollution Control (IPC) are located in the City of Rockford, Winnebago County, Illinois. Specifically, the study area for these two sites comprises the Southeast quarter of Section 34 and the Southwest quarter of the Southwest quarter of Section 35, Township 44 North, Range 1 East (Figure 1). The study area is bordered on the west by the Rock River; on the north by Blackhawk Park Avenue; on the east by the Burlington-Northern Railroad; and on the south by Harrison Road. Quaker Avenue runs east-west through the center of the study area. IPC is on the north side of that street and Peoples Avenue Landfill is on the south side.

In general, Winnebago County is characterized by broad, rolling uplands, rising 100 to 200 feet above numerous alluviated valleys. The study area is located in one of these valleys containing 300-400 feet of glacial outwash, sand and gravel deposits. The Rock River forms the major drainage way for the area and is the focal point for a well integrated regional drainage system.

2.2 Climate

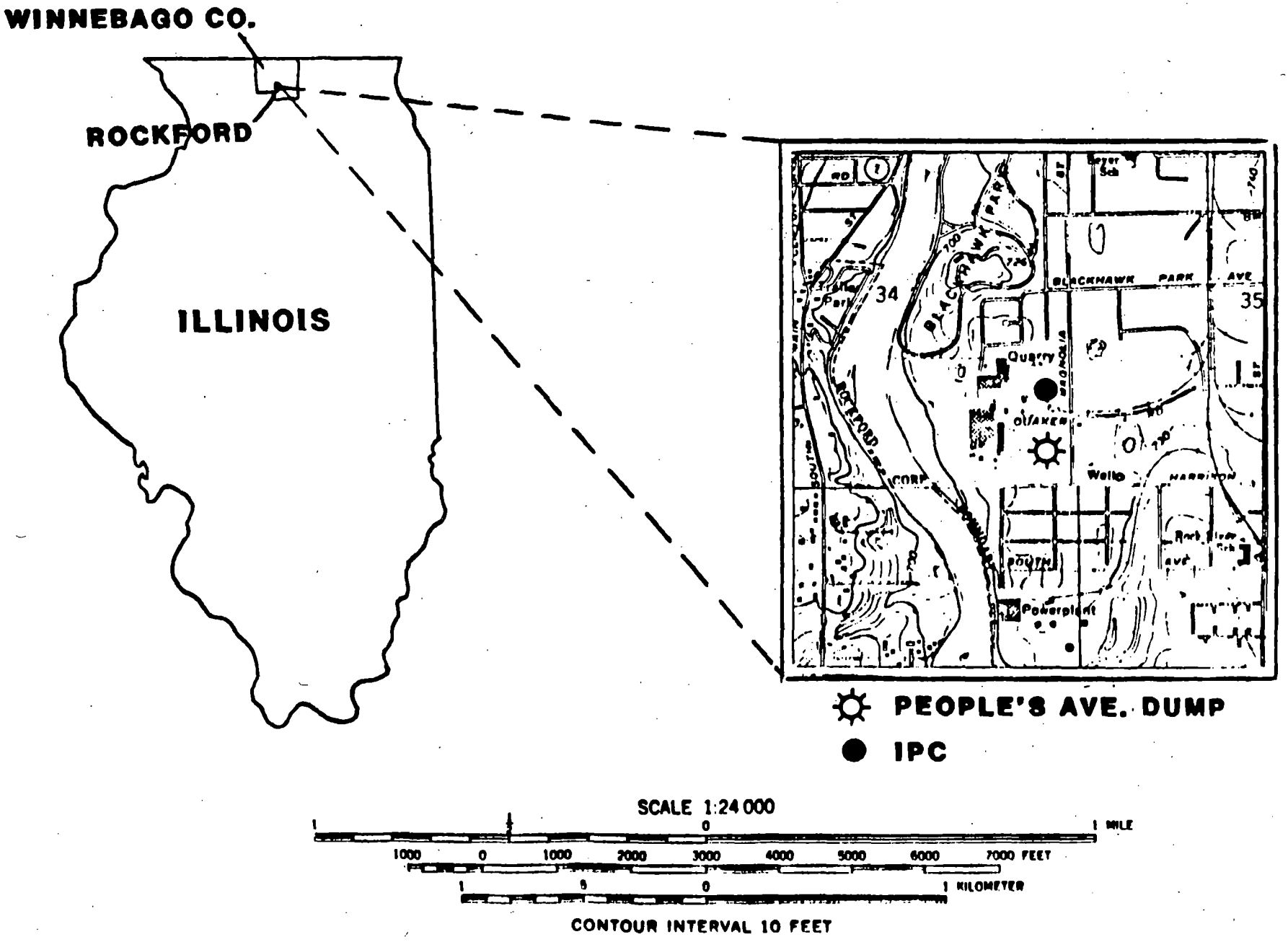
Winnebago County has a continental climate with warm summers and cold winters. The average annual precipitation is about 35 inches, the average pan and lake evaporation is 30 inches per annum, leaving a net precipitation of 5 inches per year. Precipitation highs generally occur in spring and summer and lows during fall and winter months (U.S. Department of Agriculture, 1941, P. 51).

2.3 Site History

2.3.1 Peoples Avenue Landfill

The Peoples Avenue Landfill was formerly a sand and gravel pit. In 1947, the City of Rockford purchased the site for municipal and industrial waste disposal. Three pits, approximately 30-40 feet deep

FIGURE 1
SITE LOCATION MAP



were filled during the operating years of the landfill. Wastes were dumped directly into the groundwater that surfaced in these pits. Records of amounts and types of hazardous waste accepted were not kept. Since Rockford has numerous screw and tool manufacturing industries, cyanide bearing plating wastes, heavy metals and toxic and ignitable solvents were thought to be present. The site was operated as an open dump until the mid-1950's. Daily cover was used from the 1950's to final closure in 1972. Cover material included fly ash from a small on-site incinerator and foundry sand from a nearby foundry.

Prior to this study there was evidence that groundwater had become contaminated in the area. From 1966 to 1970 a total of nine wells were abandoned due to "offensive taste and odors" (Shuster, 1976). Wells affected included four production wells at the Quaker Oats Company, Rockford Municipal Well #14 and four shallow domestic wells. The Quaker Oats wells and Rockford Well #14 were reportedly contaminated with high total dissolved solids and high mineral content. They were abandoned in 1966 and 1970 respectively. At that time no organic analysis was completed. The domestic wells, located south of the landfill, were abandoned in 1969. In response to these well closures, the Quaker Oats Company and affected private residences were connected to Rockford Municipal Water. Soon after Municipal Well #14 was shut down, replacement Well #38 was drilled approximately 1 mile southeast of the site.

In addition to groundwater contamination, methane gas emanating from the landfill became a problem in the basement of the Quaker Oats Company Plant Bakery. When lit, gas would burn from cracks in the concrete floor. No explosions or fire damages were reported. Venting pipes, placed through the landfill have apparently corrected this problem.

At present the landfill is covered, seeded with grass and mounded approximately 10-20 feet above grade. A section east of Magnolia Avenue, now owned by Paul Sahlstrom, is used for heavy equipment

storage. Another smaller section also east of Magnolia Avenue, is used for a drum recycling/pallet storage operation. The homes once located south of the landfill were removed during urban renewal and replaced with light industrial buildings.

2.3.2 IPC

Interstate Pollution Control (IPC) is located at the northwest corner of Magnolia Street and Peoples Avenue, directly north of Peoples Avenue Landfill (Figure 1). From 1974 to 1982 it operated as a hazardous waste storage facility for 20 to 25 local industrial facilities. Wastes were transported by IPC in drums and tanks and stock piled on site until permits for transfer to approved disposal areas were obtained.

Typical wastes hauled by IPC and sometimes stored on-site, included cyanide waste from electro-platers, paint sludges and residues, industrial solvents and waste oils from industry and service stations. Waste oils were reclaimed on-site with a series of underground tanks then sold to local dealers. Poor hazardous waste management practices included use of an unlined surface impoundment, leaking tanks and leaking drums. Figure 2 shows location of the surface impoundment.

In March of 1979, at the request of U.S. EPA., the National Enforcement Investigations Center (NEIC) collected samples from ponded liquids and soils on-site. Cyanide was detected in every sample. Heavy metals and volatile organic compounds were also detected in significant concentrations. A clean-up of the surface impoundment was ordered in December 1979. Some liquids and contaminated soils were removed but it is unknown if sludges from the bottom of the impoundment were removed before covering.

As part of a settlement with IEPA, a number of soil borings were drilled and three monitoring wells installed in October 1982. A fourth well was installed in 1983 by the IEPA. Samples taken from these wells indicated that groundwater contamination had occurred. An adequate upgradient well was never installed, so this became a prime

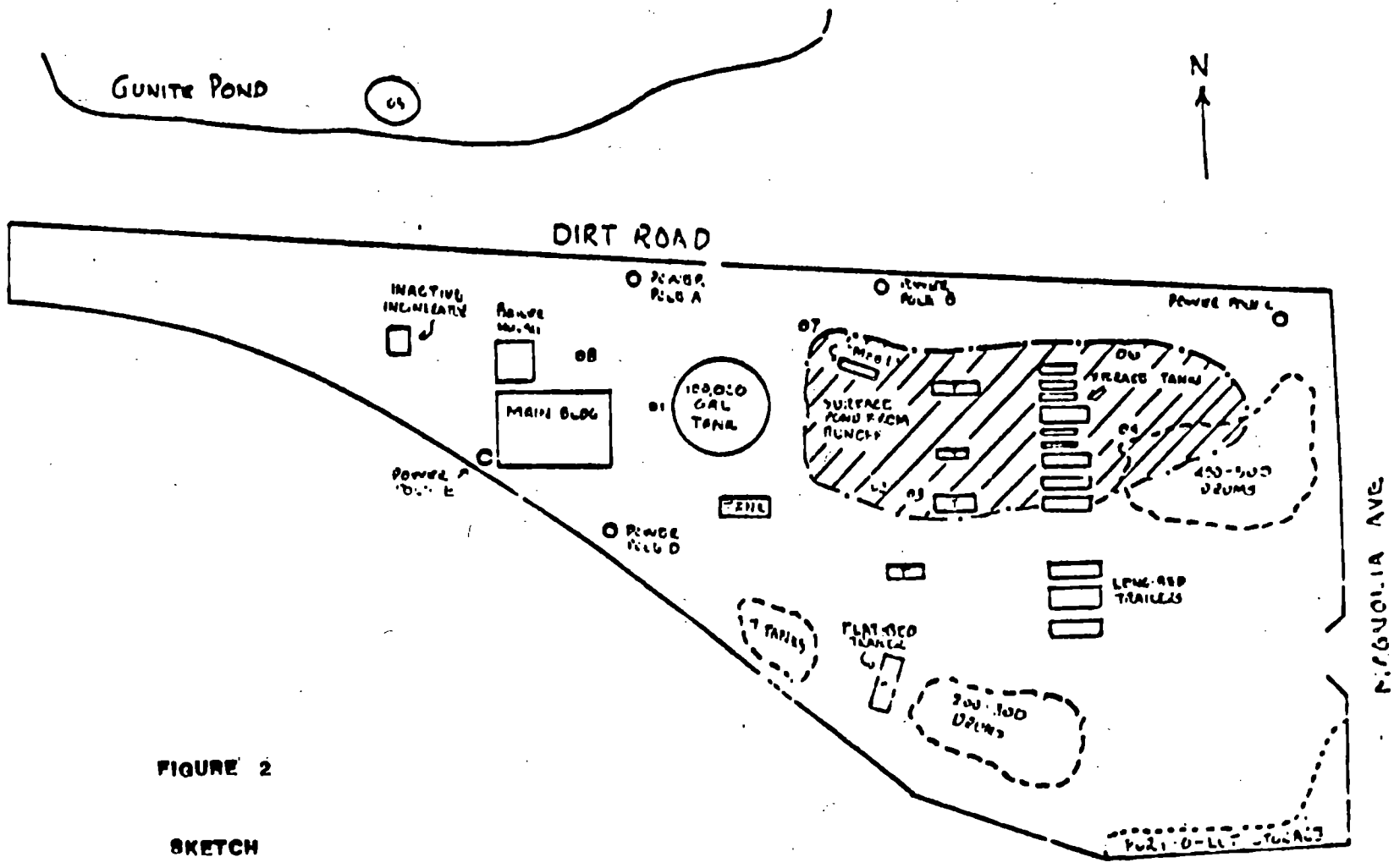


FIGURE 2

SKETCH

INTERSTATE POLLUTION CONTROL

ROCKFORD, ILLINOIS

TAKEN FROM N.E.I.C REPORT JUNE, 1979

goal for the FIT drilling program. Well locations around IPC are shown on Plate 1. At present the site is still being used for waste oil reclamation, scrap iron storage and Port-O-Let storage.

2.4 Previous Studies

No other site specific hydrogeologic studies have been done at Peoples Avenue Landfill.

Monitoring well installations and soil borins were completed by IEPA at IPC in 1982 and 1983. These wells were used in the FIT investigation and analytical results from previous IEPA sampling are included in Section 5.2 of this Report.

3.0 Method of Study/Field Work

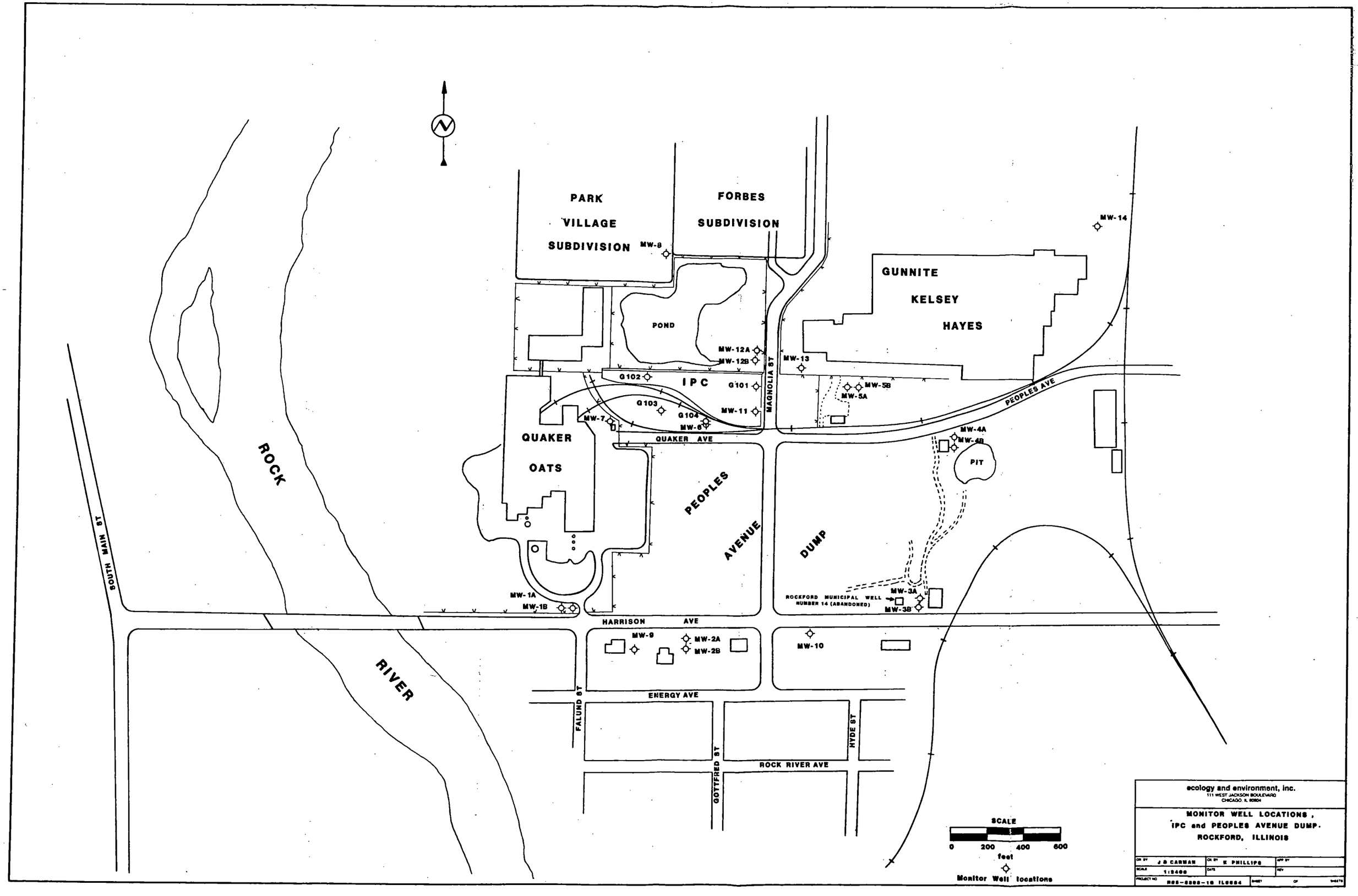
During the periods from January 22 to February 27 and April 15 to April 18, 1985, twenty (20) groundwater monitoring wells were installed in the Peoples Avenue/IPC study area. All work was performed by Canonie Construction Company of Itasca, Illinois under the direct supervision of Ecology and Environment, Inc. (E & E) personnel. Work was conducted in two phases due to property access problems.

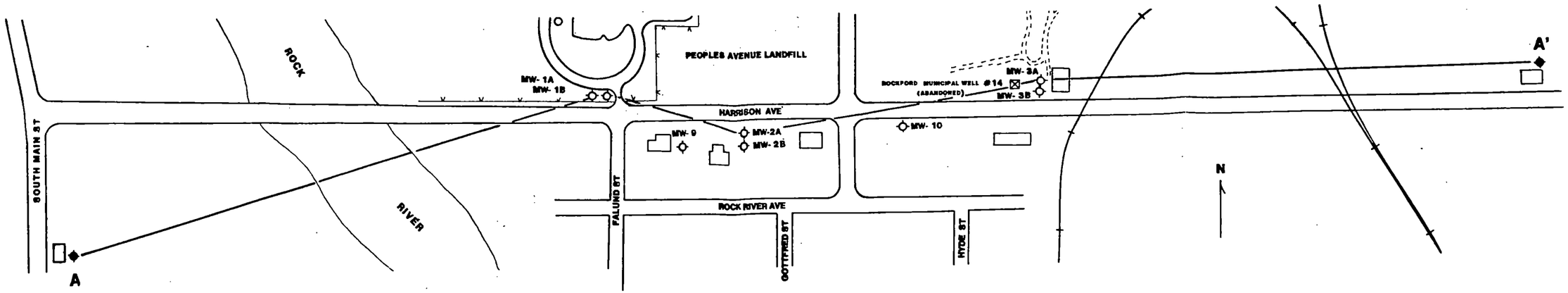
3.1 Drilling

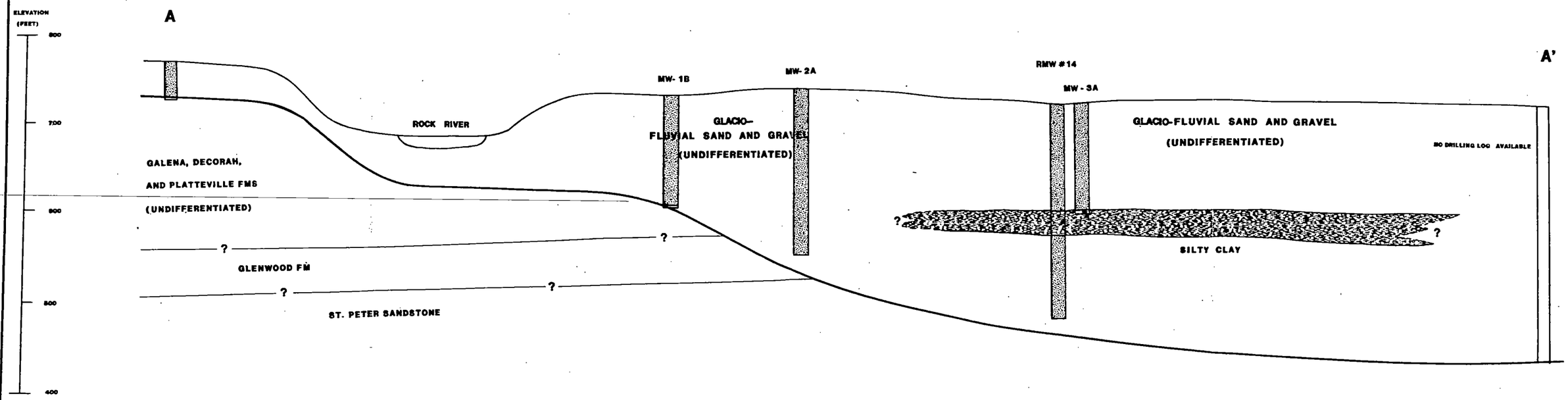
Soil borings and well installations were completed using a truck mounted, Mobile B-40 drill rig. Well locations are shown on Plate 1. A combination of 3 3/4-inch inside diameter (I.D.) hollow stem auger and rotary-wash drilling methods were used to advance all deep monitoring well borings. A guar-gum based drilling fluid, ("Vari-Flo" from American Colloid Company) hydrated with Rockford municipal water was used as a drilling mud to hold sand and gravel formations open below the water table. Samples of this material were sent to U.S. EPA contract labs for chemical analysis. Results are discussed in Section 5.2. Shallow well borings were advanced with hollow stem augers only, with the exception of MW-12B and MW-14. Sand formation caving and blow-up into the hollow stem augers necessitated the use of drilling mud in these borings. In all cases, drilling mud was flushed from the bore hole with clean water before well installation was completed. Soil samples were collected for visual classification with a 2-inch outside diameter (O.D.) split spoon sampler. Standard penetration tests in advance of the auger tip were performed in accordance with A.S.T.M. standards. Split spoon samples were collected at 5-foot and 10-foot intervals. Boring logs with detailed stratigraphic and lithologic descriptions are shown in Appendix I.

3.2 Decontamination

In accordance with contract specifications, the drill rig and tools were steam cleaned prior to site mobilization for both drilling


PARK
VILLAGE
SUBDIVISION
FORBES
SUBDIVISION
MW-8
MW-14
GUNNITE
KELSEY
HAYES
POND
MW-12A
MW-12B
MW-13
G102
IPC
G101
MW-5B
MW-5A
G103
MW-11
G104
MW-7
MW-6
MAGNOLIA ST
PEOPLES AVE
QUAKER AVE
QUAKER
OATS
MW-4A
MW-4B
PIT
ROCK
PEOPLES
AVENUE
DUMP
SOUTH MAIN ST
MW-1A
MW-1B
ROCKFORD MUNICIPAL WELL
NUMBER 14 (ABANDONED)
MW-3A
MW-3B
HARRISON AVE
MW-9
MW-2A
MW-2B
MW-10
RIVER
ENERGY AVE
FALUND ST
HYDE ST
GOTTFRED ST
ROCK RIVER AVE
SCALE
0 200 400 600
feet
Monitor Well locations
ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604
MONITOR WELL LOCATIONS,
IPC and PEOPLES AVENUE DUMP.
ROCKFORD, ILLINOIS
DR BY J B CARMAN
CK BY K PHILLIPS
APP BY
SCALE 1:2400
DATE
REV
PROJECT NO R05-8808-16 IL0004
SHEET OF





SCALE

0 200 400 600

FEET

MONITORING WELL

RESIDENTIAL / COMMERCIAL WELL

MUNICIPAL WELL

DEPTH TO BEDROCK FROM
BORING LOGS AND HACKETT (I.S.G.N) 1980

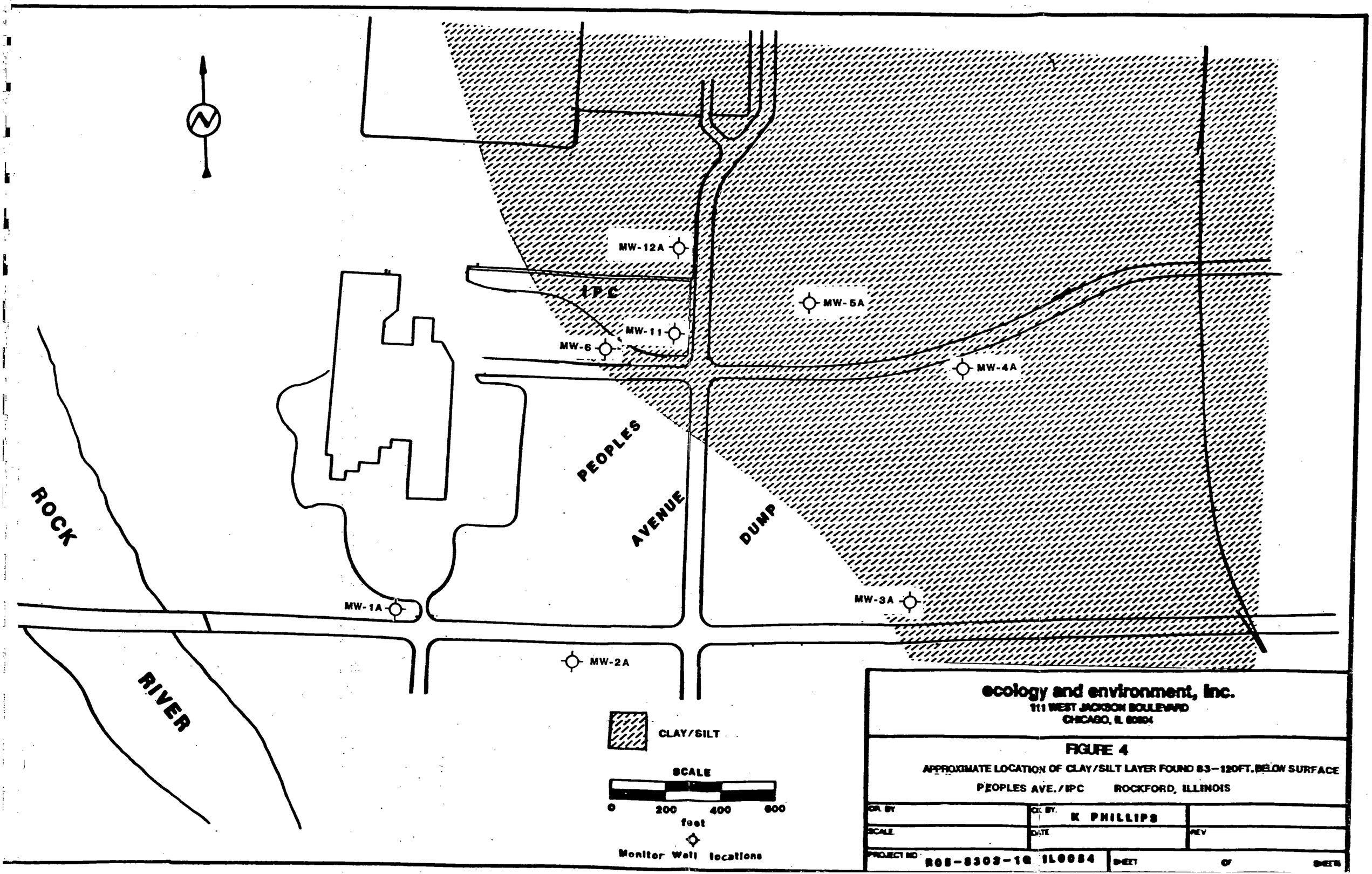
ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

GEOLOGIC CROSS-SECTION SHOWING BEDROCK VALLEY, PEOPLES AVENUE LF / IPC

ROCKFORD, ILLINOIS

PLATE- 2

DR BY RCG	CK BY K. PHILLIPS	APP BY
SCALE 1" = 200'	DATE 1/1986	REV
PROJECT NO	SHEET OF SHEETS	


MW-12A
IPC
MW-5A
MW-11
MW-6
MW-4A
PEOPLES
AVENUE
DUMP
ROCK
RIVER
MW-1A
MW-3A
MW-2A
CLAY/SILT
SCALE
0
200
400
600
feet
Monitor Well locations
ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604
FIGURE 4
APPROXIMATE LOCATION OF CLAY/SILT LAYER FOUND 83-120FT. BELOW SURFACE
PEOPLES AVE./IPC ROCKFORD, ILLINOIS
DR. BY
CK. BY
K PHILLIPS
SCALE
DATE
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PROJECT NO
R05-8303-10 IL0084
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SHEETS

5.0 GROUNDWATER

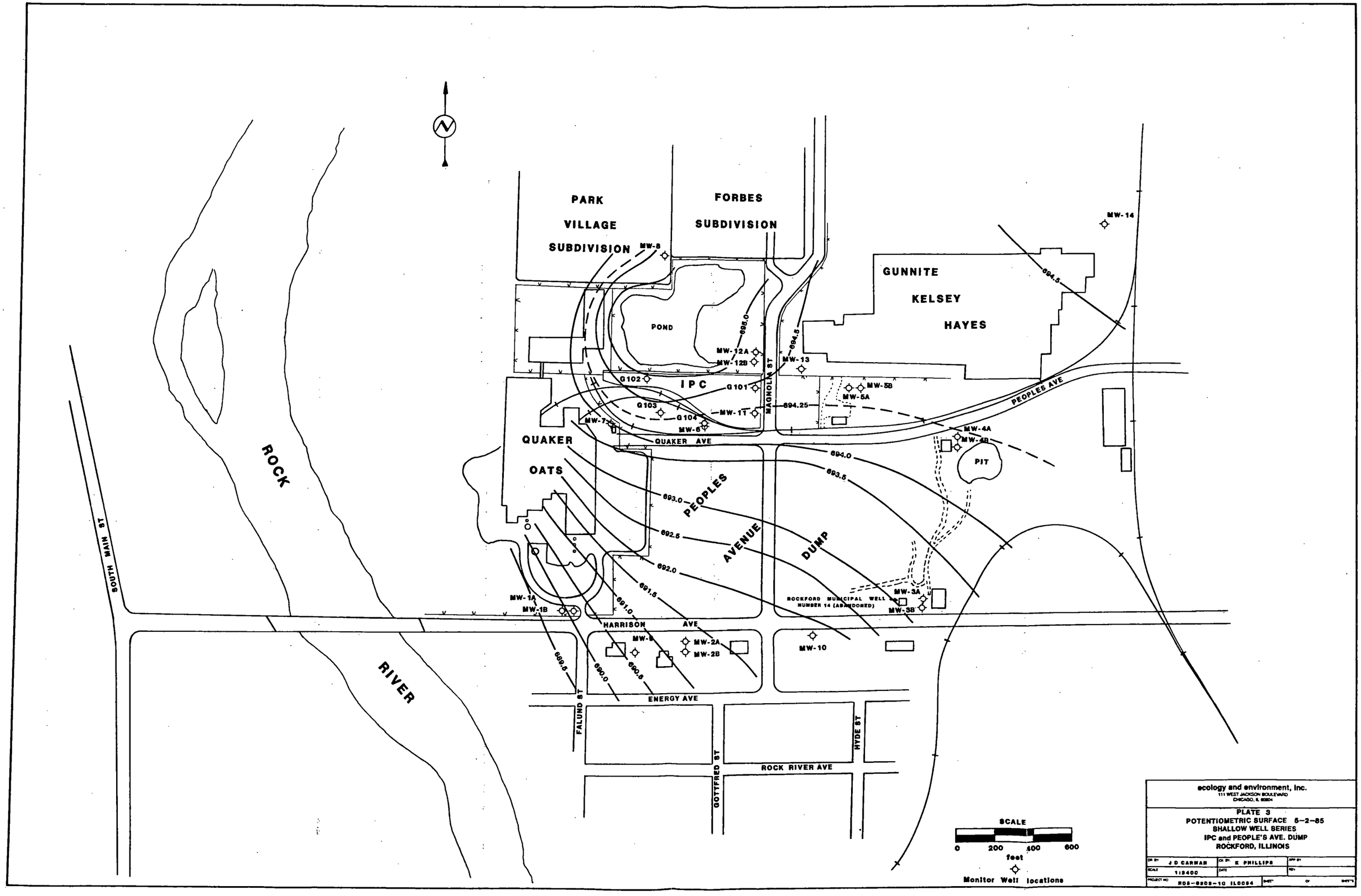
5.1 Groundwater Physical Characteristics

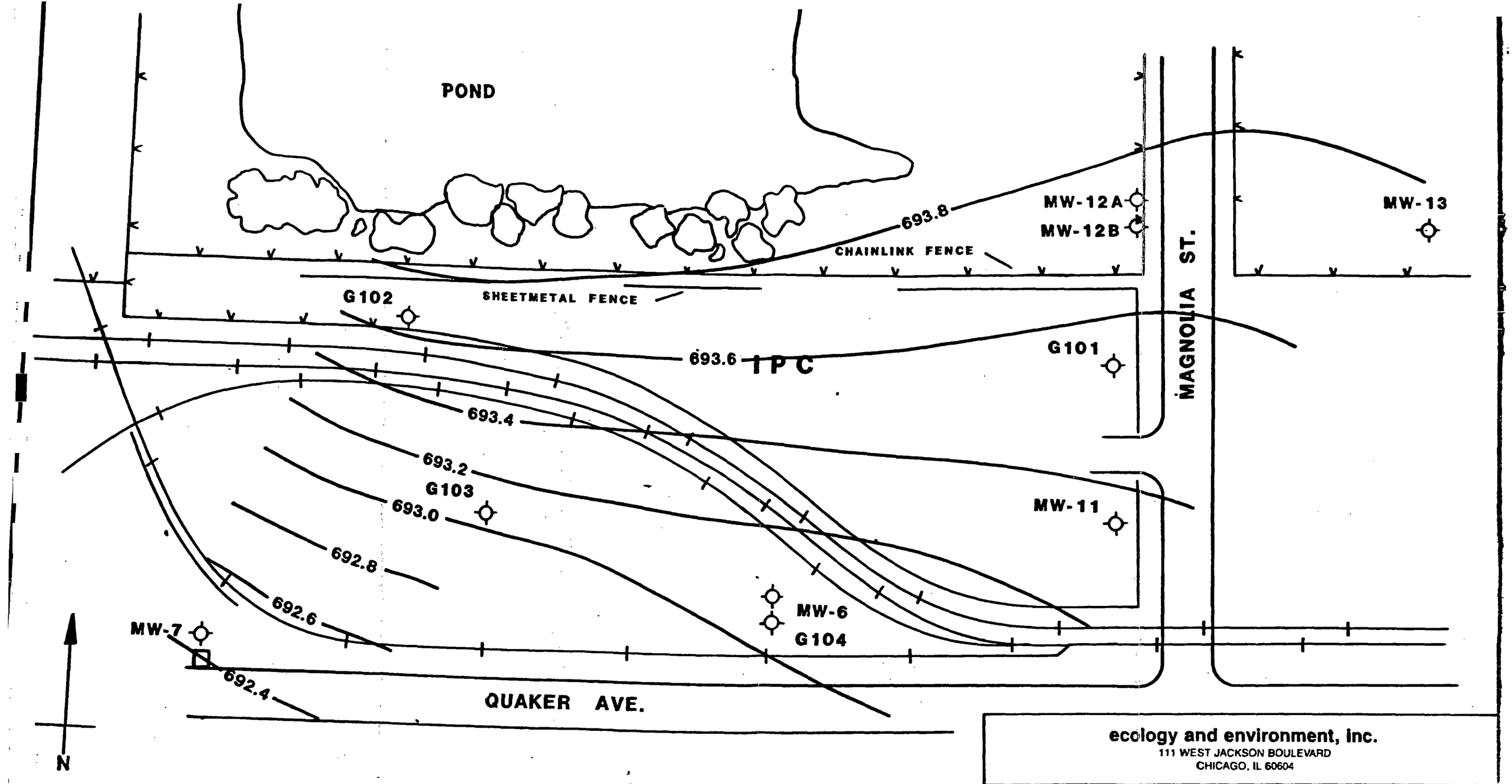
The physical characteristics of groundwater flow at the Peoples Avenue/IPC study area were determined upon completion of monitoring well installation. Aquifer physical characteristics which were determined include potentiometric surface, hydraulic conductivity and groundwater velocity.

5.1.1 Potentiometric Surface

Monitoring well water level measurements were taken at five times during the year. Table 1 shows groundwater elevations in feet above sea level and the dates they were measured. Measurements for all wells were completed in one day on the date shown. Water levels for monitoring wells MW-6 through MW-14 were not measured on 2-19-85 and 4-22-85 because they were not yet installed. When it was possible, water elevations at the Rock River, Gunite Pond, and Sahlstroms Pit were also determined.

Potentiometric surface maps for the shallow well series (Plates 3 & 5) indicate that general groundwater flow through Peoples Avenue Landfill is southwest towards the Rock River. At IPC, normal flow patterns have been affected by the gravel pit pond (Gunite Pond) north of the site. For a number of years this pond has been used as a discharge point for cooling water and storm water generated at the Gunite Kelsey/Hayes Foundry across the street. Water from the plant is piped under Magnolia Street to the pond, creating an artifically high water elevation in the pond. This was confirmed by water level measurements taken 6-4-85 and 11-7-85. The potentiometric surface maps show that the pond acts as a local recharge area, producing radial flow patterns on these dates. Because of this, groundwater flows in a southerly direction through IPC and then turns towards the southwest with increasing distance from the pond. This pattern remained consistent throughout the year. If discharge to the pond was stopped and the bottom was dredged to its natural level, water in the pond could return to water table conditions, eliminating the local recharge effect.


PARK
VILLAGE
SUBDIVISION
FORBES
SUBDIVISION
GUNNITE
KELSEY
HAYES
POND
IPC
QUAKER
OATS
PEOPLES
AVENUE
DUMP
PIT
ROCK
RIVER
SOUTH MAIN ST
MAGNOLIA ST
PEOPLES AVE
QUAKER AVE
HARRISON AVE
ENERGY AVE
ROCK RIVER AVE
FALUND ST
GOTTFRED ST
HYDE ST
ROCKFORD MUNICIPAL WELL NO. NUMBER 14 (ABANDONED)
MW-1A
MW-1B
MW-2A
MW-2B
MW-3A
MW-3B
MW-4A
MW-4B
MW-5A
MW-5B
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12A
MW-12B
MW-13
MW-14
G101
G102
G103
G104
694.5
695.0
694.5
694.25
694.0
693.5
693.0
692.5
692.0
691.5
691.0
690.5
690.0
689.5
SCALE
0 200 400 600
feet
Monitor Well locations
ecology and environment, Inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604
PLATE 3
POTENTIOMETRIC SURFACE 5-2-85
SHALLOW WELL SERIES
IPC and PEOPLE'S AVE. DUMP
ROCKFORD, ILLINOIS
DR BY J D CARMAN
CK BY K PHILLIPS
APP BY
SCALE 1:2400
DATE
REV
PROJECT NO R05-8808-10 IL0054
SHEET OF SHEETS



Scale

0 75 150 225

feet

ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

PLATE 5
POTENTIOMETRIC SURFACE 6-4-85
SHALLOW WELL
IPC, ROCKFORD IL.

DR. BY: J D CARMAM	CK. BY: K PHILLIPS	APP. BY
SCALE: 1:900	DATE	REV
PROJECT NO.: R05-8303-1G IL0054	SHEET	OF SHEETS

TABLE 1 - GROUNDWATER ELEVATIONS FOR
PEOPLES AVENUE/IPC MONITORING WELLS
ALL ELEVATIONS ARE REPORTED IN FEET ABOVE
MEAN SEA LEVEL (MSL)

Monitoring Well	T.O.I.C Elevation	MEASUREMENT DATE				
		2-19-85	4-22-85	5-2-85	6-4-85	11-7-85
G-101	739.46	693.51	694.73	694.48	693.54	693.13
G-102	742.11	693.52	695.91	695.05	693.68	693.60
G-103	738.48			694.21	693.01	693.13
G-104	738.31	693.09	694.48	694.10	693.01	692.99
MW-1A	732.58	690.38	691.53	690.95	689.72	691.04
MW-1B	732.28	690.28	691.44	690.83	689.57	690.98
MW-2A	741.43	690.81	691.95	691.46	690.50	691.23
MW-2B	741.34	690.56	691.81	691.28	690.19	691.07
MW-3A	725.08	692.46	693.65	693.38	692.81	692.71
MW-3B	725.20	692.49	693.64	693.39	692.83	692.71
MW-4A	731.81	693.21	694.35	694.15	693.64	693.19
MW-4B	732.16	693.20	694.34	694.17	693.64	693.16
MW-5A	737.32	693.36	694.48	694.31	693.65	693.12
MW-5B	737.61	693.32	694.45	694.26	693.60	693.10
MW-6(Deep)	738.51			694.13	693.07	693.02
MW-7	742.32			693.65	692.48	692.93
MW-8	738.78			694.69	693.17	693.19
MW-9	737.31			690.58	689.40	690.55
MW-10	737.14			691.77	690.86	690.88
MW-11(Deep)	739.05			694.33	693.38	693.04
MW-12A	735.81			694.61	693.80	693.24
MW-12B	735.98			694.58	693.74	693.15
MW-13	736.03			694.46	693.76	693.21
MW-14	738.54			694.52	694.24	693.66
Gunite Pond					721.24	715.98
Rock River						690.85
Sahlstrom Pit						693.16

Monitoring Wells G-101 Through G-104 installed by I.E.P.A.
T.O.I.C - Top of Inner Casing
Letter "A" indicates deep, "B" shallow in Monitoring Well Nest

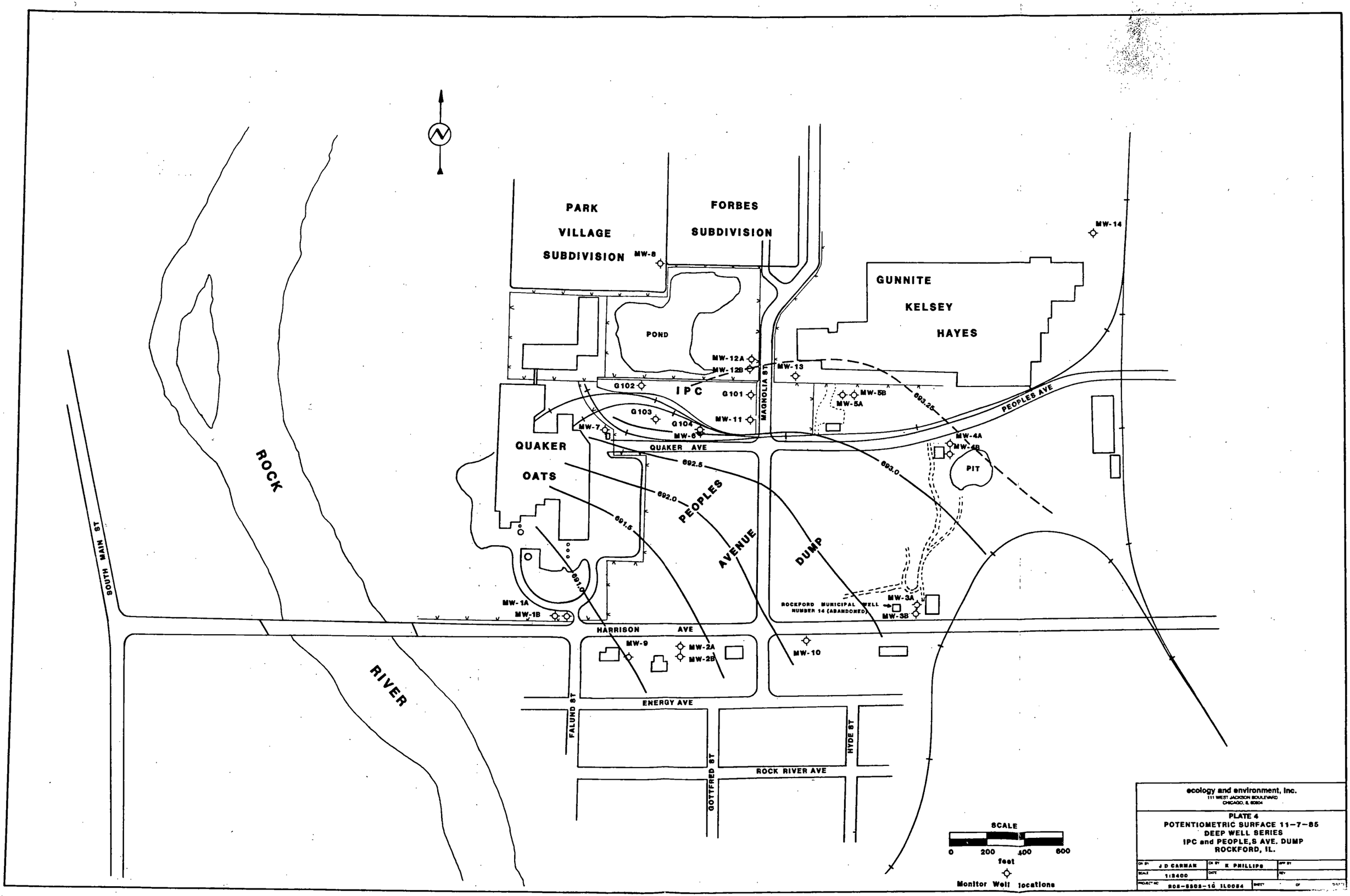
A water level elevation was measured at the Rock River on 11-7-85 to determine the relationship of the river to groundwater flow in the area. On this date, data indicates that groundwater was discharging to the river. High water episodes in the Rock River during spring or winter months may cause a backflushing effect in the normal groundwater flow, however this was not observed during the study. Affects on groundwater flow at Peoples Avenue/IPC would probably be minimal due to the sites distance from the river.

