INITIAL SITE INVESTIGATION REPORT

at

BRADFORD MINI MART
530 WAITS RIVER ROAD
BRADFORD, VERMONT

Vermont DEC SITE #2009-4004
Site Coordinates: 43° 58' 54.29" N, 72° 7' 16.76" W

May 2010

Prepared for:

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KAS Job# 406090342

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APPENDICES

EXECUTIVE SUMMARY

An Initial Site Investigation has been completed by KAS, Inc. (KAS) at the Bradford Mini Mart in Bradford, Vermont. The Bradford Mini Mart (herein referred to as "Site") is located at 530 Waits River Road, Bradford, Vermont (VTDEC Site #2009-4004). The Site is currently used as a convenience store, restaurant and gasoline station.

Monitoring Well Installation

As part of this Initial Site Investigation, KAS supervised the installation of four groundwater monitoring wells (MW10-1 through MW10-4) on March 25, 2010. PID soil screening results during drilling ranged from 0.0 to 3,150 parts per million (ppm). Petroleum odors were noted in soils during the installation of the three monitoring wells. Groundwater was observed at 15 feet below surface grade (bsg) on the day of drilling.

Groundwater Monitoring

Depth-to-fluid measurements were collected from monitoring wells MW10-1 through MW10-4 on April 9, 2010. No free phase petroleum product was observed in the monitoring wells. Groundwater flow direction was generally toward the northwest at an estimated hydraulic gradient of approximately 2.9% across the site. Based on surface topography and the location of surface waters, groundwater flow direction was not expected to flow northwest and away from the Connecticut River.

Groundwater Quality

KAS collected groundwater samples from the newly installed monitoring wells on April 9, 2010. Select volatile organic compounds (VOCs) were reported above the laboratory detection limits in the groundwater samples collected from three of the four monitoring wells. Concentrations above the Vermont Groundwater Enforcement Standard (VGES) were reported in two of the four monitoring wells. A concentration of total petroleum hydrocarbons (TPH) was reported in two of the four groundwater samples collected on April 9, 2010.

Sensitive Receptor Risk Assessment

A sensitive receptor risk assessment was conducted to identify known and potential receptors of petroleum impact from the site. Indoor air screening did not reveal the presence of detectable levels of VOCs. The on site assessment revealed a water line between the Hungry Bear and JM Landscaping located north of the site and a hydrant located on site (See Appendix A). Based on the data collected during the initial site investigation, no sensitive receptors appear to be impacted at this time.

Recommendations

Based on the results of the initial site investigation, KAS recommends another round of sampling to be conducted in the fall of 2010 to verify the groundwater flow direction and contaminant concentrations. Groundwater samples should be tested for VOCs via EPA Method 8260B from all four monitoring wells.

1.0 INTRODUCTION

This report provides a summary of the methodology, results, conclusions, and recommendations completed for the Initial Site Investigation at the Bradford Mini Mart in Bradford, Vermont (see Site Location Map, Appendix A). This work was performed in accordance with the Vermont Department of Environmental Conservation (VTDEC) requirements as presented in the June 2005 Site Investigation Procedure document. An initial site investigation was requested by Mr. Ashley Desmond of the VTDEC in a letter to Mr. Dick Browne of Champlain Oil Company (COCO) dated December 9, 2009.

2.0 SCOPE OF WORK

This Initial Site Investigation was conducted to assess the degree and extent of petroleum impact to soil and groundwater due to evidence of a petroleum release noted during the excavation of the gasoline and diesel dispenser islands in July 2009. Results of the following investigative tasks performed by KAS are presented: soil boring advancement and monitoring well installation; soil screening; groundwater sampling and analysis; and evaluation of sensitive receptors in the vicinity of the Site.

3.0 SITE DESCRIPTION

3.1 Site and Vicinity

The Site is located at the intersection of Lower Plain Road (Route 5) and Waits River Road (Route 25) in Bradford, Vermont (See Appendix A). The Site is occupied by one structure consisting of a convenience store and restaurant. A commercial business (The Hungry Bear restaurant), is located north of the site. There are no buildings located in close proximity to the site to the south and east. The Site Map included in Appendix A shows the site and relevant site features.

3.2 Site and Area Features, Topography, Surface Water Bodies, and Drainage

Based on a review of the topographic map and aerial photograph included in Appendix A, the Site lies at an approximate elevation of 500 feet above mean sea level (AMSL). The coordinates of the property at the site are approximately 43^{o} 58’ 54.29” North Latitude and 72^{o} 7’ 16.76’’ West Longitude. The nearest surface water is the Connecticut River; located approximately 2,200 feet east of the site.

Topography on the Site property is relatively flat with a moderate slope to the east. Based on site topography, the surface drainage from the site is anticipated to flow to the east towards the Connecticut River. Storm water drainage at the property is likely to flow east following the topography since no formal drainage system was observed on the property. No supply wells currently exist on the Site. A hydrant is located to the east/southeast of the site. The Site Map included in Appendix A shows the site and relevant site features.

3.3 Abutters and Nearby Properties

The land use in the surrounding areas consists of commercial properties and a residential farm. Land uses adjacent to the subject property during this initial site investigation were as follows:

- North: Hungry Bear Restaurant
- Northeast: Bradford Mini Storage (owned by COCO)
- East: Gratefully Carried Away (thrift shop). Also, vacant lot and NAPA across vacant lot (along Rte 25)
- Southeast: Kinney Drug (across Rte 25)
- South: Valley Floors (across Rte 25)
- Southwest: Pierson Farm (across Rte 25)
- West: Flea Market/Smith's Auto Body (across Rte 5)
- Northwest: JM Landscaping (across Rte 5)

3.4 Utilities

Public utilities in the area include telephone, electricity, cable, municipal water, and municipal sewer. Electrical and telephone lines are located overhead. The subject property is served by municipal water and sewer systems. No supply wells were observed in the immediate vicinity of the site. Information available online via the Vermont Department of Environmental Conservation, Water Supply Division (viewed on line at http://maps.vermont.gov/?site=ANR_wswelldriller) indicates four private wells within 3,000 feet of the Site[1]. None of these are in close proximity to the Site.

3.5 Previous Hazardous Materials Releases

Contamination was encountered in soils beneath the Site during soil field screening at a routine underground storage tank (UST) removal on July 21, 24, and 28, 2009[2]. During the July 2009 UST removal, the gasoline, diesel, and off road diesel USTs were found to be in fair condition and the kerosene UST was found to be in excellent condition. Soils in the vicinity of the removed gasoline and diesel dispenser islands were reported to have concentrations of up to 1,800 parts per million (ppm) when subjected to headspace soils testing using a properly-calibrated portable photoionization device (PID). All of the diesel and kerosene piping appeared in excellent condition. The piping associated with the gasoline USTs was found to be in fair condition with some rust and scaling noted; no contamination was noted beneath or around the USTs. The former UST locations and components are shown on the Site Sketch in Appendix A.

Petroleum is composed of a mixture of hydrocarbons. The main contaminants of concern from the suspected gasoline release at the site are benzene, toluene, ethylbenzene, xylenes, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, naphthalene, and possibly MTBE. No other releases of hazardous materials are known to have occurred on the site and thus no other contaminants of

[1] *Vermont Department of Environmental Conservation, Private Well Locator Database.* www.anr.state.vt.us
[2] *KAS, Inc., August 4, 2009, Underground Storage Tank Closure Assessment, Bradford Mini Mart*

concern are noted. Material Safety Data Sheets (MSDS) for gasoline are available on line at http://hazard.com/msds/.

4.0 REVIEW OF AVAILABLE GEOLOGIC INFORMATION

Surficial deposits in the vicinity of the site are indicated to be pebbly marine sands according to the Surficial Geological Map of the State of Vermont[3]. The native sandy subsurface observed during the UST closure assessment and advancement of MW10-1 through MW10-4 suggests that a high permeability environment is present at the site.

Bedrock was not encountered during the installation of the monitoring wells during the Initial Site Investigation on March 25, 2010. The site is located on a commercial area west of the Connecticut River. Bedrock is indicated as being dark gray to black slate with quartzite of the Orfordville Formation according to the Centennial Geological Map of Vermont[4].

5.0 SUBSURFACE EXPLORATIONS AND LABORATORY ANALYSES

5.1 Pre-Drilling Activities

Prior to the initiation of subsurface activities at the site, a Health and Safety Plan (HASP) was prepared for the site in accordance with Vermont Occupational Safety and Health Administration (VOSHA) requirements.

DigSafe number 2010-1201575 was obtained prior to the drilling activities. The site was premarked for Digsafe on March 15, 2010. The town of Bradford was also contacted for clearance of drilling locations related to any underground utilities that may be in the area.

5.2 Monitoring Well Installation and Field Screening of Subsurface Soils

Four soil borings, which were completed as monitoring wells MW10-1 through MW10-4, were installed on March 25, 2010 by T&K Drilling Services of Troy, New Hampshire, under the direct supervision of a KAS geologist. The soil borings were advanced using a hollow stem auger rig. The monitoring well and locations are indicated on the Site Map (Appendix A). The borings were advanced according to KAS' Soil Boring protocol and the monitoring wells are installed according to KAS' Monitoring Well Installation protocol.

During borehole advancement, soil samples were collected from the borings, logged by the supervising geologist and screened for the presence of VOCs using a MiniRae portable PID equipped with a 10.6 eV lamp. Prior to screening, the PID was calibrated with isobutylene referenced to benzene. Soils were screened using the KAS Jar/Polyethylene Bag Headspace Screening Protocol. Soil characteristics and contaminant concentrations were recorded by the

[3] Doll, Charles G., ed., 1970, *Surficial Geologic Map of Vermont*, Vermont Geological Survey.
[4] Doll, Charles G., ed., 1961, *Centennial Geologic Map of Vermont*, Vermont Geological Survey.

KAS geologist in detailed monitoring well construction diagrams presented in Appendix B– Monitoring Well Construction Diagrams.

Subsurface Sediments

Subsurface sediments encountered in the newly installed wells (MW10-1 through MW10-4) consisted of well to poorly sorted sand and silt with varying amounts of gravel. Groundwater was observed at approximately 15 feet bg in all four wells and bedrock was not encountered in any of the wells during drilling. One elevated PID reading of 3,150 ppm was observed in the saturated sand collected from off the auger at an approximate depth of 12-15 feet bg from MW10-4. A petroleum odor was noted in three of the four newly installed wells at varying depths. Detailed descriptions of these findings are available in Appendix B.

5.3 Groundwater Sampling and Laboratory Analysis

A groundwater sampling event for the newly installed wells was conducted on April 9, 2010. During the sampling event, groundwater samples were collected using disposable bailers. For Quality Assurance/ Quality Control (QA/QC) purposes, one trip blank and one duplicate (MW10-4) sample were submitted along with the groundwater samples.

The groundwater samples collected on April 9, 2010 were submitted to Endyne for laboratory analysis of volatile organic compounds (VOCs) by EPA Method 8260B to include the major petroleum compounds and analysis of total petroleum hydrocarbons (TPH) via EPA Method 8015-GRO.

The groundwater analytical results for the April 9, 2010 sampling event were compared to the Vermont Groundwater Enforcement Standards (VGES). Tabulated results for the initial sampling event can be found in Appendix D. Copies of the laboratory reports are included in Appendix E.

Select compounds via EPA Method 8260B were reported to be above the laboratory reporting limit in the groundwater samples collected from monitoring wells MW10-2, MW10-3 and MW10-4 on April 9, 2010. Only two of these wells, MW10-3 and MW10-4, reported compounds to be above the VGES in groundwater. None of the tested compounds were reported to be above the laboratory reporting limit in the sample collected from MW10-1 on April 9, 2010. Tested compounds via EPA Method 8015 GRO were reported in the samples collected from MW10-3 and MW10-4 ranging from 15.7 to 34.7 parts per million (ppm). The VTDEC currently does not have a groundwater enforcement standard for TPH. Tabulated results for the initial sampling event can be found in Appendix D. Copies of the laboratory reports are included in Appendix E.

