

**Summary Packet  
Vertical Profile Boring 133  
and TT-102D/TT-102D2**

**NWIRP Bethpage  
Bethpage, New York**



**Naval Facilities Engineering Command  
Mid-Atlantic**

**Contract No. N62470-08-D-1001  
Contract Task Order WE62**

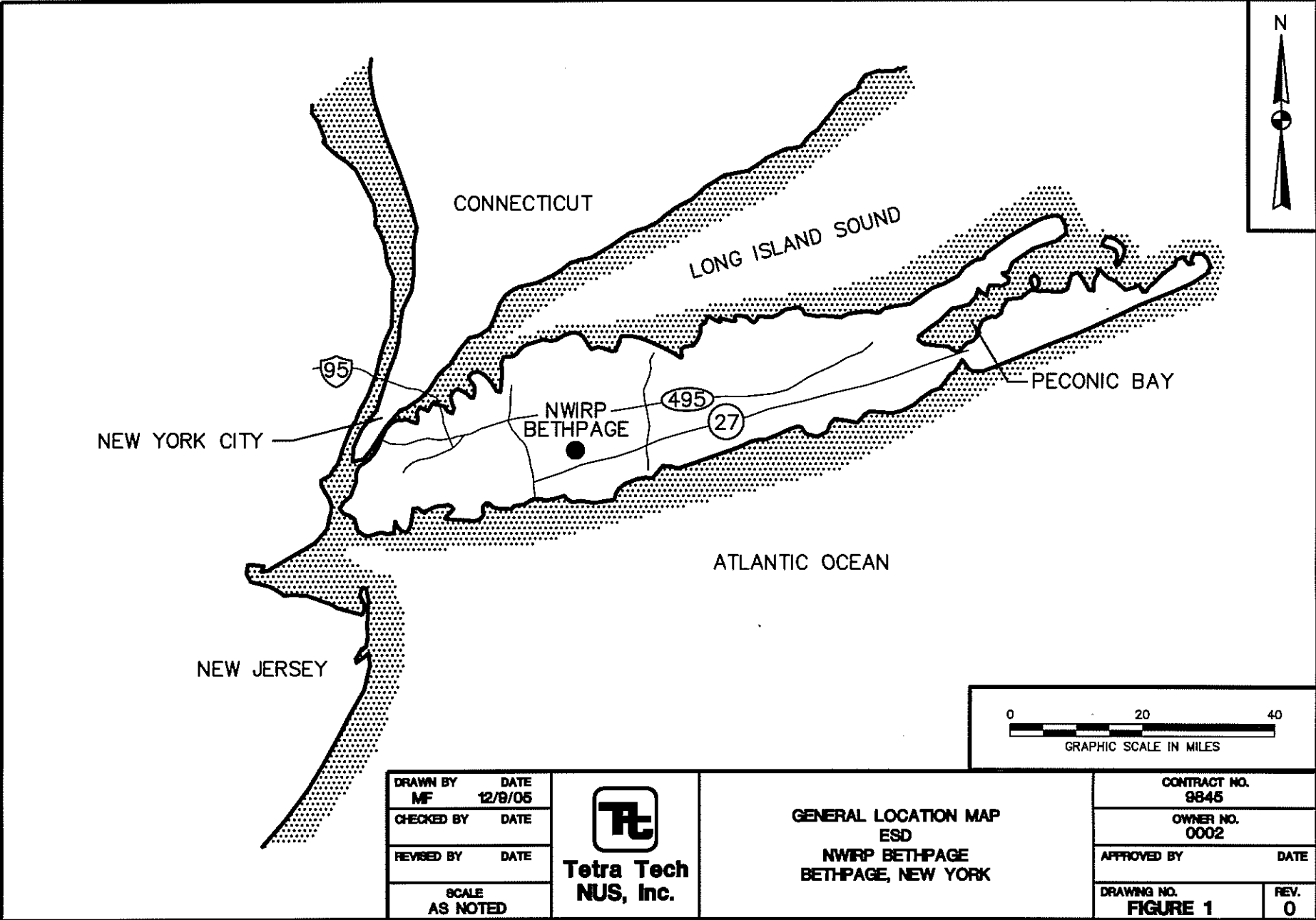
November 2012

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## **Section 1**

### **Figures**



DRAWN BY <b>MF</b>	DATE <b>12/8/05</b>
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	



**GENERAL LOCATION MAP  
ESD  
NWIRP BETHPAGE  
BETHPAGE, NEW YORK**

CONTRACT NO. <b>9845</b>	
OWNER NO. <b>0002</b>	
APPROVED BY	DATE
DRAWING NO. <b>FIGURE 1</b>	REV. <b>0</b>







**Section 2**

**VPB 133 Boring/Gamma Logs**



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Hollow Stem Auger/ Mud Rotary

BORING No.: VPB-133  
 DATE: December 13, 2011  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin / J. Gueci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1	/				Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2	/				Dark Brn	trace-little, med. Gravel, moist.	SM					
	2-3	/											
	3-4	/											
	4-5	/											
	5-6	/				Tan-Lt. Brown	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7	/				Tan-Lt. Brown	trace-little, med. Quartzose gravel	SM					
	7-8	/					moist.						
	8-9	/											
	9-10	/											
	10-11	/				Tan-Lt. Brown	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12	/				Tan-Lt. Brown	trace-little, med. Quartzose gravel	SM					
	12-13	/					moist.						
	13-14	/											
	14-15	/											
	15-16	/				Tan-Lt. Brown	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17	/				Tan-Lt. Brown	trace-little, med. Quartzose gravel	SM	Auger cuttings become				
	17-18	/					moist to wet.		wet at 17' below ground				
	18-19	/							surface.				
	19-20	/											
	20-21	/				Tan-Lt. Brown	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22	/				Tan-Lt. Brown	trace-little, fine to coarse Quartz	SM					
	22-23	/					gravel.		13:34				
	23-24	/							Stopped augering at				
	24-25	/							25' encountered clay.				

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface. (Failing F-10) Drilling Area Background (ppm):   
12" ID HAS borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above. (Strieber/Pratt)  
Drilled borehole to depth on 10/28, installed casing 10/31.  
 Converted to Well: Yes  No  Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Hollow Stem Augers / Mud Rotary

BORING No.: VPB-133  
 DATE: December 13, 2011  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin / J. Gueci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	25-26	/				Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged auger cuttings	0	0	0	0
	26-27	/				Tan-Brown	fine to coarse quartz gravel,	SM/G M	Resumed drilling 14:34.				
	27-28	/				Tan-Brown	moist to wet.	SM/G M					
	28-29	/				Tan-Brown		SM/G M					
	29-30	/				Tan-Brown		SM/G M					
	30-31	/				Tan-Brown		SM/G M					
	31-32	/				Tan-Brown		SM/G M					
	32-33	/				Tan-Brown		SM/G M					
	33-34	/				Tan-Brown		SM/G M					
	34-35	/				Tan-Brown		SM/G M					
	35-36	/				Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged auger cuttings	0	0	0	0
	36-37	/				Tan-Brown	fine to coarse quartz gravel,	SM/G M					
	37-38	/				Tan-Brown	moist to wet.	SM/G M					
	38-39	/				Tan-Brown		SM/G M					
	39-40	/				Tan-Brown		SM/G M					
	40-41	/			Tan-Brown		SM/G M						
	41-42	/			Tan-Brown		SM/G M						
	42-43	/			Tan-Brown		SM/G M						
	43-44	/			Tan-Brown		SM/G M						
	44-45	/			Tan-Brown		SM/G M						
	45-46	/			Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged auger cuttings	0	0	0	0	
	46-47	/			Tan-Brown	fine to coarse quartz gravel,	SM/G M						
	47-48	/			Tan-Brown	moist to wet.	SM/G M	Set 8" ID Sch 40 Steel					
	48-49	/			Tan-Brown		SM/G M	casing to 50'.					
	49-50	/			Tan-Brown		SM/G M						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 4, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	50-51					Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged mud rotary	0	0	0	0
	51-52					Tan-Brown	fine to coarse quartz gravel,	SM/G M	cuttings.				
	52-53					Tan-Brown	moist to wet.	SM/G M					
	53-54					Tan-Brown		SM/G M					
	54-55					Tan-Brown		SM/G M					
	55-56					Tan-Brown		SM/G M					
	56-57					Tan-Brown		SM/G M	BP-VPB133-GW-058				
GWS	57-58					Tan-Brown	↓ ↓	SM/G M	1/4/2012; 11:30:00 M				
	58-59					Tan-Brown	Silty, fine to coarse sand and	SM/G M	Resumed drilling 11:45				
	59-60					Tan-Brown	fine to coarse quartz gravel,	SM/G M	Logged mud rotary	0	0	0	0
	60-61					Tan-Brown	moist to wet.	SM/G M	cuttings.				
	61-62					Tan-Brown		SM/G M					
	62-63					Tan-Brown		SM/G M					
	63-64					Tan-Brown		SM/G M					
	64-65					Tan-Brown		SM/G M					
	65-66					Tan-Brown		SM/G M					
	66-67					Tan-Brown		SM/G M					
	67-68					Tan-Brown		SM/G M					
	68-69					Tan-Brown	↓ ↓	SM/G M					
	69-70					Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged mud rotary	0	0	0	0
	70-71					Tan-Brown	fine to coarse quartz gravel,	SM/G M	cuttings.				
	71-72					Tan-Brown	moist to wet.	SM/G M					
	72-73					Tan-Brown		SM/G M	12:04				
	73-74					Tan-Brown		SM/G M					
	74-75					Tan-Brown	↓ ↓	SM/G M					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 4, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfana

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	75-76					Tan-Brown	Silty, fine to coarse sand and	SM/G M	Logged mud rotary	0	0	0	0
	76-77					Tan-Brown	fine to coarse quartz gravel,	SM/G M	cuttings.				
	77-78					Tan-Brown	moist to wet.	SM/G M					
	78-79					Tan-Brown		SM/G M					
	79-80					Tan-Brown		SM/G M					
	80-81					Tan-Brown		SM/G M					
	81-82					Tan-Brown		SM/G M					
	82-83					Tan-Brown		SM/G M					
	83-84					Green-Gray	Sandy (fine), Silt and Clay	ML/C L	Resumed drilling 12:15				
	84-85					Green-Gray	glaucconitic, lignitic.	ML/C L	Logged mud rotary				
	85-86			Green-Gray			ML/C L	cuttings.					
	86-87			Green-Gray			ML/C L						
	87-88			Green-Gray			ML/C L						
	88-89			Green-Gray			ML/C L						
	89-90			Green-Gray			ML/C L						
	90-91			Green-Gray			ML/C L						
	91-92			Green-Gray			ML/C L						
	92-93			Green-Gray			ML/C L						
	93-94			Green-Gray		ML/C L							
	94-95			Green-Gray		ML/C L							
	95-96			Green-Gray		ML/C L							
	96-97			Green-Gray		ML/C L							
	97-98			Green-Gray		ML/C L							
	98-99			Green-Gray		ML/C L							
	99-100			Green-Gray		ML/C L							

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 4, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	100-101	/			Gray-green	Gray-green	Micaceous, silty, fine to coarse	SM					
	101-102	/			Green-gray	Green-gray	sand, wet.	SM					
	102-103	/			Gray-green	Gray-green		SM					
	103-104	/			Green-gray	Green-gray		SM	Attempted hydropunch				
	104-105	/			Gray-green	Gray-green		SM	sampler opened 3",				
	105-106	/			Gray-green	Gray-green	Micaceous, silty, fine to coarse	SM-SP	silt in screen, no water				
	106-107	/			Green-gray	Green-gray	sand, wet.	SM-SP	entered sampler.				
	107-108	/			Gray-green	Gray-green		SM-SP					
	108-109	/			Green-gray	Green-gray		SM-SP					
	109-110	/			Gray-green	Gray-green		SM-SP					
	110-111	/			Green-gray	Green-gray		SM-SP					
	111-112	/			Gray-green	Gray-green		SM-SP					
	112-113	/			Gray-green	Gray-green		SM-SP					
GWS	113-114	/			Green-gray	Green-gray		SM-SP	BP-VPB133-GW-114				
	114-115	/			Gray-green	Gray-green		SM-SP	16:00 Split sample				
	115-116	/			Green-gray	Green-gray		SM-SP	with H2M.				
	116-117	/			Gray-green	Gray-green		SM-SP	Resumed drilling from				
	117-118	/			Gray-green	Gray-green		SM-SP	114' 01/05/2011.				
	118-119	/			Green-gray	Green-gray		SM-SP					
	119-120	/			Gray-green	Gray-green		SM-SP					
	120-121	/			Green-gray	Green-gray		SM-SP					
	121-122	/			Gray-green	Gray-green		SM-SP					
	122-123	/			Gray-green	Gray-green		SM-SP					
	123-124	/			Green-gray	Green-gray		SM-SP					
	124-125	/			Gray-green	Gray-green		SM-SP					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 01/05/2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	125-126	/				Gray-white		SM-SP						
	126-127	/				Gray-white		SM-SP						
	127-128	/				Gray-white		SM-SP						
	128-129	/				Gray-white	Sandy (fine), Silt and Clay		SM-SP	Resumed drilling 12:15	0	0	0	0
	129-130	/				Gray-white	glauconitic, lignitic.		SM-SP	Logged mud rotary				
	130-131	/				Gray-white			SM-SP					
	131-132	/				Gray-white			SM-SP					
	132-133	/				Gray-white			SM-SP					
	133-134	/				Gray-white			SM-SP					
	134-135	/				Gray-white			SM-SP					
	135-136	/				Gray-white			SM-SP					
	136-137	/				Gray-white			SM-SP					
	137-138	/				Gray-white			SM-SP					
	138-139	/				Gray-white			SM-SP					
	139-140	/				Gray-white			SM-SP					
	140-141	/				Gray-white			SM-SP					
	141-142	/				Gray-white			SM-SP					
	142-143	/				Gray-white			SM-SP					
	143-144	/				Gray-white			SM-SP					
	144-145	/				Gray-white			SM-SP					
	145-146	/			Gray-white			SM-SP						
	146-147	/			Gray-white			SM-SP						
	147-148	/			Gray-white			SM-SP						
GWS	148-149	/			Gray-white			SM-SP	BP-VPB133-GW-148					
GWS	149-150	/			Gray-white			SM-SP	BP-VPB133-GW-150					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 01/06/2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151	/				Gray-black	Interbedded, silty, fine sand and	SM-ML	Resumed drilling 09:45	0	0	0	0
	151-152	/				Gray-black	sandy (fine) silt.	SM-ML	Logged mud rotary				
	152-153	/				Gray-black		SM-ML	cuttings (01/06/2012).				
GWS	153-154	/				Gray-black		SM-ML	BP-VPB133-GW-150				
	154-155	/				Gray-black		SM-ML	January 5, 2012; 13:25				
	155-156	/				Gray-black		SM-ML					
	156-157	/				Gray-black		SM-ML					
	157-158	/				Gray-black		SM-ML					
	158-159	/				Gray-black		SM-ML					
	159-160	/				Gray-black		SM-ML					
	160-161	/				Gray-black		SM-ML					
	161-162	/				Gray-black		SM-ML					
	162-163	/				Gray-black		SM-ML					
	163-164	/				Gray-black		SM-ML					
	164-165	/				Gray-black		SM-ML					
	165-166	/				Gray-black		SM-ML					
	166-167	/				Gray-black		SM-ML					
	167-168	/				Gray-black		SM-ML					
	168-169	/				Gray-black		SM-ML					
	169-170	/				Gray-black		SM-ML					
	170-171	/				Gray-black	Silt and clay		SM-ML				
	171-172	/				Gray-black			SM-ML				
	172-173	/				Gray-black			SM-ML				
	173-174	/				Gray-black			SM-ML				
	174-175	/				Gray-black			SM-ML				

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 6, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
				Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color			Material Classification	Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176					Gray-black	Interbedded, silty, fine sand and	SM-ML	Resumed drilling 10:30	0	0	0	0
	176-177					Gray-black	sandy (fine) silt.	SM-ML	Logged mud rotary				
	177-178					Gray-black		SM-ML	cuttings (01/06/2012).				
	178-179					Gray-black		SM-ML					
	179-180					Gray-black		SM-ML					
	180-181					Gray-black	Sandy (fine) silt and clay.	ML-CL					
	181-182					Gray-black		ML-CL					
	182-183					Gray-black		ML-CL					
	183-184					Gray-black		ML-CL					
	184-185					Gray-black		ML-CL					
	185-186					Gray-black		ML-CL					
	186-187					Gray-black		ML-CL					
	187-188					Gray-black		ML-CL					
	188-189					Gray-black		ML-CL					
	189-190					Gray-black		ML-CL					
	190-191				Gray-black		ML-CL						
	191-192				Gray-white	Silty, fine to medium sand	SM						
	192-193				Gray-white		SM						
GWS	193-194				Gray-white		SM	BP-VPB133-GW-194					
	194-195				Gray-white		SM	January 6, 2012; 12:15					
	195-196				Gray-white		SM						
	196-197				Gray-white		SM						
	197-198				Gray-white		SM						
	198-199				Gray-white		SM						
	199-200				Gray-white		SM						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 6, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201					Gray	Sandy (very fine to fine) silt and	SM ML	Logged mud rotary				
	201-202					Gray	silty very fine to fine sand.	SM ML	cuttings.				
	202-203					Gray		SM ML					
	203-204					Gray		SM ML					
	204-205					Gray		SM ML					
	205-206					Gray	Sandy (very fine to fine) silt and	SM ML	Logged mud rotary				
	206-207					Gray	silty very fine to fine sand.	SM ML	cuttings.				
	207-208					Gray		SM ML					
	208-209					Gray		SM ML					
	209-210					Gray		SM ML					
	210-211					Gray	Sandy (very fine to fine) silt and	SM ML	Logged mud rotary				
	211-212					Gray	silty very fine to fine sand.	SM ML	cuttings.				
	212-213					Gray		SM ML					
	213-214					Gray		SM ML					
	214-215					Gray		SM ML					
	215-216					Gray	Sandy (very fine to fine) silt and	SM ML	Logged mud rotary				
	216-217					Gray	silty very fine to fine sand.	SM ML	cuttings.				
	217-218					Gray		SM ML					
	218-219					Gray		SM ML					
	219-220					Gray		SM ML					
	220-221					Gray	Sandy (very fine to fine) silt and	SM ML	Logged mud rotary				
	221-222					Gray	silty very fine to fine sand.	SM ML	cuttings.				
	222-223					Gray		SM ML					
	223-224					Gray		SM ML					
	224-225					Gray		SM ML					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 6/7, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	225-226	/		Lithology Change (Depth/Ft.) or Screened Interval		Gray	Silty fine-medium sand.	SM	Logged mud rotary	0	0	0	0	
	226-227	/				Gray			SM	cuttings.				
	227-228	/				Gray			SM					
	228-229	/				Gray			SM	Stopped drilling @ 230'				
	229-230	/				Gray	↓	↓	SM	January 6, 2012.				
	230-231	/				Gray		Silty fine-medium sand.	SM	Logged mud rotary				
	231-232	/				Gray			SM	cuttings.				
	232-233	/				Gray			SM					
GWS	233-234	/				Gray			SM	BP-VPB133-GW-234				
	234-235	/				Gray	↓	↓	SM	January 6, 2012; 13:10				
	235-236	/				Gray		Silty fine-medium sand.	SM	Logged mud rotary				
	236-237	/				Gray			SM	cuttings.				
	237-238	/				Gray			SM					
	238-239	/				Gray	↓	↓	SM					
	239-240	/				Gray		Interbedded Sandy (fine) clay	SC CL					
	240-241	/				Gray		and clayey sand.	SC CL					
	241-242	/				Gray			SC CL					
	242-243	/				Gray			SC CL					
	243-244	/				Gray			SC CL					
	244-245	/				Gray	↓	↓	SC CL					
	245-246	/				Gray		Interbedded Sandy (fine) clay	SC CL	Screened mud rotary	0	0	0	0
	246-247	/				Gray		and clayey sand.	SC CL					
	247-248	/				Gray			SC CL					
	248-249	/				Gray			SC CL					
	249-250	/				Gray	↓	↓	SC CL					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 9, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	250-251	/		[Dotted pattern]		Gray	Interbedded Sandy (fine) clay	SC CL	Screened mud rotary	0	0	0	0
	251-252	/				Gray	and clayey sand.	SC CL	return.				
	252-253	/				Gray		SC CL					
GWS	253-254	/				Gray		SC CL	BP-VPB133-GW-254				
	254-255	/				Gray		SC CL	January 9, 2012; 15:05				
	255-256	/				Gray	Interbedded Sandy (fine) clay	SC CL	Screened mud rotary	0	0	0	0
	256-257	/				Gray	and clayey sand.	SC CL	return.				
	257-258	/				Gray		SC CL					
	258-259	/				Gray		SC CL					
	259-260	/				Gray		SC CL					
	260-261	/			Gray	Sandy (fine) Clay, trace to little	SC CL	Screened mud rotary	0	0	0	0	
	261-262	/			Gray	lignite fragments.	SC CL	return.					
	262-263	/			Gray		SC CL						
	263-264	/			Gray		SC CL						
	264-265	/			Gray		SC CL						
	265-266	/			Gray	Sandy (fine) Clay, trace to little	SC CL	Screened mud rotary	0	0	0	0	
	266-267	/			Gray	lignite fragments.	SC CL	return.					
	267-268	/			Gray		SC CL						
	268-269	/			Gray		SC CL						
	269-270	/			Gray		SC CL						
	270-271	/			Gray	Sandy (fine) Clay, trace to little	SC CL	Screened mud rotary	0	0	0	0	
	271-272	/			Gray	lignite fragments.	SC CL	return.					
	272-273	/			Gray		SC CL						
GWS	273-274	/			Gray		SC CL	BP-VPB133-GW-274					
	274-275	/			Gray		SC CL	January 10, 2012; 10:00					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 10, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin / J. Gueci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	275-276	/				Gray	Sandy (fine) Clay, trace to little	CL	Screened mud rotary	0	0	0	0
	276-277	/				Gray	lignite fragments.	CL	return.				
	277-278	/				Gray	↓ ↓	CL					
	278-279	/				Gray	Sandy (fine) Clay and clayey fine	SC CL					
	279-280	/				Gray	sand, trace to little lignite frags.	SC CL					
	280-281	/				Gray	↓ ↓	SC CL	Screened mud rotary	0	0	0	0
	281-282	/				Gray	↓ ↓	SC CL	return.				
	282-283	/				Gray	↓ ↓	SC CL					
	283-284	/				Gray	↓ ↓	SC CL					
	284-285	/				Gray	↓ ↓	SC CL					
	285-286	/				Gray	Sandy (fine) Clay, trace to little	SC CL	Screened mud rotary	0	0	0	0
	286-287	/				Gray	lignite fragments.	SC CL	return.				
	287-288	/				Gray	↓ ↓	SC CL					
	288-289	/				Gray	↓ ↓	SC CL					
	289-290	/				Gray-Lt. brown	Silty fine-medium sand.	SM					
	290-291	/				Gray-Lt. brown	Silty fine-medium sand.	SM	Screened mud rotary				
	291-292	/				Gray-Lt. brown	↓ ↓	SM	return.				
GWS	292-293	/				Gray-Lt. brown	↓ ↓	SM	BP-VPB133-GW-294				
	293-294	/				Gray-Lt. brown	↓ ↓	SM	January 10, 2012; 12:10				
SS	294-295	/				Gray	Micaceous, silty, very fine to	SM	Split spoon sample				
	295-296	/				Gray	fine sand.	SM	294'-296'.	0	0	0	0
	296-297	/				Gray	↓ ↓	SM					
	297-298	/				Gray	↓ ↓	SM					
	298-299	/				Gray	↓ ↓	SM					
	299-300	/				Gray	↓ ↓	SM					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

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Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 10, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	300-301	/		Lithology Change (Depth/Ft.) or Screened Interval		Gray	Micaceous, silty, very fine to	SM	Screened mud rotary					
	301-302	/					Gray	fine sand.	SM	return.				
	302-303	/					Gray		SM					
	303-304	/					Gray		SM					
	304-305	/					Gray	↓ ↓	SM					
	305-306	/					Gray	Micaceous, silty, very fine to	SM	Screened mud rotary				
	306-307	/					Gray	fine sand.	SM	return.				
	307-308	/					Gray		SM					
	308-309	/					Gray		SM					
	309-310	/					Gray	↓ ↓	SM					
	310-311	/					Gray	Micaceous, silty, very fine to	SM	Screened mud rotary				
	311-312	/					Gray	fine sand.	SM	return.				
	312-313	/					Gray		SM					
GWS	313-314	/					Gray		SM	BP-VPB133-GW-314				
	314-315	/					Gray	↓ ↓	SM	January 10, 2012; 15:15				
	315-316	/					Gray	Micaceous, silty, very fine to	SM	Screened mud rotary				
	316-317	/					Gray	fine sand.	SM	Resumed drilling 1/11/12				
	317-318	/					Gray		SM	from 313'.				
	318-319	/					Gray		SM					
	319-320	/					Gray	↓ ↓	SM					
	320-321	/				Gray	Micaceous, silty, very fine to	SM	Screened mud rotary					
	321-322	/				Gray	fine sand.	SM	return.					
	322-323	/				Gray		SM						
	323-324	/				Gray		SM						
	324-325	/				Gray	↓ ↓	SM						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 11, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfarzano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	325-326	/		Screened Interval		Gray	Micaceous, silty, very fine to fine	SM	Screened mud rotary					
	326-327	/				Gray	sand.		SM	return.				
	327-328	/				Gray			SM					
	328-329	/				Gray			SM					
	329-330	/				Gray			SM					
	330-331	/				Gray	Micaceous, silty, very fine to fine		SM					
	331-332	/				Gray	sand.		SM					
GWS	332-333	/				Gray			SM	BP-VPB133-GW-334				
	333-334	/				Gray			SM	January 11, 2012; 10:20				
	334-335	/				Gray			SM					
	335-336	/				Gray	Micaceous, silty, very fine to fine		SM	Screened mud rotary				
	336-337	/				Gray	sand.		SM	return.				
	337-338	/				Gray			SM					
	338-339	/				Gray			SM					
	339-340	/				Gray			SM					
	340-341	/				Gray	Micaceous, silty, very fine to fine		SM	Screened mud rotary				
	341-342	/				Gray	sand.		SM	return.				
	342-343	/				Gray			SM					
	343-344	/				Gray			SM					
	344-345	/				Gray			SM					
	345-346	/			Gray	Micaceous, silty, very fine to fine		SM	Screened mud rotary					
	346-347	/			Gray	sand.		SM	return.					
	347-348	/			Gray			SM						
	348-349	/			Gray			SM						
	349-350	/			Gray			SM						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE: \_\_\_\_\_  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfarzano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	350-351	/		[Dotted pattern]		Gray	Micaceous, silty, very fine to fine	SM	Screened mud rotary					
	351-352	/				Gray	sand.		SM	return.				
	352-353	/				Gray			SM					
GWS	353-354	/				Gray			SM	BP-VPB133-GW-354				
	354-355	/				Gray			SM	January 11, 2012; 13:00				
	355-356	/				Gray	Micaceous, silty, very fine to fine		SM	Screened mud rotary				
	356-357	/				Gray	sand.		SM	return.				
	357-358	/				Gray			SM					
	358-359	/				Gray			SM					
	359-360	/				Gray			SM					
	360-361	/		[Diagonal hatching]		Gray	Sandy (fine) clay and clayey, fine	SC CL	Screened mud rotary					
	361-362	/				Gray	Sand.		SC CL	cuttings.				
	362-363	/				Gray			SC CL					
	363-364	/				Gray			SC CL					
	364-365	/				Gray			SC CL					
	365-366	/				Gray	Sandy (fine) clay and clayey, fine		SC CL	Screened mud rotary				
	366-367	/				Gray	Sand.		SC CL	cuttings.				
	367-368	/				Gray			SC CL					
	368-369	/				Gray			SC CL					
	369-370	/				Gray			SC CL					
	370-371	/			Gray	Sandy (fine) clay and clayey, fine		SC CL	Screened mud rotary	0	0	0	0	
	371-372	/			Gray	Sand.		SC CL	cuttings.					
	372-373	/			Gray			SC CL						
GWS	373-374	/			Gray			SC CL	BP-VPB133-GW-374					
	374-375	/			Gray			SC CL	January 11, 2012; 16:30					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 12, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin / J. Gucci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	375-376	/		[Hatched Pattern]		Gray	Sandy (fine) sily and silty, fine	SM ML	Screened mud rotary	0	0	0	0	
	376-377	/				Gray	Sand.	SM ML	cuttings.					
	377-378	/				Gray			SM ML					
	378-379	/				Gray			SM ML					
	379-380	/				Gray	↓	↓	SM ML					
	380-381	/				Gray	Sandy (fine) sily and silty, fine		SM ML	Screened mud rotary				
	381-382	/				Gray	Sand.		SM ML	cuttings.				
	382-383	/				Gray			SM ML					
	383-384	/				Gray			SM ML					
	384-385	/				Gray	↓	↓	SM ML					
	385-386	/			Gray	Sandy (fine) sily and silty, fine		SM ML	Screened mud rotary	0	0	0	0	
	386-387	/			Gray	Sand.		SM ML	cuttings.					
	387-388	/			Gray			SM ML						
	388-389	/			Gray			SM ML						
	389-390	/			Gray	↓	↓	SM ML						
	390-391	/			Gray	Sandy (fine) sily and silty, fine		SM ML	Screened mud rotary					
	391-392	/			Gray	Sand.		SM ML	cuttings.					
	392-393	/			Gray			SM ML		0	0	0	0	
GWS	393-394	/			Gray			SM ML	BP-VPB133-GW-394					
	394-395	/			Gray	↓	↓	SM ML	January 12, 2012; 10:55					
	395-396	/				Green-Gray	Sandy (fine) sily and silty, fine	SM ML	Split spoon sample					
	396-397	/				Green-Gray	Sand.	SM ML						
	397-398	/				Green-Gray		SM ML						
	398-399	/				Lt.-Brn to Gray	Sandy (very fine) clay.	CL						
	399-400	/				Lt.-Brn to Gray		CL						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 12, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfarzano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	400-401	/				Lt.-Brn to Gray	Sandy (very fine) clay.	CL	Logged mud rotary				
	401-402	/				Lt.-Brn to Gray		CL	cuttings,				
	402-403	/				Lt.-Brn to Gray		CL					
	403-404	/				Lt.-Brn to Gray		CL					
	404-405	/				Lt.-Brn to Gray		CL					
	405-406	/				Lt.-Brn to Gray	Sandy (very fine) clay.	CL	Logged mud rotary cuttings.				
	406-407	/				Lt.-Brn to Gray		CL					
	407-408	/				Gray		CL					
	408-409	/				Gray	Silty very fine to fine sand.	SM					
	409-410	/				Gray		SM					
	410-411	/				Gray	Silty very fine to fine sand.	SM					
	411-412	/				Gray		SM					
	412-413	/				Gray		SM					
GWS	413-414	/				Gray		SM	BP-VPB133-GW-414				
	414-415	/				Gray		SM	January 12, 2012; 13:25				
	415-416	/				Gray	Silty very fine to fine sand.	SM					
	416-417	/				Gray		SM	Logged mud rotary cuttings.				
	417-418	/				Gray		SM					
	418-419	/				Gray		SM					
	419-420	/				Gray		SM					
	420-421	/				Gray	Micaceous, silty, fine sand with	SM SC	Logged mud rotary cuttings.				
	421-422	/				Gray	trace to little silt and clay laminae	SM SC					
	422-423	/				Gray		SM SC					
	423-424	/				Gray		SM SC					
	424-425	/				Gray		SM SC					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 12, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	425-426					Gray	Micaceous, silty, fine sand with	SM SC	Logged mud rotary cuttings.				
	426-427					Gray	trace to little silt and clay laminae	SM SC					
	427-428					Gray		SM SC					
	428-429					Gray	Sandy (fine) Clay and clayey	CL SC					
	429-430					Gray	fine sand	CL SC					
	430-431					Gray	Sandy (fine) Clay and clayey	CL SC	Logged mud rotary cuttings.				
	431-432					Gray	fine sand	CL SC					
	432-433					Gray		CL SC					
GWS	433-434					Gray		CL SC	BP-VPB133-GW-434				
	434-435					Gray		CL SC	January 12, 2012; 15:40				
	435-436					Gray	Sandy (fine) Clay and clayey	CL SC	Resumed drilling from 433'				
	436-437					Gray	fine sand	CL SC	on January 13, 2012.				
	437-438					Gray		CL SC					
	438-439					Gray		CL SC					
	439-440					Gray		CL SC					
	440-441					Gray	Clayey very fine to fine sand.	CL SC	Logged mud rotary cuttings.				
	441-442					Gray		CL SC					
	442-443					Gray		CL SC					
	443-444					Gray		CL SC					
	444-445					Gray		CL SC					
	445-446					Gray	Clayey very fine to fine sand.	CL SC	Logged mud rotary cuttings.				
	446-447					Gray		CL SC					
	447-448					Gray		CL SC					
	448-449					Gray		CL SC					
	449-450					Gray		CL SC					

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

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Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE: 1/13/2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfarzano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	450-451					Gray	Sandy (fine) Clay and clayey	CL SC	Logged mud rotary cuttings.				
	451-452					Gray	fine sand	CL SC					
	452-453					Gray		CL SC					
GWS	453-454					Gray		CL SC	BP-VPB133-GW-454				
	454-455					Gray to white	Silty, very fine sand, trace silt and clay	SM ML	January 13, 2012; 10:15				
	455-456					Gray to white	Silty, very fine sand, trace silt and clay	SM ML	Logged mud rotary cuttings.				
	456-457					Gray to white		SM ML					
	457-458					Gray to white		SM ML					
	458-459					Gray to white		SM ML					
	459-460					Gray to white		SM ML					
	460-461					Gray to white	Silty, very fine sand, trace silt and clay	SM ML	Logged mud rotary cuttings.				
	461-462					Gray to white		SM ML					
	462-463					Gray to white		SM ML					
	463-464					Gray to white		SM ML					
	464-465					Gray to white		SM ML					
	465-466					Gray to white	Silty, very fine sand, trace silt and clay	SM ML	Logged mud rotary cuttings.				
	466-467					Gray to white		SM ML					
	467-468					Gray to white		SM ML					
	468-469					Gray to white		SM ML					
	469-470					Gray to white		SM ML					
	470-471					Gray to white	Silty, very fine sand, trace silt and clay	SM ML	Logged mud rotary cuttings.				
	471-472					Gray to white		SM ML					
	472-473					Gray to white		SM ML					
GWS	473-474					Gray to white		SM ML	BP-VPB133-GW-474				
	474-475					Gray to white		SM ML	January 13, 2012; 12:15				

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

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Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 16, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / J. Sfarzano

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	475-476	/				Gray to white	Silty, very fine sand, trace silt and clay	SM	Logged mud rotary cuttings.					
	476-477	/				Gray to white			SM					
	477-478	/				Gray to white			SM					
	478-479	/				Gray to white			SM					
	479-480	/				Gray to white		↓ ↓	SM					
	480-481	/				Gray to white	Silty, very fine sand, trace silt and clay		SM	Logged mud rotary cuttings.				
	481-482	/				Gray to white			SM					
	482-483	/				Gray to white			SM					
	483-484	/				Gray to white			SM					
	484-485	/				Gray to white		↓ ↓	SM					
	485-486	/				Gray to white	Silty, very fine sand, trace silt and clay		SM ML	Logged mud rotary cuttings.				
	486-487	/				Gray to white			ML					
	487-488	/				Gray to white			SM ML					
	488-489	/				Gray to white			SM					
	489-490	/				Gray to white		↓ ↓	SM					
	490-491	/				Gray to white	Silty, very fine sand, trace silt and clay		SM	Logged mud rotary cuttings.				
	491-492	/				Gray to white			SM					
	492-493	/				Gray to white			SM					
GWS	493-494	/				Gray to white			SM	BP-VPB133-GW-494				
	494-495	/				Gray to white		↓ ↓	SM	January 13, 2012; 14:10				
	495-496	/			Gray to white	Silty, very fine sand, trace silt and clay		SM	Resumed drilling @ 493'					
	496-497	/			Gray to white			SM	January 16, 2012.					
	497-498	/			Gray to white			SM						
	498-499	/			Gray to white			SM						
	499-500	/			Gray to white		↓ ↓	SM						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes   X   No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 16, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	500-501	/				Gray to white	Silty, very fine sand, trace silt and clay	SM ML						
	501-502	/				Gray to white			SM ML					
	502-503	/				Gray to white			SM ML					
	503-504	/				Gray to white			SM ML					
	504-505	/				Gray to white		↓ ↓	SM ML					
	505-506	/				Gray to white	Silty, very fine sand, trace silt and clay		SM ML					
	506-507	/				Gray to white			SM ML					
	507-508	/				Gray to white			SM ML					
	508-509	/				Gray to white			SM ML					
	509-510	/				Gray to white			SM ML					
	510-511	/				Gray			SM					
	511-512	/				Gray			SM					
	512-513	/				Gray			SM	BP-VPB133-GW-514				
GWS	513-514	/				Gray		↓ ↓	SM	1/16/2012 12:00				
SS	514-515	/				Very dense	Gray	Silty, micaceous fine-medium sand,	SM	Split spoon sample	0	0	0	0
	515-516	/				Gray	trace to little lignite (1 mm) laminae.		SM	1/16/2012 12:25				
	516-517	/				Gray			SM					
	517-518	/				Gray			SM					
	518-519	/				Gray			SM					
	519-520	/				Gray		↓ ↓	SM					
	520-521	/			Gray	Silty, micaceous fine-medium sand,		SM	Logged mud rotary cuttings.					
	521-522	/			Gray	trace silt laminae.		SM						
	522-523	/			Gray			SM						
	523-524	/			Gray			SM						
	524-525	/			Gray		↓ ↓	SM						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 16, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	525-526	/				Gray	Silty, micaceous fine-medium sand,	SM	Logged mud rotary cuttings.				
	526-527	/				Gray	trace silt laminae.		SM				
	527-528	/				Gray			SM				
	528-529	/				Gray			SM				
	529-530	/				Gray			SM				
	530-531	/				Gray	Silty, micaceous fine-medium sand,		SM	Logged mud rotary cuttings.			
	531-532	/				Gray	trace silt laminae.		SM				
	532-533	/				Gray			SM				
GWS	533-534	/				Gray			SM	BP-VPB133-GW-534			
	534-535	/				Gray			SM	1/16/2012 16:30:00 PM			
	535-536	/			Gray	Silty, micaceous fine-medium sand,		SM	Logged mud rotary cuttings.				
	536-537	/			Gray	trace silt laminae.		SM	Resumed drilling from 533'				
	537-538	/			Gray			SM	on January 17, 2012.				
	538-539	/			Gray			SM					
	539-540	/			Gray			SM					
	540-541	/			Gray to white		Interbedded sandy (fine) clay	CL	Logged mud rotary cuttings.				
	541-542	/			Gray to white		and clayey fine sand.	SC					
	542-543	/			Gray to white			CL					
	543-544	/			Gray to white			SC					
	544-545	/			Gray to white			CL					
	545-546	/			Gray to white		Interbedded sandy (fine) clay	CL	Logged mud rotary cuttings.				
	546-547	/			Gray to white		and clayey fine sand.	SC					
	547-548	/			Gray to white			CL					
	548-549	/			Gray to white			SC					
	549-550	/			Gray to white			CL					

Remarks: \_\_\_\_\_  
 Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE: January 17, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	550-551	/				Gray to white	Silty, fine-medium sand.	SM	Logged mud rotary cuttings.					
	551-552	/				Gray to white			SM					
	552-553	/				Gray to white			SM					
GWS	553-554	/				Gray to white			SM	BP-VPB133-GW-554				
SS	554-555	/				Gray to white			SM	1/17/2012; 10:50:00 AM				
	555-556	/				Gray		Micaceous, silty, fine-medium sand.	SM	Split spoon sample (554'-				
	556-557	/				Gray			SM	556), 1/17/2012; 12:25:00 PM				
	557-558	/				Gray			SM					
	558-559	/				Gray			SM					
	559-560	/				Gray			SM					
	560-561	/				Gray to white		Silty, fine-medium sand.	SM	Logged mud rotary cuttings.				
	561-562	/				Gray to white			SM					
	562-563	/				Gray to white		Micaceous, medium to coarse sand.	SP					
	563-564	/				Gray to white			SP	Murphy encounters a				
	564-565	/				Gray to white			SP	coarse sand zone				
	565-566	/				Gray			SP	(563'-574').				
	566-567	/				Gray			SP	Lost several hundred				
	567-568	/				Gray			SP	gallons of mud.				
	568-569	/				Gray			SP					
	569-570	/				Gray			SP					
	570-571	/			Gray		Micaceous, medium to coarse sand.	SP	Logged mud rotary cuttings.					
	571-572	/			Gray			SP						
	572-573	/			Gray			SP	BP-VPB133-GW-574					
GWS	573-574	/			Gray			SP	1/17/2012; 13:25:00 PM					
SS	574-575	/			Gray		Micaceous, medium to coarse sand.	SP	Split spoon sample	0	0	0	0	

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 18, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / K. Cronin / J. Gucci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
SS	575-576	/				Gray	Micaceous, medium to coarse sand.	SP	1/17/2012; 13:45:00 PM	0	0	0	0	
	576-577	/				Gray			SP					
	577-578	/				Gray			SP					
	578-579	/				Gray			SP					
	579-580	/				Gray			SP					
	580-581	/				Gray	Micaceous, medium to coarse sand.		SP	Logged mud rotary cuttings.				
	581-582	/				Gray			SP					
	582-583	/				Gray			SP					
	583-584	/				Gray			SP					
	584-585	/				Gray			SP					
	585-586	/				Gray to white	Interbedded silt and silty fine		SM ML	Logged mud rotary cuttings.				
	586-587	/				Gray to white	sand		SM ML					
	587-588	/				Gray to white			SM ML					
	588-589	/				Gray to white			SM ML					
	589-590	/				Gray to white			SM ML					
	590-591	/			Gray to white	Interbedded silt and silty fine		SM ML	Logged mud rotary cuttings.					
	591-592	/			Gray to white	sand		SM ML						
	592-593	/			Gray to white			SM ML						
GWS	593-594	/			Gray to white			SM ML	BP-VPB133-GW-594					
	594-595	/			Gray to white			SM ML	1/17/2012; 16:00:00 PM					
	595-596	/			Gray to white	Interbedded silt and silty fine		SM ML	Resumed drilling from 593'					
	596-597	/			Gray to white	sand		SM ML	on 1/18/2012.					
	597-598	/			Gray to white			SM ML						
	598-599	/			Gray to white			SM ML						
	599-600	/			Gray to white			SM ML						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 18, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	600-601	/				Gray to white	Interbedded silt and silty fine	SM ML	Logged mud rotary cuttings.				
	601-602	/				Gray to white	sand	SM ML					
	602-603	/				Gray to white	Interbedded medium-coarse sand	SC CL					
	603-604	/				Gray to white	and clay laminae	SC CL					
	604-605	/				Gray to white		SC CL					
	605-606	/				Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	606-607	/				Gray to white	and clay laminae	SC CL					
	607-608	/				Gray to white		SC CL					
	608-609	/				Gray to white		SC CL					
	609-610	/				Gray to white		SC CL					
	610-611	/				Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	611-612	/				Gray to white	and clay laminae	SC CL					
	612-613	/				Gray to white		SC CL					
GWS	613-614	/				Gray to white		SC CL	BP-VPB133-GW-614				
	614-615	/				Gray to white		SC CL	1/18/2012; 10:15:00 AM				
	615-616	/				Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	616-617	/				Gray to white	and clay laminae	SC CL					
	617-618	/				Gray to white		SC CL					
	618-619	/				Gray to white		SC CL					
	619-620	/				Gray to white		SC CL					
	620-621	/			Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.					
	621-622	/			Gray to white	and clay laminae	SC CL						
	622-623	/			Gray to white		SC CL						
	623-624	/			Gray to white		SC CL						
	624-625	/			Gray to white		SC CL						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

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Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 18, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	625-626	/		[Diagonal Hatching]		Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	626-627	/				Gray to white	and clay laminae	SC CL					
	627-628	/				Gray to white		SC CL					
	628-629	/				Gray to white		SC CL					
	629-630	/				Gray to white		SC CL					
	630-631	/				Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	631-632	/				Gray to white	and clay laminae	SC CL					
	632-633	/				Gray to white		SC CL					
GWS	633-634	/				Gray to white		SC CL	BP-VPB133-GW-634				
	634-635	/				Gray to white		SC CL	1/18/2012; 13:15:00 PM				
	635-636	/			Gray to white	Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.					
	636-637	/			Gray to white	and clay laminae	SC CL						
	637-638	/		[Horizontal Hatching]		Gray to white	Sandy (very fine to fine) clay	CL					
	638-639	/				Gray to white		CL					
	639-640	/				Gray to white		CL					
	640-641	/				Gray to white	Sandy (very fine to fine) clay	CL	Logged mud rotary cuttings.				
	641-642	/				Gray to white		CL					
	642-643	/				Gray to white		CL					
	643-644	/				Gray to white		CL					
	644-645	/				Gray to white		CL					
	645-646	/				Gray to white	Sandy (very fine to fine) clay	CL	Logged mud rotary cuttings.				
	646-647	/				Gray to white		CL					
	647-648	/			Gray to white		CL						
	648-649	/			Gray to white		CL						
	649-650	/			Gray to white		CL						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm): 0

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Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE: January 19, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	650-651					Gray to white	Sandy (very fine to fine) clay	CL	Logged mud rotary cuttings.				
	651-652					Gray to white		CL					
	652-653					Gray to white		CL					
GWS	653-654					Gray to white		CL	BP-VPB133-GW-654				
	654-655					Gray to white	↓ ↓	SM	1/18/2012; 16:00:00 PM				
	655-656					Gray to white	Silty, fine-medium sand.	SM	Resumed drilling from 653'				
	656-657					Gray to white		SM	1/19/2012.				
	657-658					Gray to white		SM					
	658-659					Gray to white		SM					
	659-660					Gray to white	↓ ↓	SM					
	660-661					Gray to white	Silty, fine-medium sand.	SM	Logged mud rotary cuttings.				
	661-662					Gray to white		SM					
	662-663					Gray to white	Micaceous, medium to coarse sand.	SP					
	663-664					Gray to white		SP					
	664-665					Gray to white		SP					
	665-666					Gray		SP	Logged mud rotary cuttings.				
	666-667					Gray		SP					
	667-668					Gray		SP					
	668-669					Gray		SP					
	669-670					Gray	↓ ↓	SP					
	670-671					Gray	Micaceous, medium to coarse sand.	SP	Logged mud rotary cuttings.				
	671-672					Gray		SP					
	672-673					Gray		SP					
GWS	673-674					Gray	↓ ↓	SP	BP-VPB133-GW-674				
	674-675					Gray	Micaceous, medium to coarse sand.	SP	Two attempts, unsuccessful.				

