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SPEVIAL ENVIRONMENTAL

FINAL REPORT DATA COLLECTION AND INTERIM REMEDIAL PROGRAM

10500 CAYUGA DRIVE

NIAGARA FALLS, NEW YORK

PRINTED ON

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Occidental Chemical Corporation

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FINAL REPORT DATA COLLECTION AND **INTERIM REMEDIAL PROGRAM**

10500 CAYUGA DRIVE NIAGARA FALLS, NEW YORK

DECEMBER 1992

REFERENCE NO. 3307 (24) This report has been printed on recycled paper. **CONESTOGA-ROVERS & ASSOCIATES**

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5.0 FINAL CONDITIONS

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1.0 INTRODUCTION

An interim remedial program has been completed by Occidental Chemical Corporation (OxyChem) on the property at 10500 Cayuga Drive and two adjacent residential properties (1331 and 1335 104th Street) in Niagara Falls, New York.

The project was conducted in accordance with the Order on Consent (AOC) (No. B9-0263-89-03) between the New York State Department of Environmental Conservation (NYSDEC) and OxyChem.

The project consisted of iterative rounds of soil sampling to define the remediation areas and three phases of excavation activities to remove the soils which exhibited chemical presence.

This document presents a comprehensive, certified report of the sampling and excavation activities conducted.

1.

2.0 <u>BACKGROUND</u>

In the fall of 1988, while installing a sewer line, construction workers observed evidence of chemical presence in the soils under the parking lot at 10500 Cayuga Drive. The location of the project site within the City of Niagara Falls is shown on Figure 2.1.

Between March 1989 and July 1990, six rounds of sample collection (two by the NYSDEC and four by OxyChem) and two phases of soil excavation (Phases I and II) were conducted at the parking area. The purpose of these activities was to define the extent of soils exhibiting chemical presence and to remove these materials from the parking area.

Since chemicals were detected in soil samples collected just off the west edge of the parking area, the project was expanded into the rear yards of the properties located at 1331 and 1335 104th Street.

Between July 1990 and January 1991 a third phase of sampling and excavation was conducted (Phase III) on these residential properties to further define the extent of soils exhibiting chemical presence and to remove that soil material from the residential properties.

Figure 2.2 presents a plan view of the project Site. Table 2.1 presents a chronology of site activities.

3.0 NYSDEC INVESTIGATION

Following the report of the observation of possible chemical presence in site soils, the NYSDEC conducted investigations in March and April 1989 to attempt to define the nature and extent of chemical presence at the Site. The locations of all NYSDEC sample points (1 through 9 and A through L) are shown on Plan 1.

In March 1989 soil and water samples were collected by NYSDEC and analyzed for the parameters listed on Table 3.1. Documentation of the sampling procedures has not been provided to OxyChem and therefore is not included in this report.

In April 1989 NYSDEC conducted a second round of soil and water sampling. A memo dated April 24, 1989 from R.W. Schick (NYSDEC) to A.S. Nagi (NYSDEC) describes the sampling program. A copy of this memo is contained in Appendix A.

The results of the NYSDEC investigations confirmed the presence of chlorinated organic compounds in soils on the property at 10500 Cayuga Drive. The analytical data from these two sampling rounds was forwarded to OxyChem and is contained in Appendix A.

4.0 INTERIM REMEDIAL PROGRAM

Pursuant to the conditions of the AOC the documents listed on Table 4.1 were submitted by OxyChem and approved by NYSDEC. All sampling and remedial activities performed by OxyChem were executed in accordance with these documents.

Interim progress reports have been submitted by OxyChem to NYSDEC. These reports included descriptions of activities performed, presentations of results, proposed additional activities, and detailed Quality Assurance/Quality Control (QA/QC) reviews when analytical data was presented. It is to be noted that all samples were analyzed for the parameters listed on Table 4.2, as required by the approved Quality Assurance Project Plan (QAPP). This list includes the 2,4- and 2,5-isomers of dichlorophenol. Some of the interim progress reports incorrectly reported 2,3-dichlorophenol rather than 2,5-dichlorophenol. These tables have been corrected and the proper parameters are presented in this report.

4.1 <u>PHASE I ACTIVITIES</u>

In accordance with the document entitled "Work Plan, Interim Remedial Program, 10500 Cayuga Drive" (October 1989) OxyChem completed the excavation and restoration activities briefly described below. A detailed description of these activities has been submitted previously in the document entitled "Comprehensive Summary Report, Data Collection Program and Interim Remedial Activities, 10500 Cayuga Drive" (March 1991).

4.1.1 Excavation

The March and April 1989 analytical data was used to define an area from which soil material was removed in early November 1989. The area of the Phase I excavation is shown on Plan 2.

The Phase I excavation was performed by SLC Project oversight was provided by Conestoga-Rovers & Associates (CRA) on behalf of OxyChem. NYSDEC representatives were present at all times during the excavation and sampling program.

Removal of the soils was accomplished using a track-mounted backhoe. The excavated material was placed directly into plastic lined dump trailers and transported to the Chemical Waste Management (CWM) Hazardous Waste Landfill, Model City, New York, for disposal as non-hazardous material. The excavation extended from the existing ground surface to a depth of six inches to 12 inches into the native clay/till layer. Approximately 710 cubic yards of material were removed.

After completing the excavation of a given area, the sidewalls were visually examined and monitored with an HNU photoionization detector for signs of chemical presence. Additional soils were removed beyond the excavation limits as deemed necessary based on this inspection.

All areas excavated during Phase I were backfilled (maximum 12 inch lift) using #2 run of crusher stone and compacted using a vibratory roller. Prior to backfilling, the excavation was lined with polyethylene to provide a visible delineation of the area of remediation.

4.1.2 <u>Confirmatory Sampling</u>

Prior to restoration of the excavated area, confirmation samples were taken from 12 locations on the excavation walls and from four locations on the excavation floor The locations of the sample points (NCC-1 through NCC-12 and NCC-1F, NCC-3F, NCC-7F and NCC-FF) are shown on Plan 1. These samples and all subsequent samples were analyzed for the parameters shown on Table 4.2.

Analytical data from this round of confirmation samples is contained in Appendix A. A QA/QC review was performed by OxyChem and all data was determined to be acceptable for its intended purpose. The QA/QC review has been submitted previously in the Comprehensive Summary Report.

The analytical data revealed chemicals remaining in the excavation sidewalls, indicating the area of elevated chemistry at the Site extended beyond the excavated area. The excavation was backfilled before the confirmatory analytical data was received.

Following receipt and review of the analytical data from the Phase I excavation confirmation sampling, an additional data collection program was proposed by OxyChem and approved by the NYSDEC to further define the extent of contamination at the Site.

This additional data collection program was conducted in a series of events. The extent of each sampling event was based on the analytical results of the previous event. The NYSDEC approved each round of sampling prior to its being conducted and had a representative present during all activities. A sample collection summary for the Data Collection Program is presented on Table 4.3. The locations of all sample points are shown on Plan 1 and stratigraphic logs of each borehole are contained in Appendix B.

4.2.1 Fourth Round Sample Collection

On March 5-6 and March 14, 1990, OxyChem conducted a round of sample collection at 10500 Cayuga Drive utilizing a rotary drilling rig and split spoon samplers to obtain 30 soil samples from 27 boreholes (NCC-14 through NCC-32 and NCC-35 through NCC-42).

The NYSDEC collected split samples from several of the boreholes completed on March 5 and 6. These split samples were collected

directly from the sampling device. On March 14, the NYSDEC obtained split samples after homogenization at the laboratory.

Analytical results of the samples collected and analyzed in this round are contained in Appendix A. A QA/QC review was performed by OxyChem and all data were determined to be acceptable for their intended use. The QA/QC review has been submitted previously in the Comprehensive Summary Report.

The presence of chemicals was detected in 20 of the boreholes installed during this round of sampling.

4.2.2 Fifth Round Sample Collection

Based on the results of the fourth round sample collection program, 12 additional boreholes (NCC-44 through NCC-55) were completed on June 1, 1990. The boreholes were completed using the same protocols as for the previous round.

Chemistry was detected in four of the samples collected during this sampling round. Results of the chemical analyses are contained in Appendix A. A QA/QC review was performed by OxyChem and all data were found to be acceptable for their intended use. The QA/QC review was submitted previously in the Comprehensive Summary Report.

4.2.3 Sixth Round Sample Collection

Two additional boreholes (NCC-58 and NCC-59) were installed on the east side of the parking area in July 1990. Samples were collected from the boreholes in accordance with the approved protocols.

During the fifth round sampling at 10500 Cayuga Drive, chemical presence was detected in boreholes NCC-53 and NCC-55 located just off the west side of the 10500 Cayuga Drive parking area. Therefore on July 20, 1990, 16 soil samples were collected from eight boreholes (1335-1 through 1335-8) at 1355 104th Street. The locations of these boreholes are shown on Plan 1. From each borehole, analytical samples were collected from ground surface to 6 inches below ground surface (BGS) and from 6 inches BGS to the top of the native clay/till layer.

The analytical data of this sixth sample round are contained in Appendix A. A QA/QC review was performed by OxyChem and all data were found to be acceptable for their intended use. The QA/QC review was submitted previously in the Comprehensive Summary Report and "Soils Investigation Summary Report, 1335 104th Street" (April 1991).

The analytical data revealed no chemical presence in boreholes NCC-58 or NCC-59 on the 10500 Cayuga Drive property. Low levels of chemical presence was detected, however, in all boreholes installed at 1335 104th Street.

4.2.4 Seventh Round Sample Collection

1335 104th Street

On January 3 and 4, 1991, OxyChem returned to 1335 104th Street to collect additional soil samples. Five boreholes (1335-10 through 1335-14) were completed and 10 soil samples submitted for chemical analysis using the same procedures described previously.

Additionally, a water sample was collected from the basement sump of the residence and submitted for chemical analysis. The sump sampling details are presented in Table 4.4.

Chemistry was not detected in any of the soil samples or in the sump water. The analytical data from the 1335 104th Street sample analyses are contained in Appendix A. A QA/QC review as performed by OxyChem and the data were found to be acceptable for their intended use. The QA/QC review was submitted previously in the Soils Investigation Summary Report, 1335 104th Street.

Based on the data collected in July 1990 and January 1991, Dr. Paul O. Nees of Biosurvey, Inc. conducted an evaluation of the risk to human health which would result from ingestion of fruits and vegetables grown in the subsurface soils on this property. This evaluation concluded that the presence of chemicals in the soils did not represent a health risk with respect to ingestion of fruits and vegetables grown in these soils. The complete health risk assessment was presented previously in the Soils Investigation Summary Report, 1335 104th Street.

1331 104th Street

On January 8 to 10, 1991, OxyChem collected soil samples from the rear yard of the residence at 1331 104th Street. Twelve boreholes (1331-1 through 1331-12) were completed with 24 soil samples collected and submitted for chemical analysis.

Additionally, a water sample was collected from the basement sump of the residence for chemical analysis. The sump sampling details are provided in Table 4.5.

Chemistry was not detected in the sump water or surface soil samples. Low levels of chemistry were detected in subsurface samples collected from four of the boreholes.

The analytical results of the 1331 104th Street sampling are contained in Appendix A. A QA/QC review was performed by OxyChem and all data were found to be acceptable for their intended use. The QA/QC review was submitted previously in the report entitled "Soils Investigation Summary Report, 1331 104th Street" (April 1991).

Based on the analytical data, Dr. Paul O. Nees of Biosurvey, Inc. conducted an evaluation of the risk to human health which would result from the ingestion of fruits and vegetables grown in the subsurface soils on this property. This evaluation concluded that the presence of chemicals in these soils did not represent a health risk with respect to ingestion of fruits and vegetables grown in these soils. The complete health risk assessment was

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presented previously in the Soils Investigation Summary Report, 1331 104th Street.

4.3 PHASE II ACTIVITIES

Following the review of data obtained from the sixth round of sampling (July 1990), it was determined that the limits of soils exhibiting elevated chemical presence on the 10500 Cayuga Drive property had been adequately defined and a work plan entitled "Phase II Work Plan - Interim Remedial Program, 10500 Cayuga Drive" (October 1990) was developed and approved for removal of these soils.

From November 12 to 16, 1990, the soils underlying the parking area adjacent to the Phase I excavation were removed. The excavation areas are shown on Plan 2. The work was performed by SLC under the direction of the OxyChem on-Site Representative (Conestoga-Rovers & Associates). NYSDEC representatives were present at all times work was being conducted.

Removal of the soils was accomplished using a track-mounted backhoe with a three yard bucket. The excavated material was placed directly into plastic lined dump trailers and transported to the Chemical Waste Management (CWM) Hazardous Waste Landfill, Model City, New York, for disposal as non-hazardous material. The excavation extended from the existing ground surface to a depth of six inches to 12 inches into

native clay/till layer. Approximately 1,350 cubic yards of material were removed.

After completing the excavation of a given area, the sidewalls were visually examined for signs of chemical presence, and additional soils were removed beyond the excavation limits as deemed necessary based on the visual examination. No confirmation sampling was performed as consented to by the NYSDEC.

All areas excavated during Phase II were backfilled (maximum 12 inch lift) using #1 and #2 run of crusher stone and compacted using a vibratory roller. The surface of the parking area overlying both the Phase I and the Phase II excavation areas was paved using blacktop asphalt in November 1990.

4.4 PHASE III ACTIVITIES

In accordance with the document entitled "Phase III, Final Work Plan, Interim Remedial Program, 10500 Cayuga Drive" (February 1992) the following data collection, excavation, restoration, and soils disposal activities were completed.

4.4.1 <u>Waste Characterization</u>

On April 13, 1992, as part of the Phase III Interim Remedial Program, soil samples were collected from the proposed areas of excavation within the rear yards of 1331 and 1335 104th Street.

The purpose of this sampling program was two-fold:

 i) characterization of the soils to be excavated during the remediation to determine an appropriate disposal facility; and

 at the land owners request: investigation of the northwest area of the rear yard of 1335 104th Street to determine whether OxyChem chemicals were present in the soil.

Samples were collected at the locations shown on Plan 1. At locations 1331-TCLP and 1335-TCLP samples were collected from depths of 0 to 4.0 feet BGS and submitted for analysis by the Toxicity Characteristic Leaching Procedures (TCLP). Two adjacent boreholes were required at location 1331-TCLP to obtain sufficient sample volume. At location 1335-TCLP, two boreholes were installed approximately 12 feet apart (see Plan 1). No waste material was observed at either location. The soils collected from each borehole were composited for the analytical sample.

The owner of the property at 1335 104th Street requested that samples to be collected from an area of his yard where vegetative growth

was observed to be sparse. Two samples (1335-20 and 1335-21) were collected from this area and analyzed for the parameters listed on Table 4.2.

The analytical data are presented in Appendix A. A QA/QC review was performed by OxyChem and all data were found to be acceptable for their intended use. A complete QA/QC review was submitted previously in the report entitled "Waste Characterization Sampling Report, Phase III Interim Remedial Program, 10500 Cayuga Drive" (June 1992).

The concentrations of all TCLP compounds were found to be below the regulatory level indicating a hazardous waste. The material excavated, therefore, did not exhibit the characteristic of toxicity. In addition, since the soils exhibited only low level organic chemistry presence they were not expected to exhibit any of the other characteristics of a hazardous waste (ignitibility, corrosivity or reactivity). Therefore, it was deemed appropriate to dispose of the soils at OxyChem's 102nd Street Landfill. Approval was obtained from NYSDEC and USEPA for this disposal plan.

The samples analyzed for the Table 4.2 parameters showed no detected levels of any of the analytes. The deficient vegetative growth in this area of the yard at 1335 104th Street is therefore not due to any OxyChem-related chemistry.

4.4.2 <u>Excavation</u>

The excavation of soils from the yards at 1331 and 1335 104th Street commenced on June 8, 1992 and was completed on June 9, 1992. The work was performed by Sicoli and Massaro under the direction of the on-Site OxyChem Representative. All work was performed in accordance with the project documents.

With approval of the property owner, access to the excavation area was made from the property at 10500 Cayuga Drive. A track-mounted backhoe was used to excavate the soils and load them directly into tandem dump trucks. Excavation proceeded from the rear of the house at 1331 104th Street to the area east of the garage at 1335 104th Street.

As the excavation progressed, the face and bottom of each excavated area were examined for evidence of chemical presence (i.e. discoloration or staining, odor, etc.) In addition, a photoionization detector (HNU) was used to screen the excavated area to confirm that soils containing chemical presence had been removed. As each area was determined to be clean by the on-Site OxyChem Representative, concurrence from the on-Site NYSDEC Representative was obtained. The final excavation limits are shown on Plan 2. At the request of the property owner, the southeast corner of the proposed remedial area of the 1331 104th Street property was not excavated in order to preserve a large tree. OxyChem informed NYSDEC in advance of their intent to exclude this area from the excavation area. Excavation was performed to the drip edge of the tree.

After being loaded and prior to leaving the loading area, each truck was inspected and any spilled material removed. Each load was signed for by the contractor superintendent prior to leaving the Site for disposal at the 102nd Street Landfill. Care was taken to ensure that excavated materials were not tracked onto the parking lot at 10500 Cayuga Drive.

A total of 635 cubic yards of material were excavated and removed from the Site in 49 loads. All excavated material was transported to the OxyChem 102nd Street Landfill for disposal. Each load, after dumping, was signed for by the security guard at the 102nd Street Landfill. After the dumping of each load, the on-Site landfill crew spread the material in the existing soil disposal cell.

Verbal approval was given by Mr. James A. Tuk, NYSDEC, to backfill the excavation, OxyChem's on-Site Representative directed the Contractor to proceed with backfilling the excavation with fill from sources previously approved by the OxyChem Site Representative. The backfilling sequence consisted of the following:

i) general fill to within 18 inches of finished grade;

ii) sandy loam to within 6 to 9 inches of finished grade;

iii) topsoil; and

iv) sod to final grade.

Fill was placed in 12 inch lifts and compacted to a grade suitable for the placement of sod.

4.4.3 <u>Health and Safety</u>

All work activities at the Site were performed in accordance with the approved health and safety plan entitled, "Occidental Chemical Corporation; Health and Safety Plan for Interim Remedial Program; 10500 Cayuga Drive; Niagara Falls, New York".

Prior to the start of remedial activities at the Site, a health and safety meeting was conducted for all Site personnel. Meeting topics included an identification of the potential hazards at the Site, work rules and general safety requirements and a review of the personal protective equipment (PPE) required to work on the Site.

All personnel at the Site were required to wear PPE as follows:

- i) hard hat;
- ii) safety glasses with side shields;

iii) work boots; and

iv) half-face piece air purifying respirator available for immediate use ifrequired.

An exclusion zone was established around the perimeter of areas of active excavation.

Site personnel working within the exclusion zone were required to wear additional PPE as follows:

i) Tyveks;

ii) rubber overboots;

iii) half-facepiece air purifying respirator; and

iv) Neoprene gloves.

Air monitoring was conducted during all excavation activities at the Site. Air monitoring was performed for volatile organic compounds and particulate (respirable dust) levels.

Air monitoring for volatile organic compounds was performed using an HNU PI-101 photoionization detector. Air monitoring for volatile organic compounds was performed continuously at the perimeter of the exclusion zone downwind of areas of active excavation.

Particulate monitoring was performed using a Mini-Ram and an MDH PCD-1 real time particulate monitor. The Mini-Ram was used to perform continuous air monitoring at the perimeter of the exclusion zone downwind of areas of active excavation. The real time particulate monitors were used to monitor for the potential off-Site migration of dust generated by remedial activities. One real time monitor was located upwind and three real time monitors were located downwind, approximately 100 feet apart, of areas of active excavation.

Air monitoring results are included in Appendix C. No exceedances of either volatile organic compounds or particulates occurred during excavation activites at the Site.

4.4.4 <u>Property Restoration</u>

After the backfilling of the excavation was complete to rough grade, the landscape contractor (Menne Nursery) performed the final grading and placed sod. The garden and plant landscaped areas were also restored including all plants, trees, shrubs, and cover material which had been removed.

Upon completion of the landscape work, a 5 foot chain link fence with access gates was installed along the property lines. This work was performed by Argy Fence.

As a result of the movement of trucks and equipment the west edge of the parking lot asphalt at 10500 Cayuga Drive became damaged. Upon completion of the project, the damaged edge of the asphalt parking lot was mechanically cut and the stone base was restored and compacted. A 2 inch layer of binder was placed and rolled and a 1 inch layer of top coat was placed and rolled to match existing asphalt. The area between the asphalt and the chain link fence was lined with clean graded crushed stone.

4.4.5 <u>1327 and 1341 104th Street Sample Collection</u>

The owners of the properties adjacent to 1331 and 1335 104th Street contacted OxyChem and requested that samples be collected from their yards to confirm that no chemicals were present.

On June 10, 1992, soil samples were collected from the rear yards at 1327 and 1341 104th Street. Two soil samples were collected from each yard as shown on Figure 4.1. The samples from 1327 104th Street were collected from two locations (1327-1 and 1327-2). At 1341 104th Street, two boreholes (1341-1 and 1341-2) were completed at opposite ends of the yard.

A sample collection summary is presented in Table 4.3.

The analytical data of the 1327 and 1341 104th Street sampling are contained in Appendix A. QA/QC information for the 1327 and 1341 104th Street samples is contained in Appendix B.

5.0 FINAL CONDITIONS

In accordance with the Interim Remedial Work Plans (Phase I, Phase II and Phase III) soils exhibiting the presence of organic chemicals above the survey levels established have been removed from the properties at 10500 Cayuga Drive, 1331 104th Street and 1335 104th Street.

The areas of excavation have been restored to original or improved conditions to enable continued, unrestricted use of these areas.

As indicated by the data obtained from the sample of sump water collected at 1335 104th Street in January 1991 chemicals from the site soils were not present in the area groundwater. Since the potential source of chemicals to groundwater has now been removed there is no need for further groundwater monitoring at this site.

CERTIFICATION

I, Richard J. Snyder, a Professional Engineer in the State of New York, certify, based on site visits during progress of the works and interviews with persons directly responsible for supervising the performance

of the work, that the activities performed for the implementation of the Interim Remedial Program, except as otherwise noted in this report, were performed in accordance with the documents entitled:

- i) "Work Plan Interim Remedial Program" 10500 Cayuga Drive, Niagara Falls, New York October 1989;
- ii) "Phase II Work Plan Interim Remedial Program" 10500 Cayuga Drive, Niagara Falls, New York October 1990; and
- iii) "Phase III Final Work Plan Interim Remedial Program" 10500 Cayuga Drive, Niagara Falls, New York February 1992.

NEW - ENGINEER Richard J. Snyder CHSED 662 PROFESSIONAL 12-23

Date

LIST OF INFORMATION SOURCES

Correspondence

- NYSDEC memorandum to R. Schick from A. Nagi dated April 24, 1989.
- NYSDEC letter to J. Cull from R. Schick dated December 14, 1989.

Project Documents

- Work Plan, Interim Remedial Program 10500 Cayuga Drive Niagara Falls, New York (October 1989)
- Quality Assurance/Quality Control Plan Interim Remedial Program 10500 Cayuga Drive Niagara Falls, New York (October 1989)
 - Health and Safety Plan for Interim Remedial Program 10500 Cayuga Drive Niagara Falls, New York (October 1989)
- Phase II Work Plan Interim Remedial Program 10500 Cayuga Drive Niagara Falls, New York (October 1990)
- Phase III Final Work Plan Interim Remedial Program 10500 Cayuga Drive Niagara Falls, New York (February 1992)

Interim Progress Reports

- Comprehensive Summary Report, Data Collection Program and Interim Remedial Activities, 10500 Cayuga Drive, Niagara Falls, New York (March 1991).
- Soils Investigation Summary Report 1331 104th Street, Niagara Falls, New York (April 1991).
- Soils Investigation Summary Report 1335 104th Street, Niagara Falls, New York (April 1991).
- Waste Characterization Sampling Report Phase III Interim Remedial Program, 10500 Cayuga Drive, Niagara Falls, New York (June 1992).

Soil Sampling Report, 1327/1341 104th Street, 10500 Cayuga Drive, Niagara Falls, New York (August 1992).

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FIGURES





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TABLES

TABLE 2.1

CHRONOLOGY OF EVENTS 10500 CAYUGA DRIVE

1.	Reported Observation of Chemical Presence	1988
2.	Soil Sampling, 10500 Cayuga Drive (conducted by NYSDEC)	March 1989 April 1989
3.	Order on Consent	August 1989
4.	Phase I Excavation, 10500 Cayuga Drive	November 1989
5.	Phase I Confirmatory Sampling	November 1989
6.	Data Collection Program 10500 Cayuga Drive	March 1990 June 1990 July 1990 January 1991
7.	Phase II Excavation, 10500 Cayuga Drive	November 1990
8.	Waste Characterization Sampling 1331 and 1335 104th Street	April 1992
9.	Phase III Excavation 1331 and 1335 104th Street	June 1992

10. Soil Sampling 1327 and 1341 104th Street

June 1992

TABLE 3.1

NYSDEC ANALYTICAL PARAMETER LIST 10500 CAYUGA DRIVE MARCH/APRIL 1989

	March 1989	April 1989
VOLATILE ORGANIC COMPOUNDS		
Benzene	X	x
Toluene	X	x
Chlorobenzene	X	X
Trifluoromethyl benzene	X	X
Cl-trifluoromethyl benzene	X	X .
Xylene	· X	х
Chlorotoluene	X	х
a,a,a-Trifluorotoluene	•	X
Ethylbenzene		X
Dichlorobenzene		Х
SEMI-VOLATILE ORGANIC COMPOUNDS		
1.4-Dichlorobenzene	х	х
1.3-Dichlorobenzene	X	X
1,2-Dichlorobenzene	х	X
2,3-Dichlorotoluene	X	X
Trimethyl benzene	х	X
Trifluoromethyl benzene amine	Х	x
Tetrachlorobutadiene	X .	х
1,3-Dichlorotoluene	Х	x
Dichlorotoluene	X	. X
Trichlorobenzene (isomer)	Х	х
Trichlorobenzene (isomer)	X	• X
Trichlorobenzene (isomer)	. X	X
Trichlorobenzene (total)		X
Hexachlorobutadiene	Х	X
Trichlorotoluene (isomer)	Х	X
Trichlorotoluene (isomer)	· X	X
Trichlorotoluene (isomer)	X	X
Trichlorotoluene (total)		X
Tetrachlorobenzene (isomer)	Х	X
Tetrachlorobenzene (isomer)	Х	X
Tetrachlorobenzene (total)		X
Pentachlorobenzene	X	X
Hexachlorobenzene	Х	Х ,
Trichlorobiphenyl	×X	X
Tetrachlorobiphenyl	X	X

TABLE 3.1

NYSDEC ANALYTICAL PARAMETER LIST 10500 CAYUGA DRIVE MARCH/APRIL 1989

March 1989 April 1989

SEMI-VOLATILE ORGANIC COMPOUNDS

Octachlorostyrene		· X	
Pyrene	X	Х	
Fluoranthene	Х	Х	
Phenanthrene		Х	•
Anthracene		Х	
Acenaphthene		X	
Fluorene		X	
Benzene,2-chloro-1,3,5(1-methylethyl)		Х ,	. •
Octachloronaphthalene		X	
· · · ·		•	

Note:

X Compound analyzed for during program.

APPROVED PROJECT DOCUMENTS 10500 CAYUGA DRIVE

Title

Date

October 1989

- 1. Work Plan, Interim Remedial Program 10500 Cayuga Drive
- 2. Quality Assurance/Quality Control Plan Interim Remedial Program 10500 Cayuga Drive
- Health and Safety Plan for Interim Remedial Program 10500 Cayuga Drive
- 4. Work Plan Data Collection Program 10500 Cayuga Drive

5. Phase II Work Plan Interim Remedial Program 10500 Cayuga Drive

 Phase III Final Work Plan
Interim Remedial Program 10500 Cayuga Drive

October 1989

October 1989

January 1990

October 1990

February 1992

OXYCHEM ANALYTICAL PARAMETER LIST 10500 CAYUGA DRIVE

Organics	Survey Level (1) (ppb)
VOLATILES	·FF - /
Benzene	100
Toluene	100
Trichloroethylene	100
Tetrachloroethylene	100
Monochlorobenzene	100
2-Monochlorotoluene	- 100
4-Monochlorotoluene	100
2-Chlorobenzotrifluoride	100
4-Chlorobenzotrifluoride	100
1,2-Dichlorobenzene	100
1,4-Dichlorobenzene	100
2,4-Dichlorotoluene	100
2,5-Dichlorotoluene	100
2,6-Dichlorotoluene	100
3,4-Dichlorotoluene	100
2,4-Dichlorobenzotrifluoride	100
3,4-Dichlorobenzotrifluoride	100
SEMI-VOLATILES	
1,2,3-Trichlorobenzene	100
1,2,4-Trichlorobenzene	100
1,2,3,4-Tetrachlorobenzene	100
1,2,4,5-Tetrachlorobenzene	100
Pentachlorobenzene	100
Hexachlorobenzene	100
alpha-Hexachlorocyclohexane	100
beta-Hexachlorocyclohexane	100
gamma-Hexachlorocyclohexane	100
delta-Hexachlorocyclohexane	100
2,4-Dichlorophenol	100
2,5-Dichlorophenol	100
2,4,5-Trichlorophenol	100
2,4,6-Trichlorophenol	100
Hexachlorobutadiene	100
Hexachlorocyclopentadiene	100
Octachlorocyclopentene	100
Perchlorocyclopentadecane (Mirex)	100

Note: (1)

Estimated levels for soil, actual levels are sample dependent and can vary significantly with matrix.