The results of the laboratory analysis of the duplicate sample were analyzed using a relative percent difference (RPD) analysis. The RPD is defined as 100 times the difference in reported concentration between sample and duplicate, divided by the mean of the two samples. A small RPD indicates good correlation between sample and duplicate. For the initial sampling event, the duplicate sample was collected from monitoring well MW10-4. The RPD ranged from -3.1% to 24.8% for the tested compounds. A tabular presentation of the duplicate sample data and RPD

results is included in Appendix D. Lack of spurious influence on sample results was demonstrated by none of the tested VOCs reported above detection limits in the trip blank.

6.0 SITE GEOLOGY

6.1 Surficial Geology

Based on the soil boring logs in Appendix B, surficial geology at the Site consists of well to poorly sorted sand with varying amounts of gravel.

6.2 Bedrock Geology

Bedrock was not observed during the drilling activity. In addition, refusal did not occur on the day of drilling during installation of the four monitoring wells.

7.0 SITE HYDROGEOLOGY

7.1 Groundwater Flow Direction and Gradient

Depth to groundwater measurements were collected from all four monitoring wells (MW10-1 through MW10-4) on April 9, 2010. The well locations are shown on the Site Map in Appendix A. The depth to water was subtracted from the top-of-casing elevation to obtain the relative water table elevation. No floating product was observed in the monitoring wells. Depth to groundwater ranged from 12.71 feet bg in MW10-4 to 18.60 feet bg in MW10-1 on April 9, 2010. A summary of the measured depth to water and calculated groundwater elevation is provided in Appendix C.

Water table elevations were plotted and contoured to illustrate the estimated gradient and direction of groundwater flow beneath the Site (see the Groundwater Contour Map, Appendix A). According to the data, groundwater flow direction was generally toward the northwest at an estimated hydraulic gradient of approximately 2.9%. Based on surface topography and the location of Connecticut River, groundwater flow direction was not expected to flow northwest and away from the Connecticut River. This could suggest that the Connecticut River was higher than normal due to seasonal variations.

7.2 Contaminant Distribution

7.2.1 Soil

Based on a review of field screening data collected at the Site, it appears that moderate to high levels of petroleum impacts to soils (adsorbed contamination) are present near the former gasoline and diesel dispenser islands at depths at depths of approximately 1-12 feet below surface grade (monitoring wells MW10-1, MW10-3 and MW10-4).

7.2.2 Groundwater

Groundwater analytical data collected at the Site indicate that dissolved petroleum constituents (VOCs) are present at concentrations above applicable VGES limits in groundwater in the vicinity of monitoring wells MW10-3 and MW10-4. Low concentrations below the VGES were reported in MW10-2 during this sampling event.

8.0 CONCEPTUAL HYDROGEOLOGIC MODEL

8.1 Site Conditions

The site is covered by pavement, a gas pump awning, and the one on Site building. Based on a review of field screening data collected at the Site, saturated soils beneath the Site are moderately to high permeability, consisting generally of sand and gravel and lesser amounts of silty sand.

Groundwater contamination was noted in the vicinity of monitoring well MW10-1, MW10-3, and MW10-4. As previously noted, groundwater flow direction was generally toward the northwest and was not expected to flow away from the Connecticut River at an estimated hydraulic gradient of approximately 2.9%.

8.2 Potential Receptors

8.2.1 Buildings in the Vicinity

KAS screened the indoor air within the basement of the on Site building and the first floor of the nearest building to the Site, The Hungry Bear. The Hungry Bear does not have a basement. The air was screened using a properly calibrated Ion Science Photocheck model PID. No readings above 0.0 ppm were recorded on March 25, 2010 in either building. Based on the data collected it appears no risk of vapor intrusion exists to the nearby buildings.

8.2.2 Utility Corridors

The nearest utility corridors are water and sewer lines which are located on the eastern edge of the former gasoline UST at an approximate depth of 4 to 5 feet below grade. At this time the utility corridors are not considered to be at risk of acting as conduits for the migration of contaminated groundwater from the site given that the depth of groundwater is much lower than the depth of these buried utility corridors.

8.2.3 Surface Water Bodies

No potential jurisdictional wetlands were observed in the immediate vicinity (Site and abutters) of the Site.

The nearest major surface water is the Connecticut River, located approximately 2,200 feet east of the Site. There does not appear to be risk to the river given the distance between the Site and the surface water.

8.2.4 Water Supplies

The Site and surrounding properties are serviced by the public water system. Based on a review of VTDEC database for the Bradford Area four supply wells are located within a 0.5 mile radius of the Site with the closest one being approximately 1,800 feet south. Given this information none of these supply wells are considered to be at risk to petroleum impact from the Site at this time.

9.0 CONCLUSIONS

1. Based on the initial site investigation, KAS concludes that a moderate release has occurred at the Site. The source of petroleum contamination at the Site appears to be related to the former removed gasoline and diesel dispenser islands;

2. Four soil borings were advanced on March 25, 2010 (MW10-1 through MW10-4). Soil screening conducted during the installation of these monitoring wells indicated the presence of low to moderate petroleum impacts to soils (adsorbed contamination) in MW10-1, MW10-3 and MW10-4;

3. PID readings ranged from 0.0 to 3,150 ppm during the installation of the four soil borings on March 25, 2010. The highest PID reading was recorded in MW10-4 at a saturated depth of approximately 12-15 feet below grade;

4. A groundwater monitoring event was conducted on April 9, 2010. The groundwater flow direction was generally toward the northwest at an estimated hydraulic gradient of approximately 2.9% across the site. These results were not expected as the Connecticut River is located 2,200 feet to the east;

5. Groundwater analytical results indicate that VOCs above Vermont Groundwater Enforcement Standards (VGES) are present in groundwater in the vicinity of monitoring well MW10-3 and MW10-4;

6. No sensitive receptors have been identified as being at potential risk to petroleum impact during this initial site investigation.

10.0 RECOMMENDATIONS

Based on the results of the initial site investigation conducted at the Bradford Mini Mart, KAS recommends the following;

1. Groundwater monitoring should be scheduled for the fall of 2010 to verify the groundwater flow direction and contaminant concentrations. Groundwater samples should be collected from all four monitoring wells (MW10-1 through MW10-4) and analyzed via EPA Method 8021B. Water levels should be collected from all accessible monitoring wells for the development of a groundwater contour map.

11.0 REFERENCES

1. *Vermont Department of Environmental Conservation, Private Well Locator Database. www.anr.state.vt.us*

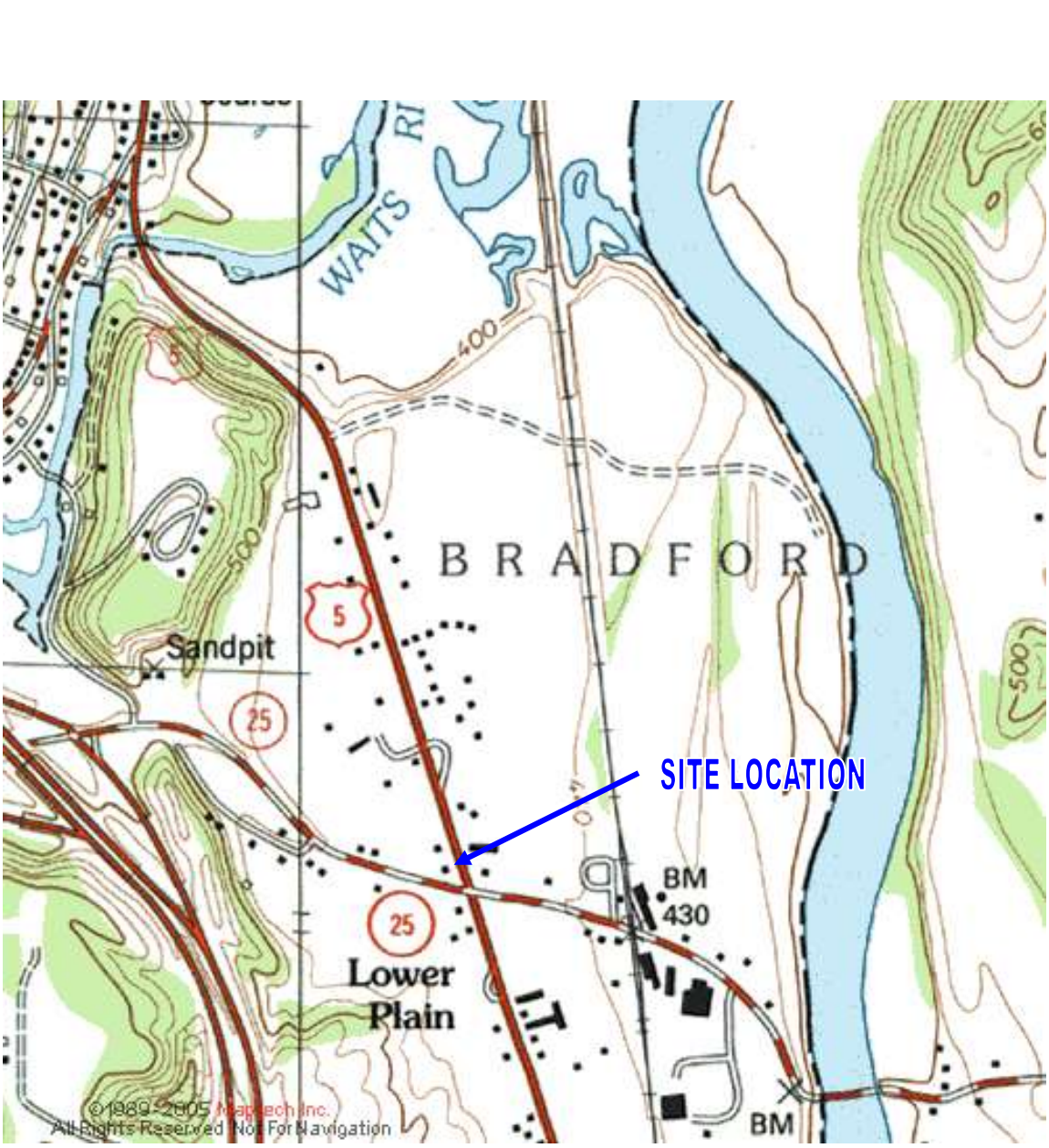
2. *KAS, Inc., August 4, 2009, Underground Storage Tank Closure Assessment, Bradford Mini Mart*

3. *Doll, Charles G., ed., 1970, Surficial Geologic Map of Vermont, Vermont Geological Survey.*

4. *Doll, Charles G., ed., 1961, Centennial Geologic Map of Vermont, Vermont Geological Survey.*