In addition, monitoring wells installed deeper in the sand and gravel aquifer show groundwater flow to the southwest (Plate 4).

5.1.2 Hydraulic Gradients

Lateral hydraulic gradients (dh/dl) were calculated using shallow wells MW-4B, MW-2B for Peoples Avenue and G-102, G-103 for IPC. At Peoples Avenue hydraulic gradients vary between .00114 and .00189 for the May, June and November measuring dates. At IPC, gradients vary between .00247 and .00442 on the same dates. The lateral gradient at IPC is greater than that at Peoples Avenue due to the proximity of G-102, G103 to Gunite Pond, which is locally recharging the aquifer.

Water levels taken from the seven (7) nests of two (2) wells each were used to determine the vertical gradients (dh/dl) within the aquifer. Using the distance between well screens of the respective shallow and deep wells for dl and the head difference for dh, the vertical gradient was determined. Table 2 shows the vertical gradients for all monitoring well nests within the study area. In general, the calculated gradients indicate that a weak mechanism exists which could prevent less dense contaminants from migrating deeper into the aquifer. In order for denser contaminants to penetrate the aquifer they would have be sufficiently dense to overcome this upward vertical gradient. These gradients also indicate that portions of the aquifer are under discharge conditions, the discharge point being the nearby Rock River. Fluctuations are to be expected and would be due to precipitaton or seasonal events or as in the case of MW-3A and MW-3B the location of a nest in a ground surface depression.


PARK
VILLAGE
SUBDIVISION
FORBES
SUBDIVISION
GUNNITE
KELSEY
HAYES
POND
IPC
QUAKER
OATS
ROCK
RIVER
SOUTH MAIN ST
MAGNOLIA ST
QUAKER AVE
PEOPLES AVE
PEOPLES
AVENUE
DUMP
PIT
HARRISON AVE
ENERGY AVE
ROCK RIVER AVE
FALUND ST
GOTTFRED ST
HYDE ST
ROCKFORD MUNICIPAL WELL
NUMBER 14 (ABANDONED)
MW-8
MW-14
MW-12A
MW-12B
MW-13
G102
G101
G103
G104
MW-11
MW-7
MW-6
MW-5B
MW-5A
MW-4A
MW-4B
MW-3A
MW-3B
MW-1A
MW-1B
MW-9
MW-2A
MW-2B
MW-10
692.5
692.0
691.5
691.0
693.0
693.25
SCALE
0
200
400
600
feet
Monitor Well locations
ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604
PLATE 4
POTENTIOMETRIC SURFACE 11-7-85
DEEP WELL SERIES
IPC and PEOPLES AVE. DUMP
ROCKFORD, IL.
DR BY J D CARMAN
CK BY R PHILLIPS
APP BY
SCALE 1:2400
DATE
REV
PROJECT NO 805-8503-16 IL0054
SHEET OF

phases. Between borings the augers, cutting bit and sampling equipment were decontaminated with a clean water rinse and allowed to air dry.

3.3 Well Construction

Groundwater monitoring wells were emplaced as single wells or nests of one deep and one shallow well. Shallow wells were generally 45 to 55 feet deep, with 5 foot screens placed just below the water table. Deep wells were 81-feet to 185-feet deep with 10-foot screens. All wells were constructed with 2-inch (I.D.) threaded, flush-jointed PVC casing conforming to Schedule 40 ASTM standards. Screens were also of PVC and were factory slotted with 0.010-inch slots.

Each well screen was surrounded by a natural sand and gravel filter pack. This formed as sand and gravel collapsed around the screen when hollow stem augers were pulled or drilling mud was flushed from the bore hole. In each well, collapse of the bore hole was allowed to occur up to a few feet above the water table. A two foot thick bentonite pellet seal was then placed around the well casing. The remainder of the annulus was allowed to collapse as augers were withdrawn. Natural spoil material was used as backfill to 5-10 feet below the surface, then a cement grout plug was installed. To complete the installation, a 4-inch I.D. locking, steel outer protective casing was embedded in the grout. General well construction is illustrated in Figure 3.

Each well was surveyed to determine elevation above Mean Sea Level (MSL). Elevations were measured from the top of the PVC casing. The benchmark was a railroad spike in a power pole at the southwest corner of Quaker and Magnolia Avenue which had been tied to a U.S.G.S. benchmark by a licensed surveyor.

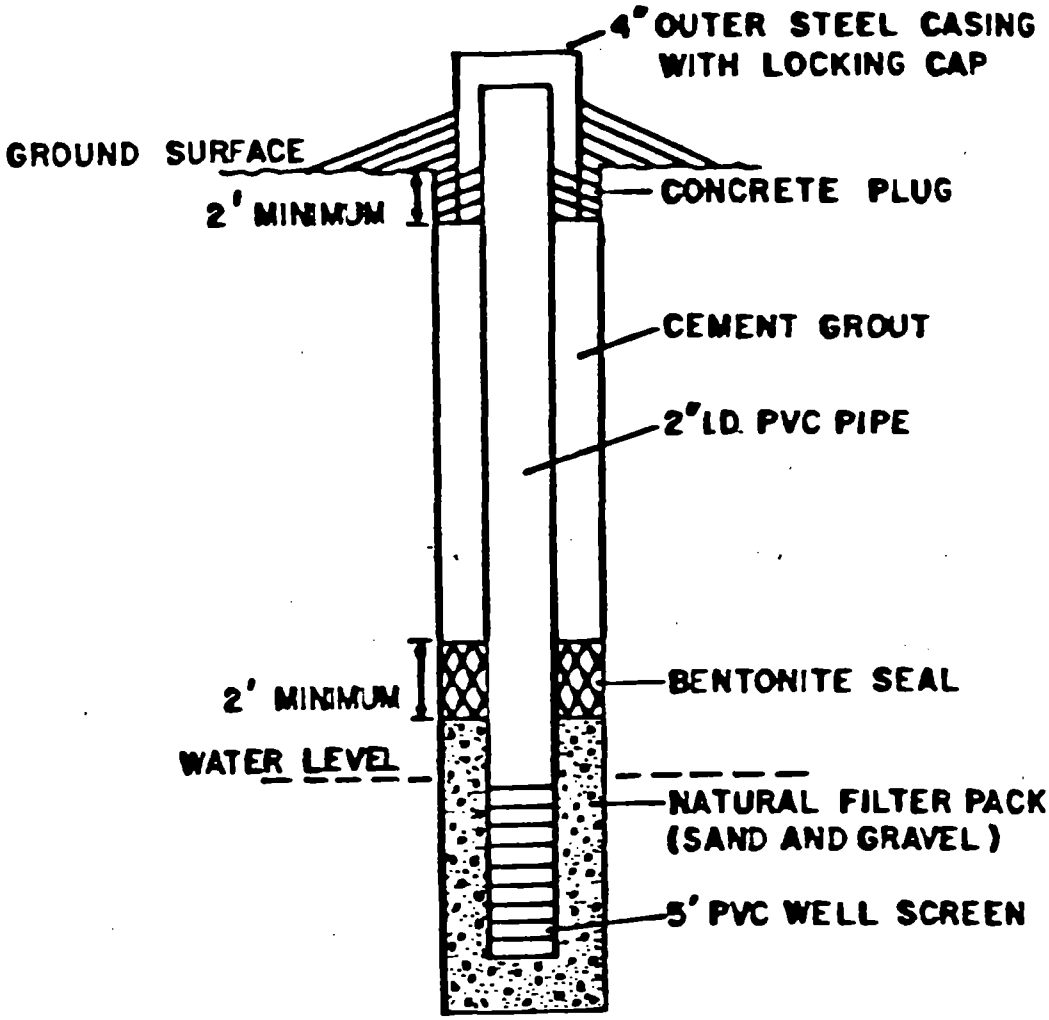


Figure 3 - Typical groundwater monitoring well.

4.0 GEOLOGY

4.1 Regional Geology

Winnebago County lies within the glaciated region of northern Illinois and was completely covered by continental glaciers which advanced from central and eastern Canada during the Pleistocene Epoch. Unconsolidated materials left by the glaciers are generally thin or absent on the uplands where glacial till and loess were deposited, but are more than 200 feet thick in the three major bedrock valleys in the county. These valleys, which formed prior to glaciation of the region, have been filled with sand and gravel outwash deposits from the melt waters of several Wisconsinan age glacial advances.

Typically, these outwash deposits lie directly on top of Paleozoic bedrock formations of Ordovician age. The upper bedrock formations are dolomites of the Galena, Decorah, and Platteville formations. They are composed of light gray or brown, finely crystalline dolomite. These bedrock formations form one of the principal aquifers in the region, yielding groundwater through well developed joint and fracture systems, bedding planes, and solution cavities. Below this is the Glenwood formation. It consists of interbedded dolomite, sandstone, and shale. Thicknesses range from 10 to 60 feet. It has little value as an aquifer and where shales are present, may act as a local aquitard. Finally, the St. Peter Sandstone underlies all of Winnebago county. In the deep bedrock valleys (ie. Rock, Pecatonica, Sugar, and Troy) it directly underlies the glacial drift. The St. Peter is fine to coarse grained, friable, and contains a high percentage of well rounded, frosted quartz grains. This formation is widely utilized as an aquifer throughout northern Illinois and is usually open in large capacity, multiple-aquifer wells such as those used by the Rockford Water Department.

4.2 Site Geology

The study area for Peoples Avenue Landfill and IPC is underlain by deep sand and gravel outwash deposits that have filled the pre-glacial

Rock Valley. The term Rock Valley refers to the older bedrock valley eroded before glaciation while the term Rock River Valley refers to the present land surface valley that contains the Rock River. Outwash deposits in the Rock Valley are generally undifferentiated fine to coarse sands and small to medium sized gravels. The outwash contains little or no fine silt or clay size particles. Boring logs and literature (Hackett, 1960) indicate that the west wall of the Rock Valley is located between the Peoples Avenue site and the Rock River. This was substantiated by MW-1B in which finely crystalized, brown dolomite (Platteville dolomite) was encountered at approximately 615 feet MSL. From here the Rock Valley drops to almost 440' MSL less than 1 mile from the Rock River. This is thought to represent the deepest part of the bedrock valley. No borings to bedrock were attempted in this area. A geologic cross section (Plate 2), has been prepared from monitoring well logs. Plate 2 Illustrates the bedrock valley surface below Peoples Avenue Landfill.

The literature also mentions a till spur located in the vicinity of the study area. FIT boring locations and depths were designed to investigate the depth and extent of this spur. At deep monitoring wells MW-3A, MW-4A, MW-5A, MW-6, MW-11, and MW-12A a clay/silt layer was encountered at 83-120' below the surface. This is thought to be the spur. Drilling was stopped at the top of this unit. The boring log for Rockford Municipal Well #14, located adjacent to MW-3A, shows this clay/silt layer to be 25' thick. Monitoring Well 1B and MW-2A, in the southwest section of the study area, drilled to 116' and 186' respectively failed to encounter this clay/silt layer. This would indicate that the clay/silt layer is discontinuous below the site and has been eroded away or pinched out somewhere between MW-6 and the west wall of the Rock Valley. Figure 4 shows the approximate location of this layer below the study area. In areas where this unit is present there is a potential for contaminants to be diverted along the top of the unit and then be carried deeper into the aquifer by groundwater as it flows over the edge of the clay towards the Rock River. Contaminant densities and vertical gradients within the aquifer will determine this type of flow.

Table 2
Vertical Gradients in
Sand and Gravel Aquifer, 1985

Monitoring Well Nest	Measurement Dates				
	2-19	4-22	5-2	6-4	11-7
MW-1A MW-1B	-.0019	-.0017	-.0023	-.0028	-.0011
MW-2A MW-2B	-.00070	-.0019	-.0011	-.0024	-.0013
MW-3A MW-3B	.00045	-.00015	.00015	-.00030	0.00
MW-4A MW-4B	-.00019	-.00019	.00037	0.00	-.00056
MW-5A MW-5B	-.00077	-.00058	-.00096	-.0011	-.00038
MW-6 G-104			-.00083	-.0017	-.00083
MW-12A MW-12B			-.0014	-.0028	-.0043

Letter "A" indicates deep, "B" shallow in monitoring well nest

5.1.3 Hydraulic Conductivity

In-situ hydraulic conductivities of aquifer materials were determined by rising-head slug tests, conducted during the period from June 4 to June 6, 1985. Water level data was collected with a "SE1000A" hydraulic pressure transducer manufactured by In-situ Inc. A 1 1/4" O.D. sand-filled slug was used to depress the initial water level to begin each test. Field test data was analyzed using the Hvorslev (1951) technique commonly used for unconfined aquifers. Conditions assumed for the use of this technique are: 1) that the aquifer is unconfined; 2) the piezometer or well is of small diameter; 3) and that the length of the screen is small compared with the length of the piezometer (Freeze and Cherry, 1979). For the Hvorslev method, a regression technique is used to determine the equation for a best fit line which approximates the field test data. From this, the basic time lag is determined which in turn is used to give the hydraulic conductivity.

Table 3 lists the calculated hydraulic conductivities at each monitoring well. Values ranged from 2.4×10^{-3} cm/sec. to 3.4×10^{-1} cm/sec., with a calculated mean of 9.0×10^{-2} cm/sec. These values correspond to values given for a clean sand and gravel in the literature (Table 4, Freeze and Cherry, 1979) and were further substantiated by split spoon samples of the same material taken in the screened zone of each well. Differences in conductivity between shallow and deep wells were within one order of magnitude indicating generally homogeneous conditions throughout the aquifer.

5.1.4 Groundwater Velocities

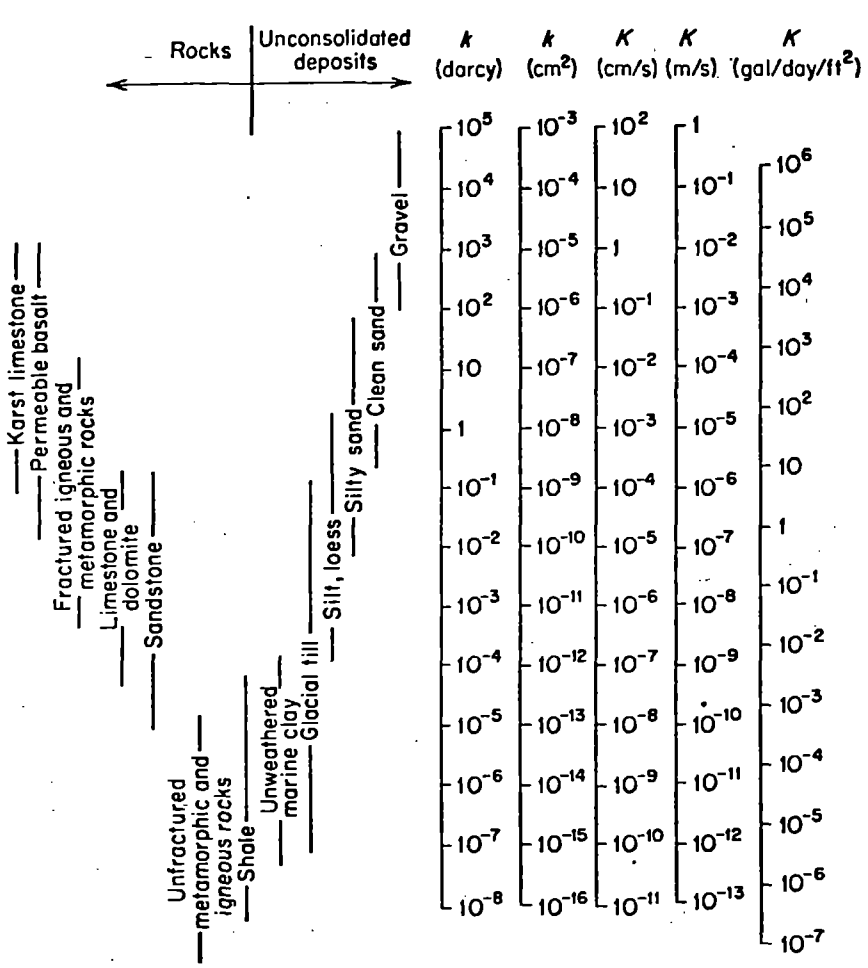
Groundwater velocity in the aquifer is a function of the hydraulic conductivity of the aquifer, the lateral hydraulic gradient and the effective porosity. The mean hydraulic conductivity in the saturated zone has been determined to be 9.0×10^{-2} cm/sec. (or 3.0×10^{-3} ft/sec).

TABLE 3
HYDRAULIC CONDUCTIVITIES
DETERMINED BY SLUG TEST
AT PEOPLES AVENUE/IPC

Monitoring Well	Hydraulic Conductivity ft/sec.	cm/sec.
MW-1A	8.4×10^{-4}	2.6×10^{-2}
MW-1B	Insufficient Water For Test	
MW-2A	Inadequate Data	
MW-2B	Insufficient Water For Test	
MW-3A	1.4×10^{-3}	4.3×10^{-2}
MW-3B	1.5×10^{-3}	4.6×10^{-2}
MW-4A	Inadequate Data	
MW-4B	1.1×10^{-2}	3.4×10^{-1}
MW-5A	7.8×10^{-5}	2.4×10^{-3}
MW-5B	1.4×10^{-3}	4.3×10^{-2}
MW-6(Deep)	7.2×10^{-4}	2.2×10^{-2}
MW-7	4.7×10^{-3}	1.4×10^{-1}
MW-8	3.6×10^{-3}	1.1×10^{-1}
MW-9	3.2×10^{-3}	9.8×10^{-2}
MW-10	6.9×10^{-3}	2.1×10^{-1}
MW-11(Deep)	4.1×10^{-4}	1.2×10^{-2}
MW-12A	1.5×10^{-3}	4.6×10^{-2}
MW-12B	6.6×10^{-4}	2.0×10^{-2}
MW-13	3.7×10^{-3}	1.1×10^{-1}
MW-14	4.6×10^{-4}	1.4×10^{-2}
G-101	Insufficient Water For Test	
G-102	Insufficient Water For Test	
G-103	Insufficient Water For Test	
G-104	7.6×10^{-3}	2.3×10^{-1}
Average	3.0×10^{-3}	9.0×10^{-2}

"A" Indicates Deep Well, "B" Shallow Well in Well Nest

Table 4
Range of Values of
Hydraulic Conductivity
(Freeze and Cherry 1979)



An approximation of the velocity, V, at which the groundwater moves through the aquifer can be calculated using Darcy's equation. For laminar flow in saturated conditions that is:

$$V = K \times \frac{dh}{dl} \times \frac{1}{NE} \text{ where}$$

K = Hydraulic conductivity
(Average 3.0×10^{-3} ft/sec for this case)

$\frac{dh}{dl}$ = Hydraulic gradient

NE = Effective porosity (0.35 for sand)

under these conditions the following velocities are calculated for Peoples Avenue Landfill.

June 4, 1985
$V = 3.0 \times 10^{-3}$ ft/sec. x .00189 x 1/0.35
$V = 1.6 \times 10^{-5}$ ft/sec.
$V = 1.6 \times 10^{-5}$ ft/sec. x 3.1536×10^{7} sec/yr.
V = Approximately 504.6 ft/yr.

Nov. 7, 1985
$V = 3.0 \times 10^{-3}$ ft/sec. x .00114 x 1/0.35
V = Approximately 308.2 ft/yr.

Velocities for IPC are:

May 2, 1985
$V = 3.0 \times 10^{-3}$ ft/sec. x .0042 x 1/0.35
V = Approximately 1135.3 ft/yr.

Nov. 7, 1985
$V = 3.0 \times 10^{-3}$ ft/sec. x .00247 x 1/0.35
V = Approximately 667.6 ft/yr.

5.1.5 Aquifer of Concern

For HRS purposes the aquifer of concern is the glacial outwash sand and gravel unit which is in direct contact with bedrock formations below the site. As mentioned before, a 25' slit/clay layer was found at a depth of 100 ft (average) in the eastern sections of Peoples Avenue Landfill and IPC. This appears to be discontinuous across the study area. Literature indicates that the sand gravel occurs both above and below the silt/clay layer, down to bedrock.

5.2 Groundwater Quality

On April 24 and 25, 1986 all 24 monitoring wells in the Peoples Avenue/-IPC study area were sampled for priority pollutants. Analytical results are presented in Table 5 and Table 6 from this sampling episode. Table 7 and 8 show results from previous sampling done only at IPC by FIT and IEPA. They have been included in this report to show that groundwater contamination has been an ongoing process at IPC and to further validate the contention that IPC is contaminating the aquifer, along with Peoples Avenue Landfill.

In order to score the two sites separately for HRS, well locations were designed to determine which contaminants each site was contributing to the overall problem. From Plate I we can see that some monitoring wells serve a dual purpose, i.e. acting as a downgradient well for one site as well as upgradient for the other. Others were positioned to locate off-site contaminant sources: MW-5A, MW-5B, MW-13, MW-14.

In general, the chemical data from April 25, 1985 sampling shows that local groundwater is contaminated with nine volatile organic compounds; vinyl chloride, chloroethane, 1,1-dichloroethane, trans-1,2- dichloroethene, 1,1,1-trichloroethane, trichloroethene, tetrachloroethene, 1,1 dichloroethene and chloroform,. With the exceptions of 1,1-dichloroethene, chloroform (detected at IPC only) and benzene (detected at Peoples Avenue only) all nine volatiles were detected at both IPC and Peoples Avenue. In the semi-volatile fraction, di-n-octyl phthalate and bis(2-ethylhexyl) phthalate were also detected but should be considered lab contaminants. None of the volatiles or semi-volatiles were detected in the field blanks. Heavy metals were detected sporadically throughout the monitoring system. These included chromium, G-102, G-103 (81 ppb) and MW-4A, MW-12B, MW-13; nickel G-101, MW-9 (65 ppb), selenium G-102 (8 ppb) and cyanide MW-1B, MW-3A (18 ppb). Because of this sporadic distribution no migration pattern could be established. Lead was seen in 16 of the 24 wells including all of the upgradient wells, so these values should be used with caution.

TABLE 5
VOLATILE ORGANIC COMPOUNDS DETECTED IN
GROUNDWATER SAMPLES COLLECTED ON APRIL 24 and 25, 1985
CONCENTRATIONS REPORTED IN ug/l (ppb)

	I. E. P. A. WELL					FIT MONITORING WELL (MW)									
	G-101	Dup. G-101	G-102	G-103	G-104	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Chloromethane															
Bromomethane															
Vinyl Chloride	110	100			88	20	140		29						
Chloroethane	89	92					46J		3.4J						
Methylene Chloride	3.5J	4.0J				2.5J	17J		11J						
Acetone						130J	85J		82J	170J					
Carbon Disulfide															
1,1 Dichloroethene					27								3.6J		
1,1 Dichloroethane	890	940		10	2400	52	470		32	3.7J	5.7	3.6J	9.3	3.2J	3J
Trans-1,2 Dichlorethene	240	230	13	30	1500	170	110		7.2	1.1J	2.8J	2.7J	3.6J	3.7J	
Chloroform					27	2.2J									
1,2 Dichloroethane															
2-Butanone															
1,1,1,Trichloroethane	270	250		37	2100	45	5.6J				3.1J	1.6J	32	2.3J	36
Carbon Tetrachloride															
Vinyl Acetate															

Note: Monitoring Wells G-101 through G-104 installed by I.E.P.A.
Well number followed by letter "A" indicates deep well, "B" indicates shallow well in well nest.
"J" indicates value is semi-quantitative i.e. below the contract required detection limit (CRDL).

TABLE 5 (Page 2)

	FIT MONITORING WELL (MW)												
	6	7	8	9	10	11	12A	12B	13	14	Dup. 1B	Blk1	Blk 2
Chloromethane													
Bromomethane													
Vinyl Chloride				34					43J		58J		
Chloroethane				18	6.1J				2.8J		24		
Methylene Chloride			71B		57B								
Acetone			130B		100B								
Carbon Disulfide													
1,1 Dichloroethene				1.6J									
1,1 Dichloroethane	28	1.6J	1.4J	45	21	9.3	1.1J	1.1J	170		230		
Trans-1,2 Dichlorethene	13			36		4.2J			28		59		
Chloroform								1.5J					
1,2 Dichloroethane									10				
2-Butanone			7.8J										
1,1,1,Trichloroethane	10	8.9	5			1.3J	4.1J	4.9J	4.3J	3.4J	3.4J		
Carbon Tetrachloride													
Vinyl Acetate													

Note: Monitoring Wells G-101 through G-104 installed by I.E.P.A
Well number followed by letter "A" indicates deep well, "B" indicates shallow well in well nest.
"J" indicates value qs semi-quantitative i.e. below the CRDL.

TABLE 5 (Page 3)

	I. E. P. A. WELL					FIT MONITORING WELL (MW)									
	G-101	Dup. G-101	G-102	G-103	G-104	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Bromodichloromethane															
1,1,2,2 Tetrachloroethane															
1,2 Dichloropropane															
Trans 1,3 Dichloropropene															
Trichloroethene	20	20		5.1	130	5.9	25J				5.4	4.5J	3.7J	30	130
Dibromochloromethane															
1,1,2 Trichloroethane															
Benzene						1.1J	8.8J		3.7J						
Cis-1,3 Dichloroprorene															
2-Chloroethylvinyl Ether															
Bromoform															
2-Hexanone															
4-Methyl-2pentatone															
Tetrachloroethene	17	16		6.3	47	2.3J					5.4	1.4J	3.9J	1.6J	12
Toluene															
Chlorobenzene															
Ethylbenzene							5.1J								
Syrene															
Total Xylenes															

Note: Monitoring Wells G-101 through G-104 installed by I.E.P.A.
Well number followed by letter "A" indicates deep well, "B" indicates shallow well in well nest.
"J" indicates value is semi-quantitative i.e. below the CRDL.

TABLE 5 (Page 4)

	FIT MONITORING WELLS (MW)												
	6	7	8	9	10	11	12A	12B	13	14	Dup. 1B	Blk 1	Blk 2
Bromodichloromethane													
1,1,2,2 Tetrachloroethane													
1,2 Dichloropropane													
Trans 1,2 Dichloropropene													
Trichloroethene	1.7J			3.0J			1.0J		7.3		3.5J		
Dibromochloromethane													
1,1,2 Trichloroethane													
Benzene				0.8J	1.0J						6.2		
Cis 1,3 Dichloroprorene													
2 Chloroethylvinyl Ether													
Bromoform													
2-Hexanone													
4-Methyl-2pentatone											1.8J		
Tetrachloroethene	1.3J	2.5J		1.0J		1.1J			1.2J		1.9J		
Toluene													
Chlorobenzene											2.0J		
Ethylbenzene											4.7J		
Tyrene													
Total Xylenes											2.7J		

Note: Monitoring Wells G-101 through G-104 installed by I.E.P.A.
Well number followed by letter "A" indicates deep well, "B" indicates shallow well in well nest.
"J" indicates value is semi-quantitative i.e. below the CRDL.

TABLE 6
INORGANIC COMPOUNDS DETECTED IN
GROUNDWATER SAMPLES COLLECTED ON APRIL 25, 1985
CONCENTRATIONS REPORTED IN mg/l (ppm)

	I. E. P. A. WELLS					FIT MONITORING (MW)									
	G-101	Dup. G-101	G-102	G-103	G-104	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Aluminum			5.10							.228					
Antimony															
Arsenic															
Barium						.213	.262	.512	.254	.236					
Beryllium															
Cadmium															
Calcium	102.6	101	85.82	63.1	106.4	53.22	59.75	20.32	94.99	94.52	69.24	71.11	100.8	55.02	113.6
Chromium			.027	.081								.010			
Cobalt															
Copper			.070		.030				.048						
Iron	.696	.638	9.88	.165			.549		.112	2.87		.739		.659	
Lead	.008	.008	.023			.0079		.0054	.021	.015	.014	.0078	.012		
Magnesium	50.24	48.82	47.47	31.12	32.41	30.97	39.38	15.84	38.58	51.7	21.6	34.74	36.99	31.09	41.63
Manganese	.404	.411	.706		.501	.202	.082	.032	.882	.189	.596	.094	.163	.168	.112
Mercury															
Nickel	.062	.057													
Potassium	27.42	22.99	5.935			6.746	56.99	38.81	42.09	83.18	35.57				
Selenium			.008												
Silver															
Sodium	100.9	94.96	664.3	32.66	89.79	22.85	139.4	93.53	143.7	508	49.88	26.55	50.96	21.8	35.67

Well number followed by "A" indicates deep well, "B" indicates shallow well in well nest

TABLE 6 (Page 2)
INORGANIC COMPOUNDS DETECTED IN
GROUNDWATER SAMPLES COLLECTED ON APRIL 25, 1985
CONCENTRATIONS REPORTED IN mg/l (ppm)

	MONITORING WELL (MW)												
	6	7	8	9	10	11	12A	12B	13	14	Dup. 1B	Blk 1	Blk 2
Aluminum								.218		.330			
Antimony													
Arsenic													
Barium					.258						.280		
Beryllium													
Cadmium													
Calcium	59.35	72.17	71.59	38.03	42.21	62.39	64.21	123.7	62.22	112.8	52.95		
Chromium								.016	.013				
Cobalt													
Copper				.048									
Iron	.274			.116	.176	.296	.128	.710			.353		.107
Lead		.0075		.011	.013		.018	.015	.019	.011	.0056		
Magnesium	35.65	36.7	39.31	36.4	38.49	35.38	36.4	50.21	33.72	38.35	38.62		
Manganese	.150	.367		.573	.114	.146	.162	1.42	.232	1.69	.070		
Mercury													
Nickel				.065									
Potassium	5.6			79.61	94.21				8.20		62.44		
Selenium													
Silver												.012	
Sodium	22.05	17.62	19.59	158.5	171.6	21.73	18.05	17.61	130.1	9.85	141.1		

TABLE 6 (Page 3)

	I. E. P. A. WELLS					FIT MONITORING (MW)									
	G-101	Dup. G-101	G-102	G-103	G-104	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Thallium															
Tin															
Vanadium															
Zinc	.082	.089	.086	.044	.045		.024	.039	.066	.224	.042	.048	.030	.047	.036
Cyanide							.011			.018					

Well number followed by "A" indicates deep well, "B" indicates shallow well in well nest

TABLE 6 (Page 4)

	FIT MONITORING WELL (MW)												
	6	7	8	9	10	11	12A	12B	13	14	Dup. 1B	Blk1	Blk 2
Thallium													
Tin													
Vanadium													
Zinc		.044	.051	.079	.032	.100					.032		
Cyanide													

TABLE 7
COMPARISON OF VOLATILE ORGANIC COMPOUNDS
DETECTED IN GROUNDWATER SAMPLES COLLECTED
DURING THREE SAMPLING EPISODES AT WELLS
IN AND AROUND IPC
CONCENTRATIONS REPORTED IN ug/l (ppb)

	I.E.P.A. SAMPLES 4-26-83				FIT SAMPLES 8-14-84					FIT SAMPLES 4-25-85				
	G-101	G-102	G-103	G-104	G-101	G-102	G-103	Dup. G-103	G-104	G-101	Dup. G-101	G-102	G-103	G-104
Vinyl Chloride	NA	NA	NA	NA	-	-	-	-	53.5	110	100	-	-	88
Chloroethane	NA	NA	NA	NA	-	-	-	-	-	89	92	-	-	-
1,1 Dichloroethene	NA	NA	NA	NA	-	-	-	-	-	-	-	-	-	27
1,1 Dichloroethane	630	13	74	4	220	18.3	71.2	123	1070	890	940	-	10	2400
Trans-1,2 Dichloroethene	3	22	62	77	19.3	20.1	82.7	146	1280	-	-	13	30	1500
Chloroform	-	-	2	2	-	-	-	-	25.4	-	-	-	-	27
1,1,1 Trichloroethane	28	9	860	350	47.5	28.4	144	205	1140	270	250	-	37	2100
Trichloroethene	2	2	30	62	12.3	-	17.5	30.8	99.6	20	20	-	5.1	130
Tetrachloroethene	5	-	2	8	8.6	19.5	15.6	21.8	16.5	17	16	-	6.3	47

Note: NA = Not Analyzed for
- = Analyzed for but not detected

TABLE 8
COMPARISON OF INORGANIC COMPOUNDS
DETECTED IN GROUNDWATER SAMPLES
COLLECTED DURING THREE SAMPLING EPISODES
FROM WELLS IN AND AROUND IPC
CONCENTRATIONS REPORTED IN mg/l (ppm)

	IEPA SAMPLES 4-26-83				FIT SAMPLES 8-14-84					FIT SAMPLES 4-25-85				
	G-101	G-102	G-103	G-104	G-101	G-102	G-103	Dup. G-103	G-104	G-101	Dup. G-101	G-102	G-103	G-104
Aluminum												5.1		
Antimony														
Arsenic	.007	.001		.002	.007									
Barium	.30			.20	.082	.085	.05	.05	.138					
Beryllium														
Cadmium														
Calcium	94.6	79.2	111	111	136	80	98.9	100	138	102.6	101	85.82	63.1	106.4
Chromium			.04				.049	.055	.009			02.7	.081	
Cobalt									.017					
Copper	.01	.01	.03	.04			.008	.006	.025			.07		.03
Iron	3.1						.092			.696	.638	9.88	.165	
Lead									.094	.008	.008	.023		
Magnesium	40.2	37.1	43.5	43.8	54.5	45.7	41.8	42.1	50.9	50.24	48.82	47.47	31.12	32.41
Manganese	.21	.16	.01	.91	.266	.126	.012	.011	1.6	.404	.411	.706		.501
Mercury									.0002					
Nickel	.20				.033				.071	.062	.057			
Potassium	93.6	3.3	3.1	15.4	13.5	3.47	3.32	3.0	7.1	27.42	22.99	5.93		
Selenium		.001	.001									.008		
Silver														
Sodium	292	17.3	21.8	46	60.8	19.9	32.3	32.6	85.8	100.9	94.96	664.3	32.66	89.79
Thallium														
Tin														
Vanadium														
Zinc							.042			.082	.089	.086	.044	.045
Cyanide	.01				.009	.024	.027	.037	.019					

More specifically, an observed release for HRS can be scored at IPC using MW-12B as an upgradient/background well and G-104 as the downgradient. MW-12B contained no compounds above the Contract Required Detection Limit (CRDL) while G-104 contained vinyl chloride 88 ppb, 1,1-dichloroethene 27 ppb, 1,1-dichloroethane 2,400 ppb, trans-1,2-dichloroethene 1500 ppb, chloroform 27 ppb, 1,1,1 trichloroethane 2100 ppb, trichloroethene 130 ppb and tetrachloroethene 47 ppb. Both wells are screened at the top of the aquifer. In addition, deep wells MW-11 and MW-6, screened above the previously mentioned silt/clay spur, show 1,1-dichloroethane, trans-1,2-dichloroethene and 1,1,1-trichloroethane indicating that contamination has spread vertically throughout this section of the aquifer.

At Peoples Avenue Landfill, the fact that IPC is located upgradient makes it difficult to delineate which contaminants are coming from the Peoples Avenue site alone. Virtually the same volatile compounds were detected at both sites. Therefore, to score an observed release at Peoples Avenue, only benzene values can be used. It was the only contaminant found in Peoples Avenue wells that was not found in IPC wells. Benzene at 6.2 ppb was detected above the CRDL in MW-1B and not detected in any of the upgradient wells, i.e., MW-4B, MW-5B, MW-13 or MW-14. Benzene was also found in MW-1A, MW-2B, MW-9 and MW-10 but values were semi-quantitative and therefore not usable for HRS. Contaminant levels detected in well nests at Peoples Avenue also indicate that contamination has spread vertically down to lower portions of the aquifer, although the entire depth of the aquifer has not been affected. This can be seen in nest MW-2A, MW-2B. MW-2A is screened at 185' below the surface, 60' deeper than other deep wells in the study. Contaminants were not detected in this well.

The use of "Vari-Flo" as a drilling fluid to drill deep monitoring wells did not effect the quality of water samples. Samples of "Vari-Flo" were sent to CRL for a priority pollutant scan to assure that use of this product would not bias the sample results. No organic compounds were detected in the "Vari-Flo" sample as it was used in the borings. Inorganic data is presented in Table 9.

Table 9
Inorganic Results for
"Vari-Flo" Drilling Fluid
Concentrations Reported In mg/l (ppm)

	Powder	Hydrated with Tap Water	Tap Water	After Natural Breakdown
Aluminum		.86 J		.149 J
Antimony				
Arsenic				
Barium			2.49	.181 J
Beryllium				
Cadmium				
Calcium	632 J	88.2 J	78.1	63.05
Chromium				.013
Cobalt				
Copper	3.1 J	.24 J	.52	.03
Iron	56	2.68	9.44	1.541
Lead	1.5 J	.142	.095	
Magnesium	343 J	38.8 J	35.6 J	30.06
Manganese	2.5 J	.188 J	1.44	
Mercury				.00028
Nickel				
Potassium	2530 J	30 J	17.9 J	18.28
Selenium	2.7 J			
Silver				
Sodium		14.4	42.2 J	21.36
Thallium				
Tin				
Vanadium				
Zinc	34	1700	109	.689

"J" indicates values are semi-quantitative, i.e. below the CRDL

6.0 CONCLUSIONS

6.1 GROUND WATER FLOW CHARACTERISTICS

Groundwater flow characteristics at the Peoples Avenue/IPC study area were determined upon completion of monitoring well installation. Flow characteristics which were determined include potentiometric surface, hydraulic conducitiy and groundwater velocity. The following conclusions are based on boring log information, monitoring well water level measurments and slug test data collected over a period of one year:

1) Groundwater flows through Peoples Avenue and IPC under unconfined conditions.

2) At Peoples Avenue, groundwater flows in a southwest direction towards the Rock River.

3) Potentiometric surface maps drawn from water levels measured in shallow wells at IPC, indicate that groundwater flow at IPC is affected by the pond (Gunite Pond) north of the site. Water levels in the pond are artifically high due to the discharge it receives from Gunite Kelsey/Hayes foundry across the street. These high water levels produce radial flow patterns around the pond. These flow patterns then produce a southerly flow at the site that turns towards the southwest with increasing distance from the pond. The pond also acts as a local recharge point for the sand and gravel aquifer.

4) The mean hydraulic conductivity for all aquifer materials tested in the study area was calculated to be 9.0×10^{-2} cm/sec. This value corresponds to values given for a clean sand dravel in the literature, this valve was further substantiated by split spoon samples of the same material taken in the screened zone of each well.

5) The mean groundwater velocity calculated at IPC was 901.5 ft/yr. compared to 406.4 ft/yr. at Peoples Avenue. The increased velocity at IPC may be attributed to the recharge affect produced by Gunite Pond.

6) Water level elevations measured at both the Rock River and monitoring wells indicate that groundwater from IPC and Peoples Avenue ultimately discharges to the Rock River. This is substantiated by a southwest groundwater flow direction towards the river and the upward vertical gradients measured in monitoring well nests. Fluctuations are expected and would be due to precipitation or seasonal river events.

   At this time it is unknown how much of the aquifer is discharging to the river. Additional monitoring well installations would be required to determine how much contamination is passing into the river and how much the bedrock and lower portions of the aquifer are contributing to base flow in the river.