SAMPLE COLLECTION SUMMARY DATA COLLECTION PROGRAM 10500 CAYUGA DRIVE

Sample	Sample Date Sample		
Number	Collected	Interval	Comments
		(ft. BGS)	
NCC14	03/05/90	0.5 - 3.5	HNU Reading = 1.0 ppm
NCC15	03/05/90	0.2 - 3.2	HNU Reading = 1.5 ppm
NCC16	03/05/90	0.2 - 3.2	HNU Reading = 0.2 ppm (borehole wet)
NCC17	03/05/90	0.5 - 3.5	HNU Reading = 4.0 ppm
NCC18	03/05/90	0.1 - 3.1	HNU Reading = 0.0 ppm (borehole wet)
NCC19	03/05/90	0.5 - 3.5	HNU Reading = 7.0 ppm
NCC20	03/05/90	0.3 - 3.3	HNU Reading = 1.5 ppm
NCC21	03/05/90	0.5 - 3.5	HNU Reading = 0.5 ppm
NCC22	03/05/90	0.5 - 3.5	HNU Reading = 1.5 ppm
NCC23	03/06/90	0.5 - 3.5	HNU Reading = 0.5 ppm
NCC24	03/05/90	0.5 - 3.5	HNU Reading = 0.5 ppm
NCC25	03/06/90	0.5 - 3.5	HNU Reading = 2.0 ppm
NCC26	03/05/90	0.5 - 3.5	HNU Reading = 9.0 ppm
NCC27	03/06/90	0.5 - 4.0	HNU Reading = 2.0 ppm
NCC28	03/06/90	0.5 - 3.5	HNU Reading = 2.2 ppm
NCC29	03/06/90	0.5 - 3.5	HNU Reading = 1.0 ppm
NCC30	03/06/90	3.0 - 3.8	HNU Inoperative
NCC30a	03/06/90	3.8 - 4.5	
NCC31	03/06/90	2.5 - 4.5	HNU Reading = 0.5 ppm
NCC31a	03/06/90	4.5 - 5.0	HNU Reading = 1.0 ppm
NCC32	03/06/90	3.0 - 3.5	HNU Inoperative
NCC32a	03/06/90	3.5 - 4.0	·
NCC33	03/05/90	0.5 - 3.5	Duplicate of NCC24
NC34	03/06/90	0.5 - 3.5	Duplicate of NCC23
NCC35	03/14/90	0.5 - 3.5	HNU Reading = 0.2 ppm
NCC36	03/14/90	0.5 - 3.5	HNU Reading = 0.6 ppm
NCC37	03/14/90	0.5 - 3.5	HNU Reading = 0.0 ppm
NCC38	03/14/90	0.5 - 3.5	HNU Reading = 0.2 ppm
NCC39	03/14/90	. 0.5 - 3.5	HNU Reading = 0.0 ppm
NCC40	03/14/90	0.5 - 3.5	HNU Reading = 0.0 ppm
NCC41	03/14/90	0.5 - 3.5	HNU Reading = 0.0 ppm (borehole wet)
NCC42	03/14/90	0.5 - 3.5	HNU Reading = 0.0 ppm
NCC43	03/14/90	0.5 - 3.5	Duplicate of NCC42
NCC44	06/01/90	0.2 - 3.5	HNU Reading = 0.8 ppm
NCC45	06/01/90	0.5 - 4.3	HNU Reading = 1.6 ppm
NCC46	06/01/90	0.3 - 3.8	HNU Reading = 1.6 ppm
NCC47	06/01/90	0.2 - 3.5	HNU Reading = 4.6 ppm
NCC48	06/01/90	0.2 - 4.8	HNU Reading = 7.6 ppm

SAMPLE COLLECTION SUMMARY DATA COLLECTION PROGRAM 10500 CAYUGA DRIVE

Sample Number	Date Collected	Sample Interval (ft. BGS)	Comments
NCC49	06/01/90	0.5 - 4.0	HNU Reading = 0.6 ppm
NCC50	06/01/90	0.5 - 4.0	HNU Reading = 0.2 ppm
NCC51	06/01/90	0.5 - 4.0	HNU Reading = 0.2 ppm
NCC52	06/01/90	0.5 - 3.5	HNU Reading = 0.5 ppm
NCC53	06/01/90	0.5 -4.0	HNU Reading = 0.1 ppm
NCC54	06/01/90	0.5 - 4.5	HNU inoperative
NCC55	06/01/90	0.5 - 3.5	HNU inoperative
NCC56	06/01/90	0.5 - 4.0	Duplicate of NCC-51
NCC58	07/20/90	1.0 - 5.0	
NCC59	07/20/90	0.5 - 4.5	White rounded gravel encountered
NCC60	07/20/90	1.0 - 4.5	Duplicate of NCC59
1335-1	07/20/90	0.0 - 0.5	
1335-1	07/20/90	0.5 - 4.5	
1335-2	07/20/90	0.0 - 0.5	
1335-2	07/20/90	.0.0 - 4.5	<u>,</u>
1335 - 3	07/20/90	0.0 - 0.5	
1335-3	07/20/90	0.5 - 4.5	White rounded gravel encountered
1335-4	07/20/90	0.0 - 0.5	
1335-4	07/20/90	0.5 - 4.5	
1335-5	07/20/90	0.0 - 0.5	
1335-5	07/20/90	0.5 - 4.5	White rounded gravel encountered
1335-6	07/20/90	0.0 - 0.5	
1335-6	07/20/90	0.5 - 4.5	Slight chemical odor
1335-7	07/20/90	0.0 - 0.5	- ··· ·
1335-7	07/20/90	0.5 - 4.5	White rounded gravel encountered; chemical odor
1335-8	07/20/90	0.0 - 0.5	
1335-8	07/20/90	· 0.5 - 4.5	
1335-9	07/20/90	0.5 - 4.5	Duplicate of 1335-7, 0.5 - 4.5 feet
1335-10	01/03/91	0.0 - 0.5	-
1335-10	01/03/91	0.5 - 3.5	
1335-11	01/03/91	0.0 - 0.5	NYSDEC Split
1335-11	01/03/91	0.5 - 4.5	
1335-12	01/03/91	0.0 - 0.5	
1335-12	01/03/91	0.5 - 4.5	NYSDEC Split
1335-13	01/03/91	0.0 - 0.5	
1335-13	01/03/91	0.5 - 4.0	· ·
1335-14	01/03/91	0.0 - 0.5	
1335-14	01/03/91	0.5 - 4.0	

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SAMPLE COLLECTION SUMMARY DATA COLLECTION PROGRAM 10500 CAYUGA DRIVE

Sample Number	Date Collected	Sample Interval (ft. BGS)	Comments
1335-15	01/03/91	0.5 - 4.5	Duplicate of 1335-10 (0.5 - 3.5 feet)
1335-20	04/13/92	0.0 - 4.0	
1335-21	04/13/92	0.0 - 3.0	
1335-22	04/13/92	0.0 - 4.0	Duplicate of 1335-20 (0.0 - 4.0 feet)
Sump	01/03/91	- ·· `	Water Sample
1331-1	01/09/91	0.0 - 0.5	
1331-1	01/09/91	0.5 - 4.5	NYSDEC Split
1331-2	01/09/91	0.0 - 0.5	· · · · · ·
1331-2	01/09/91	0.5 - 4.5	•
1331-3	01/09/91	0.0 - 0.5	· · · · · · · · · · · · · · · · · · ·
1331-3	01/09/91	0.5 - 4.5	
1331-4	01/09/91	0.0 - 0.5	
1331-4	01/09/91	0.5 - 4.5	NYSDEC Split
1331-5	01/10/91	0.0 - 0.5	
1331-5	01/10/91	0.5 - 4.5	· .
1331-6	01/10/91	0.0 - 0.5	
1331-6	01/10/91	0.5 - 4.5	· '
1331-7	01/09/91	0.0 - 0.5	
1331-7	01/09/91	0.5 - 4.5	NYSDEC Split
1331-8	01/08/91	0.0 - 0.5	
1331-8	01/08/91	0.5 - 4.0	
1331-9	01/08/91	0.0 - 0.5	
1331-9	01/08/91	0.5 - 5.0	Fine white round gravel - slight chemical odor
1331-10	01/10/91	0.0 - 0.5	
1331-10	01/10/91	0.5 - 4.5	Fine white round gravel - slight chemical odor
1331-11	01/08/91	0.0 - 0.5	
1331-11	01/08/91	0.5 - 5.5	
1331-12 ·	01/08/91	0.0 - 0.5	
1331-12	01/08/91	0.5 - 5.0	,
1331-13	01/08/91	0.5 - 4.5	Duplicate of 1331-9 (0.5 -5.0 feet)
1331-14	01/09/91	0.5 - 4.5	Duplicate of 1331-3 (0.5 - 4.5 feet)
Sump	01/08/91	- -	Water sample

SAMPLE COLLECTION SUMMARY DATA COLLECTION PROGRAM 10500 CAYUGA DRIVE

Sample	Date	Sample			
Number	Collected	Interval			
		(ft. BGS)			
1327-1	06/10/92	0.0 - 4.5 [.]			
1327-2	06/10/92	2.0 - 4.0			
1341-1	06/10/92	0.0 - 1.9			
1341-2	06/10/92	0.0 - 4.5			

Comments

Extra volume for matrix spike

*HNU reading is maximum above background.

Note:

(1) Above samples were submitted for volatile and semi-volatile analysis (per Table 1 analytes). See Appendix A for the analytical results.

SUMP WATER SAMPLING DETAILS 1335 104TH STREET .

Sampled:	January 3, 1991 at 1730 hours.
pH:	7.13
Conductance:	880 µmho/cm
Water Quality:	Clear, no odor, slight surficial second phase (possibly dust), no sheen. No sediments in sump. Possible mineral scale on sump wall coating present.
Samples Taken:	3x40 ml VOCs + 1x1L amber semi-volatiles

SUMP WATER SAMPLING DETAILS 1331 104TH STREET

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Sampled:	January 8, 1991 at 1420 hours.
pH:	7.09
Conductance:	770 µmho/cm
Water Quality:	Clear, no odor, no sheen. No sediments in sump.

Samples Taken:

3x40 ml VOCs + 1x1L amber semi-volatiles

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APPENDIX A

ANALYTICAL RESULTS

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TABLE OF CONTENTS

TABLE A.1	ANALYTICAL DATA - NYSDEC, 1989
TABLE A.2	ANALYTICAL DATA - PHASE I
TABLE A.3	ANALYTICAL DATA - DATA COLLECTION PROGRAM
TABLE A.4	ANALYTICAL DATA - RESIDENTIAL PROPERTIES
TABLE A.5	WASTE CHARACTERIZATION DATA

Sample Location:	1	2	3	4	5	6	7	8	q	N Rasin	S Racin
Sample Date:	03/08/89	03/08/89	03/08/89	03/08/89	03/08/89	03/08/89	03/08/89	03/08/89	n1/n8/80	11. Dusin	03/08/80
Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	ug/L	ug/L ·
Volatile Organic Compounds						,	-, -	•••	• •	υ,	0
Benzeno	NID0 002	0.02	0.01								
Taluana	2.19	0.02	0.01	ND0.002	ND0.002	0.01	ND0.002	0.01	ND0.002	ND1.0	ND1.0
Chlorobasana	2.18	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	0.09	ND0.002	ND0.002	ND1.0	ND1.0
Trisblesemethol becase	0.19	0.15	0.08	ND0.002	ND0.002	ND0.002	0.16	ND0.002	ND0.002	ND1.0	ND1.0
Cl Trifluoromethyl benzene	0.07	ND0.002	0.05	ND0.002	ND0.002	ND0.002	0.09	ND0.002	ND0.002	ND1.0	ND1.0
Ci-minuorometnyi benzene	0.06	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	0.04	ND0.002	ND0.002	ND1.0	ND1.0
Chleastalasa	0.06	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND1.0	ND1.0
	0.06	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	0.05	ND0.002	ND0.002	ND1.0	ND1.0
a,a,a- i rifluorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	. NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorobenzene	NA	. NA	NA	NA	ŅA	NA	NA	NA	. NA	NA	NA
Semi-Volatile Organic Compounds											
1,4-Dichlorobenzene	8.38	ND0.1	12.22	ND0.1	ND0.1	ND0.1	4.41	ND0.1	ND0.1	ND5.0	ND5.0
1,3-Dichlorobenzene	10.5	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	10.78	ND0.1	ND0.1	ND5.0	ND5.0
1,2-Dichlorobenzene	2.99	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
2,3-Dichlorotoluene	ND0.1	ND0.1	6.25	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Trimethyl benzene	0.54	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Trifluoromethylbenzeneamine	0.3	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Tetrachlorobutadiene	0.16	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
1,3-Dichlorotoluene	1.08	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorobenzene (isomer)	9.11	ND0.1	0.2	ND0.1	ND0.1	ND0.1	1.25	ND0.1	ND0.1	ND5.0	ND5.0
Trichlorobenzene (isomer)	13.68	ND0.1	0.2	ND0.1	ND0.1	ND0.1	0.59	ND0.1	ND0.1	ND5.0	ND5.0
Trichlorobenzene (isomer)	3.37	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Trichlorobenzene (total)	NA	' NA	NA	NA	NA	NA	NA	NA ·	NA	NA	NA
Hexachlorobutadiene	1.41	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND01	ND5.0	ND5.0
Trichlorotoluene (isomer)	0.27	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1 .	ND0.1	ND01	ND5.0	ND5.0
Trichlorotoluene (isomer)	0.44	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1 ·	ND0.1	ND0.1	ND01	ND5.0	NID5.0
Trichlorotoluene (isomer)	0.37	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND01	ND0 1	NID5.0	ND5.0
Trichlorotoluene (total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA
Tetrachlorobenzene (isomer)	2.36	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND5.0	ND5.0
Tetrachlorobenzene (isomer)	0.33	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND01	ND0.1	ND5.0	ND5.0
Tetrachlorobenzene (total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	0.57	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0 1	ND0.1	ND5.0	ND5.0
Hexachlorobenzene	7.46	ND0.1	ND0.1	0.14	ND0.1	ND0.1	ND01	ND0 1	ND0.1	ND5.0	ND5.0
Trichlorobiphenyl	0.18	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0 1	ND0 1	ND0 1	ND5.0	ND5.0
Tetrachlorobiphenyl	0.14	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND01	ND0.1	ND0 1	ND5.0	ND5.0
Octachlorostyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NIA
Pyrene	0.79	ND0.1	2.96	0.29	ND0.1	0.67	NID0 1	1 03	0.25	NIDEO	NIDEO
Fluoranthene	ND0.1	ND0.1	2.70	0.22	ND0 1	0.9	ND0 1	1.05	0.25	NIDE 0	
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	U.I NA	ND3.0	NUDUU
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA NA	INA NIA	INA NIA	INA NIA
Acenaphthene	NA	NA	NA	NA	NA	' NA	NIA	· NIA	NA NA	INA NIA	INA NIA
Fluorene	NA	NA	NA	NA	ΝA	NA	NA	NA		IN/A NTA	INA
Benzene,2-chloro-1,3,5(1-methylethyl)	NA	NA	NA	NA	NA	NA	NIA	IN/A NIA	INA NIA	INA NIA	INA
Octachloronaphthalene	NA	NA	NA	NA	· NA	NA	NA	IN/A NIA	IN/A NTA	INA	
· · · · · · · · · · · · · · · · · · ·				1 41 1	110	11/1	1 1 1 1	INA	INA	INA	INA

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	•					IABLE A.1						
				F	ANALYTICA	L DATA - M	VYSDEC, 19					
					10500	CAYUGA	DRIVE					
		• •		-	-	. <u>.</u>	_			•_		•
•	Sample Location:	A	B	С	D	E	F	G	Н	I	J	ĸ
	Sample Date:	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89	4/17/89
	Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
V -1	atile Oscarie Commune to											
¥01	Benzene		NID0 002	NID0.002	NIT20 002	NT20-002	0.62		NTD0-000	NID0 000		NIT20.000
	Toluono	ND0.002	ND0.002	ND0.002.	ND0.002	ND0.002	0.00	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Chlorohonzono	ND0.002	ND0.002	ND0.002	ND0.002	1 95	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Trifluorom other hongon o	ND0.002	ND0.002	IND0.002	ND0.002	1.00	0.95	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Cl Trifluoromethyl benzene	ND0.002	ND0.002	0.11	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Ci-Trinuorometnyi benzene	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Chlorateluce	NID0.002	ND0.002	ND0.002	ND0.002	ND0.002	0.65	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
		ND0.002	ND0.002	ND0.002	ND0.002	0.34	1.11	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	a,a,a-i millorotoillene	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
-	Disblassheres	ND0.002	ND0.002	IND0.002	ND0.002	IND0.002	0.22	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
	Dichlorobenzene	ND0.002	ND0.002	0.61	ND0.002	3.22	1.41	ND0.002	ND0.002	ND0.002	ND0.002	ND0.002
Sem	u-Volatile Organic Compounds		•									
	1.4-Dichlorobenzene	ND0.1	ND01	ND0 1	ND0 1	ND0 1	NID0 1	NID0 1	NID0 1	NIDO 1		
	1.3-Dichlorobenzene	ND0 1	ND0 1	ND0 1	ND0 1	ND0 1	ND0.1	ND0 1	ND0.1	ND0.1	ND0.1	ND0.1
	1.2-Dichlorobenzene	ND0.1	ND0.1	ND0.1	ND0 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	2.3-Dichlorotoluene	ND0 1	ND0 1	ND0.1	ND0.1	ND0 1	ND0.1	ND0.1	ND0.1	ND0.1	NIDO 1	ND0.1
	Trimethyl benzene	ND0 1	ND01	ND0.1	ND0 i	0.91	3.01	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Trifluoromethylbenzeneamine	ND0.1	ND0.1	ND0.1	ND0.1	ND0 1	5.91 NID0 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Tetrachlorobutadiene	ND0.1	ND0.1	ND0.1	ND0.1	ND0 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	1.3-Dichlorotoluene	ND0 1	ND0 1	ND0.1	ND0.1	ND0.1	ND0.1	NA	NIDO 1	ND0.1	ND0.1	ND0.1
	Dichlorotoluene	ND0.1	ND0.1	0.63	NID0.1	ND0 1	2.28		ND0.1	ND0.1	ND0.1	ND0.1
	Trichlorobenzene (isomer)	NA NA	NA NA	0.00 ·	NIA	NLO.1	5.20 NIA	NLO.1	ND0.1	INDU:1	INLO.I	INDU. I
	Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	INA NA	NA NA	INA NA	INA NIA	INA NA	INA NA
	Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	INA NA	' NIA	INA	INA NA	INA NA	NA
	Trichlorobenzene (total)	ND0 1	ND0 1	0.50	NDO 1	12	NA, 0.62		INA ND0 1	NA NDO I	INA NDO 1	NA ND0 1
	Heyachlorobutadiene	ND0.1	ND0.1	NID0 7	ND0.1	4.2 ND0 1	0.02	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Trichlorotolugne (isomer)	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Trichlorotoluene (isomer)	ND0.1	NID0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Trichlorotoluene (isomer)	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Trichlorotoluene (total)	NIA	NLO.1	NLO.I	NLO.I	NLO.1	ND0.1	INL/U.I	ND0.1	NLU.I	ND0.1	ND0.1
	Tetrachlorobenzene (isomer)	ND0 1	ND0 1		NIDO 1	NDO 1	NA ND0 1		INA NDO 1	INA NDO 1	INA NIDO 1	NA
	Tetrachlorobenzene (isomer)	ND0.1	NIDO 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Tetrachlorobenzene (total)	NIA	NIA	NA	NLO.1	NLO.I	NLO.I	INLOU.I	INDU. I	ND0.1	ND0.1	ND0.1
	Pontachlarahangana	ND0 1			NIDO 1	INA NDO 1	INA NDO 1	INA NDO 1	INA ND0 1	INA	INA ND0 -	NA
	Heyachlorobenzene	NID0.1		ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
·	Trichlorobinhenvl	NIDO 1	NIDO 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Tetrachlorobiphenyl	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	NL0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Octachloroctromo	NA	NLO.1	INEXU. I	NLO.1	INLO. I	9.10	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Parmo			NTNA 1	INA NDO 1		INA ND0 1	NA ND0 1	NA ND0 1	NA	NA	NA
	Elucronthere	NIDO 1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Phononthromo	INDU.I	NLU.1	INLOU.I	INDU.I	NUU.I	NUU.I	ND0.1	ND0.1	ND0.1	ND0.1	ND0.1
	Anthracono	INA NTA	INA NA	INA NA		NA NA	NA	NA	NA	NA	NA	NA
	Acenandthene	INA NIA	INA NA	INA NA	· INA		NA	NA NA	NA	NA	NA	NA
	Buorono	INA NTA	INA NIA		INA NTA	INA NA	NA NA	INA NA	NA	NA	NA	NA
	Privotene Bonzono 2 obloro 1 2 5/1	INA			INA NA	NA.	NA	NA	NA	NA	NA	NA
	Ortechlesenenekthelese	INA	INA	INA NA	INA NA	NA	NA	NA	NA	NA	NA	NA
	Octachioronaphinaiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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· ·				10500	CAYUGA	DRIVE	· · .				
Sample Location:	L	NCC-1	NCC-2	NCC-3	NCC-4	NCC-5	NCC-6	NCC-7	NCC-8	NCC-9	NCC-10
Sample Date:	04/17/89	11/07/89	11/07/89	11/09/89	11/09/89	11/09/89	11/08/89	11/08/89	11/08/89	11/08/89	11/07/89
Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg						
olatile Organic Compounds						,					
Benzene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005
Toluene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	0.027	ND0.005	ND0.005	ND0.005	ND0.005	0.03
Chlorobenzene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	1.5	ND0.005	ND0.005	ND0.005	ND0.005	0.04
Trifluoromethyl benzene	ND0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cl-Trifluoromethyl benzene	ND0.002	NA	NA	NA .	NA	NA	NA	NA	NA	NA	NA
Xylene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	0.038	· ND0.005	NID0.005	ND0.005	ND0.005	0.022
Chlorotoluene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	0.16	ND0.005	ND0.005	ND0.005	ND0.005	0.035
a,a,a-Trifluorotoluene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	0.029	ND0.005	ND0.005	ND0.005	ND0.005	0.033
Ethylbenzene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005
Dichlorobenzene	ND0.002	ND0.005	ND0.005	ND0.005	ND0.005	2.3	ND0.005	ND0.005	ND0.005	ND0.005	0.552
emi-Volatile Organic Compounds											
1,4-Dichlorobenzene	ND0.1	NA	· NA	NA	NA	NA	NA	NA	NA	NA	NA
1.3-Dichlorobenzene	ND0.1	NA	NA	NA	NA	NA ·	NA	NA	NÁ	NA	NA
1.2-Dichlorobenzene	ND0.1	NA	NA	NA .	NA	NA	NA	NA	NA	NA	NA
2.3-Dichlorotoluene	ND0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trimethyl benzene	ND0.1	0.002	NA	0.004	NA	0.092	NA	0.003	NA	· NA	NA
Trifluoromethylbenzeneamine	ND0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	· NA
Tetrachlorobutadiene	ND0.1	NA	NA	NA	NA	NA .	NA	NA	NA	NA	NA
1.3-Dichlorotoluene	ND0.1	NA	NA	NA	NA	NA	NA	NA .	NA	NA	NA
Dichlorotoluene	ND0.1	ND0.04	NA	ND0.04	NA	0.17	NA	0.031	NA	NA	NA
Trichlorobenzene (isomer)	NA	NA	ŃA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorobenzene (isomer)	NA	NA	NA	NA	NA						
Trichlorobenzene (isomer)	NA	NA	NA	NA	NA						
Trichlorobenzene (total)	ND0.1	0.007	NA	0.018	NA	0.52	NA	0.09	NA	NA	NA
Hexachlorobutadiene	ND0.1	0.004	NA	ND0.04	NA	0.140	NA	0.003	NA	NA	NA
Trichlorotoluene (isomer)	ND0.1	NA	NA ·	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorotoluene (isomer)	ND01	NA	NA	NA	NA	NA	NA	NA	NA ·	NA	NA
Trichlorotoluene (isomer)	ND01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorotoluene (total)	NA	ND0.04	NA	ND0.04	NA	0.067	NA	0.013	NA	NA	NA
Tetrachlorobenzene (isomer)	ND0 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachlorobenzene (isomer)	ND0 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachlorobenzene (total)	NA	0.002	NA	0 004	NA	. 0.05	NA	0.012	NA	NA	NA
Pentachlorobenzene	ND0 1	ND0.04	NA	0.003	NA	0.01	NA	0.004	NA	NA	NA
Hexachlorobenzene	ND0 1	0.011	NA	0.002	NA	0.11	NA	0.026	NA	NA	NA
Trichlorobinhenyl	ND0 1	NID0.04	NA	ND0.04	NA	0.033	NA	ND0.04	NA	NA	NA
Tetrachlorobiphenyl	ND0.1	ND0.04	NA	ND0.04	NA	0.030	NA	0.004	NA	NA	NA
Octachlorostyrene	NA	ND0.04	NA	ND0.04	NA	0.057	NA	0.002	NA	NA	NA
Pyrene	ND01	0.029	NA	0.03	NA	ND0.04	NA .	0.032	NA	NA	NA
Fluoranthene	ND0.1	NID0 04	NA	01	NA	ND0.04	NA	NID0.04	NA	NIA	ΝA
Phonanthrene	NIA	0.087	NA	0.137	NA	ND0.04	NA	0.031	NA	NA	NA
Anthracene	NA	0.007	NA	ND0.04	NA	ND0.04	NA		ΝA	NIA	NA
Acenanhthene	NA	ND0 M	NA	ND0.04	NA .	ND0.04	NA	ND0.04	ΝA	ΝΔ	NA
Fluorena	NA	ND0 04	NA	NID0 04	NA	ND0 M	NA.	NID0.04	NA .	NΔ	NA
Benzene 2-chloro-1 3 5(1-methylethyl)	NA	ND0.04	NA	0.004	NΔ	ND0.04	NA	ND0.04	NA ·	ΝΔ	NA
Octochloronomhthalana	- NIA	NID0.04	NA		NA	NID0.04	NIA	NID0.04	IN/A NIA	NIA	
Octacilloronaphulaiene	-INA	110.04	INA	1100.04	INA	110.04	184	INL/0.04	INA	INA	INA