Appendix A

Maps



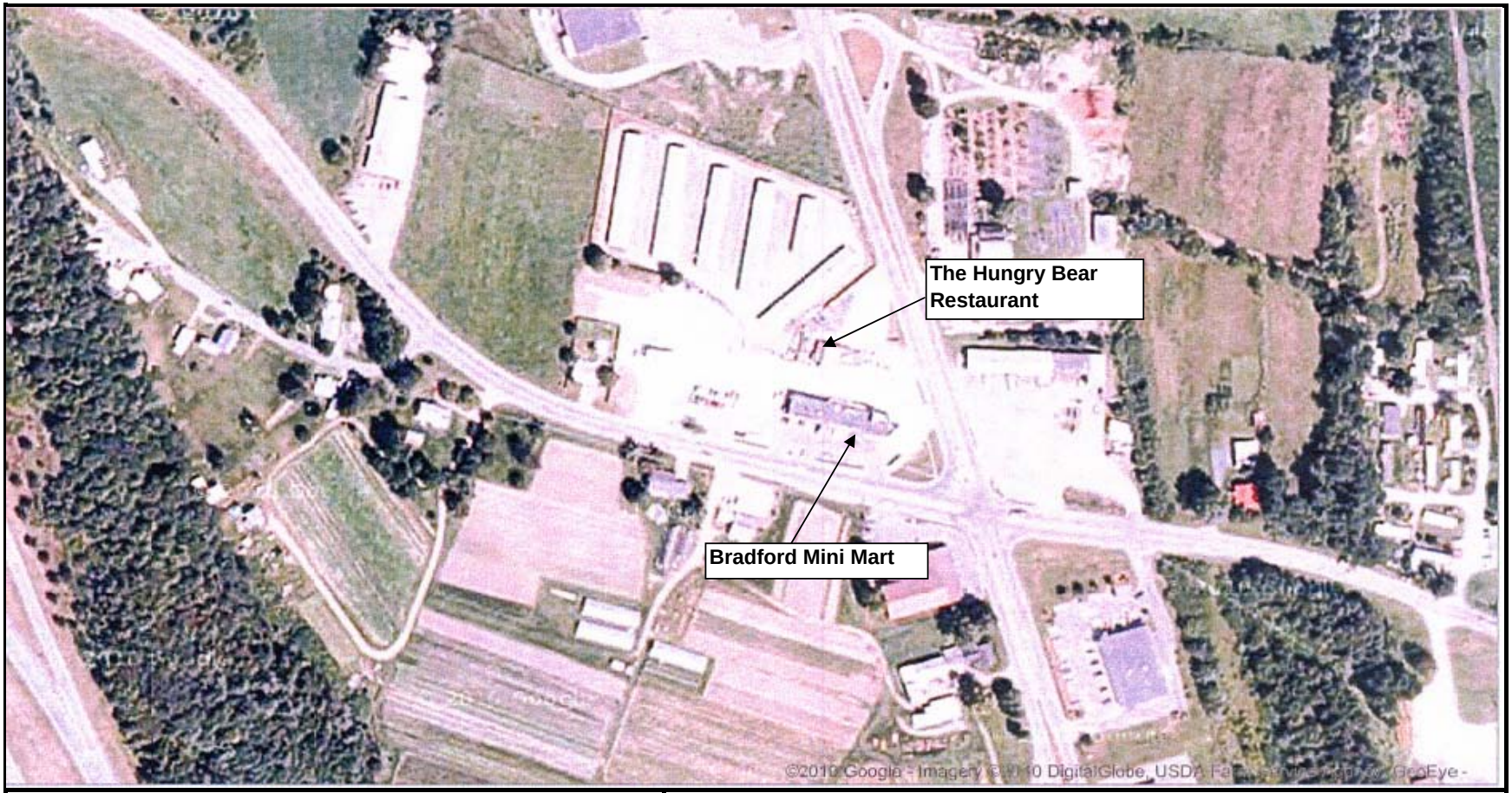
KAS Job Number: 406090342
Source: Maptech (www.maptech.com) Bradford, VT

KAS INC

Site Location Map

Bradford Mini Mart
530 Waits River Road
Bradford, Vermont

Date: 4/22/10	Drawing: 1/1	1:24,000	By: SD

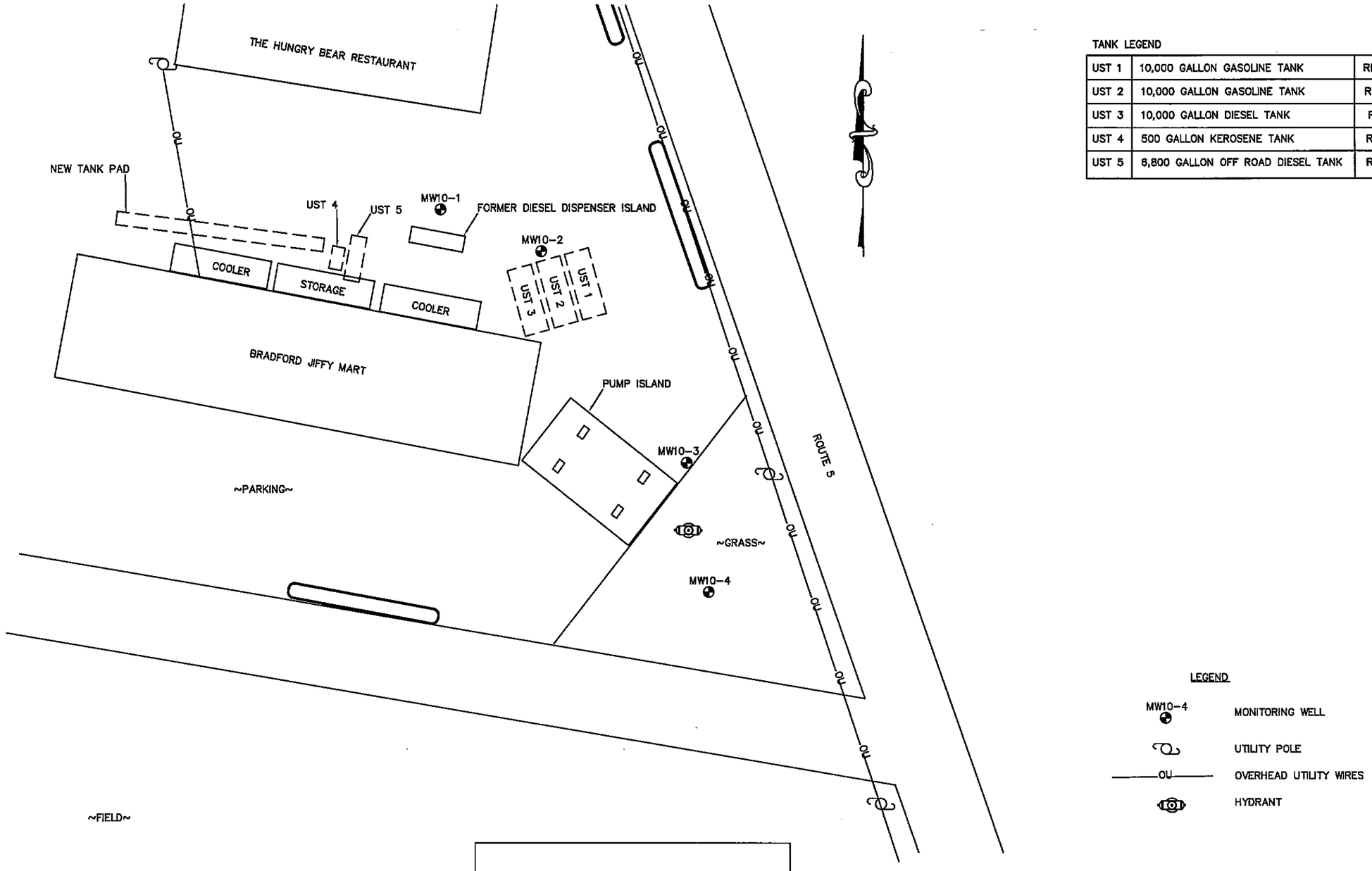


KAS INC

KAS Job # 406090342
Source: Google Maps

Aerial Photograph

Bradford Mini Mart
530 Waits River Road
Bradford, Vermont



TANK LEGEND

UST 1	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 2	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 3	10,000 GALLON DIESEL TANK	REMOVED 7/24/09
UST 4	500 GALLON KEROSENE TANK	REMOVED 7/24/09
UST 5	6,800 GALLON OFF ROAD DIESEL TANK	REMOVED 7/24/09

LEGEND

MW10-4 — MONITORING WELL

UTILITY POLE

OU — OVERHEAD UTILITY WIRES

HYDRANT

JOB #: 406090342
VTDEC #: 2009-4004

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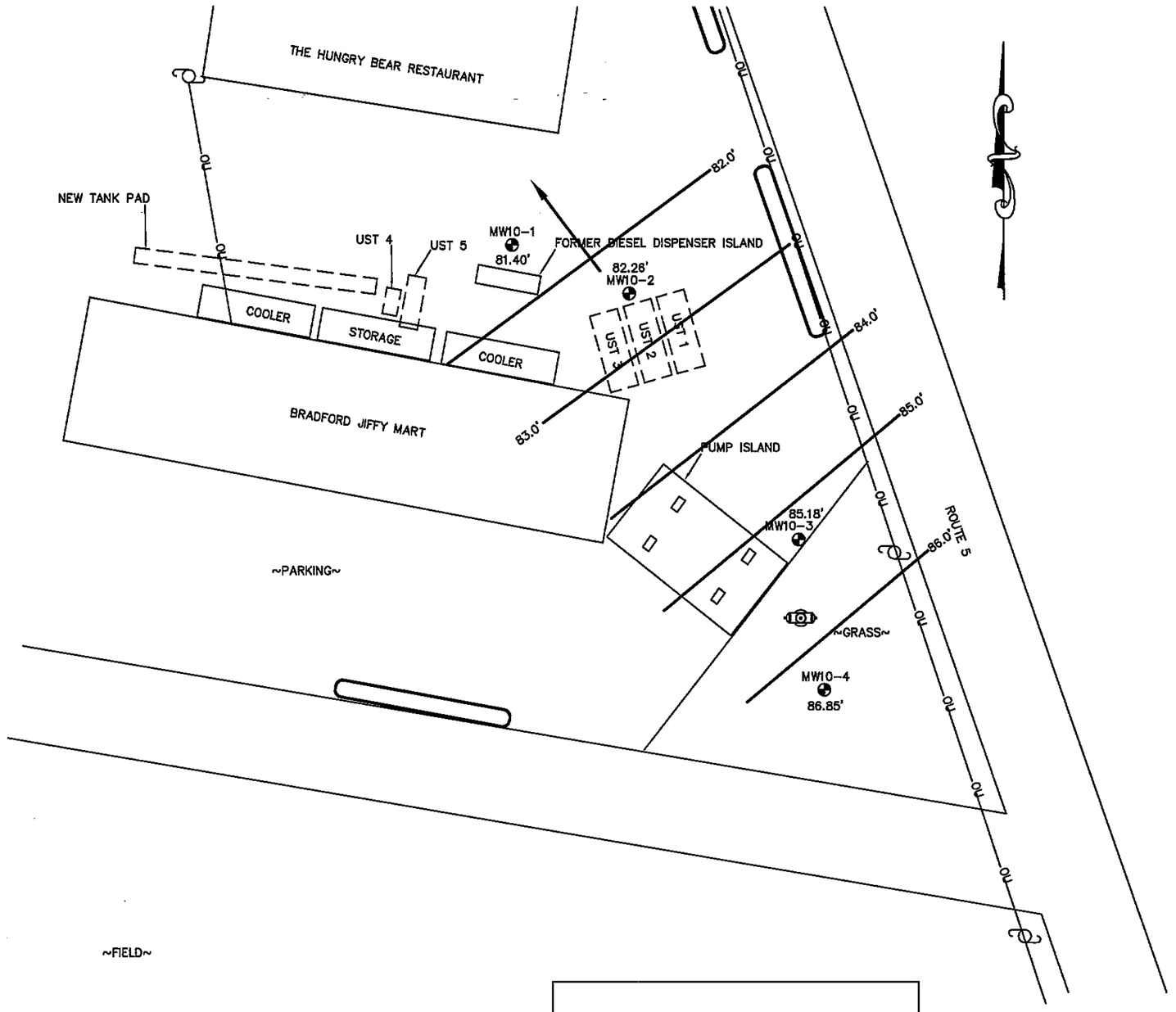
BRADFORD JIFFY MART

530 WHITE RIVER ROAD
BRADFORD, VERMONT

SITE MAP

DATE: 4/22/10	DWG #: 1	SCALE: 1"=40'	DRN.: DM	APP.: SD



TANK LEGEND

UST 1	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 2	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 3	10,000 GALLON DIESEL TANK	REMOVED 7/24/09
UST 4	500 GALLON KEROSENE TANK	REMOVED 7/24/09
UST 5	6,800 GALLON OFF ROAD DIESEL TANK	REMOVED 7/24/09

LEGEND

- MW10-4 / 86.85' — MONITORING WELL WITH GROUNDWATER ELEVATION (FT)
- UTILITY POLE
- OU — OVERHEAD UTILITY WIRES
- HYDRANT
- 86.0' — GROUNDWATER ELEVATION CONTOUR (FT) (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

