APPENDIX E SLURRY PIPELINE WETLAND DELINEATION MEMO



To: Mr. Paul Blue - Parsons cc: Mr. Alfred J. Labuz –Honeywell

From: Mr. Steve Mooney - O'Brien & Gere John P. McAuliffe, P.E. – Honeywell Re: Slurry Pipeline Route Wetland Delineation, Onondaga Mr. Tom Drachenberg – Parsons

Lake, Geddes and Camillus, New York – Report

Mr. Chris Calkins – O'Brien & Gere

File: 1163/43776

Date: December 16, 2009

This technical memorandum was prepared to document the wetland identification and delineation activities performed by O'Brien & Gere and Parsons on behalf of Honeywell, Inc. along the proposed slurry pipeline route in the Towns of Geddes and Camillus, New York (**Figure 1**). The work was performed in association with the Onondaga Lake Bottom Subsite Project and in accordance with the Slurry Pipeline Route Wetland Delineation work plan dated September 24, 2009 and approved by the New York State Department of Environmental Conservation (NYSDEC) on October 5, 2009. Field oversight was provided by Mr. Rich Henry, a representative of the U.S. Fish and Wildlife Service (USFWS) on behalf of the U.S. Environmental Protection Agency (USEPA). Presented below are the methods and findings of the efforts performed in completion of the delineation activities.

PROJECT BACKGROUND

As part of the Onondaga Lake Bottom Subsite Project, dredged sediments from Onondaga Lake will be pumped (as a slurry mixture) through a pipeline to a sediment containment area (SCA) at Settling Basin (SB) 13 for dewatering. The route of the slurry pipeline will generally parallel the western shore of the lake and Ninemile Creek (NMC) in a southwest direction to the SCA. As depicted on **Figure 1**, existing road and utility right-of-way and settling basin access roads will be followed to the extent practical. The length of this pipeline route is approximately 21,000 feet (ft) (3.97 miles) (POA 2009).

As part of this project, a wetland identification and delineation was performed to evaluate potential crossings of wetlands by the proposed pipeline construction. The wetland delineation was performed along the proposed pipeline route between the Interbed Area located between SBs 9/10 and 11 and the SCA located at SB 13, as generally represented by points A and C (survey area) on **Figure 1**. Portions of the pipeline route east of the survey area have been previously delineated, as further discussed herein.

WETLAND IDENTIFICATION AND DELINEATION

Methodology

The wetland identification and boundary delineation for this project was performed in accordance with methods utilized at other Honeywell sites associated with Onondaga Lake and described in the revised *Onondaga Lake Wetland and Floodplain Assessment Report* submitted to the NYSDEC in June 2009 (O'Brien & Gere and Parsons 2009). O'Brien & Gere biologists performed the wetland delineation along the pipeline route in accordance with the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (USACE 1987). Based on the preliminary review of available NYSDEC wetland mapping, NYSDEC jurisdictional wetlands are not mapped along the survey area. However, NYSDEC delineation methods were also factored into the field work for this project.

The USACE and USEPA jointly define wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions [33 CFR 328.3(b), 40 CFR 230.3(t)]. Criteria used to identify a wetland, as defined therein, consist of the following:

- the soils present have been classified as hydric or possess reducing soil characteristics
- the prevalent vegetation is hydrophytic
- the area is either permanently or periodically at mean water depths less than or equal to 6.6 feet, or the soil is saturated to the surface at some time during the growing season.

To make a positive wetland determination, a minimum of one wetland indicator from each criterion (soil, vegetation and hydrology) must be identified. The Routine Determination Method outlined in USACE (1987) was selected for the identification and delineation of wetlands along the survey area. Routine determinations involve simple, rapidly applied methods that result in sufficient qualitative data for identifying wetland and non-wetland areas. The Routine Determination Method consists of a combination of off-site data review and on-site inspection.

Off-site activities included an evaluation of available information regarding environmental conditions at the survey area. On-site activities consisted of collecting the field data required to identify and delineate wetland boundaries. Field data were gathered at sample plots chosen in potential wetland areas, as well as in corresponding adjacent upland areas.

Off-Site Investigation

The off-site investigation procedure consisted of the review of the following documents:

- Soil Survey of Onondaga County, New York as prepared by the United States Department of Agriculture (USDA) Soil Conservation Service (USDA-SCS 1977) (soil survey) and the NRCS Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) (USDA-NRCS 2009a).
- New York State Freshwater Wetland (NYSFW) maps, as presented on the NYSDEC Environmental Resource Mapper (http://www.dec.ny.gov/imsmaps/ERM/viewer.htm) (NYSDEC 2009).
- USFWS National Wetland Inventory (NWI) maps as presented on the NWI Wetland Mapper (http://www.fws.gov/wetlands/Data/Mapper.html) (USFWS 2009).

Soil Mapping

Information presented in the soil survey, the *New York Hydric Soils List* (USDA-NRCS 2009b), *New York Hydric Soils and Soils with Potential Hydric Inclusions* (USDA-NRCS 1995), and the USDA Web Soil Survey was used to evaluate the existing soil series present and the potential presence of hydric soils within the survey area. The soil series mapped along the survey area include:

- Cut and fill land (CFL)
- Made land, chemical waste (Ma)
- Fluvaquents (FL)
- Wayland silt loam (Wn)
- Palmyra gravelly loam (PgA)
- Collamer silt loam 0 to 2 percent slopes (ChA).

Cut and fill land soil, the most common soil of the survey area, is mapped on the central and eastern portions of the survey area. Fluvaquents soil is mapped in the Interbed Area at the eastern end of the survey area. Wayland silt loam, Palmyra gravelly loam, and Collamer silt loam soils are mapped on the western portion of the survey area. A soils map of the survey area is presented as **Figure 2** and soil descriptions obtained from the Web Soil Survey (USDA-NRCS 2009a) are provided as **Attachment 1**. Wayland silt loam and Fluvaquents are the only

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soils considered hydric within the survey area and the mapped non-hydric soils are listed as not having potential hydric inclusions.

New York State Freshwater Wetlands

The NYSFW maps were developed by the NYSDEC pursuant to Article 24 of the NYS Environmental Conservation Law. These maps present the approximate boundaries of freshwater wetlands regulated by the NYSDEC. In most instances, the state-mapped boundaries are based on aerial photographs and soil survey interpretation and, therefore, require site-specific field verification.

Based on the mapping reviewed, no NYSFW are mapped along the survey area. However, NYSFW SYW-18 is mapped southeast of the eastern portion of the survey area. Wetland SYW-18, as mapped by the NYSDEC, consists of 35.8 acres and is hydrologically associated with NMC, a tributary of Onondaga Lake. The NYSDEC classifies SYW-18 as a Class II wetland. **Figure 3** presents the mapped location of SYW-18 in relation to the survey area.

National Wetland Inventory Wetland Habitats

The USFWS, through its NWI Project, has produced a series of topical maps to show wetlands and deep water habitats. Although these maps are helpful in the preliminary identification of wetlands, they do not represent federally regulated wetlands. The locations of NWI habitats in the vicinity of the survey area were accessed using the USFWS NWI Wetland Mapper (USFWS 2009). According to the NWI mapping, no NWI habitats are located along the survey area. The nearest NWI habitat is a palustrine, scrub-shrub, broad-leaved deciduous/emergent, common reed (*Phragmites australis*) dominant, seasonally flooded/saturated (PSS1/EM5E) habitat present just west of the western end of the survey area. A map indicating the location of NWI wetland habitats in relation to the survey area is presented as **Figure 3**.

Associated Water Bodies

A significant portion of the pipeline route is proposed along the northern bank of NMC. Also, a part of the pipeline is proposed to be submerged/floating within a portion of NMC and will eventually cross the creek as it extends to SB 13. The subject reach of NMC is classified by the NYSDEC as a Class "C" water body with "C" Standards. According to 6 NYCRR Part 701.8, these waters shall be suitable for fish propagation and survival and primary and secondary contact recreation, although other factors may limit the use for these purposes (NYCRR 2008).

The creek reach along the survey area is a wide, fairly slow-moving and generally straight channel with an average depth of approximately 18 to 42 inches. The reach contains a silt and gravel substrate with sparse areas of aquatic vegetation and defined banks rising approximately 3 to 5 feet above the water level.

Previously Delineated Wetlands

Portions of the pipeline route east of the survey area have been previously delineated by Terrestrial Environmental Specialists (TES) in October 2008 as part of the Geddes Brook/Ninemile Creek Feasibility Study. The delineation results are presented in the draft *Wetland/Floodplain Assessment Ninemile Creek and Lower Reach of Geddes Brook* (TES 2009), which is currently under review by NYSDEC. TES delineated wetlands along NMC from the mouth upstream to the Interbed Area located between SBs 9/10 and 11. This effort included an assessment and delineation of NYSDEC wetland SYW-18 and the lower reach of Geddes Brook. Boundaries for these delineated wetlands are presented on **Figure 4**.

The eastern end of the proposed pipeline route is associated with the western portion of the Wastebed B/Harbor Brook Site. O'Brien & Gere performed a wetland delineation at the Wastebed B/Harbor Brook Site in the summers of 2000 and 2003 as part of the ongoing Wastebed B/Harbor Brook Site Remedial Investigation.

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Wetland delineation findings are reported in *Jurisdictional Wetland Delineation Report*, *Harbor Brook Site*, *Geddes*, *New York* (O'Brien & Gere 2003). Boundaries of these delineated wetlands that are in the vicinity of the eastern end of the proposed pipeline route are presented on **Figure 4**.

On-Site Investigation

O'Brien & Gere biologists trained in wetland delineation and assessment performed the field activities associated with the survey area delineation on October 13-16, 20 and 21, 2009. On-site activities included the evaluation of vegetative communities, the soil substrate, and hydrologic characteristics to identify and delineate wetland boundaries within an 80-foot corridor along the proposed pipeline route. Field data were gathered at sample plots chosen in potential wetland areas and adjacent upland areas. Wetlands were identified based on the presence of the following three parameters:

- hydric soils
- a vegetative community dominated by hydrophytes
- inundated or saturated soil conditions, and/or indicators of hydrologic patterns.

Vegetative, soil, and hydrologic conditions were recorded on Wetland Data Forms specified for the Routine Determination Method, which are included as **Attachment 2**.

Soils

Observed survey area soil characteristics were compared to the mapped soil descriptions of the soil survey to identify whether the survey area soils were consistent with the mapping, as characteristics can vary from mapped descriptions due to the scale at which the soil mapping was performed. Soil physical characteristics were evaluated using a manual auger to install a boring to 18 inches below ground surface, unless shallower refusal occurred. Soil color was evaluated using *Munsell Soil Color Charts* (Munsell 2000).

Based on this investigation, hydric soils were observed on the western portion of the survey area (Wayland) and at the Interbed Area (Fluvaquents). Hydric soil characteristics were observed in some areas mapped as Cut and fill land and Palmyra, which are listed as non-hydric soils per the Web Soil Survey (USDA-NRCS 2009a). Hydric soil characteristics observed in areas mapped as non-hydric likely developed due to prolonged saturation from surface or groundwater. Areas that exhibited hydric soil characteristics such as low chroma colors and/or evidence of reducing conditions (presence of mottles or gleying) met the hydric soil criterion per USACE (1987). Observed soil characteristics at each sample plot are summarized on Wetland Data Forms included as **Attachment 2**.

Vegetation

The criterion for wetland vegetation is a dominance of hydrophytic (water tolerant) species. A species is considered hydrophytic per USACE (1987) if it is classified either as obligate (OBL), facultative wet (FACW), or facultative (FAC), exclusive of a FAC- designation, in the *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)* published by the USFWS (1988). A dominance of hydrophytes requires that more than 50% of the vegetative species in an area are classified as hydrophytic.

In accordance with USACE (1987), observations of vegetation focus on dominant vegetative species in four categories: trees (3 inch diameter at breast height), saplings/shrubs (less than 3 inch diameter and greater than 3.2 feet tall), herbs, and woody vines. Vegetation along the survey area varied from herbaceous species (e.g, wildflowers) to successional woody species. The dominant vegetative species observed within each of the sample plots were recorded and are presented on the Wetland Data Forms included as **Attachment 2**. Additionally, the *Draft Ecological Communities of New York State* (Edinger et al. 2002) was utilized to identify the ecological

community best represented by the dominant vegetative species observed in the delineated wetlands. Additional discussion regarding the observed vegetation is presented in the delineated wetland descriptions, below.

Hydrology

The survey area was examined for field indicators of wetland hydrology. According to USACE (1987), wetland hydrology consists of permanent or periodic inundation, or soil saturation to the surface during the growing season. Criteria used to indicate the existence of wetland hydrology include, but are not limited to:

- ground surface inundation or evidence of inundation
- saturated soils within 12 inches of the ground surface
- standing water in soil evaluation boreholes
- drainage patterns.

If these indicators were present within the sample plots, the hydrology criterion for wetlands was met. The primary hydrologic influence along the survey area appears to be NMC high water events and surface water runoff and drainage from steeper areas (*e.g.*, SB 11 and access roads) to depressional or low gradient areas. Ground water discharge may also be a potential hydrologic influence to some portions of the survey area. Hydrologic indicators observed within the sample plots were recorded on Wetland Data Forms included as **Attachment 2**.

Observed Wetland Areas

When all three wetland criteria (hydric soils, dominance of hydrophytes and wetland hydrology) were met, the area represented by the sample plot was identified as wetland. The delineated wetland boundaries were identified in the field with sequentially numbered (WL1-1, WL1-2, WL1-3, etc.) "Wetland Boundary" surveyor markers (flagging tape tied to vegetation). Wetland sample data plot locations were also identified with flagging and labeled WP1 through WP30. The wetland boundary and sample plot flagging locations were surveyed by the field biologists using a hand-held Trimble Global Positioning System (GPS) unit and subsequent post processing of the raw data.

A total of 20 wetland areas (totaling 2.78 acres) were identified and delineated within the survey area. These wetlands are listed in **Table 1** below. The location of the surveyed wetland boundaries and wetland sample plots are presented on the Delineated Wetlands maps included herein as **Figures 5A**, **5B**, and **5C**.

Table 1. Delineated Wetland Habitats

Wetland ID	Acreage	General Location	Figure
Wetland (WL)1	0.016	Eastern end of Sun Petroleum right-of-way (ROW)	5A
WL2	0.006	West of WL1 in ROW	5A
WL3	0.004	West of WL2 in ROW	5A
WL4	0.021	West of WL3 along stream/drainage ditch	5A
WL5	0.005	West of WL6 along a drainage ditch	5A
WL6	1.654	Central portion of ROW between WL4 and WL5	5A
WL7	0.025	Central portion of ROW south of WL6	5A
WL8	0.011	North bank of NMC west of Belle Isle bridge	5A
WL9	0.043	South bank of NMC west of CSX bridge	5A
WL10	0.032	South bank of NMC west of CSX bridge; east of WL9	5A
WL11	0.063	South bank of NMC west of CSX bridge	5A
WL12	0.050	South bank of NMC west of Belle Isle bridge	5A
WL12A	0.0005	East of Belle Isle bridge center of NMC	5A
WL12B	0.001	South bank of NMC east of Belle Isle bridge	5A

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Table 1. Delineated Wetland Habitats

Wetland ID	Acreage	General Location	Figure
WL14	0.024	Between NMC and SB 11 access road	5C
WL15	0.236	West of WL14	5C
WL16	0.047	West of WL15	5C
WL17	0.005	West of WL16	5B
WL18	0.003	West of WL17	5B
WL19	0.530	West of WL18 and east of WL1	5B
Total Acreage	2.7765		

Three ecological community types described in Edinger *et al.* (2002); shallow emergent marsh, shrub swamp, and reedgrass/purple loosestrife marsh, are representative of these 20 wetland areas. Wetland-specific descriptions are presented below. A photographic log depicting some of the observed wetlands is included as **Attachment 3**.

Survey Area - West

O'Brien & Gere identified fourteen wetland habitats (WL1 through WL12B) along the western portion of the survey area, as presented on **Figure 5A**.

Wetland 1, WL2, and WL3 are small depressional wetland habitats located on the eastern portion of the ROW. Vegetation observed in these wetlands was dominated by reed canary grass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*). Hydrology was indicated by surface water drainage from higher elevations and hydric soils were indicated by the presence of low chroma colors and mottling.

Wetland 4 and WL5 are narrow wetland habitats identified along small streams discharging to NMC. Dominant species observed in these areas include reed canary grass, purple loosestrife, soft rush (*Juncus effusus*), bur reed (*Sparganium sp.*), and forget-me-not (*Myosotis scorpioides*). Hydrology was indicated by surface water drainage associated with the streams as well as soil saturation within the upper 12 inches of soil. Hydric soils were indicated by the presence of a sulfidic odor and low chroma colors and mottling within the upper 10 inches of soil. The northern boundary of WL4 is identified with a broken line on **Figure 5A** to indicate that the wetland boundary is open and continues north beyond the survey area. Based on the vegetative species observed, wetlands WL1 through WL5 are classified as shallow emergent marsh communities.

Wetland 6 is a relatively larger habitat located between WL4 and WL5 along the ROW. The eastern and central portions of WL6 are dominated by common reed. The western portion of WL6 is dominated by forget-me-not, moneywort (*Lysimachia nummularia*), and American black currant (*Ribes americanum*) with green ash (*Fraxinus pennsylvanica*) and black willow (*Salix nigra*) observed in the overstory. Snags, or standing dead trees, were also observed in this area. The western boundary of WL6 is identified with a broken line on **Figure 5A** to indicate that the wetland is open and continues west beyond the survey area. Hydrology for WL6 was indicated by surface water drainage from higher elevations and hydric soils were indicated by the presence of low chroma colors and mottling.

A portion of WL6 extends south to the edge of NMC. This area is dominated by reed canary grass. Hydrology in this area was indicated by surface water drainage patterns and potential high water flood events from NMC and sediment deposits along the stream bank creating uneven topography. Hydric soils were indicated by the presence of low chroma colors and mottling. WL6 contains a mixture of vegetative species that represent a combination of shallow emergent marsh and shrub swamp ecological communities (Edinger *et al.* 2002) surrounded by areas of mature trees.

Fringe wetlands that were identified along the banks of NMC include WL7, WL8 (north bank) and WL 9, WL10, WL11, WL12, WL12A, and WL12B (south bank). The western boundary of WL9 is identified with a broken line on **Figure 5A** to indicate that the wetland is open and continues west outside the survey area. The observed vegetation was dominated by reed canary grass and common reed. Hydrology in these areas was indicated by surface water drainage from higher topographic locations, potential flood events from NMC and sediment deposits along the stream bank creating uneven topography. Hydric soil was indicated by the presence of low chroma colors and mottling. These wetlands are best described as shallow emergent marsh communities, based on the vegetative species present and proximity to NMC.

Survey Area - Central

Three wetland habitats (WL17, WL18, and WL19) were identified along the central portion of the survey area as presented on **Figure 5B**. Wetlands 17 and 18 are shallow emergent marsh habitats located along the north bank of NMC. The observed vegetation was dominated by reed canary grass and common reed. Hydrology in these areas was indicated by surface water drainage from higher topographic locations, potential flood events from NMC and sediment deposits along the stream bank creating uneven topography. Hydric soil was indicated by the presence of low chroma colors and mottling. Wetland 19 is a reedgrass/purple loosestrife marsh community dominated by common reed with lesser densities of reed canary grass and giant goldenrod (*Solidago gigantea*). Wetland 19 receives surface water drainage via a drainage ditch and culvert located at the northwestern end of the wetland.

Survey Area - East

Three wetland habitats (WL14, WL15, and WL16) were delineated within the eastern portion of the survey area as shown on **Figure 5C**. Similar to WL19, these wetlands are located between NMC and the Setting Basin 11 access road and are dominated by common reed with lesser densities of reed canary grass and giant goldenrod. Hydric soils were indicated by the presence of low color chroma and mottling. These areas are hydrologically influenced by surface water runoff from SB 11 and seeps observed within the wetlands. These areas have likely been previously disturbed by draining, filling and/or roadside activities.

Delineated Wetland Values and Services

Data gathered during document review and wetland boundary delineation activities were used to qualitatively assess the values and services of the delineated wetlands identified within the survey area. Field observations indicate that the delineated wetlands provide suitable habitat for various species of wildlife. Amphibians, predominantly frogs and turtles, various species of songbirds, and animal sign, such as deer tracks and mammal scat, were observed throughout the survey area.

The fringe wetland habitats along NMC provide sediment/shoreline stabilization, and the wetlands identified between NCM and SB 11 likely provide sediment and toxicant retention from surface water and seep drainage directed from SB 11.

SUMMARY

O'Brien & Gere and Parsons conducted a wetland delineation for Honeywell along the proposed slurry pipeline route to evaluate potential impacts to wetlands associated with the construction of the pipeline. Field efforts were performed along the survey area on October 13-16, 20 and 21, 2009 and focused on the portion of the pipeline route located between the Interbed Area and the terminus of the pipeline at the SCA on SB 13.