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TABLE A.1 ANALYTICAL DATA - NYSDEC, 1989 10500 CAYUGA DRIVE

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Sample Location:	NCC-11	NCC-12	NCC-3F	NCC-FF	NCC-7F	NCC-1F	NCC-1(H)	NCC-2(H)	NCC-3(H)	NCC-4(H)	NCC-5/H
Sample Date:	11/07/89	11/07/89	11/08/89	11/09/89	11/09/89	11/09/89	11/01/89	11/01/80	11/01/80	11/01/90	11/01/00
Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Volatile Organic Compounds											
Benzene	· ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	0.01
Toluene	0.012	0.018	ND0.005	ND0.005	ND0.005	0.005	ND0.005	ND0.005	ND0 005	ND0 005	0.01
Chlorobenzene	0.084	0.097	ND0.005	ND0.005	ND0.005	0.042	ND0.005	ND0.005	ND0 005	ND0 005	0.000
Trifluoromethyl benzene	NA	NA	NA	NA	NA	NA	'NA	NA	NA	NA	NIA
Cl-Trifluoromethyl benzene	NA	NA	' NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylene	0.063	0.039	ND0.005	ND0.005	ND0.005	0.006	ND0 005	ND0.005	NID0 005	NIDO 005	0.011
Chlorotoluene	0.103	0.063	ND0.005	ND0.005	ND0.005	0.038	ND0 005	NID0.005	ND0.005	ND0.005	0.011
a,a,a-Trifluorotoluene	0.43	0.28	ND0.005	ND0.005	· ND0 005	0.012	ND0 005	NID0 005	ND0.005	ND0.005	0.044
Ethylbenzene	ND0.005	ND0.005	ND0.005	ND0.005	ND0 005	ND0 005	ND0.005	ND0.005	ND0.005	ND0.005	0.005
Dichlorobenzene	1.9	1.1	ND0.005	ND0.005	ND0.005	1.31	ND0.005	ND0.005	ND0.005	ND0.005	0.604
Semi-Volatile Organic Compounds											
1,4-Dichlorobenzene	· NA	NA	NA	NA	NA	NA	NA	·NA	NA	NA	NIA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	· NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA		NA	NA	IN/A NIA
2,3-Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA
Trimethyl benzene	0.125	NA	. NA	ND0.04	NA	NA	NIA	NA	NA	NA	INA NA
Trifluoromethylbenzeneamine	NA	NA	NA	NA	NA	NA	NA		NA	NA NA	INA NA
Tetrachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	INA NA
1,3-Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA '	. INA	
Dichlorotoluene	0.14	NA	NA	ND0.04	NA	NA	· NA	NA	NA NA	'NA	INA NA
Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	INA NA	INA NA
Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	INA NA	INA NA	INA NA
Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	INA NA	INA NA
Trichlorobenzene (total)	1.9	NA	NA	ND0.04	NA	NA	NA	NA	NA .	INA NA	INA NA
Hexachlorobutadiene	0.031	NA	NA	ND0.04	NA '	NA	NA	NA	INA NTA		INA
Trichlorotoluene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	INA NA	INA NIA
Trichlorotoluene (isomer)	NA	NA	NA	NA	NA	NA	NA	INA NA	INA NA	INA	NA
Trichlorotoluene (isomer)	NA	NA	NA	NA	NIA	NA	NA	INA NA	INA	INA	NA
Trichlorotoluene (total)	0 155	NA	NA	NIDO 04	NA '	NA	IN/A	IN/A	INA	INA	NA .
Tetrachlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	IN/A NIA		INA	NA	NA
Tetrachlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	IN/A NIA	INA NA	INA NA	INA	NA
Tetrachlorobenzene (total)	0.039	NA	NA	ND0 04	NA	NA	NA NA	IN/A NIA		NA	NA
Pentachlorobenzene	0.005	NA	NA	NID0.04	NA	INA NA	INA NA	INA	NA	NA	NA
Hexachlorobenzene	0.066	NA	NA	ND0.04	NA	INA NA	INA NA	INA	NA	NA	NA
Trichlorobiphenyl	0.065	NA	NA	ND0.04	IN/A NA	INA	INA	NA	NA	NA	NA
Tetrachlorobinhenvi	0.14	NA	NA	NID0.04	INA NA	INA	INA	NA	ŅA	NA	NA
Octachlorostvrene	0.084	NA NA	NA	ND0.04	INA NA	INA NA	NA .	NA	NA	NA	NA
Pyrene	• 0.004		NA	ND0.04 .	INA NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NED0.04	NA	NA	ND0,04	INA	INA	NA	NA	NA	NA	NA
Phenanthrene	0.037	NA	INA NA	NIDO 04	INA NIA	INA NA	NA NA	NA	ŅA	NA	NA
Anthracene	. ND0.04	NA	INA NA	NTX0.04		INA NA		NA	NA	NA	NA
Acenaphthene	0.026	NA	INA NA	ND0.04			NA	NA	NA	NA	NA
Fluorene	0.050	ŇI.A		ND0.04	INA.	NA ·	NA	NA	NA	NA	NA
Benzene 2-chloro-1 3 5/1-methylothyl)	0.000	INA NA	NA NA	INDU.U4	INA .	NA -	NA	NA	NA	NA	NA
Octachloronanhthalana	1NLJU.U4	INA NI 4	. INA	IND0.04	NA	NA	NA	NA	NA	·NA	NA
octachioronaphiniaiene	U.47	INA	NA	ND0.04	NA	NA	NA	NA	NA	NA	' NA

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	Sample Location:	NCC-6(H)	NCC-7(H)	NCC-8(H)	NCC-9(H)	NCC-10(H)	NCC-11(H)	NCC-12(H)	NCC-13(H)	NCC-3F(H)	NCC-FF(H)	NCC-7F(H)
	Sample Date:	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89	11/01/89
•	Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Vola	atile Organic Compounds		•·									
	Benzene	ND0.005	ND0.005	ND0.005	0.02	0.007	0.008	0.011	0.01	0.006	ND0.005	0.01
	Toluene	ND0.005	ND0.005	ND0.005	0.005	0.01	0.018	0.009	0.005	ND0.005	ND0.005	ND0.005
	Chlorobenzene	ND0.005	ND0.005	ND0.005	0.512	0.021	0.036	0.024	0.323	0.01	0.17	0.026
	Trifluoromethyl benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CI-Trifluoromethyl benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Xylene	ND0.005	ND0.005	ND0.005	ND0.005	0.014	0.04	ND0.005	0.005	ND0.005	ND0 005	ND0.005
	Chlorotoluene	ND0.005	ND0.005	ND0.005	0.053	0.008	0.016	0.009	0.019	ND0.005	0.005	ND0 005
	a,a,a-Trifluorotoluene	ND0.005	ND0.005	ND0.005	0.014	0.004	1.198	0.11	0.007	ND0.005	ND0 005	ND0 005
	Ethylbenzene	ND0.005	ND0.005	ND0.005	ND0.005	ND0.005	0.006	ND0.005	ND0.005	ND0.005	ND0 005	ND0 005
	Dichlorobenzene	ND0.005	ND0.005	ND0.005	0.079	0.134	0.097	0.101	0.178	0.031	ND0.005	0.051
6em	i-Volatile Organic Compounds											
	1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	NA	NA	NA	' NA	NA-	NA	NA	NA	NA	NA	NA
	1,2-Dichlorobenzene	NA	NA	NA	NA	NA	· NA	NA	NA	NA	NA	NA
	2,3-Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trimethyl benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trifluoromethylbenzeneamine	NA	NA	NA	NA	NA	NA	NA	NA	ŇA	NA	NA
	Tetrachlorobutadiene	NA .	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dichlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorobenzene (isomer)	· NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
•	Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA -	NA	NA	NA	NA
	Trichlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorobenzene (total)	NA	NA	· NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorotoluene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorotoluene (isomer)	· NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorotoluene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorotoluene (total)	NA	NA	• NA .	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachlorobenzene (isomer)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachlorobenzene (total)	NA	· NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobenzene	NA	NĄ	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorobiphenyl	· NA	NA .	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachlorobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Octachlorostyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	ΝA	NA
	Benzene, 2-chloro-1, 3.5(1-methylethyl)	· NA	NA.	NA	NA	NA	NA	NA	NA	NA	N۵	N۵
	Octachloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NΔ	ΝA	NA
									1 47.1	117	110	11/1

Sample Location:	NCC-1F(H)						
Sample Date:	11/01/89	• • •					
Units:	mo/Ko	· .			·		
Volatile Organic Compounds			•				
Benzene	0.008	•			•		
Toluene	0.007	•					
Chlorobenzene	0.037				· ·		
Trifluoromethyl benzene	NA						
Cl-Trifluoromethyl benzene	NA		•				
Xylene	0.005						
Chlorotoluene	0.032	· ·		•	•		
a,a,a-Trifluorotoluene	ND0:005			•			
Ethylbenzene	ND0.005						
Dichlorobenzene	1.12						
Semi-Volatile Organic Compounds		•					
1,4-Dichlorobenzene	NA						
1,3-Dichlorobenzene	NA	•					
1,2-Dichlorobenzene	NA		· .				•
2,3-Dichlorotoluene	NA	•			•		
Trimethyl benzene	NA			•			
Trifluoromethylbenzeneamine	NA	1			· ·		
Tetrachlorobutadiene	NA	•					
1,3-Dichlorotoluene	NA		· · ·		•		
Dichlorotoluene	NA						· .
Trichlorobenzene (isomer)	. NA						
Trichlorobenzene (isomer)	NA			\$			
Trichlorobenzene (isomer)	. NA .	•. •					
Trichlorobenzene (total)	NA						
Hexachlorobutadiene	NA	•	·		•		
Trichlorotoluene (isomer)	NA						
Trichlorotoluene (isomer)	. NA						
Trichlorotoluene (isomer)	NA	·					
Trichlorotoluene (total)	NA		•				
Tetrachlorobenzene (isomer)	NA		•				
Tetrachlorobenzene (isomer)	NA						
Tetrachlorobenzene (total)	NA						
Pentachlorobenzene	NA						
Hexachlorobenzene	NA						
Trichlorobiphenyl	NA .			•			
Tetrachlorobiphenyl	NA						
Octachlorostyrene	NA		· · · ·				
Pyrene	NA						
Fluoranthene	NA	·					
Phenanthrene	NA		·		•		
Anthracene	NA				•		
Acenaphthene	. NA					•	
Fluorene	NA						
Benzene,2-chloro-1,3,5(1-methylethy	/l) NA '				•	,	
Octachloronaphthalene	NA	•				•	

Notes:

NA Not analyzed

NDx Compound was not detected at the limit specified

(H) Homogenized sample received directly from the laboratory

SOURCES:

Attachment to memorandum, R.W. Schick (NYSDEC) to A. S. Nagi (NYSDEC) dated April 24, 1989 Attachment to letter R. W. Schick (NYSDEC) to J.A. Cull (OxyChem) dated December 14, 1989

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· .'			TABLE A.2	2.							
		ANALYT	ICAL DATA	- PHASE I						•	
		10500	CAYUGA	DRIVE							•
Samula Location	NCC-1	NCC-2	NCC-3	· NCC-4	NCC-5	NCC-6	NCC-7	NCC-8	NCC-9	NCC-10	NCC-11
Sample Location.	11/07/80	11/07/80	11/00/80	11/00/80	11/00/80	11/08/80	11/08/80	11/08/80	11/08/80	11/07/80	11/07/80
Jumpie Dute.	ualKa	ualKa	valka	ualKa	11103183 valKa	11100183 . 	ualKa	valka	LIIU8/85	ualKa	1110//83
amis.	uging	#8/K8	"8" "8	<i>48/1</i> 8	#8/ K8	<i>ugi</i> Kg	"8" "8	ug/Kg	<i>ug/ ng</i>	<i>ug/1</i> .g	
Volatile Organic Compounds					•						
Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Toluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Tetrachloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Monochlorobenzene	· ND100	ND100	ND100	ND100	270	ND100	ND100	ND100	380	ND100	ND100
2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	140
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	1900
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	190	ND100	ND100	ND100	ND100	620	240
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	290	ND100	ND100	ND100	ND100	800	300
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	270	ND100	ND100	ND100	ND100	ND100	ND100
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	1400	ND100	ND100	ND100	ND100	ND100	ND100
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	340	260
Semi-Volatile Organic Compounds											
1 2 3-Trichlorobenzene	ND100	ND100	ND100	240	740	ND100	NID100	ND100	ND100	760	790
1 2 4-Trichlorobenzene	ND100	ND100	ND100	500	1700	ND100	ND100	ND100	ND100	2100	2000
1.2.3.4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	250	100
1.2.4.5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	150	ND100
Hexachlorobenzene	ND100	ND100	ND100	ND100	160	ND100	ND100	ND100	ND100	1300	180
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	· ND100	ND100	ND100	NID100	ND100	ND100
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
delta-Herachlorogycloherane (BHC)	ND100	· ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2 3-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NID100	ND100
2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4-Dichlorophenol	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4,5- Inchorophenol	ND100	ND100	ND100	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4,0~ iricruoropnenoi		NID100	ND100	ND100	170		ND100	ND100	ND100	ND100	ND100.
	ND100	ND100	ND100		1/0		ND100	ND100 -	ND100	200	130
	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Octachiorocyclopentene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Perchiorocyclopentadecane (Mirex)	NDIO	UUIUN	ND100	ND100	ND100	ND100	ND100	ND100	ND100	560	270

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			ANALYTI 10500	TABLE A.2 ICAL DATA CAYUĠA I	- PHASE I DRIVE	•		
	Sample Location:	NCC-12	NCC-13	NCC-1F	NCC-3F	NCC-7F	NCC-FF	
	Sample Date:	11/07/89	11/09/89*	11/09/89	11/08/89	11/09/89	11/08/89	
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Vol	atile Organic Compounds							
•	Benzene	ND100	ND100	ND100	ND100	ND100	· ND100	
	Toluene	ND100	ND100	ND100	ND100	ND100	ND100	
	Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	
	Tetrachloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	
	Monochlorobenzene	ND100	430	ND100	ND100	ND100	200	
	2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	
	4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	
	2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	
	4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	
	1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	
	1,4-Dichlorobenzene	ND100	ND100	0.31	ND100	ND100	ND100	
	2,4-Dichlorotoluene	610	120	ND100	ND100	ND100	ND100	
	2,5-Dichlorotoluene	1000	190	ND100	ND100	ND100	ND100	
	2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	
	3,4-Dichlorotoluene	590	150	ND100	ND100	ND100	ND100	
	2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	
	3,4-Dichlorobenzotrifluoride	210	ND100	ND100	ND100	ND100	ND100	
Ser	ni-Volatile Organic Compounds						• •	
	1,2,3-Trichlorobenzene	270	280	ND100	ND100	ND100	ND100	
	1,2,4-Trichlorobenzene	1100	870	ND100	ND100	ND100	ND100	
	1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	
	1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	
	Pentachlorobenzene	ND100	ND100	ND100	ND100	⁻ ND100	ND100	
	Hexachlorobenzene	150	ND100	ND100	ND100	ND100	ND100	
	alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	
	beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	
•	gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	
	delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	
	2.3-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	
	2 4-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	
	2.4.5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	
	24.6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	
	Hexachlorobutadiene	230	150	ND100	ND100	ND100	ND100	
	Heyachlorocyclopentadiene	ND100	ND100	ND100	NID100	ND100	ND100	
	Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100	ND100	
	Perchlorocyclopentadecane (Mirex)	360	ND0.1	ND100	ND100	ND100	ND100	

Notes:

NDx Compound not detected at the level specified Duplicate of sample NCC-5.

	-			ANALYTI	CAL DATA 10500	- DATA CO CAYUGA I	DRIVE	PROGRAM	[·			
	Sample Location:	NCC-14	NCC-15	NCC-16	NCC-17	NCC-18	NCC-19	NCC-20	NCC-21	NCC-22	NCC-23	NCC-34*
	Sample Depth (Ft.):	0.5-3.5	0.2-3.2	0.2-3.2	0.5-3.5	0.1-3.1	0.5-3.5	0.3-3.3	0.5-3.5	0.5-35	0.5-3.5	0.5-3.5
	Sample Date:	03/05/90	03/05/90	03/05/90	03/05/90	03/05/90	03/05/90	03/05/90	03/05/90	03/05/90	03/06/90	03/06/90
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Vol	atile Organic Compounds							· ·	·	·		
	Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	Toluene	ND100	. 3600	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	Tetrachloroethylene	ND100	130	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	Monochlorobenzene	5 4 0 [°]	1900	ND100	ND100	ND100	ND100	ND100	ND100	290	ND100	ND100
	2-Monochlorotoluene	ND100	1500	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	4-Monochlorotoluene	ND100	510	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	2-Chlorobenzotrifluoride	ND100	320	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	4-Chlorobenzotrifluoride	ND100	110	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	1,4-Dichlorobenzene	530	10000	ND100	ND100	. ND100	620	340	ND100	280	ND100	ND100
	2,4-Dichlorotoluene	140	180	290	160	ND100	250	ND100	ND100	ND100	ND100	ND100
	2,5-Dichlorotoluene	230	290	500	250	ND100	570	ND100	ND100	ND100	ND100	ND100
	2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	3,4-Dichlorotoluene	ND100	ND100	130	110	ND100	460	ND100	ND100	ND100	ND100	ND100
	2,4-Dichlorobenzotrifluoride	ND100	260	510	450	ND100	950	ND100	ND100	ND100	ND100	ND100
	3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Sem	ii-Volatile Organic Compounds					•						
•	1,2,3-Trichlorobenzene	ND100	ND100	150	150	ND100	8600	ND100	ND100	ND100	. ND100	ND100
	1,2,4-Trichlorobenzene	210	400	1300	880	ND100	26000	ND100	ND100	110	ND100	ND100
	1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	610	ND100	ND100	ND100	ND100	ND100
	1,2,4,5-Tetrachlorobenzene	ND100	ND100	⁻ 530	230	ND100	5000	ND100	ND100	ND100	ND100	ND100
	Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	2800	ND100	ND100	ND100	ND100	ND100
	Hexachlorobenzene	ND100	ND100	1100	640	ND100	15000	ND100	ND100	ND100	ND100	ND100
	alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	delta-Hexachlorocyclohexane (BHC)	ND100	ND100	510	110	ND100	150	ND100	ND100	ND100	ND100	ND100
	2.4-Dichlorophenol	1800	2400	8300	5700	ND100	8800	ND100	ND100	ND100	ND100	ND100
	2.5-Dichlorophenol	• ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
·	2.4.5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
	2.4.6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100					ND100	ND100
	Hexachlorobutadiene	ND100	180	600	330	ND100	1600	ND100				ND100
	Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	1000 NID100	ND100	ND100	ND100	ND100	ND100
	Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100		NID100				ND100
	Perchlorocyclopentadecan'e (Mirey)	190	120	. 450	220	ND100	1100	ND100	NID100			ND100
	research of coopermate (141116x)	170	130	000	330	ND100	1100	NDIW	ND100	ND100	ND100	ND100

TABLE A.3

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	·								•			
Samp	le Location:	NCC-24	NCC-33**	NCC-25	NCC-26	NCC-27	NCC-28	NCC-29	NCC-30	NCC-30A	NCC-31	NCC-31A
' Samp	le Depth (Ft.):	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-4.0	0.5-3.5	0.5-3.5	3.0-3.8	3.8-4.5	2.5-4.5	4.5-5.0
Samp	le Date:	03/05/90	03/05/90	03/06/90	03/05/90	03/06/90	03/06/90	03/06/90	03/06/90	03/06/90	03/06/90	03/06/90
Units	:	ug/Kg										
Volatile Or	ganic Compounds		•									·
Benze	ene ⁻	ND100										
Tolue	ne	ND100										
Trichl	loroethylene	ND100										
Tetrae	chloroethylene	ND100										
Mono	chlorobenzene	1300	ND100	200	ND100	ND100						
2-Mo	nochlorotoluene	210	ND100									
4-Moi	nochlorotoluene	ND100										
2-Chl	orobenzotrifluoride	ND100										
4-Chl	orobenzotrifluoride	ND100										
1,2-Di	ichlorobenzene	ND100										
1,4-Di	ichlorobenzene	1800	ND100	ND100	ND100	ND100	ND100	. ND100	ND100	ND100	ND100	290
2,4-Di	chlorotoluene	ND100										
2,5-Di	chlorotoluene	ND100										
2,6-Di	chlorotoluene	ND100										
3,4-Di	chlorotoluene	ND100										
2,4-Di	chlorobenzotrifluoride	ND100										
3,4-Di	chlorobenzotrifluoride	ND100										
Semi-Volati	le Organic Compounds											
1,2,3-1	Trichlorobenzene	ND100	ND100	170	ND100							
1,2,4-1	Frichlorobenzene	240	ND100	550	190	ND100	190	110	ND100	ND100	ND100	ND100
1,2,3,4	l-Tetrachlorobenzene	ND100										
1,2,4,5	-Tetrachlorobenzene	ND100										
Penta	chlorobenzene	ND100										
Hexad	hlorobenzene	ND100										
alpha	-Hexachlorocyclohexane (BHC)	ND100										
beta-l	lexachlorocyclohexane (BHC)	ND100										
gamm	a-Hexachlorocyclohexane (BHC)	ND100										
delta-	Hexachlorocyclohexane (BHC)	ND100										
2,4-Di	chlorophenol	ND100										
2,5-Di	chlorophenol	ND100										
2,4,5-1	Frichlorophenol	ND100										
2,4,6-1	Trichlorophenol	ND100										
Hexad	hlorobutadiene	ND100	ND100	110	ND100							
Hexac	hlorocyclopentadiene	. ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Octacl	hlorocyclopentene	ND100										
Perch	lorocyclopentadecane (Mirex)	ND100										

					10500	CAYUGA I	DRIVE					
	Sample Location:	NCC-32	NCC-32A	NCC-35	NCC-36	NCC-37	NCC-38	NCC-39	NCC-40	NCC-41	NCC-42	NCC-43***
	Sample Depth (Ft.):	3.0-3.5	3.5-4.0	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5	0.5-3.5
	Sample Date:	03/06/90	03/06/90	03/14/90	03/14/90	03/14/90	03/14/90	03/14/90	03/14/90	03/14/90	03/14/90	03/14/90
	Units:	ug/Kg										
Vol	atile Organic Compounds											
	Benzene	ND100										
	Toluene	ND100	230	ND100								
	Trichloroethylene	ND100										
	Tetrachloroethylene	ND100										
	Monochlorobenzene	ND100	1900	ND100	ND100	960	ND100	260	ND100	290	ND100	ND100
	2-Monochlorotoluene	ND100	870	ND100								
	4-Monochlorotoluene	ND100	230	ND100								
	2-Chlorobenzotrifluoride	ND100										
	4-Chlorobenzotrifluoride	ND100										
	1,2-Dichlorobenzene	ND100										
	1,4-Dichlorobenzene	ND100	12000	ND100	ND100	140	ND100	ND100	ND100	ND100	ND100	ND100
	2,4-Dichlorotoluene	ND100	250	ND100	ND100							
	2,5-Dichlorotoluene	ND100	410	ND100	ND100							
	2,6-Dichlorotoluene	ND100										
	3,4-Dichlorotoluene	ND100	150	ND100	ND100							
	2,4-Dichlorobenzotrifluoride	• ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	430	ND100	ND100
	3,4-Dichlorobenzotrifluoride	ND100										
Sem	ii-Volatile Organic Compounds											
	1,2,3-Trichlorobenzene	390	ND100	ND100	ND100	190	ND100	120	ND100	1600	ND100	ND100
	1,2,4-Trichlorobenzene	1500	290	ND100	ND100	440	250	470	390	6100	ND100	ND100
	1,2,3,4-Tetrachlorobenzene	ND100	120	ND100	ND100							
	1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	120	ND100	110	590	ND100	ND100
	Pentachlorobenzene	ND100										
	Hexachlorobenzene	ND100	330	230	ND100	ND100						
	alpha-Hexachlorocyclohexane (BHC)	ND100										
	beta-Hexachlorocyclohexane (BHC)	ND100										
	gamma-Hexachlorocyclohexane (BHC)	ND100										
	delta-Hexachlorocyclohexane (BHC)	ND100										
	2,4-Dichlorophenol	460	170	ND100	ND100	ND100	190	ND100	280	330	ND100	ND100
	2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	'ND100	ND100	ND100	ND100	ND100	ND100
	2,4,5-Trichlorophenol	ND100										
	2,4,6-Trichlorophenol	ND100										
	Hexachlorobutadiene	170	ND100	ND100	ND100	ND100	ND100	ND100	170	100		ND100
	Hexachlorocyclopentadiene	ND100	350	ND100	ND100							
	Octachlorocyclopentene	ND100										
	Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	ND100	ND100	150	ND100	ND100	170	ND100	ND100
	-									A		110100

				10500	CAYUGAI	DRIVE					
Sample Location:	NCC-44	NCC-45	NCC-46	NCC-47	NCC-48	NCC-49	NCC-50	NCC-51	NCC-52	NCC-53	NCC-54
Sample Depth (Ft.):	0.2-3.5	0.5-4.3	0.3-3.8	0.2-3.5	0.2-4.8	0.5-4.0	0.5-4.0	0.5-4.0	0.5-3.5	0.5-4.0	0.5-4.5
Sample Date:	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90	06/01/90
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Volatile Organic Compounds										-	
Benzene	ND100	ND100	ND100	ND100	ND100						
Toluene	ND100	ND100	ND100	270	230	ND100	ND100	ND100	ND100	ND100	ND100
Trichloroethylene	ND100	ND100	ND100	ND100	ND100						
Tetrachloroethylene	ND100	ND100	ND100 ·	ND100	ND100						
Monochlorobenzene	ND100	ND100	ND100	14000	5000	280	ND100	ND100	ND100	ND100	110
2-Monochlorotoluene	ND100	ND100	ND100	400	210	ND100	ND100	ND100	ND100	ND100	ND100
4-Monochlorotoluene	ND100	ND100	ND100	110	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100						
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100						
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100						
1,4-Dichlorobenzene	ND100	ND100	ND100	1100	330	ND100	ND100	ND100	ND100	ND100	480
2,4-Dichlorotoluene	ND100	ND100	ND100	390	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,5-Dichlorotoluene	ND100	ND100	' ND100	1100	230	180	ND100	ND100	ND100	ND100	ND100
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100						
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100						
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	150	ND100	540	ND100	ND100	ND100	ND100	ND100
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100						
Semi-Volatile Organic Compounds											
1,2,3-Trichlorobenzene	ND100	ND100	ND100	1900	920	ND100	ND100	ND100	ND100	ND100	1000
1,2,4-Trichlorobenzene	ND100	ND100	ND100	5600	1700	240	ND100 ⁻	ND100	ND100	ND100	3100
1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	190	100	ND100	ND100	ND100	ND100	ND100	ND100
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	520	230	ND100	ND100	ND100	ND100	ND100	200
Pentachlorobenzene	ND100	ND100	ND100	130	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Hexachlorobenzene	ND100	ND100	ND100	620	570	ND100	ND100	ND100	ND100	ND100	280
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100						
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100						
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100						
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100						
2,4-Dichlorophenol	ND100	ND100	ND100	400	220	ND100	ND100	ND100	ND100	ND100	ND100 `
2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100						
2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100						
2,4,6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100						
Hexachlorobutadiene	ND100	ND100	ND100	320	250	ND100	ND100	ND100	ND100	ND100	ND100
Hexachlorocyclopentadiene	ND100	ND100	ND100	170	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Octachloro:yclopentene	ND100	ND100	ND100	ND100	ND100						
Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	160	ND100	ND100	ND100	ND100	ND100	ND100	ND100

				1050	O CAYUGA DRIVE	
Sample Location:	NCC-55	NCC-56****	NCC-58	NCC-59	NCC-60*****	
Sample Depth (Ft.):	0.5-3.5	0.5-4.0	1.0-5.0	0.5-4.5	1.0-4.5	
Sample Date:	06/01/90	06/01/90	07/20/90·	07/20/90	07/20/90	
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Volatile Organic Compounds						
Benzene	ND100	ND100	ND100	ND100	ND100	
Toluene	ND100	ND100	ND100	ND100	ND100	
Trichloroethylene	ND100	ND100	ND100	ND100	ND100	
Tetrachloroethylene	ND100	ND100	ND100	ND100	ND100	
Monochlorobenzene	ND100	ND100	ND100	ND100	ND100	•
2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	
1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	
Semi-Volatile Organic Compounds						
1,2,3-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	
1,2,4-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	
1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	
Hexachlorobenzene	ND100	ND100	ND100	ND100	ND100	•
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	⁻ ND100	ND100	
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorophenol	ND100	ND100	· ND100	ND100	ND100	
2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	
2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	
2,4,6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	
Hexachlorobutadiene	ND100	ND100	ND100	ND100	ND100	
Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	
Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100	
Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	ND100	ND100	

Notes:

NDx Compound not detected at the limit specified Duplicate of sample NCC-23. Duplicate of sample NCC-24. Duplicate of sample NCC-42. Duplicate of sample NCC-51. Duplicate of sample NCC-59.

