ANNUAL GROUNDWATER MONITORING REPORT

CALENDAR YEAR 2016

DANSKAMMER POINT GENERATING STATION SOLID WASTE MANAGEMENT FACILITY

Prepared for

Danskammer Energy, LLC
Newburgh, New York

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Dynegy Northeast Generation, Inc. formerly operated the Danskammer Generating Station located in Newburgh, New York. The Danskammer Generating Station has been offline since October 2012 after sustaining damage during Hurricane Sandy. Prior to October 2012 coal combustion wastes generated by the coal-fired generating units were transported off site for beneficial reuse, or alternatively placed within the on-site Solid Waste Management Facility (SWMF) Phase III cell. The Danskammer Generating Station was sold in November 2013 to Danskammer Energy, LLC with the intent of repowering the facility.

The SWMF consists of three ash disposal cells with a leachate and runoff control system directed to two sedimentation basins. The Phase I cell was constructed in 1987 utilizing a single liner system. Closure and capping of the Phase I cell was completed during 1993 in accordance with the requirements set forth in 6 NYCRR Part 360. The Phase II cell was constructed in early 1992 utilizing a double composite-liner system with primary and secondary leachate collection systems. The Phase II cell is no longer active for ash placement, and has been partially closed. Construction of the Phase III cell began in April 2005 and was completed in February 2006. The Phase III expansion also utilizes a double composite-liner system with primary and secondary leachate collection systems. The Phase III cell is presently the only active SWMF cell.

The monitoring program, as set forth in the Environmental Monitoring Plan (EMP) prepared in March 2005, addresses both the requirements of 6 NYCRR Part 360 and special monitoring conditions No 35 and No 36 detailed in the SWMF Permit to Operate. The EMP was updated as part of the 2005 Renewal Application for a Permit to Operate[1] the facility, and incorporates procedures for monitoring the three monofill cells (Phase I, Phase II, and Phase III). A Permit to Operate renewal application was submitted to NYSDEC in April 2010 and has been administratively renewed pending final approval.

The purpose of this report is to characterize SWMF groundwater quality in the perched/deep overburden and bedrock units during the fourth quarter of 2016 and present annualized results for 2016 in accordance with the requirements of the EMP. The key findings are summarized below:

Groundwater Quality

Based on the evaluation of the SWMF groundwater data collected during 2016, no significant impact on groundwater quality as a result of operation of the SWMF was detected. The data evaluation included the comparison of groundwater analytical results with site-specific operational trigger values (OTVs) and statistical trigger values (STVs) presented in the SWMF-EMP, as well as NYSDEC Groundwater Quality Standards and Guidance Values.

The results of the overburden intrawell analysis and the bedrock interwell analysis, as detailed in the 2005 EMP, have demonstrated that the groundwater quality within the perched/deep overburden and bedrock water bearing units exhibits stability and that the OTV exceedances are not specific to the leachate indicator parameters. The evaluations performed on the data collected during Quarter 4, 2016 continue to indicate no impact to groundwater quality attributable to operation of the SWMF.

[1] The renewed operating permit became effective on October 3, 2005, and remains in effect until October 2010. The revised (March 2005) EMP outlined a plan to abandon certain contingency wells and historically dry wells and consolidate the SWMF monitoring program.

Leachate Quality

The results of the water quality monitoring program continue to demonstrate that during 2016, the secondary leachate collection system has not been impacted by the primary leachate collection system (PLCS). No coal indicator parameters were reported in the secondary leachate collection system at or near the detection limits typically reported in the PLCS sample.

1 INTRODUCTION

1.1 Purpose of Report

This report summarizes analytical results from the groundwater monitoring program at Danskammer Energy, LLC's (Danskammer) SWMF for the fourth quarter of program year 2016 and presents annualized groundwater quality results and trends for 2016.

The SWMF monitoring program is a modification of the Part 360 routine and baseline parameter lists developed to monitor water quality for constituents of concern associated with coal ash at Danskammer. The fourth quarter 2016 groundwater samples were analyzed for routine parameters specified in the EMP. With this report the water quality monitoring schedule (Table 4 of the EMP) is complete through fourth quarter 2016 per the March 2005 EMP. The EMP provides a protocol for comparing SWMF groundwater quality data to specific operational trigger values for each monitored constituent.

Consistent with the EMP (Sec. 3.1.1 Evaluation Methodology), water quality trigger values for the SWMF were established by parameter for overburden intrawell comparison and upgradient bedrock-derived interwell comparison. A "significant increase" from existing water quality has occurred if: 1) the groundwater quality for any parameter exceeds the existing water quality for that parameter by three standard deviations referred herein as "Statistical Trigger Value" or "STV"; or 2) the groundwater quality exceeds the existing water quality referred to herein as the "Operational Trigger Value" or "OTV" and exceeds the New York State Groundwater Quality Standard (Part 701, 702, or 703). Trigger values were developed for both the overburden and the bedrock water bearing units at the SWMF as follows.

Overburden Monitoring Wells

Overburden monitoring well parameter analysis (perched and deep) is evaluated using intrawell comparison methods based on observed well–specific values over time. This evaluation establishes a rolling STV for each individual overburden monitoring well.

Existing water quality or OTV is calculated as the arithmetic mean of five prior years of data on an individual monitoring well basis, assuring that the data are normal and uniform. STV is defined as three standard deviations above the average existing water quality of each parameter at each well. This methodology establishes a STV, the exceedance of which would initiate implementation of the contingency water quality monitoring plan if the owner/operator determines there was a significant increase relative to existing water quality.

This published methodology incorporates intrawell analysis as the statistical approach, which is fundamentally different from interwell analysis. While interwell analysis compares compliance wells to background upgradient water quality, the intrawell analysis compares each compliance well against a background composed of its own historic data. The intrawell analysis does not require that the hydrogeologic conditions be contiguous and uniform throughout the site and that all wells are screened in the same interval. This is because the intrawell analysis monitors trends over time at a given well instead of changes among wells.

Bedrock Monitoring Wells

Bedrock monitoring wells are evaluated via interwell comparison relative to a database developed using three standard deviations from the mean from upgradient monitoring wells DW-1R, DW-8R, and DW-9R for three prior years to yield the STV for the bedrock unit.

As set forth in the SWMF's permit to operate, analytical data for boron, sulfur, sulfate and total dissolved solids (TDS) are presented in the Annual Report as charts of time versus concentration from all of the monitoring wells sampled during the year to demonstrate changes or trends in concentrations.

The contingency program pursuant to Part 360-2.11(c)(5)(iii) provides guidance when a constituent is identified above the STV levels. In such circumstances, trilinear diagrams may be prepared for both groundwater and leachate collection system samples to illustrate the relative concentrations of the major cations (calcium, magnesium, and sodium+potassium) and the major anions (sulfate, chloride, and carbonate+bicarbonate).

1.2 Monitoring Network

Eighteen (18) monitoring wells (three perched overburden wells, six deep overburden wells and nine bedrock wells) comprise the groundwater monitoring network at the Danskammer SWMF. The network includes wells screened in both the perched and deep overburden units, and in the underlying bedrock as summarized on Figure 1-1 – SWMF Groundwater Monitoring Plan and in Table 1-1 – Monitoring Status. The following summarizes the groundwater monitoring network relative to the screened unit location, and vertical and horizontal position of each well to the SWMF with 2005 designations.

Perched Overburden Monitoring Wells

- DW – 3P Downgradient - Southeast
- DW – 4P Downgradient - South
- DW – 7P Crossgradient - West

Deep Overburden Monitoring Wells

- DW – 2D Downgradient - Southeast
- DW – 3D Downgradient - Southeast
- DW – 4D Downgradient - South
- DW – 5D Downgradient - South
- DW – 6D Downgradient - South
- DW – 7D Crossgradient - Southwest

Bedrock Monitoring Wells

- DW – 1R Crossgradient - East
- DW – 2R Downgradient - Southeast
- DW – 3R Downgradient - Southeast
- DW – 4R Downgradient - South
- DW – 5R Downgradient - South
- DW – 6R Downgradient - South

- DW – 7R Crossgradient - Southwest
- DW – 8R Upgradient - Northwest
- DW – 9R Upgradient - North

Leachate generation is monitored and periodically collected at eight (8) locations around the SWMF, as depicted on Figure 2-1 – SWMF Leachate and Water Monitoring Plan. Monitoring points associated with the facility's leachate collection system include:

Phase I Components

- The Phase I Groundwater Interceptor Drain (P1-GID) is monitored daily for flow;
- The Phase I Underdrain (P1-UD) is monitored daily for flow; and
- The Phase I Cell has a Part 360 cap which is monitored to confirm that runoff is directed to the concrete perimeter collection trench.

Phase II Components

- The Phase II Primary Leachate Collection System (P2-PLCS), which collects the Phase II leachate is monitored daily for flow;
- The Phase II Secondary Leachate Collection System (P2-SLCS-E and P2-SLCS-W) is monitored daily for flow; and
- The Phase II Subgrade Stabilization System (P2-SSS) is monitored daily for flow.

Phase III Components

- The Phase III expansion is designed to monitor leachate in the same manner as the Phase II Cell, through a primary and secondary leachate collection and conveyance system (P3-PLCS and P3-SLCS, respectively); and
- The Phase III liner overlays a portion of the Phase I and Phase II Cells. Phase III leachate is diverted to the existing sediment basins for treatment and ultimate discharge through Danskammer SPDES Outfall No. 019.

1.3 Fourth Quarter Monitoring Status

Table 1-1 summarizes groundwater elevations (as field measured) for all monitored SWMF locations and their associated sampling status during the fourth quarter of 2016. Nine of the SWMF groundwater monitoring wells were sampled as part of the quarterly event. Samples for the fourth quarter monitoring period were obtained in December 2016 from the groundwater monitoring wells at the SWMF containing sufficient volume for water sampling.

Based on a review of field conditions observed during the December 2016 sampling event, nine of the SWMF monitoring wells were either dry or contained an insufficient water volume to allow for the collection of groundwater samples; this group of consistently dry monitoring wells includes:

- Perched Overburden Monitoring Wells: DW-4P, and DW-7P.
- Deep Overburden Monitoring Wells: DW-2D, DW-3D, DW-4D, and DW-5D.
- Bedrock Monitoring Wells: DW-1R, DW-2R and DW-8R.

1.4 Tables

1-1 Monitoring Status

Table 1-1
MONITORING STATUS
DECEMBER 2016
DANSKAMMER ENERGY, L.L.C.
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Sample ID	Screened Interval	Sampling Status	Water Level Elevation (ft-amsl)
DW-3P	P	SAMPLED	99.40
DW-4P	P	DRY	NA
DW-7P	P	DRY	NA
DW-2D	P	DRY	NA
DW-3D	D	DRY	NA
DW-4D	D	DRY	NA
DW-5D	D	DRY	NA
DW-6D	D	SAMPLED	59.30
DW-7D	D	SAMPLED	56.10
DW-1R	R	DRY	NA
DW-2R	D	DRY	NA
DW-3R	R	SAMPLED	33.60
DW-4R	R	SAMPLED	38.40
DW-5R	R	SAMPLED	39.50
DW-6R	R	SAMPLED	44.30
DW-7R	R	SAMPLED	69.20
DW-8R	R	SAMPLED	103.60
DW-9R	R	DRY	NA
P2-PLCS	--------	NOT SAMPLED	NA
P2-SLCS-E	--------	NOT SAMPLED	NA
P2-SLCS-W	--------	NOT SAMPLED	NA
P3-PLCS		NOT SAMPLED	NA
P3-SLCS		NOT SAMPLED	NA
PI-SB	--------	NOT SAMPLED	NA
PII-SB	--------	NOT SAMPLED	NA
SSS	--------	NOT SAMPLED	NA
GID	--------	NOT SAMPLED	NA
P1-UD	--------	NOT SAMPLED	NA

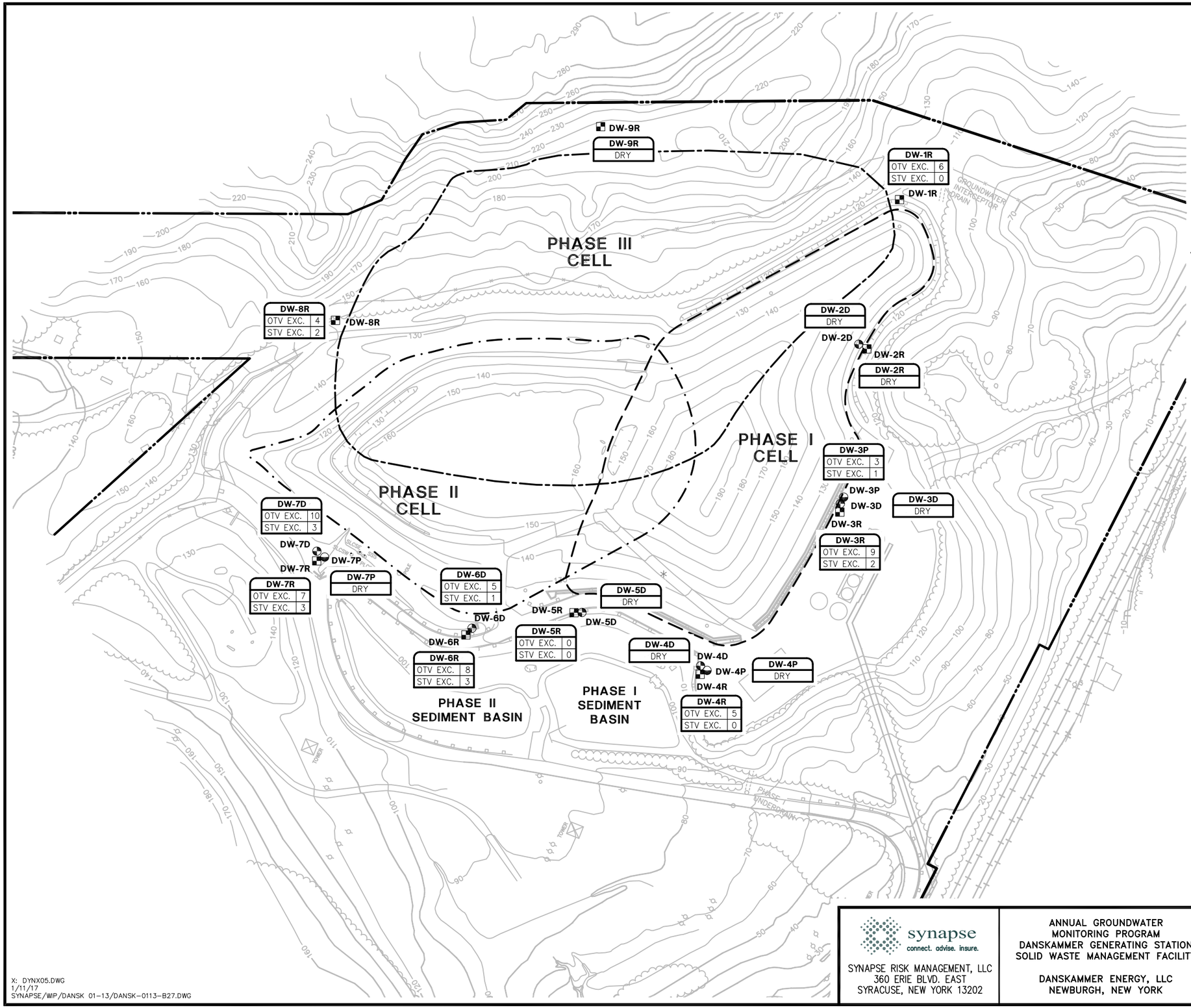
NOTES:

PLCS - Primary Leachate Collection System
SLCS-E - Secondary Leachate Collection System, East
SLCS-W - Secondary Leachate Collection System, West
PI-SB - Phase I Sedimentation Basin
PII-SB - Phase II Sedimentation Basin
SSS - Subgrade Stabilization System
GID - Groundwater Interceptor Drain
PI-UD - Phase I Under Drain
NA - not applicable
ND - Data not collected/unavailable
ft-amsl - feet above mean sea level

P = Perched Overburden Well
D = Deep Overburden Well
R = Bedrock Well

1.5 Figures

1-1 SWMF Groundwater Monitoring Plan



LEGEND:

- 70 — TOPOGRAPHIC CONTOUR
- ACCESS ROADWAY
- DRAINAGE CHANNEL
- GUIDERAIL
- FENCE
- PROPERTY BOUNDARY
- CULVERT
- STRUCTURES/TANKS
- POWER POLE
- DW-3P — PERCHED OVERBURDEN MONITORING WELL
- DW-3D — DEEP OVERBURDEN MONITORING WELL
- DW-3R — BEDROCK MONITORING WELL

DECEMBER 2016 SAMPLE EVENT RESULTS:

DW-7D	
OTV EXC.	6
STV EXC.	1

WELL ID
OPERATIONAL TRIGGER VALUE EXCEEDANCES
STATISTICAL TRIGGER VALUE EXCEEDANCES

DW-7P
DRY

WELL ID
INSUFFICIENT GROUNDWATER TO ALLOW FOR SAMPLE COLLECTION

NOTES:

1. BASE MAP MODIFIED FROM ELECTRONIC FILE BY SHAW EMCON/OWT, INC. DRAWING ENTITLED "GROUNDWATER MONITORING SYSTEM", 2003.
2. WELL LOCATIONS HAVE BEEN MOVED SLIGHTLY FOR CLARITY.

0 200' 400'
GRAPHIC SCALE

X: DYNX05.DWG
1/11/17
SYNAPSE/WIP/DANSK 01-13/DANSK-0113-B27.DWG

synapse
connect. advise. insure.

SYNAPSE RISK MANAGEMENT, LLC
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

ANNUAL GROUNDWATER MONITORING PROGRAM
DANSKAMMER GENERATING STATION
SOLID WASTE MANAGEMENT FACILITY

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

SWMF GROUNDWATER MONITORING PLAN

PROJECT NO.: DANSK 01.15.01
DATE: JANUARY 2017
FIGURE NO.: 1-1

2 ANALYTICAL RESULTS

Laboratory analytical results from the overburden and bedrock groundwater monitoring wells for the fourth quarter 2016 are presented in Table 2-1 – Overburden Groundwater Quality Data and Table 2-2 – Bedrock Groundwater Quality Data, respectively. Analyses were performed for SWMF "baseline" parameters as outlined in Table 4 of the EMP.

In addition to the laboratory analytical results, Tables 2-1 and 2-2 present the OTVs and STVs referenced in the EMP as well as the NYSDEC ambient water quality standards and guidance values. Exceedances of the OTV are identified on the water quality tables, as are STV exceedances.

2.1 Overburden Water Quality

A total of three overburden wells were sampled at the SWMF during the fourth quarter of 2016. Laboratory analytical results for groundwater samples collected from the overburden wells are presented in Table 2-1.

Overburden groundwater analytes reported at concentrations exceeding the OTVs and STVs are summarized as follows:

OTV Exceedances

Monitoring Well DW-3P

- Calcium, magnesium and barium.

Monitoring Well DW-6D

- Magnesium, chloride, hardness, sodium and turbidity.

Monitoring Well DW-7D

- Calcium, magnesium, alkalinity, potassium, chloride, hardness, sodium, sulfate, TDS and zinc.

STV Exceedances

Monitoring Well DW-6D

- Chloride.

Monitoring Well DW-7D

- Calcium, chloride and hardness.

