US EPA RECORDS CENTER REGION 5
1004963

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GROUNDWATER MONITORING SUMMARY
PRIMARY PARAMETERS
WELL B3
1993

PARAMETERS	03/93	06/93	09/93	12/93	REMARKS**
pH (S.U)	7.42	7.98	8.60	8.40	(1) 2
Al(ppm)	0.1250	0.13	< 0.25	< 0.25	(1) 2
As(ppm)	0.0032	0.0062	0.0056	0.0066	(1) 2
Ba(ppm)	0.05	0.1150	< 0.10	< 0.10	(1) 2
Cd(ppm)	0.0050	0.0050	< 0.01	< 0.01	(1) 2
Cr(ppm)	0.0250	0.0250	< 0.05	< 0.05	(1) 2
Pb(ppm)	0.0250	0.0250	< 0.05	< 0.05	(1) 2
Hg(ppm)	0.00025	0.00030	< 0.0005	< 0.0005	(1) 2
Ni(ppm)*	0.025	0.025	< 0.05	< 0.05	(1) 2
Se(ppm)	0.001	0.001	< 0.002	< 0.002	(1) 2
Ag(ppm)	0.005	0.0055	< 0.01	< 0.01	(1) 2
Zn(ppm)	0.01	0.01	< 0.02	0.029	(1) 2

*Value of nickel for 03/93 is calculated from resampling data of 06/22/93.

**Circle:1 for value within criteria
2 for value outside criteria

"<" denotes "less than"

GROUNDWATER MONITORING SUMMARY
PRIMARY PARAMETERS
WELL B4
1993

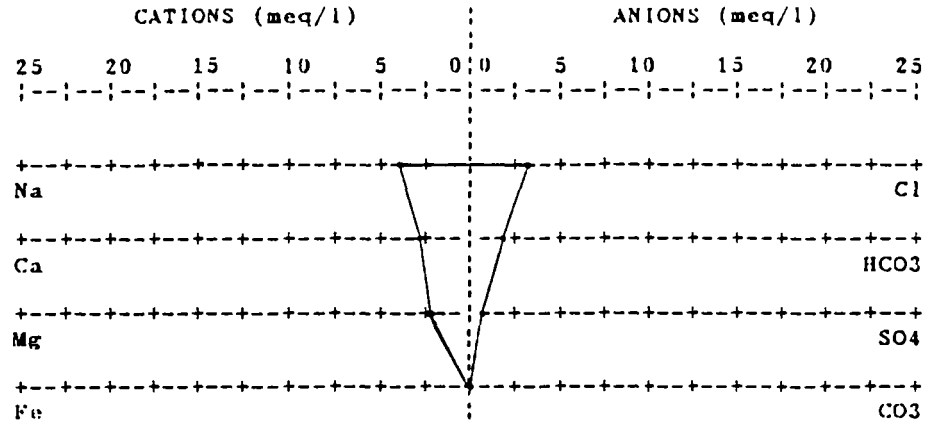
PARAMETERS	03/93	06/93	09/93	12/93	REMARKS**
pH (S.U)	7.35	7.15	7.40	7.70	1 2
Al(ppm)	0.125	0.125	< 0.25	< 0.25	1 2
As(ppm)	0.0024	0.001	0.0031	< 0.002	1 2
Ba(ppm)	0.108	0.1925	0.20	0.15	1 2
Cd(ppm)	0.005	0.0055	< 0.01	< 0.01	1 2
Cr(ppm)	0.025	0.025	< 0.05	< 0.05	1 2
Pb(ppm)	0.025	0.025	< 0.05	< 0.05	1 2
Hg(ppm)	0.0003	0.0003	< 0.0005	< 0.0005	1 2
Ni(ppm)*	0.056	0.025	< 0.05	< 0.05	1 2
Se(ppm)	0.001	0.001	< 0.002	0.002	1 2
Ag(ppm)	0.005	0.005	< 0.01	< 0.01	1 2
Zn(ppm)	0.117	0.048	0.043	0.160	1 2

*Value of nickel for 03/93 is calculated from resampling data of 06/22/93.

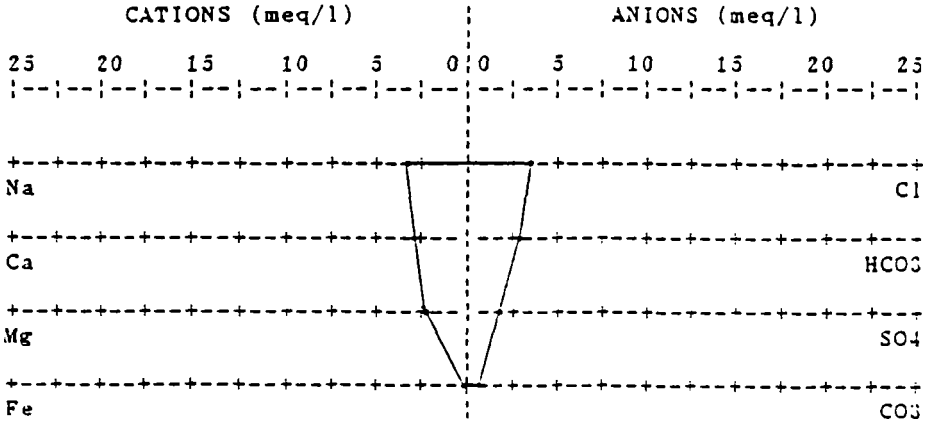
**Circle:1 for value within criteria
2 for value outside criteria

"<" denotes "less than"

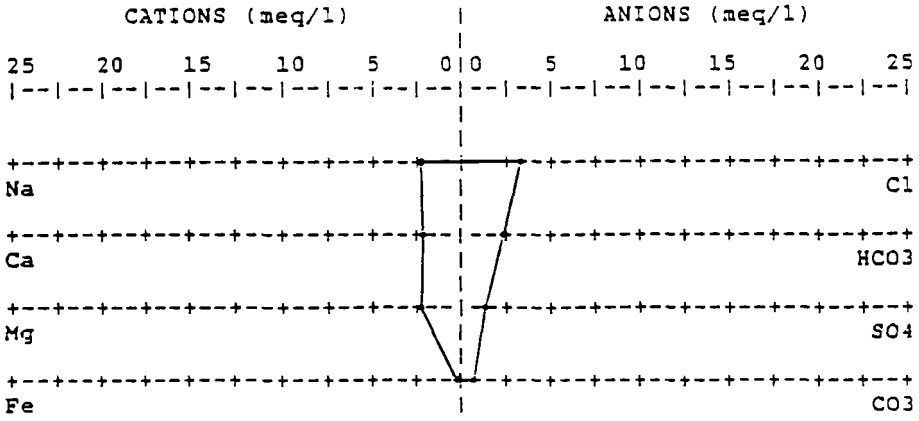
WELL: B3 (03/93)



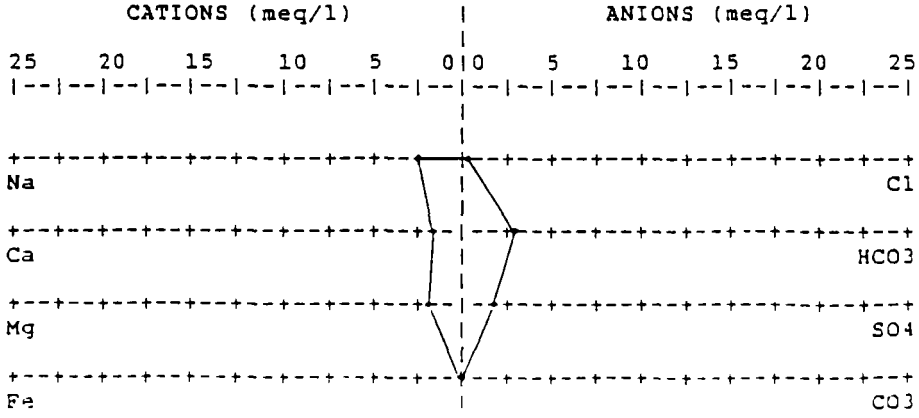
WELL: B3 (06/93)



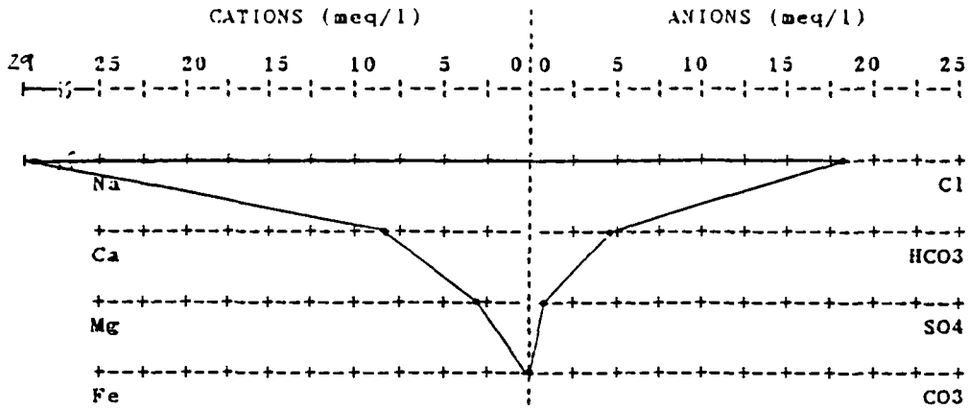
WELL: B-3 (09/93)



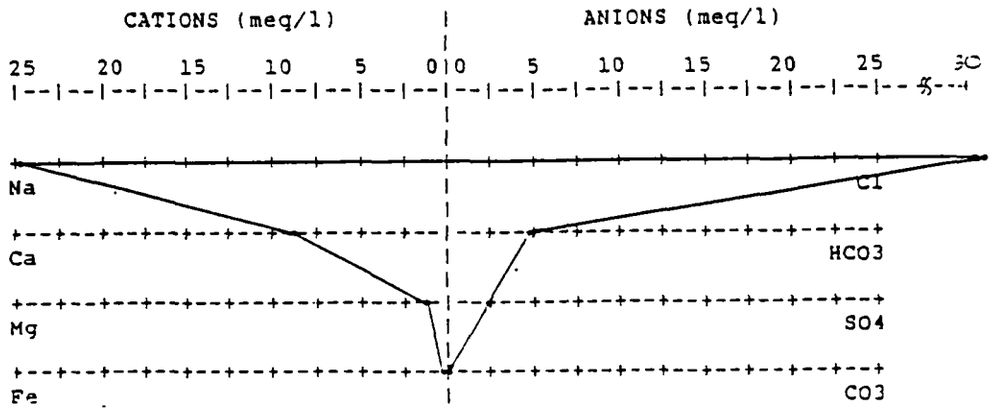
WELL: B-3 (12/93)



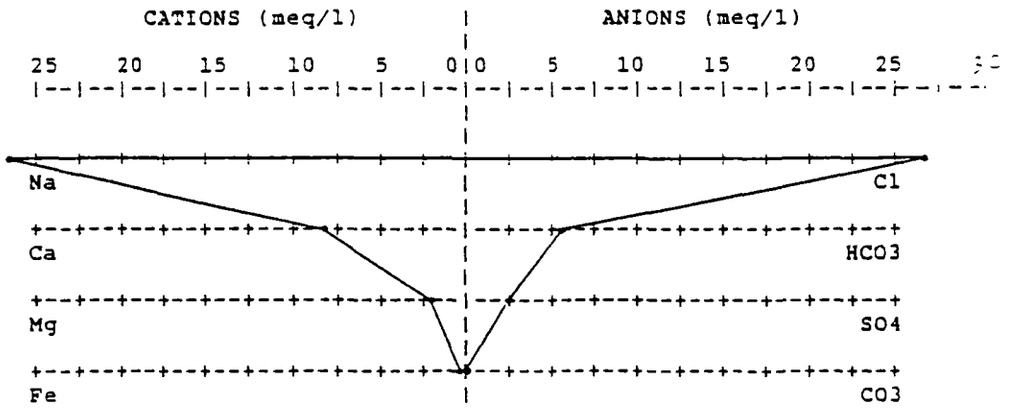
WELL: B-4 (06/93)



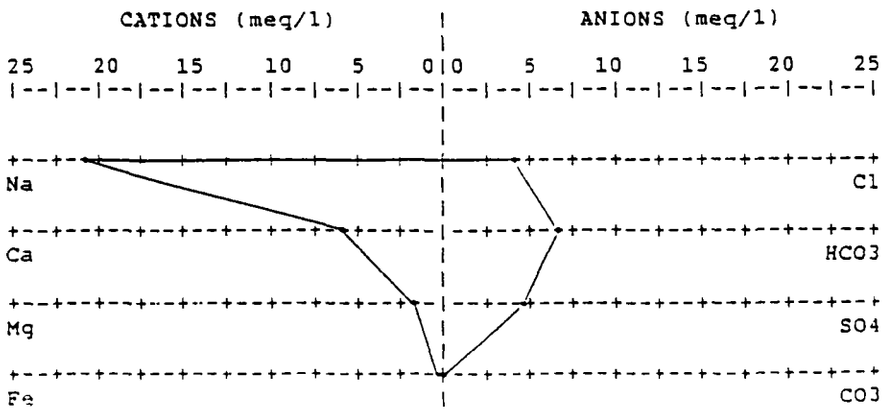
WELL: B-4 (06/93)



WELL: B-4 (09/93)



WELL: B-4 (12/93)



Dynecol, Inc.
Field Data Entry Form
PIEZOMETER B1

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY 40°F CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 2.06 feet

Depth of well: _____ feet

Date and time measured: 3/31/93 9.35AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: N/A

Method of decontamination: _____

Purge

Height of water column (depth of well - depth of water): 6.55 feet

3 casing volumes (height of column * 1.10): 6.65 gallons

Method of purging: ELECTRIC PUMP

Date and time purged: 3/30/93 9.35AM

Volume purged: 6.65

Appearance of purge water: CLEAR

Sampling

Date and time sampled: _____

Method used to sample: _____

Appearance of sample: _____

Field filtering: _____

Sample bottles filled: _____

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments: _____

Signature of sampler(s) [illegible] Date: [illegible]

Dynecol, Inc.
Field Data Entry Form
PIEZOMETER B1

General

Sampled by: RICK MEIROW

Weather and Conditions: CLOUDY, 65°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 5.55 feet

Depth of well: _____ feet

Date and time measured: 6/30/93, 10.05AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: N/A

Method of decontamination: _____

Purge

Height of water column (depth of well - depth of water): 3.83 feet

3 casing volumes (height of column * 1.10): 3.89 gal

Method of purging: ELECTRIC PUMP

Date and time purged: 06/29/93, 10AM

Volume purged: 3.89 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled: _____

Method used to sample: _____

Appearance of sample: _____

Field filtering: _____

Sample bottles filled: _____

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments: _____

Signature of sampler(s): [signature] Date: 6-30-93

Dynecol, Inc.
Field Data Entry Form
PIEZOMETER B1

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY, 50°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 6.27 ft

Depth of well: ft

Date and time measured: 9/30/93, 11.05 AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: N/A

Method of decontamination:

Purge

Height of water column (depth of well - depth of water): 3.30 ft

3 casing volumes (height of column * 1.10): 3.35 gal

Method of purging: ELECTRIC PUMP

Date and time purged: 9/29/93, 11 AM

Volume purged: 3.35 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled:

Method used to sample:

Appearance of sample:

Field filtering:

Sample bottles filled:

Field Measurements

Measured conductivity:

Temperature of sample:

Temperature corrected conductivity:

Standardized pH meter?