JOB #: 406090342
VTDEC #: 2009-4004

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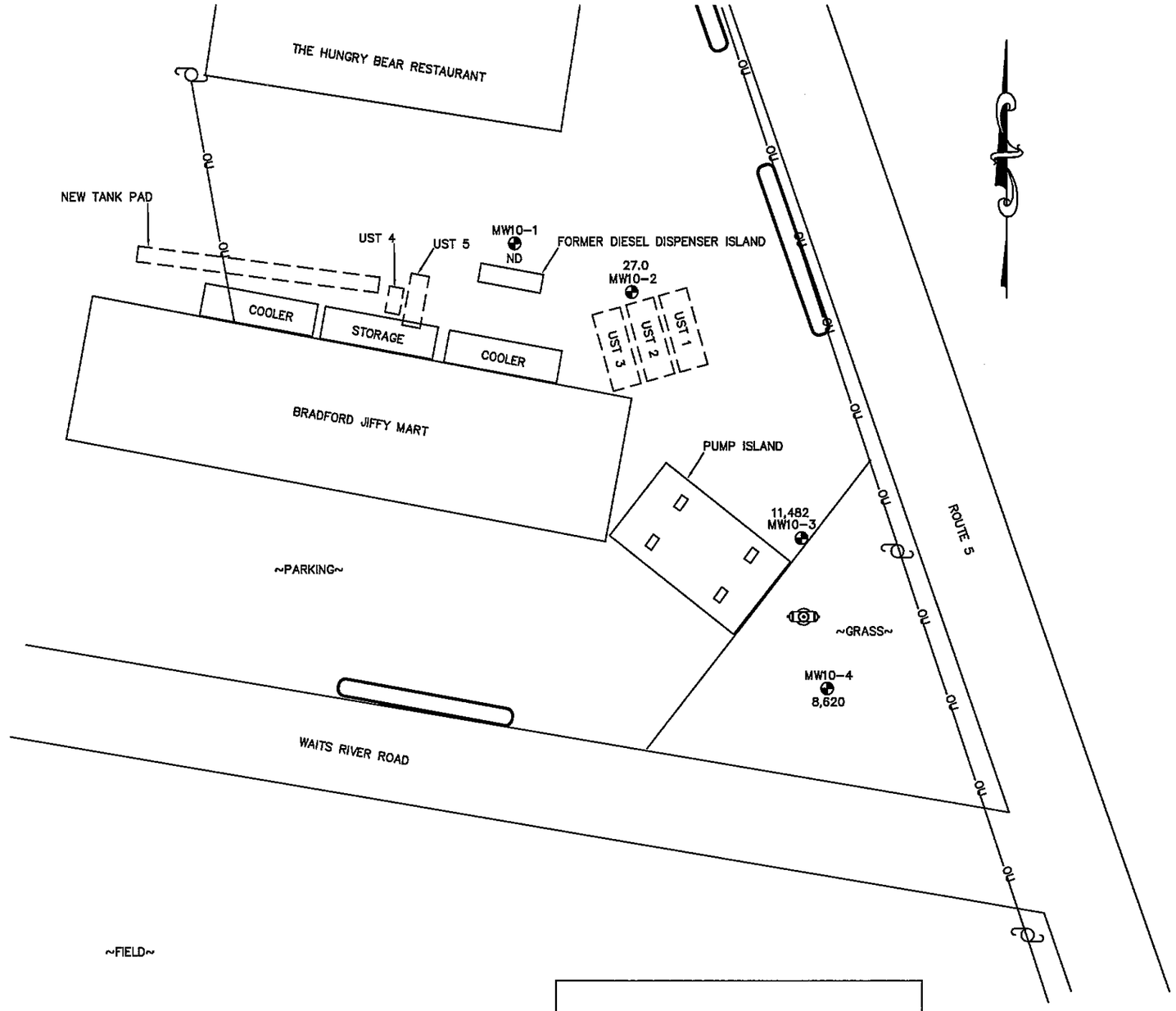
BRADFORD JIFFY MART

530 WHITE RIVER ROAD
BRADFORD, VERMONT

GROUNDWATER CONTOUR MAP

MEASURED: 4/9/10

DATE: 4/22/10	DWG #: 2	SCALE: 1"=40'	DRN.: DM	APP.: SD



TANK LEGEND

UST 1	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 2	10,000 GALLON GASOLINE TANK	REMOVED 7/24/09
UST 3	10,000 GALLON DIESEL TANK	REMOVED 7/24/09
UST 4	500 GALLON KEROSENE TANK	REMOVED 7/24/09
UST 5	6,800 GALLON OFF ROAD DIESEL TANK	REMOVED 7/24/09

LEGEND

MW10-4 8,266	MONITORING WELL WITH TOTAL TARGETED VOC CONTAMINANT CONCENTRATION (ppb) (M=8260B)
	UTILITY POLE
OU	OVERHEAD UTILITY WIRES
	HYDRANT
ND	NONE DETECTED

JOB #: 406090342
VTDEC #: 2009-4004

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BRADFORD JIFFY MART

530 WHITE RIVER ROAD
BRADFORD, VERMONT

CONTAMINANT CONCENTRATION MAP

SAMPLED: 4/9/10

DATE: 5/5/10	DWG #: 3	SCALE: 1"=40'	DRN.: DM	APP.: SD

KAS INC
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(802) 383-0486 Fax (802) 383-0490

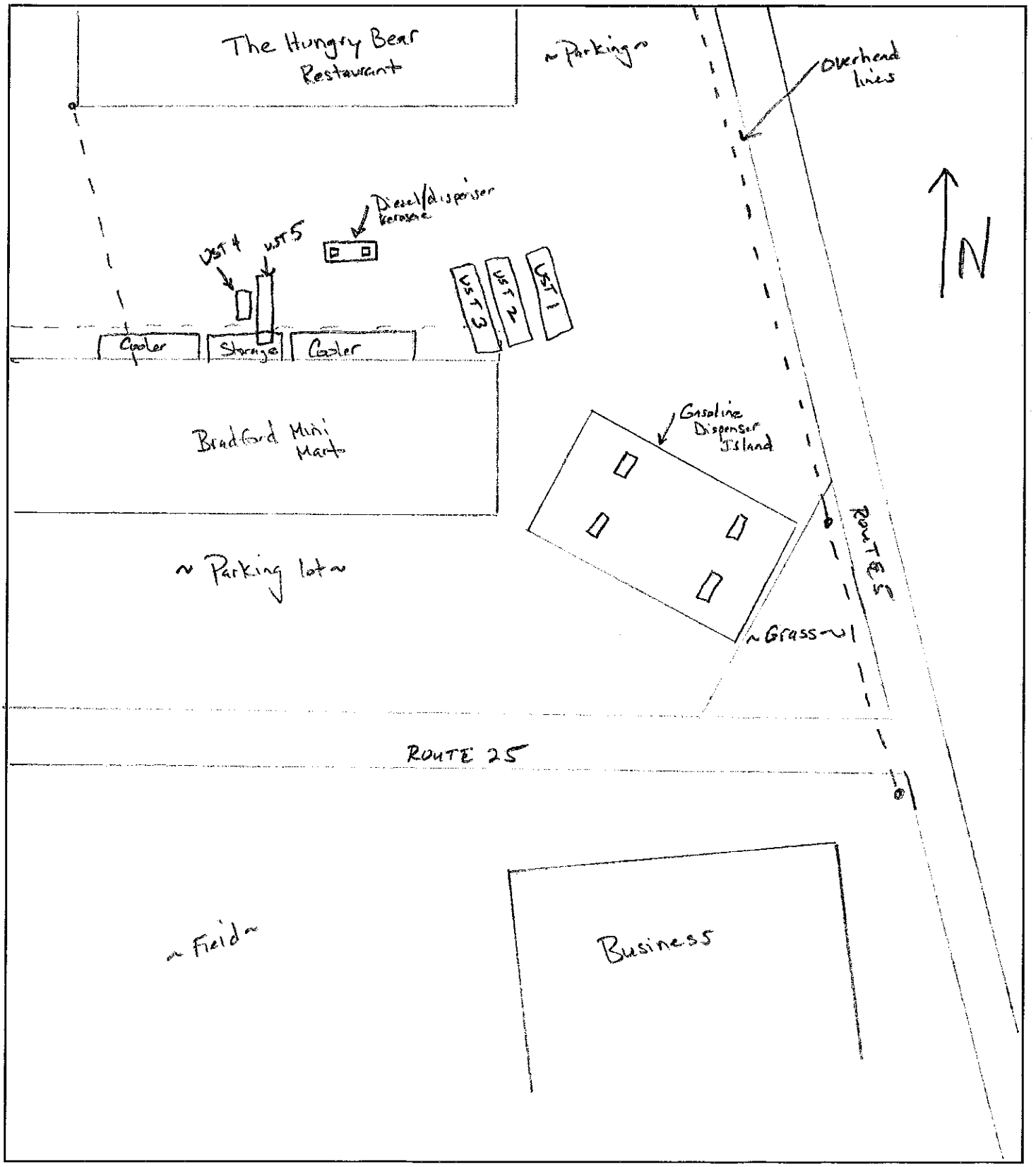
JOB Bradford Mini Mart -- SITE SKETCH

SHEET NO. 1 OF 2

CALCULATED BY JR DATE 7/29/09

CHECKED BY DATE

SCALE Not to Scale



Appendix B

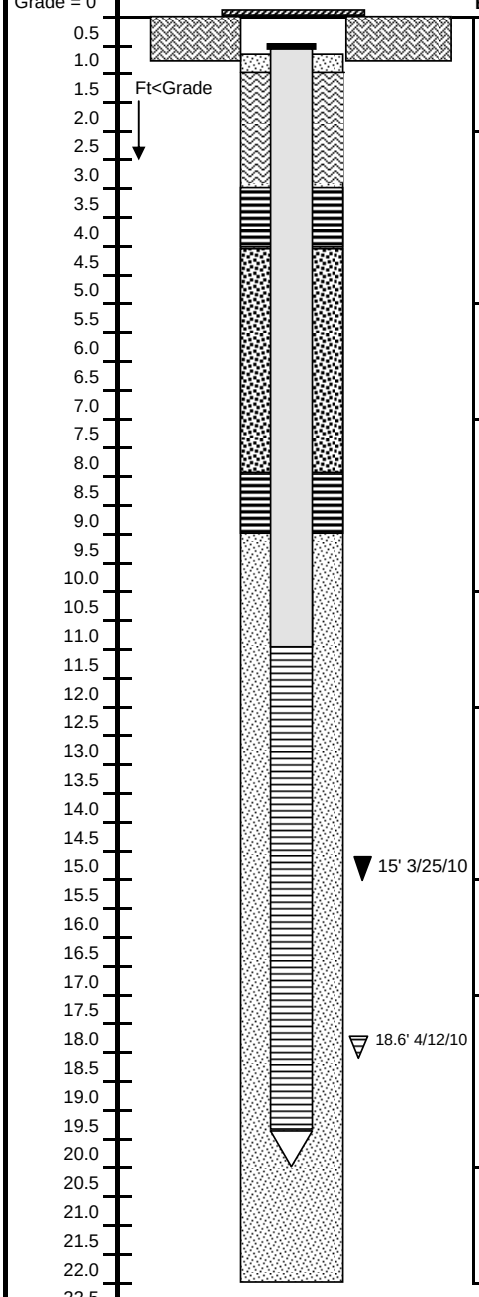
Monitoring Well Construction Diagrams

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: MW10-1

Bradford Mini Mart
Bradford, VT

KAS Project #:	406090342	Date Installed:	3/25/2010
VTDES #	2009-4004	Drilling Method:	4.25" I.D. HSA
Drilled by :	T&K Drilling	Boring Diameter.:	8.5"
Driller:	Kevin Singleton	Development Method:	Bailing
Logged by:	Myles Grey	Screened Length:	10 Feet



Well Construction	Pen/Rec(") / BlowCounts	Interval (') / PID (ppm)	Soil Characteristics	Letter Symbol	Graphic Symbol
			Gravel Surface		
	NA NA	0 - 2' 0.0	Well sorted Sand Moist, medium Brown	SW	
	24/18 6-4-4-3	5' -7' 0.0	Well sorted sand with Silt Moist, Brown	SM	
	24/14 9-6-5-5	10' - 12' 62.0	Poorly Graded, sand with gravel Light Gray, aged Diesel odor, Moist	SP	
	24/18 5-6-5-5	15' - 17' 0.0	Silt Wet, Brown	ML	
	24/17 3-4-3-5	20' - 22' 0.0	Silt, Wet and brown Set well to 20; groundwater around 15'	ML	