7) Water levels in Sahlstroms pit represent water table conditions and therefore do not affect groundwater flow characteristics.

6.2 CONTAMINANTS IDENTIFIED IN GROUNDWATER

Groundwater samples collected from both IEPA and FIT wells indicate that the aquifer is contaminated with numerous volatlve organic compounds and heavy metals. For this discussion the two sites will be considered separately. Also, upgradient wells will be distinguished from downgradient wells and only analytical values above the CRDL will be considered.

At IPC, the upgradient wells are designated MW-12A and MW-12B. These wells showed no contaminants above the CRDL. Downgradient wells include G-101, G-102, G-103, G-104, MW-6 MW-7, and MW-11. All of these wells are contaminated with at least one of the following

organic compounds: vinyl chloride, chloroethane, 1,1 dichloroethene, 1,1 dichloroethane, chloroform, 1,1,1 trichlorgethane, trichloroethane, and tetrachloroethene, and trans-1,2, dichloroethene. G-104, the most contaminated well, contained eight of these nine compounds.

Upgradient wells at Peoples Avenue are MW-4A, MW-4B, G-104 and G-103. The latter two also serve as downgradient wells for IPC and are therefore highly contaminated. MW-4A was clean and MW-4B, the shallow well in the nest showed 1,1,1 trichlorethane, trichloroethene and terachloroethene. Downgradient wells for Peoples Avenue include MW-1A, MW-1B, MW-2A, MW-2B, MW-3A, MW-3B, MW-8, MW-9, and MW-10. All nine of the above metioned compounds plus 1,2 dichloroethane and bezene were detected downgradient at Peoples Avenue. Nothing was detected above the CRDL in downgradient deep wells MW-2A and MW-3A.

The remaining wells, MW-13, MW-5A, MW-5B and MW-14 were positioned to define groundwater flow and detect any contaminants which may have been coming from Gunite Kelsey/Hayes foundry. Nothing was detected in the upgradient MW-14 well. Contaminants detected in the downgradient wells were: trichloroethene, and tetrachloroethene in MW-5B; 1,1 dichloroethane, trans-1,2 dichloroethene, 1,2 dichloroethane and trichloroethene in MW-13.

Heavy metals were detected sporadically throughout the monitoring system. These included: chromium, G-102, G-103, MW-4A, MW-12B, MW-13; nickel, G-101, MW-9; selenium, G-102; cyanide MW-1B, MW-3A; copper G-102, G-104, MW-2B, MW-9 and lead. Lead was detected in 16 of the 24 wells including all of the upgradient wells.

6.3 LATERAL AND VERTICAL EXTENT OF CONTAMINATION

Groundwater sample results show a contaminant plume exists in the IPC/Peoples Avenue study area. The exact lateral and vertical extent of this plume can not be determined without further sampling and well installation. Extending the monitoring network could delinate the plume boundaries.

However, two things can be said: 1) due to the close proximity of the Rock River and the detection of contamination in MW-1A and MW-1B the plume probably extends to the Rock River; 2) well nests indicate that some volatile compounds have overcome the upward vertical gradient within the saturated zone and have migrated to lower portions of the aquifer. However the entire vertical extent of the aquifer has not yet been affected.

6.4 SOURCE(S) OF CONTAMINATION

In order to identify a potential source(s) of contamination, at least four conditions should be met: 1) contaminants detected in downgradient wells should be at significantly higher concentrations than those detected in upgradient wells; 2) all wells should be as close to the site as necessary to eliminate any intervening potential sources; 3) the most threatened aquifer should be monitored, and 4) compounds detected in downgradient wells should be identical to or chemically linked to compounds suspected to have been on-site.

At IPC, all of these conditions have been met. Contaminants have been detected in downgraident well G-104 at significantly greater concentrations than in upgradient MW-12B. Wells are sufficiently close to the site to eliminate other sources and they are screened in the most threatened aquifer below the site. Finally, compounds detected in G-104 are industrial solvents, known to have been transported to and stored on IPC property. Thus, we can say that IPC is the source of groundwater contamination below their site and that this contaminations is presently migrating off the property.

It is more difficult to determine what Peoples Avenue is contributing to groundwater contamination in the area. This is because IPC is upgradient of Peoples Avenue. When we look at the contaminants detected in downgradient Peoples Avenue wells we see essentially the same compounds as those found in downgraident IPC wells. In addition,

concentrations found at Peoples Avenue wells are lower than those at IPC. Therefore it is difficult to say that these contaminants are coming from Peoples Avenue and not a product of contaminated groundwater flow from IPC.

There is, however, one compound seen in Peoples Avenue wells that has never been detected in IPC wells. That is benzene. Benzene was detected in downgradient MW-1B at 6.2 ppb and in MW-1A, MW-2B, MW-9 and MW-10. Benzene was not detected in any upgradient Peoples Avenue wells. This would indicate that Peoples Avenue is the source of benzene contamination in the aquifer.

Additional rounds of sampling are recommended. This would further define what chemical constituents are coming from each site and how other sources, such as Gunite Kelsey/Hayes foundry are affecting the aquifer.

6.5 HRS DATA

The following data can be used to score Peoples Avenue and IPC using the Hazard Ranking System (HRS) model:

1) An observed release can be scored at IPC using any of the contaminants detected in G-104.

2) An observed release can be scored at Peoples Avenue by using benzene, detected at 6.2 ppb in MW-1B.

3) The aquifer of concern is the glacial outwash sand and gravel deposits found below both Peoples Avenue and IPC. These deposts are hydraulically connected with the Galena-Platteville dolmite and St. Peter sandstone, making these upper bedrock units also a part of the aquifer of concern. This is substantiated by the literature and well logs which show there is no continuous confining layer separating the glacial drift from bedrock units.

4) The Rock River was measured to be 6 feet deep in August, 1985. This is not deep enough to fully transect the aquifer of concern and therefore according to the HRS model does not form a discontinuity in the aquifer of concern.

5) The closest operating Rockford Municipal well is well #4 located approximately 1 mile northwest of IPC. This is a multiple aquifer well open to a number of water bearing formations including the St. Peter sandstone.

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VOLUME 2 OF 3

APPENDIX I

BORING LOGS

PRELIMINARY HYDROGEOLOGIC
INVESTIGATION OF PEOPLES
AVENUE LANDFILL AND
INTERSTATE POLLUTION CONTROL
ROCKFORD, ILLINOIS

APPENDIX I
BORING LOGS

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-1A

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 1/24/85

Completion Date 1/25/85

Ground El. 730.27 msl

Groundwater El.
at completion

after 29 days 690.38 msl

Total Depth of Boring 102.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled due to proximity of MW-1B. Log from auger cuttings. See MW-1B log for detailed stratigraphic descriptions.	
	1	0-2' TOPSOIL dark brown sandy, clayey topsoil			3 3/4" hollow stem auger used.	
	2	2'-102' SAND AND GRAVEL firm to dense, tan, fine to coarse sand and small to medium gravel.			No samples	
	3					
	4				Well Construction 5" of 2" I.D. 0.010 PVC screen - 96.5' to 101.5' Natural sand and gravel screen pack, natural sand and gravel backfill. Seal 38' to 40' Grout 5' to surface	
	5					
	6	Water at 40.0'				
	7					
	8					
	9					
	10					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-1B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 1/21/85

Completion Date 1/24/85

Ground El. 730.27 msl

Groundwater El.
at completion

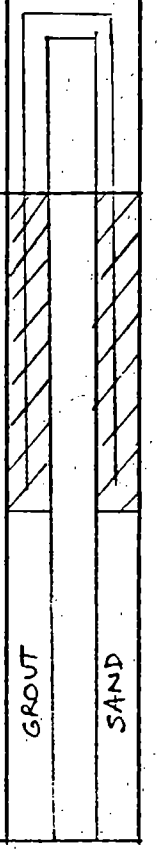
after 29 days 690.28 msl

Total Depth of Boring 116.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1	TOPSOIL Brown to black sandy topsoil, dark brown fine sand. Trace small gravel.	4/6/12	1		
	2					
	3					
	4					
	5	SAND Firm, tan, fine to medium sand. Little medium gravel. Moist.	3/3/1	2		
	6					
	7					
	8					
	9					
	10		5/7/8	3		



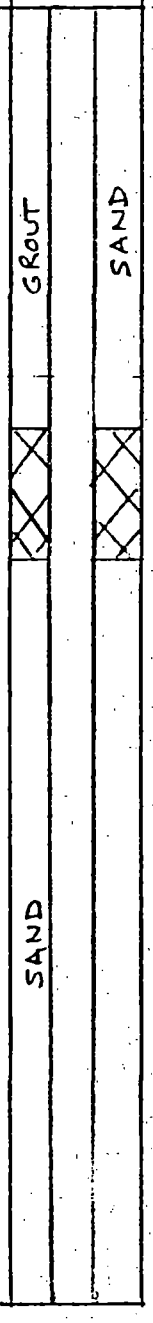
State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 2 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
			5/7/8	3		
	11					
	12					
	13					
	14					
	15					
	16		6/10/13	4		
	17					
	18					
	19					
	20	SAND Firm, tan, fine to medium sand. Trace small gravel. Very moist.	4/10/16	5		
	21					
	22					
	23					
	24					
	25					
	26		7/9/13	6		
	27					
	28					
	29					
	30					



State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 3 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL Dense, tan, fine to medium sand and medium gravel. Moist	9/22/18	7		
	32					
	33					
	34					
	35	SAND Firm, tan, fine to medium sand. Trace small gravel. Moist.	6/11/16	8		
	36					
	37					
	38					
	39					
	40	SAND AND GRAVEL Dense, tan, fine to coarse sand and small to medium gravel. Saturated.	15/20/14	9	Water at 40'	
	41					
	42					
	43					
	44					
	45					
	46		7/13/15	10		
	47					
	48					
	49					
	50					

State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 4 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	SAND AND GRAVEL As before	10/15/22	11		
	52					
	53					
	54					
	55					
	56		14/16/18	12		
	57					
	58					
	59					
	60					
	61		17/14/12	13		
	62					
	63					
	64					
	65					
	66		18/12/15	14		
	67					
	68					
	69					
	70					

State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 5 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71		11/8/7	15		
	72					
	73					
	74					
	75					
	76	SAND Loose, tan, fine sand. Trace small gravel. Trace medium sand. Saturated.	7/4/3	16		
	77					
	78					
	79					
	80					
	81		3/2/1	17		
	82					
	83					
	84					
	85					
	86		1/0/0	18		
	87					
	88					
	89					
	90					

State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 6 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91	SAND AND GRAVEL Firm, tan, fine to coarse sand and small to medium gravel. Saturated.	6/11/14	19	Occasional large gravel with secondary cementation.	
	92					
	93					
	94	SAND Firm, tan, fine sand. Trace small gravel. Saturated.				
	95					
	96		5/5/7	20		
	97					
	98					
	99					
	100					
	101		8/12/15	21		
	102					
	103					
	104					
	105					
	106	SAND AND GRAVEL Dense, tan, fine to coarse sand and small to medium gravel. Occasional large gravel. Saturated.	10/14/20	22		
	107					
	108					
	109					
	110					

State Illinois

Boring No. MW-1B

Site Peoples Ave. LF/IPC

Page 7 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	111		35-100/3"	23		
	112	SAND AND GRAVEL Dense, tan, coarse sand and medium gravel. Trace silt. Occasional very weathered, tan to brown DOLOMITE fragments with silty, clayey binder. Very fractured. Saturated.			Rod chatter. Possible highly fractured zone of bedrock-drift interface	
	113					
	114					
	115					
	116		25/23/14	24		
	117	E.O.B. 116.5				

Well Construction

5' of 2" I.D. 0.010 PVC screen - 39' to 44'. Natural sand screen pack

Natural sand back-fill

Bentonite pellet seal 16.5' - 18.5'

Grout and natural sand 16.5' to surface

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-2A

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 1/28/85

Completion Date 1/30/85

Ground El. 738.90 msl

Groundwater El.
at completion

after 22 days 690.81 msl

Total Depth of Boring 186.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1 2 3	SILTY SAND AND GRAVEL Medium dense. Dark brown sandy silt to silty sand with trace gravel and trace clay.	8/6/10	1	Gravel seam at 2' and 3.5'	
	4 5 6 7 8	SAND AND GRAVEL Very loose. Yellow brown, fine to coarse sand with some gravel. Moist.	3/3/2	2	Color change at 4'	
	9 10	SAND AND GRAVEL Medium dense, tan, fine sand and small to medium gravel. Moist.				

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 2 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11		5/6/6	3		
	12					
	13					
	14	SAND AND GRAVEL Medium dense. Tan, sand and gravel. Fine to coarse sand, fine to coarse gravel. Moist.			Mixed mineralogy	
	15					
	16		11/14/12	4		
	17					
	18					
	19					
	20					
	21					NATURAL SAND
	22	SAND AND GRAVEL Dense. Tan, sand and gravel. Fine to coarse sand, small to coarse gravel. Moist.				
	23					
	24					
	25					
	26		9/14/17	5		
	27					
	28					
	29					
	30					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 3 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL (35.0 - 36.0) medium dense, tan, fine to medium sand. Little small gravel. Moist.				NATURAL SAND
	32					
	33				No gravel in bottom 8" of split spoon	
	34					
	35					
	36		13/10/13	6		
	37					
	38					
	39	SAND AND GRAVEL Dense. Tan fine to coarse sand and small gravel. Moist.				
	40					
	41		9/15/17	7	Slightly moist.	
	42					
	43					
	44	SAND Dense (45.0' - 46.0') tan fine to medium sand with trace coarse and fine gravel. (46.0 - 46.5') tan fine sand with trace medium sand.				
	45					
	46		9/16/20	8	Moist	
	47				Water at approximately 47.0'	
	48					
	49	SAND Medium dense. Brown fine				
	50					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 4 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	To medium sand with trace coarse and fine gravel. Saturated.	6/11/18	9	Rotary method with "Revert" used to advance boring from 50' to 186.5'.	
	52					
	53					
	54				Sample Interval = 10'	
	55					
	56	SAND AND GRAVEL				
	57	Dense (60.0' - 61.0') gray, tan fine to medium sand. Trace small and coarse gravel. (61.0' - 61.5') gray-tan, medium to coarse sand. Trace small to coarse gravel. Saturated.				
	58					
	59					
	60					
	61		20/20/16	10		NATURAL SAND
	62					
	63					
	64					
	65					
	66	SAND AND GRAVEL				
	67	Medium dense, gray-tan, sand and gravel. Fine to coarse sand, small to coarse gravel with trace fines. Saturated.				
	68					
	69					
	70					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 5 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71		13/9/8	11		
	72					
	73					
	74					
	75					
	76	SAND Very dense. Gray-tan, fine to medium sand. Trace coarse and small gravel. Saturated.				
	77					
	78					
	79					
	80					NATURAL SAND
	81		17/31/36	12		
	82					
	83					
	84					
	85					
	86					
	87	SAND Very dense. Gray-tan, fine to medium sand. Trace coarse and small gravel. Saturated.				
	88					
	89					
	90					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 6 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91		28/24/30	13	Slight increase in coarse sand and gravel.	
	92					
	93					
	94					
	95					
	96	SAND Tan, fine to medium sand. Trace small to coarse gravel. Saturated.				
	97					
	98					
	99					
	100					NATURAL SAND
	101		25/44/70	14		
	102					
	103					
	104	SAND Very dense. Gray-tan fine sand. Trace medium to coarse gravel. Saturated.				
	105					
	106		80-68/3"	15		
	107					
	108					
	109	SAND Very dense. Gray-tan, fine				
	110					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 7 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	111	Sand. Trace medium to coarse gravel. Saturated.	27/40/46	16		
	112					
	113					
	114	SAND Dense, tan, fine-medium, sand. Trace small gravel. 2" medium gravel seam at 115.5'. Saturated.				
	115					
	116		16/20/25	17		
	117					
	118					
	119	SAND Very dense, tan, fine-coarse sand. Some small gravel. Saturated.				NATURAL SAND
	120					
	121		31/37/35	18		
	122					
	123					
	124	SAND Very dense, tan, fine-medium sand. Trace small gravel. Saturated.				
	125					
	126		41/45/-50/3"	19		
	127					
	128					
	129	SAND AND GRAVEL Very dense, tan, fine-medium sand. Trace small gravel				
	130					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 8 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	131	Sand. Trace small gravel. Saturated.	Slipped rod 12" 25	20		NATURAL SAND
	132					
	133	SAND AND GRAVEL				
	134	Very dense. Tan, fine-medium sand. Trace small gravel.				
	135	Saturated.				
	136		19/45/ -50/5"	21		
	137					
	138	SAND AND GRAVEL				
	139	Very dense. Tan fine to coarse sand, trace small gravel.				
	140	Saturated.				
	141		25/33/ 35	22		
	142					
	143	SAND AND GRAVEL				
	144	Very dense. Tan fine to coarse sand, trace small gravel.				
	145	Saturated.				
	146		23/28/ 42	23		
	147					
	148	SAND AND GRAVEL				
	149	Very dense. Tan fine to coarse sand, trace small				
	150					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 9 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Gravel. Saturated.	28/27/38	24	Decrease in coarse sand	
	151					
	152					
	153					
	154	SAND Very dense. Tan fine to coarse sand, trace small gravel. Saturated.				
	155					
	156		25/35/43	25		
	157					
	158					
	159	SAND AND GRAVEL Very dense. Tan fine to coarse sand, trace small gravel. Saturated.				NATURAL SAND
	160					
	161		25/34/47	26		
	162					
	163					
	164	SAND Very dense. Yellowish brown - brown. Fine-medium sand. Little small gravel. Saturated.				
	165					
	166		35/45-50/3"	27		
	167					
	168					
	169					
	170					

State Illinois

Boring No. MW-2A

Site Peoples Ave. LF/IPC

Page 10 of 10

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	171	170.0' - 171.5' Drilled through this sample.				
	172	172' - 174.5' cobbles				
	173					
	174	SILTY GRAVEL Very dense. Gray, possibly silty small to coarse gravel.				
	175	Little fine sand. Gravel angular to subrounded. Saturated.				
	176		25/45/40	28	Mixed mineralogy	
	177					
	178					
	179	SILTY GRAVEL Very dense. Gray, possibly silty small coarse gravel.				
	180	Little fine sand. Gravel angular to subrounded. Saturated.			Well Construction 5' of 2" I.D.	
	181		32/43-50/3"	29	0.010 PVC screen	
	182				from 180' - 185'	NATURAL SAND
	183				Natural sand screen pack	
	184	SAND AND GRAVEL Very dense, brown, fine-medium sand. Trace small gravel.			Natural sand back-fill	
	185	Saturated.				
	186		30/47-50/2"	30	Bentonite pellet seal 23' to 25'	
	187	E. O. B 186.5'			Grout 12' to surface	
	188					
	189					
	190					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-2B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/7/85

Completion Date 2/7/85

Ground El. 724.67 msl

Groundwater El.
at completion

after 12 days 690.56 msl

Total Depth of Boring 56.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole blind drilled due to proximity of MW-2A. See MW-2A log for detailed stratigraphic description.	
	1	0 - 56' SAND, SAND AND GRAVEL			3 3/4" hollow stem auger used No samples	
	2					
	3	Firm to dense, tan, fine to coarse sand and small gravel.			Well Construction 5' of 2" I.D. 0.010 PVC screen from 48' to 53'	
	4					
	5	Water at 48'			Natural sand screen pack	
	6					
	7				Natural sand backfill	
	8					
	9				Bentonite pellet seal 36' - 40'	
	10				Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-3A

Drilling Firm Canonie

Type of Drill Mobile B-61

Driller J. Koditek

Geologist K. Phillips

Start Date 2/7/85

Completion Date 2/11/85

Ground El. 724.67 msl

Groundwater El.
at completion

after 8 days 692.46 msl

Total Depth of Boring 126.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1 2	SAND AND GRAVEL Medium dense, dark brown, fine-medium sand and small gravel. Trace black silty clay.	4/7/9	1	HNU = 0.6 ppm = background	
	3 4 5	SAND AND GRAVEL Medium dense, firm, tan, fine-medium sand and coarse gravel. Moist.	7/9/12	2	Varied mineralogy. Very coarse	
	6 7 8	SAND AND GRAVEL Medium dense, firm, tan-light brown, fine sand. Some small gravel. Moist.	7/7/10	3		
	9 10	SAND AND GRAVEL Medium dense, firm, tan-light brown, fine, medium sand. Trace small gravel. Moist.	7/7/11	4	2" coarse gravel seam at 8.5'.	

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Page 2 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11					
	12					
	13					
	14					
	15	SAND AND GRAVEL Medium dense, light brown, fine-coarse sand. Little small gravel. Occasional coarse gravel. Moist.	10/13/14	5		
	16					
	17					
	18					
	19	SAND Dense, tan-light brown, fine-medium sand. Trace small gravel. Moist. Occasional coarse gravel.			Darker, fine sand band at 20'-20'3"	NATURAL SAND
	20					
	21		8/12/20	6		
	22					
	23					
	24	SAND Medium dense, tan-light brown, fine-medium sand. Trace small gravel. Moist. Occasional coarse gravel.				
	25					
	26		6/10/12	7		
	27					
	28					
	29	SAND Medium dense, tan, fine sand. Moist.				
	30					

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31		13/13/15	8		
	32					
	33					
	34	SAND Dense, brown, fine sand. Trace small gravel. Very moist to wet.			Water at 34'	
	35					
	36		13/14/18	9		
	37					
	38					
	39	SAND AND GRAVEL Dense, brown, fine-coarse sand and small gravel. Saturated. Coarse sand predominates.			Sand blow-up 3' in augers	
	40					
	41		13/18/13	10		
	42					
	43					
	44	SAND AND GRAVEL Dense, light brown, fine sand. Some coarse gravel. Saturated. Gravel is angular to subangular.			Rotary method with "Revert" used to advance boring from 45' to 126.5'	NATURAL SAND
	45					
	46		17/17/14	11		
	47					
	48					
	49	SAND AND GRAVEL Medium dense, light brown, coarse sand and small-medium gravel.			Petroleum odor.	
	50					

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Page 4 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Saturated. Trace fine sand.	12/12/			
	51	Occasional coarse gravel.	12	12		
	52					
	53					
		SAND				
	54	Medium dense, light brown fine sand. Saturated.				
	55					
	56		13/14/ 15	13		
	57					
	58					
		SAND AND GRAVEL				
	59	Medium dense, light brown. Coarse sand and small gravel.				
	60	Saturated.			Slight odor	
	61		10/9/7	14		
	62					
	63					
		SAND AND GRAVEL				
	64	Medium dense. Light brown. Coarse sand and small gravel.				
	65	Saturated.				
	66					
			6/5/6	15	1" brown sandy silt in tip of spoon at 66.4'.	
	67					
	68					
		SAND				
	69	Very dense. Light brown fine-medium sand.				
	70					

NATURAL SAND

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Page 5 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Trace small gravel. Saturated.	13/24 40	16		
	71					
	72					
	73					
		SAND AND GRAVEL				
	74	Medium dense. Light brown coarse sand and small gravel.				
	75	Occasional coarse gravel. Saturated.	10/9/ 17	17		
	76					
	77					
	78					
		SAND				
	79	Dense. Light brown fine-medium, sand. Trace small gravel.				
	80	Trace coarse sand. Saturated.	11/15/ 18	18		NATURAL SAND
	81					
	82					
	83					
	84	SAND				
	85	Very dense. Light brown fine-medium sand. Trace small gravel. Trace coarse sand.				
	86	Saturated.	25/42 -50/2"	19		
	87					
	88					
		SAND AND GRAVEL				
	89	Very dense. Coarse sand and				
	90					

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Page 6 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91	Coarse gravel. Trace silt. Trace fine sand. Saturated. Occasional cobble.	18/22/35	20		
	92					
	93					
	94	SAND Very dense. Light brown fine sand. Saturated.				
	95					
	96		22-50/3"	21		
	97					
	98					
	99	SAND Very dense. Light brown, fine sand. Trace small gravel. Saturated.				NATURAL SAND
	100					
	101		26/38/47	22		
	102					
	103					
	104	SAND Very dense. Light brown, fine sand. Trace small gravel. Saturated.				
	105					
	106		26/30/46	23		
	107					
	108					
	109					
	110	SAND Very dense. Light brown fine				

State Illinois

Boring No. MW-3A

Site Peoples Ave. LF/IPC

Page 7 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	111	Sand. Trace small gravel. Saturated.	60-50/1"	24		NATURAL SAND
	112					
	113					
	114	SAND AND GRAVEL Very dense. Yellowish-brown coarse sand and medium-coarse gravel (angular-subangular). Trace fine sand. Saturated.				
	115					
	116		50/4"	25		
	117					
	118					
	119					
	120					
	121		28/32/47	26	Well Construction 10' of 2" I.D. 0.010 PVC screen from 110.5' to 120.5' 6" of pea gravel 120.5' to 121.0' Natural sand and gravel screen pack and backfill Bentonite pellet seal 32' to 34' Grout 5' to surface	
	122	SILT Very dense, yellowish brown and gray silt. Little fine sand. Moist. Thin fine sand seams from 125.5' to 126'				SILT
	123					
	124					
	125					
	126		8/12	27		
	127	E.O.B. 126.0				
	128					
	129					
	130					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-3B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/11/85

Completion Date 2/12/85

Ground El. 724.67 msl.

Groundwater El.
at completion

after 7 days 692.49 msl.

Total Depth of Boring 44.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled due to proximity of MW-3A. See log for MW-3A for detailed stratigraphic description.	
	1 2 3 4 5 6 7 8 9 10	0-44.0' SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 34'			3 3/4" I.D. Hollow stem auger used. No samples. Well Description 5' of 2" I.D. 0.010 PVC screen from 39' to 44' Natural sand screen pack Natural sand back-fill Bentonite pellet seal 18' to 20' Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-4A

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/12/85

Completion Date 2/13/85

Ground El. 729.98 msl

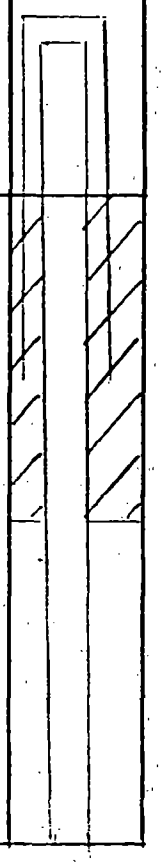
Groundwater El.
at completion

after 6 days 693.21 msl

Total Depth of Boring 116.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1 2 3	CLAYEY SAND Medium dense. Frozen. Dark brown clayey fine-medium sand. Some silty clay. Trace small gravel.	15/8/11	1		
	4 5	SILTY SAND Very loose. Brown, silty, fine sand. Little silt. Trace small gravel. Dry.				
	6 7		4/3/2	2		
	8 9 10	SAND AND GRAVEL Medium dense. Tan-light brown,				

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 2 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	Fine-coarse sand and small gravel. Dry.	6/12/14	3		
	12					
	13					
	14	SAND AND GRAVEL Medium dense. Tan-light brown, fine-coarse sand and small gravel. Dry.				
	15					
	16		6/10/10	4		
	17					
	18					
	19	SAND Medium dense. Tan-light brown, fine-medium sand. Trace small gravel. Dry.				NATURAL SAND
	20					
	21		6/12/18	5		
	22					
	23					
	24	SAND Medium dense. Tan-light brown, fine-medium sand. Trace small gravel. Dry.				
	25					
	26		9/12/12	6		
	27					
	28					
	29	SAND AND GRAVEL Very dense. Tan-light brown, fine-medium sand and small-medium gravel. Dry.				
	30					

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 3 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31		12/20/35	7		NATURAL SAND
	32					
	33					
	34	SAND Medium dense. Fine-medium sand. Trace small gravel. Dry.				
	35					
	36		9/16/13	8		
	37					
	38				Water at 38.5'	
	39					
	40	No sample recovered				
	41		4/6/9	9	Sample fell out of split spoon.	
	42					
	43					
	44	SAND Dense. Brown, fine sand. Saturated.				
	45				Rotary drilling method with "Revert" used to advance boring from 45' to 116.5'.	
	46		20/18/20	10		
	47					
	48					
	49	SAND AND GRAVEL Very dense. Tan - light brown,				
	50					

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 4 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	Fine-coarse sand and small gravel. Saturated.	20/24/30	11	Sample at 10' interval 50' to 110'	
	52					
	53					
	54					
	55					
	56					
	57					
	58	SAND Very dense. Coarse sand.				NATURAL SAND
	59	Saturated.				
	60					
	61		18/24/30	12		
	62					
	63					
	64					
	65					
	66					
	67					
	68	SAND Medium dense. Light brown.				
	69	Fine sand. Saturated.				
	70					

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 5 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71		12/12/12	13		
	72					
	73				Very coarse gravel or cobbles 73' - 74' and 79' - 80'	
	74					
	75					
	76					
	77					
	78					
	79	SAND AND GRAVEL Very dense. Light brown, fine-coarse sand. Trace small gravel. Occasional large gravel. Saturated.				NATURAL SAND
	80					
	81		17/28/30	14		
	82					
	83					
	84					
	85					
	86					
	87					
	88					
	89	SAND AND GRAVEL Very dense. Light brown, fine-coarse sand. Trace small				
	90					

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 6 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91	Gravel. Occasional coarse gravel. Saturated.	16/22/29	15		
	92					
	93					
	94					
	95					
	96					
	97					
	98					
	99	SAND AND GRAVEL Very dense. Coarse sand and small gravel. Occasional coarse gravel. Saturated. Trace fine sand.			Rod chatter. Very coarse gravel and cobbles from 102' - 113'	
	100					
	101		36/26/40	16		
	102					
	103					
	104					
	105					
	106					NATURAL SAND
	107					
	108					
	109					
	110					

State Illinois

Boring No. MW-4A

Site Peoples Ave. LF/IPC

Page 7 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	111	no recovery. Pounded on cobble.	50/2"	17		NATURAL SAND
	112					
	113					
	114	SILT, CLAY Very dense, gray, sand clayey silt. Some fine sand. Some silty clay. Interbedded with thin layers of fine sand and layers of silty clay. Trace small gravel throughout. Moist.				SILT
	115					
	116		15/30/14	18	Driller notes silt at 113'	
	117					
	118	E.O.B. 116.5'				
	119					
	120				Well Construction 10' of 2" I.D. 0.010 PVC screen from 102' to 112'	
	121					
	122				Natural sand and gravel screen pack and backfill	
	123					
	124				Bentonite pellet seal 30' to 32'	
	125					
	126				Grout 5' to surface	
	127					
	128					
	129					
	130					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-4B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/13/85

Completion Date 2/13/85

Ground El. 729.98 msl

Groundwater El.
at completion

after 6 days 693.20 msl

Total Depth of Boring 50'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled due to proximity of MW-4A. See MW4-A log for detailed stratigraphic description.	
	1	0-50' SAND, SAND AND GRAVEL			3 3/4" I.D. Hollow stem auger used.	
	2	Firm to dense, tan fine to coarse sand and small gravel.			No samples	
	3				Well Construction 5' of 2" I.D. 0.010 PVC screen from 43' to 48'	
	4					
	5	Water at 38.5			Natural sand screen pack	
	6					
	7				Natural sand back-fill	
	8					
	9				Bentonite pellet seal 28' - 30'	
	10				Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-5A

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/14/85

Completion Date 2/14/85

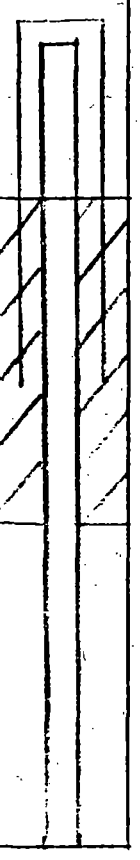
Ground El. 735.70 msl

Groundwater El.
at completion

after 5 days 693.36 msl

Total Depth of Boring 117.0'

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1 2 3	Fill Dark brown clayey sand and gravel. Concrete block, brick, wire	0	1	Did not pound on brick. Possible foundry sand.	
	4 5 6 7 8	FILL Loose dark brown-black fine-medium sand. Trace small gravel. Moist. Foundry sand-slag, concrete, etc.	2/2/2	2	-Looks oil soaked -HNU 0.4 ppm = background. No increase from sample.	
	9 10	No sample. Slag or concrete				

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 2 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11		0	3	HNU 0.8 ppm on spoils pile.	
	12					
	13					
	14	FILL Loose. Brown-black, fine sand, foundry sand. Cohesive (with oil?) Very moist.				
	15				15' sample may be virgin soil with some staining.	
	16		2/1/2	4		
	17					
	18					
	19	SAND AND GRAVEL Medium dense. Tan-light brown, fine-medium sand. Some small-medium gravel. Moist.				
	20				Natural soil. Varied mineralogy.	
	21		11/12/12	5		
	22					
	23					
	24	SAND AND GRAVEL Medium dense. Tan-light brown fine sand. Trace small gravel. Occasional coarse gravel. Moist.				
	25					
	26		10/12/15	6		
	27					
	28					
	29	SAND AND GRAVEL Medium dense. Tan-light brown				
	30					

NATURAL SAND

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 3 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	Fine-coarse sand and small gravel. Moist.	9/14/16	7		
	32					
	33					
	34	SAND AND GRAVEL Very dense. Tan-light brown, fine-coarse sand and small gravel. Moist				
	35					
	36		12/25/30	8		
	37					
	38					
	39	SAND Medium dense. Tan-light brown fine sand. Moist.				NATURAL SAND
	40					
	41		9/13/17	9		
	42				Water at 42'	
	43					
	44					
	45	SAND Dense medium dense. Tan-light brown fine sand. Saturated.			Rotary drilling method with "Revert" used to advance boring from 45' to 116.5'.	
	46		15/17/21	10		
	47					
	48					
	49	SAND Medium dense. Tan-light brown fine sand. Saturated.				
	50					

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 4 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51		16/15 13	11	Sampling interval = 10'	
	52					
	53					
	54					
	55					
	56					
	57	SAND AND GRAVEL Medium dense. Light-brown fine-coarse sand and gravel. Saturated.				
	58					
	59					
	60					NATURAL SAND
	61		16/11/ 13	12		
	62					
	63					
	64					
	65					
	66	SAND Dense. Light-brown, coarse sand. Little small gravel. Saturated.				
	67					
	68					
	69					
	70					

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 5 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71		20/22/24	13		
	72					
	73					
	74					
	75					
	76					
	77	SAND Dense. Light-brown coarse sand.				
	78	Little small gravel. Saturated.				
	79					
	80					
	81		15/19/19	14		
	82					
	83					
	84					
	85					
	86					
	87					
	88					
	89	SAND Very dense. Light brown, fine sand. Trace small gravel.				
	90	Saturated.				

NATURAL SAND

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 6 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91		40/49 -50/1"	15		
	92					
	93					
	94					
	95					
	96					
	97					
	98	SAND Dense. Light-brown, fine sand. Trace small gravel. Saturated.				
	99					
	100					
	101		15/19/ 25	16		
	102					
	103					
	104					
	105					
	106					
	107	COARSE CLASTICS				
	108	Pound on boulder. Chunk of brown dolomite in nose. Drilling through very coarse material.				
	109					
	110					

NATURAL SAND

State Illinois

Boring No. MW-5A

Site Peoples Ave. LF/IPC

Page 7 of 7

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	111		120/2"	17	Pound on boulder	NATURAL SAND
	112					
	113					
	114					
	115				Pounded spoon 115' - 116.5' with no rec. went back down, rods slipped and went to 117' without ponding.	
		SILT, CLAY	20/18/22	18		
	116	Dense, brown, sandy clayey silt. Some fine sand. Trace clay. Moist.				SILT
	117	116' - 117' hard, gray, silty clay. Little fine sand. Trace small gravel. Moist.				
	118				Well Construction	
	119	E.O.B. 117.0'			10' of 2" I.D. 0.010 PVC screen from 104' to 114'	
	120					
	121				Natural sand and gravel screen pack and backfill.	
	122					
	123				Bentonite pellet seal 22' to 24'	
	124					
	125				Grout 3' to surface	
	126					
	127					
	128					
	129					
	130					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-5B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/15/85

Completion Date 2/15/85

Ground El. 735.70 msl

Groundwater El.
at completion

after 4 days 693.32 msl

Total Depth of Boring 52.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled due to proximity of MW-5A. See MW-5A log for detailed stratigraphic description.	
	1 2 3 4 5 6 7 8 9 10	0-52' SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 42'			3 3/4" I.D. Hollow stem used. No samples Well Construction 5' of 2" I.D. 0.010 PVC screen from 46.5' to 51.5' Natural sand screen pack. Natural sand back-fill Bentonite pellet seal 36' to 38' Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-6

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/19/85

Completion Date 2/20/85

Ground El. 736.39 msl

Groundwater El.
at completion

after 69 days 694.69 msl

Total Depth of Boring 101.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1	TOPSOIL Black, some fine sand and silty clay. Frozen.				
	2					
			3/5/7	1		
	3					
	4	SAND AND GRAVEL				
	5	Firm, brown, medium sand and small gravel. Little coarse gravel. Moist.				
	6					
	7		4/9/11	2		
	8					
	9					
	10					

State Illinois

Boring No. MW-6

Site Peoples Ave. LF/IPC

Page 2 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	SAND AND GRAVEL Dense, tan to light brown, fine to coarse sand and small to medium gravel. Moist.	10/19/25	3	Occasional coarse gravel throughout. Samples at 5' intervals	NATURAL SAND
	12					
	13					
	14					
	15					
	16		11/16/19	4		
	17					
	18					
	19					
	20	SAND				
	21	Dense, brown fine to medium sand. Little small gravel. Moist.	6/11/12	5		
	22					
	23					
	24					
	25					
	26		7/21/16	6		
	27					
	28					
	29					
	30					

State Illinois

Boring No. MW-6

Site Peoples Ave. LF/IPC

Page 3 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL Dense, brown, fine to coarse sand and small to medium gravel. Moist.	10/16/13	7		NATURAL SAND
	32					
	33					
	34					
	35					
	36	SAND Dense, brown, fine sand. Trace small gravel. Moist.	10/16/14	8		
	37					
	38					
	39					
	40					
	41		9/10/16	9		
	42					
	43					
	44				Water at 44.0'	
	45					
	46		21/21/28	10		
	47					
	48					
	49					
	50					

State Illinois

Boring No. MW-6

Site Peoples Ave. LF/IPC

Page 4 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	SAND AND GRAVEL Very dense, brown, fine sand and small to medium gravel. Saturated.	12/22 30	11	Rotary drilling method with "Revert" used to advance boring from 50' to 101.5'. Sampling interval = 10 ft.	NATURAL SAND
	52					
	53					
	54					
	55					
	56					
	57					
	58					
	59					
	60					
	61		11/14/ 18	12		
	62					
	63					
	64					
	65					
	66	SAND AND GRAVEL Dense, brown fine to coarse sand and small to medium gravel. Saturated.				
	67					
	68					
	69					
	70					

State Illinois

Boring No. MW-6

Site Peoples Ave. LF/IPC

Page 5 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71		11/14/16	13		
	72					
	73					
	74					
	75					
	76					
	77					
	78					
	79					
	80					
	81	SAND Very dense, brown, fine to coarse sand and small to medium gravel. Saturated.	15/40/48	14		NATURAL SAND
	82					
	83					
	84					
	85				Occasional cobbles noted from 85' - 98'	
	86					
	87					
	88					
	89					
	90					

State Illinois

Boring No. MW-6

Site Peoples Ave. LF/IPC

Page 6 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91	SAND AND GRAVEL Dense, brown, fine to coarse sand and small gravel. Saturated.	20/22/22	15		NATURAL SAND
	92					
	93					
	94					
	95					
	96					
	97					
	98					
	99	CLAY Hard, gray, silty clay. Little fine sand. Trace small gravel. Moist.			Driller notes clay from 98'	CLAY
	100					
	101		9/12/23	16	Well Construction 10 PVC 2" I.D. 0.010 screen 86' to 96' Natural sand and gravel screen pack Bentonite pellet seal 28' - 30' Natural sand and gravel backfill to 5' Grout - 5' to surface	
	102	E.O.B. 101.5'				
	103					
	104					
	105					
	106					
	107					
	108					
	109					
	110					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-7

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/20/85

Completion Date 2/20/85

Ground El. 740.87 msl

Groundwater El.
at completion

after 71 days 693.65 msl

Total Depth of Boring 60.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled. See MW-6 log for detailed stratigraphic description.	
	1 2 3 4 5 6 7 8 9 10	0-60' SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 45'			3 3/4" I.D. Hollow stem used. No samples Well Construction 5' of 2" I.D. 0.010 PVC screen from 54' to 59' Natural sand screen pack Natural sand backfill Bentonite pellet seal 34' to 36' Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-8

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/22/85

Completion Date 2/22/85

Ground El. 737.60 msl

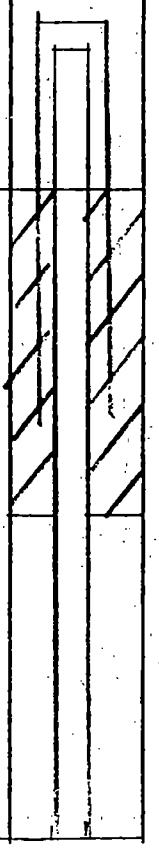
Groundwater El.
at completion

after 69 days 694.69 msl

Total Depth of Boring 56.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1	FILL				
	2	Loose brown very sandy, silty clay. Some fine-medium sand. Trace little sand, gravel. Occasional coarse gravel. Moist.	1/2/4	1		
	3					
	4					
	5					
	6		4/6/14	2		
	7					
	8					
	9	SAND AND GRAVEL Dense. Tan - light brown				
	10					

State Illinois

Boring No. MW-8

Site Peoples Ave. LF/IPC

Page 2 of 4

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	Fine-medium sand and small gravel. Moist. Occasional medium-coarse gravel.	9/21/23	3		
	12					
	13					
	14	SAND AND GRAVEL Medium dense. Tan-light brown fine-medium sand and small gravel. Moist. Occasional medium-coarse gravel.				
	15					
	16		11/12/10	4		
	17					
	18					
	19	SAND AND GRAVEL Dense. Tan-light brown fine-medium sand and small gravel. Moist. Occasional medium-coarse gravel.				NATURAL SAND
	20					
	21		16/15/16	5		
	22					
	23					
	24	SAND AND GRAVEL Very dense. Tan-light brown. Fine sand. Some small-medium gravel. Moist.				
	25					
	26		16/23/29	6		
	27					
	28					
	29	SAND AND GRAVEL Dense. Tan-light brown				
	30					

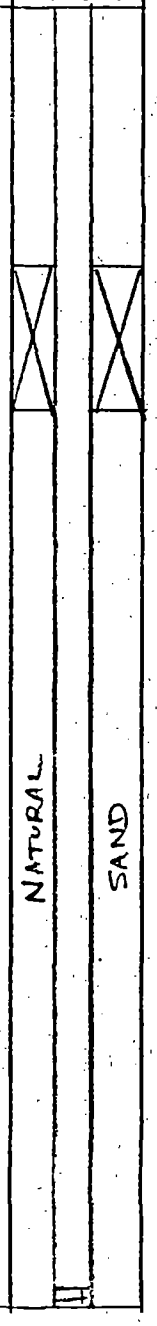
State Illinois

Boring No. MW-8

Site Peoples Ave. LF/IPC

Page 3 of 4

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	Fine sand. Some small-medium gravel. Moist.	15/21/26	7		
	32					
	33					
	34	SAND Dense. Light-brown, fine sand.				
	35	Trace small gravel. Moist.				
	36		10/20/21	8		
	37					
	38					
	39	SAND Dense. Light-brown fine sand.				
	40	Trace small gravel. Moist.				
	41		8/16/20	9		
	42					
	43					
	44	SAND Dense. Brown, fine-coarse sand.			Water at 44'	
	45	Saturated.				
	46		10/16/20	10		
	47					
	48					
	49	No recovery. Rod sand-locked. Sample fell out when rod was				
	50	pounded up.				