For this wetland delineation task, O'Brien & Gere identified 20 wetland habitats totaling approximately 2.78 acres. Shallow emergent marsh communities were observed on the western portion of the survey area and along the riparian area of NMC. A mix of shallow emergent marsh and shrub swamp communities was observed at

WL6, the largest of the delineated areas (1.6 acres). Reedgrass/purple loosestrife marsh communities were observed on the eastern portion of the survey area between NMC and the SB 11 access road.

The information presented herein will be used by the project designers to finalize the pipeline routing and minimize potential impacts to wetlands where practicable.

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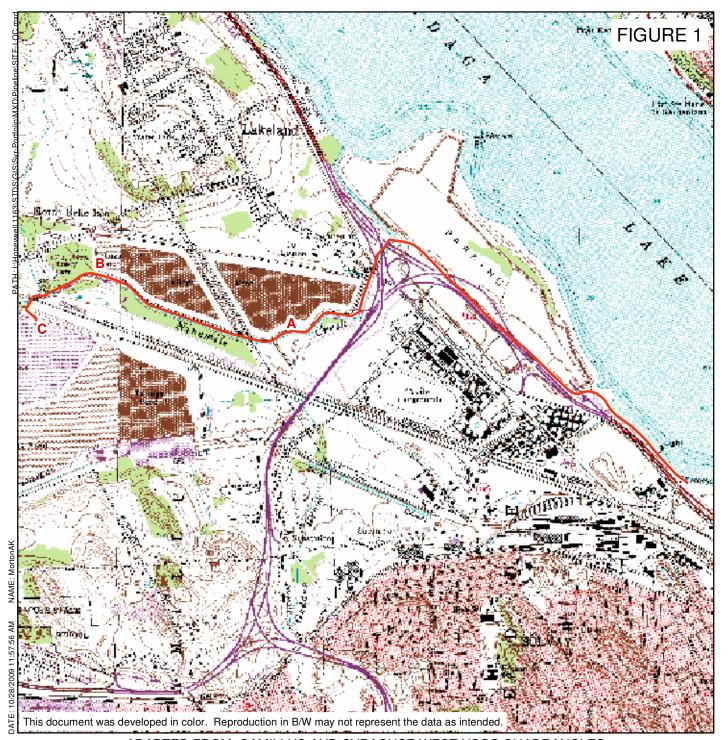
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FIGURES

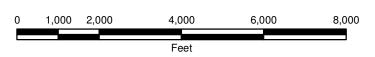


ADAPTED FROM: CAMILLUS AND SYRACUSE WEST USGS QUADRANGLES



HONEYWELL SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK

SITE LOCATION



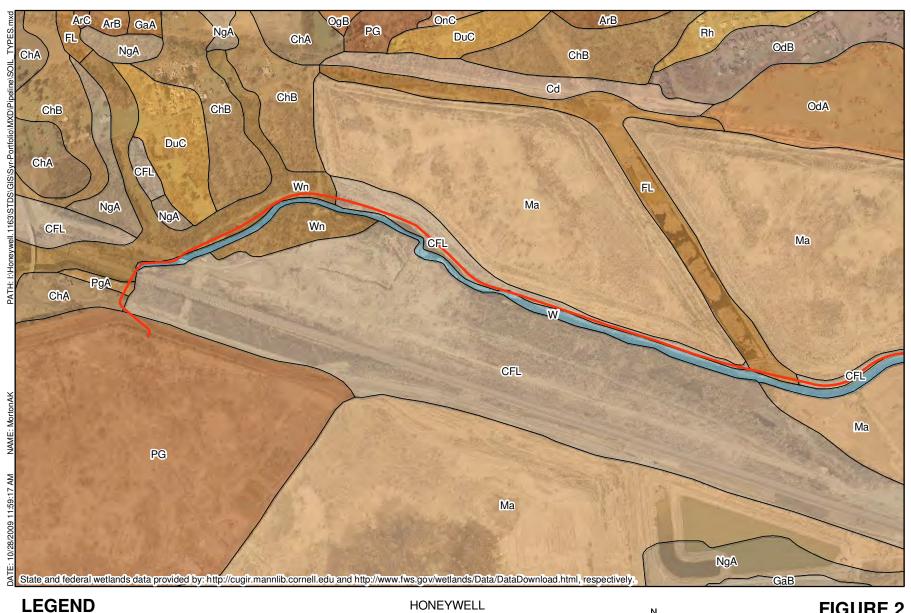


SLURRY PIPELINE ROUTE

A, B, C SURVEY AREA BETWEEN
POINTS A AND C







SLURRY PIPELINE ROUTE CFL SOIL TYPE

SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK

SOIL TYPES

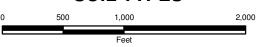


FIGURE 2





HONEYWELL SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK

STATE AND FEDERAL WETLANDS

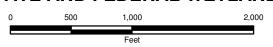


FIGURE 3





LEGEND

SLURRY PIPELINE ROUTE

PREVIOUSLY DELINEATED WETLANDS (BY TES AND O'BRIEN & GERE)

A, B, C SURVEY AREA BETWEEN POINTS A ND C

HONEYWELL SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK



PREVIOUSLY DELINEATED WETLANDS



FIGURE 5A



LEGEND

DELINEATED WETLAND

SLURRY PIPELINE ROUTE

WETLAND PLOTS REFERENCE POINT

OPEN END OF WETLAND

PHOTO LOCATIONS

HONEYWELL **SLURRY PIPELINE** WETLAND DELINEATION GEDDES AND CAMILLUS, **NEW YORK**

DELINEATED WETLANDS (WEST)

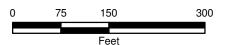






FIGURE 5B



LEGEND



SLURRY PIPELINE ROUTE

WETLAND PLOTS

REFERENCE POINT

HONEYWELL SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK

DELINEATED WETLANDS (CENTRAL)

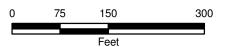




FIGURE 5C



LEGEND

DELINEATED WETLAND

SLURRY PIPELINE ROUTE

PREVIOUSLY DELINEATED WETLANDS (TES)

WETLAND PLOTS

PB PHOTO LOCATIONS

HONEYWELL SLURRY PIPELINE WETLAND DELINEATION GEDDES AND CAMILLUS, NEW YORK

DELINEATED WETLANDS (EAST)





ATTACHMENT 1

Soils Information

Map Unit Description (Brief)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Description (Brief)" report gives a brief, general description of the major soils that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief)

Onondaga County, New York

Description Category: NASIS

Map Unit: CFL-Cut and fill land

CFL = Cut and fill land Soil characteristics of this component can vary widely from one location to another. On-site investigation is needed to determine the suitability for specific use.

Map Unit: ChA—Collamer silt loam, 0 to 2 percent slopes

ChA = Collamer silt loam, 0 to 2 percent slopes This soil is very deep and moderately well drained. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to the top of a seasonal high water table ranges from 18 to 24 inches. Shrink-swell potential is low. Available water capacity is high. The Kf erodibility factor assigned to the top mineral soil layer is .49 and the soil loss tolerance factor T is 4. Hydrologic group: C Farmland class: prime farmland Hydric soil rating: no Land capability classification: 2w

Map Unit: ChB—Collamer silt loam, 2 to 6 percent slopes

ChB = Collamer silt loam, 2 to 6 percent slopes This soil is very deep and moderately well drained. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to the top of a seasonal high water table ranges from 18 to 24 inches. Shrink-swell potential is low. Available water capacity is high. The Kf erodibility factor assigned to the top mineral soil layer is .49 and the soil loss tolerance factor T is 4. Hydrologic group: C Farmland class: prime farmland Hydric soil rating: no Land capability classification: 2e

Map Unit: DuC-Dunkirk silt loam, rolling

DuC = Dunkirk silt loam, rolling This soil is very deep and well drained. Slopes range from 6 to 12 percent. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to the top of a seasonal high water table is greater than 60 inches. Shrink-swell potential is low. Available water capacity is high. The Kf erodibility factor assigned to the top mineral soil layer is .49 and the soil loss tolerance factor T is 4. Hydrologic group: B Farmland class: farmland of statewide importance Hydric soil rating: no Land capability classification: 3e

Map Unit: FL—Fluvaquents, frequently flooded

FL = Fluvaquents, frequently flooded This soil is very deep and poorly drained. Slopes range from 0 to 5 percent. The parent material consists of alluvium with highly variable texture. Depth to the top of a seasonal high water table is 0 inches. Annual flooding is frequent. Annual ponding is frequent. Shrink-swell potential is low. Available water capacity is moderate. The Kf erodibility factor assigned to the top mineral soil layer is .28 and the soil loss tolerance factor T is not assigned. Hydrologic group: D Farmland class: not prime farmland Hydric soil rating: yes Land capability classification: 5w

Map Unit: Ma—Made land, chemical waste

Ma = Made land, chemical waste Soil data not provided for this component.

Map Unit: NgA-Niagara silt loam, 0 to 4 percent slopes

NgA = Niagara silt loam, 0 to 4 percent slopes This soil is very deep and somewhat poorly drained. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to the top of a seasonal high water table ranges from 6 to 18 inches. Shrink-swell potential is low. Available water capacity is high. The Kf erodibility factor assigned to the top mineral soil layer is .49 and the soil loss tolerance factor T is 4. Hydrologic group: C Farmland class: prime farmland if drained Hydric soil rating: no Land capability classification: 3w

Map Unit: PgA—Palmyra gravelly loam, 0 to 3 percent slopes

PgA = Palmyra gravelly loam, 0 to 3 percent slopes This soil is very deep and well drained. The parent material consists of loamy over sandy and gravelly glaciofluvial deposits, derived mainly from limestone and other sedimentary rocks. Depth to the top of a seasonal high water table is greater than 60 inches. Shrink-swell potential is low. Available water capacity is moderate. The Kf erodibility factor assigned to the top mineral soil layer is .28 and the soil loss tolerance factor T is 3. Hydrologic group: B Farmland class: prime farmland Hydric soil rating: no Land capability classification: 1

Map Unit: W-Water

W = Water Soil data not provided for this component.

Map Unit: Wn-Wayland silt loam

Wn = Wayland silt loam This soil is very deep and poorly drained. Slopes range from 0 to 3 percent. The parent material consists of silty and clayey alluvium washed from uplands that contain some calcareous drift. Depth to the top of a seasonal high water table is 0 inches. Annual flooding is frequent. Annual ponding is frequent. Shrink-swell potential is low. Available water capacity is high. The Kf erodibility factor assigned to the top mineral soil layer is .43 and the soil loss tolerance factor T is 5. Hydrologic group: C/D Farmland class: not prime farmland Hydric soil rating: yes Land capability classification: 5w

Data Source Information

Soil Survey Area: Onondaga County, New York Survey Area Data: Version 4, Dec 11, 2006

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Onondaga County, New York

Map Unit: CFL—Cut and fill land

Component: Udorthents (70%)

The Udorthents component makes up 70 percent of the map unit. Slopes are 0 to 8 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

Map Unit: ChA—Collamer silt loam, 0 to 2 percent slopes

Component: Collamer (80%)

The Collamer component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Map Unit: ChB—Collamer silt loam, 2 to 6 percent slopes

Component: Collamer (80%)

The Collamer component makes up 80 percent of the map unit. Slopes are 2 to 6 percent. This component is on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Map Unit: DuC-Dunkirk silt loam, rolling

Component: Dunkirk, rolling (80%)

The Dunkirk, rolling component makes up 80 percent of the map unit. Slopes are 6 to 12 percent. This component is on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map Unit: FL-Fluvaquents, frequently flooded

Component: Fluvaquents (75%)

The Fluvaquents component makes up 75 percent of the map unit. Slopes are 0 to 5 percent. This component is on flood plains. The parent material consists of alluvium with highly variable texture. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, October, November, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Map Unit: Ma—Made land, chemical waste

Component: Made land, chemical waste (70%)

Generated brief soil descriptions are created for major soil components. The Made land is a miscellaneous area.

Map Unit: NgA-Niagara silt loam, 0 to 4 percent slopes

Component: Niagara (75%)

The Niagara component makes up 75 percent of the map unit. Slopes are 0 to 4 percent. This component is on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Map Unit: PgA—Palmyra gravelly loam, 0 to 3 percent slopes

Component: Palmyra (80%)

The Palmyra component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on deltas, outwash plains, terraces. The parent material consists of loamy over sandy and gravelly glaciofluvial deposits, derived mainly from limestone and other sedimentary rocks. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent.

Map Unit: W-Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map Unit: Wn-Wayland silt loam

Component: Wayland (75%)

The Wayland component makes up 75 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of silty and clayey alluvium washed from uplands that contain some calcareous drift. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Data Source Information

Soil Survey Area: Onondaga County, New York Survey Area Data: Version 4, Dec 11, 2006

MAP LEGEND

Interstate Highways Major Roads US Routes Rails Transportation ‡ AERIC OCHRAQUALFS, Area of Interest (AOI) Soil Map Units Area of Interest (AOI) Soil Ratings Soils

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000. Map Scale: 1:11,400 if printed on A size (8.5" × 11") sheet.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

Local Roads

1

FINE-SILTY, MIXED,

MESIC

FLUVAQUENTS

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Onondaga County, New York Version 4, Dec 11, 2006 Survey Area Data:

Date(s) aerial images were photographed: 7/16/2006

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Political Features

Not rated or not available

MOLLIC FLUVAQUENTS,

FINE-SILTY, MIXED,

NONACID, MESIC

UDORTHENTS

HAPLUDALFS, FINE-SILTY, MIXED, MESIC

GLOSSOBORIC

MIXED, MESIC

GLOSSOBORIC HAPLUDALFS, FINE-LOAMY OVER SANDY OR SANDY-SKELETAL,

SILTY, MIXED, MESIC GLOSSAQUIC HAPLUDALFS, FINE-

Cities

Water Features

Oceans

Streams and Canals

Soil Taxonomy Classification

Map unit symbol	Map unit name	Rating	Acres in AOI 41.8	Percent of AOI 43.0%
CFL	Cut and fill land	UDORTHENTS		
ChA	Collamer silt loam, 0 to 2 percent slopes	GLOSSAQUIC HAPLUDALFS, FINE-SILTY, MIXED, MESIC	2.0	2.1%
ChB	Collamer silt loam, 2 to 6 percent slopes	GLOSSAQUIC HAPLUDALFS, FINE-SILTY, MIXED, MESIC	0.9	0.9%
DuC	Dunkirk silt loam, rolling	GLOSSOBORIC HAPLUDALFS, FINE-SILTY, MIXED, MESIC	0.4	0.4%
FL	Fluvaquents, frequently flooded	FLUVAQUENTS	2.1	2.2%
Ма	Made land, chemical waste	UDORTHENTS	19.4	20.0%
NgA	Niagara silt loam, 0 to 4 percent slopes	AERIC OCHRAQUALFS, FINE- SILTY, MIXED, MESIC	0.4	0.4%
PgA	Palmyra gravelly loam, 0 to 3 percent slopes	GLOSSOBORIC HAPLUDALFS, FINE-LOAMY OVER SANDY OR SANDY-SKELETAL, MIXED, MESIC	1.1	1.2%
W	Water		9.1	9.3%
Wn	Wayland silt loam	MOLLIC FLUVAQUENTS, FINE- SILTY, MIXED, NONACID, MESIC	19.9	20.5%
Totals for Area of Interest			97.0	100.0%

Description

This rating presents the taxonomic classification based on Soil Taxonomy.

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. This table shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in sol. An example is Alfisols.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udalfs (Ud, meaning humid, plus alfs, from Alfisols).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludalfs (Hapl, meaning minimal horizonation, plus udalfs, the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective Typic identifies the subgroup that typifies the great group. An example is Typic Hapludalfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, active, mesic Typic Hapludalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

References:

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. (The soils in a given survey area may have been classified according to earlier editions of this publication.)

Rating Options

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Lower

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI) Soils

Soil Map Units

Partially Hydric All Hydric Soil Ratings

Unknown Hydric Not Hydric

Not rated or not available

Political Features

Cities Water Features

Streams and Canals Oceans

ransportation

Interstate Highways Rails

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:11,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Onondaga County, New York Survey Area Data: Version 4, Dec 11, 2006

Date(s) aerial images were photographed: 7/16/2006

compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. The orthophoto or other base map on which the soil lines were

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CFL	Cut and fill land	Not Hydric	41.8	43.0%
ChA	Collamer silt loam, 0 to 2 percent slopes	Not Hydric	2.0	2.1%
ChB	Collamer silt loam, 2 to 6 percent slopes	Not Hydric	0.9	0.9%
DuC	Dunkirk silt loam, rolling	Not Hydric	0.4	0.4%
FL	Fluvaquents, frequently flooded	All Hydric	2.1	2.2%
Ма	Made land, chemical waste	Not Hydric	19.4	20.0%
NgA	Niagara silt loam, 0 to 4 percent slopes	Not Hydric	0.4	0.4%
PgA	Palmyra gravelly loam, 0 to 3 percent slopes	Not Hydric	1,1	1.2%
W	Water	Unknown Hydric	9.1	9.3%
Wn	Wayland silt loam	All Hydric	19.9	20.5%
Totals for Area of Interest			97.0	100.0%

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "all hydric," "partially hydric," "not hydric," or "unknown hydric," depending on the rating of its respective components.

"All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hydric, and at least one component is rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Absence/Presence

Tie-break Rule: Lower

ATTACHMENT 2

Wetland Data Forms

Popular (Comment Comment Com									
Investigation: Reproductions on the site? Do Normal Circumstances exist on the site? Is the area a potential Problem Area? (In readed, opplied instance) Ves No. Plot ID WP1 Wet In the area a potential Problem Area? (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION VECETATION VECETATION Deminant Plant Spocies Stratum Indicate Problem Area (In readed, opplied in or reverse). VECETATION Problem Area (In readed, opplied in or reverse). VECETATION VECETATION Indicate Indicate (In readed, opplied in or reverse). VECETATION VECETATION VECETATION Indicate Indicate (In readed, opplied in or reverse). VECETATION VECETATION VECETATION VECETATION VECETATION Indicate Indicate (In reverse). VECETATION VE			ne Route						
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Wetland Hydrology Indicators: Primary In	8					16			
Wetland Hydrology Indicators: Primary In									
### Recorded Data (Describe in Remarks): ### Stream, Lake or Tide Gauge ### Agrial Photographs **No Recorded Data Available** **Primary Indicators: **Primary Indicators: **Drainage Patterns in Wetlands **Secondary Indicators: **Depth of Surface Water in Pit: **Depth of Surface Wat	(excluding FAC-).	-	OBL, FACW or FAC	<u> </u>	100%				
Recorded Data (Describe in Remarks): Stream, Lake or Tide Gauge And Photographs Other And Photographs Other No Recorded Data Available No Recorded Data Available Dept 12 inches Sactionary Indicators: No Recorded Data Available Dept 12 inches No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Available Dept 12 inches Data Indicators: No Recorded Data Avai	Remarks:								
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Stream, Lake or Tide Gauge Arial Photographs Other Available Available Other No Recorded Data Available No Recorded Data Available No Recorded Data Available No Recorded Data Available Saturated in Upper 12 Inches Water marks Diff Lines Scondary Indicators: Scondary Indicators: Scondary Indicators: Scondary Indicators: Water-Stained Leaves Depth of Surface Water in Pit: Other (Explain in Remarks) Secondary Indicators: Water-Stained Leaves Scondary Indicators: Water-Stained Leaves Water-Stained Leaves Other (Explain in Remarks) Remarks: SOILS Remarks: SOILS Remarks: Wayland slit loam (Wn) Drainage Class Field Observations Field Observa	Recorded Data	a (Describe in Re	emarks):			Wetland Hydrology	y Indicators:		
		Stream	n, Lake or Tide Gaug	e			:		
			Photographs					oper 12 inches	
Secondary Indicators Secondary Indicators Concretions Secondary Indicators Secondary Indica	No Recorded Date						Water marks	pper 12 menes	
Texture Text						=			
Depth of Surface Water in Pit: Depth of Free Water in Pit: Depth to Saturated Soil: Secondary Indicators (and Surface Water in Pit: Depth to Saturated Soil: Soil.S Map Unit Name (Series and Phase): Taxonomy (Subgroup) Mollic Fluvaquents Matrix Color (Munsell Moist) Multi Admic Soil Mollic Fluvaquents Texture, Concretions, Size/Contrast Structure, etc. Gray 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047 8/2 3-9 1047	Field Observations:					X			
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Remarks: Soil S									
Remarks: SOILS	.,				_` ′		FAC-Neutral To	est	
Map Unit Name (Series and Phase): Wayland slit loam (Wn)							Other (Explain	in Remarks)	
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Concretions	SOILS								
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	Hydric Soils Present?	,		Yes	No	Within	n a Wetland	Yes	No
						l I			
	Remarks:				g the Sun	Petroleum right-of	-way adjacent to	Ninemile Creek	i.