Measured pH of pH=7 buffer:

Measured pH of sample:

Comments:

Signature of sampler(s): [signature] Date: 9-30-93

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-2-83
T.O.C. Elevation = 632.79

General

Sampled by: RICK MEIROW
Weather and Conditions: SUNNY, 40°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: DRY feet
Depth of well: feet
Date and time measured: 3/31/93, 10AM
Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 3/31/93, 9 45AM
Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DISTILLED H

Purge

Height of water column (depth of well - depth of water): 4.01 feet
3 casing volumes (height of column * 1.10): 4.41 gals.
Method of purging: ELECTRIC PUMP
Date and time purged: 3/30/93, 10AM
Volume purged: 4.41
Appearance of purge water: CLEAR

Sampling

Date and time sampled: 3/31/93, 10AM
Method used to sample: ELECTRIC PUMP
Appearance of sample: N/A
Field filtering: N/A
Sample bottles filled: Ø

Field Measurements

Measured conductivity:
Temperature of sample:
Temperature corrected conductivity:
Standardized pH meter?
Measured pH of pH=7 buffer:
Measured pH of sample:

Comments:

Signature of sampler(s) [illegible] Date: [illegible]

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-2-83
T.O.C. Elevation = 632.79

General

Sampled by: RICK MEIROW

Weather and Conditions: CLOUDY, 65°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: DRY feet

Depth of well: feet

Date and time measured: 06/30/93, 9.30AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 06/30/93, 9.15AM

Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DEIONIZED H_2O

Purge

Height of water column (depth of well - depth of water): 0.63 feet

3 casing volumes (height of column * 1.10): 0.69 gals.

Method of purging: ELECTRIC PUMP

Date and time purged: 06/29/93, 9.30AM

Volume purged: 0.69 GAL.

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 06/30/93, 9.30AM

Method used to sample: ELECTRIC PUMP

Appearance of sample: N/A

Field filtering: N/A

Sample bottles filled: Ø

Field Measurements

Measured conductivity:

Temperature of sample:

Temperature corrected conductivity:

Standardized pH meter?

Measured pH of pH=7 buffer:

Measured pH of sample:

Comments:

Signature of sampler(s): [illegible] Date: 6-30-93

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-2-83
T.O.C. Elevation = 632.79

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY, 50°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: DRY feet

Depth of well: feet

Date and time measured: 09/30/93, 10.30AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 09/30/93, 10.15AM

Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DEIONIZED H2O

Purge

Height of water column (depth of well - depth of water): 0.27 feet

3 casing volumes (height of column * 1.10): 0.30 gals.

Method of purging: ELECTRIC PUMP

Date and time purged: 09/29/93, 10 30AM

Volume purged: 0.30 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 09/30/93, 10.30AM

Method used to sample: ELECTRIC PUMP

Appearance of sample: N/A

Field filtering: N/A

Sample bottles filled: Ø

Field Measurements

Measured conductivity:

Temperature of sample:

Temperature corrected conductivity:

Standardized pH meter?

Measured pH of pH=7 buffer:

Measured pH of sample:

Comments:

Signature of sampler(s) [illegible] Date: 9-30-93

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-2-83
T.O.C. Elevation = 632.79

General

Sampled by: RICK MEIROW

Weather and Conditions: PARTLY CLOUDY, 43°F, MODERATE WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: DRY feet

Depth of well: _____ feet

Date and time measured: 12/3/93

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: N/A

Method of decontamination: N/A

Purge

Height of water column (depth of well - depth of water): DRY feet

3 casing volumes (height of column * 1.10): 0 gals.

Method of purging: PERISTALTIC PUMP

Date and time purged: 12/7/93

Volume purged: 0

Appearance of purge water: N/A

Sampling

Date and time sampled: 12/5/93

Method used to sample: PERISTALTIC PUMP

Appearance of sample: N/A

Field filtering: N/A

Sample bottles filled: 0

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments: _____

Signature of sampler(s): [signature] Date: 12-6-93

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-3-88
T.O.C. Elevation = 631.50

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY, 78°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: _____ feet

Depth of well: _____ feet

Date and time measured: _____

Method used to measure: _____

Decontamination Procedures

Date and time of pre-sampling decontamination: 06/22/93, 9 45AM

Method of decontamination: SOAPY H_2O + TAP H_2O + DEIONIZED H_2O.

Purge

Height of water column (depth of well - depth of water): N/A feet

3 casing volumes (height of column * 0.49): N/A gal.

Method of purging: PERISTALTIC PUMP

Date and time purged: 06/21/93, 10AM

Volume purged: N/A

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 06/22/93, 10AM

Method used to sample: PERISTALTIC PUMP

Appearance of sample: CLEAR

Field filtering: N/A

Sample bottles filled: 4

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments:

RESAMPLING.

Signature of sampler(s) [signature] Date: 6/22/93

TEST REPORT

MAS #: 30622018

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B3(#1)

PHYSICAL DESCRIPTION: CLEAR LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
pH	8.0	units	06/23	LD	150.1
DISSOLVED NICKEL	< 0.05	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30622019

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B3(#2)

PHYSICAL DESCRIPTION: CLEAR LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
pH	8.0	units	06/23	LD	150.1
DISSOLVED NICKEL	< 0.05	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30622020

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B3(#3)

PHYSICAL DESCRIPTION: CLEAR LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
pH	7.8	units	06/23	LD	150.1
DISSOLVED NICKEL	< 0.05	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30622021

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High-Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B3(#4)

PHYSICAL DESCRIPTION: CLEAR LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
pH	8.1	units	06/23	LD	150.1
DISSOLVED NICKEL	< 0.05	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

Dynecol, Inc.
Field Data Entry Form

Monitoring Well E-3-88
T.O.C. Elevation = 631.50

General

Sampled by: RICK MEIROW
Weather and Conditions: SUNNY, 40°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 4.10 feet
Depth of well: feet
Date and time measured: 3/31/93, 10.20AM
Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 3/31/93, 10.15AM
Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DISTILLED H_2O

Purge

Height of water column (depth of well - depth of water): 10.20 feet
3 casing volumes (height of column * 0.49): 5.00 gal.
Method of purging: ELECTRIC PUMP
Date and time purged: 3/30/93 10.15AM
Volume purged: 5.00
Appearance of purge water: CLEAR

Sampling

Date and time sampled: 3/31/93 10.20AM
Method used to sample: ELECTRIC PUMP
Appearance of sample: CLEAR
Field filtering: N/A
Sample bottles filled: 5

Field Measurements

Measured conductivity:
Temperature of sample:
Temperature corrected conductivity:
Standardized pH meter?
Measured pH of pH=7 buffer:
Measured pH of sample:

Comments:

Signature of sampler(s) Date:

ENVIRONMENTAL QUALITY LABORATORIES, INC.
44075 Phoenix Drive
Sterling Heights, Michigan 48314-1420
(313) 731-1818
Outside Michigan Dial 1-800- 368-5227
Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/14/93
DATE RECEIVED:4/2/93
LAB No:3065

SAMPLE DESCRIPTION: **WELL B3 -1**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.004	6020	0.002
DISSOLVED BARIUM	LESS THAN 0.10	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.068	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN0.01	6020	0.01
DISSOLVED ZINC	LESS THAN 0.02	6020	0.02
PH	7.40	9040	0.05 s.u.

TRACKING PARAMETERS

	RESULTS(mg/L)	METHOD	
DISSOLVED CALCIUM	55	6010	0.01
DISSOLVED SODIUM	87	6010	0.1
DISSOLVED MAGNESIUM	28	6010	0.1
DISSOLVED POTASSIUM	3.9	6010	0.1
SULFATES	26	4500-SO4	5.0
BICARBONATE ALKALINITY	111 AS CaCO3	2320-B	2.0
CHLORIDE	110	4500-CL-C	2.0
NITROGEN,NITRATE	1.8	4500-NO3-D	0.1
CARBONATES (AS CaCO3)	LESS THAN 10	4500-CO2-D	
DISSOLVED IRON	0.11	6020	

GENERAL PARAMETERS

	RESULT	METHOD
SPECIFIC CONDUCTIVITY	760 umhos/cm	2510-B

JAMES TOMALIA, LAB SUPERVISOR J. Tomalia

C. BLOOM, ASSISTANT LAB SUPERVISOR C. Bloom
sd

ENVIRONMENTAL QUALITY LABORATORIES, INC.
44075 Phoenix Drive
Sterling Heights, Michigan 48314-1420
(313) 731-1818
Outside Michigan Dial 1-800- 368-5227
Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED:4/2/93
LAB No:3068

SAMPLE DESCRIPTION: **WELL B3-2**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0032	6020	0.002
DISSOLVED BARIUM	LESS THAN 0.10	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.080	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	LESS THAN 0.02	6020	0.02
PH	7.30	9040	0.05 s.u.

J. Tomalia

JAMES TOMALIA, LAB SUPERVISOR_____

C. Bloom

C. BLOOM, ASSISTANT LAB SUPERVISOR_____
tsc

ENVIRONMENTAL QUALITY LABORATORIES, INC.
44075 Phoenix Drive
Sterling Heights, Michigan 48314-1420
(313) 731-1818
Outside Michigan Dial 1-800- 368-5227
Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED: 4/2/93
LAB No: 3069

SAMPLE DESCRIPTION: **WELL B3-3**

PRIMARY MONITORING PARAMETERS

	RESULTS (mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0023	6020	0.002
DISSOLVED BARIUM	LESS THAN 0.10	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.059	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	LESS THAN 0.02	6020	0.02
PH	7.43	9040	0.05 s.u.

JAMES TOMALIA, LAB SUPERVISOR J. Tomalia

C. BLOOM, ASSISTANT LAB SUPERVISOR C. Bloom

tsc

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Sterling Heights, Michigan 48314-1420
(313) 731-1818
Outside Michigan Dial 1-800- 368-5227
Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED:4/2/93
LAB No:3070

SAMPLE DESCRIPTION: **WELL B3-4**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0034	6020	0.002
DISSOLVED BARIUM	0.114	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.088	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	LESS THAN 0.02	6020	0.02
PH	7.53	9040	0.05 s.u.

JAMES TOMALIA, LAB SUPERVISOR J. Tomalia

C. BLOOM, ASSISTANT LAB SUPERVISOR C. Bloom
tsc

GROUNDWATER MONITORING WORKSHEET
WELL B3
DATE: 03/93

PARAMETERS	LL	UL	TEST RESULT*	REMARKS**
pH (S.U)	7.37	8.69	7.42	(1) 2
Al(ppm)	N/A	0.37	0.125	(1) 2
As(ppm)	N/A	0.012	0.0032	(1) 2
Ba(ppm)	N/A	0.196	0.05	(1) 2
Cd(ppm)	N/A	0.035	0.005	(1) 2
Cr(ppm)	N/A	0.106	0.025	(1) 2
Pb(ppm)	N/A	0.106	0.025	(1) 2
Hg(ppm)	N/A	0.0011	0.00025	(1) 2
Ni(ppm)	N/A	0.106	0.025	(1) 2
Se(ppm)	N/A	0.0035	0.001	(1) 2
Ag(ppm)	N/A	0.035	0.005	(1) 2
Zn(ppm)	N/A	0.210	0.01	(1) 2

* Average of four values
**Circle:1 for value within criteria
2 for value outside criteria
Note: Value for nickel is calculated from resampling data of 06/22/93.

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 03/93

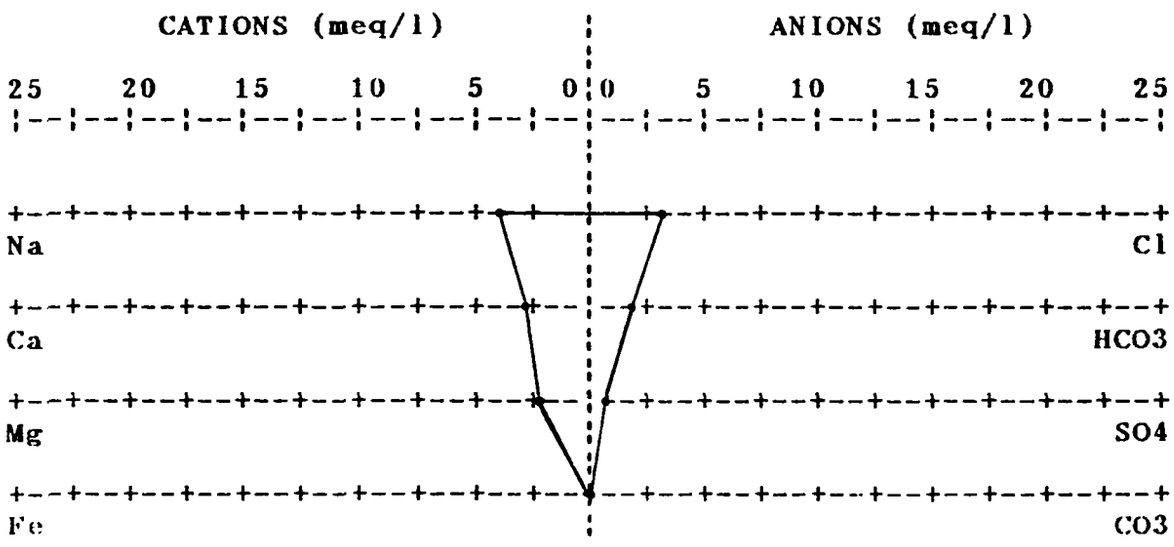
MONITORING WELL NUMBER: B3

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	110	0.02820	3.10
Bicarbonate	111	0.01639	1.82
Sulfate	26	0.02082	0.54
Carbonate	<10	0.03333	0
Sodium	87	0.04350	3.78
Calcium	55	0.04990	2.74
Magnesium	28	0.08224	2.30
Total Iron	0.11	0.03881	0.004

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B3



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-3-88
T.O.C. Elevation = 631.30

General

Sampled by: RICK MEIROW

Weather and Conditions: CLOUDY, 65°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 5.05 feet

Depth of well: _____ feet

Date and time measured: 6/30/93, 9.50AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 6/30/93, 9.45AM

Method of decontamination: SOAP SOLUTION, RINSE W/ TAP & DEIONIZED H

Purge

Height of water column (depth of well - depth of water): 9.47 feet

3 casing volumes (height of column * 0.49): 4.64 gal.

Method of purging: ELECTRIC PUMP

Date and time purged: 6/29/93, 9.50AM

Volume purged: 4.64 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 6/30/93, 9.50AM

Method used to sample: ELECTRIC PUMP

Appearance of sample: CLEAR

Field filtering: N/A

Sample bottles filled: 5

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments:

Signature of sampler(s) [illegible] Date: 6-30-93

TEST REPORT

MAS #: 30630017

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B3 (#1)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0056
DISSOLVED BARIUM	(Ba)	0.10	0.15
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
pH		0.05 units	8.0 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	59
DISSOLVED SODIUM	(Na+)	0.1	72
DISSOLVED MAGNESIUM	(Mg++)	0.1	29
DISSOLVED POTASSIUM	(K+)	0.1	4
* SULFATES	(SO4=)	5.0	73
BICARBONATE ALKALINITY	(HCO3-)	2.0	170
CHLORIDE	(Cl-)	2.0	120
NITRATE	(NO3-)	0.1	5.2
CARBONATES			20
DISSOLVED IRON			0.38
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	810 µmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER. KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30630020

Midwest Analytical Services, Inc.

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Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B3 (#2)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0061
DISSOLVED BARIUM	(Ba)	0.10	0.11
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
pH		0.05 units	7.9 units

LAB MANAGER. NITIN BARAD

LAB QUALITY MANAGER. KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF **MIDWEST ANALYTICAL SERVICES.**

N/D = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30630021

Midwest Analytical Services, Inc.

" Where industry comes for answers. "

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B3 (#3)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0062
DISSOLVED BARIUM	(Ba)	0.10	0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
pH		0.05 units	8.0 units

LAB MANAGER. NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES

ND = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30630022

Midwest Analytical Services, Inc.