State Illinois

Boring No. MW-8

Site Peoples Ave. LF/IPC

Page 4 of 4

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51		10/20/25	11		NATURAL SAND
	52					
	53					
	54	No sample taken. Potential for getting rod sand-locked				
	55					
	56					
	57	E.O.B. 56.5'				
	58				Well Construction 5' of 2" I.D. 0.010 PVC screen from 49.5' to 54.5'	
	59					
	60				Natural sand and gravel screen pack and backfill	
	61					
	62				Bentonite pellet seal 34' to 36'	
	63					
	64				Grout 5' to surface	
	65					
	66					
	67					
	68					
	69					
	70					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-9

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/25/85

Completion Date 2/25/85

Ground El. 735.51 msl

Groundwater El.
at completion

after 66 days 690.58 msl.

Total Depth of Boring 60.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled. See MW-2A log for detailed stratigraphic description.	
	1 2 3 4 5 6 7 8 9 10	0-60' SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 48'			3 3/4" I.D. Hollow stem used No samples Well Construction 5' of 2" I.D. 0.010 PVC screen from 53' to 58' Natural sand screen pack Natural sand backfill Bentonite pellet seal 34' to 36' Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-10

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/25/85

Completion Date 2/25/85

Ground El. 734.85 msl

Groundwater El.
at completion

after 65 days 691.77 msl

Total Depth of Boring 55.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled. See MW-2A log for detailed stratigraphic description.	
	1 2 3 4 5 6 7 8 9 10	0-55' SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 45'			3 3/4" I.D. Hollow stem used No samples Well Construction 5' of 2" I.D. 0.010 PVC screen from 53' to 58' Natural sand screen pack Natural sand backfill Bentonite pellet seal 34' to 36' Grout 5' to surface	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-11

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 2/26/85

Completion Date 2/26/85

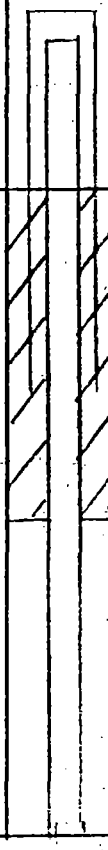
Ground El. 736.48 msl

Groundwater El.
at completion

after 65 days 694.33 msl

Total Depth of Boring 106.5'

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger 2" O.D. split spoon 140 lb. hammer 30" drop	
	1	FILL			HNU 0.2 ppm = background	
	2	Loose, black, fine sand, trace small gravel. Oil stained. Also contains burnt wood, glass, brick and slag. Very Moist.	3/6/7	1	Oily sheen in sand.	
	3					
	4				1.2 ppm above background down hole.	
	5					
	6		5/2/2	2	Breathing zone clear	
	7					
	8					
	9					
	10					

State Illinois

Boring No. MW-11

Site Peoples Ave. LF/IPC

Page 2 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11		1/1/1	3	3.4 ppm above background peak down hole	
	12					
	13					
	14					
	15	FILL				
	16	Brown, yellow fine sand, small gravel. Brick, glass, wood. Moist.	1/0/1	4	No longer oily	
	17					
	18					
	19					
	20	SAND				
	21	Loose, tan, fine to coarse sand. Trace small gravel. Moist.	2/3/2	5	Virgin soil begins. 4.0 ppm above background peak down hole	NATURAL SAND
	22					
	23					
	24					
	25	SAND				
	26	Firm to dense, tan, fine to coarse sand. Trace small to medium gravel. Moist.	4/7/10	6	3.2 ppm above background peak down hole	
	27					
	28					
	29					
	30					

State Illinois

Boring No. MW-11

Site Peoples Ave. LF/IPC

Page 3 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31		5/10/14	7		
	32					
	33					
	34					
	35					
	36		11/23/33	8		
	37					
	38					
	39					
	40					
	41		8/11/17	9		
	42					
	43					
	44				Water at 44'	NATURAL SAND
	45	SAND				
	46	Firm, brown, fine to medium sand. Saturated.	6/10/10	10		
	47					
	48					
	49					
	50					

State Illinois

Boring No. MW-11

Site Peoples Ave. LF/IPC

Page 4 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	SAND AND GRAVEL Firm, gray, fine to coarse sand and small gravel. Saturated.	14/11/9	11	Rotary method with "Revert" used to advance boring from 46.5' to 106.5'	
	52					
	53					
	54					
	55	SAND AND GRAVEL Very dense, coarse sand and small to medium gravel. Saturated.	27/25/35	12	Thin dark gray to black layers throughout. Slight petroleum odor. No HNU readings above background.	
	56					
	57					
	58					
	59					
	60					NATURAL SAND
	61		15/15/15	13	Occasional coarse gravel	
	62					
	63					
	64	SAND AND GRAVEL Dense, gray to black coarse sand and small gravel. Saturated.				
	65		15/18/15	14	Possibly stained. No odor	
	66					
	67					
	68					
	69					
	70					

State Illinois

Boring No. MW-11

Site Peoples Ave. LF/IPC

Page 5 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71	SAND AND GRAVEL Firm, light gray, fine to medium sand and small gravel. Saturated.	11/9/7	15		NATURAL SAND
	72					
	73					
	74					
	75	SAND AND GRAVEL Dense to very dense, brown, fine to coarse sand and small gravel. Saturated.				
	76		23/24/18	16		
	77					
	78					
	79					
	80					
	81		10/11/10	17		
	82					
	83					
	84					
	85					
	86		13/19/24	18		
	87					
	88					
	89					
	90					

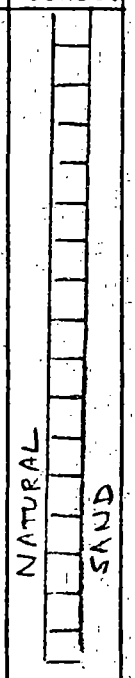
State Illinois

Boring No. MW-11

Site Peoples Ave. LF/IPC

Page 6 of 6

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	91		12/13/15	19		
	92					
	93					
	94					
	95	SAND Very dense, brown, fine sand. Trace small gravel. Saturated.	24/25/30	20		
	96					
	97					
	98					
	99					
	100					
	101		26-50/3"	21		
	102				Driller notes silt at 102'	
	103	SILT Very dense, brown to orange brown, silt. Trace fine sand. Moist.			Well Construction 10' of 2" I.D. 0.010 PVC screen from 90' to 100'	
	104					
	105					
	106		30/33/32	22	Natural sand screen pack	
	107	E.O.B. 106.5'				
	108				Natural sand back-fill	
	109				Bentonite pellet seal 36' to 38' Grout 5' to surface	
	110					



DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-12A

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 4/16/85

Completion Date 4/16/85

Ground El. 733.55 msl

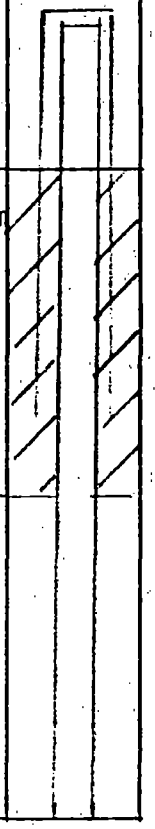
Groundwater El.
at completion

after 16 days 694.61 msl

Total Depth of Boring 86.5'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger Log written from observation of auger cuttings. No samples HNU background = 2ppm	
	1 2 3 4 5	FILL Loose, black, fine sand and cinders. Foundry sand.			Slight petroleum odor. HNU = 0 ppm above background	
	6 7 8 9 10	FILL Loose, black, fine sand and cinders. Foundry sand.				

State Illinois

Boring No. MW-12A

Site Peoples Ave. LF/IPC

Page 2 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	FILL Loose, black, fine sand and cinders. Foundry sand.				
	12					
	13					
	14					
	15					
	16	FILL Loose, black, fine sand and cinders. Foundry sand.				
	17					
	18					
	19					
	20					
	21	FILL Loose, black, fine sand and cinders. Foundry sand.				NATURAL SAND
	22					
	23					
	24	SAND AND GRAVEL Light tan, brown, fine-medium, sand. Small, medium gravel.			Begin virgin soil.	
	25					
	26	SAND AND GRAVEL Light tan, brown, fine-medium, sand and medium-large gravel. Moist.				
	27					
	28					
	29					
	30					

State Illinois

Boring No. MW-12A

Site Peoples Ave. LF/IPC

Page 3 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Moist.				NATURAL SAND
	32					
	33					
	34					
	35					
	36	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Moist.				
	37					
	38					
	39					
	40				Water at 40'4" Hollow stem augers to 44' Rotary drilling method with "Revert" used to advance boring from 44' to 85.6' 10' blow-up in Hollow stem. Begin rotary at 44'.	
	41	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				
	42					
	43					
	44					
	45					
	46	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				
	47					
	48					
	49					
	50					

State Illinois

Boring No. MW-12A

Site Peoples Ave. LF/IPC

Page 4 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	51	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				NATURAL SAND
	52					
	53					
	54					
	55					
	56	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				
	57					
	58					
	59					
	60					
	61	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				
	62					
	63					
	64					
	65					
	66	SAND AND GRAVEL Light tan, brown, fine-medium sand and medium-large gravel. Saturated.				
	67					
	68					
	69					
	70					

State Illinois

Boring No. MW-12A

Site Peoples Ave. LF/IPC

Page 5 of 5

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	71	SAND AND GRAVEL Light tan, brown, fine-medium sand, small-medium gravel. Saturated.				NATURAL SAND
	72					
	73					
	74					
	75					
	76	SAND AND GRAVEL Light tan, brown, fine-medium sand, small-mediumS gravel. Saturated.				
	77					
	78					
	79					
	80					
	81	SAND AND GRAVEL Dense, brown fine sand and gravel. Cobbles and boulders from 80'			80' - 83' cobbles and boulders	
	82				Driller notes silt at 83.0'	
	83					
	84				Begin split spoon at 85'	
	85	SILT From 83'. Very dense, light brown and yellowish brown silt. Trace fine sand. Moist.	24/25/		Well Construction 10' of 2" I.D. 0.010 PVC screen from 71' to 81'	SILT
	86		28	19		
	87	E.O.B. 86.5'			Natural sand screen pack and backfill. Bentonite seal 31' to 33'. Grout 5' to surface.	
	88					
	89					
	90					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-12B

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 4/16/85

Completion Date 4/17/85

Ground El. 733.55 msl

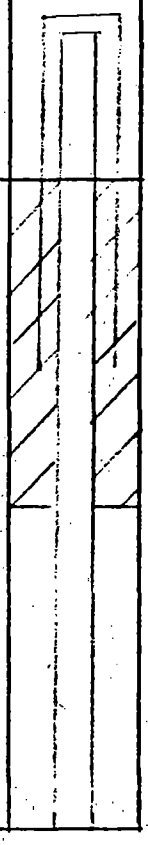
Groundwater El.
at completion

after 15 days 694.58 msl

Total Depth of Boring 50'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger Note: Hole was blind drilled. Log entry's from auger samples	
	1 2 3 4 5	FILL Loose, fine sand and cinders. Foundry sand.			Slight petroleum odor	
	6 7 8 9 10	FILL Loose, fine sand and cinders. Foundry sand.				

State Illinois

Boring No. MW-12B

Site Peoples Ave. LF/IPC

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	FILL Loose, fine sand and cinders. Foundry sand.				NATURAL SAND
	12					
	13					
	14					
	15					
	16	FILL Loose, fine sand and cinders. Foundry sand.				
	17					
	18					
	19					
	20					
	21	FILL Loose, fine sand and cinders. Foundry sand.				
	22					
	23				Begin virgin soil	
	24					
	25					
	26	SAND AND GRAVEL Light, tan-brown, fine-medium sand. Medium-coarse gravel. Moist.				
	27					
	28					
	29					
	30					

State Illinois

Boring No. MW-12B

Site Peoples Ave. LF/IPC

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL Light, tan-brown, fine-medium sand. Medium-coarse gravel. Moist.				
	32					
	33					
	34					
	35					
	36	SAND AND GRAVEL Light, tan-brown, fine-medium sand. Medium-coarse gravel. Moist.				
	37					
	38					
	39					
	40				Water at 40' Rotary drilling method with "Revert" used to advance boring from 40' - 50'.	
	41	SAND AND GRAVEL Light, tan-brown, fine-medium sand. Medium-coarse gravel. Saturated.				
	42					
	43					
	44				Well Construction 5' of 2" I.D. 0.010 PVC screen from 45' to 50' Natural sand screen pack and backfill Bentonite pellet seal 31' to 33' Grout 5' to surface	
	45					
	46	SAND AND GRAVEL Light, tan-brown, fine-medium sand. Medium-coarse gravel. Saturated.				NATURAL SAND
	47					
	48					
	49					
	50					

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-13

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 4/17/85

Completion Date 4/17/85

Ground El. 734.21 msl

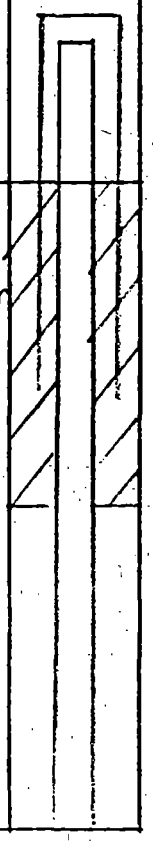
Groundwater El.
at completion

after 15 days 694.46 msl

Total Depth of Boring 50'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			3 3/4" I.D. Hollow stem auger HNU 0.2 ppm = background. No reading above background	
	1	Fill Black, very fine sand. Foundry sand.			No samples taken. Hole was blind drilled. Log entry's from auger observations.	
	2					
	3					
	4					
	5					
	6	SAND AND GRAVEL Light, brown, fine to medium sand and small gravel. Dry.				
	7					
	8					
	9					
	10					

State Illinois

Boring No. MW-13

Site Peoples Ave. LF/IPC

Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	11	SAND AND GRAVEL				
	12	Light, brown, fine to medium sand and small gravel. Dry.				
	13					
	14					
	15					
	16	SAND AND GRAVEL				
	17	Light, brown, fine to medium sand and small gravel. Dry.				
	18					
	19					NATURAL SAND
	20					
	21	SAND AND GRAVEL				
	22	Light, brown, fine to medium sand and small gravel. Dry.				
	23					
	24					
	25					
	26	SAND AND GRAVEL				
	27	Light, brown fine to medium sand and small gravel. Dry.				
	28					
	29					
	30					

State Illinois

Boring No. MW-13

Site Peoples Ave. LF/IPC

Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	31	SAND AND GRAVEL				
	32	Light, brown, fine to medium sand and small gravel. Dry.				
	33					
	34					
	35					
	36	SAND AND GRAVEL				
	37	Light, brown, fine to medium sand and small gravel. Dry.				
	38					
	39					
	40				Water at 40'	
	41	SAND AND GRAVEL				
	42	Light, brown, fine to medium sand and small gravel. Satu-			Well Construction	
	43	rated.			5' of 2" I.D. 0.010 PVC screen from 44' to 49'	
	44					
	45					
	46	SAND AND GRAVEL			Natural sand screen pack and backfill	NATURAL AND
	47	Light, brown fine to medium sand and small gravel. Satu- rated.				
	48				Bentonite pellet seal 33' to 35'	
	49					
	50	E.O.B. 50'			Grout 5' to sur- face	

DRILLING LOG

State Illinois

Site Peoples Ave. L.F./IPC

Boring No. MW-14

Drilling Firm Canonie

Type of Drill Mobile B-40

Driller J. Koditek

Geologist K. Phillips

Start Date 4/8/85

Completion Date 4/8/85

Ground El. 735.74 msl

Groundwater El.
at completion

after 24 days 694.52 msl

Total Depth of Boring 55.0'

No HNU readings above background

Lock #2429

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
		Ground Surface			This hole was blind drilled. Log from observation of auger cuttings.	
	1 2 3 4 5 6 7 8 9 10	0 - 55.0 SAND, SAND AND GRAVEL Firm to dense, tan, fine to coarse sand and small gravel. Water at 43'			3 3/4" I.D. Hollow stem auger used No samples Well Construction 5' of 2" I.D. 0.010 PVC screen 47' to 52' Natural sand screen pack Natural sand backfill Bentonite pellet seal 33' to 35' Grout 5' to surface	

VOLUME 3 OF 3

APPENDIX II

GROUNDWATER SAMPLE RESULTS

PRELIMINARY HYDROGEOLOGIC
INVESTIGATION OF PEOPLES
AVENUE LANDFILL AND
INTERSTATE POLLUTION CONTROL
ROCKFORD, ILLINOIS

APPENDIX II
GROUNDWATER SAMPLE RESULTS

TABLE OF MONITORING WELL NUMBERS
AND MATCHING SAMPLE TRAFFIC NUMBERS

Well Number	Organic Number	Inorganic Number
G-101	ED161	MED 354
G-101 Dup	ED023	ME 3826
G-102	ED162	ME 3801
G-103	ED163	ME 3802
G-104	ED001	ME 3803
MW-1A	ED002	ME 3804
MW-1B	ED003	ME 3805
MW-1B Dup	ED022	ME 3825
MW-2A	ED004	ME 3806
MW-2B	ED005	ME 3807
MW-3A	ED006	ME 3808
MW-3B	ED007	ME 3809
MW-4A	ED008	ME 3810
MW-4B	ED009	ME 3811
MW-5A	ED010	ME 3812
MW-5B	ED011	ME 3814
MW-6 (Deep)	ED012	ME 3815
MW-7	ED013	ME 3816
MW-8	ED014	ME 3817
MW-9	ED015	ME 3818
MW-10	ED016	ME 3819
MW-11 (Deep)	ED017	ME 3820
MW-12A	ED018	ME 3821
MW-12B	ED019	ME 3822
MW-13	ED020	ME 3823
MW-14	ED021	ME 3824
Blank 1	ED024	ME 3827
Blank 2	ED025	ME 3828
Drilling Mud	ED026	ME 3829

Note: Well number followed by "A" indicates deep well, "B" indicates shallow well in well nest. All others are shallow unless indicated.

INTRODUCTION TO DATA TABLES

A SUMMARY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED, HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC INFORMATION IS PROVIDED IN THE ATTACHED DATA SHEETS.

I) REPORTING UNITS
- A) ORGANICS
  - 1) Water Samples - ug/l or ppb (parts per billion)
  - 2) Soils or Sediments - ug/kg or ppb (parts per billion)
- B) METALS
  - 1) Water Samples - ug/l or ppb
  - 2) Soils or sediments - mg/kg or ppm

II) DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A) ORGANICS

Footnote	Definition	Interpretation
UJ	Detection Limit (D.L.) is estimated because of a Quality Control (QC) protocol. D.L. is possibly above or below Contract Required Detection Limit (CRDL).	Compound was not detected
UB	Compound found in laboratory blank. No Value above CRDL.	Compound was not detected
UJB	Compound found in laboratory blank, but not detected in sample. CRDL is estimated because of a QC protocol.	Compound was not detected
B	Compound found in blank. Two interpretations are possible:	
	a) If sample value is equivalent to D.L. to 5x blank concentration	Compound value is semi-quantitative.
	b) If sample value is greater than 5x the blank concentration	Compound value is quantitative
JB	Compound found in blank, value is estimated because of QC protocol.	Compound value is semi-quantitative
R	Do Not Use Value. Major Violation of QC Protocol	Compound value is not usable.
C	Value adjusted for blank (an unacceptable procedure)	Compound value is semi-quantitative
J	Value is above CRDL and is an estimated value because of a QC protocol	Compound value is semi-quantitative
Q	No Analytical Result	Compound was not detected
N	Presumptive evidence for the presence of a compound as used for a Tentatively Identified Compound (TIC)	Compound value is semi-quantitative

B) METALS

FOOTNOTE	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value is semi-quantitative
s	Analysis by Method of Standard Additions (Look for a "+" Footnote)	Value is quantative
R	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative
*	Duplicate value outside QC protocols which indicates a possible matrix problem	Value is semiquantitative
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value is biased
[ ]	Value is real, but is above instrument D.L. and below CRDL	Value may be quantitative or semiquantitative
UJ	D.L. is estimated because of a QC protocol. D.L. is possibly above or below CRDL.	Compound or element was not detected
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value is semiquantitative

Site Name / TDD#: Peoples Ave / IPC / RS-8303-16

Case Number : 4214

Sampling Date: 4-25-85

Sampling Time: 940

Sample/Station Location: W-1/G-101

Organic Traffic Number E D 161 Tags: 5-013421→426

Inorganic Traffic Number ME D 354

High Hazard Traffic Number E —

Physical Description

At time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: organics & Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, metals filtered to .45um and preserved w/5ml HNO_3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH=7, Temp=15°C, conductivity=1300 micromhos

Sampling Date: 4-25-85

Sampling Time: 850

Sample/Station Location: W-2/G-102

Organic Traffic Number E D 162 Tags: 5-013427→431

Inorganic Traffic Number ME 3801

High Hazard Traffic Number E —

Physical Description

At time of collection: Ground Water

Physical Changes (if any) (5)

From time of collection until shipment: Organics and Cyanides iced to 4°C. Cyanides preserved w/NaOH to PH~12, metals filtered to .45um and preserved w/5ml HNO_3 to PH~2.

Instrument Readings (i.e. - ph, conductivity...): PH=7, Temp=17.0°C

Site Name / TDD#: Peoples Ave - IPC / RS-8303-16

Case Number : 4214

Sampling Date: 4-25-85

Sampling Time: 845

Sample/Station Location: W-3/G-103

Organic Traffic Number ED 163 Tags: S-013433→438

Inorganic Traffic Number ME 3802

High Hazard Traffic Number E —

Physical Description

At time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics & Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH=7, Temp=14.0°C, Conductivity=450 micromhos

Sampling Date: 4-25-85

Sampling Time: 930

Sample/Station Location: W-4/G-104

Organic Traffic Number ED 001 Tags S-013439→444

Inorganic Traffic Number ME 3803

High Hazard Traffic Number E —

Physical Description

At time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics & Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um, and preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...): PH=7 Temp=16.0°C

Site Name / TDD#: Peapler Ave-IPC / RS-8303-16

Case Number : 4114

Sampling Date: 4-24-85

Sampling Time: 1045

Sample/Station Location: W-5 / MW-1A

Organic Traffic Number ED 002 Tags: 5-013445-450

Inorganic Traffic Number ME 3804

High Hazard Traffic Number E

Physical Description

At time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 15.5°C

Conductivity = 500 micromhos

Sampling Date: 4-24-85

Sampling Time: 1055

Sample/Station Location: W-6 / MW-1B

Organic Traffic Number ED 003 Tags: 130001 → 006

Inorganic Traffic Number ME 3805

High Hazard Traffic Number E

Physical Description

At time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...): PH = 7 Temp = 16.0°C

Site Name / TDDI: Peoples Ave IPC / RS-8303-16

Case Number: 4214

Sampling Date: 4-24-85

Sampling Time: 940

Sample/Station Location: W-7 / MW-2A

Organic Traffic Number ED 004 Tags: 5-130007 → 012

Inorganic Traffic Number ME 3806

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 16°C

Conductivity = 900 micromhos

Sampling Date: 4-24-85

Sampling Time: 950

Sample/Station Location: W-8 / MW-2B

Organic Traffic Number ED 005 Tags: 5-130013 → 018

Inorganic Traffic Number ME 3807

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(8)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave-IPC/RS-8303-1C

Case Number: 4114

Sampling Date: 4-24-85

Sampling Time: 930

Sample/Station Location: W-9 / MW-3A

Organic Traffic Number ED 006 Tags: 5-130019 → 024

Inorganic Traffic Number ME 3808

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 14.5°C

Conductivity = 1400 micromhos

Sampling Date: 4-24-85

Sampling Time: 945

Sample/Station Location: W-10 / MW-3B

Organic Traffic Number ED 007 Tags: 5-130025 → 030

Inorganic Traffic Number ME 3809

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(9)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDD#: Peoples Ave-IPC / RS-8303-16

Case Number: 4214

Sampling Date: 4-24-85

Sampling Time: 1100

Sample/Station Location: W-11 / MW-4A

Organic Traffic Number ED 008 Tags: 5-130031→036

Inorganic Traffic Number ME 3810

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 15.0°C

Conductivity = 500 micromhos

Sampling Date: 4-24-85

Sampling Time: 1110

Sample/Station Location: W-12 / MW-4B

Organic Traffic Number ED 009 Tags: 5-130037→042

Inorganic Traffic Number ME 3811

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(10)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave-IPC / RS-8303-16

Case Number: 4214

Sampling Date: 4-25-85

Sampling Time: 1130

Sample/Station Location: W-13 / MW-5A

Organic Traffic Number ED 010 Tags: 5-130043 → 048

Inorganic Traffic Number ME 3812

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 15.0 °C

Conductivity = 400 micromhos

Sampling Date: 4-25-85

Sampling Time: 1140

Sample/Station Location: W-14 / MW-5B

Organic Traffic Number ED 011 Tags: 5-130049 → 050

Inorganic Traffic Number ME 3814 5-130701 → 704

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(11)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave IPC / RS-8303-16

Case Number: 4414

Sampling Date: 4-25-85

Sampling Time: 1030

Sample/Station Location: W-15 / MW-6

Organic Traffic Number E D 012 Tags: 5-130705→710

Inorganic Traffic Number ME 3815

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 14°C

Conductivity = 500 micromhos

Sampling Date: 4-24-85

Sampling Time: 1130

Sample/Station Location: W-16 / MW-7 (Sample Matrix Spike)

Organic Traffic Number E D 013 Tags: 5-130711→716

Inorganic Traffic Number ME 3816 5-130793→796

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(12)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / IDDI: Peoples Ave-IPC/RS-8303-16

Case Number: 4114

Sampling Date: 4-24-85

Sampling Time: 1135

Sample/Station Location: W-17/MW-8

Organic Traffic Number EO 014 Tags: 5-130717→722

Inorganic Traffic Number ME 3817

High Hazard Traffic Number E —

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 11°C

Conductivity = 450 micromhos

Sampling Date: 4-24-85

Sampling Time: 1300

Sample/Station Location: W-18/MW-9

Organic Traffic Number EO 015 Tags: 5-130723→728

Inorganic Traffic Number ME 3818

High Hazard Traffic Number E —

Physical Description

at time of collection: Ground Water

(13)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave-IPC / RS-8303-16

Case Number: 4214

Sampling Date: 4-24-85

Sampling Time: 1230

Sample/Station Location: W-19 / MW-10

Organic Traffic Number ED 016 Tags: 5-130729→734

Inorganic Traffic Number ME 3819

High Hazard Traffic Number E —

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 15.0°C

Conductivity = 2600 micromhos

Sampling Date: 4-25-85

Sampling Time: 1100

Sample/Station Location: W-20 / MW-11

Organic Traffic Number ED 017 Tags: 5-130735-740

Inorganic Traffic Number ME 3820

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(14)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave-IPC / RS-8303-1C

Case Number: 414

Sampling Date: 4-25-85

Sampling Time: 1145

Sample/Station Location: W-21 / MW-12A

Organic Traffic Number E D 018 Tags: 5-130741→746

Inorganic Traffic Number ME 3821

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 14.0°C

Conductivity = 450 micromhos

Sampling Date: 4-25-85

Sampling Time: 1155

Sample/Station Location: W-22 / MW-12B

Organic Traffic Number ED 019 Tags: 5-130747→752

Inorganic Traffic Number ME 3822

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(15)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Site Name / TDDI: Peoples Ave IPC / RS-8303-16

Case Number: 4414

Sampling Date: 4-25-85

Sampling Time: 1115

Sample/Station Location: W-23 / MW-13

Organic Traffic Number ED 020 Tags: S-130753→758

Inorganic Traffic Number ME 3823

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 17.0°C

Conductivity = 900 micromhos

Sampling Date: 4-25-85

Sampling Time: 1010

Sample/Station Location: W-24 / MW-14

Organic Traffic Number ED 021 Tags: S-130759→764

Inorganic Traffic Number ME 3824

High Hazard Traffic Number E

Physical Description

at time of collection: Ground Water

(16)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

PH = 7 Temp = 16.0°C

Site Name / TDDI: Peoples Ave-IPC / RS-8303-16

Case Number: 4214

Sampling Date: 4-24-85

Sampling Time: 1055

Sample/Station Location: W-25 / Duplicate-1 (MW-1B)

Organic Traffic Number ED 022 Tags: 5-130765→770

Inorganic Traffic Number ME 3825

High Hazard Traffic Number E —

Physical Description

at time of collection: Ground Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH = 7 Temp = 15.0 °C

Conductivity = 1500 micromhos

Sampling Date: 4-25-85

Sampling Time: 940

Sample/Station Location: W-26 / Duplicate-2 (G-101)

Organic Traffic Number ED 023 Tags: 5-130771→776

Inorganic Traffic Number ME 3826

High Hazard Traffic Number E —

Physical Description

at time of collection: Ground Water

(17)

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides preserved w/NaOH to PH~12, Metals filtered to .45 um and Preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...): PH = 6 Temp = 15.0°C

Site Name / TDD#: Peoples Ave-JPC / RS-8303-16

Case Number: 42H

Sampling Date: 4-24-85

Sampling Time: 1105

Sample/Station Location: W-27/ Blank-1

Organic Traffic Number ED 024

Inorganic Traffic Number ME 3827

High Hazard Traffic Number E —

Tags: 5-130777→782

Physical Description

At time of collection: Distilled Water

Physical Changes (if any)

From time of collection until shipment: Organics and Cyanides iced to 4°C Cyanides Preserved w NaOH to PH~12, Metals preserved w/5ml HNO3 to PH~2

Instrument Readings (i.e. - pH, conductivity...):

PH=5, Temp=15.5°C

Conductivity=0 microhos

Sampling Date: 4-25-85

Sampling Time: 900

Sample/Station Location: W-28/ Blank-2

Organic Traffic Number ED 025

Inorganic Traffic Number ME 3828

High Hazard Traffic Number E —

Tags: 5-130783→788

Physical Description

At time of collection: Distilled Water

Physical Changes (if any)

(18)

From time of collection until shipment: Organics & Cyanides iced to 4°C Cyanides Preserved w/NaOH to PH~12, metals preserved w/5 ml HNO3 to PH~2

Instrument Readings (i.e. - ph, conductivity...): PH=5 Temp=13.0°C

Site Name / TDD#: Peoples Ave-IPC / RI-8307-16

Case Number : 4214

Sampling Date: 1-31-85 (shipped 4-25-85)

Sampling Time: 1050

Sample/Station Location: S-1/W-3

Organic Traffic Number ED 026 Tags: 5-130789 → 792

Inorganic Traffic Number ME 3829

High Hazard Traffic Number E —

Physical Description

At time of collection: Drilling revert

Physical Changes (if any)

From time of collection until shipment: Organics iced to 4°C

Metals preserved w/5ml HNO_3 to pH ~ 2

Instrument Readings (i.e. - pH, conductivity...):

None

Sampling Date:

Sampling Time:

Sample/Station Location:

Organic Traffic Number E

Inorganic Traffic Number ME

High Hazard Traffic Number E

Physical Description

At time of collection:

Physical Changes (if any)

From time of collection until shipment:

Instrument Readings (i.e. - ph, conductivity...):

ecology and environment, inc.
223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415
International Specialists in the Environmental Sciences

Date Received for Review: 7-8-85 Date Review Completed: 7-11-85

To: Kevin Phillips

From: Cynthia Bachunas / Cindy Pugh

Subject: Peoples Ave. Dump (Illinois)
(RS-8303-16)

Sample Description: CASE 4214- Low Water Organics

Project Data Status: Still awaiting Low Water Metals + Cyanide

FIT Data Review Findings:

Data acceptable with qualifications noted on attached review sheet.

Additional Comments:

* Also, the following percent differences exist between sample (ED003 MW-1B) and duplicate (ED022 MW-1B): vinyl chloride 40%, chloroethane 100%, 51% 1,1, Dichloroethane, and 46% Trans-1,2-Dichloroethene.

% differences between sample (ED161 G-101) and duplicate (ED023 G-101): 100% vinyl chloride, 18% 1,1, Dichloroethane, 33% 1,1,1 Trichloroethane 15% trichloroethene, and 24% tetrachloroethene

*Data for these compounds may be unusable.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/1/85

RECEIVED JUL 0 8 1985

SUBJECT: Review of Region V CLP Data
Received for Review on 5-29-85

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory
Francis Thomas

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: Peoples Ave. Dump SMO Case No. 4214

EPA Data Set No. SF 2292 No. of Samples: 29 D.U./Activity Numbers Y905/C48500

CRL No. 85FP05S99 to 85FP06S24

SMO Traffic No. ED001 - ED026 ED161 — ED163

CLP Laboratory: Cal Hrs. Required for Review: 19

Following are our findings.

1. SAMPLE HOLDING TIMES FOR THE VOA FRACTION OF SAMPLE ED017 WERE EXCEEDED BY 3 DAYS. THEREFORE, ~~APPROPRIATE~~ ALL PSQL'S COMPOUNDS FOR THE VOA FRACTION WERE FLAGGED AS ESTIMATED.

2. SAMPLE HOLDING TIMES FOR THE VOA FRACTIONS RERUN ON 5-8-85 WERE EXCEEDED BUT SINCE THESE RUNS WERE ONLY FOR QUANTIFYING VINYL CHLORIDE AND CHLOROETHANE THEY ARE ACCEPTABLE.

3. THE MEDIUM LEVEL SOIL VOA BLANK HAD HIGH LEVELS OF METHYLENE CHLORIDE, ACETONE AND 2-BUTANONE

4. FIELD DUPLICATES: 85FP06S22 AND 85FP06D22 WERE IN AGREEMENT 85FP06D02 HAD CONSISTANTLY LOWER VALUES THAN 85FP06S02.

CONTINUED →

Patrick J. Quinlle
6-25-85

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

(21)

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

2

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DATA QUALIFIERS

Contractor: CAL

Case 4214

Below is a summary of the out of control audits and the possible effect on the data for this case:

5. VOA INITIAL AND CONTINUING CALIBRATIONS: THERE WERE SIX COMPOUNDS THAT HAD CONSISTANTLY LOW RESPONSE FACTORS. 2 SPCC COMPOUNDS; CHLOROMETHANE AND BROMOFORM AND 4 HSL COMPOUNDS; 2-BUTANONE, VINYL ACETATE, BROMODICHLOROMETHANE AND 2-CHLOROETHYL VINYL ETHER.

6. THE ABN INITIAL CALIBRATION WAS VERY GOOD WITH ONLY 4-CHLOROANILINE HAVING A %RSD > 30% ALL SPCC & CCC WERE OK

7. ABN CONTINUING CALIBRATION 5-17-85 SPCC & CCC OK
5 HSL COMPOUNDS HAD %D > 25%

8. ABN CONTINUING CALIBRATION 5-20-85 7:11
CCC COMPOUND 2-NITROPHENOL HAD A %D = 25.6%
13 HSL COMPOUNDS HAD %D > 25%

9. ABN CONTINUING CALIBRATION 5-20-85 19:38
CCC COMPOUND 2-NITROPHENOL HAD A %D = 33.2%
15 HSL COMPOUNDS HAD %D > 25%

Reviewed by: Patrick G. Quelle

Phone: 353-2720

Date: 6-25-85

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RECEIVED JUL 0 8 1985

DATA QUALIFIERS

Contractor: CAL

Case 4214

Below is a summary of the out of control audits and the possible effect on the data for this case:

10. ABN CONTINUING CALIBRATION 5-21-85 6:22

CCC COMPOUNDS 2-NITROPHENOL AND N-NITROSODIPHENYLAMINE HAD %D >25%

18 HSL COMPOUNDS HAD %D >25%

11. ABN CONTINUING CALIBRATION 5-21-85 17:14

CCC COMPOUNDS 2-NITROPHENOL AND N-NITROSODIPHENYLAMINE HAD %D >25%

17 HSL COMPOUNDS HAD %D >25%

12. ABN CONTINUING CALIBRATION 5-22-85 6:04

CCC COMPOUNDS 2-NITROPHENOL AND N-NITROSODIPHENYLAMINE HAD %D >25%

19 HSL COMPOUNDS HAD %D >25%

13. ABN CONTINUING CALIBRATION 5-23-85 6:05

CCC COMPOUNDS 2-NITROPHENOL AND N-NITROSODIPHENYLAMINE HAD %D >25%

17 HSL COMPOUNDS HAD %D > 25%.

ALL INITIAL AND CONTINUING CALIBRATION OUTLIERS WERE FLAGGED AS ESTIMATED.