In general, OTVs reported during the fourth quarter 2016 were less than the STV calculated values based on the intrawell comparisons. The OTV exceedances observed during the fourth quarter 2016 for the above referenced monitoring wells are further discussed in Section 3 – Groundwater Quality Summary Fourth Quarter. There were five STV exceedances during the fourth quarter sampling event. Barium was detected at 0.065 mg/L at monitoring well DW-3P, exceeding the STV value of 0.052 mg/L for this intrawell location. Chloride was detected at 35.8 mg/L, at monitoring well DW-6D, exceeding the STV value of 32 mg/L for this intrawell location. Calcium was detected at 154 mg/L, chloride was detected at 141 mg/L and hardness was detected at 648 mg/L at monitoring well DW-7D, exceeding the STV values of 135 mg/L, 96 mg/L and 611 mg/L, respectively for the intrawell location. The STV exceedances in DW-6D and DW-7D are likely attributable to the elevated TDS and hardness levels measured in these samples.

2.2 Bedrock Water Quality

A total of six bedrock monitoring wells were sampled at the SWMF during the fourth quarter of 2016. Laboratory analytical data from the bedrock wells are presented in Table 2-2. The fourth quarter 2016 results indicated that a number of monitoring wells screened in the bedrock exhibited analyte concentrations above the OTV. Historically, exceedances of the NYSDEC groundwater standards detected at the SWMF have been reported in both upgradient and downgradient wells, suggesting that elevated levels of these analytes may reflect local background groundwater quality. The analyte concentrations exceeding the OTVs and STVs in downgradient bedrock wells during the fourth quarter 2016 sampling event include the following monitoring wells:

OTV Exceedances

Monitoring Well DW-3R

- Boron, potassium, selenium, hardness, sodium, sulfate, sulfur, TDS and turbidity.

Monitoring Well DW-4R

- Boron, chloride, hardness, sulfate and TDS.

Monitoring Well DW-6R

- Boron, magnesium, selenium, chloride, hardness, sodium, sulfate and TDS.

Monitoring Well DW-7R

- Magnesium, selenium, alkalinity, chloride, hardness, TDS and zinc.

Monitoring Well DW-8R

- Magnesium, selenium, alkalinity and hardness.

STV Exceedances

Monitoring Well DW-3R

- Boron and selenium.

Monitoring Well DW-6R

- Magnesium, selenium, hardness and TDS.

Monitoring Well DW-7R

- Magnesium, selenium and hardness.

Monitoring Well DW-8R

- Magnesium and selenium.

In general, the OTV values reported during the fourth quarter 2016 were less than the STV calculated values based on the upgradient groundwater derived interwell data. The OTV exceedances observed during the fourth quarter 2016 for the above referenced monitoring wells are further discussed in Section 3 – Groundwater Quality Summary Fourth Quarter. There were ten STV exceedance from sample collected from bedrock monitoring wells during the fourth quarter sampling event. Monitoring well DW-3R had two STV exceedances, Boron was detected at 2.86 mg/L and selenium as detected at 0.147 mg/L, which exceeded the STV of 1.05 mg/L and 0.009 mg/L, respectively. Monitoring well DW-6R had three STV exceedances, magnesium was detected at 80.2 mg/L, hardness was detected at 852 mg/L and TDS was detected at 685 mg/L, which exceeded the STVs of 69 mg/L, 830 mg/L and 668 mg/L, respectively. Monitoring well DW-7R had three STV exceedances, magnesium was detected at 94.1 mg/L, selenium was detected at 0.011 mg/L and hardness was detected at 877 mg/L, which exceeded the STVs of 69 mg/L, 0.009 mg/L and 830 mg/L, respectively. Monitoring well DW-8R had two STV exceedances, magnesium was detected at 86.4 mg/L and selenium was detected at 0.022 mg/L, which exceeded the STVs of 69 mg/L and 0.009 mg/L, respectively.

2.3 Quality Assurance/Quality Control

Quality Assurance/Quality Control (QA/QC) samples analyzed for the 2016 fourth quarter groundwater sampling event included field and method blanks, and a blind duplicate sample (DUP) collected from monitoring well DW-7D. No occurrences of laboratory contamination or problems with sample handling were identified in the laboratory narratives. A comparison of the analytical results and duplicate samples indicates that the data are within the expected range of reproducibility.

2.4 Summary of 2016 Results

Overburden Groundwater Quality

The analytical results from groundwater samples collected during 2016 demonstrated certain OTV and STV exceedances from three overburden intrawell locations (DW-3P, DW-6D and DW-7D). The OTV and STV exceedances identified at the overburden intrawell well locations during 2016 demonstrated occasions of statistically significant concentrations by Part 360 definition. The statistically significant OTV and STV exceedances identified during 2016 were evaluated and compared to the indicator parameters present in the primary leachate and results of subsequent monitoring events to determine potential impact from the SMWF leachate. Based on results of each quarterly evaluation, it was determined that the OTV and STV exceedances were not elevated in comparison to the SMWF leachate or subsequent monitoring events and likely attributable to field sampling procedures and natural variation in groundwater quality. No contingency monitoring was conducted in 2016. The analytical results for first quarter 2016 through third quarter 2016 are provided in Appendix B – Quarterly Water Quality Data.

Bedrock Groundwater Quality

The analytical results from groundwater samples collected during 2016 demonstrated certain OTV and STV exceedances from four bedrock interwell locations (DW-3R, DW-6R, DW-7R and DW-8R). The OTV and STV exceedances identified at the bedrock interwell well locations during 2016 demonstrated occasions of statistically significant concentrations by Part 360 definition.

The statistically significant OTV and STV exceedances identified during 2016 were evaluated and compared to the indicator parameters present in the primary leachate and results of subsequent monitoring events to determine potential impact from the SMWF leachate. Based on results of each quarterly evaluation it was determined that the OTV and STV exceedances were not elevated in comparison to the SMWF leachate or subsequent monitoring events and likely attributable to field sampling procedures and natural variation in groundwater quality. No contingency monitoring was conducted in 2016. The analytical results for first quarter 2016 through third quarter 2016 are provided in Appendix B – Quarterly Water Quality Data.

Leachate

Analytical data from the P2-PLCS in 2016 were consistent with historical observations and concentrations in the SWMF leachate of sulfate ranging from 1730 to 1830 mg/l, TDS at 2960 to 3050 mg/l, boron ranging from 27 to 35.6 mg/l, and selenium ranging from 1.21 to 1.24 mg/l. With the exception of TDS, the metals detected in the P2-PLCS (sulfate, boron and selenium) are not typically present in the upgradient or downgradient monitoring wells, and provide a good indicator of coal ash impact on leachate quality.

The phase one sediment basin P1-SB and the phase two sediment basin P2-SB were sampled in June and December 2016. The analytical results from the second and fourth quarters of 2016 indicated the presence of boron, chloride, selenium and sodium at elevated concentrations for the P1-SB and PS-SB locations. No flow was observed in both the Phase 2 and Phase 3 secondary leachate collection systems, suggesting that the SMWF liner system is functioning as designed.

2.5 Tables

2-1 Overburden Groundwater Quality Data – December 2016
2-2 Bedrock Groundwater Quality Data – December 2016
2-3 Leachate Collection System Data – December 2016

TABLE 2-1
OVERBURDEN GROUNDWATER QUALITY DATA
DECEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

ROUTINE

Monitoring Well ID		**DW-3P**			**DW-6D**			**DW-7D**		
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**12/14/2016**	**Operational**	**STV**	**12/13/2016**	**Operational**	**STV**	**12/13/2016**
Aluminum	-	0.683	1.86	<0.100	0.94	1.39	<0.100	0.33	0.81	<0.100
Arsenic	0.025	0.004	0.01	<0.005	0	0.01	<0.005	0.01	0.01	<0.005
Boron	1	0.240	0.63	<0.050	0.21	0.51	0.165	0.12	0.48	<0.050
Calcium	-	74	184	**58.4**	128	159	119	111	135	**154**
Iron	0.3	0.901	2.85	<0.050	0.73	2.71	0.104	0.44	1.19	<0.050
Magnesium	35	29	41	**35.9**	24	27	**26.6**	54	66	**63.9**
Manganese	0.3	0.153	0.55	<0.020	0.86	2.98	0.024	0.06	0.24	<0.020
Potassium	-	3	7	0.895	1.41	4.71	0.933	1.32	3.13	**1.46**
Selenium		0.016	0.05	<0.005	0	0.02	0.006	0.01	0.04	<0.005
Alkalinity	-	279	454	248	336	448	263	401	521	**425**
Bromide	-	1	1	<2	1	1	<1	1	1	<2
Chloride	250	7	30	2.24	21	32	**35.8**	64	96	**141**
Hardness	-	348	462	294	414	494	**407**	503	611	**648**
Sodium	20	7	13	2.75	8	13	**9.21**	25	42	**37.7**
Sulfate	250	59	183	35.5	81	117	72	67	98	**57.8**
Sulfur	-	30	70	11.8	31	42	24	28	56	19.3
Total Dissolved Solids	500	396	593	270	522	700	460	612	951	**725**
Carbonate	-	3	9	<1	3	9	<1	3	9	<1
Bicarbonate	-	287	477	248	344	462	263	415	533	425
Conductivity	-	1403	1403	566	1403	1403	757	1403	1403	1273
Turbidity	5	35	95	16	12	36	**19**	18	68	5

BASELINE

Monitoring Well ID		**DW-3P**			**DW-6D**			**DW-7D**		
Baseline Parameters	**NYSDEC Standard**	**Operational**	**STV**	**12/14/2016**	**Operational**	**STV**	**12/13/2016**	**Operational**	**STV**	**12/13/2016**
Antimony	0.003	0.006	0.01	<0.060	0.022	0.09	<0.060	0.03	0.115	<0.060
Barium	1	0.035	0.052	**0.065**	0.033	0.06	0.021	0.03	0.036	0.029
Beryllium	1	0.002	0.01	<0.005	0.002	0.01	<0.005	0.01	0.058	<0.005
Cadmium	0.003	0.003	0.01	<0.005	0.003	0.01	<0.005	0.01	0.01	<0.005
Chromium	0.05	0.003	0.01	<0.005	0.053	0.11	<0.005	0.01	0.01	<0.005
Hexavalent Chromium	0.05	0.014	0.03	<0.02	0.013	0.03	<0.02	0.01	0.03	<0.02
Cobolt	-	0.021	0.101	<0.050	0.029	0.09	<0.050	0.02	0.101	<0.050
Copper	0.2	0.005	0.008	<0.005	0.004	0.01	<0.005	0.005	0.008	<0.005
Lead	0.025	0.005	0.008	<0.005	0.007	0.02	<0.005	0.003	0.009	<0.005
Mercury	0.002	0.002	0.002	<0.0002	0.002	0.002	<0.0002	0.002	0.002	<0.0002
Nickel	-	0.009	0.039	<0.020	0.011	0.04	<0.020	0.04	0.01	<0.020
Silver	0.05	0.006	0.018	<0.010	0.006	0.02	<0.010	0.01	0.017	<0.010
Thallium	0.004	0.006	0.018	<0.010	0.006	0.02	<0.010	0.01	0.018	<0.010
Vanadium	-	0.009	0.039	<0.020	0.013	0.03	<0.020	0.01	0.039	<0.020
Zinc	0.3	0.009	0.2	<0.010	0.008	0.2	<0.010	0.01	0.2	**0.04**
Color	15	20	66	<5	11	31	<5	16	60	<5
Sulfide	0.05	0.082	0.203	<0.10	0.082	0.2	<0.10	0.08	0.203	<0.10
Cyanide	0.1	0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	<0.01

Notes:

1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. Overburden monitoring wells to be accessed utilizing Intrawell comparison.
5. Bolded cells indicate that the concentration is above the Operational Trigger Value.
6. Shaded cells indicate that the concentration is above the Statistical Trigger Value.
7. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
8. NA = Not Available, due to limited data from dry monitoring wells, or incomplete historical data.

TABLE 2-2
BEDROCK GROUNDWATER QUALITY DATA
DECEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Monitoring Well ID				**DW-3R**	**DW-4R**	**DW-5R**	**DW-6R**	**DW-7R**	**DW-8R**
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**12/14/2016**	**12/14/2016**	**12/14/2016**	**12/13/2016**	**12/13/2016**	**12/13/2016**
Aluminum	-	0.39	1.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Arsenic	0.025	0.01	0.2	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Boron	1	0.050	1.05	**2.86**	**0.607**	<0.050	**0.378**	<0.050	<0.050
Calcium	-	227	250	146	123	66.1	209	196	178
Iron	0.3	0.95	3.6	0.097	<0.050	0.188	0.875	<0.050	<0.005
Magnesium	35	53	69	30.7	48.6	39.1	**80.2**	**94.1**	**86.4**
Manganese	0.3	0.03	0.11	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	-	1.6	9	**3.67**	1.05	1.36	1.39	1.39	0.818
Selenium		0.004	0.009	**0.147**	<0.005	<0.005	**0.007**	**0.011**	**0.022**
Alkalinity	-	402	604	273	335	275	400	**403**	**410**
Bromide	-	1	1	<2	<2	<2	<2	<2	<2
Chloride	250	25	136	4.63	**27.7**	2.62	**57.1**	**36.3**	3.73
Hardness	-	449	830	**491**	**507**	326	**852**	**877**	**800**
Sodium	20	18	75	**18.9**	15.5	4.3	**23.7**	16.8	3.32
Sulfate	250	72	214	**203**	**135**	32.5	**130**	68.6	21.4
Sulfur	-	50	89	**67.8**	45.1	10.8	43.4	22.9	7.1
Total Dissolved Solids	500	500	668	**585**	**550**	290	**685**	**560**	400
Carbonate	-	3	9	<1	<1	<1	<1	<1	<1
Bicarbonate	-	406	612	273	335	275	400	403	410
Conductivity	-	1995	1400	983	995	591	1069	969	802
Turbidity	5	15	65	**16**	10	8	<1	9	4

BASELINE

Monitoring Well ID				**DW-3R**	**DW-4R**	**DW-5R**	**DW-6R**	**DW-7R**	**DW-8R**
Baseline Parameters	**NYSDEC Standard**	**Operational**	**STV**	**12/14/2016**	**12/14/2016**	**12/14/2016**	**12/13/2016**	**12/13/2016**	**12/13/2016**
Antimony	0.003	0.028	0.118	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060
Barium	1	0.13	0.515	0.049	0.071	0.108	0.052	0.073	0.02
Beryllium	1	0.003	1.48	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium	0.003	0.002	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.05	0.001	0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexavalent Chromium	0.05	0.006	0.032	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Cobalt	-	0.027	0.106	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Copper	0.2	0.003	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Lead	0.025	0.003	0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mercury	0.002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	-	0.01	0.044	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Silver	0.05	0.003	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Thallium	0.004	0.004	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Vanadium	-	0.01	0.041	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Zinc	0.3	0.009	0.139	<0.010	<0.010	<0.010	<0.010	**0.025**	<0.010
Color	15	10	53	<5	<5	<5	<5	<5	<5
Sulfide	0.05	0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cyanide	0.1	0.046	0.17	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Notes:
1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. NA = Not Available, due to limited data from dry monitoring wells, insufficient water volume to allow sample collection, or incomplete historical data.
5. Bedrock monitoring wells to be accessed utilizing Intrawell comparison.
6. Bolded cells indicate that the concentration is above the Operational Trigger Value.
7. Shaded cells indicate that the concentration is above the STV.

TABLE 2-3
LEACHATE COLLECTION SYSTEM DATA
DECEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

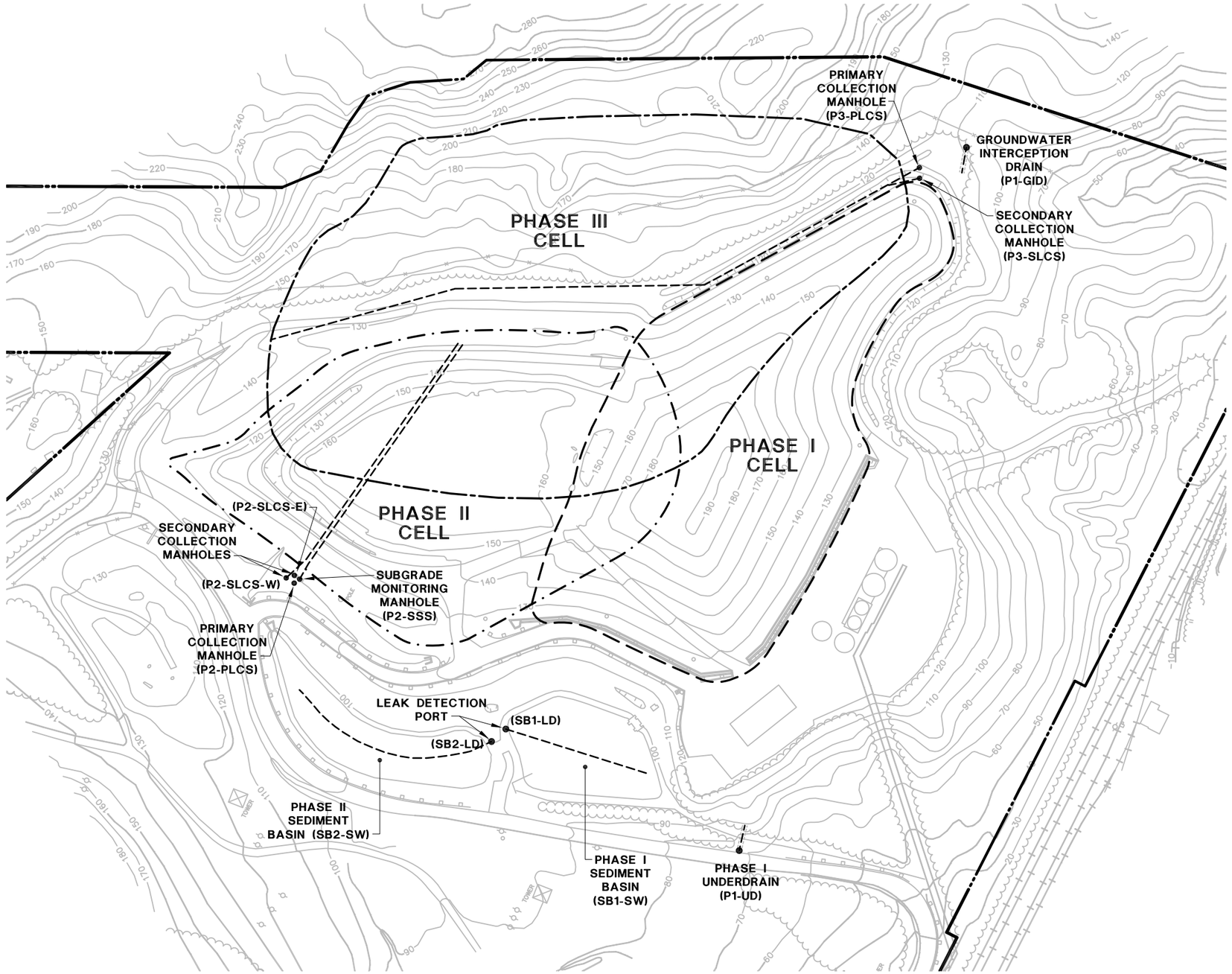
Leachate ID	P2-PLCS	P2-SLCS-E	P2-SLCS-W	P3-PLCS	P3-SLCS	P2-SSS	SB1-SW	SB2-SW	PI-GID	PI-UD
Parameters	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Routine**	**Routine**	**Baseline**	**Baseline**
Alkalinity	450	NS	NS	318	NS	NS	91	145	NS	NS
Bicarbonate	450	NS	NS	318	NS	NS	91	145	NS	NS
Bromide	4.52	NS	NS	3.61	NS	NS	<2	<2	NS	NS
Carbonate	<1	NS	NS	<1	NS	NS	<1	<1	NS	NS
Chloride	21.3	NS	NS	13.5	NS	NS	16.5	20.1	NS	NS
Cyanide, Total	<0.01	NS	NS	<0.01	NS	NS	NA	NA	NS	NS
Color	5	NS	NS	5	NS	NS	NA	NA	NS	NS
Hexavalent Chromium	<0.02	NS	NS	<0.02	NS	NS	NA	NA	NS	NS
Sulfate	1730	NS	NS	1270	NS	NS	714	618	NS	NS
Sulfide	<0.10	NS	NS	<0.10	NS	NS	NA	NA	NS	NS
Sulfur	577	NS	NS	424	NS	NS	144	206	NS	NS
Total Dissolved Solids	2960	NS	NS	2100	NS	NS	705	1050	NS	NS
Hardness	2103	NS	NS	1396	NS	NS	402	520	NS	NS
Turbidity	3	NS	NS	10	NS	NS	6	8	NS	NS
Aluminum	0.153	NS	NS	0.112	NS	NS	<0.100	0.105	NS	NS
Antimony	<0.060	NS	NS	<0.060	NS	NS	NA	NA	NS	NS
Arsenic	0.008	NS	NS	0.016	NS	NS	0.006	0.008	NS	NS
Barium	0.022	NS	NS	0.04	NS	NS	NA	NA	NS	NS
Beryllium	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	NS
Boron	35.6	NS	NS	27.5	NS	NS	4.7	7.78	NS	NS
Cadmium	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	NS
Calcium	652	NS	NS	409	NS	NS	113	142	NS	NS
Chromium	0.013	NS	NS	<0.005	NS	NS	NA	NA	NS	NS
Cobalt	<0.050	NS	NS	<0.050	NS	NS	NA	NA	NS	NS
Copper	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	NS
Iron	0.06	NS	NS	<0.050	NS	NS	0.146	0.284	NS	NS
Lead	0.018	NS	NS	<0.005	NS	NS	NA	NA	NS	NS
Magnesium	115	NS	NS	90.8	NS	NS	28.9	39.9	NS	NS
Manganese	0.311	NS	NS	0.202	NS	NS	<0.020	0.256	NS	NS
Mercury	<0.0002	NS	NS	<0.0002	NS	NS	NA	NA	NS	NS
Nickel	<0.020	NS	NS	<0.020	NS	NS	NA	NA	NS	NS
Potassium	<0.050	NS	NS	41.3	NS	NS	11.5	18.2	NS	NS
Selenium	1.24	NS	NS	1.27	NS	NS	0.222	0.286	NS	NS
Silver	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	NS
Sodium	76.1	NS	NS	75.3	NS	NS	22.5	35.5	NS	NS
Thallium	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	NS
Vanadium	0.067	NS	NS	0.034	NS	NS	NA	NA	NS	NS
Zinc	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	NS
Conductivity	3203	NS	NS	2605	NS	NS	982	1190	NS	NS
Ph	6.1	NS	NS	7.3	NS	NS	6	6.9	NS	NS