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Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B3 (#4)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.007
DISSOLVED BARIUM	(Ba)	0.10	0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
pH		0.05 units	8.0 units

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

GROUNDWATER MONITORING WORKSHEET
WELL B3
DATE: 06/93

PARAMETERS	LL	UL	TEST RESULT*	REMARKS**
pH (S.U)	7.37	8.69	7.98	(1) 2
Al(ppm)	N/A	0.37	0.13	(1) 2
As(ppm)	N/A	0.012	0.0062	(1) 2
Ba(ppm)	N/A	0.196	0.1150	(1) 2
Cd(ppm)	N/A	0.035	0.005	(1) 2
Cr(ppm)	N/A	0.106	0.025	(1) 2
Pb(ppm)	N/A	0.106	0.025	(1) 2
Hg(ppm)	N/A	0.0011	0.0003	(1) 2
Ni(ppm)	N/A	0.106	0.025	(1) 2
Se(ppm)	N/A	0.0035	0.001	(1) 2
Ag(ppm)	N/A	0.035	0.005	(1) 2
Zn(ppm)	N/A	0.210	0.01	(1) 2

*Average of four values
**Circle:1 for value within criteria
2 for value outside criteria

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 06/93

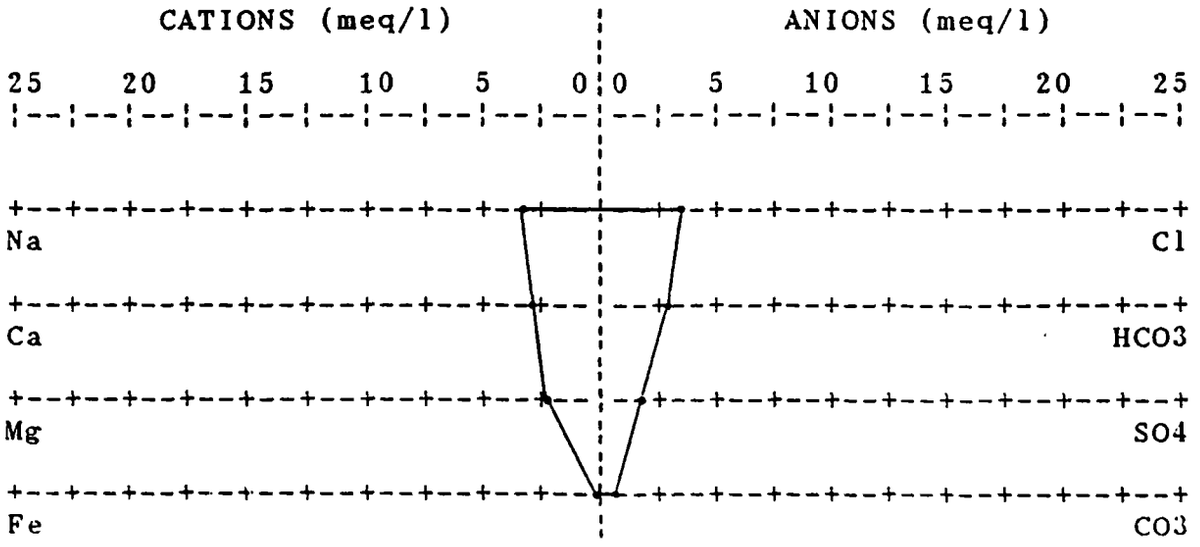
MONITORING WELL NUMBER: B3

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	120	0.02820	3.384
Bicarbonate	170	0.01639	2.786
Sulfate	73	0.02082	1.519
Carbonate	20	0.03333	0.667
Sodium	72	0.04350	3.132
Calcium	59	0.04990	2.944
Magnesium	29	0.08224	2.385
Total Iron	0.33	0.03881	0.015

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL:_____



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B-3-88
T.O.C. Elevation = 631.50

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY, 50°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 5.56 feet

Depth of well: _____ feet

Date and time measured: 09/30/93, 10.50AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 09/30/93, 10.45AM

Method of decontamination: SOAP SOLUTION, RINSE W/ TAP & DEIONIZED H2O

Purge

Height of water column (depth of well - depth of water): 8.80 feet

3 casing volumes (height of column * 0.49): 4.31 gal

Method of purging: ELECTRIC PUMP

Date and time purged: 09/29/93, 10.50AM

Volume purged: 4.31 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 09/30/93, 10.50AM

Method used to sample: ELECTRIC PUMP

Appearance of sample: CLEAR

Field filtering: N/A

Sample bottles filled: 1

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments:

Signature of sampler(s): [signature] Date: 9-30-93

ATTACHMENT B

TEST REPORT

MAS #: 30930015

Midwest Analytical Services, Inc.

"Where industry comes for answers."

Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 11/09/93
P.O. #: 78314

SAMPLE IDENTIFICATION: WELL B3(#1) 9/30/93
**** AMENDED REPORT 11/09/93**

PHYSICAL DESCRIPTION: LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0056
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
pH		0.05 s.u.	8.6 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	43
DISSOLVED SODIUM	(Na+)	0.1	57
DISSOLVED MAGNESIUM	(Mg++)	0.1	28
DISSOLVED POTASSIUM	(K+)	0.1	13
* SULFATES	(SO4=)	5.0	65
BICARBONATE ALKALINITY	(HCO3-)	2.0	150
CHLORIDE	(Cl-)	2.0	110
NITRATE	(NO3-)	0.1	0.88
** CARBONATES			28
DISSOLVED IRON			0.14
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	780 µmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

Nitin Barad

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES

ND = NOT DETECTED

GROUNDWATER MONITORING WORKSHEET

WELL B3

DATE: 3KD Q (93)

PARAMETERS	LL	UL	TEST RESULT	REMARKS*
pH (S.U)	7.37	8.69	5.60	(1) 2
Al(ppm)	N/A	0.37	<0.05	(1) 2
As(ppm)	N/A	0.012	0.0056	(1) 2
Ba(ppm)	N/A	0.196	<0.10	(1) 2
Cd(ppm)	N/A	0.035	<0.01	(1) 2
Cr(ppm)	N/A	0.106	<0.05	(1) 2
Pb(ppm)	N/A	0.106	<0.05	(1) 2
Hg(ppm)	N/A	0.0011	<0.00005	(1) 2
Ni(ppm)	N/A	0.106	<0.05	(1) 2
Se(ppm)	N/A	0.0035	<0.002	(1) 2
Ag(ppm)	N/A	0.035	[illegible]	1 2
Zn(ppm)	N/A	0.210	[illegible]	1 2

*Circle: 1 for value within criteria
2 for value outside criteria

ATTACHMENT C

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM
(REVISED VERSION)

MONTH/YEAR: 09/93

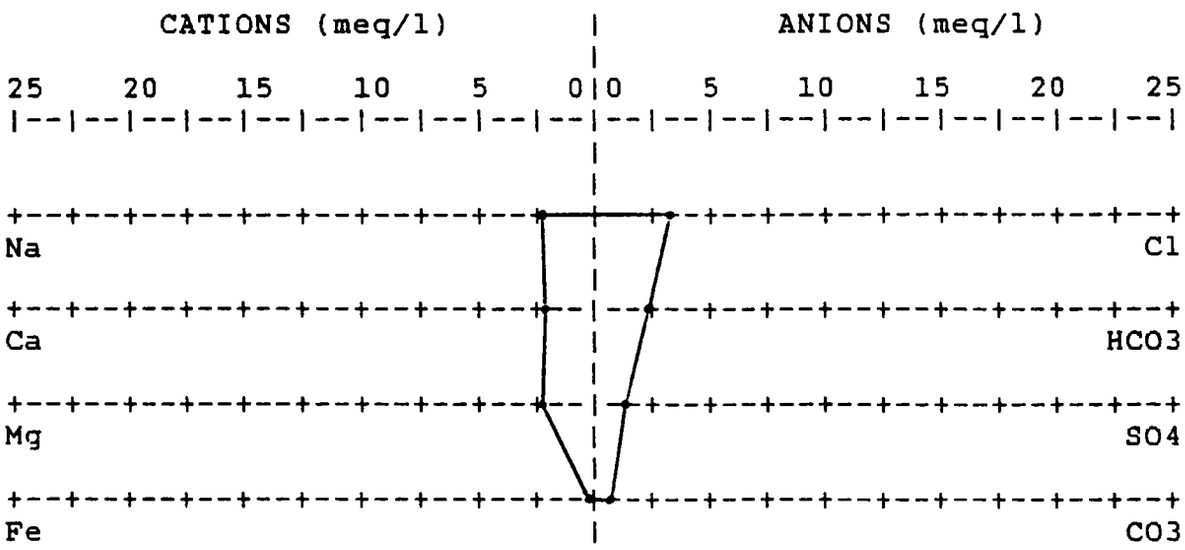
MONITORING WELL NUMBER: B-3

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	110	0.02820	3.1020
Bicarbonate	150	0.01639	2.4585
Sulfate	65	0.02082	1.3533
Carbonate	28	0.03333	0.9332
Sodium	57	0.04350	2.4795
Calcium	43	0.04990	2.1457
Magnesium	28	0.08224	2.3027
Total Iron	0.14	0.03881	0.0054

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B-3



Dynecol, Inc.
Field Data Entry Form

Monitoring Well E-3-88
T.O.C. Elevation = 631.50

General

Sampled by: RICK MEIROLU

Weather and Conditions: PARTLY CLOUDY, 43°F, MODERATE WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 5.02 feet

Depth of well: _____ feet

Date and time measured: 12/8/93

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 12/8/93

Method of decontamination: SOAP SOLUTION, RINSE W/TAP & DEIONIZED H_2O

Purge

Height of water column (depth of well - depth of water): 8.49 feet

3 casing volumes (height of column * 0.49): 4.16 gal

Method of purging: PERISTALTIC PUMP

Date and time purged: 12/7/93

Volume purged: 4.16 GAL

Appearance of purge water: CLEAR

Sampling

Date and time sampled: 12/8/93

Method used to sample: PERISTALTIC PUMP

Appearance of sample: CLEAR

Field filtering: N/A

Sample bottles filled: 2

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments: _____

Signature of sampler(s): [signature] Date: 12-8-93

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2727 Second Avenue
Detroit, Michigan 48201

Phone: 1-800-801-4MAS (MI only)
: (313) 964-3680
Fax No: (313) 964-2339

IN: smj

TEST REPORT

MAS #:3 1 2 0 8 0 4 5

TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 21-Dec-93
P.O. #: 115-524

SAMPLE IDENTIFICATION: WELL B-3 12/8/93
PHYSICAL DESCRIPTION: LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0066
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.029
pH			8.4 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	32
DISSOLVED SODIUM	(Na+)	0.1	58
DISSOLVED MAGNESIUM	(Mg++)	0.1	23
DISSOLVED POTASSIUM	(K+)	0.1	3.5
SULFATES	(SO4=)	5.0	89
BICARBONATE ALKALINITY	(HCO3-)	2.0	160
CHLORIDE	(Cl-)	2.0	10
NITRATE	(NO3-)	0.1	< 0.1
CARBONATES			< 2.0
DISSOLVED IRON			< 0.1
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	730 µmhos/cm

Krystyna Czyzo
Lab. Quality Manager

GROUNDWATER MONITORING WORKSHEET
WELL B3
DATE: 12/03/93

PARAMETERS	LL	UL	TEST RESULT	REMARKS*
pH (S.U)	7.37	8.69	8.40	(1) 2
Al(ppm)	N/A	0.37	<0.25	(1) 2
As(ppm)	N/A	0.012	0.0066	(1) 2
Ba(ppm)	N/A	0.196	<0.1	(1) 2
Cd(ppm)	N/A	0.035	<0.01	(1) 2
Cr(ppm)	N/A	0.106	<0.05	(1) 2
Pb(ppm)	N/A	0.106	<0.05	(1) 2
Hg(ppm)	N/A	0.0011	<0.0005	(1) 2
Ni(ppm)	N/A	0.106	<0.05	(1) 2
Se(ppm)	N/A	0.0035	<0.002	(1) 2
Ag(ppm)	N/A	0.035	<0.01	(1) 2
Zn(ppm)	N/A	0.210	0.029	(1) 2

*Circle: 1 for value within criteria
2 for value outside criteria

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 12/93

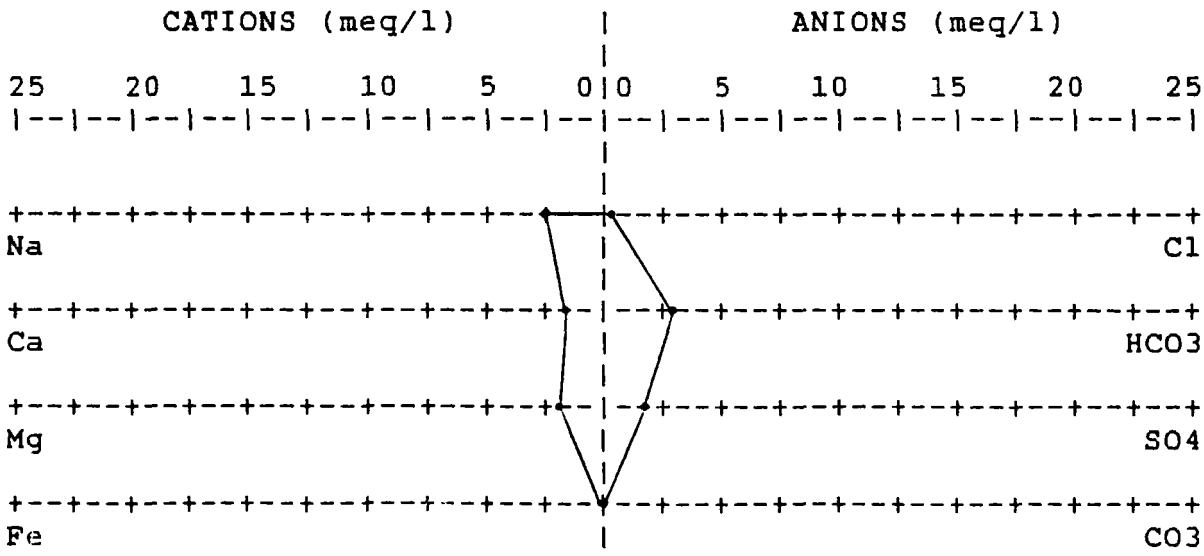
MONITORING WELL NUMBER: B-3

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	10	0.02820	0.282
Bicarbonate	160	0.01639	2.622
Sulfate	89	0.02082	1.853
Carbonate	<2.0	0.03333	0.0
Sodium	58	0.04350	2.523
Calcium	32	0.04990	1.597
Magnesium	23	0.08224	1.892
Total Iron	<0.1	0.03881	0.0

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B-3



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B 4
T.O.C. Elevation = 631.41

General

Sampled by: RICK MEIROW
Weather and Conditions: SUNNY, 78°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: _____ feet
Depth of well: _____ feet
Date and time measured: _____
Method used to measure: _____

Decontamination Procedures

Date and time of pre-sampling decontamination: 06/22/93, 10.30 AM
Method of decontamination: SOAPY H_2O + TAP H_2O + DEIONIZED H_2O

Purge

Height of water column (depth of well - depth of water): N/A feet
3 casing volumes (height of column * 0.49): N/A gals
Method of purging: PERISTALTIC PUMP
Date and time purged: 06/21/93, 10.20AM
Volume purged: N/A
Appearance of purge water: CLOUDY

Sampling

Date and time sampled: 06/22/93, 10.35AM
Method used to sample: PERISTALTIC PUMP
Appearance of sample: CLOUDY
Field filtering: N/A
Sample bottles filled: 4

