PLUMLEY ENGINEERING, P.C.
Civil and Environmental Engineering
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August 29, 2003

Mr. Harry Warner
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
615 Erie Boulevard West
Syracuse, New York 13204-2400

RE: Pamelia Nice-N-Easy
Former CITGO Alaskan Oil Site
DEC Spill No. 9704043
Voluntary Cleanup Agreement No. D7-0002-95-09
Project No. 2003028

Dear Mr. Warner:

The following information summarizes the groundwater sampling and analysis event conducted at the above-referenced site on June 23, 2003.

GROUNDWATER SAMPLING AND ANALYSIS EVENT

- Converse Laboratory, Inc. (CLI) field personnel measured the water levels and completed free product checks in monitoring wells MW-5 and MW-6 and TW-2, TW-3, TW-8, TW-9 and TW-10. These wells are located south of the Nice-N-Easy (former Alaskan Oil) site, across NYS Route 342. Refer to the attached *Site Map* for the location of the wells.

- Historical groundwater level information indicates these wells are downgradient of the site.

- No sheen, free product or petroleum odors were reported in any of the wells.

- CLI also collected a groundwater sample from each of the monitoring wells. The samples were submitted to Environmental Laboratory Services, Inc. (ELS) for analysis for volatile organic compounds (VOCs) per EPA Method 8021 (STARS[1] compounds).

- The only compound present in any of the samples was methyl-tertiary-butyl ether (MTBE). Concentrations ranged from non-detected to 303 parts per billion (ppb). Refer to the attached *Table I - Groundwater Samples - EPA Method 8021 [STARS]* for a summary of the analytical results.

- The MTBE concentrations were compared to the historical results of samples collected by others. The results indicate the concentration of MTBE is declining in all wells. Refer to the attached *Table II - Historical MTBE Concentrations* for more information.

For additional information, refer to the attached *Laboratory Analytical Results.*

EXPOSURE EVALUATION/RISK ASSESSMENT

The purpose of this qualitative evaluation was to assess the potential pathways for exposure to the site contaminants. This evaluation considered the current site conditions, as well as reasonably anticipated future site conditions. For each potentially exposed receptor, site conceptual exposure scenarios were evaluated to determine the exposure route, medium and exposure point. Where potentially completed pathways were indicated, the risks associated with possible exposure were evaluated.

Summary of Compounds of Concern

The above data indicate the following compounds and media should be considered in the exposure evaluation:

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[1]New York State Department of Environmental Conservation (DEC) Spill Technology and Remediation Series (STARS) Memo #1 – *Petroleum-Contaminated Soil Guidance Policy*, dated August 1992.

- MTBE in shallow groundwater.

- MTBE in subsurface soils.

Current Use

The site is located in a commercial area of the Town of Pamelia on NYS Route 342, adjacent to Interstate 81. The property has a history of use as a gasoline station and automobile repair shop. Commercial businesses occupy the adjoining properties along both sides of NYS Route 342. The area adjacent to the wells sampled as part of this sampling event is vacant. The Town of Pamelia provides municipal water supply distribution to the site.

Future Uses

No uses other than for commercial purposes are anticipated for the foreseeable future.

Receptors

Under current and future conditions, the following receptors were selected for evaluation of potential exposure to the contamination at the site.

- On-Site Commercial Worker

- On-Site Construction Worker

Site Conceptual Exposure Scenarios

An analysis of the potential exposure pathways is detailed in the attached *Table III – Site Conceptual Exposure Scenarios - Existing Conditions* and *Table IV – Conceptual Exposure Scenarios - Future Conditions*. The scenarios with completed exposure pathways are related to potential exposure to

subsurface soils and groundwater contaminated with low levels of VOCs on the site and in the downgradient area across NYS Route 342. Potential receptors with completed exposure pathways were determined to be current and future on-site and off-site construction workers and future off-site office workers. Refer to Tables III and IV for additional information.