Notes:

1. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
2. NS = No sample collected due to insufficient or no flow condition.
3. NA = Not analyzed.

2.6 Figures

2-1 SWMF Leachate and Surface Water Monitoring Plan



LEGEND:

- 70 — TOPOGRAPHIC CONTOUR
- ACCESS ROADWAY
- DRAINAGE CHANNEL
- GUIDERAIL
- FENCE
- PROPERTY BOUNDARY
- CULVERT
- STRUCTURES/TANKS
- POWER POLE

NOTES:

1. BASE MAP MODIFIED FROM ELECTRONIC FILE BY SHAW EMCON/OWT, INC. DRAWING ENTITLED "GROUNDWATER MONITORING SYSTEM", 2003.

0 200' 400'

GRAPHIC SCALE

X: DYNX05.DWG
1/12/17
SYNAPSE/WIP/DANSK 01-13/DANSK-0113-B01.DWG

synapse
connect. advise. insure.

SYNAPSE RISK MANAGEMENT, LLC
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

ANNUAL GROUNDWATER MONITORING PROGRAM
DANSKAMMER GENERATING STATION
SOLID WASTE MANAGEMENT FACILITY

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

SWMF
LEACHATE AND SURFACE WATER MONITORING PLAN

PROJECT NO.: DANSK 01.15.01
DATE: JANUARY 2017
FIGURE NO.: 2-1

3 GROUND WATER QUALITY SUMMARY FOURTH QUARTER

Perched/Deep Overburden Unit

Monitoring Well	December 2016 Intrawell Groundwater Quality Observations
DW-3P	DW-3P exhibited two OTV exceedances for this intrawell location (calcium and magnesium). One STV exceedance was observed at this intrawell location during the fourth quarter 2016. Barium was detected at a concentration of 0.065 mg/L, exceeding the STV of 0.052 mg/L.
DW-6D	DW-6D exhibited five exceedances of the OTVs for this intrawell location (magnesium, chloride, hardness, sodium and turbidity). One STV exceedance was identified at this location. Chloride was detected at a concentration of 35.8 mg/L, exceeding the STV of 32 mg/L.
DW-7D	DW-7D exhibited ten OTV exceedances (calcium, magnesium, potassium, alkalinity, chloride, hardness, sodium, sulfate, TDS and zinc). Three STV exceedances were identified at this intrawell location. Calcium was detected at a concentration of 154 mg/L, exceeding the STV of 135 mg/L. Chloride was detected at a concentration of 141 mg/L, exceeding the STV of 96 mg/L. Hardness was detected at a concentration of 648 mg/L, exceeding the STV of 611 mg/L.

Bedrock Unit

Monitoring Well	December 2016 Interwell Groundwater Quality Observations
DW-3R	DW-3R exhibited nine OTV exceedances (boron, potassium, selenium, hardness, sodium, sulfate, sulfur, TDS and turbidity). Two STV exceedances were identified at this interwell location. Boron was detected at a concentration of 2.86 mg/L, exceeding the STV of 1.05 mg/L. Selenium was detected at a concentration of 0.147 mg/L, exceeding the STV of 0.009 mg/L.
DW-4R	DW-4R exhibited five OTV exceedances (boron, chloride, hardness, sulfate and TDS) and no STV exceedances.
DW-5R	DW-5R exhibited no OTV exceedances, and no STV exceedances.
DW-6R	DW-6R exhibited eight OTV exceedances (boron, magnesium, selenium, chloride, hardness, sodium, sulfate and TDS). Three STV exceedances were identified at this interwell location. Magnesium was detected at a concentration of 80.2 mg/L, exceeding the STV of 69 mg/L. Hardness was detected at a concentration of 852 mg/L, exceeding the STV of 830 mg/L. TDS was detected at a concentration of 685 mg/L, exceeding the STV of 668 mg/L.

Monitoring Well	December 2016 Interwell Groundwater Quality Observations
DW-7R	DW-7R exhibited seven OTV exceedances (magnesium, selenium, alkalinity, chloride, hardness, TDS and zinc). Three STV exceedances were identified at this interwell location. Three STV exceedances were identified at this interwell location. Magnesium was detected at a concentration of 94.1 mg/L, exceeding the STV of 69 mg/L. Selenium was detected at a concentration of 0.011 mg/L, exceeding the STV of 0.009 mg/L. Hardness was detected at a concentration of 877 mg/L, exceeding the STV of 830 mg/L.
DW-8R	DW-8R exhibited four OTV exceedances (magnesium, selenium, alkalinity and hardness). Two STV exceedances were identified at this interwell location. Magnesium was detected at a concentration of 86.4 mg/L, exceeding the STV of 69 mg/L. Selenium was detected at a concentration of 0.022 mg/L, exceeding the STV of 0.009 mg/L.
DW-9R	DW-9R had insufficient groundwater to allow for sample collection.

A summary of the OTV exceedances observed during the fourth quarter 2016, and the wells in which they occurred, is provided in Table 3-1 – Summary of Operational Trigger Value Exceedances.

3.1 Tables

3-1 Summary of Operational Trigger Value Exceedances – December 2016

TABLE 3-1
SUMMARY OF OPERATIONAL TRIGGER VALUE EXCEEDANCES
DECEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Parameters	Turbidity	Alkalinity	Chloride	Sulfate	TDS	Aluminum	Arsenic	Boron	Calcium	Iron	Magnesium	Manganese	Potassium	Sulfur	Selenium	Sodium	Hardness	Bicarbonate	Carbonate	Sulfide	Barium	Copper	Lead	Zinc	Chromium
DW-3P									X		X										X				
DW-6D			X								X						X								
DW-7D		X	X	X	X				X		X		X			X	X								
DW-3R	X			X	X			X				X	X	X	X	X	X								
DW-4R			X	X	X			X									X								
DW-5R																									
DW-6R			X	X	X			X							X	X	X								
DW-7R		X	X		X						X				X		X							X	
DW-8R		X									X				X		X							X	

Notes:
X - Operational Trigger Value Exceedance

4 TREND ANALYSIS

As set forth in the SWMF Permit to Operate and the 2005 EMP, time trends of concentration versus time, for boron, sulfate, sulfur and TDS have been prepared for the SWMF monitoring wells. Those trends are described below and presented in Appendix C.

Perched/Deep Overburden Monitoring Wells

Concentration versus time charts for the five overburden monitoring wells (DW-3P, DW-3D, DW-5D, DW-6D, and DW-7D) have been prepared for leachate indicator parameters sulfur, sulfate, TDS, aluminum, calcium, iron, manganese and boron. The following trend observations are provided for each intrawell location:

Monitoring Well	Constituent	2016 Trend Observation
DW-3P	Sulfur	Sulfur is generally stable with fluctuations below and above the OTV.
	Sulfate	Sulfate is generally stable with fluctuations below and above the OTV.
	TDS	TDS is considered stable with most concentrations below the OTV in 2016.
	Boron	No apparent trend is associated with boron. Boron was above the OTV and STV during the first, second and third quarters of 2016.
	Aluminum	Aluminum is considered stable with concentrations below the OTV.
	Calcium	Calcium appears to have a seasonal fluctuation with the highest concentrations observed in the third quarter 2016. Calcium is considered stable with concentrations below the STV.
	Iron	Iron is considered stable with concentrations below the OTV.
	Manganese	Manganese is considered stable with concentrations below the OTV.
DW-6D	Sulfur	Sulfur concentrations were elevated in 2016 and was above the STV during the third quarter.
	Sulfate	Sulfate concentrations were elevated in 2016 and above the STV during third quarter.
	TDS	TDS concentrations were elevated 2016, however below the STV during all four quarters.
	Boron	No apparent trend is associated with boron. Boron was below the OTV and STV in all four quarters of 2016.
	Aluminum	Aluminum is considered stable with concentrations below the OTV.
	Calcium	Calcium is considered stable with concentrations below the STV with the exception of the first quarter of 2016.
	Iron	Iron is considered stable and with concentrations below the OTV since January 2009.
	Manganese	Manganese is considered stable with concentrations below the OTV since November 2006.

Monitoring Well	Constituent	2016 Trend Observation
DW-7D	Sulfur	Sulfur is considered stable with concentrations below the OTV since November 2005.
	Sulfate	Sulfate concentrations appear to be declining and are below the OTV.
	TDS	TDS was above the OTV for all four quarters 2016 but below the STV.
	Boron	Boron is considered stable with concentrations below the OTV since January 2002.
	Aluminum	Aluminum is considered stable with concentrations below the OTV during all four quarters of 2016.
	Calcium	Calcium is considered stable however concentrations exceeded the OTV in the first, third and fourth quarters of 2016.
	Iron	Iron is considered stable with concentrations below the OTV since January 2007.
	Manganese	Manganese is considered stable with concentrations below the method detection limit.

Bedrock Monitoring Wells

Concentration versus time charts for the seven bedrock monitoring wells (DW-3R, DW-4R, DW-5R, DW-6R, DW-7R, DW-8R, and DW-9R) have been prepared for leachate indicator parameters sulfur, sulfate, TDS, aluminum, calcium, iron, manganese and boron. The following trend observations are provided for each interwell location:

Monitoring Well	Constituent	2016 Trend Observation
DW-3R	Sulfur	Sulfur is considered stable with concentrations below the OTV since January 2001.
	Sulfate	Sulfate is considered stable with concentrations below the OTV since January 2001.
	TDS	TDS is considered stable with concentrations below the OTV since January 2008.
	Boron	Boron is considered stable with concentrations below the method detection limit since July 2003.
	Aluminum	Aluminum is considered stable with concentrations below the OTV.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2001.
	Iron	Iron is considered stable with concentrations below the OTV.

Monitoring Well	Constituent	2016 Trend Observation
DW-4R	Sulfur	Sulfur is considered stable with concentrations below the OTV since July 2007, with the exception of the first, third and fourth quarters of 2013.
	Sulfate	Sulfate is considered stable with concentrations below the STV since January 2000.
	TDS	TDS demonstrates a seasonal trend with the highest concentration observed in the third and fourth quarter. TDS is considered stable, with concentrations below the STV since April 2006, with the exception of fourth quarter 2013.
	Boron	Boron is considered stable with concentrations below the STV since January 2000.
	Aluminum	Aluminum is considered stable with concentrations below the OTV.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron is considered stable with concentrations below the OTV since an exceedance in April 2009.
DW-5R	Sulfur	Sulfur is considered stable with concentrations below the OTV since January 2000, with the exception of June 2012.
	Sulfate	Sulfate is considered stable with concentrations below the OTV since January 2000.
	TDS	TDS is considered stable with concentrations below the OTV since October 2005.
	Boron	Boron is considered stable with concentrations below the method detection limit since April 2008.
	Aluminum	Aluminum is considered stable with concentrations below the OTV throughout 2016.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron is considered stable with concentrations remaining below the OTV since July 2008 with the exception of a slight exceedance in December 2013.
DW-6R	Sulfur	Sulfur is considered stable with concentrations below the OTV since January 2002.
	Sulfate	Sulfate is considered stable with concentrations below the STV.
	TDS	TDS is considered stable with concentrations generally below the STV.
	Boron	Boron has demonstrated a downward trend since January 2005 with concentrations remaining below the STV since April 2003.
	Aluminum	Aluminum is considered stable with concentrations remaining below the OTV during 2016. The only OTV exceedances occurred in April 2008 and December 2011.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron is considered stable with concentrations below the OTV since November 2000.

Monitoring Well	Constituent	2016 Trend Observation
DW-7R	Sulfur	Sulfur is considered stable with concentrations below the OTV.
	Sulfate	Sulfate is considered stable with concentrations below the OTV during 2016.
	TDS	TDS appears to show a seasonal trend with the highest concentrations in the first quarter. TDS is considered stable with concentrations above the OTV and below the STV during 2016.
	Boron	Boron is considered stable with concentrations at or below the OTV.
	Aluminum	Aluminum is considered stable with concentrations below the OTV. The only STV exceedance occurred in April 2007 with concentrations remaining below the OTV during 2016.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron is considered stable with concentrations below the OTV. The only STV exceedance occurred in July 2007 with concentrations remaining below the OTV during 2016.
DW-8R	Sulfur	Sulfur is considered stable with concentrations below the OTV since January 2000.
	Sulfate	Sulfate is considered stable with concentrations below the OTV since January 2009.
	TDS	TDS is considered stable with concentrations below the OTV since April 2008.
	Boron	Boron is considered stable with concentrations at or below the OTV since January 2000, with the exception of one exceedance in January 2007.
	Aluminum	Aluminum is considered stable with concentrations below the STV and slightly above the OTV. Concentrations were below the OTV in 2016.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron is considered stable with concentrations remaining below the OTV since August 2009.
DW-9R	Sulfur	Sulfur is considered stable with concentrations below the OTV since January 2000.
	Sulfate	Sulfate is considered stable with concentrations below the OTV since July 2002.
	TDS	TDS is considered stable with concentrations below the OTV since August 2009.
	Boron	No apparent trend is associated with boron. Boron was below the method detection limit in 2016.
	Aluminum	Aluminum is considered stable with concentrations fluctuating above and below the OTV. Concentrations in 2016 were below the OTV.
	Calcium	Calcium is considered stable with concentrations below the OTV since January 2000.
	Iron	Iron in considered stable with concentrations that fluctuate around the OTV.

5 WATER LEVEL EVALUATION

Groundwater elevations were measured from eighteen SWMF monitoring wells during the quarterly sampling events conducted during 2016 and are summarized on Table 5-1. The groundwater elevations have been plotted versus time from the prior thirteen years (2003 through 2016) provided in Appendix D.

Perched/Deep Overburden

Groundwater elevations versus time charts for five overburden monitoring wells (DW-3P, DW-3D, DW-5D, DW-6D, and DW-7D) have been prepared for the prior thirteen years. Review of the groundwater elevation data indicated that the perched/deep groundwater bearing unit has generally declined since the construction of the Phase II cell. This general lowering of the groundwater levels in the perched/deep unit is likely the result of the Phase II cell and the groundwater interceptor trench limiting groundwater recharge to the perched/deep units. The groundwater interceptor trench was constructed for the sole purpose of limiting recharge to the perched unit from the upgradient surface flow and continues to function as designed. The following trend summarizes the overburden groundwater elevations measured at each overburden monitoring well location:

Monitoring Well	2016 Overburden Groundwater Elevation Summary
DW-3P	Measurable groundwater during the March through December 2016 sampling events.
DW-4P	This monitoring well remained dry during March through December 2016 sampling events.
DW-7P	This monitoring well remained dry during March through December 2016 sampling events.
DW-2D	This monitoring well remained dry during March through December 2016 sampling events.
DW-3D	This monitoring well remained dry during March through December 2016 sampling events.
DW-4D	This monitoring well remained dry during March through December 2016 sampling events.
DW-5D	This monitoring well remained dry during March through December 2016 sampling events.
DW-6D	Measurable groundwater during the March through December 2016 sampling events.
DW-7D	Measurable groundwater during the March through December 2016 sampling events.

Bedrock

Groundwater elevations versus time charts for seven bedrock monitoring wells (DW-3R, DW-4R, DW-5R, DW-6R, DW-7R, DW-8R, and DW-9R) have been prepared for the prior thirteen years. Groundwater elevation data for the previous thirteen years indicated that the bedrock water levels are generally consistent from quarter to quarter with the exception of DW-1R (Dry September and December 2016). The diminished groundwater at this bedrock location may be attributed to the construction of the Phase III cell; this monitoring well may be installed to a

greater depth. DW-2R has consistently remained dry since January 2003; this well continues to fulfill its Part 360 regulatory requirements even with the dry observations.

Monitoring Well	2016 Bedrock Groundwater Elevation Summary
DW-1R	Measurable groundwater during the March through June 2016 sampling events.
DW-2R	This bedrock groundwater monitoring well remained dry during March through December 2016 sampling events.
DW-3R	Measurable groundwater during the March through December 2016 sampling events.
DW-4R	Measurable groundwater during the March through December 2016 sampling events.
DW-5R	Measurable groundwater during the March through December 2016 sampling events.
DW-6R	Measurable groundwater during the March through December 2016 sampling events.
DW-7R	Measurable groundwater during the March through December 2016 sampling events.
DW-8R	Measurable groundwater during the March and December 2016 sampling events.
DW-9R	Measurable groundwater during the March and June 2016 sampling events.