Applicant/Owner:	Slurry Pipeline Honeywell	e Koute				_	Date: County:	10/15/2009 Onondaga	
Investigator:	RPC/AKM/AES	S				_	State:	NY	
Do Normal Circumstanc	on aviet on the s	oito?		Vee	No		Community ID:	W/I 4 and W	<i>u</i> 2
s the site significantly d				Yes	No	1		_	/LZ
,		ai situation?)		Yes	No		Transect ID:	dry	
s the area a potential P				Yes	No		Plot ID	WP2	
(if needed, explain on	reverse).				_	-			
/EGETATION							<u> </u>		
Dominant Plant Species		Stratum	Indicator		Dominant	Plant Spec	ries	Stratum	Indica
Artemisia vulgaris*	•	herb	FACU-		9	Flant Spec	Lies	Stratum	IIIuica
Solidago canadensis	*	herb	FACU		10				
Rubus sp.	,	herb	1 400		11				
4 Helianthus tuberosus	e	herb	FAC		12				
5 Clematis virginiana	3	herb	FAC		13				
6 Phalaris arundinace	9	herb	FACW+		14				
' Thurains dramamacci	и	TICID	TAOTIT		15				
					16				
					_				
Percent of Dominant Sp (excluding FAC-).	ecies that are O	BL, FACW or FAC,		0%]				
= dominant species									
Remarks:									
IYDROLOGY									
Recorded Data (I	Describe in Rem	arks):			Wetland F	lydrology I	ndicators:		
		Lake or Tide Gauge	e		Primary In				
		hotographs					Inundated		
	Other	3 11					Saturated in Up	per 12 inche	s
No Recorded Data A	Available						Water marks		
 '							Drift Lines		
							Sediment Depo	sits	
Field Observations:							Drainage Patte		ds
					Secondar	/ Indicators	s (2 or more requ		
Depth of Surface Water	:		-	(in.)			Oxidized Root	Channels in L	Jpper 12 in
Depth of Free Water in	Pit:		-	(in.)			Water-Stained	Leaves	
Depth to Saturated Soil:			-	(in.)			Local Soil Surv		
Depth to Saturated Soil:			-	(in.)			Local Soil Surv FAC-Neutral Te	ey Data est	
Depth to Saturated Soil:	:		-	(in.)			Local Soil Surv	ey Data est	
Depth to Saturated Soil:	:	-	-	(in.)			Local Soil Surv FAC-Neutral Te	ey Data est	
Depth to Saturated Soil:	:		-	(in.)			Local Soil Surv FAC-Neutral Te	ey Data est	
Remarks:			-	(in.)			Local Soil Surv FAC-Neutral Te	ey Data est	
Remarks: SOILS Map Unit Name	Wayland silt k	oam (Wn)	-	(in.)	Drainage		Local Soil Surv FAC-Neutral Te	ey Data est in Remarks)	
Remarks: SOILS Map Unit Name Series and Phase):	Wayland silt lo			(in.)	Drainage Field Obse		Local Soil Surv FAC-Neutral T Other (Explain	ey Data est in Remarks)	
				(in.)	Field Obse		Local Soil Surv FAC-Neutral Te Other (Explain	ey Data est in Remarks)	No
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup)	Wayland silt lo			(in.)	Field Obse	ervations	Local Soil Surv FAC-Neutral Te Other (Explain	ey Data set in Remarks)	No
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description:	Wayland silt lo	uents	Mottle Colors		Field Obse	ervations lapped Typ	Local Soil Surver FAC-Neutral Te Other (Explain poorly drained	ey Data set in Remarks)	No
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth	Wayland silt k	uents Matrix Color	Mottle Colors (Munsell Moist		Field Obse Confirm M	ervations lapped Typ undance/	Local Soil Surv FAC-Neutral Te Other (Explain poorly drained pe? Texture, Concr	ey Data set in Remarks)	No
Remarks: SOILS Jap Unit Name Series and Phase): axonomy (Subgroup) Profile Description: Depth Inches)	Wayland silt lo	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist		Field Obse	ervations lapped Typ undance/	Local Soil Surver FAC-Neutral To Other (Explain poorly drained pe? Texture, Concr Structure, etc.	ey Data est in Remarks) Yes etions,	No
Remarks: BOILS Map Unit Name Series and Phase): axonomy (Subgroup) Profile Description: Jepth Junches)	Wayland silt k	uents Matrix Color			Field Obse Confirm M	ervations lapped Typ undance/	Local Soil Surver FAC-Neutral To Other (Explain Doorly drained Doo	ey Data est in Remarks) Yes etions,	No
Remarks: BOILS Map Unit Name Series and Phase): axonomy (Subgroup) Profile Description: Jepth Junches)	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2	(Munsell Moist		Field Obse Confirm M	ervations lapped Typ undance/	Local Soil Surver FAC-Neutral To Other (Explain poorly drained pe? Texture, Concr Structure, etc.	ey Data est in Remarks) Yes etions,	No
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Jepth Inches)	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2	(Munsell Moist		Field Obse Confirm M	ervations lapped Typ undance/	Local Soil Surver FAC-Neutral To Other (Explain Doorly drained Doo	ey Data est in Remarks) Yes etions,	No
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 1-12 12-16	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2	(Munsell Moist		Field Obse Confirm M	ervations lapped Typ undance/ rast	poorly drained per ? Texture, Concr Structure, etc. silty clay loam silty clay silty clay loam silty clay silty clay loam silty clay silty clay silty clay s	ey Data est in Remarks) Yes etions,	No
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Remarks: SOILS Map Unit Name Series and Phase): axonomy (Subgroup) Profile Description: Depth Inches) 12 2-16	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor	(Munsell Moist		Field Obse Confirm M	ervations lapped Typ undance/ rast Concretic High Org Sandy \$	poorly drained per ? Texture, Concr Structure, etc. silty clay loam silty cl	ey Data est in Remarks) Yes etions,	
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 1-12 12-16	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Rej	(Munsell Moist		Field Obse Confirm M	ervations lapped Tyr undance/ rast Concretic High Org Sandy S Organic S	poorly drained Texture, Concr Structure, etc. silty clay loam	ey Data est in Remarks) Yes etions, Surface Layer dy Soils	
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Remarks: SOILS Map Unit Name Series and Phase): axonomy (Subgroup) Profile Description: Depth Inches) 12 2-16	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Rej	(Munsell Moist		Field Obse Confirm M	concretic High Org Sandy S Organic S Listed on	poorly drained Texture, Concr Structure, etc. silty clay loam	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils oils List Soils List	
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demarks: Idap Unit Name Series and Phase): axonomy (Subgroup) Idap Unit Name Series and Phase): axonomy (Subgroup) Idap Unit Name Series and Phase): Idap Unit Name Series and Phase Series an	Wayland silt k	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reg Reducing Condition	(Munsell Moist		Field Obse Confirm M	concretic High Org Sandy S Organic S Listed on	poorly drained poorly drained per Texture, Concretive, etc. silty clay loam silty clay	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils oils List Soils List	
Remarks: GOILS Jap Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 1-12 2-16 Hydric Soil Indicators:	Wayland silt k Mollic Fluvaqu Horizon	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reg Reducing Condition	(Munsell Moist		Field Obse Confirm M	concretic High Org Sandy S Organic S Listed on	poorly drained poorly drained per Texture, Concretive, etc. silty clay loam silty clay	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils oils List Soils List	
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 1-12 12-16 Hydric Soil Indicators: Remarks: WETLAND DETERMIN.	Wayland silt is Mollic Fluvaqu Horizon ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reg Reducing Condition	gime ns oma Colors	, it)	Field Obse Confirm M	concretic High Org Sandy S Organic L Listed on Other (E)	poorly drained poorly drained per? Texture, Concr Structure, etc. silty clay loam silty clay	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils oils List Soils List	
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 12-16 Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation Wetland Hydrology Pres	Wayland silt is Mollic Fluvaqu Horizon ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reg Reducing Condition	ggime ns oma Colors Yes Yes	No No	Field Obse Confirm M	Concretic High Org Sandy S Organic S Listed on Other (Ex	poorly drained poorly drained per? Texture, Concr Structure, etc. silty clay loam silty clay loam silty clay loam sols Streaking in San Local Hydric Sc National Hydric kplain in Remark	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils ils List Soils List s)	· in
Remarks: SOILS Map Unit Name Series and Phase): Faxonomy (Subgroup) Profile Description: Depth Inches) 1-12 12-16 Hydric Soil Indicators: Remarks: WETLAND DETERMIN.	Wayland silt is Mollic Fluvaqu Horizon ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reg Reducing Condition	gime ns oma Colors	, it)	Field Obse Confirm M	Concretic High Org Sandy S Organic S Listed on Other (Ex	poorly drained poorly drained per? Texture, Concr Structure, etc. silty clay loam silty clay	ey Data est in Remarks) I Yes etions, Surface Layer dy Soils oils List Soils List	

Project/Site: Applicant/Owner: Investigator:	Slurry Pipelir Honeywell RPC/AKM/AE					Date: County: State:	10/15/2009 Onondaga NY	
Do Normal Circumstanc Is the site significantly d Is the area a potential P (if needed, explain on I	isturbed (atypic roblem Area?			Yes Yes Yes	No No No	Community ID: Transect ID: Plot ID	WL2 wet WP3	
VEGETATION								
Dominant Plant Species 1 Phalaris arundinacee 2 Lythrum salicaria 3 Aster lanceolatus 4 Clematis virginlana 5 Apocynum sp. 6 Verbena urticifolia 7 Chelone glabra		Stratum herb herb herb herb herb herb	Indicator FACW+ FACW+ FACW FAC FACU OBL		Dominant Plant Specie 9 10 11 12 13 14 15	S	Stratum	Indicator
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are C	OBL, FACW or FAC,		100%				
Remarks:								
HYDROLOGY								
Recorded Data (I	Stream Aerial I Other	narks): n, Lake or Tide Gauç Photographs	je		Wetland Hydrology Indi Primary Indicators: X Secondary Indicators (3	Inundated Saturated in Up Water marks Drift Lines Sediment Depo Drainage Patter	sits	
Depth of Surface Water Depth of Free Water in I Depth to Saturated Soil:	Pit:		- - -	(in.) (in.) (in.)		Oxidized Root (Water-Stained I Local Soil Surve FAC-Neutral Te Other (Explain i	Channels in Upp Leaves ey Data est	er 12 inches
SOILS								
Map Unit Name (Series and Phase):	Wayland silt	loam (Wn)			Drainage Class	poorly drained		
Taxonomy (Subgroup)	Mollic Fluvaq	juents			Field Observations Confirm Mapped Type?	,	Yes	No
Profile Description: Depth (Inches)	Horizon	Matrix Color (Munsell Moist) 10YR 3/2	Mottle Colors (Munsell Moist)		Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay loam		
5-9 9-16		10YR 3/2 10YR 4/2	7.5YR 4/6 7.5YR 4/6		moderate/moderate	silty clay loam silty clay loam		
Hydric Soil Indicators:	X X	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	ons		Sandy Soi Organic Str Listed on Lo Listed on N	ic Content in Surfa	oils	
Remarks:								
WETLAND DETERMINA	ATION	-						
Hydrophytic Vegetation Wetland Hydrology Pres Hydric Soils Present?			Yes Yes Yes	No No No	Is this Sam Within a V		Yes	No
Remarks:	Plot collected	d in a depressional	area. Small wetl	and flagg	ed WL2-1 thru WL2-4.	Dry hole for WL2	2 is WP2.	

Project/Site: Applicant/Owner: Investigator:	Slurry Pipeline Rout Honeywell RPC/AKM/AES	te					Date: County: State:	10/15/2009 Onondaga NY	
Do Normal Circumstanc Is the site significantly d Is the area a potential P (if needed, explain on	isturbed (atypical situa roblem Area?	ition?)		Yes Yes Yes	No No No		Community ID: Transect ID: Plot ID	WL3 wet WP4	
VEGETATION									
Dominant Plant Species 1 Phalaris arundinace. 2 Lythrum salicaria* 3 Carex crinita 4 Rosa multiflora 5 Lysimachia nummul. 6 Acer saccharum 7 Apocynum cannabin 8	a* aria	Stratum herb herb herb herb herb herb	Indicator FACW+ FACW+ OBL FACU OBL FACU- FACU- FACU-		Dominant PI 9 10 11 12 13 14 15 16	ant Species	S	Stratum	Indicator
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are OBL, FA	ACW or FAC,		100%	1				
Remarks:									
HYDROLOGY									
	Describe in Remarks): Stream, Lake Aerial Photogr Other Available		1		Wetland Hyd Primary India		cators: Inundated Saturated in Up Water marks Drift Lines Sediment Depo		
Field Observations: Depth of Surface Water Depth of Free Water in Depth to Saturated Soil:	Pit:		- - -	(in.) (in.) (in.)	Secondary Ti	X ndicators (2	or more require	Channels in Upp Leaves rey Data est	er 12 inches
Remarks:									
SOILS									
Map Unit Name (Series and Phase):	Wayland silt loam (\	Wn)			Drainage Cla		poorly drained	j	
Taxonomy (Subgroup)	Mollic Fluvaquents				Field Observ Confirm Map			Yes	No
Profile Description: Depth (Inches)	Horizon (Mu		Mottle Colors (Munsell Moist)		Mottle Abun		Texture, Concr Structure, etc.	retions,	
0-8 8-16		0YR 4/2 0YR 4/1	7.5YR 4/6		moderate/m	noderate	clay loam clay loam		
Hydric Soil Indicators:	Sulfid Aquid x Redu	sol : Epipedon lic Odor : Moisture Reg cing Condition d or Low-Chro	s			Sandy Soil Organic Stre Listed on Lo Listed on Na	ic Content in Sui	Soils List	
Remarks:									
WETLAND DETERMIN	ATION								
Hydrophytic Vegetation Wetland Hydrology Pres Hydric Soils Present?			Yes Yes Yes	No No No		s this Samp Within a W		Yes	No
Remarks:	Plot collected in a d	epressional a	rea. Flags WL3	 -1 thru \	WL3-4.				

Project/Site:	Slurry Pipelir	ne Route					Date:	10/15/2009	
Applicant/Owner:	Honeywell						County:	Onondaga	
Investigator:	RPC/AKM/AE	S					State:	NY	
-							-		
Do Normal Circumstan	ces exist on the	site?		Yes	No		Community ID:	WL4	
Is the site significantly				Yes	No		Transect ID:	wet	
Is the area a potential				Yes	No		Plot ID	WP5	
(if needed, explain on	reverse).								
VEGETATION									
Dominant Plant Specie	ne .	Stratum	Indicator		Dominant P	lant Sne	ries	Stratum	Indicator
1 Phalaris arundinace		herb	FACW+		9 Euthamia			herb	FAC
2 Lythrum salicaria*		herb	FACW+		10 Phragm	ites aust	tralis	herb	FACW
3 Juncus effusus* 4 Sparganium americ	.anm*	herb herb	FACW+ OBL		11 Lycopus 12 Carex lu		anus	herb herb	OBL OBL
5 Myosotis scorpioide		herb	FACW+		13 Carex 10	ii iua		Herb	OBL
6 Eupatorium perfolia	atum	herb	FACW+		14				
7 Solidago canadens	is	herb	FACU FACW		15				
8 Aster lanceolatus		herb	FACW		16				
Percent of Dominant S (excluding FAC-). * = dominant species	pecies that are 0	OBL, FACW or FAC,		100%]				
Remarks:									
HYDROLOGY					T				
Recorded Data	(Describe in Rer				Wetland Hy		ndicators:		
		n, Lake or Tide Gaug Photographs	е		Primary Indi	cators:	Inundated		
	Other	Filologiapris			-	Х	Saturated in Up	oper 12 inches	
No Recorded Data	Available				_		Water marks	•	
					-		Drift Lines Sediment Depo	ncito	
Field Observations:					-	Х		rns in Wetlands	
					Secondary		s (2 or more requ	uired):	
Depth of Surface Water in				—(in.) —(in.)	-		Oxidized Root Water-Stained	Channels in Upp	per 12 inches
Depth to Saturated So		-	0	(in.)	-		Local Soil Surv		
				_	_		FAC-Neutral Te		
					-		Other (Explain	in Remarks)	
Remarks:	Stream/drain	age draining into N	inemile Creek.		11				
SOILS									
Map Unit Name (Series and Phase):	Wayland silt	loom (M/n)			Drainage Cl	000	poorly drained		
(Selles allu Filase).	wayianu siit	ioaiii (vvii)			Field Obser		poorly drained		
Taxonomy (Subgroup)	Mollic Fluvac	quents			Confirm Ma	pped Typ	oe?	Yes	No
Profile Description:									
Depth		Matrix Color	Mottle Colors		Mottle Abun		Texture, Concr	etions,	
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist	t)	Size/Contra	st	Structure, etc.		
0-7 7-15		10YR 3/2 10YR 4/1	-				silty loam silty loam		
7-13		1011(4/1					sity loani		
Hydric Soil Indicators:									
		Histosol Histic Epipedon				Concretion	ons janic Content in S	Surface Laver in	
	x	Sulfidic Odor				Sandy S		ourrace Layer in	
		Aquic Moisture Re					Streaking in San		
	X	Reducing Conditio Gleyed or Low-Chi					n Local Hydric So n National Hydric		
		_ Cleyed of Low-Citi	ioma Colors				xplain in Remark		
Remarks:		surface. High perce lard layer/refusal re		ic materi	al with prese	nce of g	leying, roots/le	aves, sulfidic o	dor.
WETLAND DETERMIN					I				
Hydrophytic Vegetation Wetland Hydrology Pre			Yes	No No	l,	le thin Sa	ampling Point		
Hydric Soils Present?	SOUTH!		Yes	No No	ľ		ampling Point a Wetland	Yes	No
Pomarka:	Elaca Wil 4 4	thru WI 4 44							
Remarks:		thru WL4-11. d 6 the wetland con	tinues north be	eyond sur	vey area.				
	•				-				

Applicant/Owner: Investigator:	Slurry Pipelin	e Route			Date:	10/15/2009	
-	Honeywell RPC/AKM/AES	•			County: State:	Onondaga NY	
	RPC/ARWIAES	<u> </u>			State.	N T	
D - M 1 O :		-11-0		—	Community ID:		
Do Normal Circumstance Is the site significantly of				es No es No	Community ID: Transect ID:	WL4 dry	
Is the area a potential P		a situation (es No	Plot ID	WP6	
(if needed, explain on				- NO	1.00.15		
VEGETATION							
Dominant Plant Species	3	Stratum	Indicator	Dominant Plant Spe	ecies	Stratum	Indicator
1 Artemisia vulgaris*		herb	FACU-	9 Carex sp.**		herb	-
2 Solidago canadensis 3 Verbena urticifolia	3*	herb herb	FACU FACU	10 11			
4 Rosa multiflora		herb	FACU	12			
5 Aster novae-angliae		herb	FACW-	13			
6 Phalaris arundinacea 7 Viola sp.	а	herb	FACW+	14			
8 Equisetum sp.		herb herb	-	15 16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are O	BL, FACW or FAC,	0	%			
Remarks:							
HYDROLOGY							
Recorded Data (Describe in Rem	narks).		Wetland Hydrology	Indicators:		
Necolded Data (, Lake or Tide Gaug	je	Primary Indicators:	indicators.		
		Photographs			Inundated		
No Recorded Data	Other				Saturated in Up Water marks	per 12 inches	
No Necolded Data /	available				Drift Lines		
					Sediment Depos		
Field Observations:				Secondary Indicato	Drainage Patter		s
Depth of Surface Water			- (in.)		Oxidized Root C		per 12 inche
Depth of Free Water in	Pit:		- (in.)		Water-Stained L	eaves	
Depth to Saturated Soil:	:		- (in.)		Local Soil Surve		
				-	Other (Explain in		
Remarks:							
SOILS							
Map Unit Name (Series and Phase):	Wayland silt le	oam (Wn)		Drainage Class	poorly drained		
Tayonamy (Pubaraun)	Mellie Elmon	to		Field Observations		.,	
Taxonomy (Subgroup)	Mollic Fluvaqu	Jents		Confirm Mapped Ty	pe?	Yes	No
Profile Description:							
Depth		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concre	etions,	
(Inches) 0-5	Horizon	(Munsell Moist) 10YR 3/3	(Munsell Moist)	Size/Contrast	Structure, etc.		
0-3		1011 3/3			Clay Ioalli		
		7.5YR 4/2	-		gravelly loam		
5-14							
5-14							
5-14 Hydric Soil Indicators:							
		Histosol		Concret		turfo o Lovor	
		Histic Epipedon		High Or	ganic Content in S	Surface Layer	in
		Histic Epipedon Sulfidic Odor Aquic Moisture Re		High Or Sandy Organic	ganic Content in S Soils Streaking in Sand	ly Soils	in
		Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio	ins	High Or Sandy Organic Listed o	ganic Content in S Soils Streaking in Sand n Local Hydric Soi	ly Soils	in
		Histic Epipedon Sulfidic Odor Aquic Moisture Re	ins	High Or Sandy Organic Listed o Listed o	ganic Content in S Soils Streaking in Sand	ly Soils Is List Soils List	in
Hydric Soil Indicators:	Between 5-14	Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	ns roma Colors	High Or Sandy Organic Listed o Listed o	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric s explain in Remarks	ly Soils Is List Soils List	in
Hydric Soil Indicators:		Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	ns roma Colors	High Or Sandy Organic Listed o Listed o Other (t	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric s explain in Remarks	ly Soils Is List Soils List	in
Hydric Soil Indicators: Remarks: WETLAND DETERMIN	ATION	Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	ns roma Colors f gravel percentage;	High Or Sandy Organic Listed o Listed o Other (f	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric s explain in Remarks	ly Soils Is List Soils List	in
Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation	ATION Present?	Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	f gravel percentage;	High Or Sandy Organic Listed o Listed o Other (f	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric t xplain in Remarks	ly Soils Is List Soils List	in
Hydric Soil Indicators: Remarks: WETLAND DETERMIN	ATION Present?	Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	roma Colors f gravel percentage; Yes Yes	High Or Sandy Organic Listed o Listed o Other (£	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric s explain in Remarks	ly Soils Is List Soils List	in No
Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation Wetland Hydrology Pres	ATION Present?	Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	roma Colors f gravel percentage; Yes Yes	High Or Sandy Organic Listed o Listed o Other (E	ganic Content in S Soils Streaking in Sand n Local Hydric Soi n National Hydric Si explain in Remarks I at 14 inches.	ty Soils Is List Soils List S)	

