ADDENDUM D10B:

WETLAND DELINEATION FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 Corps of Engineers Manual)

Project/Site:	Nichols Ranch Unit	Date:	6/28/06
Applicant/Owner:	Uranerz Energy Corporation	County:	Campbell
Investigator:	Jan Hart/Waylon Hiler	State:	Wyoming

Do Normal Circumstances exist on the site?	[X] Yes [ ] No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	[ ] Yes [X] No	Transect ID:	
Is the area a potential Problem Area?	[ ] Yes [X] No	Plot ID:	Site 1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Typha augustifolia*	Herb	OBL	7.		
2. *Scirpus pungens*	Herb	OBL	8.		
3. *Cirsium arvense*	Herb	FACU	9.		
4. *Scirpus acutus*	Feb	OBL	10.		
5. *Asclepias speciosa*	Herb	FAC	11.		
6. *Juncus balticus*	Herb	OBL	12.		

Percent of Dominant Species that are OBL, FACW, and/or FAC (exclude FAC- species). 5/6 = 83%

Remarks: This site is dominated by cattails. The perimeter of this site has some species diversity while the center is primarily cattails.

HYDROLOGY

[ ] Recorded Data (Describe in Remarks)
[ ] Stream, Lake, or Tide Gauge
[ ] Aerial Photographs
[ ] Other - USGS Topographic Map
[X] No Known Recorded Data

Field Observations:

Depth of Surface Water: 0-24 inches

Depth to Free Water in Pit: 10 inches

Depth to Saturated Soil: 2 inches

Wetland Hydrology Indicators:
Primary Indicators:
[X] Inundated
[X] Saturated in Upper 12 inches
[ ] Water Marks
[ ] Drift Lines
[ ] Sediment Deposits
[ ] Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
[ ] Oxidized Root Channels in Upper 12 inches
[ ] Water-stained Leaves
[ ] Local Soil Survey Data
[ ] FAC-Neutral Test
[ ] Other (Explain in Remarks)

Remarks: This site is within the Cottonwood Creek drainage. An impoundment contains the water on site. There are springs in the area. Based on the lack of rain this year, it is assumed that this site's hydrology is dependant on ground water.

SOILS

Map Unit Name (Series and Phase):	Haverdad-Clarken complex, 0-4 percent slopes	Drainage Class:	
Taxonomy (Subgroup):		Field Observations Confirm Map Type?	[X] Yes [ ] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR4/2	None	n/a	Sandy loam
6-14		10YR3/2	7.5YR5/6	20%/good	Sandy clay loam

Hydric Soil Indicators:

[ ] Histosol
[ ] Histic Epipedon
[X] Sulfidic Odor
[ ] Aquic Moisture Regime
[ ] Reducing Conditions (test required)
[ ] Gleyed or Low-Chroma Colors
[ ] Concretions
[ ] High Organic Content in Surface Layer of Sandy Soils
[ ] Organic Streaking in Sandy Soils
[ ] Listed on Local Hydric Soils List
[ ] Listed on National Hydric Soils List
[X] Other (Explain in Remarks)

Remarks: Soils were mottled approximately 6 inches below the surface.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [X] Yes [ ] No Wetland Hydrology Present? [X] Yes [ ] No Hydric Soils Present? [X] Yes [ ] No	Is this Sampling Point within a Wetland? [X] Yes [ ] No

Remarks: This site is a jurisdictional wetland within a WUS.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 Corps of Engineers Manual)

Project/Site:	Nichols Ranch Unit	Date:	6/28/06
Applicant/Owner:	Uranerz Energy Corporation	County:	Campbell
Investigator:	Jan Hart/Waylon Hiler	State:	Wyoming

Do Normal Circumstances exist on the site?	[X] Yes [ ] No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	[ ] Yes [X] No	Transect ID:	
Is the area a potential Problem Area?	[ ] Yes [X] No	Plot ID:	Site 2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Polypogon monospeliensis*	Herb	OBL	7.		
2. *Typha angustifolia*	Herb	OBL	8.		
3. *Scirpus pungens*	Herb	OBL	9.		
4. *Juncus* spp.	Herb	OBL	10.		
5. *Hordeum jubatum*	Herb	FACW	11.		
6. *Spartina pectinata*	Herb	FACW	12.		