5.1 Tables

5-1 2016 Groundwater Elevation Data

Table 5-1
2016 GROUNDWATER ELEVATION DATA
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Quarter 1 through Quarter 4			March-16		June-16		September-16		December-16	
Sample ID	TOC	Total Well Depth	Depth to Water	Water Level Elevation (ft-amsl)	Depth to Water	Water Level Elevation (ft-amsl)	Depth to Water	Water Level Elevation (ft-amsl)	Depth to Water	Water Level Elevation (ft-amsl)
DW-3P	122.20	28.70	22.00	99.90	22.25	99.40	22.50	99.70	21.30	100.90
DW-4P	123.41	27.73	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-7P	105.70	20.40	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-2D	123.60	38.22	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-3D	122.53	90.30	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-4D	123.51	67.94	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-5D	122.78	67.67	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-6D	116.50	70.00	56.20	59.00	55.60	59.30	55.90	59.30	54.2	62.30
DW-7D	104.97	62.33	49.35	55.45	48.61	56.10	47.70	56.10	47.5	57.47
DW-1R	119.58	48.32	35.40	84.90	34.50	85.80	33.90	85.80	37.2	NA
DW-2R	123.52	75.00	DRY	NA	DRY	NA	DRY	NA	DRY	NA
DW-3R	122.41	126.00	88.60	32.90	87.50	33.60	87.55	33.60	87.9	34.51
DW-4R	123.76	107.64	88.60	36.00	88.62	38.40	88.50	38.40	88.4	35.36
DW-5R	122.94	159.84	82.50	40.35	82.90	39.50	83.20	39.50	83.40	39.54
DW-6R	119.58	125.00	75.21	43.69	74.60	44.30	76.30	44.30	67.9	51.68
DW-7R	105.17	89.89	36.00	69.20	36.50	69.20	43.50	69.20	37.5	67.67
DW-8R	135.41	41.90	29.50	103.10	DRY	NA	DRY	NA	31.5	103.91
DW-9R	215.38	108.00	65.30	153.00	66.50	151.50	65.20	146.98	DRY	NA

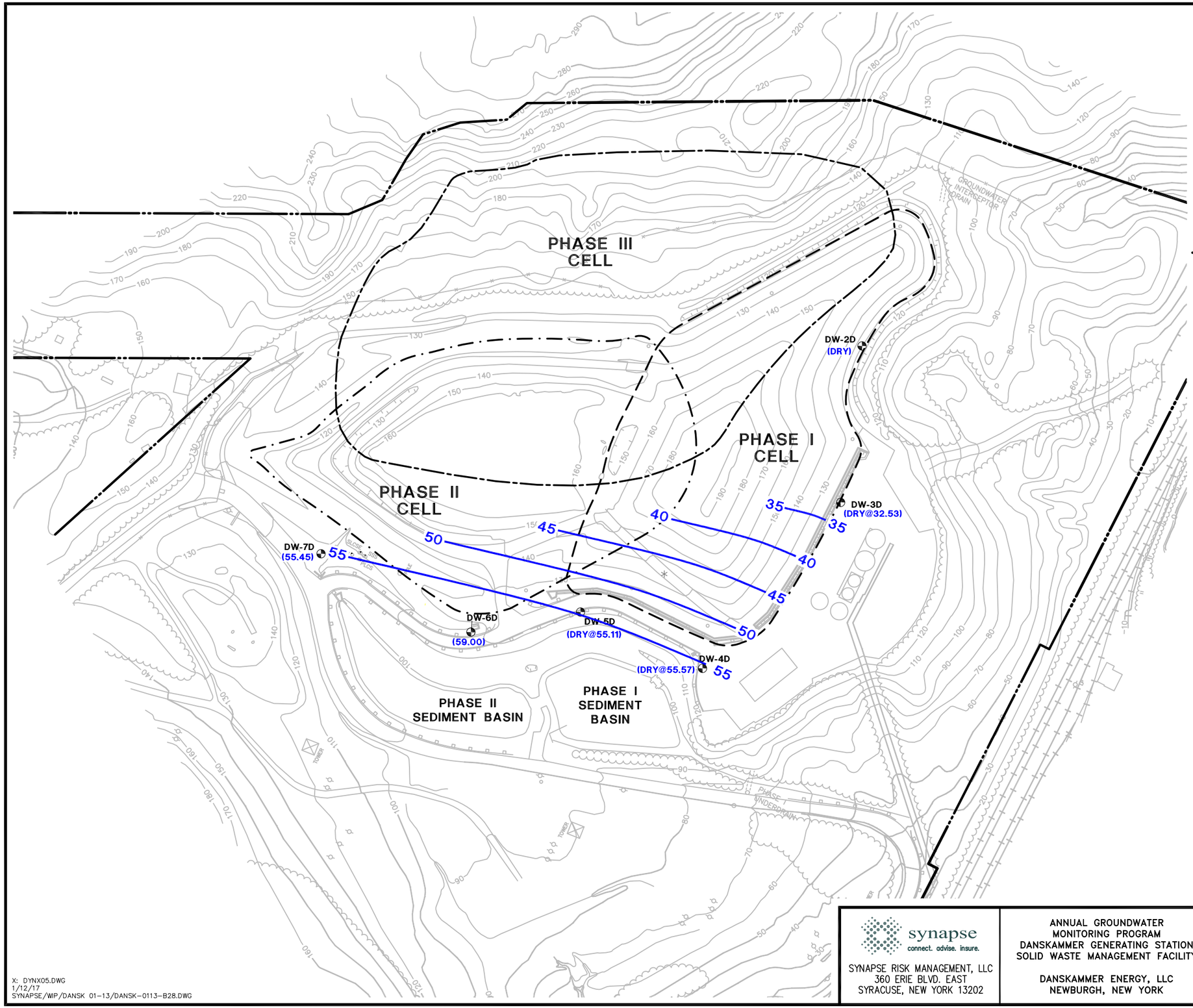
NOTES:

* = Denotes upgradient well
R = Bedrock Well
S = Perched Overburden Well
D = Deep Overburden Well
NA - not applicable
ft-amsl - feet above mean sea level
TOC = Top of Outer Casing

5.2 Figures

5-1 Deep Overburden Potentiometric Surface

5-2 Bedrock Potentiometric Surface



LEGEND:

- 70 — TOPOGRAPHIC CONTOUR
- ACCESS ROADWAY
- DRAINAGE CHANNEL
- GUIDERAIL
- FENCE
- PROPERTY BOUNDARY
- CULVERT
- STRUCTURES/TANKS
- POWER POLE
- DW-3D — DEEP OVERBURDEN MONITORING WELL
- (55.45) — MARCH 2016 GROUNDWATER ELEVATION (FEET)
- 55 — MARCH 2016 GROUNDWATER ELEVATION CONTOUR LINE (FEET)

NOTES:

1. BASE MAP MODIFIED FROM ELECTRONIC FILE BY SHAW EMCON/OWT, INC. DRAWING ENTITLED "GROUNDWATER MONITORING SYSTEM", 2003.
2. ALL PHASE III COMPONENTS WERE PROPOSED, NOT CONSTRUCTED, AT THE TIME OF THIS PRINTING.

0 200' 400'

GRAPHIC SCALE

X: DYNX05.DWG
1/12/17
SYNAPSE/WIP/DANSK 01-13/DANSK-0113-B28.DWG

synapse
connect. advise. insure.

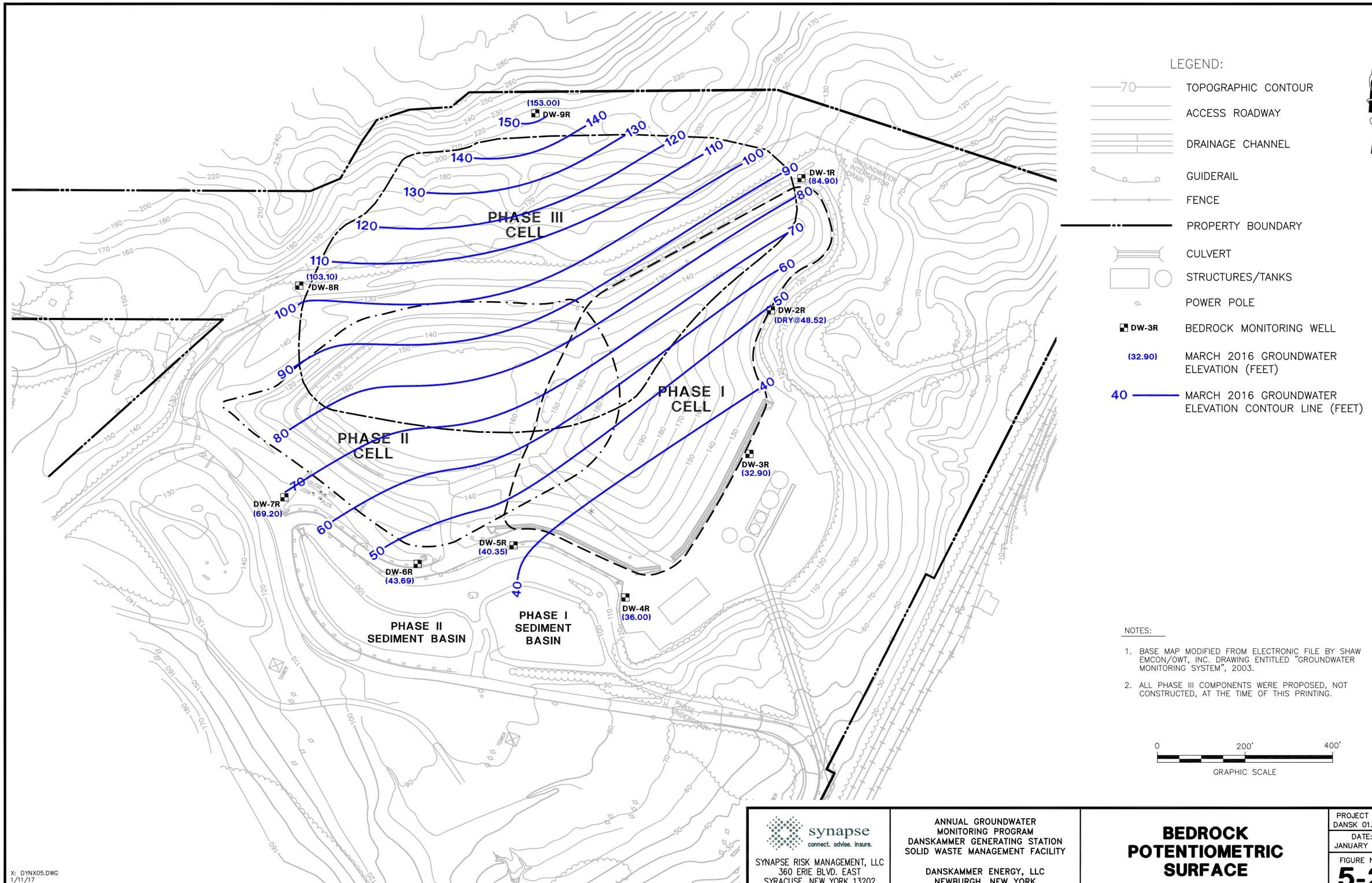
SYNAPSE RISK MANAGEMENT, LLC
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

ANNUAL GROUNDWATER MONITORING PROGRAM
DANSKAMMER GENERATING STATION
SOLID WASTE MANAGEMENT FACILITY

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

DEEP OVERBURDEN POTENTIOMETRIC SURFACE

PROJECT NO.: DANSK 01.15.01
DATE: JANUARY 2017
FIGURE NO.: 5-1



NOTES:

1. BASE MAP MODIFIED FROM ELECTRONIC FILE BY SHAW EMCON/OWT, INC. DRAWING ENTITLED "GROUNDWATER MONITORING SYSTEM", 2003.
2. ALL PHASE III COMPONENTS WERE PROPOSED, NOT CONSTRUCTED, AT THE TIME OF THIS PRINTING.

X: DYNX05.DWG
1/11/17
SYNAPSE/WIP/DANSK 01-13/DANSK-0113-B29.DWG

synapse
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SYNAPSE RISK MANAGEMENT, LLC
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

ANNUAL GROUNDWATER MONITORING PROGRAM
DANSKAMMER GENERATING STATION
SOLID WASTE MANAGEMENT FACILITY

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

BEDROCK POTENTIOMETRIC SURFACE

PROJECT NO.: DANSK 01.15.01
DATE: JANUARY 2017
FIGURE NO.: 5-2

6 CONCLUSIONS

Groundwater Quality

Based on the evaluation of the SWMF groundwater data collected during 2016, no impact on groundwater quality as a result of operation of the SWMF was identified. The data evaluation included the comparison of groundwater analytical results with site-specific OTVs and STVs presented in the SWMF-EMP, as well as NYSDEC Groundwater Quality Standards and Guidance Values.

The results of the overburden intrawell analysis and the interwell analysis as detailed in the 2005 EMP, have demonstrated that the groundwater quality within the perched/deep overburden and bedrock water bearing units are stable and that the OTV exceedances are not specific to the leachate indicator parameters.

The evaluations performed on the data collected during fourth quarter 2016 continue to indicate no impact to groundwater quality attributable to operation of the SWMF.

Leachate Quality

The results of the water quality monitoring program continue to demonstrate that during 2016, the secondary leachate collection system has not been impacted by the PLCS. No coal indicator parameters were reported in the secondary leachate collection system at or near the detection limits typically reported in the PLCS sample.

7 REFERENCES

New York State Department of Environmental Conservation, Division of Solid Waste. 6 NYCRR Part 360.

Synapse Risk Management, LLC. March 2010. Environmental Monitoring Plan, Danskammer Point Solid Waste Management Facility.

APPENDIX A
LABORATORY ANALYSIS & FIELD DATA REPORTS QUARTER 4

2016 ANNUAL REPORT

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

FEBRUARY 2017

Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

December 30, 2016

Roger Creighton
Synapse Risk Management, LLC
360 Erie Blvd East
Syracuse, NY 13202

TEL: (315) 475-3700
FAX: (315) 475-3780

Work Order No: 161214081

RE: Quarterly GW
SWMF-Danskammer-Baselines

Dear Roger Creighton:

Adirondack Environmental Services, Inc received 5 samples on 12/14/2016 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Krzysztof Trafalski
Laboratory Manager

Adirondack Environmental Services, Inc CASE NARRATIVE

CLIENT:	Synapse Risk Management, LLC	**Date:**	*30-Dec-16*
Project:	Quarterly GW		
Lab Order:	161214081		

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

The samples for Metals analysis had the pH adjusted and held at least 16 hours prior to digestion.

Qualifiers:

	C - Details are above in Case Narrative
ND - Not Detected at reporting limit	S - LCS Spike recovery outside acceptable limits(+ is over - is under)
J - Analyte detected below quantitation limit	R - Duplication outside acceptable limits
B - Analyte detected in Blank	T - Tentatively Identified Compound-Estimated
X - Exceeds maximum contamination limit	E -Above quantitation range-Estimated
H - Hold time exceeded	M - Matrix Spike outside acceptable limits(+ is over - is under)

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-3R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 1:35:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-001
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**983**	1.0		umhos/cm		12/14/2016 1:35:00 PM
Dissolved Oxygen (E360.1)	**5.89**	0.10		mg/L		12/14/2016 1:35:00 PM
eH (Orion)	**236.6**			mV		12/14/2016 1:35:00 PM
pH (E150.1)	**6.5**			S.U.		12/14/2016 1:35:00 PM
Temperature (E170.1)	**13**			deg C		12/14/2016 1:35:00 PM
Turbidity (E180.1)	**16**	1.0		NTU		12/14/2016 1:35:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**491**	5		mg/L CaCO3	1	12/27/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/27/2016 1:57:00 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/27/2016 1:57:00 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Barium	**0.049**	0.010		mg/L	1	12/27/2016 1:57:00 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Boron	**2.86**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Calcium	**146**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Copper	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Iron	**0.097**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Lead	**< 0.005**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Magnesium	**30.7**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/27/2016 1:57:00 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/27/2016 1:57:00 PM
Potassium	**3.67**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Selenium	**0.147**	0.005		mg/L	1	12/27/2016 1:57:00 PM
Silver	**< 0.010**	0.010		mg/L	1	12/27/2016 1:57:00 PM
Sodium	**18.9**	0.050		mg/L	1	12/27/2016 1:57:00 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/27/2016 1:57:00 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/27/2016 1:57:00 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/27/2016 1:57:00 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/16/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/16/2016 12:14:51 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-3R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 1:35:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-001
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**4.63**	2.00		mg/L	2	12/29/2016 2:26:59 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 2:26:59 AM
Sulfate	**203**	20.0		mg/L	10	12/29/2016 5:50:57 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**273**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**273**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:31:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**67.8**	0.6		mg/L	1	12/30/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**585**	5		mg/L	1	12/20/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH7	1	12/15/2016 1:15:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 5:25:00 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-3P
Work Order:	**161214081**	**Collection Date:**	12/14/2016 12:40:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**566**	1.0		umhos/cm		12/14/2016 12:40:00 PM
Dissolved Oxygen (E360.1)	**2.29**	0.10		mg/L		12/14/2016 12:40:00 PM
eH (Orion)	**147.0**			mV		12/14/2016 12:40:00 PM
pH (E150.1)	**7.3**			S.U.		12/14/2016 12:40:00 PM
Temperature (E170.1)	**12**			deg C		12/14/2016 12:40:00 PM
Turbidity (E180.1)	**16**	1.0		NTU		12/14/2016 12:40:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**294**	5		mg/L CaCO3	1	12/27/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/15/2016)**						Analyst: **SM**
Aluminum	**< 0.100**	0.100		mg/L	1	12/27/2016 2:03:00 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/27/2016 2:03:00 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Barium	**0.065**	0.010		mg/L	1	12/27/2016 2:03:00 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Boron	**< 0.050**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Calcium	**58.4**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Copper	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Iron	**< 0.050**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Lead	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Magnesium	**35.9**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/27/2016 2:03:00 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/27/2016 2:03:00 PM
Potassium	**0.895**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Selenium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:03:00 PM
Silver	**< 0.010**	0.010		mg/L	1	12/27/2016 2:03:00 PM
Sodium	**2.75**	0.050		mg/L	1	12/27/2016 2:03:00 PM
Thallium	**0.012**	0.010		mg/L	1	12/27/2016 2:03:00 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/27/2016 2:03:00 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/27/2016 2:03:00 PM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/16/2016)**						Analyst: **AVB**
Mercury	**< 0.0002**	0.0002		mg/L	1	12/16/2016 12:19:43 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-3P
Work Order:	**161214081**	**Collection Date:**	12/14/2016 12:40:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**2.24**	2.00		mg/L	2	12/29/2016 2:42:34 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 2:42:34 AM
Sulfate	**35.5**	4.00		mg/L	2	12/29/2016 2:42:34 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**248**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**248**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:33:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**11.8**	0.6		mg/L	1	12/30/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**270**	5		mg/L	1	12/20/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/15/2016 1:15:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 5:25:00 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-4R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 11:50:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**995**	1.0		umhos/cm		12/14/2016 11:50:00 AM
Dissolved Oxygen (E360.1)	**4.32**	0.10		mg/L		12/14/2016 11:50:00 AM
eH (Orion)	**201.6**			mV		12/14/2016 11:50:00 AM
pH (E150.1)	**6.9**			S.U.		12/14/2016 11:50:00 AM
Temperature (E170.1)	**12**			deg C		12/14/2016 11:50:00 AM
Turbidity (E180.1)	**10**	1.0		NTU		12/14/2016 11:50:00 AM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**507**	5		mg/L CaCO3	1	12/27/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/27/2016 2:09:00 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/27/2016 2:09:00 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Barium	**0.071**	0.010		mg/L	1	12/27/2016 2:09:00 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Boron	**0.607**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Calcium	**123**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Copper	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Iron	**< 0.050**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Lead	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Magnesium	**48.6**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/27/2016 2:09:00 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/27/2016 2:09:00 PM
Potassium	**1.05**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Selenium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:09:00 PM
Silver	**< 0.010**	0.010		mg/L	1	12/27/2016 2:09:00 PM
Sodium	**15.5**	0.050		mg/L	1	12/27/2016 2:09:00 PM
Thallium	**0.016**	0.010		mg/L	1	12/27/2016 2:09:00 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/27/2016 2:09:00 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/27/2016 2:09:00 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/16/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/16/2016 12:21:13 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-4R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 11:50:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**27.7**	2.00		mg/L	2	12/29/2016 2:58:10 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 2:58:10 AM
Sulfate	**135**	4.00		mg/L	2	12/29/2016 2:58:10 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**335**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**335**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:35:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**45.1**	0.6		mg/L	1	12/30/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**550**	5		mg/L	1	12/20/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/15/2016 1:15:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 5:25:00 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-4P
Work Order:	**161214081**	**Collection Date:**	12/14/2016
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-004
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Observation	**Dry**			NA		12/14/2016