Remarks: \_\_\_\_\_

Drilling Area Background (ppm): 0

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Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 20, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	675-676	/				Gray	Micaceous, medium to coarse sand.	SP	Resumed drilling from 673'					
	676-677	/				Gray			SP	1/20/2012.				
	677-678	/				Gray			SP					
	678-679	/				Gray			SP					
	679-680	/				Gray			SP					
	680-681	/				Gray	Micaceous, medium to coarse sand.		SP	Logged mud rotary cuttings.				
	681-682	/				Gray			SP					
	682-683	/				Gray			SP					
	683-684	/				Gray			SP					
	684-685	/				Gray			SP					
	685-686	/				Gray to white	Interbedded silt and silty fine		SM	Logged mud rotary cuttings.				
	686-687	/				Gray to white	sand		SM					
	687-688	/				Gray to white			SM					
	688-689	/				Gray to white			SM					
	689-690	/				Gray to white			SM					
	690-691	/			Gray to white	Interbedded silt and silty fine		SM	Logged mud rotary cuttings.					
	691-692	/			Gray to white	sand		SM						
	692-693	/			Gray to white			SM						
GWS	693-694	/			Gray to white			SM	BP-VPB133-GW-694					
	694-695	/			Gray	Micaceous, silty, fine sand		SM	1/20/2012; 12:30:00 PM					
SS	695-696	/			Gray			SM	Split spoon sample (694'-					
	696-697	/			Gray			SM	696'), 1/20/12; 12:50:00 PM					
	697-698	/			Gray			SM						
	698-699	/			Gray			SM						
	699-700	/			Hard	Gray to white	Silt and Clay	ML CL						

Remarks: \_\_\_\_\_

Drilling Area Background (ppm): 0

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Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 20, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	700-701	/			Hard	Gray to white	Silt and Clay	ML CL	Logged mud rotary cuttings.				
	701-702	/				Gray to white			ML CL				
GWS	702-703	/				Gray to white			ML CL	BP-VPB133-GW-703			
	703-704	/				Gray to white			ML CL	1/20/2012; 15:30:00 PM			
	704-705	/				Gray to white		↓	ML CL	Resumed drilling from 703'			
	705-706	/				Hard	Gray to white	Silt and Clay	ML CL	1/23/2012.			
	706-707	/					Gray to white		ML CL				
	707-708	/					Gray to white		ML CL				
	708-709	/					Gray to white	Interbedded sandy (fine) clay	CL ML				
	709-710	/					Gray to white	and sandy (fine) silt.	CL ML				
	710-711	/				Gray to white	Interbedded sandy (fine) clay	CL ML	Logged mud rotary cuttings.				
	711-712	/				Gray to white	and sandy (fine) silt.	CL ML					
	712-713	/				Gray to white			CL ML	BP-VPB133-GW-714			
GWS	713-714	/				Gray to white		↓	CL ML	1/23/2012; 11:40:00 AM			
	714-715	/				Gray	Silty, micaceous fine-medium sand,		CL ML				
	715-716	/				Gray	Interbedded sandy (fine) clay		CL ML	Logged mud rotary cuttings.			
	716-717	/				Gray	and sandy (fine) silt.		CL ML				
	717-718	/				Gray			CL ML				
	718-719	/			Gray			CL ML					
	719-720	/			Gray		↓	CL ML					
	720-721	/				Tan to white	Sandy (fine), fine to medium gravel	GM	Logged mud rotary cuttings.				
	721-722	/				Tan to white			GM				
	722-723	/				Tan to white			GM				
	723-724	/				Tan to white			GM				
	724-725	/				Tan to white		↓	GM				

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 23/24, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	725-726	/				Tan to white	Sandy (fine), fine to medium gravel	GM	Logged mud rotary cuttings.				
	726-727	/				Tan to white			GM				
	727-728	/				Tan to white			GM				
	728-729	/				Gray		Interbedded medium-coarse sand	SC CL				
	729-730	/			Gray		and clay laminae	SC CL					
	730-731	/			Gray		Interbedded medium-coarse sand	SC CL	Logged mud rotary cuttings.				
	731-732	/			Gray		and clay laminae	SC CL					
	732-733	/			Gray			SC CL					
GWS	733-734	/			Gray			SC CL	BP-VPB133-GW-734				
	734-735	/			Gray			SC CL	1/23/2012; 15:50:00 PM				
	735-736	/			Gray		Interbedded medium-coarse sand	SC CL	Resumed drilling from 733'				
	736-737	/			Gray		and clay laminae	SC CL	1/24/2012.				
	737-738	/			Gray			SC CL					
	738-739	/				Tan to Lt brown		Sandy (fine), fine to medium gravel	GP				
	739-740	/		Tan to Lt brown				GP					
	740-741	/		Tan to Lt brown			Sandy (fine), fine to medium quartzose	GP	Logged mud rotary cuttings.				
	741-742	/		Tan to Lt brown			gravel	GP					
	742-743	/		Tan to Lt brown				GP					
GWS	743-744	/		Tan to Lt brown				GP	BP-VPB133-GW-744				
	744-745	/		Tan to Lt brown				GP	1/24/2012; 11:00:00 AM				
	745-746	/		Tan to Lt brown			Sandy (fine), medium quartzose gravel	GP	Logged mud rotary cuttings.				
	746-747	/		Tan to Lt brown				GP					
	747-748	/		Tan to Lt brown				GP					
	748-749	/		Tan to Lt brown			GP						
	749-750	/		Tan to Lt brown			GP						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 24, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	750-751	/				Tan to White	Silty, fine-medium quartzose gravel.	GM						
	751-752	/				Tan to White			GM					
	752-753	/				Tan to White			GM					
	753-754	/				Tan to White			GM					
GWS	754-755	/				Tan to White		↓ ↓	GM	BP-VPB133-GW-754				
	755-756	/				Tan to White		Silty, fine-medium quartzose gravel.	GM	1/24/2012; 13:00:00 PM				
	756-757	/				Tan to White			GM					
	757-758	/				Tan to White			GM					
	758-759	/				Tan to White			GM					
	759-760	/				Tan to White		↓ ↓	GM					
	760-761	/				Tan to White		Silty, fine-medium quartzose gravel.	GM					
	761-762	/				Tan to White			GM					
	762-763	/				Tan to White			GM					
GWS	763-764	/				Tan to White			GM	BP-VPB133-GW-764				
	764-765	/				Gray to white			SP	1/24/2012; 15:50:00 PM				
	765-766	/				Gray			SP	Resumed drilling from 763'				
	766-767	/				Gray			SP	January 25, 2012.				
	767-768	/				Gray			SP					
	768-769	/				Gray			SP					
	769-770	/				Gray		↓ ↓	SP					
	770-771	/			Gray		Micaceous, medium to coarse sand.	SP						
	771-772	/			Gray			SP						
	772-773	/			Gray			SP						
	773-774	/			Gray		↓ ↓	SP	Attempted hydropunch from					
	774-775	/			Gray		Micaceous, medium to coarse sand.	SP	773'-774', no GW recovery	0	0	0	0	

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: January 25, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	775-776	/				Gray	Micaceous, medium to coarse sand.	SP					
	776-777	/				Gray			SP				
	777-778	/				Gray			SP				
SS	778-779	/				Gray to white	Sandy (very fine to fine) clay and	SC CL	Split spoon sample				
	779-780	/				Gray to white	Clayey very fine to fine sand.	SC CL	778'-780'.				
	780-781	/				Gray	Micaceous, medium to coarse sand.	SP					
	781-782	/				Gray			SP				
	782-783	/				Gray			SP				
GWS	783-784	/				Gray			SP	BP-VPB133-GW-784			
	784-785	/				Gray			SP	1/25/2012; 13:50:00 PM			
	785-786	/				Gray to white	Interbedded silt and silty fine	SM					
	786-787	/				Gray to white	sand	SM					
	787-788	/				Gray to white			SM				
	788-789	/				Gray to white			SM				
	789-790	/				Gray to white			SM				
	790-791	/			Gray to white	Interbedded silt and silty fine	SM						
	791-792	/			Gray to white	sand	SM						
	792-793	/			Gray to white			SM	Split spoon sample				
SS	793-794	/			Gray to white			SM	793'-794'.				
GWS	794-795	/			Gray to white			SM	BP-VPB133-GW-794				
	795-796	/			Gray to white	Interbedded silt and silty fine	SM ML	1/25/2012; 16:25:00 PM					
	796-797	/			Gray to white	sand	SM ML	Resumed drilling 1/26/2012					
	797-798	/			Gray to white			SM ML	from 793'.				
	798-799	/			Gray to white			SM ML					
	799-800	/			Gray to white			SM ML					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 1/26/2011  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	800-801	/			Hard	gray to white	Sandy (very fine) Clay	CL	01/26/2011				
	801-802	/				gray to white		CL					
	802-803	/				gray to white		CL					
	803-804	/				gray to white		CL	Attempted hydropunch				
	804-805	/				gray to white		CL	unable due to tip of sampler				
	805-806	/				gray to white	Sandy (very fine) Clay	CL	lost in hole.				
	806-807	/				gray to white		CL					
GWS	807-808	/				gray to white		CL					
SS	808-809	/			Hard	Gray	Sandy (very fine) Clay	CL	BP-VPB133-GW-808	0	0	0	0
	809-810	/				Gray		CL	1/26/2012 11:50				
	810-811	/			Hard	gray to white	Sandy (very fine) Clay	CL	Split spoon sample 808'-810'.				
	811-812	/				gray to white		CL					
	812-813	/				gray to white		CL					
GWS	813-814	/				gray to white		CL	BP-VPB133-GW-814				
	814-815	/				gray to white		CL	1/26/2012 15:00:00 PM	0	0	0	0
	815-816	/				gray to white		CL					
	816-817	/				Gray to white	Interbedded silt and silty fine sand	SM	Driller reports soft drilling				
	817-818	/				Gray to white		SM					
SS	818-819	/			Very dense	Gray to white	Silty, micaceous, very fine to fine sand.	SM	Split spoon sample				
	819-820	/				Gray to white		SM	1/26/2012 16:30:00 PM	0	0	0	0
	820-821	/				Gray to white	Interbedded silt and silty fine sand	SM	Resumed drilling from 818'				
	821-822	/				Gray to white	Sandy (very fine) Clay	SM	on 01/27/2012.				
	822-823	/				Gray to white		SM					
GWS	823-824	/				Gray to white		SM	BP-VPB133-GW-824				
	824-825	/				Gray to white		SM	1/27/2012 10:55				

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE:                       
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	825-826	/				Gray	Interbedded medium-coarse sand	SC CL					
	826-827	/				Gray	and clay laminae	SC CL					
	827-828	/				Gray		SC CL					
SS	828-829	/				Gray to white	Micaceous, silty, fine sand	SM	Split spoon sample	0	0	0	0
	829-830	/				Gray to white		SM	1/27/2012 12:25				
	830-831	/				Gray to white		SM					
	831-832	/				Gray to white		SM					
	832-833	/				Gray to white		SM					
GWS	833-834	/				Gray to white		SM	BP-VPB133-GW-834				
	834-835	/				Gray to white		SM	1/27/2012 15:00:00 PM				
	835-836	/				Gray to white		SM	Resumed drilling from 833'				
	836-837	/				Gray to white		SM	on 1/30/2012.				
	837-838	/				Gray to white		SM					
SS	838-839	/				Gray to white	Micaceous, silty, fine to medium sand	SM	Split spoon sample	0	0	0	0
	839-840	/				Gray to white		SM	1/30/2012 9:00				
	840-841	/			Gray to white	Micaceous, silty, fine to medium sand	SM						
	841-842	/			Gray to white		SM						
	842-843	/			Gray to white		SM						
GWS	843-844	/			Gray to white		SM	BP-VPB133-GW-844					
	844-845	/			Gray to white		SM	1/30/2012 11:30					
	845-846	/			Gray to white	Micaceous, silty, fine to medium sand	SM						
	846-847	/					SM						
	847-848	/					SM						
SS	848-849	/			Black-brown	Lignite, trace, silty fine sand and		Split spoon sample					
	849-850	/			Black-brown	sandy (fine) silt.		1/30/2012 11:30					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE:                       
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	850-851					Gray	Micaceous, medium to coarse sand.	SM	Logged mud rotary cuttings.					
	851-852					Gray			SM					
	852-853					Gray			SM					
GWS	853-854					Gray			SM	BP-VPB133-GW-854				
	854-855					Gray			SM	1/30/2012 14:20:00 PM				
	855-856					Gray	Micaceous, medium to coarse sand.		SM	Logged mud rotary cuttings.				
	856-857					Gray			SM					
	857-858					Gray			SM					
SS	858-859					Gray	Micaceous, medium to coarse sand.		SM	Split spoon sample	0	0	0	0
	859-860					Gray			SM	January 30, 2012 15:15				
	860-861					Gray	Interbedded, sandy (very fine to fine)	SC CL	Resumed drilling from 858'					
	861-862					Gray	clay and very fine to fine sand		SC CL	on 1/31/2012.				
	862-863					Gray			SC CL					
GWS	863-864					Gray			SC CL	BP-VPB133-GW-864				
	864-865					Gray			SC CL	January 31, 2012 10:10				
	865-866					Gray	Interbedded, sandy (very fine to fine)		SC CL					
	866-867					Gray	clay and very fine to fine sand		SC CL					
	867-868					Gray			SC CL					
SS	868-869					Gray	Clayey, micaceous, very fine-fine sand.		SC CL	Split spoon sample				
	869-870					Gray			SC CL	January 31, 2012 11:10				
	870-871				Gray	Interbedded, sandy (very fine to fine)		SC CL						
	871-872				Gray	clay and very fine to fine sand		SC CL						
	872-873				Gray			SC CL						
GWS	873-874				Gray	Lignitic, Sandy(very fine), micaceous		ML CL	BP-VPB133-GW-874					
	874-875				Gray	silt and clay		ML CL	January 31, 2012 13:10					

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 1/31/2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	875-876					Gray	Lignitic, Sandy(very fine), micaceous	ML CL	Logged mud rotary cuttings.				
	876-877					Gray	silt and clay	ML CL					
	877-878					Gray	↓ ↓	ML CL					
SS	878-879					Light gray	Lignitic, silty, micaceous, very fine	SM	Split spoon sample				
	879-880					Light gray	to fine sand.	SM	January 31, 2012 14:10				
	880-881					Gray	Clayey, micaceous, very fine to fine	SC					
	881-882					Gray	sand	SC					
	882-883					Gray		SC					
GWS	883-884					Gray		SC	BP-VPB133-GW-884				
	884-885					Gray	↓ ↓	SC	January 31, 2012 16:10				
	885-886					Gray	Clayey, micaceous, very fine to fine	SC	Resumed drilling from 883'				
	886-887					Gray	sand	SC	on 2/1/2012.				
	887-888					Gray	↓ ↓	SC					
	888-889					Gray	Lignitic, silty, very fine to fine	SM					
	889-890					Gray	sand	SM					
	890-891			Gray		Clayey, micaceous, very fine to fine	SC						
	891-892			Gray		sand	SC						
	892-893			Gray			SC						
	893-894			Gray			SC						
	894-895			Gray		↓ ↓	SC						
	895-896			Gray		Clayey, micaceous, very fine to fine	SC		Logged mud rotary cuttings.				
	896-897			Gray		sand	SC						
	897-898			Gray			SC						
	898-899			Gray		SC							
	899-900			Gray	↓ ↓	SC							

Remarks: \_\_\_\_\_

Drilling Area Background (ppm): 0

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Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 1/26/2011  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
SS	900-901	/				Gray to black	Lignite, trace sandy (vf-f) clay and	SC CL	Split spoon sample	0	0	0	0
	901-902	/				Gray to black	clayey very fine-fine sand.	SC CL	2/1/2012; 10:46:00 AM				
	902-903	/				Gray	Sandy (very fine to fine) clay	SC CL					
GWS	903-904	/				Gray	and clayey very fine to fine sand	SC CL	BP-VPB133-GW-904				
	904-905	/				Gray		SC CL	2/1/2012, 12:20:00 AM				
	905-906	/				Gray		SC CL	Logged mud rotary cuttings.				
	906-907	/				Gray		SC CL					
	907-908	/				Gray		SC CL					
	908-909	/				Gray		SC CL					
	909-910	/				Gray	↓ ↓	SC CL					
	910-911	/				Gray	Micaceous, silty, fine to medium sand	SC	Logged mud rotary cuttings.				
	911-912	/				Gray	and micaceous, sandy (vf-f), clay	SC					
	912-913	/				Gray	↓ ↓	SC					
SS	913-914	/				Gray to white	Micaceous, silty, fine to medium sand	SC	Split spoon sample	0	0	0	0
	914-915	/				Gray to white	and micaceous, sandy (vf-f), clay	SC	2/01/2012 14:00:00 PM				
	915-916	/				Gray to white		SC					
	916-917	/				Gray to white		SC					
	917-918	/				Gray to white		SC					
	918-919	/				Gray to white		SC					
	919-920	/				Gray to white		SC					
	920-921	/				Gray to white		SC					
	921-922	/				Gray to white		SC					
	922-923	/				Gray to white	↓ ↓	SC					
SS	923-924	/				Gray to white	Micaceous, clayey, very fine to fine	SC	Split spoon sample	0	0	0	0
	924-925	/				Gray to white	sand.	SC	2/01/2012 15:05:00 PM				

Remarks: \_\_\_\_\_ Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: VPB-133





PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE:                       
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. McAdam

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	925-926	/		[Dotted pattern]		Gray	Interbedded medium-coarse sand	SM						
	926-927	/					Gray	and clay laminae	SM					
	927-928	/					Gray	↓ ↓	SM					
	928-929	/					Gray to white	Micaceous, silty, fine to medium sand	SM					
	929-930	/					Gray to white		SM					
	930-931	/					Gray to white		SM					
	931-932	/					Gray to white		SM					
	932-933	/					Gray to white	↓ ↓	SM					
SS	933-934	/					Gray to white	Micaceous, clayey, fine to med. sand	SC	Split spoon sample				
	934-935	/					Gray to white		SC	2/01/2012 16:00:00 PM				
	935-936	/					Gray to white		SM					
	936-937	/					Gray to white		SM					
	937-938	/					Gray to white		SM					
GWS	938-939	/				Gray to white		SM	BP-VPB133-GW-939					
	939-940	/				Gray to white		SM	2/2/2012, 10:50:00 AM					
	940-941	/				Gray to white		SM						
	941-942	/				Gray to white		SM						
	942-943	/				Gray to white	↓ ↓	SM						
SS	943-944	/				Gray	Micaceous, silty, fine to med. sand	SM	Split spoon sample	0	0	0	0	
	944-945	/				Gray	(10 mm drk gray clay laminae)	SM	2/2/2012 12:05					
	945-946	/				Gray	Micaceous, silty, fine to medium sand	SM						
	946-947	/				Gray		SM						
	947-948	/				Gray		SM						
	948-949	/				Gray		SM						
	949-950	/				Gray	↓ ↓	SM						

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133 VPB-133  
 DATE: Febraury 02, 2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	950-951	/				Gray	Medium to coarse sand.	SM	Logged mud rotary cuttings.				
	951-952	/				Gray			SM				
	952-953	/				Gray			SM	Lost +/- 200 gals mud			
SS	953-954	/				Gray	Medium to coarse, quartzose sand.		SP	Split spoon sample			
	954-955	/				Gray	trace silt.		SP	Febraury 02, 2012 14:15			
	955-956	/				Gray	Medium to coarse sand.		SM	Logged mud rotary cuttings.			
	956-957	/				Gray			SM				
	957-958	/				Gray			SM				
GWS	958-959	/				Gray			SM	BP-VPB133-GW-959			
	959-960	/				Gray			SM	Febraury 02, 2012 16:15			
	960-961	/				Gray			SM				
	961-962	/				Gray			SM				
	962-963	/				Gray			SM				
SS	963-964	/				Gray	Micaceous, silty, fine to medium		SM	Split spoon sample			
	964-965	/				Gray	sand, trace lignite laminae (1-2 mm).		SM	Febraury 03, 2012 10:00			
	965-966	/				Gray			SM				
	966-967	/				Gray			SM				
	967-968	/				Gray			SM				
	988-969	/				Gray			SM				
	969-970	/				Gray			SM				
	970-971	/				Gray			SM				
GWS	971-972	/				Gray			SM	BP-VPB133-GW-974			
	972-973	/				Gray			SM	2/3/2012, 12:15:00 AM			
	973-974	/				Gray	Micaceous, silty, fine to medium		SM SC	Split spoon sample			
	974-975	/			Gray	sand, trace clay.		SM SC	Febraury 03, 2012 13:15				

Remarks: \_\_\_\_\_ Drilling Area Background (ppm): 0

Converted to Well: Yes X No \_\_\_\_\_ Well I.D. #: VPB-133



PROJECT NAME: Bethpage OU-2  
 PROJECT NUMBER: 112G00622  
 DRILLING COMPANY: Delta Drilling  
 DRILLING RIG: Mud Rotary

BORING No.: VPB-133  
 DATE: 1/31/2012  
 GEOLOGIST: J. Ferguson  
 DRILLER: B. Murphy / P. Dornan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	975-976	/				Gray	Silty, medium to coarse sand.	SP	Logged mud rotary cuttings.				
	976-977	/			Gray			SP	February 03, 2012: 13:05				
	977-978	/			Gray			SP					
	978-979	/			Gray			SP					
	979-980	/			Gray			SP					
	980-981	/			Gray		Silty, medium to coarse sand.	SP	Logged mud rotary cuttings.				
	981-982	/			Gray			SP					
	982-983	/			Gray			SP					
SS	983-984	/				Gray	Clayey, micaceous, very fine to	SC	Split spoon sample				
	984-985	/				Gray	fine sand.		SC	February 03, 2012 13:45			
	985-986	/		Gray				SC					
SS	986-987	/			Black	Lignite, trace clayey, fine sand	Lig.	Split spoon sample					
	987-988	/			Black			Lig.	February 03, 2012 14:30				
	988-989	/				Bottom of boring = 988							
	989-990	/											
	990-991	/											
	991-992	/											
	992-993	/											
	993-994	/											
	994-995	/											
	995-996	/											
	996-997	/											
	997-998	/											
	998-999	/											
	999-1000	/											

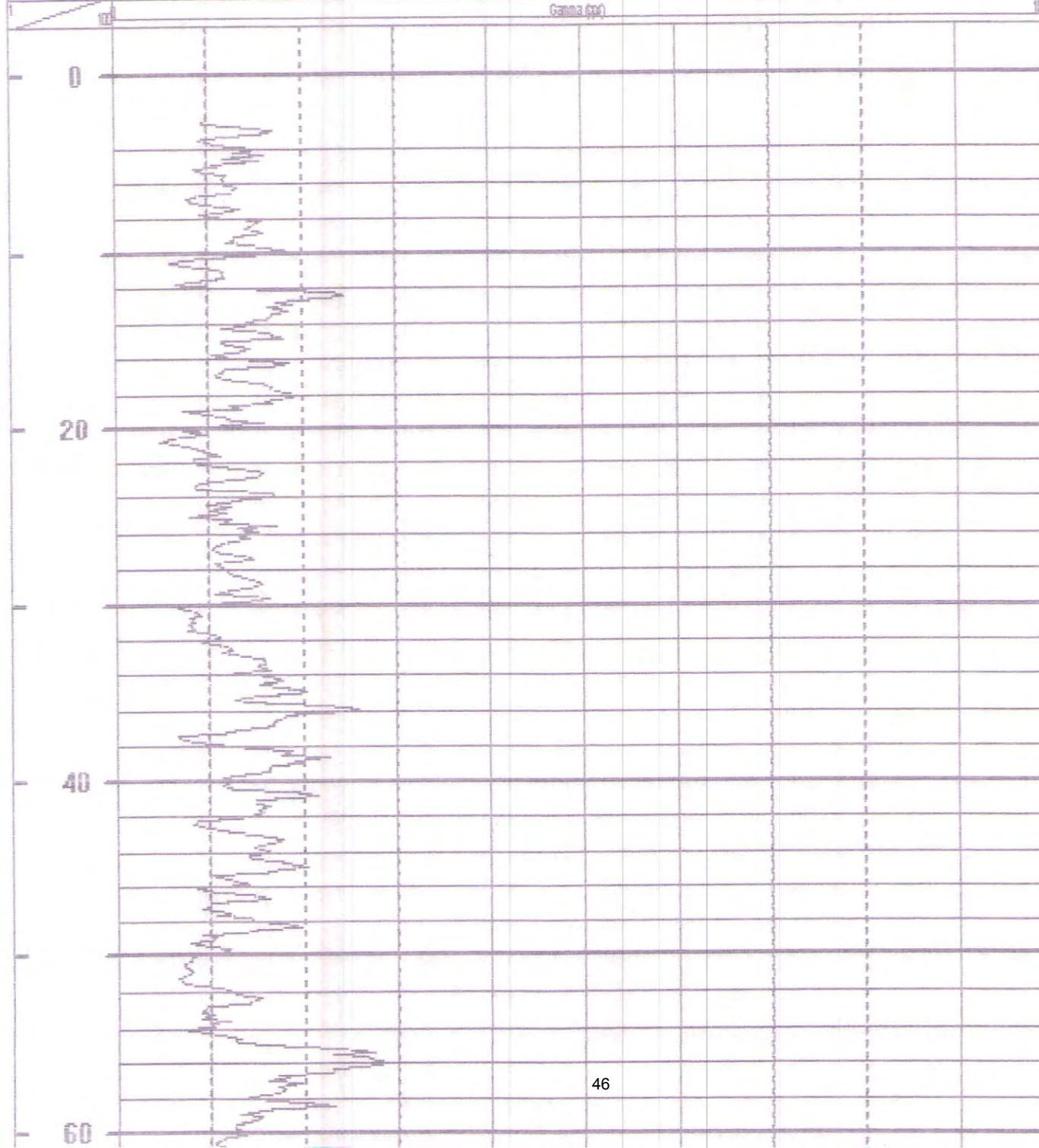
Remarks: Borehole geophysically logged Friday February 3, 2011. (Natural Gamma) Drilling Area Background (ppm): 0

Converted to Well: Yes X No      Well I.D. #: VPB-133

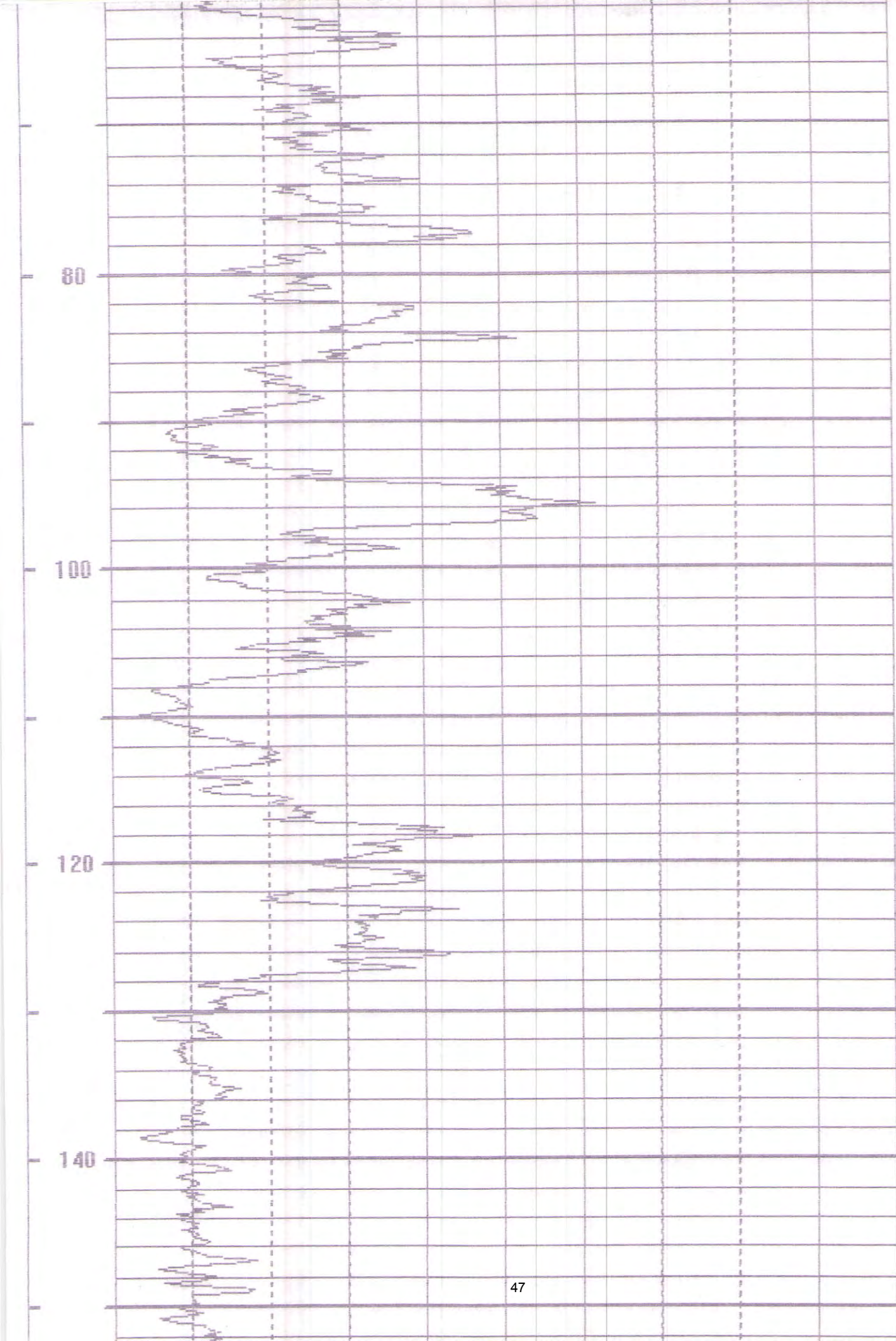
Gamma Log Down

Date: Friday, February 03, 2012 Time: 15:36 File: C:\Documents and Settings\Kirk\My Documents\VP11up-133.lid

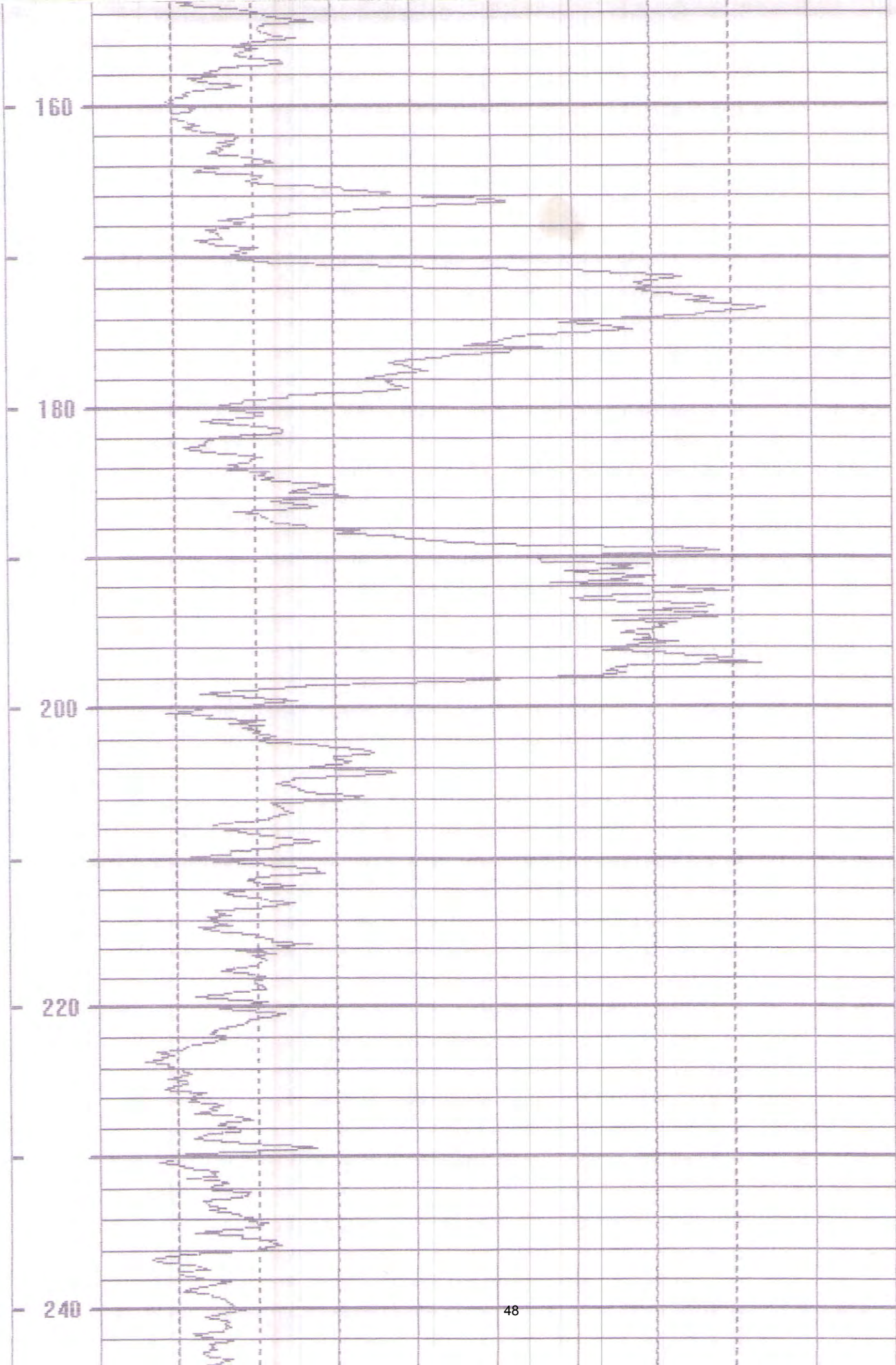
COMPANY: DELTA WELL & PUMP CO., INC.		Casing	
Location: NW/4 ALKEN AVE			
Well	VP-133	Depth Driller	
		Depth Logger	
Date	02/03/12	BH Fluid	
		Logged by:	orc
File Name	717	Witness:	