Risk Assessment

Where we concluded a pathway might be completed, we used the DEC's draft Tier 1 Risk-Based Screening Levels[2] to assess the exposure risk posed by the residual contamination (refer to the attached *Table V – Tier 1 Risk-Based Screening Levels – Soil Analytical Data* and *Table VI – Tier 1 Risk-Based Screening Levels – Groundwater Analytical Data*). The concentrations of VOCs in the soil were assumed to be the same as groundwater concentrations in the area of concern. The estimated soil concentrations were all well below Tier 1 screening levels for all potential exposure pathways. Similarly, the concentrations of VOCs in groundwater in the area of concern were also well below Tier 1 screening levels. Based on this methodology, no human health risks were indicated for the current or anticipated future conditions.

CONCLUSIONS AND RECOMMENDATIONS

Based on the above information, we offer the following:

1. The groundwater analytical results indicated low levels of MTBE to be located in the area under the roadway south of the former Alaskan Oil CITGO station. The extent of contamination was limited in the downgradient area, since wells further to the south by only

[2]DEC *Draft Interim Procedures for Inactivation of Petroleum-Impacted Sites*, dated January 1997.

a few feet had non-detected levels of MTBE. No other petroleum compounds were detected in any of the wells.

2. These results indicate a continuing declining trend in the MTBE concentrations in the downgradient area.

3. These results indicate that prior remedial activities on the site have effectively removed the source of the groundwater contamination.

4. We recommend that DEC Spill No. 9704043 should be closed, based on the findings of this investigation and the exposure evaluation/risk assessment, which indicate there are no significant human health risks associated with the low levels of residual contamination.

Please review the above information and give us a call if you have any questions or comments.

Sincerely,

PLUMLEY ENGINEERING, P.C.

Dale R. Vollmer, P.E.

DRV/cas
Attachments
cc: Mr. John MacDougall (w/attachments)

LEGEND:

- MW-1 GROUNDWATER MONITORING WELL
- PZ-1 PIEZOMETER
- TW-1 TEMPORARY 1" MONITORING WELL (INSTALLED WITH B&L)
- 10/11/01 / 16.7 / 14 — DATE OF MOST RECENT SAMPLING EVENT; MTBE CONCENTRATION; MTBE CONCENTRATION - 6/23/03
- MTBE PLUME
- INFERRED MTBE PLUME

N

SWALE

MW-3 — 6/5/01 — <5

7/18/01 — 14.0 — PZ-2

9/13/01 — <1 — TW-6

ASPHALT

MW-4 — 9/13/01 — 396.0

23179 ROUTE 342 FORMER BUILDING

WATER WELL

CATTAILS

TW-5 — 9/13/01 — 16.3

9/13/01 — 670.0 — MW-1

ASPHALT

7/18/01 — 880.0 — PZ-1

APPROXIMATE GROUNDWATER FLOW DIRECTION

FORMER PUMP ISLAND

MW-2 — 6/5/01 — 85.0

10/11/01 — 16.7 — TW-7

9/13/01 — 1340.0 — TW-4

GRASSY AREA

ROUTE 342

9/13/01 — 800.0 — 303 — MW-5

TW-1 — 9/13/01 — 107.0 — NS

TW-2 — 9/13/01 — 625.0 — 244

TW-3 — 9/13/01 — 77.8 — 14

MW-6 — 10/11/01 — 7.5 — 3

TW-8 — 10/11/01 — <1 — <1

10/11/01 — <1 — TW-9 — <1

10/11/01 — <1 — TW-10 — <1

SAMPLING EVENT JUNE 23, 2003

SCALE: 1"=30'

Barton & Loguidice, P.C.
Consulting Engineers
290 Elwood Davis Road / Box 3107, Syracuse, New York 13220

ALASKAN OIL, INC.
23179 N.Y.S. RTE. 342 & RTE. 81
WATERTOWN, NEW YORK

SITE MAP

WATERTOWN NEW YORK

Figure 1

Project No. 639.012

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE I - GROUNDWATER SAMPLES - EPA METHOD 8021 [STARS[1]]
Summary of Analytical Results