Reviewed by: Patrick J. Chiulli

Phone: 353-2720

Date: 6-25-85

G104

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED001

85FP05599

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L794
QC Report No: 71
Sample Matrix: Water
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 5 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	50 UJ
74-83-9	Bromomethane	50 U
75-01-4	Vinyl Chloride	55 J
75-00-3	Chloroethane	50 U
75-09-2	Methylene Chloride	~~25 JB~~ 7.5 UJ
67-64-1	Acetone	~~50 JB~~ 38 UJ
75-15-0	Carbon Disulfide	25 U J
75-35-4	1,1-Dichloroethene	26
75-34-3	1,1-Dichloroethane	1300
156-60-5	Trans-1,2-Dichloroethene	1300
67-66-3	Chloroform	25
107-06-2	1,2-Dichloroethane	25 U
78-93-3	2-Butanone	~~50 JB~~ 30 UJ
71-55-6	1,1,1-Trichloroethane	1300
56-23-5	Carbon Tetrachloride	25 U
108-05-4	Vinyl Acetate	50 U J
75-27-4	Bromodichloromethane	25 U J

PJC 6-25-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	25 U
78-87-5	1,2-Dichloropropane	25 U
10061-02-6	Trans-1,3-Dichloropropene	25 U
79-01-6	Trichloroethene	110
124-48-1	Dibromochloromethane	25 U
79-00-5	1,1,2-Trichloroethane	25 U
71-43-2	Benzene	25 U
10061-01-5	cis-1,3-Dichloropropene	25 U
110-75-8	2-Chloroethylvinylether	50 U J
75-25-2	Bromoform	25 U J
591-78-6	2-Hexanone	50 U
108-10-1	4-Methyl-2-Pentanone	50 U
127-18-4	Tetrachloroethene	38
108-88-3	Toluene	25 U
108-90-7	Chlorobenzene	25 U
100-41-4	Ethylbenzene	25 U
100-42-5	Styrene	25 U
	Total Xylenes	25 U

PJC 6-25-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 001RE

G-104

RECEIVED JUL 08 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L794 RE

QC Report No: 71

Sample Matrix: Water

Contract No: 68-01-6958

Data Release Authorized By: MM

Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/8/85

Date Analyzed: 5/8/85

Conc/Dil Factor: 5 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	50 U
74-83-9	Bromomethane	50 U
75-01-4	Vinyl Chloride	88
75-00-3	Chloroethane	50 U
75-09-2	Methylene Chloride	25 U
67-64-1	Acetone	50 U
75-15-0	Carbon Disulfide	25 U
75-35-4	1,1-Dichloroethene	27
75-34-3	1,1-Dichloroethane	2400
156-60-5	Trans-1,2-Dichloroethene	1500
67-66-3	Chloroform	27
107-06-2	1,2-Dichloroethane	25 U
78-93-3	2-Butanone	~~50 J~~ 22 J
71-55-6	1,1,1-Trichloroethane	2100
56-23-5	Carbon Tetrachloride	25 U
108-05-4	Vinyl Acetate	50 U J
75-27-4	Bromodichloromethane	25 U J

PSC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	25 U
78-87-5	1,2-Dichloropropane	25 U
10061-02-6	Trans-1,3-Dichloropropene	25 U
79-01-6	Trichloroethene	130
124-48-1	Dibromochloromethane	25 U
79-00-5	1,1,2-Trichloroethane	25 U
71-43-2	Benzene	25 U
10061-01-5	cis-1,3-Dichloropropene	25 U
110-75-8	2-Chloroethylvinylether	50 U J
75-25-2	Bromoform	25 U J
591-78-6	2-Hexanone	50 U
108-10-1	4-Methyl-2-Pentanone	50 U
127-18-4	Tetrachloroethene	47
108-88-3	Toluene	25 U
108-90-7	Chlorobenzene	25 U
100-41-4	Ethylbenzene	25 U
100-42-5	Styrene	25 U
	Total Xylenes	25 U

PSC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

25

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 001

6-104

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 500 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	32 U J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Prepared by: DB

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED001

G-104

Organics Analysis Data Sheet
(Page 3)

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Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 27 V_t = 25000 V_i = 5

6-104

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ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED001,

QC REPORT NO. 71 LAB SAMPLE NO. L79401AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	127-18-4	ETHENE, TETRACHLORO-	A/BN	251	974	42.6 UG/L
2.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	806	936	268.0 UG/L
3.	33599-35-8	BENZOTHIAZOLIUM, 5-CHLORO-3-ETH	A/BN	1731	160	2.2 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHENE, TETRACHLORO-	1. D	1.
2. 2H-AZEPIN-2-ONE, HEXAHYDRO-	2. A	2.
3. BENZOTHIAZOLIUM, 5-CHLORO-3-ETH	3. C	3.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 002

MW-1A

SEE RERUN ED002

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L780

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MJM

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 4/29/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	20
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 3.7 J
67-64-1	Acetone	100 ~~B~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5.2
75-34-3	1,1-Dichloroethane	48
156-60-5	Trans-1,2-Dichloroethene	160
67-66-3	Chloroform	~~5 J~~ 2.3 J
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 J
71-55-6	1,1,1-Trichloroethane	39
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5.9
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 1.4 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 2.6 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

29

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 002 RE

MW-LA

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L780 RE
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number			ug/L
74-87-3		Chloromethane	10 U
74-83-9		Bromomethane	10 U
75-01-4		Vinyl Chloride	16 20
75-00-3		Chloroethane	10 U
75-09-2		Methylene Chloride	~~5 J~~ 2.5 J
67-64-1		Acetone	130 ~~B~~ J
75-15-0		Carbon Disulfide	5 U
75-35-4		1,1-Dichloroethene	~~5 J~~ 4.7 J
75-34-3	*	1,1-Dichloroethane	52
156-60-5	*	Trans-1,2-Dichloroethene	170
67-66-3		Chloroform	~~5 J~~ 2.2 J
107-06-2		1,2-Dichloroethane	5 U
78-93-3		2-Butanone	10 U J
71-55-6	*	1,1,1-Trichloroethane	45
56-23-5		Carbon Tetrachloride	5 U
108-05-4		Vinyl Acetate	10 U J
75-27-4		Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number			ug/L
79-34-5		1,1,2,2-Tetrachloroethane	5 U
78-87-5		1,2-Dichloropropane	5 U
10061-02-6		Trans-1,3-Dichloropropene	5 U
79-01-6		Trichloroethene	5.8 5.9
124-48-1		Dibromochloromethane	5 U
79-00-5		1,1,2-Trichloroethane	5 U
71-43-2		Benzene	~~5 J~~ 1.1 J
10061-01-5		cis-1,3-Dichloropropene	5 U
110-75-8		2-Chloroethylvinylether	10 U J
75-25-2		Bromoform	5 U J
591-78-6		2-Hexanone	10 U
108-10-1		4-Methyl-2-Pentanone	10 U
127-18-4		Tetrachloroethene	~~5 J~~ 2.3 J
108-88-3		Toluene	5 U
108-90-7		Chlorobenzene	5 U
100-41-4		Ethylbenzene	5 U
100-42-5		Styrene	5 U
		Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

30

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 002

MW-1A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/17/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U J
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U J
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	~~10 J~~ 2.8 J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 6.8 JB
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Prepared by: Key

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 002

MW-1A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR (32) $V_t = 25000$ $V_i = 5$

MW - VA

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED002,

QC REPORT NO. 71 LAB SAMPLE NO. L78001AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	142-62-1	HEXANOICACID	A/BN	518	861	4.6 UG/L
2.	124-07-2	OCTANOICACID	A/BN	732	883	51.1 UG/L
3.	334-48-5	DECANOICACID	A/BN	890	810	69.2 UG/L
4.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	991	900	12.1 UG/L
5.	111-82-0	DODECANOICACID, METHYLESTER	A/BN	1001	885	12.6 UG/L
6.	143-07-7	DODECANOICACID	A/BN	1051	832	295.3 UG/L
7.	75-63-8	METHANE, BROMOTRIFLUORO-	A/BN	1188	466	3.5 UG/L
8.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1190	809	62.0 UG/L
9.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1361	806	103.4 UG/L
10.	57-11-4	OCTADECANOICACID	A/BN	1411	757	16.4 UG/L
11.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1513	780	189.4 UG/L
12.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1582	457	10.5 UG/L
13.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1649	767	236.7 UG/L
14.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1719	473	15.8 UG/L
15.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1817	509	154.5 UG/L
16.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1923	477	14.3 UG/L
17.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	2058	448	5.8 UG/L
18.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	2095	702	58.4 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. HEXANOICACID	1. B	1.
2. OCTANOICACID	2. A	2.
3. DECANOICACID	3. A	3.
4. ETHANOL, 2-\2-(2-METHOXYETHOXY)	4. ~~B~~ mt A	4.
5. DODECANOICACID, METHYLESTER	5. B	5. Or Related compound
6. DODECANOICACID	6. A	6.
~~7. METHANE, BROMOTRIFLUORO-~~ mt	~~7.~~ mt	~~7.~~
8. ETHANOL, 2-\2-(2-METHOXYETHOXY)	8. B	8.
9. ETHANOL, 2-\2-(2-METHOXYETHOXY)	9. B	9.
10. OCTADECANOICACID	10. A	10.
11. 2,5,8,11,14-PENTAOXAPENTADECAN	11. B	11.
12. 2,5,8,11,14-PENTAOXAPENTADECAN	12. B	12.
13. 2,5,8,11,14-PENTAOXAPENTADECAN	13. B	13.

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MW-1A

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14.	2,5,8,11,14-PENTAOXAPENTADECAN	14. B	14.
15.	2,5,8,11,14-PENTAOXAPENTADECAN	15. B	15.
16.	2,5,8,11,14-PENTAOXAPENTADECAN	16. B	16.
17.	2,5,8,11,14-PENTAOXAPENTADECAN	17. B	17.
18.	2,5,8,11,14-PENTAOXAPENTADECAN	18. B	18.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 003

MW-1B

85FP06S02

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L781
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 4/29/85
Date Analyzed: 4/29/85
Conc/Dil Factor: 5 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	50 U J
74-83-9	Bromomethane	50 U
75-01-4	Vinyl Chloride	140
75-00-3	Chloroethane	~~50 J~~ 46 J
75-09-2	Methylene Chloride	~~25 J~~ 17 J
67-64-1	Acetone	~~85 B~~ 85 4J
75-15-0	Carbon Disulfide	25 U
75-35-4	1,1-Dichloroethene	25 U
75-34-3	1,1-Dichloroethane	470
156-60-5	Trans-1,2-Dichloroethene	110
67-66-3	Chloroform	25 U
107-06-2	1,2-Dichloroethane	25 U
78-93-3	2-Butanone	~~50 J B~~ 13 4J
71-55-6	1,1,1-Trichloroethane	~~25 J~~ 5.6 J
56-23-5	Carbon Tetrachloride	25 U
108-05-4	Vinyl Acetate	50 U J
75-27-4	Bromodichloromethane	25 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	25 U
78-87-5	1,2-Dichloropropane	25 U
10061-02-6	Trans-1,3-Dichloropropene	25 U
79-01-6	Trichloroethene	25 J
124-48-1	Dibromochloromethane	25 U
79-00-5	1,1,2-Trichloroethane	25 U
71-43-2	Benzene	~~25 J~~ 8.8 J
10061-01-5	cis-1,3-Dichloropropene	25 U
110-75-8	2-Chloroethylvinylether	50 U J
75-25-2	Bromoform	25 U J
591-78-6	2-Hexanone	50 U
108-10-1	4-Methyl-2-Pentanone	50 U
127-18-4	Tetrachloroethene	25 U
108-88-3	Toluene	25 U
108-90-7	Chlorobenzene	25 U
100-41-4	Ethylbenzene	~~25 J~~ 5.1 J
100-42-5	Styrene	25 U
	Total Xylenes	25 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

35

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 003

MW-1B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/17/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U J
106-46-7	1,4-Dichlorobenzene	~~10 J~~ 4.4 J
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U J
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	~~10 J~~ 2.2 J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	140 B
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	24
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 003

MW-1B

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR (37) $V_t = 25000$ $V_i = 5$

MW-1E

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED003,

QC REPORT NO. 71 LAB SAMPLE NO. L78101AB

RECEIVED JUL 0 8 1985

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	507-45-9	BUTANE, 2, 3-DICHLORO-2-METHYL-	A/BN	272	852	8.3 UG/L
2.	108-90-7	BENZENE, CHLORO-	A/BN	307	799	6.7 UG/L
3.	100-41-4	BENZENE, ETHYL-	A/BN	331	830	22.4 UG/L
4.	41065-97-8	HEXANAL, 4-METHYL-	A/BN	391	741	8.6 UG/L
5.	98-82-8	BENZENE, (1-METHYLETHYL)-	A/BN	419	945	25.7 UG/L
6.	5063-96-7	1H-PYRROLE-2, 5-DIONE, 1-(HYDROX	A/BN	510	591	43.6 UG/L
7.	53600-58-1	TRICYCLO\4. 2. 0. 02, 4\OCTAN-5-OL	A/BN	525	452	153.3 UG/L
8.	496-11-7	1H-INDENE, 2, 3-DIHYDRO-	A/BN	556	940	90.8 UG/L
9.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	A/BN	562	894	302.6 UG/L
10.	54518-04-6	METHANOL, DIBUTOXY-	A/BN	587	631	38.2 UG/L
11.	1758-88-9	BENZENE, 2-ETHYL-1, 4-DIMETHYL-	A/BN	613	815	65.8 UG/L
12.	1758-88-9	BENZENE, 2-ETHYL-1, 4-DIMETHYL-	A/BN	645	887	34.4 UG/L
13.	824-22-6	1H-INDENE, 2, 3-DIHYDRO-4-METHYL	A/BN	680	742	36.2 UG/L
14.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	811	798	266.8 UG/L
15.	98-73-7	BENZOICACID, 4-(1, 1-DIMETHYLETH	A/BN	984	812	15.3 UG/L
16.	143-07-7	DODECANOICACID	A/BN	1035	810	32.6 UG/L
17.	1907-65-9	BENZENESULFONAMIDE, N-BUTYL-4-M	A/BN	1102	620	22.3 UG/L
18.	143-24-8	2, 5, 8, 11, 14-PENTAOXAPENTADECAN	A/BN	1385	531	21.5 UG/L
19.	629-74-3	1-HEXADECYNE	A/BN	1378	664	16.2 UG/L
20.	5353-25-3	ETHANOL, 2-(9-OCTADECENYLOXY)-,	A/BN	1503	785	19.8 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	BUTANE, 2, 3-DICHLORO-2-METHYL-	1. A	1.
2.	BENZENE, CHLORO-	2. D	2.
3.	BENZENE, ETHYL-	3. D	3.
4.	HEXANAL, 4-METHYL-	4. B	4.
5.	BENZENE, (1-METHYLETHYL)-	5. A	5. or isomer
6.	1H-PYRROLE-2, 5-DIONE, 1-(HYDROX	6. C	6.
7.	TRICYCLO\4. 2. 0. 02, 4\OCTAN-5-OL	7. C	7. I.S. d4-1,2-Dichlorobenzene
8.	1H-INDENE, 2, 3-DIHYDRO-	8. A	8. Or isomer
9.	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	9. A	9. or isomer
10.	METHANOL, DIBUTOXY-	10. A	10.
11.	BENZENE, 2-ETHYL-1, 4-DIMETHYL-	11. A	11. or isomer
12.	BENZENE, 2-ETHYL-1, 4-DIMETHYL-	12. A	12. or isomer

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RECEIVED JUL 0 8 1985 MW-1B

13.	1H-INDENE, 2, 3-DIHYDRO-4-METHYL	13A	13. Or isomer
14.	2H-AZEPIN-2-ONE, HEXAHYDRO-	14.A	14.
15.	BENZOICACID, 4-(1, 1-DIMETHYLETH	15.A	15.
16.	DODECANOICACID	16.A	16.
17.	BENZENESULFONAMIDE, N--BUTYL-4-M	17.B	17.
18.	2, 5, 8, 11, 14-PENTAOXAPENTADECAN	18.B	18.
19.	1-HEXADECYNE	19.B	19.
20.	ETHANOL, 2-(9-OCTADECENYLOXY)-,	20.B	20.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 022

MW-LB
DUP

Organics Analysis Data Sheet
(Page 1)

85FP06D02
RECEIVED JUL 08 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L792
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	58 J
75-00-3	Chloroethane	21 24
75-09-2	Methylene Chloride	2000 B
67-64-1	Acetone	31 ~~M~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	200 230
156-60-5	Trans-1,2-Dichloroethene	53 59
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 9.6 UJ
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 3.9 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-27-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 3.5 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	6.2
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	~~10 J~~ 1.8 J
127-18-4	Tetrachloroethene	~~5 J~~ 1.5 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	~~5 J~~ 2.0 J
100-41-4	Ethylbenzene	~~5 J~~ 4.7 J
100-42-5	Styrene	5 U
	Total Xylenes	~~5 J~~ 2.7 J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

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Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
F.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 022 RE

MW-1-B Dup

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 08 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L792 RE

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: NGM

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/1/85

Date Analyzed: 5/1/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	84 J
75-00-3	Chloroethane	24
75-09-2	Methylene Chloride	~~5 JB~~ 4.0 4J
67-64-1	Acetone	19 ~~U~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	230
156-60-5	Trans-1,2-Dichloroethene	59
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 B J
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 3.4 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 3.7 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 4.7 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	~~10 J~~ 3.2 J
127-18-4	Tetrachloroethene	~~5 J~~ 1.8 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	~~5 J~~ 1.2 J
100-41-4	Ethylbenzene	~~5 J~~ 1.6 J
100-42-5	Styrene	5 U
	Total Xylenes	~~5 J~~ 2.5 J

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

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Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 022

MW-1E
Dup

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 42/9/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	13 BJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	14
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

PSC
6-24

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 022

MW-1 Dup

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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$V_s = 1000$ or $W_s = NR$ $V_t = 25000$ $V_i = 5$

14.	CYCLOHEXANEPROPANOL, . ALPHA. -ME	14. 0	14.
15.	1,2-BENZENEDICARBOXYLICACID,BI	15. 0	15.
16.	1,2-BENZENEDICARBOXYLICACID,DI	16. 0	16.
17.	1,2-BENZENEDICARBOXYLICACID,DI	17. 0	17.

MW-1D
Dup

RECEIVED JUL 0 8 1985

Isomer

No volatile compounds found

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED002, MW-1B DUP

GC REPORT NO. 71 LAB SAMPLE NO. L79201AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	98-82-8	BENZENE, (1-METHYLETHYL)-	A/BN	419	934	14.9 UG/L
2.	496-11-7	1H-INDENE, 2, 3-DIHYDRO-	A/BN	556	937	62.6 UG/L
3.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	A/BN	562	894	231.1 UG/L
4.	54518-04-6	METHANOL, DIBUTOXY-	A/BN	587	612	32.6 UG/L
5.	824-22-6	1H-INDENE, 2, 3-DIHYDRO-4-METHYL	A/BN	680	751	26.6 UG/L
6.	142-62-1	HEXANOICACID	A/BN	776	627	15.7 UG/L
7.	40365-61-5	2H-PYRAN, 2-(3-BUTYNYLOXY)TETRA	A/BN	807	527	86.0 UG/L
8.	19549-72-5	3-HEPTANOL, 2, 4-DIMETHYL-	A/BN	825	387	21.3 UG/L
9.	143-07-7	DODECANOICACID	A/BN	1034	820	12.7 UG/L
10.	1907-65-9	BENZENESULFONAMIDE, N-BUTYL-4-M	A/BN	1104	632	16.4 UG/L
11.	936-61-8	BENZENECARBOTHIOICACID, O-ETHYL	A/BN	1478	384	6.2 UG/L
12.	5353-25-3	ETHANOL, 2-(9-OCTADECENYLOXY)-,	A/BN	1498	737	7.0 UG/L
13.	131-18-0	1, 2-BENZENEDICARBOXYLICACID, DI	A/BN	1607	687	8.9 UG/L
14.	10528-67-3	CYCLOHEXANEPROPANOL, . ALPHA. -ME	A/BN	1635	539	5.5 UG/L
15.	84-69-5	1, 2-BENZENEDICARBOXYLICACID, BI	A/BN	1665	663	4.9 UG/L
16.	131-18-0	1, 2-BENZENEDICARBOXYLICACID, DI	A/BN	1843	655	5.2 UG/L
17.	27554-26-3	1, 2-BENZENEDICARBOXYLICACID, DI	A/BN	2031	590	2.3 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. BENZENE, (1-METHYLETHYL)-	1. A	1.
2. 1H-INDENE, 2, 3-DIHYDRO-	2. A	2.
3. CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	3. A	3.
4. METHANOL, DIBUTOXY-	4. C	4.
5. 1H-INDENE, 2, 3-DIHYDRO-4-METHYL	5. B	5.
6. HEXANOICACID	6. B	6.
7. 2H-PYRAN, 2-(3-BUTYNYLOXY)TETRA	7. C	7.
8. 3-HEPTANOL, 2, 4-DIMETHYL-	8. C	8.
9. DODECANOICACID	9. A	9.
10. BENZENESULFONAMIDE, N-BUTYL-4-M	10. D	10.
11. BENZENECARBOTHIOICACID, O-ETHYL	11. C	11.
12. ETHANOL, 2-(9-OCTADECENYLOXY)-,	12. A	12.
13. 1, 2-BENZENEDICARBOXYLICACID, DI	13. A	13.
14. CYCLOHEXANEPROPANOL, . ALPHA. -ME	14.	14.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 004

MW-2A

85FP06503

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L782
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 4/29/85
Date Analyzed: 4/29/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 2.5 UJ
67-64-1	Acetone	36 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 8.5 UJ
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

FJ 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 004

MW-2A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/17/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U J
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U J
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	11 ~~B~~ J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 004

MW-2A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR (48) $V_t = 25000$ $V_i = 5$

MW-2A

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED 004

QC REPORT NO. 71 LAB SAMPLE NO. L78201AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	124-07-2	OCTANOICACID	A/BN	733	897	62.9 UG/L
2.	334-48-5	DECANOICACID	A/BN	890	811	106.9 UG/L
3.	143-07-7	DODECANOICACID	A/BN	1046	835	188.7 UG/L
4.	544-63-8	TETRADECANOICACID	A/BN	1171	790	33.2 UG/L
5.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1649	767	516.9 UG/L
6.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1925	493	26.1 UG/L
7.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	2098	724	163.3 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. OCTANOICACID	1. A	1.
2. DECANOICACID	2. A	2.
3. DODECANOICACID	3. A	3.
4. TETRADECANOICACID	4. A	4.
5. 2,5,8,11,14-PENTAOXAPENTADECAN	5. B	5.
6. 2,5,8,11,14-PENTAOXAPENTADECAN	6. C	6.
7. 2,5,8,11,14-PENTAOXAPENTADECAN	7. B	7.

No notable compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 005

MW-2B

85FP06S0 (4)

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

RECEIVED JUL 0 8 1985

Lab Sample ID No: L783

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By:

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 4/29/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number			ug/L
74-87-3		Chloromethane	10 U J
74-83-9		Bromomethane	10 U
75-01-4	*	Vinyl Chloride	29
75-00-3		Chloroethane	~~10 J~~ 3.4 J
75-09-2		Methylene Chloride	11 ~~B~~ J
67-64-1		Acetone	82 ~~B~~ J
75-15-0		Carbon Disulfide	5 U
75-35-4		1,1-Dichloroethene	5 U
75-34-3		1,1-Dichloroethane	31 32
156-60-5	*	Trans-1,2-Dichloroethene	7.2
67-66-3		Chloroform	5 U
107-06-2		1,2-Dichloroethane	5 U
78-93-3		2-Butanone	13 B J
71-55-6		1,1,1-Trichloroethane	5 U
56-23-5		Carbon Tetrachloride	5 U
108-05-4		Vinyl Acetate	10 U J
75-27-4		Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 3.7 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

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C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED005 RE

MW-2B

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L783RE
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	22
75-00-3	Chloroethane	~~10 J~~ 3.7 J
75-09-2	Methylene Chloride	12
67-64-1	Acetone	160 4 J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	32
156-60-5	Trans-1,2-Dichloroethene	6.4
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

RJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 2.8 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 005

MW-2B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	12 U J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

52

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute, Analyzed as a single compound

Prepared by:

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 005

MW-2B

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR (53) $V_t = 25000$ $V_i = 5$

MW-2B

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED 005

GC REPORT NO. 71 LAB SAMPLE NO. L78301AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	824	870	225.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 006

MW-3A

85FP06505

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L784

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MGM

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 4/29/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	31 B
67-64-1	Acetone	170 ~~B~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 3.7 J
156-60-5	Trans-1,2-Dichloroethene	~~5 J~~ 1.1 J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.9 UJ
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PSM 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 006

MW-3A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	28 BJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

56

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Prepared by:

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 006

NW-3A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 57 $V_t = 25000$ $V_i = 5$

MW-3A

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO., ED 006

QC REPORT NO. 71 LAB SAMPLE NO. L78401AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	100-37-8	ETHANOL, 2-(DIETHYLAMINO)-	A/BN	395	844	28.5 UG/L
2.	108-82-7	4-HEPTANOL, 2,6-DIMETHYL-	A/BN	857	642	17.6 UG/L
3.	10544-50-0	SULFUR, MOL. (S8)	A/BN	1357	952	73.5 UG/L
4.	14905-56-7	TETRADECANE, 2,6,10-TRIMETHYL-	A/BN	1685	527	9.6 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHANOL, 2-(DIETHYLAMINO)-	1. A	1.
2. 4-HEPTANOL, 2,6-DIMETHYL-	2. C	2.
3. SULFUR, MOL. (S8)	3. A	3.
4. TETRADECANE, 2,6,10-TRIMETHYL-	4. B	4. Alkane

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 007

MW-3B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	180 B
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

60

PJ

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 007

MW-3B

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 61 $V_t = 25000$ $V_i = 5$

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 007

MW-3B

85FP06506

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L785
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: MCM
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 4/29/85
Date Analyzed: 4/29/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	16 ~~U~~ J
67-64-1	Acetone	73 ~~U~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5.7
156-60-5	Trans-1,2-Dichloroethene	~~5 J~~ 2.8 J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.7 UJ
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 3.1 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PFC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5.4
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5.4
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

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C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

MW-3B

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED007,

QC REPORT NO. 71 LAB SAMPLE NO. L78501AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	825	938	186.7 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 008

MW-4A

85FP06507

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L786

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By:

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 4/29/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	36 B
67-64-1	Acetone	13 ~~B~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 3.6 J
156-60-5	Trans-1,2-Dichloroethene	~~5 J~~ 2.7 J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U J
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 1.6 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 1.5 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 1.4 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC
6-27-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 008

MW-4A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	22 BJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

PSC 6-24-85

 Prepared by:

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 008

MW-4A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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$V_s = 1000$ or W_s = NR $V_t = 25000$ $V_i = 5$

MW-4A

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED008,

QC REPORT NO. 71 LAB SAMPLE NO. L78601AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	779	949	19.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 009

MW-4B

85FP06508

RECEIVED JUL 0 8 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L787
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 4/29/85
Date Analyzed: 4/29/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	19 B
67-64-1	Acetone	130 ~~U~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	~~5 J~~ 3.6 J
75-34-3	1,1-Dichloroethane	9.3
156-60-5	Trans-1,2-Dichloroethene	~~5 J~~ 3.6 J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U J
71-55-6	1,1,1-Trichloroethane	32
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 3.7 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 3.9 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 009

MW-4B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 4.8 U J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

PJC 6-24-85

PJC 6-24-85

 Prepared by: [signature]

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 009

MW-4B

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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$V_s = 1000$ or $W_s = NR$ $V_t = 25000$ $V_i = 5$

MW-4B

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

.AB NAME: CAL CASE NO. 4214 SAMPLE NO. ED009,

QC REPORT NO. 71 LAB SAMPLE NO. L78701AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	778	941	7.4 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.

No volatile Compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 010

MW-5A

Organics Analysis Data Sheet
(Page 1)

85FP06509
RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L795
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 UJ
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 UJ
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.1 BJ
67-64-1	Acetone	68 B
75-15-0	Carbon Disulfide	5 UJ
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5J~~ 3.2J
156-60-5	Trans-1,2-Dichloroethene	~~6J~~ 3.7J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10JB~~ 7.3 UJ
71-55-6	1,1,1-Trichloroethane	~~5J~~ 2.3J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 UJ
75-27-4	Bromodichloromethane	5 UJ

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	30
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 UJ
75-25-2	Bromoform	5 UJ
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5J~~ 1.6J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. *Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.*

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. *Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions.* (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. *(e.g. 10J).*

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 010

MW-5A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U J
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 J B~~ 6.4 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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PJC 6-24-85

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED010

MW-5A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 0.5L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =500 or W_s = NR 73 V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

MW-5A

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED010

QC REPORT NO. 71 LAB SAMPLE NO. L7?501AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	597-93-3	5-NONANOL, 5-BUTYL-	A/BN	659	472	4.6 UG/L
2.	124-07-2	OCTANOICACID	A/BN	726	902	20.9 UG/L
3.	108-82-7	4-HEPTANOL, 2, 6-DIMETHYL-	A/BN	859	661	14.5 UG/L
4.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	987	914	9.8 UG/L
5.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1360	844	88.5 UG/L
6.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1511	805	154.6 UG/L
7.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1648	768	211.6 UG/L
8.	143-24-8	2, 5, 8, 11, 14-PENTAOXAPENTADECAN	A/BN	1817	757	138.7 UG/L
9.	143-24-8	2, 5, 8, 11, 14-PENTAOXAPENTADECAN	A/BN	2092	723	50.6 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 5-NONANOL, 5-BUTYL-	1. B	1.
2. OCTANOICACID	2. A	2.
3. 4-HEPTANOL, 2, 6-DIMETHYL-	3. C	3.
4. ETHANOL, 2-\2-(2-METHOXYETHOXY)	4. A	4.
5. ETHANOL, 2-\2-(2-METHOXYETHOXY)	5. C	5.
6. ETHANOL, 2-\2-(2-METHOXYETHOXY)	6. C	6.
7. ETHANOL, 2-\2-(2-METHOXYETHOXY)	7. C	7.
8. 2, 5, 8, 11, 14-PENTAOXAPENTADECAN	8. C	8.
9. 2, 5, 8, 11, 14-PENTAOXAPENTADECAN	9. C	9.

No volatile Compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 011

MW-5B

85EP06510
RECEIVED JUL 08 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L796
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [signature]
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 UJ
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 UJ
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 3.2 4J
67-64-1	Acetone	~~10 JB~~ 9.7 4J
75-15-0	Carbon Disulfide	5 UJ
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 3.0J
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 4.2 4J
71-55-6	1,1,1-Trichloroethane	36
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 UJ
75-27-4	Bromodichloromethane	5 UJ

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	130
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 UJ
75-25-2	Bromoform	5 UJ
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	12
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 011

MW-5B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U J
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 4.0 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED011

MW-5B

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 77 V_t = 25000 V_i = 5

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED011

QC REPORT NO. 71 LAB SAMPLE NO. L79601AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	127-18-4	ETHENE, TETRACHLORO-	A/BN	256	978	13.9 UG/L
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	307	936	9.7 UG/L
3.	30691-59-9	AZIRIDINE, 1-HEXYL-	A/BN	411	569	4.4 UG/L
4.	108-82-7	4-HEPTANOL, 2, 6-DIMETHYL-	A/BN	858	658	16.7 UG/L
5.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1335	700	5.0 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHENE, TETRACHLORO-	1. D	1.
2. 2-PENTANONE, 4-HYDROXY-4-METHYL	2. A	2. see blank
3. AZIRIDINE, 1-HEXYL-	3. C	3.
4. 4-HEPTANOL, 2, 6-DIMETHYL-	4. C	4.
5. ETHANOL, 2-\2-(2-METHOXYETHOXY)	5. C	5.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 012

MW-G

85FP06S11

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L797
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: MSM
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	11 ~~B~~ J
67-64-1	Acetone	~~16 B~~ ~~7~~ 16 U J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	28
156-60-5	Trans-1,2-Dichloroethene	13
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 5.8 U J
71-55-6	1,1,1-Trichloroethane	10
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PSC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 1.7 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 1.3 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PSC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 012

MW-6

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U J
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~15~~ B 15 U J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

80

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

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P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED012

MW-6

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s = 1000 or W_s = NR V_t = 25000 V_i = 5

MW-6

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED012

QC REPORT NO. 71 LAB SAMPLE NO. L79701AB

MM

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PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	288-06-2	SILACYCLOPENTANE	A/BN	214	375	4.1 UG/L
2.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	988	903	11.2 UG/L
3.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1360	838	114.6 UG/L
4.	112-35-6	ETHANOL, 2-\2-(2-METHOXYETHOXY)	A/BN	1512	805	193.7 UG/L
5.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1648	768	234.4 UG/L
6.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	1818	736	158.3 UG/L
7.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	2096	724	60.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. SILACYCLOPENTANE	1. C	1.
2. ETHANOL, 2-\2-(2-METHOXYETHOXY)	2. A	2.
3. ETHANOL, 2-\2-(2-METHOXYETHOXY)	3. C	3. possibly related
4. ETHANOL, 2-\2-(2-METHOXYETHOXY)	4. C	4. " "
5. 2,5,8,11,14-PENTAOXAPENTADECAN	5. C	5.
6. 2,5,8,11,14-PENTAOXAPENTADECAN	6. C	6.
7. 2,5,8,11,14-PENTAOXAPENTADECAN	7. C	7.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 013

MW-1

85FP06512

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L788
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	11 ~~B~~ J
67-64-1	Acetone	37 ~~B~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 1.6 J
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	11 ~~B~~ J
71-55-6	1,1,1-Trichloroethane	8.9
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

RJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 2.5 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 013

MW-7

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	30 B J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	~~10 J~~ 0.2 J
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

84

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 013

NW-7

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 85 $V_t = 25000$ $V_i = 5$

MW-7

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

AB NAME: CAL CASE NO. 4214 SAMPLE NO. ED013,

QC REPORT NO. 71 LAB SAMPLE NO. L78801AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	75-09-2	METHANE, DICHLORO-	A/BN	214	494	9.8 UG/L
2.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	811	927	155.6 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. METHANE, DICHLORO-	1. D	1.
2. 2H-AZEPIN-2-ONE, HEXAHYDRO-	2. A	2.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 014

MW-8

85FP06513

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L789
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: NOM
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	71 B
67-64-1	Acetone	130 B
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 1.4 J
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.8 J
71-55-6	1,1,1-Trichloroethane	5
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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See cover letter.
NR Not Required.
S Spiked Compound.

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Sample Number
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Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	18 BJ
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	18
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-eluted - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 014

MW-8

Organics Analysis Data Sheet
(Page 3)

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Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 89 $V_t = 25000$ $V_i = 5$

MW-8

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED014

QC REPORT NO. 71 LAB SAMPLE NO. L78901AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	820	938	309.2 UG/L
2.	55759-91-6	2-PROPENAL, 3-(2,2,6-TRIMETHYL-	A/BN	921	587	6.7 UG/L
3.	143-07-7	DODECANOICACID	A/BN	1030	825	6.0 UG/L
4.	20758-60-5	BENZENE, 1-(1-CYCLOHEXEN-1-YL)-	A/BN	1135	642	5.6 UG/L
5.	30278-08-1	1-HEXANAMINE, N-BUTYL-	A/BN	1478	446	6.0 UG/L
6.	84-74-2	1,2-BENZENEDICARBOXYLICACID, DI	A/BN	1607	729	13.7 UG/L
7.	84-69-5	1,2-BENZENEDICARBOXYLICACID, BI	A/BN	1665	620	9.6 UG/L
8.	7299-89-0	1,2-BENZENEDICARBOXYLICACID, BI	A/BN	1781	679	9.9 UG/L
9.	131-18-0	1,2-BENZENEDICARBOXYLICACID, DI	A/BN	1842	671	15.5 UG/L
10.	84-61-7	1,2-BENZENEDICARBOXYLICACID, DI	A/BN	2030	637	7.3 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.
2. 2-PROPENAL, 3-(2,2,6-TRIMETHYL-	2. C	2.
3. DODECANOICACID	3. A	3.
4. BENZENE, 1-(1-CYCLOHEXEN-1-YL)-	4. B	4.
5. 1-HEXANAMINE, N-BUTYL-	5. C	5.
6. 1,2-BENZENEDICARBOXYLICACID, DI	6. B	6.
7. 1,2-BENZENEDICARBOXYLICACID, BI	7. B	7.
8. 1,2-BENZENEDICARBOXYLICACID, BI	8. B	8.
9. 1,2-BENZENEDICARBOXYLICACID, DI	9. B	9.
10. 1,2-BENZENEDICARBOXYLICACID, DI	10. B	10.

related

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 015

MW-9

Organics Analysis Data Sheet
(Page 1)

8SFP06 S14
USE RERUN

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Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L790
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	24 J
75-00-3	Chloroethane	16
75-09-2	Methylene Chloride	~~5 JB~~ 3.4 4 J
67-64-1	Acetone	43 ~~U~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	~~5 J~~ 1.7 J
75-34-3	1,1-Dichloroethane	38
156-60-5	Trans-1,2-Dichloroethene	36
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 8.2 4 J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 3.2 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 2.2 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 1.3 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	~~5 J~~ 1.7 J
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 015 RE

MW-9

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L790 RE
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: MGM
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number			ug/L
74-87-3		Chloromethane	10 U
74-83-9		Bromomethane	10 U
75-01-4	*	Vinyl Chloride	34
75-00-3	*	Chloroethane	18
75-09-2		Methylene Chloride	5 U
67-64-1		Acetone	61 ~~U~~ J
75-15-0		Carbon Disulfide	5 U
75-35-4		1,1-Dichloroethene	~~5 U~~ 1.6 J
75-34-3	*	1,1-Dichloroethane	45
156-60-5		Trans-1,2-Dichloroethene	32 36
67-66-3		Chloroform	5 U
107-06-2		1,2-Dichloroethane	5 U
78-93-3		2-Butanone	10 U J
71-55-6		1,1,1-Trichloroethane	5 U
56-23-5		Carbon Tetrachloride	5 U
108-05-4		Vinyl Acetate	10 U J
75-27-4		Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 U~~ 3.0 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 U~~ 0.8 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 U~~ 1.0 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 015

MW-4

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/20/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	~~10 J~~ 2.6 J
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 6.8 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

93

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 015

MW-4

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 94 $V_t = 25000$ $V_i = 5$

MW-9

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL. CASE NO. 4214 SAMPLE NO. ED015

QC REPORT NO. 71 LAB SAMPLE NO. L79001AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	817	926	276.7 UG/L
2.	98-73-7	BENZOICACID, 4-(1,1-DIMETHYLETH	A/BN	984	823	14.2 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.
2. BENZOICACID, 4-(1,1-DIMETHYLETH	2. A	2.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 016

MW-10

85FP06515

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L791
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/1/85
Date Analyzed: 5/1/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	~~10 J~~ 6.1 J
75-09-2	Methylene Chloride	57 B
67-64-1	Acetone	100 B
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	21
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.5 4J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PSC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	~~5 J~~ 1.0 J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PSC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 016 RE

MW-10

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L791 RE
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	~~10 J~~ 5.9 J
75-09-2	Methylene Chloride	36
67-64-1	Acetone	23 ~~U~~ J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	17
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 U J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 016

MW-10

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 7.6 4 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

98

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 016

MW-10

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 99 $V_t = 25000$ $V_i = 5$

MW-10

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ORGANICS ANALYSIS DATA SHEET

AB NAME: CAL CASE NO. 4214 SAMPLE NO. ED 016

C REPORT NO. 71 LAB SAMPLE NO. L79101AB

ROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	823	904	180.9 UG/L
2.	98-73-7	BENZOICACID, 4-(1,1-DIMETHYLETH	A/BN	990	804	11.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.
2. BENZOICACID, 4-(1,1-DIMETHYLETH	2. A	2.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 017

MW-11

85FP06S16

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L798
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: MGM
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/6/85
Date Analyzed: 5/6/85 ← HOLDING TIME EXCEEDED. AROMATIC COMPOUNDS FLAGGED AS ESTIMATED. PSC
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 3.3 4J
67-64-1	Acetone	~~10 JB~~ 7.6 4J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	9.3
156-60-5	Trans-1,2-Dichloroethene	~~5 J~~ 4.2 J
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 2.0 4J
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 1.3 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U J
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 1.1 J
108-88-3	Toluene	5 U J
108-90-7	Chlorobenzene	5 U J
100-41-4	Ethylbenzene	5 U J
100-42-5	Styrene	5 U J
	Total Xylenes	5 U J

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

101

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 019

MW-12B

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 5.6 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 017

MW-11

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U J
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U J
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 7.64 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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PJC 6-24-85

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED017

MW-11

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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V_s =1000 or W_s = NR V_t = 25000 V_i = 5

Key

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. EDO17 MW-11

QC REPORT NO. 71 LAB SAMPLE NO. L79801AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	53907-95-2	2-PROPANOL, 1-(1-METHYLPROPOXY)	A/BN	1414	571	790.3 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2-PROPANOL, 1-(1-METHYLPROPOXY)	1. B	1.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 6 8, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 018

MW-12A

85F P06517

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L799
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 2.6 4J
67-64-1	Acetone	38 ~~B~~ 4 J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 1.1 J
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.1 4J
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 4.1 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	~~5 J~~ 1.0 J
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 018

MW-12A

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	~~10 J~~ 2.8 J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 5.8 4 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	~~10 J~~ 2.8 J
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Prepared by: DB

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED018

MW-12A

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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V_s =1000 or W_s = NR , V_t = 25000 , V_i = 5

Key

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED018, MW-12A

QC REPORT NO. 71 LAB SAMPLE NO. L79901AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	124-07-2	OCTANOICACID	A/BN	740	866	46.0 UG/L
2.	334-48-5	DECANOICACID	A/BN	896	818	24.7 UG/L
3.	143-07-7	DODECANOICACID	A/BN	1055	831	107.6 UG/L
4.	544-63-8	TETRADECANOICACID	A/BN	1178	798	68.8 UG/L
5.	57-10-3	HEXADECANOICACID	A/BN	1300	766	50.7 UG/L
6.	112-35-6	ETHANOL,2-\2-(2-METHOXYETHOXY)	A/BN	1361	834	99.7 UG/L
7.	112-35-6	ETHANOL,2-\2-(2-METHOXYETHOXY)	A/BN	1512	797	121.9 UG/L
8.	248-70-4	\1\BENZOTHIENO\3,2-B\\1\BENZOT	A/BN	1581	476	14.6 UG/L
9.	112-35-6	ETHANOL,2-\2-(2-METHOXYETHOXY)	A/BN	1648	764	116.0 UG/L
10.	143-24-8	2,5,8,11,14-PENTAOXAPENTADECAN	A/BN	2092	705	22.6 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	OCTANOICACID	1. A	1.
2.	DECANOICACID	2. A	2.
3.	DODECANOICACID	3. A	3.
4.	TETRADECANOICACID	4. A	4.
5.	HEXADECANOICACID	5. A	5.
6.	ETHANOL,2-\2-(2-METHOXYETHOXY)	6. B	6.
7.	ETHANOL,2-\2-(2-METHOXYETHOXY)	7. B	7.
8.	\1\BENZOTHIENO\3,2-B\\1\BENZOT	8. C	8. I.S. d_{12}-Chrysene
9.	ETHANOL,2-\2-(2-METHOXYETHOXY)	9. B	9.
10.	2,5,8,11,14-PENTAOXAPENTADECAN	10. C	10.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 019

MW-12B

85FP06518

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

RECEIVED JUL 08 1985

Lab Sample ID No: L800

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MSM

Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/2/85

Date Analyzed: 5/2/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 2.4 UJ
67-64-1	Acetone	14 ~~U~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	~~5 J~~ 1.1 J
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	~~5 J~~ 1.5 J
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.1 UJ
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 4.9 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED019

MW-RB

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR /// V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED019

MW-12B

QC REPORT NO. 71 LAB SAMPLE NO. L8OC01AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	513-38-2	PROPANE, 1-IODO-2-METHYL-	A/BN	346	798	135.1 UG/L
2.	100-52-7	BENZALDEHYDE	A/BN	465	936	50.3 UG/L
3.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	839	891	348.6 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. PROPANE, 1-IODO-2-METHYL-	1. B	1.
2. BENZALDEHYDE	2. A	2.
3. 2H-AZEPIN-2-ONE, HEXAHYDRO-	3. A	3.

No volatiles compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 020

MW-13

85FP06519

RECEIVED JUL 0 8 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L801
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: MM
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	43 J
75-00-3	Chloroethane	~~10 J~~ 2.8 J
75-09-2	Methylene Chloride	~~5 JB~~ 2.2 UJ
67-64-1	Acetone	11 ~~B~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	170
156-60-5	Trans-1,2-Dichloroethene	28
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	10
78-93-3	2-Butanone	~~10 JB~~ 4.9 UJ
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 4.3 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	7.3
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	~~5 J~~ 1.2 J
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 020

MW-13

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 UJ
95-50-1	1,2-Dichlorobenzene	10 J
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 UJ
621-64-7	N-Nitroso-Di-n-Propylamine	10 UJ
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 UJ
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 UJ
105-67-9	2,4-Dimethylphenol	10 UJ
65-85-0	Benzoic Acid	50 UJ
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 UJ
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 UJ
77-47-4	Hexachlorocyclopentadiene	10 UJ
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 UJ
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 UJ

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 UJ
100-02-7	4-Nitrophenol	50 UJ
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 UJ
606-20-2	2,6-Dinitrotoluene	10 UJ
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 UJ
86-30-6	N-Nitrosodiphenylamine(1)	10 UJ
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 UJ
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 3.4 4J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 UJ
53-70-3	Dibenz(a,h)Anthracene	10 UJ
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED020

MW-13

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 115 V_t = 25000 V_i = 5

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED 020

QC REPORT NO. 71 LAB SAMPLE NO. LB0103V

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC J VALUE
1.	64-17-5	ETHANOL	VOA	85	942	40.6 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHANOL	1. A	1.

