



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): 0
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 X No Well I.D. #: VPB-133



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BORING No.: VPB-133
 DATE: December 13, 2011
 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**	
	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): 0

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 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						

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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	glaucanitic, 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						

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 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	Micaceous, silty, fine to coarse	SM						
	101-102	/				Green-gray	sand, wet.		SM					
	102-103	/				Gray-green			SM					
	103-104	/				Green-gray			SM	Attempted hydropunch				
	104-105	/				Gray-green			SM	sampler opened 3",				
	105-106	/				Gray-green	Micaceous, silty, fine to coarse		SM-SP	silt in screen, no water				
	106-107	/				Green-gray	sand, wet.		SM-SP	entered sampler.				
	107-108	/				Gray-green			SM-SP					
	108-109	/				Green-gray			SM-SP					
	109-110	/				Gray-green			SM-SP					
	110-111	/				Green-gray			SM-SP					
	111-112	/				Gray-green			SM-SP					
	112-113	/				Gray-green			SM-SP					
GWS	113-114	/				Green-gray			SM-SP	BP-VPB133-GW-114				
	114-115	/				Gray-green			SM-SP	16:00 Split sample				
	115-116	/				Green-gray			SM-SP	with H2M.				
	116-117	/				Gray-green			SM-SP	Resumed drilling from				
	117-118	/				Gray-green			SM-SP	114' 01/05/2011.				
	118-119	/				Green-gray			SM-SP					
	119-120	/				Gray-green			SM-SP					
	120-121	/				Green-gray			SM-SP					
	121-122	/				Gray-green			SM-SP					
	122-123	/				Gray-green			SM-SP					
	123-124	/				Green-gray			SM-SP					
	124-125	/				Gray-green			SM-SP					

Remarks: _____

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 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: _____

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 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: _____

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 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					

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					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: _____

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 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	/				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):

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DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary

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

Table with columns: 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, Soil Density/Consistency or Rock Hardness, Color, Material Classification, U S C S *, Remarks, PID/FID Reading (ppm) (Sample, Sampler BZ, Borehole**, Driller BZ**)

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 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):

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	/				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 Lines]		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): 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 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 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

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):

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):

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 / 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	/		[Dotted pattern]		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 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 sand	SM ML	Logged mud rotary cuttings.				
	601-602					Gray to white			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):

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**
	625-626	/				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	/				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

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

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

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 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):

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 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

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	Split spoon sample	0	0	0	0
	901-902	/				Gray to black	clayey very fine-fine sand.	SC	2/1/2012; 10:46:00 AM				
	902-903	/				Gray	Sandy (very fine to fine) clay	SC					
GWS	903-904	/				Gray	and clayey very fine to fine sand	SC	BP-VPB133-GW-904				
	904-905	/				Gray		SC	2/1/2012, 12:20:00 AM				
	905-906	/				Gray		SC	Logged mud rotary cuttings.				
	906-907	/				Gray		SC					
	907-908	/				Gray		SC					
	908-909	/				Gray		SC					
	909-910	/				Gray		SC					
	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	/				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