Date Sampled: June 23, 2003 **Matrix:** Groundwater

Compound	State Standard[2] (µg/L)	Monitoring Well Location						
		TW-2	TW-3	TW-8	TW-9	TW-10	MW-5	MW-6
		Compound Concentration (µg/L)						
1,2,4-Trimethylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
1,3,5-Trimethylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
4-Isopropyltoluene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Benzene	0.7	ND<0.7	ND<0.7	ND<0.7	ND<0.7	ND<0.7	ND<0.7	ND<0.7
Ethylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Isopropylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Methyl-tert-butyl-ether (MTBE)	10	***244***	***14***	ND<1.0	ND<1.0	ND<1.0	***303***	3
Naphthalene	10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
n-Butylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
n-Propylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
sec-Butylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
tert-Butylbenzene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Toluene	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Xylene, m+p	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Xylene, o	5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Total VOCs	---	**244**	**14**	**ND**	**ND**	**ND**	**303**	**3**

Notes:

[1] DEC Spill Technology and Remediation Series (STARS) Memo #1 - *Petroleum-Contaminated Soil Guidance Policy,* dated August 1992.

[2] State standard is in reference to the NYSDEC Division of Water's Technical and Operational Guidance Series (TOGS) (1.1.1), *Ambient Water Quality Standards and Guidance Values*, reissued June 1998.

µg/L micrograms per liter (equivalent to parts per billion, ppb)

ND< Not detected less than

--- No promulgated State Standard

Compounds that exceeded State Standards are denoted in ***BOLD***.

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE II - HISTORICAL MTBE CONCENTRATIONS

DATE	MTBE CONCENTRATION (µg/L)							
	LOCATION							
	MW-5	MW-6	TW-1	TW-2	TW-3	TW-8	TW-9	TW-10
07/17/01	***800***	<5	NI	NI	NI	NI	NI	NI
07/18/01	---	---	NI	NI	NI	NI	NI	NI
07/19/01	***620***	<5	NI	NI	NI	NI	NI	NI
09/13/01	***800***	---	***107***	***625***	***79***	---	---	---
10/11/01	---	7.5	---	---	---	<1	<1	<1
06/23/03	***303***	3	---	***244***	14	ND	ND	ND

Notes:

µg/L micrograms per liter, equivalent to parts per billion (ppb)
--- Not sampled
NI Not installed
Values above NYSDEC Standard (10 µg/L) denoted in ***BOLD***.
No other compounds under EPA Methods 8021 or 8270 were detected in any of the wells.
TW Series wells tested only for EPA Method 8021 plus MTBE (no other compounds detected).

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE III - SITE CONCEPTUAL EXPOSURE SCENARIOS - EXISTING CONDITIONS*

Potentially Exposed	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk
On-Site Commercial Worker	Inhalation of volatiles from subsurface soils	No	Contaminated soil not in area of structures	NA
	Ingestion of shallow groundwater	No	Municipal water supply	NA
	Inhalation of volatiles from shallow groundwater	No	Contaminated groundwater not in area of structures	NA
	Dermal contact with shallow groundwater	No	Municipal water supply	NA
	Dermal contact with deep groundwater	No	Municipal water supply	NA
Off-Site Residential	Inhalation of volatiles from subsurface soils	No	No residential occupancy in area of groundwater or soil contamination	NA
	Ingestion of shallow groundwater	No	Municipal water supply	NA
	Inhalation of volatiles from shallow groundwater	No	No residential occupancy in area of groundwater or soil contamination	NA
	Dermal contact with shallow groundwater	No	No residential occupancy in area of groundwater or soil contamination	NA

NA Not applicable

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE III - SITE CONCEPTUAL EXPOSURE SCENARIOS - EXISTING CONDITIONS*

Potentially Exposed	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk
On-Site Construction Worker	Inhalation of volatiles from subsurface soils	Yes	Excavation activities could expose contaminated soil	Soil contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Ingestion of shallow groundwater	Yes	Accidental exposure during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Inhalation of volatiles from shallow groundwater	Yes	Contact during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Dermal contact with shallow groundwater	Yes	Contact during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers*
Off-Site Construction Worker	Inhalation of volatiles from subsurface soils	Yes	Excavation activities could expose contaminated soil	Soil contamination levels are below Tier 1 Risk-Based Screening Levels for commercial workers**
	Ingestion of shallow groundwater	Yes	Accidental exposure during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Inhalation of volatiles from shallow groundwater	Yes	Contact during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Dermal contact with shallow groundwater	Yes	Contact during excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**

* Building used as car dealership.
** DEC Draft *Interim Procedures for Inactivation of Petroleum-Impacted Sites*, January 1997.