Field Measurements

Measured conductivity: _____
Temperature of sample: _____
Temperature corrected conductivity: _____
Standardized pH meter? _____
Measured pH of pH=7 buffer: _____
Measured pH of sample: _____

Comments: RESAMPLING

Signature of sampler(s): [signature] Date: 6/22/93

TEST REPORT

MAS #: 30622022

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Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B4(#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
DISSOLVED NICKEL	0.052	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

Krystyna Czyzo

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30622023

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2727 Second Avenue
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Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B4(#2)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
DISSOLVED NICKEL	0.055	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, ug/l, ug/kg or ug/kg (dry weight)

TEST REPORT

MAS #: 30622024

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FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B4(#3)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
DISSOLVED NICKEL	0.05	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

Krystyna Czyzo
LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES
N/D = NOT DETECTED
Results relate only to the items tested
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, ug/l, ug/kg or ug/kg (dry weight)

TEST REPORT

MAS #: 30622025

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Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NWB

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 06/29/93
P.O. #: 82550

RELEASE#: 78309

SAMPLE IDENTIFICATION: B4(#4)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	DATE ANAL.	LAB TECH.	METHOD #
DISSOLVED NICKEL	0.068	mg/l	06/28	DM	200.7

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

Dynecol, Inc.
Field Data Entry Form

Monitoring Well B 4
T.O.C. Elevation = 631.41

General

Sampled by: RICK MEIROW
Weather and Conditions: SUNNY, 40°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 2.16 feet
Depth of well: feet
Date and time measured: 3/31/93, 10.50AM
Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 3/31/93, 10.45AM
Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DISTILLED H2

Purge

Height of water column (depth of well - depth of water): 5.27 feet
3 casing volumes (height of column * 0.49): 2.58 gal
Method of purging: ELECTRIC PUMP
Date and time purged: 3/30/93, 10.45AM
Volume purged: 2.58
Appearance of purge water: CLEAR

Sampling

Date and time sampled: 3/31/93 10.50AM
Method used to sample: ELECTRIC PUMP
Appearance of sample: CLEAR
Field filtering: N/A
Sample bottles filled: 5

Field Measurements

Measured conductivity:
Temperature of sample:
Temperature corrected conductivity:
Standardized pH meter?
Measured pH of pH=7 buffer:
Measured pH of sample:

Comments:

Signature of sampler(s): [illegible] Date: [illegible]

ENVIRONMENTAL QUALITY LABORATORIES, INC.
44075 Phoenix Drive
Sterling Heights, Michigan 48314-1420
(313) 731-1818
Outside Michigan Dial 1-800- 368-5227
Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED: 4/2/93
LAB No: 3066

SAMPLE DESCRIPTION: **WELL B4 -1**

PRIMARY MONITORING PARAMETERS

	RESULTS (mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0027	6020	0.002
DISSOLVED BARIUM	0.107	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.204	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	0.107	6020	0.02
PH	7.30	9040	0.05 s.u.

TRACKING PARAMETERS

	RESULTS (mg/L)	METHOD	
DISSOLVED CALCIUM	169	6010	0.01
DISSOLVED SODIUM	659	6010	0.1
DISSOLVED MAGNESIUM	37	6010	0.1
DISSOLVED POTASSIUM	47	6010	0.1
SULFATES	35	4500-SO4	5.0
BICARBONATE ALKALINITY	280 AS CaCO3	2320-B	2.0
CHLORIDE	650	4500-CL-C	2.0
NITROGEN, NITRATE	30	4500-NO3-D	0.1
CARBONATES (AS CaCO3)	LESS THAN 10	4500-CO2-D	
DISSOLVED IRON	0.348	6020	

GENERAL PARAMETERS

	RESULT	METHOD
SPECIFIC CONDUCTIVITY	3500 umhos/cm	2510-B

JAMES TOMALIA, LAB SUPERVISOR J. Tomalia

C. BLOOM, ASSISTANT LAB SUPERVISOR C. Bloom

tsc

ENVIRONMENTAL QUALITY LABORATORIES, INC.
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Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED:4/2/93
LAB No:3071

SAMPLE DESCRIPTION: **WELL B4-2**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0021	6020	0.002
DISSOLVED BARIUM	0.110	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.235	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	0.126	6020	0.02
PH	7.27	9040	0.05 s.u.

J. Tomalia

JAMES TOMALIA, LAB SUPERVISOR

C. Bloom

C. BLOOM, ASSISTANT LAB SUPERVISOR
tsc

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6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED:4/2/93
LAB No:3072

SAMPLE DESCRIPTION: **WELL B4-3**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0022	6020	0.002
DISSOLVED BARIUM	0.105	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.216	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	0.145	6020	0.02
PH	7.54	9040	0.05 s.u.

J. Tomalia

JAMES TOMALIA, LAB SUPERVISOR

C. Bloom

C. BLOOM, ASSISTANT LAB SUPERVISOR
tsc

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(313) 731-1818
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Fax Line 313-731-2590

DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE REPORTED: 4/15/93
DATE RECEIVED:4/2/93
LAB No:3073

SAMPLE DESCRIPTION: **WELL B4-4**

PRIMARY MONITORING PARAMETERS

	RESULTS(mg/L)	METHOD	EXPECTED DETECTION LIMIT (mg/L)
DISSOLVED ALUMINUM	LESS THAN 0.25	6010	0.25
DISSOLVED ARSENIC	0.0027	6020	0.002
DISSOLVED BARIUM	0.109	6020	0.10
DISSOLVED CADMIUM	LESS THAN 0.01	6020	0.01
DISSOLVED CHROMIUM	LESS THAN 0.05	6020	0.05
DISSOLVED LEAD	LESS THAN 0.05	6020	0.05
DISSOLVED MERCURY	LESS THAN 0.0005	7470	0.0005
DISSOLVED NICKEL	0.229	6020	0.05
DISSOLVED SELENIUM	LESS THAN 0.002	6020	0.002
DISSOLVED SILVER	LESS THAN 0.01	6020	0.01
DISSOLVED ZINC	0.089	6020	0.02
PH	7.28	9040	0.05 s.u.

J. Tomalia

JAMES TOMALIA, LAB SUPERVISOR_____

C. Bloom

C. BLOOM, ASSISTANT LAB SUPERVISOR_____
tsc

GROUNDWATER MONITORING WORKSHEET
WELL B4
DATE: 03/93

PARAMETERS	LL	UL	TEST RESULT*	REMARKS**
pH (S.U)	5.78	8.41	7.35	(1) 2
Al(ppm)	N/A	0.380	0.125	(1) 2
As(ppm)	N/A	0.007	0.0024	(1) 2
Ba(ppm)	N/A	0.297	0.108	(1) 2
Cd(ppm)	N/A	0.035	0.005	(1) 2
Cr(ppm)	N/A	0.106	0.025	(1) 2
Pb(ppm)	N/A	0.106	0.025	(1) 2
Hg(ppm)	N/A	0.0011	0.00025	(1) 2
Ni(ppm)	N/A	0.106	0.056	(1) 2
Se(ppm)	N/A	0.0035	0.001	(1) 2
Ag(ppm)	N/A	0.035	0.005	(1) 2
Zn(ppm)	N/A	0.715	0.117	(1) 2

* Average of four values
**Circle:1 for value within criteria
2 for value outside criteria
Note: Value for nickel is calculated from resampling data of 06/22/93.

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 03/93

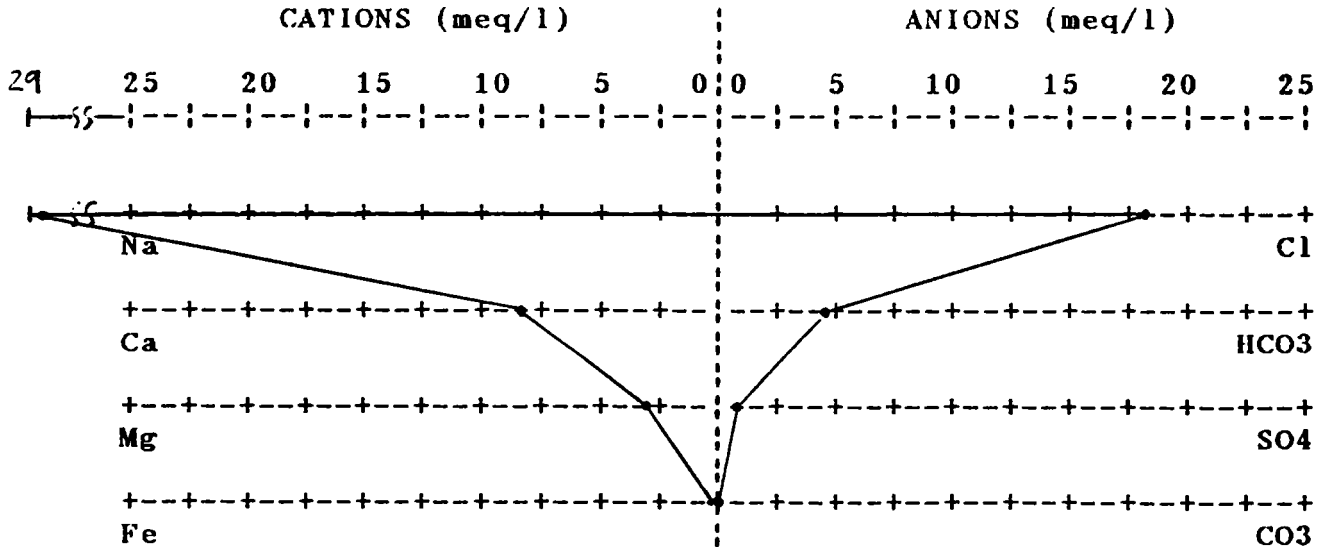
MONITORING WELL NUMBER: B4

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	650	0.02820	18.33
Bicarbonate	280	0.01639	4.59
Sulfate	35	0.02082	0.73
Carbonate	<10	0.03333	0
Sodium	659	0.04350	28.67
Calcium	169	0.04990	8.43
Magnesium	37	0.08224	3.04
Total Iron	0.348	0.03881	0.01

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B4



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B 4
T.O.C. Elevation = 631.41

General

Sampled by: RICK MEIROW
Weather and Conditions: CLOUDY, 65°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 4.19 feet
Depth of well: feet
Date and time measured: 6/30/93, 10.30AM
Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 6/30/93, 10.20AM
Method of decontamination: SOAP SOLUTION + RINSE W/ TAP & DEIONIZED

Purge

Height of water column (depth of well - depth of water): 3.02 feet
3 casing volumes (height of column * 0.49): 1.48 gal
Method of purging: ELECTRIC PUMP
Date and time purged: 06/29/93 10.15AM
Volume purged: 1.48 GAL
Appearance of purge water: CLOUDY

Sampling

Date and time sampled: 6/30/93 10.30AM
Method used to sample: ELECTRIC PUMP
Appearance of sample: CLOUDY
Field filtering: N/A
Sample bottles filled: 5

Field Measurements

Measured conductivity:
Temperature of sample:
Temperature corrected conductivity:
Standardized pH meter?
Measured pH of pH=7 buffer:
Measured pH of sample:

Comments:

Signature of sampler(s) [signature] Date: 6.30.93

TEST REPORT

MAS #: 30630018

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Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B4 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.23
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.074
pH		0.05 units	7.1 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	180
DISSOLVED SODIUM	(Na+)	0.1	570
DISSOLVED MAGNESIUM	(Mg++)	0.1	17
DISSOLVED POTASSIUM	(K+)	0.1	63
* SULFATES	(SO4=)	5.0	120
BICARBONATE ALKALINITY	(HCO3-)	2.0	300
CHLORIDE	(Cl-)	2.0	1100
NITRATE	(NO3-)	0.1	34
CARBONATES			< 1.0
DISSOLVED IRON			0.59
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	3700 µmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED

Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)

ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30630023

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2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B4 (#2)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.19
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.063
pH		0.05 units	7.1 units

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES

N/D = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

MAS #: 30630024

Midwest Analytical Services, Inc.

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Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B4 (#3)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.18
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.025
pH		0.05 units	7.2 units

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

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ND = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, ug/l, ug/kg or ug/kg (dry weight)

TEST REPORT

MAS #: 30630025

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2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 07/20/93

RELEASE#: 78311

SAMPLE IDENTIFICATION: B4 (#4)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.17
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.029
pH		0.05 units	7.2 units

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED

Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)

ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

GROUNDWATER MONITORING WORKSHEET
WELL B4
DATE: 06/93

PARAMETERS	LL	UL	TEST RESULT*	REMARKS**
pH (S.U)	5.78	8.41	7.15	(1) 2
Al(ppm)	N/A	0.380	0.125	(1) 2
As(ppm)	N/A	0.007	0.001	(1) 2
Ba(ppm)	N/A	0.297	0.1925	(1) 2
Cd(ppm)	N/A	0.035	0.005	(1) 2
Cr(ppm)	N/A	0.106	0.025	(1) 2
Pb(ppm)	N/A	0.106	0.025	(1) 2
Hg(ppm)	N/A	0.0011	0.0003	(1) 2
Ni(ppm)	N/A	0.106	0.025	(1) 2
Se(ppm)	N/A	0.0035	0.001	(1) 2
Ag(ppm)	N/A	0.035	0.005	(1) 2
Zn(ppm)	N/A	0.715	0.048	(1) 2

* Average of four values
**Circle:1 for value within criteria
2 for value outside criteria

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 06/93

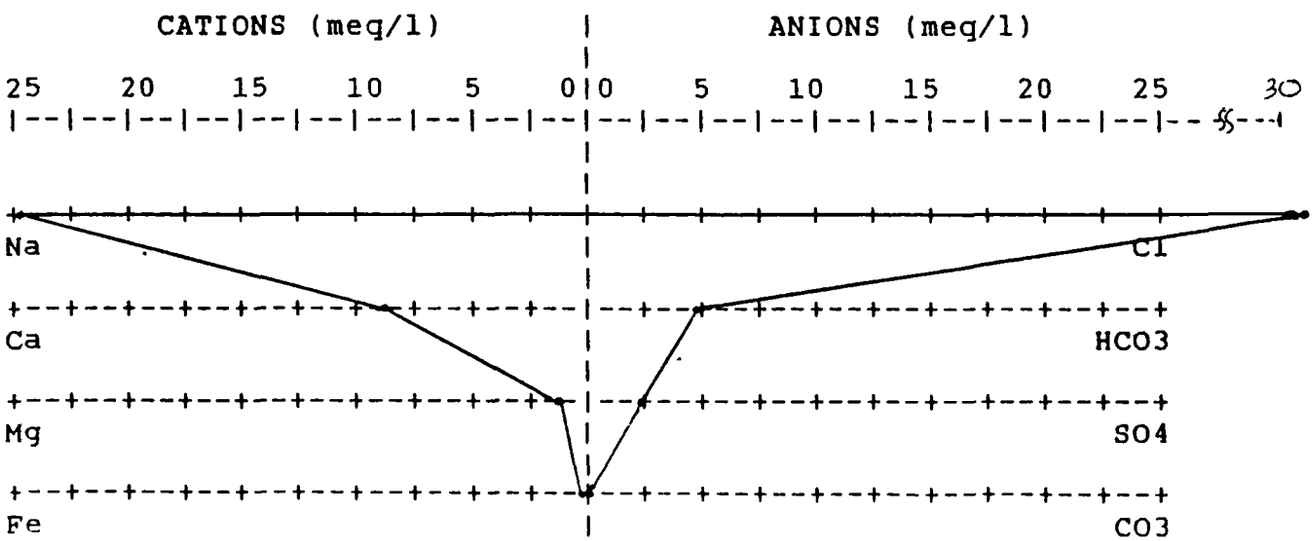
MONITORING WELL NUMBER: B4

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	1,100	0.02820	31.02
Bicarbonate	300	0.01639	4.917
Sulfate	120	0.02082	2.498
Carbonate	<1.0	0.03333	0.0
Sodium	570	0.04350	24.795
Calcium	180	0.04990	8.982
Magnesium	17	0.08224	1.398
Total Iron	0.59	0.03881	0.023

