32N03. GW 71

1071

MM imm
logged in
computer

Robert Bucci, Consultant
3344 Wildwood Dr.
Niagara Falls, New York 14304
Phone 716 297-6772 Cell & 716 628-8208
Email: nia3344@verizon.net

32NO3

December 10, 2008

Mr. Mark Hans, PE
Regional Solid Materials Engineer
NYS Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

SUBJECT: UCAR Republic Landfill #32NO3

Dear Mr. Hans,

Please find enclosed a copy of the sampling results that were sent to Mary E. McIntosh, Engineering Geologist II of the New York State Department of Environmental Conservation Region 9 Office.

If you have any questions please feel free to call me at (716 628-8208.

Very truly yours,

Robert Bucci
Consultant

R. Bucci
enc.

Robert Bucci, Consultant
3344 Wildwood Dr.
Niagara Falls, New York 14304
Phone 716 297-6772 Cell & 716 628-8208
Email: nia3344@verizon.net

December 10, 2008

Reference No. 005513

Ms. Mary F. McIntosh
Engineering Geologist II
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Ms. McIntosh:

Re: Annual Monitoring Event 2007
UCAR Republic SWMF #32N03

The annual monitoring event for the above-referenced Site was conducted on September 2, 2008. The Site groundwater monitoring program was modified in November 2005 and currently consists of the following (excerpt from letter from C. Barron (CRA) to M. McIntosh (NYSDEC) dated November 4, 2005.):

> Annual sampling of seven wells (BW-1, BW-2, BW-3, BW-4, MW-3, GW-8B, and GW-9B) with analysis of the samples for Part 360 volatiles, ammonia, iron (total and soluble), potassium (total and soluble), zinc (total and soluble), nitrite, total kjeldahl nitrogen (TKN), turbidity, groundwater elevation, pH, specific conductance, and temperature. Monitoring is rotated between the spring and fall seasons such that one year sampling is conducted in the spring and the next year it will be conducted in the fall. Sampling is conducted once in each calendar year and reporting is submitted annually following receipt and review of the groundwater analytical data.

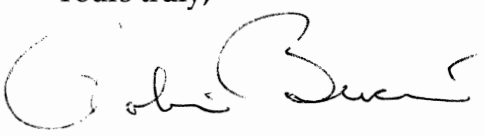
The sample collection and analyses were performed in accordance with the program outlined in the letters from M. McIntosh (NYSDEC) to R. Bucci (UCAR), dated January 18, 2000 and February 23, 2000. A sample collection and analysis summary is presented in Table 1 and water level elevations measured prior to well purging are presented in Table 2. The analytical laboratory report for this sampling event is enclosed and the data are summarized in Table 3.

December 10, 2008 Reference No. 005513

The analytical data from this monitoring event are consistent with the historical data.

The next groundwater monitoring event at the Site will be conducted in the Spring of 2009. Should you have any questions or require additional information, please do not hesitate to contact the undersigned at 716-628-8208.

Yours truly,



Robert Bucci
Site Consultant

Encl.

c.c.: M. Hans
M. Hinton
J. M. Bursley

CONESTOGA-ROVERS & ASSOCIATES

2371 George Urban Blvd.
Depew, New York 14043
Telephone: (716) 206-0202 Fax: (716) 206-0201
www.CRAworld.com

MEMORANDUM

TO: Jim Kay

REF. NO.: 005513

FROM: Susan Scrocchi/bjw/6 SCS

DATE: December 8, 2008
REVISED: December 10, 2008

E-Mail and Hard Copy If Requested

RE: **Analytical Results and QA/QC Review**
Annual Groundwater Monitoring Program
UCAR Carbon Company, Inc.
Niagara Falls, New York
September 2008

INTRODUCTION

Eight (8) groundwater samples and one quality control (QC) sample were collected during September 2008 in support of the annual monitoring program at the UCAR Carbon Site in Niagara Falls, New York (Site). The samples were submitted to Columbia Analytical Services (CAS), located in Rochester, New York, and analyzed for the following:

Parameter	*Methodology*
Volatile Organic Compounds (VOCs)	SW-846 8260B[1]
Total/Dissolved Iron, Potassium, and Zinc	SW-846 6010B[1]
Ammonia	USEPA 350.1[2]
Nitrite	USEPA 353.2[2]
Total Kjeldahl Nitrogen (TKN)	USEPA 351.2[2]

A sampling and analysis summary is presented in Table 1. The analytical results are summarized in Table 2. The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical methods and with the following guidance documents:

i) "National Functional Guidelines for Organic Data Review" (October 1999); and

ii) "National Functional Guidelines for Inorganic Data Review" (February 1994).