Project/Site:	Slurry Pipeline R	oute			Date:	10/15/2009	
Applicant/Owner: Investigator:	Honeywell RPC/AKM/AES				County: State:	Onondaga NY	
Do Normal Circumstan	ices exist on the site	?	Yes	No	Community ID:	WL5 (Ditch-Bl	bridge)
Is the site significantly	disturbed (atypical si		Yes	No	Transect ID:	wet	
Is the area a potential (if needed, explain on			Yes	No	Plot ID	WP7	
(ii fieeded, explain of	rreverse).						
VEGETATION							
Dominant Plant Specie	ae .	Stratum	Indicator	Dominant Plant	Species	Stratum	Indicator
1 Phalaris arundinace	ea *	herb	FACW+	9	opecies -	Otratam	maloator
2 Myosotis scorpioide 3 Solidago canadens		herb herb	FACW+ FACU	10 11			
4 Aster lanceolatus	15	herb	FACW	12			
5				13 14			
<u>6</u> 7				15			
8				16			
Percent of Dominant S (excluding FAC-).	species that are OBL	, FACW or FAC,	100%	6			
* = dominant species							
Remarks:							
HYDROLOGY							
Recorded Data	(Describe in Remark	s):		Wetland Hydrolo	av Indicators:		
Noordod Bald	Stream, La	ke or Tide Gauge	е	Primary Indicator	rs:		
	Aerial Phot Other	ographs			Inundated Saturated in U	nner 12 inches	
No Recorded Data					Water marks	pper 12 mones	
				_	Drift Lines Sediment Dep	a a i ta	
Field Observations:				-		erns in Wetlands	
Death of Confess West			(i-)	Secondary Indica	ators (2 or more req		40 !
Depth of Surface Water in			- (in.) 3 (in.)		Water-Stained	Channels in Upp Leaves	er 12 inches
Depth to Saturated So			0 (in.)		Local Soil Surv	ey Data	
					FAC-Neutral T Other (Explain		
Remarks:							
SOILS							
Map Unit Name							
(Series and Phase):	Wayland silt loan	n (Wn)		Drainage Class Field Observatio	poorly drained	i .	
Taxonomy (Subgroup)	Mollic Fluvaquen	ts		Confirm Mapped		Yes	No
Profile Description:		Matrix Color	Mottle Colors	Mattle About days	-/ T+ 0	4:	
Depth (Inches)	Horizon (Munsell Moist)	(Munsell Moist)	Mottle Abundand Size/Contrast	ce/ Texture, Conci Structure, etc.	retions,	
0-10		10YR 3/1	-	-	silt		
10-16		10YR 4/1	-		silty sand		
Hydric Soil Indicators:							
Tryano con maioatoro.		stosol			retions		
		stic Epipedon ulfidic Odor			Organic Content in dy Soils	Surface Layer in	
	Ac	quic Moisture Reg		X Orga	nic Streaking in Sar		
		educing Condition leyed or Low-Chr			d on Local Hydric So d on National Hydric		
		leyed of Low-Cili	orria Colors		r (Explain in Remark		
Remarks:	0-10" increase in						
	iu-io dispiayed	Screaking of Su	rface organic material				
WETLAND DETERMIN	NATION						
Hydrophytic Vegetation			Yes No				
Wetland Hydrology Pre			Yes No	Is this	s Sampling Point		
Hydric Soils Present?			Yes No	With	nin a Wetland	Yes	No
-							
Remarks:	Flags WL5-1 thru	ı WL5-3 along w	estern edge and cente	r line of ditch.			

Project/Site:	Slurry Pipelir	ne Route				Date:	10/15/2009	
Applicant/Owner:	Honeywell					County:	Onondaga	
Investigator:	RPC/AKM/AE	S				State:	NY	
Do Normal Circumstar	nces evist on the	site?		Yes	No	Community ID:	WL6	
Is the site significantly				Yes	No	Transect ID:	wet	
Is the area a potential	Problem Area?	•		Yes	No	Plot ID	WP8	
(if needed, explain or	n reverse).			-				
VEGETATION								
Dominant Plant Specie	••	Stratum	Indicator	-	Oominant Plant Spe	nei e e	Stratum	Indicator
1 Myosotis scorpioid		herb	FACW+	9		cies	Stratum	mulcator
2 Sparganium americ	canum*	herb	OBL		0			
3 Ribes americanum		shrub	FACW		1			
4 Lysimachia nummu 5 Fraxinus pennsylva		herb shrub	OBL FACU-		3			
6 Fraxinus pennsylva		tree	FACU-		4			
7					5			
8				1	6			
Percent of Dominant S	Species that are 0	DBL, FACW or FAC,		100%				
(excluding FAC-). * = dominant species								
- dominant species								
Remarks:	Just north of	plot, Phalaris, Phi	ragmites, and C	ornus sp. l	ecome more don	ninant.		
HYDROLOGY								
Recorded Data	(Describe in Rer	narke).		v	Vetland Hydrology	Indicators:		
Necoraca Data		n, Lake or Tide Gaug	je	F	rimary Indicators:	maioators.		
	Aerial I	Photographs	,		·	Inundated		
No Recorded Data	Other					Saturated in Up Water marks	per 12 inches	
No Recorded Date	Available					Drift Lines		
						Sediment Depo		
Field Observations:					X	Drainage Patte		
Depth of Surface Water	er.		_	(in.)	Secondary Indicato		Dhannels in Upp	er 12 inches
Depth of Free Water in			-	(in.)		Water-Stained	Leaves	
Depth to Saturated So	oil:		-	(in.)		Local Soil Surv		
						FAC-Neutral Te Other (Explain		
1								
Remarks:								
SOILS								
Map Unit Name (Series and Phase):	Wayland silt	loam (Wn)		г	rainage Class	poorly drained		
(Series and Friase).	waylana siit	ioaiii (wii)			ield Observations	poorly drained		
Taxonomy (Subgroup)	Mollic Fluvac	uents			Confirm Mapped Ty	pe?	Yes	No
Profile Description:						_		
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)		Nottle Abundance/ Size/Contrast	Texture, Concre Structure, etc.	etions,	
0-3	HOHZOH	10YR 3/1	(IVIUIISEII IVIOISI))		loam		
3-16		10YR 3/1	7.5 YR 4/6		high/low	loam		
Hydric Soil Indicators:								
,		Histosol		_	Concret			
		Histic Epipedon		_		ganic Content in S	Surface Layer in	
		Sulfidic Odor Aquic Moisture Re	edime		Sandy	Soils Streaking in San	dy Soils	
	-	Reducing Condition		_		n Local Hydric So		
	Х	Gleyed or Low-Ch	roma Colors	_		n National Hydric		
				_	Other (E	xplain in Remark	s)	
Remarks:	Moist soil.							
WETLAND DETERMI	NATION							
				_	1			
Hydrophytic Vegetatio Wetland Hydrology Pro			Yes	No No	lo this S	ampling Point		
Hydric Soils Present?	esent!		Yes	No No		ampling Point a Wetland	Yes	No
D	Fl 140 6 :	41			•	-		
Remarks:	riags WL6-1	thru WL6-75. Flag	vv_b-4/ located	near WP5.				

Project/Site: Applicant/Owner:	Slurry Pipelin Honeywell					Date: County:	10/15/200 Onondag	
Investigator:	RPC/AKM/AE	S				State:	NY	
Do Normal Circumstar Is the site significantly Is the area a potential (if needed, explain or	disturbed (atypica Problem Area?			Yes Yes Yes	No No No	Community ID Transect ID: Plot ID	WL6 dry WP9	
VEGETATION						I		
Dominant Plant Specie	es	Stratum	Indicator	Do	minant Plant S	pecies	Stratum	Indicato
1 Rosa multiflora*		herb	FACU	9				
2 Aster lateriflorus* 3 Clematis virginiana	*	herb herb	FACW-	10 11				
4 Lysimachia nummu	ılaria*	herb	OBL	12				
5 Solidago canadens		herb	FACU	13				
6 Solidago gigantea* 7 Viola sp.*,**		herb herb	FACW 	14 15				
8				16				
Percent of Dominant S (excluding FAC-). * = dominant species Remarks:	** = species a	DBL, FACW or FAC, are not included as qually dominant.		50% ent dominan	ce calculation.			
HYDROLOGY								
	/Danasiba in Dana	\.		10/-	41	. In dia ataun		
Recorded Data	(Describe in Rem Stream	าarks): , Lake or Tide Gau	ae		tland Hydrolog mary Indicators			
	Aerial F	hotographs			·	Inundated		
No Recorded Data	Other Available					Saturated in U Water marks	Ipper 12 inche	IS .
	, , , , and					Drift Lines		
Field Observations						Sediment Dep		
Field Observations:				Se	condary Indicat	Drainage Patte ors (2 or more rec		nas
Depth of Surface Water			-	(in.)		Oxidized Root	Channels in I	Jpper 12 inch
Depth of Free Water in Depth to Saturated So			-	(in.) (in.)		Water-Stained Local Soil Sur		
Depin to Saturated So	11.			_(III.)		FAC-Neutral T		
						Other (Explain	in Remarks)	
						_ ` `	,	
Remarks:								
SOILS								
	Wayland silt I	oam (Wn)			ninage Class	poorly draine		
SOILS Map Unit Name (Series and Phase):				Fie	ld Observation	poorly draine	d	
SOILS Map Unit Name				Fie		poorly draine		No
SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup)				Fie	ld Observation	poorly draine	d	No
SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description:			Mottle Colors	Fie Co	ld Observation	poorly draine	d Yes	No
SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)		Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Fie Co Mo	Id Observation: nfirm Mapped	poorly draine s ype? / Texture, Conc Structure, etc.	d Yes	No
SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	Mollic Fluvaq	uents Matrix Color		Fie Co Mo	Id Observation: Infirm Mapped I	poorly draine S Type? / Texture, Conc	d Yes	No
SOILS Map Unit Name (Series and Phase):	Mollic Fluvaq	Matrix Color (Munsell Moist)		Fie Co Mo	Id Observation: Infirm Mapped I	poorly draine s ype? / Texture, Conc Structure, etc.	d Yes	No
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14	Mollic Fluvaq	Matrix Color (Munsell Moist)		Fie Co Mo	Id Observation: Infirm Mapped I	poorly draine s ype? / Texture, Conc Structure, etc.	d Yes	No
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14	Mollic Fluvaq	Matrix Color (Munsell Moist)		Fie Co Mo	Id Observation: Infirm Mapped I	poorly draine S Type? / Texture, Conc Structure, etc.	d Yes	No
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon		Fie Co Mo	Id Observation: nfirm Mapped 1 ttle Abundance e/Contrast Concre High C	poorly draine SType? / Texture, Conc Structure, etc. loam	d Yes retions,	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor	(Munsell Moist)	Fie Co Mo	Id Observation: nfirm Mapped Total ttle Abundance e/Contrast Concre High Conditions Sand	poorly draine s Type? / Texture, Conc Structure, etc. loam stions rganic Content in y Soils	d Yes retions,	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic	(Munsell Moist)	Fie Co Mo	ttle Abundance e/Contrast Concre High C Sand Organi Listed	poorly draine S Type? / Texture, Conc Structure, etc. loam etions trganic Content in y Soils c Streaking in Sai on Local Hydric S	d Yes retions, Surface Layer ndy Soils oils List	
SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re	(Munsell Moist)	Fie Co Mo	do Observation: nfirm Mapped To title Abundance e/Contrast	poorly draine s Type? / Texture, Conc Structure, etc. loam etions loamic Content in y Soils c Streaking in Sar	d Yes retions, Surface Layer andy Soils oils List c Soils List	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14 Hydric Soil Indicators:	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	Fie Co Mo	do Observation: nfirm Mapped To title Abundance e/Contrast	poorly draines sype? / Texture, Conc Structure, etc. loam etions riganic Content in y Soils c Streaking in Sar on Local Hydric S on National Hydric S	d Yes retions, Surface Layer andy Soils oils List c Soils List	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14 Hydric Soil Indicators:	Mollic Fluvaq	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	Fie Co Mo	do Observation: nfirm Mapped To title Abundance e/Contrast	poorly draines sype? / Texture, Conc Structure, etc. loam etions riganic Content in y Soils c Streaking in Sar on Local Hydric S on National Hydric S	d Yes retions, Surface Layer andy Soils oils List c Soils List	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14 Hydric Soil Indicators: Remarks:	Mollic Fluvaq Horizon No mottling o	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	Fie Co	do Observation: nfirm Mapped To title Abundance e/Contrast	poorly draines sype? / Texture, Conc Structure, etc. loam etions riganic Content in y Soils c Streaking in Sar on Local Hydric S on National Hydric S	d Yes retions, Surface Layer andy Soils oils List c Soils List	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14 Hydric Soil Indicators: Remarks: WETLAND DETERMII Hydrophytic Vegetation	Mollic Fluvaq Horizon No mottling o	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	egime ensurement colors	Fie Co Mo Siz	d Observation: Infirm Mapped Temperature Concrete High C Sand Organi Listed Listed Other	poorly draine s Type? / Texture, Conc Structure, etc. loam etions load load load load load load load load	d Yes retions, Surface Layer andy Soils oils List c Soils List	
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-14 Hydric Soil Indicators: Remarks:	Mollic Fluvaq Horizon No mottling o	Matrix Color (Munsell Moist) 10YR 3/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	Fie Co	Concre High C Sand Organi Listed Listed Usher	poorly draines sype? / Texture, Conc Structure, etc. loam etions riganic Content in y Soils c Streaking in Sar on Local Hydric S on National Hydric S	d Yes retions, Surface Layer andy Soils oils List c Soils List	

Project/Site: Applicant/Owner: Investigator:	Slurry Pipelir Honeywell RPC/AKM/AE					Date: County: State:	10/15/2009 Onondaga NY	
Do Normal Circumstand Is the site significantly of Is the area a potential F (if needed, explain on	listurbed (atypic roblem Area?			Yes Yes Yes	No No No	Community ID: Transect ID: Plot ID	WL7 wet WP10	
VEGETATION								
Dominant Plant Species 1 Phalaris arundinace 2 Elymus riparius* 3 Ribes americanum* 4 Lythrum salicaria 5 Verbena urticifolia 6 Myosotis scorpioide 7 Rosa multiflora 8 Lysimachia nummul	a *	Stratum herb herb shrub herb herb herb herb herb	Indicator FACW+ FACW FACW FACW+ FACU FACW+ FACU FACW+ FACU OBL		Dominant Plant Specie 9 Clematis virginiana 10 Arcticum minus 11 Peltandra virginica 12 Toxicodendron rat 13 Ageratina altissim 14 Fraxinus american 15	a dicans a	Stratum herb herb herb herb herb	Indicator FAC OBL FAC FACU- FACU-
Percent of Dominant Sp (excluding FAC-). * = dominant species Remarks:	pecies that are (DBL, FACW or FAC,		100%]			
HYDROLOGY								
Recorded Data (No Recorded Data a Field Observations: Depth of Surface Water Depth of Free Water in Depth to Saturated Soil	StreamAerial IOther Available : Pit:	narks): n, Lake or Tide Gaug Photographs	 	_(in.) _(in.) _(in.)	Wetland Hydrology Ind Primary Indicators:	Inundated Saturated in Up Water marks Drift Lines Sediment Depo Drainage Patter or more required	sits rns in Wetlands d): Channels in Upp Leaves by Data st	er 12 inches
Remarks:	Soil slightly i	noist at surface. Ninemile Creek (at	edge).					
SOILS	-	•						
Map Unit Name (Series and Phase):	Wayland silt	loam (Wn)			Drainage Class	poorly drained		
Taxonomy (Subgroup)	Mollic Fluvac	juents			Field Observations Confirm Mapped Type?	?	Yes	No
Profile Description: Depth (Inches) 0-10	Horizon	Matrix Color (Munsell Moist) 10YR 4/2	Mottle Colors (Munsell Moist) 10YR 5/6		Mottle Abundance/ Size/Contrast moderate/moderate	Texture, Concre Structure, etc. silty loam	etions,	
10-16		10YR 4/2	7.5Yr 4/6		moderate/moderate	silty loam		
Hydric Soil Indicators:	x	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Chi	ns		Sandy Soi Organic Str Listed on L Listed on N	ic Content in Surf	Soils List	
Remarks:								
WETLAND DETERMIN	ATION							
Hydrophytic Vegetation Wetland Hydrology Pres Hydric Soils Present?			Yes Yes Yes	No No No	Is this Sam Within a V		Yes	No
Remarks:	Sample plot I Flags WL7-1	ocated adjacent to thru WL7-7.	flags WL6-32 to	WL6-35.				

-						1		
Project/Site:	Slurry Pipelir	ne Route				Date:	10/16/2009	
Applicant/Owner:	Honeywell					County:	Onondaga	
Investigator:	RPC/AKM/AE	S				State:	NY	
Do Normal Circumstan	oos ovist on the	cito?		Yes	No	Community ID:	WL8	
Is the site significantly				Yes	No No	Transect ID:	wet	
Is the area a potential		ar situation :)		Yes	No	Plot ID	WP11	
(if needed, explain on				162	140	I IOUID	WEII	
VEGETATION								
Dominant Plant Specie		Stratum	Indicator		Dominant Blant Sno	oios	Stratum	Indicator
1 Phragmites australi		herb	FACW		Dominant Plant Spe 9 Cirsium discolor		herb	indicator
2 Phalaris arundinace		herb	FACW+		10 Lythrum salicar		herb	FACW+
3 Brassica nigra		herb			11 Dipsacus sylves	stris	herb	NI
4 Urtica procera		herb	FACU		12 Xanthium chine	nse	herb	FAC
5 Arcticum lappa 6 Solidago canadensi	-	herb	FACU		13			
7 Alliaria officinalis	8	herb herb	FACU-		14 15			
8 Solanum dulcamara	7	herb	FAC-		16			
Percent of Dominant S (excluding FAC-). * = dominant species Remarks:	pecies that are C	DBL, FACW or FAC,		100%				
Nemarks.								
HYDROLOGY								
Recorded Data		, Lake or Tide Gaug	je		Wetland Hydrology Primary Indicators:			
No Recorded Data	Other	Photographs				Inundated Saturated in Up Water marks	oper 12 inches	
Field Observations:					X	Drift Lines Sediment Depo Drainage Patte	osits erns in Wetlands	
					Secondary Indicator			
Depth of Surface Water			-	(in.)			Channels in Upp	er 12 inches
Depth of Free Water in			-	(in.)		Water-Stained Local Soil Surv		
Depth to Saturated Soi	I.			_ (in.)		FAC-Neutral To		
					-	Other (Explain		
						_		
Remarks:	Adjacent to s	tream and displays	s evidence of sc	our and d	leposition.			
SOILS								
Map Unit Name								
(Series and Phase):	Wayland silt	loam (Wn)			Drainage Class	poorly drained	i	
((,			Field Observations	<u> </u>	_	
Taxonomy (Subgroup)	Mollic Fluvaq	uents			Confirm Mapped Ty	pe?	Yes	No
Profile Description:								
Depth		Matrix Color	Mottle Colors		Mottle Abundance/	Texture, Concr	etions,	
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist))	Size/Contrast	Structure, etc.		
0-6 6-16		10YR 4/2 10YR 3/2	7.5YR 4/4		moderate/low	silty clay clay silt		
0-10		1011 3/2	7.511 4/4		moderate/low	Clay Silt		
Hydric Soil Indicators:								
		Histosol			Concreti			
		Histic Epipedon Sulfidic Odor				ganic Content in	Surface Layer in	
		Aquic Moisture Re	agime		Sandy	Soils Streaking in San	dy Soile	
	x	Reducing Condition				n Local Hydric So		
		Gleyed or Low-Ch			Listed or	n National Hydric	Soils List	
		_			Other (E	xplain in Remark	(s)	
Remarks:								
nomains.								
WETLAND DETERMIN	NATION							
Hydrophytic Vegetation			Yes	No				
Wetland Hydrology Pre			Yes	No No	Is this S	ampling Point		
Hydric Soils Present?			Yes	No		a Wetland	Yes	No
				_				
Remarks:	Flags WL-8-1	to WL8-6. Referen	ce points taken	on GPS o	lemarcating Ninemi	le Creek bank e	dge.	