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: _____



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B 4
T.O.C. Elevation = 631.41

General

Sampled by: RICK MEIROW

Weather and Conditions: SUNNY 50°F, CALM WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 4.58 feet

Depth of well: _____ feet

Date and time measured: 9/30/93, 11 30 AM

Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 9/30/93, 11.20 AM

Method of decontamination: SOAP SOLUTION + RINSE W/TAP & DEIONIZED H2O

Purge

Height of water column (depth of well - depth of water): 2.70 feet

3 casing volumes (height of column * 0.49): 1 32 gals

Method of purging: ELECTRIC PUMP

Date and time purged: 9/29/93, 11.15AM

Volume purged: 1 32 GAL

Appearance of purge water: CLOUDY

Sampling

Date and time sampled: 9/30/93 11 30AM

Method used to sample: ELECTRIC PUMP

Appearance of sample: CLOUDY

Field filtering: N/A

Sample bottles filled: 1

Field Measurements

Measured conductivity: _____

Temperature of sample: _____

Temperature corrected conductivity: _____

Standardized pH meter? _____

Measured pH of pH=7 buffer: _____

Measured pH of sample: _____

Comments:

Signature of sampler(s): [signature] Date: 9-30-93

TEST REPORT

MAS #: 30930016

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2727 Second Avenue
Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO:
TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 10/15/93
P.O. #: 78314

SAMPLE IDENTIFICATION: WELL B4(#1) 9/30/93

PHYSICAL DESCRIPTION: LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	0.0031
DISSOLVED BARIUM	(Ba)	0.10	0.2
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.043
pH		0.05 s.u.	7.4 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	170
DISSOLVED SODIUM	(Na+)	0.1	610
DISSOLVED MAGNESIUM	(Mg++)	0.1	25
DISSOLVED POTASSIUM	(K+)	0.1	31
* SULFATES	(SO4=)	5.0	120
BICARBONATE ALKALINITY	(HCO3-)	2.0	340
CHLORIDE	(Cl-)	2.0	950
NITRATE	(NO3-)	0.1	6.6
CARBONATES			< 1.0
DISSOLVED IRON			5.3
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	4200 µmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

LAB QUALITY MANAGER: KRYSTYNA CZYZO

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ND = NOT DETECTED
Results relate only to the items tested

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

GROUNDWATER MONITORING WORKSHEET
WELL B4
DATE: 3KD C. (93)

PARAMETERS	LL	UL	TEST RESULT	REMARKS*
pH (S.U)	5.78	8.41	7.40	(1) 2
Al(ppm)	N/A	0.380	<0.25	(1) 2
As(ppm)	N/A	0.007	0.0031	(1) 2
Ba(ppm)	N/A	0.297	0.20	(1) 2
Cd(ppm)	N/A	0.035	<0.01	(1) 2
Cr(ppm)	N/A	0.106	<0.05	(1) 2
Pb(ppm)	N/A	0.106	<0.05	(1) 2
Hg(ppm)	N/A	0.0011	<0.0005	(1) 2
Ni(ppm)	N/A	0.106	<0.05	(1) 2
Se(ppm)	N/A	0.0035	<0.002	(1) 2
Ag(ppm)	N/A	0.035	<0.01	(1) 2
Zn(ppm)	N/A	0.715	0.043	(1) 2

*Circle: 1 for value within criteria
2 for value outside criteria

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 09/93

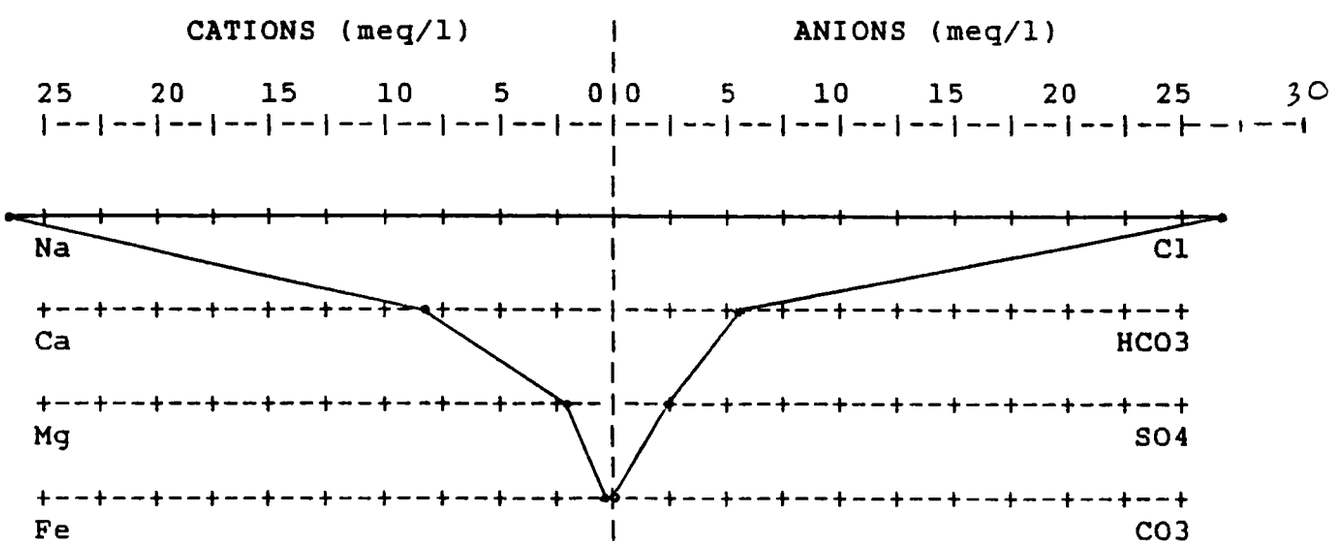
MONITORING WELL NUMBER: B-4

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	950	0.02820	26.7900
Bicarbonate	340	0.01639	5.5726
Sulfate	120	0.02082	2.4984
Carbonate	<1.0	0.03333	0
Sodium	610	0.04350	26.535
Calcium	170	0.04990	8.4830
Magnesium	25	0.08224	2.0560
Total Iron	5.3	0.03881	0.2057

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B-4



Dynecol, Inc.
Field Data Entry Form

Monitoring Well B 4
T.O.C. Elevation = 631.41

General

Sampled by: RICK MEIROW
Weather and Conditions: PARTLY CLOUDY, 43°F, MODERATE WIND

Witness: TIEN PHAM

Water Level Measurement

Depth of water from top of casing: 4.15 feet
Depth of well: feet
Date and time measured: 12/8/93
Method used to measure: WATER LEVEL INDICATOR

Decontamination Procedures

Date and time of pre-sampling decontamination: 12/8/93
Method of decontamination: SOAP SOLUTION, RINSE W/TAP & DEIONIZED H_2O

Purge

Height of water column (depth of well - depth of water): 3.01 feet
3 casing volumes (height of column * 0.49): 1.47 gal
Method of purging: PERISTALTIC PUMP
Date and time purged: 12/7/93
Volume purged: 1.47 GAL
Appearance of purge water: CLOUDY

Sampling

Date and time sampled: 12/8/93
Method used to sample: PERISTALTIC PUMP
Appearance of sample: CLOUDY
Field filtering: N/A
Sample bottles filled: 2

Field Measurements

Measured conductivity:
Temperature of sample:
Temperature corrected conductivity:
Standardized pH meter?
Measured pH of pH=7 buffer:
Measured pH of sample:

Comments:

Signature of sampler(s): [signature] Date: 12-8-93

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2727 Second Avenue
Detroit, Michigan 48201

Phone: 1-800-801-4MAS (MI only)
: (313) 964-3680
Fax No: (313) 964-2339

IN: smj

TEST REPORT

MAS #:3 1 2 0 8 0 4 6

TIEN PHAM
DYNECOL, INC.
6520 GEORGIA
DETROIT, MI 48211

DATE COMPLETED: 21-Dec-93
P.O. #: 115-524

SAMPLE IDENTIFICATION: WELL B-4 12/8/93
PHYSICAL DESCRIPTION: LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.15
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.16
pH			7.7 units
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	120
DISSOLVED SODIUM	(Na+)	0.1	480
DISSOLVED MAGNESIUM	(Mg++)	0.1	21
DISSOLVED POTASSIUM	(K+)	0.1	30
SULFATES	(SO4=)	5.0	220
BICARBONATE ALKALINITY	(HCO3-)	2.0	410
CHLORIDE	(Cl-)	2.0	100
NITRATE	(NO3-)	0.1	< 0.1
CARBONATES			< 2.0
DISSOLVED IRON			0.12
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	3400 µmhos/cm

Krystyna Czyzo
Lab. Quality Manager

GROUNDWATER MONITORING WORKSHEET
WELL B4
DATE: 12/08/93

PARAMETERS	LL	UL	TEST RESULT	REMARKS*
pH (S.U)	5.78	8.41	7.70	(1) 2
Al(ppm)	N/A	0.380	<0.25	(1) 2
As(ppm)	N/A	0.007	<0002	(1) 2
Ba(ppm)	N/A	0.297	0.15	(1) 2
Cd(ppm)	N/A	0.035	<0.01	(1) 2
Cr(ppm)	N/A	0.106	<0.05	(1) 2
Pb(ppm)	N/A	0.106	<0.05	(1) 2
Hg(ppm)	N/A	0.0011	<0.0005	(1) 2
Ni(ppm)	N/A	0.106	<0.05	(1) 2
Se(ppm)	N/A	0.0035	0.002	(1) 2
Ag(ppm)	N/A	0.035	<0.01	(1) 2
Zn(ppm)	N/A	0.715	0.16	(1) 2

*Circle: 1 for value within criteria
2 for value outside criteria

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 12/93

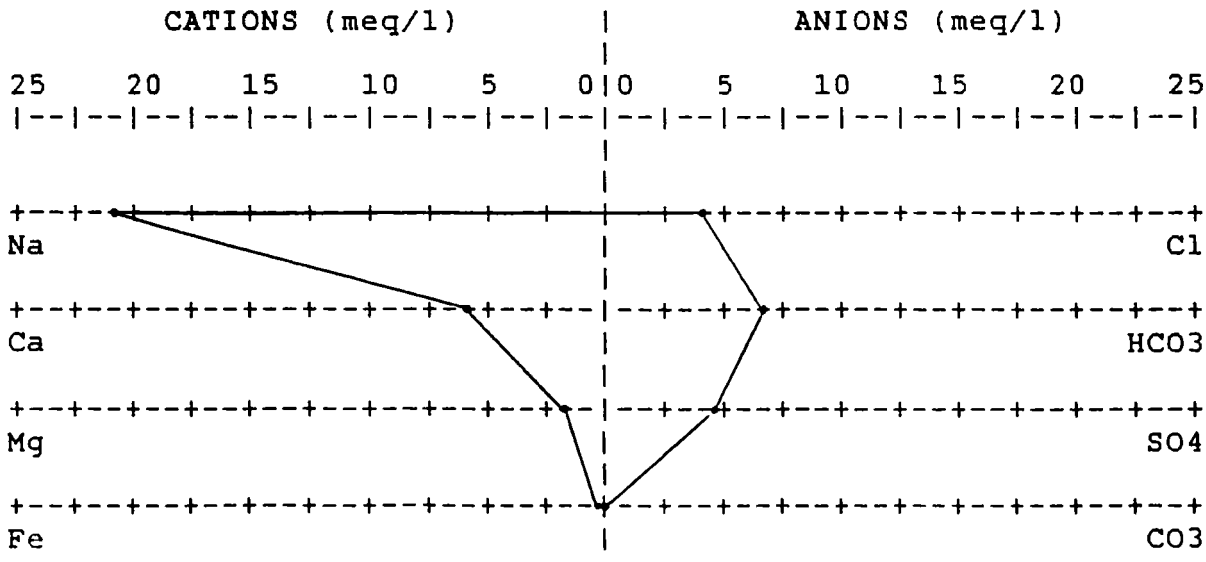
MONITORING WELL NUMBER: B-4

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	100	0.02820	2.820
Bicarbonate	410	0.01639	6.720
Sulfate	220	0.02082	4.580
Carbonate	<2.0	0.03333	0.0
Sodium	480	0.04350	20.88
Calcium	120	0.04990	5.988
Magnesium	21	0.08224	1.727
Total Iron	0.12	0.03881	0.005

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B-4



DYNECOL

DYNECOL, INC.

6520 GEORGIA STREET
DETROIT, MICHIGAN 48211
(313) 571-7141

February 22, 1993

RECEIVED

FEB 23 1993

Waste Management
Division

Michigan Department of Natural Resources
Waste Management Division
Geotechnical Support Unit
P.O.Box 30241
Lansing, MI 48909
Attn: Ms. Elaine Bennett

Dear Ms. Bennett:

RE: Dynecol, Inc.
MID 074 259 565
Annual Groundwater Report

In reference to your letter of January 28, 1993, please find enclosed three (3) copies of our Annual Groundwater Report for 1992. Please also note the following:

(1) This report inludes groundwater data for the four quarters of 1992, geochemical diagrams, i.e., Stiff Diagrams, along with background values, i.e., means, standard deviations, upper and lower limits for pH and dissolved metals for wells B2, B3, and B4. Monitoring well B5 is officially closed per Dynecol's letter of request of 08/19/1991 and MDNR's approval letter of 09/13/1991.

(2) Background values for monitoring well B2 are evaluated with the only use of groundwater data from the first quarter of 1992, since this particular well is dry for the rest of the year. Background values for wells B3 and B4 are established from use of sixteen (16) data sets gotten for each well during the four (4) quarters of 1992. These background values will be used for determination of any statistically significant increase/decrease of pH/dissolved metals during the four quarters of 1993.

(3) We are unable to provide, at this stage, groundwater flow rate/direction/contour map due to the dryness of monitoring well B2 during the last three quarters of 1992.

Should you have any questions or comments concerning this report, please feel free to contact me.

Truly yours,

Tien H. Pham
Manager, Technical Services

Enc(3)

cc: MDNR File

DYNECOL, INC.

MID 074 259 565

ANNUAL GROUNDWATER REPORT(1992)

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Test Data for Well B4 29-45

PIEZOMETER B1
DATA ANALYSIS AND STATISTICAL EVALUATION

S T A T I C L E V E L* 03/92	06/92	09/92	12/92	MEAN	STD. DEV.
2.78	3.93	4.14	2.93	3.45	0.69

* Measured in feet

MONITORING WELL B2
DATA ANALYSIS AND STATISTICAL EVALUATION*

PARAMETERS**	MEAN	STANDARD DEVIATION	LOWER LIMIT	UPPER LIMIT
Static Level	N/A	N/A	N/A	N/A
pH	7.28	0.13	7.07	7.49
Al	0.25	0.09	0	0.36
As	0.0220	0.0076	0	0.031
Ba	0.11	0.01	0	0.1218
Cd	0.01	0.01	0	0.0218
Cr	0.07	0.06	0	0.14
Pb	0.03	0.03	0	0.07
Hg	0.0003	0.0003	0	0.0007
Ni	0.03	0.03	0	0.07
Se	0.001	0.0012	0	0.0024
Ag	0.01	0.01	0	0.0218
Zn	0.06	0.01	0	0.0718

* Statistical evaluation performed using data from first quarter of 1992 only. B2 is dry for the remaining part of 1992, i.e., June, September, and December of 1992.