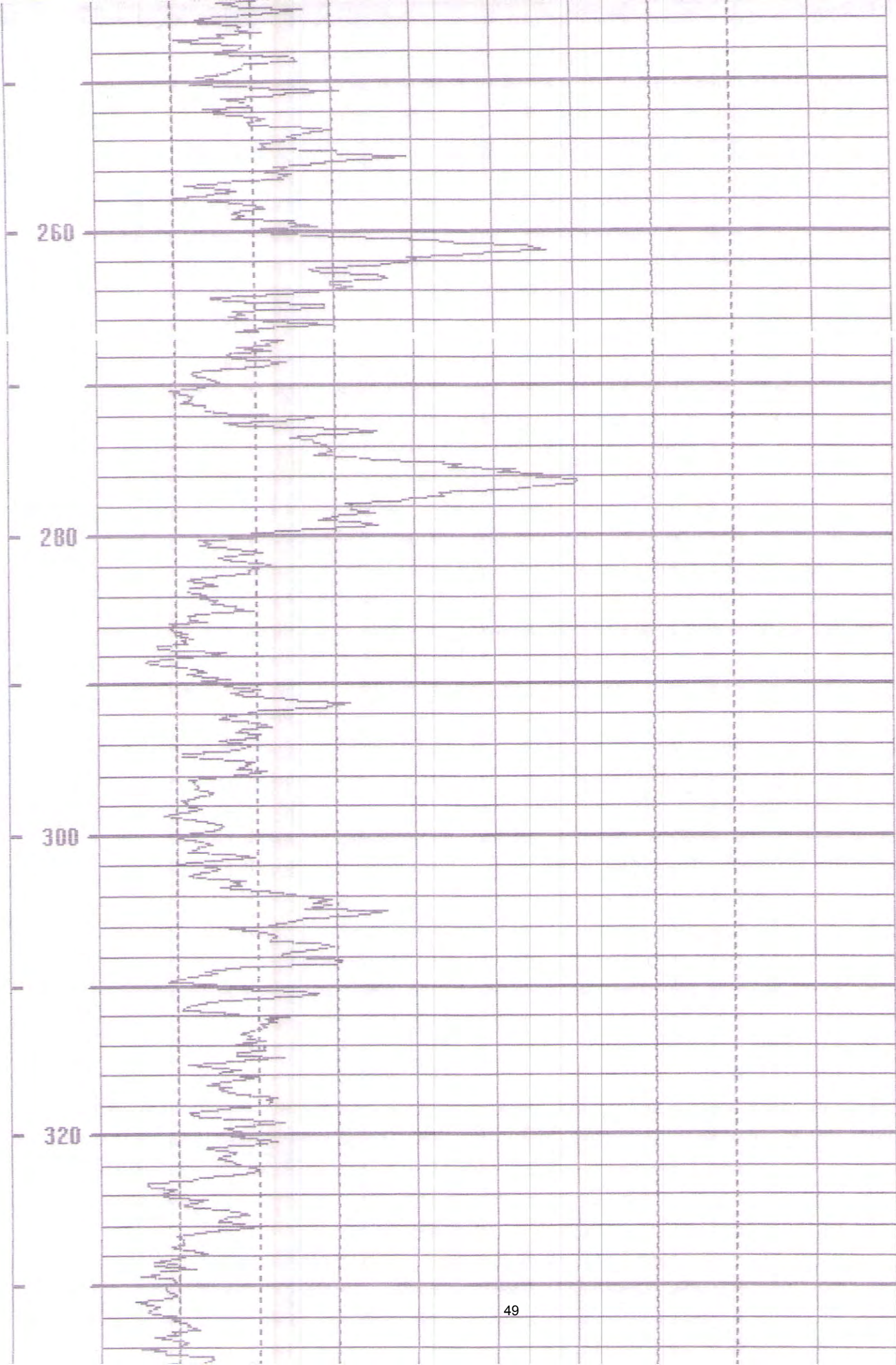




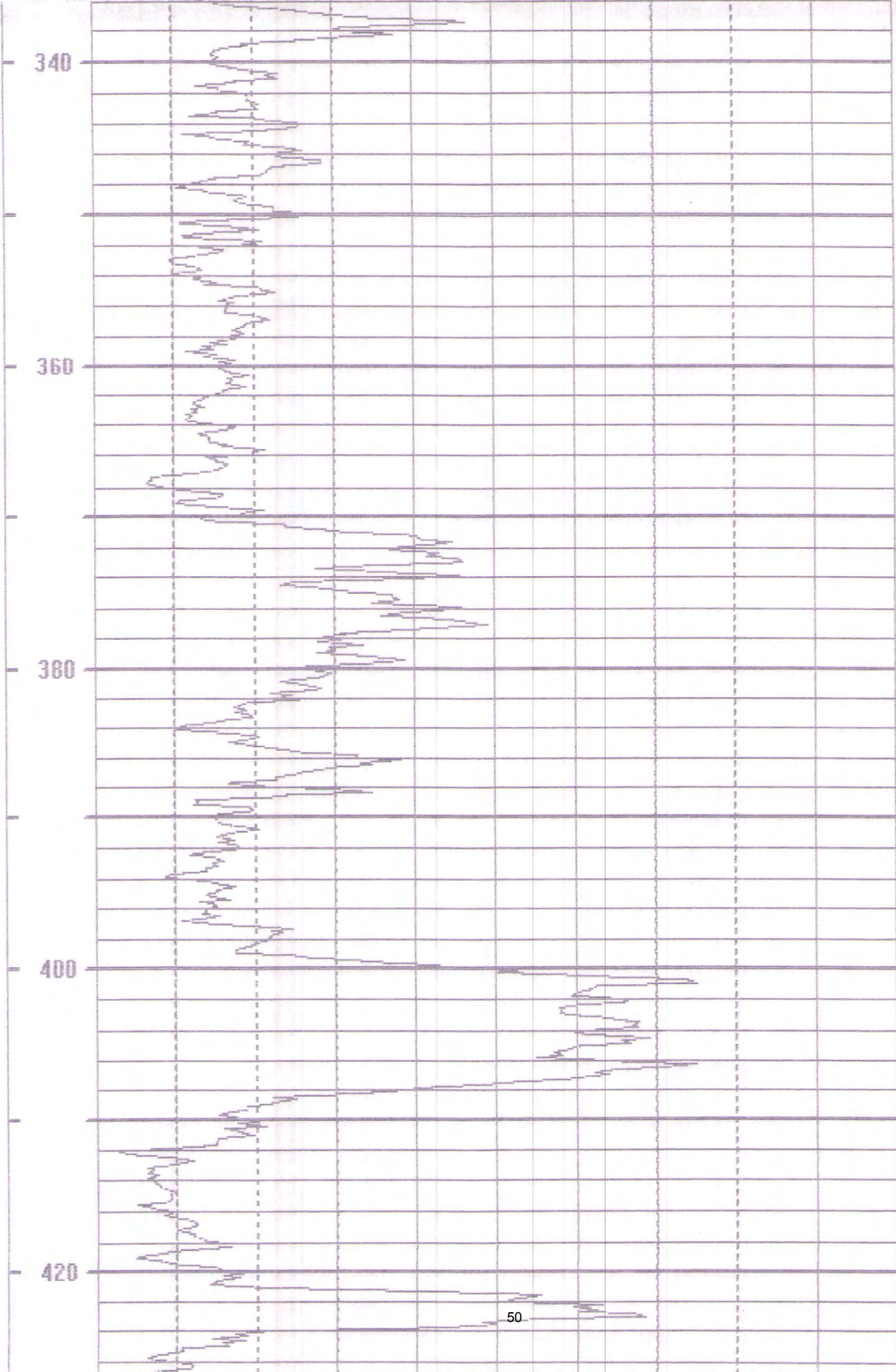




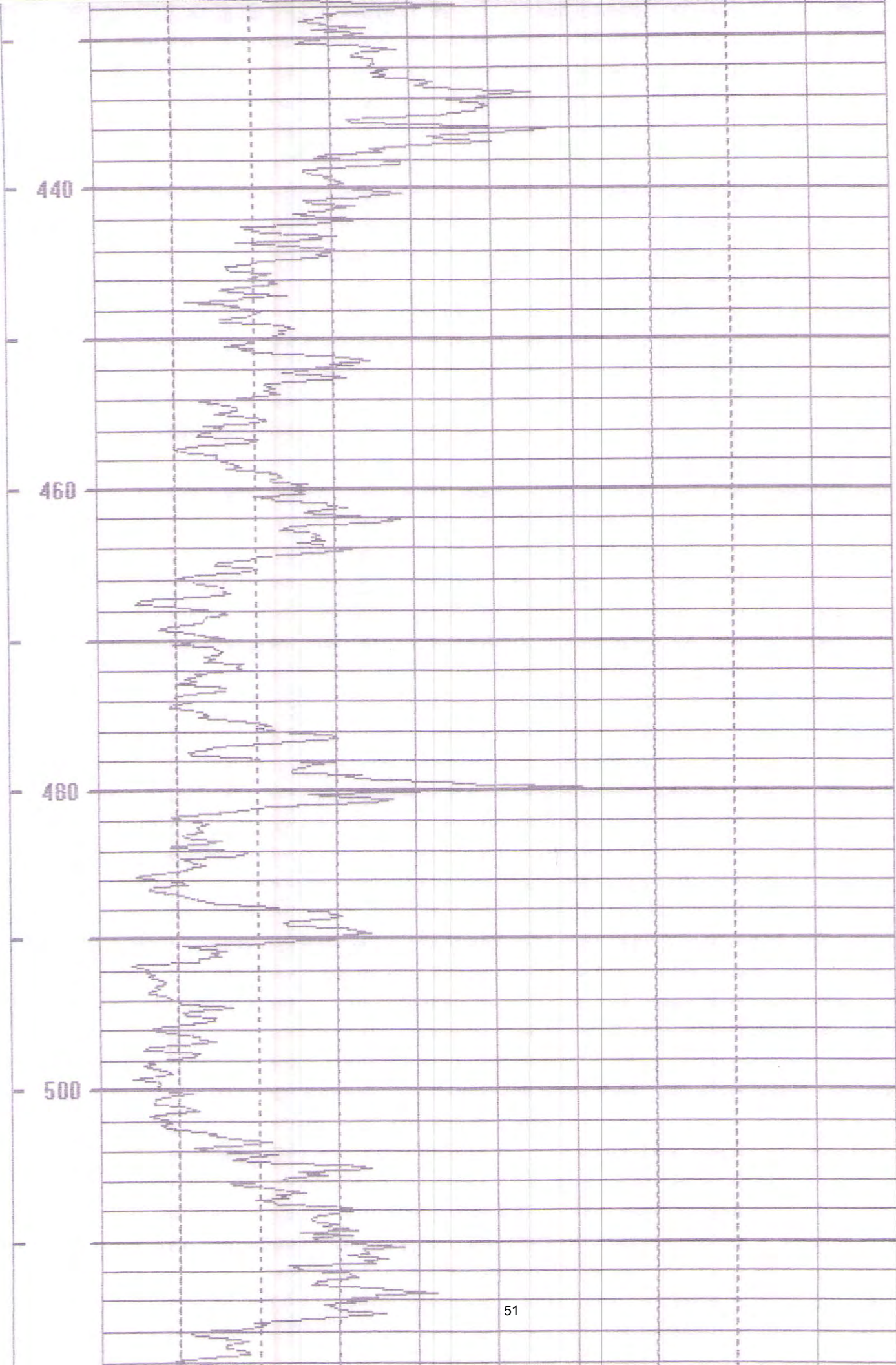




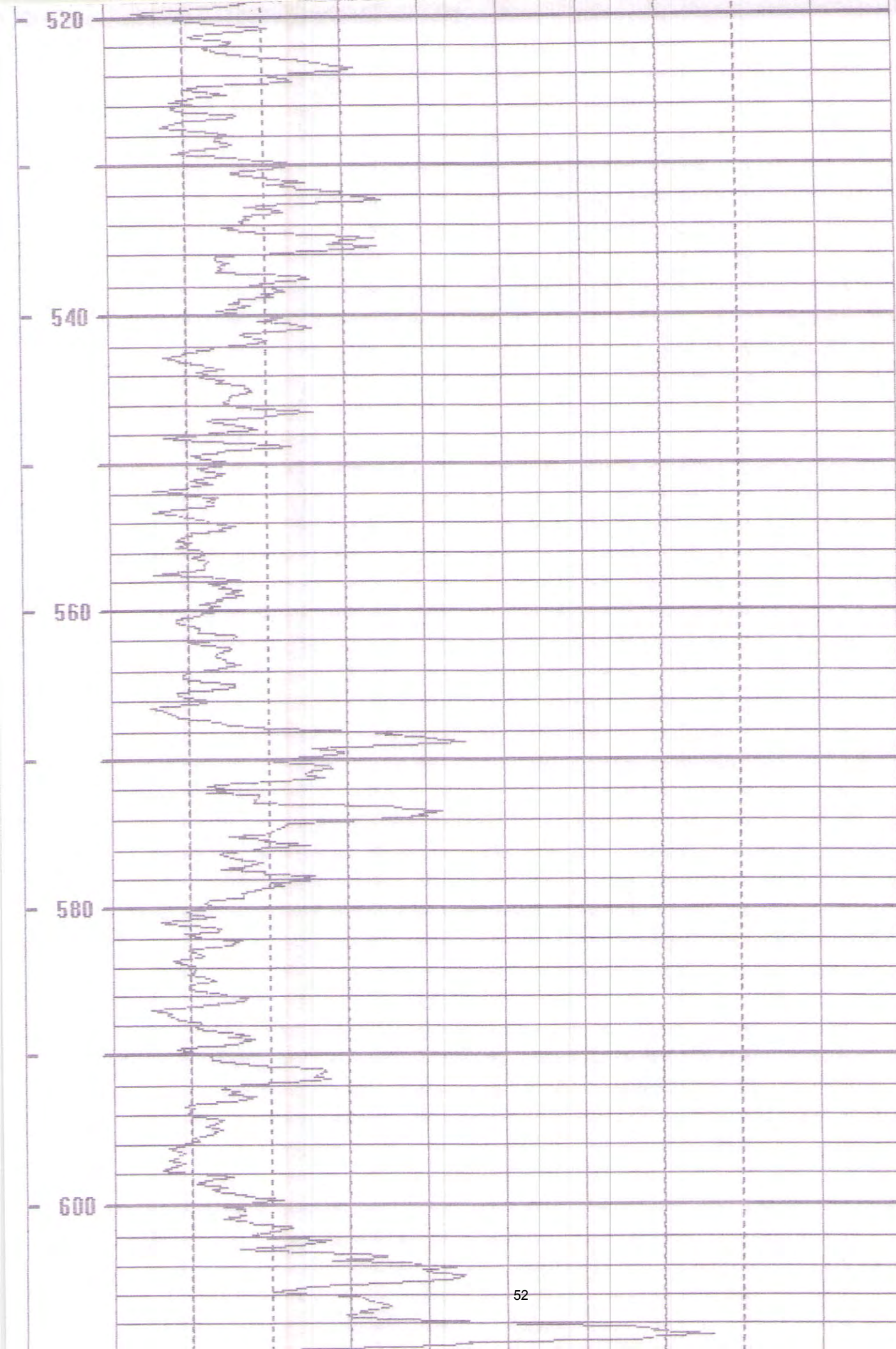














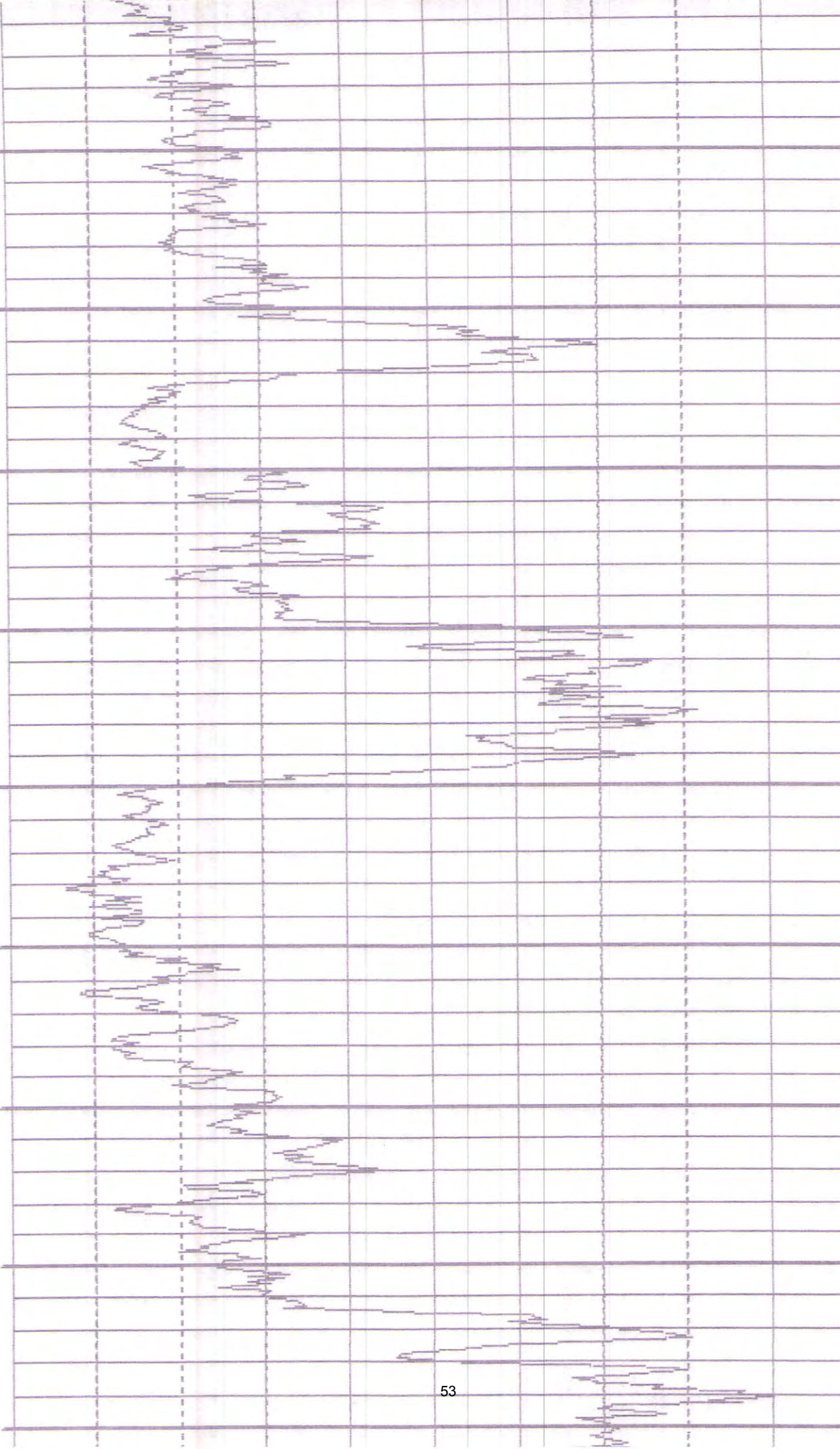
620

640

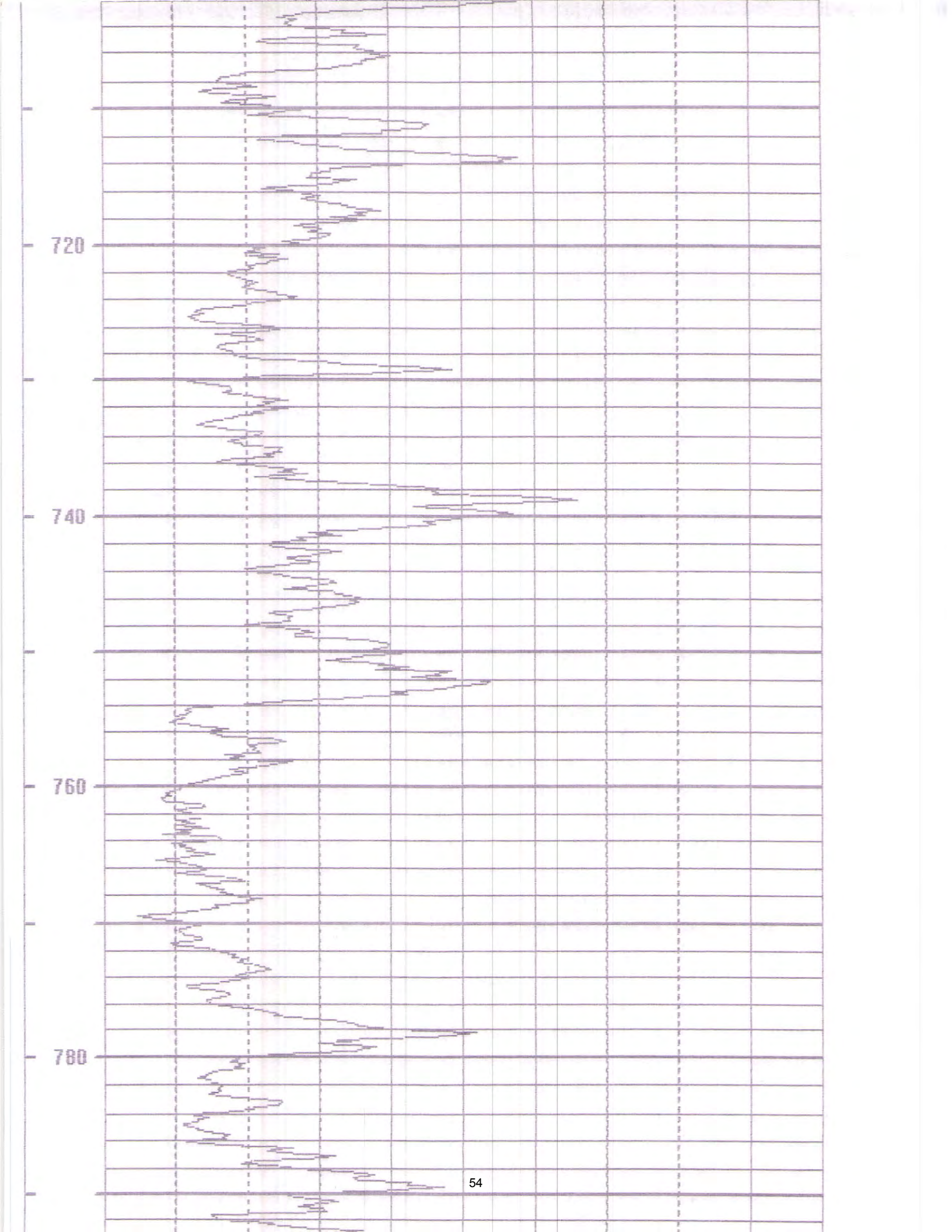
660

680

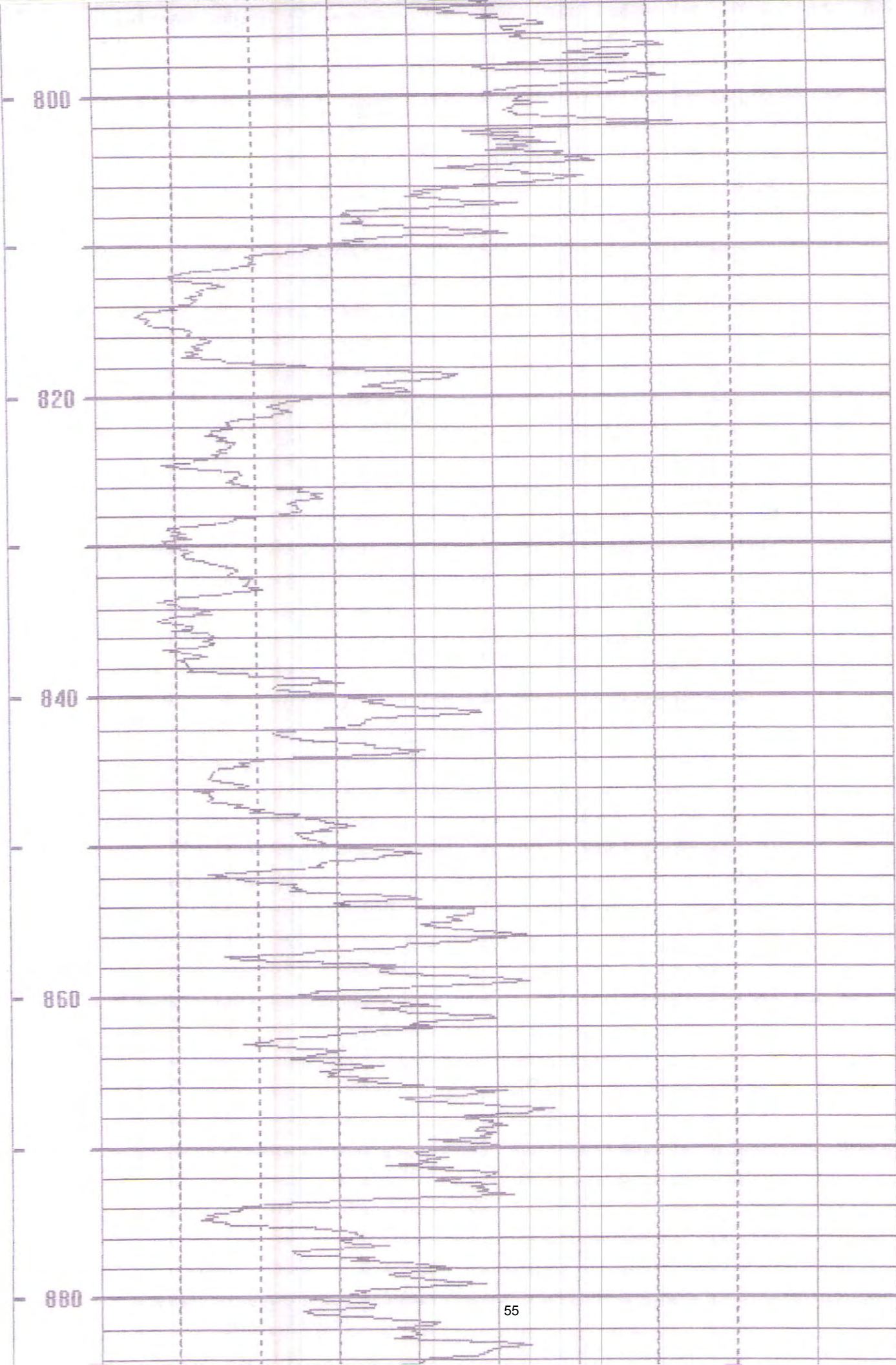
700













900

920

940

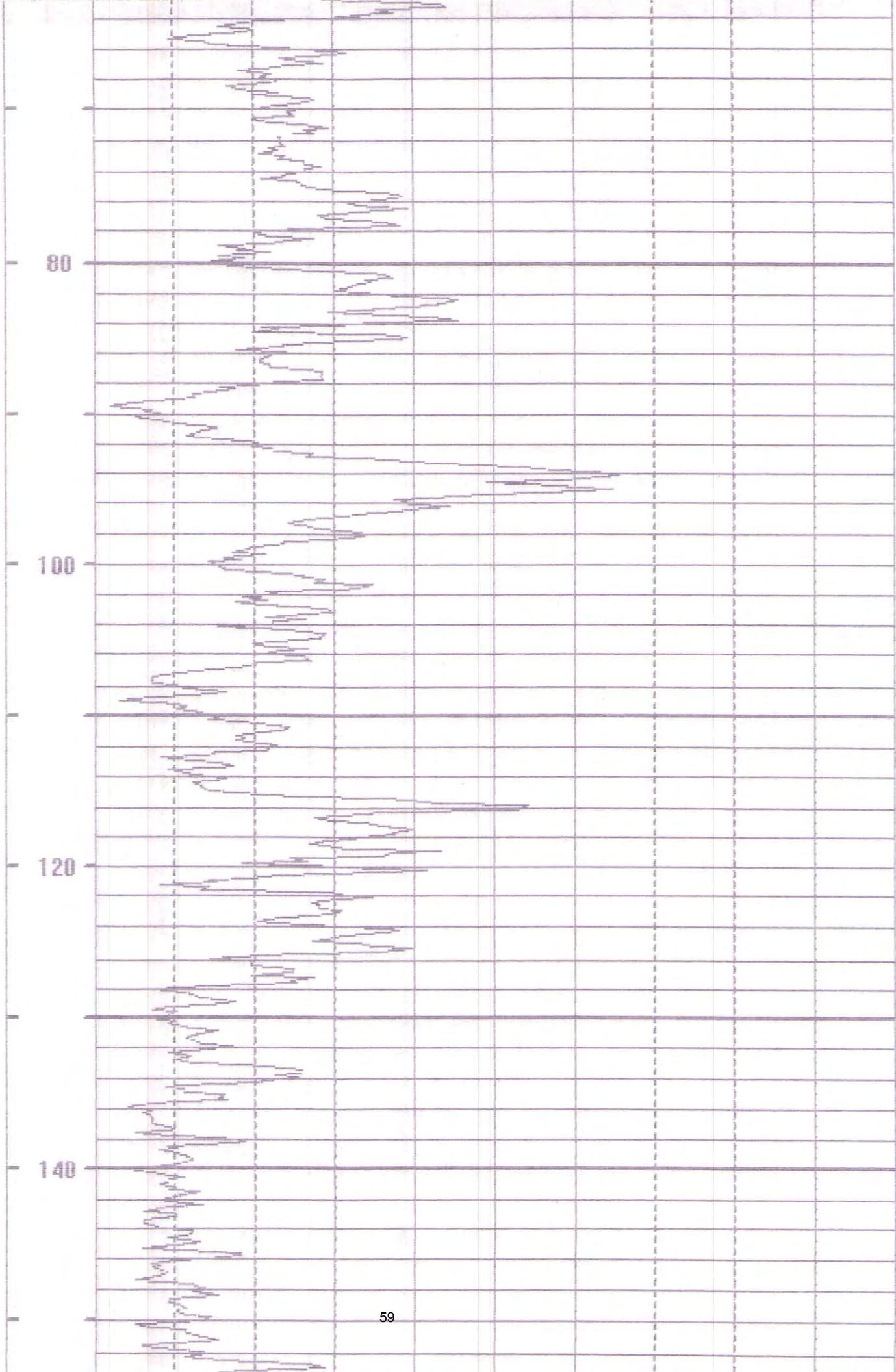
960



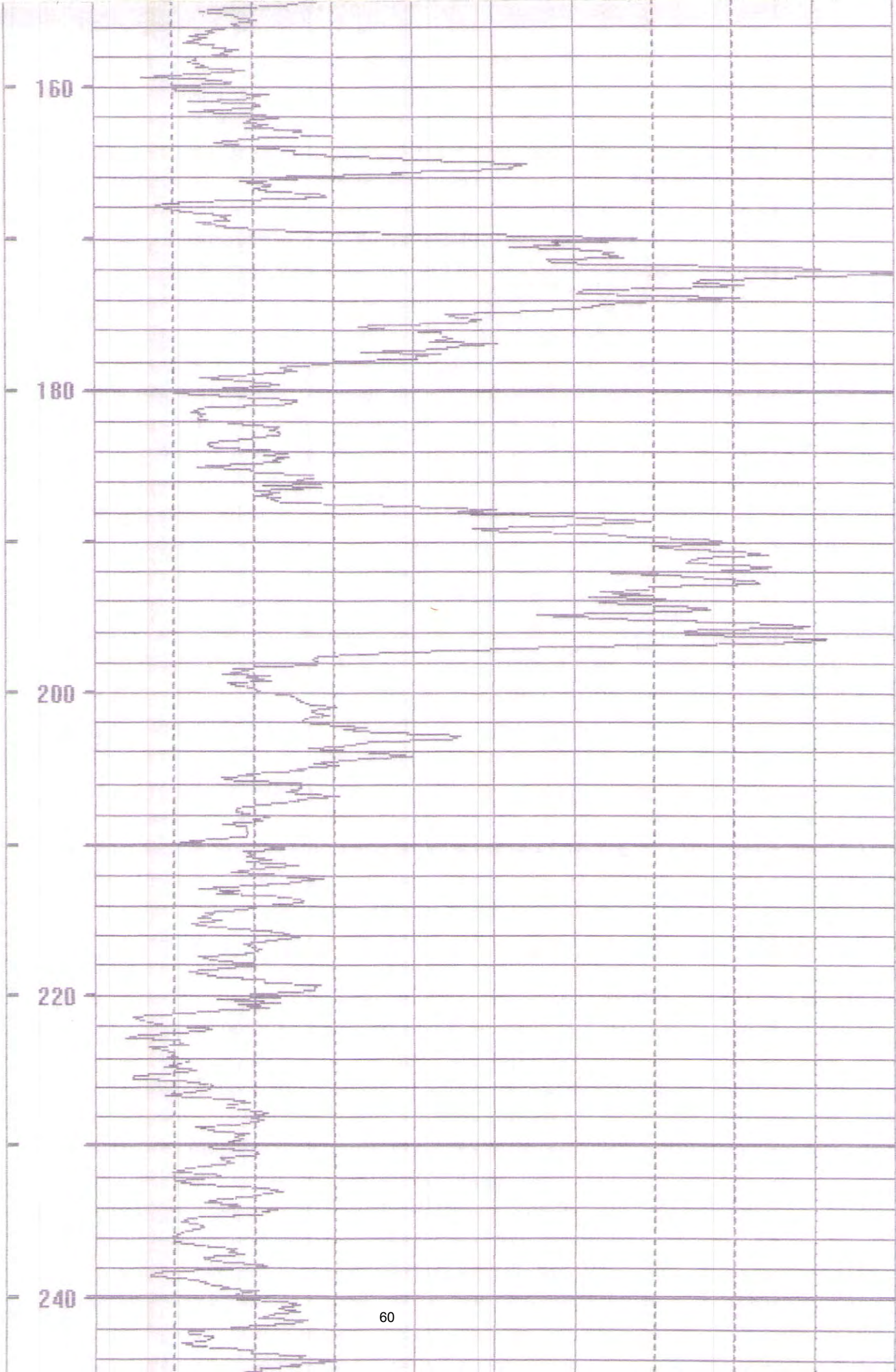




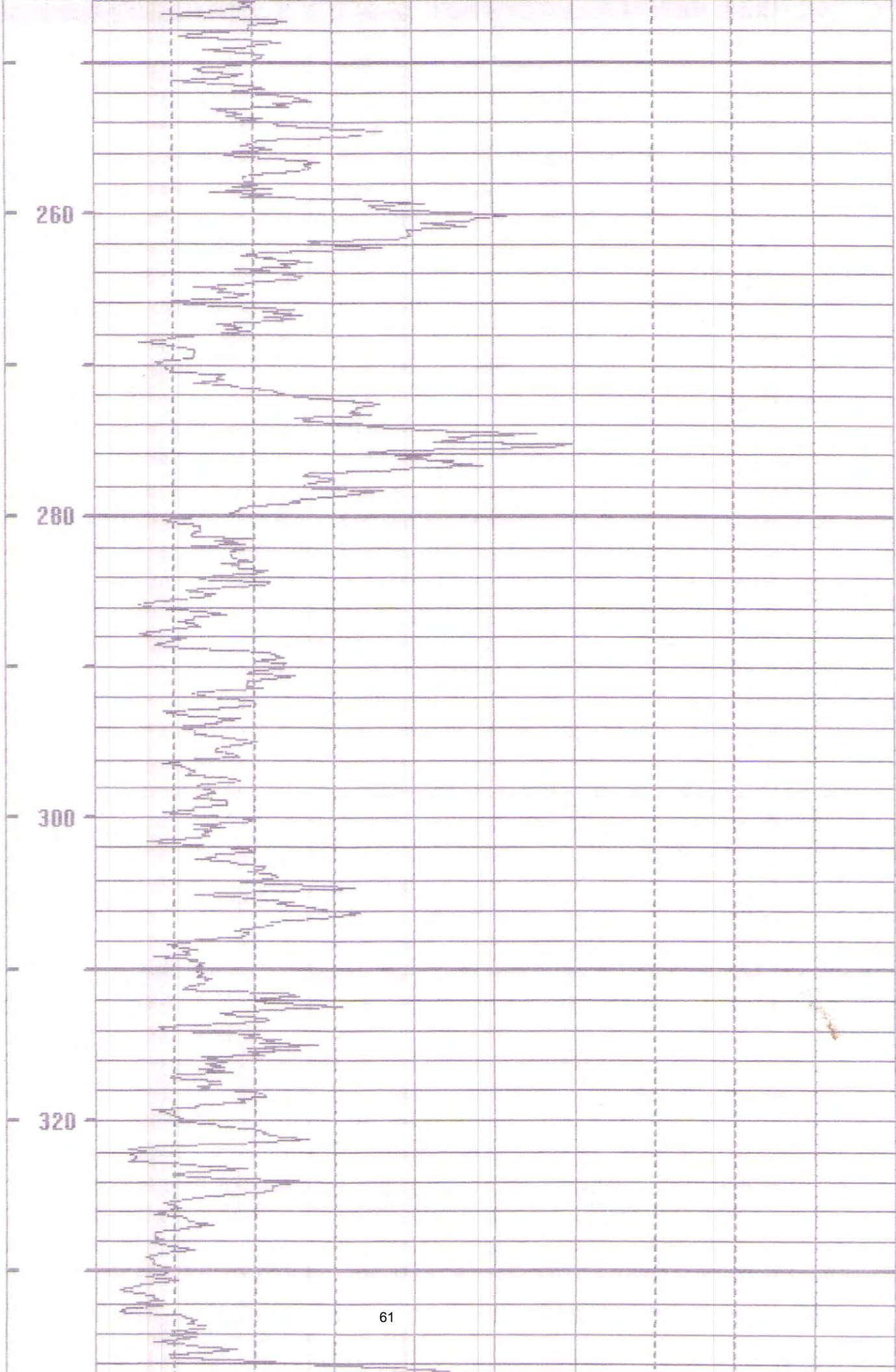




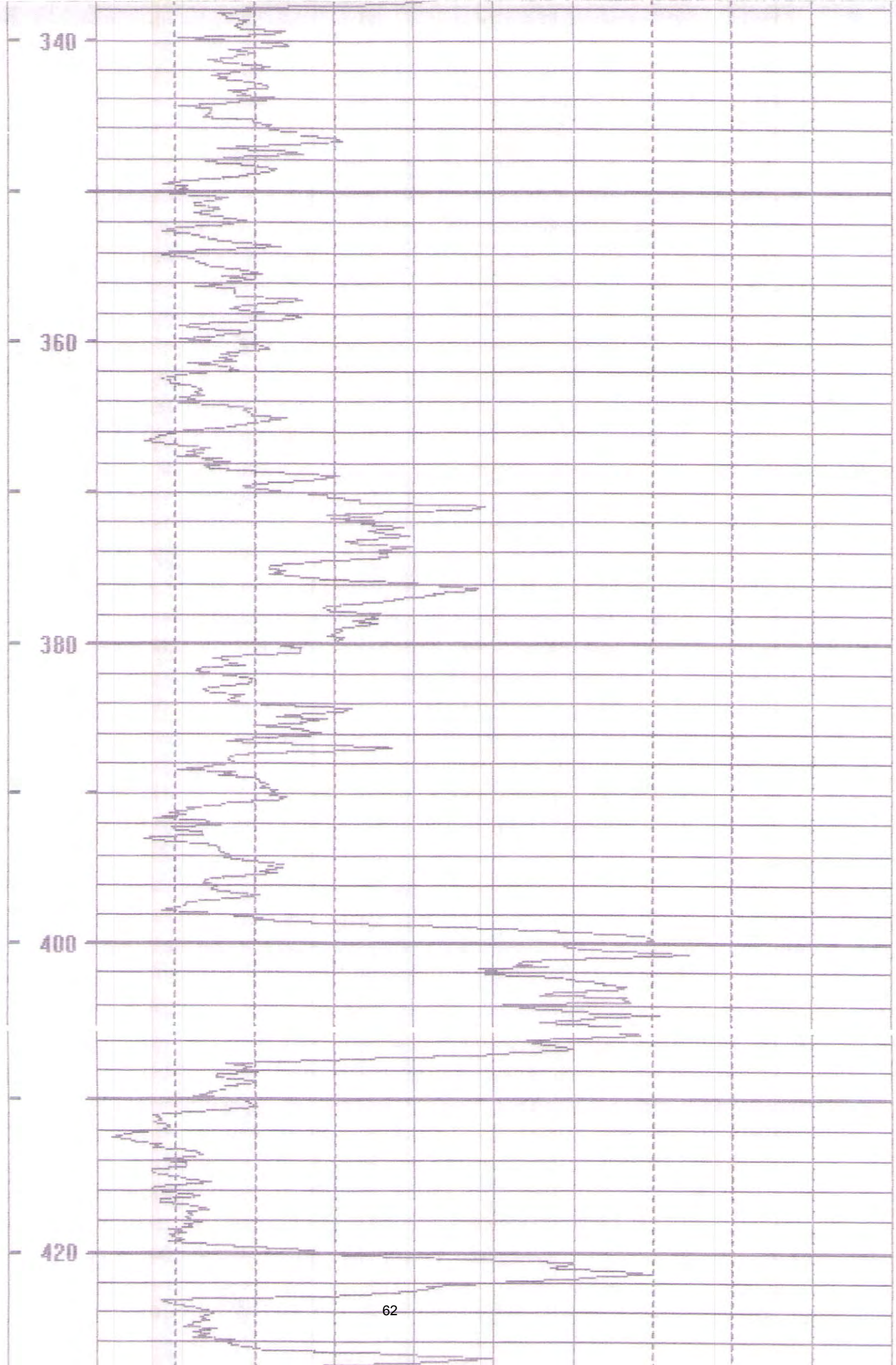




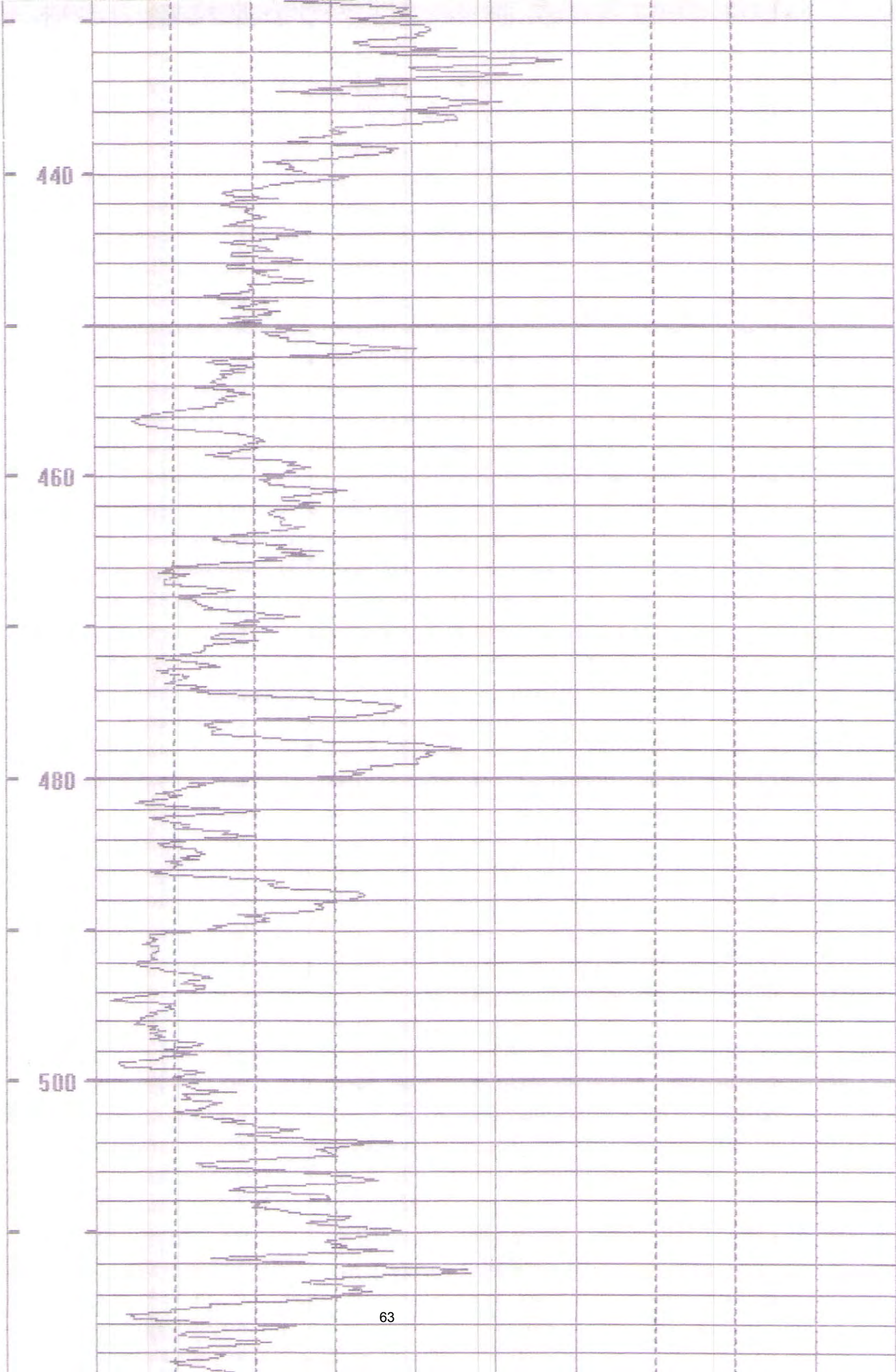














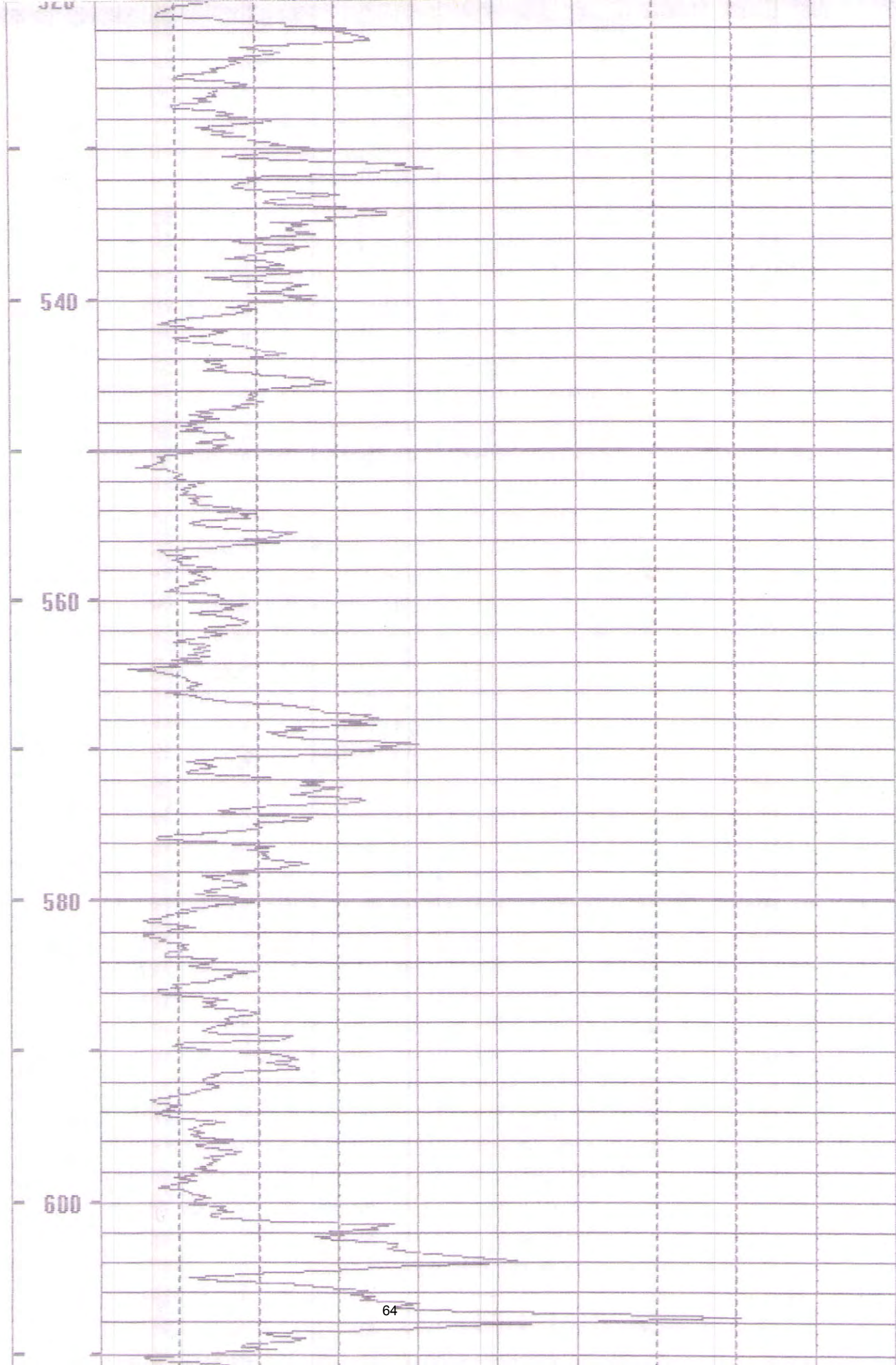
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540

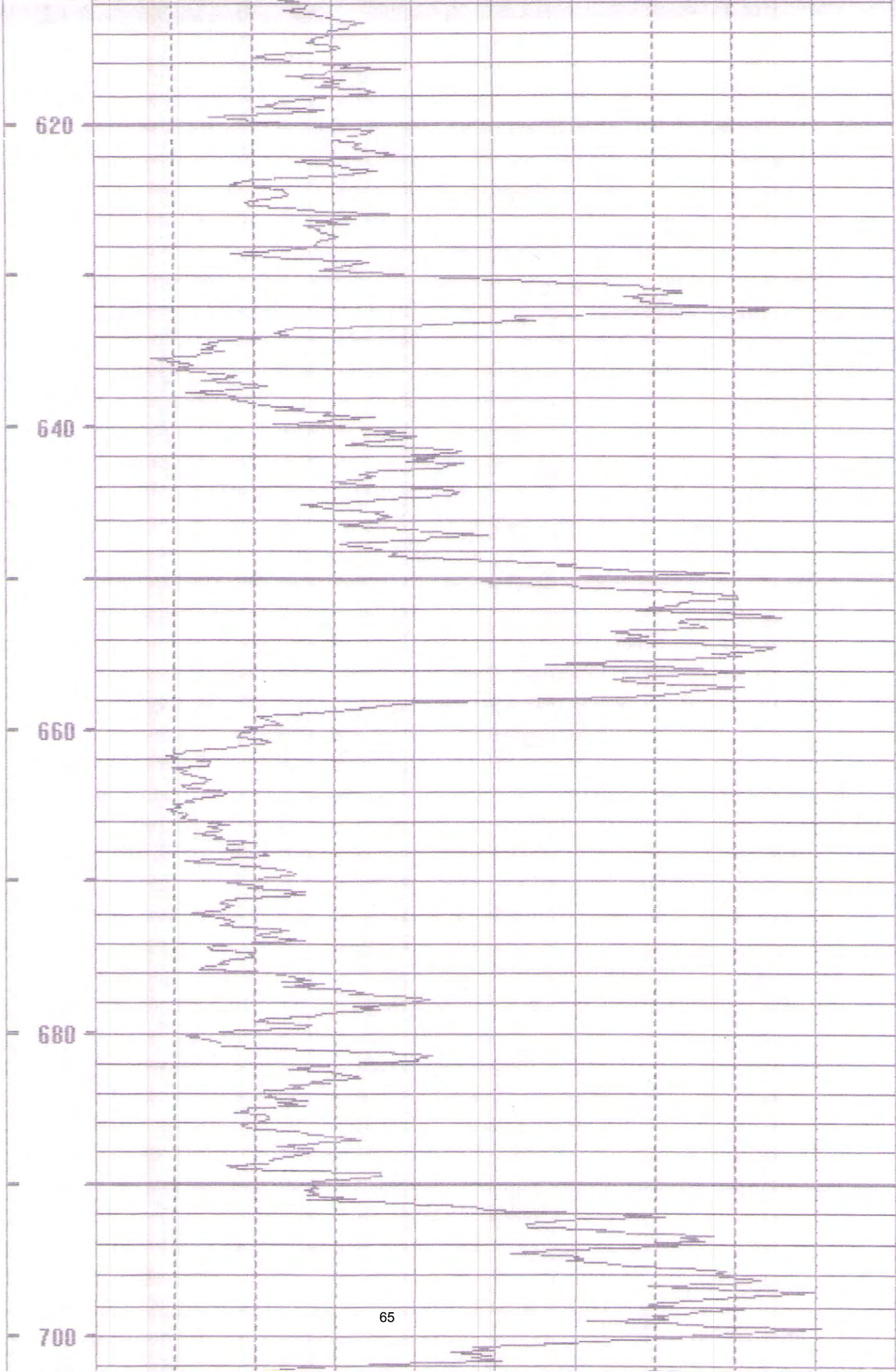
560

580

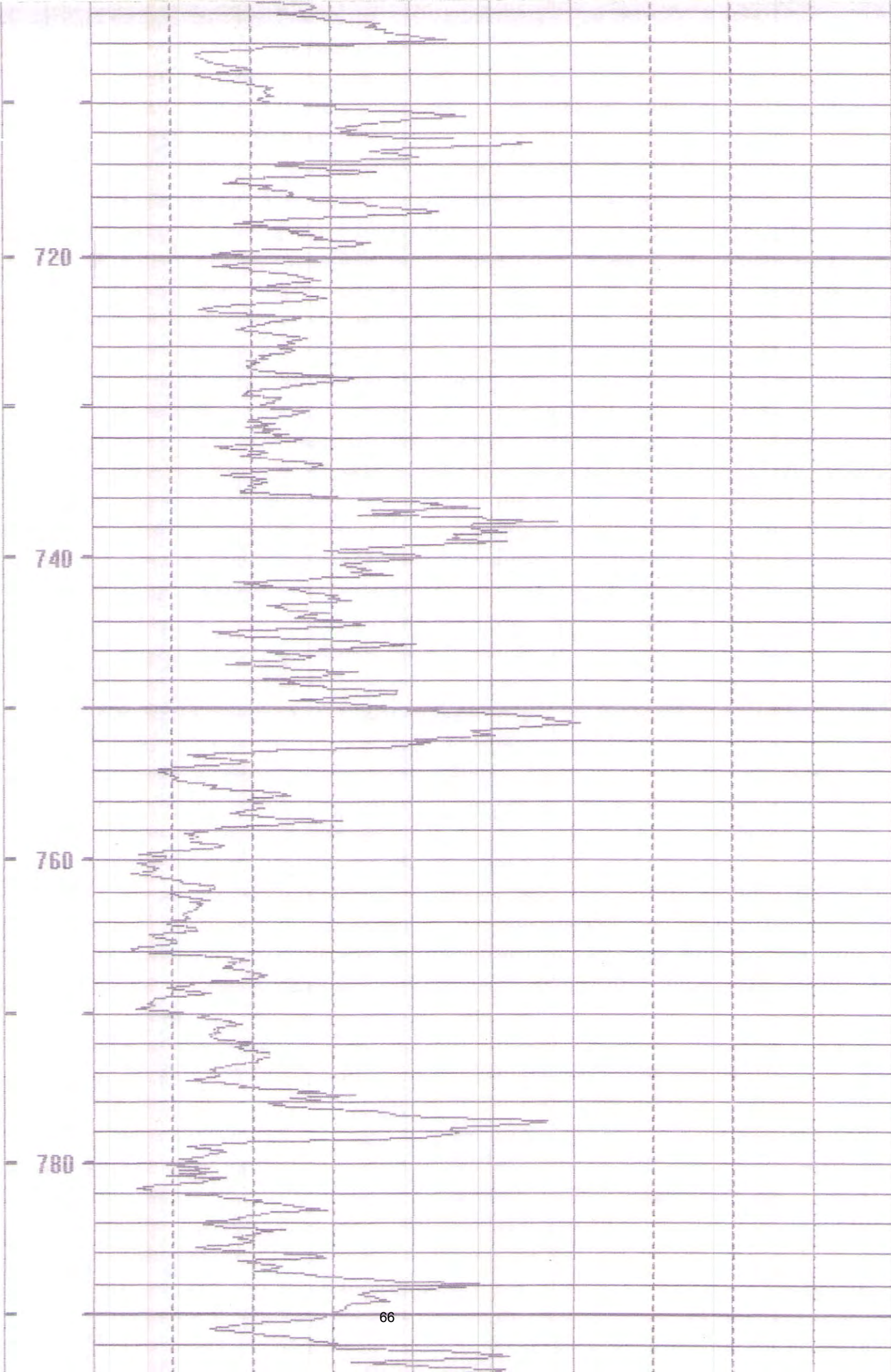
600



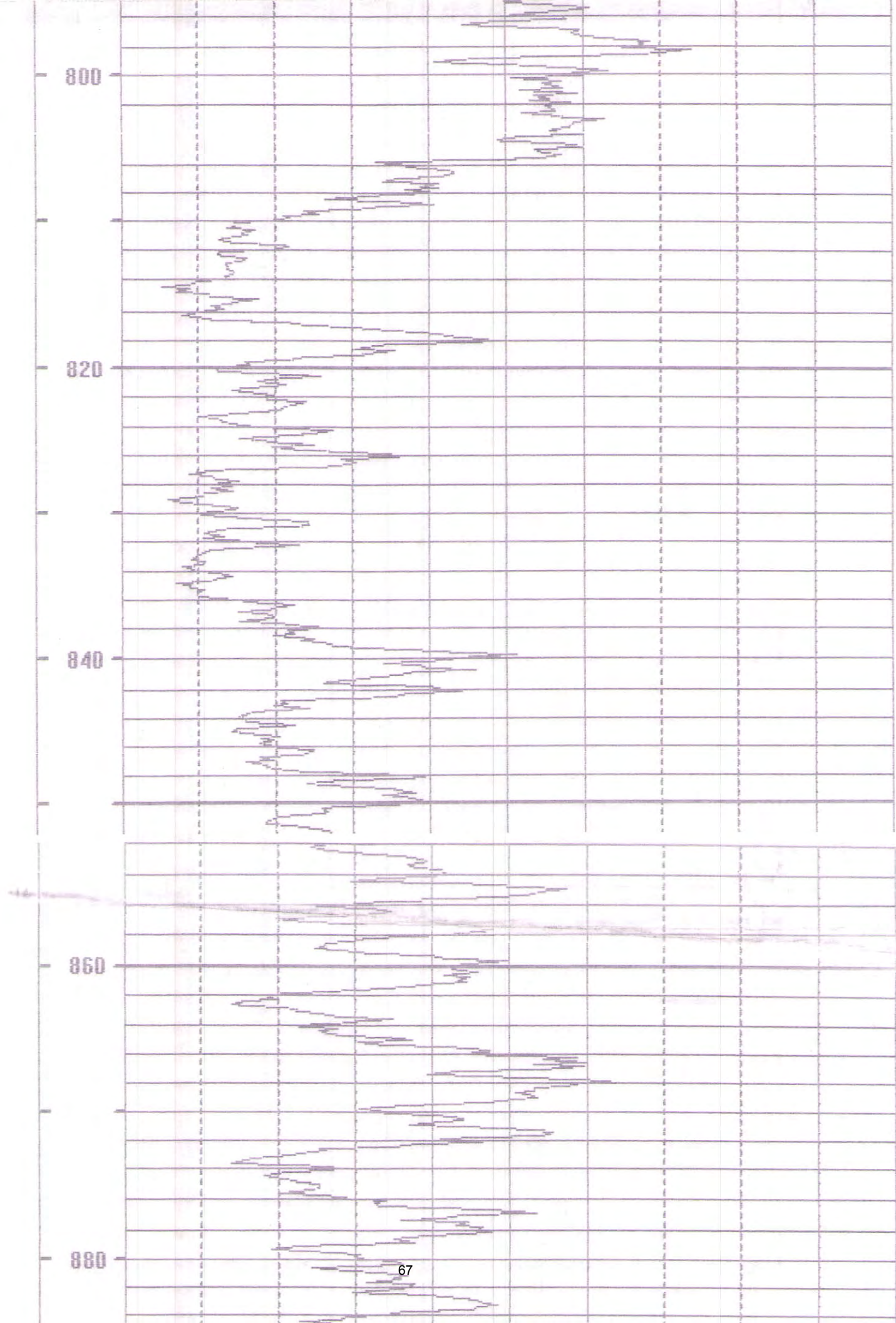




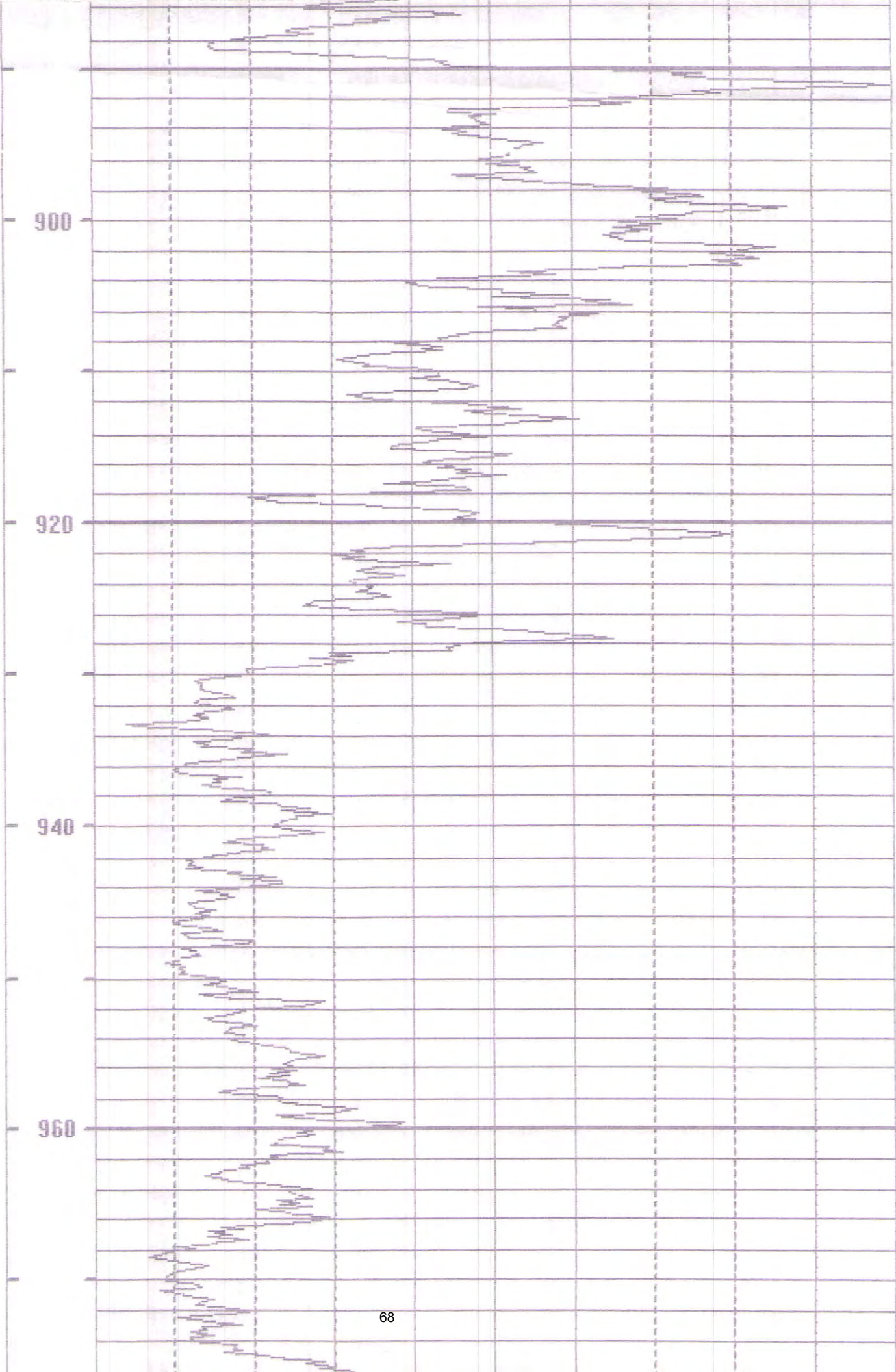













980								
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Date: Friday, February 03, 2012 Time: 15:03 File: C:\Documents and Settings\Wahid\My Documents\171p131p.rtd

**Section 3**

**VPB 133 Groundwater Sample Log Sheets**



Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: BETHPAGE OU-2 OFFSITE GW  
 Project No.: 112G00622  
PRE-DESIGN FIELD INVES

Sample ID No.: BP-VPB133-GW-058  
 Sample Location: VPB-133  
 Sampled By: JF

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1152  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>0110412012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>11:30</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>62M</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sample interval 57'-58'*

Circle if Applicable:		Signature(s): 
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPAGE OU-2 OFFSITE GW  
 Project No.: 112G00622  
PRE-DESIGN FIELD INVES

Sample ID No.: BP-VPB133-GW-114  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1152  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date:	<u>011 041 2012</u>	Color		pH		S.C.		Temp.		Turbidity		DO		ORP		Other	
Time:	<u>16:00</u>	Visual		Standard		mS/cm		Degrees C		NTU		mg/l		mV		NA	
Method:	<u>Hydropunch</u>	<u>6.247</u>		<u>5.30</u>		<u>0.961</u>		<u>6.19</u>		<u>71000</u>		<u>5.65</u>		<u>-25</u>		<u>0.613 mg</u>	

**PURGE DATA:**

Date:	<u>NA</u>																
Method:	<u>NA</u>																
Monitor Reading (ppm):																	
Well Casing Diameter & Material Type:																	
Total Well Depth (TD):																	
Static Water Level (WL):																	
One Casing Volume(gal/L):																	
Start Purge (hrs):																	
End Purge (hrs):																	
Total Purge Time (min):																	
Total Vol. Purged (gal/L):																	

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	<u>HCL/4 DEG C</u>	<u>2- 40ml Glass Vials</u>	
TOC	<u>4 DEG C</u>		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*SPLIT SAMPLE WITH CHRIS FURN OF H2M - 2 VOL (40ml) 1 WPT. QUOTE 100ml*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-148**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1152  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/05/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>11:55</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	—	—	—	—	—	—	—	—

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*only sufficient volume for 2-40ml sample of GW. Check valve did not set.*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	<i>JF → RTJ</i>





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-150**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1152  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date:	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
01/05/2012	GRAY	5.45	0.674	8.25	—	8.99	87	0.429 RD5

**PURGE DATA:**

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft  
 Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

- Not enough volume for water quality parameters   
 Check box if not enough volume.
- Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Advanced second hydropunch due to poor recovery @ 148'*  
 Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-254**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1166  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/09/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>15:05</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	TDS <u>NA</u> S/L
Method: <u>Hydropunch</u>	<u>GRAY</u>	<u>5.69</u>	<u>0.388</u>	<u>9.68</u>	<u>775</u>	<u>2.28</u>	<u>-39</u>	<u>0.253</u>

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW- 174**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1166  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/10/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other
Time: <u>10:00</u>	<u>6004</u>	<u>5.57</u>	<u>0.266</u>	<u>7.39</u>	<u>800</u>	<u>6.31</u>	<u>152</u>	<u>TD5 NA 9/c</u>
Method: <u>Hydropunch</u>								<u>0.172</u>

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<input checked="" type="checkbox"/>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters  
 Check box if not enough volume.

Used pH paper instead of water quality meter  
 Check box if used pH paper.

*Spot Sample with Dunk Lou of HAM*

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s):



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: BP-VPB133-GW-294  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 11106  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/10/12</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>12:10</u>	—	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>	—	—	—	—	—	—	—	—

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*5/15 Sample collected by D. FURMAN of H2M*

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-314**  
 Sample Location: **VPB-133-314**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1166  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/10/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other TDS <u>NA</u> <u>9/L</u>
Time: <u>15:15</u>	<u>LS. 62M</u>	<u>7.82</u>	<u>0.252</u>	<u>11.78</u>	<u>346</u>	<u>5.61</u>	<u>229</u>	<u>0.163</u>
Method: <u>Hydropunch</u>								

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Spot Sample collected by Derek Liu at 142M*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: BP-VPB133-GW-334  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 11662  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/11/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other TDS NA %/L
Time: <u>18:30</u>	<u>6.45</u>	<u>5.52</u>	<u>0.359</u>	<u>7.71</u>	<u>71000</u>	<u>3.48</u>	<u>78</u>	<u>0.232</u>
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Spur Sample Collected by A. Flynn of H2M*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-374**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1166  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	MS NA S/L
011/11/2012	6.5	4.99	0.250	10.71	71000	4.50	130	0.163

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	0
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters  
 Check box if not enough volume.

Used pH paper instead of water quality meter  
 Check box if used pH paper.

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s):



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-394**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/12/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>10:55</u>	—	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>	—	—	—	—	—	—	—	—

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	<u>1 40ml Glass Vials</u>	/
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*ONLY ONE 40 ML VOA VIAL COLLECTED DUE TO INSUFFICIENT VOLUME*

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-414**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/12/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>19:25</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	—	—	—	—	—	—	—	—

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	<u>2- 40ml Glass Vials</u>	<u>/</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Hydroly punch, only 1 40 ml vial, insufficient volume*

Circle if Applicable: \_\_\_\_\_ Signature(s): JF

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-434**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	TDS NA g/L
01/12/2012	U. GRAY	5.64	0.332	10.50	623	5.51	131	0.151
Method: Hydropunch								

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	2
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*SPLIT SAMPLE Collected by H2M*

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-454**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/13/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other TDS NA 3/L
Time: <u>10:15</u>	<u>6200</u>	<u>5.58</u>	<u>0.245</u>	<u>10.61</u>	<u>552</u>	<u>3.37</u>	<u>100</u>	<u>0.159</u>
Method: <u>Hydropunch</u>								

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

Split sample at 10:15 with H<sub>2</sub>O

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-474**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/13/2017</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>12:15</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	<u>7.05 NA 3/L</u>
Method: <u>Hydropunch</u>	<u>6.24</u>	<u>5.93</u>	<u>0.318</u>	<u>9.01</u>	<u>&gt; 800</u>	<u>2.16</u>	<u>9</u>	<u>0.206</u>

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*SPLIT SAMPLE WITH HAM - Chris Fernan / Duke Lee*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	<i>[Signature]</i>



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-494**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1165  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/13/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>14:10</u>	<u>Grey</u>	<u>5.69</u>	<u>0.379</u>	<u>7.75</u>	<u>7800</u>	<u>4.77</u>	<u>-55</u>	<u>0.246</u>
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Split Sample with 1st representative Derek Lee*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-514**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1151  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/16/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>12:00</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	<u>TD5 NA 9/c</u>
Method: <u>Hydropunch</u>	<u>6.24</u>	<u>6.71</u>	<u>0.317</u>	<u>6.72</u>	<u>772</u>	<u>6.16</u>	<u>-24</u>	<u>3.141</u>

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

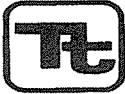
Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Salt sample with H<sub>2</sub>M*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-534**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1157  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	TD5 NA 3/c
1/16/2012	47.6m	5.60	0.393	7.80	346	6.90	58	8.190
Method: Hydropunch								

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	2
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*3olit sample with 1/2 m*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-554**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1151  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>1/17/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other
Time: <u>10:50</u>	<u>6.24</u>	<u>5.76</u>	<u>0.532</u>	<u>8.26</u>	<u>435</u>	<u>2.76</u>	<u>-7</u>	<u>703 3/L</u>
Method: <u>Hydropunch</u>								<u>0.338</u>

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters  
 Check box if not enough volume.

Used pH paper instead of water quality meter  
 Check box if used pH paper.

*Split sample with D. Lee of H2M*

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): JF



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-574**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1151  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>011/17/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>13:25</u>	<u>GRAY</u>	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sediment in sample*

*SPUR Sample with check low of U2M*

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-594**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1151  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>0111712012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>16:00</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>GRAY</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<input checked="" type="checkbox"/>
TOC	4 DEG C		<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sediment in sample*

*Unable to find sample split sample with Derek Lee of H&M*

Circle if Applicable: \_\_\_\_\_ Signature(s):

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-614**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1157  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>0111812012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>10:15</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>62M</u>	—	—	—	—	—	—	—

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sediment in sample*

*Spent sample collected by Derek Lee of H&E*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	<i>JF</i>



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPAGE OU-2 OFFSITE GW  
 Project No.: 112G00622  
PRE-DESIGN FIELD INVES

Sample ID No.: BP-VPB133-GW-034  
 Sample Location: VPB-133  
 Sampled By: JF

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1151  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/18/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>13:15</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	TDSNA <u>3/2</u>
Method: <u>Hydropunch</u>	<u>6000</u>	<u>6.35</u>	<u>0.097</u>	<u>10.90</u>	<u>7800</u>	<u>6.70</u>	<u>-265</u>	<u>0.063</u>

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MWV = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Residue in sample container with sediment in sample*

*SPLIT SAMPLE collected by David Liu of HDM*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPHE 002  
Project No.: 112602751-112600632

Sample ID No.: BP-VPB133-GW-694  
Sample Location: VPB 133  
Sampled By: J. Ferguson  
C.O.C. No.: 1154

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Hydro punch
- QA Sample Type:

- Type of Sample:
- Low Concentration
  - High Concentration

### SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>01/20/2012</u>	<u>Gray-Silty</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1161</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>12:30</u>								
<u>Hydro punch</u>								

### PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOLENTILE ORGANICS 8260B</u>	<u>ITCC</u>	<u>2-40ml glass</u>	<u>2</u>

### OBSERVATIONS / NOTES:

• INSUFFICIENT volume for groundwater quality parameter  
 • gray, silty, high turbidity.

Soil sample with Derek Liu at H&M

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-714**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/23/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>11:40</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>CLAY</u>	—	—	—	—	—	—	—

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Contained sediment*

*Spit sample with back low of HDM.*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPAGE OU-2 OFFSITE GW  
 Project No.: 112G00622  
PRE-DESIGN FIELD INVES

Sample ID No.: BP-VPB133-GW-734  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1154  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/13/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>15:30</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>62M</u>	—	—	—	—	—	—	—

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

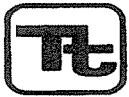
Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sp. t sample collected by Mark low of HDM.  
 There was insufficient volume for low quality parameter*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-744**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1154  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/24/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>11:00</u>	<u>6.24</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Significant quantity of silt and very fine sand in sample.  
 Just sample with 1/2" MW. Depth low*

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s):





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-754**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1154  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/24/2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>13:00</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>62AY</u>	—	—	—	—	—	—	—

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sample had sediment suspended in sample  
 Spill sample with Derek Lee (H2M)*

<b>Circle if Applicable:</b>		<b>Signature(s):</b> 
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-764**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>08/24/2013</u>	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: <u>15:50</u>	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Method: <u>Hydropunch</u>	<u>6.2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*Sample contains sediment, gray, high turbidity.  
 Spent sample with Derek Liu of H2O*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPAGE OU-2 OFFSITE GW  
 Project No.: 112G00622  
PRE-DESIGN FIELD INVES

Sample ID No.: BP-VPB133-GW-784  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1155  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>09/25/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>13:50</u>	<u>LIBRY</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	2
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*2 VOC Bottles → 1 preserved, 1 non preserved.  
 Salt Sample with Duck Luv HDM. Sample TURBID, Gray*

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-794**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: Vertical Profile Boring  
 QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1155  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/25/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>16:25</u>	<u>FAW</u>	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: NA								
Method: NA								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	/
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters  
 Check box if not enough volume.

Used pH paper instead of water quality meter  
 Check box if used pH paper.

*Druck low (1/2 m) in attempt to split sample, could not fill all bottles.  
 Collected 1 40 ml VOC (preserved) turbid FAW*

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	<i>JF</i>



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-208**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1155  
 Type of Sample:  
 Low Concentration  
 High Concentration

**SAMPLING DATA:**

Date: <u>01/26/2012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>11:50</u>	<u>6200</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Method: <u>Hydropunch</u>								

**PURGE DATA:**

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION: Strike thru analysis not required**

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C		

**OBSERVATIONS / NOTES:**

2" MVV = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

*collected one unpreserved VOC vial. Bench also collected 1 unpreserved vial  
 Spill sample with Bench low of H2M sample w/ grey, for lab d*

MS/MSD	Duplicate ID No.:	Signature(s): 
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Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BETHPAGE 002  
Project No.: 112600627 - 1126007951

Sample ID No.: BP-VPB133-66-814  
Sample Location: VPB 133  
Sampled By: J. Ferguson  
C.O.C. No.: 1156

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: VERTICAL Profile Boring
- QA Sample Type:

- Type of Sample:
- Low Concentration
- High Concentration

### SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>01/26/2012</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Time: <u>15:00</u>	<u>GRAY</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Method:								

### PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Volatile Organics 8260B</u>	<u>HCL</u>	<u>2 - 40ml glass</u>	<u>2</u>

### OBSERVATIONS / NOTES:

- insufficient volume for gw quality parameter
- split sample with back cup of 10ml
- sample had high silt, sediment content, grey in color

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BENHONG DUA  
Project No.: 112600632 - 112602751

Sample ID No.: BP-VPB133-6W-234  
Sample Location: VPB 133  
Sampled By: J. Ferguson  
C.O.C. No.: 1155

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Venture Pacific Boring
- QA Sample Type:

- Type of Sample:
- Low Concentration
  - High Concentration

### SAMPLING DATA:

Date: <u>01/27/2012</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>10:55</u>	<u>gray-white</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Method: <u>Hand pump</u>								

### PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Volatile Organics 2260B</u>	<u>HCL</u>	<u>2-40 ml glass</u>	<u>1</u>

### OBSERVATIONS / NOTES:

- Split sample with Derek Liu of Ham
- Insufficient volume for low quality parameters.
- sample gray-white in color

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: **BP-VPB133-GW-844**  
 Sample Location: **VPB-133**  
 Sampled By: **JF**

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1156  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01130 12012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>11:30</u>	<u>6.24</u>	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date: <u>NA</u>								
Method: <u>NA</u>								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	<del>4</del> 4 DEG C	2- 40ml Glass Vials	<u>2</u>
TOC	4 DEG C	<u>40ml glass vials</u>	

### OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters   
 Check box if not enough volume.

Used pH paper instead of water quality meter   
 Check box if used pH paper.

Collected 2-40ml VOCs. Sample was sent for lead

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]







# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: **BETHPAGE OU-2 OFFSITE GW**  
 Project No.: **112G00622**  
**PRE-DESIGN FIELD INVES**

Sample ID No.: BP-VPB133-GW-864  
 Sample Location: VPB-133  
 Sampled By: JF

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Vertical Profile Boring
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: 1156  
 Type of Sample:  
 Low Concentration  
 High Concentration

### SAMPLING DATA:

Date: <u>01/13/12012</u>	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Time: <u>10:10</u>	<u>LT Br-W</u>	—	—	—	—	—	—	—
Method: <u>Hydropunch</u>								

### PURGE DATA:

Date:	NA							
Method:	NA							
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

### SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	<del>MCL/4 DEG C</del>	2- 40ml Glass Vials <u>- UN PRES</u>	<u>2</u>
TOC	4 DEG C		

### OBSERVATIONS / NOTES:

2" MVV = 0.163 gal/ft  
 Sample taken at discreet intervals using a hydropunch sampler unless otherwise noted.

Not enough volume for water quality parameters  
 Check box if not enough volume.

Used pH paper instead of water quality meter  
 Check box if used pH paper.