	ANALY I CAL DATA - RESIDENTIAL PROPERTIES 10500 CAYUGA DRIVE												
	Sample Location: Sample Depth (Ft.): Sample Date: Units:	1335-1 0-0.5 07/20/90 ug/Kg	1335-1 0.5-4.5 07/20/90 ug/Kg	1335-2 0-0.5 07/20/90 ug/Kg	1335-2 0.5-4.5 07/20/90 ug/Kg	1335-3 0-0.5 07/20/90 ug/Kg	1335-3 0.5-4.5 07/20/90 ug/Kg	1335-4 0-0.5 07/20/90 ug/Kg	1335-4 0.5-4.5 07/20/90 ug/Kg	1335-5 0-0.5 07/20/90 ug/Kg	1335-5 0.5-4.5 07/20/90 ug/Kg	1335-6 0-0.5 07/20/90 ug/Kg	
Vol	atile Organic Compounds												
	Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NID100	NID100	NID100		
	Toluene	ND100	ND100	ND100	ND100	370	ND100	ND100	ND100	ND100	ND100	ND100	
	Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	2/0	ND100	
	Tetrachloroethylene	ND100	ND100	ND100									
	Monochlorobenzene	ND100	ND100	ND100									
	2-Mon'ochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	· ND100	ND100	ND100	
	4-Monochlorotoluene	ND100	ND100	ND100									
·	2-Chlorobenzotrifluoride	ND100	ND100	ND100									
	4-Chlorobenzotrifluoride	ND100	ND100	ND100-									
	1,2-Dichlorobenzene	ND100	ND100	. 220	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
	1,4-Dichlorobenzene	ND100	ND100	260	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
	2,4-Dichlorotoluene	ND100	ND100	ND100									
	2,5-Dichlorotoluene	ND100	ND100	ND100									
	2,6-Dichlorotoluene	ND100	ND100	ND100									
	3,4-Dichlorotoluene	ND100	ND100	ND100									
	2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100									
	3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100 ND100	ND100 ND100	ND100 ND100	
Sem	il-Volatile Organic Compounds						· *						
	1,2,3-Trichlorobenzene	ND100	160	ND100	NID100	NID100	420						
	1,2,4-Trichlorobenzene	ND100	440	ND100	ND100	ND100	420	ND100	ND100	ND100	490	ND100	
·	1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	1400	ND100	ND100	ND100	1600	ND100	
	1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	120	ND100	ND100	ND100	140	ND100	
	Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	110	ND100	ND100	ND100	180	ND100	
	Hexachlorobenzene	ND100	410	ND100	ND100	ND100	NDIO	ND100	ND100	ND100	ND100	ND100	
	alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	590 NID100	ND100	ND100	ND100	880	ND100	
	beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100									
	gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100									
	delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100									
•	2.4-Dichlorophenol	ND100	ND100	ND100	•								
	2.5-Dichlorophenol	ND100	ND100	ND100	ND100	NDIO	ND100	ND100	ND100	ND100	ND100	ND100	
	2.4.5-Trichlorophenol	· ND100	ND100	ND100	ND100	ND100	160	ND100	ND100	ND100	ND100	ND100	
·	2.4.6-Trichlorophenol	· ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
÷	Hexachlorobutadiene	ND100	ND100	ND100		ND100	ND100	ND100	ND100	ND100	ND100	ND100	
	Hexachlorocyclopentadiene	ND100	ND100	NID100	ND100	ND100	120	ND100	ND100	ND100	280	ND100	
	Octachlorocyclopentene	. ND100	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
	Perchlorocyclopentadecane (Mirey)	ND100	NID100	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
	(miles)	110100	INDIO	IND100	001 G M	ND100	ND100	ND100	ND100	ND100	ND100	ND100	

TABLE A.4

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Sample Location:	1335-6	1335-7	1335-7	1335-8	1335-8	1335-9*	1335-10	1335-10	1335-11	1335-11	1335-12
Sample Depth (Ft.):	0.5-4.5	0-0.5	0.5-4.5	0-0.5	0.5-4.5	0.5-4.5	0-0.5	0.5-3.5	0-0.5	0.5-4.0	0_0 5
Sample Date:	07/20/90	07/20/90 ·	07/20/90	07/20/90	07/20/90	07/20/90	01/03/91	01/03/91	01/03/91	01/03/91	01/03/01
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Volatile Organic Compounds											
Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NID100	NID100	NID100
Toluene	ND100	ND100	1800	ND100	ND100	160	ND100	ND100	ND100	ND100	ND100
Trichloroethylene	. ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Tetrachloroethylene	ND100	ND100	200	ND100							
Monochlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
1,2-Dichlorobenzene	1600	ND100	1800	ND100							
1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Semi-Volatile Organic Compounds			·								
1,2,3-Trichlorobenzene	180	ND100	100	ND100	ND100	ND100	ND100	NID100	NID100	ND100	NID100
1,2,4-Trichlorobenzene	580	ND100	270	ND100	180	200	ND100	ND100	ND100	ND100	ND100
1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NID100	ND100
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Hexachlorobenzene	460	ND100	290 .	ND100	ND100	200	ND100	ND100	ND100	ND100	ND100
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
2,4,6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Hexachlorobutadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100
Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NID100
Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	· ND100	ND100
Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100

TABLE A.4 ANALYTICAL DATA - RESIDENTIAL PROPERTIES 10500 CAYUGA DRIVE

	10500 CAYUGA DRIVE									
Sample Location:	1335-12	1335-13	1335-13	1335-14	1335-14	1335-15**	1335-20	1335-21	1335-22***	1335
Sample Depth (Ft.):	0.5-4.0	0-0.5	0.5-4.0	0-0.5	0.5-4.0	0.5-3.5	0.0-4.0	0.0-3.0	0.0-4.0	SUMP
Sample Date:	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	4/13/92	04/13/92	04/13/92	01/03/91
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L
Volatile Organic Compounds										
Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Toluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Tetrachloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Monochlorobenzene	ND100	· ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	'ND100	ND100	ND100	ND1
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Semi-Volatile Organic Compounds		-		•						
1,2,3-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
1,2,4-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NDI
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NDI
Hexachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NDI
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NDI
2,4-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	· ND100	ND100	ND1
2,5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	NDI
2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND10
2,4,6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Hexachlorobutadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1
Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND1

TABLE A.4 ANALYTICAL DATA - RESIDENTIAL PROPERTIES 10500 CAYUGA DRIVE

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					TABLE A.4			•				
1	•	ANALYTICAL DATA - RESIDENTIAL PROPERTIES										
	10500 CAYUGA DRIVE											
Sample Location:	. 1331-1	1331_1	1331_2	1331-2	1331-3	1321 3	1221 4	1221 4	1221 5	1221 5	1001 6	
Sample Denth (Ft.)	1001-1 1.0 5	05-45	1551-2	1551-2	1331-3	1551-5	1551-4	1551-4	1331-5	1331-5.	1331-6	
Sample Date:	01/09/91	01.00/01	01/00/01	01/00/01	01/00/01	01/00/01	0-0.5	0.3-4.3	0-0-5	0.5-4.5	0-0.5	
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	01/09/91 ug/Kg	01/10/91 ug/Kg	01/10/91 ug/Kg	01/10/91 ug/Kg	
Volatile Organic Compounds	•			·								
Benzene	ND100	ND100	NID100	NID100	NID100	NID100	NID100	NID100	NID100	NID:100	1000	
Toluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Trichloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Tetrachloroethylene	ND100	120	ND100	ND100	ND100	ND100	ND100	ND100	NDIO	. ND100	ND100	
Monochlorobenzene	ND100	120 ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2-Monochlorotoluone	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2 Chlaschanastrifussi da	ND100	NDIO	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2-Chlorobenzomhuoride	NDIO	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
4-Chiorobenzomiluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,4-Dichlorobenzene	· ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100 ⁻	
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	· ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Semi-Volatile Organic Compounds											•	
1,2,3-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,4-Trichlorobenzene	ND100	130	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Hexachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
alpha-Hexachiorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
gamma-Hexachlorocyclohexane (BHC	.) ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2.4-Dichlorophenol	ND100	510	ND100	750	ND100	ND100	ND100	ND100	ND100	220	ND100	
2.5-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	330 ND100	ND100	
2.4.5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100		
2.4.6-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Hexachlorobutadiene	. ND100	ND100	ND100	ND100	NID100	ND100	· NID100	ND100	ND100		ND100	
Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	NID100	ND100	ND100	ND100	ND100	ND100 ·	
Octachlorocyclopentene	ND100	NID100	ND100	ND100	NID100	ND100	ND100	ND100	NDIO	NDIO	ND100	
Perchlorocyclopentadecane (Miray)	ND100	NID100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
· ····································	140100	INDIOU	IND 100	INDIO	INDIOU -	NDIUU	· ND100	ND100	ND100	ND100	ND100	

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	· .	10500 CAYUGA DRIVE										
Sample Location:	1331-6	1331-7	1331-7	1331-8	1331-8	1331-9	1331-9	1331-10	1331-10	1331-11	1331-11	
Sample Depth (Ft.):	0.5-4.5	0-0.5	0.5-4.5	0-0.5	0.5-4.0	.0-0.5	0.5-5.0	0-0.5	0.5-4.5	0-0.5	0.5-4.5	
Sample Date:	01/10/91	01/09/91	01/09/91	01/08/91	01/08/91	01/08/91	01/08/91	01/10/91	01/10/91	01/08/91	01/08/91	
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	: ug/Kg	ug/Kg	ug/Kg	
Volatile Organic Compounds		•										
Benzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Toluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Trichloroethylene	ND100	ND100	ND100	ND100	ND100	, ND100	· ND100	ND100	ND100	ND100	ND100	
Tetrachloroethylene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Monochlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND100	. ND100	ND100	ND100	ND100	ND100	ND100	
Semi-Volatile Organic Compounds				•								
1,2,3-Trichlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,4-Trichlorobenzene	120	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,3,4-Tetrachlorobenzene	390	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Pentachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Hexachlorobenzene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
beta-Hexachlorocyclohexane (BHC)	760	ND100	ND100	'ND100	ND100							
gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,3-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4-Dichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
2,4,6-Trichlorophenol	ND100	ND100 -	- ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Hexachlorobutadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	
Perchlorocyclopentadecane (Mirex)	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	ND100	

TABLE A.4 ANALYTICAL DATA - RESIDENTIAL PROPERTIES 10500 CAYUGA DRIVE

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				•						
	Sample Location:	1331-12	1331-12	1331-13****	1331-14****	1331	1327-1	1327-2	1341-1	1341 2
	Sample Depth (Ft.):	0-0.5	0.5-5.0	0.5-5.0	0.5-4.5	SUMP	0-4 5	1527-2 0-4 0	0.1.0	1341-2
	Sample Date:	01/08/91	01/08/91	01/08/91	01/09/91	1/8/91	6/10/97	6/10/92	6/10/02	6/10/02
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L	ua/ka	ualka	ualka	ualka
_			•••		00	0	100	10110	<u>~8</u> ~~8	
Vo	latile Organic Compounds									
	Benzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
•	Toluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
,	Trichloroethylene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	Tetrachloroethylene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	Monochlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2-Monochlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	4-Monochlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	4-Chlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	1,2-Dichlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	1,4-Dichlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	. ND100
	2,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2,5-Dichlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2,6-Dichlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	3,4-Dichlorotoluene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	3,4-Dichlorobenzotrifluoride	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
Sen	ni-Volatile Organic Compounds									
	1,2,3-Trichlorobenzene	· ND100	ND100	ND100	ND100	ND1	NID100	NID100	NID100	
	1,2,4-Trichlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
ŕ	1,2,3,4-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	1,2,4,5-Tetrachlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	Pentachlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	Hexachlorobenzene	ND100	ND100	ND100	ND100	ND1	ND100		ND100	ND100
	alpha-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	NDIO
	beta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND1	ND100		ND100	ND100
	gamma-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	delta-Hexachlorocyclohexane (BHC)	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2,4-Dichlorophenol	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	2,5-Dichlorophenol	ND100	ND100	ND100	ND100		ND100	ND100	ND100	ND100
	2,4,5-Trichlorophenol	ND100	ND100	ND100	ND100	ND10	ND100	ND100	ND100	ND100
	2,4,6-Trichlorophenol	ND100	ND100	ND100	ND100	ND10	ND100	ND100	ND100	ND100
	Hexachlorobutadiene	ND100	ND100	ND100	ND100	ND1	ND100		ND100	ND100
	Hexachlorocyclopentadiene	ND100	ND100	ND100	ND100	ND1	ND100	ND100	ND100	ND100
	Octachlorocyclopentene	ND100	ND100	ND100	ND100	ND1 3	ND100		NDIO	ND100
	Perchlorocyclopentadecane (Mirey)	ND100	ND100	ND100	ND100	NDI	ND100	ND100	ND100	ND100
	, r r		110100	140100	IND IOU	INDI	ND100	ND100	ND100	ND100

TABLE A.4 ANALYTICAL DATA - RESIDENTIAL PROPERTIES 10500 CAYUGA DRIVE

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ANALYTICAL DATA - RESIDENTIAL PROPERTIES

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TABLE A.4 10500 CAYUGA DRIVE

Notes:

NDx Compound not detected at the limit specified Duplicate of 1335-7.

- Duplicate of 1000-7. Duplicate of sample 1335-10. Duplicate of sample 1335-20. Duplicate of sample 1331-9. **
- *** ****
- -
- Duplicate of sample 1331-3.
TABLE A.5

WASTE CHARACTERIZATION DATA 10500 CAYUGA DRIVE

Sample Date:			•	4/13/92 1331-TCLP	4/13/92 1335-TCLP
Sample Description:		Mathad	• . •	1001-1001	1000 1021
		Detection	Demulator		
		Detection	Regulatory		
	Units:	Limit:	Level		÷
TCLP Volatiles					
Benzene	mg/L	0.05	0.5	ND	ND
Carbon Tetrachloride	mg/L	0.05	0.5	ND	ND
Chlorobenzene	mg/L	0.05	100	ND	ND
Chloroform	mg/L	0.05	6.0	ND	ND
1 2-Dichloroethane	mg/L	0.05	0.5	ND	ND
1 1-Dichloroethylene	mg/L	0.05	0.7	ND	ND
Mathul Ethul Katana	mg/L	01	200	ND	ND
Tabashlarashlara	mg/L	0.05	07	ND	ND
Tetrachioroethene	mg/L	0.05	0.5	ND	ND
	mg/L	0.05	0.2	ND	ND
Vinyl Chloride	ing/L	0.1	0.2	ne -	
TCLP Semi-Volatiles			•		
Occessi	mg/L	0.03	200	ND	ND
m /n-Cresol	mg/L	0.03	200	ND	ND
1 4-Dichlorobenzene	mg/L	0.03	7.5	ND	ND
2 4-Dinitrotoluene	mg/L	0.03	0.13	ND	ND
Hevachlorobenzene	mg/L	0.03	0.13	ND	ND
Hovachlorobutadiana	mg/L	0.03	0.52	ND	ND
Hexachioroothano	mg/L	0.03	3.0	ND	ND
Nitrohonzono	mg/L	0.03	2.0	ND	ND
Nitrobenzene	mg/L	0.00	100	ND	ND
Pentachiorophenoi	mg/L	0.03	50	ND	ND
Pyridine	mg/L	0.05	400	ND	ND
2,4,5-1 richiorophenol	mg/L	0.2	20	ND	ND
2,4,6-1 richlorophenol	mg/L	0.05	2.0	ne.	
TCLP Pesticides/Herbicides					
Chlorodane	mg/L	0.0017	0.03	ND	ND
Endrin	mg/L	0.0003	0.02	ND	ND
Heptachlor	mg/L	0.0002	0.008	ND	ND
Heptachlor epoxide	mg/L	0.0002	. 0.008	ND	· ND
Lindane	mg/L	0.0002	0.4	ND	ND .
Methorychlor	mg/L	0.0007	10.0	ND	ND
Toyanbene	. mg/L	0.0067	, 0.5	ND	ND
24.0	mg/L	0.0002	10.0	ND	ND
2,3-0 2 4 5-TP	mg/L	0.0002	1.0	ND	ND
=,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,				
TCLP Metals	,				•
Total Arsenic	mg/L	0.005	5.0	ND .	ND
Total Barium	mg/L	0.03	100.0	0.75	0.77
Total Cadmium	mg/L	0.01	1.0	· 0.02	0.024
Total Chromium	' mg/L	0.01	5.0	0.016	0.023
Total Lead	mg/L	0.003	5.0	0.014J	0.009J
Total Mercury	mg/L	0.0002	0.2	ND	ND
Total Selenium	mg/L	0.005	1.0	ND	ND
Total Silver	mg/L	0.01	5.0	ND	ND

lotes:

J The associated value is estimated indicating a low bias.
* Maximum concentration for the Toxicity Characteristic, 40 CFR 261.24.

APPENDIX B

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STRATIGRAPHIC LOGS

)GS

	(OVERBU	RDEN)			(L-01)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-14	
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 5,	1990
CLIENT	: OXYCHEM		DRILLING METHOD:	3" SPLIT S	SPOON
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAME	21 F
t BGS		ft BGS	INSTALLATION		
				B	
1.0	Auger through asphalt and sub-base gravel Brown CLAY with some fine to coarse sand, trace wood, dry, FILL		BOREHOLE	R	
2.0	Brown to gray CLAY, some sand, trace brick, slag and gravel, moist, slight chemical odor				
3.0	Gray mottled CLAY, some silt and fine sand, moist, NATIVE	-2.8			
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from	3.3]
. `	0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface		,		
5.0	with cement/bentonite grout.				
6.0					
7.0					
8 .0			· .		
9.0					
10.0					
11.0					
12.0					
13.0					

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG	· .	(L-02)
PROJE	CT NAME: 10500 CAYUGA DRIVĖ		HOLE DESIGNATION	NCC-15	
PROJEC	CT NO.: 3307		DATE COMPLETED:	MARCH 5, 19	990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SP	OON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAM	
ft BGS	×	ft BGS	INSTALLATION		S 'N' T V
	· · · · · · · · · · · · · · · · · · ·			BER	
1.0	Auger through asphalt Brown fine to coarse SAND, some fine to coarse angular gravel, dry, FILL		BOREHOLE	ISS	35
2.0	Dark gray CLAY, trace fine angular gravel, moist, slight chemical odor Same with trace brown resinous material, maist slight chemical odor	-7.4 -2.1			
3.0	Same with trace silt and plant roots, moist, NATIVE	-3.2		255	30
4.0	NOTES: 1. Soil sample collected for chemical analysis from 0.2 to 3.2 ft. BGS. 2. Borehole backfilled to surface with cement/bentonite grout.				
5.0					
6.0					
7.0			•		
8.0			· · ·		
9.0					
10.0					
11.0					
12.0					
13.0			· · ·		
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	SE: REFER	TO CURRENT ELEVATIO	N TABLE	<u> </u>

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PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-16	
PROJE	CT NO.: 3307			MARCH 5	1000
CLIENT	OXYCHEM		DRILLING METHOD	3" SPLIT S	(POO)
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR		
		In number			
ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMP	
	Auger through asphalt		Regenzer	R E E	_
	A Brown SAND, trace fine to coarse angular /	-0.3			7
1.0	Black CLAY, some sand, trace gravel, slag		Borchotte	(ISS)	(:
			CEMENT/ BENTONITE		V
2.0	Dark gray SAND, some fine gravel, wet	-7.7	CROUT		7
	Gray CLAY, some fine sand and silt, trace roots, moist, NATIVE	-2.2		255	<u> </u>
3.0	Green-gray mottled CLAY with trace silt and roots, moist	_ 7.2			V
	END OF HOLE @ 3.2 FT. BGS NOTES: 1. Soil sample collected for	-5.2			1
4.0	chemical analysis from 0.2 to 3.2 ft. BGS.				
	 Borehole backfilled to surface with cement/bentanite grout. 				
5.0					
					1
6.0			•		
7.0					
.8.0					ŀ
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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG	(L-04)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-17
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 5, 1990
CLIENT	ОХҮСНЕМ		DRILLING METHOD:	3" SPLIT SPOON
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft BGS	INSTALLATION	N S N U T V
	Auger through asphalt Grav SAND, trace brick and gravel, maist.			
	FILL		BOREHOLE	
F 1.0		-1.4	CEMENT/	155 X 44
	Black to red-brown CLAY, some sand, trace weathered concrete, metal, wood and coal,		GROUT	
2.0	Same, moist			
				2SS X 28
0.0	Gray mottled CLAY, trace silt and fine sand,	-3.1		
- 4.0	END OF HOLE @ 3.5 FT. BGS			
	chemical analysis from			
- 50	2. Borehole backfilled to surface with coment/hentonite arout			
		a.		
- 6.0				
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- 7.0	,			
- 8.0				•
- 9.0				
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- 10.0				
	1			
- 11.0				
- 12.0	· · · · · ·		· .	
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- 13.0	· · ·			
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NOT	ES: MEASURING POINT ELEVATIONS MAY CHANC	E: REFER	TO CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS WATER	FOUND Z	STATIC WATER LEVE	T

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	CT NAME 10500 CAMICA DRIVE		HOLE DESIGNATION	NCC-18
				MARCH
CLIENT			DRILLING METHOD:	3" SPLIT
			CRA SUPERVISOR:	K. LYNCH
ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	N N
	Auger through asphalt			Ř
	Brown SAND, some clay, trace rounded fine gravel, wet, FILL		BOREHOLE	
1.0	· · · ·			
	Same		BENTONITE	l K
2.0	Dark gray CLAY, some silt, moist, NATIVE	-2.1		255
	Green-gray mottled CLAY, some silt and fine sand, moist			
3.0	END OF HOLE @ 3.1 FT. BGS	-3.1		l f
	NUILS: 1. Soil sample collected for ' chemical analysis from			1 -
4.0	2. Borehole backfilled to surface with cement/bentonite arout			
5.0	······ ·······························		·	
0.0			•	
6.0 [°]				•
7.0				
8.0	· · ·			
9.0				
10.0			· .	·
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12.0	·			
12.0				
13.0				
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NOT	ES: MEASURING POINT ELEVATIONS MAY CHAN	GE; REFER	TO CURRENT ELEVATION	TABLE

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:	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG	(L-06)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION: NO	CC-19
PROJE	CT NO.: 3307		DATE COMPLETED: M	ARCH 5, 1990
CLIENT	OXYCHEM		DRILLING METHOD: 3	SPLIT SPOON
LOCAT	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR: K.	LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft_BGS	· · · · · · · · · · · · · · · · · · ·	ft BGS	INSTALLATION	
- 1.0	Auger through asphalt Black SAND, some silt, trace concrete, brick coal, slag, dry to moist, FILL, slight chemical odor		- 3.0° BOREHOLE	155 34
- 2.0	Red-brown CLAY, some concrete and gravel, moist Same, moist	-1.6 -2.1	BEN TON/TE GROUT	
- 3.0	Dark gray SILT, some concrete and gravel, moist Gray/green mottled CLAY, some fine sand and	-2.6		2SS 54
- 4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from	-3.5		
- 5.0	0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with cement/bentonite grout.		•	
,				
- 6.0				
- 7.0				
- 8.0				
- 9.0 				
- 10.0				
- 11.0				
- 12.0				
- 13.0				
	· . · .			
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER 1	TO CURRENT ELEVATION T	ABLE
	CHEMICAL ANALYSIS WATER	FOUND 🔽	STATIC WATER LEVEL	¥ l

	OVERBU	ISTRUMEI IRDEN)	NTATION LOG	(L-4
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION: N	ICC-20
PROJE	CT NO.: 3307		DATE COMPLETED: N	ARCH 5, 1990
CLIENT	OXYCHEM		DRILLING METHOD: 3	SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERMSOR: K	LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft BGS	INSTALLATION	
				M A B T E E
	Auger through asphalt Brown SAND, some fine to coarse angular			
_	gravel, moist, FILL		BOREHOLE	
1.0		-1.2		
	Brown SAND, some fine gravel, trace slag.	-1.6	BENTONITE GROUT	
2.0	Same without slag and gravel, dry to moist	-2.0		$ $ $\overline{\Lambda}$
	Gray CLAY, some silt and fine sand, dry to moist, NATIVE			255
3.0	Gray-green mottled CLAY, some silt and sand, dry to moist	- 7 7		
	END OF HOLE @ 3.3 FT. BGS			
4.0	chemical analysis from			
	2. Borehole backfilled to surface with compart (bentonite growt			
5.0	with cementy bentomite grout.		· · ·	
6.0			•	
7.0				
			-	
8.0				
9.0	• • •			
10.0				
11.0	· · · · · ·		• • •	
12.0				
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13.0				
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER '	TO CURRENT ELEVATION T	ABLE

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	STRATIGRAPHIC AND IN (OVERBU	ISTRUMEN JRDEN)	ITATION LOG	(L-0)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-21
ROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 5, 1990
	: OXYCHEM	•	DRILLING METHOD:	3" SPLIT SPOON
	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
EPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
603	· ·	TT BGS	INSTALLATION	<u>,</u> U ↑ U ↑ B E
1.0	Auger through asphalt Gray CLAY, some glass, trace coal, metal, wood and rounded white fine gravel, moist, FILL			
2.0	White, rounded fine GRAVEL, some gray clay,	-1.8	CEMENT/ BENTONITE GROUT	
3.0	Same Dark gray mottled CLAY, some silt, moist,	-2.5		255
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from	3.5		
5.0	0.5 to 3.5 ft BGS. 2. Borehole backfilled to surface with cement/bentonite grout.			
6.0				
7.0				
.8.0				
9.0				
10.0				
11.0				
12.0				
13.0				
	_ · · · ·		· ·	
NOTE	S: MEASURING POINT ELEVATIONS MAY CHAN	GE; REFER	TO CURRENT ELEVATION	TABLE

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		STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG		(L-09)
	PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-22	
	PROJE	CT NO.: 3307	•	DATE COMPLETED:	MARCH 5, 1	990
	CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT S	POON
	LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
	DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SA	VPLE
	ft_BGS		ft BGS	INSTALLATION		
		Auger through asphalt Gray fine to coarse GRAVEL, some sand, FILL	-0.7	BOREHOLE	····	
	- 1.0	Some CLAY, some gravel, trace brick, moist	-0.7		155	49
	- 2.0	Same, no brick, moist		GROUT		
	- 3.0	Dark to light gray mottled CLAY, some silt and fine sand, moist, NATIVE	-2.6		255	39
	- 4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS.	-3.5			
	- 5.0	 Borehole backfilled to surface with cement/bentonite grout. 				
	- 6.0			ر		
	- 7.0					
	- 8.0			•		•
	- 9.0					
	- 10.0					
	- 11.0					
	- 12.0	· · ·				
	12.0	· ·		· · ·		
· .	- 13.0					
	NOTE	ES: MEASURING POINT ELEVATIONS MAY CHANG	I I GE; REFER	TO CURRENT ELEVATIO	DN TABLE	1
ļ		CHEMICAL ANALYSIS WATER	FOUND 🔽	STATIC WATER LE	EVEL 🗶	

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		STRATIGRAPHIC AND IN (OVERBUI	STRUMEN RDEN)	TATION LOG		· (1	-10)
	PROJĖ	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-23		
•	PROJE	CT NO.: 3307	·	DATE COMPLETED:	MARCH	6, 199	0
	CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT	SPOO	N
	LOCATI	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNC	4	
· .	DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR		AMPL	<u></u>
	ft BGS	· · · · · · · · · · · · · · · · · · ·	ft BGS	INSTALLATION	N	S T	'N' V
					Ē	Ê	
		Auger through asphalt Gray SAND, some gravel, dry, FILL					
	- 1.0					$\langle \rangle $	
		Dark gray CLAY, some sand and fine to coarse	-1.5	CEMENT/ BENTONITE		٦Ň	- 90
	- 2.0	gravel, moist Same, moist	-22			$\left(\rightarrow \right)$	
		Same with some silt, moist, NATIVE			255	νN	107
ч.	- 3.0	silt, moist Same with some silt and trace fine subround			233	$ \Lambda $	• • •
	,	gravel, moist END OF HOLE @ 3.5 FT. BGS	-3.5			\vdash	
	- 4.0 ·	NOTES: 1. Sail sample collected for chemical analysis from					
		0.5 to 3.5 ft. BGS. 2. Duplicate soil sample					
	- 5.0	collected and submitted as NCC-34.					
		with cement/bentonite grout.		· · ·	1		
	- 6.0			· · · ·			
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	- 11.0						
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	- 12.0				-* 		
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		CHEMICAL ANALISIS WATER		STATIC WATER LE			

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	OVERBU	RDEN)	LIATION LUG	(L-1
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION: N	CC-24
PROJE	CT NO.: 3307		DATE COMPLETED: M	ARCH 5, 1990
CLIENT	OXYCHEM		DRILLING METHOD: 3	SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR: K	. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft BGS	INSTALLATION	N S U T M A E E
1.0	Auger through asphalt Dark gray mottled CLAY, some fine to coarse gravel, moist, FILL			
2.0	White rounded fine GRAVEL, some clay, moist Same	-1.9	BENTON/TE GROUT	
3.0	Gray mottled CLAY, some silt, moist, NATIVE	-2.7		
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from	3.5	· · ·	
. •	2. Duplicate soil sample			
5.0	collected and submitted for chemical analysis as NCC-33. 3. Borehole backfilled to surface		• • •	
6.0	with cement/bentonite grout.			
7 <u>.</u> 0				
8.0			· .	
9.0				
`10.0				
11.0			· · · ·	
12.0	1			
13.0				
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	GE; REFER	TO CURRENT ELEVATION	TABLE