Legend

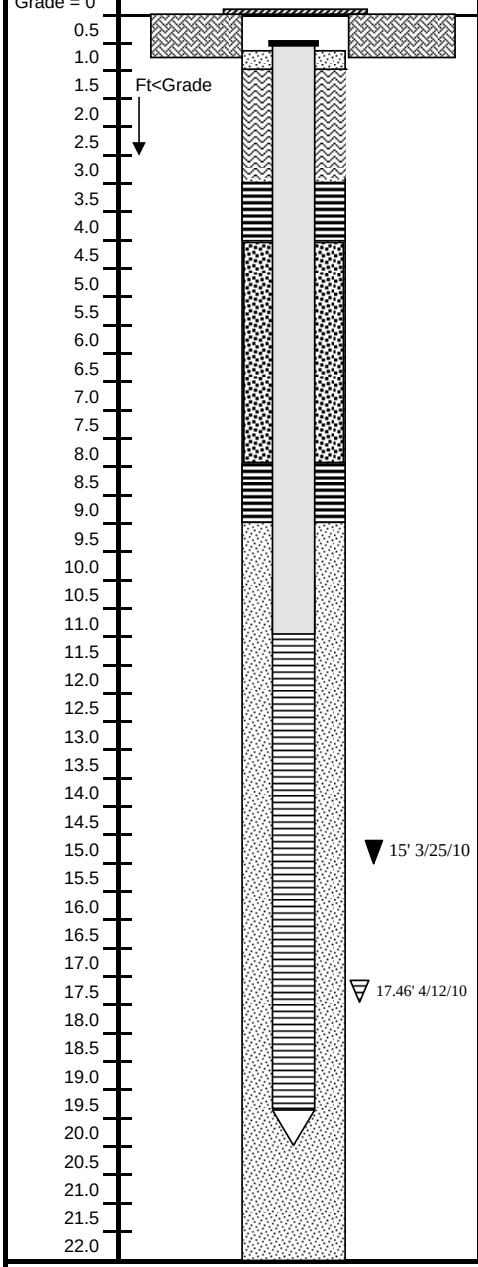
- Road Box with Bolt Down Cover, Set in Cement.
- Existing Surface.
- Bentonite Seal Placed in Annulus.
- Grade #1 Silica Sand Pack Placed in Annulus.
- Drill Cuttings Placed in Annulus.
- Native Soil
- Locking Plug.
- 2" ID, Schedule 40 PVC Riser.
- Well Screen
- Plug Point
- Approximate Water Level During Drilling, below grade
- Static Water Level, below top of casing

BORING LOG AND WELL CONSTRUCTION DIAGRAM
Well No: MW10-2

Bradford Mini Mart
Bradford, VT

KAS Project #: 406090342
VTDES # 2009-4004
Drilled by : T&K Drilling
Driller: Kevin Singleton
Logged by: Myles Grey

Date Installed: 3/25/2010
Drilling Method: 4.25" I.D. HSA
Boring Diameter.: 8.5"
Development Method: Bailing
Screened Length: 10 Feet



Pen/Rec(") / BlowCounts	Interval (') / PID (ppm)	Soil Characteristics (Gravel Surface)	Letter Symbol	Graphic
NA NA	0 - 2' 0.0	Poorly sorted Sand with gravel Moist, Brown	SP	
24/16 2-4-8-8	5' -7' 0.0	Well sorted Sand Moist, Light Brown	SW	
24/10 6-9-10-6	10' - 12' 0.0	Poorly Graded, sand with gravel Moist light gray	SP	
24/14 2-1-1-1	15' - 17' 0.0	Silt Wet, Brown	ML	
24/18 3-2-3-3	20' - 22' 0.0	Silt, Wet and brown	ML	

Legend

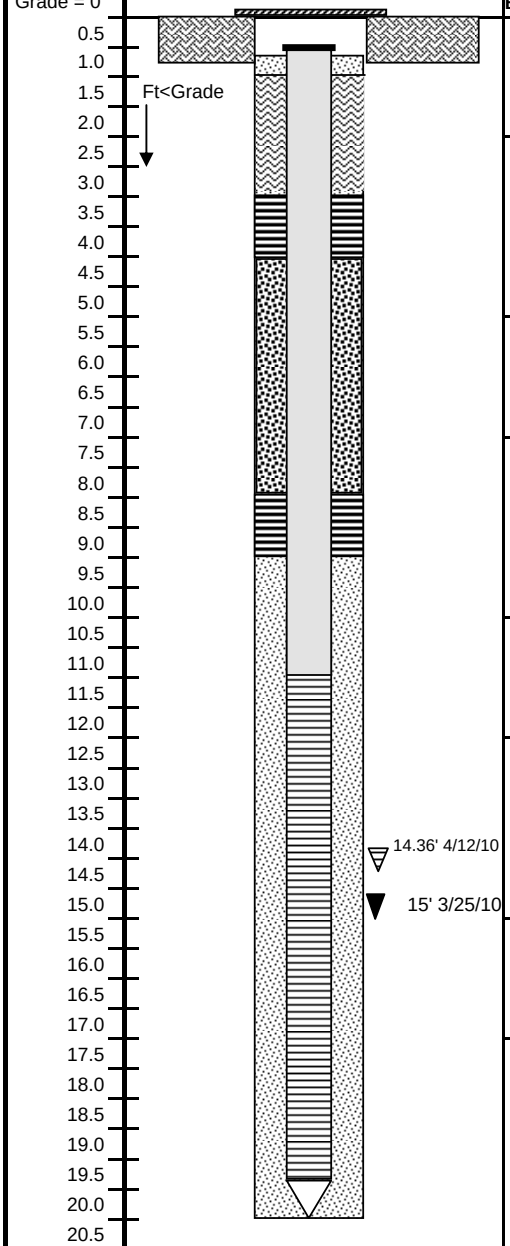
- Road Box with Bolt Down Cover, Set in Cement.
- Existing Surface.
- Bentonite Seal Placed in Annulus.
- Grade #1 Silica Sand Pack Placed in Annulus.
- Drill Cuttings Placed in Annulus.
- Native Soil
- Locking Plug.
- 2" ID, Schedule 40 PVC Riser.
- Screen
- Plug Point
- Approximate Water Level During Drilling, below grade
- Static Water Level, below top of casing

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: MW10-3

Bradford Mini Mart
Bradford, VT

KAS Project #:	406090342	Date Installed:	3/25/2010
VTDES #	2009-4004	Drilling Method:	4.25" I.D. HSA
Drilled by :	T&K Drilling	Boring Diameter.:	8.5"
Driller:	Kevin Singleton	Development Method:	Bailing
Logged by:	Myles Grey	Screened Length:	10 Feet



Pen/Rec(") / BlowCounts	Interval (') / PID (ppm)	Soil Characteristics: Gravel Surface	Letter Symbol	Graphic Symbol
NA	0 - 2'	Silty sand with gravel	SM	
NA	13.5	Dark brown/black with slight gasoline ordor		
24/14	5' -7'	Well sorted Sand	SW	
4-4-3-5	0.0	Moist, Light Brown		
24/13	10' - 12'	Well sorted Graded, sand with gravel	SW	
5-6-7-8	10.2	Moist light gray, non petro odor		
		Black and oragne staining at 8" from bottom		
24/20	15' - 17'	Silt	ML	
1-1-1-1	0.0	Wet, Brown		
		Set well to 20', no sample taken at 20'-22'		

Legend

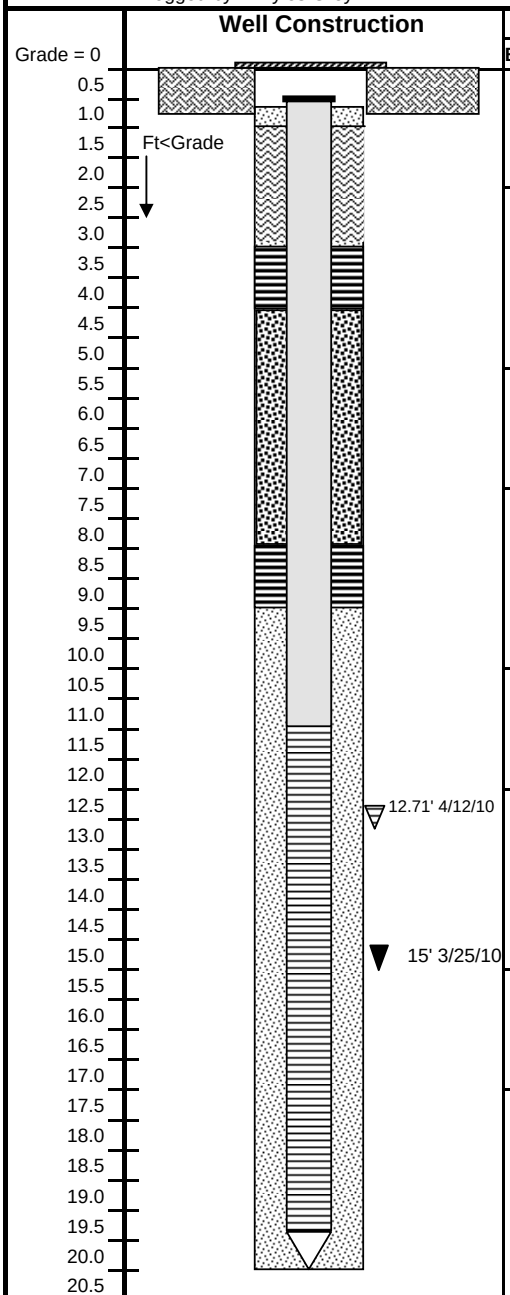
- Road Box with Bolt Down Cover, Set in Cement.
- Existing Surface.
- Bentonite Seal Placed in Annulus.
- Grade #1 Silica Sand Pack Placed in Annulus.
- Drill Cuttings Placed in Annulus.
- Native Soil
- Locking Plug.
- 2" ID, Schedule 40 PVC Riser.
- Screen
- Plug Point
- Approximate Water Level During Drilling, below grade
- Static Water Level, below top of casing

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: MW10-4

Bradford Mini Mart
Bradford, VT

KAS Project #:	406090342	Date Installed:	3/25/2010
VTDES #	2009-4004	Drilling Method:	4.25" I.D. HSA
Drilled by :	T&K Drilling	Boring Diameter.:	8.5"
Driller:	Kevin Singleton	Development Method:	Bailing
Logged by:	Myles Grey	Screened Length:	10 Feet



Pen/Rec(") / BlowCounts	Interval (') / PID (ppm)	Soil Characteristics / Gravel Surface	Letter Symbol	Graphic Symbol
NA NA	0 - 2' 5.2	Well sorted Sand with gravel Moist dark brown (possilbe asphalt) Asphalt layer at 2.5' below grass and soil - continue after asphalt confimred visually	SW	
24/12 9-28-30-7	5' -7' 14.6	Poorly sorted sand Moist dark brown. Asphalt layer confirmed before continuing deeper. Asphalt and brick debris in spoon	SP	
24/12 5-6-4-3	10' - 12' 46.4	Poorly Graded, sand with gravel Moist light gray with mild aged gasoline odor Additional wet sand sample off of auger at 12'-15'. PID = 3150. Very strong odor	SP	
24/18 3-2-3-1	15' - 17' 0.0	Silt Wet, Brown Drill to 20' and set well	ML	

Legend

- Road Box with Bolt Down Cover, Set in Cement.
- Existing Surface.
- Bentonite Seal Placed in Annulus.
- Grade #1 Silica Sand Pack Placed in Annulus.
- Drill Cuttings Placed in Annulus.
- Native Soil
- Locking Plug.
- 2" ID, Schedule 40 PVC Riser.
- Screen
- Plug Point
- ▼ Approximate Water Level During Drilling, below grade
- ▽ Static Water Level, below top of casing

Appendix C

Liquid Level Monitoring Data

Sample Data: 4/9/10

Well I.D.	Top of Casing Elevation	Depth to Product	Depth to Water	Product Thickness	Specific Gravity of Product	Hydro Equivalent	Corrected Depth to Water	Corrected Water Table Elevation
MW10-1	100.00	-	18.60	-	-	-	18.60	81.40
MW10-2	99.72	-	17.46	-	-	-	17.46	82.26
MW10-3	99.54	-	14.36				14.36	85.18
MW10-4	99.56	-	12.71	-	-	-	12.71	86.85

Historic Water Table Elevations

	Sample Date:							
Well I.D.	4/9/10							
MW10-1	81.40							
MW10-2	82.26							
MW10-3	85.18							
MW10-4	86.85							

NOTES:
NM - Not Measured.
All values reported in feet except for Specific Gravity.
Blank values in "Depth to Product" indicated that no product was detected.
Top-of-Casing elevations measured in feet relative to top of casing for monitoring well MW10-1 (100.00').
Elevations surveyed by KAS, Inc. on 3/25/2010.