*Split sample with HFM, check low insolvent vol. to low quality parameters*

### Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s):





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name:	<u>BETHPAGE OVA</u>	Sample ID No.:	<u>82-VPB133-6W-004</u>
Project No.:	<u>112600672 - 112600751</u>	Sample Location:	<u>VPB133</u>
<input type="checkbox"/> Domestic Well Data		Sampled By:	<u>J. Ferguson</u>
<input type="checkbox"/> Monitoring Well Data		C.O.C. No.:	<u>1156</u>
<input checked="" type="checkbox"/> Other Well Type:	<u>Vacuum Profile Boring</u>	Type of Sample:	
<input type="checkbox"/> QA Sample Type:		<input type="checkbox"/> Low Concentration	
		<input type="checkbox"/> High Concentration	

**SAMPLING DATA:**

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>01/31/2017</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Time: <u>16:10</u>								
Method: <u>Hydropon Lp</u>	<u>Clear</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>Turbid</u>	<u>—</u>	<u>—</u>	<u>—</u>

**PURGE DATA:**

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
<u>Volatile Organics 2760 B</u>	<u>None-CHL</u>	<u>2- 40 ml glass</u>	<u>2</u>

**OBSERVATIONS / NOTES:**

*split sample with back Liv of HSM*  
*Insufficient volume for groundwater quality parameters*

Circle if Applicable:		Signature(s): 
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: <u>BETHPALE OUG</u> Project No.: <u>11260 2751 -112600677</u>  <input type="checkbox"/> Domestic Well Data <input type="checkbox"/> Monitoring Well Data <input checked="" type="checkbox"/> Other Well Type: <u>Vertical Profile Bore</u> <input type="checkbox"/> QA Sample Type: _____	Sample ID No.: <u>BP-VPB133-OW-904</u> Sample Location: <u>VPB133</u> Sampled By: <u>J. Ferguson</u> C.O.C. No.: <u>1156</u> Type of Sample: <input type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration
--	---

**SAMPLING DATA:**

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>02/01/2012</u>	<u>Green</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>cloud</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>12:20</u>								
Method: <u>Hydro punch</u>								

**PURGE DATA:**

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
<u>Volatile Organics 8260B</u>	<u>NONE-LIQUID</u>	<u>2 - 40 ml glass</u>	<u>2</u>

**OBSERVATIONS / NOTES:**

• Lights in screen of sample  
 • Insufficient volume for groundwater quality parameter  
 • collected a split sample by Chris FURN of HGM.

Circle if Applicable:		Signature(s): 
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	









# QA SAMPLE LOG SHEET

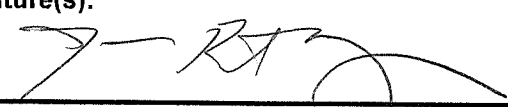
Project Site Name: BETHANNE 002 Sample ID Number: RP VPB-TB-010412  
 Project Number: 11260 2751 Sampled By: J. Ferguson  
 Sample Location: VPB 133 C.O.C. Number: 1152  
 QA Sample Type:  
 Trip Blank  Rinsate Blank  
 Source Water Blank  Other Blank \_\_\_\_\_

SAMPLING DATA:	WATER SOURCE:
Date: <u>January 8, 2012</u> Time: <u>08:30</u> Method: <u>Laboratory Prepared</u>	<input checked="" type="checkbox"/> Laboratory Prepared <input type="checkbox"/> Tap <input type="checkbox"/> Purchased <input type="checkbox"/> Fire Hydrant <input type="checkbox"/> Other _____

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):	RINSATE INFORMATION (If Applicable):
Product Name: _____ Supplier: _____ Manufacturer: _____ Order Number: _____ Lot Number: _____ Expiration Date: _____	Media Type: _____ Equipment Used: _____ Equipment Type: <input type="checkbox"/> Dedicated <input type="checkbox"/> Reusable

SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	<u>2- 40 ml Glass</u>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Semivolatiles	Cool 4°C		YES / NO
Pesticide / PCB	Cool 4°C		YES / NO
Metals	Cool 4°C & HNO <sub>3</sub>		YES / NO
Cyanide	Cool 4°C & NaOH		YES / NO

**OBSERVATIONS / NOTES:**

Signature(s):  




# QA SAMPLE LOG SHEET

Project Site Name: BETHPME 002 Sample ID Number: BP VPB-TB-010912  
 Project Number: 112602751 Sampled By: J. Ferguson  
 Sample Location: VPB 133 C.O.C. Number: 1166  
 QA Sample Type:

- Trip Blank  Rinsate Blank  
 Source Water Blank  Other Blank \_\_\_\_\_

SAMPLING DATA:	WATER SOURCE:
----------------	---------------

Date: <u>JANUARY 9, 2012</u> Time: <u>11:08</u> Method: <u>Laboratory Prepared</u>	<input checked="" type="checkbox"/> Laboratory Prepared <span style="margin-left: 50px;"><input type="checkbox"/> Tap</span> <input type="checkbox"/> Purchased <span style="margin-left: 50px;"><input type="checkbox"/> Fire Hydrant</span> <input type="checkbox"/> Other _____
--	--

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):	RINSATE INFORMATION (If Applicable):
--	---

Product Name: _____ Supplier: _____ Manufacturer: _____ Order Number: _____ Lot Number: _____ Expiration Date: _____	Media Type: _____ Equipment Used: _____ Equipment Type: <input type="checkbox"/> Dedicated <input type="checkbox"/> Reusable
---	--

SAMPLE COLLECTION INFORMATION:			
--------------------------------	--	--	--

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	<u>2-40 ml glass</u>	<u>YES</u> / NO
Semivolatiles	Cool 4°C		YES / NO
Pesticide / PCB	Cool 4°C		YES / NO
Metals	Cool 4°C & HNO <sub>3</sub>		YES / NO
Cyanide	Cool 4°C & NaOH		YES / NO

OBSERVATIONS / NOTES:
-----------------------

Signature(s):



# QA SAMPLE LOG SHEET

Project Site Name: BETHPAGE 002 Sample ID Number: BP-VPB-TB-011212  
 Project Number: 112602751 / 112600622 Sampled By: J. Ferguson  
 Sample Location: VPB 133 C.O.C. Number: 1165  
 QA Sample Type:

- Trip Blank                       Rinsate Blank  
 Source Water Blank             Other Blank \_\_\_\_\_

**SAMPLING DATA:**

Date: January 12, 2012  
 Time: 08:00  
 Method: Laboratory Supplied

**WATER SOURCE:**

- Laboratory Prepared             Tap  
 Purchased                             Fire Hydrant  
 Other \_\_\_\_\_

**PURCHASED WATER INFORMATION  
(If Applicable as Source or Rinsate Water):**

Product Name: \_\_\_\_\_  
 Supplier: \_\_\_\_\_  
 Manufacturer: \_\_\_\_\_  
 Order Number: \_\_\_\_\_  
 Lot Number: \_\_\_\_\_  
 Expiration Date: \_\_\_\_\_

**RINSATE INFORMATION  
(If Applicable):**

Media Type: \_\_\_\_\_  
 Equipment Used: \_\_\_\_\_  
 Equipment Type:  
 Dedicated  
 Reusable

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	<u>2 - 40ml glass</u>	<u>YES</u> / NO
Semivolatiles	Cool 4°C		YES / NO
Pesticide / PCB	Cool 4°C		YES / NO
Metals	Cool 4°C & HNO <sub>3</sub>		YES / NO
Cyanide	Cool 4°C & NaOH		YES / NO

**OBSERVATIONS / NOTES:**

Signature(s): J. Ferguson









# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: <u>BENHANE 00-2</u> Project No.: <u>112602751 - 112600622</u>  <input type="checkbox"/> Domestic Well Data <input type="checkbox"/> Monitoring Well Data <input type="checkbox"/> Other Well Type: <input checked="" type="checkbox"/> QA Sample Type: <u>TRIP BLANK</u>	Sample ID No.: <u>BP-VPB-IB-012510</u> Sample Location: <u>BP-VPB133</u> Sampled By: <u>J. Ferguson</u> C.O.C. No.: <u>1155</u> Type of Sample: <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration
---	---

**SAMPLING DATA:**

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>01/25/12</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Time: <u>08:00</u>	<u>Clear</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Method: <u>LAB prepared</u>								

**PURGE DATA:**

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
<u>VOLATILE ORGANIC Compounds</u>	<u>ITCL</u>	<u>2-40 ml VOL</u>	<u>2</u>
<u>8260 B</u>			

**OBSERVATIONS / NOTES:**

Circle if Applicable:		Signature(s): 
MS/MSD	Duplicate ID No.:	



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name:	<u>BETHANIE 003</u>	Sample ID No.:	<u>BR VPB133-58-013012-5F</u>
Project No.:	<u>112600 622 112602751</u>	Sample Location:	<u>VPB 133</u>
<input type="checkbox"/> Domestic Well Data		Sampled By:	<u>J. K. G. GON</u>
<input type="checkbox"/> Monitoring Well Data		C.O.C. No.:	<u>1156</u>
<input type="checkbox"/> Other Well Type:	<u>TRIP BUNK</u>	Type of Sample:	
<input checked="" type="checkbox"/> QA Sample Type:		<input type="checkbox"/> Low Concentration	
		<input type="checkbox"/> High Concentration	

**SAMPLING DATA:**

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>01/30/2012</u>	<u>1/1m</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Time: <u>08:00</u>								
Method: <u>LABORATORY SUP.</u>								

**PURGE DATA:**

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume (gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
<u>Volatile Organic Compounds</u>	<u>HCL</u>	<u>2 - 40 ml glass</u>	<u>2</u>

**OBSERVATIONS / NOTES:**

• Trip Bunk

Circle if Applicable:		Signature(s): 
MS/MSD	Duplicate ID No.:	

**Section 4**  
**VPB 133 Analytical Data Sheets**  
**(Chemtech and AirToxics)**

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/04/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-058	SDG No.:	D1061
Lab Sample ID:	D1061-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040184.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	2.1		0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	1.7		0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	42		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.6		0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	J	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/04/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-058	SDG No.:	D1061
Lab Sample ID:	D1061-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040184.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	53.9		70 - 120	108%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		85 - 115	93%	SPK: 50
2037-26-5	Toluene-d8	41.5	*	85 - 120	83%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		75 - 120	94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	591677	3.9			
540-36-3	1,4-Difluorobenzene	901659	4.7			
3114-55-4	Chlorobenzene-d5	792580	9.68			
3855-82-1	1,4-Dichlorobenzene-d4	415689	13.39			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000066-25-1	Hexanal	5.3	J		9.4	ug/L
000124-19-6	Nonanal	6.6	J		15.61	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/04/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-114	SDG No.:	D1061
Lab Sample ID:	D1061-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE024749.D	1		01/11/12	VE011112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	5.5		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/04/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-114	SDG No.:	D1061
Lab Sample ID:	D1061-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE024749.D	1		01/11/12	VE011112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.7		70 - 120	95%	SPK: 50
1868-53-7	Dibromofluoromethane	47.8		85 - 115	96%	SPK: 50
2037-26-5	Toluene-d8	45.7		85 - 120	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	58.3		75 - 120	117%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1337580	9.37			
540-36-3	1,4-Difluorobenzene	1780050	10.47			
3114-55-4	Chlorobenzene-d5	1872780	14.89			
3855-82-1	1,4-Dichlorobenzene-d4	1197970	18.7			



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/05/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-148	SDG No.:	D1061
Lab Sample ID:	D1061-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040187.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	55.1		70 - 120	110%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		85 - 115	97%	SPK: 50
2037-26-5	Toluene-d8	44.1		85 - 120	88%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.2		75 - 120	92%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	563347	3.9			
540-36-3	1,4-Difluorobenzene	858734	4.71			
3114-55-4	Chlorobenzene-d5	743786	9.68			
3855-82-1	1,4-Dichlorobenzene-d4	401117	13.39			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
	unknown1.16	5.3	J		1.16	ug/L
000066-25-1	Hexanal	5.8	J		9.41	ug/L
000111-71-7	Heptanal	6.6	J		11.79	ug/L





## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/05/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-150	SDG No.:	D1061
Lab Sample ID:	D1061-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE024750.D	1		01/11/12	VE011112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.63	J	0.47	1	ug/L
67-64-1	Acetone	3.8	J	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.3		0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	1.1		0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.42	J	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	1.4		0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/05/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-150	SDG No.:	D1061
Lab Sample ID:	D1061-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE024750.D	1		01/11/12	VE011112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	1.4		0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.7		70 - 120	95%	SPK: 50
1868-53-7	Dibromofluoromethane	46.4		85 - 115	93%	SPK: 50
2037-26-5	Toluene-d8	43.3		85 - 120	87%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.8		75 - 120	116%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1282390	9.37			
540-36-3	1,4-Difluorobenzene	1729930	10.46			
3114-55-4	Chlorobenzene-d5	1804350	14.89			
3855-82-1	1,4-Dichlorobenzene-d4	1170090	18.7			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/06/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-194	SDG No.:	D1061
Lab Sample ID:	D1061-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040189.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/06/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB133-GW-194	SDG No.:	D1061
Lab Sample ID:	D1061-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040189.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	52		70 - 120	104%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		85 - 115	90%	SPK: 50
2037-26-5	Toluene-d8	43.4		85 - 120	87%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.6		75 - 120	87%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	611871	3.9			
540-36-3	1,4-Difluorobenzene	916214	4.72			
3114-55-4	Chlorobenzene-d5	768593	9.68			
3855-82-1	1,4-Dichlorobenzene-d4	392291	13.39			



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-234	SDG No.:	D1108
Lab Sample ID:	D1108-02	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002881.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.1		0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.68	J	0.47	1	ug/L
67-64-1	Acetone	5	J	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	8.8		0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	3		0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.7	J	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1.8		0.35	1	ug/L
67-66-3	Chloroform	3.1		0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.32	J	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.51	J	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	2.2		0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-234	SDG No.:	D1108
Lab Sample ID:	D1108-02	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002881.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	J	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.3		70 - 120	99%	SPK: 50
1868-53-7	Dibromofluoromethane	46		85 - 115	92%	SPK: 50
2037-26-5	Toluene-d8	50.6		85 - 120	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		75 - 120	99%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2820550	7.62			
540-36-3	1,4-Difluorobenzene	5640410	8.37			
3114-55-4	Chlorobenzene-d5	5094160	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2459580	12.71			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
123-91-1	1,4-Dioxane	210	J		8.89	ug/L
104-51-8	n-Butylbenzene	0.60	J		12.98	ug/L
87-68-3	Hexachlorobutadiene	1.8	J		14.36	ug/L



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-254	SDG No.:	D1108
Lab Sample ID:	D1108-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002882.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2		0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	9.1		0.5	5	ug/L
75-15-0	Carbon Disulfide	1.8		0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	5.4		0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	13		1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-254	SDG No.:	D1108
Lab Sample ID:	D1108-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002882.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.8		70 - 120	98%	SPK: 50
1868-53-7	Dibromofluoromethane	46.4		85 - 115	93%	SPK: 50
2037-26-5	Toluene-d8	47.3		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.2		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2789180	7.62			
540-36-3	1,4-Difluorobenzene	5534750	8.37			
3114-55-4	Chlorobenzene-d5	5037480	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2410050	12.71			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
87-68-3	Hexachlorobutadiene	0.97	J		14.36	ug/L





### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/10/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-274	SDG No.:	D1108
Lab Sample ID:	D1108-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002883.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.7		70 - 120	97%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		85 - 115	92%	SPK: 50
2037-26-5	Toluene-d8	45.8		85 - 120	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.2		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2785930	7.62			
540-36-3	1,4-Difluorobenzene	5499690	8.37			
3114-55-4	Chlorobenzene-d5	5021870	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2395790	12.71			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
87-68-3	Hexachlorobutadiene	0.70	J		14.36	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/10/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-294	SDG No.:	D1108
Lab Sample ID:	D1108-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002884.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	6.8		0.5	5	ug/L
75-15-0	Carbon Disulfide	2		0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/10/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-294	SDG No.:	D1108
Lab Sample ID:	D1108-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002884.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.5		70 - 120	99%	SPK: 50
1868-53-7	Dibromofluoromethane	45.7		85 - 115	91%	SPK: 50
2037-26-5	Toluene-d8	48.8		85 - 120	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.9		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2767170	7.62			
540-36-3	1,4-Difluorobenzene	5511990	8.37			
3114-55-4	Chlorobenzene-d5	4968930	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2380250	12.71			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/10/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-314	SDG No.:	D1108
Lab Sample ID:	D1108-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002885.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	6.2		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/10/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-314	SDG No.:	D1108
Lab Sample ID:	D1108-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002885.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.6		70 - 120	97%	SPK: 50
1868-53-7	Dibromofluoromethane	45.7		85 - 115	91%	SPK: 50
2037-26-5	Toluene-d8	46.9		85 - 120	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2772020	7.62			
540-36-3	1,4-Difluorobenzene	5477170	8.37			
3114-55-4	Chlorobenzene-d5	4997020	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2388350	12.71			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
87-68-3	Hexachlorobutadiene	0.48	J		14.36	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/11/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-334	SDG No.:	D1108
Lab Sample ID:	D1108-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002886.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	7.3		0.5	5	ug/L
75-15-0	Carbon Disulfide	2.4		0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	5.5		1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/11/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-334	SDG No.:	D1108
Lab Sample ID:	D1108-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002886.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.3		70 - 120	99%	SPK: 50
1868-53-7	Dibromofluoromethane	46		85 - 115	92%	SPK: 50
2037-26-5	Toluene-d8	47.1		85 - 120	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2777270	7.62			
540-36-3	1,4-Difluorobenzene	5458640	8.37			
3114-55-4	Chlorobenzene-d5	4999910	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2402600	12.71			



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/11/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-354	SDG No.:	D1108
Lab Sample ID:	D1108-08	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002887.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49		70 - 120	98%	SPK: 50
1868-53-7	Dibromofluoromethane	45.9		85 - 115	92%	SPK: 50
2037-26-5	Toluene-d8	47.4		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.5		75 - 120	99%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2712260	7.62			
540-36-3	1,4-Difluorobenzene	5378290	8.37			
3114-55-4	Chlorobenzene-d5	4918250	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2380760	12.71			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000066-25-1	Hexanal	22	J		10.34	ug/L
000124-13-0	Octanal	6.0	J		12.56	ug/L
000124-19-6	Nonanal	6.3	J		13.47	ug/L



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/11/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-374	SDG No.:	D1108
Lab Sample ID:	D1108-09	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002888.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	8.6		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/11/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB133-GW-374	SDG No.:	D1108
Lab Sample ID:	D1108-09	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002888.D	1		01/13/12	VR011312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49		70 - 120	98%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		85 - 115	93%	SPK: 50
2037-26-5	Toluene-d8	43.7		85 - 120	87%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.8		75 - 120	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2768110	7.62			
540-36-3	1,4-Difluorobenzene	5380680	8.37			
3114-55-4	Chlorobenzene-d5	4946700	10.86			
3855-82-1	1,4-Dichlorobenzene-d4	2371960	12.71			



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-434	SDG No.:	D1148
Lab Sample ID:	D1148-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040298.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-434	SDG No.:	D1148
Lab Sample ID:	D1148-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040298.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	66.3	*	70 - 120	133%	SPK: 50
1868-53-7	Dibromofluoromethane	53.5		85 - 115	107%	SPK: 50
2037-26-5	Toluene-d8	44.3		85 - 120	89%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		75 - 120	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	477901	3.91			
540-36-3	1,4-Difluorobenzene	1037950	4.72			
3114-55-4	Chlorobenzene-d5	1242220	9.69			
3855-82-1	1,4-Dichlorobenzene-d4	459297	13.4			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-454	SDG No.:	D1148
Lab Sample ID:	D1148-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040299.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-454	SDG No.:	D1148
Lab Sample ID:	D1148-05	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040299.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	67.6	*	70 - 120	135%	SPK: 50
1868-53-7	Dibromofluoromethane	54		85 - 115	108%	SPK: 50
2037-26-5	Toluene-d8	47.5		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		75 - 120	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	479625	3.91			
540-36-3	1,4-Difluorobenzene	1029340	4.72			
3114-55-4	Chlorobenzene-d5	1202540	9.69			
3855-82-1	1,4-Dichlorobenzene-d4	461071	13.4			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-474	SDG No.:	D1148
Lab Sample ID:	D1148-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040300.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-474	SDG No.:	D1148
Lab Sample ID:	D1148-06	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040300.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	64.2	*	70 - 120	128%	SPK: 50
1868-53-7	Dibromofluoromethane	54.6		85 - 115	109%	SPK: 50
2037-26-5	Toluene-d8	51.1		85 - 120	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.2		75 - 120	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	476854	3.91			
540-36-3	1,4-Difluorobenzene	1000930	4.71			
3114-55-4	Chlorobenzene-d5	1150500	9.69			
3855-82-1	1,4-Dichlorobenzene-d4	442283	13.39			



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-494	SDG No.:	D1148
Lab Sample ID:	D1148-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040301.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/13/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-494	SDG No.:	D1148
Lab Sample ID:	D1148-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040301.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	64.6	*	70 - 120	129%	SPK: 50
1868-53-7	Dibromofluoromethane	55.3		85 - 115	111%	SPK: 50
2037-26-5	Toluene-d8	45.7		85 - 120	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.6		75 - 120	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	476822	3.91			
540-36-3	1,4-Difluorobenzene	998893	4.72			
3114-55-4	Chlorobenzene-d5	1133250	9.68			
3855-82-1	1,4-Dichlorobenzene-d4	441666	13.4			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/20
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-394	SDG No.:	D1148
Lab Sample ID:	D1148-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030849.D	1		01/19/12	VF011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	72		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	23	J	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/20
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-394	SDG No.:	D1148
Lab Sample ID:	D1148-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030849.D	1		01/19/12	VF011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	40.5		55 - 158	81%	SPK: 50
1868-53-7	Dibromofluoromethane	45.9		53 - 156	92%	SPK: 50
2037-26-5	Toluene-d8	48.3		85 - 115	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.8		85 - 120	86%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	146268	4.38			
540-36-3	1,4-Difluorobenzene	256114	5.12			
3114-55-4	Chlorobenzene-d5	217304	9.32			
3855-82-1	1,4-Dichlorobenzene-d4	90623	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000066-25-1	Hexanal	51	J		9.03	ug/Kg
000111-71-7	Heptanal	6.3	J		11.13	ug/Kg
	unknown11.84	5.9	J		11.84	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/20
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB133-GW-414	SDG No.:	D1148
Lab Sample ID:	D1148-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.001 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030850.D	1		01/19/12	VF011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	22	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	18		1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	5.4	J	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg





### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-514	SDG No.:	D1208
Lab Sample ID:	D1208-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003003.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	7.6		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-514	SDG No.:	D1208
Lab Sample ID:	D1208-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003003.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.7		70 - 120	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		85 - 115	100%	SPK: 50
2037-26-5	Toluene-d8	54.2		85 - 120	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.9		75 - 120	106%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2267470	7.57			
540-36-3	1,4-Difluorobenzene	4092330	8.5			
3114-55-4	Chlorobenzene-d5	3722380	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1940000	13.26			

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-534	SDG No.:	D1208
Lab Sample ID:	D1208-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003004.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	4.2	J	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-534	SDG No.:	D1208
Lab Sample ID:	D1208-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003004.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.7		70 - 120	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		85 - 115	101%	SPK: 50
2037-26-5	Toluene-d8	53.9		85 - 120	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		75 - 120	105%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2227050	7.57			
540-36-3	1,4-Difluorobenzene	4055920	8.5			
3114-55-4	Chlorobenzene-d5	3705770	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1918980	13.26			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-554	SDG No.:	D1208
Lab Sample ID:	D1208-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003005.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	4.8	J	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-554	SDG No.:	D1208
Lab Sample ID:	D1208-04	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003005.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.6		70 - 120	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.9		85 - 115	102%	SPK: 50
2037-26-5	Toluene-d8	54		85 - 120	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.3		75 - 120	105%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2248970	7.57			
540-36-3	1,4-Difluorobenzene	4065640	8.5			
3114-55-4	Chlorobenzene-d5	3691620	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1893240	13.25			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000102-67-0	Aluminum, tripropyl-	6.3	J		1.81	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-574	SDG No.:	D1208
Lab Sample ID:	D1208-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.05      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030893.D	1		01/21/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.64	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	32		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.68	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.73	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.63	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.61	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.63	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.78	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.71	5	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-574	SDG No.:	D1208
Lab Sample ID:	D1208-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.05      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030893.D	1		01/21/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.53	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.63	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.61	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.71	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.67	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.73	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.61	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.69	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	44.1		55 - 158	88%	SPK: 50
1868-53-7	Dibromofluoromethane	51.9		53 - 156	104%	SPK: 50
2037-26-5	Toluene-d8	48.8		85 - 115	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.4		85 - 120	87%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	93507	4.37			
540-36-3	1,4-Difluorobenzene	158947	5.11			
3114-55-4	Chlorobenzene-d5	136968	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	57845	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
	unknown10.26	6.5	J		10.26	ug/Kg
062960-77-4	4-Octene, 2,6-dimethyl-, [S-(Z)]-	6.7	J		10.89	ug/Kg
000624-29-3	Cyclohexane, 1,4-dimethyl-, cis-	5.6	J		11.21	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-594	SDG No.:	D1208
Lab Sample ID:	D1208-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.93      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030894.D	1		01/21/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.55	U	0.66	5.1	ug/Kg
74-87-3	Chloromethane	2.55	U	0.87	5.1	ug/Kg
75-01-4	Vinyl Chloride	2.55	U	1.2	5.1	ug/Kg
74-83-9	Bromomethane	2.55	U	2.5	5.1	ug/Kg
75-00-3	Chloroethane	2.55	U	1.4	5.1	ug/Kg
75-69-4	Trichlorofluoromethane	2.55	U	1.3	5.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.55	U	1.3	5.1	ug/Kg
75-35-4	1,1-Dichloroethene	2.55	U	1.5	5.1	ug/Kg
67-64-1	Acetone	38		3.1	25	ug/Kg
75-15-0	Carbon Disulfide	2.55	U	1.1	5.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.55	U	0.97	5.1	ug/Kg
79-20-9	Methyl Acetate	2.55	U	1.5	5.1	ug/Kg
75-09-2	Methylene Chloride	2.55	U	1.4	5.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.55	U	0.7	5.1	ug/Kg
75-34-3	1,1-Dichloroethane	2.55	U	0.95	5.1	ug/Kg
110-82-7	Cyclohexane	2.55	U	1	5.1	ug/Kg
78-93-3	2-Butanone	12.5	U	3.2	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.55	U	1	5.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.55	U	0.9	5.1	ug/Kg
67-66-3	Chloroform	2.55	U	0.75	5.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.55	U	0.89	5.1	ug/Kg
108-87-2	Methylcyclohexane	2.55	U	1.1	5.1	ug/Kg
71-43-2	Benzene	2.55	U	0.39	5.1	ug/Kg
107-06-2	1,2-Dichloroethane	2.55	U	0.65	5.1	ug/Kg
79-01-6	Trichloroethene	2.55	U	0.87	5.1	ug/Kg
78-87-5	1,2-Dichloropropane	2.55	U	0.26	5.1	ug/Kg
75-27-4	Bromodichloromethane	2.55	U	0.63	5.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	3	25	ug/Kg
108-88-3	Toluene	2.55	U	0.65	5.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.55	U	0.8	5.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.55	U	0.73	5.1	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/17/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-594	SDG No.:	D1208
Lab Sample ID:	D1208-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.93 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030894.D	1		01/21/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.55	U	0.91	5.1	ug/Kg
591-78-6	2-Hexanone	12.5	U	4	25	ug/Kg
124-48-1	Dibromochloromethane	2.55	U	0.55	5.1	ug/Kg
106-93-4	1,2-Dibromoethane	2.55	U	0.65	5.1	ug/Kg
127-18-4	Tetrachloroethene	2.55	U	1	5.1	ug/Kg
108-90-7	Chlorobenzene	2.55	U	0.51	5.1	ug/Kg
100-41-4	Ethyl Benzene	2.55	U	0.63	5.1	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.73	10	ug/Kg
95-47-6	o-Xylene	2.55	U	0.69	5.1	ug/Kg
100-42-5	Styrene	2.55	U	0.46	5.1	ug/Kg
75-25-2	Bromoform	2.55	U	0.75	5.1	ug/Kg
98-82-8	Isopropylbenzene	2.55	U	0.49	5.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.55	U	0.47	5.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.55	U	0.38	5.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.55	U	0.42	5.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.55	U	0.63	5.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.55	U	0.88	5.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.55	U	0.71	5.1	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	45		55 - 158	90%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		53 - 156	99%	SPK: 50
2037-26-5	Toluene-d8	49.3		85 - 115	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.4		85 - 120	85%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	93043	4.37			
540-36-3	1,4-Difluorobenzene	161949	5.12			
3114-55-4	Chlorobenzene-d5	138952	9.32			
3855-82-1	1,4-Dichlorobenzene-d4	64044	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
002613-65-2	Cyclopentane, 1-ethyl-3-methyl-, t	5.8	J		10.26	ug/Kg
062960-77-4	4-Octene, 2,6-dimethyl-, [S-(Z)]-	6.1	J		10.9	ug/Kg
000583-57-3	Cyclohexane, 1,2-dimethyl-	5.1	J		11.22	ug/Kg





### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-614	SDG No.:	D1208
Lab Sample ID:	D1208-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030871.D	1		01/20/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.45	U	0.64	4.9	ug/Kg
74-87-3	Chloromethane	2.45	U	0.84	4.9	ug/Kg
75-01-4	Vinyl Chloride	2.45	U	1.2	4.9	ug/Kg
74-83-9	Bromomethane	2.45	U	2.4	4.9	ug/Kg
75-00-3	Chloroethane	2.45	U	1.4	4.9	ug/Kg
75-69-4	Trichlorofluoromethane	2.45	U	1.3	4.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.45	U	1.3	4.9	ug/Kg
75-35-4	1,1-Dichloroethene	2.45	U	1.4	4.9	ug/Kg
67-64-1	Acetone	34		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.45	U	1	4.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.45	U	0.94	4.9	ug/Kg
79-20-9	Methyl Acetate	2.45	U	1.5	4.9	ug/Kg
75-09-2	Methylene Chloride	6.1		1.4	4.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.45	U	0.68	4.9	ug/Kg
75-34-3	1,1-Dichloroethane	2.45	U	0.92	4.9	ug/Kg
110-82-7	Cyclohexane	2.45	U	0.99	4.9	ug/Kg
78-93-3	2-Butanone	12.5	U	3	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.45	U	0.97	4.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.45	U	0.87	4.9	ug/Kg
67-66-3	Chloroform	2.45	U	0.73	4.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.45	U	0.86	4.9	ug/Kg
108-87-2	Methylcyclohexane	2.45	U	1	4.9	ug/Kg
71-43-2	Benzene	2.45	U	0.37	4.9	ug/Kg
107-06-2	1,2-Dichloroethane	2.45	U	0.63	4.9	ug/Kg
79-01-6	Trichloroethene	2.45	U	0.84	4.9	ug/Kg
78-87-5	1,2-Dichloropropane	2.45	U	0.25	4.9	ug/Kg
75-27-4	Bromodichloromethane	2.45	U	0.61	4.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.45	U	0.63	4.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.45	U	0.77	4.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.45	U	0.71	4.9	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-614	SDG No.:	D1208
Lab Sample ID:	D1208-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030871.D	1		01/20/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.45	U	0.88	4.9	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.8	25	ug/Kg
124-48-1	Dibromochloromethane	2.45	U	0.53	4.9	ug/Kg
106-93-4	1,2-Dibromoethane	2.45	U	0.63	4.9	ug/Kg
127-18-4	Tetrachloroethene	2.45	U	0.99	4.9	ug/Kg
108-90-7	Chlorobenzene	2.45	U	0.49	4.9	ug/Kg
100-41-4	Ethyl Benzene	2.45	U	0.61	4.9	ug/Kg
179601-23-1	m/p-Xylenes	4.9	U	0.71	9.8	ug/Kg
95-47-6	o-Xylene	2.45	U	0.67	4.9	ug/Kg
100-42-5	Styrene	2.45	U	0.44	4.9	ug/Kg
75-25-2	Bromoform	2.45	U	0.73	4.9	ug/Kg
98-82-8	Isopropylbenzene	2.45	U	0.47	4.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.45	U	0.45	4.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.45	U	0.36	4.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.45	U	0.4	4.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.45	U	0.61	4.9	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.45	U	0.85	4.9	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.45	U	0.69	4.9	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	42.5		55 - 158	85%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		53 - 156	97%	SPK: 50
2037-26-5	Toluene-d8	49		85 - 115	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.1		85 - 120	90%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	112149	4.36			
540-36-3	1,4-Difluorobenzene	189848	5.11			
3114-55-4	Chlorobenzene-d5	172866	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	77267	12.22			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000109-66-0	Pentane	5.5	J		1.26	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	5.7	J		12.28	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-634	SDG No.:	D1208
Lab Sample ID:	D1208-08	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003006.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	8.2		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-634	SDG No.:	D1208
Lab Sample ID:	D1208-08	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003006.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.8		70 - 120	96%	SPK: 50
1868-53-7	Dibromofluoromethane	51		85 - 115	102%	SPK: 50
2037-26-5	Toluene-d8	53.9		85 - 120	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.7		75 - 120	105%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2221650	7.57			
540-36-3	1,4-Difluorobenzene	4029720	8.5			
3114-55-4	Chlorobenzene-d5	3667070	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1929470	13.26			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-654	SDG No.:	D1208
Lab Sample ID:	D1208-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99      Units:    g	Final Vol:	5000            uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID :    0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030872.D	1		01/20/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	31		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	6		1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/18/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB133-GW-654	SDG No.:	D1208
Lab Sample ID:	D1208-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF030872.D	1		01/20/12	VF012012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	41.3		55 - 158	83%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4		53 - 156	99%	SPK: 50
2037-26-5	Toluene-d8	50.9		85 - 115	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.3		85 - 120	87%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	114788	4.37			
540-36-3	1,4-Difluorobenzene	187220	5.11			
3114-55-4	Chlorobenzene-d5	165025	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	70575	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000124-18-5	Decane	5.5	J		11.33	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-694	SDG No.:	D1280
Lab Sample ID:	D1280-01	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002634.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	38		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	3.9	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-694	SDG No.:	D1280
Lab Sample ID:	D1280-01	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002634.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.72	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	59.7		55 - 158	119%	SPK: 50
1868-53-7	Dibromofluoromethane	50		53 - 156	100%	SPK: 50
2037-26-5	Toluene-d8	46		85 - 115	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.2	*	85 - 120	74%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1138970	8.05			
540-36-3	1,4-Difluorobenzene	1829590	8.95			
3114-55-4	Chlorobenzene-d5	987532	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	393503	13.63			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
	unknown4.26	8.0	J		4.26	ug/Kg
000506-51-4	1-Tetracosanol	7.9	J		13.02	ug/Kg
024399-15-3	Cyclohexane, 1-methyl-3-(1-methyle	5.3	J		13.95	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-694RE	SDG No.:	D1280
Lab Sample ID:	D1280-01RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002640.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	29		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.7	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-694RE	SDG No.:	D1280
Lab Sample ID:	D1280-01RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002640.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	42.6		55 - 158	85%	SPK: 50
1868-53-7	Dibromofluoromethane	41.1		53 - 156	82%	SPK: 50
2037-26-5	Toluene-d8	39.5	*	85 - 115	79%	SPK: 50
460-00-4	4-Bromofluorobenzene	30.9	*	85 - 120	62%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1831790	8.05			
540-36-3	1,4-Difluorobenzene	2789440	8.95			
3114-55-4	Chlorobenzene-d5	1440910	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	520562	13.63			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-734	SDG No.:	D1280
Lab Sample ID:	D1280-03	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002635.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.45	U	0.64	4.9	ug/Kg
74-87-3	Chloromethane	2.45	U	0.84	4.9	ug/Kg
75-01-4	Vinyl Chloride	2.45	U	1.2	4.9	ug/Kg
74-83-9	Bromomethane	2.45	U	2.4	4.9	ug/Kg
75-00-3	Chloroethane	2.45	U	1.4	4.9	ug/Kg
75-69-4	Trichlorofluoromethane	2.45	U	1.3	4.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.45	U	1.3	4.9	ug/Kg
75-35-4	1,1-Dichloroethene	2.45	U	1.4	4.9	ug/Kg
67-64-1	Acetone	16	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.45	U	1	4.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.45	U	0.94	4.9	ug/Kg
79-20-9	Methyl Acetate	2.45	U	1.5	4.9	ug/Kg
75-09-2	Methylene Chloride	2.45	U	1.4	4.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.45	U	0.68	4.9	ug/Kg
75-34-3	1,1-Dichloroethane	2.45	U	0.92	4.9	ug/Kg
110-82-7	Cyclohexane	2.45	U	0.99	4.9	ug/Kg
78-93-3	2-Butanone	12.5	U	3	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.45	U	0.97	4.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.45	U	0.87	4.9	ug/Kg
67-66-3	Chloroform	2.45	U	0.73	4.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.45	U	0.86	4.9	ug/Kg
108-87-2	Methylcyclohexane	2.45	U	1	4.9	ug/Kg
71-43-2	Benzene	2.45	U	0.37	4.9	ug/Kg
107-06-2	1,2-Dichloroethane	2.45	U	0.63	4.9	ug/Kg
79-01-6	Trichloroethene	2.45	U	0.84	4.9	ug/Kg
78-87-5	1,2-Dichloropropane	2.45	U	0.25	4.9	ug/Kg
75-27-4	Bromodichloromethane	2.45	U	0.61	4.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.45	U	0.63	4.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.45	U	0.77	4.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.45	U	0.71	4.9	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-734	SDG No.:	D1280
Lab Sample ID:	D1280-03	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002635.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.45	U	0.88	4.9	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.8	25	ug/Kg
124-48-1	Dibromochloromethane	2.45	U	0.53	4.9	ug/Kg
106-93-4	1,2-Dibromoethane	2.45	U	0.63	4.9	ug/Kg
127-18-4	Tetrachloroethene	2.45	U	0.99	4.9	ug/Kg
108-90-7	Chlorobenzene	2.45	U	0.49	4.9	ug/Kg
100-41-4	Ethyl Benzene	2.45	U	0.61	4.9	ug/Kg
179601-23-1	m/p-Xylenes	4.9	U	0.71	9.8	ug/Kg
95-47-6	o-Xylene	2.45	U	0.67	4.9	ug/Kg
100-42-5	Styrene	2.45	U	0.44	4.9	ug/Kg
75-25-2	Bromoform	2.45	U	0.73	4.9	ug/Kg
98-82-8	Isopropylbenzene	2.45	U	0.47	4.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.45	U	0.45	4.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.45	U	0.36	4.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.45	U	0.4	4.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.45	U	0.61	4.9	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.45	U	0.85	4.9	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.45	U	0.69	4.9	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47		55 - 158	94%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		53 - 156	93%	SPK: 50
2037-26-5	Toluene-d8	46		85 - 115	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	35.8	*	85 - 120	72%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1817310	8.05			
540-36-3	1,4-Difluorobenzene	2784570	8.95			
3114-55-4	Chlorobenzene-d5	1431140	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	530718	13.63			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
004923-77-7	Cyclohexane, 1-ethyl-2-methyl-, ci	6.2	J		12.22	ug/Kg
000506-52-5	1-Hexacosanol	14	J		13.02	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	11	J		13.95	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-734RE	SDG No.:	D1280
Lab Sample ID:	D1280-03RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05      Units:    g	Final Vol:	5000            uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID :    0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002641.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.64	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	21	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.68	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.73	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.63	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.61	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.63	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.78	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.71	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-734RE	SDG No.:	D1280
Lab Sample ID:	D1280-03RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002641.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.53	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.63	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.61	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.71	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.67	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.73	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.61	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.69	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	53.4		55 - 158	107%	SPK: 50
1868-53-7	Dibromofluoromethane	49.6		53 - 156	99%	SPK: 50
2037-26-5	Toluene-d8	47.9		85 - 115	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	35.1	*	85 - 120	70%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1676790	8.05			
540-36-3	1,4-Difluorobenzene	2576950	8.95			
3114-55-4	Chlorobenzene-d5	1289070	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	441544	13.63			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-703	SDG No.:	D1280
Lab Sample ID:	D1280-04	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002636.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	35		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.7	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-703	SDG No.:	D1280
Lab Sample ID:	D1280-04	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002636.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.1		55 - 158	100%	SPK: 50
1868-53-7	Dibromofluoromethane	47.4		53 - 156	95%	SPK: 50
2037-26-5	Toluene-d8	45		85 - 115	90%	SPK: 50
460-00-4	4-Bromofluorobenzene	28.6	*	85 - 120	57%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1549880	8.05			
540-36-3	1,4-Difluorobenzene	2413960	8.95			
3114-55-4	Chlorobenzene-d5	1114800	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	326094	13.63			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000506-52-5	1-Hexacosanol	9.1	J		13.02	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	8.6	J		13.95	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-703RE	SDG No.:	D1280
Lab Sample ID:	D1280-04RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002642.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	38		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	3	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/20/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-703RE	SDG No.:	D1280
Lab Sample ID:	D1280-04RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002642.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.72	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	53.8		55 - 158	108%	SPK: 50
1868-53-7	Dibromofluoromethane	49.2		53 - 156	98%	SPK: 50
2037-26-5	Toluene-d8	45.5		85 - 115	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	30.1	*	85 - 120	60%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1415200	8.05			
540-36-3	1,4-Difluorobenzene	2224900	8.95			
3114-55-4	Chlorobenzene-d5	1013290	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	303030	13.63			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-714	SDG No.:	D1280
Lab Sample ID:	D1280-05	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.07 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002637.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.45	U	0.64	4.9	ug/Kg
74-87-3	Chloromethane	2.45	U	0.85	4.9	ug/Kg
75-01-4	Vinyl Chloride	2.45	U	1.2	4.9	ug/Kg
74-83-9	Bromomethane	2.45	U	2.4	4.9	ug/Kg
75-00-3	Chloroethane	2.45	U	1.4	4.9	ug/Kg
75-69-4	Trichlorofluoromethane	2.45	U	1.3	4.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.45	U	1.3	4.9	ug/Kg
75-35-4	1,1-Dichloroethene	2.45	U	1.4	4.9	ug/Kg
67-64-1	Acetone	19	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.45	U	1	4.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.45	U	0.95	4.9	ug/Kg
79-20-9	Methyl Acetate	2.45	U	1.5	4.9	ug/Kg
75-09-2	Methylene Chloride	2.7	J	1.4	4.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.45	U	0.68	4.9	ug/Kg
75-34-3	1,1-Dichloroethane	2.45	U	0.93	4.9	ug/Kg
110-82-7	Cyclohexane	2.45	U	1	4.9	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.45	U	0.98	4.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.45	U	0.88	4.9	ug/Kg
67-66-3	Chloroform	2.45	U	0.73	4.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.45	U	0.87	4.9	ug/Kg
108-87-2	Methylcyclohexane	2.45	U	1	4.9	ug/Kg
71-43-2	Benzene	2.45	U	0.37	4.9	ug/Kg
107-06-2	1,2-Dichloroethane	2.45	U	0.63	4.9	ug/Kg
79-01-6	Trichloroethene	2.45	U	0.85	4.9	ug/Kg
78-87-5	1,2-Dichloropropane	2.45	U	0.26	4.9	ug/Kg
75-27-4	Bromodichloromethane	2.45	U	0.61	4.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.45	U	0.63	4.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.45	U	0.78	4.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.45	U	0.71	4.9	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-714	SDG No.:	D1280
Lab Sample ID:	D1280-05	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.07 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002637.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.45	U	0.89	4.9	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.45	U	0.53	4.9	ug/Kg
106-93-4	1,2-Dibromoethane	2.45	U	0.63	4.9	ug/Kg
127-18-4	Tetrachloroethene	2.45	U	1	4.9	ug/Kg
108-90-7	Chlorobenzene	2.45	U	0.49	4.9	ug/Kg
100-41-4	Ethyl Benzene	2.45	U	0.61	4.9	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.71	9.9	ug/Kg
95-47-6	o-Xylene	2.45	U	0.67	4.9	ug/Kg
100-42-5	Styrene	2.45	U	0.44	4.9	ug/Kg
75-25-2	Bromoform	2.45	U	0.73	4.9	ug/Kg
98-82-8	Isopropylbenzene	2.45	U	0.47	4.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.45	U	0.45	4.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.45	U	0.36	4.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.45	U	0.4	4.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.45	U	0.61	4.9	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.45	U	0.86	4.9	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.45	U	0.69	4.9	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.8		55 - 158	100%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		53 - 156	92%	SPK: 50
2037-26-5	Toluene-d8	44		85 - 115	88%	SPK: 50
460-00-4	4-Bromofluorobenzene	29.5	*	85 - 120	59%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1764630	8.05			
540-36-3	1,4-Difluorobenzene	2729720	8.95			
3114-55-4	Chlorobenzene-d5	1345350	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	411626	13.63			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
003728-56-1	1-Ethyl-4-methylcyclohexane	5.6	J		12.22	ug/Kg
	unknown12.86	5.1	J		12.86	ug/Kg
006971-40-0	17-Pentatriacontene	13	J		13.02	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-714RE	SDG No.:	D1280
Lab Sample ID:	D1280-05RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002643.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	23	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.6	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/23/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-714RE	SDG No.:	D1280
Lab Sample ID:	D1280-05RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002643.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.8		55 - 158	98%	SPK: 50
1868-53-7	Dibromofluoromethane	44		53 - 156	88%	SPK: 50
2037-26-5	Toluene-d8	40.7	*	85 - 115	81%	SPK: 50
460-00-4	4-Bromofluorobenzene	29.9	*	85 - 120	60%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1649340	8.05			
540-36-3	1,4-Difluorobenzene	2592910	8.95			
3114-55-4	Chlorobenzene-d5	1267650	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	411895	13.63			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-744	SDG No.:	D1280
Lab Sample ID:	D1280-06	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002638.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	24	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-744	SDG No.:	D1280
Lab Sample ID:	D1280-06	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002638.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.72	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.4		55 - 158	101%	SPK: 50
1868-53-7	Dibromofluoromethane	32		53 - 156	64%	SPK: 50
2037-26-5	Toluene-d8	46.8		85 - 115	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	36.6	*	85 - 120	73%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1817790	8.05			
540-36-3	1,4-Difluorobenzene	2797100	8.95			
3114-55-4	Chlorobenzene-d5	1504030	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	568572	13.63			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000111-84-2	Nonane	6.4	J		11.94	ug/Kg
006236-88-0	Cyclohexane, 1-ethyl-4-methyl-, tr	7.1	J		12.23	ug/Kg
	unknown12.86	5.3	J		12.86	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-744	SDG No.:	D1280
Lab Sample ID:	D1280-06	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.03      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002638.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
002461-18-9	Oxirane, [(dodecyloxy)methyl]-	18	J		13.02	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	13	J		13.95	ug/Kg
1000152-47-3	trans-Decalin, 2-methyl-	9.3	J		14.45	ug/Kg

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-744RE	SDG No.:	D1280
Lab Sample ID:	D1280-06RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002644.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.87	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	29		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.97	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.95	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	1	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.9	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.89	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.87	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-744RE	SDG No.:	D1280
Lab Sample ID:	D1280-06RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002644.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.91	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.88	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	53.7		55 - 158	107%	SPK: 50
1868-53-7	Dibromofluoromethane	37.3		53 - 156	75%	SPK: 50
2037-26-5	Toluene-d8	49.6		85 - 115	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	38.8	*	85 - 120	78%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1641360	8.05			
540-36-3	1,4-Difluorobenzene	2524290	8.95			
3114-55-4	Chlorobenzene-d5	1312480	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	489943	13.63			



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-764	SDG No.:	D1280
Lab Sample ID:	D1280-07	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002639.D	1		01/26/12	vt012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.87	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	35		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.97	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	3.1	J	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.95	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	1	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.9	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.89	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.87	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-764	SDG No.:	D1280
Lab Sample ID:	D1280-07	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002639.D	1		01/26/12	vt012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.91	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.88	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.1		55 - 158	100%	SPK: 50
1868-53-7	Dibromofluoromethane	47.8		53 - 156	96%	SPK: 50
2037-26-5	Toluene-d8	45.1		85 - 115	90%	SPK: 50
460-00-4	4-Bromofluorobenzene	31.7	*	85 - 120	63%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1752410	8.05			
540-36-3	1,4-Difluorobenzene	2687740	8.95			
3114-55-4	Chlorobenzene-d5	1334680	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	422574	13.62			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000506-52-5	1-Hexacosanol	15	J		13.02	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	11	J		13.95	ug/Kg
002958-76-1	Naphthalene, decahydro-2-methyl-	7.2	J		14.45	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-764RE	SDG No.:	D1280
Lab Sample ID:	D1280-07RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.06      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002645.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.45	U	0.64	4.9	ug/Kg
74-87-3	Chloromethane	2.45	U	0.85	4.9	ug/Kg
75-01-4	Vinyl Chloride	2.45	U	1.2	4.9	ug/Kg
74-83-9	Bromomethane	2.45	U	2.4	4.9	ug/Kg
75-00-3	Chloroethane	2.45	U	1.4	4.9	ug/Kg
75-69-4	Trichlorofluoromethane	2.45	U	1.3	4.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.45	U	1.3	4.9	ug/Kg
75-35-4	1,1-Dichloroethene	2.45	U	1.5	4.9	ug/Kg
67-64-1	Acetone	36		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.45	U	1	4.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.45	U	0.95	4.9	ug/Kg
79-20-9	Methyl Acetate	2.45	U	1.5	4.9	ug/Kg
75-09-2	Methylene Chloride	2.9	J	1.4	4.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.45	U	0.68	4.9	ug/Kg
75-34-3	1,1-Dichloroethane	2.45	U	0.93	4.9	ug/Kg
110-82-7	Cyclohexane	2.45	U	1	4.9	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.45	U	0.98	4.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.45	U	0.88	4.9	ug/Kg
67-66-3	Chloroform	2.45	U	0.73	4.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.45	U	0.87	4.9	ug/Kg
108-87-2	Methylcyclohexane	2.45	U	1	4.9	ug/Kg
71-43-2	Benzene	2.45	U	0.38	4.9	ug/Kg
107-06-2	1,2-Dichloroethane	2.45	U	0.63	4.9	ug/Kg
79-01-6	Trichloroethene	2.45	U	0.85	4.9	ug/Kg
78-87-5	1,2-Dichloropropane	2.45	U	0.26	4.9	ug/Kg
75-27-4	Bromodichloromethane	2.45	U	0.61	4.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.45	U	0.63	4.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.45	U	0.78	4.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.45	U	0.71	4.9	ug/Kg

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-764RE	SDG No.:	D1280
Lab Sample ID:	D1280-07RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.06 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VT002645.D	1		01/26/12	VT012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.45	U	0.89	4.9	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.45	U	0.53	4.9	ug/Kg
106-93-4	1,2-Dibromoethane	2.45	U	0.63	4.9	ug/Kg
127-18-4	Tetrachloroethene	2.45	U	1	4.9	ug/Kg
108-90-7	Chlorobenzene	2.45	U	0.49	4.9	ug/Kg
100-41-4	Ethyl Benzene	2.45	U	0.61	4.9	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.71	9.9	ug/Kg
95-47-6	o-Xylene	2.45	U	0.67	4.9	ug/Kg
100-42-5	Styrene	2.45	U	0.44	4.9	ug/Kg
75-25-2	Bromoform	2.45	U	0.73	4.9	ug/Kg
98-82-8	Isopropylbenzene	2.45	U	0.47	4.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.45	U	0.45	4.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.45	U	0.37	4.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.45	U	0.41	4.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.45	U	0.61	4.9	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.45	U	0.86	4.9	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.45	U	0.69	4.9	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.6		55 - 158	93%	SPK: 50
1868-53-7	Dibromofluoromethane	43.4		53 - 156	87%	SPK: 50
2037-26-5	Toluene-d8	41.8	*	85 - 115	84%	SPK: 50
460-00-4	4-Bromofluorobenzene	29.7	*	85 - 120	59%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1875220	8.05			
540-36-3	1,4-Difluorobenzene	2903730	8.95			
3114-55-4	Chlorobenzene-d5	1442630	11.71			
3855-82-1	1,4-Dichlorobenzene-d4	460025	13.63			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-754	SDG No.:	D1280
Lab Sample ID:	D1280-08	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003161.D	1		01/26/12	VR012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	6.8		0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/24/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB133-GW-754	SDG No.:	D1280
Lab Sample ID:	D1280-08	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003161.D	1		01/26/12	VR012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	45.1		70 - 120	90%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		85 - 115	94%	SPK: 50
2037-26-5	Toluene-d8	47		85 - 120	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.4		75 - 120	95%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2099760	7.57			
540-36-3	1,4-Difluorobenzene	3691150	8.5			
3114-55-4	Chlorobenzene-d5	3210840	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1616800	13.25			



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/25/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-784	SDG No.:	D1320
Lab Sample ID:	D1320-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031006.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	53		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/25/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-784	SDG No.:	D1320
Lab Sample ID:	D1320-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031006.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	37.9		55 - 158	76%	SPK: 50
1868-53-7	Dibromofluoromethane	44.2		53 - 156	88%	SPK: 50
2037-26-5	Toluene-d8	47.1		85 - 115	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.6		85 - 120	89%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	173667	4.37			
540-36-3	1,4-Difluorobenzene	288467	5.11			
3114-55-4	Chlorobenzene-d5	263030	9.3			
3855-82-1	1,4-Dichlorobenzene-d4	124410	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
	unknown1.91	6.7	J		1.91	ug/Kg
	unknown5.78	7.0	J		5.78	ug/Kg
004057-42-5	2-Octene, 2,6-dimethyl-	5.5	J		10.89	ug/Kg





### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/25/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-794	SDG No.:	D1320
Lab Sample ID:	D1320-03	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003247.D	1		01/31/12	VR013112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.8		70 - 120	94%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		85 - 115	97%	SPK: 50
2037-26-5	Toluene-d8	47.5		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.6		75 - 120	99%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1942810	7.57			
540-36-3	1,4-Difluorobenzene	3480580	8.5			
3114-55-4	Chlorobenzene-d5	3106030	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1560550	13.25			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000115-07-1	Propene	6.4	J		1.81	ug/L
000124-13-0	Octanal	5.1	J		13.1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/26/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-808	SDG No.:	D1320
Lab Sample ID:	D1320-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.05      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031007.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.64	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.85	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.4	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	24	J	3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.95	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.68	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.93	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.98	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.88	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.73	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.87	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.63	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.85	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.61	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.63	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.78	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.71	5	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/26/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-808	SDG No.:	D1320
Lab Sample ID:	D1320-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031007.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.89	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.53	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.63	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.61	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	0.71	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	0.67	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.73	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.61	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.86	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.69	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	37.3		55 - 158	75%	SPK: 50
1868-53-7	Dibromofluoromethane	44.7		53 - 156	89%	SPK: 50
2037-26-5	Toluene-d8	48.6		85 - 115	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		85 - 120	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	172218	4.36			
540-36-3	1,4-Difluorobenzene	283909	5.1			
3114-55-4	Chlorobenzene-d5	265140	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	142657	12.22			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
042075-32-1	(2R,4R)-(-)-Pentane-2,4-diol	6.6	J		1.9	ug/Kg
000071-36-3	1-Butanol	7.2	J		5.77	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/26/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-814	SDG No.:	D1320
Lab Sample ID:	D1320-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031008.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	27		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/26/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-814	SDG No.:	D1320
Lab Sample ID:	D1320-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031008.D	1		01/30/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	38.7		55 - 158	77%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		53 - 156	91%	SPK: 50
2037-26-5	Toluene-d8	47.9		85 - 115	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	47		85 - 120	94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	157529	4.37			
540-36-3	1,4-Difluorobenzene	259847	5.11			
3114-55-4	Chlorobenzene-d5	246095	9.3			
3855-82-1	1,4-Dichlorobenzene-d4	121652	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
019489-10-2	cis-1-Ethyl-3-methyl-cyclohexane	6.3	J		9.78	ug/Kg
	unknown10.26	6.1	J		10.26	ug/Kg
006783-92-2	Cyclohexane, 1,1,2,3-tetramethyl-	6.6	J		10.89	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-824	SDG No.:	D1320
Lab Sample ID:	D1320-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.94      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031017.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.55	U	0.66	5.1	ug/Kg
74-87-3	Chloromethane	2.55	U	0.87	5.1	ug/Kg
75-01-4	Vinyl Chloride	2.55	U	1.2	5.1	ug/Kg
74-83-9	Bromomethane	2.55	U	2.5	5.1	ug/Kg
75-00-3	Chloroethane	2.55	U	1.4	5.1	ug/Kg
75-69-4	Trichlorofluoromethane	2.55	U	1.3	5.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.55	U	1.3	5.1	ug/Kg
75-35-4	1,1-Dichloroethene	2.55	U	1.5	5.1	ug/Kg
67-64-1	Acetone	28		3.1	25	ug/Kg
75-15-0	Carbon Disulfide	2.55	U	1.1	5.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.55	U	0.97	5.1	ug/Kg
79-20-9	Methyl Acetate	2.55	U	1.5	5.1	ug/Kg
75-09-2	Methylene Chloride	2.55	U	1.4	5.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.55	U	0.7	5.1	ug/Kg
75-34-3	1,1-Dichloroethane	2.55	U	0.95	5.1	ug/Kg
110-82-7	Cyclohexane	2.55	U	1	5.1	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.55	U	1	5.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.55	U	0.9	5.1	ug/Kg
67-66-3	Chloroform	2.55	U	0.75	5.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.55	U	0.89	5.1	ug/Kg
108-87-2	Methylcyclohexane	2.55	U	1.1	5.1	ug/Kg
71-43-2	Benzene	2.55	U	0.38	5.1	ug/Kg
107-06-2	1,2-Dichloroethane	2.55	U	0.65	5.1	ug/Kg
79-01-6	Trichloroethene	2.55	U	0.87	5.1	ug/Kg
78-87-5	1,2-Dichloropropane	2.55	U	0.26	5.1	ug/Kg
75-27-4	Bromodichloromethane	2.55	U	0.63	5.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	3	25	ug/Kg
108-88-3	Toluene	2.55	U	0.65	5.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.55	U	0.8	5.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.55	U	0.73	5.1	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-GW-824	SDG No.:	D1320
Lab Sample ID:	D1320-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.94 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031017.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.55	U	0.91	5.1	ug/Kg
591-78-6	2-Hexanone	12.5	U	4	25	ug/Kg
124-48-1	Dibromochloromethane	2.55	U	0.55	5.1	ug/Kg
106-93-4	1,2-Dibromoethane	2.55	U	0.65	5.1	ug/Kg
127-18-4	Tetrachloroethene	2.55	U	1	5.1	ug/Kg
108-90-7	Chlorobenzene	2.55	U	0.51	5.1	ug/Kg
100-41-4	Ethyl Benzene	2.55	U	0.63	5.1	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.73	10	ug/Kg
95-47-6	o-Xylene	2.55	U	0.69	5.1	ug/Kg
100-42-5	Styrene	2.55	U	0.46	5.1	ug/Kg
75-25-2	Bromoform	2.55	U	0.75	5.1	ug/Kg
98-82-8	Isopropylbenzene	2.55	U	0.49	5.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.55	U	0.47	5.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.55	U	0.37	5.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.55	U	0.41	5.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.55	U	0.63	5.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.55	U	0.88	5.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.55	U	0.71	5.1	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	39.7		55 - 158	79%	SPK: 50
1868-53-7	Dibromofluoromethane	43.7		53 - 156	87%	SPK: 50
2037-26-5	Toluene-d8	47.5		85 - 115	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		85 - 120	89%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	184326	4.36			
540-36-3	1,4-Difluorobenzene	322238	5.11			
3114-55-4	Chlorobenzene-d5	292119	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	134294	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
004926-78-7	Cyclohexane, 1-ethyl-4-methyl-, ci	5.8	J		9.78	ug/Kg
062960-76-3	4-Octene, 2,6-dimethyl-, [S-(E)]-	6.8	J		10.89	ug/Kg
1000152-47-3	trans-Decalin, 2-methyl-	7.6	J		12.88	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-834	SDG No.:	D1320
Lab Sample ID:	D1320-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031019.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	73		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-834	SDG No.:	D1320
Lab Sample ID:	D1320-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031019.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	38.4		55 - 158	77%	SPK: 50
1868-53-7	Dibromofluoromethane	44.7		53 - 156	89%	SPK: 50
2037-26-5	Toluene-d8	46.8		85 - 115	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.2		85 - 120	90%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	168606	4.37			
540-36-3	1,4-Difluorobenzene	272871	5.11			
3114-55-4	Chlorobenzene-d5	254088	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	122085	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
019489-10-2	cis-1-Ethyl-3-methyl-cyclohexane	5.7	J		9.78	ug/Kg
	unknown10.27	5.9	J		10.27	ug/Kg
062960-77-4	4-Octene, 2,6-dimethyl-, [S-(Z)]-	8.1	J		10.89	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-834	SDG No.:	D1320
Lab Sample ID:	D1320-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.98      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031019.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
000124-18-5	Decane	5.5	J		11.33	ug/Kg
007154-80-5	Heptane, 3,3,5-trimethyl-	7.3	J		11.69	ug/Kg
1000152-47-3	trans-Decalin, 2-methyl-	8.6	J		12.89	ug/Kg

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-844	SDG No.:	d1365
Lab Sample ID:	D1365-01	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031102.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	12.5	U	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-844	SDG No.:	d1365
Lab Sample ID:	D1365-01	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031102.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	45.8			92%	SPK: 50
1868-53-7	Dibromofluoromethane	49.6			99%	SPK: 50
2037-26-5	Toluene-d8	46.7			93%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2			94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	127195	4.38			
540-36-3	1,4-Difluorobenzene	215545	5.12			
3114-55-4	Chlorobenzene-d5	204289	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	104701	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
004926-78-7	Cyclohexane, 1-ethyl-4-methyl-, ci	5.1	J		9.79	ug/Kg
062960-77-4	4-Octene, 2,6-dimethyl-, [S-(Z)]-	6.5	J		10.9	ug/Kg
004291-79-6	Cyclohexane, 1-methyl-2-propyl-	5.1	J		11.21	ug/Kg



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-854	SDG No.:	d1365
Lab Sample ID:	D1365-02	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031103.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	18	J	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-854	SDG No.:	d1365
Lab Sample ID:	D1365-02	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031103.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	4.95	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	42.4			85%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1			96%	SPK: 50
2037-26-5	Toluene-d8	48			96%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.1			98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	122150	4.38			
540-36-3	1,4-Difluorobenzene	196307	5.12			
3114-55-4	Chlorobenzene-d5	193002	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	92557	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
	unknown10.90	5.7	J		10.9	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	12	J		12.29	ug/Kg
002958-76-1	Naphthalene, decahydro-2-methyl-	6.5	J		12.89	ug/Kg

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-864	SDG No.:	d1365
Lab Sample ID:	D1365-04	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.9 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031104.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.55	U	2.55	5.1	ug/Kg
74-87-3	Chloromethane	2.55	U	2.55	5.1	ug/Kg
75-01-4	Vinyl Chloride	2.55	U	2.55	5.1	ug/Kg
74-83-9	Bromomethane	2.55	U	2.55	5.1	ug/Kg
75-00-3	Chloroethane	2.55	U	2.55	5.1	ug/Kg
75-69-4	Trichlorofluoromethane	2.55	U	2.55	5.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.55	U	2.55	5.1	ug/Kg
75-35-4	1,1-Dichloroethene	2.55	U	2.55	5.1	ug/Kg
67-64-1	Acetone	13	U	13	26	ug/Kg
75-15-0	Carbon Disulfide	2.55	U	2.55	5.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.55	U	2.55	5.1	ug/Kg
79-20-9	Methyl Acetate	2.55	U	2.55	5.1	ug/Kg
75-09-2	Methylene Chloride	2.55	U	2.55	5.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.55	U	2.55	5.1	ug/Kg
75-34-3	1,1-Dichloroethane	2.55	U	2.55	5.1	ug/Kg
110-82-7	Cyclohexane	2.55	U	2.55	5.1	ug/Kg
78-93-3	2-Butanone	13	U	13	26	ug/Kg
56-23-5	Carbon Tetrachloride	2.55	U	2.55	5.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.55	U	2.55	5.1	ug/Kg
67-66-3	Chloroform	2.55	U	2.55	5.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.55	U	2.55	5.1	ug/Kg
108-87-2	Methylcyclohexane	2.55	U	2.55	5.1	ug/Kg
71-43-2	Benzene	2.55	U	2.55	5.1	ug/Kg
107-06-2	1,2-Dichloroethane	2.55	U	2.55	5.1	ug/Kg
79-01-6	Trichloroethene	2.55	U	2.55	5.1	ug/Kg
78-87-5	1,2-Dichloropropane	2.55	U	2.55	5.1	ug/Kg
75-27-4	Bromodichloromethane	2.55	U	2.55	5.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	13	U	13	26	ug/Kg
108-88-3	Toluene	2.55	U	2.55	5.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.55	U	2.55	5.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.55	U	2.55	5.1	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-864	SDG No.:	d1365
Lab Sample ID:	D1365-04	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.9 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031104.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.55	U	2.55	5.1	ug/Kg
591-78-6	2-Hexanone	13	U	13	26	ug/Kg
124-48-1	Dibromochloromethane	2.55	U	2.55	5.1	ug/Kg
106-93-4	1,2-Dibromoethane	2.55	U	2.55	5.1	ug/Kg
127-18-4	Tetrachloroethene	2.55	U	2.55	5.1	ug/Kg
108-90-7	Chlorobenzene	2.55	U	2.55	5.1	ug/Kg
100-41-4	Ethyl Benzene	2.55	U	2.55	5.1	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.55	U	2.55	5.1	ug/Kg
100-42-5	Styrene	2.55	U	2.55	5.1	ug/Kg
75-25-2	Bromoform	2.55	U	2.55	5.1	ug/Kg
98-82-8	Isopropylbenzene	2.55	U	2.55	5.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.55	U	2.55	5.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.55	U	2.55	5.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.55	U	2.55	5.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.55	U	2.55	5.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.55	U	2.55	5.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.55	U	2.55	5.1	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.3			97%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4			99%	SPK: 50
2037-26-5	Toluene-d8	46.9			94%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5			105%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	117380	4.38			
540-36-3	1,4-Difluorobenzene	199518	5.12			
3114-55-4	Chlorobenzene-d5	197635	9.32			
3855-82-1	1,4-Dichlorobenzene-d4	116640	12.23			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-874	SDG No.:	d1365
Lab Sample ID:	D1365-05	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031105.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.45	U	2.45	4.9	ug/Kg
74-87-3	Chloromethane	2.45	U	2.45	4.9	ug/Kg
75-01-4	Vinyl Chloride	2.45	U	2.45	4.9	ug/Kg
74-83-9	Bromomethane	2.45	U	2.45	4.9	ug/Kg
75-00-3	Chloroethane	2.45	U	2.45	4.9	ug/Kg
75-69-4	Trichlorofluoromethane	2.45	U	2.45	4.9	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.45	U	2.45	4.9	ug/Kg
75-35-4	1,1-Dichloroethene	2.45	U	2.45	4.9	ug/Kg
67-64-1	Acetone	20	J	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.45	U	2.45	4.9	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.45	U	2.45	4.9	ug/Kg
79-20-9	Methyl Acetate	2.45	U	2.45	4.9	ug/Kg
75-09-2	Methylene Chloride	2.45	U	2.45	4.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.45	U	2.45	4.9	ug/Kg
75-34-3	1,1-Dichloroethane	2.45	U	2.45	4.9	ug/Kg
110-82-7	Cyclohexane	2.45	U	2.45	4.9	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.45	U	2.45	4.9	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.45	U	2.45	4.9	ug/Kg
67-66-3	Chloroform	2.45	U	2.45	4.9	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.45	U	2.45	4.9	ug/Kg
108-87-2	Methylcyclohexane	2.45	U	2.45	4.9	ug/Kg
71-43-2	Benzene	2.45	U	2.45	4.9	ug/Kg
107-06-2	1,2-Dichloroethane	2.45	U	2.45	4.9	ug/Kg
79-01-6	Trichloroethene	2.45	U	2.45	4.9	ug/Kg
78-87-5	1,2-Dichloropropane	2.45	U	2.45	4.9	ug/Kg
75-27-4	Bromodichloromethane	2.45	U	2.45	4.9	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.45	U	2.45	4.9	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.45	U	2.45	4.9	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.45	U	2.45	4.9	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-874	SDG No.:	d1365
Lab Sample ID:	D1365-05	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.1 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031105.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.45	U	2.45	4.9	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.45	U	2.45	4.9	ug/Kg
106-93-4	1,2-Dibromoethane	2.45	U	2.45	4.9	ug/Kg
127-18-4	Tetrachloroethene	2.45	U	2.45	4.9	ug/Kg
108-90-7	Chlorobenzene	2.45	U	2.45	4.9	ug/Kg
100-41-4	Ethyl Benzene	2.45	U	2.45	4.9	ug/Kg
179601-23-1	m/p-Xylenes	4.9	U	4.9	9.8	ug/Kg
95-47-6	o-Xylene	2.45	U	2.45	4.9	ug/Kg
100-42-5	Styrene	2.45	U	2.45	4.9	ug/Kg
75-25-2	Bromoform	2.45	U	2.45	4.9	ug/Kg
98-82-8	Isopropylbenzene	2.45	U	2.45	4.9	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.45	U	2.45	4.9	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.45	U	2.45	4.9	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.45	U	2.45	4.9	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.45	U	2.45	4.9	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.45	U	2.45	4.9	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.45	U	2.45	4.9	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	42.4			85%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4			99%	SPK: 50
2037-26-5	Toluene-d8	46.7			93%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.6			99%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	115953	4.38			
540-36-3	1,4-Difluorobenzene	193839	5.12			
3114-55-4	Chlorobenzene-d5	182472	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	93548	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
019489-10-2	cis-1-Ethyl-3-methyl-cyclohexane	5.6	J		9.79	ug/Kg
004057-42-5	2-Octene, 2,6-dimethyl-	5.8	J		10.9	ug/Kg
004291-80-9	Cyclohexane, 1-methyl-3-propyl-	5.3	J		11.21	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-884	SDG No.:	d1365
Lab Sample ID:	D1365-06	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.02      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031106.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	20	J	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-884	SDG No.:	d1365
Lab Sample ID:	D1365-06	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.02 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031106.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	44.9			90%	SPK: 50
1868-53-7	Dibromofluoromethane	47.3			95%	SPK: 50
2037-26-5	Toluene-d8	48.2			96%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.8			100%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	112730	4.37			
540-36-3	1,4-Difluorobenzene	186646	5.12			
3114-55-4	Chlorobenzene-d5	185922	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	98976	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
004926-78-7	Cyclohexane, 1-ethyl-4-methyl-, ci	5.1	J		9.79	ug/Kg
062960-76-3	4-Octene, 2,6-dimethyl-, [S-(E)]-	6.1	J		10.9	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	11	J		12.29	ug/Kg



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/01/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-904	SDG No.:	d1365
Lab Sample ID:	D1365-07	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031107.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	33		12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.6	J	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/01/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-904	SDG No.:	d1365
Lab Sample ID:	D1365-07	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031107.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	41.5			83%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7			101%	SPK: 50
2037-26-5	Toluene-d8	47			94%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.6			93%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	118755	4.38			
540-36-3	1,4-Difluorobenzene	190733	5.12			
3114-55-4	Chlorobenzene-d5	188018	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	91985	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000107-46-0	Disiloxane, hexamethyl-	13	J		3.92	ug/Kg
062960-77-4	4-Octene, 2,6-dimethyl-, [S-(Z)]-	5.7	J		10.9	ug/Kg
000124-18-5	Decane	5.8	J		11.34	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/01/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-GW-904	SDG No.:	d1365
Lab Sample ID:	D1365-07	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031107.D	1		02/02/12	VF020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
002847-72-5	Decane, 4-methyl-	7.2	J		11.69	ug/Kg
000493-02-7	Naphthalene, decahydro-, trans-	9.0	J		12.29	ug/Kg
015232-85-6	Cyclohexene, 1-pentyl-	5.7	J		12.89	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-939	SDG No.:	D1436
Lab Sample ID:	D1436-02	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031172.D	1		02/09/12	VF020912

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	12.5	U	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-939	SDG No.:	D1436
Lab Sample ID:	D1436-02	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031172.D	1		02/09/12	VF020912

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	40.3		55 - 158	81%	SPK: 50
1868-53-7	Dibromofluoromethane	45		53 - 156	90%	SPK: 50
2037-26-5	Toluene-d8	43.6		85 - 115	87%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.1		85 - 120	90%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	146721	4.36			
540-36-3	1,4-Difluorobenzene	228247	5.11			
3114-55-4	Chlorobenzene-d5	214434	9.3			
3855-82-1	1,4-Dichlorobenzene-d4	123228	12.23			





### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-959	SDG No.:	D1436
Lab Sample ID:	D1436-03	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031173.D	1		02/09/12	VF020912

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	12.5	U	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-959	SDG No.:	D1436
Lab Sample ID:	D1436-03	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031173.D	1		02/09/12	VF020912

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	5	10	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	37.5		55 - 158	75%	SPK: 50
1868-53-7	Dibromofluoromethane	43.8		53 - 156	88%	SPK: 50
2037-26-5	Toluene-d8	43.1		85 - 115	86%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.9	*	85 - 120	80%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	130671	4.37			
540-36-3	1,4-Difluorobenzene	199948	5.11			
3114-55-4	Chlorobenzene-d5	179692	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	88473	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
006236-88-0	Cyclohexane, 1-ethyl-4-methyl-, tr	5.8	J		9.78	ug/Kg
	unknown10.26	7.2	J		10.26	ug/Kg
062960-76-3	4-Octene, 2,6-dimethyl-, [S-(E)]-	8.4	J		10.89	ug/Kg



### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-959RE	SDG No.:	D1436
Lab Sample ID:	D1436-03RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031182.D	1		02/10/12	VF021012

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	5	ug/Kg
74-87-3	Chloromethane	2.5	U	2.5	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	2.5	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	2.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	2.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	2.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-64-1	Acetone	12.5	U	12.5	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	2.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	2.5	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	2.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	2.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	2.5	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	2.5	5	ug/Kg
78-93-3	2-Butanone	12.5	U	12.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	2.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	5	ug/Kg
67-66-3	Chloroform	2.5	U	2.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	2.5	5	ug/Kg
71-43-2	Benzene	2.5	U	2.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	2.5	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	2.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	2.5	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	2.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	12.5	25	ug/Kg
108-88-3	Toluene	2.5	U	2.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-959RE	SDG No.:	D1436
Lab Sample ID:	D1436-03RE	Matrix:	SOIL
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031182.D	1		02/10/12	VF021012

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	12.5	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	2.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	2.5	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	2.5	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	2.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	2.5	5	ug/Kg
179601-23-1	m/p-Xylenes	4.95	U	4.95	9.9	ug/Kg
95-47-6	o-Xylene	2.5	U	2.5	5	ug/Kg
100-42-5	Styrene	2.5	U	2.5	5	ug/Kg
75-25-2	Bromoform	2.5	U	2.5	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	2.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	35.4		55 - 158	71%	SPK: 50
1868-53-7	Dibromofluoromethane	43.2		53 - 156	86%	SPK: 50
2037-26-5	Toluene-d8	42.8		85 - 115	86%	SPK: 50
460-00-4	4-Bromofluorobenzene	39	*	85 - 120	78%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	132978	4.37			
540-36-3	1,4-Difluorobenzene	201783	5.11			
3114-55-4	Chlorobenzene-d5	178169	9.31			
3855-82-1	1,4-Dichlorobenzene-d4	92610	12.23			





## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/03/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-974	SDG No.:	D1436
Lab Sample ID:	D1436-04	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040833.D	1		02/08/12	VG020812

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	1	ug/L
74-87-3	Chloromethane	0.5	U	0.5	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.5	1	ug/L
74-83-9	Bromomethane	0.5	U	0.5	1	ug/L
75-00-3	Chloroethane	0.5	U	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.5	1	ug/L
67-64-1	Acetone	2.5	U	2.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.5	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.5	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.5	1	ug/L
78-93-3	2-Butanone	2.5	U	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
67-66-3	Chloroform	0.5	U	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.5	1	ug/L
71-43-2	Benzene	0.5	U	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.5	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.5	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	5	ug/L
108-88-3	Toluene	0.5	U	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/03/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-GW-974	SDG No.:	D1436
Lab Sample ID:	D1436-04	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040833.D	1		02/08/12	VG020812

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.5	1	ug/L
591-78-6	2-Hexanone	2.5	U	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.5	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.5	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.5	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.5	1	ug/L
179601-23-1	m/p-Xylenes	1	U	1	2	ug/L
95-47-6	o-Xylene	0.5	U	0.5	1	ug/L
100-42-5	Styrene	0.5	U	0.5	1	ug/L
75-25-2	Bromoform	0.5	U	0.5	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	57		70 - 120	114%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		85 - 115	97%	SPK: 50
2037-26-5	Toluene-d8	49.1		85 - 120	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.7		75 - 120	75%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	915668	3.9			
540-36-3	1,4-Difluorobenzene	1327230	4.7			
3114-55-4	Chlorobenzene-d5	1042240	9.67			
3855-82-1	1,4-Dichlorobenzene-d4	518076	13.38			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
000110-62-3	Pentanal	5.7	J		6.36	ug/L
000111-71-7	Heptanal	9.6	J		11.78	ug/L
000124-13-0	Octanal	9.7	J		13.8	ug/L



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-DW	SDG No.:	D1320
Lab Sample ID:	D1320-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003248.D	1		01/31/12	VR013112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	1.6	J	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.63	J	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	1.1		0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-DW	SDG No.:	D1320
Lab Sample ID:	D1320-07	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003248.D	1		01/31/12	VR013112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	1.7		0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.5		70 - 120	93%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		85 - 115	97%	SPK: 50
2037-26-5	Toluene-d8	47.5		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		75 - 120	99%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1944130	7.57			
540-36-3	1,4-Difluorobenzene	3466960	8.5			
3114-55-4	Chlorobenzene-d5	3087860	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1540100	13.25			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-DM	SDG No.:	D1320
Lab Sample ID:	D1320-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031018.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	2.5	U	0.65	5	ug/Kg
74-87-3	Chloromethane	2.5	U	0.86	5	ug/Kg
75-01-4	Vinyl Chloride	2.5	U	1.2	5	ug/Kg
74-83-9	Bromomethane	2.5	U	2.5	5	ug/Kg
75-00-3	Chloroethane	2.5	U	1.4	5	ug/Kg
75-69-4	Trichlorofluoromethane	2.5	U	1.3	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2.5	U	1.3	5	ug/Kg
75-35-4	1,1-Dichloroethene	2.5	U	1.5	5	ug/Kg
67-64-1	Acetone	51		3	25	ug/Kg
75-15-0	Carbon Disulfide	2.5	U	1.1	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.5	U	0.96	5	ug/Kg
79-20-9	Methyl Acetate	2.5	U	1.5	5	ug/Kg
75-09-2	Methylene Chloride	2.5	U	1.4	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.5	U	0.69	5	ug/Kg
75-34-3	1,1-Dichloroethane	2.5	U	0.94	5	ug/Kg
110-82-7	Cyclohexane	2.5	U	1	5	ug/Kg
78-93-3	2-Butanone	12.5	U	3.1	25	ug/Kg
56-23-5	Carbon Tetrachloride	2.5	U	0.99	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.5	U	0.89	5	ug/Kg
67-66-3	Chloroform	2.5	U	0.74	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.5	U	0.88	5	ug/Kg
108-87-2	Methylcyclohexane	2.5	U	1.1	5	ug/Kg
71-43-2	Benzene	2.5	U	0.38	5	ug/Kg
107-06-2	1,2-Dichloroethane	2.5	U	0.64	5	ug/Kg
79-01-6	Trichloroethene	2.5	U	0.86	5	ug/Kg
78-87-5	1,2-Dichloropropane	2.5	U	0.26	5	ug/Kg
75-27-4	Bromodichloromethane	2.5	U	0.62	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12.5	U	2.9	25	ug/Kg
108-88-3	Toluene	2.5	U	0.64	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.5	U	0.79	5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.5	U	0.72	5	ug/Kg

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-DM	SDG No.:	D1320
Lab Sample ID:	D1320-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031018.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	2.5	U	0.9	5	ug/Kg
591-78-6	2-Hexanone	12.5	U	3.9	25	ug/Kg
124-48-1	Dibromochloromethane	2.5	U	0.54	5	ug/Kg
106-93-4	1,2-Dibromoethane	2.5	U	0.64	5	ug/Kg
127-18-4	Tetrachloroethene	2.5	U	1	5	ug/Kg
108-90-7	Chlorobenzene	2.5	U	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	2.5	U	0.62	5	ug/Kg
179601-23-1	m/p-Xylenes	5	U	0.72	10	ug/Kg
95-47-6	o-Xylene	2.5	U	0.68	5	ug/Kg
100-42-5	Styrene	2.5	U	0.45	5	ug/Kg
75-25-2	Bromoform	2.5	U	0.74	5	ug/Kg
98-82-8	Isopropylbenzene	2.5	U	0.48	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	0.46	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.5	U	0.37	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.5	U	0.41	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.5	U	0.62	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	0.87	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.5	U	0.7	5	ug/Kg
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	37.7		55 - 158	75%	SPK: 50
1868-53-7	Dibromofluoromethane	42.2		53 - 156	84%	SPK: 50
2037-26-5	Toluene-d8	46.5		85 - 115	93%	SPK: 50
460-00-4	4-Bromofluorobenzene	45		85 - 120	90%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	179987	4.37			
540-36-3	1,4-Difluorobenzene	306389	5.11			
3114-55-4	Chlorobenzene-d5	276236	9.3			
3855-82-1	1,4-Dichlorobenzene-d4	126167	12.23			
<b>TENTATIVE IDENTIFIED COMPOUNDS</b>						
019489-10-2	cis-1-Ethyl-3-methyl-cyclohexane	5.7	J		9.78	ug/Kg
004057-42-5	2-Octene, 2,6-dimethyl-	7.2	J		10.89	ug/Kg
	unknown11.68	5.1	J		11.68	ug/Kg



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/27/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB133-DM	SDG No.:	D1320
Lab Sample ID:	D1320-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	4.99      Units: g	Final Vol:	5000      uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-624      ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF031018.D	1		01/31/12	VF013012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
015932-80-6	Cyclohexanone, 5-methyl-2-(1-methy	7.7	J		12.89	ug/Kg

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/04/12
Project:	Bethpage CTO-066	Date Received:	01/07/12
Client Sample ID:	BP-VPB-TB-010412	SDG No.:	D1061
Lab Sample ID:	D1061-02	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040185.D	1		01/10/12	VG011012

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB-TB-010912	SDG No.:	D1108
Lab Sample ID:	D1108-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040262.D	1		01/17/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/09/12
Project:	Bethpage CTO-066	Date Received:	01/12/12
Client Sample ID:	BP-VPB-TB-010912	SDG No.:	D1108
Lab Sample ID:	D1108-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040262.D	1		01/17/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	57.1		70 - 120	114%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		85 - 115	104%	SPK: 50
2037-26-5	Toluene-d8	56.1		85 - 120	112%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		75 - 120	101%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	582730	3.92			
540-36-3	1,4-Difluorobenzene	1231710	4.74			
3114-55-4	Chlorobenzene-d5	1471790	9.71			
3855-82-1	1,4-Dichlorobenzene-d4	555218	13.42			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB-TB-011212	SDG No.:	D1148
Lab Sample ID:	D1148-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040292.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/12/12
Project:	Bethpage CTO-066	Date Received:	01/14/12
Client Sample ID:	BP-VPB-TB-011212	SDG No.:	D1148
Lab Sample ID:	D1148-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040292.D	1		01/18/12	VG011712

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	64.2	*	70 - 120	128%	SPK: 50
1868-53-7	Dibromofluoromethane	52.3		85 - 115	105%	SPK: 50
2037-26-5	Toluene-d8	55.2		85 - 120	110%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		75 - 120	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	494984	3.92			
540-36-3	1,4-Difluorobenzene	1055750	4.72			
3114-55-4	Chlorobenzene-d5	1238450	9.7			
3855-82-1	1,4-Dichlorobenzene-d4	468799	13.4			



**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB-TB-011612	SDG No.:	D1208
Lab Sample ID:	D1208-02	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002996.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/16/12
Project:	Bethpage CTO-066	Date Received:	01/19/12
Client Sample ID:	BP-VPB-TB-011612	SDG No.:	D1208
Lab Sample ID:	D1208-02	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR002996.D	1		01/19/12	VR011912

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.9		70 - 120	94%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		85 - 115	101%	SPK: 50
2037-26-5	Toluene-d8	53.7		85 - 120	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		75 - 120	105%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2379270	7.57			
540-36-3	1,4-Difluorobenzene	4254370	8.5			
3114-55-4	Chlorobenzene-d5	3847920	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1959820	13.26			

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/19/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB-TB-011912	SDG No.:	D1280
Lab Sample ID:	D1280-02	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003155.D	1		01/26/12	VR012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/19/12
Project:	Bethpage CTO-066	Date Received:	01/25/12
Client Sample ID:	BP-VPB-TB-011912	SDG No.:	D1280
Lab Sample ID:	D1280-02	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003155.D	1		01/26/12	VR012612

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.4		70 - 120	93%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		85 - 115	95%	SPK: 50
2037-26-5	Toluene-d8	47.5		85 - 120	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.9		75 - 120	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	2127190	7.57			
540-36-3	1,4-Difluorobenzene	3780160	8.5			
3114-55-4	Chlorobenzene-d5	3288400	11.32			
3855-82-1	1,4-Dichlorobenzene-d4	1654110	13.25			

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/25/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB-TB-012512	SDG No.:	D1320
Lab Sample ID:	D1320-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003246.D	1		01/31/12	VR013112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	1	ug/L
67-64-1	Acetone	2.5	U	0.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	1	ug/L
71-43-2	Benzene	0.5	U	0.32	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	5	ug/L
108-88-3	Toluene	0.5	U	0.37	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/25/12
Project:	Bethpage CTO-066	Date Received:	01/28/12
Client Sample ID:	BP-VPB-TB-012512	SDG No.:	D1320
Lab Sample ID:	D1320-01	Matrix:	WATER
Analytical Method:	SW8260B	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003246.D	1		01/31/12	VR013112

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	1	ug/L
100-42-5	Styrene	0.5	U	0.36	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	46.1		70 - 120	92%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		85 - 115	96%	SPK: 50
2037-26-5	Toluene-d8	47.2		85 - 120	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		75 - 120	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1927340	7.57			
540-36-3	1,4-Difluorobenzene	3489970	8.5			
3114-55-4	Chlorobenzene-d5	3070250	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1540680	13.25			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-TB-013012-JF	SDG No.:	d1365
Lab Sample ID:	D1365-03	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003356.D	1		02/02/12	VR020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	1	ug/L
74-87-3	Chloromethane	0.5	U	0.5	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.5	1	ug/L
74-83-9	Bromomethane	0.5	U	0.5	1	ug/L
75-00-3	Chloroethane	0.5	U	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.5	1	ug/L
67-64-1	Acetone	2.5	U	2.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.5	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.5	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.5	1	ug/L
78-93-3	2-Butanone	2.5	U	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
67-66-3	Chloroform	0.5	U	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.5	1	ug/L
71-43-2	Benzene	0.5	U	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.5	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.5	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	5	ug/L
108-88-3	Toluene	0.5	U	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	1	ug/L



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/30/12
Project:	Bethpage CTO-066	Date Received:	02/02/12
Client Sample ID:	BP-VPB133-TB-013012-JF	SDG No.:	d1365
Lab Sample ID:	D1365-03	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR003356.D	1		02/02/12	VR020212

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.5	1	ug/L
591-78-6	2-Hexanone	2.5	U	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.5	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.5	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.5	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.5	1	ug/L
179601-23-1	m/p-Xylenes	1	U	1	2	ug/L
95-47-6	o-Xylene	0.5	U	0.5	1	ug/L
100-42-5	Styrene	0.5	U	0.5	1	ug/L
75-25-2	Bromoform	0.5	U	0.5	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.4			95%	SPK: 50
1868-53-7	Dibromofluoromethane	49			98%	SPK: 50
2037-26-5	Toluene-d8	43.9			88%	SPK: 50
460-00-4	4-Bromofluorobenzene	48			96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1721070	7.57			
540-36-3	1,4-Difluorobenzene	3089190	8.5			
3114-55-4	Chlorobenzene-d5	2384890	11.31			
3855-82-1	1,4-Dichlorobenzene-d4	1362130	13.25			

### Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-TB-020212-JRF	SDG No.:	D1436
Lab Sample ID:	D1436-01	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040832.D	1		02/08/12	VG020812

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	1	ug/L
74-87-3	Chloromethane	0.5	U	0.5	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.5	1	ug/L
74-83-9	Bromomethane	0.5	U	0.5	1	ug/L
75-00-3	Chloroethane	0.5	U	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.5	1	ug/L
67-64-1	Acetone	2.5	U	2.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.5	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.5	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.5	1	ug/L
78-93-3	2-Butanone	2.5	U	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	1	ug/L
67-66-3	Chloroform	0.5	U	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.5	1	ug/L
71-43-2	Benzene	0.5	U	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.5	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.5	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	5	ug/L
108-88-3	Toluene	0.5	U	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	1	ug/L

**Report of Analysis**

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/02/12
Project:	Bethpage CTO-066	Date Received:	02/08/12
Client Sample ID:	BP-VPB133-TB-020212-JRF	SDG No.:	D1436
Lab Sample ID:	D1436-01	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VG040832.D	1		02/08/12	VG020812

CAS Number	Parameter	Conc.	Qualifier	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.5	U	0.5	1	ug/L
591-78-6	2-Hexanone	2.5	U	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.5	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.5	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.5	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.5	1	ug/L
179601-23-1	m/p-Xylenes	1	U	1	2	ug/L
95-47-6	o-Xylene	0.5	U	0.5	1	ug/L
100-42-5	Styrene	0.5	U	0.5	1	ug/L
75-25-2	Bromoform	0.5	U	0.5	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	1	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	55.9		70 - 120	112%	SPK: 50
1868-53-7	Dibromofluoromethane	43.3		85 - 115	87%	SPK: 50
2037-26-5	Toluene-d8	44.7		85 - 120	89%	SPK: 50
460-00-4	4-Bromofluorobenzene	38.5		75 - 120	77%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	1005150	3.89			
540-36-3	1,4-Difluorobenzene	1484850	4.7			
3114-55-4	Chlorobenzene-d5	1077240	9.68			
3855-82-1	1,4-Dichlorobenzene-d4	523570	13.37			





Air Toxics

Client Sample ID: BP-VPB133-AIR-060612

Lab ID#: 1206167-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v061110	Date of Collection:	6/7/12 12:00:00 PM
Dil. Factor:	1.34	Date of Analysis:	6/11/12 03:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.067	Not Detected U	0.36	Not Detected U
Carbon Tetrachloride	0.067	0.056 J	0.42	0.35 J
Trichloroethene	0.067	Not Detected U	0.36	Not Detected U
Bromodichloromethane	0.067	Not Detected U	0.45	Not Detected U
1,1,2-Trichloroethane	0.067	Not Detected U	0.36	Not Detected U
Tetrachloroethene	0.067	0.016 J	0.45	0.11 J
Dibromochloromethane	0.067	Not Detected U	0.57	Not Detected U
1,2-Dibromoethane (EDB)	0.067	Not Detected U	0.51	Not Detected U
1,1,2,2-Tetrachloroethane	0.067	Not Detected UJ	0.46	Not Detected UJ
1,3-Dichlorobenzene	0.067	Not Detected U	0.40	Not Detected U
1,4-Dichlorobenzene	0.067	Not Detected U	0.40	Not Detected U
1,2-Dichlorobenzene	0.067	Not Detected U	0.40	Not Detected U
Freon 12	0.067	0.41	0.33	2.0
Freon 114	0.067	Not Detected U	0.47	Not Detected U
Freon 11	0.067	0.19	0.38	1.1
Freon 113	0.067	0.068	0.51	0.52
Bromoform	0.067	Not Detected U	0.69	Not Detected U
Vinyl Chloride	0.13	Not Detected U	0.34	Not Detected U
1,1-Dichloroethene	0.13	Not Detected U	0.53	Not Detected U
1,1-Dichloroethane	0.13	Not Detected U	0.54	Not Detected U
cis-1,2-Dichloroethene	0.13	Not Detected U	0.53	Not Detected U
Benzene	0.13	0.098 J	0.43	0.31 J
1,2-Dichloroethane	0.13	0.018 J	0.54	0.073 J
Toluene	0.13	0.22	0.50	0.84
Ethyl Benzene	0.13	0.026 J	0.58	0.11 J
m,p-Xylene	0.13	0.078 J	0.58	0.34 J
o-Xylene	0.13	0.030 J	0.58	0.13 J
trans-1,2-Dichloroethene	0.13	Not Detected U	0.53	Not Detected U
Methyl tert-butyl ether	0.13	Not Detected U	0.48	Not Detected U
Chloromethane	0.13	0.40	0.28	0.82
Bromomethane	0.13	0.064 J	0.52	0.25 J
Chloroethane	0.67	Not Detected U	1.8	Not Detected U
Hexane	0.13	0.14	0.47	0.50
2-Butanone (Methyl Ethyl Ketone)	0.67	0.29 J	2.0	0.86 J
Chloroform	0.13	Not Detected U	0.65	Not Detected U
Cyclohexane	0.13	0.027 J	0.46	0.094 J
1,2-Dichloropropane	0.13	Not Detected U	0.62	Not Detected U
1,4-Dioxane	0.13	0.23	0.48	0.82
cis-1,3-Dichloropropene	0.13	Not Detected U	0.61	Not Detected U
4-Methyl-2-pentanone	0.13	0.028 J	0.55	0.11 J
trans-1,3-Dichloropropene	0.13	Not Detected U	0.61	Not Detected U
Chlorobenzene	0.13	Not Detected U	0.62	Not Detected U



Client Sample ID: BP-VPB133-AIR-060612

Lab ID#: 1206167-01A

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

<b>File Name:</b>	<b>v061110</b>	<b>Date of Collection:</b> 6/7/12 12:00:00 PM
<b>Dil. Factor:</b>	<b>1.34</b>	<b>Date of Analysis:</b> 6/11/12 03:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.13	Not Detected U	0.57	Not Detected U
1,3,5-Trimethylbenzene	0.13	Not Detected U	0.66	Not Detected U
1,2,4-Trimethylbenzene	0.13	Not Detected U	0.66	Not Detected U
alpha-Chlorotoluene	0.13	Not Detected U	0.69	Not Detected U
2,2,4-Trimethylpentane	0.13	0.12 J	0.62	0.56 J
tert-Butyl alcohol	0.67	0.063 J	2.0	0.19 J
Methylene Chloride	0.67	0.13 J	2.3	0.46 J
Hexachlorobutadiene	0.67	Not Detected U	7.1	Not Detected U
Ethanol	0.67	1.7	1.3	3.2
1,2,4-Trichlorobenzene	0.67	Not Detected U	5.0	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

J = Estimated value.

UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

**TENTATIVELY IDENTIFIED COMPOUNDS**

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane	106-97-8	58%	1.6 NJ
Acetaldehyde	75-07-0	64%	1.9 NJ
Butane, 2-methyl-	78-78-4	72%	1.4 NJ
2-Propanone	67-64-1	9.0%	2.7 NJ
Butanal	123-72-8	30%	0.78 NJ

NJ =The identification is based on presumptive evidence; estimated value.

**Container Type: 6 Liter Summa Canister (100% Certified)**

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	110	87-118
1,2-Dichloroethane-d4	89	78-134
Toluene-d8	101	91-106

**Section 5**  
**VPB 133 Chain of Custody Records**





D1108



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **Nº 1166**

PAGE 1 OF 1

PROJECT NO: <b>112600622</b>		FACILITY: <b>BETHPAGE 00-2</b>		PROJECT MANAGER <b>David Brink</b>		PHONE NUMBER <b>757-461-3768</b>		LABORATORY NAME AND CONTACT: <b>CHEMTECH</b>			
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER <b>J. Ferguson / J. Conner</b>		PHONE NUMBER <b>412-496-9283</b>		ADDRESS <b>284 Sheffield Street</b>			
CARRIER/WAYBILL NUMBER <b>8993 8010 8761</b>						CITY, STATE <b>Mountainside NJ 07092</b>					
STANDARD TAT <input type="checkbox"/> <b>72 hr</b> <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day RUSH TAT <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input checked="" type="checkbox"/> 72 hr				CONTAINER TYPE PLASTIC (P) or GLASS (G) <b>G</b>		PRESERVATIVE USED		TYPE OF ANALYSIS <i>Vanadium Determination</i>			
DATE YEAR <b>2012</b>				TOP DEPTH (FT)		BOTTOM DEPTH (FT)					
TIME				LOCATION ID		No. OF CONTAINERS		GRAB (G) COMP (C)		COMMENTS	
01-09 11:00				BP-VPB-TB-010913		VPB 133		GW G 2		X	
01-09 13:10				BP-VPB-133-GW-234		VPB 133		GW G 2		X split sample	
01-09 15:05				BP-VPB133-GW-254		VPB 133		GW G 2		X split sample	
01-10 10:10				BP-VPB133-GW-274		VPB 133		GW G 2		X split sample	
1-10 12:10				BP-VPB133-GW-294		VPB 133		GW G 2		X split sample	
1-10 15:15				BP-VPB133-GW-314		VPB 133		GW G 2		X split sample	
1-11 10:20				BP-VPB133-GW-334		VPB 133		GW G 2		X "	
1-11 13:00				BP-VPB133-GW-354		VPB 133		GW G 2		X " "	
1-11 16:30				BP-VPB133-GW-374		VPB 133		GW G 2		X " "	
1. RELINQUISHED BY				DATE <b>1/11/12</b>		TIME <b>18:00</b>		1. RECEIVED BY <b>FedEx # 8993 8010 8761</b>		DATE <b>1/11/12</b>	
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY		TIME	
3. RELINQUISHED BY <b>FedEx</b>				DATE <b>1/12/12</b>		TIME <b>9:10</b>		3. RECEIVED BY <b>PS</b>		DATE <b>1/12/12</b>	
COMMENTS											

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FORM NO. TINUS-001

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TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER

No 1165

PAGE 1 OF 1

D1148

PROJECT NO: 112600622		FACILITY: BENTONITE 002 VPB133		PROJECT MANAGER David Brannick		PHONE NUMBER 257 461 3768		LABORATORY NAME AND CONTACT: LUMATECH (K. Hummel)					
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER Jim Ferguson		PHONE NUMBER 412-496-9283		ADDRESS 284 Sheffield Street					
				CARRIER/WAYBILL NUMBER 8993 8010 8772				CITY, STATE Mountainside NJ 07093					
STANDARD TAT <input type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input checked="" type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day								CONTAINER TYPE PLASTIC (P) or GLASS (G)		TYPE OF ANALYSIS <i>Multiple Organics Expendable</i>			
								PRESERVATIVE USED					
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS				COMMENTS	
1/12	08:00	BP-VPB-TB-011212	-	-	-	GW	G	2	x				
1/12	10:55	BP-VPB133-GW-394	VPB 133	393	394	GW	G	2	x				insufficient volume for split with H2O2
1/12	12:25	BP-VPB133-GW-414	VPB 133	413	414	GW	G	2	x				" " "
1/12	15:40	BP-VPB133-GW-434	VPB 133	433	434	GW	G	2	x				split sample 1/2 PM
1/13	10:15	BP-VPB133-GW-454	VPB 133	453	454	GW	G	2	x				" " "
1/13	12:15	BP-VPB133-GW-474	VPB 133	473	474	GW	G	2	x				" " "
1/13	14:10	BP-VPB133-GW-494	VPB 133	493	494	GW	G	2	x				x x x
1. RELINQUISHED BY				DATE	TIME	1. RECEIVED BY <i>Federal Express AB# 8993 8010 8772</i>				DATE	TIME		
2. RELINQUISHED BY				DATE	TIME	2. RECEIVED BY				DATE	TIME		
3. RELINQUISHED BY <i>Fed Ex</i>				DATE	TIME	3. RECEIVED BY <i>Ken Burns</i>				DATE	TIME		
COMMENTS													

DISTRIBUTION:

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FORM NO. TMIUS-001

D1208



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **Nº 1151**

PAGE      OF     

PROJECT NO: <b>112600622</b>	FACILITY: <b>BENTONITE CWA VPB133</b>	PROJECT MANAGER <b>David Braylock</b>	PHONE NUMBER <b>757-461-3768</b>	LABORATORY NAME AND CONTACT: <b>CHAMBERLAIN (K. Hummel)</b>
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER <b>J. Ferguson / S. Counts</b>	PHONE NUMBER <b>412-496-9283</b>	ADDRESS <b>284 Shorthill Street</b>
CARRIER/WAYBILL NUMBER <b>8987 4256 0978</b>			CITY, STATE <b>Mountainside NJ 07092</b>	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED	TYPE OF ANALYSIS <i>Vanadium Organic Comp. etc.</i>	COMMENTS
1/16	12:00	BP-VPB133-GW-514	VPB133	513	514	GW	G	2	X				Split Sample H2O2
1/16	10:00	BP-VPB-TB-011612	-	-	-	GW	G	2	X				TRIP BLANK
1/16	16:30	BP-VPB133-GW-534	VPB133	533	534	GW	G	2	X				1/2M Split Sample
1/17	10:30	BP-VPB133-GW-554	VPB133	553	554	GW	G	2	X				1/2M Split Sample
1/17	13:25	BP-VPB133-GW-574	VPB133	573	574	GW	G	2	X				SEDIMENT in sample Due to highly perme. zone.
1/17	16:00	BP-VPB133-GW-594	VPB133	593	594	GW	G	2	X				" " " "
1/18	10:15	BP-VPB133-GW-614	VPB133	613	614	GW	G	2	X				SEDIMENT in sample highly permeable zone
1/18	13:15	BP-VPB133-GW-634	VPB133	633	634	GW	G	2	X				Noted reaction in water when filtering VOC for.
1/18	16:00	BP-VPB133-GW-654	VPB133	653	654	GW	G	2	X				1/2M sediment control

1. RELINQUISHED BY 	DATE <b>1/18/2012</b>	TIME <b>17:30</b>	1. RECEIVED BY <b>FEDERAL EXPRESS AB# 8987 4256 0978</b>	DATE <b>1/18/2012</b>	TIME <b>17:30</b>
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY <b>FedEx</b>	DATE <b>1/19/12</b>	TIME <b>9:10</b>	3. RECEIVED BY	DATE	TIME

COMMENTS

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D1280



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **N<sup>o</sup> 1154**

PAGE **1** OF **1**

PROJECT NO: <b>112600622</b>	FACILITY: <b>BETHUNE 002 VPB133</b>	PROJECT MANAGER <b>David BRYANIK</b>	PHONE NUMBER <b>757-461-3768</b>	LABORATORY NAME AND CONTACT: <b>ChemTech (K. Kimmel)</b>
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER <b>J. Ferguson / J. C. ...</b>	PHONE NUMBER <b>412-496-9283</b>	ADDRESS <b>284 Sheffield Street</b>
		CARRIER/WAYBILL NUMBER <b>8987 4526 0989</b>	CITY, STATE <b>Mountainside NJ 07092</b>	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED	TYPE OF ANALYSIS <i>VOC's</i>	COMMENTS
1/20	12:30	BP-VPB133-GW-694	VPB133	693	694	GW	G	2	X				
1/19	08:00	BP-VPB-TB-011912				GW	G	2	X				
1/23	15:30	BP-VPB133-GW-734	VPB133	733	734	GW	G	2	X				Sediment on sample
1/20	15:30	BP-VPB133-GW-703	VPB133	703	704	GW	G	2	X				
1/23	11:40	BP-VPB133-GW-714	VPB133	713	714	GW	G	2	X				
1/21	11:00	BP-VPB133-GW-744	VPB133	743	744	GW	G	2	X				
1/24	15:50	BP-VPB133-GW-764	VPB133	763	764	GW	G	2	X				
1/24	13:00	BP-VPB133-GW-754	VPB133	753	754	GW	G	2	X				

1. RELINQUISHED BY 	DATE <b>1/24/2012</b>	TIME <b>18:00</b>	1. RECEIVED BY <b>Feb 6th ASH</b>	DATE <b>1/24/2012</b>	TIME <b>18:00</b>
2. RELINQUISHED BY 	DATE	TIME	2. RECEIVED BY <b>ZFE</b>	DATE	TIME
3. RELINQUISHED BY <b>Fedex</b>	DATE <b>1/25/12</b>	TIME <b>9:10</b>	3. RECEIVED BY <b>PS</b>	DATE <b>1/25/12</b>	TIME <b>9:10</b>

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*Temo: 40C*

D 1320



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **N<sup>o</sup> 1155**

PAGE 1 OF 1

PROJECT NO: <b>112600622</b>	FACILITY: <b>BETHPAGE 002 VPB133</b>	PROJECT MANAGER <b>David Braddock</b>	PHONE NUMBER <b>757-461-3768</b>	LABORATORY NAME AND CONTACT: <b>LAWRENCE H 908-789 8900</b>
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER <b>Jim Ferguson</b>	PHONE NUMBER <b>412-496-9383</b>	ADDRESS <b>284 Sheffield Street</b>
CARRIER/WAYBILL NUMBER <b>8735 5966 0369</b>			CITY, STATE <b>Mountainside NJ 07093</b>	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	NO. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED	TYPE OF ANALYSIS	COMMENTS
1/25	08:00	BP-VPB-TB-012513	VPB 133	—	—	GW	G	2	x				
1/25	13:50	BP-VPB133-GW-784	VPB 133	783	784	GW	G	2	x				sediment in sample
1/25	16:25	BP-VPB133-GW-794	VPB 133	793	794	GW	G	2	x				fine sediment in sample
1/26	11:50	BP-VPB133-GW-808	VPB 133	807	808	GW	G	2	x				
1/26	15:00	BP-VPB133-GW-814	VPB 133	813	814	GW	G	2	x				GIEM, sediment bubbles in sample from fish
1/27	10:55	BP-VPB133-GW-824	VPB 133	823	824	GW	G	1	(X)				UNPRESERVED
1/27	14:00	BP-VPB133-DW	VPB 133	—	—	W	G	2	x				Fire hydrant water
1/27	14:30	BP-VPB133-DM	VPB 133	—	—	Drill mud	G	2	(X)				Drilling mud
1/27	15:00	BP-VPB133-834	VPB 133	833	834	GW	G	2	(X)				sediment in sample

1. RELINQUISHED BY 	DATE <b>1/27/2012</b>	TIME <b>17:30</b>	1. RECEIVED BY <b>FEDERAL EXPRESS AB "8735 5966"</b>	DATE <b>1/27/2012</b>	TIME <b>17:30</b>
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY <b>FedEx</b>	DATE <b>1/28/12</b>	TIME <b>10:10</b>	3. RECEIVED BY <b>Ken Rivera</b>	DATE <b>1/28/12</b>	TIME <b>10:10</b>

COMMENTS **Temp: 4°C**

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D1365



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **No 1156**

PAGE 1 OF 1

PROJECT NO: <b>112600622</b>		FACILITY: <b>BENTONITE CWT VPB133</b>		PROJECT MANAGER <b>David Bernack</b>		PHONE NUMBER <b>757 461 3768</b>		LABORATORY NAME AND CONTACT: <b>Chemtech K. Howard</b>						
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER <b>Jim Ferguson P. Linn</b>		PHONE NUMBER <b>412-496-9283</b>		ADDRESS <b>284 Sheffield Street</b>						
				CARRIER/WAYBILL NUMBER <b>8000 4356 0791</b>		CITY, STATE <b>Mount Pleasant MS 39097</b>								
STANDARD TAT <input type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input checked="" type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day								CONTAINER TYPE PLASTIC (P) or GLASS (G)						
								PRESERVATIVE USED						
								TYPE OF ANALYSIS						
								No. OF CONTAINERS						
								COMMENTS						
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS <i>YOC</i> <i>XOC</i>		PRESERVATIVE USED <i>ONPRES</i> <i>PRES.</i>		COMMENTS	
1/30	11:30	BP-VPB133-GW-844	VPB 133	843	844	GW	G	2	X	-			Gross turbid, unPRES.	
1/30	14:30	BP-VPB133-GW-854	VPB 133	853	854	GW	G	2	X	X			Gross turbid, unPRES. 1 piece / 1 unpres	
1/30	08:00	BP-VPB133-TB-013012-JF				GW	G	2	-	X				
1/31	10:10	BP-VPB133-GW-864	VPB 133	863	864	GW	G	2	X	-			Gross, Turbid	
1/31	13:10	BP-VPB133-GW-874	VPB 133	873	874	GW	G	2	X	-			" "	
1/31	16:10	BP-VPB133-GW-884	VPB 133	883	884	GW	G	2	X	-			" "	
2/1	12:20	BP-VPB133-GW-904	VPB 133	903	904	GW	G	2	X	-			" "	

1. RELINQUISHED BY 	DATE <b>3/1/2012</b>	TIME <b>17:45</b>	1. RECEIVED BY <b>Federal Express AB# 8000 4356 0791</b>	DATE <b>3/1/2012</b>	TIME <b>17:45</b>
2. RELINQUISHED BY 	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY <b>Fedex</b>	DATE <b>2/2/12</b>	TIME <b>9:15</b>	3. RECEIVED BY <b>Palak Shah</b>	DATE <b>2/2/12</b>	TIME <b>9:15</b>

COMMENTS  
**Temp 4°C**

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TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER **Nº 1190**

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D1436

PROJECT NO: <b>112600632</b>		FACILITY: <b>BENTONVILLE 002 VPB133</b>		PROJECT MANAGER <b>David Bernack</b>		PHONE NUMBER <b>7574613768</b>		LABORATORY NAME AND CONTACT: <b>CHAMPELL (K. Hummel)</b>				
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER <b>S. LINDI S. ENGUSON</b>		PHONE NUMBER <b>412-496-9283</b>		ADDRESS <b>284 SHEFFIELD STREET</b>				
				CARRIER/WAYBILL NUMBER <b>8000 4355 8265</b>		CITY, STATE <b>MOUNTAINSIDE NJ</b>						
STANDARD TAT <input type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input checked="" type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day								CONTAINER TYPE PLASTIC (P) or GLASS (G) <b>G G</b>				
								PRESERVATIVE USED <b>HCL</b>		<b>EMIL</b>		
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS <b>VOE</b> <b>VOE</b>		COMMENTS	
<b>2/2</b>	<b>09:00</b>	<b>BP-VPB133-TB-030212-JRF</b>	<b>TB</b>	<b>-</b>	<b>-</b>	<b>GW</b>	<b>G</b>	<b>2</b>	<b>X</b>	<b>-</b>		
<b>2/2</b>	<b>10:50</b>	<b>BP-VPB133-GW-934</b>	<b>VPB 133</b>	<b>938</b>	<b>939</b>	<b>GW</b>	<b>G</b>	<b>2</b>	<b>-</b>	<b>2</b>		
<b>2/2</b>	<b>16:15</b>	<b>BP-VPB133-GW-959</b>	<b>VPB 133</b>	<b>958</b>	<b>959</b>	<b>GW</b>	<b>G</b>	<b>2</b>	<b>-</b>	<b>2</b>		
<b>2/2</b>	<b>12:10</b>	<b>BP-VPB133-GW-974</b>	<b>VPB 133</b>	<b>973</b>	<b>974</b>	<b>GW</b>	<b>G</b>	<b>1</b>	<b>-</b>	<b>1</b>		
1. RELINQUISHED BY				DATE	TIME	1. RECEIVED BY <b>FRANK GROSS MO# 8000 4355 8265</b>				DATE	TIME	
2. RELINQUISHED BY				DATE	TIME	2. RECEIVED BY				DATE	TIME	
3. RELINQUISHED BY <b>Fedex</b>				DATE	TIME	3. RECEIVED BY <b>PS</b>				DATE	TIME	
COMMENTS <b>Temp 4°C</b>												

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4/02R  
FORM NO. TINUS-001



**Section 6**

**VPB 133 Validation Letter and Table**



two vials were sent for this sample no validation action was taken as the alternate vial was available for sample analysis. According to the laboratory, sample BP-VPB133-GW-114 had two (2) of two (2) sample vials with big air bubbles in both vials, sample BP-VPB133-GW-150 had two (2) of two (2) sample vials with medium air bubbles, and sample BP-VPB133-GW-148 had one (1) of one (1) sample vial with small multiple air bubbles. Samples BP-VPB133-GW-114 and BP-VPB133-GW-150 VOC sample positive results were qualified estimated, (J), and the non-detected sample results were qualified rejected, (UR), per the Region 2 data validation guidelines. Sample BP-VPB133-GW-148 VOC results were not qualified for the sample vial small air bubble content identified in the email.