	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	NTATION LOG		(L-12)
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-25	
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 6.	1990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT S	SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SA	MPLE
ft BGS		ft BGS	INSTALLATION		
	Auger through asphalt Dark gray CLAY, some fine gravel, moist, FILL		10.0	Ŕ	
1.0			BORÉHOLE	155	76
2.0	Same, moist		EENTON/TE CROUT		\square
3.0	Same without gravel, moist, NATIVE Light gray mottled CLAY, moist Brown CLAY, some fine to coarse sand, moist	-2.6		255	80
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from	-3.5			
5.0	2. Borehole backfilled to surface with cement/bentonite grout.				
6.0					
7.0					
8.0					
9.0		• •	•		
10.0					
11.0			•		
12.0					
13.0					
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	N TABLE	
	CHEMICAL ANALYSIS WATER		STATIC WATER LEV	ÆL 🔽	

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	•	STRATIGRAPHIC AND I (OVERB	NSTRUMEN URDEN)	TATION LOG		(L-13)
	PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	N.CC-26	
	PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 5, 19	990
	CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPC	NON
	LOCATI	ON: 10500 CAYUGA DRIVE	· ·	CRA SUPERVISOR	K. LYNCH	
	DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMF	PLE
	ft BGS	· · · · · · · · · · · · · · · · · · ·	ft BGS	INSTALLATION		N
			l'		B E E	
ſ		Auger through asphalt Gray SILT some clay and fine to coarse				
	1.0	gravel, trace coal, moist, FILL		BOREHOLE		7
ſ	- 1.0		-14	CEMENT/	155	(57
· ·		Gray CLAY, trace gravel, moist Same moist	1.4	BENTONITE CROUT		V
	2.0					7
		Same with some white rounded gravel, moist			255	47
· · [· 3.0	Gray mottled CLAY, some silt, moist, NATIVE				V
· ·		END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for	3.5			
	4.0	chemical analysis from 0.5 to 3.5 ft. BGS.				
·	5.0	2. Borehole backfilled to surface with cement/bentonite grout.				
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	6.0					
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	70			·		
	7.0					
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Ļ	13.0					
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	NOTE	S: MEASURING POINT ELEVATIONS MAY CHAN	NGE: REFER T	O CURRENT ELEVATION	TABLE	
		CHEMICAL ANALYSIS - WATER	FOUND 🔽	STATIC WATER LEV	EL 🔽	

	STRATIGRAPHIC AND IN (OVERBUI	STRUMEN RDEN)	NTATION LOG	(L-
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-27
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 6, 1990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH t BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR	SAMPLE
	Auger through asphalt			<u> </u>
	Brown SILT, some fine to coarse gravel and sand, trace weathered concrete, moist, FILL		BOREHOLE	
1.0	Dark gray CLAY, some silt, trace white	-1.1		
	rounded fine gravel, moist		BENTONITE GROUT	
2.0	Same			
	· · · · ·			
3.0 [°]	White fine rounded GRAVEL, some clay, moist	-3.1		
	Same except wet	-3.6		725
4.0	Gray mottled CLAY, some silt, moist, NATIVE	-4.0	E TRANSPORT	
	NOTES: 1. Soil sample collected for			
5.0	chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with compart (heatonite arout		$\sum_{i=1}^{n}$	
6.0	with cementy bentome grout.			
7.0			-	
8.0				
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9.0				
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11.0			•	
		l		
120			·	
12.0				
130			· ·	
13.0			.	
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	N TABLE

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	STRATIGRAPHIC AND IN (OVERBU	ISTRUMEN (RDEN)	TATION LOG	(L-15
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION: N	CC-28
PROJE	CT NO.: 3307		DATE COMPLETED: M	ARCH 6, 1990
CLIEN	OXYCHEM	• .	DRILLING METHOD: 3"	SPLIT SPOON
ĻOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR: K	LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft_BGS		ft BGS	INSTALLATION	U T M A B T E E
1.0	Auger through asphalt Brown SAND, some fine to coarse angular gravel, dry, FILL	1.6		
2.0	Gray CLAY, some silt and white fine rounded gravel, moist Red-brown same, moist Same, moist	7.5	BENTONITE	
3.0	Dark gray CLAY, some silt, moist, NATIVE Light gray mottled CLAY, moist	-3.5		
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface			
5.0	with cement/bentonite grout.			
6.0				
7.0				
8.0			· ·	
9.0				
10.0			•	
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12.0				
13.0				

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			(OVERB	URDEN)					
PROJE	CT NAME: 10500 CA	YUGA DRIVE			HOLE DI	SIGNATION:	NCC-29		
PROJE	CT NO.: 3307				DATE CO	OMPLETED:	MARCH 6,	199	0
CLIENT	C: OXYCHEM				DRILLING	METHOD:	3" SPLIT S	SP00	N
LOCAT	ION: 10500 CA	YUGA DRIVE			CRA SU	PERVISOR:	K. LYNCH		
DEPTH	STRATIGRAPHIC DES	CRIPTION & R	EMARKS	ELEVATION	MON	ITOR	SA	MPL	Ē
ft BGS				ft_BGS	INSTAL			ST A T E	
1.0	Auger through asp Light gray SAND. trace gravel, mois	some weather t, FILL	ed concrete,	-16			R 1SS		
2.0	Gray-brown CLAY, moist Same, moist	some sand, t	trace gravel,	-2.7		CROUT	255	\square	
3.0	Light gray mottled	CLAY, moist	S., NATIVE	-3.5				Д	
4.0 5.0	NOTES: 1. Soil ch 0.5 2. Bor wit	I sample colle emical analysi 5 to 3.5 ft. B rehole backfille th cement/ber	ected for is from IGS. ed to surface ntonite grout.						
6.0									
7.0	•				· · ·				
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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	NTATION LOG		(L-17)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-30)
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH	6, 1990
CLIENT	OXYCHEM		DRILLING METHOD:	4 1/4"	ID HSA
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNC	н
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	FIEVATION	MONITOR		
ft BGS		ft BGS	INSTALLATION		
				8 F	A A T L
i	Auger to 2.5 ft. BGS through fine to coarse			<u>Ř</u>	Ē
	angular gravel and sand fill .		BOREHOLE		
- 1.0					
			CEMENT/ BENTONITE CROUT		
- 2.0					
	Gray and tan SAND, some fine to coarse angular gravel, dry to moist, FILL				
- 3.0					Λ/I
				155	72
- 4.0		-4.1			/\
	Red/brown CLAY, some silt, dry to moist,	-4.3 -4.5			<u> </u>
- 5.0	NATIVE				
	NOTES: 1. Soil sample NCC-30 collected		· · ·		
- 6.0	3.0 to 3.8 ft. BGS. Soil		· · ·		
	chemical analysis from 3.8 to 4.5 ft BGS				
- 7.0	2. Borehole backfilled to surface with cement/bentonite grout				
	3. Borehole was located in area excavated in November 1989				
- 8.0					
- 9.0					
- 10.0			· .		
			· .		
- 11.0			•		
			• .		
F 12.0					
F 13.0					•
NOTE	S: MEASURING POINT FLEVATIONS MAY CHANC				
			CTATIO WATER I CIT		
L	UTEMICAL ANALTSIS WATER		STATIC WATER LEVEL	.	

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NAME: 10500 CAYUGA DRIVE NO.: 3307 OXYCHEM 10500 CAYUGA DRIVE RATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	HOLE DESIGNATION: DATE COMPLETED: DRILLING METHOD: CRA SUPERVISOR: MONITOR	NCC-31 MARCH 4 1/4" K. LYNC	6, ⁻ ID I
NO.: 3307 OXYCHEM 10500 CAYUGA DRIVE RATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	DATE COMPLETED: DRILLING METHOD: CRA SUPERVISOR: MONITOR	MARCH 4 1/4" K. LYNC	6, ⁻ ID I Ж
OXYCHEM 10500 CAYUGA DRIVE RATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	DRILLING METHOD: CRA SUPERVISOR: MONITOR	4 1/4" K. LYNC	ID CH
10500 CAYUGA DRIVE RATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	CRA SUPERVISOR:	K. LYNC	Эн
RATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR		
uger through fine to coarse gravel and soud	11 865		S/	MP
user through fine to coarse gravel and sond	1. 1			
uder unrough une in charse gravel and sond			E R	É
		30.0		
		CREATE CHOUT		
rown SAND, some gray fine to coarse angular ravel, dry, FILL				-
				$\left \right\rangle$
			155	X
				$ \rangle$
ay fine to coarse angular GRAVEL, some gray nd red—brown clay, wet, FILL			255	\mathbf{k}
ND OF HOLE @ 5 FT. BGS	-5.0	NEW INSTALL		F
for chemical analysis from 2.5 to 4.5 ft. BGS. Soil				
sample NCC-31a collected for chemical analysis from				
4.5 to 5.0 ft. BGS. 2. Borehole backfilled to surface				
3. Borehole was located in area				
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	rown SAND, some gray fine to coarse angular ravel, dry, FILL no of HOLE S FT. BCS NOTES: 1. Soil sample NCC-31 collected for chemical analysis from 2.5 to 4.5 ft. BCS. Soil sample NCC-31 collected for chemical analysis from 4.5 to 5.0 ft. BCS. 2. Borehole backfilled to surface with cement/bentonite graut. 3. Borehole was located in area excavated in November 1989.	rown SAND, some gray fine to coarse angular ravel, dry, FILL ray fine to coarse angular GRAVEL, some gray nd red-brown clay, wet, FILL ND OF HOLE © 5 FT. BGS NOTES: 1. Soil sample NCC-31 collected for chemical analysis from 2.5 to 4.5 th. BGS. Soil sample NCC-31 collected for chemical analysis from 4.5 to 5.0 ft. BGS. 2. Borehole backfilled to surface with cement/bentonite grout. 3. Borehole was located in area excavated in November 1989. MEASURING POINT ELEVATIONS MAY CHANGE: REFER	rown SAND, same gray fine to coarse angular ravel, dry, FilL -5.0 -5.0 -5.0 -5.0 Morestein and set of the	rown SAND, some gray fine to coarse angular rovel, dry, FiLL rovel, dry, FiLL NO OF HOLE @ 5 FT. BGS NOTES: 1. Soil sample NCC-31 collected for chemical analysis from 2.5 to 4.5 ft. BGS. Soil sample NCC-31 collected for chemical analysis from 4.5 to 5.0 ft. BGS. 2. Borehole back/filed to surface with cement/bentanite-graut. 3. Borehole was located in area excavated in November 1989. MEASURING POINT ELEVATIONS MAY CHANCE; REFER TO CURRENT ELEVATION TABLE

.

	STRATIGRAPHIC AND II (OVERBU	NSTRUMEN JRDEN)	ITATION LOG	
PROJEC	CT NAME: 10500 CAYUGA DRIVE	-	HOLE DESIGNATION:	NCC-32
PROJEC	CT NO.: 3307		DATE COMPLETED:	MARCH 6, 1
CLIENT	OXYCHEM		DRILLING METHOD:	4 1/4" ID 1
LOCATI	ON: 10500 CAYUGA DRIVE	•	CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPL
IL BC2	· · · · · · · · · · · · · · · · · · ·	11 862		
	-			E E R
	Auger through fine to coarse angular gravel and sand fill			
- 1.0			BOREHOLE	
- 2.0			CROUT	
	Light gray SAND, some gravel, dry, FILL			
- 3.0				Ι Ν,
- 4.0	Dark gray mottled CLAY, some silt and fine	3.7		
	Red-brown mottled Same, some silt and fine \sand, moist	-4.5	51-1-002-55	
- 5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1 Soil sample NCC-32 collected			
	for chemical analysis from 3.0 to 3.5 ft. BGS. Soil			
- 6.0	sample NCC-32a collected for chemical analysis from			
	3.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface		•	
- 7.0	3. Borehole was located in area excepted in November 1989	· · [
	excuvited in November 1989.			
- 8.0				
- 9.0			:	
	· · · · ·			
- 10.0				
			. ·	
- 11.0	· · ·			
- 12.0		×.	•	
17.0				
- 13.0	· · · · · ·		•	
	· · · · · · · · · · · · · · · · · · ·			
NOTE	S: MEASURING POINT ELEVATIONS MAY CHAN	IGE: REFER	TO CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS WATER	FOUND 🔽	STATIC WATER LEVEL	. ¥

	OVERBU	JRDEN)	NIATION LUG		(L-20)
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-35	
PROJEC	CT NO.: 3307 ,		DATE COMPLETED:	MARCH 1	4, 1990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT	SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAM	PLE
n BGS		ft BGS	INSTALLATION		S N A
				8	T L E U
	Auger through asphalt		10-		
1.0	Brown to gray GRAVEL, some fine to coarse sand and clay, trace asphalt and coal, FILL		BOREHOLE	(1SS)	34
2.0	Same, except moist to wet				<u></u>
3.0	Red brown mottled CLAY, some silt, dry to	-2.7 -3.0 -3.2		255	24
4.0	Green-brown SILT, some fine sand, trace sub- rounded gravel, moist Dark gray mottled CLAY, dry to moist, NATIVE	3.5	MALIAN C		<u> </u>
5.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with cement—bentonite grout.		· .		
6.0					
7.0					
8 .0					
.9.0					
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10.0					
11.0	· · ·				
12.0					
13.0					
NOTES	S: MEASURING POINT ELEVATIONS MAY CHANC	SE: REFER T	O CURRENT ELEVATION T	ABLE	

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	(OVERBU	RDEN)		
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-36
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 14, 199
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOC
LOCATI	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
t BGS		ft BGS	INSTALLATION	N S U T B T
- 11-	Auger through asphalt			
1.0	Gray GRAVEL, some sand, red-brown clay and wood, wet, FILL		BOREHOLE	
			CEMENT/ BENTONITE CROUT	
2.0	Same, with some fine sand			
3.0				255
4.0	Light gray mottled CLAY, some silt, trace rounded gravel, dry to moist, Native Red brown CLAY, dense, dry to moist	-3.8		355
5.0	END OF HOLE @ 5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.8 ft. BGS.	-5.0		
6.0	 Borehole backfilled to surface with cement-bentonite grout. 			
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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	NTATION LOG	(L-22)
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-37
PROJEC	CT NO.: 3307		DATE COMPLETED:	MARCH 14, 1990
CLIENT:	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS		MONITOR	SAMPLE
ft BGS		ft BGS	INSTALLATION	
	Auger through asphalt	· · ·		<u>R</u> ĒĒ
- 1.0	Gray SAND, some fine to coarse angular gravel, dry to moist, FILL	-0.5	BOREHOLE	
	Gray and red brown CLAY, some gravel, trace coal, cobbles and metal, moist	-1.2	CEMENT/ BENTONITE GROUT	
2.0				
7.0				255 30
. 3.0	Gray mottled CLAY, moist, NATIVE	-3.1		
· 4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with	-3.5		
50	cement-bentonite grout.			
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION T	ABLE
	CHEMICAL ANALYSIS WATER	FOUND 🔽	STATIC WATER LEVEL	X

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	STRATIGRAPHIC AND IN (OVERBU	STRUME RDEN)	NTATION LOG	(L-23)
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-38
PROJEC	CT NO.: 3307		DATE COMPLETED:	MARCH 14, 1990
CLIENT:	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTHI	STRATIGRAPHIC DESCRIPTION & REMARKS	FLEVATION	MONITOR	SAMDI E
ft BGS		ft BGS	INSTALLATION	
	¢ ,			B T L E E U
	Auger through asphalt	<u> </u>		<u> </u>
- 1.0	Dark gray SAND, some clay and silt, trace fine to coarse gravel, clinkers and weathered concrete, moist, FILL	-0.5		
- 20			BENTON/TE GROUT	\sim
1.0	Gray CLAY, trace vegetation (roots), moist Same, with cobbles	-2.3 -2.5		255 26
	Light gray motiled CLAY, moist, NATIVE	7.6		
- 4.0	 END OF HOLE Ø 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with computer benchic grout 	-3.5		
- 5.0	canent benonne grout.			
- 6.0				
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13.0				
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NOTES	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS - WATER	FOUND 🔽	STATIC WATER LEVEL	. 🗶

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG	
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-39
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 14,
CĻIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT S
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMP
ft BGS		ft BGS	INSTALLATION	
				E E R
	Auger through asphalt	-0.5	3.0"0	
1.0	Dark brown to gray SAND, some fine gravel. trace coarse grvel, moist, FILL	,	BOREHOLE	
	Dark gray SILT, some sand, weathered concrete and brick, moist		CROUT	
2.0	Dark gray SILT, some fine sand, weathered concrete and brick, moist NATIVE	-2.1		
3.0	Light gray mottled CLAY, some silt, moist	-2.8		255
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with cement—bentonite grout	-3.5		
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- 13.0				
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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG		(1	L-25
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-4()	
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH	14,	199
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLI	T SP	200
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNC	н	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SA	MPL	ε
t BGS		ft BGS	INSTALLATION		S T A T E	
	Auger through asphalt Gray SAND, some fine gravel, trace brick,	-0.5	BOREHOLE	<u> R</u>		
1.0	Wet, FILL			155	V	
2.0	Gray and red brown CLAY, some silt, weathered concrete and cobbles, moist Same, with sand, weathered concrete and angular fine to coarse gravel, wet	. –1.6	BENTON/TE CROUT		$\left \right\rangle$	
3.0	Gray mottled CLAY, some silt, dry, NATIVE	-2.8´		255	X	'
4.0 ·	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS.	-3.5			<u>(.</u>)	
5.0	 Borehole backfilled to surface with cement—bentonite grout. 		•			
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	(OVERBO			
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-41
PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 14.
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT S
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMP
IL BC2		ft BGS	INSTALLATION	
				8 T E E
	Auger through asphalt			
	Brown and gray SAND, some fine to coarse	-0.5	BOREHOLE	
- 1.0	Same, except dark gray with cobbles and wood			
			BENTONITE GROUT	
- 2.0	Gray CLAY, trace gravel, moist	-1.9		
				255
- 3.0	Light gray mottled CLAY, dry, NATIVE	-3.1		
	END OF HOLE @ 3.5 FT. BGS	-3.5		
- 4.0	NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS.			
	Borehole backfilled to surface with cement-bentonite grout.			
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NOTE	S. MEASURING POINT ELEVATIONS MAY CHANC			

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PROJECT NAME: 10500 CATUGA DRIVE HOLE DESIGNATION: NCC-42 PROJECT NO.: 3307 DATE COMPLETED: MARCH 1 CUENT: OXYCHEM LOCATION: 10500 CATUGA DRIVE DEPTH STRATGRAPHIC DESCRIPTION & REMARKS ILCATION: 10500 CATUGA DRIVE DEPTH STRATGRAPHIC DESCRIPTION & REMARKS ILCATION: 10500 CATUGA DRIVE OCEDIN: TRATGRAPHIC DESCRIPTION & REMARKS ILCATION: TRATGRAPHIC DESCRIPTION & REMARKS ILCATION: Gray motile description Brown to gray SAND, some weathered concrete grave, moist, FILL -2.5 2.0 Some, except gray Gray motiled CLAY, some silt and fine sand, moist -2.9 -3.0 Cray CLAY, some silt and fine sand, moist 2.0 Some, except gray -3.1 Cray CLAY, some silt and fine sand, moist -3.2 Borehole backfled: 10.0 DO FHOLE @ 3.5 FT, BCS 2.0 Some backfled: for chemical analysis for backfled for chemical analysis or NCC-43. -3.0 Duplicate sail sample submitted for chemical analysis or NCC-43. 5.0 Chemical analysis or NCC-43. 9.0 10.0 11.0 11.0 12.0					
PROJECT NO: 3307 DATE COMPLETED: MARCH 14 CUENT: OXYCHEM LOCATION: 10500 CANUGA DRIVE DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS L BGS INSTALLATION Auger through aspholt It BGS Brown to gray SAND, some weathered concrete gravel, moist, FIL 2.0 Same, except gray Gray CLAY, some silt and time sond, moist 2.0 Same, except gray Gray CLAY, some silt, dry, NATIVE 2.0 Same, except gray Croy motified CLAY, some silt, dry, NATIVE 2.0 Same, except gray Croy motified Sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2.0 Borbance so strate south the for chemical analysis as NCC-43. 5.0 .0 7.0 3.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 11.0 12.0	PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-42
CLENT: OXYCHEM DRILLING METHOD: 3" SPLIT LOCATION: 10500 CAYUGA DRIVE CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS LEVATION MONITOR It BGS It BGS INSTALLATION MONITOR Auger through asphalt Brown to gray SAND, some weathered concrete MONITOR SAM 1.0 Gray CLAY, some silt and rounded white -2.5 -2.5 2.0 Same, except gray -2.5 -2.9 3.0 Gray CLAY, some silt and fine sond, moist -2.9 -3.0 Gray Monttled CLAY, some silt, dry, NATIVE -3.5 4.0 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. -3.5 5.0 Soment-benching graut -3.5 5.0 Supercise soil sample submitted for chemical analysis from 0.5 to 3.5 ft. BGS. -3.5 6.0 Soment-benching graut -1.5 7.0 Soment-benching graut -1.5 7.0 7.0 7.0 7.0 7.0 7.0 7.10 7.10	PROJE	CT NO.: 3307		DATE COMPLETED:	MARCH 14
LOCATION: 10500 CAYUGA DRIVE CRA SUPERVISOR: K. LINCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAM Auger through asphalt Brown to gray SAND, some weathered concrete cobbles, trace wood, silt and rounded white gravel, moist, FILL -2.5 -2.5 -2.5 2.0 Same, except gray -2.5 -2.9 -3.5 -3.5 3.0 Gray mottled CLAY, some silt, dry, NATIVE -2.9 -3.5 -3.5 4.0 END OF HOLE @ 3.5 FT. BGS -3.5 -3.5 -3.5 5.0 Some silt and the sond, moist -2.9 -3.5 5.0 Some some some some some some some some s	CLIENT	: OXYCHEM		DRILLING METHOD:	3" SPLIT
DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMI It BCS Auger through asphalt INSTALLATION INSTALLATION INSTALLATION Brown to gray SAND, some weathered concrete cobbles, trace wood, silt and rounded white gravel, moist, Fill. -2.5 -2.5 2.0 Same, except gray -2.9 -2.9 -3.0 Gray CLAY, some silt and line sand, moist -2.9 -3.5 3.0 Gray mottled CLAY, some silt, dry, NATIVE -3.5 -3.5 4.0 NO OF HOLE @ 35 FT. BCS -3.5 ft. BCS -3.5 5.0 NO TES I. 1.50 is somple collected for chemical onalysis from 0.5 to 3.5 ft. BCS. -3.5 -3.5 5.0 Somele backfilled to surface with cernent-bencibile gravit. -3.5 -3.5 6.0 3. Duplicate sail sample collected for chemical onalysis os NCC-43. -3.5 6.0 3.0 -3.0 -3.0 7.0 -10.0 -10.0 -3.0 9.0 -10.0 -10.0 -10.0 11.0 -13.0 -13.0	LOCAT	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
Auger through asphalt Brown to gray SAND, some weathered concrete cobbles, trace wood, silt and rounded white gravel, moist, Fill. 2.0 Some, except gray Gray CLAY, some silt and fine sand, moist Gray mottled CLAY, some silt, dry, NATIVE END Of HOLE @ 3.5 FT, BCS 2. Borehale bookflied to sufficient 2.0 Some metabeneties graving 3.0 Croy mottled CLAY, some silt, dry, NATIVE END Of HOLE @ 3.5 FT, BCS 2. Borehale bookflied to sufficient 3. Duplicate soil sample submitted for chemical analysis as NCC-43. 5.0 5.0 1.0 1.0 1.0 1.0	DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMF
Auger through asphalt 9 1.0 Brown to gray SAND, some weathered concrete cobbies, trace wood, silt and rounded while growel, moist Fill. -2.5 2.0 Same, except gray -2.9 3.0 Gray CLAY, some silt and fine sand, moist Gray motited CLAY, some silt, dry, NATIVE -2.9 4.0 NoTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. -3.5 4.0 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. -3.5 5.0 Schole backfilled to surface with cerement-bentonile grout. -3.5 5.0 3.0 Upicate soil sample submitted for chemical analysis as NCC-43. -3.5 6.0 -7.0 10.0 -1.0 11.0 -1.0		· · · · · · · · · · · · · · · · · · ·			
Brown to gray SAND, some weathered concrete cobbles, track, silt and rounded while gravel, moist, FIL. -2.5 2.0 Same, except gray 3.0 Gray CLAY, some silt and fine sand, moist analysis from 0.5 to 3.5 ft. BCS. -2.9 4.0 END OF HOLE © 3.5 ft. BCS. -3.5 NOTES: 1. 501 sample collected for chemical analysis from 0.5 to 3.5 ft. BCS. -3.5 5.0 Cray motiled to surface with certain the point of the collected for chemical analysis os NCC-43. 5.0 3.0 Uplicate soil sample submitted for chemical analysis os NCC-43. 6.0 -7.0 7.0 -7.0 10.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0 11.0 -7.0		Auger through asphalt			<u>R</u>
2.0 Same, except gray Gray CLAY, some silt and fine sand, moist -2.5 3.0 Gray mattled CLAY, some silt, dry, NATIVE 4.0 END OF HOLE @ 3.5 FT. BCS 7.0 -3.5 5.0 Semble backfilled to surple submitted for chemical analysis from 0.5 to 3.5 ft. BCS. 2.0 Derohe backfilled to surple submitted for chemical analysis as NCC-43. 5.0 3.0 Uplicate sails asomple submitted for chemical analysis as NCC-43. 6.0 -7.0 7.0 -7.0 9.0 -10.0 11.0 -11.0 12.0 -13.0	- 1.0	Brown to gray SAND, some weathered concrete cobbles, trace wood, silt and rounded white gravel, moist, FILL		BOREHOLE	155
Groy CLAY, some silt and fine sand, moist -2.5 3.0 Gray mottled CLAY, some silt, dry, NATIVE -2.9 -2.9 4.0 END OF HOLE @ 3.5 FT. BGS NOTES 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. -3.5 5.0 Sole backfilled to surface with chemical analysis for NOTES to 3.0 uplicate soil sample submitted for chemical analysis as NCC-43. 5.0 3. Duplicate soil sample submitted for chemical analysis as NCC-43. 6.0 -7.0 8.0 -9.0 10.0 -10.0 11.0 -13.0	- 2.0	Same, except gray		BENTONITE GROUT	
 3.0 Gray mottled CLAY, some silt, dry, NATIVE 4.0 END OF HOLE @ 3.5 FT. BGS onalysis from 0.5 to 3.5 ft. BGS. 2. Borehole bockfilled to surface with cementonic graut. 3. Duplicate soil sample submitted for chemical analysis as NCC-43. 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 		Gray CLAY, some silt and fine sand, moist	-2.5		200
END OF HOLE @ 3.5 FT. BCS -3.5 4.0 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout. 5.0 2. Borehole backfilled to surface with cement-bentonite grout. 3. Duplicate soil sample submitted for chemical analysis as NCC-43. 6.0 3. Duplicate soil sample submitted for chemical analysis as NCC-43. 7.0 8.0 9.0 11.0 13.0	- 3.0	Gray mottled CLAY, some silt, dry, NATIVE	-2.9		
5.0 3. Duplicate soil same growmitted for chemical analysis as NCC-43. 6.0 7.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 13.0	- 4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with	-3.5		
 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 	- 5.0	 Duplicate soil sample submitted for chemical analysis as NCC-43. 			
 7.0 8.0 9.0 10.0 11.0 12.0 13.0 	- 6.0 ⁻				
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		- CHEMICAL ANALYSIS - WATER		STATIC WATER LEVEL	▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: 10500 CAYUGA DRIVE

PROJECT NO .: 3307

CLIENT: OCCIDENTAL CHEMICAL CORPORATION

LOCATION: 10500 CAYUGA DRIVE

HOLE DESIGNATION: NCC-44 DATE COMPLETED: JUNE 1, 1990 DRILLING METHOD: 3"Ø SPLIT SPOON CRA SUPERVISOR: K LYNCH

EPIH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	<u>S</u> A	MPL	E
L BGS		ft AMSL	INSTALLATION		S T	
				E B E Q	Ē	
1	Black SILT, some fine to coarse sand and vegetation, moist, TOPSOIL	-0.2			$\overline{\Lambda}$	
1.0	Gray fine to coarse SAND, some fine to coarse angular gravel, dry to moist, FILL	-0.8	BOREHOLE	1SS	X	2
	Red-brown CLAY, some fine to coarse angular gravel, trace sand, dense, hard, moist		BACKFILL		\vdash	
2.0	trace wood	,			$\mathbb{N}/$	
		_20		255	IXI	3
.0	Gray mottled CLAY, some silt, soft, plastic, moist, NATIVE	_ 7 5			V	
.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical					
	2. Borehole backfilled to surface with gravel and topsoil		,			
.0	3. Borehole located in grass off west edge of pavement					
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(L-28)