---

1 "Test Methods for Solid Waste Physical/Chemical Methods", SW-846, 3rd Edition, September 1986 (with all subsequent revisions).

2 "Methods for Chemical Analysis of Water and Wastes", United States Environmental Protection Agency (USEPA) 600/4-79-220, March 1983 (with all subsequent revisions).

Full Contract Laboratory Program (CLP) equivalent raw data deliverables were provided by the laboratory. The data were checked for QC outliers, but no recalculation of raw data was performed. The data quality assessment and validation presented in the following subsections were performed based on the sample results and supporting QA/QC provided. This includes calibration data, blank data, duplicates, matrix spikes, laboratory control samples, serial dilutions, surrogate recoveries, and retention time/internal standard results.

QA/QC REVIEW

All samples were prepared and/or analyzed within the method specified holding times. All samples were properly preserved and cooled to 4°C(±2°C) after collection.

Initial and continuing calibration summary forms were reviewed. All method criteria for linearity and sensitivity were met.

Surrogates and internal standards were added to all samples, blanks, and QC samples prior to analysis of VOCs. All recoveries met the method criteria indicating acceptable analytical efficiency.

Method blanks were analyzed for all parameters. All results were non-detect with the exception of carbon disulfide at low concentrations. All positive carbon disulfide results were similar to the blank and were qualified as non-detect (see Table 3).

Blank spikes (BS) were prepared and analyzed for all parameters. All recoveries showed acceptable analytical accuracy.

Matrix spikes/matrix spike duplicates (MS/MSD) were analyzed for all parameters. All recoveries showed acceptable analytical accuracy and precision.

A trip blank was transported, stored, and analyzed with the investigative samples to identify potential cross-contamination of VOCs. Trip blanks were collected at the proper frequency, and all results were non-detect for the analytes of interest, with the exception of 2-butanone and carbon disulfide. All 2-butanone results were non-detect and would not have been impacted and all carbon disulfide results were previously qualified as non-detect due to method blank concentrations.

A field duplicate was collected and submitted "blind" to the laboratory for analysis as shown in Table 1. A comparison of the results showed good analytical and sampling precision.

CONCLUSION

Based on the preceding assessment, the data were acceptable for use with the qualifications noted.

TABLE 2

SAMPLE COLLECTION AND ANALYSIS SUMMARY
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

Well I.D.	Purge Date	Sample Date	One Well Volume (Gallons)	Total Volume Purged (Gallons)	Turbidity (NTU)	Analytical Parameters			Misc. (1) Parameters	Comments
						VOCs	Total Metals	Dissolved Metals		
MW-3	09/02/08	09/03/08	0.60	2.0	NM	x	x	x	x	
BW-1	09/02/08	09/02/08	8.5	25.5	75.2	x	x	x	x	
BW-2	09/02/08	09/02/08	6.9	20.4	128.8	x	x	x	x	
BW-3	09/02/08	09/02/08	3.7	11.1	6.9	x	x	x	x	MS/MSD
BW-4	09/02/08	09/02/08	5.5	16.5	5.8	x	x	x	x	
GW-8B	09/02/08	09/02/08	7.0	28.0	32.2	x	x	x	x	
GW-9B	09/02/08	09/02/08	6.4	19.2	5.8	x	x	x	x	

Notes:

(1) Nitrite, nitrogen, NO_2, ammonia, total kjeldahl nitrogen.

MS Matrix Spike.

MSD Matrix Spike Duplicate.

NM Not measured, insufficient volume for final reading.

NTU Nephelometric Turbidity Unit.

VOCs Volatile Organic Compounds.