Project/Site:	Slurry Pipeline				Date:	10/16/200	Q .
Applicant/Owner:	Honeywell	c reduce		-	County:	Onondage	
Investigator:	RPC/AKM/AES	3			State:	NY	
						·	
Do Normal Circumstan	and aviet on the s	ito?	V	es No	Community ID:	WL8	
Is the site significantly					Transect ID:		
Is the area a potential I		ii Situation?)			Plot ID	dry WP12	
(if needed, explain on			ı	es No	FIOLID	WF12	
VEGETATION				1			
Dominant Plant Specie		Stratum	Indicator	Dominant Plant S	Species	Stratum	Indicator
1 Solanum dulcamara	1*	herb	FAC-	9			
2 Alliaria officinalis* 3 Cirsium discolor*, *	*	herb herb	FACU-	10 11			
4 Fraxinus americana		tree	FACU	12			
5 Phragmites australi		herb	FACW	13			
6 Urtica procera		herb	FACU	14			
7 Phalaris arundinace	ea	herb	FACW+	15			
8 Brassica nigra		herb		16			
Percent of Dominant S	nocice that are O	DI EACW or EAC		2/			
(excluding FAC-).				%	_		
* = dominant species Remarks:	= species a	re not included as	part of the percent of	ominance calculation	1.		
Remarks.							
HYDROLOGY				1			
Recorded Data	(Describe in Rem			Wetland Hydrolo			
		Lake or Tide Gaug	je	Primary Indicator			
		hotographs			Inundated	40 ih-	_
No Recorded Data	Other				Saturated in U	pper 12 inche	S
No Recorded Data	Available				Drift Lines		
					Sediment Depo	osits	
Field Observations:					Drainage Patte		ıds
				Secondary Indica	ators (2 or more req		
			- (in.)		Oxidized Root		Jpper 12 inche
Depth of Surface Water			/:- ·				
Depth of Free Water in	Pit:		- (in.		Water-Stained		
	Pit:		- (in.	=	Local Soil Surv	ey Data	
Depth of Free Water in	Pit:					ey Data est	
Depth of Free Water in	Pit:				Local Soil Surv FAC-Neutral To	ey Data est	
Depth of Free Water in	Pit:				Local Soil Surv FAC-Neutral To	ey Data est	
Depth of Free Water in Depth to Saturated Soi	Pit:				Local Soil Surv FAC-Neutral To	ey Data est	
Depth of Free Water in Depth to Saturated Soi Remarks:	Pit:				Local Soil Surv FAC-Neutral To	ey Data est	
Depth of Free Water in Depth to Saturated Soi Remarks:	Pit:	pam (Wn)		Drainage Class	Local Soil Surv FAC-Neutral T. Other (Explain	rey Data est in Remarks)	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase):	Pit: l: <u>Wayland silt le</u>			Field Observation	Local Soil Surv FAC-Neutral Tr Other (Explain	rey Data est in Remarks)	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS	Pit: I:				Local Soil Surv FAC-Neutral Tr Other (Explain	rey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup)	Pit: l: <u>Wayland silt le</u>			Field Observation	Local Soil Surv FAC-Neutral Tr Other (Explain	rey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase):	Pit: l: <u>Wayland silt le</u>		- (in.	Field Observation	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type?	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	Pit: l: <u>Wayland silt le</u>	Matrix Color (Munsell Moist)	- (in.	Field Observation Confirm Mapped	Local Soil Surv. FAC-Neutral To Other (Explain poorly drained is Type? Texture, Concer Structure, etc.	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2	Mottle Colors (Mussell Moist)	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained s Type? // Texture, Conct Structure, etc. silty clay	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist)	- (in.	Field Observation Confirm Mapped Mottle Abundance	Local Soil Surv. FAC-Neutral To Other (Explain poorly drained is Type? Texture, Concer Structure, etc.	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2	Mottle Colors (Mussell Moist)	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained s Type? // Texture, Conct Structure, etc. silty clay	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2	Mottle Colors (Mussell Moist)	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained s Type? // Texture, Conct Structure, etc. silty clay	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2	Mottle Colors (Mussell Moist)	Field Öbservation Confirm Mapped Mottle Abundanc Size/Contrast low/low	Local Soil Surv FAC-Neutral T Other (Explain poorly drained IS Type? Texture, Conce Structure, etc. silty clay silty clay	yey Data est in Remarks)	No
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2	Mottle Colors (Mussell Moist)	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast Iow/low	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained ns Type? Texture, Conct Structure, etc. silty clay silty clay retions	yey Data est in Remarks) Yes retions,	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2	Mottle Colors (Mussell Moist)	Field Öbservatio Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High	Local Soil Surv FAC-Neutral T Other (Explain poorly drained IS Type? Texture, Conce Structure, etc. silty clay silty clay	yey Data est in Remarks) Yes retions,	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High San Organ	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained as Type? e/ Texture, Conci Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils inc Streaking in San	yes Data est in Remarks) Yes retions, Surface Laye edy Soils	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservatio Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High San Orga Listet	Local Soil Surv. FAC-Neutral To Other (Explain Other O	yey Data est in Remarks) Yes Yes Surface Laye ady Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Pit: : Wayland silt le Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained as Type? e/ Texture, Conci Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils inc Streaking in San	yey Data est in Remarks) Yes retions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators:	Wayland silt k Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type? E/ Texture, Concident Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils nic Streaking in San d on Local Hydric Sc on National Hydric Sc	yey Data est in Remarks) Yes retions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16	Wayland silt k Mollic Fluvaqu	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type? E/ Texture, Concident Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils nic Streaking in San d on Local Hydric Sc on National Hydric Sc	yey Data est in Remarks) Yes retions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators:	Pit: Wayland silt le Mollic Fluvagt Horizon Mottling not o	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservation Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type? E/ Texture, Concident Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils nic Streaking in San d on Local Hydric Sc on National Hydric Sc	yey Data est in Remarks) Yes retions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators:	Pit: Wayland silt le Mollic Fluvaqu Horizon Mottling not o	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6 regime ns roma Colors	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High San Orga Listet Listet Other	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type? E/ Texture, Concident Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils nic Streaking in San d on Local Hydric Sc on National Hydric Sc	yey Data est in Remarks) Yes retions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation	Wayland silt le Mollic Fluvage Horizon Mottling not o	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6	Field Öbservatio Confirm Mapped Mottle Abundanc Size/Contrast	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained Type? E/ Texture, Concident Structure, etc. silty clay silty clay silty clay retions Organic Content in dy Soils nic Streaking in San d on Local Hydric Sc on National Hydric Sc	yey Data est in Remarks) Yes Petions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators:	Wayland silt le Mollic Fluvage Horizon Mottling not o	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6 depth criteria.	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High San Orga Listee Listee Other	Local Soil Surv. FAC-Neutral T. Other (Explain poorly drained as Type? e/ Texture, Conce Structure, etc. sitty clay sitty clay sitty clay sitty clay forganic Content in dy Soils ic Streaking in San d on Local Hydric St d on National Hydric (Explain in Remark	yey Data est in Remarks) Yes Petions, Surface Laye ady Soils bilst ist is Soils List	
Depth of Free Water in Depth to Saturated Soi Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-16 Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation Wetland Hydrology Pre	Wayland silt le Mollic Fluvage Horizon Mottling not o	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/2 10YR 4/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 7.5YR 4/6 7.5YR 4/6 Yes Yes Yes	Field Observation Confirm Mapped Mottle Abundanc Size/Contrast Iow/low Conc High San Orga Listee Listee Other	Local Soil Sun-FAC-Neutral T-Other (Explain poorly drained structure, Concident Structure, etc. silty clay silty clay retions Organic Content in dy Soils nic Streaking in San I on Local Hydric & On National Hydric (Explain in Remark	yey Data est in Remarks) Yes retions, Surface Laye edy Soils bils List soils List (s)	r in

Project/Site: Applicant/Owner:	Slurry Pipeline Route Honeywell			Date: County:	10/16/2009 Onondaga
Investigator:	RPC/AKM			State:	NY
Do Normal Circumstanc Is the site significantly d Is the area a potential P (if needed, explain on	listurbed (atypical situation?) roblem Area?	С	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID	WL9 wet WP13
VEGETATION					
Dominant Plant Species 1 Phragmites australis 2 3		Indicator FACW	Dominant Plant S 9 10	pecies	Stratum Indica
4			11 12		
5 6			13 14		
7			15		
8			16		
(excluding FAC-). * = dominant species	ecies that are OBL, FACW or FAC		100%		
Remarks:	Closer to creekside, Impatiens	pallida and Lythrui	m salicaria were observ	ed.	
HYDROLOGY					
Recorded Data (Describe in Remarks): Stream, Lake or Tide Gauge Aerial Photographs Other	ge	Wetland Hydrolog Primary Indicators		ner 12 inches
No Recorded Data				Water marks Drift Lines	
Field Observations:			<u> </u>	Sediment Depo Drainage Patter	ns in Wetlands
Depth of Surface Water	:	- (i	n.) Secondary Indicat	tors (2 or more requ Oxidized Root (iired): Channels in Upper 12 in
Depth of Free Water in	Pit:	<u> </u>	n.)	Water-Stained	Leaves
Depth to Saturated Soil:		0 (n.)	Local Soil Surve	
				Other (Explain i	
Remarks:	Soil saturated at surface.				
SOILS					
Map Unit Name			D : 01		
(Series and Phase):	Palmyra gravelly loam (PgA)		Drainage Class Field Observation	well drained s	
Taxonomy (Subgroup)	Glossoboric Hapludalfs		Confirm Mapped	Type?	Yes No
Profile Description: Depth	Matrix Color	Mottle Colors	Mottle Abundance	e/ Texture, Concre	etions,
(Inches) 0-8	Horizon (Munsell Moist) 10YR 4/2	(Munsell Moist) 7.5YR 4/6	Size/Contrast	Structure, etc.	
			high/high		
8-16	Gley 1 2.5N			muck	
Hydric Soil Indicators:	Histosol		Concr	etions	
	Histic Epipedon			Organic Content in S	Surface Layer in
	Sulfidic Odor Aquic Moisture Re	egime		ly Soils ic Streaking in Sand	dy Soils
	Reducing Condition X Gleyed or Low-Ch			on Local Hydric So on National Hydric	
	Oleyed of Low of	noma colors		(Explain in Remarks	
Remarks:					
WETLAND DETERMIN	ATION				
Hydrophytic Vegetation		Yes	No		
Wetland Hydrology Pres Hydric Soils Present?	sent?	Yes	No Is this	Sampling Point in a Wetland	Yes No
			37.4		
Remarks:	Plot collected approximately 10	feet from Ninemile	Creek edge on south b	ank.	

Project/Site: Applicant/Owner:	Slurry Pipeline R Honeywell	oute						10/16/200 Onondaga		
Investigator:	RPC/AKM							NY		
pilicant/Downer: Honeywell RPC/JAKM State State of the site?	WL9 and V	VL10								
VEGETATION										
Dominant Plant Species	3					nt Spec	es	Stratum	Indi	icator
2 Prunus serotina*										
3 Rhamnus cathartica										
5		SIII UD	1 400							
6 7										
8										
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are OBL	, FACW or FAC,		0%	j					
Remarks:										
HYDROLOGY					1			_		
Recorded Data (I	Stream, La	ike or Tide Gaug	e			ators:				
No Recorded Data A							Water marks Drift Lines		S	
Field Observations:							Drainage Patter	ns in Wetlan	ds	
Depth of Surface Water	:		-	(in.)	Secondary Inc				Jpper 12	inche
Depth of Free Water in	Pit:		-	(in.)	_		Water-Stained I	_eaves		
Deptir to Saturated Soil.	_			_("".)	_		FAC-Neutral Te	st		
					_			- rtomano,		
Remarks:										
SOILS										
Map Unit Name (Series and Phase):	Palmyra gravelly	loam (PgA)					well drained			
Taxonomy (Subgroup)	Glossoboric Hap	ludalfs					9?	Yes		No
Profile Description:		Matrix Color	Mottle Colors		Mottle Abunda	ance/	Texture Concre	ations		
(Inches)	Horizon ((Munsell Moist))			Structure, etc.	suoris,		
0-16		10YR 2/2	-				dry silty loam			
Hydric Soil Indicators:	LI	intenal				oncretio				
	Hi	stosol stic Epipedon			Hig	gh Orga	nic Content in S	Surface Laye	r in	
		ulfidic Odor quic Moisture Re	aime			Sandy Some	oils treaking in Sand	dv Soils		
	Re	educing Conditio	ns		Lis	sted on	Local Hydric So	ils List		
	G	leyed or Low-Chi	ionia Colofs				National Hydric olain in Remarks			
Remarks:										
METI AND DETERMIN	ATION									
WETLAND DETERMIN			Yes	No	1					
	Present?									
Hydrophytic Vegetation Wetland Hydrology Pres			Yes	No			npling Point	W		
Hydrophytic Vegetation							npling Point Wetland	Yes		NO
Hydrophytic Vegetation Wetland Hydrology Pres		bank southeas	Yes Yes	No				Yes		NO

Project/Site: Applicant/Owner:	Slurry Pipeline Route Honeywell			Date: County:	10/16/2009 Onondaga	
Investigator:	RPC/AKM			State:	NY	
Do Normal Circumstano			es No	Community ID:		
Is the site significantly or Is the area a potential F	disturbed (atypical situation?)		es No	Transect ID: Plot ID	WP15	
is the area a potential if (if needed, explain on		Y	es No	PIOUID	WP15	
VEGETATION						
Dominant Plant Species 1 Phragmites australis		Indicator FACW	Dominant Plant Sp	ecies	Stratum	Indicator
2 3			10 11			
4			12			
5 6			13 14			
7			15			
8			16			
	pecies that are OBL, FACW or FA	C, 10	0%			
(excluding FAC-). * = dominant species						
Remarks:						
HYDROLOGY						
Recorded Data ((Describe in Remarks):		Wetland Hydrology			
	Stream, Lake or Tide Ga Aerial Photographs	uge	Primary Indicators:	Inundated		
	Other			Saturated in U	pper 12 inches	
No Recorded Data	Available		-	Water marks Drift Lines		
F: 1101 - #:				Sediment Depo		
Field Observations:			Secondary Indicate		erns in Wetlands uired):	
Depth of Surface Water		- (in.)) <u> </u>	Oxidized Root	Channels in Uppe	er 12 inches
Depth of Free Water in Depth to Saturated Soil		- (in.) - (in.)		Water-Stained Local Soil Surv		
•		``		FAC-Neutral T	est	
			· 	Other (Explain	in Remarks)	
Remarks:						
SOILS						
Map Unit Name						
(Series and Phase):	Palmyra gravelly loam (PgA) /	Cut and Fill Land (CFL			somewhat exces	sively drai
Taxonomy (Subgroup)	Glossoboric Hapludalfs / Udor	rthents	Field Observations Confirm Mapped T		Yes	No
				7,		
Profile Description:						
Depth (Inches)	Matrix Color	Mottle Colors	Mottle Abundance/ Size/Contrast	Texture, Concr Structure, etc.	retions,	
(Inches) 0-10	Horizon (Munsell Moist 10YR 4/2	7.5YR 4/6	high/high	silty clay		
10-14	Gley 1 3N			grey muck		
10-14			-	grey muck		
Hydric Soil Indicators:	Histosol		Concre			
	Histic Epipedon			rganic Content in	Surface Layer in	
	Sulfidic Odor Aquic Moisture F	Regime	Sandy Organic	Streaking in San	ndy Soils	
	Reducing Condi X Gleyed or Low-0	tions	Listed of	on Local Hydric So on National Hydric	oils List	
	Gleyed of Low-C	πιστια σσιστό		Explain in Remark		
Remarks:	Refusal at 14 inches.					
WETLAND DETERMIN	MATION					
Hydrophytic Vegetation		Yes N	lo			
Wetland Hydrology Pre-		Yes N	lo Is this S	Sampling Point		
Hydric Soils Present?		Yes	lo Within	a Wetland	Yes	No
Remarks:	Plot location on the south ban Dry hole paired location is WF		outhwest of CSX railroa	d bridge.		

Project/Site: Applicant/Owner:	Slurry Pipelin Honeywell	ne Route				Date: County:	10/16/2009 Onondaga	
Investigator:	RPC/AKM					State:	NY	
Do Normal Circumstand Is the site significantly d Is the area a potential P (if needed, explain on	listurbed (atypic roblem Area?		[Yes	No No	Community ID Transect ID: Plot ID	WL11 wet WP16	
VEGETATION								
			1. 1		·		2: :	
Dominant Plant Species 1 Phragmites australis	*	Stratum herb	Indicator FACW	9	ninant Plant S	pecies	Stratum	Indicator
2 Phalaris arundinacea 3 Agrostis stolonifera		herb herb	FACW+	10 11				
4 Apocynum cannabin		herb	FACU	12				
<u>5</u>				13 14				
7 8				15 16				
0				10				
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are 0	DBL, FACW or FAC,		100%				
Remarks:								
HYDROLOGY								
Recorded Data (10		tland Hydrolog			
	Aerial	ı, Lake or Tide Gaug Photographs	е	Prin	nary Indicators	Inundated		
No Recorded Data	Other Available					Saturated in U Water marks	pper 12 inches	
						Drift Lines Sediment Dep	neite	
Field Observations:					X	Drainage Patte	erns in Wetlands	
Depth of Surface Water			-	(in.)	ondary indica		Channels in Upp	er 12 inches
Depth of Free Water in Depth to Saturated Soil:				(in.) (in.)		Water-Stained Local Soil Sur		
Depth to Catalated Con-				()		FAC-Neutral T	est	
					-	Other (Explain	in Remarks)	
Remarks:								
SOILS								
Map Unit Name								
(Series and Phase):	Cut and Fill L	and (CFL)			inage Class d Observation		cessively draine	ed
Taxonomy (Subgroup)	Udorthents				firm Mapped		Yes	No
Profile Description:								
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)		tle Abundance e/Contrast	 Texture, Conc Structure, etc. 		
0-8	Honzon	10YR 4/2		OIZ		silt loam		
8-15		10YR 4/2	5YR 5/8	mod	derate/moder	ate silt loam		
Hydric Soil Indicators:								
Tryunc oon mulcators.		Histosol			Concr			
		Histic Epipedon Sulfidic Odor		-		Organic Content in S by Soils	Surface Layer in	
		Aquic Moisture Re Reducing Condition			Organ	ic Streaking in San on Local Hydric So		
	Х	Gleyed or Low-Ch			Listed	on National Hydric	Soils List	
				-	Other	(Explain in Remark	s)	
Remarks:								
WETLAND DETERMIN	ATION							
			Vea	No				
Hydrophytic Vegetation Wetland Hydrology Pres			Yes	No No		Sampling Point		
Hydric Soils Present?			Yes	No		n a Wetland	Yes	No
				_				
Remarks:	Plot located	on south bank of N	nemile Creek imr	nediately ea	st of CSX rail	road bridge.		