FORMER CITGO STATION
ALASKAN OIL, INC.
Town fo Pamelia, New York
DEC Spill No. 9704043

TABLE IV - SITE CONCEPTUAL EXPOSURE SCENARIOS - FUTURE CONDITIONS*

Potentially Exposed	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk**
On-Site Commercial Worker (assumes the building will be occupied)	Inhalation of volatiles from subsurface soils	Yes	Potential low-level contaminated soil in area of future structures	Estimated soil contamination levels are below Tier 1 Risk-Based Screening Levels for commercial workers**
	Ingestion of shallow groundwater	No	Municipal water supply	NA
	Inhalation of volatiles from shallow groundwater	Yes	Potential low-level groundwater contamination in area of future structures	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for commercial workers**
	Dermal contact with shallow groundwater	No	Municipal water supply	NA
	Dermal contact with deep groundwater	No	Municipal water supply	NA
Off-Site Residential	Inhalation of volatiles from subsurface soils	No	No residential occupancy in area of groundwater or soil contamination	NA
	Ingestion of shallow groundwater	No	Municipal water supply	NA
	Inhalation of volatiles from shallow groundwater	No	No residential occupancy in area of groundwater or soil contamination	NA
	Dermal contact with shallow groundwater	No	No residential occupancy in area of groundwater or soil contamination	NA

NA Not applicable

FORMER CITGO STATION
ALASKAN OIL, INC.
Town fo Pamelia, New York
DEC Spill No. 9704043

TABLE IV - SITE CONCEPTUAL EXPOSURE SCENARIOS - FUTURE CONDITIONS*

Potentially Exposed	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk**
On-Site Construction Worker	Inhalation of volatiles from subsurface soils	Yes	Outside excavation activities could expose contaminated soil	Soil contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Ingestion of shallow groundwater	Yes	Accidental exposure during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Inhalation of volatiles from shallow groundwater	Yes	Contact during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Dermal contact with shallow groundwater	Yes	Contact during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers*
Off-Site Construction Worker	Inhalation of volatiles from subsurface soils	Yes	Outside excavation activities could expose contaminated soil	Soil contamination levels are below Tier 1 Risk-Based Screening Levels for commercial workers**
	Ingestion of shallow groundwater	Yes	Accidental exposure during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Inhalation of volatiles from shallow groundwater	Yes	Contact during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**
	Dermal contact with shallow groundwater	Yes	Contact during outside excavation activities	Groundwater contamination levels are below Tier 1 Risk-Based Screening Levels for construction workers**

* Building is in commercially zoned area and future use is assumed to be non-residential.

** DEC Draft *Interim Procedures for Inactivation of Petroleum-Impacted Sites*, January 1997.

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE V - TIER 1 RISK-BASED SCREENING LEVELS - SOIL ANALYTICAL DATA

Date Sampled: NA **Matrix:** Soil

Compound	Tier 1 Risk-Based Screening Levels[1]					
	Commercial Worker			Construction Worker		
	Inhalation Indoors	Inhalation Outdoors	Surfical	Inhalation Indoors	Inhalation Outdoors	Surfical
Methyl-tertiary-butyl ether (MTBE)	1,410	6,350	6,330	584	15,900	16,400

Compound	Compound Concentration (mg/kg)*						
	TW-2	TW-3	TW-8	TW-9	TW-10	MW-5	MW-6
MTBE	***0.244***	***0.014***	ND<0.001	ND<0.001	ND<0.001	***0.303***	0.003

Notes:

* Soil concentrations are assummed to be equal to groundwater concentrations.

[1] DEC *Draft Interim Procedures for Inactivation of Petroleum-Impacted Sites*, January 1997.
Allowable concentration with no dilution/attenuation factor. Refer to TAGM 4046.

mg/kg milligrams per kilogram (parts per million, ppm)

--- Not detected, less than method detection limit

FORMER CITGO STATION
ALASKAN OIL, INC.
Town of Pamelia, New York
DEC Spill No. 9704043