TABLE 2

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

	Sample ID:	WG-5513-090208-001	WG-5513-090208-002	WG-5513-090208-003	WG-5513-090208-004	WG-5513-090208-005
	Location ID:	BW-2	GW-8B	BW-1	BW-3	GW-9B
	Collection Date:	*09/02/08*	*09/02/08*	*09/02/08*	*09/02/08*	*09/02/08*
Parameters	***Units***					
TCL Volatiles						
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	µg/L	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	1.6 J	5.0 U	3.3 J	5.0 U	5.0 U
Chloroform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	0.36 J	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	23	1.5 J	2.2 J	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	10 U	10 U	50 U	10 U	10 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	µg/L	10 U	10 U	50 U	10 U	10 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

	Sample ID:	WG-5513-090208-001	WG-5513-090208-002	WG-5513-090208-003	WG-5513-090208-004	WG-5513-090208-005
	Location ID:	BW-2	GW-8B	BW-1	BW-3	GW-9B
	Collection Date:	*09/02/08*	*09/02/08*	*09/02/08*	*09/02/08*	*09/02/08*
Parameters	***Units***					
TCL Volatiles (Cont'd.)						
Trichloroethene	µg/L	5.0 U	5.7	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	5.0 U	4.7 J	5.0 U	8.2	5.0 U
o-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
m/p-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Metals						
Iron (total)	mg/L	14.3	0.385	3.39	1.22	0.372
Potassium (total)	mg/L	5.62	5.51	4.71	3.73	3.95
Zinc (total)	mg/L	4.88	1.52	11.2	0.141	0.0200 U
Iron (dissolved)	mg/L	0.845	0.206	0.922	0.838	0.130
Potassium (dissolved)	mg/L	5.78	5.87	4.67	3.62	3.96
Zinc (dissolved)	mg/L	0.0200 U	0.271	0.0200 U	0.0413	0.0200 U
General Chemistry						
Ammonia	mg/L	0.489	0.0991	0.689	0.548	0.472
Nitrite	mg/L	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Total Kjeldahl Nitrogen	mg/L	1.18	0.381	1.21	1.04	0.944

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

	Sample ID:	WG-5513-090208-006	WG-5513-090208-007	WG-5513-090208-008
	Location ID:	BW-4	BW-4	MW-3
	Collection Date:	*09/02/08*	*09/02/08* *Duplicate*	*09/02/08*
Parameters	***Units***			
TCL Volatiles				
Acetone	µg/L	100 U	100 U	20 U
Benzene	µg/L	25 U	25 U	5.0 U
Bromodichloromethane	µg/L	25 U	25 U	5.0 U
Bromoform	µg/L	25 U	25 U	5.0 U
Bromomethane	µg/L	25 U	25 U	5.0 U
2-Butanone	µg/L	50 U	50 U	10 U
Carbon disulfide	µg/L	50 U	50 U	10 U
Carbon tetrachloride	µg/L	25 U	25 U	5.0 U
Chlorobenzene	µg/L	25 U	25 U	5.0 U
Chloroethane	µg/L	25 U	25 U	5.0 U
Chloroform	µg/L	6.0 J	5.2 J	5.0 U
Chloromethane	µg/L	25 U	25 U	5.0 U
Dibromochloromethane	µg/L	25 U	25 U	5.0 U
1,1-Dichloroethane	µg/L	25 U	25 U	5.0 U
1,2-Dichloroethane	µg/L	25 U	25 U	5.0 U
1,1-Dichloroethene	µg/L	2.8 J	2.9 J	5.0 U
cis-1,2-Dichloroethene	µg/L	580	540	5.0 U
trans-1,2-Dichloroethene	µg/L	4.0 J	2.8 J	5.0 U
1,2-Dichloropropane	µg/L	25 U	25 U	5.0 U
cis-1,3-Dichloropropene	µg/L	25 U	25 U	5.0 U
trans-1,3-Dichloropropene	µg/L	25 U	25 U	5.0 U
Ethyl benzene	µg/L	25 U	25 U	5.0 U
2-Hexanone	µg/L	50 U	50 U	10 U
Methylene chloride	µg/L	25 U	25 U	5.0 U
4-Methyl-2-pentanone	µg/L	50 U	50 U	10 U
Styrene	µg/L	25 U	25 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.8 J	25 U	5.0 U
Tetrachloroethene	µg/L	86	79	5.0 U
1,1,1-Trichloroethane	µg/L	25 U	25 U	5.0 U
1,1,2-Trichloroethane	µg/L	25 U	25 U	5.0 U
Toluene	µg/L	25 U	25 U	5.0 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