Project/Site:	Slurry Pipeline	Route				Date:	10/16/2009	
Applicant/Owner: Investigator:	Honeywell RPC/AKM					County: State:	Onondaga NY	1
	🕠 ,					J.C.C.		
Do Normal Circumstanc	es exist on the si	ite?		Yes	No	Community ID:	WL11	
Is the site significantly d				Yes	No	Transect ID:	dry	
Is the area a potential P				Yes	No	Plot ID	WP17	
(ir needed, explain on r	everse).							
VEGETATION					1			
Dominant Plant Species		Stratum	Indicator		Dominant Plant	Species	Stratum	Indicator
1Solidago canadensis ³	•	herb	FACU		10			
3					11			
5					12 13			
6					14			
7 8					15 16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are OB	BL, FACW or FAC,		0%	1			
Remarks:								
HYDROLOGY								
Recorded Data (I	Describe in Rema	arks):			Wetland Hydrolo	ogy Indicators:		
110001000 2010 (2	Stream,	Lake or Tide Gaug	е		Primary Indicate	rs:		
	Aerial Ph Other	notographs				Inundated Saturated in U	oper 12 inche	s
No Recorded Data A						Water marks	ppor 12 1110110	•
					-	Drift Lines Sediment Depo	nsits	
Field Observations:						Drainage Patte	rns in Wetlan	ds
Depth of Surface Water:			-	(in.)	Secondary Indic	ators (2 or more req Oxidized Root		Jpper 12 inches
Depth of Free Water in F	Pit:		-	(in.)		Water-Stained	Leaves	,pp01 12 11101100
Depth to Saturated Soil:	-		-	(in.)		Local Soil Surv FAC-Neutral T		
						Other (Explain		
					l			
Remarks:								
SOILS								
Map Unit Name								
(Series and Phase):	Cut and Fill La	nd (CFL)			Drainage Class Field Observation	somewhat exc	essively dra	ined
Taxonomy (Subgroup)	Udorthents				Confirm Mapped		Yes	No
					_			
Profile Description:								
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)		Mottle Abundan Size/Contrast	ce/ Texture, Concr Structure, etc.	etions,	
0-11	TIONZON	10YR 3/2				loose silty loa	m	
Hydric Soil Indicators:		Histosol			Cond	cretions		
		Histic Epipedon				Organic Content in	Surface Layer	in
		Sulfidic Odor Aquic Moisture Reg	gime			ndy Soils anic Streaking in San	dv Soils	
		Reducing Condition	ns		Liste	d on Local Hydric So	oils List	
	X	Gleyed or Low-Chr	oma Colors			ed on National Hydric er (Explain in Remark		
							•	
Remarks:	Refusal at 11 in	nches. Gross root	s in soil.					
WETLAND DETERMINA	ATION							
			Vaa	N'-	,			
Hydrophytic Vegetation I Wetland Hydrology Pres			Yes Yes	No No	Is th	is Sampling Point		
Hydric Soils Present?			Yes	No		hin a Wetland	Yes	No
					1			
Remarks:	Plot located so	outh of WP16 in a	stand of Solidae	yo sp.				

Project/Site: Applicant/Owner: Investigator:	Slurry Pipelir Honeywell RPC/AKM	ne Route				Date: County: State:	10/20/2009 Onondaga NY	
					<u> </u>		-	
Do Normal Circumstance Is the site significantly d				Yes	No No	Community ID: Transect ID:	WL12	
Is the area a potential P		ai Situation?)		Yes Yes	No No	Plot ID	WP18	
(if needed, explain on					 -			
VEGETATION						1		
Dominant Plant Species		Stratum	Indicator		Dominant Plant Speci	es	Stratum	Indicator
1 Phragmites australis 2 Phalaris arundinacea		herb herb	FACW+		9 10			
3 Solanum dulcamara		herb	FAC-		11			
4 Brassica nigra 5		herb			12 13			
6					14			
7 8					15 16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are C	DBL, FACW or FAC,		67%	l			
Remarks:								
HYDROLOGY								
Recorded Data (I	Describe in Ren	narks):			Wetland Hydrology Ind	dicators:		
Necorded Bala (i	Stream	, Lake or Tide Gaug Photographs	е		Primary Indicators:	Inundated		
No Recorded Data A	Other	notographo				Saturated in Up Water marks	per 12 inches	
Field Observations:					x	Drift Lines Sediment Depos Drainage Patter		
					Secondary Indicators	2 or more require	ed):	
Depth of Surface Water Depth of Free Water in Depth to Saturated Soil:	Pit:		- - -	(in.) (in.) (in.)	<u> </u>	Oxidized Root C Water-Stained L Local Soil Surve FAC-Neutral Te	Leaves By Data St	per 12 inches
						Other (Explain in	n Remarks)	
Remarks:								
SOILS								
Map Unit Name (Series and Phase):	Cut and Fill L	and (CFL)			Drainage Class	somewhat exce	essively draine	ed
Taxonomy (Subgroup)	Udorthents				Field Observations Confirm Mapped Type	?	Yes	No
Profile Description:		Matrix Color	Mottle Colors		Mottle Abundance/	Texture, Concre	tions	
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist)		Size/Contrast	Structure, etc.	HIOTIS,	
0-5		10YR 4/2	 7 EVD 5/0			silt with some	clay	
5-13 13-18		10YR 4/2 2.5Y 4/1	7.5YR 5/8 		moderate/moderate	silty clay silty clay		
Hydric Soil Indicators:		Histosol			Concretion	9		
		Histic Epipedon			High Organ	nic Content in Su	rface Layer in	
		Sulfidic Odor Aquic Moisture Re	aime		Sandy So	oils reaking in Sandy	Soils	
		Reducing Conditio	ns		Listed on L	ocal Hydric Soils	List	
	X	Gleyed or Low-Ch	roma Colors			National Hydric So Ilain in Remarks)	oils List	
Remarks:	Phragmites s	shoots throughout.	Grey to black st	reaking	at 18"+ with a sewage	/manure odor.		
WETLAND DETERMIN	ATION							
			Voc	No				
Hydrophytic Vegetation Wetland Hydrology Pres Hydric Soils Present?			Yes Yes Yes	No No No	Is this Sam Within a	npling Point Wetland	Yes	No
Remarks:	Plot located of	on south bank of Ni	nemile Creek be	etween C	SX and Belle Isle brid	ges. Flags WL12	-1 thru WL12-	16.

Project/Site:										
	Slurry Pipelin	e Route					Date:	10/20/200		
Applicant/Owner: Investigator:	Honeywell RPC/AKM						County: State:	Onondag NY	a	
	-									
Do Normal Circumstano				Yes	No		Community ID:	WL12		
Is the site significantly or Is the area a potential F		al situation?)		Yes	No		Transect ID: Plot ID	dry		
(if needed, explain on				Yes	No		Plot ID	WP19		
VEGETATION					1					
Dominant Plant Species		Stratum	Indicator		Dominant P	ant Spec	ies	Stratum	l	ndicator
1 Rhamnus cathartica 2 Lonicera tatarica*	*	shrub shrub	FACU FACU		9 10					
3 Cornus racemosa* 4 Solidago altissima		shrub herb	FAC- FACU-		11 12					
5		Helb	1 400-		13					
6 7					14 15					
8					16					
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are C	DBL, FACW or FAC,		0%						
Remarks:										
HYDROLOGY					I					
Recorded Data (Stream	narks): , Lake or Tide Gaug Photographs	ge		Wetland Hyd Primary Indi		Inundated			
No Recorded Data	Other Available	- '			_ _ _		Saturated in Up Water marks Drift Lines		s	
Field Observations:					_		Sediment Depo Drainage Patte	rns in Wetlar	ıds	
Depth of Surface Water	:		-	(in.)	Secondary I	ndicators	(2 or more requ Oxidized Root (Joper	12 inches
					_					
			-	(in.)	_		Water-Stained			
Depth of Free Water in Depth to Saturated Soil				(in.) (in.)	- -		Local Soil Surv FAC-Neutral Te	ey Data est		
					- - - -		Local Soil Surv	ey Data est		
Depth to Saturated Soil					- - - -		Local Soil Surv FAC-Neutral Te	ey Data est		
Depth to Saturated Soil			-		- - - -		Local Soil Surv FAC-Neutral Te	ey Data est		
Depth to Saturated Soil Remarks: SOILS Map Unit Name	none	and (CFL)	<u>:</u>		Drainage Cl		Local Soil Surv FAC-Neutral Te Other (Explain	rey Data est in Remarks)	ined	
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase):	none Cut and Fill L	and (CFL)			Drainage Cl	ass vations	Local Soil Surv FAC-Neutral Te Other (Explain	rey Data est in Remarks)	ined	
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase):	none	and (CFL)	<u>:</u>			ass vations	Local Soil Surv FAC-Neutral Te Other (Explain	rey Data est in Remarks)	ined	No
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup)	none Cut and Fill L	and (CFL)	-		Field Observ	ass vations	Local Soil Surv FAC-Neutral Te Other (Explain	rey Data est in Remarks)	ined	No
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth	none Cut and Fill L Udorthents	Matrix Color	- Mottle Colors	(in.)	Field Observ Confirm Maj	ass vations oped Typ	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e?	ey Data est in Remarks) cessively dra Yes	ined	No
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	none Cut and Fill L		-	(in.)	Field Observ Confirm Map	ass vations oped Typ	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concr. Structure, etc. dry, loose silt	ey Data set in Remarks) cessively dra Yes etions,	_	
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist)	- Mottle Colors	(in.)	Field Observ Confirm Maj	ass vations oped Typ	Local Soil Surv FAC-Neutral Tc Other (Explain somewhat exc e? Texture, Concr Structure, etc.	ey Data set in Remarks) cessively dra Yes etions,	_	
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches)	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist)	- Mottle Colors	(in.)	Field Observ Confirm Maj	ass vations oped Typ	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concr. Structure, etc. dry, loose silt	ey Data set in Remarks) cessively dra Yes etions,	_	
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist)	- Mottle Colors	(in.)	Field Observ Confirm Maj	ass vations oped Typ	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concr. Structure, etc. dry, loose silt	ey Data set in Remarks) cessively dra Yes etions,	_	
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist) 2.5Y 3/1	- Mottle Colors	(in.)	Field Observ Confirm Maj Mottle Abun Size/Contract	ass vations vations oped Typ dance/ st	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concr. Structure, etc. dry, loose silt with some gra	ey Data est in Remarks) cessively dra Yes etions, loam with greel	ross re	
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor	Mottle Colors (Munsell Moist)	(in.)	Field Öbsen Confirm Map Mottle Abun Size/Contras	ass vations pped Typ dance/ st Concretio High Orga Sandy S	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concn Structure, etc. dry, loose silt with some gra ns sinic Content in Soils	eessively dra Yes etions, loam with givel	ross re	
Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio	Mottle Colors (Munsell Moist)	(in.)	Field Öbsen Confirm Maj Mottle Abun Size/Contra:	ass vations pped Typ dance/ st Concretio ligh Orga Sandy S Organic S	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some grains of content in Sanic Conten	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Laye dy Soils	ross re	
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re	Mottle Colors (Munsell Moist)	(in.)	Field Öbsen Confirm Maj Mottle Abun Size/Contra:	ass vations oped Typ dance/ st Concretio ligh Orgs Sandy S Organic S isted on	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some grainic Content in Soils streaking in San	ey Data ey Data in Remarks) cessively dra Yes etions, loam with greel dy Soils list List Soils List	ross re	
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15 Hydric Soil Indicators:	none Cut and Fill L Udorthents Horizon	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist)	_(in.)	Field Obsen Confirm Maj Mottle Abun Size/Contra:	ass vations pped Typ dance/ st Concretio ligh Orga Sandy S Organic S jisted on other (Ex	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some gra ns anic Content in Soils streaking in San Local Hydric So. National Hydric Shational Hydric Shational Hydric Shational Hydric Shational Hydric plain in Remark	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Layer dy Soils slis List ss)	Tross re	oots
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15 Hydric Soil Indicators:	none Cut and Fill L Udorthents Horizon X	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio	Mottle Colors (Munsell Moist) egime ens roma Colors	n bank ab	Field Obsern Confirm Maj	ass vations pped Typ dance/ st Concretio ligh Orga Sandy S Organic S isted on isted on Other (Ex	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some gra ns anic Content in Soils streaking in San Local Hydric So. National Hydric Shational Hydric Shational Hydric Shational Hydric Shational Hydric plain in Remark	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Layer dy Soils slis List ss)	Tross re	oots
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15 Hydric Soil Indicators:	none Cut and Fill L Udorthents Horizon X Plot located i not resemble	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) egime ens roma Colors	n bank ab	Field Obsern Confirm Maj	ass vations pped Typ dance/ st Concretio ligh Orga Sandy S Organic S isted on isted on Other (Ex	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some gra ns anic Content in Soils streaking in San Local Hydric So. National Hydric Shational Hydric Shational Hydric Shational Hydric Shational Hydric plain in Remark	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Layer dy Soils slis List ss)	Tross re	oots
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15 Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation	none Cut and Fill L Udorthents Horizon X Plot located is not resemble ATION Present?	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) egime ons roma Colors urea on the south y a fill area asso	n bank ab	Field Obser Confirm Maj Mottle Abun Size/Contra:	ass vations pped Typ dance/ st Concretion ligh Orga Sandy S Organic S isted on Other (Ex	somewhat exce e? Texture, Concr. Structure, etc. dry, loose silt with some gra ns anic Content in s oils treaking in San Local Hydric Sc National Hydric plain in Remark Soil meets cole	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Layer dy Soils slis List ss)	Tross re	oots
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15 Hydric Soil Indicators: Remarks: WETLAND DETERMIN Hydrophytic Vegetation Wetland Hydrology Pres	none Cut and Fill L Udorthents Horizon X Plot located is not resemble ATION Present?	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) egime ens roma Colors urea on the south y a fill area asso	n bank ab	Field Obser Confirm Maj Mottle Abun Size/Contra:	ass vations poped Typ dance/ st Concretio ligh Orga Sandy S Organic S isted on isted on Other (Ex e Creek. ad.	somewhat excee? Texture, Concr. Structure, etc. dry, loose silt with some gra ns anic Content in Soils streaking in San Local Hydric So. National Hydric Shational Hydric Shational Hydric Shational Hydric Shational Hydric plain in Remark	ey Data est in Remarks) cessively dra Yes etions, loam with grivel Surface Layer dy Soils slis List ss)	Tross re	oots
Depth to Saturated Soil Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-15	none Cut and Fill L Udorthents Horizon X Plot located is not resemble ATION Present?	Matrix Color (Munsell Moist) 2.5Y 3/1 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) egime ens roma Colors area on the south by a fill area asso Yes Yes	n bank abociated w	Field Obser Confirm Maj Mottle Abun Size/Contra:	ass vations poped Typ dance/ st Concretio ligh Orga Sandy S Organic S isted on isted on Other (Ex e Creek. ad.	Local Soil Surv FAC-Neutral To Other (Explain somewhat exc e? Texture, Concr Structure, etc. dry, loose silt with some gra ns anic Content in s oils streaking in San Local Hydric So Streaking in Remark Soil meets col	ey Data ey Data in Remarks) cessively dra Yes etions, loam with grivel Surface Laye dy Soils bils List s) or indicator,	Tross re	oots

Project/Site:	Slurry Pipelii	ne Route			Date:	10/20/2009	
Applicant/Owner:	Honeywell				County:	Onondaga	
Investigator:	RPC/AKM				State:	NY	
Do Normal Circumstano	es exist on the	site?		Yes No	Community ID:	WL14	
Is the site significantly of	disturbed (atypic	al situation?)		Yes No	Transect ID:	wet	
Is the area a potential P			,	Yes No	Plot ID	WP22	
(if needed, explain on	reverse).			<u></u>			
VEGETATION					ı		
		_				_	
Dominant Plant Species 1 Phragmites australis		Stratum herb	Indicator FACW	Dominant Plant Spec	cies	Stratum	Indicator
	•	IICID	TACW	10			
2 3				11			
4				12			
<u>5</u>				13 14			
7				15			
8				16			
-							
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are 0	OBL, FACW or FAC	1	00%			
Remarks:							
HYDROLOGY							
	Dogosih - i D	morko).		Motlen d Hindard	adiantara:		
Recorded Data (narks): า, Lake or Tide Gauç	10	Wetland Hydrology In Primary Indicators:	ndicators:		
		Photographs	je	i fillary ilidicators.	Inundated		
	Other			X	Saturated in Up	per 12 inches	
No Recorded Data	Available				Water marks		
					Drift Lines Sediment Depo	eite	
Field Observations:				X	Drainage Patter		
				Secondary Indicators	(2 or more required)	red):	
Depth of Surface Water			- (in 9 (in			Channels in Upp	er 12 inches
Depth of Free Water in Depth to Saturated Soil		-	9 (in 8 (in		Water-Stained Local Soil Surve		
			(· —	FAC-Neutral Te		
					Other (Explain i	in Remarks)	
-							
Remarks:	Seep drainag	je area with puddle	s of standing water.				
SOILS							
Map Unit Name							
(Series and Phase):	Cut and Fill L	and (CFL)		Drainage Class	somewhat exc	essively draine	d
Taxonomy (Subgroup)	Udorthents			Field Observations	-0	V	NI-
raxonomy (Subgroup)	Odorthents			Confirm Mapped Typ	De?	Yes	No
Profile Description: Depth		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concre	ations	
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Size/Contrast	Structure, etc.	Buons,	
surface				-	Phragmites lit	ter	
0-10		5Y 2.5/1	5YR 4/6	moderate/moderate			
10+		Gley 2 2.5/10B		-	gravelly black,	clay silt	
Hydric Soil Indicators:							
•		Histosol		Concretion			
		Histic Epipedon			anic Content in Su	urface Layer in	
		Sulfidic Odor Aquic Moisture Re	agime	Sandy S	Solls Streaking in Sandy	/ Soile	
		Reducing Condition			Local Hydric Soil		
	Х	Gleyed or Low-Ch	roma Colors		National Hydric S		
				Other (Ex	(plain in Remarks)	
Remarks:							
Remarks.							
WETLAND DETERMIN	ATION						
Hydrophytic Vegetation	Present?		Yes	No			
Wetland Hydrology Pres					mpling Point		
Hydric Soils Present?	-				Wetland	Yes	No
Pomarka:	Diot in a - t - 1	at baco of acces	and clare here are "	of Ninomila Carata			
Remarks:	Flot located	at pase of access f	oad slope just north	or Minerine Creek.			

Project/Site:	Slurry Pipelin	e Route				Date:	10/21/2009	
Applicant/Owner:	Honeywell					County:	Onondaga	
Investigator:	RPC/AKM					State:	NY	
						 		
Do Normal Circumstance	es exist on the	site?		Yes	No	Community ID:	WI 14 and W	VI 15
Is the site significantly d				Yes	No	Transect ID:	dry	
Is the area a potential P		,		Yes	No	Plot ID	WP23	
(if needed, explain on				100	140	1.00.15	- 111 25	
VEGETATION								
Dominant Plant Species		Stratum	Indicator		Dominant Plant Spe	cies	Stratum	Indicato
1 Solidago canadensis	s*	herb	FACU		9			
2 Poa pratensis* 3 Phragmites australis		herb herb	FACU FACW		10			
4	•	Herb	FACW		12			
5					13			
6					14			
7					15			
8					16			
Percent of Dominant Sp	pecies that are C	DBL, FACW or FAC,		0%]			
(excluding FAC-). * = dominant species								
Remarks:								
HYDROLOGY								
Recorded Data (I	Describe in Rem	narks):			Wetland Hydrology I	ndicators:		
recorded bala (i		, Lake or Tide Gaug	ge		Primary Indicators:	ridicators.		
		hotographs	,-			Inundated		
	Other					Saturated in Up	per 12 inches	
No Recorded Data A	Available					Water marks		
					-	Drift Lines Sediment Depo	eite	
Field Observations:					-	Drainage Patter		ls
					Secondary Indicator			
Depth of Surface Water			-	(in.)		Oxidized Root 0		oper 12 inch
Depth of Free Water in			-	(in.)		Water-Stained		
Depth to Saturated Soil:		-	-	_ (in.)		Local Soil Surve FAC-Neutral Te		
					-	Other (Explain i		
						<u>-</u>		
Remarks:								
SOILS								
Man Linit Name								
Map Unit Name (Series and Phase):	Cut and Fill L	and (CFL)			Drainage Class	somewhat exc	essively drai	ned
(Series and Phase):	Cut and Fill L	and (CFL)			_ Drainage Class Field Observations	somewhat exc	essively drai	ned
	Cut and Fill L	and (CFL)					essively drai	ned No
(Series and Phase): Taxonomy (Subgroup)		and (CFL)			Field Observations			
(Series and Phase): Taxonomy (Subgroup) Profile Description:			Mattle Colors		Field Observations Confirm Mapped Typ	pe?	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth	Udorthents	Matrix Color	Mottle Colors (Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/	De?	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description:			(Munsell Moist)		Field Observations Confirm Mapped Typ	pe?	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6	(Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2	(Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/	Texture, Concrestructure, etc.	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6	(Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6	(Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay	Yes	
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2	(Munsell Moist)		Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay silty clay	Yes etions,	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon	(Munsell Moist)		Field Observations Confirm Mapped Typ Mottle Abundance/ Size/Contrast Iow/moderate Concretit High Org	Texture, Concre Structure, etc. silty clay silty clay silty clay	Yes etions,	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor	(Munsell Moist) 10YR 4/6		Field Observations Confirm Mapped Typ Mottle Abundance/ Size/Contrast Iow/moderate Concreti High Org Sandy 1	Texture, Concrestructure, etc. silty clay silty clay silty clay silty clay	Yes etions,	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re	(Munsell Moist) 10YR 4/6		Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay sons cons cons solis Streaking in Sanc	Yes etions, Surface Layer dy Soils	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor	(Munsell Moist) 10YR 4/6		Field Öbservations Confirm Mapped Typ Mottle Abundance/ Size/Contrast Iow/moderate Concreti High Org Sandy to Organic Listed or Listed or	Texture, Concrestructure, etc. silty clay	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Udorthents	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic	(Munsell Moist) 10YR 4/6		Field Öbservations Confirm Mapped Typ Mottle Abundance/ Size/Contrast Iow/moderate Concreti High Org Sandy to Organic Listed or Listed or	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay sons panic Content in S Soils Streaking in Sanu	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+	Horizon	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic	(Munsell Moist)		Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concrestructure, etc. silty clay	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators:	Horizon	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)		Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concrestructure, etc. silty clay	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators: Remarks:	Horizon A few mottles	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)		Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concrestructure, etc. silty clay	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation	Horizon A few mottles ATION Present?	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist) 10YR 4/6 10YR 4/6 beginne ons roma Colors Does not meet i	hydric in	Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast low/moderate Concretit High Org Sandy Organic Listed or Listed or Other (E	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay sons anic Content in Soils Soils Streaking in Sand Local Hydric So National Hydric xplain in Remark	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation Wetland Hydrology Pres	Horizon A few mottles ATION Present?	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	hydric in	Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay silty clay sons annic Content in S Soils Streaking in Sant Local Hydric So National Hydric explain in Remarks	Yes Surface Layer dy Soils ils List Soils List s)	No
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation	Horizon A few mottles ATION Present?	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist) 10YR 4/6 10YR 4/6 beginne ons roma Colors Does not meet i	hydric in	Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay sons anic Content in Soils Soils Streaking in Sand Local Hydric So National Hydric xplain in Remark	Yes etions, Surface Layer dy Soils ils List Soils List	N o
(Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-12 12-13 13+ Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation Wetland Hydrology Pres	Horizon A few mottles ATION Present?	Matrix Color (Munsell Moist) 10YR 4/2 10YR 5/6 10YR 5/2 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	(Munsell Moist)	hydric in	Field Öbservations Confirm Mapped Tyr Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc. silty clay silty clay silty clay silty clay silty clay sons annic Content in S Soils Streaking in Sant Local Hydric So National Hydric explain in Remarks	Yes Surface Layer dy Soils ils List Soils List s)	No