**Units: Static Level (feet)
pH (S.U)
Dissolved Metals (ppm)

DYNECOL, INC.
GEOCHEMICAL EVALUATION FORM

MONTH/YEAR: 03/92

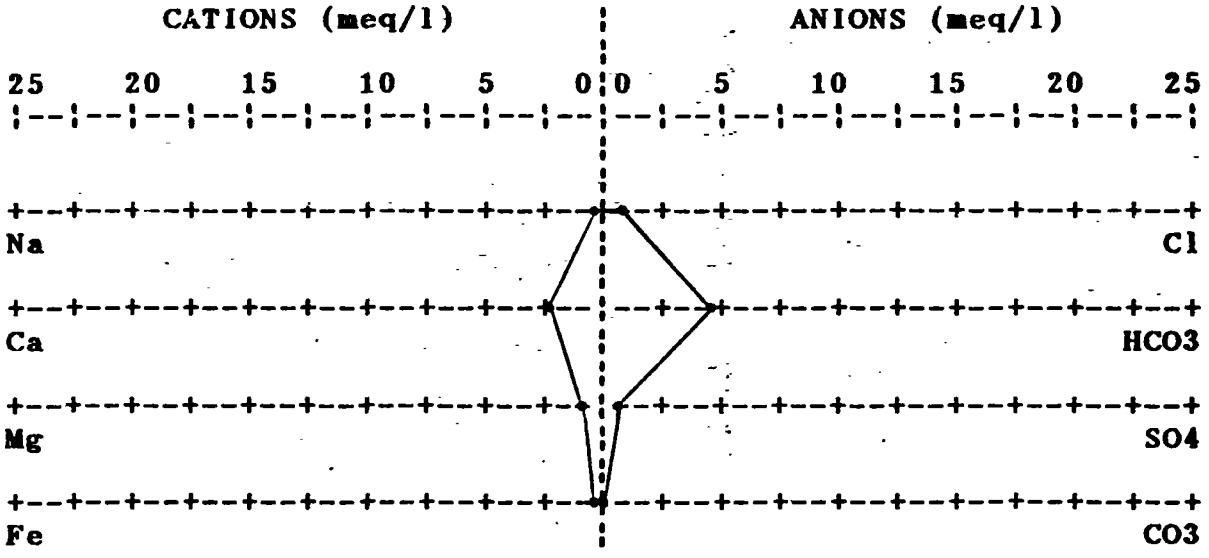
MONITORING WELL NUMBER: B2

PARAMETERS	RESULTS (ppm)	CONVERSION FACTOR	PARAMETERS* (meq/l)
Chloride	29	0.02820	0.82
Bicarbonate	277	0.01639	4.54
Sulfate	40	0.02082	0.83
Carbonate	< 50	0.03333	0
Sodium	8.1	0.04350	0.35
Calcium	47	0.04990	2.35
Magnesium	11	0.08224	0.90
Total Iron	5.5	0.03881	0.21

*Parameter(mg/l) X Conversion Factor = Parameter(meq/l)

STIFF DIAGRAM

WELL: B2 (03/92)



MAS#:2030423

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Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: NW

TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 03/18/92
P.O. #: 73172

SAMPLE IDENTIFICATION: B2 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.24
ARSENIC	(As)	0.002	0.033
BARIUM	(Ba)	0.10	0.12
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.07
pH		0.05 s.u.	7.45 s.u.
TRACKING PARAMETERS			
CALCIUM	(Ca++)	0.01	47
SODIUM	(Na+)	0.1	8.1
MAGNESIUM	(Mg++)	0.1	11
POTASSIUM	(K+)	0.1	6.2
* SULFATES	(SO4=)	5.0	40
BICARBONATE ALKALINITY	(HCO3-)	2.0	277
CHLORIDE	(Cl-)	2.0	29
NITRATE	(NO3-)	0.1	0.24
CARBONATES			< 50
TOTAL IRON			5.5
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	831 umhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Nitin Barad

C:\PW\1_ .WC

MAS #: 2030413

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TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B2 (#2)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.35
ARSENIC	(As)	0.002	0.021
BARIUM	(Ba)	0.10	0.11
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	0.12
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.07
pH		0.05 s.u.	7.18 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

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MAS #: 2030414

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TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B2 (#3)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.26
ARSENIC	(As)	0.002	0.018
BARIUM	(Ba)	0.10	0.12
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	0.11
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.05
pH		0.05 s.u.	7.30 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

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MAS #: 2030415

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IN:NW

TO: MR. TIEN PHAM
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6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B2 (#4)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.14
ARSENIC	(As)	0.002	0.016
BARIUM	(Ba)	0.10	0.10
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.05
pH		0.05 s.u.	7.18 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

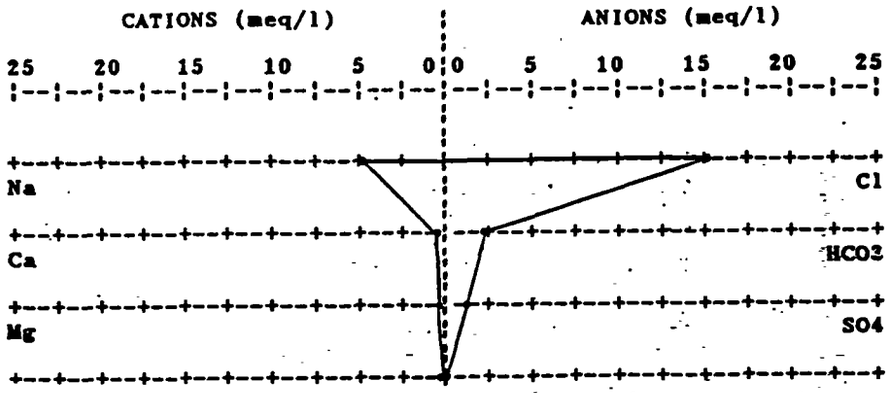
Kathleen A. Anderson

MONITORING WELL B3
DATA ANALYSIS AND STATISTICAL EVALUATION*

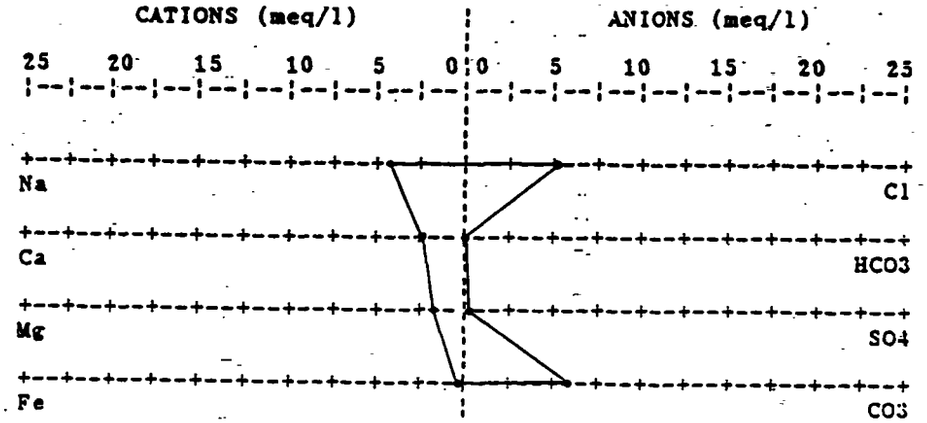
PARAMETERS**	MEAN	STANDARD DEVIATION	LOWER LIMIT	UPPER LIMIT
Static Level	5.77	0.98	N/A	N/A
pH	8.03	0.26	7.89	8.17
Al	0.14	0.09	0	0.18
As	0.004	0.003	0	0.0053
Ba	0.07	0.05	0	0.0919
Cd	0.01	0.01	0	0.0144
Cr	0.03	0.03	0	0.0431
Pb	0.03	0.03	0	0.0431
Hg	0.0003	0.0003	0	0.0004
Ni	0.03	0.03	0	0.0431
Se	0.001	0.001	0	0.0014
Ag	0.01	0.01	0	0.0144
Zn	0.08	0.05	0	0.1019

* Using all 16 data sets (pH & Dissolved Metals for 1992)
** Units: Static Level (feet)
pH (S.U)
Dissolved Metals (ppm)

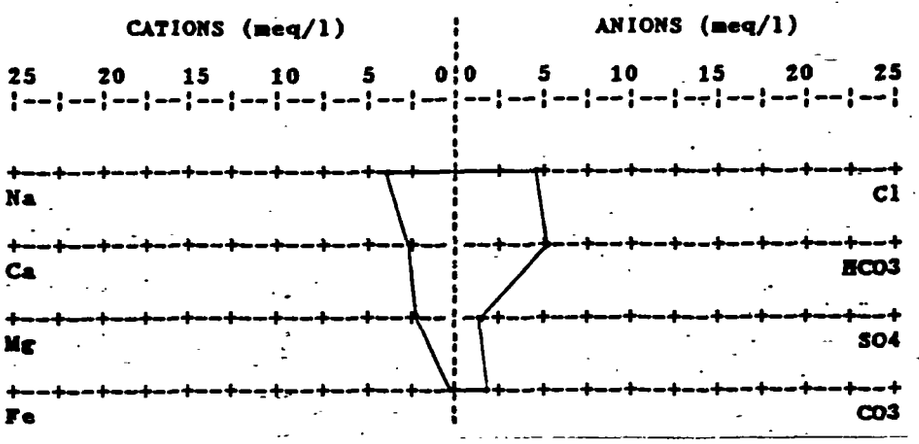
WELL: B3 (03/92)



WELL: B3 (06/92)

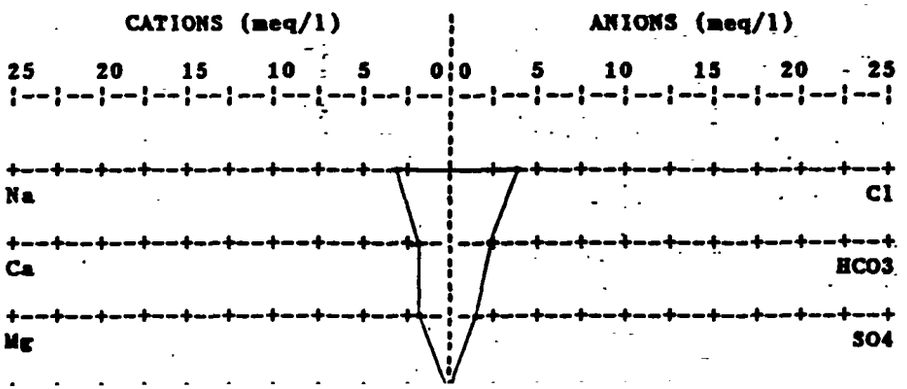


WELL: B3 (09/92)



STIFF DIAGRAM

WELL: B3 (12/92)



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IN: NW

TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 03/18/92
P.O. #: 73172

SAMPLE IDENTIFICATION: B3 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.11
ARSENIC	(As)	0.002	0.003
BARIUM	(Ba)	0.10	0.10
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.13
pH		0.05 s.u.	7.63 s.u.
TRACKING PARAMETERS			
CALCIUM	(Ca++)	0.01	27
SODIUM	(Na+)	0.1	113
MAGNESIUM	(Mg++)	0.1	14
POTASSIUM	(K+)	0.1	1.9
* SULFATES	(SO4=)	5.0	60
BICARBONATE ALKALINITY	(HCO3-)	2.0	151
CHLORIDE	(Cl-)	2.0	540
NITRATE	(NO3-)	0.1	1.6
CARBONATES			< 50
TOTAL IRON			2
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	2240 umhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD ASST. LAB MANAGER: KATHLEEN ANDERSON

Nitin Barad.

C:\PW\R\WC

MAS #: 2030416

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DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B3 (#2)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.18
ARSENIC	(As)	0.002	0.003
BARIUM	(Ba)	0.10	0.12
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.11
pH		0.05 s.u.	7.83 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

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MAS #: 2030417

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DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B3 (#3)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.22
ARSENIC	(As)	0.002	0.004
BARIUM	(Ba)	0.10	0.12
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.15
pH		0.05 s.u.	7.68 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L Anderson

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MAS #: 2030418

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DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B3 (#4)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.24
ARSENIC	(As)	0.002	0.003
BARIUM	(Ba)	0.10	0.10
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	0.051
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.15
pH		0.05 s.u.	7.84 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060324

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FAX No.: (313) 964-2339

IN: SJ

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B3 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	0.009
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.034
pH		0.05 s.u.	7.96 s.u.
TRACKING PARAMETERS			
CALCIUM	(Ca++)	0.01	45
SODIUM	(Na+)	0.1	100
MAGNESIUM	(Mg++)	0.1	24
POTASSIUM	(K+)	0.1	2.8
* SULFATES	(SO4=)	5.0	7.2
BICARBONATE ALKALINITY	(HCO3-)	2.0	< 50
CHLORIDE	(Cl-)	2.0	180
NITRATE	(NO3-)	0.1	1.4
CARBONATES			174
TOTAL IRON			0.63
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	0.17 mmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

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TO: MOLLY DWINNELLS
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DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B3 (#2)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	0.009
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.045
pH		0.05 s.u.	7.79 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen S. Anderson

MAS#: 2060318

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DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B3 (#3)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	0.009
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.04
pH		0.05 s.u.	7.84 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060319

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FAX No.: (313) 964-2339

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B3 (#4)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	0.009
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.063
pH		0.05 s.u.	7.87 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060324

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DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/26/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B3 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	METHOD #
DISSOLVED IRON	< 0.1	ppm	200.7

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2091103

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IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/15/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B3 (#1)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.14
DISSOLVED ARSENIC	(As)	0.002	0.0076
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.077
pH		0.05 s.u.	8.33 s.u.
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	52
DISSOLVED SODIUM	(Na+)	0.1	89
DISSOLVED MAGNESIUM	(Mg++)	0.1	28
DISSOLVED POTASSIUM	(K+)	0.1	2.9
* SULFATES	(SO4=)	5.0	67
BICARBONATE ALKALINITY	(HCO3-)	2.0	320
CHLORIDE	(Cl-)	2.0	160
NITRATE	(NO3-)	0.1	2.0
CARBONATES			64
DISSOLVED IRON			0.98
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	0.856 mmhos/cm

* **ASSUMING ALL SULFUR IS IN SULFATE FORM.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D - NOT DETECTED

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MAS#: 2091104

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TO: TIEN PHAM
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6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/21/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B3 (#2)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.18
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.13
pH		0.05 s.u.	8.20 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MAS#: 2091105

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IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/15/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B3 (#3)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.21
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.11
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.11
pH		0.05 s.u.	8.35 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

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DETROIT. MI 48211

DATE COMPLETED: 10/21/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B3 (#4)

PHYSICAL DESCRIPTION: CLEAR LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.20
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.10
pH		0.05 s.u.	8.29 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

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MAS #: 21207033

IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B3 #1

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.020
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	8.5 units
TRACKING PARAMETERS			
TOTAL IRON			0.18
DISSOLVED CALCIUM	(Ca++)	0.01	39
DISSOLVED POTASSIUM	(K+)	0.1	3.9
DISSOLVED MAGNESIUM	(Mg++)	0.1	24
DISSOLVED SODIUM	(Na+)	0.1	70
* DISSOLVED SULFATES	(SO4=)	5.0	77
BICARBONATE ALKALINITY	(HCO3-)	2.0	150
CHLORIDE	(Cl-)	2.0	130
NITRATE	(NO3-)	0.1	0.88
CARBONATES			< 10
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	780 µmhos/cm

*** ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

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N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

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MAS #: 21207026

IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B3 #2

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	0.002
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	< 0.02
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	8.1 units

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

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N/D = NOT DETECTED
Results relate only to the items tested.