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-5R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 11:20:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-005
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**591**	1.0		umhos/cm		12/14/2016 11:20:00 AM
Dissolved Oxygen (E360.1)	**0.79**	0.10		mg/L		12/14/2016 11:20:00 AM
eH (Orion)	**57.2**			mV		12/14/2016 11:20:00 AM
pH (E150.1)	**7.1**			S.U.		12/14/2016 11:20:00 AM
Temperature (E170.1)	**12**			deg C		12/14/2016 11:20:00 AM
Turbidity (E180.1)	**8**	1.0		NTU		12/14/2016 11:20:00 AM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**326**	5		mg/L CaCO3	1	12/27/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/27/2016 2:14:00 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/27/2016 2:14:00 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Barium	**0.109**	0.010		mg/L	1	12/27/2016 2:14:00 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Boron	**< 0.050**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Calcium	**66.1**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Copper	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Iron	**0.188**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Lead	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Magnesium	**39.1**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/27/2016 2:14:00 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/27/2016 2:14:00 PM
Potassium	**1.36**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Selenium	**< 0.005**	0.005		mg/L	1	12/27/2016 2:14:00 PM
Silver	**< 0.010**	0.010		mg/L	1	12/27/2016 2:14:00 PM
Sodium	**4.30**	0.050		mg/L	1	12/27/2016 2:14:00 PM
Thallium	**0.012**	0.010		mg/L	1	12/27/2016 2:14:00 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/27/2016 2:14:00 PM
Zinc	**0.035**	0.010		mg/L	1	12/27/2016 2:14:00 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/16/2016)						
Mercury	**0.0002**	0.0002		mg/L	1	12/16/2016 12:25:51 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-5R
Work Order:	**161214081**	**Collection Date:**	12/14/2016 11:20:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214081-005
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**2.62**	2.00		mg/L	2	12/29/2016 3:13:45 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 3:13:45 AM
Sulfate	**32.5**	4.00		mg/L	2	12/29/2016 3:13:45 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**275**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**275**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/21/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/22/2016 1:22:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**10.8**	0.6		mg/L	1	12/30/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**290**	5		mg/L	1	12/20/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH7	1	12/15/2016 1:15:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 5:25:00 PM

Adirondack Environmental Services, Inc.®
314 North Pearl Street
Albany, New York 12207
518-434-4546 ♦ Fax: 518-434-0891

EXPERIENCE IS THE SOLUTION

CHAIN OF CUSTODY RECORD

AES Work Order#: 161214081

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Synapse	Address:		
Send Report to:	Project Name (Location): SWMF-Danskammer-Quarterly Baselines	Samplers Name: Paul Bast	
Client Phone No:	PO #:	Samplers Signature: Paul Bast	
Client Fax No:			

AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm		Sample Type Matrix	C	G	# of Cont's	Analysis
001	**DW-3R**	12/14/16	1:35	A (P)	GW		G	5	Dynegy Baseline Parameters
				A P					Field: pH, Temp, sCond, DO,
				A P					Turbidity, eH
002	**DW-3P**	12/14/16	12:40	A (P)	GW		G	5	"
003	**DW-4R**	12/14/16	11:50	(A) P	GW		G	5	"
004	**DW-4P**	12/14/16	—	A P	GW		G	5/6 (PB)	Observation Only "
005	**DW-5R**	12/14/16	11:20	(A) P	GW		G	5	"
				A P					
				A P					
				A P					
				A P					
				A P					

Shipment Arrived Via:
FedEx UPS Client (AES) Other: _____

Special Instructions/Remarks:

Page 1 of 2 JM 12/15/16

Turnaround Time Requested:
☐ 1 Day ☐ 3 Day ☐ Normal
☐ 2 -Day ☐ 5 Day

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Paul Bast	12/14/16	4:10			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	**Received for Laboratory by:**	Date	Time
			[signature]	12/14/16	5:10 PM

Sample Temperature
Ambient (Chilled)
Chilling Process begun
Notes: 8°C

Properly Preserved
(Y) N
Notes: _____

Received Within Holding Times
(Y) N
Notes: _____

Demo
161214081

Adirondack Environmental Services Inc.®
Experience is the solution
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TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

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(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

December 30, 2016

Roger Creighton
Synapse Risk Management, LLC
360 Erie Blvd East
Syracuse, NY 13202

TEL: (315) 475-3700
FAX: (315) 475-3780

Work Order No: 161214008

RE: Quarterly GW
SWMF-Danskammer-Baselines

Dear Roger Creighton:

Adirondack Environmental Services, Inc received 8 samples on 12/14/2016 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Krzysztof Trafalski
Laboratory Manager

Adirondack Environmental Services, Inc CASE NARRATIVE

CLIENT:	Synapse Risk Management, LLC	**Date:**	*30-Dec-16*
Project:	Quarterly GW		
Lab Order:	161214008		

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

The samples for Metals analysis had the pH adjusted and held at least 16 hours prior to digestion.

Qualifiers:

	C - Details are above in Case Narrative
ND - Not Detected at reporting limit	S - LCS Spike recovery outside acceptable limits(+ is over - is under)
J - Analyte detected below quantitation limit	R - Duplication outside acceptable limits
B - Analyte detected in Blank	T - Tentatively Identified Compound-Estimated
X - Exceeds maximum contamination limit	E -Above quantitation range-Estimated
H - Hold time exceeded	M - Matrix Spike outside acceptable limits(+ is over - is under)

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-6R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 2:25:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-001
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**1069**	1.0		umhos/cm		12/13/2016 2:25:00 PM
Dissolved Oxygen (E360.1)	**2.35**	0.10		mg/L		12/13/2016 2:25:00 PM
eH (Orion)	**71.9**			mV		12/13/2016 2:25:00 PM
pH (E150.1)	**6.7**			S.U.		12/13/2016 2:25:00 PM
Temperature (E170.1)	**9**			deg C		12/13/2016 2:25:00 PM
Turbidity (E180.1)	**< 1**	1.0		NTU		12/13/2016 2:25:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**852**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 4:39:09 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 4:39:09 PM
Arsenic	**0.006**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Barium	**0.052**	0.010		mg/L	1	12/21/2016 4:39:09 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Boron	**0.378**	0.050		mg/L	1	12/21/2016 4:39:09 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Calcium	**209**	0.500		mg/L	10	12/21/2016 4:44:22 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 4:39:09 PM
Copper	**< 0.005**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Iron	**0.875**	0.050		mg/L	1	12/21/2016 4:39:09 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Magnesium	**80.2**	0.500		mg/L	10	12/21/2016 4:44:22 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/21/2016 4:39:09 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 4:39:09 PM
Potassium	**1.39**	0.050		mg/L	1	12/21/2016 4:39:09 PM
Selenium	**0.007**	0.005		mg/L	1	12/21/2016 4:39:09 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 4:39:09 PM
Sodium	**23.7**	0.050		mg/L	1	12/21/2016 4:39:09 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 4:39:09 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 4:39:09 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/21/2016 4:39:09 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:21:29 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-6R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 2:25:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-001
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**57.1**	2.00		mg/L	2	12/29/2016 12:04:17 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 12:04:17 AM
Sulfate	**130**	4.00		mg/L	2	12/29/2016 12:04:17 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**400**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**400**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/14/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/15/2016 1:17:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**43.4**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**685**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-6D
Work Order:	**161214008**	**Collection Date:**	12/13/2016 2:13:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**767**	1.0		umhos/cm		12/13/2016 2:13:00 PM
Dissolved Oxygen (E360.1)	**4.38**	0.10		mg/L		12/13/2016 2:13:00 PM
eH (Orion)	**222.5**			mV		12/13/2016 2:13:00 PM
pH (E150.1)	**7.3**			S.U.		12/13/2016 2:13:00 PM
Temperature (E170.1)	**11**			deg C		12/13/2016 2:13:00 PM
Turbidity (E180.1)	**19**	1.0		NTU		12/13/2016 2:13:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**407**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 5:05:13 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 5:05:13 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Barium	**0.021**	0.010		mg/L	1	12/21/2016 5:05:13 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Boron	**0.165**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Calcium	**119**	0.500		mg/L	10	12/21/2016 5:10:32 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Copper	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Iron	**0.104**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Magnesium	**26.6**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Manganese	**0.024**	0.020		mg/L	1	12/21/2016 5:05:13 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 5:05:13 PM
Potassium	**0.933**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Selenium	**0.006**	0.005		mg/L	1	12/21/2016 5:05:13 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 5:05:13 PM
Sodium	**9.21**	0.050		mg/L	1	12/21/2016 5:05:13 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 5:05:13 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 5:05:13 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/21/2016 5:05:13 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:23:06 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-6D
Work Order:	**161214008**	**Collection Date:**	12/13/2016 2:13:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**35.8**	2.00		mg/L	2	12/29/2016 12:19:52 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 12:19:52 AM
Sulfate	**72.0**	4.00		mg/L	2	12/29/2016 12:19:52 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**263**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**263**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/14/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/15/2016 1:19:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**24.0**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**460**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**969**	1.0		umhos/cm		12/13/2016 12:30:00 PM
Dissolved Oxygen (E360.1)	**4.45**	0.10		mg/L		12/13/2016 12:30:00 PM
eH (Orion)	**225.3**			mV		12/13/2016 12:30:00 PM
pH (E150.1)	**7.0**			S.U.		12/13/2016 12:30:00 PM
Temperature (E170.1)	**12**			deg C		12/13/2016 12:30:00 PM
Turbidity (E180.1)	**9**	1.0		NTU		12/13/2016 12:30:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**877**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 5:15:41 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 5:15:41 PM
Arsenic	**0.007**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Barium	**0.073**	0.010		mg/L	1	12/21/2016 5:15:41 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Boron	**< 0.050**	0.050		mg/L	1	12/21/2016 5:15:41 PM
Cadmium	**0.014**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Calcium	**196**	0.500		mg/L	10	12/21/2016 5:20:54 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 5:15:41 PM
Copper	**< 0.005**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Iron	**< 0.050**	0.050		mg/L	1	12/21/2016 5:15:41 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Magnesium	**94.1**	0.500		mg/L	10	12/21/2016 5:20:54 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/21/2016 5:15:41 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 5:15:41 PM
Potassium	**1.39**	0.050		mg/L	1	12/21/2016 5:15:41 PM
Selenium	**0.011**	0.005		mg/L	1	12/21/2016 5:15:41 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 5:15:41 PM
Sodium	**16.8**	0.050		mg/L	1	12/21/2016 5:15:41 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 5:15:41 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 5:15:41 PM
Zinc	**0.034**	0.010		mg/L	1	12/21/2016 5:15:41 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:24:45 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**36.3**	2.00		mg/L	2	12/29/2016 12:35:27 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 12:35:27 AM
Sulfate	**68.6**	4.00		mg/L	2	12/29/2016 12:35:27 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**403**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**403**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:16:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**22.9**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**560**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-1R
Work Order:	**161214008**	**Collection Date:**	12/13/2016
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-004
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Observation	**Dry**			NA		12/13/2016

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7D
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-005
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**1273**	1.0		umhos/cm		12/13/2016 12:30:00 PM
Dissolved Oxygen (E360.1)	**6.18**	0.10		mg/L		12/13/2016 12:30:00 PM
eH (Orion)	**113.3**			mV		12/13/2016 12:30:00 PM
pH (E150.1)	**6.6**			S.U.		12/13/2016 12:30:00 PM
Temperature (E170.1)	**11**			deg C		12/13/2016 12:30:00 PM
Turbidity (E180.1)	**5**	1.0		NTU		12/13/2016 12:30:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**648**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 5:26:08 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 5:26:08 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Barium	**0.029**	0.010		mg/L	1	12/21/2016 5:26:08 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Boron	**0.080**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Cadmium	**0.018**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Calcium	**154**	0.500		mg/L	10	12/21/2016 5:31:20 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Copper	**< 0.005**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Iron	**< 0.050**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Magnesium	**63.9**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/21/2016 5:26:08 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 5:26:08 PM
Potassium	**1.46**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Selenium	**0.009**	0.005		mg/L	1	12/21/2016 5:26:08 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 5:26:08 PM
Sodium	**37.7**	0.050		mg/L	1	12/21/2016 5:26:08 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 5:26:08 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 5:26:08 PM
Zinc	**0.040**	0.010		mg/L	1	12/21/2016 5:26:08 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:32:25 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7D
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-005
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**141**	2.00		mg/L	2	12/29/2016 12:51:03 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 12:51:03 AM
Sulfate	**57.8**	4.00		mg/L	2	12/29/2016 12:51:03 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**425**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**425**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 **(Prep: 9010C - 12/16/2016)**						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:18:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**19.3**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**725**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7D DUP
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-006
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**1273**	1.0		umhos/cm		12/13/2016 12:30:00 PM
Dissolved Oxygen (E360.1)	**6.18**	0.10		mg/L		12/13/2016 12:30:00 PM
eH (Orion)	**113.3**			mV		12/13/2016 12:30:00 PM
pH (E150.1)	**6.6**			S.U.		12/13/2016 12:30:00 PM
Temperature (E170.1)	**11**			deg C		12/13/2016 12:30:00 PM
Turbidity (E180.1)	**5**	1.0		NTU		12/13/2016 12:30:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**642**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 5:36:29 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 5:36:29 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Barium	**0.028**	0.010		mg/L	1	12/21/2016 5:36:29 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Boron	**0.075**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Cadmium	**0.018**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Calcium	**156**	0.500		mg/L	10	12/21/2016 5:41:41 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Copper	**< 0.005**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Iron	**0.051**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Magnesium	**61.3**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/21/2016 5:36:29 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 5:36:29 PM
Potassium	**1.47**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Selenium	**0.007**	0.005		mg/L	1	12/21/2016 5:36:29 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 5:36:29 PM
Sodium	**36.3**	0.050		mg/L	1	12/21/2016 5:36:29 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 5:36:29 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 5:36:29 PM
Zinc	**0.040**	0.010		mg/L	1	12/21/2016 5:36:29 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:33:57 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-7D DUP
Work Order:	**161214008**	**Collection Date:**	12/13/2016 12:30:00 PM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-006
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**140**	2.00		mg/L	2	12/29/2016 1:55:30 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 1:55:30 AM
Sulfate	**55.4**	4.00		mg/L	2	12/29/2016 1:55:30 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**430**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**430**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:20:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**18.5**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**735**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-8R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 11:30:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-007
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**802**	1.0		umhos/cm		12/13/2016 11:30:00 AM
Dissolved Oxygen (E360.1)	**2.69**	0.10		mg/L		12/13/2016 11:30:00 AM
eH (Orion)	**110.8**			mV		12/13/2016 11:30:00 AM
pH (E150.1)	**6.4**			S.U.		12/13/2016 11:30:00 AM
Temperature (E170.1)	**15**			deg C		12/13/2016 11:30:00 AM
Turbidity (E180.1)	**4**	1.0		NTU		12/13/2016 11:30:00 AM
HARDNESS - EPA 200.7 REV 4.4						Analyst: **SM**
Total Hardness (As CaCO3)	**800**	5		mg/L CaCO3	1	12/21/2016
ICP METALS - EPA 200.7 REV 4.4						Analyst: **SM**
(Prep: E200.7 - 12/15/2016)						
Aluminum	**< 0.100**	0.100		mg/L	1	12/21/2016 5:57:24 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/21/2016 5:57:24 PM
Arsenic	**< 0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Barium	**0.020**	0.010		mg/L	1	12/21/2016 5:57:24 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Boron	**< 0.050**	0.050		mg/L	1	12/21/2016 5:57:24 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Calcium	**178**	0.500		mg/L	10	12/21/2016 6:02:36 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/21/2016 5:57:24 PM
Copper	**0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Iron	**< 0.050**	0.050		mg/L	1	12/21/2016 5:57:24 PM
Lead	**< 0.005**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Magnesium	**86.4**	0.500		mg/L	10	12/21/2016 6:02:36 PM
Manganese	**< 0.020**	0.020		mg/L	1	12/21/2016 5:57:24 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/21/2016 5:57:24 PM
Potassium	**0.818**	0.050		mg/L	1	12/21/2016 5:57:24 PM
Selenium	**0.022**	0.005		mg/L	1	12/21/2016 5:57:24 PM
Silver	**< 0.010**	0.010		mg/L	1	12/21/2016 5:57:24 PM
Sodium	**3.32**	0.050		mg/L	1	12/21/2016 5:57:24 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/21/2016 5:57:24 PM
Vanadium	**< 0.020**	0.020		mg/L	1	12/21/2016 5:57:24 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/21/2016 5:57:24 PM
MERCURY - EPA 245.1 REV 3.0						Analyst: **AVB**
(Prep: E245.1 - 12/15/2016)						
Mercury	**< 0.0002**	0.0002		mg/L	1	12/15/2016 12:35:30 PM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-8R
Work Order:	**161214008**	**Collection Date:**	12/13/2016 11:30:00 AM
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-007
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**3.73**	2.00		mg/L	2	12/29/2016 2:11:23 AM
Bromide	**< 2.00**	2.00		mg/L	2	12/29/2016 2:11:23 AM
Sulfate	**21.4**	4.00		mg/L	2	12/29/2016 2:11:23 AM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**410**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/27/2016
Alkalinity, Total (As CaCO3)	**410**	1.0		mg/L CaCO3	1	12/27/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/16/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/16/2016 3:29:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/20/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**7.1**	0.6		mg/L	1	12/29/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**400**	5		mg/L	1	12/19/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH8	1	12/14/2016 12:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/14/2016 10:31:00 AM