	Sample ID:	WG-5513-090208-006	WG-5513-090208-007	WG-5513-090208-008
	Location ID:	BW-4	BW-4	MW-3
	Collection Date:	*09/02/08*	*09/02/08*	*09/02/08*
			Duplicate	
Parameters	***Units***			
TCL Volatiles (Cont'd.)				
Trichloroethene	µg/L	320	300	5.0 U
Vinyl chloride	µg/L	100	100	5.0 U
o-Xylenes	µg/L	25 U	25 U	5.0 U
m/p-Xylenes	µg/L	25 U	25 U	5.0 U
Metals				
Iron (total)	mg/L	18.3	18.6	35.0
Potassium (total)	mg/L	19.7	20.2	6.92
Zinc (total)	mg/L	2.55	2.87	0.179
Iron (dissolved)	mg/L	4.57	4.94	1.58
Potassium (dissolved)	mg/L	19.3	19.4	2.08
Zinc (dissolved)	mg/L	0.0513	0.138	0.0200 U
General Chemistry				
Ammonia	mg/L	3.62	3.66	0.0655
Nitrite	mg/L	0.0500 U	0.0500 U	0.0100 U
Total Kjeldahl Nitrogen	mg/L	4.65	4.37	0.774

Notes:
- Not applicable.
J Estimated.
TCL Target Compound List
U Not detected.

TABLE 3

HYDRAULIC MONITORING
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK
SEPTEMBER 2008

Well I.D.	*TOC Elevation (Ft. AMSL)*	*Depth to Water (Ft. BTOC)*	*Water Level Elevation (Ft. AMSL)*	*Sounded Depth (Ft. BTOC)*	*Installed Depth (Ft. BTOC)*
MW-3	601.89	11.48	590.41	15.24	14.4
BW-1	610.72	15.13	595.59	26.00	35.9
BW-2	608.43	13.94	594.49	24.63	37.1
BW-3	604.72	13.48	591.24	23.45	22.7
BW-4	607.08	13.10	593.98	21.28	27.5
GW-8B	603.90	10.68	593.22	29.48	29.5
GW-9B	603.40	14.73	588.67	31.98	31.7

Notes:

AMSL	Above Mean Sea Level.
BTOC	Below Top of Casing.
Ft.	Feet.
NM	Not Measured.

(88)

Daily Log

9 2 08 Sunny 65-80°F
Calm

0900 SG/DJT on-site get site keys start a/c Round

0930 PURGE AND SAMPLE GW-8B
DRY DRY MW-3
PURGE AND SAMPLE BW-2, BW-1
BW-3, GW-9B, BW-4

ATTEMPTED TO SAMPLE MW-3 STILL DRY TRY TOMORROW

1510 OFFSITE

(89)

Calibration Log

9/2/08

YSI MDS 650 Inst Control
NF 04441 calibrated

	Before Cal.	After Cal
cond (4.49)	4.48	4.47
pH 7.00	7.04	7.00
pH 4.00	3.93	4.00
Turb (0)	0.4	-0.5
Turb (100)	100.1	100.0

9/3/08 YSI MDS 650
calibrated as above

	Before Cal	After Cal
Cond (4.49)	4.48	4.47
pH (7.00)	6.97	7.00
pH (4.00)	3.96	4.00
Turb (0)	-0.2	0.0
Turb (100)	100.0	100.0

Jason Thurn

(90)

Hydraulic Monitoring

Date 9.2.08 Crew SG/DJT

Project # 5513.02

Well #	Time	w/L	Sounded Depth
MW 3	1005	11.48	15.24
BW 1	0920	16.13	26.00
BW 2	1037	13.94	24.63
BW 3	0941	13.48	23.45
BW 4	0938	13.10	21.28
GW 8B	0911	10.68	29.48
GW 9B	1025	14.73	31.98
MW 1	0931	10.03	21.11
MW 2	1035	19.41	24.60
BW 5	0949	9.98	25.83
BW 6	1030	17.47	26.10

Inst. Control #

w/L Meter NF04417

Jason Nadeau

SEE PAGE 104 FOR SAMPLE RECORD

MW-3

DATE 9-2-08

PROJECT 5513.20

CONDITION GOOD

DEPTH. 15.24

INITIAL W/L 11.48

VOL. CALC. 15.24-11.48 = 3.76 x .16 = 0.6 Gal

METHOD: ~~WATER PUMP~~ TEFLON BAILER

PURGE RECORD

TIME	VOL	PH	COND.	TEMP	TURB.
10.07	0.60	6.76	0.421	15.12	[illegible]
10.12	1.2	7.38	0.475	12.91	1245
10.15	1.26	7.78	0.480	12.32	[illegible]

