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Laboratory Report

Crossroads Land Dip.
Mark Cross
P.O. Box 80
Camanche, IA 52730

Date Received: 11/11/13
Date Reported: 12/03/13
Project: Wetlands (PCS Clinton, IA)

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-1 Grab
Lab No.: 3111101-01

Date Sampled: 11/11/13

Date Received: 11/11/13

Classical Chemistry Parameters

Ammonia as N	<0.06	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	10.2	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.35	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	9.4	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	10.13	mg/L	11/11/13	Leonard I	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-2 Grab
Lab No.: 3111101-02

Date Sampled: 11/11/13

Date Received: 11/11/13

Classical Chemistry Parameters

Ammonia as N	15.4	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	21.9	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.34	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	10.13	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	8	mg/L	11/11/13	Leonard I	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-3A Grab
Lab No.: 3111101-03

Date Sampled: 11/11/13

Date Received: 11/11/13

Classical Chemistry Parameters

Ammonia as N	0.06	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	4.2	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.36	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	7.6	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	10.24	mg/L	11/11/13	Leonard I	SM 4500 O G	

Analysis Certified by:

Randall Wanke, Ph.D.

Randal Wanke, Laboratory Director



Crossroads Land Dlp. P.O. Box 80 Camanche IA, 52730	Project: Wetlands (PCS Clinton, IA) Client Contact: Mark Cross	Reported: 12/03/13 10:27
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-4 Grab		Date Sampled: 11/11/13		Date Received: 11/11/13		
Lab No.: 3111101-04						
Classical Chemistry Parameters						
Ammonia as N	4.30	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	10.9	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.15	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	8.3	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	8.57	mg/L	11/11/13	Leonard I	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-5 Grab		Date Sampled: 11/11/13		Date Received: 11/11/13		
Lab No.: 3111101-05						
Classical Chemistry Parameters						
Ammonia as N	0.30	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	6.2	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.22	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	9.2	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	10.21	mg/L	11/11/13	Leonard I	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-6 Grab		Date Sampled: 11/11/13		Date Received: 11/11/13		
Lab No.: 3111101-06						
Classical Chemistry Parameters						
Ammonia as N	5.06	mg/L	11/19/13	jc	SM 4500 NH3 E	
Nitrate as N	13.0	mg/L	11/12/13	EV	EPA 300.0	
Field pH	8.17	pH Units	11/11/13	Leonard I	SM 4500 H + B	
Field Temperature	7.3	°C	11/11/13	Leonard I	SM 2550 B	
Field DO	6.97	mg/L	11/11/13	Leonard I	SM 4500 O G	



Laboratory Report

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Date Received: 12/01/13
Date Reported: 12/17/13
Project: Wetlands (PCS Clinton, IA)

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-1 Grab
Lab No.: 3120101-01

Date Sampled: 12/01/13

Date Received: 12/01/13

Classical Chemistry Parameters

Ammonia as N	0.08	mg/L	12/06/13	jc	SM 4500 NH3 E-1997	
Nitrate as N	10.3	mg/L	12/02/13	EV	SM 4110 B-2000	
Field pH	8.7	pH Units	12/01/13	Dan Halv	SM 4500 H + B	
Field Temperature	4.1	°C	12/01/13	Dan Halv	SM 2550 B	
Field DO	11.58	mg/L	12/01/13	Dan Halv	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-2 Grab
Lab No.: 3120101-02

Date Sampled: 12/01/13

Date Received: 12/01/13

Classical Chemistry Parameters

Ammonia as N	12.3	mg/L	12/06/13	jc	SM 4500 NH3 E-1997	
Nitrate as N	24.0	mg/L	12/02/13	EV	SM 4110 B-2000	
Field pH	8.5	pH Units	12/01/13	Dan Halv	SM 4500 H + B	
Field Temperature	2.9	°C	12/01/13	Dan Halv	SM 2550 B	
Field DO	11.91	mg/L	12/01/13	Dan Halv	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
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Sample ID: SS-3A Grab
Lab No.: 3120101-03

Date Sampled: 12/01/13

Date Received: 12/01/13

Classical Chemistry Parameters

Ammonia as N	0.06	mg/L	12/06/13	jc	SM 4500 NH3 E-1997	
Nitrate as N	5.0	mg/L	12/02/13	EV	SM 4110 B-2000	
Field pH	8.5	pH Units	12/01/13	Dan Halv	SM 4500 H + B	
Field Temperature	3.4	°C	12/01/13	Dan Halv	SM 2550 B	
Field DO	12.48	mg/L	12/01/13	Dan Halv	SM 4500 O G	

Analysis Certified by:

Randall Wanke, Ph.D.

Randal Wanke, Laboratory Director



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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-4 Frozen Grab		Date Sampled: 12/01/13		Date Received: 12/01/13		
Lab No.: 3120101-04						
<i>Classical Chemistry Parameters</i>						

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-5 Grab		Date Sampled: 12/01/13		Date Received: 12/01/13		
Lab No.: 3120101-05						
<i>Classical Chemistry Parameters</i>						

Ammonia as N	2.16	mg/L	12/06/13	jc	SM 4500 NH3 E-1997	
Nitrate as N	13.7	mg/L	12/02/13	EV	SM 4110 B-2000	
Field pH	7.9	pH Units	12/01/13	Dan Halv	SM 4500 H + B	
Field Temperature	6.4	°C	12/01/13	Dan Halv	SM 2550 B	
Field DO	15.3	mg/L	12/01/13	Dan Halv	SM 4500 O G	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: SS-6 Grab		Date Sampled: 12/01/13		Date Received: 12/01/13		
Lab No.: 3120101-06						
<i>Classical Chemistry Parameters</i>						

Ammonia as N	4.77	mg/L	12/06/13	jc	SM 4500 NH3 E-1997	
Nitrate as N	13.7	mg/L	12/02/13	EV	SM 4110 B-2000	
Field pH	8.48	pH Units	12/01/13	Dan Halv	SM 4500 H + B	
Field Temperature	2.1	°C	12/01/13	Dan Halv	SM 2550 B	
Field DO	12.96	mg/L	12/01/13	Dan Halv	SM 4500 O G	