Percent of Dominant Species that are OBL, FACW, and/or FAC (exclude FAC- species). 6/6 = 100%

Remarks:

HYDROLOGY

[ ] Recorded Data (Describe in Remarks)
[ ] Stream, Lake, or Tide Gauge
[ ] Aerial Photographs
[ ] Other - USGS Topographic Map
[X] No Known Recorded Data

Field Observations:

Depth of Surface Water: 0 inches

Depth to Free Water in Pit: >12 inches

Depth to Saturated Soil: >12 inches

Wetland Hydrology Indicators:
Primary Indicators:
[ ] Inundated
[ ] Saturated in Upper 12 inches
[X] Water Marks
[ ] Drift Lines
[ ] Sediment Deposits
[X] Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
[ ] Oxidized Root Channels in Upper 12 inches
[ ] Water-stained Leaves
[ ] Local Soil Survey Data
[ ] FAC-Neutral Test
[ ] Other (Explain in Remarks)

Remarks: This site was dry but there are indicators of wetland hydrology. This site is located in the Cottonwood Creek drainage.

SOILS

Map Unit Name (Series and Phase):	Haverdad-Clarken complex, 0-4 percent slopes	Drainage Class:	
Taxonomy (Subgroup):		Field Observations Confirm Map Type?	[X] Yes [ ] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR3/1	None	n/a	Sandy loam
3-14		10YR3/1	10YR5/8	30%/good	Sandy loam

Hydric Soil Indicators:

[ ] Histosol
[ ] Histic Epipedon
[ ] Sulfidic Odor
[ ] Aquic Moisture Regime
[ ] Reducing Conditions (test required)
[ ] Gleyed or Low-Chroma Colors
[ ] Concretions
[ ] High Organic Content in Surface Layer of Sandy Soils
[ ] Organic Streaking in Sandy Soils
[ ] Listed on Local Hydric Soils List
[ ] Listed on National Hydric Soils List
[X] Other (Explain in Remarks)

Remarks: Soil mottles observed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [X] Yes [ ] No Wetland Hydrology Present? [X] Yes [ ] No Hydric Soils Present? [X] Yes [ ] No	Is this Sampling Point within a Wetland? [X] Yes [ ] No

Remarks: This site is a jurisdictional wetland within the Cottonwood Creek drainage.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 Corps of Engineers Manual)

Project/Site:	Nichols Ranch Unit	Date:	6/28/06
Applicant/Owner:	Uranerz Energy Corporation	County:	Campbell
Investigator:	Jan Hart/Waylon Hiler	State:	Wyoming

Do Normal Circumstances exist on the site?	[X] Yes [ ] No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	[ ] Yes [X] No	Transect ID:	
Is the area a potential Problem Area?	[ ] Yes [X] No	Plot ID:	Site 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Typha angustifolia*	Herb	OBL	7. *Asclepias speciosa*	Herb	FAC
2. *Scirpus pungens*	Herb	OBL	8.		
3. *Scirpus acutus*	Herb	OBL	9.		
4. *Juncus* spp.	Herb	FACW or wetter	10.		
5. *Hordeum jubatum*	Herb	FACW	11.		
6. *Polopogon monospeliensis*	Herb	OBL	12.		

Percent of Dominant Species that are OBL, FACW, and/or FAC (exclude FAC- species). 7/7 = 100%

Remarks:

HYDROLOGY

[ ] Recorded Data (Describe in Remarks)
[ ] Stream, Lake, or Tide Gauge
[ ] Aerial Photographs
[ ] Other - USGS Topographic Map
[X] No Known Recorded Data

Field Observations:

Depth of Surface Water: 0-18 inches

Depth to Free Water in Pit: 0 inches

Depth to Saturated Soil: 0 inches

Wetland Hydrology Indicators:
Primary Indicators:
[X] Inundated
[X] Saturated in Upper 12 inches
[ ] Water Marks
[ ] Drift Lines
[ ] Sediment Deposits
[X] Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
[ ] Oxidized Root Channels in Upper 12 inches
[ ] Water-stained Leaves
[ ] Local Soil Survey Data
[ ] FAC-Neutral Test
[ ] Other (Explain in Remarks)

Remarks: This site is located in the Cottonwood Creek drainage.