Adirondack Environmental Services, Inc

Date: *30-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	DW-9R
Work Order:	**161214008**	**Collection Date:**	12/13/2016
Reference:	Quarterly GW / SWMF-Danskammer-Baselin	**Lab Sample ID:**	161214008-008
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Observation	**Inaccessible**			NA		12/13/2016

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314 North Pearl Street
Albany, New York 12207
518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 16121400 8

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Synapse	Address:	
Send Report to:	Project Name (Location): SWMF-Danskammer-Quarterly Baselines	Samplers Name: Paul Bast
Client Phone No:	PO #:	Samplers Signature: Paul Bast
Client Fax No:		

AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm		Sample Type Matrix	C	G	# of Cont's	Analysis
001	**DW-6R**	12/13/16	2:25	A (P)	**GW**		**G**	**5**	**Dynegy Baseline Parameters**
				A P					**Field: pH, Temp, sCond, DO,**
0				A P					**Turbidity, eH**
002	**DW-6D**	12/13/16	2:15	A (P)	**GW**		**G**	**5**	"
003	**DW-7R**	12/13/16	12:30	A (P)	**GW**		**G**	**5**	"
004	**DW-1R**	12/13/16	—	A P	**GW**		**G**	**0**	**Observation Only**
				A P					
				A P					
				P					
				A P					
				A P					
				A P					

Shipment Arrived Via:
FedEx UPS Client (AES) Other:_____

Special Instructions/Remarks:

Page 1 of 2

Turnaround Time Requested:
☐ 1 Day ☐ 3 Day ☐ Normal
☐ 2 -Day ☐ 5 Day

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Paul Bast	12/13/16	7:55			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	**Received for Laboratory by:**	Date	Time
			[illegible]	12/14/16	8:32AM

Sample Temperature
Ambient (Chilled)
Chilling Process begun
Notes: 4°C

Properly Preserved
(Y) N
Notes:

Received Within Holding Times
(Y) N
Notes:

Demo
161214008

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

AES Work Order#: 16121400 8

EXPERIENCE IS THE SOLUTION

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Client Name: Synapse	Address:	
Send Report to:	Project Name (Location): SWMF-Danskammer-Quarterly Baselines	Samplers Name: Paul Bast
Client Phone No:	PO #:	Samplers Signature: Paul Bast
Client Fax No:		

AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm		Sample Type Matrix	C	G	# of Cont's	Analysis
005	**DW-7D**	12/13/16	12:30	(P)	**GW**		**G**	**5**	**Dynegy Baseline Parameters**
									Field: pH, Temp, sCond, DO,
									Turbidity, eH
006	**DW-7D dup**	12/13/16	12:30	(P)	**GW**		**G**	**5**	"
007	**DW-8R**	12/13/16	11:30	(A) P	**GW**		**G**	**5**	"
008	**DW-9R**	12/13/16	—	A P	**GW**		**G**	~~5~~ 6	" Observation Only
				A P				(PS)	
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Shipment Arrived Via:
FedEx UPS Client (AES) Other:_____

Special Instructions/Remarks:

Page 2of 2

Turnaround Time Requested:
1 Day 3 Day Normal
2 -Day 5 Day

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Paul Bast	12/14/16	7:55			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	**Received for Laboratory by:**	Date	Time
			J. Mel	12/14/16	8:32 AM

Sample Temperature
Ambient (Chilled)
Chilling Process begun
Notes: 4°C

Properly Preserved
(Y) N
Notes:

Received Within Holding Times
(Y) N
Notes:

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TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

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December 29, 2016

Roger Creighton
Synapse Risk Management, LLC
360 Erie Blvd East
Syracuse, NY 13202

TEL: (315) 475-3700
FAX: (315) 475-3780

Work Order No: 161212038

RE: Quarterly GW
SWMF-Leachate SA

Dear Roger Creighton:

Adirondack Environmental Services, Inc received 7 samples on 12/12/2016 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709

Krzysztof Trafalski
Laboratory Manager

Adirondack Environmental Services, Inc CASE NARRATIVE

CLIENT:	Synapse Risk Management, LLC	**Date:**	*29-Dec-16*
Project:	Quarterly GW		
Lab Order:	161212038		

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

The samples P2-PLCS, P3-PLCS and P2-PLCS DUP for Metals analysis had the pH adjusted and held at least 16 hours prior to digestion.

		C - Details are above in Case Narrative
Qualifiers:	ND - Not Detected at reporting limit	S - LCS Spike recovery outside acceptable limits(+ is over - is under)
	J - Analyte detected below quantitation limit	R - Duplication outside acceptable limits
	B - Analyte detected in Blank	T - Tentatively Identified Compound-Estimated
	X - Exceeds maximum contamination limit	E -Above quantitation range-Estimated
	H - Hold time exceeded	M - Matrix Spike outside acceptable limits(+ is over - is under)

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P1-UD
Work Order:	**161212038**	**Collection Date:**	12/12/2016
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-001
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Observation	**Dry**			NA		12/12/2016

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P2-PLCS
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:30:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**3203**	1.0		umhos/cm		12/12/2016 2:30:00 PM
Dissolved Oxygen (E360.1)	**4.42**	0.10		mg/L		12/12/2016 2:30:00 PM
eH (Orion)	**146.1**			mV		12/12/2016 2:30:00 PM
pH (E150.1)	**6.1**			S.U.		12/12/2016 2:30:00 PM
Temperature (E170.1)	**12**			deg C		12/12/2016 2:30:00 PM
Turbidity (E180.1)	**3**	1.0		NTU		12/12/2016 2:30:00 PM
HARDNESS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Total Hardness (As CaCO3)	**2103**	5		mg/L CaCO3	1	12/19/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Aluminum	**0.153**	0.100		mg/L	1	12/19/2016 11:43:14 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/19/2016 11:43:14 PM
Arsenic	**0.008**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Barium	**0.022**	0.010		mg/L	1	12/19/2016 11:43:14 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Boron	**35.6**	0.500		mg/L	10	12/19/2016 11:48:29 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Calcium	**652**	0.500		mg/L	10	12/19/2016 11:48:29 PM
Chromium	**0.013**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/19/2016 11:43:14 PM
Copper	**< 0.005**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Iron	**0.060**	0.050		mg/L	1	12/19/2016 11:43:14 PM
Lead	**0.018**	0.005		mg/L	1	12/19/2016 11:43:14 PM
Magnesium	**115**	0.050		mg/L	1	12/19/2016 11:43:14 PM
Manganese	**0.311**	0.020		mg/L	1	12/19/2016 11:43:14 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/19/2016 11:43:14 PM
Potassium	**< 0.050**	0.050		mg/L	1	12/19/2016 11:43:14 PM
Selenium	**1.24**	0.005	B	mg/L	1	12/19/2016 11:43:14 PM
Silver	**< 0.010**	0.010		mg/L	1	12/19/2016 11:43:14 PM
Sodium	**76.1**	0.500		mg/L	10	12/19/2016 11:48:29 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/19/2016 11:43:14 PM
Vanadium	**0.067**	0.020		mg/L	1	12/19/2016 11:43:14 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/19/2016 11:43:14 PM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/14/2016)**						Analyst: **MB**
Mercury	**< 0.0002**	0.0002		mg/L	1	12/14/2016 3:48:13 PM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P2-PLCS
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:30:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-002
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**21.3**	2.00		mg/L	2	12/27/2016 4:57:21 PM
Bromide	**4.52**	2.00		mg/L	2	12/27/2016 4:57:21 PM
Sulfate	**1730**	100		mg/L	50	12/27/2016 4:41:46 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**450**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Total (As CaCO3)	**450**	1.0		mg/L CaCO3	1	12/20/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/14/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/15/2016 1:09:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/14/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**577**	0.6		mg/L	1	12/28/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**2960**	5		mg/L	1	12/16/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH7	1	12/12/2016 5:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/13/2016 10:12:00 AM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P3-PLCS
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:55:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**2605**	1.0		umhos/cm		12/12/2016 2:55:00 PM
Dissolved Oxygen (E360.1)	**6.27**	0.10		mg/L		12/12/2016 2:55:00 PM
eH (Orion)	**79.4**			mV		12/12/2016 2:55:00 PM
pH (E150.1)	**7.3**			S.U.		12/12/2016 2:55:00 PM
Temperature (E170.1)	**12**			deg C		12/12/2016 2:55:00 PM
Turbidity (E180.1)	**10**	1.0		NTU		12/12/2016 2:55:00 PM
HARDNESS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Total Hardness (As CaCO3)	**1396**	5		mg/L CaCO3	1	12/19/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Aluminum	**0.112**	0.100		mg/L	1	12/19/2016 11:53:52 PM
Antimony	**< 0.060**	0.060		mg/L	1	12/19/2016 11:53:52 PM
Arsenic	**0.016**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Barium	**0.040**	0.010		mg/L	1	12/19/2016 11:53:52 PM
Beryllium	**< 0.005**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Boron	**27.5**	0.500		mg/L	10	12/19/2016 11:59:15 PM
Cadmium	**< 0.005**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Calcium	**409**	0.500		mg/L	10	12/19/2016 11:59:15 PM
Chromium	**< 0.005**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Cobalt	**< 0.050**	0.050		mg/L	1	12/19/2016 11:53:52 PM
Copper	**< 0.005**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Iron	**0.118**	0.050		mg/L	1	12/19/2016 11:53:52 PM
Lead	**0.012**	0.005		mg/L	1	12/19/2016 11:53:52 PM
Magnesium	**90.8**	0.050		mg/L	1	12/19/2016 11:53:52 PM
Manganese	**0.202**	0.020		mg/L	1	12/19/2016 11:53:52 PM
Nickel	**< 0.020**	0.020		mg/L	1	12/19/2016 11:53:52 PM
Potassium	**41.3**	0.050		mg/L	1	12/19/2016 11:53:52 PM
Selenium	**1.27**	0.005	B	mg/L	1	12/19/2016 11:53:52 PM
Silver	**< 0.010**	0.010		mg/L	1	12/19/2016 11:53:52 PM
Sodium	**75.3**	0.050		mg/L	1	12/19/2016 11:53:52 PM
Thallium	**< 0.010**	0.010		mg/L	1	12/19/2016 11:53:52 PM
Vanadium	**0.034**	0.020		mg/L	1	12/19/2016 11:53:52 PM
Zinc	**< 0.010**	0.010		mg/L	1	12/19/2016 11:53:52 PM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/14/2016)**						Analyst: **MB**
Mercury	**< 0.0002**	0.0002		mg/L	1	12/14/2016 3:49:49 PM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P3-PLCS
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:55:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-003
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**13.5**	2.00		mg/L	2	12/27/2016 5:28:32 PM
Bromide	**3.61**	2.00		mg/L	2	12/27/2016 5:28:32 PM
Sulfate	**1270**	100		mg/L	50	12/27/2016 5:12:57 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**318**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Total (As CaCO3)	**318**	1.0		mg/L CaCO3	1	12/20/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/14/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/15/2016 1:11:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/14/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**424**	0.6		mg/L	1	12/28/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**2100**	5		mg/L	1	12/16/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH7	1	12/12/2016 5:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/13/2016 10:12:00 AM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P2-PLCS DUP
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:30:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-004
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**3202**	1.0		umhos/cm		12/12/2016 2:30:00 PM
Dissolved Oxygen (E360.1)	**4.39**	0.10		mg/L		12/12/2016 2:30:00 PM
eH (Orion)	**143.3**			mV		12/12/2016 2:30:00 PM
pH (E150.1)	**6.1**			S.U.		12/12/2016 2:30:00 PM
Temperature (E170.1)	**12**			deg C		12/12/2016 2:30:00 PM
Turbidity (E180.1)	**3**	1.0		NTU		12/12/2016 2:30:00 PM
HARDNESS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Total Hardness (As CaCO3)	**1778**	5		mg/L CaCO3	1	12/19/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/14/2016)**						Analyst: **SM**
Aluminum	**0.154**	0.100		mg/L	1	12/20/2016 12:04:38 AM
Antimony	**< 0.060**	0.060		mg/L	1	12/20/2016 12:04:38 AM
Arsenic	**0.008**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Barium	**0.022**	0.010		mg/L	1	12/20/2016 12:04:38 AM
Beryllium	**< 0.005**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Boron	**25.3**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Cadmium	**< 0.005**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Calcium	**< 0.050**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Chromium	**< 0.005**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Cobalt	**< 0.050**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Copper	**< 0.005**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Iron	**< 0.050**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Lead	**0.014**	0.005		mg/L	1	12/20/2016 12:04:38 AM
Magnesium	**116**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Manganese	**0.307**	0.020		mg/L	1	12/20/2016 12:04:38 AM
Nickel	**< 0.020**	0.020		mg/L	1	12/20/2016 12:04:38 AM
Potassium	**< 0.050**	0.050		mg/L	1	12/20/2016 12:04:38 AM
Selenium	**1.23**	0.005	B	mg/L	1	12/20/2016 12:04:38 AM
Silver	**< 0.010**	0.010		mg/L	1	12/20/2016 12:04:38 AM
Sodium	**84.7**	0.500		mg/L	10	12/20/2016 12:09:52 AM
Thallium	**< 0.010**	0.010		mg/L	1	12/20/2016 12:04:38 AM
Vanadium	**0.067**	0.020		mg/L	1	12/20/2016 12:04:38 AM
Zinc	**< 0.010**	0.010		mg/L	1	12/20/2016 12:04:38 AM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/14/2016)**						Analyst: **MB**
Mercury	**< 0.0002**	0.0002		mg/L	1	12/14/2016 3:51:26 PM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P2-PLCS DUP
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:30:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-004
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**21.3**	2.00		mg/L	2	12/27/2016 5:59:43 PM
Bromide	**4.36**	2.00		mg/L	2	12/27/2016 5:59:43 PM
Sulfate	**1750**	100		mg/L	50	12/27/2016 5:44:08 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**453**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Total (As CaCO3)	**453**	1.0		mg/L CaCO3	1	12/20/2016
CYANIDE, TOTAL - EPA 335.4 REV 1.0 (Prep: 9010C - 12/14/2016)						Analyst: **KB**
Cyanide	**< 0.010**	0.010		mg/L	1	12/15/2016 1:13:00 PM
TOTAL SULFIDE - SM 4500 S2 D-00,-11						Analyst: **RK**
Sulfide	**< 0.10**	0.10		mg/L	1	12/14/2016
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**584**	0.6		mg/L	1	12/28/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**2960**	5		mg/L	1	12/16/2016
COLOR (PLATINUM-COBALT) - SM 2120B-01,-11						Analyst: **KB**
Color	**5**	5		cpu@pH7	1	12/12/2016 5:00:00 PM
HEXAVALENT CHROMIUM - SM3500-CR D						Analyst: **AS**
Chromium, Hexavalent	**< 0.02**	0.02		mg/L	1	12/13/2016 10:12:00 AM

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	P1-GID
Work Order:	**161212038**	**Collection Date:**	12/12/2016
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-005
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Observation	**Dry**			NA		12/12/2016

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	SB1-SW
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:15:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-006
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**982**	1.0		umhos/cm		12/12/2016 2:15:00 PM
Dissolved Oxygen (E360.1)	**9.88**	0.10		mg/L		12/12/2016 2:15:00 PM
eH (Orion)	**138.4**			mV		12/12/2016 2:15:00 PM
pH (E150.1)	**6.8**			S.U.		12/12/2016 2:15:00 PM
Temperature (E170.1)	**1**			deg C		12/12/2016 2:15:00 PM
Turbidity (E180.1)	**6**	1.0		NTU		12/12/2016 2:15:00 PM
HARDNESS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/13/2016)**						Analyst: **SM**
Total Hardness (As CaCO3)	**402**	5		mg/L CaCO3	1	12/19/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/13/2016)**						Analyst: **SM**
Aluminum	**< 0.100**	0.100		mg/L	1	12/20/2016 12:25:49 AM
Arsenic	**0.006**	0.005		mg/L	1	12/20/2016 12:25:49 AM
Boron	**4.70**	0.050		mg/L	1	12/20/2016 12:25:49 AM
Calcium	**113**	0.050		mg/L	1	12/20/2016 12:25:49 AM
Iron	**0.146**	0.050		mg/L	1	12/20/2016 12:25:49 AM
Magnesium	**28.9**	0.050		mg/L	1	12/20/2016 12:25:49 AM
Manganese	**0.074**	0.020		mg/L	1	12/20/2016 12:25:49 AM
Potassium	**11.5**	0.050		mg/L	1	12/20/2016 12:25:49 AM
Selenium	**0.222**	0.005		mg/L	1	12/20/2016 12:25:49 AM
Sodium	**22.5**	0.050		mg/L	1	12/20/2016 12:25:49 AM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/13/2016)**						Analyst: **AVB**
Mercury	**< 0.0002**	0.0002		mg/L	1	12/13/2016 12:11:24 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**16.5**	2.00		mg/L	2	12/27/2016 6:30:54 PM
Bromide	**< 2.00**	2.00		mg/L	2	12/27/2016 6:30:54 PM
Sulfate	**430**	40.0		mg/L	20	12/27/2016 6:15:19 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**91**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Total (As CaCO3)	**91**	1.0		mg/L CaCO3	1	12/20/2016

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	SB1-SW
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:15:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-006
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**144**	0.6		mg/L	1	12/28/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**705**	5		mg/L	1	12/16/2016

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	SB2-SW
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:05:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-007
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						Analyst: **FLD**
Conductivity (E120.1)	**1190**	1.0		umhos/cm		12/12/2016 2:05:00 PM
Dissolved Oxygen (E360.1)	**10.49**	0.10		mg/L		12/12/2016 2:05:00 PM
eH (Orion)	**131.0**			mV		12/12/2016 2:05:00 PM
pH (E150.1)	**6.9**			S.U.		12/12/2016 2:05:00 PM
Temperature (E170.1)	**1**			deg C		12/12/2016 2:05:00 PM
Turbidity (E180.1)	**8**	1.0		NTU		12/12/2016 2:05:00 PM
HARDNESS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/13/2016)**						Analyst: **SM**
Total Hardness (As CaCO3)	**520**	5		mg/L CaCO3	1	12/19/2016
ICP METALS - EPA 200.7 REV 4.4 **(Prep: E200.7 - 12/13/2016)**						Analyst: **SM**
Aluminum	**0.105**	0.100		mg/L	1	12/20/2016 12:36:18 AM
Arsenic	**0.008**	0.005		mg/L	1	12/20/2016 12:36:18 AM
Boron	**7.78**	0.050		mg/L	1	12/20/2016 12:36:18 AM
Calcium	**142**	0.050		mg/L	1	12/20/2016 12:36:18 AM
Iron	**0.284**	0.050		mg/L	1	12/20/2016 12:36:18 AM
Magnesium	**39.9**	0.050		mg/L	1	12/20/2016 12:36:18 AM
Manganese	**0.256**	0.020		mg/L	1	12/20/2016 12:36:18 AM
Potassium	**18.2**	0.050		mg/L	1	12/20/2016 12:36:18 AM
Selenium	**0.286**	0.005		mg/L	1	12/20/2016 12:36:18 AM
Sodium	**35.5**	0.050		mg/L	1	12/20/2016 12:36:18 AM
MERCURY - EPA 245.1 REV 3.0 **(Prep: E245.1 - 12/13/2016)**						Analyst: **AVB**
Mercury	**< 0.0002**	0.0002	M-	mg/L	1	12/13/2016 12:12:59 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1						Analyst: **CS**
Chloride	**20.1**	2.00		mg/L	2	12/27/2016 7:33:50 PM
Bromide	**< 2.00**	2.00		mg/L	2	12/27/2016 7:33:50 PM
Sulfate	**618**	40.0		mg/L	20	12/27/2016 7:18:08 PM
ALKALINITY - SM 2320B-97,-11						Analyst: **AS**
Alkalinity, Bicarbonate (As CaCO3)	**145**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Carbonate (As CaCO3)	**< 1.0**	1.0		mg/L CaCO3	1	12/20/2016
Alkalinity, Total (As CaCO3)	**145**	1.0		mg/L CaCO3	1	12/20/2016