STRATIGRAPHIC AND INSTRUMENTATION LOG (L-29) (OVERBURDEN) PROJECT NAME: 10500 CAYUGA DRIVE HOLE DESIGNATION: NCC-45 PROJECT NO .: 3307 DATE COMPLETED: JUNE 1, 1990 OCCIDENTAL CHEMICAL CORPORATION CLIENT: DRILLING METHOD: 3" SPLIT SPOON LOCATION: 10500 CAYUGA DRIVE CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE ft BGS INSTALLATION ft AMSL NU Ň Ň A T E L U Auger through asphalt Gray fine to coarse GRAVEL, some coarse sand dry, FILL 3.0 0 BOREHOLE 1.0 **1**SS 24 CEMENT/ BENTONITE GROUT -1.7 Dark gray SILT, trace gravel and fine to 2.0 -2.0 <u>coarse sand. (black tar on gravel), moist</u> Gray fine angular GRAVEL, trace fine to coarse sand, moist 255 27 Same, with gray, some red-brown clay, fine to coarse sand and silt 3.0 -3.5 Gray mottled CLAY, some silt, soft, plastic, moist, NATIVE 4.0 355 31 Same, except red-brown, fine to coarse sand, dense, very slightly plastic -4.5 END OF HOLE @ 4.5 FT. BGS 5.0 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.3 ft. BGS. 2. Stratigraphy from 3.0 to 4.5 ft. from borehole 1 ft. east of original borehole. 6.0 3. Borehole backfilled to surface with cement-bentonite grout and blacktop patch. - 7.0 8.0 9.0 - 10.0 - 11.0 - 12.0 - 13.0 MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE NOTES: CHEMICAL ANALYSIS WATER FOUND 🔽 STATIC WATER LEVEL 🕎 🗉

	(OVERBU	RDEN)		
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-46
PROJEC	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1990
CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"¢ SPLIT SPOO
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS			SAMPLE
11 863	· · · · · · · · · · · · · · · · · · ·	IT AMSL		
1.0	Auger through asphalt Gray fine to coarse SAND, some fine to coarse angular gravel, trace black tar, dry to moist, FILL		BOREHOLE	R
2.0	Red-brown mottled CLAY, some silt, fine to coarse sand, strongly laminated, moist, NATIVE	-1.2		
3.0	Black fine to coarse SAND, some silt, moist, slight chemical odor	-2.8 -3.1		255 3
4.0	END OF HOLE © 3.8 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.2 to 3.8 ft. BGS.	-3.8		
5.0	 Borehole backfilled to surface with cement—bentonite grout. Interval from 0.2 to 0.8 ft. BGS sampled by hand. 			
6.0	· · · ·			
7.0				
8.0				
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10.0				
11.0				
12.0				
13.0				
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	TABLE

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	ITATION LOG	(L	31)
PROJEC	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-47	
PROJEC	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1990	
CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"ø SPLIT SPC	DON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE	
ft BGS		ft AMSL	INSTALLATION	N S U T M A B T E	SN V L
	Black SILT, some fine to coarse sand, fine angular gravel, vegetation, moist to wet, TOPSOU	-0.6		R	<u> </u>
- 1.0	Red-brown CLAY, dry, FILL Same, except black, some fine to coarse sand, trace rounded white pebbles, some cinders and wood dry to moist chemical odor		MATIVE BACKFILL		18
- 2.0	Same, except moist, chemical odor Same, except gray, some fine to coarse black sand layers, trace metal and glass slag, no pebbles, cinders ar wood, moist to wet			255	21
- 3.0	Gray mottled CLAY, some silt, dry to moist, NATIVE	-2.9			•
- 4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.2 to 3.5 ft. BGS. 2. Borehole backfilled to surface with crawl and topacil	-3.5			
- 5.0	3. Borehole located in grass off west edge of pavement.				
- 6.0					
- 7.0					
8.0					
- 9.0					
- 10.0		-			
- 11.0					
- 12.0					
• 13.0					
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG CHEMICAL ANALYSIS WATER	E; REFER	TO CURRENT ELEVATION STATIC WATER LEVE	TABLE	

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	(OVERBU	STRUMEN RDEN)	NTATION LOG	(L-32)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-48
PROJE	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1990
CLIENT	COCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"¢ SPLIT SPOON
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATICRAPHIC DESCRIPTION & REMARKS		MONITOR	
ft BGS		ft AMSL	INSTALLATION	
				M A A B T L E E U
	Black SILT, some fine to coarse sand, trace fine rounded white gravel, moist, TOPSOIL	-0.3	- 3.0**	
- 1.0	Dark gray SAND, some clay, fine round white gravel, moist, FILL		BOREHOLE	1SS 70
	Same, except black, some white pasty		NATIVE	
- 2.0	odor			255 112/6
	Sampler refusal, no recovery, wood in shoe of			
- 3.0	split spoon sampler - augered to 3.0 ft. BGS Black SAND, some clay, fine round white			
	gravel, moist to wet			
- 4.0		-4.0		355 18
	fine to coarse sand, trace subrounded gravel,			
• 5.0	Same, except red-brown, no sand or gravel,	-5.0		
	END OF HOLE @ 5 FT. BGS			
· 6.0.	NOTES: 1. Soil sample collected for chemical analysis from 0.2 to 4.8 ft. BGS.			
	 Borehole backfilled to surface with gravel and top soil. 			
· 7.0	 Borehole located in grass off west edge of pavement. 			
8.0				
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9.0				
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12.0			. 1	
13.0				
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS - WATER F		STATIC WATER LEVEL	

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STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: 10500 CAYUGA DRIVE

PROJECT NO .: 3307

CLIENT: OCCIDENTAL CHEMICAL CORPORATION

LOCATION: 10500 CAYUGA DRIVE

HOLE DESIGNATION: NCC-49 DATE COMPLETED: JUNE 1, 1990 DRILLING METHOD: 3"Ø SPLIT SPOON

Auger through asphalt Gray fine to coarse angular GRAVEL, some fine to coarse sand, concrete pieces, trace fine rounded while gravel, moist to wet, FILL Red-brown CLAY, some fine to coarse sub- rounded gravel, moist to wet Same, with trace brick Gray and brown mottled CLAY, some silt, hard, dense, dry to moist, NATIVE 0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil somple collected for chemical 2. Borehole backfilled to surface with cement-bentonite graut. 0 0 0 0 0 0 0 0 0 0 0 0 0	PTH BCS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE	Ę
Auger through asphalt Gray fine to coarse angular GRAVEL, some fine to coarse sond, correte piecas, trace fine rounded white gravel, moist to wet, FILL -20 Red-brown CLAY, some fine to coarse sub- rounded gravel, moist to wet Same, with trace brick -20 Gray and brown mottled CLAY, some silt, hard, dense, dry to moist. NATIVE -30 END OF HOLE @ 4.5 FT. BGS -4.5 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite graut. -4.5			IT AMSL	INSTALLATION	N S U T B T E E	
0 Red-brown CLAY, some fine to coarse sub- rounded grovel, moist to wet Same, with trace brick -2.0 0 Gray and brown mottled CLAY, some silt, hard, dense, dry to moist, NATIVE -3.0 0 END OF HOLE • 4.5 FT. BGS -4.5 NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout. -4.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	Auger through asphalt Gray fine to coarse angular GRAVEL, some fine to coarse sand, concrete pieces, trace fine rounded white gravel, moist to wet, FILL				
C Gray and brown mottled CLAY, some silt, hard, dense, dry to moist, NATIVE C HOLE • 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout.	0	Red-brown CLAY, some fine to coarse sub- rounded gravel, moist to wet Same, with trace brick	-2.0			
 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout. 	c l	Gray and brown mottled CLAY, some silt, hard, dense, dry to moist, NATIVE	-3.0		255	
END OF HOLE • 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout. 0. 0. 0. 0. 0. 0. 0. 0.	ַכ					
NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout.	· · [END OF HOLE @ 4.5 FT. BGS	-4.5	State Barris River		
)	NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout.		· · · · · · · · · · · · · · · · · · ·		
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(L-33)

PROJE	CT NAME: 10500 CAYLIGA DRIVE		HOLE DESIGNATION	• NCC- 50	
PROJE	CT NO.: 3307		DATE CONDICTED.		1000
			DATE COMPLETED.	JUNE I.	1990
			CRA SUPERMOOD	J Ø SPLI	1 SPU
				K. LINC	1
DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft AMSL	MONITOR INSTALLATION	SAN	APLE S
				U 98 8	T A T E
1.0	Auger through asphalt Brown fine to coarse SAND, some fine to coarse angular gravel, trace clay, slag, coal and ash, moist, FILL		BOREHOLE	125	V.
2.0			GROUT CROUT	133	
3.0	Red-brown CLAY, some silt, hard, dense, dry to moist, NATIVE Gray coarse SAND, trace shells, wet	-3.0 -3.5 -3.8		255	XI :
4.0	Gray CLAY, trace silt, soft, plastic, dry to moist	-5.0			\square
5.0	END OF HOLE @ 4.8 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 4.0 ft. BGS.	-4.8	Ease holdern op		
6.0	 Borehole backfilled to surface with cement-bentonite grout. 				
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8.0			· ·		
9.0					
10.0					
11.0	· · ·				•
12.0					
13.0					

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	ITATION LOG		(L-35)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-51	
PROJE	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1	990
CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"ø SPLIT	SPOO
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAM	PLE
ft BGS		ft AMSL	INSTALLATION		S N T V
				E R	
	Auger through asphalt Brown fine to coarse SAND, some fine to		3.0"		
1.0	coarse angular gravel, dry to moist, FILL		BOREHOLE	I N	Λ
	Red-brown CLAX some sitt trace wood and	· -1.5	CEMENT/ BENTONITE	(ISS)	39
2.0	glass slag, moist		GROUT		
					╡
· 3.0	Gray mattled CLAY, some fine to coarse sand	-3.1		255	/ 37
	and silt, moist to wet, NATIVE				N.
4.0	END OF HOLE @ 4 FT. BGS	-4.0			-1
	NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS.				
· 5.0	2. Duplicate soil sample submitted for chemical analysis as NCC-56 at time 17:45 from 0.5 to 4.0 ft BCS		. •		
6.0	3. Borehole backfilled to surface with cement-bentonite grout.				
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	TABLE	
	CHEMICAL ANALYSIS WATER	FOUND 🔽	STATIC WATER LEVEL		•

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	OVERBU	RDEN)	NTATION LUG	(L-36
PROJE	CT NAME: 10500 CAYUGA DRIVE	•	HOLE DESIGNATION	NCC-52
PROJE	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1990
CLIENT	: OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"¢ SPLIT SPOO
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft_BGS		ft AMSL	INSTALLATION	N 5 U T M A B T
1.0	Auger through asphalt Gray fine to coarse SAND, some fine to coarse angular gravel, dry, FILL		BOREHOLE	
2:0	Dark gray CLAY, some fine to coarse sand, moist, slight chemical odor	-1.5	CEMENT/ BENTONITE CROUT	
3.0	Brown CLAY, some fine to coarse sand, moist, NATIVE	-2.4		
4.0	END OF HOLE @ 3.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with	-3.5		
5.0	cement-beatonite grout.			
6.0	· · · · · · · · · · · · · · · · · · ·			
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	STRATIGRAPHIC AND IN (OVERBU	STRU <u>MEI</u> RDEN)	NTATION LOG	(L-J
PROJE	CT NAME: 10500 CAYUGA DRIVE	-	HOLE DESIGNATION	NCC-53
PROJE	CT NO.: 3307		DATE COMPLETED:	JUNE 1. 1990
CLIENT	T: OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3 Ø SPLIT SPO
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS		MONITOR	SAMDI F
ft BGS		ft AMSL	INSTALLATION	
				M A B T E E R
	Black SILT, some fine to coarse sand and fine angular gravel, moist, TOPSOIL			
1.0	Red-brown and gray CLAY, some silt, trace fine angular gravel, moist, FILL	-0.9	NATIVE	
2.0	Same, with trace red brick		BACKFILL	
,		-2.8		
3.0	plastic, moist, NATIVE			
4.0	Red-brown mottled CLAY, some silt, hard, dense, moist END OF HOLE @ 4 FT. BGS	-4:0		
5.0	NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with gravel and topsoil. 3. Borehole is located in grass off			
6.0 _.	east edge of pavement.			
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12.0				
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PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	NCC-54
PROJE	CT NO.: 3307		DATE COMPLETED:	JUNE 1. 1990
CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"ø SPLIT SPO
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERMSOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft AMSL	INSTALLATION	N S U T M A B E
	Auger through asphalt Brown SILT, some fine to coarse sand, trace			R
- 1.0	clay and fine to coarse rounded gravel, dry to moist, FILL		BOREHOLE	
- 2.0	Black CLAY, some fine to coarse sand, fine rounded white gravel, trace wood, moist, chemical odor	-1.8		
- 3.0				\square
				255
- 4.0	Gray CLAY, some fine to coarse sand, silt, moist, NATIVE Same, except red-brown, some silt, no sand,	- <i>-3.9</i> - <i>-4.5</i>		
- 5.0	dense, hard, dry END OF HOLE @ 4.5 FT. BGS			
- 6.0	analysis from 0.5 to 4.5 ft. BGS. 2. Borehole backfilled to surface with cement-bentonite grout.			
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- 9.0				
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- 13.0	· · · · · · · · · · · · · · · · · · ·		•	
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHAN	GE: REFER	TO CURRENT ELEVATION	TABLE

	STRATIGRAPHIC AND IN (OVERBUI	STRUMEI RDEN)	NTATION LOG	(L-39)
PROJEC	T NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: NCC-55
PROJEC	CT NO.: 3307		DATE COMPLETED:	JUNE 1, 1990
CLIENT:	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	3"Ø SPLIT SPOO
	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
EPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
BGS		ft AMSL	INSTALLATION	
	·	•		
	Black SILT, some fine to coarse sand, some vegetation, fine angular gravel, trace fine white round gravel, moist, TOPSOIL		BOREHOLE	
1.0	Red-brown CLAY, some silt and fine sand, some coarse angular gravel, moist, FILL Same, except red-brown to brown	-0.9		
2.0	· · · · · · · · · · · · · · · · · · ·	2 2		
·	Gray fine to coarse SAND, some silt and clay, moist, NATIVE	-2.2		255 43
3.0	Red-brown CLAY, some silt, trace fine sub-	-3.1 -3.5		
i.o	END OF HOLE @ 3.5 FT. BGS	·		
50	NOTES: 1. Soil sample collected for chemical analysis from 0.5 to 3.5 ft. BGS. 2. Borehole backfilled to surface with around cost to surface with			
	3. Borehole is located in grass off east edge of pavement.		. ,	
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NOTE	S. MEASURING POINT ELEVATIONS MAY CHANG		TO CURRENT ELEVATION	

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	TATION LOG		(L-40)
PROJEC	T NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	NCC-58	
PROJEC	CT NO.: 3307		DATE COMPLETED:	JULY 20.	1990
CLIENT:	OXYCHEM		DRILLING METHOD:	3" SPLIT	SPOON
LOCATI	ON: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAME	PLE
ft BGS		ft AMSL	INSTALLATION		
•	Auger through asphalt			R	£
- 1.0	Brown SAND, some fine white subround gravel, trace angular gravel, dry to moist, FILL				7
- 2.0	Red-brown, CLAY, some silt, stiff, dry to moist, FILL Gray SILT, some clay, soft, moist	-1.7 -2.0	BOREHOLE		17
- 3.0			GROUT		
- 4.0				255	12
- 5.0	Red-brown CLAY, some silt, trace subround medium gravel, moist, NATIVE END OF HOLE @ 5.0 FT. BGS	-5.0			4
- 6.0	1. Soil sample collected for chemical analysis from 0.5 to 4.6 ft. BGS 2. Borehole backfilled to surface with cement/bentonite grout.				
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- 8.0					
- 9.0	· · ·		· .		
- 10.0					
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- 13.0					
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	GE; REFER 1	TO CURRENT ELEVATION		

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PROJE	CT NAME: 10500 CAYUGA DRIVE	-	HOLE DESIGNATION	1. NCC-50
PROJE	CT NO.: 3307			
CLIENT			DRILLING METHOD:	3" SPLIT (
			CRA SUPERVISOR	
ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft AMSL	MONITOR	SAMP
			· · ·	
	AUGER through asphalt	<u> </u>	82	
	Brown SAND, some fine angular gravel, trace			
1.0	······ ······· ······ ······ ·········			
	Gray CLAY trace silt fine angular gravel	-1.5	3.0	(ISS)
2.0	moist			
			BENTONITE	
3.0				
-	Red-brown SILT, some clay, some fine gravel, maist NATIVE	3.3		255
4.0		-42		
· .	Red-brown CLAY, some silt, moist	-4.5		
5.0	NOTES:			
	analysis from 0.5 to 4.5 ft. BGS 2. Duplicate soil sample collected for			
6.0	chemical analysis as NCC-60. 3. Borehole backfilled to surface with			
	cement/bentonite grout.			. '
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NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	GE; REFER TO	O CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS \bigcirc WATER F		STATIC WATER LEVEL	.

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	STRATIGRAPHIC AND IN (OVERBU	STRUMEN' RDEN)	TATION LOG	· .	(L-6
PROJE	CT NAME: 104th ST. DATA COLLECTION PROGRAM		HOLE DESIGNATION	1331-1	
PROJE	CT NO.: 3307	·	DATE COMPLETED:	JANUARY	9. 1
CLIEN	CCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	2"ø SPLIT	SPC
LOCAT	ION: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH	
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMP	LE
IL BGS		ft AMSL	INSTALLATION		
	· · · ·			B T E E	
	Remove sod and topsoil with spade. Sampled by hand		SX.	THS	1
-10	Gray and brown SILT, some sand, little clay, moist, FILL				7
					/
- 2.0	Black CINDERS, some medium sand, trace slag	-1.8	BOREHOLE		
	and coal, moist, no odor		TOPSOIL		V
- 3.0					1
				255	1
- 4.0					
:	Gray and red-brown CLAY, some fine sand	-4.4 -4.5			Y
- 5.0	And silt, dry to moist, NATIVE				
	NOTES: 1. Soil samples collected for chemical				
- 6.0	analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS.		•		
	2. At completion the borehole was backfilled using clean commercial				
- 7.0	over the borehole.				
- 8.0					
			•		
9.0	· ·				
- 10.0					
• 11.0			•		
· 12.U	· · · ·				
17.0					
13.0	· · ·		· .		•
	· · · ·				
NOTE	S: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER TO	CURRENT ELEVATION	TABLE	
	CHEMICAL ANALYSIS - WATER FO	DUND 🔽	STATIC WATER LEVEL	X	
· · ·		· ·			

•	STRAT	IGRAPHIC AND IN (OVERBU	ISTRUMEI IRDEN)	NTATION LOG	(L-54
PROJE	CT NAME: 104th ST. DATA	COLLECTION PROGRAM		HOLE DESIGNATION	: 1331-2
PROJEC	CT NO.: 3307			DATE COMPLETED:	JANUARY 9, 19
CLIENT	OCCIDENTAL CHEI	AICAL CORPORATION	•	DRILLING METHOD:	2"ø SPLIT SPO
LOCAŤI	ON: 1331 104th ST.			CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTIC	N & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS			ft AMSL	INSTALLATION	
			-		H A B T E E
10	Remove sod and topsoil by hand Brown fine SAND, some s FILL(TOPSOIL)	with spade. Sampled ilt, dry to moist,			1HS
1.0	Red-brown CLAY, some s dry to moist	ilt, trace gravel,	-1.1		
2.0	Black coarse SAND, some	silt, dry, no odor	-7.8		
7.0	Red-brown CLAY, some s dry to moist Brown and red-brown SI	ilt, trace gravel,	-2.5		
5.0	moist				255
4.0		•			
5.0	END OF HOLE @ 4.5 FT NOTES: 1. Borehole was not a	. BGS dvanced to native	-4.5		
6.0 7.0	clay. 2. Soil samples collect analysis from 0.0 t 0.5 to 4.5 ft. BGS 3. At completion the backfilled using cle topsoil and the so over the borehole.	ed for chemical to 0.5 ft. and porehole was an commercial t was replaced			
	t			-	
8.0	•	:		· .	
9.0					
		•		• •	
10.0		· · ·		· · · · ·	
	_			· · · · ·	
11.0					
12.0				· · ·	
				· .	
13.0	·				
NOTE	S: MEASURING POINT EL	EVATIONS MAY CHANC	E; REFER	TO CURRENT ELEVATION	TABLE
				STATIC WATER LEVEL	

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•	STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	ITATION LOG	(
PROJE	CT NAME: 104th ST. DATA COLLECTION PROGRAM		HOLE DESIGNATION	: 1331–3
PROJE	CT NO.: 3307		DATE COMPLETED:	JANUARY 9
CLIENT	: OCCIDENTAL CHEMICAL CORPORATION	· · ·	DRILLING METHOD:	2"ø SPLIT
LOCAT	ON: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPL
ft-BGS		ft AMSL	INSTALLATION	
			<i></i>	
	Remove sod and topsoil with spade. Sample by hand			
- 1.0	Red and brown CLAY, some silt and fine sand, moist, FILL			
- 1.0	· · · · ·			V
- 2.0		-1.9	BOREHOLE	
-	Brown SAND some silt moist	-2.4		
- 3.0				
		-36		(255)
- 4.0	Red-brown SILT, some fine to medium sand, . dry to moist, NATIVE (TILL)	0.0		
	END OF HOLE @ 4.5 FT. BGS	-4.5		
- 5.0	NOTES: 1. Soil samples collected for chemical			
	analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS.	,		
- 6.0	2. Duplicate soil sample collected for chemical analysis as 1331–14 from 0.5 to 4.5 ft BCS			
<u>.</u>	3. At completion the borehole was backfilled using clean commercial			
- 7.0	topsoil and the sod was replaced over the borehole.		· .	
80			•	
0.0				
9.0				
		· · ·		
10.0			· ·	
			•	
- 11.0			н. Н	
12.0		•		
			•	
• 13.0				
	S: MEASURING POINT ELEVATIONS MAY CHANC	E; REFER	TO CURRENT ELEVATION	TABLE
			STATIC WATER LEVEL	•

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PROJE	CT NAME: 104th ST. DATA COLLECTION PROGRAM		•	
PROF			HOLE DESIGNATION:	: 1331–4
ITROOL	CT NO.: 3307		DATE COMPLETED:	JANUARY 9, 19
CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	2"ø SPLIT SPOC
LOCAT	ION: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	
ft BGS		ft AMSL	INSTALLATION	
- 1.0	Remove sod and topsoil with spade. Sampled by hand Brown fine to medium SAND, some vegetation, little silt, trace coal, moist, TOPSOIL	-0.8		1HS
-20	and gravel, dry to moist, FILL		2 BOREHOLE	
	- - -		TOP SOIL	
- 3.0			12 Jac	255
4.0	Red-brown CLAY, some silt, trace fine subround gravel, dry, NATIVE (TILL) Brown medium SAND, dry to moist	-3.8 -4.2 -4.5		\square
5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil samples collected for chemical			
6.0	0.5 to 4.5 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced			
7.0	over the borehole.			
8.0				
9.0			• • • •	
•				
10.0				
11.0				
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12.0				
	•			
13.0				