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

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DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B3 #3

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	0.004
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.042
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	8.2 units

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED
Results relate only to the items tested.
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

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MAS #: 21207028

IN: SJ

TO: TIEN PHAM
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6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B3 #4

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	0.003
DISSOLVED BARIUM	(Ba)	0.10	< 0.1
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	0.0024
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.12
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	8.0 units

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED
Results relate only to the items tested.

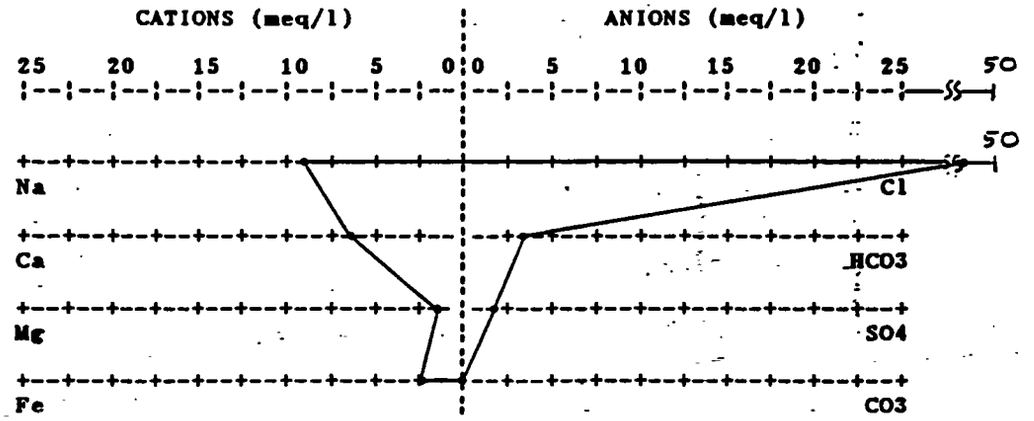
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MONITORING WELL B4
DATA ANALYSIS AND STATISTICAL EVALUATION*

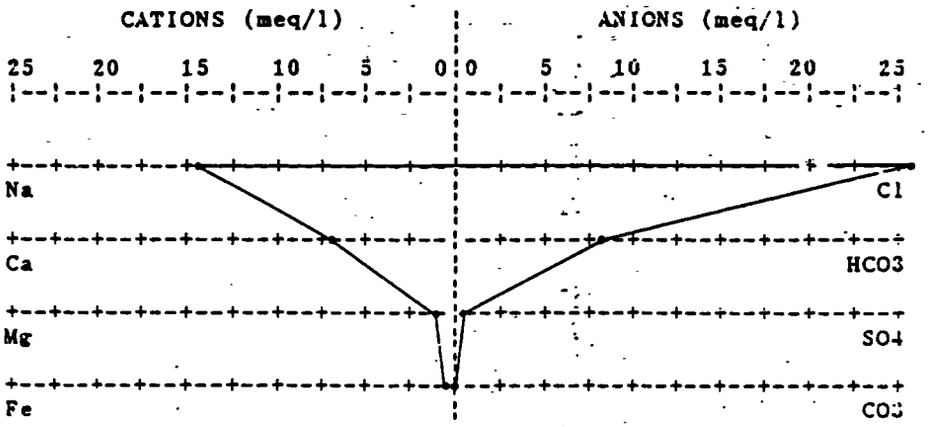
PARAMETERS**	MEAN	STANDARD DEVIATION	LOWER LIMIT	UPPER LIMIT
Static Level	4.77	2.85	N/A	N/A
pH	7.10	0.52	6.82	7.38
Al	0.15	0.09	0	0.19
As	0.002	0.002	0	0.003
Ba	0.12	0.07	0	0.15
Cd	0.01	0.01	0	0.014
Cr	0.03	0.03	0	0.043
Pb	0.03	0.03	0	0.043
Hg	0.0003	0.0003	0	0.0004
Ni	0.03	0.03	0	0.043
Se	0.001	0.001	0	0.0014
Ag	0.01	0.01	0	0.014
Zn	0.16	0.22	0	0.26

* Using all 16 data sets (pH & Dissolved Metals) for 1992.
** Units: Static Level (feet)
pH (S.U)
Dissolved Metals (ppm)

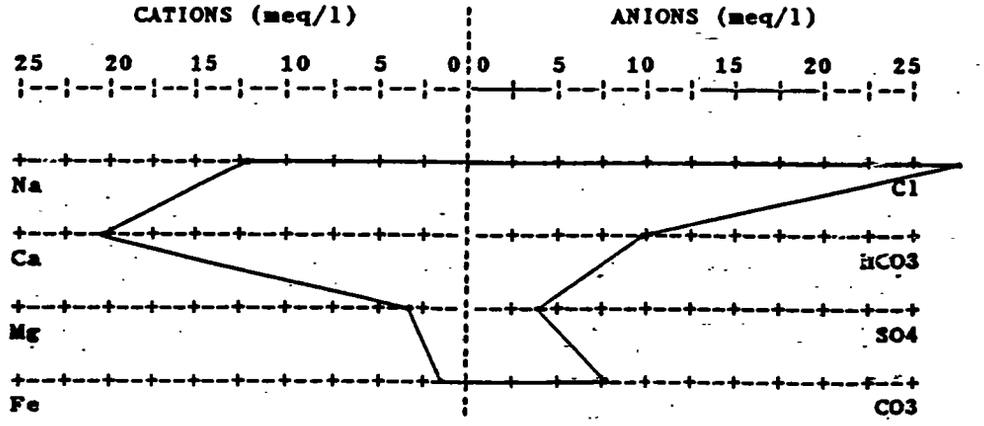
LL: B4 (03/92)



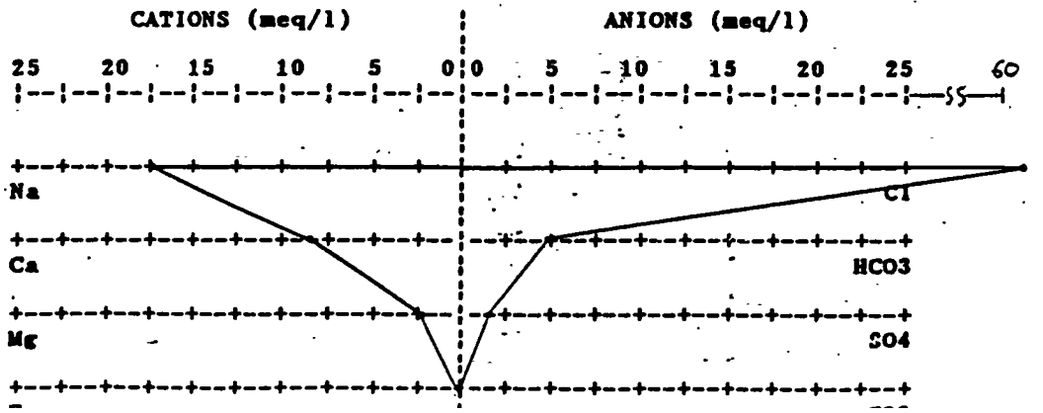
WELL: B4 (06/92)



WELL: B4 (09/92)



WELL: B4 (12/92)



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IN: NW

TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 03/18/92
P.O. #: 73172

SAMPLE IDENTIFICATION: B4 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.08
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	0.22
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.07
pH		0.05 s.u.	6.48 s.u.
TRACKING PARAMETERS			
CALCIUM	(Ca++)	0.01	130
SODIUM	(Na+)	0.1	210
MAGNESIUM	(Mg++)	0.1	17
POTASSIUM	(K+)	0.1	17
* SULFATES	(SO4=)	5.0	90
BICARBONATE ALKALINITY	(HCO3-)	2.0	206
CHLORIDE	(Cl-)	2.0	1700
NITRATE	(NO3-)	0.1	3.5
CARBONATES			< 50
TOTAL IRON			57
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	4700 umhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

Nitin Barad.

ASST. LAB MANAGER: KATHLEEN ANDERSON

C:\PW\

MAS #: 2030419

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TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B4 (#2)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.14
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	0.19
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.06
pH		0.05 s.u.	6.57 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

C:\PW\

MAS #: 2030420

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TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B4 (#3)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.21
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	0.20
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.10
pH		0.05 s.u.	6.65 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

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MAS #: 2030421

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TO: MR. TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT, MI 48211

DATE COMPLETED: 03/18/92
P.O.# 73172

SAMPLE IDENTIFICATION: B4 (#4)

PHYSICAL DESCRIPTION : CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.18
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	0.21
CADMIUM	(Cd)	0.01	< 0.010
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.010
ZINC	(Zn)	0.02	0.08
pH		0.05 s.u.	6.64 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060325

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IN: SJ

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B4 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.12
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	0.059
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.12
pH		0.05 s.u.	6.94 s.u.
TRACKING PARAMETERS			
CALCIUM	(Ca++)	0.01	140
SODIUM	(Na+)	0.1	330
MAGNESIUM	(Mg++)	0.1	13
POTASSIUM	(K+)	0.1	31
* SULFATES	(SO4=)	5.0	17
BICARBONATE ALKALINITY	(HCO3-)	2.0	488
CHLORIDE	(Cl-)	2.0	900
NITRATE	(NO3-)	0.1	5.2
CARBONATES			< 50
TOTAL IRON			15
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	3.66 mmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060320

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TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B4 (#2)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	0.11
ARSENIC	(As)	0.002	0.003
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.17
pH		0.05 s.u.	7.26 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060321

Midwest Analytical Services, Inc.
" Where industry comes for answers. "
Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

IN: SJ

Phone: (313) 964-3680
FAX No.: (313) 964-2339

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B4 (#3)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.18
pH		0.05 s.u.	7.21 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen A. Anderson

Midwest Analytical Services, Inc.
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Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

MAS#: 2060322

IN: SJ

Phone: (313) 964-3680
FAX No.: (313) 964-2339

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/16/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B4 (#4)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
ALUMINUM	(Al)	0.25	< 0.1
ARSENIC	(As)	0.002	< 0.002
BARIUM	(Ba)	0.10	< 0.1
CADMIUM	(Cd)	0.01	< 0.01
CHROMIUM	(Cr)	0.05	< 0.05
LEAD	(Pb)	0.05	< 0.05
MERCURY	(Hg)	0.0005	< 0.0005
NICKEL	(Ni)	0.05	< 0.05
SELENIUM	(Se)	0.002	< 0.002
SILVER	(Ag)	0.01	< 0.01
ZINC	(Zn)	0.02	0.15
pH		0.05 s.u.	7.02 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2060325

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Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO: MOLLY DWINNELLS
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 06/26/92
P.O. #: 73210

SAMPLE IDENTIFICATION: B4 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

PARAMETER	SAMPLE RESULT	UNITS	METHOD #
DISSOLVED IRON	0.31	ppm	200.7

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN ANDERSON

Kathleen L. Anderson

MAS#: 2091107

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Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN:SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/15/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B4 (#1)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	1.2
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.30
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.23
pH		0.05 s.u.	7.11 s.u.
TRACKING PARAMETERS			
DISSOLVED CALCIUM	(Ca++)	0.01	410
DISSOLVED SODIUM	(Na+)	0.1	280
DISSOLVED MAGNESIUM	(Mg++)	0.1	40
DISSOLVED POTASSIUM	(K+)	0.1	38
* SULFATES	(SO4=)	5.0	180
BICARBONATE ALKALINITY	(HCO3-)	2.0	610
CHLORIDE	(Cl-)	2.0	980
NITRATE	(NO3-)	0.1	10
CARBONATES			230
DISSOLVED IRON			34
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 umhos/cm	4.27 mmhos/cm

* **ASSUMING ALL SULFUR IS IN SULFATE FORM.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF MIDWEST ANALYTICAL SERVICES.

N/D = NOT DETECTED

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MAS#: 2091108

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TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/21/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B4 (#2)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.35
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.24
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	0.051
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.98
pH		0.05 s.u.	7.39 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MAS#: 2091109

Midwest Analytical Services, Inc.

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Detroit, Michigan 48201

Phone: (313) 964-3680
FAX No.: (313) 964-2339

IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/15/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B4 (#3)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.36
DISSOLVED ARSENIC	(As)	0.002	0.0021
DISSOLVED BARIUM	(Ba)	0.10	0.28
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	0.055
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.10
pH		0.05 s.u.	7.33 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

MAS#: 2091110

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IN:SJ

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Detroit, Michigan 48201

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FAX No.: (313) 964-2339

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 10/21/92

P.O. #: 75798

SAMPLE IDENTIFICATION: B4 (#4)

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/l)	SAMPLE RESULTS (mg/l)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ALUMINUM	(Al)	0.25	0.24
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.25
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	0.051
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.10
pH		0.05 s.u.	7.24 s.u.

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED

ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

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2727 Second Avenue
Detroit, Michigan 48201
Phone: (313) 964-3680
FAX No.: (313) 964-2339

MAS #: 21207034

IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B4 #1

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	< 0.002
DISSOLVED BARIUM	(Ba)	0.10	0.14
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	< 0.05
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.045
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	8.7 units
TRACKING PARAMETERS			
TOTAL IRON			3.8
DISSOLVED CALCIUM	(Ca++)	0.01	170
DISSOLVED POTASSIUM	(K+)	0.1	27
DISSOLVED MAGNESIUM	(Mg++)	0.1	27
DISSOLVED SODIUM	(Na+)	0.1	400
* DISSOLVED SULFATES	(SO4=)	5.0	82
BICARBONATE ALKALINITY	(HCO3-)	2.0	290
CHLORIDE	(Cl-)	2.0	2200
NITRATE	(NO3-)	0.1	9.0
CARBONATES			< 10
GENERAL PARAMETERS			
SPECIFIC CONDUCTIVITY		5 µmhos/cm	3200 µmhos/cm

* **ASSUMING ALL SULFUR IN SAMPLE IS SULFATE.**

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

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N/D = NOT DETECTED
Results relate only to the items tested.
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

Midwest Analytical Services, Inc.
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Metropolitan Center for High Technology
2727 Second Avenue
Detroit, Michigan 48201

MAS #: 21207029

IN: SJ

Phone: (313) 964-3680
FAX No.: (313) 964-2339

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B4 #2

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	0.002
DISSOLVED BARIUM	(Ba)	0.10	0.16
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	0.059
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.11
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	7.3 units

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED
Results relate only to the items tested.
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

TEST REPORT

Midwest Analytical Services, Inc.
" Where industry comes for answers. "
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2727 Second Avenue
Detroit, Michigan 48201
Phone: (313) 964-3680
FAX No.: (313) 964-2339

MAS #: 21207030

IN: SJ

TO: TIEN PHAM
DYNECOL
6520 GEORGIA ST.
DETROIT. MI 48211

DATE COMPLETED: 12/17/92

P.O. #: 78324

SAMPLE IDENTIFICATION: B4 #3

PHYSICAL DESCRIPTION: CLOUDY LIQUID

		EXPECTED DETECTION LIMIT (mg/L)	SAMPLE RESULTS (mg/L)
PRIMARY MONITORING PARAMETERS			
DISSOLVED ARSENIC	(As)	0.002	0.002
DISSOLVED BARIUM	(Ba)	0.10	0.14
DISSOLVED CADMIUM	(Cd)	0.01	< 0.01
DISSOLVED CHROMIUM	(Cr)	0.05	< 0.05
DISSOLVED LEAD	(Pb)	0.05	0.054
DISSOLVED NICKEL	(Ni)	0.05	< 0.05
DISSOLVED SELENIUM	(Se)	0.002	< 0.002
DISSOLVED SILVER	(Ag)	0.01	< 0.01
DISSOLVED ZINC	(Zn)	0.02	0.06
DISSOLVED ALUMINUM	(Al)	0.25	< 0.25
DISSOLVED MERCURY	(Hg)	0.0005	< 0.0005
pH		0.05 units	6.9 units