TABLE VI - TIER 1 RISK-BASED SCREENING LEVELS - GROUNDWATER ANALYTICAL DATA

Date Sampled: June 23, 2003 **Matrix:** Groundwater

Compound	Tier 1 Risk-Based Screening Levels[1]			
	Commercial Worker		Construction Worker	
	Inhalation Indoors	Inhalation Outdoors	Inhalation Indoors	Inhalation Outdoors
Methyl-tert-butyl-ether (MTBE)	2,650	445,000	6,640	1,110,000

Compound	Compound Concentration (mg/L)						
	TW-2	TW-3	TW-8	TW-9	TW-10	MW-5	MW-6
MTBE	***0.244***	***0.014***	ND<0.001	ND<0.001	ND<0.001	***0.303***	0.003

Notes:

[1] DEC Draft Interim Procedures for Inactivation of Petroleum-Impacted Sites, January 1997

[2] DEC Technical and Operational Guidance Series (TOGS) 1.1.1., *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limits*, dated June 1998.

mg/L milligrams per liter (equivalent to parts per million, ppm)

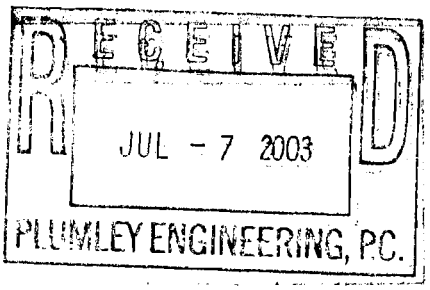
ND< Not detected less than

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park, North Syracuse, NY 13212
(315) 458-8033, FAX (315) 458-0249, (800) 842-4667

PLUMLEY ENGINEERING, P.C.
8232 Loop Road

Baldwinsville, NY 13027
ATTN: Derk Hudson



PROJECT #: 205326
RECEIVED: 06/24/2003

Site Address:
FORMER CITGO
ROUTE 342
WATERTOWN, NY

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 347542 CLIENT SAMPLE ID: TW-10				**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/27/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
mtbe	<1.00	UG/L	06/27/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/27/03	EPA 8021B	MNE
SAMPLE #: 347543 CLIENT SAMPLE ID: TW-9				**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/27/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
mtbe	<1.00	UG/L	06/27/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE

PLUMLEY ENGINEERING, P.C.
8232 Loop Road

Baldwinsville, NY 13027
ATTN: Derk Hudson

PROJECT #: 205326
RECEIVED: 06/24/2003

Site Address:
FORMER CITGO
ROUTE 342
WATERTOWN, NY

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 347543 CLIENT SAMPLE ID: TW-9				**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
toluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/27/03	EPA 8021B	MNE
SAMPLE #: 347544 CLIENT SAMPLE ID: TW-8				**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/27/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
mtbe	<1.00	UG/L	06/27/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/27/03	EPA 8021B	MNE
SAMPLE #: 347545 CLIENT SAMPLE ID: MW-6				**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/27/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
mtbe	3.25	UG/L	06/27/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/27/03	EPA 8021B	MNE

PLUMLEY ENGINEERING, P.C.
8232 Loop Road

Baldwinsville, NY 13027
ATTN: Derk Hudson

PROJECT #: 205326
RECEIVED: 06/24/2003

Site Address:
FORMER CITGO
ROUTE 342
WATERTOWN, NY

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 347546 CLIENT SAMPLE ID: TW-3				**DATE SAMPLED:** 06/23/03	
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/27/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
mtbe	13.5	UG/L	06/27/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/27/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/27/03	EPA 8021B	MNE
SAMPLE #: 347547 CLIENT SAMPLE ID: TW-2				**DATE SAMPLED:** 06/23/03	
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
4-isopropyltoluene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/28/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
mtbe	244	UG/L	06/28/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/28/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/28/03	EPA 8021B	MNE
SAMPLE #: 347548 CLIENT SAMPLE ID: MW-5				**DATE SAMPLED:** 06/23/03	
Volatile - 8021 STARS LIST					
1,2,4-trimethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
1,3,5-trimethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE

PLUMLEY ENGINEERING, P.C.
8232 Loop Road

Baldwinsville, NY 13027
ATTN: Derk Hudson

PROJECT #: 205326
RECEIVED: 06/24/2003

Site Address:
FORMER CITGO
ROUTE 342
WATERTOWN, NY

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 347548 CLIENT SAMPLE ID:	MW-5			**DATE SAMPLED:**	06/23/03
Volatile - 8021 STARS LIST					
4-isopropyltoluene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
benzene	<0.700	UG/L	06/28/03	EPA 8021B	MNE
ethylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
isopropylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
mtbe	303	UG/L	06/28/03	EPA 8021B	MNE
naphthalene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
n-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
n-propylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
sec-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
tert-butylbenzene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
toluene	<1.00	UG/L	06/28/03	EPA 8021B	MNE
xylene, m+p	<1.00	UG/L	06/28/03	EPA 8021B	MNE
xylene, o	<1.00	UG/L	06/28/03	EPA 8021B	MNE

Wendy J. Umberger
Laboratory Director

06/30/2003
Print Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated.
Report relates only to the samples as received by the laboratory and shall not be reproduced except in full, without written approval from Environmental Laboratory Services.

Environmental
LABORATORY SERVICES

Converse Laboratories Inc.

ENVIRONMENTAL AND FOOD MICROBIOLOGY SPECIALISTS
800 STARBUCK AVENUE, SUITE B101
WATERTOWN, NY 13601
315-788-8388, FAX 315-788-9258
1-800-427-5227

P.O. Number _____

Name: Plumley Engineering PC Date Sampled: 06-23-2003

Address: 8232 Loop Road Phone: _____

Baldwinsville NY 13027 Collected By: Dario Converse

Sample Site/Location: Former Citgo Rte 342 Watertown NY

Sample Matrix: Drinking Water Wastewater Soil Other Please Send results and Bill to Plumley AH: Derk Hudson

Sample Chlorinated? Y / N Residual: _____

Lab I.D.#	Time Taken	Origin Source	Description Comp	Description Grab	Analyses Requested
347542	1040	TW-10		X	EPA 8021 (STARS) & MTBE
347543	1050	TW-9		X	
347544	1055	TW-8		X	
347545	1105	MW-6		X	
347546	1120	TW-3		X	
347547	1130	TW-2		X	
347548	1145	~~EW~~ MW-5		X	

Sub-Contracted: _____ Customer Initials: _____

Sample(s) as received conforms to NELAC standards (Y/*N) * See attached sheet

Relinquished By:	Date/Time	Received By:	Date/Time
Signature: David Converse	6-23-03 1500	Signature: Matthew A. Lew	6/24/03 1445
		Temp. Deg. C 10	
Relinquished By:	Date/Time	Received By:	Date/Time
Signature:		Signature:	
		Temp. Deg. C	

Sample(s) must be received COLD.
Sample(s) must be received by 4:00pm for drinking water and 2:00pm for wastewater and sub-contracted analyses.

Initial Review: _____

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # TW-10 SAMPLING SEQ. # 1

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1040 PURGE DATE: (6/23/03) PURGE TIME: FROM: 915 TO: 925

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP ____ OTHER ____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP ____ OTHER ____

PURGE VOLUME CALCULATION

TOTAL DEPTH: TOP OF CASING : PVC (well) ____ STEEL (standpipe) ____

TOTAL DEPTH ____ FT.
DEPTH TO WATER 4.45 FT. DUPLICATE ____
LENGTH OF COLUMN ____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:			
1.25 "	LWC * 0.06375 =	____	GALS.
1.50 "	LWC * 0.092 =	____	GALS.
2.00 "	LWC * 0.163 =	____	GALS.
3.00 "	LWC * 0.367 =	____	GALS.
4.00 "	LWC * 0.653 =	____	GALS.
6.00 "	LWC * 1.469 =	____	GALS.

VOLUME OF WATER FOR 3 VOLUMES ____ GALS.
DID WELL GO DRY? YES ____ NO ____
ACTUAL VOLUME OF WATER REMOVED 2 GALS.
PUMPING RATES IN GPM <1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY Slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY moderate
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION: LOG-IN DATA

	INITIAL	FINAL	UNITS
SAMPLING DEPTH		6.21	Ft.
INITIAL DEPTH TO WATER	4.45	4.45	Ft.
DEPTH RECOVERED TO AT SAMPLING		6.21	Ft.