Appendix D

Groundwater Quality Summary Data

Bradford Mini Mart
Bradford, Vermont

Monitoring Well MW10-1

Sampling Date *Analytical Method* PARAMETER	4/9/2010 8260B				**VGES**
MTBE	ND<2.0				40
Benzene	ND<1.0				5
Toluene	ND<1.0				1,000
Ethylbenzene	ND<1.0				700
Xylenes	ND<2.0				10,000
Total BTEX	ND				-
1,3,5-Trimethylbenzene	ND<1.0				350
1,2,4-Trimethylbenzene	ND<1.0				
Naphthalene	ND<2.0				20
Total VOCs	ND				-
TPH (Method 8015)	ND<0.20				-

NOTES:
VGES = Vermont Groundwater Enforcement Standard
TBQ<1.0 = Trace below quantitation limit
NA = not applicable, not analyzed
All Values Reported in ug/L (ppb) except TPH which is reported in mg/L
Detections are **Bolded**. Shaded areas indicate exceedance of the applicable VGES.
VOC ANALYSIS: EPA Method 8260B; TPH 8015 DRO

Bradford Mini Mart
Bradford, Vermont

Monitoring Well MW10-2

Sampling Date *Analytical Method* PARAMETER	4/9/2010 8260B				**VGES**
MTBE	**27.0**				40
Benzene	ND<1.0				5
Toluene	ND<1.0				1,000
Ethylbenzene	ND<1.0				700
Chloroform	**18.0**				
Xylenes	ND<2.0				10,000
Total BTEX	**27.0**				-
1,3,5-Trimethylbenzene	ND<1.0				350
1,2,4-Trimethylbenzene	ND<1.0				
Naphthalene	ND<2.0				20
Total VOCs	**27.0**				-
TPH (Method 8015)	ND<0.20				-

NOTES:
VGES = Vermont Groundwater Enforcement Standard
ND<1.0 = not detected above laboratory detection limit
TBQ<1.0 = Trace below quantitation limit
NA = not applicable, not analyzed
All Values Reported in ug/L (ppb) except TPH which is reported in mg/L
Detections are **Bolded**. Shaded areas indicate exceedance of the applicable VGES.
VOC ANALYSIS: EPA Method 8260B; TPH 8015 DRO

Bradford Mini Mart
Bradford, Vermont

Monitoring Well MW10-3

Sampling Date *Analytical Method* PARAMETER	4/9/2010 8260B				**VGES**
MTBE	**269**				40
Benzene	**179**				5
Toluene	**5,180**				1,000
Ethylbenzene	**633.**				700
Xylenes	**4,480**				10,000
Total BTEX	**10,741**				-
1,3,5-Trimethylbenzene	**152.**				350
1,2,4-Trimethylbenzene	**589.**				
Naphthalene	ND<100				20
Total VOCs	**11,482**				-
TPH (Method 8015)	**15.7**				-

NOTES:
VGES = Vermont Groundwater Enforcement Standard
ND<1.0 = not detected above laboratory detection limit
TBQ<1.0 = Trace below quantitation limit
NA = not applicable, not analyzed
All Values Reported in ug/L (ppb) except TPH which is reported in mg/L
Detections are **Bolded**. Shaded areas indicate exceedance of the applicable VGES.
VOC ANALYSIS: EPA Method 8260B; TPH 8015 DRO

Bradford Mini Mart
Bradford, Vermont

Monitoring Well MW10-4

Sampling Date *Analytical Method* PARAMETER	4/9/2010 8260B				**VGES**
MTBE	ND<100				40
Benzene	ND<50.0				5
Toluene	**1,030**				1,000
Ethylbenzene	**637**				700
Xylenes	**4,400**				10,000
Total BTEX	**6,067**				-
1,3,5-Trimethylbenzene	**447**				350
1,2,4-Trimethylbenzene	**1,530**				
Naphthalene	**222**				20
n-Propylbenzene	**212**				260
Isopropylbenzene	**79.0**				800
n-Butylbenzene	**63.0**				260
Total VOCs	**8,620**				-
TPH (Method 8015)	**34.7**				-

NOTES:
VGES = Vermont Groundwater Enforcement Standard
ND<1.0 = not detected above laboratory detection limit
TBQ<1.0 = Trace below quantitation limit
NA = not applicable, not analyzed
All Values Reported in ug/L (ppb) except TPH which is reported in mg/L
Detections are **Bolded**. Shaded areas indicate exceedance of the applicable VGES.
VOC ANALYSIS: EPA Method 8260B; TPH 8015 DRO

QA/QC SAMPLES

Sample Date: April 9, 2010

PARAMETER	Trip Blank	MW010-4	Duplicate (MW10-4)	RPD	VGES
Benzene	ND<1.0	ND<50	ND<50	n/a	5
Toluene	ND<1.0	**1,030**	**869**	**17.0**	1,000
Ethylbenzene	ND<1.0	**637**	**598**	**6.3**	700
Xylenes	ND<2.0	**4,400**	**4,110**	**6.8**	10,000
Total BTEX	ND	**6,067**	**5,577**	**8.4**	
MTBE	ND<2.0	ND<100	ND<100	n/a	40
1,3,5 Trimethyl Benzene	ND<1.0	**447**	**408**	**9.1**	350
1,2,4 Trimethyl Benzene	ND<1.0	**1,530**	**1,380**	**10.3**	
Napthalene	ND<2.0	**222**	**173**	**24.8**	20
n-Propylbenzene	ND<1.0	**212**	**190**	**10.9**	260
Isopropylbenzene	ND<1.1	**79.0**	**71.5**	**10.0**	800
n-Butylbenzene	ND<1.2	**63.0**	**65.0**	**-3.1**	260
Total Targeted VOCs	ND	**8,620**	**7,865.**	**9.2**	

Analysis by EPA Method 8021B

All values in ug/L (ppb) unless noted

ND<1.0 = None detected over (detection limit) RPD = Relative Percent Difference

VGES = Vermont Groundwater Enforcement Standards (Vermont Groundwater Protection Rule and Strategy, 2/14/2005)

>VGES

QA/QC SAMPLES

Sample Date: April 9, 2010

PARAMETER	Trip Blank	MW010-4	Duplicate (MW10-4)	RPD	VGES
Benzene	ND<1.0	ND<50	ND<50	n/a	5
Toluene	ND<1.0	**1,030**	**869**	**17.0**	1,000
Ethylbenzene	ND<1.0	**637**	**598**	**6.3**	700
Xylenes	ND<2.0	**4,400**	**4,110**	**6.8**	10,000
Total BTEX	ND	**6,067**	**5,577**	**8.4**	
MTBE	ND<2.0	ND<100	ND<100	n/a	40
1,3,5 Trimethyl Benzene	ND<1.0	**447**	**408**	**9.1**	350
1,2,4 Trimethyl Benzene	ND<1.0	**1,530**	**1,380**	**10.3**	
Napthalene	ND<2.0	**222**	**173**	**24.8**	20
n-Propylbenzene	ND<1.0	**212**	**190**	**10.9**	260
Isopropylbenzene	ND<1.1	**79.0**	**71.5**	**10.0**	800
n-Butylbenzene	ND<1.2	**63.0**	**65.0**	**-3.1**	260
Total Targeted VOCs	ND	**8,620**	**7,865.**	**9.2**	

Analysis by EPA Method 8021B
All values in ug/L (ppb) unless noted
ND<1.0 = None detected over (detection limit) RPD = Relative Percent Difference
VGES = Vermont Groundwater Enforcement Standards (Vermont Groundwater Protection Rule and Strategy, 2/14/2005)
>VGES

Appendix E

Groundwater Analytical Report

ENDYNE Inc.
Environmental Laboratories

Laboratory Report

KAS, Inc.	100306
PO Box 787	
Williston, VT 05495	
Atten: Sam Diver	

PROJECT: 406090342 Bradford MiniMart
WORK ORDER: **1004-04356**
DATE RECEIVED: April 12, 2010
DATE REPORTED: April 21, 2010
SAMPLER: Caitlin Andrews

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody located at the end of this report.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

This NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE:4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8015B

001 Site: MW10-01 Date Sampled: 4/9/10 15:21 Analysis Date: 4/13/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
TPH Gas Range Organics	< 0.20	mg/L	U						

TEST METHOD: EPA 8260B

001 Site: MW10-01 Date Sampled: 4/9/10 15:21 Analysis Date: 4/16/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 5.0	ug/L	A		Chloromethane	< 3.0	ug/L	A	
Vinyl chloride	< 2.0	ug/L	A		Bromomethane	< 5.0	ug/L	A	
Chloroethane	< 5.0	ug/L	A		Trichlorofluoromethane	< 2.0	ug/L	N	
Diethyl ether	< 5.0	ug/L	U		1,1-Dichloroethene	< 1.0	ug/L	A	
Acetone	< 10.0	ug/L	N		Carbon disulfide	< 5.0	ug/L	N	
Methylene chloride	< 5.0	ug/L	A		t-Butanol	< 20.0	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	A		trans-1,2-Dichloroethene	< 1.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 2.0	ug/L	N		1,1-Dichloroethane	< 1.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 2.0	ug/L	N		2-Butanone	< 10.0	ug/L	A	
2,2-Dichloropropane	< 2.0	ug/L	N		cis-1,2-Dichloroethene	< 1.0	ug/L	N	
Bromochloromethane	< 2.0	ug/L	N		Chloroform	< 1.0	ug/L	A	
Tetrahydrofuran	< 10.0	ug/L	U		1,1,1-Trichloroethane	< 1.0	ug/L	A	
Carbon tetrachloride	< 1.0	ug/L	A		1,1-Dichloropropene	< 1.0	ug/L	N	
Benzene	< 1.0	ug/L	A		t-Amylmethyl ether (TAME)	< 2.0	ug/L	N	
1,2-Dichloroethane	< 1.0	ug/L	A		Trichloroethene	< 1.0	ug/L	A	
1,2-Dichloropropane	< 2.0	ug/L	A		Dibromomethane	< 2.0	ug/L	N	
Bromodichloromethane	< 0.5	ug/L	A		cis-1,3-Dichloropropene	< 1.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 10.0	ug/L	N		Toluene	< 1.0	ug/L	A	
trans-1,3-Dichloropropene	< 2.0	ug/L	A		1,1,2-Trichloroethane	< 1.0	ug/L	A	
Tetrachloroethene	< 1.0	ug/L	A		1,3-Dichloropropane	< 1.0	ug/L	N	
2-Hexanone	< 10.0	ug/L	N		Dibromochloromethane	< 2.0	ug/L	A	
1,2-Dibromoethane	< 1.0	ug/L	N		Chlorobenzene	< 1.0	ug/L	A	
Ethylbenzene	< 1.0	ug/L	A		1,1,1,2-Tetrachloroethane	< 2.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	A		Styrene	< 1.0	ug/L	N	
Bromoform	< 2.0	ug/L	A		Isopropylbenzene	< 1.0	ug/L	N	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	A		Bromobenzene	< 1.0	ug/L	U	
n-Propylbenzene	< 1.0	ug/L	A		1,2,3-Trichloropropane	< 2.0	ug/L	N	
2-Chlorotoluene	< 1.0	ug/L	U		1,3,5-Trimethylbenzene	< 1.0	ug/L	A	
4-Chlorotoluene	< 1.0	ug/L	U		t-Butylbenzene	< 1.0	ug/L	A	
1,2,4-Trimethylbenzene	< 1.0	ug/L	A		s-Butylbenzene	< 1.0	ug/L	A	
4-Isopropyltoluene	< 1.0	ug/L	A		1,3-Dichlorobenzene	< 1.0	ug/L	A	
1,4-Dichlorobenzene	< 1.0	ug/L	A		n-Butylbenzene	< 1.0	ug/L	A	
1,2-Dichlorobenzene	< 1.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 2.0	ug/L	N	
1,2,4-Trichlorobenzene	< 2.0	ug/L	N		1,3,5-Trichlorobenzene	< 2.0	ug/L	U	
Hexachlorobutadiene	< 0.5	ug/L	N		Naphthalene	< 2.0	ug/L	A	
1,2,3-Trichlorobenzene	< 2.0	ug/L	N		Surr. 1 (Dibromofluoromethane	103	%	A	
Surr. 2 (Toluene d8)	100	%	A		Surr. 3 (4-Bromofluorobenzene	99	%	A	
Unidentified Peaks	> 10		U						