The continuing calibration verification (CCV) percent differences (%D) were greater than the 20% quality control limit for dichlorodifluoromethane, chloromethane, vinyl chloride, 1,1,2-trichlorotrifluoroethane, acetone, and methylene acetate for instrument MSVOAG on 01/10/12 @ 13:13.

**Affected samples:**

BP-VPB-TB-010412                      BP-VPB133-GW-058                      BP-VPB133-GW-148  
BP-VPB133-GW-194

**Action:** The aforementioned sample positive and non-detected results for dichlorodifluoromethane, chloromethane, vinyl chloride, 1,1,2-trichlorotrifluoroethane, acetone, and methylene acetate were qualified estimated, (J) and (UJ), respectively.

The laboratory control sample (LCS) percent recoveries (%R) were greater than the quality control limit for chloromethane and 1,2-dibromo-3-chloropropane for batch VBG0110W2.

**Affected samples:**

BP-VPB-TB-010412                      BP-VPB133-GW-058                      BP-VPB133-GW-148  
BP-VPB133-GW-194

**Action:** The positive results for chloromethane for samples BP-VPB133-GW-058 and BP-VPB133-GW-148 were qualified estimated, (J). The non-detected chloromethane and 1,2-dibromo-3-chloropropane sample results were not qualified.

The surrogate %R for toluene-d8 was less than the quality control limits for sample BP-VPB133-GW-058.

**Action:** Sample BP-VPB133-GW-058 positive and non-detected results were qualified estimated, (J) and (UJ), respectively.

Positive results below the limit of quantitation (LOQ) and above the method detection limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

**Additional Comments**

The Matrix Spike (MS) and MS duplicate (MSD) %Rs were greater than the quality control limit for chloromethane, methyl tert-butyl ether, and 2-hexanone for a spiked sample from another SDG.

**Affected samples:** None

**Action:** No validation action was taken as the sample was not from this SDG.

Forty-nine (49) analytes were reported for VOCs.

Non-detected sample results were reported to the LOD.

Sample BP-VPB133-GW-148 had the analytes octanal and 1,2,3-trichloropropane identified as present in the tentatively identified compound page of the laboratory sample results. This was identified for report completeness and no validation action was necessary.

TO: D. BRAYACK  
SDG: D1061


PAGE: 3

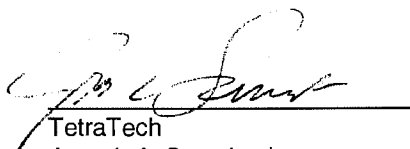
**EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** Sample VOC results were qualified for CCV %D, LCS %R, and surrogate %R quality control limit non-compliances.

**Other Factors Affecting Data Quality:** Sample BP-VPB133-GW-114 and BP-VPB133-GW-150 VOC positive results were qualified and non-detected VOC results rejected for significant air bubble content in the sample vials. Positive results below the LOQ and above the MDL were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the USEPA SW-846 Method 8260B, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B SOP HW-24 Revision #2 August 2008 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

  
TetraTech  
Joseph Kalinyak  
Chemist/Data Validator

  
TetraTech  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

- Appendix A - Qualified Analytical Results
- Appendix B - Results as Reported by the Laboratory
- Appendix C - Region II Data Validation Forms
- Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results



### **Value Qualifier Key (Val Qual)**

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

### **DATA QUALIFICATION CODE (QUAL CODE)**

#### **Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed



PARAMETER	BP-VPB133-GW-194		BP-VPB-TB-010412	
	RESULT	VQL	RESULT	VQL
1,1,1-TRICHLOROETHANE	0.5 U		0.5 U	
1,1,2,2-TETRACHLOROETHANE	0.5 U		0.5 U	
1,1,2-TRICHLOROETHANE	0.5 U		0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 UJ	C	0.5 UJ	C
1,1-DICHLOROETHANE	0.5 U		0.5 U	
1,1-DICHLOROETHENE	0.5 U		0.5 U	
1,2,4-TRICHLOROBENZENE	0.5 U		0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U		0.5 U	
1,2-DIBROMOETHANE	0.5 U		0.5 U	
1,2-DICHLOROBENZENE	0.5 U		0.5 U	
1,2-DICHLOROETHANE	0.5 U		0.5 U	
1,2-DICHLOROPROPANE	0.5 U		0.5 U	
1,3-DICHLOROBENZENE	0.5 U		0.5 U	
1,4-DICHLOROBENZENE	0.5 U		0.5 U	
2-BUTANONE	2.5 U		2.5 U	
2-HEXANONE	2.5 U		2.5 U	
4-METHYL-2-PENTANONE	2.5 U		2.5 U	
ACETONE	2.5 UJ	C	2.5 UJ	C
BENZENE	0.5 U		0.5 U	
BROMODICHLOROMETHANE	0.5 U		0.5 U	
BROMOFORM	0.5 U		0.5 U	
BROMOMETHANE	0.5 U		0.5 U	
CARBON DISULFIDE	0.5 U		0.5 U	
CARBON TETRACHLORIDE	0.5 U		0.5 U	
CHLOROBENZENE	0.5 U		0.5 U	
CHLORODIBROMOMETHANE	0.5 U		0.5 U	
CHLOROETHANE	0.5 U		0.5 U	
CHLOROFORM	0.5 U		0.5 U	
CHLOROMETHANE	0.5 UJ	C	0.5 UJ	C
CIS-1,2-DICHLOROETHENE	0.5 U		0.5 U	
CIS-1,3-DICHLOROPROPENE	0.5 U		0.5 U	
CYCLOHEXANE	0.5 U		0.5 U	
DICHLORODIFLUOROMETHANE	0.5 UJ	C	0.5 UJ	C
ETHYLBENZENE	0.5 U		0.5 U	
ISOPROPYLBENZENE	0.5 U		0.5 U	



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-194	BP-VPB-TB-010412			
SDG: D1061	LAB_ID	D1061-06	D1061-02			
FRACTION: OV	SAMP_DATE	1/6/2012	1/4/2012			
MEDIA: WATER	QC_TYPE	NM	NM			
	UNITS	UG/L	UG/L			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U		1 U	1 U	
METHYL ACETATE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
METHYL CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U		0.5 U	0.5 U	
METHYLENE CHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U	
O-XYLENE	0.5 U	0.5 U		0.5 U	0.5 U	
STYRENE	0.5 U	0.5 U		0.5 U	0.5 U	
TETRACHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TOLUENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U	
VINYL CHLORIDE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C



TO: D. Brayack  
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The continuing calibration percent differences (%Ds) for several target analytes were greater than the 20% quality control limit On January 13, 2012 @ 16:35 on instrument MSVOA R. The analytes were carbon tetrachloride, chloroform, trans- 1,3-dichloropropene, dibromochloromethane and bromoform. The nondetected bromoform results were qualified as estimated (UJ) in the affected samples BP-VPB133-GW-234, BP-VPB133-GW-254, BP-VPB133-GW-274, BP-VPB133-GW-294, BP-VPB133-GW-314, BP-VPB133-GW-334, BP-VPB133-GW-354 and BP-VPB133-GW-374.

The initial calibration %RSDs for several target analytes were greater than the 15% quality control limit on January 17, 2012 on instrument MSVOA G. The analytes were bromomethane, chloroethane, acetone, methyl acetate, methylene chloride, 2-butanone, 4-methyl-2-pentanone, 2-hexanone and tetrachloroethene. The nondetected bromomethane, chloroethane, acetone, methyl acetate, methylene chloride, 2-butanone, 4-methyl-2-pentanone, 2-hexanone and tetrachloroethene results were qualified as estimated (UJ) in the affected sample BP-VPB-TB-010912.

The laboratory control sample (LCS) percent recoveries (%Rs) of 2-butanone and cis-1,2-dichloroethene were greater than the upper quality control limit in batch BSR0113W1. The positive 2-butanone and cis-1,2-dichloroethene results were qualified as estimated (J) in the affected samples BP-VPB133-GW-234, BP-VPB133-GW-254, BP-VPB133-GW-274, BP-VPB133-GW-294, BP-VPB133-GW-314, BP-VPB133-GW-334, BP-VPB133-GW-354 and BP-VPB133-GW-374.

#### Additional Comments

The matrix spike/matrix spike duplicate (MS/MSD) %Rs for cis-1,2-dichloroethene, methyl cyclohexane, trichloroethene, chlorobenzene and o-xylene were outside quality control limits in a sample not included in this SDG. No action was taken on the for cis-1,2-dichloroethene, methyl cyclohexane, trichloroethene, chlorobenzene and o-xylene results. In addition, the %R of ethyl benzene was greater than the upper quality control limit. No action was taken.

Nondetected results are reported to the limit of detection (LOD).

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

#### EXECUTIVE SUMMARY

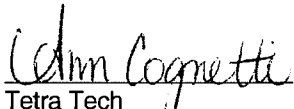
**Laboratory Performance Issues:** The continuing calibration %Ds and % drifts for several analytes exceeded quality control limits. The %RSDs exceeded the quality control limit for several analytes resulting in the qualification of data. The LCS %Rs of 2-butanone and cis-1,2-dichloroethene were greater than the upper quality control limit.

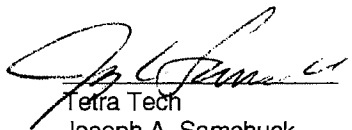
**Other Factors Affecting Data Quality:** None.



TO: D. Brayack  
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The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009. The text of this report has been formulated to address only those problem areas affecting data quality.

  
Tetra Tech  
Ann Cognetti  
Chemist/Data Validator

  
Tetra Tech  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-234		BP-VPB133-GW-254		BP-VPB133-GW-274		BP-VPB133-GW-294				
	LAB_ID	D1108-02	D1108-03	D1108-04	D1108-05	SAMP_DATE	1/9/2012	1/10/2012	1/10/2012	QC_TYPE	NM	UG/L	0.0
FRACTION: OV	QC_TYPE	NM	UG/L	0.0	UG/L	0.0	UG/L	0.0	UG/L	0.0	PCT_SOLIDS	0.0	DUP_OF
MEDIA: WATER	PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
	1,1,1-TRICHLOROETHANE	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	1,1,2,2-TETRACHLOROETHANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,1,2-TRICHLOROETHANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,1-DICHLOROETHANE	3		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,1-DICHLOROETHENE	0.68 J	P	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,2,4-TRICHLOROBENZENE	0.46 J	P	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	1,2-DIBROMO-3-CHLOROPROPANE	0.5 UJ		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,2-DIBROMOETHANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,2-DICHLOROBENZENE	0.51 J	P	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,2-DICHLOROETHANE	2.2		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,2-DICHLOROPROPANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,3-DICHLOROBENZENE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	1,4-DICHLOROBENZENE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	2-BUTANONE	2.7 J	EP	13 J	E	2.5 UJ	C	2.5 UJ	C	2.5 UJ	C	2.5 UJ	C
	2-HEXANONE	2.5 UJ	C	2.5 U		2.5 U		2.5 U		2.5 U		2.5 U	
	4-METHYL-2-PENTANONE	2.5 U		9.1	P	4.7 J	P	6.8		0.5 U		0.5 U	
	ACETONE	5 J		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	BENZENE	0.5 U		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	BROMODICHLOROMETHANE	0.5 UJ		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	BROMOFORM	0.5 UJ		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	BROMOMETHANE	0.5 U		1.8 J	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	CARBON DISULFIDE	0.5 UJ		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	CARBON TETRACHLORIDE	0.5 UJ		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	CHLOROBENZENE	0.5 U		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	CHLORODIBROMOMETHANE	0.5 UJ		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	CHLOROETHANE	0.5 U		3.1 J	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	CHLOROFORM	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	CHLOROMETHANE	0.5 U		1.8 J	E	0.5 U		0.5 U		0.5 U		0.5 U	
	CIS-1,2-DICHLOROETHENE	0.5 UJ		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	CIS-1,3-DICHLOROPROPENE	0.5 UJ		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	CYCLOHEXANE	0.5 UJ		2.1 J	C	2 J	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	DICHLORODIFLUOROMETHANE	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0.5 U	
	ETHYLBENZENE	0.5 U		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C
	ISOPROPYLBENZENE	0.5 UJ		0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C	0.5 UJ	C

PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-314		BP-VPB133-GW-334		BP-VPB133-GW-354		BP-VPB133-GW-374				
	LAB_ID	D1108-06	D1108-07	D1108-08	D1108-09	SAMP_DATE	1/1/2012	1/1/2012	1/1/2012	QC_TYPE	NM	UG/L	0.0
FRACTION: OV	QC_TYPE	NM	UG/L	0.0	PCT_SOLIDS	0.0	DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD
MEDIA: WATER	PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
	1,1,1-TRICHLOROETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,1,2-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,1-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,1-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,2,4-TRICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,2-DIBROMO-3-CHLOROPROPANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	1,2-DIBROMOETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,2-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,2-DICHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,3-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	1,4-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	2-BUTANONE	2.5 U	2.5 U		5.5 J	5.5 J	E	5.5 J	5.5 J	E	2.5 U	2.5 U	
	2-HEXANONE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
	4-METHYL-2-PENTANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
	ACETONE	6.2	7.3		7.3	10		10	8.6		8.6	8.6	
	BENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	BROMODICHLOROMETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	BROMOFORM	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	BROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	CARBON DISULFIDE	0.5 UJ	0.5 UJ	C	2.4 J	1.6 J	C	1.6 J	1.6 J	C	0.5 UJ	0.5 UJ	C
	CARBON TETRACHLORIDE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	CHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	CHLORODIBROMOMETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	CHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	CHLOROFORM	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	CHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	CIS-1,3-DICHLOROPROPENE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	CYCLOHEXANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	DICHLORODIFLUOROMETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
	ETHYLBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
	ISOPROPYLBENZENE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C

PROJ_NO: 00622	NSAMPLE	BP-VPB-TB-010912	
SDG: D1108	LAB_ID	D1108-01	
FRACTION: OV	SAMP_DATE	1/9/2012	
MEDIA: WATER	QC_TYPE	NM	
	UNITS	UG/L	
	PCT_SOLIDS	0.0	
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U		
1,1,2,2-TETRACHLOROETHANE	0.5 U		
1,1,2-TRICHLOROETHANE	0.5 U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U		
1,1-DICHLOROETHANE	0.5 U		
1,1-DICHLOROETHENE	0.5 U		
1,2,4-TRICHLOROBENZENE	0.5 U		
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U		
1,2-DIBROMOETHANE	0.5 U		
1,2-DICHLOROBENZENE	0.5 U		
1,2-DICHLOROETHANE	0.5 U		
1,2-DICHLOROPROPANE	0.5 U		
1,3-DICHLOROBENZENE	0.5 U		
1,4-DICHLOROBENZENE	0.5 U		
2-BUTANONE	2.5 UJ	C	
2-HEXANONE	2.5 UJ	C	
4-METHYL-2-PENTANONE	2.5 UJ	C	
ACETONE	2.5 UJ	C	
BENZENE	0.5 U		
BROMODICHLOROMETHANE	0.5 U		
BROMOFORM	0.5 U		
BROMOMETHANE	0.5 UJ	C	
CARBON DISULFIDE	0.5 U		
CARBON TETRACHLORIDE	0.5 U		
CHLOROBENZENE	0.5 U		
CHLORODIBROMOMETHANE	0.5 U		
CHLOROETHANE	0.5 UJ	C	
CHLOROFORM	0.5 U		
CHLOROMETHANE	0.5 U		
CIS-1,2-DICHLOROETHENE	0.5 U		
CIS-1,3-DICHLOROPROPENE	0.5 U		
CYCLOHEXANE	0.5 U		
DICHLORODIFLUOROMETHANE	0.5 U		
ETHYLBENZENE	0.5 U		
ISOPROPYLBENZENE	0.5 U		

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-234	BP-VPB133-GW-254	BP-VPB133-GW-274	BP-VPB133-GW-294	
SDG: D1108	LAB_ID	D1108-02	D1108-03	D1108-04	D1108-05	
FRACTION: OV	SAMP_DATE	1/9/2012	1/9/2012	1/10/2012	1/10/2012	
MEDIA: WATER	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/L	UG/L	UG/L	UG/L	
	PCT_SOLIDS	0.0	0.0	0.0	0.0	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U		1 U	1 U	
METHYL ACETATE	0.5 U	0.5 U		0.5 U	0.5 U	
METHYL CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	8.8	5.4		0.5 U	0.5 U	
METHYLENE CHLORIDE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
O-XYLENE	0.5 U	0.5 U		0.5 U	0.5 U	
STYRENE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
TETRACHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TOLUENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,3-DICHLOROPROPENE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
TRICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U	
VINYL CHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U	



PROJ_NO: 00622 SDG: D1108 FRACTION: OV MEDIA: WATER	BP-VPB133-GW-314		BP-VPB133-GW-334		BP-VPB133-GW-354		BP-VPB133-GW-374									
	NSAMPLE	LAB_ID	SAMP_DATE	QC_TYPE	UNITS	PCT_SOLIDS	DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
	D1108-06	1/10/2012	NM	UG/L	0.0			1 U			1 U			1 U		
M+P-XYLENES								0.5 U			0.5 U			0.5 U		
METHYL ACETATE								0.5 U			0.5 U			0.5 U		
METHYL CYCLOHEXANE								0.5 U			0.5 U			0.5 U		
METHYL TERT-BUTYL ETHER								0.5 UJ	C		0.5 UJ	C		0.5 UJ	C	
METHYLENE CHLORIDE								0.5 U			0.5 U			0.5 U		
O-XYLENE								0.5 UJ	C		0.5 UJ	C		0.5 UJ	C	
STYRENE								0.5 U			0.5 U			0.5 U		
TETRACHLOROETHENE								0.5 U			0.5 U			0.5 U		
TOLUENE								0.5 U			0.5 U			0.5 U		
TRANS-1,2-DICHLOROETHENE								0.5 UJ	C		0.5 UJ	C		0.5 UJ	C	
TRANS-1,3-DICHLOROPROPENE								0.5 U			0.5 U			0.5 U		
TRICHLOROETHENE								0.5 U			0.5 U			0.5 U		
TRICHLOROFLUOROMETHANE								0.5 U			0.5 U			0.5 U		
VINYL CHLORIDE								0.5 U			0.5 U			0.5 U		

PROJ_NO: 00622	NSAMPLE	BP-VPB-TB-010912	
SDG: D1108	LAB_ID	D1108-01	
FRACTION: OV	SAMP_DATE	1/9/2012	
MEDIA: WATER	QC_TYPE	NM	
	UNITS	UG/L	
	PCT_SOLIDS	0.0	
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
M+P-XYLENES	1	U	
METHYL ACETATE	0.5	UJ	C
METHYL CYCLOHEXANE	0.5	U	
METHYL TERT-BUTYL ETHER	0.5	U	
METHYLENE CHLORIDE	0.5	UJ	C
O-XYLENE	0.5	U	
STYRENE	0.5	U	
TETRACHLOROETHENE	0.5	UJ	C
TOLUENE	0.5	U	
TRANS-1,2-DICHLOROETHENE	0.5	U	
TRANS-1,3-DICHLOROPROPENE	0.5	U	
TRICHLOROETHENE	0.5	U	
TRICHLOROFLUOROMETHANE	0.5	U	
VINYL CHLORIDE	0.5	U	



TO: D. Brayack  
FROM: A. Cognetti  
SDG: D1148  
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pentanone, 2-hexanone and tetrachloroethene results were qualified as estimated (UJ) in the affected samples BP-VPB-TB-0112122, BP-VPB133-GW-434, BP-VPB133-GW-454, BP-VPB133-GW-474 and BP-VPB133-GW-494.

The continuing calibration percent differences and/or percent drifts were greater than the 20% quality control limit for several target analytes on January 18, 2012 @ 5:41 on instrument MSVOAG. The analytes were acetone, methyl acetate and tetrachloroethane. The nondetected acetone, methyl acetate and tetrachloroethane results were qualified as estimated (UJ) in the affected samples BP-VPB-TB-0112122, BP-VPB133-GW-434, BP-VPB133-GW-454, BP-VPB133-GW-474 and BP-VPB133-GW-494.

Due to sediment in samples BP-VPB133-GW-394 and BP-VPB133-GW-414, the laboratory had to analyze them as soil after decanting the top portion of liquid. No validation action was taken.

#### Additional Comments

The percent recovery (%R) of surrogate 1,2-dichloroethane-d4 was greater than the upper quality control limit in samples BP-VPB-TB-011212, BP-VPB133-GW-434, BP-VPB133-GW-454, BP-VPB133-GW-474 and BP-VPB133-GW-494. No action was taken on the nondetected results in the affected samples.

The matrix spike/matrix spike duplicate (MS/MSD) %Rs for cis-1,2-dichloroethene, methyl cyclohexane, trichloroethene, chlorobenzene and o-xylene were outside quality control limits in a sample not included in this SDG. No action was taken on the for cis-1,2-dichloroethene, methyl cyclohexane, trichloroethene, chlorobenzene and o-xylene results. In addition, the %R of ethyl benzene was greater than the upper quality control limit. No action was taken.

The MS/MSD %Rs of 1,1,2,2-tetrachloroethane was greater than the upper quality control limit in a sample not included in this SDG. No action was taken on the 1,1,2,2-tetrachloroethane results. In addition, the MSD %Rs of isopropylbenzene and 1,2,4-trichlorobenzene were outside quality control limits. No action was taken.

The laboratory control sample %R of methyl tert-butyl ether was greater than the upper quality control limit in batch BSG0117W3. No action was taken on the nondetected methyl tert-butyl ether results in the affected samples.

Nondetected results are reported to the limit of detection (LOD).

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

#### EXECUTIVE SUMMARY


**Laboratory Performance Issues:** The continuing calibration %Ds and % drifts for several analytes exceeded quality control limits. The %RSDs exceeded the quality control limit for several analytes resulting in the qualification of data.

**Other Factors Affecting Data Quality:** Due to sediment in samples BP-VPB133-GW-394 and BP-VPB133-GW-414, the laboratory had to analyzed them as soil after decanting the top portion of liquid.

TO: D. Brayack  
FROM: A. Cognetti  
SDG: D1148  
DATE: February 21, 2012  
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The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009. The text of this report has been formulated to address only those problem areas affecting data quality.

  
Tetra Tech  
Ann Cognetti  
Chemist/Data Validator

  
Tetra Tech  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed



PROJ_NO: 00622 SDG: D1148 FRACTION: OV MEDIA: WATER	NSAMPLE		BP-VPB133-GW-434		BP-VPB133-GW-454		BP-VPB133-GW-474		BP-VPB133-GW-494						
	LAB_ID	SAMP_DATE	QC_TYPE	UNITS	PCT_SOLIDS	DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
	D1148-04	1/12/2012	NM	UG/L	0.0										
	D1148-05	1/13/2012	NM	UG/L	0.0										
	D1148-06	1/13/2012	NM	UG/L	0.0										
	D1148-07	1/13/2012	NM	UG/L	0.0										
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2,4-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMOETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,3-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
2-BUTANONE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
2-HEXANONE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
4-METHYL-2-PENTANONE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
ACETONE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
BENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMODICHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOFORM	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON DISULFIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON TETRACHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLORODIBROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
CHLOROFORM	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
ETHYLBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
ISOPROPYLBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	

<b>PROJ_NO: 00622</b> <b>SDG: D1148</b> <b>FRACTION: OV</b> <b>MEDIA: WATER</b>	NSAMPLE	BP-VPB-TB-011212		
	LAB_ID	D1148-01		
	SAMP_DATE	1/12/2012		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
1,1,1-TRICHLOROETHANE		0.5 U		
1,1,2,2-TETRACHLOROETHANE		0.5 U		
1,1,2-TRICHLOROETHANE		0.5 U		
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5 U		
1,1-DICHLOROETHANE		0.5 U		
1,1-DICHLOROETHENE		0.5 U		
1,2,4-TRICHLOROBENZENE		0.5 U		
1,2-DIBROMO-3-CHLOROPROPANE		0.5 U		
1,2-DIBROMOETHANE		0.5 U		
1,2-DICHLOROBENZENE		0.5 U		
1,2-DICHLOROETHANE		0.5 U		
1,2-DICHLOROPROPANE		0.5 U		
1,3-DICHLOROBENZENE		0.5 U		
1,4-DICHLOROBENZENE		0.5 U		
2-BUTANONE		2.5 UJ	C	
2-HEXANONE		2.5 UJ	C	
4-METHYL-2-PENTANONE		2.5 UJ	C	
ACETONE		2.5 UJ	C	
BENZENE		0.5 U		
BROMODICHLOROMETHANE		0.5 U		
BROMOFORM		0.5 U		
BROMOMETHANE		0.5 U		
CARBON DISULFIDE		0.5 U		
CARBON TETRACHLORIDE		0.5 U		
CHLOROBENZENE		0.5 U		
CHLORODIBROMOMETHANE		0.5 U		
CHLOROETHANE		0.5 UJ	C	
CHLOROFORM		0.5 U		
CHLOROMETHANE		0.5 U		
CIS-1,2-DICHLOROETHENE		0.5 U		
CIS-1,3-DICHLOROPROPENE		0.5 U		
CYCLOHEXANE		0.5 U		
DICHLORODIFLUOROMETHANE		0.5 U		
ETHYLBENZENE		0.5 U		
ISOPROPYLBENZENE		0.5 U		



PROJ_NO: 00622		NSAMPLE	BP-VPB-TB-011212	
SDG: D1148		LAB_ID	D1148-01	
FRACTION: OV		SAMP_DATE	1/12/2012	
MEDIA: WATER		QC_TYPE	NM	
		UNITS	UG/L	
		PCT_SOLIDS	0.0	
		DUP_OF		
PARAMETER	RESULT	VQL	QLCD	
M+P-XYLENES	1 U			
METHYL ACETATE	0.5 UJ		C	
METHYL CYCLOHEXANE	0.5 U			
METHYL TERT-BUTYL ETHER	0.5 U			
METHYLENE CHLORIDE	0.5 UJ		C	
O-XYLENE	0.5 U			
STYRENE	0.5 U			
TETRACHLOROETHENE	0.5 UJ		C	
TOLUENE	0.5 U			
TRANS-1,2-DICHLOROETHENE	0.5 U			
TRANS-1,3-DICHLOROPROPENE	0.5 U			
TRICHLOROETHENE	0.5 U			
TRICHLOROFLUOROMETHANE	0.5 U			
VINYL CHLORIDE	0.5 U			

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2.5 U			2.5 U	
1,1,2,2-TETRACHLOROETHANE		2.5 U			2.5 U	
1,1,2-TRICHLOROETHANE		2.5 U			2.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE		2.5 U			2.5 U	
1,1-DICHLOROETHANE		2.5 U			2.5 U	
1,1-DICHLOROETHENE		2.5 U			2.5 U	
1,2,4-TRICHLOROBENZENE		2.5 U			2.5 U	
1,2-DIBROMO-3-CHLOROPROPANE		2.5 UJ	C		2.5 UJ	C
1,2-DIBROMOETHANE		2.5 U			2.5 U	
1,2-DICHLOROBENZENE		2.5 U			2.5 U	
1,2-DICHLOROETHANE		2.5 U			2.5 U	
1,2-DICHLOROPROPANE		2.5 U			2.5 U	
1,3-DICHLOROBENZENE		2.5 U			2.5 U	
1,4-DICHLOROBENZENE		2.5 U			2.5 U	
2-BUTANONE		23 J	P		5.4 J	P
2-HEXANONE		12.5 U			12.5 U	
4-METHYL-2-PENTANONE		12.5 U			12.5 U	
ACETONE		72			22 J	P
BENZENE		2.5 U			2.5 U	
BROMODICHLOROMETHANE		2.5 U			2.5 U	
BROMOFORM		2.5 U			2.5 U	
BROMOMETHANE		2.5 U			2.5 U	
CARBON DISULFIDE		2.5 U			18	
CARBON TETRACHLORIDE		2.5 U			2.5 U	
CHLOROBENZENE		2.5 U			2.5 U	
CHLORODIBROMOMETHANE		2.5 U			2.5 U	
CHLOROETHANE		2.5 UJ	C		2.5 UJ	C
CHLOROFORM		2.5 U			2.5 U	
CHLOROMETHANE		2.5 U			2.5 U	
CIS-1,2-DICHLOROETHENE		2.5 U			2.5 U	
CIS-1,3-DICHLOROPROPENE		2.5 U			2.5 U	
CYCLOHEXANE		2.5 U			2.5 U	
DICHLORODIFLUOROMETHANE		2.5 U			2.5 U	
ETHYLBENZENE		2.5 U			2.5 U	
ISOPROPYLBENZENE		2.5 U			2.5 U	

PROJ\_NO: 00622  
 SDG: D1148  
 FRACTION: OV  
 MEDIA: SOIL

NSAMPLE BP-VPB133-GW-394 BP-VPB133-GW-414  
 LAB\_ID D1148-08 D1148-09  
 SAMP\_DATE 1/12/2012 1/12/2012  
 QC\_TYPE NM NM  
 UNITS UG/KG UG/KG  
 PCT\_SOLIDS 100.0 100.0  
 DUP\_OF

PROJ_NO: 00622 SDG: D1148 FRACTION: OV MEDIA: SOIL	NSAMPLE		BP-VPB133-GW-394		BP-VPB133-GW-414				
	LAB_ID	D1148-08	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
SAMP_DATE	1/12/2012	QC_TYPE	NM	UG/KG	100.0	UG/KG	100.0	DUP_OF	
PCT_SOLIDS	100.0	UNITS	UG/KG	RESULT	5 U	RESULT	5 U	RESULT	5 U
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	5 U	5 U			5 U			5 U	
METHYL ACETATE	2.5 U	2.5 U			2.5 U			2.5 U	
METHYL CYCLOHEXANE	2.5 U	2.5 U			2.5 U			2.5 U	
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U			2.5 U			2.5 U	
METHYLENE CHLORIDE	2.5 U	2.5 U			2.5 U			2.5 U	
O-XYLENE	2.5 U	2.5 U			2.5 U			2.5 U	
STYRENE	2.5 U	2.5 U			2.5 U			2.5 U	
TETRACHLOROETHENE	2.5 U	2.5 U			2.5 U			2.5 U	
TOLUENE	2.5 U	2.5 U			2.5 U			2.5 U	
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U			2.5 U			2.5 U	
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U			2.5 U			2.5 U	
TRICHLOROETHENE	2.5 U	2.5 U			2.5 U			2.5 U	
TRICHLOROFLUOROMETHANE	2.5 U	2.5 U			2.5 U			2.5 U	
VINYL CHLORIDE	2.5 U	2.5 U			2.5 U			2.5 U	





TO: D. Brayack  
FROM: A. Cognetti  
SDG: D1208  
DATE: February 21, 2012  
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nondetected results of the aforementioned analytes were qualified as estimated (UJ) in the affected samples BP-VPB-TB-011612, BP-VPB133-GW-514, BP-VPB133-GW-534, BP-VPB133-GW-554 and BP-VPB133-GW-634.

The continuing calibration %Ds for trans-1,2-dichloroethene carbon tetrachloride and bromoform were greater than the 20% quality control limit on January 19, 2012 @ 13:24 on instrument MSVOA R. The nondetected trans-1,2-dichloroethene carbon tetrachloride and bromoform results were qualified as estimated (UJ) in the affected samples BP-VPB-TB-011612, BP-VPB133-GW-514, BP-VPB133-GW-534, BP-VPB133-GW-554 and BP-VPB133-GW-634.

Due to sediment in samples BP-VPB133-GW-574, BP-VPB133-GW-594, BP-VPB133-GW-614 and BP-VPB133-GW-654, the laboratory had to analyze them as soil after decanting the top portion of liquid. No action was taken.

It was noted by the laboratory that samples BP-VPB133-GW-534, BP-VPB133-GW-554 and BP-VPB133-GW-634 contained air bubbles. The positive results in these samples were qualified as estimated (J) and the nondetected results were rejected (UR).

#### Additional Comments

The matrix spike (MS) percent recovery (%R) for 1,2,4-trichlorobenzene was less than the lower quality control limit in a sample not included in this SDG. No action was taken on the for 1,2,4-trichlorobenzene results. In addition, the MSD %R of 1,1,2,2-tetrachloroethane was greater than the upper quality control limit. No action was taken.

The relative percent difference (RPD) for trans-1,2-dichloroethene was outside quality control limits in the MS/MSD of sample D1165-03 which is not included in this SDG. No action was taken.

Nondetected results are reported to the limit of detection (LOD).

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

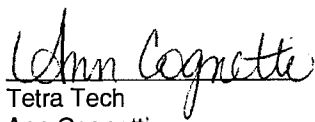
#### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** The continuing calibration %Ds and % drifts for several analytes exceeded quality control limits. The %RSDs exceeded the quality control limit for several analytes resulting in the qualification of data.

**Other Factors Affecting Data Quality:** Due to sediment in samples BP-VPB133-GW-574, BP-VPB133-GW-594, BP-VPB133-GW-614 and BP-VPB133-GW-654, the laboratory had to analyzed them as soil after decanting the top portion of liquid. Samples BP-VPB133-GW-534, BP-VPB133-GW-554 and BP-VPB133-GW-634 contained air bubbles

TO: D. Brayack  
FROM: A. Cognetti  
SDG: D1208  
DATE: February 21, 2012  
PAGE: 3

The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009. The text of this report has been formulated to address only those problem areas affecting data quality.



Tetra Tech  
Ann Cognetti  
Chemist/Data Validator



Tetra Tech  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-574		BP-VPB133-GW-594		BP-VPB133-GW-614		BP-VPB133-GW-654			
	LAB_ID	D1208-05	D1208-06	D1208-07	D1208-08	D1208-09	D1208-09	D1208-09	D1208-09	D1208-09		
SDG: D1208	SAMP_DATE	1/17/2012	1/17/2012	1/17/2012	1/18/2012	1/18/2012	1/18/2012	1/18/2012	1/18/2012	1/18/2012		
FRACTION: OV	QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM	NM		
MEDIA: SEDIMENT	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG		
	PCT_SOLIDS											
	DUP_OF											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	2.5 UJ	2.5 UJ	C	2.55 UJ	2.55 UJ	C	2.45 UJ	2.45 UJ	C	2.5 UJ	2.5 UJ	C
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,2-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,2-DICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,3-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
1,4-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
2-BUTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
2-HEXANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
ACETONE	32	32		38	38		34	34		31	31	
BENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
BROMOFORM	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
BROMOMETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CARBON DISULFIDE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CHLOROETHANE	2.5 UJ	2.5 UJ	C	2.55 UJ	2.55 UJ	C	2.45 UJ	2.45 UJ	C	2.5 UJ	2.5 UJ	C
CHLOROFORM	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CHLOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
CYCLOHEXANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
ETHYLBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.55 U	2.55 U		2.45 U	2.45 U		2.5 U	2.5 U	



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-514	BP-VPB133-GW-534	BP-VPB133-GW-554	BP-VPB133-GW-534				
SDG: D1208	LAB_ID	D1208-01	D1208-03	D1208-04	D1208-08				
FRACTION: OV	SAMP_DATE	1/16/2012	1/16/2012	1/17/2012	1/18/2012				
MEDIA: WATER	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/L	UG/L	UG/L	UG/L				
	PCT_SOLIDS	0.0	0.0	0.0	0.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,1,2-TRICHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,1-DICHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,1-DICHLOROETHENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2-DIBROMOETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2-DICHLOROBENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2-DICHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,2-DICHLOROPROPANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,3-DICHLOROBENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
1,4-DICHLOROBENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
2-BUTANONE	2.5 U	2.5 UR	Q	2.5 UR	2.5 UR	Q	2.5 UR	2.5 UR	Q
2-HEXANONE	2.5 U	2.5 UR	Q	2.5 UR	2.5 UR	Q	2.5 UR	2.5 UR	Q
4-METHYL-2-PENTANONE	2.5 U	2.5 UR	Q	2.5 UR	2.5 UR	Q	2.5 UR	2.5 UR	Q
ACETONE	7.6	4.2 J	PQ	4.2 J	4.8 J	PQ	8.2 J	8.2 J	Q
BENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
BROMODICHLOROMETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
BROMOFORM	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
BROMOMETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CARBON DISULFIDE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CARBON TETRACHLORIDE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CHLOROBENZENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CHLORODIBROMOMETHANE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CHLOROETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CHLOROFORM	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CHLOROMETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CIS-1,3-DICHLOROPROPENE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
CYCLOHEXANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
DICHLORODIFLUOROMETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
ETHYLBENZENE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
ISOPROPYLBENZENE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q

PROJ_NO: 00622	NSAMPLE	BP-VPB-TB-011612	
SDG: D1208	LAB_ID	D1208-02	
FRACTION: OV	SAMP_DATE	1/16/2012	
MEDIA: WATER	QC_TYPE	NM	
	UNITS	UG/L	
	PCT_SOLIDS	0.0	
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U		
1,1,2,2-TETRACHLOROETHANE	0.5 U		
1,1,2-TRICHLOROETHANE	0.5 U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U		
1,1-DICHLOROETHANE	0.5 U		
1,1-DICHLOROETHENE	0.5 U		
1,2,4-TRICHLOROBENZENE	0.5 U		
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U		
1,2-DIBROMOETHANE	0.5 U		
1,2-DICHLOROBENZENE	0.5 U		
1,2-DICHLOROETHANE	0.5 U		
1,2-DICHLOROPROPANE	0.5 U		
1,3-DICHLOROBENZENE	0.5 U		
1,4-DICHLOROBENZENE	0.5 U		
2-BUTANONE	2.5 U		
2-HEXANONE	2.5 U		
4-METHYL-2-PENTANONE	2.5 U		
ACETONE	2.5 U		
BENZENE	0.5 U		
BROMODICHLOROMETHANE	0.5 U		
BROMOFORM	0.5 UJ		C
BROMOMETHANE	0.5 U		
CARBON DISULFIDE	0.5 U		
CARBON TETRACHLORIDE	0.5 UJ		C
CHLOROBENZENE	0.5 U		
CHLORODIBROMOMETHANE	0.5 UJ		C
CHLOROETHANE	0.5 U		
CHLOROFORM	0.5 U		
CHLOROMETHANE	0.5 U		
CIS-1,2-DICHLOROETHENE	0.5 U		
CIS-1,3-DICHLOROPROPENE	0.5 UJ		C
CYCLOHEXANE	0.5 U		
DICHLORODIFLUOROMETHANE	0.5 U		
ETHYLBENZENE	0.5 UJ		C
ISOPROPYLBENZENE	0.5 UJ		C



PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-514		BP-VPB133-GW-534		BP-VPB133-GW-554		BP-VPB133-GW-634			
	LAB_ID	SAMP_DATE	D1208-01	D1208-03	D1208-04	D1208-03	D1208-04	D1208-08	D1208-08	D1208-08		
FRACTION: OV	QC_TYPE	1/16/2012	1/16/2012	1/16/2012	1/17/2012	1/17/2012	1/17/2012	1/18/2012	1/18/2012	1/18/2012		
MEDIA: WATER	UNITS	NM	NM	NM	NM	NM	NM	NM	NM	NM		
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L		
	PCT_SOLIDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	DUP_OF											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U	Q	1 UR	1 UR	Q	1 UR	1 UR	Q	1 UR	1 UR	Q
METHYL ACETATE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
METHYL CYCLOHEXANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
METHYL TERT-BUTYL ETHER	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
METHYLENE CHLORIDE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
O-XYLENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
STYRENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TETRACHLOROETHENE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TOLUENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TRANS-1,2-DICHLOROETHENE	0.5 UJ	0.5 UR	C	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TRICHLOROETHENE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
TRICHLOROFLUOROMETHANE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q
VINYL CHLORIDE	0.5 U	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q	0.5 UR	0.5 UR	Q

<b>PROJ_NO: 00622</b>		<b>NSAMPLE</b>	BP-VPB-TB-011612		
<b>SDG: D1208</b>		<b>LAB_ID</b>	D1208-02		
<b>FRACTION: OV</b>		<b>SAMP_DATE</b>	1/16/2012		
<b>MEDIA: WATER</b>		<b>QC_TYPE</b>	NM		
		<b>UNITS</b>	UG/L		
		<b>PCT_SOLIDS</b>	0.0		
		<b>DUP_OF</b>			
<b>PARAMETER</b>	<b>RESULT</b>	<b>VQL</b>	<b>QLCD</b>		
M+P-XYLENES	1	U			
METHYL ACETATE	0.5	U			
METHYL CYCLOHEXANE	0.5	U			
METHYL TERT-BUTYL ETHER	0.5	U			
METHYLENE CHLORIDE	0.5	UJ	C		
O-XYLENE	0.5	U			
STYRENE	0.5	U			
TETRACHLOROETHENE	0.5	UJ	C		
TOLUENE	0.5	U			
TRANS-1,2-DICHLOROETHENE	0.5	UJ	C		
TRANS-1,3-DICHLOROPROPENE	0.5	U			
TRICHLOROETHENE	0.5	U			
TRICHLOROFLUOROMETHANE	0.5	U			
VINYL CHLORIDE	0.5	U			



**TO:** D. BRAYACK **DATE:** MARCH 20, 2012  
**FROM:** TERRI L. SOLOMON **COPIES:** DV FILE  
**SUBJECT:** ORGANIC DATA VALIDATION – VOC  
NWIRP BETHPAGE CTO WE 066  
SAMPLE DELIVERY GROUP (SDG) – D1280  
**SAMPLES:** 8/Aqueous/VOC  
BP-VPB133-GW-754 BP-VPB-TB-011912  
BP-VPB133-GW-694 BP-VPB133-GW-703  
BP-VPB133-GW-714 BP-VPB133-GW-734  
BP-VPB133-GW-744 BP-VPB133-GW-764

### Overview

The sample set for NWIRP Bethpage, CTO WE 066, SDG D1280 consists of seven (7) environmental aqueous samples and a trip blank analyzed for volatile organic compounds (VOCs). There was no field duplicate contained in this SDG.

The samples were collected on January 19, 20, 23 and 24, 2012 by Tetra Tech and analyzed by Chemtech. VOC analyses were conducted in accordance with EPA Method SW-846 8260B analytical and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- \* ● Data completeness
- \* ● Holding times
- \* ● GC/MS Tuning
- Initial/continuing calibrations
- \* ● Laboratory Method Blank Results
- Surrogate Recoveries
- Laboratory Control Sample Recoveries
- Internal Standard Recoveries
- \* ● Compound Quantitation
- \* ● Compound Identification
- \* ● Detection Limits

The symbol (\*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

### VOC

The initial calibration relative standard deviations (%RSDs) for bromomethane, methyl acetate, methylene chloride, cyclohexane, trans-1,3-dichloropropene and cis-1,3-dichloropropene were greater than the 15% quality control limit on 01/26/2012 on instrument MSVOA R. The nondetected results for bromomethane, methyl acetate, methylene chloride, cyclohexane, trans-1,3-dichloropropene and cis-1,3-dichloropropene were qualified as estimated "UJ" in the affected samples BP-VPB133-GW-754 and BP-VPB-TB-011912.

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**DATE: MARCH 20, 2012**

The continuing calibration percent differences and/or percent drifts were greater than the 20% quality control limit for chloromethane and bromomethane on 01/26/2012 at 18:20 on instrument MSVOA R. The nondetected results for chloromethane and bromomethane were qualified as estimated "UJ" in the affected samples BP-VPB133-GW-754 and BP-VPB-TB-011912.

The initial calibration %RSDs for bromomethane, styrene and bromoform were greater than the 15% quality control limit on 01/24/2012 on instrument MSVOA T. The nondetected results for bromomethane, styrene and bromoform were qualified as estimated "UJ" in the affected samples BP-VPB133-GW-694, BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764.

The continuing calibration percent differences and/or percent drifts were greater than the 20% quality control limit for bromomethane, chloroethane and carbon disulfide on 01/26/2012 at 11:48 on instrument MSVOA T. The nondetected results for bromomethane, chloroethane and carbon disulfide were qualified as estimated "UJ" in the affected samples BP-VPB133-GW-694, BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764.

Sample BP-VPB133-GW-694 had a surrogate recovery less than the quality control limit for 4-bromofluorobenzene and internal standards recoveries below the quality control limits for pentafluorobenzene, chlorobenzene-d5 and 1,4-dichlorobenzene-d4. The sample was reanalyzed and had surrogate recoveries for 4-bromofluorobenzene and toluene-d8 less than the quality control limits and an internal standard recovery for 1,4-dichlorobenzene-d4 below the quality control limit. The reanalysis was chosen for validation purposes. The positive and nondetected results reported for sample BP-VPB133-GW-694 were qualified as estimated, "J" and "UJ", respectively, as a result of surrogate noncompliances. The nondetected results reported for sample BP-VPB133-GW-694 for the affected compounds were qualified as estimated, "UJ", as a result of internal standard noncompliances..

Samples BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764 had surrogate recoveries less than the quality control limits for 4-bromofluorobenzene. The samples were reanalyzed and had surrogate recoveries for 4-bromofluorobenzene and/or toluene-d8 less than the quality control limits. The original analyses were chosen for validation purposes. The positive and nondetected results reported for samples BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764 were qualified as estimated, "J" and "UJ", respectively.

Samples BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744, BP-VPB133-GW-764 had internal standard recoveries less than the quality control limits for 1,4-dichlorobenzene-d4. The samples were reanalyzed and had internal standard recoveries for 1,4-dichlorobenzene-d4 less than the quality control limits. The original analyses were chosen for validation purposes. The nondetected results reported for samples BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764 for the affected compounds were qualified as estimated, "UJ".

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

#### Additional Comments

Groundwater samples BP-VPB133-GW-694, BP-VPB133-GW-703, BP-VPB133-GW-714, BP-VPB133-GW-734, BP-VPB133-GW-744 and BP-VPB133-GW-764 were analyzed as soil samples due to the amount of sediment in the samples. The sample results were reported as ug/kg on a wet weight basis.

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**DATE: MARCH 20, 2012**

The laboratory control sample duplicate (LCSD) percent recovery for chloromethane was greater than the upper quality control limit affecting samples BP-VPB133-GW-754 and BP-VPB-TB-011912. No validation actions were required as all sample results for chloromethane were nondetects.

The laboratory control sample (LCS) / laboratory control sample duplicate (LCSD) relative percent difference was outside the quality control limits for methyl acetate affecting samples BP-VPB133-GW-754 and BP-VPB-TB-011912. No validation actions were required as the LCS and LCSD percent recoveries for methyl acetate were within the quality control limits.

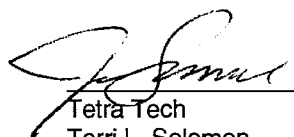
Nondetected results are reported to the limit of detection (LOD).

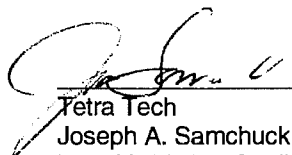
#### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Several initial %RSDs and continuing calibration %Ds / % drifts for several compounds exceeded the quality control limits.

**Other Factors Affecting Data Quality:** Several surrogate and internal standards were below the quality control limits. Positive results below the RL and above the detection limit were qualified as estimated.

The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009. The text of this report has been formulated to address only those problem areas affecting data quality.