NOTES: _____

TECHNICIAN : DC II WEATHER Sunny 75°

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # TW-9 SAMPLING SEQ. # 2

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1050 PURGE DATE: (6/23/03) PURGE TIME: FROM: 920 TO: 935

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____

PURGE VOLUME CALCULATION

TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (standpipe) _____

TOTAL DEPTH _____ FT.
DEPTH TO WATER 4.74 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:	1.25 "	LWC * 0.06375 =	GALS.
	1.50 "	LWC * 0.092 =	GALS.
	2.00 "	LWC * 0.163 =	GALS.
	3.00 "	LWC * 0.367 =	GALS.
	4.00 "	LWC * 0.653 =	GALS.
	6.00 "	LWC * 1.469 =	GALS.

VOLUME OF WATER FOR 3 VOLUMES _____ GALS.
DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 2 GALS.
PUMPING RATES IN GPM ~1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY Slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY moderate
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION: LOG-IN DATA

	INITIAL	FINAL	UNITS
SAMPLING DEPTH		6.80	Ft.
INITIAL DEPTH TO WATER	4.74	4.74	Ft.
DEPTH RECOVERED TO AT SAMPLING		6.80	Ft.

NOTES: _____

TECHNICIAN : Mic Dill WEATHER Sunny 75°

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # TW-8 SAMPLING SEQ. # 3

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1055 PURGE DATE: (6/23/03) PURGE TIME: FROM: 930 TO: 940

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER: _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER: _____

PURGE VOLUME CALCULATION

TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (stardpipe) _____

TOTAL DEPTH _____ FT.
DEPTH TO WATER 4.15 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:			
1.25 "	LWC * 0.06375 =	_____	GALS.
1.50 "	LWC * 0.092 =	_____	GALS.
2.00 "	LWC * 0.163 =	_____	GALS.
3.00 "	LWC * 0.367 =	_____	GALS.
4.00 "	LWC * 0.653 =	_____	GALS.
6.00 "	LWC * 1.469 =	_____	GALS.

VOLUME OF WATER FOR 3 VOLUMES _____ GALS.
DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 2 GALS.
PUMPING RATES IN GPM <1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION:

	LOG-IN DATA		
	INITIAL	FINAL	UNITS
SAMPLING DEPTH		5.00	Ft.
INITIAL DEPTH TO WATER	4.15	4.15	Ft.
DEPTH RECOVERED TO AT SAMPLING		5.00	Ft.

NOTES: _____

TECHNICIAN : DC DCII WEATHER Sunny 75°

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: MONITORING POINT # MW-6 SAMPLING SEQ. # 4

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1105 PURGE DATE: (6/23/03) PURGE TIME: FROM: 945 TO: 955

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____

PURGE VOLUME CALCULATION

TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (standpipe) _____

TOTAL DEPTH _____ FT.
DEPTH TO WATER 3.02 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:			
1.25 "	LWC * 0.06375 =	_____	GALS.
1.50 "	LWC * 0.092 =	_____	GALS.
2.00 "	LWC * 0.163 =	_____	GALS.
3.00 "	LWC * 0.367 =	_____	GALS.
4.00 "	LWC * 0.653 =	_____	GALS.
6.00 "	LWC * 1.469 =	_____	GALS.

VOLUME OF WATER FOR 3 VOLUMES _____ GALS.
DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 5 GALS.
PUMPING RATES IN GPM 4.1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION: LOG-IN DATA

	INITIAL	FINAL	UNITS
SAMPLING DEPTH		3.18	Ft.
INITIAL DEPTH TO WATER	3.02	3.02	Ft.
DEPTH RECOVERED TO AT SAMPLING		3.18	Ft.

NOTES: _____

TECHNICIAN : DC II WEATHER Sunny 75°

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # TW-3 SAMPLING SEQ. # 5

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1120 PURGE DATE: (6/23/03) PURGE TIME: FROM: 1000 TO: 1015

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____

PURGE VOLUME CALCULATION

TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (standpipe) _____

TOTAL DEPTH _____ FT.
DEPTH TO WATER 2.02 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:	1.25 "	LWC * 0.06375 = _____	GALS.
	1.50 "	LWC * 0.092 = _____	GALS.
	2.00 "	LWC * 0.163 = _____	GALS.
	3.00 "	LWC * 0.367 = _____	GALS.
	4.00 "	LWC * 0.653 = _____	GALS.
	6.00 "	LWC * 1.469 = _____	GALS.