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE: 4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8015B

002 Site: MW10-02 Date Sampled: 4/9/10 14:59 Analysis Date: 4/13/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
TPH Gas Range Organics	< 0.20	mg/L	U						

TEST METHOD: EPA 8260B

002 Site: MW10-02 Date Sampled: 4/9/10 14:59 Analysis Date: 4/16/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 5.0	ug/L	A		Chloromethane	< 3.0	ug/L	A	
Vinyl chloride	< 2.0	ug/L	A		Bromomethane	< 5.0	ug/L	A	
Chloroethane	< 5.0	ug/L	A		Trichlorofluoromethane	< 2.0	ug/L	N	
Diethyl ether	< 5.0	ug/L	U		1,1-Dichloroethene	< 1.0	ug/L	A	
Acetone	< 10.0	ug/L	N		Carbon disulfide	< 5.0	ug/L	N	
Methylene chloride	< 5.0	ug/L	A		t-Butanol	< 20.0	ug/L	N	
Methyl-t-butyl ether (MTBE)	27.0	ug/L	A		trans-1,2-Dichloroethene	< 1.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 2.0	ug/L	N		1,1-Dichloroethane	< 1.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 2.0	ug/L	N		2-Butanone	< 10.0	ug/L	A	
2,2-Dichloropropane	< 2.0	ug/L	N		cis-1,2-Dichloroethene	< 1.0	ug/L	N	
Bromochloromethane	< 2.0	ug/L	N		Chloroform	18.0	ug/L	A	
Tetrahydrofuran	< 10.0	ug/L	U		1,1,1-Trichloroethane	< 1.0	ug/L	A	
Carbon tetrachloride	< 1.0	ug/L	A		1,1-Dichloropropene	< 1.0	ug/L	N	
Benzene	< 1.0	ug/L	A		t-Amylmethyl ether (TAME)	< 2.0	ug/L	N	
1,2-Dichloroethane	< 1.0	ug/L	A		Trichloroethene	< 1.0	ug/L	A	
1,2-Dichloropropane	< 2.0	ug/L	A		Dibromomethane	< 2.0	ug/L	N	
Bromodichloromethane	< 0.5	ug/L	A		cis-1,3-Dichloropropene	< 1.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 10.0	ug/L	N		Toluene	< 1.0	ug/L	A	
trans-1,3-Dichloropropene	< 2.0	ug/L	A		1,1,2-Trichloroethane	< 1.0	ug/L	A	
Tetrachloroethene	< 1.0	ug/L	A		1,3-Dichloropropane	< 1.0	ug/L	N	
2-Hexanone	< 10.0	ug/L	N		Dibromochloromethane	< 2.0	ug/L	A	
1,2-Dibromoethane	< 1.0	ug/L	N		Chlorobenzene	< 1.0	ug/L	A	
Ethylbenzene	< 1.0	ug/L	A		1,1,1,2-Tetrachloroethane	< 2.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	A		Styrene	< 1.0	ug/L	N	
Bromoform	< 2.0	ug/L	A		Isopropylbenzene	< 1.0	ug/L	N	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	A		Bromobenzene	< 1.0	ug/L	U	
n-Propylbenzene	< 1.0	ug/L	A		1,2,3-Trichloropropane	< 2.0	ug/L	N	
2-Chlorotoluene	< 1.0	ug/L	U		1,3,5-Trimethylbenzene	< 1.0	ug/L	A	
4-Chlorotoluene	< 1.0	ug/L	U		t-Butylbenzene	< 1.0	ug/L	A	
1,2,4-Trimethylbenzene	< 1.0	ug/L	A		s-Butylbenzene	< 1.0	ug/L	A	
4-Isopropyltoluene	< 1.0	ug/L	A		1,3-Dichlorobenzene	< 1.0	ug/L	A	
1,4-Dichlorobenzene	< 1.0	ug/L	A		n-Butylbenzene	< 1.0	ug/L	A	
1,2-Dichlorobenzene	< 1.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 2.0	ug/L	N	
1,2,4-Trichlorobenzene	< 2.0	ug/L	N		1,3,5-Trichlorobenzene	< 2.0	ug/L	U	
Hexachlorobutadiene	< 0.5	ug/L	N		Naphthalene	< 2.0	ug/L	A	
1,2,3-Trichlorobenzene	< 2.0	ug/L	N		Surr. 1 (Dibromofluoromethane	103	%	A	
Surr. 2 (Toluene d8)	103	%	A		Surr. 3 (4-Bromofluorobenzene)	98	%	A	
Unidentified Peaks	> 10		U						

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE:4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8015B

003 Site: MW10-03 Date Sampled: 4/9/10 14:42 Analysis Date: 4/13/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
TPH Gas Range Organics	15.7	mg/L	U						

TEST METHOD: EPA 8260B

003 Site: MW10-03 Date Sampled: 4/9/10 14:42 Analysis Date: 4/19/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 250	ug/L	A		Chloromethane	< 150	ug/L	A	
Vinyl chloride	< 100	ug/L	A		Bromomethane	< 250	ug/L	A	
Chloroethane	< 250	ug/L	A		Trichlorofluoromethane	< 100	ug/L	N	
Diethyl ether	< 250	ug/L	U		1,1-Dichloroethene	< 50.0	ug/L	A	
Acetone	< 500	ug/L	N		Carbon disulfide	< 250	ug/L	N	
Methylene chloride	< 250	ug/L	A		t-Butanol	< 1,000	ug/L	N	
Methyl-t-butyl ether (MTBE)	269	ug/L	A		trans-1,2-Dichloroethene	< 50.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 100	ug/L	N		1,1-Dichloroethane	< 50.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 100	ug/L	N		2-Butanone	< 500	ug/L	A	
2,2-Dichloropropane	< 100	ug/L	N		cis-1,2-Dichloroethene	< 50.0	ug/L	N	
Bromochloromethane	< 100	ug/L	N		Chloroform	< 50.0	ug/L	A	
Tetrahydrofuran	< 500	ug/L	U		1,1,1-Trichloroethane	< 50.0	ug/L	A	
Carbon tetrachloride	< 50.0	ug/L	A		1,1-Dichloropropene	< 50.0	ug/L	N	
Benzene	179	ug/L	A		t-Amylmethyl ether (TAME)	< 100	ug/L	N	
1,2-Dichloroethane	< 50.0	ug/L	A		Trichloroethene	< 50.0	ug/L	A	
1,2-Dichloropropane	< 100	ug/L	A		Dibromomethane	< 100	ug/L	N	
Bromodichloromethane	< 25.0	ug/L	A		cis-1,3-Dichloropropene	< 50.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 500	ug/L	N		Toluene	5,180	ug/L	A	
trans-1,3-Dichloropropene	< 100	ug/L	A		1,1,2-Trichloroethane	< 50.0	ug/L	A	
Tetrachloroethene	< 50.0	ug/L	A		1,3-Dichloropropane	< 50.0	ug/L	N	
2-Hexanone	< 500	ug/L	N		Dibromochloromethane	< 100	ug/L	A	
1,2-Dibromoethane	< 50.0	ug/L	N		Chlorobenzene	< 50.0	ug/L	A	
Ethylbenzene	633	ug/L	A		1,1,1,2-Tetrachloroethane	< 100	ug/L	N	
Xylenes, Total	4,480	ug/L	A		Styrene	< 50.0	ug/L	N	
Bromoform	< 100	ug/L	A		Isopropylbenzene	< 50.0	ug/L	N	
1,1,2,2-Tetrachloroethane	< 100	ug/L	A		Bromobenzene	< 50.0	ug/L	U	
n-Propylbenzene	< 50.0	ug/L	A		1,2,3-Trichloropropane	< 100	ug/L	N	
2-Chlorotoluene	< 50.0	ug/L	U		1,3,5-Trimethylbenzene	152	ug/L	A	
4-Chlorotoluene	< 50.0	ug/L	U		t-Butylbenzene	< 50.0	ug/L	A	
1,2,4-Trimethylbenzene	589	ug/L	A		s-Butylbenzene	< 50.0	ug/L	A	
4-Isopropyltoluene	< 50.0	ug/L	A		1,3-Dichlorobenzene	< 50.0	ug/L	A	
1,4-Dichlorobenzene	< 50.0	ug/L	A		n-Butylbenzene	< 50.0	ug/L	A	
1,2-Dichlorobenzene	< 50.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 100	ug/L	N	
1,2,4-Trichlorobenzene	< 100	ug/L	N		1,3,5-Trichlorobenzene	< 100	ug/L	U	
Hexachlorobutadiene	< 25.0	ug/L	N		Naphthalene	< 100	ug/L	A	
1,2,3-Trichlorobenzene	< 100	ug/L	N		Surr. 1 (Dibromofluoromethane	103	%	A	
Surr. 2 (Toluene d8)	103	%	A		Surr. 3 (4-Bromofluorobenzene	103	%	A	
Unidentified Peaks	3		U						

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE:4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8015B

004 Site: MW10-04 Date Sampled: 4/9/10 14:20 Analysis Date: 4/13/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
TPH Gas Range Organics	34.7	mg/L	U						