  
Tetra Tech  
Terri L. Solomon  
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Data Validation Quality Assurance Officer

#### Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

**Qualified Analytical Results**

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-754	BP-VPB-TB-011912
SDG: D1280	LAB_ID	D1280-08	D1280-02
FRACTION: OV	SAMP_DATE	1/24/2012	1/19/2012
MEDIA: WATER	QC_TYPE	NM	NM
	UNITS	UG/L	UG/L
	PCT_SOLIDS	100.0	100.0
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHENE	0.5 U	0.5 U	0.5 U
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 U	0.5 U
1,2-DIBROMOETHANE	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U
1,2-DICHLOROETHANE	0.5 U	0.5 U	0.5 U
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U
1,3-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U
2-BUTANONE	2.5 U	2.5 U	2.5 U
2-HEXANONE	2.5 U	2.5 U	2.5 U
4-METHYL-2-PENTANONE	2.5 U	2.5 U	2.5 U
ACETONE	6.8	2.5 U	2.5 U
BENZENE	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.5 U	0.5 U	0.5 U
BROMOFORM	0.5 U	0.5 U	0.5 U
BROMOMETHANE	0.5 UJ	0.5 UJ	0.5 UJ C
CARBON DISULFIDE	0.5 U	0.5 U	0.5 U
CARBON TETRACHLORIDE	0.5 U	0.5 U	0.5 U
CHLOROBENZENE	0.5 U	0.5 U	0.5 U
CHLORODIBROMOMETHANE	0.5 U	0.5 U	0.5 U
CHLOROETHANE	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	0.5 UJ	0.5 UJ	0.5 UJ C
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U
CIS-1,3-DICHLOROPROPENE	0.5 UJ	0.5 UJ	0.5 UJ C
CYCLOHEXANE	0.5 UJ	0.5 UJ	0.5 UJ C
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	0.5 U	0.5 U	0.5 U
ISOPROPYLBENZENE	0.5 U	0.5 U	0.5 U



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-754	BP-VPB-TB-011912			
SDG: D1280	LAB_ID	D1280-08	D1280-02			
FRACTION: OV	SAMP_DATE	1/24/2012	1/19/2012			
MEDIA: WATER	QC_TYPE	NM	NM			
	UNITS	UG/L	UG/L			
	PCT_SOLIDS	100.0	100.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U		1 U	1 U	
METHYL ACETATE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
METHYL CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U		0.5 U	0.5 U	
METHYLENE CHLORIDE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
O-XYLENE	0.5 U	0.5 U		0.5 U	0.5 U	
STYRENE	0.5 U	0.5 U		0.5 U	0.5 U	
TETRACHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TOLUENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,3-DICHLOROPROPENE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
TRICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U	
VINYL CHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U	

PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-694RE		BP-VPB133-GW-703		BP-VPB133-GW-714		BP-VPB133-GW-734			
	LAB_ID	SAMP_DATE	D1280-01RE	1/20/2012	D1280-04	1/20/2012	D1280-05	1/23/2012	D1280-03	1/23/2012		
FRACTION: OV	QC_TYPE	UNITS	NM	UG/KG	NM	UG/KG	NM	UG/KG	NM	UG/KG		
MEDIA: SEDIMENT	PCT_SOLIDS	DUP_OF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,1,2,2-TETRACHLOROETHANE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
1,1,2-TRICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,1-DICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,1-DICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,2,4-TRICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
1,2-DIBROMO-3-CHLOROPROPANE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
1,2-DIBROMOETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,2-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
1,2-DICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,2-DICHLOROPROPANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
1,3-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
1,4-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR
2-BUTANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
2-HEXANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
4-METHYL-2-PENTANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
ACETONE	29 J	35 J	R	35 J	35 J	R	19 J	19 J	PR	16 J	16 J	PR
BENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
BROMODICHLOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
BROMOFORM	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.45 UJ	2.45 UJ	CR	2.45 UJ	2.45 UJ	CR
BROMOMETHANE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.45 UJ	2.45 UJ	CR	2.45 UJ	2.45 UJ	CR
CARBON DISULFIDE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.45 UJ	2.45 UJ	CR	2.45 UJ	2.45 UJ	CR
CARBON TETRACHLORIDE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CHLOROBENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CHLORODIBROMOMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CHLOROETHANE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.45 UJ	2.45 UJ	CR	2.45 UJ	2.45 UJ	CR
CHLOROFORM	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CHLOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CIS-1,2-DICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CIS-1,3-DICHLOROPROPENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
CYCLOHEXANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
DICHLORODIFLUOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
ETHYLBENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
ISOPROPYLBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.45 UJ	2.45 UJ	NR	2.45 UJ	2.45 UJ	NR

PROJ_NO: 00622	NSAMPLE		BP-VPB133-GW-694RE		BP-VPB133-GW-703		BP-VPB133-GW-714		BP-VPB133-GW-734			
	LAB_ID	D1280-01RE	D1280-04	D1280-05	D1280-03	D1280-04	D1280-05	D1280-03	D1280-03	D1280-03		
SDBG: D1280	SAMP_DATE	1/20/2012	1/20/2012	1/23/2012	1/20/2012	1/20/2012	1/23/2012	1/23/2012	1/23/2012	1/23/2012		
FRACTION: OV	QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM	NM		
MEDIA: SEDIMENT	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG		
	PCT_SOLIDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	DUP_OF											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	5 UJ	5 UJ	R	5 UJ	5 UJ	R	4.95 UJ	4.95 UJ	R	4.9 UJ	4.9 UJ	R
METHYL ACETATE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
METHYL CYCLOHEXANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
METHYL TERT-BUTYL ETHER	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
METHYLENE CHLORIDE	2.7 J	2.7 J	PR	2.7 J	2.7 J	PR	2.7 J	2.7 J	PR	2.45 UJ	2.45 UJ	R
O-XYLENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
STYRENE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.45 UJ	2.45 UJ	CR	2.45 UJ	2.45 UJ	CR
TETRACHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
TOLUENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
TRANS-1,2-DICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
TRANS-1,3-DICHLOROPROPENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
TRICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
TRICHLOROFLUOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R
VINYL CHLORIDE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.45 UJ	2.45 UJ	R	2.45 UJ	2.45 UJ	R

PROJ_NO: 00622		NSAMPLE		BP-VPB133-GW-744		BP-VPB133-GW-764			
SDG: D1280		LAB_ID		D1280-06		D1280-07			
FRACTION: OV		SAMP_DATE		1/24/2012		1/24/2012			
MEDIA: SEDIMENT		QC_TYPE		NM		NM			
		UNITS		UG/KG		UG/KG			
		PCT_SOLIDS		0.0		0.0			
		DUP_OF							
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,1,2,2-TETRACHLOROETHANE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
1,1,2-TRICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,1-DICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,1-DICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,2,4-TRICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
1,2-DIBROMO-3-CHLOROPROPANE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
1,2-DIBROMOETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,2-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
1,2-DICHLOROETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,2-DICHLOROPROPANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
1,3-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
1,4-DICHLOROBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR
2-BUTANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
2-HEXANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
4-METHYL-2-PENTANONE	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R	12.5 UJ	12.5 UJ	R
ACETONE	24 J	24 J	PR	24 J	24 J	PR	35 J	35 J	R
BENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
BROMODICHLOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
BROMOFORM	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR
BROMOMETHANE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR
CARBON DISULFIDE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR
CARBON TETRACHLORIDE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CHLOROBENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CHLORODIBROMOMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CHLOROETHANE	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR	2.5 UJ	2.5 UJ	CR
CHLOROFORM	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CHLOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CIS-1,2-DICHLOROETHENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CIS-1,3-DICHLOROPROPENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
CYCLOHEXANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
DICHLORODIFLUOROMETHANE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
ETHYLBENZENE	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R	2.5 UJ	2.5 UJ	R
ISOPROPYLBENZENE	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR	2.5 UJ	2.5 UJ	NR

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-744	BP-VPB133-GW-764			
SDG: D1280	LAB_ID	D1280-06	D1280-07			
FRACTION: OV	SAMP_DATE	1/24/2012	1/24/2012			
MEDIA: SEDIMENT	QC_TYPE	NM	NM			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	4.95 UJ	UJ	R	5 UJ	UJ	R
METHYL ACETATE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
METHYL CYCLOHEXANE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
METHYL TERT-BUTYL ETHER	2.5 UJ	UJ	R	2.5 UJ	UJ	R
METHYLENE CHLORIDE	2.5 UJ	UJ	R	3.1 J	J	PR
O-XYLENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
STYRENE	2.5 UJ	UJ	CR	2.5 UJ	UJ	CR
TETRACHLOROETHENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
TOLUENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
TRANS-1,2-DICHLOROETHENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
TRANS-1,3-DICHLOROPROPENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
TRICHLOROETHENE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
TRICHLOROFLUOROMETHANE	2.5 UJ	UJ	R	2.5 UJ	UJ	R
VINYL CHLORIDE	2.5 UJ	UJ	R	2.5 UJ	UJ	R



**Volatiles (VOC)**

Due to the nature of the matrices, the environmental groundwater samples, BP-VPB133-834, BP-VPB133-GW-784, BP-VPB133-GW-808, BP-VPB133-GW-814, and BP-VPB133-GW-824, were analyzed as soils. The sample results were reported in µg/Kg based on the dry weight of the sample.

Positive results reported below the LOQ but above the Method Detection Limit (MDL) were qualified as estimated, (J).

**Additional Comments**

The aqueous Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD), BSR0103W1 and BSR0103W2G0216W1, had a Percent Recoveries (%Rs) for dichlorodifluoromethane chloride above the upper quality control limit. No action necessary because no positive results were reported for this compound in the affected samples.

The soil Matrix Spike Duplicate (MS/MSD) analysis yielded a %R for 1,2,4-trichlorobenzene below the lower quality control limit. No action was taken because the Matrix Spike (MS) %R was acceptable and the MS/MSD parent sample was not a sample from this SDG.

Non-detected results are reported to the Limit of Detection (LOD).

**EXECUTIVE SUMMARY**

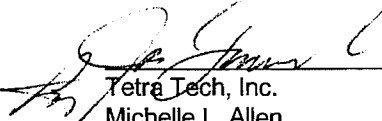
**Laboratory Performance Issues:** The aqueous LCS/LCSD had high %Rs for a target compound.


**Other Factors Affecting Data Quality:** A MSD %R was low. Positive results reported below the LOQ but above the MDL were qualified as estimated.

TO: D. BRAYACK  
SDG: D1320

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The data for these analyses were reviewed with reference to the SOP #HW-24 Revision #2, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (August 2008), EPA Method SW-846 8260C analytical and reporting protocols, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Michelle L. Allen  
Chemist/Data Validator

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation



**Appendix A**

**Qualified Analytical Results**

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 00622 SDG: D1320 FRACTION: OV MEDIA: SOIL	BP-VPB133-834		BP-VPB133-DM		BP-VPB133-GW-784		BP-VPB133-GW-808		
	NSAMPLE LAB_ID	D1320-09	D1320-08	D1320-02	D1320-04	SAMP_DATE	1/27/2012	1/25/2012	1/26/2012
QC_TYPE	NM	NM	NM	NM	NM	UG/KG	UG/KG	UG/KG	UG/KG
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	0.0	0.0	0.0	0.0
PCT_SOLIDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUP_OF									
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,3-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
1,4-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
2-BUTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
2-HEXANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U	
ACETONE	73	51		53	24 J		24 J	P	
BENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
BROMOFORM	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
BROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CARBON DISULFIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROFORM	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ETHYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-814	BP-VPB133-GW-824			
SDG: D1320	LAB_ID	D1320-05	D1320-06			
FRACTION: OV	SAMP_DATE	1/26/2012	1/27/2012			
MEDIA: SOIL	QC_TYPE	NM	NM			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2-DICHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.55 U	2.55 U	
1,3-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
1,4-DICHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
2-BUTANONE	12.5 U	12.5 U		12.5 U	12.5 U	
2-HEXANONE	12.5 U	12.5 U		12.5 U	12.5 U	
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	12.5 U	
ACETONE	27	27		28	28	
BENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
BROMOFORM	2.5 U	2.5 U		2.55 U	2.55 U	
BROMOMETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
CARBON DISULFIDE	2.5 U	2.5 U		2.55 U	2.55 U	
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.55 U	2.55 U	
CHLOROBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
CHLOROETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
CHLOROFORM	2.5 U	2.5 U		2.55 U	2.55 U	
CHLOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.55 U	2.55 U	
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.55 U	2.55 U	
CYCLOHEXANE	2.5 U	2.5 U		2.55 U	2.55 U	
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.55 U	2.55 U	
ETHYLBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.55 U	2.55 U	

PROJ_NO: 00622	NSAMPLE	BP-VPB133-834		BP-VPB133-DM		BP-VPB133-GW-784		BP-VPB133-GW-808	
		LAB_ID	D1320-09	D1320-08	D1320-02	D1320-04	SDG: D1320	FRACTION: OV	MEDIA: SOIL
	SAMP_DATE	1/27/2012	1/27/2012	1/25/2012	1/26/2012				
	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	0.0	0.0	0.0	0.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	5 U	5 U		5 U	5 U		4.96 U		
METHYL ACETATE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
METHYL CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
METHYLENE CHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
O-XYLENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
STYRENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TETRACHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TOLUENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TRICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
TRICHLOROFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		
VINYL CHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U		

PARAMETER	BP-VPB133-GW-814		BP-VPB133-GW-824	
	RESULT	QLCD	RESULT	QLCD
M+P-XYLENES	5 U		5 U	
METHYL ACETATE	2.5 U		2.55 U	
METHYL CYCLOHEXANE	2.5 U		2.55 U	
METHYL TERT-BUTYL ETHER	2.5 U		2.55 U	
METHYLENE CHLORIDE	2.5 U		2.55 U	
STYRENE	2.5 U		2.55 U	
TETRACHLOROETHENE	2.5 U		2.55 U	
TOLUENE	2.5 U		2.55 U	
TRANS-1,2-DICHLOROETHENE	2.5 U		2.55 U	
TRANS-1,3-DICHLOROPROPENE	2.5 U		2.55 U	
TRICHLOROETHENE	2.5 U		2.55 U	
TRICHLOROFLUOROMETHANE	2.5 U		2.55 U	
VINYL CHLORIDE	2.5 U		2.55 U	

PARAMETER	BP-VPB133-GW-814		BP-VPB133-GW-824	
	RESULT	QLCD	RESULT	QLCD
NSAMPLE				
LAB_ID	D1320-05		D1320-06	
SAMP_DATE	1/26/2012		1/27/2012	
QC_TYPE	NM		NM	
UNITS	UG/KG		UG/KG	
PCT_SOLIDS	0.0		0.0	
DUP_OF				

PROJ_NO: 00622	NSAMPLE	BP-VPB133-DW		BP-VPB133-GW-794		BP-VPB-TB-012512			
		LAB_ID	D1320-07	LAB_ID	D1320-03	LAB_ID	D1320-01		
SDG: D1320	SAMP_DATE	1/27/2012		1/25/2012		1/25/2012			
FRACTION: OV	QC_TYPE	NM		NM		NM			
MEDIA: WATER	UNITS	UG/L		UG/L		UG/L			
	PCT_SOLIDS	0.0		0.0		0.0			
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMOETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,3-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
2-BUTANONE	2.5 U	2.5 U		3.9 J	3.9 J	P	2.5 U	2.5 U	
2-HEXANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
4-METHYL-2-PENTANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ACETONE	1.6 J	1.6 J	P	15	15		2.5 U	2.5 U	
BENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMODICHLOROMETHANE	1.1	1.1		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOFORM	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON DISULFIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON TETRACHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLORODIBROMOMETHANE	1.7	1.7		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROFORM	0.63 J	0.63 J	P	0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
ETHYLBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
ISOPROPYLBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	

PROJ_NO: 00622	NSAMPLE	BP-VPB133-DW		BP-VPB133-GW-794		BP-VPB-TB-012512			
		LAB_ID	D1320-07	D1320-03	D1320-01	LAB_ID	D1320-01		
SDG: D1320	SAMP_DATE	1/27/2012	1/25/2012	1/25/2012	1/25/2012	1/25/2012	1/25/2012		
FRACTION: OV	QC_TYPE	NM	NM	NM	NM	NM	NM		
MEDIA: WATER	UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L		
	PCT_SOLIDS	0.0	0.0	0.0	0.0	0.0	0.0		
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U		1 U	1 U		1 U	1 U	
METHYL ACETATE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
METHYL CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
METHYLENE CHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
O-XYLENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
STYRENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TETRACHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TOLUENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
VINYL CHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	





**MEMO TO: D. BRAYACK - PAGE 2**

**DATE: MARCH 21, 2012**

The continuing calibration percent differences and/or percent drifts were greater than the 20% quality control limit for methyl acetate on 02/02/2012 at 18:11 on instrument MSVOA R. The nondetected result for methyl acetate was qualified as estimated "UJ" in the affected sample BP-VPB133-TB-013012-JF

The continuing calibration percent differences and/or percent drifts were greater than the 20% quality control limit for chloroethane and trichlorofluoromethane on 02/02/2012 at 12:12 on instrument MSVOA F. The nondetected results for chloroethane and trichlorofluoromethane were qualified as estimated "UJ" in the affected samples BP-VPB133-GW-844, BP-VPB133-GW-854, BP-VPB133-GW-864, BP-VPB133-GW-874, BP-VPB133-GW-884 and BP-VPB133-GW-904.

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

#### Additional Comments

Groundwater samples BP-VPB133-GW-844, BP-VPB133-GW-854, BP-VPB133-GW-864, BP-VPB133-GW-874, BP-VPB133-GW-884 and BP-VPB133-GW-904 were analyzed as soil samples due to the amount of sediment in the samples. The sample results were reported as ug/kg on a wet weight basis.

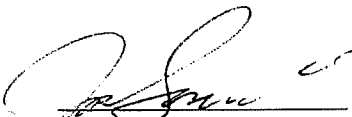
Nondetected results are reported to the limit of detection (LOD).

#### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Several initial %RSDs and continuing calibration %Ds / % drifts for several compounds exceeded the quality control limits.

**Other Factors Affecting Data Quality:** Positive results below the RL and above the detection limit were qualified as estimated.

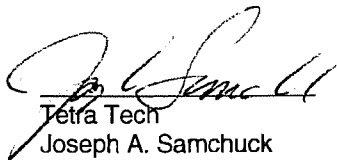
The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009. The text of this report has been formulated to address only those problem areas affecting data quality.



Tetra Tech  
Terri L. Solomon  
Chemist/Data Validator

**MEMO TO: D. BRAYACK - PAGE 3**

**DATE: MARCH 21, 2012**



Tetra Tech

Joseph A. Samchuck

Data Validation Quality Assurance Officer

**Attachments:**

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 00622		NSAMPLE		BP-Y/PB133-TB-013012-JF	
SDG: D1365		LAB_ID		D1365-03	
FRACTION: OV		SAMP_DATE		1/30/2012	
MEDIA: WATER		QC_TYPE		NM	
		UNITS		UG/L	
		PCT_SOLIDS		0.0	
		DUP_OF			
PARAMETER	RESULT	VQL	QLCD		
1,1,1-TRICHLOROETHANE	0.5 U				
1,1,2,2-TETRACHLOROETHANE	0.5 U				
1,1,2-TRICHLOROETHANE	0.5 U				
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U				
1,1-DICHLOROETHANE	0.5 U				
1,1-DICHLOROETHENE	0.5 U				
1,2,4-TRICHLOROBENZENE	0.5 U				
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U				
1,2-DIBROMOETHANE	0.5 U				
1,2-DICHLOROBENZENE	0.5 U				
1,2-DICHLOROETHANE	0.5 U				
1,2-DICHLOROPROPANE	0.5 U				
1,3-DICHLOROBENZENE	0.5 U				
1,4-DICHLOROBENZENE	0.5 U				
2-BUTANONE	2.5 U				
2-HEXANONE	2.5 U				
4-METHYL-2-PENTANONE	2.5 U				
ACETONE	2.5 U				
BENZENE	0.5 U				
BROMODICHLOROMETHANE	0.5 U				
BROMOFORM	0.5 U				
BROMOMETHANE	0.5 UJ				C
CARBON DISULFIDE	0.5 U				
CARBON TETRACHLORIDE	0.5 U				
CHLOROBENZENE	0.5 U				
CHLORODIBROMOMETHANE	0.5 U				
CHLOROETHANE	0.5 U				
CHLOROFORM	0.5 U				
CHLOROMETHANE	0.5 U				
CIS-1,2-DICHLOROETHENE	0.5 U				
CIS-1,3-DICHLOROPROPENE	0.5 UJ				C
CYCLOHEXANE	0.5 UJ				C
DICHLORODIFLUOROMETHANE	0.5 U				
ETHYLBENZENE	0.5 U				
ISOPROPYLBENZENE	0.5 U				

PROJ_NO: 00622	NSAMPLE	BP-VPB133-TB-013012-JF	
SDG: D1365	LAB_ID	D1365-03	
FRACTION: OV	SAMP_DATE	1/30/2012	
MEDIA: WATER	QC_TYPE	NM	
	UNITS	UG/L	
	PCT_SOLIDS	0.0	
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
M+P-XYLENES	1	U	
METHYL ACETATE	0.5	UJ	C
METHYL CYCLOHEXANE	0.5	U	
METHYL TERT-BUTYL ETHER	0.5	U	
METHYLENE CHLORIDE	0.5	UJ	C
O-XYLENE	0.5	U	
STYRENE	0.5	U	
TETRACHLOROETHENE	0.5	U	
TOLUENE	0.5	U	
TRANS-1,2-DICHLOROETHENE	0.5	U	
TRANS-1,3-DICHLOROPROPENE	0.5	UJ	C
TRICHLOROETHENE	0.5	U	
TRICHLOROFLUOROMETHANE	0.5	U	
VINYL CHLORIDE	0.5	U	

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-844	BP-VPB133-GW-854	BP-VPB133-GW-864	BP-VPB133-GW-874				
SDG: D1365	LAB_ID	D1365-01	D1365-02	D1365-04	D1365-05				
FRACTION: OV	SAMP_DATE	1/30/2012	1/30/2012	1/31/2012	1/31/2012				
MEDIA: SOIL	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	0.0	0.0	0.0	0.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,2-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,3-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
1,4-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
2-BUTANONE	12.5 U	12.5 U		12.5 U	13 U		12.5 U	12.5 U	
2-HEXANONE	12.5 U	12.5 U		12.5 U	13 U		12.5 U	12.5 U	
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	13 U		12.5 U	12.5 U	
ACETONE	12.5 U	18 J	P	13 U	13 U		20 J	P	
BENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
BROMOFORM	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
BROMOMETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CARBON DISULFIDE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CHLOROETHANE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.55 UJ	C	2.45 UJ	2.45 UJ	C
CHLOROFORM	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
ETHYLBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.5 U	2.55 U		2.45 U	2.45 U	



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-844		BP-VPB133-GW-854		BP-VPB133-GW-864		BP-VPB133-GW-874			
		LAB_ID	D1365-01	D1365-02	D1365-04	D1365-05	SAMP_DATE	1/30/2012	1/31/2012	1/31/2012	
SDG: D1365	SAMP_DATE	1/30/2012	NM	UG/KG	0.0	NM	UG/KG	0.0	NM	UG/KG	0.0
FRACTION: OV	QC_TYPE	NM	UG/KG	0.0	NM	UG/KG	0.0	NM	UG/KG	0.0	
MEDIA: SOIL	UNITS	UG/KG	0.0	UG/KG	0.0	UG/KG	0.0	UG/KG	0.0		
PARAMETER	DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
M+P-XYLENES		5 U	5 U		4.95 U	5 U		5 U	4.9 U		
METHYL ACETATE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
METHYL CYCLOHEXANE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
METHYL TERT-BUTYL ETHER		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
METHYLENE CHLORIDE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
O-XYLENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
STYRENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TETRACHLOROETHENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TOLUENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TRANS-1,2-DICHLOROETHENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TRANS-1,3-DICHLOROPROPENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TRICHLOROETHENE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		
TRICHLOROFLUOROMETHANE		2.5 UJ	2.5 UJ	C	2.5 UJ	2.55 UJ	C	2.55 UJ	2.45 UJ	C	
VINYL CHLORIDE		2.5 U	2.5 U		2.5 U	2.55 U		2.55 U	2.45 U		

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-884	BP-VPB133-GW-904			
SDG: D1365	LAB_ID	D1365-06	D1365-07			
FRACTION: OV	SAMP_DATE	1/31/2012	2/1/2012			
MEDIA: SOIL	QC_TYPE	NM	NM			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2,4-TRICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U	
1,3-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
1,4-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
2-BUTANONE	12.5 U	12.5 U		12.5 U	12.5 U	
2-HEXANONE	12.5 U	12.5 U		12.5 U	12.5 U	
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	12.5 U	
ACETONE	20 J	P		33		
BENZENE	2.5 U	2.5 U		2.5 U	2.5 U	
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
BROMOFORM	2.5 U	2.5 U		2.5 U	2.5 U	
BROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
CARBON DISULFIDE	2.5 U	2.5 U		2.5 U	2.5 U	
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U	
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROETHANE	2.5 UJ	C		2.5 UJ	C	
CHLOROFORM	2.5 U	2.5 U		2.5 U	2.5 U	
CHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U	
CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U	
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U	
ETHYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U	

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-884	BP-VPB133-GW-904			
SDG: D1365	LAB_ID	D1365-08	D1365-07			
FRACTION: OV	SAMP_DATE	1/31/2012	2/1/2012			
MEDIA: SOIL	QC_TYPE	NM	NM			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
M+P-XYLENES	5 U	5 U		5 U	5 U	
METHYL ACETATE	2.5 U	2.5 U		2.5 U	2.5 U	
METHYL CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U	
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U		2.5 U	2.5 U	
METHYLENE CHLORIDE	2.5 U	2.5 U		2.6 J	2.5 U	P
O-XYLENE	2.5 U	2.5 U		2.5 U	2.5 U	
STYRENE	2.5 U	2.5 U		2.5 U	2.5 U	
TETRACHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
TOLUENE	2.5 U	2.5 U		2.5 U	2.5 U	
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U	
TRICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U	
TRICHLOROFLUOROMETHANE	2.5 UJ	2.5 UJ	C	2.5 UJ	2.5 UJ	C
VINYL CHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U	



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The continuing calibration performed on instrument MSVOAG on 02/08/12 @ 11:29 had Percent Differences (%Ds) for 2-butanone, bromoform, and bromomethane, and Percent Drifts (%Drifts) for chloroethane and methyl acetate above the 20% quality control criterion. Only non-detected results were reported for these compounds in the affected samples, BP-VPB133-GW-974 and BP-VPB133-TB-020212-JRF, and these non-detects were qualified as estimated, (UJ).

The Percent Recovery (%R) for the surrogate spike compound, 4-bromofluorobenzene, was below the lower quality control limit in sample BP-VPB133-GW-959. The sample was reanalyzed with similar results. The results from the initial analysis were used in the data validation. The non-detected results reported for the target compounds in this sample were qualified as estimated, (UJ).

### **Additional Comments**

Non-detected results are reported to the Limit of Detection (LOD).

### **EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** Some continuing calibration %Ds and %Drifts exceeded 20%. One sample had a low surrogate %R.

**Other Factors Affecting Data Quality:** None.

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The data for these analyses were reviewed with reference to the SOP #HW-24 Revision #2, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (August 2008), EPA Method SW-846 8260C analytical and reporting protocols, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).



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Chemist/Data Validator



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Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results



**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times \text{IDL}$  for inorganics and  $< \text{CRQL}$  for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $> 40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $< 30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-939	BP-VPB133-GW-959			
SDG: D1436	LAB_ID	D1436-02	D1436-03			
FRACTION: OV	SAMP_DATE	2/2/2012	2/2/2012			
MEDIA: SOIL	QC_TYPE	NM	NM			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2.5 U			2.5 UJ	R
1,1,2,2-TETRACHLOROETHANE		2.5 U			2.5 UJ	R
1,1,2-TRICHLOROETHANE		2.5 U			2.5 UJ	R
1,1,2-TRICHLOROTRIFLUOROETHANE		2.5 U			2.5 UJ	R
1,1-DICHLOROETHANE		2.5 U			2.5 UJ	R
1,1-DICHLOROETHENE		2.5 U			2.5 UJ	R
1,2,4-TRICHLOROETHENE		2.5 U			2.5 UJ	R
1,2-DIBROMO-3-CHLOROPROPANE		2.5 U			2.5 UJ	R
1,2-DIBROMOETHANE		2.5 U			2.5 UJ	R
1,2-DICHLOROETHENE		2.5 U			2.5 UJ	R
1,2-DICHLOROETHANE		2.5 U			2.5 UJ	R
1,2-DICHLOROPROPANE		2.5 U			2.5 UJ	R
1,3-DICHLOROETHENE		2.5 U			2.5 UJ	R
1,4-DICHLOROETHENE		2.5 U			2.5 UJ	R
2-BUTANONE		12.5 U			12.5 UJ	R
2-HEXANONE		12.5 U			12.5 UJ	R
4-METHYL-2-PENTANONE		12.5 U			12.5 UJ	R
ACETONE		12.5 U			12.5 UJ	R
BENZENE		2.5 U			2.5 UJ	R
BROMODICHLOROMETHANE		2.5 U			2.5 UJ	R
BROMOFORM		2.5 U			2.5 UJ	R
BROMOMETHANE		2.5 U			2.5 UJ	R
CARBON DISULFIDE		2.5 U			2.5 UJ	R
CARBON TETRACHLORIDE		2.5 U			2.5 UJ	R
CHLOROBENZENE		2.5 U			2.5 UJ	R
CHLORODIBROMOMETHANE		2.5 U			2.5 UJ	R
CHLOROETHANE		2.5 U			2.5 UJ	R
CHLOROFORM		2.5 U			2.5 UJ	R
CHLOROMETHANE		2.5 U			2.5 UJ	R
CIS-1,2-DICHLOROETHENE		2.5 U			2.5 UJ	R
CIS-1,3-DICHLOROPROPENE		2.5 U			2.5 UJ	R
CYCLOHEXANE		2.5 U			2.5 UJ	R
DICHLORODIFLUOROMETHANE		2.5 U			2.5 UJ	R
ETHYLBENZENE		2.5 U			2.5 UJ	R
ISOPROPYLBENZENE		2.5 U			2.5 UJ	R

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-939	BP-VPB133-GW-959
SDG: D1436	LAB_ID	D1436-02	D1436-03
FRACTION: OV	SAMP_DATE	2/2/2012	2/2/2012
MEDIA: SOIL	QC_TYPE	NM	NM
	UNITS	UG/KG	UG/KG
	PCT_SOLIDS	0.0	0.0
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
M+P-XYLENES	5 U	5 UJ	R
METHYL ACETATE	2.5 U	2.5 UJ	R
METHYL CYCLOHEXANE	2.5 U	2.5 UJ	R
METHYL TERT-BUTYL ETHER	2.5 U	2.5 UJ	R
METHYLENE CHLORIDE	2.5 U	2.5 UJ	R
O-XYLENE	2.5 U	2.5 UJ	R
STYRENE	2.5 U	2.5 UJ	R
TETRACHLOROETHENE	2.5 U	2.5 UJ	R
TOLUENE	2.5 U	2.5 UJ	R
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 UJ	R
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 UJ	R
TRICHLOROETHENE	2.5 U	2.5 UJ	R
TRICHLOROFLUOROMETHANE	2.5 U	2.5 UJ	R
VINYL CHLORIDE	2.5 U	2.5 UJ	R

PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-974	BP-VPB133-TB-020212-JRF			
SDG: D1436	LAB_ID	D1436-04	D1436-01			
FRACTION: OV	SAMP_DATE	2/3/2012	2/2/2012			
MEDIA: WATER	QC_TYPE	NM	NM			
	UNITS	UG/L	UG/L			
	PCT_SOLIDS	0.0	0.0			
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5 U			0.5 U	
1,1,2,2-TETRACHLOROETHANE		0.5 U			0.5 U	
1,1,2-TRICHLOROETHANE		0.5 U			0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5 U			0.5 U	
1,1-DICHLOROETHANE		0.5 U			0.5 U	
1,1-DICHLOROETHENE		0.5 U			0.5 U	
1,2,4-TRICHLOROBENZENE		0.5 U			0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5 U			0.5 U	
1,2-DIBROMOETHANE		0.5 U			0.5 U	
1,2-DICHLOROBENZENE		0.5 U			0.5 U	
1,2-DICHLOROETHANE		0.5 U			0.5 U	
1,2-DICHLOROPROPANE		0.5 U			0.5 U	
1,3-DICHLOROBENZENE		0.5 U			0.5 U	
1,4-DICHLOROBENZENE		0.5 U			0.5 U	
2-BUTANONE		2.5 UJ	C		2.5 UJ	C
2-HEXANONE		2.5 U			2.5 U	
4-METHYL-2-PENTANONE		2.5 U			2.5 U	
ACETONE		2.5 U			2.5 U	
BENZENE		0.5 U			0.5 U	
BROMODICHLOROMETHANE		0.5 U			0.5 U	
BROMOFORM		0.5 UJ	C		0.5 UJ	C
BROMOMETHANE		0.5 UJ	C		0.5 UJ	C
CARBON DISULFIDE		0.5 U			0.5 U	
CARBON TETRACHLORIDE		0.5 U			0.5 U	
CHLOROBENZENE		0.5 U			0.5 U	
CHLORODIBROMOMETHANE		0.5 U			0.5 U	
CHLOROETHANE		0.5 UJ	C		0.5 UJ	C
CHLOROFORM		0.5 U			0.5 U	
CHLOROMETHANE		0.5 U			0.5 U	
CIS-1,2-DICHLOROETHENE		0.5 U			0.5 U	
CIS-1,3-DICHLOROPROPENE		0.5 U			0.5 U	
CYCLOHEXANE		0.5 U			0.5 U	
DICHLORODIFLUOROMETHANE		0.5 U			0.5 U	
ETHYLBENZENE		0.5 U			0.5 U	
ISOPROPYLBENZENE		0.5 U			0.5 U	



PROJ_NO: 00622	NSAMPLE	BP-VPB133-GW-974	BP-VPB133-TB-020212-JRF
SDG: D1436	LAB_ID	D1436-04	D1436-01
FRACTION: OV	SAMP_DATE	2/3/2012	2/2/2012
MEDIA: WATER	QC_TYPE	NM	NM
	UNITS	UG/L	UG/L
	PCT_SOLIDS	0.0	0.0
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
M+P-XYLENES	1 U	1 U	1 U
METHYL ACETATE	0.5 UJ	0.5 UJ	0.5 UJ C
METHYL CYCLOHEXANE	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U	0.5 U
METHYLENE CHLORIDE	0.5 U	0.5 U	0.5 U
O-XYLENE	0.5 U	0.5 U	0.5 U
STYRENE	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	0.5 U	0.5 U	0.5 U
TOLUENE	0.5 U	0.5 U	0.5 U
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	0.5 U	0.5 U	0.5 U
TRICHLOROFUOROMETHANE	0.5 U	0.5 U	0.5 U
VINYL CHLORIDE	0.5 U	0.5 U	0.5 U



VOC

The following compounds were detected in the associated method blank #1206167-02A at the maximum concentration as indicated below affecting the sample:

<u>Compound</u>	<u>Maximum Conc. (<math>\mu\text{g}/\text{m}^3</math>)</u>	<u>Action Level (<math>\mu\text{g}/\text{m}^3</math>)</u>
Hexane	0.089	0.445
2-Butanone	0.13	1.30
Methylene chloride	0.12	1.20

An action level of 10X the maximum contaminant concentration for methylene chloride and 2-butanone, and 5X the maximum contaminant concentration for hexane was established to evaluate laboratory contamination for the aforementioned compounds. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. The sample positive results for 2-butanone and methylene chloride were qualified non-detected, (U), due to the method blank contamination.

The initial calibration percent relative standard deviation (%RSD) was greater than the 30% quality control limit for 1,2,4-trichlorobenzene for instrument MSDV.I on 06/07/12 affecting the SDG sample. The non-detected 1,2,4-trichlorobenzene result was qualified estimated, (UJ).

The continuing calibration verification (CCV) percent recovery (%R) was greater than the 30% quality control limit for 1,1,2,2-tetrachloroethane for instrument MSDV.I on 06/08/12 @ 08:04 affecting the SDG sample. The non-detected 1,1,2,2-tetrachloroethane result was qualified estimated, (UJ).

The laboratory reported tentatively identified compounds (TICs) in the VOC results. All TIC compounds were qualified presumptively present estimated (NJ), as the instrument was not specifically calibrated for these compounds.

Positive results below the Reporting Limit (RL) and above the method detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

ADDITIONAL COMMENTS

The laboratory reported the VOC air result concentrations in units of both ppbv and  $\mu\text{g}/\text{m}^3$  on the sample forms. The results in the database and the qualified analytical result concentrations are reported as  $\mu\text{g}/\text{m}^3$  only. Additionally, TICs were reported in part per billion volume (ppbv) units by the laboratory.

The laboratory performed a duplicate analysis for sample BP-VPB133-AIR-060612. Precision criteria, defined as the relative percent difference <25%, was satisfied for all detected analytes reported at concentrations below five times the reporting limit.

Sample VOC analyte results were reported to the RL.

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SDG: 1206167

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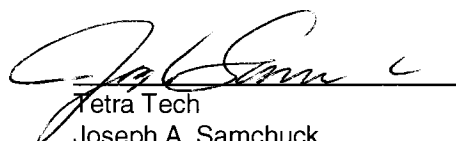
EXECUTIVE SUMMARY

**Laboratory Performance Issues:** The sample was qualified for 2-butanone and methylene chloride method blank contamination. The sample non-detected 1,2,4-trichlorobenzene result was qualified for an initial calibration %RSD quality control limit non-compliance. The sample non-detected 1,1,2,2-tetrachloroethane result was qualified for a CCV %D non-compliance.

**Other Factors Affecting Data Quality:** Positive results below the Reporting Limit (RL) and above the method detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the EPA Method TO-15, SOP HW-31 Revision #4, October 2006, USEPA Region II Hazardous Waste Support Branch Validating Air Samples Volatile Organic Analysis of Ambient Air in Canister by Method TO-15, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

  
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Attachments:

- Appendix A - Qualified Analytical Results
- Appendix B - Results as Reported by the Laboratory
- Appendix C - Region II Data Validation Forms
- Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results



### **Value Qualifier Key (Val Qual)**

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

### **DATA QUALIFICATION CODE (QUAL CODE)**

#### **Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times \text{IDL}$  for inorganics and  $< \text{CRQL}$  for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $> 40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $< 30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02751	NSAMPLE	BP-VPB133-AIR-060612	
SDG: 1206167	LAB_ID	1206167-01A	
FRACTION: OV-M3	SAMP_DATE	6/7/2012	
MEDIA: AIR	QC_TYPE	NM	
	UNITS	UG/M3	
	PCT_SOLIDS		
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.36 U		
1,1,2,2-TETRACHLOROETHANE	0.46 UJ		C
1,1,2-TRICHLOROETHANE	0.36 U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.52		
1,1-DICHLOROETHANE	0.54 U		
1,1-DICHLOROETHENE	0.53 U		
1,2,4-TRICHLOROBENZENE	5 UJ		C
1,2,4-TRIMETHYLBENZENE	0.66 U		
1,2-DIBROMOETHANE	0.51 U		
1,2-DICHLOROBENZENE	0.4 U		
1,2-DICHLOROETHANE	0.073 J		P
1,2-DICHLOROPROPANE	0.62 U		
1,2-DICHLOROTETRAFLUROETHANE	0.47 U		
1,3,5-TRIMETHYLBENZENE	0.66 U		
1,3-DICHLOROBENZENE	0.4 U		
1,4-DICHLOROBENZENE	0.4 U		
1,4-DIOXANE	0.82		
2,2,4-TRIMETHYLPENTANE	0.56 J		P
2-BUTANONE	0.86 U		A
4-METHYL-2-PENTANONE	0.11 J		P
BENZENE	0.31 J		P
BENZYL CHLORIDE	0.69 U		
BROMODICHLOROMETHANE	0.45 U		
BROMOFORM	0.69 U		
BROMOMETHANE	0.25 J		P
CARBON TETRACHLORIDE	0.35 J		P
CHLOROBENZENE	0.62 U		
CHLORODIBROMOMETHANE	0.57 U		
CHLOROETHANE	1.8 U		
CHLOROFORM	0.65 U		
CHLOROMETHANE	0.82		
CIS-1,2-DICHLOROETHENE	0.53 U		
CIS-1,3-DICHLOROPROPENE	0.61 U		
CYCLOHEXANE	0.094 J		P
DICHLORODIFLUOROMETHANE	2		

PROJ_NO: 02751	NSAMPLE	BP-VPB133-AIR-060612	
SDG: 1206167	LAB_ID	1206167-01A	
FRACTION: OV-M3	SAMP_DATE	6/7/2012	
MEDIA: AIR	QC_TYPE	NM	
	UNITS	UG/M3	
	PCT_SOLIDS		
	DUP_OF		
PARAMETER	RESULT	VQL	QLCD
ETHANOL	3.2		
ETHYLBENZENE	0.11 J		P
HEXACHLOROBUTADIENE	7.1 U		
HEXANE	0.5		
M+P-XYLENES	0.34 J		P
METHYL TERT-BUTYL ETHER	0.48 U		
METHYLENE CHLORIDE	0.46 U		A
O-XYLENE	0.13 J		P
STYRENE	0.57 U		
TERTIARY-BUTYL ALCOHOL	0.19 J		P
TETRACHLOROETHENE	0.11 J		P
TOLUENE	0.84		
TRANS-1,2-DICHLOROETHENE	0.53 U		
TRANS-1,3-DICHLOROPROPENE	0.61 U		
TRICHLOROETHENE	0.36 U		
TRICHLOROFLUOROMETHANE	1.1		
VINYL CHLORIDE	0.34 U		

**Section 7**

**VPB 133 Detected Compounds Table**

**VALIDATED ANALYTICAL RESULTS  
DETECTED COMPOUNDS FOR VERTICAL PROFILE BORING 133  
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT  
BETHPAGE, NEW YORK**

No.	Sample ID	Depth (feet bgs) <sup>1</sup>	Analysis Type	Total VOCs (µg/L) <sup>2</sup>	TCE	PCE	1,1- DCA	1,1- DCE	1,2- DCA	Chloro form	Cis-1,2- DCE	Chloro ethane	Chloro methane	2-Buta none	1,2- DCP	1,2,4- TBZ	Ace.	Freon 12	Carbon Disulfide	Methy lene Chloride	tert BME
1	BP-VPB133-GW-058	58	AQ	0.5						0.5 J		1.7 J	2.1 J				42 J				2.6 J
2	BP-VPB133-GW-114	114	AQ	ND													5.5 J				
3	BP-VPB133-GW-148	148	AQ	2.09	0.79 J		1.3					4 J		4.9 J			27 J				2.2
4	BP-VPB133-GW-150	150	AQ	4.95	1.4 J	1.4 J	1.1 J	0.63 J		0.42 J							3.8 J				2.3 J
5	BP-VPB133-GW-194	194	AQ	ND																	
6	BP-VPB133-GW-234	234	AQ	9.09			3	0.68 J	0.51 J	3.1 J	1.8 J			2.7 J	2.2	0.46 J	5 J	2.1 J			8.8
7	BP-VPB133-GW-254	254	AQ	ND										13			9.1	2 J	1.8 J		5.4
8	BP-VPB133-GW-274	274	AQ	ND													4.7 J				
9	BP-VPB133-GW-294	294	AQ	ND													6.8		2 J		
10	BP-VPB133-GW-314	314	AQ	ND													6.2				
11	BP-VPB133-GW-334	334	AQ	ND										5.5 J			7.3		2.4 J		
12	BP-VPB133-GW-354	354	AQ	ND										5.5 J			10		1.6 J		
13	BP-VPB133-GW-374	374	AQ	ND													8.6				
14	BP-VPB133-GW-394	394	SO <sup>3</sup>	ND										23 J			72				
15	BP-VPB133-GW-414	414	SO <sup>3</sup>	ND										5.4 J			22 J		18		
16	BP-VPB133-GW-434	434	AQ	ND																	
17	BP-VPB133-GW-454	454	AQ	ND																	
18	BP-VPB133-GW-474	474	AQ	ND																	
19	BP-VPB133-GW-494	494	AQ	ND																	
20	BP-VPB133-GW-514	514	AQ	ND													7.6				
21	BP-VPB133-GW-534	534	AQ	ND													4.2 J				
22	BP-VPB133-GW-554	554	AQ	ND													4.8 J				
23	BP-VPB133-GW-574	574	SO <sup>3</sup>	ND													32				
24	BP-VPB133-GW-594	594	SO <sup>3</sup>	ND													38				
25	BP-VPB133-GW-614	614	SO <sup>3</sup>	ND													34			6.1	
26	BP-VPB133-GW-634	634	AQ	ND													8.2 J				
27	BP-VPB133-GW-654	654	SO <sup>3</sup>	ND													31			6	
28	BP-VPB133-GW-694	694	SO <sup>3</sup>	ND													29 J			2.7 J	
29	BP-VPB133-GW-703	703	SO <sup>3</sup>	ND													35 J			2.7 J	
30	BP-VPB133-GW-714	714	SO <sup>3</sup>	ND													19 J			2.7 J	
31	BP-VPB133-GW-734	734	SO <sup>3</sup>	ND													16 J				
32	BP-VPB133-GW-744	744	SO <sup>3</sup>	ND													24 J				
33	BP-VPB133-GW-754	754	AQ	ND													6.8				
34	BP-VPB133-GW-764	764	SO <sup>3</sup>	ND													35 J			3.1 J	
35	BP-VPB133-GW-784	784	SO <sup>3</sup>	ND													53				
36	BP-VPB133-GW-794	794	AQ	ND										3.9 J			15				
37	BP-VPB133-GW-808	808	SO <sup>3</sup>	ND													24 J				
38	BP-VPB133-GW-814	814	SO <sup>3</sup>	ND													27				
39	BP-VPB133-GW-824	824	SO <sup>3</sup>	ND													28				
40	BP-VPB133-GW-834	834	SO <sup>3</sup>	ND													73				
41	BP-VPB133-GW-844	844	SO <sup>3</sup>	ND																	
42	BP-VPB133-GW-854	854	SO <sup>3</sup>	ND													18 J				
43	BP-VPB133-GW-864	864	SO <sup>3</sup>	ND																	
44	BP-VPB133-GW-874	874	SO <sup>3</sup>	ND													20 J				
45	BP-VPB133-GW-884	884	SO <sup>3</sup>	ND													20 J				
46	BP-VPB133-GW-904	904	SO <sup>3</sup>	ND													33			2.6 J	
47	BP-VPB133-GW-939	939	SO <sup>3</sup>	ND																	
48	BP-VPB133-GW-959	959	SO <sup>3</sup>	ND																	
49	BP-VPB133-GW-974	974	AQ	ND																	

**Notes:**

bgs: Below ground surface  
µg/L: micrograms per liter  
J: Estimated Value  
ND: Not detected

TCE: Trichloroethene  
PCE: Tetrachloroethene  
1,1-DCA: 1,1-Dichloroethane  
1,1-DCE: 1,1-Dichloroethene

1,2-DCA: 1,2-Dichloroethane  
cis-1,2-DCE: 1,2-Dichloroethene  
1,2-DCE: 1,2-Dichloroethane  
1,2-DCP: 1,2-Dichloropropane  
1,2,4-TBZ: 1,2,4-Trichlorobenzene

Ace.: Acetone  
tert BME: tert. ButylMethylEther

<sup>1</sup> Samples were taken on 20-foot centers starting at 200 ft bgs to the total depth of the borehole. Where a sample could not be obtained from the designated interval, an attempt was made at the next 10-foot interval or at the direction of the site geologist.

<sup>2</sup> TCE, PCE, 1,1-DCA, 1,1-DCE, 1,2-DCA, Cis-1,2-DCE, and chloroform used to calculate Total VOCs

<sup>3</sup> Results are reported as a soil on a wet weight basis (microgram per kilogram)

## **Section 8**

### **TT-102D/TT-102D2**

**-TT-102D/TT-102D2 Boring Log Sheets/Well Construction  
Log Sheets**

**-TT-102D/TT-102D2 Well Development Record**

**-TT-102D/TT-102D2 GW Sample Log**

**-TT-102D/TT-102D2 Chain of Custody Record**

**-TT-102D/TT-102D2 Analytical Data Sheet**

**-TT-102D/TT-102D2 Validation Letter and Table**

**TT-102D/TT-102D2**  
**BORING LOG SHEETS**  
**WELL CONSTRUCTION LOG SHEETS**



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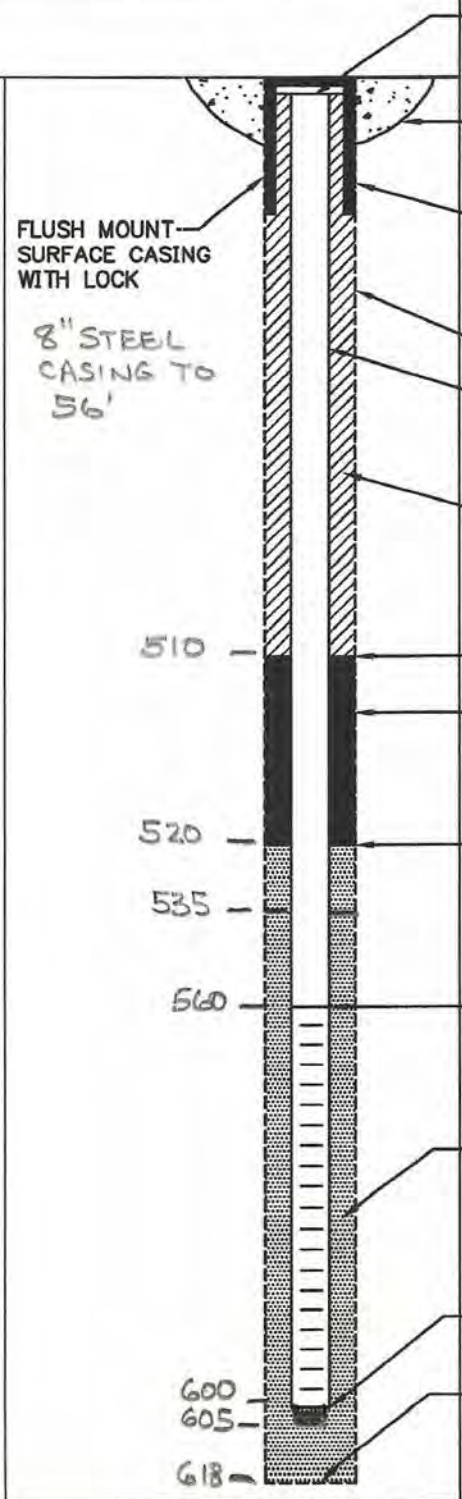
# OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: TT-102D

VPB-133

PROJECT <u>BETHPAGE OV2</u>	LOCATION <u>BETHPAGE NY</u>	DRILLER <u>TWIGG</u>
PROJECT NO. <u>112602751</u>	BORING <u>VPB-133</u>	DRILLING METHOD <u>MUD ROT</u>
DATE BEGUN <u>6/13/12</u>	DATE COMPLETED <u>6/14/12</u>	DEVELOPMENT METHOD <u>AIR/PUMP</u>
FIELD GEOLOGIST <u>CONTI</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM\_KWF.M.dwg 07/20/99 INL



ELEVATION TOP OF RISER: \_\_\_\_\_

TYPE OF SURFACE SEAL: FLUSH MOUNT

TYPE OF PROTECTIVE CASING: STEEL

I.D. OF PROTECTIVE CASING: 12

DIAMETER OF HOLE: 8"

TYPE OF RISER PIPE: PVC SCH 80

RISER PIPE I.D.: 4"

TYPE OF BACKFILL/SEAL: HIGH SOLIDS BENTONITE GROUT

ELEVATION/DEPTH TOP OF SEAL: 510

TYPE OF SEAL: 1/4" Ø BENTONITE PELLETS

ELEVATION/DEPTH TOP OF SAND: 520

FINE SAND

TOP C. SAND

ELEVATION/DEPTH TOP OF SCREEN: 560

TYPE OF SCREEN: PVC SCH 80

SLOT SIZE x LENGTH: 10SL x 40'

TYPE OF SAND PACK: FILPRO #2WG QUARTZ SAND

DIAMETER OF HOLE IN BEDROCK: NA

ELEVATION / DEPTH BOTTOM OF SCREEN: 600

ELEVATION / DEPTH BOTTOM OF SAND: 605

ELEVATION/DEPTH BOTTOM OF HOLE: 618

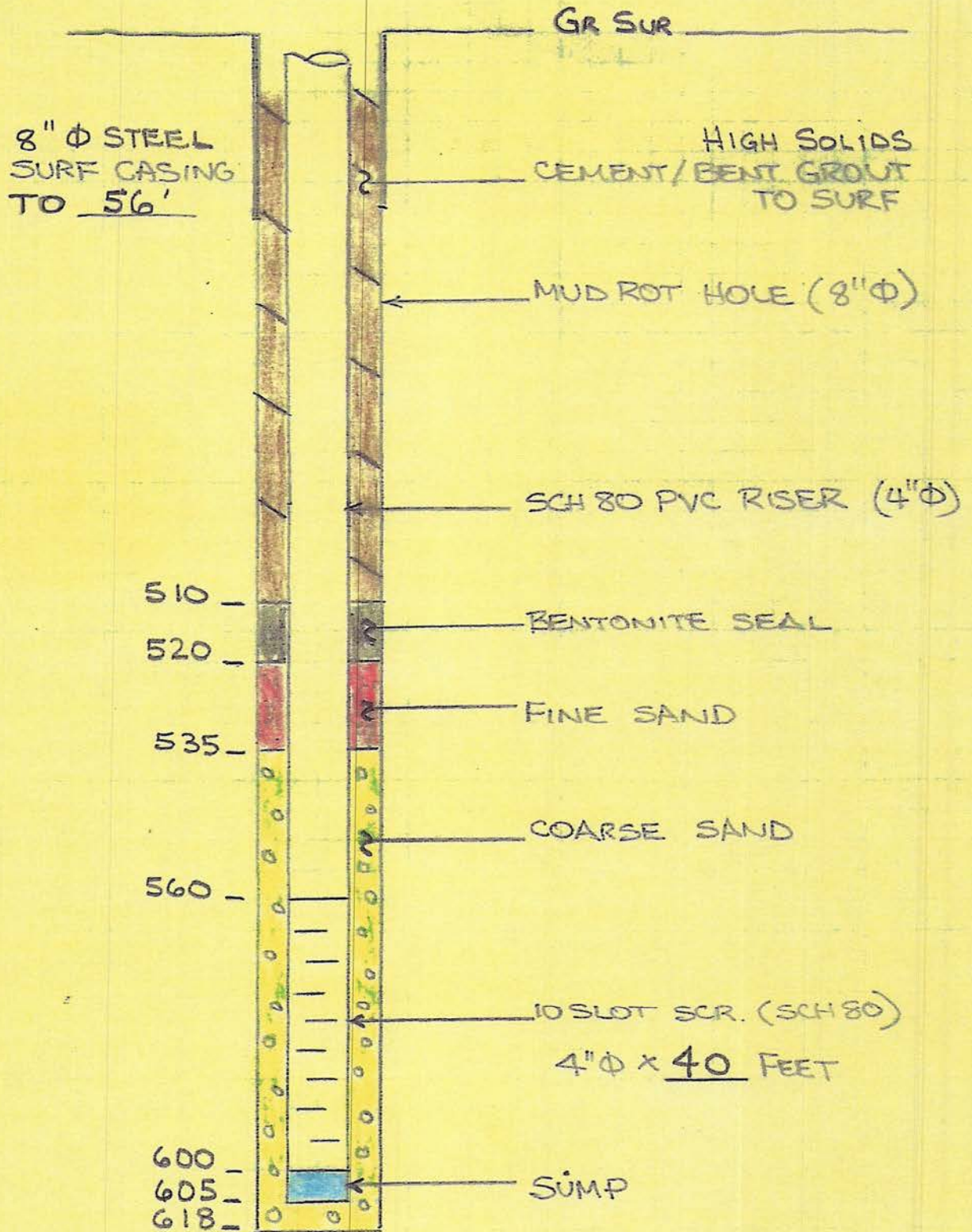
BACKFILL MATERIAL BELOW SAND: SAND



SHALLOW

TT-102 D

VPB-133 LOC.