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED020, MW-13

QC REPORT NO. 71 LAB SAMPLE NO. L80101AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	3868-64-2	PENTALENE, OCTAHYDRO-2-METHYL-	A/BN	410	866	14.2 UG/L
2.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	817	911	231.2 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	PENTALENE, OCTAHYDRO-2-METHYL-	1. B	1. or isomer
2.	2H-AZEPIN-2-ONE, HEXAHYDRO-	2. A	2.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 021

MW-14

85FP06520

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214 RECEIVED JUL 0 8 1985

Lab Sample ID No: L802

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MM

Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/3/85

Date Analyzed: 5/3/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	6.4 ~~U~~ J
67-64-1	Acetone	~~10 JB~~ 5.4 UJ
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 4.8 UJ
71-55-6	1,1,1-Trichloroethane	~~5 J~~ 3.9 J
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

118

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 021

MW-14

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 6.4 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	~~10 J~~ 7.8 J
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

119

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED021

MW-14

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 120 V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

MW-14

E: CAL CASE NO. 4214 SAMPLE NO. ED021

EPORT NO. 71 LAB SAMPLE NO. L80203V

RECEIVED JUL 0 8 1985

OBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
64-17-5	ETHANOL	VOA	85	941	46.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHANOL	1. A	1.

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ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 08 1985

LAB NAME. CAL CASE NO. 4214 SAMPLE NO. ED021. MW-14

QC REPORT NO. 71 LAB SAMPLE NO. L80201AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	513-38-2	PROPANE, 1-IODO-2-METHYL-	A/BN	345	903	22.1 UG/L
2.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	842	913	287.2 UG/L
3.	18060-77-0	2-BUTENOICACID, 1-METHYLETHYLES	A/BN	863	636	13.7 UG/L
4.	1912-24-9	1,3,5-TRIAZINE-2,4-DIAMINE, 6-C	A/BN	1169	757	18.4 UG/L
5.	54410-91-2	PIPERAZINE, 2,3-DIMETHYL-5-(2-M	A/BN	1481	450	11.1 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. PROPANE, 1-IODO-2-METHYL-	1. B	1.
2. 2H-AZEPIN-2-ONE, HEXAHYDRO-	2. A	2.
3. 2-BUTENOICACID, 1-METHYLETHYLES	3. B	3.
4. 1,3,5-TRIAZINE-2,4-DIAMINE, 6-C	4. A	4. common name is Atrazine
5. PIPERAZINE, 2,3-DIMETHYL-5-(2-M	5. B	5.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 024

BLK

85F06R01

RECEIVED JUL 0 8 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L793

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By:

Date Sample Received: 4/25/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/1/85

Date Analyzed: 5/1/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 4.0 4J
67-64-1	Acetone	13 ~~B~~ J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.5 4J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PSC 6-14-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

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C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 024

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/21/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U J
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U J
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 2.4 4 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U J

124

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 024

BLK

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/29/85

Date Analyzed: 5/11/85

Conc/Dil Factor: 1L/25ML

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or W_s = NR 125 $V_t = 25000$ $V_i = 5$

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BLK

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ORGANICS ANALYSIS DATA SHEET

AB NAME: CAL CASE NO. 4214 SAMPLE NO. ED024,

QC REPORT NO. 71 LAB SAMPLE NO. L79301AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
	NO A/BN				

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 025

BLK 2

85FP06 A8
85FP06R02

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L804

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MGM

Date Sample Received: ~~4/25/85~~ DB 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/2/85

Date Analyzed: 5/2/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U J
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 2.3 4 J
67-64-1	Acetone	~~10 JB~~ 8.7 4 J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 5.3 4 J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

RC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

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Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

See cover letter.
NR Not Required.
S Spiked Compound.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 025

BLK 2

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Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	~~40 J~~ 3.0 J
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 4.0 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

128

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

PTC 5-24-85

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED025

BLK 2

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

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V_s =1000 or W_s = NR V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 08 1985

B NAME: CAL CASE NO. 4214 SAMPLE NO. ED025, BLK 2

REPORT NO. 71 LAB SAMPLE NO. L80401AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	779	933	8.2 UG/L
2.	593-45-3	OCTADECANE	A/BN	904	855	8.8 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.
2.	OCTADECANE	2. B	2. alkane

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 026

REVECT

85FP06S21

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L805
QC Report No: 71
Sample Matrix: SOIL
Contract No: 68-01-6958
Data Release Authorized By: MGM
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 5/3/85
Date Analyzed: 5/3/85
Conc/Dil Factor: 100 pH: NR
Percent Moisture: 100
Percent Moisture (Decanted): NR

CAS Number		ug/Kg
74-87-3	Chloromethane	500 U J
74-83-9	Bromomethane	500 U
75-01-4	Vinyl Chloride	500 U J
75-00-3	Chloroethane	500 U
75-09-2	Methylene Chloride	250 J B
67-64-1	Acetone	1100 B J
75-15-0	Carbon Disulfide	250 U J
75-35-4	1,1-Dichloroethene	250 U
75-34-3	1,1-Dichloroethane	250 U
156-60-5	Trans-1,2-Dichloroethene	250 U
67-66-3	Chloroform	250 U
107-06-2	1,2-Dichloroethane	250 U
78-93-3	2-Butanone	3500 B J
71-55-6	1,1,1-Trichloroethane	250 U
56-23-5	Carbon Tetrachloride	250 U
108-05-4	Vinyl Acetate	500 U J
75-27-4	Bromodichloromethane	250 U J

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	250 U
78-87-5	1,2-Dichloropropane	250 U
10061-02-6	Trans-1,3-Dichloropropene	250 U
79-01-6	Trichloroethene	250 U
124-48-1	Dibromochloromethane	250 U
79-00-5	1,1,2-Trichloroethane	250 U
71-43-2	Benzene	250 U
10061-01-5	cis-1,3-Dichloropropene	250 U
110-75-8	2-Chloroethylvinylether	500 U J
75-25-2	Bromoform	250 U J
591-78-6	2-Hexanone	500 U
108-10-1	4-Methyl-2-Pentanone	500 U
127-18-4	Tetrachloroethene	250 U
108-88-3	Toluene	250 U
108-90-7	Chlorobenzene	250 U
100-41-4	Ethylbenzene	250 U
100-42-5	Styrene	250 U
	Total Xylenes	250 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

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C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Sample Number
ED 026

REVERT

Organics Analysis Data Sheet
(Page 2)

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Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/23/85

Conc/DiL Factor: 29G/ML

CAS Number		ug/Kg
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	330 U
62-53-3	Aniline	330 U
111-44-4	bis(-2-Chloroethyl)Ether	330 U
95-57-8	2-Chlorophenol	330 U
541-73-1	1,3-Dichlorobenzene	330 U
106-46-7	1,4-Dichlorobenzene	330 U
100-51-6	Benzyl Alcohol	~~330 J~~ 74 J
95-50-1	1,2-Dichlorobenzene	330 U
95-48-7	2-Methylphenol	330 U
39638-32-9	bis(2-chloroisopropyl)Ether	330 U
106-44-5	4-Methylphenol	330 U
621-64-7	N-Nitroso-Di-n-Propylamine	330 U J
67-72-1	Hexachloroethane	330 U
98-95-3	Nitrobenzene	330 U J
78-59-1	Isophorone	330 U
88-75-5	2-Nitrophenol	330 U J
105-67-9	2,4-Dimethylphenol	330 U J
65-85-0	Benzoic Acid	1600 U J
111-91-1	bis(-2-Chloroethoxy)Methane	330 U
120-83-2	2,4-Dichlorophenol	330 U
120-82-1	1,2,4-Trichlorobenzene	330 U
91-20-3	Naphthalene	330 U
106-47-8	4-Chloroaniline	330 U J
87-68-3	Hexachlorobutadiene	330 U
59-50-7	4-Chloro-3-Methylphenol	330 U
91-57-6	2-Methylnaphthalene	330 U J
77-47-4	Hexachlorocyclopentadiene	330 U J
88-06-2	2,4,6-Trichlorophenol	330 U
95-95-4	2,4,5-Trichlorophenol	1600 U
91-58-7	2-Chloronaphthalene	330 U
88-74-4	2-Nitroaniline	1600 U J
131-11-3	Dimethyl Phthalate	330 U
208-96-8	Acenaphthylene	330 U
99-09-2	3-Nitroaniline	1600 U J

CAS Number		ug/Kg
83-32-9	Acenaphthene	330 U
51-28-5	2,4-Dinitrophenol	1600 U
100-02-7	4-Nitrophenol	1600 U
132-64-9	Dibenzofuran	330 U
121-14-2	2,4-Dinitrotoluene	330 U J
606-20-2	2,6-Dinitrotoluene	330 U
84-66-2	Diethylphthalate	330 U J
7005-72-3	4-Chlorophenyl-phenylether	330 U
86-73-7	Fluorene	330 U J
100-01-6	4-Nitroaniline	1600 U J
534-52-1	4,6-Dinitro-2-Methylphenol	1600 U
86-30-6	N-Nitrosodiphenylamine(1)	330 U J
101-55-3	4-Bromophenyl-phenylether	330 U
118-74-1	Hexachlorobenzene	330 U
87-86-5	Pentachlorophenol	1600 U
85-01-8	Phenanthrene	330 U
120-12-7	Anthracene	330 U
84-74-2	Di-n-Butylphthalate	330 U J
206-44-0	Fluoranthene	330 U
92-87-5	Benzidine	1600 U
129-00-0	Pyrene	330 U J
85-68-7	Butylbenzylphthalate	480
91-94-1	3,3'-Dichlorobenzidine	660 U
56-55-3	Benzo(a)Anthracene	330 U
117-81-7	bis(2-Ethylhexyl)Phthalate	330 U
218-01-9	Chrysene	330 U
117-84-0	Di-n-Octyl Phthalate	330 U
205-99-2	Benzo(b)Fluoranthene(2)	330 U
207-08-9	Benzo(k)Fluoranthene(2)	330 U
50-32-8	Benzo(a)Pyrene	330 U
193-39-5	Indeno(1,2,3-cd)Pyrene	330 U
53-70-3	Dibenz(a,h)Anthracene	330 U J
191-24-2	Benzo(g,h,i)Perylene	330 U

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PJC
c 5/4

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

PJC
c 5/5

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P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED026

REVERT

Organics Analysis Data Sheet
(Page 3)

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Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1.5g/5ml

CAS Number		ug/Kg
319-84-6	Alpha-BHC	2.0 U
319-85-7	Beta-BHC	2.0 U
319-86-8	Delta-BHC	2.0 U
58-89-9	Gamma-BHC (Lindane)	2.0 U
76-44-8	Heptachlor	2.0 U
309-00-2	Aldrin	2.0 U
1024-57-3	Heptachlor Epoxide	2.0 U
959-98-8	Endosulfan I	2.0 U
60-57-1	Dieldrin	4.0 U
72-55-9	4,4'-DDE	4.0 U
72-20-8	Endrin	4.0 U
33213-65-9	Endosulfan II	4.0 U
72-54-8	4,4'-DDD	4.0 U
7421-93-4	Endrin Aldehyde	4.0 U
1031-07-8	Endosulfan Sulfate	4.0 U
50-29-3	4,4'-DDT	4.0 U
72-43-5	Methoxychlor	20 U
53494-70-5	Endrin Ketone	4.0 U
57-74-9	Chlordane	20 U
8001-35-2	Toxaphene	40 U
12674-11-2	Aroclor-1016	20 U
11104-28-2	Aroclor-1221	20 U
11141-16-5	Aroclor-1232	20 U
53469-21-9	Aroclor-1242	20 U
12672-29-6	Aroclor-1248	20 U
11097-69-1	Aroclor-1254	40 U
11096-82-5	Aroclor-1260	40 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s = NR or W_s = 1.5 V_t = 5000 V_i = 5

REVERT

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED026,

QC REPORT NO. 71 LAB SAMPLE NO. L80501AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	4359-77-7	2-PENTANONE, 3-METHYLENE-	A/BN	251	919	1.0 UG/G
2.	110-02-1	THIOPHENE	A/BN	282	597	0.5 UG/G
3.	926-82-9	HEPTANE, 3, 5-DIMETHYL-	A/BN	303	949	0.9 UG/G
4.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	322	902	4.1 UG/G
5.	110-12-3	2-HEXANONE, 5-METHYL-	A/BN	336	789	2.4 UG/G
6.	2216-34-4	OCTANE, 4-METHYL-	A/BN	344	935	1.4 UG/G
7.	2216-33-3	OCTANE, 3-METHYL-	A/BN	354	968	1.2 UG/G
8.	108-41-8	BENZENE, 1-CHLORO-3-METHYL-	A/BN	531	886	2.8 UG/G
9.	1316-80-9	CYCLOHEPTATRIENYLIUM, IODIDE	A/BN	623	842	1.5 UG/G
10.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	783	950	0.3 UG/G
11.	107-45-9	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	A/BN	987	845	2.1 UG/G
12.	107-45-9	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	A/BN	1000	844	2.0 UG/G
13.	107-45-9	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	A/BN	1136	843	1.2 UG/G
14.	57-10-3	HEXADECANOICACID	A/BN	1300	788	1.2 UG/G
15.	103-79-7	2-PROPANONE, 1-PHENYL-	A/BN	1388	715	0.8 UG/G
16	60-33-3	9, 12-OCTADECADIENOICACID(Z, Z)-	A/BN	1401	789	1.7 UG/G
17.	56554-96-2	2-OCTADECENAL	A/BN	1404	692	1.5 UG/G
18.	593-45-3	OCTADECANE	A/BN	1632	871	0.4 UG/G
19.	629-99-2	PENTACOSANE	A/BN	1682	844	0.4 UG/G
20.	29354-98-1	HEXADECANOL	A/BN	1888	782	0.3 UG/G

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	2-PENTANONE, 3-METHYLENE-	1 A	1.
2.	THIOPHENE	2 C	2.
3.	HEPTANE, 3, 5-DIMETHYL-	3 B	3. alkane
4.	2-PENTANONE, 4-HYDROXY-4-METHYL	4 A	4.
5.	2-HEXANONE, 5-METHYL-	5 B	5.
6.	OCTANE, 4-METHYL-	6 B	6. alkane
7.	OCTANE, 3-METHYL-	7 B	7. alkane
8.	BENZENE, 1-CHLORO-3-METHYL-	8 A	8. or isomer
9.	CYCLOHEPTATRIENYLIUM, IODIDE	9 B	9.
10	2H-AZEPIN-2-ONE, HEXAHYDRO-	10 A 13	10.
11.	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	11 B	11.
12.	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	12 B	12.

REVERA

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13.	2-PENTANAMINE, 2, 4, 4-TRIMETHYL-	13. B	13.
14.	HEXADECANOICACID	14. A	14.
15.	2-PROPANONE, 1-PHENYL-	15. B	15.
16.	9, 12-OCTADECADIENOICACID(Z, Z)-	16. B	16.
17.	2-OCTADECENAL	17. B	17. or isomer
18.	OCTADECANE	18. B	18. alkane
19.	PENTACOSANE	19. B	19. alkane
20.	HEXADECANOL	20. B	20.

No volatile compounds found

USE RERUN G-101

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P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 161

85FP06522

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 08 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L806
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	130 J
75-00-3	Chloroethane	83
75-09-2	Methylene Chloride	5.3 ~~B~~ J
67-64-1	Acetone	~~10 JB~~ 3.7 4J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	770
156-60-5	Trans-1,2-Dichloroethene	240
67-66-3	Chloroform	~~5 J~~ 4.7 J
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 5.5 4J
71-55-6	1,1,1-Trichloroethane	180
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	17
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	~~10 J~~ 1.4 J
127-18-4	Tetrachloroethene	13
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 161 RE

G-101

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L806
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By:
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number			ug/L
74-87-3		Chloromethane	10 U
74-83-9		Bromomethane	10 U
75-01-4	*	Vinyl Chloride	110
75-00-3	*	Chloroethane	69
75-09-2		Methylene Chloride	~~5 J~~ 3.5 J
67-64-1		Acetone	10 U
75-15-0		Carbon Disulfide	5 U
75-35-4		1,1-Dichloroethene	5 U
75-34-3	*	1,1-Dichloroethane	890
156-60-5		Trans-1,2-Dichloroethene	190 240
67-66-3		Chloroform	5 U
107-06-2		1,2-Dichloroethane	5 U
78-93-3		2-Butanone	~~10 J~~ 1.3 J
71-55-6	*	1,1,1-Trichloroethane	270
56-23-5		Carbon Tetrachloride	5 U
108-05-4		Vinyl Acetate	10 U J
75-27-4		Bromodichloromethane	5 U J

PJC 6-24-85

CAS Number			ug/L
79-34-5		1,1,2,2-Tetrachloroethane	5 U
78-87-5		1,2-Dichloropropane	5 U
10061-02-6		Trans-1,3-Dichloropropene	5 U
79-01-6	*	Trichloroethene	20
124-48-1		Dibromochloromethane	5 U
79-00-5		1,1,2-Trichloroethane	5 U
71-43-2		Benzene	5 U
10061-01-5		cis-1,3-Dichloropropene	5 U
110-75-8		2-Chloroethylvinylether	10 U J
75-25-2		Bromoform	5 U J
591-78-6		2-Hexanone	10 U
108-10-1		4-Methyl-2-Pentanone	10 U
127-18-4	*	Tetrachloroethene	17
108-88-3		Toluene	5 U
108-90-7		Chlorobenzene	5 U
100-41-4		Ethylbenzene	5 U
100-42-5		Styrene	5 U
		Total Xylenes	5 U

PJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

G-101

Sample Number
ED 161

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 08 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	~~10 J~~ 9.0 J
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	~~10 J~~ 2.4 J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	11 ~~B~~ J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	13
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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PSC
G-24

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED161

6-101

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 139 V_t = 25000 V_i = 5

G-101

RECEIVED JUL 0 8 1985

ORGANICS ANALYSIS DATA SHEET

AB NAME: CAL CASE NO. 4214 SAMPLE NO. ED161

QC REPORT NO. 71 LAB SAMPLE NO. LB0603V

ROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	354-23-4	ETHANE, 1, 2-DICHLORO-1, 1, 2-TRIF	VOA	162	953	64.7 UG/L
2	76-13-1	ETHANE, 1, 1, 2-TRICHLORO-1, 2, 2-T	VOA	199	832	87.1 UG/L
3.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	VOA	628	828	4.4 UG/L

	COMPOUND NAME	PROBABILITY		COMMENTS
1.	ETHANE, 1, 2-DICHLORO-1, 1, 2-TRIF	1.	A	1.
2.	ETHANE, 1, 1, 2-TRICHLORO-1, 2, 2-T	2.	A	2.
3.	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	3.	A	3.

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 08 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED161,

QC REPORT NO. 71 LAB SAMPLE NO. L80601AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	127-18-4	ETHENE, TETRACHLORO-	A/BN	255	983	23.3 UG/L
2.	1569-01-3	2-PROPANOL, 1-PROPOXY-	A/BN	311	758	26.4 UG/L
3.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	A/BN	565	872	903.6 UG/L
4.	116-02-9	CYCLOHEXANOL, 3, 3, 5-TRIMETHYL-	A/BN	584	874	629.8 UG/L
5.	78-59-1	2-CYCLOHEXEN-1-ONE, 3, 5, 5-TRIME	A/BN	652	915	18.3 UG/L
6.	23436-19-3	2-PROPANOL, 1-(2-METHYLPROPOXY)	A/BN	689	675	25.0 UG/L
7.	111-92-2	1-BUTANAMINE, N-BUTYL-	A/BN	725	735	28.5 UG/L
8.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	826	869	474.9 UG/L
9.	10544-50-0	SULFUR, MOL. (S8)	A/BN	1355	963	46.3 UG/L
10.	30278-08-1	1-HEXANAMINE, N-BUTYL-	A/BN	1487	445	15.4 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	ETHENE, TETRACHLORO-	1. A	1. see VOA
2.	2-PROPANOL, 1-PROPOXY-	2. A	2.
3.	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	3. A	3.
4.	CYCLOHEXANOL, 3, 3, 5-TRIMETHYL-	4. A	4.
5.	2-CYCLOHEXEN-1-ONE, 3, 5, 5-TRIME	5. A	5.
6.	2-PROPANOL, 1-(2-METHYLPROPOXY)	6. B	6.
7.	1-BUTANAMINE, N-BUTYL-	7. B	7.
8.	2H-AZEPIN-2-ONE, HEXAHYDRO-	8. A	8.
9.	SULFUR, MOL. (S8)	9. A	9.
10.	1-HEXANAMINE, N-BUTYL-	10. C	10.

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

USE REVERSE

Sample Number
ED 023

G101 DUP

85FP06D22

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 08 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L803
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: [illegible]
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/2/85
Date Analyzed: 5/2/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	130 J
75-00-3	Chloroethane	78
75-09-2	Methylene Chloride	5.8 ~~B~~ J
67-64-1	Acetone	~~10 JB~~ 5.2 4J
75-15-0	Carbon Disulfide	5 U J
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	730
156-60-5	Trans-1,2-Dichloroethene	200
67-66-3	Chloroform	~~5 J~~ 4.2 J
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 5.5 4J
71-55-6	1,1,1-Trichloroethane	180
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U J
75-27-4	Bromodichloromethane	5 U J

PTC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	17
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U J
75-25-2	Bromoform	5 U J
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	~~10 J~~ 1.7 J
127-18-4	Tetrachloroethene	13
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PTC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 023 RE

G-101 DUP

Organics Analysis Data Sheet
(Page 1)

RECEIVED JUL 0 8 1985

Laboratory Name: California Analytical Laboratories, Inc.
Case No: 4214
Lab Sample ID No: L803
QC Report No: 71
Sample Matrix: WATER
Contract No: 68-01-6958
Data Release Authorized By: WSM
Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 5/8/85
Date Analyzed: 5/8/85
Conc/Dil Factor: 1 pH: NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number			ug/L
74-87-3		Chloromethane	10 U
74-83-9		Bromomethane	10 U
75-01-4	*	Vinyl Chloride	100
75-00-3	*	Chloroethane	92
75-09-2		Methylene Chloride	~~5 J~~ 4.0 J
67-64-1		Acetone	~~10 JB~~ 5.1 4J
75-15-0		Carbon Disulfide	5 U
75-35-4		1,1-Dichloroethene	5 U
75-34-3	*	1,1-Dichloroethane	940
156-60-5	*	Trans-1,2-Dichloroethene	230
67-66-3		Chloroform	5 U
107-06-2		1,2-Dichloroethane	5 U
78-93-3		2-Butanone	10 UJ
71-55-6	*	1,1,1-Trichloroethane	250
56-23-5		Carbon Tetrachloride	5 U
108-05-4		Vinyl Acetate	10 UJ
75-27-4		Bromodichloromethane	5 UJ

PJC 6-24-85

CAS Number			ug/L
79-34-5		1,1,2,2-Tetrachloroethane	5 U
78-87-5		1,2-Dichloropropane	5 U
10061-02-6		Trans-1,3-Dichloropropene	5 U
79-01-6	*	Trichloroethene	20
124-48-1		Dibromochloromethane	5 U
79-00-5		1,1,2-Trichloroethane	5 U
71-43-2		Benzene	5 U
10061-01-5		cis-1,3-Dichloropropene	5 U
110-75-8		2-Chloroethylvinylether	10 UJ
75-25-2		Bromoform	5 UJ
591-78-6		2-Hexanone	10 U
108-10-1		4-Methyl-2-Pentanone	10 U
127-18-4	*	Tetrachloroethene	16
108-88-3		Toluene	5 U
108-90-7		Chlorobenzene	5 U
100-41-4		Ethylbenzene	5 U
100-42-5		Styrene	5 U
		Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

143

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 023

DUP

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/22/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U J
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	~~10 J~~ 4.4 J
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U J
100-02-7	4-Nitrophenol	50 U J
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U J
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U J
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	~~10 J~~ 2.4 J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 J~~ B 5.8 J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U J
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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PJC 6-24-85

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

PJC 6-24-85

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED023

Dup

RECEIVED JUL 0 8 1985

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/21/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 145 V_t = 25000 V_i = 5

G-101 DUP

RECEIVED JUL 08 1985

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL 71 CASE NO. 4214 SAMPLE NO. ED023

QC REPORT NO. LAB SAMPLE NO. L80303V

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. VALUE
1	354-23-4	ETHANE, 1, 2-DICHLORO-1, 1, 2-TRIF	VOA	162	954	64.5 UG/L
2	76-13-1	ETHANE, 1, 1, 2-TRICHLORO-1, 2, 2-T	VOA	199	834	84.7 UG/L
3.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	VOA	628	598	25.7 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHANE, 1, 2-DICHLORO-1, 1, 2-TRIF	1. A	1.
2. ETHANE, 1, 1, 2-TRICHLORO-1, 2, 2-T	2. A	2.
3. CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	3. A	3.

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ORGANICS ANALYSIS DATA SHEET RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED023, G101 DUP

QC REPORT NO. 71 LAB SAMPLE NO. LB0301AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	127-18-4	ETHENE, TETRACHLORO-	A/BN	252	974	23.5 UG/L
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	304	941	33.3 UG/L
3.	1860-27-1	BUTANE, 1-(1-METHYLETHOXY)-	A/BN	540	737	27.6 UG/L
4.	3524-75-2	CYCLOPENTANE, 2-PROPENYL-	A/BN	550	701	19.0 UG/L
5.	873-94-9	CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	A/BN	564	883	685.3 UG/L
6.	116-02-9	CYCLOHEXANOL, 3, 3, 5-TRIMETHYL-	A/BN	581	873	276.8 UG/L
7.	111-92-2	1-BUTANAMINE, N-BUTYL-	A/BN	724	739	25.6 UG/L
8.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	807	855	336.6 UG/L
9.	10544-50-0	SULFUR, MOL. (S8)	A/BN	1355	957	37.3 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. ETHENE, TETRACHLORO-	1. D	1.
2. 2-PENTANONE, 4-HYDROXY-4-METHYL	2. A	2.
3. BUTANE, 1-(1-METHYLETHOXY)-	3. B	3.
4. CYCLOPENTANE, 2-PROPENYL-	4. B	4.
5. CYCLOHEXANONE, 3, 3, 5-TRIMETHYL-	5. A	5. or isomer
6. CYCLOHEXANOL, 3, 3, 5-TRIMETHYL-	6. B	6.
7. 1-BUTANAMINE, N-BUTYL-	7. B	7.
8. 2H-AZEPIN-2-ONE, HEXAHYDRO-	8. A	8.
9. SULFUR, MOL. (S8)	9. A	9.

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Sample Number
ED 162

G-10L

85FP06523

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Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L807

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MBM

Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/3/85

Date Analyzed: 5/3/85

Conc/Dil Factor: ~~100~~ 5.0 pH: NR

Percent Moisture: 100

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	50 U J
74-83-9	Bromomethane	50 U
75-01-4	Vinyl Chloride	50 U J
75-00-3	Chloroethane	50 U
75-09-2	Methylene Chloride	9.3 B J
67-64-1	Acetone	71 B J
75-15-0	Carbon Disulfide	25 U J
75-35-4	1,1-Dichloroethene	25 U
75-34-3	1,1-Dichloroethane	25 U
156-60-5	Trans-1,2-Dichloroethene	13
67-66-3	Chloroform	25 U
107-06-2	1,2-Dichloroethane	25 U
78-93-3	2-Butanone	38 B J
71-55-6	1,1,1-Trichloroethane	25 U
56-23-5	Carbon Tetrachloride	25 U
108-05-4	Vinyl Acetate	50 U J
75-27-4	Bromodichloromethane	25 U J

RJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	25 U
78-87-5	1,2-Dichloropropane	25 U
10061-02-6	Trans-1,3-Dichloropropene	25 U
79-01-6	Trichloroethene	25 U
124-48-1	Dibromochloromethane	25 U
79-00-5	1,1,2-Trichloroethane	25 U
71-43-2	Benzene	25 U
10061-01-5	cis-1,3-Dichloropropene	25 U
110-75-8	2-Chloroethylvinylether	50 U J
75-25-2	Bromoform	25 U J
591-78-6	2-Hexanone	50 U
108-10-1	4-Methyl-2-Pentanone	50 U
127-18-4	Tetrachloroethene	25 U
108-88-3	Toluene	25 U
108-90-7	Chlorobenzene	25 U
100-41-4	Ethylbenzene	25 U
100-42-5	Styrene	25 U
	Total Xylenes	25 U

RJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

G-102

Sample Number
ED 162

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/23/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U J
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U J
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~10 JB~~ 3.6 45
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	~~10 J~~ 8.8 J
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

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P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

G-10L

Sample Number
ED162

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 150 V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

RECEIVED JUL 0 8 1985

LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED 162 G-102

QC REPORT NO. 71 LAB SAMPLE NO. L80701AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	308	952	31.9 UG/L
2.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	827	940	236.2 UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2-PENTANONE, 4-HYDROXY-4-METHYL	1. A	1. see blank
2. 2H-AZEPIN-2-ONE, HEXAHYDRO-	2. A	2.

No volatile compounds found

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 163

G-103

85FP06524

RECEIVED JUL 0 8 1985

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4214

Lab Sample ID No: L808

QC Report No: 71

Sample Matrix: WATER

Contract No: 68-01-6958

Data Release Authorized By: MGM

Date Sample Received: 4/26/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 5/2/85

Date Analyzed: 5/2/85

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	10 UJ
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 UJ
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	~~5 JB~~ 2.8 4J
67-64-1	Acetone	11 ~~B~~ 4J
75-15-0	Carbon Disulfide	5 UJ
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	10
156-60-5	Trans-1,2-Dichloroethene	30
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	~~10 JB~~ 7.1 4J
71-55-6	1,1,1-Trichloroethane	37
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 UJ
75-27-4	Bromodichloromethane	5 UJ

RJC 6-24-85

CAS Number		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5.1
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 UJ
75-25-2	Bromoform	5 UJ
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5.3
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

RJC 6-24-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the *definition of each flag must be explicit.*

Value If the result is a value greater than or equal to the detection limit, report the value.

U *Indicates compound was analyzed for but not detected.* Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either *when estimating a concentration for tentatively* identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract *should be confirmed by GC/MS*

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data *summary report.*

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED 163

G-103

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUL 0 8 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/23/85

Conc/DiL Factor: 1000 ML/ 2ML

CAS Number		ug/L
62-75-9	N-Nitrosodimethylamine	NR
108-95-2	Phenol	10 U
62-53-3	Aniline	10 U
111-44-4	bis(-2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U J
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U J
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U J
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U J
105-67-9	2,4-Dimethylphenol	10 U J
65-85-0	Benzoic Acid	50 U J
111-91-1	bis(-2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U J
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U J
77-47-4	Hexachlorocyclopentadiene	10 U J
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U J
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U J

CAS Number		ug/L
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U J
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U J
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U J
100-01-6	4-Nitroaniline	50 U J
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U J
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U J
206-44-0	Fluoranthene	10 U
92-87-5	Benzidine	100 U
129-00-0	Pyrene	10 U J
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo(a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	11 B J
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	11
205-99-2	Benzo(b)Fluoranthene(2)	10 U
207-08-9	Benzo(k)Fluoranthene(2)	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
53-70-3	Dibenz(a,h)Anthracene	10 U J
191-24-2	Benzo(g,h,i)Perylene	10 U

PJC 6-24-85

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Environmental Protection Agency, CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
ED163

G-103

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUL 0 8 1985

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 4/30/85

Date Analyzed: 5/17/85

Conc/Dil Factor: 1L/25ml

CAS Number		ug/L
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s =1000 or W_s = NR 154 V_t = 25000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

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LAB NAME: CAL CASE NO. 4214 SAMPLE NO. ED163, GP3

QC REPORT NO. 71 LAB SAMPLE NO. L8OEC1AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-	A/BN	816	937	143.5 UG/L

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	2H-AZEPIN-2-ONE, HEXAHYDRO-	1. A	1.

No Volatile Compounds found

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

Date Received for Review: 10/8/85 **Date Review Completed:** 10/11/85

To: Kevin Phillips

From: Arlene Pratl

Subject: Peoples Ave Dump ROS-8303-016 (SLL)

Sample Description: Case # 4214 low water metals + Cyanide

Project Data Status: complete

FIT Data Review Findings:

See attached CRL review.

Fe + ZN outside QC limits for dup s ME 3805 + ME 3825
Ca, Fe, Ag, Na + ZN in field blank ME 3827
ME 3826 + ME D 354 dup OK
AL, Ca, Fe, Pb, Mg + Na detected in field blank ME 3828
these compds are of questionable value

Additional Comments:

Book No. 4
Page No. 212

35X:3M

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Transmitted 6/12/85

DATE: 6-6-85

SUBJECT: Review of Region V CLP Data
Received for Review on 6/4/85

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thakker

TO: Data User: Jt

We have reviewed the data for the following case(s).

SITE NAME: Pepper Ave Dump SMO Case No. 4214

EPA Data Set No. SF2292 No. of Samples: 29 D.U./Activity Numbers 49051C48500

CRL No. 85FP05599 - 85FP06524

SMO Traffic No. ME3801 - ME3829 ; MED354

CLP Laboratory: Chemtech Hrs. Required for Review: 5 hrs.

Following are our findings.

This review covers 29 low concentration water samples. The analysis was done on two days; a batch of the first twenty one samples was run on May 21st and the last ~~nine~~ eight were run on May 22nd. Concerning the batch of 21 (sample #s ME 3801-3812, 3814-3820, 3825, 3827, the spike recovery was low for Fe (67%), Hg (0%), Se (60%) and Tl (60%). ~~The Se~~, Hg ~~and Tl~~ data is unusable for this batch of 21 samples. The spike recovery for Ag (380%) was biased high and is also unusable for this batch. Two duplicates were run with this batch; the duplicate precision was poor for Fe (67%) and Zn (40%) in the second duplicate.
Concerning the second batch of 8 samples (# ME 3821-24, 3826, 3828, 3829, MED354): the spike recovery for As (50%) and Pb (70%) was biased low. The As data is unusable for this batch. The spike recovery was biased high for Ag (652%), and the Ag data is unusable for this batch. Neither a duplicate nor a laboratory control sample was run in this batch.
(However, the correct number of G.C. audits were performed for the case as a whole.)

Jan J. Bela 6/5/85

( ) Data are acceptable for use.
(x) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

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EPA FORM 1320-6 (REV 3-76)

ESD/Central Regional Laboratory

DATA TRACKING - FORM I

CRL Data Set No. SF 2292 ERRIS No. _____

SMO Case No. 5214 Site Name: Peoples Ave Dump/Interstate

Name of Laboratory: Chemtech Data User: Fit

No. of Samples: 29 Date Samples Received: 6/4/85

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic reports been received? YES ✓ NO ___
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ✓ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___
6. Number of samples claimed: 29 Number of samples received: 29
7. Checked by: [illegible] Date: 6/4/85
8. Received by Contract Project Management Section: JN Date: 6.4.85
9. Review Started: 6/4/85 Reviewer Signature: [illegible]
10. Total time spent on review: 5 hrs. Date review completed: 6/8/85
11. Copied (xeroxed) by: _____ Date: _____
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, SSCRL

13. Data received by: Arlene Brave Date: 10/10/85
14. Q.A. review received by: Arlene Brave Date: 10/10/85
15. Received by CRL - CPM Section for file by: _____

Date: _____

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703/557-2490 FTS: 8-557-2490

5F2292

Date 5-30-85

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name CHEMTECH CONSULTING GROUP Case No. 4214

SOW No. 784 Q.C. Report No. 476

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
ME 3804	G2-476-01	ME 3817	G2-476-10
3805	-02	3818	-11
3806	-03	3819	-12
3807	-04	3825	-13
3808	-05	3827	-14
3809	-06	3801	-15
3810	-07	3802	-16
3811	-08	3803	-17
3816	-09	3812	-18

Comments: Since there is no silver or cobalt found in the samples, analyses were not repeated even though a continuing calibration for silver and an ICS for cobalt are out of control.

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CHICAGO, ILLINOIS 60605

ICP Interelement and background corrections applied? Yes ✓ No ____.

If yes, corrections applied before ✓ or after calculation of raw data.

Footnotes:

NR - not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP/Flame AA) or F (for furnace).

U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

s - Indicates value determined by Method of Standard Addition.

R - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

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Date 5-30-85

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name CHEMTECH CONSULTING GROUP

Case No. _____

SOW No. _____

Q.C. Report No. _____

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
ME 3814	G2-476-19	ME 3829	G2-476-28
3815	-20	MED 354	G2-476-29
3820	-21		
3821	-22		
3822	-23		
3823	-24		
3824	-25		
3826	-26		
3828	-27		

Comments:

ICP Interelement and background corrections applied? Yes ✓ No ____.

If yes, corrections applied before ✓ or after _____ generation of raw data.

Footnotes:

NR - not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP/Flame AA) or F (for furnace).

U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

s - Indicates value determined by Method of Standard Addition.

R - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

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Form I

MW-1A
85FP06501

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EPA Sample No.
ME. 3804

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-01

QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	30970 P
2.	Antimony	50 UP	14.	Manganese	202 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	213 P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	6746 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	53220 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	22850 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[92] PR	23.	Vanadium	20 UP
12.	Lead	79 F	24.	Zinc	58 P

Cyanide 10 U

Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

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Lab Manager

Form I

85FP06502 MW

1B

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703/557-2490 FTS: 8-557-2490

EPA Sample No. ME. 3805

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-02 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	[57]P	13.	Magnesium	39380 P
2.	Antimony	50 UP	14.	Manganese	82 P
3.	Arsenic	10 UF	15.	Mercury	0.2UR
4.	Barium	262 P	16.	Nickel	20UP
5.	Beryllium	5 UP	17.	Potassium	56990 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	59750 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	139400 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	[22]P	22.	Tin	30UF
11.	Iron	549 PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	24 P

Cyanide 11 Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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85FP06503 MW-2A

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EPA Sample No. ME. 3806

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-03 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[71] P	13.	Magnesium	15840 P
2.	Antimony	50 UP	14.	Manganese	32 P
3.	Arsenic	10 UF	15.	Mercury	0.2UR
4.	Barium	512 P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	38810 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	20320 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	93530 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[74] PR	23.	Vanadium	20 UP
12.	Lead	54F	24.	Zinc	39 P
Cyanide		10U	Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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EPA Sample No. ME. 3807 MW 2B

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-04 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[123] P	13.	Magnesium	38580 P
2.	Antimony	50 UP	14.	Manganese	882 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	254 P	16.	Nickel	[32] P
5.	Beryllium	5 UP	17.	Potassium	42090 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	94990 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	143700 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	48 P	22.	Tin	30 UF
11.	Iron	112 PR	23.	Vanadium	20 UP
12.	Lead	21 F P	24.	Zinc	66 P

Cyanide 10 U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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85FP06505
EPA Sample No.
ME. 3808 3A

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-05 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	228 P	13.	Magnesium	51700 P
2.	Antimony	50 UP	14.	Manganese	189 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	236 P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	83180 P
6.	Cadmium	5 UP	18.	Selenium	10 UFER
7.	Calcium	94520 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	508000 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	300 UF
11.	Iron	2875 PR	23.	Vanadium	20 UP
12.	Lead	15 FS	24.	Zinc	224 P
	Cyanide	18		Percent Solids (%)	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: FOR SELENIUM, "E" DENOTES MATRIX INTERFERENCE.

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85F006506

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EPA Sample No. MW-3B
ME. 3809

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-06 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[57] P	13.	Magnesium	21600 P
2.	Antimony	50 UP	14.	Manganese	596 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[89] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	35570 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	69240 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	49880 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[61] PR	23.	Vanadium	20 UP
12.	Lead	14 F	24.	Zinc	42 P

Cyanide 10U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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85FP06507
EPA Sample No.
MW-4A
ME. 3810

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

AB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

OW NO. 784

AB SAMPLE ID. NO. G2-476-07 QC REPORT NO. 476

Elements Identified and Measured

oncentration: Low ✓ Medium ____

atrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

.	Aluminum	[139] P	13.	Magnesium	34740 P
.	Antimony	50 UP	14.	Manganese	94 P
.	Arsenic	10 UF	15.	Mercury	0.2 UR
.	Barium	[63] P	16.	Nickel	20 UP
.	Beryllium	5 UP	17.	Potassium	[2693] P
.	Cadmium	5 UP	18.	Selenium	5 UFR
.	Calcium	71,110 P	19.	Silver	10 UPR
.	Chromium	10 P	20.	Sodium	26550 P
.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	[23] P	22.	Tin	30 UF
.	Iron	739 PR	23.	Vanadium	20 UP
12.	Lead	7.8 F	24.	Zinc	48 P
yanide		10 U	Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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03/557-2490 FTS: 8-557-2490

EPA Sample No. MW-4B
ME. 3811

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

AB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

OW NO. 784

AB SAMPLE ID. NO. G2-476-08 QC REPORT NO. 476

Elements Identified and Measured

oncentration: Low ✓ Medium ____

atrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[73] P	13.	Magnesium	36990 P
2.	Antimony	50 UP	14.	Manganese	163 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	50 UP	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[2379] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	100800 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	50960 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	[23] P	22.	Tin	30 UF
11.	Iron	[56] PR	23.	Vanadium	20 UP
12.	Lead	12 F	24.	Zinc	30 P
	Cyanide	10 U		Percent Solids (%)	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

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85FP06512

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EPA Sample No. MW-7
ME. 3816

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-09 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[86] P	13.	Magnesium	36700 P
2.	Antimony	50 UP	14.	Manganese	367 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[107] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[1509] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	72170 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	17620 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	176 PR	23.	Vanadium	20 UP
12.	Lead	75 F	24.	Zinc	44 P

Cyanide 10 U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

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EPA Sample No. MW-08
ME. 3817

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-10 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[109] P	13.	Magnesium	39310 P
2.	Antimony	50 UP	14.	Manganese	15 UP
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[62] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[2263] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	71590 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	19590 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[75] PR	23.	Vanadium	20 UP
12.	Lead	55 FE	24.	Zinc	51 P
Cyanide		10 U	Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments: FOR LEAD, "E" DENOTES MATRIX INTERFERENCE.