TEST METHOD: EPA 8260B

004 Site: MW10-04 Date Sampled: 4/9/10 14:20 Analysis Date: 4/16/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 250	ug/L	A		Chloromethane	< 150	ug/L	A	
Vinyl chloride	< 100	ug/L	A		Bromomethane	< 250	ug/L	A	
Chloroethane	< 250	ug/L	A		Trichlorofluoromethane	< 100	ug/L	N	
Diethyl ether	< 250	ug/L	U		1,1-Dichloroethene	< 50.0	ug/L	A	
Acetone	< 1,000	ug/L	N		Carbon disulfide	< 250	ug/L	N	
Methylene chloride	< 250	ug/L	A		t-Butanol	< 1,000	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 100	ug/L	A		trans-1,2-Dichloroethene	< 50.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 100	ug/L	N		1,1-Dichloroethane	< 50.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 100	ug/L	N		2-Butanone	< 500	ug/L	A	
2,2-Dichloropropane	< 100	ug/L	N		cis-1,2-Dichloroethene	< 50.0	ug/L	N	
Bromochloromethane	< 100	ug/L	N		Chloroform	< 50.0	ug/L	A	
Tetrahydrofuran	< 500	ug/L	U		1,1,1-Trichloroethane	< 50.0	ug/L	A	
Carbon tetrachloride	< 50.0	ug/L	A		1,1-Dichloropropene	< 50.0	ug/L	N	
Benzene	< 50.0	ug/L	A		t-Amylmethyl ether (TAME)	< 100	ug/L	N	
1,2-Dichloroethane	< 50.0	ug/L	A		Trichloroethene	< 50.0	ug/L	A	
1,2-Dichloropropane	< 100	ug/L	A		Dibromomethane	< 100	ug/L	N	
Bromodichloromethane	< 25.0	ug/L	A		cis-1,3-Dichloropropene	< 50.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 500	ug/L	N		Toluene	1,030	ug/L	A	
trans-1,3-Dichloropropene	< 100	ug/L	A		1,1,2-Trichloroethane	< 50.0	ug/L	A	
Tetrachloroethene	< 50.0	ug/L	A		1,3-Dichloropropane	< 50.0	ug/L	N	
2-Hexanone	< 500	ug/L	N		Dibromochloromethane	< 100	ug/L	A	
1,2-Dibromoethane	< 50.0	ug/L	N		Chlorobenzene	< 50.0	ug/L	A	
Ethylbenzene	637	ug/L	A		1,1,1,2-Tetrachloroethane	< 100	ug/L	N	
Xylenes, Total	4,400	ug/L	A		Styrene	< 50.0	ug/L	N	
Bromoform	< 100	ug/L	A		Isopropylbenzene	79.0	ug/L	N	
1,1,2,2-Tetrachloroethane	< 100	ug/L	A		Bromobenzene	< 50.0	ug/L	U	
n-Propylbenzene	212	ug/L	A		1,2,3-Trichloropropane	< 100	ug/L	N	
2-Chlorotoluene	< 50.0	ug/L	U		1,3,5-Trimethylbenzene	447	ug/L	A	
4-Chlorotoluene	< 50.0	ug/L	U		t-Butylbenzene	< 50.0	ug/L	A	
1,2,4-Trimethylbenzene	1,530	ug/L	A		s-Butylbenzene	< 50.0	ug/L	A	
4-Isopropyltoluene	< 50.0	ug/L	A		1,3-Dichlorobenzene	< 50.0	ug/L	A	
1,4-Dichlorobenzene	< 50.0	ug/L	A		n-Butylbenzene	63.0	ug/L	A	
1,2-Dichlorobenzene	< 50.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 100	ug/L	N	
1,2,4-Trichlorobenzene	< 100	ug/L	N		1,3,5-Trichlorobenzene	< 100	ug/L	U	
Hexachlorobutadiene	< 25.0	ug/L	N		Naphthalene	222	ug/L	A	
1,2,3-Trichlorobenzene	< 100	ug/L	N		Surr. 1 (Dibromofluoromethane	103	%	A	
Surr. 2 (Toluene d8)	103	%	A		Surr. 3 (4-Bromofluorobenzene)	98	%	A	
Unidentified Peaks	> 10		U						

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE:4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8260B

005 | Site: Duplicate | Date Sampled: 4/9/10 14:20 | Analysis Date: 4/16/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 250	ug/L	A		Chloromethane	< 150	ug/L	A	
Vinyl chloride	< 100	ug/L	A		Bromomethane	< 250	ug/L	A	
Chloroethane	< 250	ug/L	A		Trichlorofluoromethane	< 100	ug/L	N	
Diethyl ether	< 250	ug/L	U		1,1-Dichloroethene	< 50.0	ug/L	A	
Acetone	< 1,000	ug/L	N		Carbon disulfide	< 250	ug/L	N	
Methylene chloride	< 250	ug/L	A		t-Butanol	< 1,000	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 100	ug/L	A		trans-1,2-Dichloroethene	< 50.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 100	ug/L	N		1,1-Dichloroethane	< 50.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 100	ug/L	N		2-Butanone	< 500	ug/L	A	
2,2-Dichloropropane	< 100	ug/L	N		cis-1,2-Dichloroethene	< 50.0	ug/L	N	
Bromochloromethane	< 100	ug/L	N		Chloroform	< 50.0	ug/L	A	
Tetrahydrofuran	< 500	ug/L	U		1,1,1-Trichloroethane	< 50.0	ug/L	A	
Carbon tetrachloride	< 50.0	ug/L	A		1,1-Dichloropropene	< 50.0	ug/L	N	
Benzene	< 50.0	ug/L	A		t-Amylmethyl ether (TAME)	< 100	ug/L	N	
1,2-Dichloroethane	< 50.0	ug/L	A		Trichloroethene	< 50.0	ug/L	A	
1,2-Dichloropropane	< 100	ug/L	A		Dibromomethane	< 100	ug/L	N	
Bromodichloromethane	< 25.0	ug/L	A		cis-1,3-Dichloropropene	< 50.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 500	ug/L	N		Toluene	869	ug/L	A	
trans-1,3-Dichloropropene	< 100	ug/L	A		1,1,2-Trichloroethane	< 50.0	ug/L	A	
Tetrachloroethene	< 50.0	ug/L	A		1,3-Dichloropropane	< 50.0	ug/L	N	
2-Hexanone	< 500	ug/L	N		Dibromochloromethane	< 100	ug/L	A	
1,2-Dibromoethane	< 50.0	ug/L	N		Chlorobenzene	< 50.0	ug/L	A	
Ethylbenzene	598	ug/L	A		1,1,1,2-Tetrachloroethane	< 100	ug/L	N	
Xylenes, Total	4,110	ug/L	A		Styrene	< 50.0	ug/L	N	
Bromoform	< 100	ug/L	A		Isopropylbenzene	71.5	ug/L	N	
1,1,2,2-Tetrachloroethane	< 100	ug/L	A		Bromobenzene	< 50.0	ug/L	U	
n-Propylbenzene	190	ug/L	A		1,2,3-Trichloropropane	< 100	ug/L	N	
2-Chlorotoluene	< 50.0	ug/L	U		1,3,5-Trimethylbenzene	408	ug/L	A	
4-Chlorotoluene	< 50.0	ug/L	U		t-Butylbenzene	< 50.0	ug/L	A	
1,2,4-Trimethylbenzene	1,380	ug/L	A		s-Butylbenzene	< 50.0	ug/L	A	
4-Isopropyltoluene	< 50.0	ug/L	A		1,3-Dichlorobenzene	< 50.0	ug/L	A	
1,4-Dichlorobenzene	< 50.0	ug/L	A		n-Butylbenzene	65.0	ug/L	A	
1,2-Dichlorobenzene	< 50.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 100	ug/L	N	
1,2,4-Trichlorobenzene	< 100	ug/L	N		1,3,5-Trichlorobenzene	< 100	ug/L	U	
Hexachlorobutadiene	< 25.0	ug/L	N		Naphthalene	173	ug/L	A	
1,2,3-Trichlorobenzene	< 100	ug/L	N		Surr. 1 (Dibromofluoromethane	105	%	A	
Surr. 2 (Toluene d8)	103	%	A		Surr. 3 (4-Bromofluorobenzene)	99	%	A	
Unidentified Peaks	> 10		U						

CLIENT: KAS, Inc.
PROJECT: 406090342 Bradford MiniMart
REPORT DATE: 4/21/2010

WORK ORDER: **1004-04356**
DATE RECEIVED: 04/12/2010

TEST METHOD: EPA 8260B

006 | Site: Trip Blank | Date Sampled: 4/9/10 11:00 | Analysis Date: 4/19/10 W DAW

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 5.0	ug/L	A		Chloromethane	< 3.0	ug/L	A	
Vinyl chloride	< 2.0	ug/L	A		Bromomethane	< 5.0	ug/L	A	
Chloroethane	< 5.0	ug/L	A		Trichlorofluoromethane	< 2.0	ug/L	N	
Diethyl ether	< 5.0	ug/L	U		1,1-Dichloroethene	< 1.0	ug/L	A	
Acetone	< 10.0	ug/L	N		Carbon disulfide	< 5.0	ug/L	N	
Methylene chloride	< 5.0	ug/L	A		t-Butanol	< 20.0	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	A		trans-1,2-Dichloroethene	< 1.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 2.0	ug/L	N		1,1-Dichloroethane	< 1.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 2.0	ug/L	N		2-Butanone	< 10.0	ug/L	A	
2,2-Dichloropropane	< 2.0	ug/L	N		cis-1,2-Dichloroethene	< 1.0	ug/L	N	
Bromochloromethane	< 2.0	ug/L	N		Chloroform	< 1.0	ug/L	A	
Tetrahydrofuran	< 10.0	ug/L	U		1,1,1-Trichloroethane	< 1.0	ug/L	A	
Carbon tetrachloride	< 1.0	ug/L	A		1,1-Dichloropropene	< 1.0	ug/L	N	
Benzene	< 1.0	ug/L	A		t-Amylmethyl ether (TAME)	< 2.0	ug/L	N	
1,2-Dichloroethane	< 1.0	ug/L	A		Trichloroethene	< 1.0	ug/L	A	
1,2-Dichloropropane	< 2.0	ug/L	A		Dibromomethane	< 2.0	ug/L	N	
Bromodichloromethane	< 0.5	ug/L	A		cis-1,3-Dichloropropene	< 1.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 10.0	ug/L	N		Toluene	< 1.0	ug/L	A	
trans-1,3-Dichloropropene	< 2.0	ug/L	A		1,1,2-Trichloroethane	< 1.0	ug/L	A	
Tetrachloroethene	< 1.0	ug/L	A		1,3-Dichloropropane	< 1.0	ug/L	N	
2-Hexanone	< 10.0	ug/L	N		Dibromochloromethane	< 2.0	ug/L	A	
1,2-Dibromoethane	< 1.0	ug/L	N		Chlorobenzene	< 1.0	ug/L	A	
Ethylbenzene	< 1.0	ug/L	A		1,1,1,2-Tetrachloroethane	< 2.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	A		Styrene	< 1.0	ug/L	N	
Bromoform	< 2.0	ug/L	A		Isopropylbenzene	< 1.0	ug/L	N	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	A		Bromobenzene	< 1.0	ug/L	U	
n-Propylbenzene	< 1.0	ug/L	A		1,2,3-Trichloropropane	< 2.0	ug/L	N	
2-Chlorotoluene	< 1.0	ug/L	U		1,3,5-Trimethylbenzene	< 1.0	ug/L	A	
4-Chlorotoluene	< 1.0	ug/L	U		t-Butylbenzene	< 1.0	ug/L	A	
1,2,4-Trimethylbenzene	< 1.0	ug/L	A		s-Butylbenzene	< 1.0	ug/L	A	
4-Isopropyltoluene	< 1.0	ug/L	A		1,3-Dichlorobenzene	< 1.0	ug/L	A	
1,4-Dichlorobenzene	< 1.0	ug/L	A		n-Butylbenzene	< 1.0	ug/L	A	
1,2-Dichlorobenzene	< 1.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 2.0	ug/L	N	
1,2,4-Trichlorobenzene	< 2.0	ug/L	N		1,3,5-Trichlorobenzene	< 2.0	ug/L	U	
Hexachlorobutadiene	< 0.5	ug/L	N		Naphthalene	< 2.0	ug/L	A	
1,2,3-Trichlorobenzene	< 2.0	ug/L	N		Surr. 1 (Dibromofluoromethane	103	%	A	
Surr. 2 (Toluene d8)	105	%	A		Surr. 3 (4-Bromofluorobenzene)	101	%	A	
Unidentified Peaks	0		U						

≡ ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

44517

Special Reporting Instructions/PO#: 4060903412

Project Name: Bradford Min. Mat	Client/Contact Name: San Diver	Sampler Name: Caitlin Andrew
State of Origin: VT NY NH Other	Phone #:	Phone #:
Endyne WO # 1004-04356	Mailing Address: KAS, Inc. 368 Avenue D, Williston	Billing Address: KAS, Inc. 368 Ave D, Williston, VT

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled 4-9-10	Sample Containers No	Type/Size	Sample Preservation	Analysis Required	Field Results/Remarks	Due Date
MW10-01	H_2O			1521	2	40ml	HCl	24 +22		
MW10-02	↓			1459	↓	↓	↓	↓		
MW10-03				1442						
MW10-04				1420				↓		
Rplicate				1420				24		
Trip Blank				1100	↓	↓	↓	24		

Relinquished by:	Date/Time	Received by:	Date/Time	Received by:	Date/Time
Caitlin Andrew	4-9-10/0700			Eileen Toomey	4/12/10 @ 10:40

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	~~23~~	~~8015 DRO~~	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	~~24~~	~~8260B~~	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					33	Other				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivered: Client
Temp: 3.7
Comments:

(White - Laboratory / Yellow - Client)

Page ____ of ____

Appendix F

Field Notes