VOLUME OF WATER FOR 3 VOLUMES _____ GALS.
DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 2 GALS.
PUMPING RATES IN GPM < 1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY Slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY Slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION: LOG-IN DATA

	INITIAL	FINAL	UNITS
SAMPLING DEPTH		2.51	Ft.
INITIAL DEPTH TO WATER	2.02	2.02	Ft.
DEPTH RECOVERED TO AT SAMPLING		2.51	Ft.

NOTES: _____

TECHNICIAN : DC II WEATHER Sunny 75

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # Tw-2 SAMPLING SEQ. # 6

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1130 PURGE DATE: (6/23/03) PURGE TIME: FROM: 1030 TO: 1030

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____

PURGE VOLUME CALCULATION
TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (standpipe) _____
TOTAL DEPTH _____ FT.
DEPTH TO WATER 1.23 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:			
1.25 "	LWC * 0.06375 =		GALS.
1.50 "	LWC * 0.092 =		GALS.
2.00 "	LWC * 0.163 =		GALS.
3.00 "	LWC * 0.367 =		GALS.
4.00 "	LWC * 0.653 =		GALS.
6.00 "	LWC * 1.469 =		GALS.
VOLUME OF WATER FOR 3 VOLUMES			GALS.

DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 2 GALS.
PUMPING RATES IN GPM < 1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR clear
ODOR none
VISUAL TURBIDITY moderate
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION:

LOG-IN DATA	INITIAL	FINAL	UNITS
SAMPLING DEPTH		3.06	Ft.
INITIAL DEPTH TO WATER	1.23	1.23	Ft.
DEPTH RECOVERED TO AT SAMPLING		3.06	Ft.

NOTES: _____

TECHNICIAN : [illegible] WEATHER Sunny 75°

GROUNDWATER SAMPLING FIELD LOG

SAMPLE SITE: Plumley Citgo 342 MONITORING POINT # MW-5 SAMPLING SEQ. # 7

SOURCE (DESCRIPTION) _____

SAMPLING DATE : (6/23/03) SAMPLE TIME: 1145 PURGE DATE: (6/23/03) PURGE TIME: FROM: 1100 TO: 1115

PURGING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____
SAMPLING EQUIPMENT: TEFLON BAILER ____ PUMP _____ OTHER _____

PURGE VOLUME CALCULATION
TOTAL DEPTH: TOP OF CASING : PVC (well) _____ STEEL (standpipe) _____
TOTAL DEPTH _____ FT.
DEPTH TO WATER 2.65 FT. DUPLICATE _____
LENGTH OF COLUMN _____ FT. (LWC)

PURGE VOLUME IN GALLONS:

WELL DIAMETER:			
1.25 "	LWC * 0.06375 =		GALS.
1.50 "	LWC * 0.092 =		GALS.
2.00 "	LWC * 0.163 =		GALS.
3.00 "	LWC * 0.367 =		GALS.
4.00 "	LWC * 0.653 =		GALS.
6.00 "	LWC * 1.469 =		GALS.

VOLUME OF WATER FOR 3 VOLUMES _____ GALS.
DID WELL GO DRY? YES _____ NO _____
ACTUAL VOLUME OF WATER REMOVED 5- GALS.
PUMPING RATES IN GPM <1
PROPER DISPOSAL OF PURGE WATER: YES ✓ NO ____

PHYSICAL CHARACTERISTICS DURING PURGE: COLOR Clear
ODOR none
VISUAL TURBIDITY Slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

PHYSICAL CHARACTERISTICS DURING SAMPLING: COLOR Clear
ODOR none
VISUAL TURBIDITY slight
PRESENCE OF IMMISCIBLE LAYERS: YES ____ NO ✓ TOP ____ BOTTOM ____

SAMPLING INFORMATION: LOG-IN DATA

	INITIAL	FINAL	UNITS
SAMPLING DEPTH		3.00	Ft.
INITIAL DEPTH TO WATER	2.65	2.65	Ft.
DEPTH RECOVERED TO AT SAMPLING		3.00	Ft.

NOTES: _____

TECHNICIAN : DC DC II WEATHER Sunny 75°