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EPA Sample No. MW-9
ME. 3818

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-11

QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[97] P	13.	Magnesium	36400 P
2.	Antimony	50 UP	14.	Manganese	573 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[154] P	16.	Nickel	65 P
5.	Beryllium	5 UP	17.	Potassium	79610 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	38030 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	158500 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	48 P	22.	Tin	30 UF
11.	Iron	116 PR	23.	Vanadium	20 UP
12.	Lead	11 FS	24.	Zinc	79 P

Cyanide 10U

Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SDW NO. 784

LAB SAMPLE ID. NO. G2-476-12 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[66]P	13.	Magnesium	38490 P
2.	Antimony	50UP	14.	Manganese	114 P
3.	Arsenic	10UF	15.	Mercury	0.2UR
4.	Barium	258 P	16.	Nickel	[20]P
5.	Beryllium	5UP	17.	Potassium	94210 P
6.	Cadmium	5UP	18.	Selenium	10 UFER
7.	Calcium	42210 P	19.	Silver	10 UPR
8.	Chromium	10UP	20.	Sodium	171600 P
9.	Cobalt	20UP	21.	Thallium	10UFR
10.	Copper	20UP	22.	Tin	30UF
11.	Iron	176 PR	23.	Vanadium	20UP
12.	Lead	[redacted]	24.	Zinc	32 P

Cyanide 10U Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-13 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	38620 P
2.	Antimony	50 UP	14.	Manganese	70 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	280 P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	62440 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	52950 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	141100 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	353 PR	23.	Vanadium	20 UP
12.	Lead	56 F	24.	Zinc	32 P

Cyanide 10U Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-14

QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	150 UP
2.	Antimony	50 UP	14.	Manganese	15 UP
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	50 UP	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	1000 UP
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	[639] P	19.	Silver	12 PR
8.	Chromium	10 UP	20.	Sodium	[1447] P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[60] PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	[13] P

Cyanide 10 U

Percent Solids (%)

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ME. 3801

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-15 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	5104 P	13.	Magnesium	47470 P
2.	Antimony	50 UP	14.	Manganese	706 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[150] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	5935 P
6.	Cadmium	5 UP	18.	Selenium	8.0 FR
7.	Calcium	85820 P	19.	Silver	10 UPR
8.	Chromium	27 P	20.	Sodium	664300 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	70 P	22.	Tin	300 UF
11.	Iron	9883 PR	23.	Vanadium	[24] P
12.	Lead	23 F	24.	Zinc	86 P

Cyanide 10 U Percent Solids (%)

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G-103
ME. 3802

Date 5-30-85

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LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-16 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[59] P	13.	Magnesium	31120 P
2.	Antimony	50 UP	14.	Manganese	15 UP
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	50 UP	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[2200] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	63100 P	19.	Silver	10 UPR
8.	Chromium	8 P	20.	Sodium	32660 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	165 PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	44 P
	Cyanide	10 U		Percent Solids (%)	

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85FP05599

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G104
ME. 3803

Date 5-30-85

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LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-17

QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	32410 P
2.	Antimony	50 UP	14.	Manganese	501 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[70] P	16.	Nickel	[35] P
5.	Beryllium	5 UP	17.	Potassium	[2412] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	106400 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	89790 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	30 P	22.	Tin	30 UF
11.	Iron	[84] PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	45 P

Cyanide 10U

Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SDG NO. 784

SAMPLE ID. NO. G2-476-18 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	31090 P
2.	Antimony	50 UP	14.	Manganese	168 P
3.	Arsenic	10 UF	15.	Mercury	0.2 UR
4.	Barium	[64] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[3163] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	55020 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	21800 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	659 PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	47 P
	Cyanide	10 U		Percent Solids (%)	

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LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-19 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	41630 P
2.	Antimony	50 UP	14.	Manganese	112 P
3.	Arsenic	10 UF	15.	Mercury	0.2UR
4.	Barium	[60] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[1637] P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	113600 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	35670 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30 UF
11.	Iron	[47] PR	23.	Vanadium	20 UP
12.	Lead	5 UF	24.	Zinc	36 P
	Cyanide	10U		Percent Solids (%)	

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LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-20 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low / Medium ____

Matrix: Water / Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	35650 P
2.	Antimony	50 UP	14.	Manganese	150 P ?
3.	Arsenic	10 UF	15.	Mercury	0.2UR
4.	Barium	[64] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	5601 P
6.	Cadmium	5 UP	18.	Selenium	5 UFR
7.	Calcium	59350 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	22050 P
9.	Cobalt	20 UP	21.	Thallium	10 UFR
10.	Copper	20 UP	22.	Tin	30UF
11.	Iron	274 PR	23.	Vanadium	20 UP
12.	Lead	5UF	24.	Zinc	[17] P
	Cyanide	10U		Percent Solids (%)	

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-21 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	50 UP	13.	Magnesium	35380 P
2.	Antimony	50 UP	14.	Manganese	146 P
3.	Arsenic	10 UFR	15.	Mercury	0.2U
4.	Barium	[74] P	16.	Nickel	[27] P
5.	Beryllium	5 UP	17.	Potassium	[3300] P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	62390 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	21730 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	30 UFR
11.	Iron	296 P*	23.	Vanadium	20 UP
12.	Lead	18 FR	24.	Zinc	100 P*

Cyanide 10U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-22 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[74] P	13.	Magnesium	36400 P
2.	Antimony	50 UP	14.	Manganese	162 P
3.	Arsenic	10 UFR	15.	Mercury	0.2U
4.	Barium	50 UP	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[2631] P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	64210 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	18050 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	30 UFR
11.	Iron	128 P*	23.	Vanadium	20 UP
12.	Lead	18 FR	24.	Zinc	10 UP *

Cyanide 10U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-23 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low / Medium ____

Matrix: Water / Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	218 P	13.	Magnesium	50210 P
2.	Antimony	50 UP	14.	Manganese	1423 P
3.	Arsenic	10 UFR	15.	Mercury	0.2 U
4.	Barium	[152] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	[3717] P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	123700 P	19.	Silver	10 UPR
8.	Chromium	16 P	20.	Sodium	17610 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	300 UFER
11.	Iron	710 P*	23.	Vanadium	20 UP
12.	Lead	15 FR	24.	Zinc	[20] P*

Cyanide 10 U Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. 62-476-24 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[104] P	13.	Magnesium	33720 P
2.	Antimony	50 UP	14.	Manganese	232 P
3.	Arsenic	10 UFR	15.	Mercury	0.2 U
4.	Barium	[110] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	8207 P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	62220 P	19.	Silver	10 UPR
8.	Chromium	13 P	20.	Sodium	130100 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	30 UFR
11.	Iron	[40] P*	23.	Vanadium	20 UP
12.	Lead	19 FR	24.	Zinc	10 UP *

Cyanide 10 U Percent Solids (%)

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INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. 62-476-25

QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	330 P	13.	Magnesium	38350 P
2.	Antimony	50 UP	14.	Manganese	1694 P
3.	Arsenic	10 UFR	15.	Mercury	0.2U
4.	Barium	[78] P	16.	Nickel	[35] P
5.	Beryllium	5 UP	17.	Potassium	[1349] P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	112800 P	19.	Silver	10 UPR
8.	Chromium	12 P	20.	Sodium	9855 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	300 UFR
11.	Iron	561 P*	23.	Vanadium	20 UP
12.	Lead	11 FR	24.	Zinc	[12] P*
Cyanide		10U	Percent Solids (%)		

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703/557-2490 FTS: 8-557-2490

4/25

85FP06D22
EPA Sample No.
DUP2 6-101
ME. 3826

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. G2-476-26 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[66] P	13.	Magnesium	48820 P
2.	Antimony	50 UP	14.	Manganese	411 P
3.	Arsenic	10 UFR	15.	Mercury	0.2U
4.	Barium	[133] P	16.	Nickel	57 P
5.	Beryllium	5 UP	17.	Potassium	22990 P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	101000 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	94960 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	10 UP	22.	Tin	30 UFR
11.	Iron	638 P*	23.	Vanadium	20 UP
12.	Lead	8.1 FR	24.	Zinc	89 P*

Cyanide 10U Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

Lab Manager E Hedrall

Form I

85FP06R02

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
9/25 BLANK 2
ME. 3828

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SOW NO. 784

LAB SAMPLE ID. NO. 62-476-27 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[60]P	13.	Magnesium	[705]P
	Antimony	50 UP	14.	Manganese	15 UP
3.	Arsenic	10 UFR	15.	Mercury	0.2U
	Barium	50 UP	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	1000 UP
	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	[1940]P	19.	Silver	10 UPR
	Chromium	10 UP	20.	Sodium	[2459]P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	30 UFR
11.	Iron	107 P*	23.	Vanadium	20 UP
12.	Lead	12 FR	24.	Zinc	10 UP *
	Cyanide	10U		Percent Solids (%)	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

Lab Manager [signature]

Form I

85FP06521

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. REVERT
ME. 3829

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

SW NO. 784

LAB SAMPLE ID. NO. G2-476-28 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[149] P	13.	Magnesium	30060 P
2.	Antimony	50 UP	14.	Manganese	142 P
3.	Arsenic	10 UFR	15.	Mercury	0.28
4.	Barium	[181] P	16.	Nickel	20 UP
5.	Beryllium	5 UP	17.	Potassium	18280 P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	63050 P	19.	Silver	10 UPR
8.	Chromium	13 P	20.	Sodium	21360 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	30 P	22.	Tin	30 UFR
11.	Iron	1541 P*	23.	Vanadium	20 UP
12.	Lead	5 UFSR	24.	Zinc	689 P*

Cyanide NOT REQUESTED Percent Solids (%)

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

Lab Manager [signature]

Form I

85FP06522

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ample Management Office
P.O. Box 818 - Alexandria, VA 22313
03/557-2490 FTS: 8-557-2490

EPA Sample No. G-101 MED 354

Date 5-30-85

INORGANIC ANALYSIS DATA SHEET

AB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

OW NO. 784

AB SAMPLE ID. NO. 62-476-29 QC REPORT NO. 476

Elements Identified and Measured

Concentration: Low ✓ Medium ____

atrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	[80] P	13.	Magnesium	50240 P
2.	Antimony	50 UP	14.	Manganese	404 P
3.	Arsenic	10 UFR	15.	Mercury	0.2U
4.	Barium	[151] P	16.	Nickel	62 P
5.	Beryllium	5 UP	17.	Potassium	27420 P
6.	Cadmium	5 UP	18.	Selenium	5 UF
7.	Calcium	102600 P	19.	Silver	10 UPR
8.	Chromium	10 UP	20.	Sodium	100900 P
9.	Cobalt	20 UP	21.	Thallium	10 UF
10.	Copper	20 UP	22.	Tin	30 UFR
11.	Iron	696 P*	23.	Vanadium	20 UP
12.	Lead	84 FR	24.	Zinc	82 P*
Cyanide		10U	Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Lab Manager [signature]

Form II

Q. C. Report No. 476

INITIAL AND CONTINUING CALIBRATION VERIFICATION[3]

LAB NAME CHEMTECH CONSULTING GROUP

CASE NO. 4214

SOW NO. 784

DATE 5-30-85 EH

UNITS ug/L

Compound	Initial Calib.[1]			Continuing Calibration[2]					
Metals:	True Value	Found	%R	True Value	Found	%R	Found	%R	Method[4]
1. Aluminum	2000	2050	103	2000	1993	100	2027	101	P
2. Antimony	1015	908	90	1015	1016	100	945	93	P
3. Arsenic	30	28	103	30	29	97	28	93	F
4. Barium	2000	2031	102	2000	1974	99	2011	101	P
5. Beryllium	900	901	100	900	895	99	905	101	P
6. Cadmium	70	69	99	70	64	91	66	94	P
7. Calcium	21200	21260	100	21200	20490	97	20640	97	P
8. Chromium	250	256	102	250	240	96	231	92	P
9. Cobalt	600	547	91	600	540	90	545	91	P
10. Copper	350	362	103	350	354	101	366	105	P
11. Iron	900	887	99	900	875	97	869	97	P
12. Lead (1-12)	60	54	90	60	65	108	61	102	F
13. Magnesium	7200	7290	101	7200	7022	98	7105	99	P
14. Manganese	500	501	100	500	485	97	489	98	P
15. Mercury (01-02 PDS)	1.0	1.0	100	1.0	0.90	90			MERCURY ANALYZE
16. Nickel	300	305	102	300	296	99	296	99	P
17. Potassium	10000	9690	97	10000	10174	102	9959	100	P
18. Selenium	15	16	107	15	15	100	15	100	F
*19. Silver	49.7	53.2	107	49.7	59.0	118	53.9	108	P
20. Sodium	32800	32550	99	32800	31850	97	32450	99	P
21. Thallium (1-2 PDS)	50.4	51.6	102	50.4	51.7	103			F
22. Tin	100	99	99	100	93	93	92	92	F
23. Vanadium	850	876	103	850	857	101	853	100	P
24. Zinc	400	410	103	400	403	101	409	102	P
Other:									
Cyanide	213	230	108	100	97	97	95	95	EPA SOP 335.2

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[1] Initial Calibration Source See "Key to Sample ID"

[2] Continuing Calibration Source same as 1.

[3] Control Limits: Mercury and Tin 80-120; All Other Compounds 90-110 .

[4] Indicate Analytical Method Used: P - ICP/Flame AA; F - Furnace *See cover page (ICP, 1-21)

Form III

Q. C. Report No. 476

BLANKS

LAB NAME CHEMTECH

CASE NO. 4214

DATE 5-30-85 EH

UNITS ug/L

Matrix LOW WATER

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. Aluminum	50U	50U				50U	
2. Antimony	50U	50U				50U	
3. Arsenic							
4. Barium	50U	50U				50U	
5. Beryllium	5U	5U				5U	
6. Cadmium	5U	5U				5U	
7. Calcium	100U	100U				100U	
8. Chromium	10U	10U				10U	
9. Cobalt	20U	20U				20U	
10. Copper	20U	20U				20U	
11. Iron	20U	20U				20U	
12. Lead (13-29)	5U	5U	5U				
13. Magnesium	150U	150U				150U	
14. Manganese	15U	15U				15U	
15. Mercury (03-29)	0.2U	0.2U	0.2U	0.2U		0.2U	
16. Nickel	20U	20U				20U	
17. Potassium							
18. Selenium							
19. Silver	10U	10U				10U	
20. Sodium	1200U	1200U				1200U	
21. Thallium (03 29)	10U	10U	10U	10U		10U	
22. Tin							
23. Vanadium	20U	20U				20U	
24. Zinc	10U	10U				10U	
Other:							
Cyanide							

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(ICP, 22-29)

Form III

Q. C. Report No. 476

BLANKS

LAB NAME CHEMTECH CASE NO. 4214

DATE 5-30-85 EH UNITS ug/L

Matrix Low Water

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. Aluminum	50U	50U	[69]	50U		50U	
2. Antimony	50U	50U	50U	50U		50U	
3. Arsenic	10U	10U	10U	10U	10U	10U	10U
4. Barium	50U	50U	50U	50U		50U	
5. Beryllium	5U	5U	5U	5U		5U	
6. Cadmium	5U	5U	5U	5U		5U	
7. Calcium	100U	100U	100U	100U		[150]	
8. Chromium	10U	10U	10U	10U		10U	
9. Cobalt	20U	20U	20U	20U		20U	
10. Copper	20U	20U	20U	20U		20U	
11. Iron	20U	20U	20U	20U		[68]	
12. Lead (1-12)	5U	5U	5U			5U	5U
13. Magnesium	150U	150U	150U	150U		150U	
14. Manganese	15U	15U	15U	15U		15U	
15. Mercury (01-02 PDS)	0.2U	0.2U				0.2U	
16. Nickel	20U	20U	20U	20U		20U	
17. Potassium	1000U	1000U	1000U	1000U	1000U	1000U	1000U
18. Selenium	5U	5U	5U	5U	5U	5U	5U
19. Silver	10U	10U	10U	10U		10U	
20. Sodium	1200U	1200U	1200U	1200U		1200U	
21. Thallium (01-02 PDS)	10U	10U				10U	
22. Tin	30U	30U	30U	30U	30U	30U	30U
23. Vanadium	20U	20U	20U	20U		20U	
24. Zinc	[19]	10U	10U	10U		10U	
Other:							
Cyanide	10U	10U	10U	10U		10U	10U

(ICP, 1-21)

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Form V (1)

Q. C. Report No. 476

SPIKE SAMPLE RECOVERY

LAB NAME CHEMTECH

DATE 5-30-85 EH

CASE NO. 4214

EPA Sample No. ME 3805

Lab Sample ID No. 62-476-02

Units ug/L

Matrix LOW WATER

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]
Metals:					
1. Aluminum	75-125	2052	[57]	2000	100
2. Antimony	"	449	50U	500	90
3. Arsenic	"	16	10U	20	80
4. Barium	"	2167	262	2000	95
5. Beryllium	"	51	5U	50	102
6. Cadmium	"	50	5U	50	100
7. Calcium	"	148900	59750	100000	89
8. Chromium	"	190	10U	200	95
9. Cobalt	"	442	20U	500	88
10. Copper	"	261	[22]	250	96
11. Iron	"	1221	549	1000	67R
12. Lead	"	23	5U	20	115
13. Magnesium	"	85040	39380	50000	91
14. Manganese	"	253	82	200	86
15. Mercury	"	0.2U	0.2U	1.0	0 R
16. Nickel	"	388	20U	400	97
17. Potassium	"	108810	56990	50000	104
18. Selenium	"	6.0	5U	10	60R
19. Silver	"	190	10U	50	380R
20. Sodium	"	233700	139400	100000	94
21. Thallium	"	30	10U	50	60R
22. Tin	"	198	30U	200	99
23. Vanadium	"	491	20U	500	98
24. Zinc	"	222	24	200	99
Other:					
Cyanide	62-476-01 ME 3814	90	10U	100	90

[1] %R = [(SSR - SR)/SA] x 100

"R"- out of control

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Comments:

Q. C. Report No. 476 (2)

SPIKE SAMPLE RECOVERY

LAB NAME CHEMTECH CONSULTING GROUP

DATE 5-30-85 RH

CASE NO. 4214
EPA Sample No. ME 3821
Lab Sample ID No. G2-476-22
Units ug/L

Matrix Low Water

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]
Metals:					
1. Aluminum	75-125	2069	[74]	2000	100
2. Antimony	-	471	50U	500	94
3. Arsenic	-	10	10U	20	50 R
4. Barium	-	1999	50U	2000	100
5. Beryllium	-	47	5U	50	94
6. Cadmium	-	55	5U	50	110
7. Calcium	-	157400	64210	100000	93
8. Chromium	-	188	10U	200	94
9. Cobalt	-	456	20U	500	91
10. Copper	-	247	20U	250	99
11. Iron	-	1026	128	1000	90
12. Lead	-	32	18	20	70 R
13. Magnesium	-	83280	36400	50000	94
14. Manganese	-	346	162	200	92
15. Mercury	-	0.82	0.2U	1.0	82
16. Nickel	-	385	20U	400	96
17. Potassium	-	47450	[2631]	50000	90
18. Selenium	-	8.5	5U	10	85
19. Silver	-	326	10U	50	652 R
20. Sodium	-	113200	18050	100000	95
21. Thallium	-	43	10U	50	86
22. Tin	-	280	30U	200	140 R
23. Vanadium	-	497	20U	500	99
24. Zinc	-	198	10U	200	99
Others:					
Cyanide	G2-476-25 ME 3824	110	10U	100	110

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[1] %R = [(SSR - SR)/SA] x 100

"R" = out of control

Q. C. Report No. 476

DUPLICATES

(1)

LAB NAME CHEMTECH CONSULTING GROUP

DATE 5-30-85 EH

CASE NO. 4214
EPA Sample No. ME 3804
Lab Sample ID No. 62-476-01
Units ug/L

Matrix LOW WATER

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum		50U	50U	NC
2. Antimony		50U	50U	NC
3. Arsenic		10U	10U	NC
4. Barium		213	227	6.4
5. Beryllium		5U	5U	NC
6. Cadmium		5U	5U	NC
7. Calcium		53220	56550	6.1
8. Chromium		10U	10U	NC
9. Cobalt		20U	20U	NC
10. Copper		20U	20U	NC
11. Iron		[92]	[96]	4.3
12. Lead		7.9	5U	NC
13. Magnesium		30970	32820	5.8
14. Manganese		202	210	3.9
15. Mercury		0.2U	0.2U	NC
16. Nickel		20U	20U	NC
17. Potassium		6746	7804	15
18. Selenium		5U	5U	NC
19. Silver		10U	10U	NC
20. Sodium		22850	23240	1.7
21. Thallium		10U	10U	NC
22. Tin		30U	30U	NC
23. Vanadium		20U	20U	NC
24. Zinc		58	55	5.3
Other:				
Cyanide		10U	10U	NC

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* Out of Control

[1] To be added at a later date.

[2] RPD = [|S - D|/((S + D)/2)] x 100

NC - Non calculable RPD due to value(s) less than CRDL

Q. C. Report No. 476

DUPLICATES (2)

LAB NAME CHEMTECH CONSULTING GROUP

DATE 5-30-85 EH

CASE NO. 4214
EPA Sample No. ME 3820
Lab Sample ID No. G2-476-21
Units ug/L

Matrix Low Water

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum		50U	50U	NC
2. Antimony		50U	50U	NC
3. Arsenic		10U	10U	NC
4. Barium		[74]	[83]	11
5. Beryllium		5U	5U	NC
6. Cadmium		5U	5U	NC
7. Calcium		62390	62930	0.86
8. Chromium		10U	10U	NC
9. Cobalt		20U	20U	NC
10. Copper		20U	20U	NC
11. Iron		296 ~~200~~ AG	147	67 *
12. Lead		18.4	18.5	0.27
13. Magnesium		35380	35650	0.76
14. Manganese		146	154	5.3
15. Mercury		0.2U	0.2U	NC
16. Nickel		[27]	[22]	20
17. Potassium		[3300]	[3509]	6.1
18. Selenium		5U	5U	NC
19. Silver		10U	10U	NC
20. Sodium		21730	21890	0.73
21. Thallium		10U	10U	NC
22. Tin		30U	30U	NC
23. Vanadium		20U	20U	NC
24. Zinc		100	67	40 *
Other:				
			RECEIVED OCT 8 1985	
Cyanide	G2-476-25 ME 3824	10U	10U	NC

* Out of Control

[1] To be added at a later date.

[2] RPD = [|S - D|/((S + D)/2)] x 100

NC - Non calculable RPD due to value(s) less than CRDL

Form VII

Q.C. Report No. 476

INSTRUMENT DETECTION LIMITS AND

LABORATORY CONTROL SAMPLE

LAB NAME CHEMTECH

DATE 5-30-85 EH

CASE NO. 4214

LCS UNITS ug/L mg/kg (Circle One)

Compound	Required Detection Limits (CRDL)-ug/l	Instrument Detection Limits (IDL)-ug/l ICP/AA	Instrument Detection Limits (IDL)-ug/l Furnace	Lab Control Sample True	Lab Control Sample Found	Lab Control Sample %R
Metals:						
1. Aluminum	200	50		2000	2008	100
2. Antimony	60	50		1015	823	81
3. Arsenic	10		10	30	25	83
4. Barium	200	50		2000	1982	99
5. Beryllium	5	5		900	796	88
6. Cadmium	5	5		70	58	83
7. Calcium	5000	100		10000	9473	95
8. Chromium	10	10		250	225	90
*9. Cobalt	50	20		600	471	79
10. Copper	25	20		350	353	101
11. Iron	100	20		900	877	97
12. Lead	5		5	60	61	102
13. Magnesium	5000	150		10000	10270	103
14. Manganese	15	15		500	438	88
15. Mercury	0.2	0.2		–	–	–
16. Nickel	40	20		300	262	87
17. Potassium	5000	1000		10000	9653	97
18. Selenium	5		5	15	16	107
19. Silver	10	10		49.7	64.4	130
20. Sodium	5000	1200		20000	20700	104
21. Thallium	10		10	50.4	41.4	82
22. Tin	40		30	100	117	117
23. Vanadium	50	20		850	769	90
24. Zinc	20	10		400	391	98
Others:						
Cyanide	10					

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Form VII

Q.C. Report No. 476

INSTRUMENT DETECTION LIMITS AND

LABORATORY CONTROL SAMPLE

*LCS run on 20 May

LAB NAME CHEMTECH

DATE 5-30-85 EH

CASE NO. 4214

LCS UNITS ug/L mg/kg (Circle One)

Compound	Required Detection Limits (CRDL)-ug/l	Instrument Detection Limits (IDL)-ug/l ICP/AA	Instrument Detection Limits (IDL)-ug/l Furnace	Lab Control Sample True	Lab Control Sample Found	Lab Control Sample %R
Metals:						
1. Aluminum	200	50		2000	2149	107
2. Antimony	60	50		1015	878	87
3. Arsenic	10		10	30	26	87
4. Barium	200	50		2000	2156	108
5. Beryllium	5	5		900	850	94
6. Cadmium	5	5		70	65	93
7. Calcium	5000	100		10000	11660	117
8. Chromium	10	10		250	252	101
9. Cobalt	50	20		600	552	92
10. Copper	25	20		350	358	102
11. Iron	100	20.		900	945	105
12. Lead	5		5	60	56	93
13. Magnesium	5000	150		10000	10960	110
14. Manganese	15	15		500	488	98
15. Mercury	0.2	0.2		—	—	—
16. Nickel	40	20		300	311	104
17. Potassium	5000	1000		10000	9687	97
18. Selenium	5		5	15	15	100
19. Silver	10	10		49.7	53.6	108
20. Sodium	5000	1200		20000	20830	104
21. Thallium	10		10	50.4	42.9	85
22. Tin	40		30	100	117	117
23. Vanadium	50	20		850	860	101
24. Zinc	20	10		400	438	110
Other: LEAD (P)	70	35				
Cyanide	10	10				

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Form VIII

Q.C. Report No. 476

STANDARD ADDITION RESULTS

LAB NAME CHEMTECH CONSULTING GROUP CASE NO. 4214

DATE 5-30-85 EH UNITS ug/L

Sample #	Element	0 ADD ABS.	1 ADD CON./ABS[1]	2 ADD CON./ABS.[1]	3 ADD CON./ABS.[1]	FINAL CON.[2]	r*
476-05	LEAD	0.082	10/0.173	20/0.255	30/0.298	21.2	0.989
05		0.080	10/0.162	20/0.263	30/0.340	14.8	0.999
07		0.036	10/0.098	20/0.207	30/0.~~260~~ 275	0.8	0.991+
- 07		0.047	10/0.131	20/0.202	30/0.277	7.8	0.999
11		0.072	10/0.134	20/0.223	30/0.309	10.6	0.997
28		0.003	10/0.085	20/0.141	30/0.215	<5	0.998

1 CON is the concentration added, ABS. is the instrument readout in absorbance or concentration.

2 Concentration as determined by MSA

*"r" is the correlation coefficient.

+ - correlation coefficient is outside of control window of 0.995.

RECEIVED OCT 8 1985

"VARI-FLO" SAMPLES AND CORRESPONDING
SAMPLE TRAFFIC NUMBERS

	ORGANIC NUMBER	INORGANIC NUMBER
"VARI-FLO" Solid (Dry)	E 9259	ME 4861
"VARI-FLO" Hydrated	E 9260	ME 4862
TAP WATER	E 9260	ME 4863

ecology and environment, inc.
223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415
International Specialists in the Environmental Sciences

Date Received for Review: 4-3-85 ~~4-5-85~~ Date Review Completed: 4/17/85

To: Kevin Phillips

From: Cynthia Bachunas / Cynthia Pugh

Subject: Peoples Ave. Dump (Illinois)
R5-8303-16

Sample Description: CASE 3859 - Low Soil + Water Organics, Low Soil + Water Metals

Project Data Status: COMPLETE

FIT Data Review Findings:

See attached CRL review sheets.
Data are acceptable with qualifications noted.

Additional Comments:

More QA info. available from Rene Hix' file if needed.

recycled paper

RECEIVED APR 0 3 1985

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 4/3/85

SUBJECT: Review of Region V CLP Data
Received for Review on 3/4/85

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory

TO: Data User: Fit

We have reviewed the data for the following case(s).

SITE NAME: Peoples Ave Dump SMO Case No. 3859

EPA Data Set No. SF2020 No. of Samples: 5 D.U./Activity Numbers V905 / C48500

CRL No. 85MP07542 - 85MP07543

SMO Traffic No. E9259 - E9261

CLP Laboratory: Compu Chem Hrs. Required for Review: 36

Following are our findings.

1) Surrogates OK
2) MS/MSD acceptable
3) Blanks acceptable
4) Tuning acceptable
5) GPC & CCC acceptable see form
6) Int QC acceptable

Reviewed by Kathy Ripperger

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

EPA FORM 1320-6 (REV. 3-79)

REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY
ESD/Central Regional Laboratory

DATA TRACKING - FORM I

RECEIVED APR 0 3 1985

CRL Data Set No. SF 2020 ERRIS No. _____

SMO Case No. 3859 Site Name: Peoples Ave Dump

Name of Laboratory: Compu Chem Data User: Fit

No. of Samples: 3 Date Samples Received: 3/4/85

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic reports been received? YES ___ NO ✓
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ___ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___
6. Number of samples claimed: 3 Number of samples received: 3
7. Checked by: Melvin Feliciano Date: 3/4/85
8. Received by Contract Project Management Section: J Thomas Date: 3/4/85
9. Review Started: March 26 1985 Reviewer Signature: [illegible]
10. Total time spent on review: 36 hours Date review completed: [illegible]
11. Copied (xeroxed) by: Willie Mae Date: 4/5/85
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, 5SCRL

13. Data received by: Cynthia Pugh Date: 4-
14. Q.A. review received by: Cynthia Pugh Date: 4-3-85
15. Received by CRL - CPM Section for file by: _____

Data for E9259-9261 rec'd, Complete Date: _____

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DATA QUALIFIERS

Peoples Ave. Damp.

Contractor: Compuchem

Case No. 3859

Below is a summary of the out of control audits and the possible effect on the data for this case:

1. Sample E9259 (Solid):

Vol. a. Methylene Chloride - 7300 ug/kg

Low Solid. b. Acetone - 1100 ug/kg.

c. Tentatively Identified Compound - Hexane - 840J (ug/kg)

Methylene Chloride and Acetone were found both in the reagent blank (GR042347A13) and matrix Spike/Matrix Spike Duplicate. In the reviewer's opinion Methylene Chloride in matrix Spike/Matrix Spike Duplicate was analyzed at the Blank level rather than at the sample E9259 level.

Semi-Volatiles: MS/MSD was done two days after sample E9259 was running

~~G. N-Nitrosodimethylamine should be flagged as 3000.0 ug/kg.~~ Error I.R

2. Sample E9260 (low liquid) - Methylene Chloride (34 ppb) and Acetone (10 ppb) usable for limited purposes (see item 4 in over Data qualifiers)

Reviewed by: Lilya Rikshpun - M.S. Chemist

Phone: (415) 777-2811 ext. 38 (San Francisco E+E Co.)

Date: April 3, 1985

Cont.

page 2 of 3.

RECEIVED APR 0 3 1985

DATA QUALIFIERS

No. 3859

Case Peoples Ave Damp.

Contractor: Compuchem

Below is a summary of the out of control audits and the possible effect on the data for this case:

3. Sample E 9261 (low liquid)

Vol. a. Chloroform reported as 5U should be reported as 2J. estimated

b. 1,1,1-Trichloroethane should be reported as 2J. estimated

Semivol.

a. Benzidine reported as 100U actually is ~~33J~~ 100J (as qualified by the reviewer).

4. All reagent Blanks were consistently contaminated with Methylene Chloride (range 3 to 5 ppb) and Acetone (range 6 to 9 ppb). So reviewer considers Methylene Chloride as reported for the samples E9260 and E 9261 to be invalid. Acetone as reported for the sample E9260 is a result of sample contamination as well and nonacceptable.

Reviewed by: Lilya Ripskren - M.S. Chemist

Phone: (415) 777-2811 ext. 38

Date: April 3, 1985

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EPA CASE SUMMARY NARRATIVE--CASE #3859
Contract No. 68-01-7017

The Quality Assurance Notices associated with Case #3859 are included. This case consisted of 1 solid sample for the analysis of volatiles, semivolatiles, and pesticides. The volatile fraction contained HSL compounds methylene chloride and acetone and 1 tentatively identified compound. The SV fraction contained benzyl alcohol and many tentatively identified compounds. No pesticides were found.

This sample was analyzed, prepared, and reported using the latest set of EPA organics contract protocol modifications for samples received after September 15, 1984.

Janet C. Garrett

Janet C. Garrett 3-1-85
EPA Technical Analyst

RECEIVED APR 0 3 1985 E 9259 RE

85MPC0354/2

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9259 RE

REVERT SOLID

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

LABORATORY NAME: COMPUCHEM
LAB SAMPLE ID NO: GR041871A13
SAMPLE MATRIX: VOA LOW SOLID
DATA RELEASE
AUTHORIZED BY: JB

CASE: 3859
QC REPORT NO: _____
CONTRACT NO: 68\01\7017
DATE SAMPLE
RECEIVED: 2\01\85

VOLATILE COMPOUNDS

CONCENTRATION: LOW
DATE EXTRACTED/PREPARED: 2\07\85 (2\04\85 orig.)
DATE ANALYZED: 2\11\85
CONC/DIL FACTOR: 112 PH: 6.38
PERCENT MOISTURE: 11%
PERCENT MOISTURE (DECANTED):

CAS NUMBER		ug/kg	CAS NUMBER		ug/kg
74-87-3	CHLOROMETHANE	1120 U	79-34-5	1, 1, 2, 2-TETRACHLOROETHANE	560 U
74-83-9	BROMOMETHANE	1120 U	78-87-5	1, 2-DICHLOROPROPANE	560 U
75-01-4	VINYL CHLORIDE	1120 U	10061-02-6	TRANS-1, 3-DICHLOROPROPENE	560 U
75-00-3	CHLOROETHANE	1120 U	79-01-6	TRICHLOROETHENE	560 U
75-09-2	METHYLENE CHLORIDE	7300	124-48-1	DIBROMOCHLOROMETHANE	560 U
67-64-1	ACETONE	11000	79-00-5	1, 1, 2-TRICHLOROETHANE	560 U
75-15-0	CARBON DISULFIDE	560 U	71-43-2	BENZENE	560 U
75-35-4	1, 1-DICHLOROETHENE	560 U	10061-01-5	CIS-1, 3-DICHLOROPROPENE	560 U
75-34-3	1, 1-DICHLOROETHANE	560 U	110-75-8	2-CHLOROETHYLVINYLETHER	1120 U
156-60-5	TRANS-1, 2-DICHLOROETHENE	560 U	75-25-2	BROMOFORM	560 U
67-66-3	CHLOROFORM	560 U	591-78-6	2-HEXANONE	1120 U
107-06-2	1, 2-DICHLOROETHANE	560 U	108-10-1	4-METHYL-2-PENTANONE	1120 U
78-93-3	2-BUTANONE	1120 U	127-18-4	TETRACHLOROETHENE	560 U
71-55-6	1, 1, 1-TRICHLOROETHANE	560 U	108-88-3	TOLUENE	560 U
56-23-5	CARBON TETRACHLORIDE	560 U	108-90-7	CHLOROBENZENE	560 U
108-05-4	VINYL ACETATE	1120 U	100-41-4	ETHYLBENZENE	560 U
75-27-4	BROMODICHLOROMETHANE	560 U	100-42-5	STYRENE	560 U
				TOTAL XYLENES	560 U

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for, but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J)

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >/= 10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

RECEIVED APR 0 3 1985

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9259

Re, SOLID

ORGANICS ANALYSIS DATA SHEET
(PAGE 2)

SEMIVOLATILE COMPOUNDS
CONCENTRATION: LOW
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\18\85
CONC/DIL FACTOR: 190.0

CAS NUMBER		ug/kg	CAS NUMBER		ug/kg
62-75-9	N-NITROSODIMETHYLAMINE	3000.0 1900 U ?	83-32-9	ACENAPHTHENE	1900 U
108-95-2	PHENOL	1900 U	51-28-5	2, 4-DINITROPHENOL	9500 U
62-53-3	ANILINE	1900 U	100-02-7	4-NITROPHENOL	9500 U
111-44-4	BIS(2-CHLOROETHYL)ETHER	1900 U	132-64-9	DIBENZOFURAN	1900 U
95-57-8	2-CHLOROPHENOL	1900 U	121-14-2	2, 4-DINITROTOLUENE	1900 U
541-73-1	1, 3-DICHLOROBENZENE	1900 U	606-20-2	2, 6-DINITROTOLUENE	1900 U
106-46-7	1, 4-DICHLOROBENZENE	1900 U	84-66-2	DIETHYLPHTHALATE	1900 U
100-51-6	BENZYL ALCOHOL	2800	7005-72-3	4-CHLOROPHENYL-PHENYLETHER	1900 U
95-50-1	1, 2-DICHLOROBENZENE	1900 U	86-73-7	FLUORENE	1900 U
95-48-7	2-METHYLPHENOL	1900 U	100-01-6	4-NITROANILINE	9500 U
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	1900 U	534-52-1	4, 6-DINITRO-2-METHYLPHENOL	9500 U
106-44-5	4-METHYLPHENOL	1900 U	86-30-6	N-NITROSODIPHENYLAMINE (1)	1900 U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1900 U	101-55-3	4-BROMOPHENYL-PHENYLETHER	1900 U
67-72-1	HEXACHLOROETHANE	1900 U	118-74-1	HEXACHLOROBENZENE	1900 U
98-95-3	NITROBENZENE	1900 U	87-86-5	PENTACHLOROPHENOL	9500 U
78-59-1	ISOPHORONE	1900 U	85-01-8	PHENANTHRENE	1900 U
88-75-5	2-NITROPHENOL	1900 U	120-12-7	ANTHRACENE	1900 U
105-67-9	2, 4-DIMETHYLPHENOL	1900 U	84-74-2	DI-N-BUTYLPHTHALATE	1900 U
65-85-0	BENZOIC ACID	9500 U	206-44-0	FLUORANTHENE	1900 U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1900 U	92-87-5	BENZIDINE	9500 U
120-83-2	2, 4-DICHLOROPHENOL	1900 U	129-00-0	PYRENE	1900 U
120-82-1	1, 2, 4-TRICHLOROBENZENE	1900 U	85-68-7	BUTYLBENZYLPHTHALATE	1900 U
91-20-3	NAPHTHALENE	1900 U	91-94-1	3, 3-DICHLOROBENZIDINE	3800 U
106-47-8	4-CHLOROANILINE	1900 U	56-55-3	BENZO(A)ANTHRACENE	1900 U
87-68-3	HEXACHLOROBUTADIENE	1900 U	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1900 U
59-50-7	4-CHLORO-3-METHYLPHENOL	1900 U	218-01-9	CHRYSENE	1900 U
91-57-6	2-METHYLNAPHTHALENE	1900 U	117-84-0	DI-N-OCTYL PHTHALATE	1900 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	1900 U	205-99-2	BENZO(B)FLUORANTHENE	1900 U
88-06-2	2, 4, 6-TRICHLOROPHENOL	1900 U	207-08-9	BENZO(K)FLUORANTHENE	1900 U
95-95-4	2, 4, 5-TRICHLOROPHENOL	9500 U	50-32-8	BENZO(A)PYRENE	1900 U
91-58-7	2-CHLORONAPHTHALENE	1900 U	193-39-5	INDENO(1, 2, 3-CD)PYRENE	1900 U
88-74-4	2-NITROANILINE	9500 U	53-70-3	DIBENZ(A, H)ANTHRACENE	1900 U
131-11-3	DIMETHYL PHTHALATE	1900 U	191-24-2	BENZO(G, H, I)PERYLENE	1900 U
208-96-8	ACENAPHTHYLENE	1900 U			
99-09-2	3-NITROANILINE	9500 U			

(1)-CANNOT BE SEPARATED FROM DIPHENYLAMINE

RECEIVED APR 0 3 1985

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2493

SAMPLE NUMBER
E9259

R. Sacco

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCBS

CONCENTRATION: LOW SOLID
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\13\85
CONC/DIL FACTOR: 1.1

CAS NUMBER		
319-84-6	ALPHA-BHC	2.20 U
319-85-7	BETA-BHC	2.20 U
319-86-8	DELTA-BHC	2.20 U
58-89-9	GAMMA-BHC (LINDANE)	2.20 U
76-44-8	HEPTACHLOR	2.20 U
309-00-2	ALDRIN	2.20 U
1024-57-3	HEPTACHLOR EPOXIDE	2.20 U
959-98-8	ENDOSULFAN I	2.20 U
60-57-1	DIELDRIN	4.40 U
72-55-9	4, 4-DDE	4.40 U
72-20-8	ENDRIN	4.40 U
33213-65-9	ENDOSULFAN II	4.40 U
72-54-8	4, 4-DDD	4.40 U
7421-93-4	ENDRIN ALDEHYDE	4.40 U
1031-07-8	ENDOSULFAN SULFATE	4.40 U
50-29-3	4, 4-DDT	4.40 U
72-43-5	METHOXYCHLOR	22.00 U
53494-70-5	ENDRIN KETONE	4.40 U
57-74-9	CHLORDANE	22.00 U
8001-35-2	TOXAPHENE	44.00 U
12674-11-2	AROCLOR-1016	22.00 U
11104-28-2	AROCLOR-1221	22.00 U
11141-16-5	AROCLOR-1232	22.00 U
53469-21-9	AROCLOR-1242	22.00 U
12672-29-6	AROCLOR-1248	22.00 U
11097-69-1	AROCLOR-1254	44.00 U
11096-82-5	AROCLOR-1260	44.00 U

VI = VOLUMN OF EXTRACT INJECTED (UL)
VS = VOLUMN OF WATER EXTRACTED (ML)
WS = WEIGHT OF SAMPLE EXTRACTED (G)
VT = VOLUMN OF TOTAL EXTRACT (UL)

VS: OR WS: 30 VT: 2000 VI: 5

RECEIVED APR 0 3 1985

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9259

R. Sood

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCBS

CONCENTRATION: LOW SOLID
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\15\85
CONC/DIL FACTOR: 1.1

CAS NUMBER		
319-84-6	ALPHA-BHC	2.20 U
319-85-7	BETA-BHC	2.20 U
319-86-8	DELTA-BHC	2.20 U
58-89-9	GAMMA-BHC (LINDANE)	2.20 U
76-44-8	HEPTACHLOR	2.20 U
309-00-2	ALDRIN	2.20 U
1024-57-3	HEPTACHLOR EPOXIDE	2.20 U
959-98-8	ENDOSULFAN I	2.20 U
60-57-1	DIELDRIN	4.40 U
72-55-9	4, 4-DDE	4.40 U
72-20-8	ENDRIN	4.40 U
33213-65-9	ENDOSULFAN II	4.40 U
72-54-8	4, 4-DDD	4.40 U
7421-93-4	ENDRIN ALDEHYDE	4.40 U
1031-07-8	ENDOSULFAN SULFATE	4.40 U
50-29-3	4, 4-DDT	4.40 U
72-43-5	METHOXYCHLOR	22.00 U
53494-70-5	ENDRIN KETONE	4.40 U
57-74-9	CHLORDANE	22.00 U
8001-35-2	TOXAPHENE	44.00 U
12674-11-2	AROCLOR-1016	22.00 U
11104-28-2	AROCLOR-1221	22.00 U
11141-16-5	AROCLOR-1232	22.00 U
53469-21-9	AROCLOR-1242	22.00 U
12672-29-6	AROCLOR-1248	22.00 U
11097-69-1	AROCLOR-1254	44.00 U
11096-82-5	AROCLOR-1260	44.00 U

VI = VOLUMN OF EXTRACT INJECTED (UL)
VS = VOLUMN OF WATER EXTRACTED (ML)
WS = WEIGHT OF SAMPLE EXTRACTED (G)
VT = VOLUMN OF TOTAL EXTRACT (UL)

VS: OR WS: 30 VT: 2000 VI: 1

Environmental Protection Agency. CLP Sample Management Office.
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

RECEIVED APR 0 3

Sample Number
E9259

Organics Analysis Data Sheet
(Page 4)

R. SOLID

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 110-54-3	HEXANE	VOA	382	840 J ?
2.				
3.				
4.				
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29.				
30.				