SOILS

Map Unit Name (Series and Phase):	Haverdad-Clarken complex, 0-4 percent slopes	Drainage Class:	
Taxonomy (Subgroup):		Field Observations Confirm Map Type?	[X] Yes [ ] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10YR5/4	None	n/a	Sand
2-14		10YR2/1	w/gleying - 5GY		Sandy loam
			7.5YR5/6	15%/fair	Sandy clay loam

Hydric Soil Indicators:

[ ] Histosol
[ ] Histic Epipedon
[X] Sulfidic Odor
[ ] Aquic Moisture Regime
[ ] Reducing Conditions (test required)
[ ] Gleyed or Low-Chroma Colors
[ ] Concretions
[ ] High Organic Content in Surface Layer of Sandy Soils
[ ] Organic Streaking in Sandy Soils
[ ] Listed on Local Hydric Soils List
[ ] Listed on National Hydric Soils List
[X] Other (Explain in Remarks)

Remarks: Gleyed soils are mixed with mottled.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [X] Yes [ ] No
Wetland Hydrology Present? [X] Yes [ ] No
Hydric Soils Present? [X] Yes [ ] No

Is this Sampling Point within a Wetland? [X] Yes [ ] No

Remarks: This site is a jurisdictional wetland located in a WUS.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 Corps of Engineers Manual)

Project/Site:	Nichols Ranch Unit	Date:	7/21/06
Applicant/Owner:	Uranerz Energy Corporation	County:	Campbell
Investigator:	Jan Hart	State:	Wyoming

Do Normal Circumstances exist on the site?	[X] Yes [ ] No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	[ ] Yes [X] No	Transect ID:	
Is the area a potential Problem Area?	[ ] Yes [X] No	Plot ID:	Site 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Scirpus acutus*	Herb	OBL	7.		
2. *Eleocharis palustris*	Herb	OBL	8.		
3. *Echinochloa crusgalli*	Herb	FACW	9.		
4. *Typha angustifolia*	Herb	OBL	10.		
5. *Beckmannia syzigache*	Herb	OBL	11.		
6.			12.		

Percent of Dominant Species that are OBL, FACW, and/or FAC (exclude FAC- species). 5/5 = 100%

Remarks: Upland vegetation surrounds this site. Water supplied by an overflowing stock tank has created a site suitable to support hydrophytic vegetation.

HYDROLOGY

[ ] Recorded Data (Describe in Remarks)
[ ] Stream, Lake, or Tide Gauge
[ ] Aerial Photographs
[ ] Other - USGS Topographic Map
[X] No Known Recorded Data

Field Observations:

Depth of Surface Water: 1-14 inches

Depth to Free Water in Pit: 3 inches

Depth to Saturated Soil: 1 inches

Wetland Hydrology Indicators:
Primary Indicators:
[X] Inundated
[X] Saturated in Upper 12 inches
[ ] Water Marks
[ ] Drift Lines
[ ] Sediment Deposits
[ ] Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
[ ] Oxidized Root Channels in Upper 12 inches
[ ] Water-stained Leaves
[ ] Local Soil Survey Data
[ ] FAC-Neutral Test
[ ] Other (Explain in Remarks)

Remarks: Water is supplied to this site by an overflowing stock tank. The stream (as designated on the USGS quadrangle) that occurs in the floodplain is dry, with no defined bed/bank. A series of irrigation canals, also dry, occur in the floodplain, which surrounds this site. A stock tank occurs upstream from the wetland, and the water overflows from tank to site.

SOILS

Map Unit Name (Series and Phase):	Haverdad-Clarken complex, 0-4 percent slopes	Drainage Class:	
Taxonomy (Subgroup):		Field Observations Confirm Map Type?	[X] Yes [ ] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR5/2	7.5YR6/6	50%/good	Sandy loam
4-12		10YR2/1	--		Sandy loam

Hydric Soil Indicators:

[ ] Histosol
[ ] Histic Epipedon
[X] Sulfidic Odor
[ ] Aquic Moisture Regime
[ ] Reducing Conditions (test required)
[X] Gleyed or Low-Chroma Colors
[ ] Concretions
[ ] High Organic Content in Surface Layer of Sandy Soils
[ ] Organic Streaking in Sandy Soils
[ ] Listed on Local Hydric Soils List
[ ] Listed on National Hydric Soils List
[ ] Other (Explain in Remarks)

Remarks: The soils emitted a very strong sulfidic odor when the soil pit was dug.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [X] Yes [ ] No Wetland Hydrology Present? [X] Yes [ ] No Hydric Soils Present? [X] Yes [ ] No	Is this Sampling Point within a Wetland? [X] Yes [ ] No

Remarks: This site is a created wetland located in the floodplain of Cottonwood Creek below an overflowing stock watering tank.