TD = 618  $\pm$

NOT TO SCALE

SJC







# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D  
 DATE: 6/7/2  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)								
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**					
	100																	
					DENSE	TAN GRAY	SAND F/M	SM /SP	WET									0
									TR LIGNITE TO 120'									
6/6	120								SAND F/M									
6/7																		
	140								SAME									0
	160								SAME - TR GRAVEL									
									TR CLAY ~170'									
	180								SAME									0
1115																		
	200																	

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area  
 Background (ppm):

Converted to Well: Yes x

No \_\_\_\_\_

Well I.D. #: TT-102D





# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D**  
 DATE: 6/7/12 & 6/8/12  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	200				DENSE	GRAY	F/M SAND	SM /SP	WET					0
	220						SAME							
	240						SAME							0
	260						SAME							
	280						SAME TR							
							LIGNITE @	285'						0
								↓						
	300							300 ±						

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes x No \_\_\_\_\_ Well I.D. #: **TT-102D**



# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D**  
 DATE: 6/8/12 & 6/11/12  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	300				DENSE	GRAY	F/M SAND	SM SP	WET				0
	320						SAME						
	340						SAME						0
	360						SAME						
	380						SAME						0
	400												

6/8

6/11

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area  
 Background (ppm):

Converted to Well: Yes  No  Well I.D. #: **TT-102D**





# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D  
 DATE: 6/11/12 & 6/12/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	400				DENSE	GRAY	F/M SAND	SM	WET				0
	420						SAME						
	440						SAME						0
	460						SAME						
	480						SAME						0
	500												

6/11  
6/12

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: TT-102D



# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D  
 DATE: 6/12/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

6112

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	500				DENSE	GRAY	F/M SAND	SM	WET					0
	520						SAME							
	540						SAME - TR GRAVEL		STARTED TO HIT SOME GRAVEL ~ 540 - BASED ON DRILLING AND CUTTINGS.					0
	560						F/C SAND - TR FINE GRAVEL	SW, SP	WET					
	580								SOME LOSS OF DRILL FLUIDS 570 → 590					
	600						SAME		CUTTING SAMPLE					0

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area  
 Background (ppm):

Converted to Well: Yes  No  Well I.D. #: TT-102D





# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D  
 DATE: 6/12/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)					
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**		
	600				DENSE GRAY		F/M SAND-TR GRAVEL		WET						
	620			618 TD			SCREEN 560-600 SUMP 600-605		4" Ø SCH 80 PVC.						

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: TT-102D





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# OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: TT-102D2

VPB-133

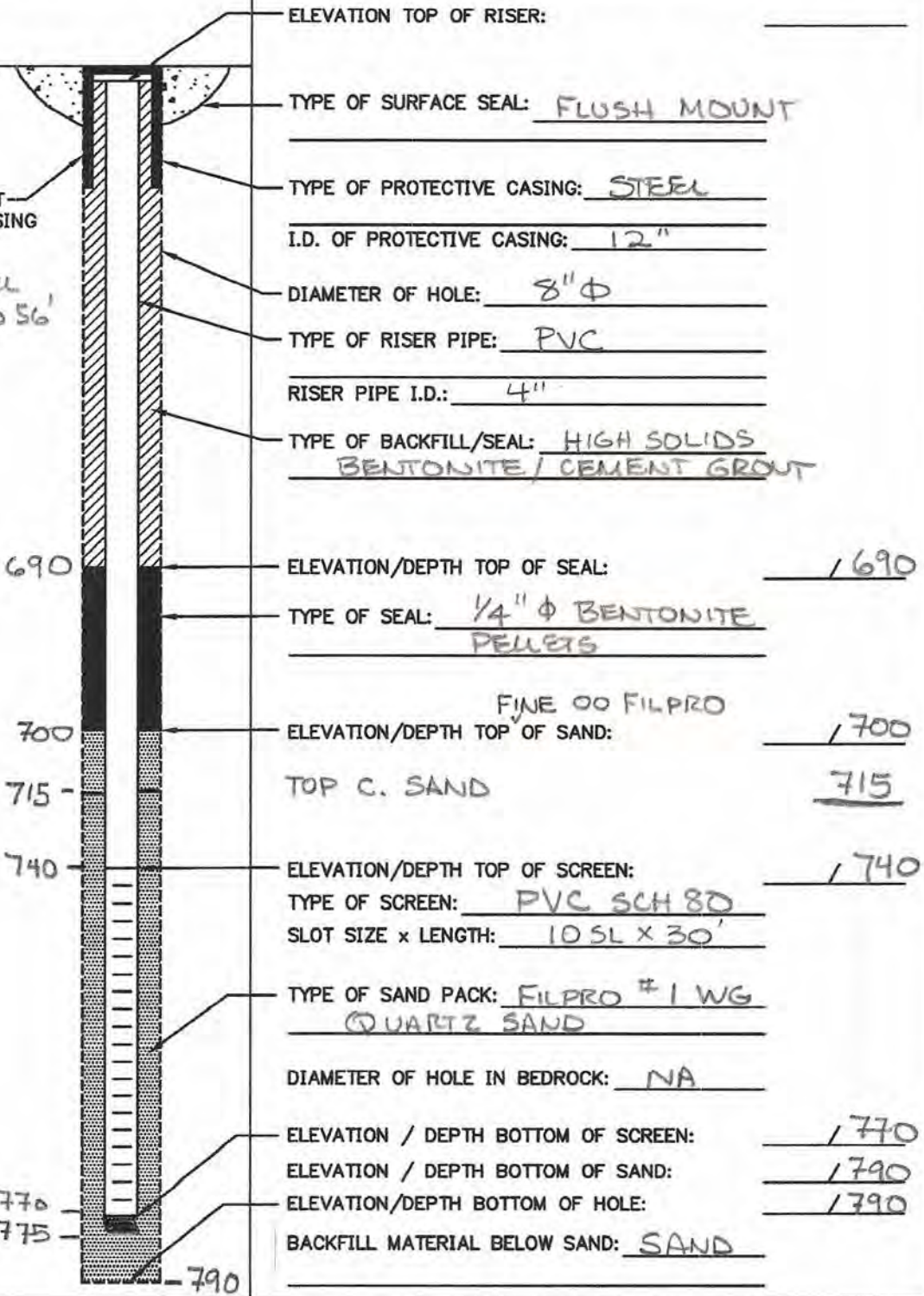
PROJECT <u>BETHPAGE 002</u>	LOCATION <u>BETHPAGE NY</u>	DRILLER <u>C. TWIGG</u>
PROJECT NO. <u>112602751</u>	BORING <u>VPB-133</u>	DRILLING METHOD <u>MUD ROT</u>
DATE BEGUN <u>5/23/12</u>	DATE COMPLETED <u>5/24/12</u>	DEVELOPMENT METHOD <u>AIR/PUMP</u>
FIELD GEOLOGIST <u>CONTI</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM\_MWFM.dwg 07/20/99 INL

FLUSH MOUNT SURFACE CASING WITH LOCK

8" STEEL CAS TO 56'

5' sump 770 775



ELEVATION TOP OF RISER: \_\_\_\_\_

TYPE OF SURFACE SEAL: FLUSH MOUNT

TYPE OF PROTECTIVE CASING: STEEL

I.D. OF PROTECTIVE CASING: 12"

DIAMETER OF HOLE: 8"  $\phi$

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 4"

TYPE OF BACKFILL/SEAL: HIGH SOLIDS BENTONITE / CEMENT GROUT

ELEVATION/DEPTH TOP OF SEAL: 1690

TYPE OF SEAL: 1/4"  $\phi$  BENTONITE PELLETS

ELEVATION/DEPTH TOP OF SAND: 1700

TOP C. SAND: 715

ELEVATION/DEPTH TOP OF SCREEN: 1740

TYPE OF SCREEN: PVC SCH 80

SLOT SIZE x LENGTH: 10 SL x 30'

TYPE OF SAND PACK: FILPRO #1 WG QUARTZ SAND

DIAMETER OF HOLE IN BEDROCK: NA

ELEVATION / DEPTH BOTTOM OF SCREEN: 1770

ELEVATION / DEPTH BOTTOM OF SAND: 1790

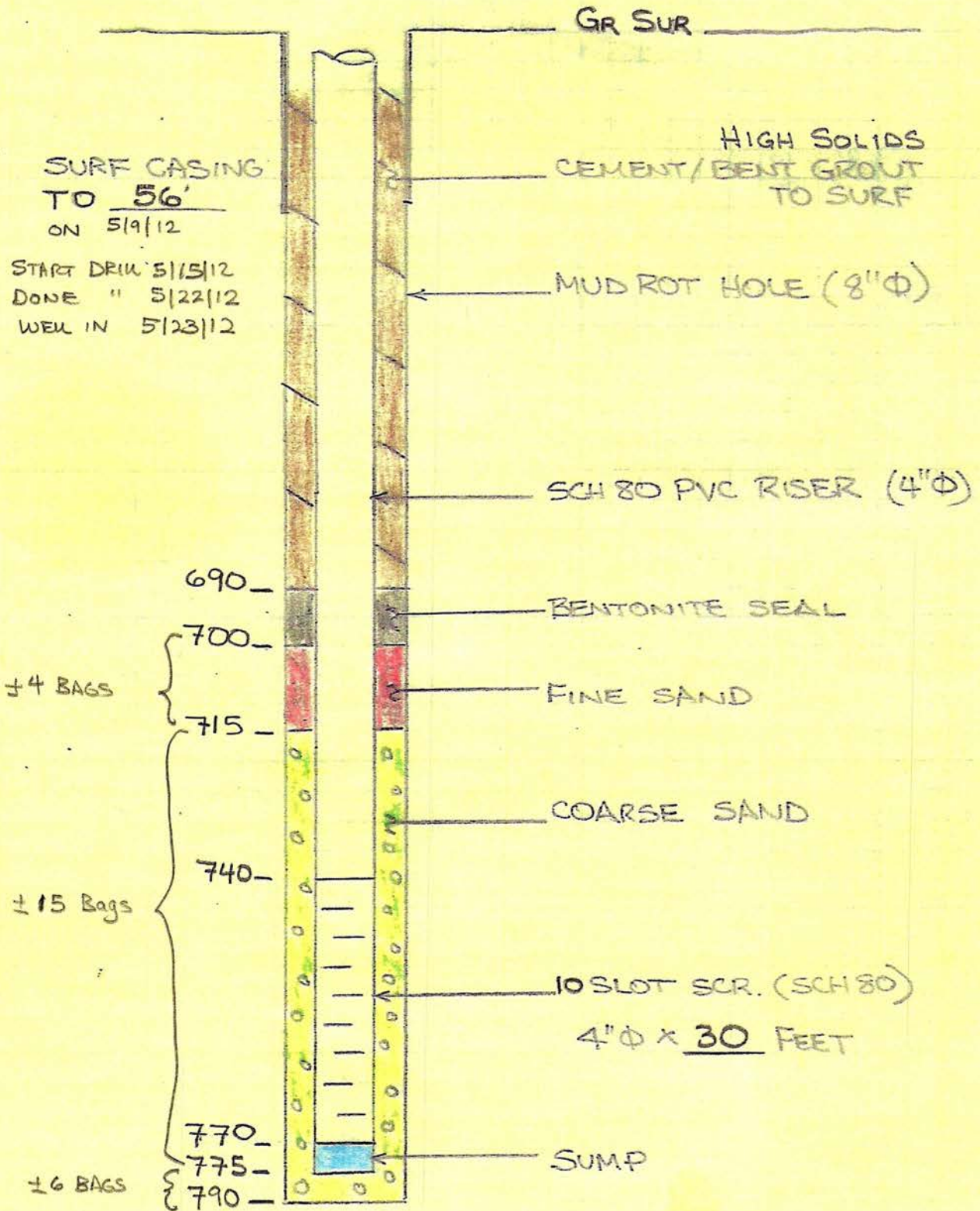
ELEVATION/DEPTH BOTTOM OF HOLE: 1790

BACKFILL MATERIAL BELOW SAND: SAND

DEEP

TT- 102D2

VPB- 133 LOC.



NOT TO SCALE

*SJC*





# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D2**  
 DATE: **5/9/12 AND 5/16/12**  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)									
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**						
	0																		
							FOR DETAILS SEE	SW	DAMP										0
							JIM F LOG FOR	GW											
							BORING VPB-133		ALSO SEE										
									GAMMA LOG										
	20						DROVE 8" STEEL												
							CAS TO ~ 56'												
							YELLOW												
							DENSE BRN SAND - SOME												
							GRAVEL												
	40						TO 60'		MOIST										0
							8" CASING TO 56' ±												
							TO												
	60						BRN GRAY SAND - TR	SM	WET										0
							GRAVEL	SP											
							SAME - TR												0
							CLAY ~		80'										
	100																		

5/9  
5/15  

---

5/16

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: DROVE 8" CAS TO 56'  
THEN 8" MUD ROTARY TO BOTM.

Drilling Area Background (ppm): 0

Converted to Well: Yes x No      Well I.D. #: TT-102D2



# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D2**  
 DATE: **5/16/12 → 5/17/12**  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	100				DENSE	BRN GRAY	SAND (F/C)	SM SP	WET					0
	120						SAME							
	140						SAME							0
	160						SAME							
	180						SAME - MORE CLAY ~ 185'		LENSES					0
	200													

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area  
 Background (ppm):

Converted to Well: Yes  No  Well I.D. #: **TT-102D2**





# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D2  
 DATE: 5/17/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	200				DENSE	GRAY	F/C SAND	SM SP						0
	220						SAME							
	240						SAME							0
	260						SAME							
	280						SAME - TR LIGNITE -							0
	300													

5/16  
5/17

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes x No \_\_\_\_\_ Well I.D. #: TT-102D2



# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D2**  
 DATE: **5/17/12 → 5/18/12**  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	300				DENSE	GRAY	F/C SAND	SM SP	WET				0
	320						SAME						
	340						SAME						0
	360						SAME						
	380						SAME						0
	400												

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: **TT-102D2**





# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D2  
 DATE: 5/17/12 - 5/18/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	400				DENSE	GRAY	SAND/ F/M	SM SP	WET				0
	420						SAME						
	440						SAME						0
	460						SAME						
	480						SAME						0
	500												

5/17  
5/18

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes x No \_\_\_\_\_ Well I.D. #: TT-102D2



# BORING LOG

PROJECT NAME: BETHPAGE OU-2 OFFSITE GW  
 PROJECT NUMBER: 112G02751-PHASE II  
 DRILLING COMPANY: DELTA WELL & PUMP  
 DRILLING RIG: MUD ROTARY

BORING No.: TT-102D2  
 DATE: 5/18/12  
 GEOLOGIST: Conti  
 DRILLER: C. Twigg

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	500				DENSE	GRAY	F/M SAND	SM SP	WET					0
	520						SAME							
	540						SAME							0
	560						SAND - TR TO SOME GRAVEL		SOME LOSS OF DRIVING FLUID TO 605					
	580						SAME							0
	600													

5/18  
5/21

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm): 0

Converted to Well: Yes x No \_\_\_\_\_ Well I.D. #: TT-102D2





# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D2**  
 DATE: **5/21/12**  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S +	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	600				DENSE GRAY SAND - SOME GRAVEL TO			SP/ WET					0
	620				SAND (F/M)								0
	640				SAME								
	660				SAME - SOME CLAY								0
	680				SAME - LESS CLAY								
	700												

5/21  
5/22

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes x No \_\_\_\_\_ Well I.D. #: **TT-102D2**



# BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**  
 PROJECT NUMBER: **112G02751-PHASE II**  
 DRILLING COMPANY: **DELTA WELL & PUMP**  
 DRILLING RIG: **MUD ROTARY**

BORING No.: **TT-102D2**  
 DATE: **5/22/12**  
 GEOLOGIST: **Conti**  
 DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
	700				DENSE	GRAY	F I M SAND	SM	WET					0
	720						SAME-TR F GRAVEL		725±					
	740						SAME-TR F GRAVEL		745 CUTTING SAMPLE SAND TR GRAVEL					0
	760				10 SL SCREEN									
SS 1355	765 766		.7/1				SAND - SOME GRAVEL		WET POOR REC 1/2" GRAVEL SUB ROUND TO ROUND					
	780						SUMP 770-775 OVERDRILL TO 790							0
	800				TD									

\* When rock coring, enter rock brokenness.

\*\* Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: \_\_\_\_\_

Drilling Area Background (ppm):

Converted to Well: Yes  No  Well I.D. #: **TT-102D2**

**TT-102D/TT-102D2**  
**WELL DEVELOPMENT LOG SHEETS**



AIR LIFT



Tetra Tech

**MONITORING WELL DEVELOPMENT RECORD**

Well: JT-102D Depth to Bottom (ft.): 605 Responsible Personnel: J. Lambert  
 Site: Behrpage Static Water Level Before (ft.): 21.40 Drilling Co.: Delta Well Pump  
 Date Installed: 6/15-6/17/12 Static Water Level After (ft.): 40 Project Name: Behrpage O&A  
 Date Developed: 7/16/12-7/20 Screen Length (ft.): 40 Project Number: 112G02751  
 Dev. Method: air lift Specific Capacity: 4"  
 Pump Type: Air lift Casing ID (in.): 4"

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units $\mu\text{S}/\text{cm}$ )	Turbidity (NTU)	Remarks (color, etc.)	(odor)
102	start pump								
1015		WSD	NA	20.65	7.26	6.368	4.9	Stopment water in case	
1030			NA	19.42	7.19	6.261	0.0	100% gray - thick w/ sed.	
1045			NA	18.99	7.75	0.917	0.0R		
1115				18.86	7.74	0.171	19.9		
1130		air flow	increased	20.04	6.80	0.144	131	gray, cloudy, no odor	
1155				18.32	5.72	0.146	265		
1215				18.03	5.65	0.143	154		
1235				17.99	5.49	0.139	67.9	st. cloudy gray	
1300				17.03	5.30	0.171	28.0		
1325				18.47	5.27	0.141	12.1	clear, no odor	
1355		~4,000		18.26	5.46	0.139	0.0R	gray, cloudy	
1415	turn off compressor								
0740	start pump - hose		has been lowered			70.1 to improve		flow rate.	
0800				17.12	4.75	0.199	101.3	cloudy gray, no odor	
0825				18.05	4.68	0.151	27.0		
0900				19.68	9.55	0.143	30.8		
0930				20.26	4.54	0.141	20.5		

7/16  
7/17







3" PUMP



Tetra Tech

**MONITORING WELL DEVELOPMENT RECORD**

Well: TT-102D Depth to Bottom (ft.): 665' Responsible Personnel: Jennifer Lambert  
 Site: Bethpage Static Water Level Before (ft.): 21.40 Drilling Co.: Delta Well + Pump  
 Date Installed: 6/13-6/14/12 Static Water Level After (ft.): Bethpage 042  
 Date Developed: 7/19/12-7/26/12 Screen Length (ft.): 560' → 600' Project Name: Bethpage 042  
 Dev. Method: purge Specific Capacity: \_\_\_\_\_ Project Number: 112G02751  
 Pump Type: 13" grubs Casing ID (in.): \_\_\_\_\_

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units $\mu\text{S/cm}$ )	Turbidity (NTU)	Remarks (color, etc.)	(odor,
1640	171.611	reading	21.40	Begin purge					
1730	172.185	574	24.40	17.43	5.46	0.170	8.52	clear, no odor	
1125	172.610	999	24.52	16.57	4.32	0.142	40.8		
1155	172.784	1673	24.63	16.30	4.27	0.141	11.4		
1158	stop purge	→	lower pump.	→ 10'					
1200	no. stop	→	lower pump.						
1202	172.924	1313	24.52	14.90	4.17	0.139	28.9		
1220	173.241	1633	24.59	14.73	4.18	0.139	13.2		
1240	173.585	1974	24.53	15.02	7.35	0.140	2.45		
1300	173.930	2319	24.59	15.19	4.28	0.138	1.55		
1304	lower	pump	10' - no	need to	stop	purge.			
1310	174.133	2522		15.20	4.73	0.139	1.83		
1312	- generator	shut down - adding fuel			didn't	help.			
0811	174.133	2522	21.44	Begin purge					
0815	174.210	2599	24.41	14.77	4.28	0.192	28.8		
0835	174.565	2957	24.47	13.83	4.42	0.147	5.22		
0855	174.897	3286	24.50	14.00	4.39	0.145	1.27		
0900	lower	pump	10' - no need to stop	stop	purge -	pump	at	SD	

7/19

7/20







AIR



Tetra Tech

**MONITORING WELL DEVELOPMENT RECORD**

Well: JT-102D2 Depth to Bottom (ft.): 770' Responsible Personnel: J. Lambert  
 Site: Bethpage Static Water Level Before (ft.): Delta Well - Pump  
 Date Installed: 5/23-5/24/12 Static Water Level After (ft.): Bethpage O&D  
 Date Developed: 7/18/12 Screen Length (ft.): 30' Project Number: 112GG02751  
 Dev. Method: AIR LIFT Specific Capacity: \_\_\_\_\_  
 Pump Type: \_\_\_\_\_ Casing ID (in.): \_\_\_\_\_

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units $mS/cm$ )	Turbidity (NTU)	Remarks (color, etc.)	(odor,
0725	start	purge.							
0735			—	18.34	5.76	0.602	00R	thick, dk gray	
0755				16.68	6.07	0.099	1097	gray, not as thick w/ sed.	
0815				16.72	6.05	0.062	267		
0830				16.49	5.51	0.035	283		
0850				17.52	5.21	6.033	169		
0910				17.52	5.07	6.029	153		
0920				17.32	4.93	0.027	173	8012	
1120	- turn pump off - 27,000 gal			20.18	6.16	0.071	00R	gray, v. cloudy	
1125	start pump - collect sample			18.52	5.01	0.027	308		
1150	have some overflowing issues - turned pump off			18.65	4.88	0.024	765		
1215				18.73	4.81	0.024	71.5		
1255				19.03	5.14	0.023	91.2		
1310		~14,000 gal.		18.84	5.28	0.020	78.5		
	→ pump off after sampling.								



Well Development TT-102J12

PUMP

Time	Temperature (°C)	pH	Conductivity	Turbidity (NTU)	Remarks
0750 (X)	16.38	4.72	0.145	1.8	Totalizer Reading 175928 gal
0800	14.81	5.13	0.039	170	Tinted (Ten)
0810	16.11	5.09	0.030	300	cloudy (Ten)
0830	16.20	4.92	0.028	262	Tinted (Ten)
0850	16.25	4.74	0.029	107	slight tint (Ten)
0910	16.30	4.72	0.028	63.0	" " "
0930	16.38	4.85	0.027	57.7	" " "
0950	16.43	5.09	0.027	30.3	" " "
1010	16.50	5.14	0.026	23.1	clear
1030	16.57	5.22	0.026	17.8	clear
1050	16.61	5.24	0.026	16.0	Ⓢ lower pump 10' in borehole
1110	16.63	5.20	0.027	72.6	Tinted (Ten)
1130	16.67	5.20	0.027	48.2	slight tint (Ten)
1150	16.70	5.20	0.027	36.7	" " "
1210	16.72	5.17	0.027	28.5	Ⓢ lower pump 10' in well
1230	16.75	5.14	0.026	23.0	clear
1250	16.76	5.12	0.026	18.5	clear
1310	16.77	5.12	0.026	12.8	clear
1330	16.80	5.12	0.026	10.0	clear
1350	16.83	5.11	0.027	8.9	clear
1410	16.85	5.11	0.026	8.1	clear
1430	16.87	5.11	0.026	7.2	Totalizer reading 180658 clear - collect sample

\* Total of 4730 gallons purged

Ⓢ initial pump depth → 738' BGS (2' above top of well screen)

**TT-102D/TT-102D2**  
**GROUNDWATER SAMPLE LOG SHEET**





# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Sample ID No.: BP-TT-10202-072312  
 Project No.: 112602751 Sample Location: TT-10202  
 Sampled By: VAS  
 C.O.C. No.: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

Domestic Well Data  
 Monitoring Well Data  
 Other Well Type: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

**SAMPLING DATA:**

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>7-23-12</u>								
Time: <u>1430</u>								<u>CRP</u>
Method: <u>submersible pump</u>	<u>clear</u>	<u>5.11</u>	<u>0.026</u>	<u>16.87</u>	<u>7.2</u>	<u>1.47</u>	<u>0.0</u>	<u>203</u>

**PURGE DATA:**

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>7-23-12</u>								
Method: <u>submersible pump</u>								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material Type: <u>4" PVC</u>								
Total Well Depth (TD): <u>770'</u>	<u>(see well development logs)</u>							
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs): <u>0750</u>								
End Purge (hrs): <u>1430</u>								
Total Purge Time (min): <u>480</u>								
Total Vol. Purged (gal/L): <u>4730</u>								

**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
<u>VOCS</u>	<u>HCl + Ice</u>	<u>2 X 40 ml VOAs</u>	<u>yes</u>

**OBSERVATIONS / NOTES:**

\* sample split with Andy Colepin of local water District

Circle if Applicable:

MS/MSD <input type="checkbox"/>	Duplicate ID No.: <u>-</u>	Signature(s): <u>Unit [Signature]</u>
------------------------------------	-------------------------------	--



# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Bethpage 042  
Project No.: \_\_\_\_\_

Sample ID No.: BP-TT102D-072012

Sample Location: TT-102D

Sampled By: J. Lambert

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

C.O.C. No.: \_\_\_\_\_

Type of Sample:

- Low Concentration
- High Concentration

### SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>7/20/12</u>	<u>clear</u>	<u>4.33</u>	<u>0.142</u>	<u>13.54</u>	<u>0.64</u>			
Time: <u>0950</u>								
Method: <u>3" pump</u>								

### PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>7/19 → 7/20/12</u>	<u>see well development logs</u>							
Method: <u>3" pump</u>								
Monitor Reading (ppm): <u>0.6</u>								
Well Casing Diameter & Material Type: <u>4"</u>								
Total Well Depth (TD): <u>605</u>								
Static Water Level (WL): <u>2190</u>								
One Casing Volume (gal/L):								
Start Purge (hrs): <u>1040 7/19</u>								
End Purge (hrs): <u>0950 7/20</u>								
Total Purge Time (min): <u>55hr 3" pump</u>								
Total Vol. Purged (gal/L): <u>15000 + 1926 = 16926</u>								

### SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>2 x 40 mL VOA</u>	<input checked="" type="checkbox"/>

### OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

**TT-102D/TT-102D2**  
**CHAIN OF CUSTODY RECORD**





TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER No 1139

PAGE 1 OF 1

03507

PROJECT NO: 112602751		FACILITY: NWIRP Bethpage		PROJECT MANAGER Dave Brayack		PHONE NUMBER (752) 461-3824		LABORATORY NAME AND CONTACT: Chentech (Hummel)			
SAMPLERS (SIGNATURE) <i>[Signature]</i>		FIELD OPERATIONS LEADER Vince Shickora		PHONE NUMBER (610) 909-1893		ADDRESS 284 Sheffield Street					
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/>		CARRIER/WAYBILL NUMBER FED Ex # 8735 5966 0428		CONTAINER TYPE PLASTIC (P) or GLASS (G) G		CITY, STATE Mountainside, NJ 07012					
<input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day		MATRIX (GW, SO, SW, SD, QC, ETC.)		COLLECTION METHOD GRAB (G) COMP (C)		PRESERVATIVE USED		TYPE OF ANALYSIS VOCs (40 ml) 40% HCl			
DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	No. OF CONTAINERS	COMMENTS				
7/20	0800	BP-TB-072012	TB	-	-	QC G 2 2	Trip Blank				
7/20	0950	BP-TT1020-072012	TT-1020	-	-	GW G 2 2	After Dev. w/ pump				
7/23	1430	BP-TT10202-072312	TT-10202	-	-	GW G 2 2	After Day w/ pump (deep)				
1. RELINQUISHED BY <i>[Signature]</i>		DATE 7/23/12	TIME 1530	1. RECEIVED BY FED Ex		DATE	TIME				
2. RELINQUISHED BY		DATE	TIME	2. RECEIVED BY		DATE	TIME				
3. RELINQUISHED BY Fedex		DATE 7-23-12	TIME 920	3. RECEIVED BY PS		DATE 7-23-12	TIME 920				
COMMENTS Temp: 5°C											

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE)

YELLOW (FIELD COPY)

PINK (FILE COPY)

4/02R  
FORM NO. TINUS-001



**TT-102D/TT-102D2**  
**ANALYTICAL DATA SHEETS**

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/20/12
Project:	Bethpage CTO-066	Date Received:	07/23/12
Client Sample ID:	BP-TT102D-072012	SDG No.:	D3507
Lab Sample ID:	D3507-14	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID: 0.25	Level:	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR006673.D	1		07/24/12	VR072412

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	0.5	1	ug/L
67-64-1	Acetone	2.5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	0.5	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	0.5	1	ug/L
71-43-2	Benzene	0.5	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	0.5	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	0.5	1	ug/L

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/20/12
Project:	Bethpage CTO-066	Date Received:	07/23/12
Client Sample ID:	BP-TT102D-072012	SDG No.:	D3507
Lab Sample ID:	D3507-14	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RX1-624 ID: 0.25	Level:	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR006673.D	1		07/24/12	VR072412

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.52	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	0.5	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	1	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	0.5	1	ug/L
100-42-5	Styrene	0.5	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	0.5	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.5	U	0.2	0.5	1	ug/L
123-91-1	1,4-Dioxane	10	U	10	10	20	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	47.9		70 - 120		96%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		85 - 115		93%	SPK: 50
2037-26-5	Toluene-d8	49		85 - 120		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	46		75 - 120		92%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	498244	7.58				
540-36-3	1,4-Difluorobenzene	1018950	8.5				
3114-55-4	Chlorobenzene-d5	925376	11.3				
3855-82-1	1,4-Dichlorobenzene-d4	418334	13.24				





## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/23/12
Project:	Bethpage CTO-066	Date Received:	07/23/12
Client Sample ID:	BP-TT102D2-072312	SDG No.:	D3507
Lab Sample ID:	D3507-15	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RX1-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR006674.D	1		07/24/12	VR072412

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
75-71-8	Dichlorodifluoromethane	0.5	U	0.2	0.5	1	ug/L
74-87-3	Chloromethane	0.5	U	0.2	0.5	1	ug/L
75-01-4	Vinyl Chloride	0.5	U	0.34	0.5	1	ug/L
74-83-9	Bromomethane	0.5	U	0.2	0.5	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.5	U	0.35	0.5	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.45	0.5	1	ug/L
75-35-4	1,1-Dichloroethene	0.5	U	0.47	0.5	1	ug/L
67-64-1	Acetone	2.5	U	0.5	2.5	5	ug/L
75-15-0	Carbon Disulfide	0.5	U	0.2	0.5	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.5	U	0.41	0.5	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.41	0.5	1	ug/L
75-34-3	1,1-Dichloroethane	0.5	U	0.36	0.5	1	ug/L
110-82-7	Cyclohexane	0.5	U	0.2	0.5	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.5	U	0.2	0.5	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.35	0.5	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.5	U	0.34	0.5	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.5	U	0.4	0.5	1	ug/L
108-87-2	Methylcyclohexane	0.5	U	0.2	0.5	1	ug/L
71-43-2	Benzene	0.5	U	0.32	0.5	1	ug/L
107-06-2	1,2-Dichloroethane	0.5	U	0.48	0.5	1	ug/L
79-01-6	Trichloroethene	0.5	U	0.28	0.5	1	ug/L
78-87-5	1,2-Dichloropropane	0.5	U	0.46	0.5	1	ug/L
75-27-4	Bromodichloromethane	0.5	U	0.36	0.5	1	ug/L
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.1	2.5	5	ug/L
108-88-3	Toluene	0.5	U	0.37	0.5	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.29	0.5	1	ug/L



## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/23/12
Project:	Bethpage CTO-066	Date Received:	07/23/12
Client Sample ID:	BP-TT102D2-072312	SDG No.:	D3507
Lab Sample ID:	D3507-15	Matrix:	WATER
Analytical Method:	SW8260C	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RX1-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR006674.D	1		07/24/12	VR072412

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.31	0.5	1	ug/L
79-00-5	1,1,2-Trichloroethane	0.5	U	0.38	0.5	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.5	U	0.52	0.5	1	ug/L
106-93-4	1,2-Dibromoethane	0.5	U	0.41	0.5	1	ug/L
127-18-4	Tetrachloroethene	0.5	U	0.27	0.5	1	ug/L
108-90-7	Chlorobenzene	0.5	U	0.49	0.5	1	ug/L
100-41-4	Ethyl Benzene	0.5	U	0.2	0.5	1	ug/L
179601-23-1	m/p-Xylenes	1	U	0.95	1	2	ug/L
95-47-6	o-Xylene	0.5	U	0.43	0.5	1	ug/L
100-42-5	Styrene	0.5	U	0.36	0.5	1	ug/L
75-25-2	Bromoform	0.5	U	0.47	0.5	1	ug/L
98-82-8	Isopropylbenzene	0.5	U	0.45	0.5	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.31	0.5	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.5	U	0.43	0.5	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.5	U	0.32	0.5	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.5	U	0.45	0.5	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.5	U	0.46	0.5	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.2	0.5	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.5	U	0.2	0.5	1	ug/L
123-91-1	1,4-Dioxane	10	U	10	10	20	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	46.8		70 - 120		94%	SPK: 50
1868-53-7	Dibromofluoromethane	47.3		85 - 115		95%	SPK: 50
2037-26-5	Toluene-d8	50.1		85 - 120		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.6		75 - 120		95%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	486744	7.57				
540-36-3	1,4-Difluorobenzene	969570	8.5				
3114-55-4	Chlorobenzene-d5	891068	11.3				
3855-82-1	1,4-Dichlorobenzene-d4	402083	13.24				





**TT-102D/TT-102D2**  
**VALIDATION LETTER AND TABLE**



TO: D. BRAYACK DATE: SEPTEMBER 21, 2012

FROM: JOSEPH KALINYAK COPIES: DV FILE

SUBJECT: ORGANIC DATA VALIDATION – VOC  
 NWIRP BETHPAGE, CTO WE62  
 SDG D3507

SAMPLES: 8 / Aqueous / VOC

BP-TB-072012	BP-TT102D-072012	BP-TT102D2-072312
BP-VPB-TB-072012	BP-VPB-TB-072012-1	BP-VPB135-GW-478
BP-VPB136-GW-581	BP-VPB136-SW-072312	

7 / Aqueous Samples Analyzed as Soils / VOC

BP-VPB135-GW-418	BP-VPB135-GW-438	BP-VPB135-GW-458
BP-VPB136-DM-620	BP-VPB136-GW-561	BP-VPB136-GW-601
BP-VPB136-GW-621		

**Overview**

The sample set for NWIRP Bethpage, CTO WE62, SDG D3507 consisted of fifteen (15) aqueous samples including three (3) aqueous trip blank samples. Seven (7) of the samples had significant sediment in the samples and were analyzed by the laboratory as soils. All samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in this Sample Delivery Group (SDG).

The samples were collected by Tetra Tech on July 20 and 23, 2012 and analyzed by ChemTech laboratory. The sample analyses were conducted in accordance with EPA SW-846 Method 8260C for VOCs, analytical and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

- \* • Data completeness
- \* • Hold times
- \* • GC/MS System Tuning and Performance
- Initial/continuing calibrations
- \* • Laboratory Blank Results
- Laboratory Control Sample Recoveries
- Matrix Spike/Matrix Spike Duplicate Recoveries
- \* • Surrogate Spike Recoveries
- \* • Internal Standard Recoveries
- \* • Compound Identification
- \* • Compound Quantitation
- \* • Detection Limits

The symbol (\*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

**VOC**

The initial calibration average relative response factor (RRF) was less than the 0.05 criteria for 1,4-dioxane for instrument MSVOA\_F on 07/17/12 and for instrument MSVOA\_R on 07/23/12 and for all continuing calibration verifications (CCVs).

**Affected samples:** All samples

**Action:** The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The CCV percent differences (%D) were greater than the 20% quality control limit for chloroethane and bromochloromethane for instrument MSVOA\_R on 07/24/12 @ 12:15.

**Affected samples:**

BP-TB-072012	BP-TT102D-072012	BP-TT102D2-072312
BP-VPB-TB-072012	BP-VPB-TB-072012-1	BP-VPB135-GW-478
BP-VPB136-GW-581	BP-VPB136-SW-072312	

**Action:** The non-detected chloroethane and bromochloromethane results for the sample were qualified estimated, (UJ).

**Additional Comments**

Positive results below the limit of quantitation (LOQ) and above the method detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

The laboratory control sample (LCS)/LCS duplicate (LCS D) relative percent difference (RPD) was greater than the quality control limit for chloroethane for batch VR0724WBSD.

**Affected samples:**

BP-TB-072012	BP-TT102D-072012	BP-TT102D2-072312
BP-VPB-TB-072012	BP-VPB-TB-072012-1	BP-VPB135-GW-478
BP-VPB136-GW-581	BP-VPB136-SW-072312	

**Action:** The sample results for chloroethane were non-detected and therefore no validation action was necessary.

A matrix spike (MS) sample and MS duplicate (MSD) sample had %Rs that were non-compliant and MS/MSD relative percent differences (RPD) that exceeded the quality control limits for several analytes for VOC method 8260C. No validation action was taken as the spiked sample was not from this SDG.

Fifty-two (52) analytes were reported for VOCs for Method 8260C.

Non-detected sample results were reported to the LOD.

The VOC results for aqueous samples BP-VPB135-GW-418, BP-VPB135-GW-438, BP-VPB135-GW-458, BP-VPB136-DM-620, BP-VPB136-GW-561, BP-VPB136-GW-601, and BP-VPB136-GW-621 were reported in soil units of  $\mu\text{g}/\text{kg}$  uncorrected for moisture content.

Sample BP-VPB136-GW-561 had a VOC identified in the tentatively identified compound (TIC) page for the laboratory sample analysis report. This information is included in Appendix B of this report.

TO: D. BRAYACK  
SDG: D3507

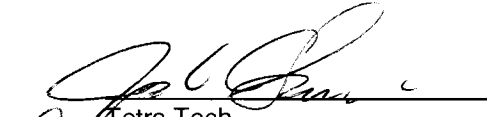
PAGE: 3


**EXECUTIVE SUMMARY**

**Laboratory Performance Issues:** Sample VOC results were qualified for RRF criteria and CCV %D non-compliances.

**Other Factors Affecting Data Quality:** Positive results below the Limit of Detection (LOD) and above the method detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260C SOP #HW-24 Revision #2 August 2008 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

  
Tetra Tech  
Joseph Kalinyak  
Chemist/Data Validator

  
Tetra Tech  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

**Attachments:**

- Appendix A - Qualified Analytical Results
- Appendix B - Results as Reported by the Laboratory
- Appendix C - Region II Data Validation Forms
- Appendix D - Support Documentation

**Appendix A**

Qualified Analytical Results

### **Value Qualifier Key (Val Qual)**

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

### **DATA QUALIFICATION CODE (QUAL CODE)**

#### **Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times \text{IDL}$  for inorganics and  $< \text{CRQL}$  for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $> 40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $< 30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02751	NSAMPLE	BP-TB-072012	BP-TT102D-072012	BP-TT102D2-072312	BP-VPB135-GW-478				
SDG: D3507	LAB_ID	D3507-13	D3507-14	D3507-15	D3507-12				
FRACTION: OV	SAMP_DATE	7/20/2012	7/20/2012	7/23/2012	7/23/2012				
MEDIA: WATER	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/L	UG/L	UG/L	UG/L				
	PCT_SOLIDS	0.0	0.0	0.0	0.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	1.4	
1,1-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2,3-TRICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMOETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROPROPANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,3-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DICHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DIOXANE	10 UR	10 UR	C	10 UR	10 UR	C	10 UR	10 UR	C
2-BUTANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
2-HEXANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
4-METHYL-2-PENTANONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ACETONE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	16	
BENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOCHLOROMETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
BROMODICHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOFORM	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
BROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON DISULFIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CARBON TETRACHLORIDE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROBENZENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLORODIBROMOMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROETHANE	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
CHLOROFORM	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROMETHANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	
CYCLOHEXANE	0.5 U	0.5 U		0.5 U	0.5 U		0.5 U	0.5 U	



PROJ_NO: 02751	NSAMPLE	BP-VPB136-GW-581	BP-VPB136-SW-072312	BP-VPB-TB-072012	BP-VPB-TB-072012-1				
SDG: D3507	LAB_ID	D3507-03	D3507-05	D3507-01	D3507-08				
FRACTION: OV	SAMP_DATE	7/23/2012	7/23/2012	7/20/2012	7/20/2012				
MEDIA: WATER	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/L	UG/L	UG/L	UG/L				
	PCT_SOLIDS	0.0	0.0	0.0	0.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2,2-TETRACHLOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,1-DICHLOROETHENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2,3-TRICHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2,4-TRICHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DIBROMOETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,2-DICHLOROPROPANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,3-DICHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DICHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
1,4-DIOXANE	10 UR	C		10 UR	10 UR	C	10 UR	10 UR	C
2-BUTANONE	2.5 U			2.5 U	2.5 U		2.5 U	2.5 U	
2-HEXANONE	2.5 U			2.5 U	2.5 U		2.5 U	2.5 U	
4-METHYL-2-PENTANONE	2.5 U			2.5 U	2.5 U		2.5 U	2.5 U	
ACETONE	9			2.5 U	2.5 U		2.5 U	2.5 U	
BENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
BROMOCHLOROMETHANE	0.5 UJ	C		0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
BROMODICHLOROMETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
BROMOFORM	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
BROMOMETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CARBON DISULFIDE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CARBON TETRACHLORIDE	0.5 U			2.4	2.4		0.5 U	0.5 U	
CHLOROBENZENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CHLORODIBROMOMETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROETHANE	0.5 UJ	C		0.5 UJ	0.5 UJ	C	0.5 UJ	0.5 UJ	C
CHLOROFORM	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CHLOROMETHANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CIS-1,3-DICHLOROPROPENE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	
CYCLOHEXANE	0.5 U			0.5 U	0.5 U		0.5 U	0.5 U	

PROJ_NO: 02751 SDG: D3507 FRACTION: OV MEDIA: WATER	NSAMPLE		BP-TB-072012		BP-TT102D-072012		BP-TT102D2-072312		BP-VPB135-GW-478	
	LAB_ID	SAMP_DATE	D3507-13	7/20/2012	D3507-14	7/20/2012	D3507-15	7/23/2012	D3507-12	7/23/2012
QC_TYPE	UNITS	UG/L	NM	UG/L	NM	UG/L	NM	UG/L	NM	UG/L
PCT_SOLIDS	DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
ETHYLBENZENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
ISOPROPYLBENZENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
M+P-XYLENES	1 U	1 U			1 U			1 U		1 U
METHYL ACETATE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
METHYL CYCLOHEXANE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
METHYLENE CHLORIDE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
O-XYLENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
STYRENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
TETRACHLOROETHENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
TOLUENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U
TRICHLOROETHENE	0.5 U	0.5 U			0.5 U			0.5 U		3.1
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U			0.5 U			0.5 U		3.4
VINYL CHLORIDE	0.5 U	0.5 U			0.5 U			0.5 U		0.5 U

PROJ_NO: 02751 SDG: D3507 FRACTION: OV MEDIA: WATER	NSAMPLE		BP-VPB136-GW-581		BP-VPB136-SW-072312		BP-VPB-TB-072012		BP-VPB-TB-072012-1						
	LAB_ID	D3507-03	D3507-05	D3507-01	D3507-08	SAMP_DATE	7/23/2012	7/20/2012	7/20/2012	QC_TYPE	NM	UG/L	UG/L	0.0	
UNITS	UG/L	NM	UG/L	NM	UG/L	0.0	UG/L	0.0	UG/L	0.0	0.0	0.0	0.0		
PCT_SOLIDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
DUP_OF															
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
ETHYLBENZENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
ISOPROPYLBENZENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
M+P-XYLENES	1 U			1 U			1 U			1 U			1 U		
METHYL ACETATE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
METHYL CYCLOHEXANE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
METHYL TERT-BUTYL ETHER	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
METHYLENE CHLORIDE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
O-XYLENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
STYRENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
TETRACHLOROETHENE	1.5			0.5 U			0.5 U			0.5 U			0.5 U		
TOLUENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
TRANS-1,2-DICHLOROETHENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
TRANS-1,3-DICHLOROPROPENE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
TRICHLOROETHENE	2.6			0.5 U			0.5 U			0.5 U			0.5 U		
TRICHLOROFUOROMETHANE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		
VINYL CHLORIDE	0.5 U			0.5 U			0.5 U			0.5 U			0.5 U		



PROJ_NO: 02751 SDG: D3507 FRACTION: OV MEDIA: SOIL	NSAMPLE		BP-VPB136-GW-561		BP-VPB136-GW-601		BP-VPB136-GW-621	
	LAB_ID	D3507-02	D3507-02	D3507-04	D3507-07	SAMP_DATE	7/20/2012	7/23/2012
QC_TYPE	NM	UG/KG	NM	UG/KG	NM	PCT_SOLIDS	0.0	0.0
DUP_OF	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,1-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,1-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2,3-TRICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2-DIBROMOETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2-DICHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,2-DICHLOROPROPANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,3-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,4-DICHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
1,4-DIOXANE	50 UR	50 UR	C	50 UR	50 UR	C	50 UR	50 UR
2-BUTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U
2-HEXANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U
4-METHYL-2-PENTANONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U
ACETONE	12.5 U	12.5 U		12.5 U	12.5 U		12.5 U	12.5 U
BENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
BROMOCHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
BROMODICHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
BROMOFORM	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
BROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CARBON DISULFIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CARBON TETRACHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CHLOROBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CHLORODIBROMOMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CHLOROETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CHLOROFORM	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CHLOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U
CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U



PROJ_NO: 02751 SDG: D3507 FRACTION: OV MEDIA: SOIL	NSAMPLE		BP-VPB136-GW-561		BP-VPB136-GW-601		BP-VPB136-GW-621		
	LAB_ID	D3507-02	D3507-04	D3507-07	SAMP_DATE	7/20/2012	7/23/2012	7/23/2012	
QC_TYPE	NM	NM	NM	NM	UNITS	UG/KG	UG/KG	UG/KG	
PCT_SOLIDS	0.0	0.0	0.0	0.0	DUP_OF				
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ETHYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
ISOPROPYLBENZENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
M+P-XYLENES	5 U	5 U		5 U	5 U		5 U	5 U	
METHYL ACETATE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
METHYL CYCLOHEXANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
METHYLENE CHLORIDE	2.3 J	2.3 J	P	1.9 J	1.9 J	P	2.6 J	2.6 J	P
O-XYLENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
STYRENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TETRACHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TOLUENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TRICHLOROETHENE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
TRICHLOROFLUOROMETHANE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	
VINYL CHLORIDE	2.5 U	2.5 U		2.5 U	2.5 U		2.5 U	2.5 U	



**Section 9**  
**Survey**



WELL #'s TT-102D & TT102D2  
 EASEMENT DESCRIPTION

BEING all that certain plot, piece or parcel of land lying within Seaford, Town of Hempstead, County of Nassau, State of New York; said plot being northerly of Alken Avenue at its intersection with the northerly terminus of Stuart Place, known and designated as Section 52, Block 473 Lot 3, lands Now or Formerly of the County of Nassau and more particularly described as follows:

BEGINNING for the same at a point distant South 06°02'06" East, 19,049.675 feet from a geodetic monument found, know and designated as Monument Number 15E 14N (PID# KU5039) having a geographic coordinate of 40 45 13.49016(N), 073 29 29.50713(W) (NAD83-2007) and a New York State Plane (NYSPC) Long Island Zone, North American Datum of 1983 (NAD83) coordinate of North 65,317.552 meters East 342,938.662 meters (N 214,296.002 feet E 1,125,124.594 feet). Said point of beginning having a coordinate, as referenced to New York State Plane Coordinates (NYSPC) Long Island zone, North American Datum of 1983 (NAD83) of North 195,351.91 feet and East 1,127,127.38 feet and running thence in, through, over and across the lands as described, the four (4) following courses and distances:

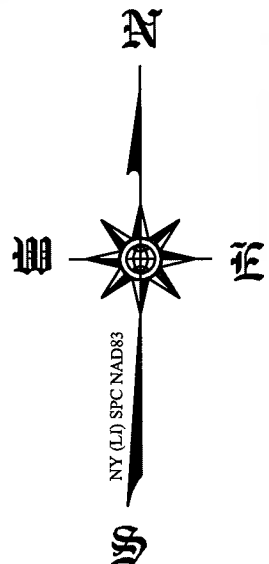
- (1) South 74° 41' 38" East 30.00 feet thence;
- (2) South 15° 18' 22" West, 8.00 feet thence;
- (3) North 74° 41' 38" West, 30.00 feet thence;
- (4) North 15° 18' 22" East, 8.00 feet to the point and place of beginning.

Containing 240 square feet or 0.006 acre of land more or less.

Together with the use of the existing stone drive within said lot to and from Alken Avenue for access to the above described easement.

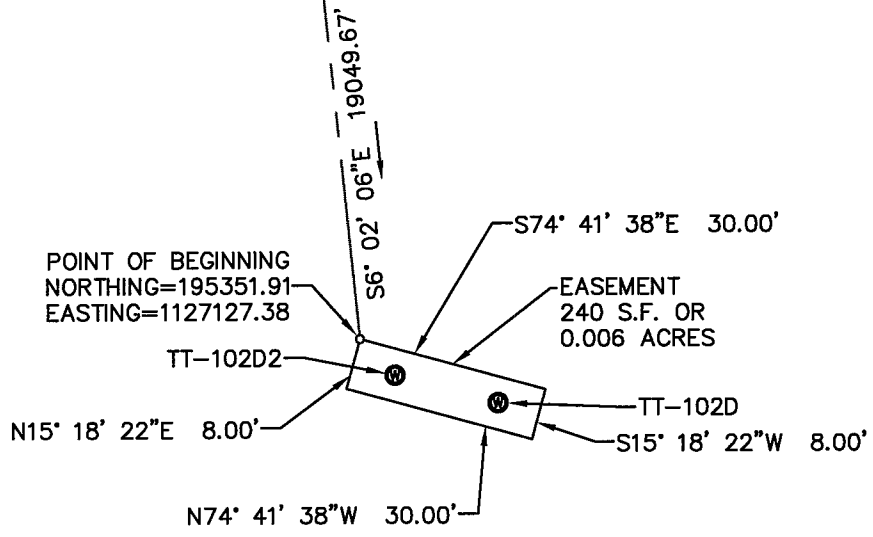


*Thomas F. Miller* 9/19/12  
 Thomas F. Miller, PLS, PP Date  
 State of New York Professional Land Surveyor  
 License No. 050484



MONUMENT 15E 14N  
 NORTHING=214296.00  
 EASTING=1125124.59

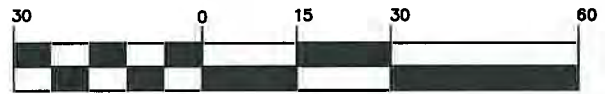
SOUTHERN STATE PARKWAY



ALKEN AVENUE

STUART PLACE

GRAPHIC SCALE



( IN FEET )  
 1 inch = 30 ft.

The Survey was performed without the benefit of a Title Report and may not show all easements or encumbrances recorded or unrecorded.

No responsibility or liability is assumed by the surveyor for location of utilities and easements, if any, shown below the surfaces of lands or not visible on the surface of the lands shown hereon.

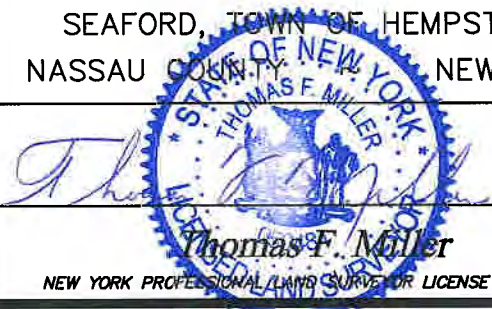


**BANC 3, INC., P.C.**  
 Consulting Engineers

300 ALEXANDER PARK, SUITE 350  
 PRINCETON, NEW JERSEY 08540  
 PHONE:(609) 759-1900 ~ FAX:(609) 919-9022

**NWIRP BETHPAGE**

8' X 30' WELL EASEMENT  
 N/F COUNTY OF NASSAU  
 SEAFORD, TOWN OF HEMPSTEAD  
 NASSAU COUNTY, NEW YORK



PROJECT MANAGER: TM	DRAWN: AJW	CHECKED: TM
DATE: 09/19/12	SCALE: 1" = 30'	PROJECT NO.: 2000215-04

NEW YORK PROFESSIONAL LAND SURVEYOR LICENSE No. 050484

PT #	GRID NORTHING (US FT)	GRID EASTING (US FT)	ELEV (US FT)	CODE / DESCRIPTION
	(SEPT. 2012)			
2517	195341.937	1127148.911	42.92	TT-102D
2515	195342.324	1127147.842	40.23	GROUND
2514	165346.266	1127132.843	37.08	TT-102D2
2513	195346.317	1127131.845	38.25	GROUND