WELL DRY @ 2 GALLONS

INITIAL W/Q CLOUDY, RED BROWN SEDIMENTS

FINAL W/Q CLOUDY BROWN

FINAL W/L DRY

Jason Nadeau

(92)

BW-2

DATE 9-2-08 CREW SA/DJT
PROJECT # 5513-02
CONDITION - GOOD
DEPTH 24.63
INITIAL W/L 13.94
VOL CALC. 24.63 - 13.94 = 10.69 x .65 = 6.9 ~~x .16 = 1.71~~
METHOD WHALE PUMP

PURGE RECORD

TIME	VOL	PH	COND	TEMP	TURB
1048	~~6.9~~ 13.5	6.93	2.58	11.2	48.1
1049	~~3.42~~ (20)	6.88	2.60	10.6	70.4
1050	~~6.12~~ (30) 20.4	6.86	2.60	10.7	35.3

INITIAL W/Q CLOUDY, BLACK

FINAL W/Q CLEARS, COLORLESS

FINAL W/L 14.16

(93)

SAMPLE RECORD

DATE 9-2-08
CREW SA/DJT
METHOD DEDICATED BAILER

VOL/ANALYSIS SEE PAGE 28

SAMPLE TIME: 1105
SAMPLE ID: WEA-5513-090208-JB1

W/Q CLOUDY BROWN

PH	COND	TEMP	TURB
7.22	2.64	12.0	12.0

COC # 17070

INST. CONTROLS
W/L METER NF 04417
YSI - NF 04441

(94)

GW-8B

DATE 9-2-08
PROJECT# 5513-02
CONDITION GOOD
DEPTH 29.48
INITIAL W/L 10.68
VOL CALC. 29.48 - 10.68 = 18.8 x .37 = 7
METHOD: WHALE PUMP

PURGE RECORD

TIME	VOL	PH	COND.	TEMP	TURB
1125	7.0	7.99	1.84	12.0	49.0
1130	14.0	7.52	1.82	11.1	56.4
1135	21.0	7.21	1.78	10.6	110.6
1141	28.0	7.30	1.80	10.7	42.3

INITIAL W/Q CLEAR, COLORLESS

FINAL W/Q Same

FINAL W/L 26.3

(95)

Sample Record

Date 9-2-08
Crew SG/DJT
Method Dedicated Tef. Bailer

Lbl/Analyses See Pg 28C

Sample Time 1145
Sample ID WG-5513-090208-002

W/Q CLEAR, COLORLESS

pH	Cond	Temp	Turb
7.21	1.78	10.6	Silt

CofC # 17670

Inst Control #'s
W/L Meter NF04447
YSI NF04441

Sampler

(96)

BCW-1

Date 9-2-08 Crew DJT/SG

Project # 5513-02

Condition Good

Depth 4"o- 20.9 3" 20.9 - 35.9

Initial w/L 15.13

Vol. Calc 20.9 - 15.13 = 5.77 x .65 = 3.75

4.75 + 3.75 = 8.5

Method Whale Pump

Purge Record

Time	Vol	pH	Cond	Temp	Turb
1218	8.5	7.74	1.80	11.7	45.5
1222	17.0	7.82	1.74	11.0	18.0
1227	25.5	7.57	1.72	11.2	6.2

Initial WQ cloudy, dark gray

Final WQ clear, colorless

Final w/L 17.68

(97)

SAMPLE RECORD

DATE 9-2-08

CREW DJT/SG

METHOD DEDICATED TEFLON BAILER

VOL/ANALYSIS SEE PAGE 28C

SAMPLE TIME 1245

SAMPLE ID WG5513-090208-003

W/Q CLEAR, COLORLESS FINE BROWN SEDIMENTS

pH	Cond	Temp	Turb
7.58	1.73	11.5	75.2

COFC # 17670

INST CONTROLS #

W/L METER NF04417

YSI NF04441

Shawn Mundell

(98)