Adirondack Environmental Services, Inc

Date: *29-Dec-16*

CLIENT:	Synapse Risk Management, LLC	**Client Sample ID:**	SB2-SW
Work Order:	**161212038**	**Collection Date:**	12/12/2016 2:05:00 PM
Reference:	Quarterly GW / SWMF-Leachate SA	**Lab Sample ID:**	161212038-007
PO#:		**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SULFUR IN WATER CALCULATION						Analyst: **CMH**
Sulfur	**206**	0.6		mg/L	1	12/28/2016
TOTAL DISSOLVED SOLIDS - SM 2540C-97,-11						Analyst: **CS**
TDS (Residue, Filterable)	**1050**	5		mg/L	1	12/16/2016

Adirondack Environmental Services Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 161212038

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Synapse	Address:	
Send Report to:	Project Name (Location): SWMF-Leachate SA	Samplers Name: Shaun Sroni / Paul Burt
Client Phone No:	PO #:	Samplers Signature:
Client Fax No:		

AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm		Sample Type Matrix	C	G	# of Cont's	Analysis
001	~~P1-UD~~ (SS)	12/12/16		A P	~~GW~~		~~G~~	~~5~~ (10)	Obs. Only Al,As,Sb,B,Ba,Be,Ca,Cd,Cr,Co
				A P					Cu,Fe,Pb,Hg,Mg,Mn,K,Ni,Se
				A P					Ag,Tl,V,Zn,Na,
				A P					Hardness, Color, Sulfide
				A P					Cyanide,Hexchrome,Sulfate
				A P					Bromide,Chloride,
				A P					Carbonate/Bicarbonate, Alkalinity,TDS, Sulfur
002	P2-PLCS	12/12/16	2:30	A (P)	GW		G	5	"
003	P3-PLCS	12/12/16	2:55	A (P)	GW		G	5	"
004	P2-PLCS dup	12/12/16	2:30	A (P)	GW		G	5	"
005	~~P1-GID~~ (SS)			A P	~~GW~~		~~G~~	~~5~~ (10)	Observation Only "
				A P					

Shipment Arrived Via:
FedEx UPS Client (AES) Other:_____

Special Instructions/Remarks:

Page 1 of 2
Field: pH, Temp, EH, Conductivity, Turbidity, DO

Turnaround Time Requested:
1 Day 3 Day Normal
2 -Day 5 Day

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	12/12/16	5:00pm			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	**Received for Laboratory by:**	Date	Time
				12/12	5:04pm

Sample Temperature
Ambient (Chilled)
Chilling Process begun
4°C
Notes: _____

Properly Preserved
(Y) N
Notes: _____

Received Within Holding Times
(Y) N
Notes: _____

161212038

Adirondack Environmental Services Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 1612120 38

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Synapse	Address:	
Send Report to:	Project Name (Location): SWMF-Leachate SA	Samplers Name: Shaun Sweet / Paul Bast
Client Phone No:	PO #:	Samplers Signature:
Client Fax No:		

AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm		Sample Type Matrix	C	G	# of Cont's	Analysis
006	SB1-SW	12/12/16	2:15	A (P)	GW		G	3	Al,As,B,Ca,Fe,Mg,Mn,K,Se, Na, Hardness,TDS,Bromide Chloride,Sulfate, Carb+Bicarb Alkalinity,Sulfur Field: pH,Temp,EH, Conductivity,DO,Turbidity
				A P					
				A P					
				A P					
				A P					
				A P					
007	SB2-SW	12/12/16	2:05	A (P)	GW		G	3	"
				A P					
				A P					
				A P					
				A P					
				A P					

Shipment Arrived Via:
FedEx UPS Client (AES) Other:_____

Special Instructions/Remarks:

Turnaround Time Requested:
1 Day 3 Day Normal
2 -Day 5 Day

	Date	Time		Date	Time
Relinquished by: (Signature)	12/12/16	5:00pm	Received by: (Signature)		
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	**Received for Laboratory by:** Candy Higgins	12/12	5:04pm

Sample Temperature
Ambient (Chilled)
Chilling Process begun
Notes: 4 °C

Properly Preserved
(Y) N
Notes:

Received Within Holding Times
(Y) N
Notes:

Adirondack Environmental Services Inc.®
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TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-3P
Project No.	DANSK 01.13.01	Sample ID:	DW-3P
Date:	12/14/2016	Sampler:	Mike Wisley
Weather:	Sunny, 35 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	4"
Depth to Water (ft):	21.8
Total Depth (ft):	
Well Volume (gal):	

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
12:05	20	5	10	310	22	7	14	551	6.2	131	17	
12:09	20	5	10	310	22.5	7	13	555	5.4	132	15	
12:13	20	5	10	310	22.6	7.3	12	566	2.29	147	16	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				y	y	y	y	y	y	y	N	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	12:40	

Comments: Baseline Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-6D
Project No.	DANSK 01.13.01	Sample ID:	DW-6D
Date:	12/13/2016	Sampler:	Mike Wisley
Weather:	Sunny, 40 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	4"
Depth to Water (ft):	55.25
Total Depth (ft):	70
Well Volume (gal):	9.6

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
13:29	40	5	10	350	59.2	7	12	779	6	214	24	
13:38	40	5	10	350	59.2	6.7	12	780	5.8	221	20	
13:59	40	5	10	350	59.2	7.3	11	767	4.38	222.5	19	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	14:13	

Comments: Baseline Parameters

Synapse Risk Management, LLC

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-7D
Project No.	DANSK 01.13.01	Sample ID:	DW-7D
Date:	12/15/2015	Sampler:	Mike Wisley
Weather:	Sunny, 30 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	4"
Depth to Water (ft):	47.22
Total Depth (ft):	62.33
Well Volume (gal):	9.8

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
13:55	35	5	10	315	49.25	6.8	12	1266	7	119	5	
12:07	35	5	10	315	49.29	6.9	12	1268	6	120	2	
12:12	35	5	10	315	49.25	6.6	11	1273	5.8	121.9	5	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	N	1.5

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	12:30	

Comments: Baseline Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-3R
Project No.	DANSK 01.13.01	Sample ID:	DW-3R
Date:	12/14/2015	Sampler:	Mike Wisley
Weather:	Sunny, 30 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	2"
Depth to Water (ft):	88.6
Total Depth (ft):	127.5
Well Volume (gal):	25.3

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
12:50	35	5	10	225	91.5	7.1	14	975	6	229	20	
13:00	35	5	10	225	91.5	7.1	13	980	5	231	19	
13:16	35	5	10	225	91.5	6.5	13	983	5.89	236.6	16	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	N	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	13:35	

Comments: Routine Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-4R
Project No.	DANSK 01.13.01	Sample ID:	DW-4R
Date:	12/15/2015	Sampler:	Mike Wisley
Weather:	Sunny, 35F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	2"
Depth to Water (ft):	89.2
Total Depth (ft):	107.6
Well Volume (gal):	3.0

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
11:08	35	5	10	310	92	7.2	12	982	4	196	12	
11:17	35	5	10	310	92.5	6.9	12	992	3	200	11	
11:28	35	5	10	310	92.5	6.9	12	995	2.6	201.6	10	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y	1.5

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	11:50	

Comments: Baseline Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-5R
Project No.	DANSK 01.13.01	Sample ID:	DW-5R
Date:	12/14/2015	Sampler:	Mike Wisley
Weather:	Sunny, 35 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	2"
Depth to Water (ft):	84.2
Total Depth (ft):	159.84
Well Volume (gal):	49.2

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
10:59	35	5	10	325	84.1	7	12	609	1.3	62	9	
11:06	35	5	10	325	85.3	7.3	12	601	1	60	9	
11:16	35	5	10	325	85.3	7.1	12	591	0.79	57.2	8	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y	1.5

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	11:20	

Comments: Baseline Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-6R
Project No.	DANSK 01.13.01	Sample ID:	DW-6R
Date:	12/14/2016	Sampler:	
Weather:	Sunny, 40 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	4"
Depth to Water (ft):	67.5
Total Depth (ft):	121.4
Well Volume (gal):	35.0

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
13:40	35	5	10	275	70	6.9	10	1061	6	-39.6	3	
13:44	35	5	10	275	71	6.9	10	1062	4	-41.8	2	
14:18	35	5	10	275	72	6.7	9	1069	2.35	-51.2	<1	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	14:25	

Comments: Baseline Parameters

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-7R
Project No.	DANSK 01.13.01	Sample ID:	DW-7R
Date:	12/13/2016	Sampler:	Mike Wisley
Weather:	Sunny, 40 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	2"
Depth to Water (ft):	37.6
Total Depth (ft):	89.89
Well Volume (gal):	8.5

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
12:02	35	5	10	285	42.5	6.5	13	951	6.2	214	7	
12:09	35	5	10	285	42.5	6.7	12	961	5	220	4	
12:16	35	5	10	285	42.5	7	12	969	4.45	225.3	4	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	N	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	12:30	

Comments: Baseline Parameters

Synapse Risk Management, LLC

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	Danskammer SWMF	Well ID:	DW-8R
Project No.	DANSK 01.13.01	Sample ID:	DW-8R
Date:	12/13/2016	Sampler:	Mike Wisley
Weather:	Sunny, 30 F	Signature:	

Well Condition Observations	
Protective Casing:	Good
Lock:	Yes
Label:	Yes
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in):	4"
Depth to Water (ft):	29.5
Total Depth (ft):	41.1
Well Volume (gal):	1.9

TIME	PUMP SETTING (feet of H_2O)	DISCHARGE TIME (seconds)	REFILL TIME (seconds)	FLOW RATE (ml/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)	PURGE VOLUME (liters)
10:46	35	5	10	310	35.25	6.8	16	789	9	127	6	
11:02	35	5	10	310	35.3	6.4	15	799	7.1	125	5	
11:17	35	5	10	310	35.3	6.4	15	802	2.69	110.8	4	
Stabilization Criteria				100-400 ml/min	Drawdown <0.3'	± 0.1 units	3%	3%	10%	± 10 mv	10% (>1 NTU)	Total Purge
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	N	

Sampling/Purge Equipment	
Water Level Meter:	Solinst Model 101
pH/S.C./Dissolved Oxygen/ORP/Turbidity:	Horbia Model
Pump:	QED Bladder Pump Model
Intake Depth (feet below PVC):	
Tubing:	QED Bonded Poly Sample Tubing

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
8-OZ P	HNO3	1	Metals/Hardness
4-OZ P/G	None	1	Alk/Bicard/Card
32-OZ P	None	1	Br, Cl, SO4, TDS, SU, Turbidity

Sample Collection Time	Start	End
	11:30	

Comments: Baseline Parameters

Synapse Risk Management, LLC

APPENDIX B
QUARTERLY WATER QUALITY DATA

2016 ANNUAL REPORT

DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

FRBRUARY 2017

TABLE 2-1
OVERBURDEN GROUNDWATER QUALITY DATA
MARCH 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Monitoring Well ID		**DW-3P**			**DW-6D**			**DW-7D**		
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**3/23/2016**	**Operational**	**STV**	**3/22/2016**	**Operational**	**STV**	**3/23/2016**
Aluminum	-	0.683	1.86	<0.100	0.94	6.5	<0.100	0.33	0.81	<0.100
Arsenic	0.025	0.004	0.01	<0.005	0.01	0.01	<0.005	0.01	0.01	<0.005
Boron	1	0.240	0.66	**1.66**	0.21	0.51	0.155	0.12	0.48	0.059
Calcium	-	74	184	**129**	128	159	**168**	111	135	**123**
Iron	0.3	0.901	2.85	<0.050	0.73	2.71	0.222	0.44	1.29	<0.050
Magnesium	35	29	41	24.2	24	27	**25.9**	54	66	54.3
Manganese	0.3	0.153	0.55	<0.020	0.86	2.98	0.024	0.06	0.24	<0.020
Potassium	-	3	7	2.8	1.41	4.71	0.923	1.32	3.13	1.15
Selenium		0.016	0.05	**0.096**	0.006	0.02	<0.005	0.01	0.04	0.009
Alkalinity	-	279	454	260	336	448	273	401	521	**443**
Bromide	-	1	1	<2	1	1	<2	1	1	<2
Chloride	250	7	30	2.19	21	32	**86.2**	64	96	**114**
Hardness	-	348	508	**422**	414	494	**526**	503	611	**531**
Sodium	20	7	24	**10.7**	8	12	**12.3**	25	42	**33.7**
Sulfate	250	59	240	**138**	81	117	**105**	67	98	62.1
Sulfur	-	30	70	**46.1**	31	42	**35**	28	56	20.7
Total Dissolved Solids	500	396	593	**490**	522	700	**540**	612	951	**690**
Carbonate	-	3	9	**25**	3	9	<1	3	9	<1
Bicarbonate	-	287	477	260	344	462	273	415	533	443
Conductivity	-	1403	1403	814	1403	1403	977	1403	1403	1297
Turbidity	5	35	95	7	12	36	<1	18	68	6

Notes:
1. Operational = Existing Water Quality, the mean of prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. Overburden monitoring wells to be accessed utilizing Intrawell comparison.
5. Bolded cells indicate that the concentration is above the Operational Trigger Value.
6. Shaded cells indicate that the concentration is above the Statistical Trigger Value.
7. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
8. NA = Not Available, due to limited data from dry monitoring wells, or incomplete historical data.
* - Exceedance of OTV & GWQS.

TABLE 2-2
BEDROCK GROUNDWATER QUALITY DATA
MARCH 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Monitoring Well ID				**DW-1R**	**DW-3R**	**DW-4R**	**DW-5R**	**DW-6R**	**DW-7R**	**DW-8R**	**DW-9R**
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**3/23/2016**	**3/22/2016**	**3/22/2016**	**3/23/2016**	**3/22/2016**	**3/23/2016**	**3/23/2016**	**3/23/2016**
Aluminum	-	0.39	1.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Arsenic	0.025	0.01	0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Boron	1	0.050	1.05	<0.050	<0.050	**0.543**	<0.050	**0.340**	0.053	<0.050	<0.050
Calcium	-	227	250	142	50.9	166	52.9	169	94.1	112	83.1
Iron	0.3	0.95	3.6	0.177	0.157	0.079	0.249	**1.95**	0.052	0.21	0.183
Magnesium	35	53	69	**55.9**	33.2	42.9	34.9	48	48	52.1	47
Manganese	0.3	0.03	0.11	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.028	<0.020
Potassium	-	1.6	9	**2.01**	0.879	1	1.3	1.16	1.17	1.02	0.75
Selenium		0.004	0.009	<0.005	<0.005	**0.024**	<0.005	**0.008**	<0.005	<0.005	<0.005
Alkalinity	-	402	604	355	235	305	260	**393**	390	**403**	398
Bromide	-	1	1	<2	<2	<2	<2	<2	<2	<2	<2
Chloride	250	25	136	2.91	3	**26.9**	<2	**54.6**	**44.3**	3.37	4.01
Hardness	-	449	830	**585**	264	**591**	276	**620**	433	**494**	401
Sodium	20	18	75	10.8	2.83	14.6	1.89	**21.1**	17	1.29	2.21
Sulfate	250	72	214	**171**	35.7	**138**	28.9	**131**	53.8	43.1	20
Sulfur	-	50	89	**57.1**	11.9	46.1	9.6	43.7	18	14.4	6.7
Total Dissolved Solids	500	500	668	**600**	330	**630**	300	**700**	**525**	455	410
Carbonate	-	3	9	<1	**10**	**25**	<1	<1	<1	<1	<1
Bicarbonate	-	406	612	355	235	305	260	393	390	403	398
Conductivity	-	1995	1400	933	544	968	557	1141	927	811	877
Turbidity	5	15	65	7	<1	<1	<1	7	4	13	6

Notes:
1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. NA = Not Available, due to limited data from dry monitoring wells, insufficient water volume to allow sample collection, or incomplete historical data.
5. Bedrock monitoring wells to be accessed utilizing Intrawell comparison.
6. Bolded cells indicate that the concentration is above the Operational Trigger Value.
7. Shaded cells indicate that the concentration is above the STV.
* - Exceedance of OTV & GWQS.

TABLE 2-1
OVERBURDEN GROUNDWATER QUALITY DATA
JUNE 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

ROUTINE

Monitoring Well ID		**DW-3P**			**DW-6D**			**DW-7D**		
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**6/29/2016**	**Operational**	**STV**	**6/29/2016**	**Operational**	**STV**	**6/29/2016**
Aluminum	-	0.683	1.86	<0.100	0.94	1.39	<0.100	0.33	0.81	<0.100
Arsenic	0.025	0.004	0.01	<0.005	0	0.01	<0.005	0.01	0.01	<0.005
Boron	1	0.240	0.63	**1.01**	0.21	0.51	0.122	0.12	0.48	0.061
Calcium	-	74	184	**87.2**	128	159	111	111	135	110
Iron	0.3	0.901	2.85	<0.050	0.73	2.71	<0.050	0.44	1.19	<0.050
Magnesium	35	29	41	17.5	24	27	**28.9**	54	66	**58.6**
Manganese	0.3	0.153	0.55	<0.020	0.86	2.98	<0.020	0.06	0.24	<0.020
Potassium	-	3	7	2.35	1.41	4.71	0.842	1.32	3.13	1.11
Selenium		0.016	0.05	**0.039**	0	0.02	<0.005	0.01	0.04	<0.005
Alkalinity	-	279	454	218	336	448	263	401	521	418
Bromide	-	1	1	<2	1	1	<2	1	1	<2
Chloride	250	7	30	2.59	21	32	**75.6**	64	96	**110**
Hardness	-	348	462	290	414	494	396	503	611	**515**
Sodium	20	7	13	**10**	8	13	**13.6**	25	42	**36.4**
Sulfate	250	59	183	**122**	81	117	**92.3**	67	98	56.6
Sulfur	-	30	70	**40.7**	31	42	30.8	28	56	18.9
Total Dissolved Solids	500	396	593	**400**	522	700	500	612	951	**645**
Carbonate	-	3	9	<1	3	9	<1	3	9	<1
Bicarbonate	-	287	477	218	344	462	263	415	533	418
Conductivity	-	1403	1403	756	1403	1403	1012	1403	1403	1336
Turbidity	5	35	95	<1	12	36	<1	18	68	<1

Notes:
1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. Overburden monitoring wells to be accessed utilizing Intrawell comparison.
5. Bolded cells indicate that the concentration is above the Operational Trigger Value.
6. Shaded cells indicate that the concentration is above the Statistical Trigger Value.
7. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
8. NA = Not Available, due to limited data from dry monitoring wells, or incomplete historical data.