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PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM HOLE DESIGNATION: 1331-6 PROJECT NO:: 3307 DATE COMPLETED: JANUARY 10, CUENT:: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2'® SPLIT SP LOCATION: 1331 104th ST. CRA SUPERMISOR: K. LYNCH DEPTH STRATICRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR PREMOVE sod and topsoil with spade. Sample by hand, NO. trace sit and vegetation, dry -0.6 INSTALLATION 1.0 Trace fine gravel, dry -0.6 INSTALLATION 2.0 Remove sod and topsoil with spade. Sample by hand, NO. trace sit and vegetation, dry -0.6 1.0 Trace fine gravel, dry -0.6 1.0 Trace fine gravel, dry -3.5 2.0 Red-brown SLT, some clay and fine sand, dry -3.5 3.0 Topsoil somples collected for chemical 1. Soil somples for 0.0 to 10.5 fi. and 2. Soil somples collected for chemical 1. Soil somples c		STRATIGRAPHIC AND IN (OVERBU	STRUMEN RDEN)	ITATION LOG	(L-58)
PROJECT NO: 3307 DATE COMPLETED: JANUARY 10, CLIENT: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2'# SPLIT SP LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE It MOS Provide Status It AMSL INSTALLATION It SAMPLE Remove sod and topsoil with spade. Sample MONITOR SAMPLE It STRATIGRAPHIC DESCRIPTION & REMARKS It SAMSL Nomist, FILL (TOPSOL) Red-brown GLAY and SULT, some fine sond, trace fine gravel, dry -2.6 It S It S -1.0 Red-brown SILT, some clay and fine sand, dry -3.5 -3.6 It S It S -3.0 Red-brown fine to medium SAND, some silt, to moist NATIVE (TILL) -3.5 -3.5 It S It S -3.0 It S Status collected for chemical to complete to the borehole was replaced over the borehole. -3.5 -10.0 -11.0 -11.0 -11.0 -11.0 -11.0 <t< th=""><th>PROJEC</th><th>CT NAME: 104th ST. DATA COLLECTION PROGRAM</th><th></th><th>HOLE DESIGNATION</th><th>: 1331-6</th></t<>	PROJEC	CT NAME: 104th ST. DATA COLLECTION PROGRAM		HOLE DESIGNATION	: 1331-6
CLIENT: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2'# SPLIT SP LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH STRATGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE LICATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH INSTALLATION INSTALLATION DEPTH STRATGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE LICATION: Transmitter BURKING K. LYNCH INSTALLATION INSTALLATION INSTALLATION LICATION: Transmitter BURKING K. LYNCH INSTALLATION INSTALLATION INSTALLATION LICATION: Transmitter BURKING K. LYNCH INSTALLATION INSTALLATION INSTALLATION LICATION: STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE LICATION: Transmitter INSTALLATION INSTALLATION INSTALLATION LICATION: Transmitter INSTALLATION INSTALLATION INSTALLATION LICATION: STRATICATION INSTALLATION INSTALLATION INSTALLATION LICATION: STRATIGRAPHIC DESCRIPTION: STRATIGN INSTALLATION INSTALLATION 10.0 Transmitter INSTALLATION INSTALLATION INSTALLATION	PROJEC	CT NO.: 3307		DATE COMPLETED:	JANUARY 10, 19
LOCATION: 131 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE 1 BOS Remove sod and topsoil with spade. Sample by mand AND, trace sit and vegetation, dry to moist, NATIVE (TILL) 20 3.0 Red-brown SLT, some clay and fine sand, dry to moist, NATIVE (TILL) Dark brown fine to medium SAND, some silt, Soil somples collected for chemical and by since of the borehole was backfilled using clean commercial topsoil on the sode was replaced 8.0 1.0 	CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	2"ø SPLIT SPOO
DEPTH STRATICRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE (1 BOS) Remove sod and topsoil with spade. Sample by hand. INSTALLATION 1 1 Brown SAND, trace silt and vegetation, dry trace fine gravel, dry -0.6 -0.6 115 1.0 Red-brown CLAY and SILT, some fine sand, trace fine gravel, dry -0.6 115 2.0 Red-brown SILT, some clay and fine sand, dry -3.5 155 3.0 Red-brown fine to medium SAND, some silt, noist, NLTVE (TILL) -3.5 5.0 Dark brown fine to medium SAND, some silt, noist and using class commercial topsoil and the sod was replaced over the borehole, so service and service and topsoil and the sod was replaced over the borehole, so service and servic	LOCATI	ON: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH
rt BCS rt AMSL INSTALLATION Remove sod and topsoil with spade. Sample by hand Brown SAND, trace silt and vegetation, dry Red-brown GLAY and SiLT, some fine sand, trace fine gravel, dry -0.6 2.0 Red-brown GLAY and SiLT, some fine sand, trace fine gravel, dry -0.6 3.0	DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
Remove sod and topsoil with spade. Sample by hand Brown SAND, trace sit and vegetation, dry Bred-brown CLAY and SILT, some fine sand, trace fine gravel, dry -0.6 1.0 Red-brown CLAY and SILT, some fine sand, trace fine gravel, dry -0.6 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 3.0 -3.5 -3.5 5.0 END OF HOLE @ 4.5 FT. BCS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 th 3.5 ft. BCS 2. About Publish fine tearbodie was a boot Publish and the soid was replaced over the borehole; -4.5 8.0 -3.0 -3.5 10.0 -3.6 -3.5	ft BGS		ft AMSL	INSTALLATION	N S N
Remove sod and topsoil with spade. Sample Brown SAND, trace sit and vegetation, dry Brown SAND, trace sit and vegetation, dry Red-brown CLAY and SILT, some fine sond, trace fine gravel, dry 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3					
 a brain SAND, trace silt and vegetation, dry to moist, Fill (10PSOL) Red-brown CLAY and SilT, some fine sand, trace fine gravel, dry a moist, NATIVE (TILL) Bark brown fine to medium SAND, some silt, to moist, NATIVE (TILL) Dark brown fine to medium SAND, some silt, endities and to be official using the sod was replaced over the borehole, and the sod was replaced over the		Remove sod and topsoil with spade. Sample		34	
 1.0 IO Intervent Intervent of the solution of the sol		Brown SAND, trace silt and vegetation, dry	-0.6		
 1155 2.0 3.0 Red-brown SiLT, some clay and fine sand, dry to moist, NATIVE (TILL) Dark brown fine to medium SAND, some silt, END OF HOLE @ 4.5 FT. BCS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BCS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0 13.0 	-1.0	Red-brown CLAY and SILT, some fine sand,			
 2.0 3.0 3.0 Red-brown SiLT, some clay and fine sand, dry to moist, NATIVE (TILL) Dark brown fine to medium SAND, some silt, END OF HOLE @ 4.5 FT. BCS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BCS. 2. At completion the borehole was backfilled using clean commercial topsoil and the soat was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0 13.0 		trace line gravel, ary		BOREHOLE	
3.0 Red-brown SILT, some clay and fine sand, dry to moist, NATIVE (TILL) -3.5 4.0 Dark brown fine to medium SAND, some silt, moist -4.4 5.0 END OF HOLE @ 4.5 FT. BGS -4.5 1.0 Soil samples collected for chemical analysis from 0.8 to 5.5 ft. and 0.5 to 4.5 ft. BGS -4.5 2.0 At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. -4.5 9.0 10.0 11.0 11.0 12.0 13.0 13.0	2.0			TOPSOIL	
 3.0 Red-brown SILT, some clay and fine sand, dry to moist, NATIVE (TILL) Dark brown fine to medium SAND, some silt, moist END OF HOLE @ 4.5 FT. BCS NOTES: Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BCS. At completion the borehole was backfilled using clean cammercial topsoil and the sod was replaced over the borehole. 9.0 10.0 11.0 12.0 13.0 		•			
 Red-brown SILT, some clay and fine sand, dry 3.5 to moist. NATIVE (TILL) Dark brown fine to medium SAND, some silt, moist Dor HOLE • 4.5 FT. BCS NOTES: Soil somples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 9.0 10.0 11.0 12.0 	3.0				
Dark brown fine to medium SAND, some silt, moist -4.4 moist -4.5 5.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 8.0 9.0 11.0 12.0	4.0	Red-brown SILT, some clay and fine sand, dry to moist, NATIVE (TILL)	-3.5	ACT 20	(255)
5.0 Image: I	F	Dark brown fine to medium SAND, some silt,	-4.4 -4.5	3	
NOTES: 1. Soil samples collected for chemical onalysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 7.0 topsoil and the sod was replaced 9.0 10.0 11.0 11.0	5.0	END OF HOLE @ 4.5 FT. BGS			
6.0 analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsail and the sod was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0		NOTES: 1. Soil samples collected for chemical		· .	
7.0 topsoil and the sod was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0 13.0	6.0	analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. 2. At completion the borehole was backfilled using clean commercial			
8.0 9.0 10.0 11.0 <	7.0	topsoil and the sod was replaced over the borehole.			
8.0 9.0 10.0 11.0 12.0 13.0				· .	
9.0 10.0 11.0 12.0 13.0	8.0				
9.0 10.0 11.0 12.0 13.0				• •	
10.0 11.0 12.0 13.0	9.0				
10.0 11.0 12.0 13.0					
11.0 12.0 13.0	10.0				
11.0 12.0 13.0					
12.0	11.0			•	
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13.0	12.0				
13.0				•	
	13.0				
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		STRA	TIGRAPHIC	AND IN OVERBU	ISTRUME JRDEN)	NTATION	I LOG		(L-66)
PROJE	CT NAME:	104th ST. DAT	A COLLECTION	PROGRAM		но	LE DESIGNATION	I: 1331–7	
PROJE	CT NO.:	3307				DA	TE COMPLETED:	JANUAR	Y 9, 199
CLIENT	:	OCCIDENTAL CH	EMICAL CORPO	ORATION		DR	ILLING METHOD:	2"ø SPL	IT SPOO
LOCATI	ON:	1331 104th ST.				CR	A SUPERVISOR:	K. LYNC	H.
DEPTH	STRATIC	RAPHIC DESCRIPT		KS	FIEVATION				MBLE
ft BGS					ft AMSL		TALLATION		
			•		-			B. E	
	Remove	sod and topsoi	I with spade.	Sampled				(1HS	
	Red-br	own and gray CL	AY, some fin	e sand and	4	N S	•		\mathbb{H}
- 1.0	siit, mo	IST, FILL							\mathbb{N}/\mathbb{I}
				`			BOREHOLE	ISS	XI
- 2.0							TOPSOIL		[/ \]
			•						$\left[- \right]$
- 3:0	,		· ·						\mathbb{N}/\mathbb{I}
							•	255	IXI
- 4.0			•			No.			/
	END OF	HOLE @ 4.5	FT. BGS		4.5	23			\vdash
- 5.0	I. B	orehole was not	advanced to	native					
	2. 5	oil samples colle	ected for cher	nical		ŗ			
- 6.0	3 4	1.5 to 4.5 ft. BC	SS. Borehole wa	e					
	t t	ockfilled using a	clean commerce	cial ced		_			
7.0	Ċ	over the borehole	e.			-			
						1			
8.0						· .			
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9.0				·			•		
10.0									·
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11.0		•	· .				•		
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12.0						۰.			l de la composition de la comp
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13.0							•		
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PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM HOLE DESIGNATION: 1331-8 PROJECT NO:: 3307 DATE COMPLETED: JANUARY 8, 199 CLIENT: OCODENTAL CHEMICAL CORPORATION DRILLING METHOD: 2*9 SPLIT SPOOL LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR If GS INSTALLATION SAMPLE Provide and and topsoil with spade. Sampled INSTALLATION INSTALLATION DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR Red-brown CLAY, some silt, dry, -0.6 Installation Provide fine to medium SAND, some silt, trace -0.6 Installation 10 Red-brown CLAY, some silt, trace -0.6 110 Red-brown CLAY, some silt, hord, dense, dry, -1.5 3.0 CND OF HOLE Ø 4.5 FT. BGS -1.5 130 CND OF HOLE Ø 4.5 FT. BGS -1.5 14.0 Samples calected for chemical 0.5 to 4.0 ft. BGS -1.5 15.0 Inotesia -1.6 2.1 CND OF HOLE Ø 4.5 FT. BGS -1.5 10.0 CND OF HOLE Ø 4.5 FT. BGS -1.5 11.0 CND OF 1.6 GS -1.5 12.0 CND OF 1.6 GS -1.5 13.0 CND OF 1		STRATIGRAPHIC AND IN (OVERBU	ISTRUMEN'. JRDEN)	FATION LOG	(L-67)
PROJECT NO: 3307 DATE COMPLETED: JANUARY 8, 199 CLIENT: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2°8 SPLIT SPOOL LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS LLEVATION MONITOR SAMPLE Remove sod and topsoil with spade. Sampled by hand. MONITOR SAMPLE 10 Red-brown CLAY, some silt, trace time to medium SAND, some silt, dry. -0.6 -0.6 10 1.0 Red-brown CLAY, some silt, hard, dense, dry. -4.5 -4.5 3.0 Red-brown CLAY, some silt, hard, dense, dry. -4.5 -4.5 3.0 NOTES Somples collacted for chemical topsoil with spece commercial topsoil commercial topsoil commercial topsoil commercial topsoil	PROJE	CT NAME: 104th ST. DATA COLLECTION PROGRAM	·	HOLE DESIGNATION	: 1331-8
CLIENT: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2*9 SPLIT SPOOL LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LINCH DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE It BOS It Adds. INSTALLATION It Adds. INSTALLATION It Adds. Permove sod and topsoil with spade. Sampled by hand. It Adds. Installation It adds. It Adds. It BOS Red-brown fine to medium SAND, some silt, dry, fill (TOPSOIL) -0.6 It BOREHOLE It BOREHOLE 3.0 It BOY Red-brown CLAY, some silt, hard, dense, dry, fill (TOPSOIL) -4.2 -4.5 It BOREHOLE It BOREHOLE 1.0 Red-brown CLAY, some silt, hard, dense, dry, fill (TOPSOIL) -4.5 -4.5 It BOREHOLE It BOREHOLE 3.0 It Soli samples collected for chemical to borehole was replaced for chemical topsoil and the soch was replaced for chemical topsoi	PROJE	CT NO.: 3307		DATE COMPLETED:	JANUARY 8, 199
LOCATION: 1331 1041h ST. DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS LEVATION Remove sod and topsoil with spade. Sampled Brhad fine to medium SAND, some silt, dry, Fill (TOPSOL) Red-brown CLAY, some silt, hard, dense, dry, Wattree Remove medium SAND, dry to moist S.0 Red-brown medium SAND, dry to moist S.0 Red-brown CLAY, some silt, hard, dense, dry, NATIVE Remove medium SAND, dry to moist S.0 END OF HOLE @ 4.5 FT. BOS NOTES: S.0 S.0 S.0 S.0 S.0 S.0 S.0 S.0	CLIENT	OCCIDENTAL CHEMICAL CORPORATION		DRILLING METHOD:	2" SPLIT SPOON
DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE It BGS Remove sod and topsoil with spade. Sampled by hand. INSTALLATION INSTALLATION InstALLATION Brown fine to medium SAND, some silt, dry, Frade Frade -0.6 InstALLATION InstALLATION 10 Vill (10PSOL) Red-brown CLAY, some silt, trace time to medium angular subround gravel, trace -0.6 InstALLATION InstALLATION 2.0 Red-brown CLAY, some silt, hard, dense, dry, vegetation, maist -0.6 InstALLATION InstALLATION 3.0 Red-brown CLAY, some silt, hard, dense, dry, Vegetation, maist -0.6 InstALLATION InstALLATION 3.0 Red-brown CLAY, some silt, hard, dense, dry, Vegetation, maist -4.9 -4.5 3.0 Red-brown CLAY, some silt, hard, dense, dry, Vegetation, maist -4.9 3.0 Silt, bard to bask to bard to bard to bask to bard to bask to bard to bard to bard to bask to bard	LOCATI	ON: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH
Remove and and topsoil with spade. Sampled It AMSL NSTALLATION SAMPLe Remove and and topsoil with spade. Sampled It AMSL It AMSL It AMSL Promotion File to medium SAND, some silt, dry. -0.6 It AMSL It AMSL Red-brown CLAY, some silt, trace fine to medium angular subround gravel, trace -0.6 It AMSL It AMSL 3.0 Red-brown CLAY, some silt, hard, dense, dry. -0.6 It AMSL It AMSL 3.0 Red-brown CLAY, some silt, hard, dense, dry. -4.2 -4.2 4.0 Red-brown CLAY, some silt, hard, dense, dry. -4.5 -4.2 3.0 It Amsteries collected for chemical analysis for 0.0 to 0.5 ft. and 0.5 ft.5			ELEVATION	MONITOR	
Remove sod and topsoil with spade. Sampled by hand. -0.6 Pill (DorSOL) Red-brown CLAY, some silt, trace tine to meregetation, moist -0.6 3.0 -0.6 4.0 Red-brown CLAY, some silt, hard, dense, dry, NATIVE -0.6 5.0 Red-brown CLAY, some silt, hard, dense, dry, NATIVE -4.2 6.0 -4.5 FT. BCS -4.5 7.0 No OF HOLE @ 4.5 FT. BCS -4.5 7.0 Solito AD, the Borehole was backfilled using clean commercial totsofilled using clean commercial totsofilled using clean commercial -4.5 8.0 -0.6 -1.5 9.0 -1.1 11.0 -1.1	ft BGS		ft AMSL	INSTALLATION	
Remove sod and topsoil with spade. Sampled by hand. -2.6 Interpret to medium SAND, some silt, dry, fill (10PS0L) -2.6 Red-brown CLAY, some silt, trace tine to medium angular subround gravel, trace vegetation, moist -2.6 3.0 -2.6 4.0 Red-brown CLAY, some silt, hard, dense, dry, NATVE 5.0 END OF HOLE @ 4.5 FT. BCS 7.0 Soil samples collected for chemical and using clean commercial topsoil and the sod was replaced over the borehole. 7.0 Soil samples collected for chemical topsoil and the sod was replaced over the borehole. 8.0 -4.5 9.0 -4.5					
by hand. Brown fine to medium SAND, some silt, dry, FILL (10PSOL) Red-brown CLAY, some silt, trace fine to medium angular subround gravel, trace vegetation, moist 10. Red-brown CLAY, some silt, hard, dense, dry, NATVE Brown medium SAND, dry to moist 5.0 END OF HOLE @ 4.5 FT. BCS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BCS 2. At completion the borehole was backfilde using clean commercial topsail and the sod was replaced 0.0 over the borehole.		Remove sod and topsoil with spade. Sampled	+	R	
1.0 FILL_(TOPSOIL) medium ongular subround gravel, trace vegetation, moist 10 2.0		by hand Brown fine to medium SAND, some silt, dry,	-0.6		
2.0 2.0	1.0	FILL (TOPSOIL)			
 2.0 3.0 3.0 4.0 Red-brown CLAY, some silt, hord, dense, dry, Altryc Brown medium SAND, dry to moist Brown medium SAND, dry to moist Soll somples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 3.1 Soil sompletion the borehole was backfild using clean commercial topsoil and the sod was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0 		medium angular subround gravel, trace		2.0	1SS X
 3.0 4.0 Red-brown CLAY, some silt, hord, dense, dry, ATIVE Brown medium SAND, dry to moist 5.0 END OF HOLE Ø 4.5 FT. BGS NOTES: Soil sompletion the borehole was backfilde using clean commercial topsoil and the sod was replaced over the borehole. 8.0 9.0 11.0 13.0 	2.0			BOKEHOLE	
3.0 Red-brown CLAY, some silt, hard, dense, dry, NATIVE -4.0 5.0 END OF HOLE @ 4.5 FT. BGS -4.5 8.0 0.5 to 4.0 ft. BGS. -4.5 9.0 0.4 to mole ion commercial topsoil and the sod was replaced over the borehole. -4.5 10.0 11.0 11.0 11.0 11.0 11.0	•		· .	TOPSOIL	
 4.0 Red-brown CLAY, some silt, hard, dense, dry, AITVE Brown medium SAND, dry to moist CND OF HOLE @ 4.5 FT. BGS NOTES: Soil somplex collected for chemical topsoil and the sod was replaced over the borehole. 8.0 9.0 10.0 11.0 12.0 	3.0	·			
 4.0 Red-brown CLAY, some silt, hard, dense, dry, HATIVE Brown medium SAND, dry to moist S.0 END OF HOLE @ 4.5 FT. BGS NOTES: Soii samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 9.0 10.0 13.0 				1. A A A A A A A A A A A A A A A A A A A	255
Native -4.2 Brown medium SAND, dry to moist -4.5 S.0 END OF HOLE 4.5 FT. BGS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 9.0 10.0 11.0 13.0	4.0		-4.0	- 新 - - - - - - - - - - - - -	
Brown medium SAND, dry to moist / END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsiol and the sod was replaced 7.0 9.0 10.0 11.0 12.0		NATIVE	-4.2	E Contraction de la contractio	
NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 8.0 9.0 11.0 12.0	5.0	Brown medium SAND, dry to moist			
analysis from 0.0 to 0.5 ft. and 6.0 0.5 to 4.0 ft. BGS. 2. At completion the borehole was backfilled using clean commercial topsoil and the sad was replaced 7.0 over the borehole. 8.0 9.0 11.0 12.0 13.0		NOTES:		. •	
2. At completion the borehole was backfilled using clean commercial topsoli and the sod was replaced 7.0 aver the borehole. 8.0 9.0 10.0 11.0 12.0 13.0	6.0	analysis from 0.0 to 0.5 ft. and			
Lopsoil and the sod was replaced 7.0 over the borehole. 8.0 9.0 10.0 11.0 12.0 13.0	0.0	2. At completion the borehole was	· · ·		
		topsoil and the sod was replaced			
8.0 9.0 9.0 10.0 11.0 11.0 12.0 13.0	/.0				
9.0 10.0 11.0 12.0 13.0	80				
9.0 10.0 11.0 12.0 13.0	0.0				
10.0 11.0 12.0 13.0					
10.0 11.0 12.0 13.0	9.0				
10.0 11.0 12.0 13.0					
11.0 12.0 13.0	10.0				
11.0 12.0 13.0				· · ·	
12.0	11.0				
12.0					
13.0	12.0				
13.0					
	13.0			· ·	

PROF	T NAME: 104th ST. DATA COLLECTION PROGRAM		HOLE DESIGNATION	1.3.31_0
			DRILLING METHOD	2"A SPLIT SPO
	ON- 131 104b ST	•	CPA SUDERVISOD	
L BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft AMSL	MONITOR INSTALLATION	SAMPLE N S
			· · · ·	
	Remove sod and topsoil with spade. Sampled	·	13	
	by hand Brown and gray fine to medium SAND, some			
1.0	fine white round gravel, dry to moist, no odor FILL	·		
				(ISS)
2.0		-2.0	BOREHOLE	
	fine to medium angular and subround gravel.			
3.0 ·	trace glassy slag and metallic slag, dry			
4 0	· · ·			
1.0	Brown SAND, moist to wet, NATIVE	4.2		
	Same, except wet			355
5.0	END OF HOLE @ 5.0 FT. BGS	-5.0		
	1. Borehole was not advanced to native		•	
5.0	2. Soil samples collected for chemical			
	0.5 to 5.0 ft. BGS.			
7.0	backfilled using clean commercial			
	over the borehole.			
8.0		-		
9.0				·
10.0				
11.0				
12 0			•	
2.0	· .			
13.0				
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STRATIGRAPHIC AND INSTRUMENTATION LOG (L-59) (OVERBURDEN) PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM HOLE DESIGNATION: 1331-10 PROJECT NO .: 3307 DATE COMPLETED: JANUARY 10, 1991 CLIENT: OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2" SPLIT SPOON LOCATION: 1331 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH I STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE ft BGS ft AMSL INSTALLATION 'N V ü Ň A T E 8 L U Remove sod and topsoil with spade. Sampled 1HS by hand Brown fine SAND, some silt and vegetation, -0.8 dry to moist, FILL (TOPSOIL) 1.0 Red-brown CLAY, some silt and fine gravel, dry to moist **1**SS -1.5 2*ø Black SAND, some silt and fine to medium BOREHOLE 2.0 -2.0 round white gravel, moist, slight chemical odor TOPSOL Dark brown SAND, some silt and subround gravel, moist 3.0 -3.4 255 Red-brown CLAY, some silt and fine sand, dry to moist, NATIVE (TILL) 4.0 -4.5 END OF HOLE @ 4.5 FT. BGS NOTES: 5.0 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.5 ft. BGS. At completion the borehole was 2. 6.0 backfilled using clean commercial topsoil and the sod was replaced over the borehole. - 7.0 - 8.0 - 9.0 - 10.0 - 11.0 - 12.0 13.0 MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE NOTES: STATIC WATER LEVEL WATER FOUND V T CHEMICAL ANALYSIS

۰.	STRATIGRAPHIC AND (OVER	INSTRUMEN' BURDEN)	FATION LOG	(1
PROJE	CT NAME: 104th ST. DATA COLLECTION PROGR	AM	HOLE DESIGNATION	1331-11
PROJE	CT NO.: 3307	. · ·	DATE COMPLETED:	JANUARY 8
CLIENT	OCCIDENTAL CHEMICAL CORPORATION	N	DRILLING METHOD:	2"ø SPLIT S
LOCATI	ON: 1331 104th ST.		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPI
m BCS		nt AMSL	INSTALLATION	
	Remove sod and topsoil with spade. Sample	:d	ř	
	Brown fine to medium SAND, some to little vegetation. FILL (TOPSOIL)			
- 1.0	Same, except black, some white fine round			
	gravel, little wood, trace metallic slag, dry		BOREHOLE	
2.0	Gray SILT, some fine sand, trace clay, dry to moist		TOPSOIL	
7.0	Same, except moist to wet		21427	
	Brown fine SAND, some silt, moist			
7.0	- Red-brown SILT some silt moist NATIVE	-4.3		
50	END OF HOLE @ 4.5 FT. BGS		_	
5.0	1. Soil samples collected for chemical			
60	0.5 to 4.5 ft. BGS.		· . * .	
0.0	backfilled using clean commercial		· .	
70	over the borehole. 3. Water in borehole at completion.			
/.0	 Sample depth noted incorrectly on Chain of Custody as 5.5 ft. rather 			
80	than 4.5 ft. BGS.			
			· ·	
9.0			•	
<i></i>				
10.0				
11.0				
12.0			· · ·	
13.0			· .	
NOTE	S: MEASURING POINT ELEVATIONS MAY CH	ANGE: REFER TO	O CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS 🔘 WATE	ER FOUND 🔽	STATIC WATER LEVEL	T

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM

PROJECT NO .: 3307

CLIENT: OCCIDENTAL CHEMICAL CORPORATION

LOCATION: 1331 104th ST.

DATE COMPLETED: JANUARY 8, 1991 DRILLING METHOD: 2"Ø SPLIT SPOON

CRA SUPERVISOR: K. LYNCH

HOLE DESIGNATION: 1331-12

DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE	
ft BGS		ft AMSL	INSTALLATION		Ŋ.
				M A A B T t E E t R	A L U E
· 1.0	Remove sod and topsoil with spade. Sampled by hand Brown fine to medium SAND, some vegetation (roots), dry to moist, FILL (TOPSOIL) Plock and gray SAND, some day little			1HS	·
	cinders, coal, trace slag, dry				
• 2.0	Brown medium SAND, trace silt, moist		BOREHOLE		
3.0				255	
4.0					
· 5.0	Red-brown CLAY, some to little silt, trace clay, dry to moist, NATIVE	- 4.7		355	
6.0	END OF HOLE @ 5.5 FT. BGS NOTES: 1. Soil samples collected for chemical	5.5			
7.0	analysis from 0.0 to 0.5 ft. and 0.5 to 5.0 ft. BGS: 2. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole.				
8.0 .					
9.0					
· 10.0					
11.0			-		•
12.0			· · · · · · · · · · · · · · · · · · ·		
- 13.0					
NOT	ES: MEASURING POINT ELEVATIONS MAY CHAN	GE: REFER	TO CURRENT ELEVATION	TABLE	
	CHEMICAL ANALYSIS O WATER	FOUND 🔽	STATIC WATER LEVEL	X	

(L-70)

	STRATIGRAPHIC AND II (OVERBI	NSTRUMEN URDEN)	TATION LOG	(L-42)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION:	1335-1
PROJE	CT NO.: 3307		DATE COMPLETED:	JULY 20, 1990
CĻIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE	•	CRA SUPERVISOR:	K. LYNCH
			101/1700	
ft BGS		ft AMSL	INSTALLATION	N S N
	·			M A A B T L E E U R E E
- 1.0	Sample collected by hand Light and dark brown, fine to medium grained SAND and SILT, some fine to coarse angular gravel, dry to moist, FILL	-0.1		1HS
- 2.0	to moist Same, except trace silt, small angular gravel Concrete cobble	-2.0	3" BOREHOLE	155 X 78
- 3.0	Light brown SILT, some clay, trace fine angular gravel, dry, trace brick, trace very fine clinkers Gray and brown SILT, some clay, trace fine	-2.5		
- 4.0	sand, moist, NATIVE Red-brown CLAY, trace silt, soft, mottled, moist	3.9		(2SS) 60
- 5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. BGS and 0.5 to 4.5 ft BCS			
- 6.0	 Borehole backfilled with clean commercial topsoil, with the original sod placed over the borehole. 		•	
- 7.0				
- 8.0				
- 9.0				
- 10.0			· · · · · · · · · · · · · · · · · · ·	
- 11.0				
- 12.0				
- 13.0				

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•	STRATIGRAPHIC AND (OVER	INSTRUMEN BURDEN)	TATION LOG	(L-43)
PROJECT NAME	10500 CAYUGA DRIVE	•	HOLE DESIGNATION:	1335-2
PROJECT NO .:	3307		DATE COMPLETED:	JULY 20, 1990
CLIENT:	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATION:	10500 CAYUGA DRIVE	·	CRA SUPERVISOR:	K. LYNCH
DEPTH I STRATIC	RAPHIC DESCRIPTION & REMARKS	FLEVATION	MONITOR	SAMPLE
ft BGS		ft AMSL	INSTALLATION	N S N U T V
			· .	
Sample	collected by hand			
SAND	and SILT, some fine to medium grain moiet Fill	lar		
1.0 graver,				
Light o	ray fine to coarse grained SAND,		3 BOREHOLE	(1SS) / >10
2.0 some metal	medium to coarse angular gravel, mo	ist,	TOPSOIL	
Brick	e in silt content	-29		
3.0 Light g	n gravel, moist, trace coal	- <u>3.0</u>		
Dark g	LAY, some fine sand and silt, moist ray SAND, some silt, some clay, mois	-3.5		
4.0 Gray C	LAY, some silt, trace sand, moist,			
END O	HOLE @ 4.5 FT. BGS	-4.5		
5.0 1.	Soil sample collected for chemical			
2	and 0.5 to 4.5 ft. BGS. Ants and earthworms found in soil			
6.0 3.	from 0.0 to 0.5 ft. BGS. Barehole backfilled with clean			
7.0	commercial topsoil with the original sod placed over the borehole.			•
7.0				
	· · · · · · · · · · · · · · · · · · ·			
8.0	· .			·*
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9.0				
10.0				
10.0				
110				
11.0	· · ·		·	
12.0				
12.0			· _	
13.0	· · ·			
13.0				
NOTES: 1	ALASURING POINT ELEVATIONS MAY CH	HANGE; REFER 1	O CURRENT ELEVATION	TABLE
	CHEMICAL ANALYSIS WATE		STATIC WATER LEVEL	

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	STRATIGRAPHIC AND IN (OVERBU	ISTRUMEN' JRDEN)	TATION LOG	(L-44)
PROJE	CT NAME: 10500 CAYUGA DRIVE	•	HOLE DESIGNATION:	1335-3
PROJE	CT NO.: 3307		DATE COMPLETED:	JULY 20, 1990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
LOCATI	ON: 10500 CAYUGA DRIVE	•	CRA SUPERVISOR:	K. LYNCH
	STRATIGRAPHIC DESCRIPTION & REMARKS		MONITOR	SAMPLE
	Sample collected by hand Brown, fine to medium grained SAND, trace silt, dry to moist Fill			THS X
1.0				
			3 BOREHOLE	
2.0	Light brown SILT, some fine sand, some gravel, trace white rounded gravel, dry to maist no apparent chemical odor	-2.0		
3.0	Red-brown SILT, trace clay, dry to moist			
4.0	Black SILT, trace slag, loose, moist	-4.1		
5.0	Gray CLAY, some silt, moist // /////////////////////////////////	-4.2 -4.5		
	NOTES: 1. Soil sample collected for chemical conclusis from 0.0 to 0.5 ft PCS			
6.0	and 4.5 ft. BGS. 2. Numerous ants in soil from 0.0 to			
7.0	0.5 ft. BGS. 3. Borehole backfilled with clean commercial topsoil with the original sod placed over borehole.			
80			• •	
9.0			•	
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10.0			-	
	·	1		
11.0		• •		
12.0			. ,	
13.0			• .	
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PROJECT PROJECT CLIENT: LOCATIO	T NAME: 10500 CAYUGA DRIVE T NO.: 3307			
PROJECT CLIENT: LOCATIO	T NO.: 3307		HOLE DESIGNATION:	: 1335-4
CLIENT: LOCATIO			DATE COMPLETED:	JULY 20, 1990
LOCATIO	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOON
	N: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft AMSL	INSTALLATION	
	Sample collected by hand		r.a.	
- 1.0	Brown fine to medium grained SAND, trace silt, dry to moist, FILL			
		-1.9	BOREHOLE	
- 2.0	Red-brown CLAY, some silt, dry Brown SILT, some clay, dry, trace white powder, no odor Brown to red-brown SILT, some sond and clay.	-2.1	TOPSOIL	
- 3.0	dry, trace concrete Gray SILT, some clay, some fine sand, dry			255 35
- 4.0	Red-brown CLAY, moist, NATIVE	-4.2		
- 5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.0 to 0.5 ft. BGS.	-4.5		
- 6.0	and 4.5 ft. BGS: 2. Earthworms in soil from 0.0 to 0.25 ft. BGS. 3. Borehole backfilled with clean commercial topsail with the original		·* .	
- 7.0	sod placed over borehole.			
- 8.0			· .	
9.0				
10.0				
11.0				
12.0				
13.0			•	
NOTES:	: MEASURING POINT ELEVATIONS MAY CHANG	E; REFER	TO CURRENT ELEVATION	TABLE