SAMPLE NUMBER

EQ259

ORGANICS ANALYSIS DATA SHEET (PAGE 4)

TENTATIVELY IDENTIFIED COMPOUNDS

CAS NUMBER	COMPOUND NAME	FRACTION	SCAN NUMBER	ESTIMATED CONC. (UG/L OR UG/KG)	
123-42-2	acetone contaminant ~~Ketone~~ ~~2-PENTANONE,4-HYDROXY-4-METHYL-~~	SEMI	291	16000.	J B
100-44-7	chloro Toluene BENZENE,(CHLOROMETHYL)-	SEMI	414	34000.	J
2425-54-9	Alkane TETRADECANE,1-CHLORO-	SEMI	654	3800.	J
112-18-5	Amine 1-DODECANAMINE,N,N-DIMETHYL-	SEMI	668	86000.	J
1002-69-3	Alkane DECANE,1-CHLORO-	SEMI	742	14000.	J
594-39-8	Amine 2-BUTANAMINE,2-METHYL-	SEMI	753	55000.	J
1002-84-2	Fatty Acid PENTADECANOICACID	SEMI	811	6600.	J
616-24-0	Amine 3-PENTANAMINE	SEMI	828	40000.	J
57-10-3	Fatty Acid HEXADECANOICACID	SEMI	848	47000.	J
108-01-0	Alcohol ETHANOL,2-(DIMETHYLAMINO)-	SEMI	898	44000.	J
4371-19-8	Aromatic BENZENE,(2-METHOXYETHENYL)-,(Z)-	SEMI	907	30000.	J
60-33-3	Fatty Acid 9,12-OCTADECADIENOICACID(Z,Z)-	SEMI	911	67000.	J
538-93-2	propyl Toluene BENZENE,(2-METHYLPROPYL)-	SEMI	972	37000.	J

.000 40.00

SPECTROSCOPIST [illegible]

DATE 2-20-85

FORM1, PART B

RECEIVED APR 03 1985

A. SOLID

SAMPLE NUMBER

E9259

ORGANICS ANALYSIS DATA SHEET (PAGE 4)

TENTATIVELY IDENTIFIED COMPOUNDS

CAS NUMBER	COMPOUND NAME	FRACTION	SCAN NUMBER	ESTIMATED CONC. (UG/L OR UG/KG)	
538-93-2	BENZENE,(2-METHYLPROPYL)- propyl	SEMI	1032	21000.	J
5353-25-3	ETHANOL,2-(9-OCTADECENYLOXY)-,(Z)- Alcohol	SEMI	1080	11000.	J
538-93-2	BENZENE,(2-METHYLPROPYL)- propyl Toluene	SEMI	1096	16000.	J
56554-70-2	4-PENTADECYNE,15-CHLORO- Alkyne	SEMI	1104	6400.	J
4602-84-0	2,6,10-DODECATRIEN-1-OL,3,7,11-TRIMETHYL- Alkene	SEMI	1126	3400.	J B
56599-50-9	2H-PYRAN,2-(7-HEPTADECYNYLOXY)TETRAHYDRO- unknown	SEMI	1399	11000.	J
56599-50-9	2H-PYRAN,2-(7-HEPTADECYNYLOXY)TETRAHYDRO- unknown	SEMI	1426	36000.	J
~~83-46-5~~	~~STIGMAST-5-EN-3-OL,(3.BETA.)-~~ ~~unknown~~	~~SEMI~~	~~1481~~	~~30000.~~	~~J~~
~~489-39-4~~	~~1H-CYCLOPROP[E]AZULENE,DECAHYDRO-1,1,7-TRIMETHYL-4-M~~ ~~unknown~~	~~SEMI~~	~~1581~~	~~13000.~~	~~J~~

).000 40.00

SPECTROSCOPIST [illegible]

DATE 2-20-85

RF 11

RECEIVED APR 0 3 1985

R. Solid

FORM1, PART B

RECEIVED APR 0 3 1985

5. In the reviewers opinion the following data concerning sample E9261 have really high chance to be the results of sample contamination and, thus, can be usable for limited purposes: chloroform (2J), 1,1,1-Trichloroethane (2J), Bromodichloromethane (3J), TCE (4J), dibromochloromethane (3J).

COMPUCHEM LABORATORIES

RECEIVED APR 0 3 1985

March 1, 1985

U.S. Environmental Protection Agency
HWI/Sample Management Office
Post Office Box 818
Alexandria, Virginia 22313

Attention: Mr. Richard Thacker
Deputy Project Manager

Subject: Report of Data - EPA Contract 68-01- 7017

Dear Mr. Thacker:

Enclosed herewith are the results of analytical work performed in accordance with the referenced contract.

This report covers 2 samples and results associated with the analysis of the duplicate matrix spike results, received by CompuChem Laboratories on the date of 2/2/85 identified as EPA Case Number 3859.

If you have any questions regarding this package, please contact me at 1/800/334-8525 or 919/549-8263.

Sincerely,

Mary Mitchell for

Pamela S. Carrington
Manager, Report Preparation

Enclosures

NOTE: Quality Control information contained in this report applies to:

EPA Numbers: E9260, E9261.

C/C Numbers: 41883, 41896.

cc: EPA Region
EMSL
Selina Flynt

5F2020

COMPUCHEM LABORATORIES

RECEIVED APR 0 3 1985

March 1, 1985

U.S. Environmental Protection Agency
HWI/Sample Management Office
Post Office Box 818
Alexandria, Virginia 22313

Attention: Mr. Richard Thacker
Deputy Project Manager

Subject: Report of Data - EPA Contract 68-01-7017

Dear Mr. Thacker:

Enclosed herewith are the results of analytical work performed in accordance with the referenced contract.

This report covers 1 samples and results associated with the analysis of the duplicate matrix spike results, received by CompuChem Laboratories on the date of 2/1/85 identified as EPA Case Number 3859.

If you have any questions regarding this package, please contact me at 1/800/334-8525 or 919/549-8263.

Sincerely,

Mary Mitchell for

Pamela S. Carrington
Manager, Report Preparation

Enclosures

NOTE: Quality Control information contained in this report applies to:

EPA Numbers: E9259

C/C Numbers: 41871

RECEIVED
MAR 04 1985
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

cc: EPA Region
EMSL
Selina Flynt

Sample No. E 9260.

RECEIVED APR 0 3 1985

/IRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
..O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9260

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

ABORATORY NAME: COMPUCHEM
LAB SAMPLE ID NO: CN041883A12
MPLE MATRIX: VOA LOW LIQUID
TA RELEASE
AUTHORIZED BY: _____

CASE: 3859
QC REPORT NO: _____
CONTRACT NO: 68\01\7017
DATE SAMPLE
RECEIVED: 2\02\85

VOLATILE COMPOUNDS

CONCENTRATION: LOW
DATE EXTRACTED/PREPARED: 2\07\85
DATE ANALYZED: 2\07\85
CONC/DIL FACTOR: 1 PH: N\A
PERCENT MOISTURE: N\A
PERCENT MOISTURE (DECANTED):

CAS NUMBER		ug/l	CAS NUMBER		ug/l
74-87-3	CHLOROMETHANE	10 U	79-34-5	1, 1, 2, 2-TETRACHLOROETHANE	5 U
74-83-9	BROMOMETHANE	10 U	78-87-5	1, 2-DICHLOROPROPANE	5 U
75-01-4	VINYL CHLORIDE	10 U	10061-02-6	TRANS-1, 3-DICHLOROPROPENE	5 U
75-00-3	CHLOROETHANE	10 U	79-01-6	TRICHLOROETHENE	5 U
75-09-2	METHYLENE CHLORIDE	34	124-48-1	DIBROMOCHLOROMETHANE	5 U
67-64-1	ACETONE	10	79-00-5	1, 1, 2-TRICHLOROETHANE	5 U
75-15-0	CARBON DISULFIDE	5 U	71-43-2	BENZENE	5 U
75-35-4	1, 1-DICHLOROETHENE	5 U	10061-01-5	CIS-1, 3-DICHLOROPROPENE	5 U
75-34-3	1, 1-DICHLOROETHANE	5 U	110-75-8	2-CHLOROETHYLVINYLETHER	10 U
156-60-5	TRANS-1, 2-DICHLOROETHENE	5 U	75-25-2	BROMOFORM	5 U
67-66-3	CHLOROFORM	5 U	591-78-6	2-HEXANONE	10 U
107-06-2	1, 2-DICHLOROETHANE	5 U	108-10-1	4-METHYL-2-PENTANONE	10 U
78-93-3	2-BUTANONE	10 U	127-18-4	TETRACHLOROETHENE	5 U
71-55-6	1, 1, 1-TRICHLOROETHANE	5 U	108-88-3	TOLUENE	5 U
56-23-5	CARBON TETRACHLORIDE	5 U	108-90-7	CHLOROBENZENE	5 U
108-05-4	VINYL ACETATE	10 U	100-41-4	ETHYLBENZENE	5 U
75-27-4	BROMODICHLOROMETHANE	5 U	100-42-5	STYRENE	5 U
				TOTAL XYLENES	5 U

DATA REPORTING QUALIFIERS

r reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

LUE If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J)

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >/= 10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

FORM I 4/84

R. WEET

RECEIVED APR 0 3 1985

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

ORGANICS ANALYSIS DATA SHEET
(PAGE 2)

SAMPLE NUMBER
E9260

SEMIVOLATILE
CONCENTRATION: LOW
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\19\85
CONC/DIL FACTOR: 2.0

CAS NUMBER		ug/l	CAS NUMBER		ug/l
62-75-9	N-NITROSODIMETHYLAMINE	20 U	83-32-9	ACENAPHTHENE	20 U
108-95-2	PHENOL	20 U	51-28-5	2, 4-DINITROPHENOL	100 U
62-53-3	ANILINE	20 U	100-02-7	4-NITROPHENOL	100 U
111-44-4	BIS(2-CHLOROETHYL)ETHER	20 U	132-64-9	DIBENZOFURAN	20 U
95-57-8	2-CHLOROPHENOL	20 U	121-14-2	2, 4-DINITROTOLUENE	20 U
541-73-1	1, 3-DICHLOROBENZENE	20 U	606-20-2	2, 6-DINITROTOLUENE	20 U
106-46-7	1, 4-DICHLOROBENZENE	20 U	84-66-2	DIETHYLPHTHALATE	20 U
100-51-6	BENZYL ALCOHOL	20 U	7005-72-3	4-CHLOROPHENYL-PHENYLETHER	20 U
95-50-1	1, 2-DICHLOROBENZENE	20 U	86-73-7	FLUORENE	20 U
95-48-7	2-METHYLPHENOL	20 U	100-01-6	4-NITROANILINE	100 U
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	20 U	534-52-1	4, 6-DINITRO-2-METHYLPHENOL	100 U
106-44-5	4-METHYLPHENOL	20 U	86-30-6	N-NITROSODIPHENYLAMINE (1)	20 U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	20 U	101-55-3	4-BROMOPHENYL-PHENYLETHER	20 U
67-72-1	HEXACHLOROETHANE	20 U	118-74-1	HEXACHLOROBENZENE	20 U
98-95-3	NITROBENZENE	20 U	87-86-5	PENTACHLOROPHENOL	100 U
78-59-1	ISOPHORONE	20 U	85-01-8	PHENANTHRENE	20 U
88-75-5	2-NITROPHENOL	20 U	120-12-7	ANTHRACENE	20 U
105-67-9	2, 4-DIMETHYLPHENOL	20 U	84-74-2	DI-N-BUTYLPHTHALATE	20 U
65-85-0	BENZOIC ACID	100 U	206-44-0	FLUORANTHENE	20 U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	20 U	92-87-5	BENZIDINE	100 U
120-83-2	2, 4-DICHLOROPHENOL	20 U	129-00-0	PYRENE	20 U
120-82-1	1, 2, 4-TRICHLOROBENZENE	20 U	85-68-7	BUTYLBENZYLPHTHALATE	20 U
91-20-3	NAPHTHALENE	20 U	91-94-1	3, 3-DICHLOROBENZIDINE	40 U
106-47-8	4-CHLOROANILINE	20 U	56-55-3	BENZO(A)ANTHRACENE	20 U
87-68-3	HEXACHLOROBUTADIENE	20 U	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	20 U
59-50-7	4-CHLORO-3-METHYLPHENOL	20 U	218-01-9	CHRYSENE	20 U
91-57-6	2-METHYLNAPHTHALENE	20 U	117-84-0	DI-N-OCTYL PHTHALATE	20 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	20 U	205-99-2	BENZO(B)FLUORANTHENE	20 U
88-06-2	2, 4, 6-TRICHLOROPHENOL	20 U	207-08-9	BENZO(K)FLUORANTHENE	20 U
95-95-4	2, 4, 5-TRICHLOROPHENOL	100 U	50-32-8	BENZO(A)PYRENE	20 U
91-58-7	2-CHLORONAPHTHALENE	20 U	193-39-5	INDENO(1, 2, 3-CD)PYRENE	20 U
88-74-4	2-NITROANILINE	100 U	53-70-3	DIBENZ(A, H)ANTHRACENE	20 U
131-11-3	DIMETHYL PHTHALATE	20 U	191-24-2	BENZO(G, H, I)PERYLENE	20 U
208-96-8	ACENAPHTHYLENE	20 U			
99-09-2	3-NITROANILINE	100 U			

(1)-CANNOT BE SEPARATED FROM DIPHENYLAMINE

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85MP07543

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9260

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCBS

CONCENTRATION: LOW LIQUID
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\07\85
CONC/DIL FACTOR: 1

CAS NUMBER		
319-84-6	ALPHA-BHC	0.05 U
319-85-7	BETA-BHC	0.05 U
319-86-8	DELTA-BHC	0.05 U
58-89-9	GAMMA-BHC (LINDANE)	0.05 U
76-44-8	HEPTACHLOR	0.05 U
309-00-2	ALDRIN	0.05 U
1024-57-3	HEPTACHLOR EPOXIDE	0.05 U
959-98-6	ENDOSULFAN I	0.05 U
60-57-1	DIELDRIN	0.10 U
72-55-9	4, 4-DDE	0.10 U
72-20-8	ENDRIN	0.10 U
33213-65-9	ENDOSULFAN II	0.10 U
72-54-8	4, 4-DDD	0.10 U
7421-93-4	ENDRIN ALDEHYDE	0.10 U
1031-07-8	ENDOSULFAN SULFATE	0.10 U
50-29-3	4, 4-DDT	0.10 U
72-43-5	METHOXYCHLOR	0.50 U
53494-70-5	ENDRIN KETONE	0.10 U
57-74-9	CHLORDANE	0.50 U
8001-35-2	TOXAPHENE	1.00 U
12674-11-2	AROCLOR-1016	0.50 U
11104-28-2	AROCLOR-1221	0.50 U
11141-16-5	AROCLOR-1232	0.50 U
53469-21-9	AROCLOR-1242	0.50 U
12672-29-6	AROCLOR-1248	0.50 U
11097-69-1	AROCLOR-1254	1.00 U
11096-82-5	AROCLOR-1260	1.00 U

VI = VOLUMN OF EXTRACT INJECTED (UL)
VS = VOLUMN OF WATER EXTRACTED (ML)
WS = WEIGHT OF SAMPLE EXTRACTED (G)
VT = VOLUMN OF TOTAL EXTRACT (UL)

VS: 1000 OR WS: VT: 10,000 VI: 1

FORM 1 4/84

Environmental Protection Agency. CLP Sample Management Office.
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

RECEIVED APR 0 3

Sample Number
E9260

R. WHT.

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	"NO VOA COMPOUNDS FOUND"			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

SAMPLE NUMBER

E9260

ORGANICS ANALYSIS DATA SHEET (PAGE 4)

TENTATIVELY IDENTIFIED COMPOUNDS

	CAS NUMBER	COMPOUND NAME	FRACTION	SCAN NUMBER	ESTIMATED ~~CONC.~~ (UG/L) OR (UG/KG)	
1	100-44-7	BENZENE,(CHLOROMETHYL)- Alkene	SEMI	490	150.	J
2	75-50-3	METHANAMINE,N,N-DIMETHYL- Amine.	SEMI	766	140.	J
~~3~~	~~147-82-0~~	~~BENZENAMINE,2,4,6-TRIBROMO-~~ ~~A SS.~~	~~SEMI~~	~~845~~	~~27.~~	~~J~~
3 ~~4~~	75-50-3	METHANAMINE,N,N-DIMETHYL- Amine	SEMI	856	85.	J
4 ~~5~~	75-50-3	METHANAMINE,N,N-DIMETHYL- Amine	SEMI	937	20.	J
5 ~~6~~	57-10-3	HEXADECANOICACID unknown	SEMI	957	66.	J
6 7	6765-39-5	1-HEPTADECENE Hydrocarbon.	SEMI	1013	52.	J
7 ~~8~~	14371-19-8	BENZENE,(2-METHOXYETHENYL)-,(Z)- Alkene.	SEMI	1020	100.	J
~~9~~	~~16587-34-1~~	~~NAPHTHO[2,3-B]THIOPHENE,4,9-DIMETHYL-~~ ~~SS. Dio Pyrene.~~	~~SEMI~~	~~1042~~	~~50.~~	~~J~~
8 ~~10~~	629-74-3	1-HEXADECYNE Hydrocarbon.	SEMI	1074	260.	J
9 ~~11~~	538-93-2	BENZENE,(2-METHYLPROPYL)- Alkene.	SEMI	1089	18.	J
~~10~~	~~56728-02-0~~	~~Benzene,1,1'-(2-Methyl-2-(Phenylthio)cyclopropylidene)Bis~~	~~unknown~~	~~semi~~	~~1030~~	
	2.000	40.00				
10	629-74-3	1-Hexadecyne\unknown	semi	1023		

SPECTROSCOPIST ___k___

DATE 2/20/85

77J

RECEIVED APR 03 1985

FORM1, PART B

Sample E9261
volatiles
2/07/85
85MP07R11

RECEIVED APR 0 3 1985

IRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9261

TAP

ORGANICS ANALYSIS DATA SHEET
(PAGE 1)

ORATORY NAME: COMPUCHEM
LAB SAMPLE ID NO: CN041896A12
PLE MATRIX: VOA LOW LIQUID
TA RELEASE
UTHORIZED BY: _____

CASE: 3859
QC REPORT NO: _____
CONTRACT NO: 68\01\7017
DATE SAMPLE
RECEIVED: 2\02\85

VOLATILE COMPOUNDS
CONCENTRATION: LOW
DATE EXTRACTED/PREPARED: 2\07\85
DATE ANALYZED: 2\07\85 859
CONC/DIL FACTOR: 1 PH: N\A
PERCENT MOISTURE: N\A
PERCENT MOISTURE (DECANTED):

CAS NUMBER		ug/l	CAS NUMBER		ug/l
74-87-3	CHLOROMETHANE	10 U	79-34-5	1, 1, 2, 2-TETRACHLOROETHANE	5 U
74-83-9	BROMOMETHANE	10 U	78-87-5	1, 2-DICHLOROPROPANE	5 U
75-01-4	VINYL CHLORIDE	10 U	10061-02-6	TRANS-1, 3-DICHLOROPROPENE	5 U
75-00-3	CHLOROETHANE	10 U	79-01-6	TRICHLOROETHENE	4 J
75-09-2	METHYLENE CHLORIDE	4 J	124-48-1	DIBROMOCHLOROMETHANE	3 J
67-64-1	ACETONE	10 U	79-00-5	1, 1, 2-TRICHLOROETHANE	5 U
75-15-0	CARBON DISULFIDE	5 U	71-43-2	BENZENE	5 U
75-35-4	1, 1-DICHLOROETHENE	5 U	10061-01-5	CIS-1, 3-DICHLOROPROPENE	5 U
75-34-3	1, 1-DICHLOROETHANE	5 U	110-75-8	2-CHLOROETHYLVINYLETHER	10 U
156-60-5	TRANS-1, 2-DICHLOROETHENE	5 U	75-25-2	BROMOFORM	5 U
67-66-3	CHLOROFORM	2J 5 U	591-78-6	2-HEXANONE	10 U
107-06-2	1, 2-DICHLOROETHANE	5 U	108-10-1	4-METHYL-2-PENTANONE	10 U
78-93-3	2-BUTANONE	10 U	127-18-4	TETRACHLOROETHENE	5 U
71-55-6	1, 1, 1-TRICHLOROETHANE	2J 5 U	108-88-3	TOLUENE	5 U
56-23-5	CARBON TETRACHLORIDE	5 U	108-90-7	CHLOROBENZENE	5 U
108-05-4	VINYL ACETATE	10 U	100-41-4	ETHYLBENZENE	5 U
75-27-4	BROMODICHLOROMETHANE	3 J	100-42-5	STYRENE	5 U
				TOTAL XYLENES	5 U

DATA REPORTING QUALIFIERS

r reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

LUE If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J)

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >/= 10ng/ul in the final extract should be confirmed by GC/MS.

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Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

FORM 1 4/84

RECEIVED APR 0 3 1985

IRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
.. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

ORGANICS ANALYSIS DATA SHEET
(PAGE 2)

SAMPLE NUMBER
E9261

TAP

SEMIVOLATILE
CONCENTRATION: LOW
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\19\85
CONC/DIL FACTOR: 2.0

CAS NUMBER		ug/l	CAS NUMBER		ug/l
-75-9	N-NITROSODIMETHYLAMINE	20 U	83-32-9	ACENAPHTHENE	20 U
8-95-2	PHENOL	20 U	51-28-5	2, 4-DINITROPHENOL	100 U
-53-3	ANILINE	20 U	100-02-7	4-NITROPHENOL	100 U
1-44-4	BIS(2-CHLOROETHYL)ETHER	20 U	132-64-9	DIBENZOFURAN	20 U
-57-8	2-CHLOROPHENOL	20 U	121-14-2	2, 4-DINITROTOLUENE	20 U
541-73-1	1, 3-DICHLOROBENZENE	20 U	606-20-2	2, 6-DINITROTOLUENE	20 U
6-46-7	1, 4-DICHLOROBENZENE	20 U	84-66-2	DIETHYLPHTHALATE	20 U
0-51-6	BENZYL ALCOHOL	20 U	7005-72-3	4-CHLOROPHENYL-PHENYLETHER	20 U
95-50-1	1, 2-DICHLOROBENZENE	20 U	86-73-7	FLUORENE	20 U
-48-7	2-METHYLPHENOL	20 U	100-01-6	4-NITROANILINE	100 U
1638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	20 U	534-52-1	4, 6-DINITRO-2-METHYLPHENOL	100 U
06-44-5	4-METHYLPHENOL	20 U	86-30-6	N-NITROSODIPHENYLAMINE (1)	20 U
21-64-7	N-NITROSO-DI-N-PROPYLAMINE	20 U	101-55-3	4-BROMOPHENYL-PHENYLETHER	20 U
-72-1	HEXACHLOROETHANE	20 U	118-74-1	HEXACHLOROBENZENE	20 U
3-95-3	NITROBENZENE	20 U	87-86-5	PENTACHLOROPHENOL	100 U
78-59-1	ISOPHORONE	20 U	85-01-8	PHENANTHRENE	20 U
8-75-5	2-NITROPHENOL	20 U	120-12-7	ANTHRACENE	20 U
05-67-9	2, 4-DIMETHYLPHENOL	20 U	84-74-2	DI-N-BUTYLPHTHALATE	20 U
65-85-0	BENZOIC ACID	100 U	206-44-0	FLUORANTHENE	20 U
11-91-1	BIS(2-CHLOROETHOXY)METHANE	20 U	92-87-5	BENZIDINE	100 U
20-83-2	2, 4-DICHLOROPHENOL	20 U	129-00-0	PYRENE	20 U
20-82-1	1, 2, 4-TRICHLOROBENZENE	20 U	85-68-7	BUTYLBENZYLPHTHALATE	20 U
91-20-3	NAPHTHALENE	20 U	91-94-1	3, 3-DICHLOROBENZIDINE	40 U
06-47-8	4-CHLOROANILINE	20 U	56-55-3	BENZO(A)ANTHRACENE	20 U
7-68-3	HEXACHLOROBUTADIENE	20 U	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	20 U
59-50-7	4-CHLORO-3-METHYLPHENOL	20 U	218-01-9	CHRYSENE	20 U
1-57-6	2-METHYLNAPHTHALENE	20 U	117-84-0	DI-N-OCTYL PHTHALATE	20 U
7-47-4	HEXACHLOROCYCLOPENTADIENE	20 U	205-99-2	BENZO(B)FLUORANTHENE	20 U
88-06-2	2, 4, 6-TRICHLOROPHENOL	20 U	207-08-9	BENZO(K)FLUORANTHENE	20 U
95-95-4	2, 4, 5-TRICHLOROPHENOL	100 U	50-32-8	BENZO(A)PYRENE	20 U
1-58-7	2-CHLORONAPHTHALENE	20 U	193-39-5	INDENO(1, 2, 3-CD)PYRENE	20 U
8-74-4	2-NITROANILINE	100 U	53-70-3	DIBENZ(A, H)ANTHRACENE	20 U
131-11-3	DIMETHYL PHTHALATE	20 U	191-24-2	BENZO(G, H, I)PERYLENE	20 U
208-96-8	ACENAPHTHYLENE	20 U			
9-09-2	3-NITROANILINE	100 U			

(1)-CANNOT BE SEPARATED FROM DIPHENYLAMINE

RECEIVED APR 0 3 1985

IRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

ORGANICS ANALYSIS DATA SHEET
(PAGE 2)

SAMPLE NUMBER
E9261 RE

TAP

SEMIVOLATILE
CONCENTRATION: LOW
DATE EXTRACTED / PREPARED: 02\20\85 (02\05\85 orig.)
DATE ANALYZED: 02\21\85
CONC/DIL FACTOR: 2.0

CAS NUMBER		ug/l	CAS NUMBER		ug/l
-75-9	N-NITROSODIMETHYLAMINE	20 U	83-32-9	ACENAPHTHENE	20 U
108-95-2	PHENOL	20 U	51-28-5	2, 4-DINITROPHENOL	100 U
-53-3	ANILINE	20 U	100-02-7	4-NITROPHENOL	100 U
1-44-4	BIS(2-CHLOROETHYL)ETHER	20 U	132-64-9	DIBENZOFURAN	20 U
-57-8	2-CHLOROPHENOL	20 U	121-14-2	2, 4-DINITROTOLUENE	20 U
1-73-1	1, 3-DICHLOROBENZENE	20 U	606-20-2	2, 6-DINITROTOLUENE	20 U
6-46-7	1, 4-DICHLOROBENZENE	20 U	84-66-2	DIETHYLPHTHALATE	20 U
0-51-6	BENZYL ALCOHOL	20 U	7005-72-3	4-CHLOROPHENYL-PHENYLETHER	20 U
95-50-1	1, 2-DICHLOROBENZENE	20 U	86-73-7	FLUORENE	20 U
-48-7	2-METHYLPHENOL	20 U	100-01-6	4-NITROANILINE	100 U
638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	20 U	534-52-1	4, 6-DINITRO-2-METHYLPHENOL	100 U
106-44-5	4-METHYLPHENOL	20 U	86-30-6	N-NITROSODIPHENYLAMINE (1)	20 U
1-64-7	N-NITROSO-DI-N-PROPYLAMINE	20 U	101-55-3	4-BROMOPHENYL-PHENYLETHER	20 U
-72-1	HEXACHLOROETHANE	20 U	118-74-1	HEXACHLOROBENZENE	20 U
8-95-3	NITROBENZENE	20 U	87-86-5	PENTACHLOROPHENOL	100 U
7-59-1	ISOPHORONE	20 U	85-01-8	PHENANTHRENE	20 U
1-75-5	2-NITROPHENOL	20 U	120-12-7	ANTHRACENE	20 U
05-67-9	2, 4-DIMETHYLPHENOL	20 U	84-74-2	DI-N-BUTYLPHTHALATE	20 U
65-85-0	BENZOIC ACID	100 U	206-44-0	FLUORANTHENE	20 U
11-91-1	BIS(2-CHLOROETHOXY)METHANE	20 U	92-87-5	BENZIDINE	~~335~~ J 100 U
20-83-2	2, 4-DICHLOROPHENOL	20 U	129-00-0	PYRENE	TC 20 U
120-82-1	1, 2, 4-TRICHLOROBENZENE	20 U	85-68-7	BUTYLBENZYLPHTHALATE	20 U
1-20-3	NAPHTHALENE	20 U	91-94-1	3, 3-DICHLOROBENZIDINE	40 U
06-47-8	4-CHLOROANILINE	20 U	56-55-3	BENZO(A)ANTHRACENE	20 U
7-68-3	HEXACHLOROBUTADIENE	20 U	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	20 U
9-50-7	4-CHLORO-3-METHYLPHENOL	20 U	218-01-9	CHRYSENE	20 U
1-57-6	2-METHYLNAPHTHALENE	20 U	117-84-0	DI-N-OCTYL PHTHALATE	20 U
7-47-4	HEXACHLOROCYCLOPENTADIENE	20 U	205-99-2	BENZO(B)FLUORANTHENE	20 U
88-06-2	2, 4, 6-TRICHLOROPHENOL	20 U	207-08-9	BENZO(K)FLUORANTHENE	20 U
5-95-4	2, 4, 5-TRICHLOROPHENOL	100 U	50-32-8	BENZO(A)PYRENE	20 U
1-58-7	2-CHLORONAPHTHALENE	20 U	193-39-5	INDENO(1, 2, 3-CD)PYRENE	20 U
8-74-4	2-NITROANILINE	100 U	53-70-3	DIBENZ(A, H)ANTHRACENE	20 U
131-11-3	DIMETHYL PHTHALATE	20 U	191-24-2	BENZO(G, H, I)PERYLENE	20 U
208-96-8	ACENAPHTHYLENE	20 U			
9-09-2	3-NITROANILINE	100 U			

(1)-CANNOT BE SEPARATED FROM DIPHENYLAMINE

RECEIVED APR 0 3 1985

ENVIRONMENTAL PROTECTION AGENCY, CLP SAMPLE MANAGEMENT OFFICE
P.O. BOX 818, ALEXANDRIA, VA 22313 703/557-2490

SAMPLE NUMBER
E9261

TAP

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCBS

CONCENTRATION: LOW LIQUID
DATE EXTRACTED / PREPARED: 02\05\85
DATE ANALYZED: 02\07\85
CONC/DIL FACTOR: 1

CAS NUMBER		
319-84-6	ALPHA-BHC	0.05 U
319-85-7	BETA-BHC	0.05 U
319-86-8	DELTA-BHC	0.05 U
58-89-9	GAMMA-BHC (LINDANE)	0.05 U
76-44-8	HEPTACHLOR	0.05 U
309-00-2	ALDRIN	0.05 U
1024-57-3	HEPTACHLOR EPOXIDE	0.05 U
959-98-8	ENDOSULFAN I	0.05 U
60-57-1	DIELDRIN	0.10 U
72-55-9	4, 4-DDE	0.10 U
72-20-8	ENDRIN	0.10 U
33213-65-9	ENDOSULFAN II	0.10 U
72-54-8	4, 4-DDD	0.10 U
7421-93-4	ENDRIN ALDEHYDE	0.10 U
1031-07-8	ENDOSULFAN SULFATE	0.10 U
50-29-3	4, 4-DDT	0.10 U
72-43-5	METHOXYCHLOR	0.50 U
53494-70-5	ENDRIN KETONE	0.10 U
57-74-9	CHLORDANE	0.50 U
8001-35-2	TOXAPHENE	1.00 U
12674-11-2	AROCLOR-1016	0.50 U
11104-28-2	AROCLOR-1221	0.50 U
11141-16-5	AROCLOR-1232	0.50 U
53469-21-9	AROCLOR-1242	0.50 U
12672-29-6	AROCLOR-1248	0.50 U
11097-69-1	AROCLOR-1254	1.00 U
11096-82-5	AROCLOR-1260	1.00 U

VI = VOLUME OF EXTRACT INJECTED (UL)
VS = VOLUMN OF WATER EXTRACTED (ML)
WS = WEIGHT OF SAMPLE EXTRACTED (G)
VT = VOLUME OF TOTAL EXTRACT (UL)

VS: 1000 OR WS: VT: 10,000 VI: 1

Environmental Protection Agency. CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E9261

TAP

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	"NO VOA COMPOUNDS FOUND"			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

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Environmental Protection Agency. CLP Sample Management Office.
P. O. Box 818. Alexandria, Virginia 22313 703/557-2490

Sample Number
E9261
E9261 RE
TAP

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NO SV COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 3-25-85

SUBJECT: Review of Region V CLP Data
Received for Review on [illegible]

RECEIVED MAR 0 5 1985

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Theiss

TO: Data User: [illegible]

We have reviewed the data for the following case(s).

SITE NAME: [illegible] SMO Case No. [illegible]

EPA Data Set No. [illegible] No. of Samples: 13 D.U./Activity Numbers [illegible]

CRL No. [illegible]

SMO Traffic No. ME4862 to ME4863

CLP Laboratory: [illegible] Hrs. Required for Review: 2

Following are our findings.

Contractural:
ICP interference check sample for As is biased high (133%) Spike recoveries for Se on soil and water are biased low at 68% and 64% respectively. Duplicate for Zn on soil gave an RPD (25) >CRL.

Integral:
Ca, Mg + Zn for water ME4863 are reported as 1/10 of the true value. Contractor did not list the true values for ICP interference check sample.

3-25-85 DM

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

EPA FORM 1320-6 (REV. 3-78)

REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY
ESD/Central Regional Laboratory

DATA TRACKING - FORM I

RECEIVED APR 0 5 1985

CRL Data Set No. _____ ERRIS No. _____

SMO Case No. _____ Site Name: _____

Name of Laboratory: [illegible] Data User: _____

No. of Samples: [illegible] Date Samples Received: _____

1. Have chain-of-custody records been received? YES ___ NO ___
2. Have Traffic reports been received? YES ___ NO ___
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ___ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ___ NO ___
6. Number of samples claimed: X 3 per [illegible] Number of samples received: 2+1=3
7. Checked by: [illegible] Date: [illegible]
8. Received by Contract Project Management Section: JN Date: 3-5-85
9. Review Started: 3-25-85 Reviewer Signature: Dorothy May
10. Total time spent on review: 2 Date review completed: March 25, 1985
11. Copied (xeroxed) by: Willie Dillon Date: 3/26/85
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, 5SCRL

13. Data received by: Cynthia Pink Date: 4-5-85
14. Q.A. review received by: Cynthia Pink Date: 4-5-85
15. Received by CRL - CPM Section for file by: _____

Data for ME4861-4863 rec'd. Date: _____
Complete

REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY
ESD/Central Regional Laboratory

DATA TRACKING - FORM I

RECEIVED APR 0 5 1985

CRL Data Set No. SF 2020 ERRIS No. _____

SMO Case No. 3859 Site Name: Peoples Ave. Dump

Name of Laboratory: RMAL Data User: FIT

No. of Samples: 1 Date Samples Received: 3-11-85

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic reports been received? YES ___ NO ✓
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ✓ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___
6. Number of samples claimed: 1 Number of samples received: 1
7. Checked by: Sylvia Griffin Date: 3-11-85
8. Received by Contract Project Management Section: JPS Date: 3-11-85
9. Review Started: 3-25-85 Reviewer Signature: Dorothy May
10. Total time spent on review: 2 Date review completed: March 25 1985
11. Copied (xeroxed) by: Willie Green Date: 3/26/85
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, 5SCRL

13. Data received by: _____ Date: _____
14. Q.A. review received by: _____ Date: _____
15. Received by CRL - CPM Section for file by: _____

Date: _____

REVIEW OF CLP INORGANIC DATA

RECEIVED APR 0 5 1985

Contractor: RMAL

Case #3859

The data package for this case was reviewed by Region V, Central Regional Laboratory personnel in accordance with the "Standard Operating Procedure for Contract Laboratory (CLP) Data Review; August 1984". The quality of the data was assessed based on laboratory compliance with the contract and the data quality objectives as defined by the user.

This review covers the following samples and parameters:

SMO#	CRL#	MATRIX	CONCENTRATION
ME 4861	85MP07542	soil	low
62	S43	water	↓
63	R11	water	↓

SF-2020

RECEIVED

MAR 05 1985

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

US EPA CENTRAL REGIONAL LAB.
555 S. CLARK STREET
Chicago, Illinois 60605

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

RECEIVED APR 0 2 1985

Lab Name ROCKY MOUNTAIN ANALYTICAL Case No. 3859
SOW No. 784 QC Report No. 5621

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
ME4862			
ME4863			

Comments: LOW WATERS TASK 1 2 ONLY
SAMPLE ME4862 ANALYZED @ 20X DILUTION BY ICAP and furnace DUE TO HIGH DISSOLVED SOLIDS

ICP Interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after ___ generation of raw data.

Footnotes:
NR - not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the method used with P (for ICP/Flame AA) or F (for furnace).
U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of Interference. Explanatory note included on cover page.
s - Indicates value determined by Method of Standard Addition.
R - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is Less than 0.995
CV - Indicates Cold Vapor
MS - Indicates Manual Spectrophotometric

RECEIVED APR 05 1985

R: SOLID

85MP07542

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
ME4861

Date 6 MAR 85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL CASE NO. 3859
SOW NO. 784
LAB SAMPLE ID. NO. - QC REPORT NO. 5628

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	19U	P	13.	MAGNESIUM	[343]	P
2.	ANTIMONY	28U	P	14.	MANGANESE	[2.5]	P
3.	ARSENIC	1.6U	F	15.	MERCURY	0.055U	CV
4.	BARIUM	6.6U	P	16.	NICKEL	3.8U	P
5.	BERYLLIUM	0.33U	P	17.	POTASSIUM	[2530]	P
6.	CADMIUM	2.7U	P	18.	SELENIUM	[2.7]	F R
7.	CALCIUM	[632] =J	P	19.	SILVER	2.7U	P
8.	CHROMIUM	2.2U	P	20.	SODIUM	396U	P
9.	COBALT	3.3U	P	21.	THALLIUM	3.3U	F
10.	COPPER	[3.1]	P	22.	TIN	15U	P
11.	IRON	56	P	23.	VANADIUM	2.7U	P
12.	LEAD	[1.5]	F	24.	ZINC	34	P *

Cyanide NR Percent Solids (%) 91

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

RECEIVED APR 0

R. WET

857MP07543

EPA Sample No.

ME4862J

Date 3/4/85

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL CASE NO. 3859
SOW NO. 784
LAB SAMPLE ID. NO. - QC REPORT NO. 5621

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L

1.	ALUMINUM	[860]	P	13.	MAGNESIUM	[38800]	P
2.	ANTIMONY	1020w	P	14.	MANGANESE	[188]	P
3.	ARSENIC	60w	F	15.	MERCURY	2w	CV
4.	BARIUM	240w	P	16.	NICKEL	140w	P
5.	BERYLLIUM	12w	P	17.	POTASSIUM	[30000]	P
6.	CADMIUM	100w	P	18.	SELENIUM	100w	F
7.	CALCIUM	[88200]	P	19.	SILVER	100w	P
8.	CHROMIUM	80w	P	20.	SODIUM	14400	P
9.	COBALT	120w	P	21.	THALLIUM	200w	F
10.	COPPER	[240]	P	22.	TIN	560w	P
11.	IRON	2680	P	23.	VANADIUM	100w	P
12.	LEAD	142	F	24.	ZINC	1700	P

Cyanide ____ Percent Solids (%) ____

Footnotes: For reporting results to EPA, standard result qualifiers used as defined on Cover Page. Additional flags or footn explaining results are encouraged. Definition of such fl must be explicit and contained on Cover Page, however.

Comments: Sample prepped @ 20X dilution due to h dissolved solids. jm

Lab Manager jm

TAP

RECEIVED APR 0 5 1985

85MP07R11

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. ME4863

Date 3/4/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 3859
QC REPORT NO. 5621

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L

1.	ALUMINUM	35w	P	13.	MAGNESIUM	[3560]	P
2.	ANTIMONY	51w	P	14.	MANGANESE	144	P
3.	ARSENIC	13w	F	15.	MERCURY	0.1w	CV
4.	BARIUM	249	P	16.	NICKEL	7w	P
5.	BERYLLIUM	0.6w	P	17.	POTASSIUM	[1790]	P
6.	CADMIUM	5w	P	18.	SELENIUM	5w	F R
7.	CALCIUM	7810	P	19.	SILVER	5w	P
8.	CHROMIUM	4w	P	20.	SODIUM	[4220]	P
9.	COBALT	6w	P	21.	THALLIUM	10w	F
10.	COPPER	52	P	22.	TIN	28w	P
11.	IRON	944	P	23.	VANADIUM	5w	P
12.	LEAD	9.6	F	24.	ZINC	109	P

Cyanide ____ Percent Solids (%) ____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ____

Lab Manager JH