BW-3

DATE 9-2-08 CREW DJT/SG

PROJECT: 5513-02

CONDITION: GOOD

DEPTH: 23.45

INITIAL W/L: 13.48

VOL CAL: 23.45 - 13.48 = 9.93 x .37 = 3.7

METHOD: WHALE PUMP

PURGE RECORD

TIME	VOL	PH	COND	TEMP	TURB
1250	3.70	7.42	1.77	11.3	0.4
1251	7.40	7.32	1.75	10.4	2.3
1252	11.1	7.30	1.75	10.3	0.6

INITIAL WQ CLEAR, COLORLESS

FINAL WQ CLEAR, COLORLESS

FINAL W/L 13.58

(99)

SAMPLE RECORD MS/MSD

DATE 9-2-08

CREW DJT/SG

METHOD DEDICATED TEFLON BAILER

VOL/ANALYSIS SEE PAGE 28C

SAMPLE TIME: 1305

SAMPLE ID: WG-5513090208-004

W/Q CLEAR, COLORLESS

PH	COND	TEMP	TURB
7.48	1.77	11.8	6.9

C of C # 17670

INST CONTROL #S

W/L METER NF04417

YSI NF04441

Shawn Marshall

GW-9B

DATE 9-2-08 CREW DJT/SG
PROJECT 5513-02
CONDITION GOOD
DEPTH 31.98 3"
INITIAL W/L 14.73
VOL CALC. 31.98 - 14.73 = 17.25 x .37 = 6.4

METHOD: WHALE PUMP

PURGE RECORD

TIME	VOL	PH	COND	TEMP	TURB
1345	6.4	7.09	2.64	11.9	4.7
1348	12.8	6.99	2.65	11.1	1.0
1353	19.2	6.93	2.66	10.7	0.8

INITIAL W/Q CLEAR, COLORLESS

FINAL W/Q SAME

FINAL W/L 22.09

SAMPLE RECORD

DATE 9-2-08
CREW DJT/SG
METHOD: DEDICATED TEFLON BAILER

VOL/ANALYSIS SEE PAGE 28C

SAMPLE TIME: 1400
SAMPLE ID: WG-5513-090208-005

W/Q - CLEAR, COLORLESS

PH	COND	TEMP	TURB
7.25	2.68	10.9	5.8

COC # 17670

INST CONTROL #S
W/L METER NF04417
YSI NF04441

Shawn Chidester

(102)

SAMPLE RECORD MW-3

DATE 9-3-08

CREW DJT/SG

METHOD DEDICATED TEFLON BAILER

VOL/ANALYSIS SEE PAGE 28C

SAMPLE TIME 0800

SAMPLE ID WG5513-090308-008

W/C: CLOUDY, BROWN

PH	COND	TEMP	TURB

INSUFFICIENT VOLUME FOR FINAL READINGS

COFC # 17670

INST CONTROL #'S

W/L METER - NF04417

YSI NF04441

Shawn Gardner

(103)

(104)

BW-4

DATE 9-2-08 CREW DJT/SG
PROJECT 5513-20
CONDITION GOOD
DEPTH 21.28
INITIAL W/L 13.10
VOL CALC. 13.9 - 13.1 = .8 x .65 = .5
27.5 - 13.9 = 13.6 x .37 = 5 GAL = 5.5
METHOD: WHALE PUMP

PURGE RECORD

TIME	VOL	PH	COND	TEMP	TURB
1424	5.5	7.40	1.99	11.5	59.8
1425	11.0	6.99	1.90	10.9	16.2
1428	16.5	6.90	1.83	10.8	5.9

INITIAL W/Q CLOUDY BROWN

FINAL W/Q CLEAR COLORLESS

FINAL W/L 14.10

(105)

SAMPLE RECORD

DLIP

DATE 9-2-08
CREW DJT/SG
METHOD DEDICATED TEFLON BAILER

VOL/ANALYSIS SEE PAGE 28C

SAMPLE TIME: 1445
SAMPLE ID: WG-5513-090208-006
BLIND DUP ID: WG 5513-090208-007 TIME 1500
W/Q - CLEAR COLORLESS, RED BROWN SEDIMENTS

PH	COND	TEMP	TURB
7.33	1.86	12.0	5.8

COFC # 17670

INST CONTROL #S
W/L METER NF 04417
YSI NF 04441