LAB MANAGER: NITIN BARAD

ASST. LAB MANAGER: KATHLEEN L. HAGAN

Kathleen L. Hagan

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N/D = NOT DETECTED
Results relate only to the items tested.
ppm = parts per million, mg/l, mg/kg or mg/kg (dry weight)
ppb = parts per billion, µg/l, µg/kg or µg/kg (dry weight)

DYNECOL, INC.
MID 074 259 565
1990 GROUNDWATER REPORT

B 1-83

	UNIT	MEAN	MEAN + 2s	03/90	06/90	09/90	12/90
Static Level	Feet	N/A	N/A	2.35	2.52	2.67	1.66
pH	S.U	7.79	12.08	11.50	7.70	10.89	11.30
SP.COND	mmhos/cm	3,282.50	4,420.62	3,200.00	1,400.00	2,100.00	1,900.00
CL	ppm	639.00	1,565.00	520.00	60.00	424.00	560.00
NO3	ppm	1.168	4.152	1.50	-1.00	1.40	34.60
SO4	ppm	273.05	886.61	104.00	41.00	2.10	50.00
As	ppm	-0.05	-0.05	0.30	-0.05	-0.05	-0.05
Ca	ppm	268.08	720.32	28.00	46.30	381.00	310.00
Cr(Tot)	ppm	0.0058	0.0288	-0.50	-0.50	-0.10	-0.10
Pb	ppm	0.035	0.1294	-0.50	-0.50	-0.10	-0.10
Hg	ppm	0.035	0.0625	-0.01	-0.01	-0.01	-0.01
Ni	ppm	0.044	0.146	-0.50	-0.50	-0.10	-0.10
Na	ppm	392.94	756.70	33.20	90.30	246.00	230.00
Zn	ppm	0.286	0.841	-0.50	0.643	-0.10	0.11

	UNIT	MEAN	MEAN+2s	03/90	06/90	09/90	12/90
Static Level	Feet	N/A	N/A	DRY	DRY	DRY	DRY
pH	S.U	6.70	7.186				
SP.COND	mmhos/cm	2,900.00	4,824.16				
CL	ppm	381.90	1,119.62				
NO3	ppm	1.0825	3.7285				
SO4	ppm	450.65	1,133.57				
As	ppm	0.025	0.125				
Ca	ppm	360.98	903.83				
Cr(Tot)	ppm	0.125	0.625				
Pb	ppm	0.035	0.129				
Hg	ppm	0.025	0.083				
Ni	ppm	0.0515	0.1195				
Na	ppm	212.41	384.37				
Zn	ppm	0.455	1.7418				

	UNIT	MEAN	MEAN+2s	03/90	06/90	09/90	12/90
Static Level	Feet	N/A	N/A	3.98	3.72	8.21	1.21
pH	S.U	6.96	7.464	8.30	11.50	8.45	8.06
SP.COND	mmhos/cm	1,366.50	2,626.44	490.00	1,900.00	350.00	-100.00
CL	ppm	145.00	462.84	91.00	424.00	91.00	72.00
NO3	ppm	0.175	0.317	0.60	7.50	-1.00	2.16
SO4	ppm	198.43	492.37	45.00	410.00	-1.00	20.00
As	ppm	-0.05	-0.05	0.12	-0.05	-0.05	-0.05
Ca	ppm	147.84	430.18	4.24	374.00	27.00	40.00
Cr(Tot)	ppm	0.337	0.823	-0.50	-0.50	-0.10	-0.10
Pb	ppm	0.06	0.114	-0.50	-0.50	-0.10	-0.10
Hg	ppm	0.0125	0.0625	-0.01	-0.01	-0.01	-0.01
Ni	ppm	0.025	0.125	-0.50	-0.50	-0.10	-0.10
Na	ppm	157.34	393.56	5.35	530.00	52.00	55.00
Zn	ppm	2.857	11.85	-0.50	-0.50	-0.10	0.32

W 4-88

	UNIT	MEAN	MEAN+2s	03/90	06/90	09/90	12/90
Static Level	Feet	N/A	N/A	2.17	2.68	3.27	1.96
pH	S.U	7.3550	8.0246	7.60	7.40	7.72	7.29
SP.COND	mmhos/ cm	2,900.00	5,598.15	1,750.00	1,550.00	1,700.00	500.00
CL	ppm	592.65	1,328.85	390.00	212.00	273.00	260.00
NO3	ppm	56.7628	237.53	5.50	14.30	6.70	21.40
SO4	ppm	316.125	503.84	360.00	400.00	1.50	70.00
As	ppm	0.1300	0.5584	-0.05	-0.05	-0.05	-0.05
Ca	ppm	269.20	420.78	10.70	243.00	190.00	225.00
Cr	ppm	0.1403	0.62	-0.50	-0.50	-0.10	-0.10
Pb	ppm	0.1653	0.615	-0.50	-0.50	-0.10	-0.10
Hg	ppm	0.0430	0.1542	-0.01	-0.01	-0.01	-0.01
Ni	ppm	0.2995	0.8609	-0.50	-0.50	-0.10	-0.10
Na	ppm	178.70	425.87	38.50	310.00	39.00	190.00
Zn	ppm	0.5153	0.6049	-0.50	-0.50	0.154	0.23

W 5-88

	UNIT	06/89	09/89	12/89	03/90	06/90	09/90	12/90
Static Level	Feet	6.23	DRY	DRY	2.63	DRY	DRY	DRY
pH	S.U	7.60			7.50			
SP.COND	mmhos/cm	3,400.00			8,000.00			
CL	ppm	1,200.00			2,300.00			
NO3	ppm	280.00			1.00			
SO4	ppm	150.00			390.00			
As	ppm	-0.01			-0.05			
Ca	ppm	106.40			32.70			
Cr(Tot)	ppm	0.011			-0.50			
Pb	ppm	-0.02			-0.50			
Hg	ppm	-0.001			-0.01			
Ni	ppm	0.05			-0.50			
Na	ppm	-100.00			258.00			
Zn	ppm	356.40			-0.50			

NOTE:
12/88: DRY
03/89: DRY

MID076393487

11/34 MICHIGAN DEP NATURAL RESOURCES ENVIRONMENTAL LABOR.....
MATRIX = WATER ANALYSIS REQUEST SHEET

YES (NO) - INFO ON BACK
***** SAFETY WARNING *****

LAB 6558 PROJ CODE HT COST CENTER 60583 PR II RECEIVED AT LAB MR DATE 7/25/85 TIME 0835 (AM) PM

LOCATION SAMPLED Waste Acid Services COLLECTED BY Browne/McNiel TRANSFERED TO

SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) Liz Browne - HWD-Tech. Serv.

LAB USE ONLY	#	FIELD ID OR DESCRIPTION	SAMPLE INFORMATION pH	cond.	YY/MM/DD	HH:MM
50605	01	B-1	11.6	3990	850724	1045
50606	02	B-3	6.7	655	850724	1035
50607	03	FB	Field blank		850724	1345
	04					
	05					
	06					
	07					
	08					
	09					
	10					

ORGANIC

PO1 #1 HALOCARBONS.....1 2 3 4 5 6 7 8 9 10

PO2 #2 AROMATIC HC.....1 2 3 4 5 6 7 8 9 10

OBN #3 CL HC&PEST &PCB.1 2 3 4 5 6 7 8 9 10
#6 PHTHALATES.....1 2 3 4 5 6 7 8 9 10
#7 PNA.....1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

OA #8 PHENOLS.....1 2 3 4 5 6 7 8 9 10

OB OIL & GREASE-IR....1 2 3 4 5 6 7 8 9 10
OIL & GREASE-GRAV..1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10

INORGANIC

(MA) FIELD FILTER+PRES.(1 2 3)4 5 6 7 8 9 10
MD LAB FILTRATION.....1 2 3 4 5 6 7 8 9 10

MA-CA MG NA K.....(1 2 3)4 5 6 7 8 9 10
-CD CR CU NI PB ZN.(1 2 3)4 5 6 7 8 9 10
-HG MERCURY.....(1 2 3)4 5 6 7 8 9 10
-AS ARSENIC.....(1 2 3)4 5 6 7 8 9 10
SE SELENIUM.....1 2 3 4 5 6 7 8 9 10
SB ANTIMONY.....1 2 3 4 5 6 7 8 9 10
OTHERS (CIRCLE)
AG AL BA BE CO (FE) (1 2 3)4 5 6 7 8 9 10
LI (MN) MO TI V.....(1 2 3)4 5 6 7 8 9 10
FURNACE- CD.....1 2 3 4 5 6 7 8 9 10
* CR CU NI PB.....1 2 3 4 5 6 7 8 9 10

(MN) PH, CONDUCTANCE....1 2 3 4 5 6 7 8 9 10
-CL SO4 TOTAL ALK..(1 2 3)4 5 6 7 8 9 10
FLUORIDE.....1 2 3 4 5 6 7 8 9 10
CR+6.....1 2 3 4 5 6 7 8 9 10
-HCO3- CO3=.....(1 2 3)4 5 6 7 8 9 10
CA MG NA K -DISS. 1 2 3 4 5 6 7 8 9 10

MB BRINE (CIRCLE)
* CL SO4 BR 1 2 3 4 5 6 7 8 9 10
* ALK HCO3- CO3=..1 2 3 4 5 6 7 8 9 10
* CA MG NA K 1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

DO DISS OXYGEN....1 2 3 4 5 6 7 8 9 10

(GN) O-PHOS NO2-...(1 2 3)4 5 6 7 8 9 10
RES-NF (SS)....1 2 3 4 5 6 7 8 9 10
RES-TF (TDS)...1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
BOD TOT 5 DAY.1 2 3 4 5 6 7 8 9 10
BOD CARB 5 DAY.1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

(GA) COD.....1 2 3 4 5 6 7 8 9 10
-TOC.....(1 2 3)4 5 6 7 8 9 10
-NO3+NO2 NH3...(1 2 3)4 5 6 7 8 9 10
KJEL N, TOT P..1 2 3 4 5 6 7 8 9 10
PHENOLICS.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

GB TOTAL CN.....1 2 3 4 5 6 7 8 9 10
FREE CN.....1 2 3 4 5 6 7 8 9 10

BC FECAL COLI.....1 2 3 4 5 6 7 8 9 10
TOTAL COLI.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

CA CHLOROPHYLL....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

Waste Acid Services

Parameter	Units	Date Sampled 7-24-85								
	mg/l unless noted	B-1	B-3	Field Blank						
pH	su	11.6	6.7	–						
Conductivity	umhos/cm	3990	655	–						
Orthophos.		0.03 DM	0.06 DM	<0.01						
Nitrite N		0.01 DM	0.01 DM	<0.01 DM						
TOC		38	2.7	<0.01						
Nitrate Nitrite N		0.01	<0.01	<0.01						
Ammonia N		9.0	0.31	0.01						
Alkalinity		251	141	<5.						
Carbonate		82.	<5.	<5.						
Chloride		942	73.2	<1.						
Bicarbonate		<5.	141	<5.						
Sulfate		353	68.7	<1.						
Arsenic		0.0105	0.0045	<0.0025						
Calcium		316	47.	<1.						
Cadmium		0.075	0.06	0.03						
Chromium		<0.05	<0.05	<0.05						
Copper		0.06	<0.02	<0.02						
Iron		8.55	0.15	<0.1						
Mercury		<0.0005	<0.0005	<0.0005						
Potassium		158	2.4	<0.1						
Magnesium		1.7	20.3	<1.						
Manganese		0.11	<0.05	<0.05						
Sodium		428	491	1.						
Nickel		0.05	<0.05	<0.05						
Lead		<0.05	<0.05	<0.05						
Zinc		0.065	0.06	<0.05						

B-2 contained no water on 7-24-85. Had been purged by facility personnel on 7-23-85.

DM-Sample was diluted to reduce possible matrix interference.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Hazardous Waste Division

Geotechnical Subunit

Sampling Data Sheet

FACILITY: Waste Acid Services LOCATION: Detroit

CONTACT: Gerald Groves

Sample#		B-3	B-1	B-2	FB		
Date		7-24-85	7-24	7-24	7-24		
Time		1035	1045	—	1345		
pH (field)		6.7	11.6	bone	—		
Conductivity (field)		655	3990	dry-	—		
PO	1						
PO	2			sand			
OBN	3,4,6,7,9			on			
OA	8			bottom			
OG	oil & grease			of			
				boiler			
MA/D	basic 6/Fe	✓	✓		✓		
	Ca/Mg/Na/K	✓	✓		✓		
	Hg/As/~~Se~~/~~Sb~~	✓	✓		✓		
MN	Cl/SO_4/Alk	✓	✓		✓		
	HCO_3/CO_3	✓	✓		✓		
	Fluoride/Cr^{+6}						
GA	COD/TOC						
	NO_3NO_2/NH_3	✓	✓		✓		
	Kjel N/TotP						
	Phenols						
GB	Total/Free Cn						
GN	NO_2	✓	✓		✓		
Sample Appearance		clear-silty	very silty				

Additional Notes: field blank taken after sampling was completed at Edwards Oil Service

DNR sampling staff: Browne / McNiel

Facility sampling staff: No sampling by WAS

(if purging and/or sampling methods differ, report facility method/DNR method)

Monitor Well#	B 3	B 1				
SWL (and method used)	None	None				
Sounding	—	—				
Volume Purged	dry	dry				
Purging Method	teflon	teflon				
Sampling Method	bailer	bailer				
Lusimeter#						
Volume Purged						
Sampling Method						
Surface Water#						
Description						
Sampling Method						
Detection System#						
Sampling Method						
Private Well #						
Location Sampled						
Length of Time Purged						

Facility Sampling Notes:

Potential External Sources of Contamination: Minimal

Precautions Taken:

Field Measurements Taken:

Handling/Preservation:

Sampling Bottles Used:

Replicates and/or Blanks Taken:

Decontamination Procedures:

Additional Notes: No SWL taken - no idea where wells TOC was measured to know where ~~to~~ they are measured to - all lower than ground level at this time

MID 074259365

Waste Acid Services - [illegible]

Date Sampled - 6-5-[illegible]

Parameter	Units mg/l unless noted	B-1	[illegible]	B-2	B-[illegible]				
pH	[illegible]	6.8	6.8	6.6	8.4				
Arsenic		0.0023	0.0026	0.0013	0.0008				
Calcium		417	402	[illegible]	54.8				
Chloride		[illegible]	820	[illegible]	96.				
Chromium		<0.05	<0.05	<0.05	<0.05				
Lead		<0.05	<0.05	<0.05	<0.05				
Mercury		<0.0005	<0.0[illegible]	<0.0005	<0.0005				
Nickel		0.02	0.02	<0.05	<0.05				
Sodium		313	332	264	53.2				
Conductivity	[illegible]	2500	2500	2500	[illegible]				
Sulfate		[illegible]	450	560	[illegible]				
Zinc		<0.05	<0.05	0.12	<0.05				
Stabilizer	[illegible]	8.17	8.17	8.58	15.0				
Alkalinity		220	210	340	110.				
Boron		<1.0	<1.0	<1.0	<1.0				
Carbonate		<5.0	<5.0	<5.0	12.				
Cadmium		<0.02	<0.02	<0.02	<0.02				
Copper		<0.02	<0.02	<0.02	<0.02				
Iron		0.29	0.44	0.31	<0.1				
Bicarbonate		220	210	340	99.				
Manganese		4.0	4.3	1.7	0.06				
Potassium		26.2	29.	28.2	3.3				
Magnesium		51.	39.5	62.	17.8				
Ortho Phos		<0.01	<0.01	0.01	0.02				
Nitrite		0.02	0.02	[illegible]	<0.01				
Nitrate-Nitrogen	N	0.03	0.02	[illegible]	0.01				
Ammonia-N		1.5	1.3	0.17	[illegible]				