					1		
Project/Site:	Slurry Pipelii	ne Route			Date:	10/21/2009	
Applicant/Owner: Investigator:	Honeywell RPC/AKM				County: State:	Onondaga NY	
investigator.	IN O/AIN				otato.		
Do Normal Circumstano	res evist on the	site?		Yes No	Community ID:	WL15	
Is the site significantly of				Yes No	Transect ID:	wet	
Is the area a potential F				Yes No	Plot ID	WP24	
(if needed, explain on	reverse).						
VEGETATION					II.		
						_	
Dominant Plant Species 1 Phragmites australis		Stratum herb	Indicator FACW	Dominant Plant Spe	cies	Stratum	Indicator
2 Solidago gigantea*		herb	FACW	10			
3 Solidago canadensis 4	s*	herb	FACU	11 12			
5				13			
6 7				14 15			
8				16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are 0	OBL, FACW or FAC,		75%			
Remarks:	Phragmites	50% dominant, Soli	dago sp. each 25%	dominant.			
HYDROLOGY							
Recorded Data (Describe in Rer	marks):		Wetland Hydrology	ndicators:		
Necolded Data (n, Lake or Tide Gaug	je	Primary Indicators:	ildicators.		
	Aerial Other	Photographs			Inundated Saturated in Up	nor 12 inches	
No Recorded Data				-	Water marks	per 12 inches	
					Drift Lines	-:4-	
Field Observations:				x	Sediment Depo Drainage Patter		
				Secondary Indicator	s (2 or more requir	ed):	
Depth of Surface Water Depth of Free Water in		-	- (in - (in		Water-Stained	Channels in Upp Leaves	er 12 inches
Depth to Saturated Soil			- (in		Local Soil Surve	ey Data	
					FAC-Neutral Te Other (Explain i		
Remarks:	Proximity to	Ninemile Creek and	I toe of slope of SB	11 and access road.			
SOILS							
Man Unit Name							
Map Unit Name (Series and Phase):	Cut and Fill L	and (CFL)		Drainage Class	somewhat exc	essively draine	d
		,		Field Observations			
Taxonomy (Subgroup)	Udorthents			Confirm Mapped Ty	pe?	Yes	No
Profile Description:							
Depth		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concre	etions,	
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Size/Contrast	Structure, etc.		
0-3 3-14		10YR 3/2 10YR 4/1	10YR 4/6	 moderate/moderat	loose loam wit silty clay	n roots	
14-18		2.5Y 5/3	10YR 5/6	moderate/moderat			
Hydric Soil Indicators:							
,		Histosol		Concreti			
		Histic Epipedon Sulfidic Odor		High Org Sandy	janic Content in Su Soils	ırface Layer in	
	-	Aquic Moisture Re		Organic	Streaking in Sandy		
	Х	Reducing Condition Gleyed or Low-Ch			n Local Hydric Soils n National Hydric S		
		_ Cleyed of Low-On	TOTTIA COIOTS		xplain in Remarks)		
Remarks:							
WETLAND DETERMIN				<u> </u>			
Hydrophytic Vegetation Wetland Hydrology Pres	Present? sent?			No Is this S	ampling Point		
Hydric Soils Present?					a Wetland	Yes	No
Remarks:							

Project/Site: Applicant/Owner:	Slurry Pipelin Honeywell RPC/AKM	e Route				Date: County: State:	10/21/2009 Onondaga NY	
Investigator:	RPC/ARW					State.	NT	
Do Normal Circumstand Is the site significantly of Is the area a potential P (if needed, explain on	listurbed (atypic roblem Area?			Yes Yes Yes	No No No	Community ID Transect ID: Plot ID	WL16 wet WP25	
VEGETATION								
Dominant Plant Species 1 Phragmites australis		Stratum herb	Indicator FACW		Dominant Plant S	pecies	Stratum	Indicator
3					10 11			
<u>4</u> 5					12 13			
6					14			
7 8					15 16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	ecies that are C	DBL, FACW or FAC,	,	100%]			
Remarks:								
HYDROLOGY								
Recorded Data (Stream	narks): , Lake or Tide Gaug Photographs	ge		Wetland Hydrolog Primary Indicators			
No Recorded Data A	Other Available				<u> </u>	Water marks Drift Lines	Jpper 12 inches	
Field Observations:					Secondary Indica	tors (2 or more red	erns in Wetlands quired):	
Depth of Surface Water Depth of Free Water in		-	2	(in.) (in.)		Oxidized Root Water-Stained	t Channels in Upp d Leaves	er 12 inches
Depth to Saturated Soil:			0	(in.)		Local Soil Sur FAC-Neutral 1 Other (Explain	vey Data Fest	
Remarks:	Saturated at	surface.						
SOILS								
Map Unit Name (Series and Phase):	Cut and Fill L	and (CFL)			Drainage Class		cessively draine	ed
Taxonomy (Subgroup)	Udorthents				Field Observation Confirm Mapped		Yes	No
Profile Description: Depth		Matrix Color	Mottle Colors		Mottle Abundance			
(Inches)	Horizon	(Munsell Moist)	(Munsell Moist))	Size/Contrast	Structure, etc. Phragmites li		
2-10		7.5YR 5/2	2.5Y 3/1		-	clay with sma	all/medium grave	
10-15		7.5YR 5/2	2.5Y 3/1		-	clay with incr presence	ease in gravel s	ize and
Hydric Soil Indicators:		10.4						
		Histosol Histic Epipedon			Concr High C	etions Organic Content in	Surface Layer in	1
		Sulfidic Odor Aquic Moisture Re	arime			dy Soils iic Streaking in Sai	ndy Soils	
		Reducing Condition	ons		Listed	on Local Hydric S	Soils List	
	Х	Gleyed or Low-Ch	roma Colors			on National Hydri (Explain in Remar		
Remarks:	Rust coloring	. An increase in gr	avel size and al	oundance	at 10" in depth.			
WETLAND DETERMIN	ATION							
Hydrophytic Vegetation			Yes	No				
Wetland Hydrology Pres Hydric Soils Present?			Yes	No No		Sampling Point in a Wetland	Yes	No
Remarks:		n a potential draina arent culvert is as			connecting with	Ninemile Creek. I	Ditch is approxir	nately 3 feet

Project/Site:								
	Slurry Pipelin Honeywell	e Route			Date:		0/21/2009	
Applicant/Owner: Investigator:	RPC/AKM				County State:	· <u> </u>	Onondaga NY	
					0.0.0			
D 11 10:		0				. 15		
Do Normal Circumstance			L	Yes No		unity ID:	WL16	
Is the site significantly d		ai situation?)		Yes No	Transe Plot ID	Ct ID:	dry	
Is the area a potential P (if needed, explain on				Yes No	Plot ID	_	WP26	
(ii rieeded, explain on	reverse).							
VEGETATION								
Dominant Plant Species	3	Stratum	Indicator	Dominant P	Plant Species		Stratum	Indicator
1 Festuca arundinacea	P*	herb	FACU	9				
2 Plantago major*		herb	FACU	10				
3 Solidago canadensis 4 Aster lateriflorus	3	herb herb	FACU FACW-	11 12				
5 Daucus carota		herb		13				
6 Achillea millefolium		herb	FACU	14				
7 Lythrum salicaria		herb	FACW+	15				
8				16				
D		ADI FAOM FAO	F					
Percent of Dominant Sp (excluding FAC-).	ecies that are C	BL, FACW or FAC,	L	0%				
* = dominant species								
Remarks:								
HYDROLOGY								
Recorded Data (I	Describe in Rem	narks):		Wetland Hv	drology Indicator	S:		
		, Lake or Tide Gaug	je	Primary Indi				
	Aerial P	hotographs		_	Inunda			
	Other					ed in Upper	12 inches	
No Recorded Data A	Available			_	Water Drift Li			
						nes ent Deposits		
Field Observations:				-			in Wetlands	
r iola obcorvationo.				Secondary 1	Indicators (2 or m			
			- (in.)			nnels in Upp	er 12 inche
Depth of Surface Water								
Depth of Free Water in	Pit:		- (in.)		Stained Lea		
	Pit:		- (in.)	Local S	Stained Lea Soil Survey D		
Depth of Free Water in	Pit:		- (Local S FAC-N	Stained Lea soil Survey Deutral Test	Data	
Depth of Free Water in	Pit:		- (Local S FAC-N	Stained Lea Soil Survey D	Data	
Depth of Free Water in Depth to Saturated Soil:	Pit:		- (i		Local S FAC-N	Stained Lea soil Survey Deutral Test	Data	
Depth of Free Water in	Pit:		- (i		Local S FAC-N	Stained Lea soil Survey Deutral Test	Data	
Depth of Free Water in Depth to Saturated Soil:	Pit:		- (i		Local S FAC-N	Stained Lea soil Survey Deutral Test	Data	
Depth of Free Water in I Depth to Saturated Soil: Remarks: SOILS Map Unit Name	Pit:	and (CEL)	- (i	in.)	Local S FAC-N Other (Stained Lea ioil Survey Deutral Test Explain in R	Oata remarks)	
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS	Pit:	and (CFL)	- (i		Local S FAC-N Other (Stained Lea ioil Survey Deutral Test Explain in R	Data	
Depth of Free Water in I Depth to Saturated Soil: Remarks: SOILS Map Unit Name	Pit:	and (CFL)	- (i	Drainage Cl	Local S FAC-N Other (Stained Lea ioil Survey Deutral Test Explain in R	Oata remarks)	
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup)	Pit:	and (CFL)	- (i	Drainage Cl	Local S FAC-N Other (Stained Lea ioil Survey Deutral Test Explain in R	Data Hemarks)	ed
Depth of Free Water in I Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description:	Pit:		- ((- ()	Drainage Cl Field Obser Confirm Ma	Local S FAC-N Other (Stained Lea oil Survey D sutral Test Explain in R	Data Jemarks) Sively draine	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth	Cut and Fill Li Udorthents	Matrix Color	- ((Drainage Cl Field Obser Confirm Ma	Local S FAC-N Other (Stained Lea oil Survey D surtral Test Explain in R	Data Jemarks) Sively draine	ed
Depth of Free Water in I Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description:	Pit:		- ((- ()	Drainage Cl Field Obser Confirm Ma	Local S FAC-N Other (Stained Lea ioil Survey E sutral Test Explain in R	Data Jemarks) Sively draine	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2	- ((Drainage Cl Field Obser Confirm Ma	Local S FAC-N Other (Ideas Somewations Simpled Type? Ideas Structure Silt too Sil	Stained Lea ioil Survey E sutral Test Explain in R what excess e, Concretion re, etc. m m	olata demarks) dively draine Yes ns,	ed
Depth of Free Water in I Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2	- ((- () - () - () - () - () - () - ()	Drainage Cl Field Obser Confirm Ma Mottle Abur Size/Contra	Local S FAC-N Other (lass somewatations pped Type? Indance/ Texturn sit Struct sit toa sit toa sit toa	Stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal	olata demarks) dively draine Yes ns,	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (lass somewatations pped Type? Indance/ Texturn sit Struct sit toa sit toa sit toa	Stained Lea ioil Survey E sutral Test Explain in R what excess e, Concretion re, etc. m m	olata demarks) dively draine Yes ns,	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (lass somewatations pped Type? Indance/ Texturn sit Struct sit toa sit toa sit toa	Stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal	olata demarks) dively draine Yes ns,	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra low/low	Local S FAC-N Other (The factor of the fac	Stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal	olata demarks) dively draine Yes ns,	ed
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra 	Local S FAC-N Other (FAC-N Other (Other (I state of the second of the second other (I state other (I s	stained Lea ioil Survey E sutral Test Explain in R that excess c, Concretion re, etc. m m m m m m with shal	olata demarks) dively draine Yes ns,	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra 	Local S FAC-N Other (Other (stained Lea ioil Survey E sutral Test Explain in R that excess c, Concretion re, etc. m m m m m m with shal	olata demarks) dively draine Yes ns,	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor	Mottle Colors (Munsell Moist) — 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (Ideas Somework Ideas Somework	stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal ifth gravel	olata lemarks) leively draine Yes ns, le ace Layer in	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon	Mottle Colors (Munsell Moist)	Drainage Cl Field Obser Confirm Ma Mottle Abur Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E putral Test Explain in R that excess c, Concretion re, etc. m m m m with shal ith gravel	olata demarks) dively draine Yes ns, dee ace Layer in Soils	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histic Epipedon Sulfidic Odor Aquic Moisture Re	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal ifth gravel at sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils L	olata demarks) demarks)	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E sutral Test Explain in R what excess c, Concretion re, etc. m m m with shal ifth gravel at sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils L	olata demarks) demarks)	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators:	Cut and Fill Li Udorthents Horizon	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m with shal ith gravel intent in Surf. g in Sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils Remarks)	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15	Cut and Fill Li Udorthents Horizon	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m with shal ith gravel intent in Surf. g in Sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils Remarks)	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	ed No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators:	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m with shal ith gravel intent in Surf. g in Sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils Remarks)	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	ed No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators:	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abur Size/Contra Iow/low	Local S FAC-N Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m with shal ith gravel intent in Surf. g in Sandy S ydric Soils L Il Hydric Soils L Il Hydric Soils Remarks)	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	ed No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15 ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (Other (stained Lea ioil Survey E putral Test Explain in R what excess c, Concretion re, etc. m m with shal rith gravel attent in Surf. g in Sandy S ydric Soils L il Hydric Soil Remarks)	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	Pd No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation Wetland Hydrology Pres	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15 ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8 regime roma Colors not strong. Mottlin	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra	Local S FAC-N Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m m thith shal ifth gravel Hydric Soils L Hydric Soils Remarks) stent throug	olata lemarks) lemarks) lemarks) lemarks) lemarks) lemarks lemarks) lemarks lemarks) lemarks lemarks)	ed No
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators: Remarks: WETLAND DETERMIN. Hydrophytic Vegetation Wetland Hydrology Pres	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15 ATION Present?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8	Drainage Cl Field Obser Confirm Ma Mottle Abun Size/Contra low/low g present was fain	Local S FAC-N Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m m thith shal ifth gravel Hydric Soils L Hydric Soils Remarks) stent throug	olata lemarks) lemarks) Yes Ins, le ace Layer in Soils list List lyhout depth	No No interval.
Depth of Free Water in Depth to Saturated Soil: Remarks: SOILS Map Unit Name (Series and Phase): Taxonomy (Subgroup) Profile Description: Depth (Inches) 0-5 5-7 7-8 8-15 Hydric Soil Indicators:	Cut and Fill Li Udorthents Horizon No moisture. Refusal at 15 ATION Present? sent?	Matrix Color (Munsell Moist) 10YR 3/2 10YR 3/2 10YR 3/2 10YR 5/6 Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gleyed or Low-Ch	Mottle Colors (Munsell Moist) 10YR 6/8 10YR 6/8 regime ons roma Colors Not strong. Mottlin Yes Yes Yes Yes Yes	Drainage Cl Field Obser Confirm Ma Mottle Abur Size/Contra low/low g present was fain	Local S FAC-N Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (Other (stained Lea ioil Survey E surtral Test Explain in R that excess c, Concretion re, etc. m m m m m thith shal ifth gravel Hydric Soils L Hydric Soils Remarks) stent throug	olata lemarks) lemarks) Yes Ins, le ace Layer in Soils list List lyhout depth	No No interval.

Project/Site: Applicant/Owner: Investigator:	Slurry Pipeline Honeywell RPC/AKM	Route				Date: County: State:	10/21/2009 Onondaga NY	
Do Normal Circumstance Is the site significantly of Is the area a potential P (if needed, explain on	listurbed (atypical Problem Area?			Yes Yes Yes	No No No	Community Transect ID Plot ID		
VEGETATION								
Dominant Plant Species 1 Phragmites australis 2 Lythrum salicaria 3 4 5 6 7 8		Stratum herb herb	Indicator FACW FACW+		Dominant Plant 9 10 11 12 13 14 15 16	Species	Stratum	Indicator
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are Of	BL, FACW or FAC,		100%]			
Remarks:								
HYDROLOGY								
Recorded Data (Stream, Aerial Ph	arks): Lake or Tide Gaug notographs	ie		Wetland Hydrolo Primary Indicato	rs: Inundated		
Field Observations: Depth of Surface Water Depth of Free Water in Depth to Saturated Soil:	Pit:		- - -	(in.) (in.) (in.)		Drainage Paators (2 or more of Oxidized Rown Water-Stain Local Soil Seatons of Seatons o	atterns in Wetlands required): oot Channels in Upp led Leaves survey Data	er 12 inches
Remarks:	Likely seep dra	ainage from side o	of slope and hig	gh water e	events from Nine	mile Creek.		
SOILS								
Map Unit Name (Series and Phase):	Cut and Fill La	nd (CFL)			Drainage Class		excessively draine	d
Taxonomy (Subgroup)	Udorthents				Field Observation Confirm Mapped		Yes	No
Profile Description: Depth (Inches) 0-2	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist		Mottle Abundand Size/Contrast	ce/ Texture, Co Structure, e cinder mate	tc.	
2-14		7.5YR 5/2	10YR 5/6		Ξ		ith some clay	
Hydric Soil Indicators:		Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditio Gleyed or Low-Ch	ns		High Sar Orga Liste	cretions Organic Content ndy Soils nic Streaking in \$ d on Local Hydric d on National Hye or (Explain in Rem	Soils List dric Soils List	
Remarks:	Cinder materia	I - hard material,	not natural.					
WETLAND DETERMIN	ATION							
Hydrophytic Vegetation Wetland Hydrology Pres Hydric Soils Present?			Yes Yes Yes	No No No		s Sampling Point hin a Wetland	Yes	No
Remarks:		north bank of Ni mounts of driftwo				deposit (island)	centrally located i	n Ninemile

						T		
Project/Site:	Slurry Pipelin	e Route				Date:	10/21/2009	
Applicant/Owner:	Honeywell					County:	Onondaga	
Investigator:	RPC/AKM					State:	NY	
						-		
Do Normal Circumsta	nces exist on the s	site?		Yes	No	Community ID:	WL18	
Is the site significantly				Yes	No	Transect ID:	wet	
Is the area a potential		,		Yes	No	Plot ID	WP28	
(if needed, explain o								
VEGETATION					1			
Dominant Plant Speci		Stratum	Indicator		Dominant Plant Spe	ecies	Stratum	Indicator
1 Phragmites austra 2 Lythrum salicaria	lis*	herb herb	FACW+		9			
3 Solanum dulcama	ra	herb	FAC-		11			
4					12			
5					13 14			
7					15			
8					16			
Percent of Dominant (excluding FAC-). * = dominant species	•	BL, FACW or FAC,		100%]			
Remarks:		wet and dry veget	ation is a line of	of Festuca	a arundinacea.			
HYDROLOGY								
Recorded Data	a (Describe in Rem	arke):			Wetland Hydrology	Indicators:		
Necoraca Bate		Lake or Tide Gaug	ge		Primary Indicators:	maioators.		
		hotographs	•			Inundated		
No Recorded Data	Other					Saturated in Up Water marks	per 12 inches	
No Recorded Date	a Available				-	Drift Lines		
						Sediment Depo	sits	
Field Observations:					X	Drainage Patter		
Death of Ourford Med				(:- \	Secondary Indicator			40 !
Depth of Surface Water in Depth of Free Water in				—(in.) —(in.)		Oxidized Root 0 Water-Stained		er 12 inches
Depth to Saturated So		-	-	(in.)	-	Local Soil Surve		
•		•		_``		FAC-Neutral Te		
						Other (Explain i	in Remarks)	
Remarks:	Fringe wetlan	d along north banl	k of Ninemile C	reek.				
SOILS								
Map Unit Name								
(Series and Phase):	Cut and Fill La	and (CFL)			Drainage Class	somewhat exc	essively draine	ed
((0/			Field Observations			-
Taxonomy (Subgroup	Udorthents				_Confirm Mapped Ty	pe?	Yes	No
Destile Description								
Profile Description: Depth		Matrix Color	Mottle Colors	:	Mottle Abundance/	Texture, Concre	etions	
(Inches)	Horizon	(Munsell Moist)	(Munsell Mois		Size/Contrast	Structure, etc.	ottorio,	
0-14		10YR 4/2				silty clay		
Hydric Soil Indicators:		Histosol			Concreti	ione		
		Histic Epipedon				ganic Content in S	Surface Laver in	
		Sulfidic Odor			Sandy	Soils	•	
		Aquic Moisture Re			Organic	Streaking in Sand		
		Reducing Condition Gleyed or Low-Ch				n Local Hydric So n National Hydric		
	•	Gleyed of Low-Cit	IIOIIIa Colois			xplain in Remark		
Remarks:	Plot located o Refusal at 14		h deposition ar	nd scourii	ng, so mottling likely	does not have t	ime to form.	
WETLAND DETERM	INATION							
Hydrophytic Vegetation	on Present?	<u> </u>	Yes	No				
Wetland Hydrology Pi			Yes	No	Is this S	ampling Point		
Hydric Soils Present?			Yes	No		a Wetland	Yes	No
Remarks:	Flags WI 10 4	thru WI 10 2 CL-	reline can be d	omaroata	d by connecting flag	e 1 and 2		
noma no.	i iaga WLIO-I	u **L10-3. 3110	Tomic call be u	ciliai cale	a by connecting hag	o ranu J.		