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	STRATIGRAPHIC AND IN (OVERBU	RDEN)	TATION LOG	(L-46)
PROJE	CT NAME: 10500 CAYUGA DRIVE		HOLE DESIGNATION	: 1335-5
PROJE	CT NO.: 3307		DATE COMPLETED:	JULY 20, 1990
CLIENT	OXYCHEM		DRILLING METHOD:	3" SPLIT SPOO
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft AMSL	INSTALLATION	
	· ·			
-	Sample collected by hand Brown SAND and SiLT, topsoil, dry to moist, FILL	-0.3	14 12 12	THS
1.0 . •	Red-brown CLAY, trace sand, trace silt, trace angular gravel, moist			
2.0	Dark gray SILT, some clay, some fine white round gravel, moist to wet, trace brick, no	-2.0	BOREHOLE	
3.0	apparent chemical odor			
4.0	Gray CLAY, some silt, moist, NATIVE	-4.1		
5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical anglesis from 0.0 to 0.5 ft. BCS	-4.5		
6.0	 and 4.5 ft. BGS. 2. Earthworms found in soil from 0.0 to 0.25 ft. BGS. 3. Borehole backfilled with clean 			
7.0	commercial topsoil with the original sod placed over borehole.			
8.0				
9.0	,		*	
10.0				
11.0			. · ·	
12.0			-*	
. 2. 0				
13.0			· · ·	

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: 10500 CAYUGA DRIVE

PROJECT NO .: 3307

CLIENT: OXYCHEM

LOCATION: 10500 CAYUGA DRIVE

HOLE DESIGNATION: 1335-6 DATE COMPLETED: JULY 20, 1990 DRILLING METHOD: 3" SPLIT SPOON CRA SUPERVISOR: K. LYNCH



(L-47)

	STRATIGRAPHIC AND I (OVERB	NSTRUMENT URDEN)	ATION LOG	(L-48)
PROJE	CT NAME: 10500 CAYUGA DRIVE	•	HOLE DESIGNATION	: 1335-7
PROJE	CT NO.: 3307		DATE COMPLETED:	JULY 20, 1990
CLIENT	T: OXYCHEM		DRILLING METHOD:	3" SPLIT SPOOR
LOCAT	ION: 10500 CAYUGA DRIVE		CRA SUPERVISOR:	K. LYNCH
DEPTH	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION	MONITOR	SAMPLE
ft BGS		ft AMSL	INSTALLATION	N S U T M A B T F
	Sample collected by hand Brown SAND and SILT, dry to moist, some Jarass and roots	-0.3		1HS
1.0	Light brown CLAY, some silt, dry to moist Light brown SAND, some silt, dry to moist			
2.0	Light brown SILT, some clay, trace fine some clay, trace fine gravel, dry to moist Same, except dark brown	-2.3		
3.0	Gray CLAY, some fine round white pebbles, moist, trace brick, chemical odor Same, except trace silt, no odor		12.55 A	
4.0		-4.2		
5.0	END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemical analysis from 0.0 to 0.5 ft. BGS	-4.5		
6.0	and 4.5 ft. BGS. 2. Duplicate soil sample collected for chemical analysis from 0.5 to 4.5 ft. BGS. as 1335-9.			
7.0	 Numerous ants and several earthworms noted from 0.0 to 0.3 ft. BGS. Borehole backfilled with clean commercial topsoil with the original sod placed over borehole. 			
8.0			·;	
9.0			·.	
10.0			·	
11.0				
12.0			· · ·	
13.0				
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PROJECT NAME: 10500 CAYUGA DRIVE PROJECT NO.: 3307 CLIENT: OXYCHEM LOCATION: 10500 CAYUGA DRIVE DEPTH STRATIGRAPHIC DESCRIPTION & REMARK It BGS Sample collected by hand Brown SAND and SILT, dry to moist, f Light brown CLAY, some silt, trace gr -1.0 dry to moist Dark brown SILT, some medium graine dry to moist Dark brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist -2.0 Light brown SILT, some sand, dry to m White weathered CEMENT, some fine g trace sand, dry to moist -3.0 Light brown SILT, some sand, dry to m Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom -4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1 Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS -6.0 2. Borehole backfilled with clean commercial topsoil with the orit sod placed over borehole. -7.0 2.0	KS <u>FILL</u> ravel, ed SILT, noist gravel, <u>moist</u> ses. n cal SS. iginal	ELEVATION ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5	HOLE (DATE (DRILLIN CRA SI INSTALL	DESIGNATIO COMPLETED NG METHOD UPERVISOR: TOR ATION	N: 1335- : JULY : : 3" SPI : K. LYN 0 0 1HS 1SS 2SS	8 20. 1 ICH
PROJECT NO.: 3307 CLIENT: OXYCHEM LOCATION: 10500 CAYUGA DRIVE DEPTH STRATIGRAPHIC DESCRIPTION & REMARK ft BGS Sample collected by hand Brown SAND and SILT, dry to moist, ff Light brown CLAY, some silt, trace gr 1.0 Dark brown SILT, some medium graine dry to moist Dark brown SILT, some medium graine dry to moist 2.0 Light brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist 3.0 Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom -4.0 END OF HOLE @ 4.5 FT. BGS -5.0 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. -6.0 2. Borehole backfilled with clean commercial topsoil with the ori sod placed over borehole.	KS <u>FILL</u> ravel, ed SILT, noist gravel, <u>moist</u> ses. n cal SS. iginal	ELEVATION ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5	DATE O DRILLIN CRA SI INSTALL	COMPLETED NG METHOD UPERVISOR: TOR ATION	: JULY : : 3" SPI : K. LYN 	20. 1 LIT SI ICH
CLIENT: OXYCHEM LOCATION: 10500 CAYUGA DRIVE DEPTH STRATIGRAPHIC DESCRIPTION & REMARK ft BGS Sample collected by hand Brown SAND and SILT, dry to moist, f Light brown CLAY, some silt, trace gr dry to moist Dark brown SILT, some medium graine dry to moist Dark brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to m Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the original sod placed over borehole.	KS <u>FILL</u> ravel, ed SILT, moist gravel, <u>moist</u> ses, n cal SS. iginal	ELEVATION ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5	DRILLIN CRA SI INSTALL	NG METHOD UPERVISOR: TOR ATION BOREHOLE TOPSOIL	: 3" SPI	
LOCATION: 10500 CAYUGA DRIVE DEPTH STRATIGRAPHIC DESCRIPTION & REMARK It BGS Sample collected by hand Brown SAND and SILT, dry to moist, H Light brown CLAY, some silt, trace gr dry to moist Dark brown SILT, some medium graine dry to moist Dark brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to r White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic and 4.5 ft. BGS. 2. Borehole backfilled with clean commercial topsoil with the orig sod placed over borehole. 7.0	KS <u>FILL</u> ravel, ed SILT, moist gravel, <u>moist</u> ses, n cal 3S. iginal	ELEVATION ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5	CRA SI	UPERVISOR: TOR ATION	K LYN	
DEPTH ft BGS STRATIGRAPHIC DESCRIPTION & REMARK ft BGS Sample collected by hand Brown SAND and SILT, dry to moist, I Light brown CLAY, some silt, trace gr dry to moist 1.0 Dark brown SILT, some medium graine dry to moist 2.0 Light brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist 3.0 Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the orig sod placed over borehole.	KS <u>FILL</u> / ravel, ed SILT, moist gravel, moist ses, n cal 3S. iginal	ELEVATION ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5	MONI	TOR ATION BOREHOLE TOPSOIL	1HS	
ft BGS Sample collected by hand Brown SAND and SILT, dry to moist, I Light brown CLAY, some silt, trace gr 1.0 Dark brown SILT, some medium graine dry to moist Dark brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Jord Light brown SILT, some sand, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Jord CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the original collected over borehole. 7.0	<u>FILL</u> ravel, ed SILT, moist gravel, <u>moist</u> ses, n	ft AMSL -0.3 -1.3 -2.2 -2.5 -3.0 -4.5		ATION 	1HS	
Sample collected by hand Brown SAND and SILT, dry to moist, I Light brown CLAY, some silt, trace gr dry to moist Dark brown SILT, some medium grained dry to moist Light brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to m Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 2. Borehole backfilled with clean commercial topsoil with the ori- sod placed over borehole.	FILL/ ravel, ed SILT, moist gravel, / moist ses, n	-0.3 -1.3 -2.2 -2.5 -3.0		3*6 Barehole Topsoil	1HS 1SS 2SS	
Sample collected by hand Brown SAND and SILT, dry to moist, I Light brown CLAY, some silt, trace gr dry to moist Dark brown SILT, some medium graine dry to moist Light brown SILT, some clay, dry to n White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 2. Borehole backfilled with clean commercial topsoil with the ori- sod placed over borehole.	FILL/ ravel, ed SILT, moist gravel, moist ses, n cal SS. iginal	-0.3 -1.3 -2.2 -2.5 -3.0		3*4 Borehole Topsoil	1HS 1SS 2SS	
 Light brown CLAY, some silt, trace gr dry to moist Dark brown SILT, some medium graine dry to moist Light brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom END OF HOLE @ 4.5 FT. BGS Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. Borehole backfilled with clean commercial topsoil with the ori sod placed over borehole. 	ed SILT, noist gravel, moist ses, n cal 3S.	-1.3 -2.2 -2.5 -3.0		3°¢ Borehole Topsoil	1SS 2SS	
 Dark brown SILT, some medium graine dry to moist Light brown SILT, some clay, dry to n White weathered CEMENT, some fine g trace sand, dry to moist Light brown SILT, some sand, dry to n Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom END OF HOLE @ 4.5 FT. BGS Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. Borehole backfilled with clean commercial topsoil with the original placed over borehole. 	ed SILT, moist moist ses, n cal 3S. iginal	-1.3 -2.2 -2.5 -3.0		3*4 Borehole Topsoil	1SS 2SS	
 2.0 Light brown SILT, some medulin graine dry to moist 2.0 Light brown SILT, some clay, dry to m White weathered CEMENT, some fine g trace sand, dry to moist 3.0 Light brown SILT, some sand, dry to r Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS NOTES: Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the ori- sod placed over borehole. 	cal Gainal	-2.2 -2.5 -3.0		- 3°¢ Borehole - Topsoil	255	
 4.0 END OF HOLE @ 4.5 FT. BGS Sold Sold Street Content of the sold of the s	gravel, moist ses, n cal SS.	-2.2 -2.5 -3.0	NAMES AND ADDRESS OF ADDRESS ADDRESS OF ADDRESS OF ADDR	- Topsoil	255	
 3.0 Light brown SILT, some sand, dry to in Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE 4.5 FT. BGS 5.0 NOTES: Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the original solution of the provided over borehole. 7.0 	cal SS.	-2.5 -3.0 -4.5	K S X Y Z W X X Y X Y X	· · · · · · · · · · · · · · · · · · ·	255	
 Gray CLAY, some silt, some sand lens moist, NATIVE, mottled toward bottom 4.0 END OF HOLE @ 4.5 FT. BGS 5.0 Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 Borehole backfilled with clean commercial topsoil with the original placed over borehole. 7.0 	cal SS.	-3.0	N. C. L.		255	
 4.0 END OF HOLE 4.5 FT. BGS 5.0 Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 Borehole backfilled with clean commercial topsoil with the original placed over borehole. 7.0 	cal 35. iginal	-4.5	Sec.	· ·	255	
 5.0 END OF HOLE 4.5 FT. BGS 5.0 1. Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. 6.0 2. Borehole backfilled with clean commercial topsoil with the original sod placed over borehole. 7.0 	cal 35. iginal	-4.5		· ·		
 END OF HOLE @ 4.5 FT. BGS NOTES: Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. Borehole backfilled with clean commercial topsoil with the ori- sod placed over borehole. 	cal SS. iginal		_			
 Soil sample collected for chemic analysis from 0.0 to 0.5 ft. BG and 4.5 ft. BGS. Borehole backfilled with clean commercial copysoil with the ori sod placed over borehole. 	cal SS. iginal					
 and 4.5 ft. BGS. Borehole backfilled with clean commercial topsoil with the orisoid placed over borehole. 7.0 	iginal					
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NOTES: MEASURING POINT FLEVATIONS M	AY CHANC					
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	STRATIGRAPHIC AND IN (OVERBU	ISTRUMEN IRDEN)	ITATION LOG	(L-60)
PROJE	CT NAME: 104th ST. DATA COLLECTION PROGRAM		HOLE DESIGNATION	: 1335-10
PROJEC	CT NO.: 3307	DATE COMPLETED:	JANUARY 3, 199	
CLIENT: OCCIDENTAL CHEMICAL CORPORATION			DRILLING METHOD:	2" SPLIT SPOO
LOCATI	ON: 1335 104th ST.		CRA SUPERVISOR:	K. LYNCH
EPTH t BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft AMSL	MONITOR	SAMPLE
	Remove sod and topsoil with spade. Sampled			
1.0	by hand Brown and gray SILT, some clay, little fine to medium gravel, moist, FILL		2°0	
2.0				
3.0	Red-brown and grow CLAX game all little	-3.2		255
4.0	fine sand and gravel, dry to moist, NATIVE / END OF HOLE @ 3.5 FT. BGS NOTES:	-3.5		
5.0	 Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 3.5 ft. BGS. Duplicate soil sample collected for chemical analysis from 0.0 to 3.5 ft. 			
5.0 -	 3. At completion the borehole was backfilled using clean commercial topsoil and the sod was replaced over the borehole. 			
7.0				
3.0				
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0.0			·	
1.0				
2.0				
3.0				

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PROJE	CT NAME: 104th ST. DA	TA COLLECTION PROGR	AM	HOLE DESIGNATION	: 1335-12
PROJE	CT NO.: 3307	•	• •	DATE COMPLETED:	JANUARY 4,
CLIENT	CLIENT:OCCIDENTAL CHEMICAL CORPORATIONLOCATION:1335 104th ST.		1	DRILLING METHOD: CRA SUPERVISOR:	2"ø SPLIT SP K. LYNCH
LOCATI					
	STRATIGRAPHIC DESCRI	PTION & REMARKS	ELEVATION	MONITOR	SAMPLE
11 803	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		INSTALLATION	U T M A B T
	Remove sod and tops	oil with spade. Sample	d	<u>.</u>	R THS
1.0	by hand Red-brown and gray SAND, some fine to r moist, FILL	SILT and fine to mediu nedium gravel, dry to	Im		
2.0				2°6 BOREHOLE	1SS X
	,				
3.0	•	·· ·			
				a de la companya de la company Na companya de la comp	255
4.0	Red-brown CLAY, som subround gravel, dry f	ne silt, trace fine to moist, NATIVE	-3.9		$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i$
5.0	END OF HOLE @ 4.5 NOTES: 1. Soil samples co analysis from (0.5 to 4.0 ft	5 FT. BGS llected for chemical 0.0 to 0.5 ft. and BGS	-+.5		
6.0	 At completion t backfilled using topsoil and the over the boreh 	the borehole was clean commercial sod was replaced ole.			
7.0		·. ·			
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10.0					
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		T. C. C			

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STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM

PROJECT NO .: 3307

CLIENT: OCCIDENTAL CHEMICAL CORPORATION

LOCATION: 1335 104th ST.

HOLE DESIGNATION: 1335-13 DATE COMPLETED: JANUARY 3, 1991 DRILLING METHOD: 2^{*}Ø SPLIT SPOON CRA SUPERVISOR: K. LYNCH

DEPTH STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE ft BGS ft AMSL INSTALLATION Ň NUMBER A T E A Remove sod and topsoil with spade. Sampled **1**SS by hand Dark brown fine SAND, some silt, trace vegetation, trace coal, moist, FILL -1.0 -1.2 155 Red-brown CLAY, some silt, trace coal and fine white round gravel, dense, moist 2"# BOREHOLE Red-brown and gray CLAY, some silt, little subround gravel, moist, some black 2.0 discoloration, no odor TOPSOIL 3.0 255 4.0 **3**SS -4.6 Red-brown CLAY, some silt, little fine sand, 5.0 dry to moist, NATIVE END OF HOLE @ 4.8 FT. BGS NOTES: 1. Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 6.0 At completion the borehole was 2. backfilled using clean commercial topsail and the sod was replaced 7.0 over the borehole. Water in borehole was 2.5 ft. BGS. 3. at completion. · 8.0 9.0 10.0 - 11.0 - 12.0 13.0 NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE CHEMICAL ANALYSIS WATER FOUND V STATIC WATER LEVEL T

(L~63)

STRATIGRAPHIC AND INSTRUMENTATION LOG (L-64) (OVERBURDEN) PROJECT NAME: 104th ST. DATA COLLECTION PROGRAM HOLE DESIGNATION: 1335-14 3307 PROJECT NO .: DATE COMPLETED: JANUARY 3, 1991 OCCIDENTAL CHEMICAL CORPORATION DRILLING METHOD: 2" SPLIT SPOON CLIENT: LOCATION: 1335 104th ST. CRA SUPERVISOR: K. LYNCH DEPTH | STRATIGRAPHIC DESCRIPTION & REMARKS ELEVATION MONITOR SAMPLE ft BGS ft AMSL INSTALLATION N ü Å A T E 8 L Remove sod and topsoil with spade. Sampled THS by hand Dark brown fine SAND, some silt, trace fine gravel, moist, FILL (TOPSOIL) -0.8 1.0 Brown SILT, some clay, little fine gravel, moist 155 2"# BOREHOLE 2.0 TOPSOIL A STUTION STATE 3.0 255 -3.8 4.0 Gray CLAY, some silt, moist, NATIVE Same, except red-brown -4.5 END OF HOLE @ 4.5 FT. BGS NOTES: 5.0 Soil samples collected for chemical analysis from 0.0 to 0.5 ft. and 0.5 to 4.0 ft. BGS. 1. 2. At completion the borehole was 6.0 backfilled using clean commercial topsoil and the sod was replaced over the borehole. 7.0 - 8.0 9.0 - 10.0 11.0 -12.0 - 13.0 NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE CHEMICAL ANALYSIS WATER FOUND V STATIC WATER LEVEL T

APPENDIX C

AIR MONITORING RESULTS

Notebook No. 104 x 57 Church - 6/8/92 Continued From Page OJECT Job # 103352 TIME: 070 901578 IN UM For STZ PPM 70 = Space = 9/8 YEMI: WIND: ED-2 3817 / 3816 3818 CON: Hazy Miniham # .96 100 1.09 Using # 3818 Zero Value: Minika . TIMS (ourner ?? MNU Ousite at phych : Preparing To Begin Exanstin 0625 • is back grands of houses on west side of church. Preparing To Bagin digging - Upwind 0. Z QQQCrew 0703 0.00 mul in Tsegin Digging -2745 0.2 · D- Perimeter 0.0d 0.2 21800 0.00 0830 0.2 UPaving 0.00 0990 0.2 0.00 0.2 ٠ Tour la !! Perinater 1 0.00 0730 0.0 1000 2.2 D.O 030 0.7 0.00• 0.01 100 0.1 Perinuter 0.00 Harris 0.2 Town cering begine ther 0.2 OH Down wind Perinceter 0.00 1130 0.2 1200 Lunch Ousive ۰ 1200 Work Reserved - Doever Wind 0.2 • \mathcal{O} . O 110 Upwind 0.2 000 Down Wind (own Continues To Exavate 0.2 1330 0.00 0.2 0.00 1 1400 . 0.00 14,30 Pour wind Perimeter of Warksine. 0.2 459 0.00 0.2 0.00 1540 0.00 0.2 1600 0.00 Q.2 1630 1640 Going To Continued on Page Read and Understood By 6/8/9C ÷

PROJECT JOHF 103352 104th church Continued From Page 1. NUS 601281 TIME: 0700 SPAN = 9.8 SOR 57 PPM TEMP: ~GZ FI EDZ Wind: CON: char Sun Min: Ram # 381G 3817 / Zero Value = . 95 Min: Rom · Comments TIME ANU On site lour st. 0629 church Upwind ; crew Beyins excavating. O.Z 0.00 070 O.Z 0.00 Down wind Down wind - erimeter 0.1 0.00 0.00 0790 O. 1 0.00 Continuine To exceede d house 0.1 0805 along West sile of church. No Unisual Readings Notes -0833 0.00 \mathcal{O} . Down Wind Periare Tor. 0.1 0.00 1900 0478 0.00 0.1 0.1 OPUNAS 1010 0.00 Down Wind .. 0.00 0.1 Down Wind Perinter Bejuning To Back Sill. 0.00 0.2 1940 *Ю.*2 d.or 0.2 1105 10.00 0.00 1123 \mathcal{O} ": lench 1200 0.00 0.1 Upwind 0.00 0.1 1300 Down ca Din 0.00 **O**. / Heriner 0.1 0.00 Town Wind 1325 0.3 0.00 in Backoe Bucket Soil 3-7 0.01 3" From 0.00 La borer Breathing Zone $\mathcal{O}_{\cdot \cdot / \cdot}$ Down wind tenimeter. 0.02 0. 400 Λ Bask hoe Becke - 3 Documential Perine Ver 0.02 1450 0.1 ; Suiting up - Entening Excars for Read 0.00 0.1 1500 3" from Soil in NE Count - 15 FT STREE 2 - 7 1530 1600 Ting for S Coffining on Page Site 1620 Declan 000 DeAL C/Par Read and Understood By 6/9/92

Signed

Date

Signed



JECT 163352 104 "" ST. CHURCH Continued From Page 👘 🖌 DOWN LOAD NO EXCEEDENCES TO RECORD FOR 1900 THE HOUR OF 0800. LOST DATA ON EAST SIDE MONITOR. MONED MONITORS, WD SHIFTED AROUND. DOWN LOAD NO EXCEEDENCES TO RECORD 000 FOR THE HOUR OF 0900. DOWN GOAD NO EXCÉEDENCES TO RÉCORD \mathcal{O} STILL EXCAVATING MATERIAL NO READINGS WHY FOR THE HOUR OF 1000 DOWN LOAD NO EXCEEDENCES TO RECORD FOR 200 THE HOUR OF 1100 UNCH DOWN LOAD NO ACTIVITY AND NO EXCEEDENKES 300 TO RECORD FOR THE HOUR OF 1200 DOWN LOAD NO EXCREDENCES TO RECORD FOR 400 THE HOUR OF 1300 EXCAVATING MATERIAL AND HAULING IT TO LANDFILC. POWN LOAD NO EXCEEDENCES TO RECORD FOR THE 500 STILL EXCAVATING MATERIAL 100R OF 1400. NO READING WIH-NU. DOWN LOAD, NO EXCREDENCES TO RELOAD FOR 600 THE HOUR OF 1500. DOWN LOAD MONITORS COLLECTED AND 700 NO EXCEEDENCES TO RECORD FOR HOUR OF OFF SITE 1600 j ð Continued on Page Read and Understood By R. Blurter 6-8-92 Date
NURBOOK NO 84 ROJECT 163352 104 TH ST. CHURCH Continued From Page CALIBRATION 0530 9-92 SITE ON BAUD BG PBG BATT SENS! K SERIAL 4900 0,0/3 6. 0.007 4900 51 0013 6.5 2 0191176 0.008 4800 1.010 র্ত হ 4800 0.010 SET UP MONITORS AROUND SITE A 0700 House Ħ #2 GARIA ND TION r#17 144 HURC-H IST 1/2 HOUR OF DATA ON DOWN LOAD 0830 NEG DUF 10 CANLEISI VPVIND MONITOR PROBLEM CORECTED READINGS ONE QUARTERIY EXCERACICE ON WESTSIDE IL FROM BEING TO CLOSE TO THE DUMP TRUCKS BALK MON ITOR MOVED EXA UST DESUL EXCECDENCE PROBABLY DUE TO Continued on Page Read and Understood By 6-9-9-2 R. Bluston

JECT 103352 104 TIT ST. CHURCH Continued From Flage SITE A DOWN LOAD 6930 10 EXCESIDENCES FOR TITE LAST HOUR DOWN LOAD SITE A. 1100 THE HOUR OF 1000 FOR 6051 DAIA BATT ON MONITOR POWN LOAD, SITE A. 1 200 NO EXCEEDENCES TO RECORD FOR THE HOUR OF 1100. SITEA Down LOAD 300 NO EXCEEDIENCES TO RIECORD FOR TIFE HOUR OF 1200 1 SITS DOWN LOAD 400 RELORD EXCEDENLES 50 NO THE HOUR OF 1300 DOWN KOAD, SITE A 500 RECORI EXCEEDENCES 0£ 1400 HOUR 1600 COLLECTED AND DOWN LOAD SITE A TO RELORD TOR NO EXCEEDENCES 500 0 SITE Continued on Page Read and Understood By Stresta 5.9-92 Date Signed



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EXISTING FRANE GARAGE	Sector Se	-52
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} NCC-23 \\ NCC-25 \\ \bullet \\ 5 \end{array} \end{array} \\ \begin{array}{c} C-13 \\ \bullet \\ S \end{array} \\ \begin{array}{c} NCC-27 \\ \bullet \\ S \end{array} \\ \begin{array}{c} NCC-27 \\ \bullet \\ S \end{array} \\ \begin{array}{c} NCC-53 \end{array} \end{array} \\ \begin{array}{c} NCC-53 \end{array} \\ \begin{array}{c} NCC-53 \end{array} \\ \begin{array}{c} NCC-53 \end{array} \end{array} $
$\begin{bmatrix} 1331-1 & 1^{1331-5} & 1^{331-9} \\ 1^{1331-2} & 1^{1331-7} & 1^{331-10} \\ 1^{1331-3} & 1^{1331-7} & 1^{331-11} \\ 1^{1331-4} & 1^{1331-8} & 1^{1331-12} \end{bmatrix} \mathbf{J}_{\mathbf{X}}$		BACC-59 HASE I OGIGNAL SAMPLE PONT (WARCH 1989) SCOON BOUND SAMPLE POINT (APRIL 1989) DISCOON BOUND SAMPLE POINT (APRIL 1989) DISCOON BOUND SAMPLE POINT (WARCH 1989) PHASE I OF DIGHT ROUND SAMPLE POINT (WARCH 1980) DISCOON BOUND SAMPLE POINT DISCOON BOUND SAMPLE POINT DISCOON BOUND SAMPLE POINT DISCOON BOUND SAMPLE POINT DISCOON BOUND BO
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IJ341-2 PRAME ORACE IJ35-21 OIJ35-22 OIJ35-22 OIJ35-22 OIJ35-22 OIJ35-22 OIJ35-22 OIJ35-21 OIJ35-12 OIJ35-12 OIJ35-12 OIJ35-12 OIJ35-12 OIJ35-2 OIJ35-2 OIJ35-2 OIJ35-2 OIJ35-2 OIJ35-2 OIJ35-12 OIJ35-2 OIJ	HEADER HIG-15 HIG-15 HIG-15 HIG-15 HIG-15 HIG-16 HIG-16 HIG-17 HIG-17 HIG-19	NCC-52 122 124 NCC-25 224 NCC-25 225 PIACE 2 226 PACC-54 PACC-53 227 PACC-54 PACC-55 PACC-59 PACC-59 PACC-54 PACC-59	E FONT (MARCH 1989) SAMPLE FONT (ARCH 1989) SAMPLE FONT (MARCH 1980) SAMPLE FONT (MARCH 1980) SA
N ² Re	Approved	Occidental Chemical Corporation Buffalo Avenue Plant SITE REMEDIATION 104th STREET LIMITS OF EXCAVATED AREAS	CRA CONSECTOGA-ROVERS & ASSOCIATES Drawn by: I.W.R. Scale: I*=20' Date: SEPTEMBER File N*: P-14 Rev.N*: 0 Designed by: Designed by: J.P. J.P. Field book: Project Nº: 3307 Drawing Nº: 2