Project/Size: Moneywell Mo									
Investigation: REPOZIKI Do Normal Circumstances exist on the size? Is the area a potential Problem Awar? Ves No. Community ID: Wit.19 Is the area a potential Problem Awar? Ves No. Post ID: WP29 Ves No. Post ID: WP29 Ves Wo.			Route						
Do Normal Circumstances exist on the site? Is the site agenticately disturbed (appeal situation?) Is the site agent appeal problem Area? (If needed, explain on reverse). Vest No. Post ID WP29 VESTATION Dominant Plant Species Stratum Indicator West Indicator West Indicator West Indicator Indicator West Indicator West Indicator Indicator Indicator West Indicator Indicat									
Is the site asyndicantly disturbed (daypical situation?) Is the site area potential Problem Area? (if needed, explain on reverse) Ves No Prol ID Ves No Prol	investigator.	KFC/ARW					State.		
Is the site asyndicantly disturbed (daypical situation?) Is the site area potential Problem Area? (if needed, explain on reverse) Ves No Prol ID Ves No Prol						1			
Is the area patential Phoblem Area? (In needed, option or reverse). VEGETATION Deminant Plant Species Stratum Indicator Testinas auradinaces The									
VEGETATION Testical annualization Dominant Plant Species Stratum Indicator Testical annualization Testical an	,		i situation:)						
Dominant Plant Species					. 00		1		
Dominant Plant Species									
Festure arundinacea* herb FACU 9	VEGETATION								
Festure arundinacea* herb FACU 9	D : 181 10 :		2: :			D : 151 16		2: :	
2 Concern statistics* shrub FACU 10 3 Solidago canadensis herb FACU 11 4 Solidago canadensis herb FACU 11 5 Solidago FACA:							Species	Stratum	Indicator
12 13 14 15 15 16 16 16 16 16 16	2 Lonicera tatarica*		shrub	FACU		10			
Total Color		5	herb	FACU					
18 16 16 16 16 16 16 16									
Percent of Dominant Species that are OBL, FACW or FAC, (excluding FAC): - dominant species Remarks: Rhamnus cathartica observed in the surrounding area. HYDROLOGY Recorded Data (Describe in Remarks): - Other Orlogogaphs - O									
Percent of Dominant Species that are OBL, FACW or FAC, (excluding FAC-). — dominant species Rhamus cathartica observed in the surrounding area. HYDROLOGY Recorded Data (Describe in Roman's): Stream, Lake or Tide Gauge Anal Photographs Other No Recorded Data Available No Recorded Data Available No Recorded Data Available Primary Indicators: Primary Indicato									
(excluding FAC-) - " - dominant species									
Recorded Data (Describe in Remarks): Stream, Lake or Tide Gauge Aerial Photographs Other No Recorded Data Available Pirid Observations: Depth of Surface Water: Depth of Surface Water in Pit: Surface Water Stained Leaves Ut and Fill Land (CFL) Drainage Class Field Observations Fie	(excluding FAC-). * = dominant species			. Ale a construe di]			
Recorded Data (Describe in Remarks): Stream, Lake or Tide Gauge Aerial Photographs Other No Recorded Data Available No Retire Take In Record Place No Recorded Data Available No Retire Take In Record Place No Recorded Data Available No Recorded Data Available No Retire Take In Record Place No Recorded Data Available No Recorded Data Recorded In Recorded Data Recorded D	Remarks:	Rnamnus catr	artica observed ii	n the surroundir	ng area.				
Stream, Lake or Title Gauge Aerial Photographs Other Other Other No Recorded Data Available No Recorded Data Available Primary Indicators: Inundated Saturated in Upper 12 inches Saturated in Upper 12 inches Othit Lines Secondary Indicators: Depth of Surface Water: Depth of Surface Water in Pit: Depth of Surface Water in Pit: Depth to Saturated Soil: Cut and Fill Land (CFL) Prainage Class Field Observations Confirm Mapped Type? Texture, Concretions Field Observations Confirm Mapped Type? No Profile Description: Depth (Munsell Moist) Remarks: Histosol Histic Epipedon Histic Codor Aquic Moisture Regime Aquic Moisture Regime Reducing Conditions Reducing Conditions Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Phydrochylic Vegetation Present? Wetland Hydrology Present? Yes No Profile Saturated Inundated Saturated in Upper 12 inches Secondary Indicators: Primary Indicators:	HYDROLOGY								
	Recorded Data (
OtherOther				е		Primary Indicator			
Field Observations: Depth of Surface Water: Depth of Surface Water: Depth of Surface Water: Depth of Surface Water: Depth to Saturated Soil: Secondary Indicators: (in,) Depth to Saturated Soil: (in,) Depth to Saturated Soil: Depth (Explain in Remarks) (in,) Depth to Saturated Soil: Depth (Explain in Remarks) (in,) Depth to Saturated Soil: Depth (Explain in Remarks) (in,) Depth to Saturated Soil: Depth (In,) Depth (Explain in Saturated Soil: Depth (In,) Depth		Other	notograpno				Saturated in		
Sediment Deposits Drainage Patterns in Wetlands Drainage	No Recorded Data	Available							
Depth of Surface Water: Depth of Free Water in Pit: Depth to Saturated Soil: Soil: Map Unit Name (Series and Phase): Cut and Fill Land (CFL) Depth to Secondary Indicators: Map Unit Name (Series and Phase): Depth Description: Depth Conditions Depth Cinches) Drainage Class Field Observations Field Observations Confirm Mapped Type? Texture, Concretions, Sitze/Contrast Sitze/Contrast Sitze/Contrast Sitze/Land Soils Hydric Soil Indicators: Histosol Aquic Molsture Regime Reducing Conditions Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Wetland Hydrology Present? Hydric Soils Present? Wetland Hydrology Present? Hydric Soils Present? Yes No No Notice Condary Indicators (Indicators) August Molesture Regime Reducing Conditions Listed on Local Hydric Soils List Listed on National Hydric Soils List Listed on National Hydric Soils List Uithin a Wetland Yes No							Sediment De		
Depth of Surface Water: Depth of Sere Water in Pit: Depth to Saturated Soil: Cut and Fill Land (CFL)	Field Observations:								s
Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Depth to Saturated Soil: - (in.) Drainage Class FAC-Neutral Test Other (Explain in Remarks) Remarks: SOILS Map Unit Name (Series and Phase): Cut and Fill Land (CFL) Drainage Class Field Observations Confirm Mapped Type? Ves No Profile Description: Depth (inches) Horizon Horizon (Munsell Moist) Horizon (Munsell Moist) Horizon Horizon Horizon Histosol Horizon Sulficic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Cleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No No No No Within a Wetland Yes No No No No Within a Wetland Yes No N	Depth of Surface Water	-		-	(in.)	Secondary Indica			oper 12 inches
Remarks: SOILS	Depth of Free Water in	Pit:		-	(in.)		Water-Staine	ed Leaves	
Remarks: Cother (Explain in Remarks)	Depth to Saturated Soil			-	(in.)				
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Udorthents Cut and Fill Land (CFL) Taxonomy (Subgroup) Udorthents Drainage Class Field Observations Confirm Mapped Type? Yes No Profile Description: Depth (Inches) Horizon Horizon Horizon Histosol Histosol Histosol Histosol Histosol Histosol Histosol Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydric Soils Present? Hydric Soils Present? Hydric Soils Present? Hydric Soils Present? Yes No No Nottle Abundance/ Muttle Abundance/ Muttle Abundance/ Size/Contrast Structure, etc. Siltry clay loam Concretions High Organic Content in Surface Layer in Sandy Soils Listed on Local Hydric Soils List Listed on Local Hydric Soils List Listed on National Hydric Soils List Listed on National Hydric Soils List Cother (Explain in Remarks) Is this Sampling Point Within a Wetland Yes No						-			
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Udorthents Cut and Fill Land (CFL) Taxonomy (Subgroup) Udorthents Drainage Class Field Observations Confirm Mapped Type? Yes No Profile Description: Depth (Inches) Horizon Horizon Horizon Histosol Histosol Histosol Histosol Histosol Histosol Histosol Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydric Soils Present? Hydric Soils Present? Hydric Soils Present? Hydric Soils Present? Yes No No Nottle Abundance/ Muttle Abundance/ Muttle Abundance/ Size/Contrast Structure, etc. Siltry clay loam Concretions High Organic Content in Surface Layer in Sandy Soils Listed on Local Hydric Soils List Listed on Local Hydric Soils List Listed on National Hydric Soils List Listed on National Hydric Soils List Cother (Explain in Remarks) Is this Sampling Point Within a Wetland Yes No									
Map Unit Name (Series and Phase): Taxonomy (Subgroup) Udorthents Cut and Fill Land (CFL) Drainage Class Field Observations Confirm Mapped Type? Yes No Profile Description: Depth (Inches) Horizon (Munsell Moist) (Munsell Moist) Horizon (Munsell Moist) Taxonomy (Subgroup) Matrix Color Mottle Colors (Munsell Moist) Mottle Abundance/ Size/Contrast Structure, etc. Size/Contrast Structure, etc. Concretions High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No N	Remarks:								
(Series and Phase): Taxonomy (Subgroup) Udorthents Confirm Mapped Type? Yes No Profile Description: Depth (Inches) Horizon (Munsell Moist) Hydric Soil Indicators: Histosol Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors Remarks: Cut and Fill Land (CFL) Field Observations Confirm Mapped Type? Wottle Abundance/ Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Texture, Concretions Texture, Concretions Texture	SOILS								
(Series and Phase): Taxonomy (Subgroup) Udorthents Confirm Mapped Type? No Profile Description: Depth (Inches) Horizon (Munsell Moist) Hydric Soil Indicators: Histosol Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors Remarks: Cut and Fill Land (CFL) Field Observations Field Observations Confirm Mapped Type? Yes No Mottle Abundance/ Texture, Concretions, Structure, etc. Texture, Concretions, Structure, etc. Structure, etc. Structure, etc. Structure, etc. Texture, Concretions, Structure, etc. Structure, Concretions, Structure, etc. Structure, Concretions, Structure, etc. Structure, Concretions, Structure, etc. Structure, Concretions, Structure, etc. Structure, etc. Structure, Concretions, Structure, etc. Structure, etc. Structure, Concretions, Structure, etc. Structure	Man I Init Name								
Taxonomy (Subgroup) Depth		Cut and Fill La	ind (CFL)			Drainage Class	somewhat e	xcessively drain	ned
Profile Description: Depth (Inches) Horizon (Munsell Moist) (Munsell Moist) Size/Contrast Structure, etc. 0-15 10YR 3/2 - silty clay loam Hydric Soil Indicators: Histosol Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydric Soils Present? Westland Hydrology Present? Hydric Soils Present? Yes No No Hottle Abundance/ Texture, Concretions, Mottle Colors Structure, etc. Structure, concretions, Mottle Colors Size/Contrast Structure, etc. Structure, etc. Structure, etc. Structure, Concretions, Mottle Colors Size/Contrast Structure, etc. Stru	Tayonamy (Puharaun)	Helevikente	-						
Depth (Inches) Horizon (Munsell Moist) (Munsell Moist) Size/Contrast Structure, etc. 10YR 3/2 silty clay loam Hydric Soil Indicators: Histosol Sulfidic Odor Aquic Moistructure Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors WETLAND DETERMINATION Hydroc Soils Present? Wetland Hydrology Present?	raxonomy (Subgroup)	Udortnents				Confirm Mapped	Type?	Yes	No
Depth (Inches) Horizon (Munsell Moist) (Munsell Moist) Size/Contrast Structure, etc. 10YR 3/2 silty clay loam Hydric Soil Indicators: Histosol Sulfidic Odor Aquic Moistructure Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors WETLAND DETERMINATION Hydroc Soils Present? Wetland Hydrology Present?									
(Inches) Horizon (Munsell Moist) (Munsell Moist) Size/Contrast Structure, etc. 0-15 10YR 3/2			Matrix Color	Mottle Colors		Mottle Abundanc	e/ Texture Con	cretions	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present?		Horizon			1				
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Sandy Soils Aquic Moisture Regime Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Cother (Explain in Remarks) Reducing Conditions Listed on National Hydric Soils List Other (Explain in Remarks) Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Yes No	0-15		10YR 3/2	-			silty clay loa	am	
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Sandy Soils Aquic Moisture Regime Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Cother (Explain in Remarks) Reducing Conditions Listed on National Hydric Soils List Other (Explain in Remarks) Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Yes No									
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Sandy Soils Aquic Moisture Regime Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Cother (Explain in Remarks) Reducing Conditions Listed on National Hydric Soils List Other (Explain in Remarks) Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Yes No									
Histosol Concretions High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Sandy Soils Aquic Moisture Regime Organic Streaking in Sandy Soils Reducing Conditions Gleyed or Low-Chroma Colors Cherrican Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No No Within a Wetland Yes No									
Histosol Concretions High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Sandy Soils Aquic Moisture Regime Organic Streaking in Sandy Soils Reducing Conditions Gleyed or Low-Chroma Colors Cherrican Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No No Within a Wetland Yes No									
Histic Epipedon	Hydric Soil Indicators:		Historial			Cono	rotions		
Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Gleyed or Low-Chroma Colors Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No Within a Wetland Yes No		-						n Surface Layer	in
Reducing Conditions Gleyed or Low-Chroma Colors Listed on National Hydric Soils List Cother (Explain in Remarks) Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Within a Wetland Yes No									
Gleyed or Low-Chroma Colors Cher (Explain in Remarks) Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes World Hydrology Present? Yes No No No No Within a Wetland Yes No						Orgai	nic Streaking in Sa d on Local Hydric	andy Soils Soils List	
Remarks: WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes NO Wetland Hydrology Present? Yes NO Within a Wetland Yes NO Within a Wetland Yes NO						Listed	d on National Hyd	ric Soils List	
WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No No Is this Sampling Point Within a Wetland Yes No						Other	r (Explain in Rema	arks)	
WETLAND DETERMINATION Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No No No No Within a Wetland Yes No									
Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No Is this Sampling Point Within a Wetland Yes No	Remarks:								
Hydrophytic Vegetation Present? Wetland Hydrology Present? Yes No Is this Sampling Point Within a Wetland Yes No	WETLAND DETERMIN	ATION							
Wetland Hydrology Present? Yes No Is this Sampling Point Within a Wetland Yes No									
Hydric Soils Present? Yes No Within a Wetland Yes No						le this	s Sampling Point		
Remarks: Plot located approximately 20 feet south of access road.		JOIN!						Yes	No
Remarks: Plot located approximately 20 feet south of access road.									
	Remarks:	Plot located a	nnrovimately 20 to	et south of acco	ee road				

Project/Site:	Slurry Pipelir	ne Route			Date:	10/21/2009	
Applicant/Owner:	Honeywell				County:	Onondaga	
Investigator:	RPC/AKM				State:	NY	
Do Normal Circumstand			Ye		Community ID:	WL19	
Is the site significantly of		al situation?)		es No	Transect ID: Plot ID	WP30	
Is the area a potential F (if needed, explain on			Y	es No	PIOLID	WP3U	
VEGETATION							
D : 181 10 :		0: :	1 2 4	D : 151 10		0	
Dominant Plant Species 1 Phalaris arundinace		Stratum herb	Indicator FACW+	Dominant Plant Sp	ecies	Stratum	Indicator
2 Phragmites australis		herb	FACW	10			
4				11 12			
5				13			
6				14			
7 8				15 16			
Percent of Dominant Sp (excluding FAC-). * = dominant species	pecies that are 0	OBL, FACW or FAC,	100	0%			
Remarks:							
HYDROLOGY							
				<u> </u>			
Recorded Data (Wetland Hydrology Primary Indicators:	Indicators:		
		ı, Lake or Tide Gauç Photographs	je	Primary indicators.	Inundated		
	Other	3 4			Saturated in Up	per 12 inches	
No Recorded Data	Available			-	Water marks Drift Lines		
				_	Sediment Depo	sits	
Field Observations:				Secondary Indicato		rns in Wetlands	
Depth of Surface Water	:		- (in.)	Secondary Indicato		airea): Channels in Uppei	r 12 inches
Depth of Free Water in	Pit:		- (in.)		Water-Stained	Leaves	
Depth to Saturated Soil			- (in.)		Local Soil Surv FAC-Neutral Te		
					Other (Explain		
					_		
Remarks:	Proximity to	Ninemile Creek app	proximately 6 feet from	n creek waters edge.			
SOILS							
Map Unit Name							
(Series and Phase):	Cut and Fill L	and (CFL)		Drainage Class Field Observations	somewhat exc	essively drained	
Taxonomy (Subgroup)	Udorthents			Confirm Mapped Ty	/pe?	Yes	No
Profile Description:							
Depth		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concre	etions,	
(Inches)	Horizon	(Munsell Moist) 10YR 4/2	(Munsell Moist)	Size/Contrast	Structure, etc. silty clay loam		
8-16		10YR 4/2	7.5 YR 4/6	moderate/low	silty clay loam		
-							
Hydric Soil Indicators:		Histosol		Concret	ions		
		Histic Epipedon			ganic Content in S	Surface Layer in	
		Sulfidic Odor	aim a	Sandy		du Cail-	
		Aquic Moisture Re Reducing Condition			Streaking in San n Local Hydric So		
	Х	Gleyed or Low-Ch		Listed o	n National Hydric	Soils List	
				Other (E	Explain in Remark	S)	
Remarks:							
Remarks:							
WETLAND DETERMIN	ATION						
Hydrophytic Vegetation	Present?		Yes N				
Wetland Hydrology Pres			Yes N	o Is this S	ampling Point		
Hydric Soils Present?			Yes N		a Wetland	Yes	No
Remarks:							

ATTACHMENT 3

Photograph Log



Photo 1 (P1). Looking west at Wetland 1 (WL1) a depressed area dominated by reed canary grass. Date: October 15, 2009



Photo 2 (P2). Looking north at Wetland 4 (WL4) along a stream/drainage way discharging to Ninemile Creek.

Date: October 15, 2009



Photo 3 (P3). Looking north at the western portion of WL6 dominated with reed canary grass and forget-me-not.



Photo 4 (P4). Looking east along the southern boundary of Wetland 6 (WL6). Date: October 15, 2009



Photo 5 (P5). Looking north at fringe Wetland 9 (WL9) along Ninemile Creek dominated by common reed and reed canary grass.

Date: October 16, 2009



Photo 6 (P6). Looking southwest from Belle Isle bridge along Ninemile Creek fringe Wetland 12 (WL12). Date: October 20, 2009



Photo 7 (P7). Looking southwest at Wetland 15 (WL15) consisting of a typical stand of common reed. Date: October 21, 2009



Photo 8 (P8). Looking east along the southern boundary of Wetland 16 (WL16) consisting of a stand of common reed.

Date: October 21, 2009