TABLE 2-2
BEDROCK GROUNDWATER QUALITY DATA
JUNE 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Monitoring Well ID				**DW-1R**	**DW-3R**	**DW-4R**	**DW-5R**	**DW-6R**	**DW-7R**	**DW-9R**
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**6/29/2016**	**6/29/2016**	**6/29/2016**	**6/29/2016**	**6/29/2016**	**6/29/2016**	**6/29/2016**
Aluminum	-	0.39	1.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Arsenic	0.025	0.01	0.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Boron	1	0.050	1.05	<0.050	<0.050	**0.573**	<0.050	**0.33**	<0.050	<0.050
Calcium	-	227	250	110	57.5	100	48.2	115	106	76
Iron	0.3	0.95	3.6	0.084	0.177	<0.050	0.151	**1.67**	<0.050	<0.050
Magnesium	35	53	69	**57.4**	33.9	46.7	34.4	54.3	**56.5**	51
Manganese	0.3	0.03	0.11	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	-	1.6	9	**1.72**	0.802	0.975	1.18	1.24	0.996	0.858
Selenium		0.004	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alkalinity	-	402	604	353	235	328	250	385	390	393
Bromide	-	1	1	<2	<2	<2	<2	<2	<2	<2
Chloride	250	25	136	3.02	2.46	**27**	<2	**55.9**	**87.5**	3.25
Hardness	-	449	830	**510**	283	443	262	**512**	**497**	400
Sodium	20	18	75	14.2	2.82	16.3	1.74	**24**	**32.7**	1.46
Sulfate	250	72	214	**170**	35.8	**138**	30.2	**135**	**88.7**	25.8
Sulfur	-	50	89	**56.7**	12	**46.1**	10.1	45.1	29.6	8.6
Total Dissolved Solids	500	500	668	**615**	295	**570**	260	**660**	**640**	400
Carbonate	-	3	9	<1	<1	<1	<1	<1	<1	<1
Bicarbonate	-	406	612	353	235	328	250	385	390	393
Conductivity	-	1995	1400	1035	601	1047	596	1239	1316	897
Turbidity	5	15	65	<1	<1	9	<1	<1	<1	<1

Notes:
1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. NA = Not Available, due to limited data from dry monitoring wells, insufficient water volume to allow sample collection, or incomplete historical data.
5. Bedrock monitoring wells to be accessed utilizing Intrawell comparison.
6. Bolded cells indicate that the concentration is above the Operational Trigger Value.
7. Shaded cells indicate that the concentration is above the STV.

TABLE 2-3
LEACHATE COLLECTION SYSTEM DATA
JUNE 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Leachate ID	P2-PLCS	P2-SLCS-E	P2-SLCS-W	P3-PLCS	P3-SLCS	P2-SSS	SB1-SW	SB2-SW	PI-GID	PI-UD
Parameters	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Baseline**	**Routine**	**Routine**	**Baseline**	**Baseline**
Alkalinity	430	NS	NS	210	NS	NS	90	78	NS	255
Bicarbonate	430	NS	NS	210	NS	NS	90	78	NS	255
Bromide	5.25	NS	NS	5.79	NS	NS	3.35	2.72	NS	<2
Carbonate	<1	NS	NS	<1	NS	NS	<1	<1	NS	<1
Chloride	22.2	NS	NS	17.9	NS	NS	60.8	74.1	NS	78.2
Cyanide, Total	<0.01	NS	NS	<0.01	NS	NS	NA	NA	NS	<0.01
Color	5	NS	NS	5	NS	NS	NA	NA	NS	5
Hexavalent Chromium	<0.02	NS	NS	<0.02	NS	NS	NA	NA	NS	<0.02
Sulfate	1830	NS	NS	1580	NS	NS	1070	968	NS	132
Sulfide	<0.10	NS	NS	<0.10	NS	NS	NA	NA	NS	<0.10
Sulfur	611	NS	NS	530	NS	NS	360	320	NS	44
Total Dissolved Solids	3050	NS	NS	2500	NS	NS	1700	1500	NS	680
Hardness	2073	NS	NS	1726	NS	NS	1191	1030	NS	389
Turbidity	<1	NS	NS	<1	NS	NS	22	<1	NS	<1
Aluminum	<0.100	NS	NS	<0.100	NS	NS	<0.100	<0.100	NS	<0.100
Antimony	<0.060	NS	NS	<0.060	NS	NS	NA	NA	NS	<0.060
Arsenic	0.017	NS	NS	0.032	NS	NS	0.013	0.013	NS	<0.005
Barium	0.025	NS	NS	0.038	NS	NS	NA	NA	NS	0.03
Beryllium	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	<0.005
Boron	27	NS	NS	23.7	NS	NS	14.6	11.7	NS	0.299
Cadmium	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	<0.005
Calcium	608	NS	NS	365	NS	NS	358	297	NS	100
Chromium	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	<0.005
Cobalt	<0.050	NS	NS	<0.050	NS	NS	NA	NA	NS	<0.050
Copper	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	<0.005
Iron	<0.050	NS	NS	<0.050	NS	NS	0.115	<0.050	NS	<0.050
Lead	<0.005	NS	NS	<0.005	NS	NS	NA	NA	NS	<0.005
Magnesium	135	NS	NS	98.5	NS	NS	72.2	70.2	NS	33.6
Manganese	0.378	NS	NS	<0.020	NS	NS	0.086	<0.020	NS	<0.020
Mercury	<0.0002	NS	NS	<0.0002	NS	NS	NA	NA	NS	<0.0002
Nickel	<0.020	NS	NS	<0.020	NS	NS	NA	NA	NS	<0.020
Potassium	59.8	NS	NS	66.7	NS	NS	41.4	35.1	NS	0.057
Selenium	1.24	NS	NS	0.71	NS	NS	0.293	0.23	NS	0.017
Silver	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	<0.010
Sodium	107	NS	NS	101	NS	NS	86.9	67.3	NS	44.8
Thallium	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	<0.010
Vanadium	0.043	NS	NS	<0.020	NS	NS	NA	NA	NS	<0.020
Zinc	<0.010	NS	NS	<0.010	NS	NS	NA	NA	NS	<0.010
Conductivity	3674	NS	NS	3227	NS	NS	2424	2200	NS	1099
Ph	7.1	NS	NS	7.4	NS	NS	8.2	8.1	NS	7.5

Notes:
1. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
2. NS = No sample collected due to insufficient or no flow condition.
3. NA = Not analyzed.

TABLE 2-1
OVERBURDEN GROUNDWATER QUALITY DATA
SEPTEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

ROUTINE

Monitoring Well ID		**DW-3P**			**DW-6D**			**DW-7D**		
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**9/28/2016**	**Operational**	**STV**	**9/28/2016**	**Operational**	**STV**	**9/28/2016**
Aluminum	-	0.683	1.86	<0.100	0.94	1.39	<0.100	0.33	0.81	<0.100
Arsenic	0.025	0.004	0.01	<0.005	0.01	0.01	0.007	0.01	0.01	0.008
Boron	1	0.240	0.63	**1.24**	0.21	0.51	0.140	0.12	0.48	0.063
Calcium	-	74	184	**99.3**	128	159	114	111	135	**138**
Iron	0.3	0.901	2.85	<0.050	0.73	2.71	<0.050	0.44	1.19	<0.050
Magnesium	35	29	41	18.7	24	27	**26.2**	54	66	**61.2**
Manganese	0.3	0.153	0.55	<0.020	0.86	2.98	<0.020	0.06	0.24	<0.020
Potassium	-	3	7	2.4	1.41	4.71	0.734	1.32	3.13	1.16
Selenium		0.016	0.05	**0.056**	0	0.02	<0.005	0.01	0.04	<0.005
Alkalinity	-	279	454	220	336	448	270	401	521	423
Bromide	-	1	1	<2	1	1	<2	1	1	<2
Chloride	250	7	30	3.66	21	32	**40.4**	64	96	**137**
Hardness	-	348	462	325	414	494	393	503	611	**597**
Sodium	20	7	13	**12**	8	13	**9.41**	25	42	**36.5**
Sulfate	250	59	183	**127**	81	117	**77.3**	67	98	60
Sulfur	-	30	70	14.1	31	42	8.6	28	56	6.7
Total Dissolved Solids	500	396	593	**435**	522	700	470	612	951	**695**
Carbonate	-	3	9	<1	3	9	<1	3	9	<1
Bicarbonate	-	287	477	220	344	462	270	415	533	**423**
Conductivity	-	1403	1403	667	1403	1403	763	1403	1403	1293
Turbidity	5	35	95	7	12	36	10	18	68	<1

Notes:
1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. Overburden monitoring wells to be accessed utilizing Intrawell comparison.
5. Bolded cells indicate that the concentration is above the Operational Trigger Value.
6. Shaded cells indicate that the concentration is above the Statistical Trigger Value.
7. Concentrations reported in milligrams per liter (mg/L), approximately equivalent to parts per million.
8. NA = Not Available, due to limited data from dry monitoring wells, or incomplete historical data.

TABLE 2-2
BEDROCK GROUNDWATER QUALITY DATA
SEPTEMBER 2016
DANSKAMMER ENERGY, LLC
DANSKAMMER SOLID WASTE MANAGEMENT FACILITY

Monitoring Well ID				**DW-1R**	**DW-3R**	**DW-4R**	**DW-5R**	**DW-6R**	**DW-7R**
Routine Parameters	**NYSDEC Standard**	**Operational**	**STV**	**9/27/2016**	**9/28/2016**	**9/28/2016**	**9/28/2016**	**9/27/2016**	**9/27/2016**
Aluminum	-	0.39	1.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Arsenic	0.025	0.01	0.2	0.007	0.007	0.008	0.006	0.007	0.011
Boron	1	0.050	1.05	<0.050	<0.050	**0.556**	<0.050	**0.328**	<0.050
Calcium	-	227	250	110	57.7	121	62.6	140	120
Iron	0.3	0.95	3.6	0.319	<0.005	<0.050	0.151	0.751	<0.050
Magnesium	35	53	69	**57.6**	33.9	46.4	36.3	**53.7**	52.8
Manganese	0.3	0.03	0.11	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	-	1.6	9	**1.72**	0.812	0.963	1.22	1.18	1.13
Selenium		0.004	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alkalinity	-	402	604	350	250	343	278	405	385
Bromide	-	1	1	<2	<2	<2	<2	<2	<2
Chloride	250	25	136	3.01	2.46	**26.5**	2.44	**56.3**	**48.9**
Hardness	-	449	830	**511**	283	**493**	305	**570**	**518**
Sodium	20	18	75	12.3	3.08	15.8	2.28	**22.9**	**23**
Sulfate	250	72	214	**176**	37.4	**132**	33.8	**133**	**91.1**
Sulfur	-	50	89	19.6	4.2	14.7	3.8	14.8	10.1
Total Dissolved Solids	500	500	668	**590**	295	**570**	325	**660**	**580**
Carbonate	-	3	9	<1	<1	<1	<1	<1	<1
Bicarbonate	-	406	612	350	250	343	278	405	385
Conductivity	-	1995	1400	939	545	949	542	1138	957
Turbidity	5	15	65	**60**	9	5	5	3	9

Notes:

1. Operational = Existing Water Quality, the mean of the prior five years (2000-2004) of analytical data, where available.
2. STV = Statistical Trigger Values: Calculated value of three standard deviations above the average analytical value.
3. NYSDEC Standard = Groundwater Quality Standards per NYCRR Part 703.
4. NA = Not Available, due to limited data from dry monitoring wells, insufficient water volume to allow sample collection, or incomplete historical data.
5. Bedrock monitoring wells to be accessed utilizing Intrawell comparison.
6. Bolded cells indicate that the concentration is above the Operational Trigger Value.
7. Shaded cells indicate that the concentration is above the STV.

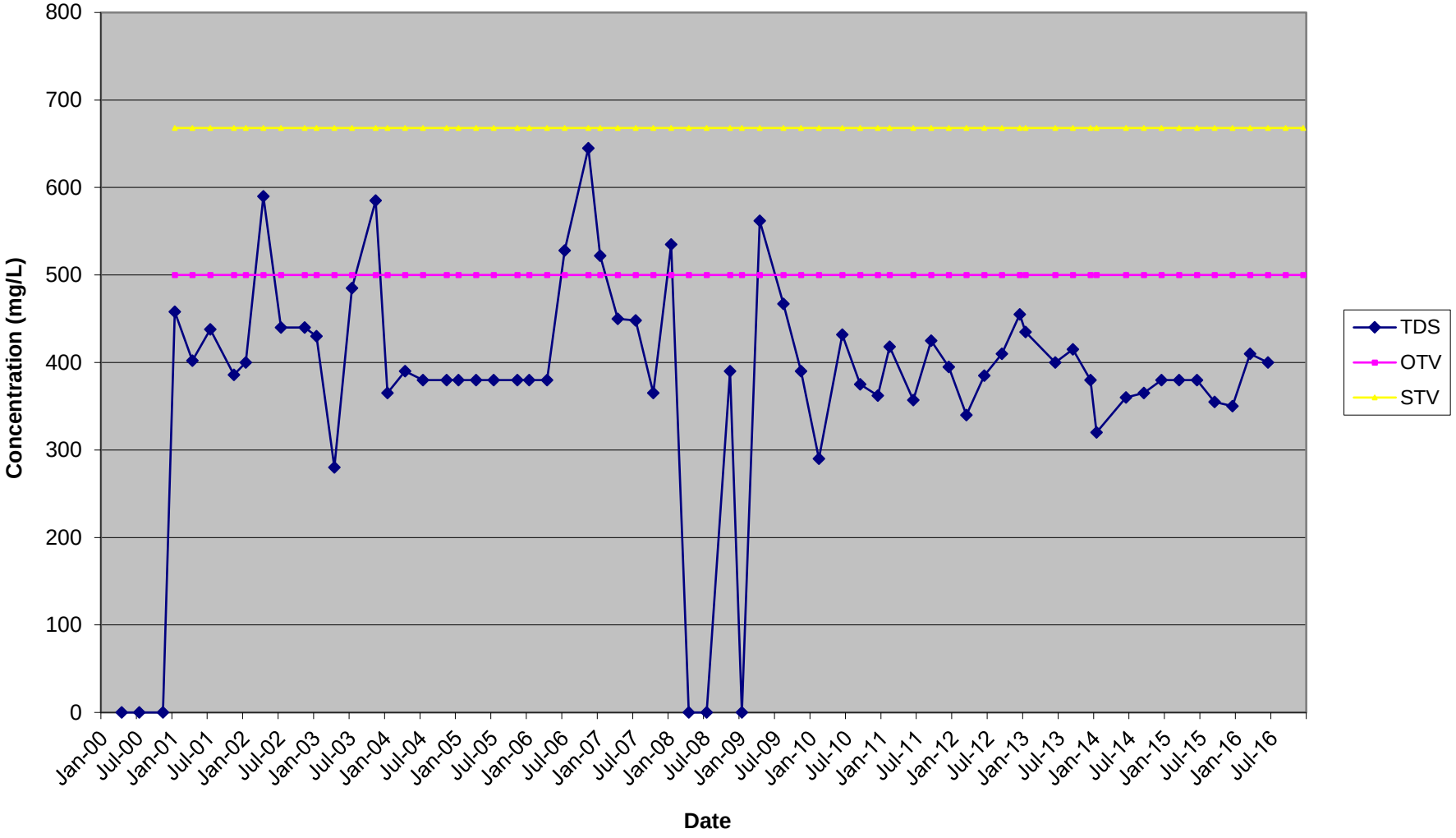
APPENDIX C
INDICATOR PARAMETER TIME TREND PLOTS

2016 ANNUAL REPORT

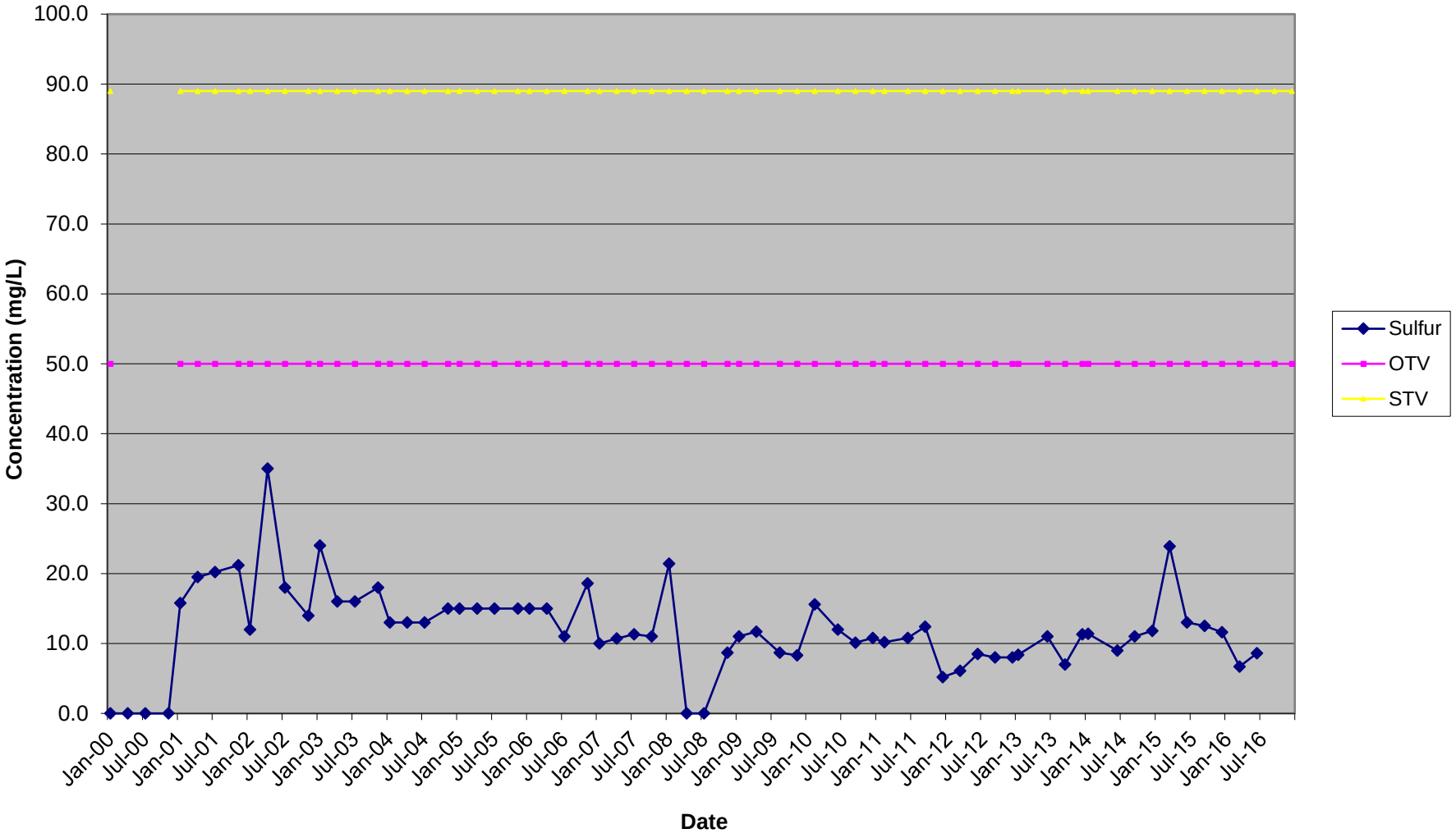
DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

FEBRUARY 2017

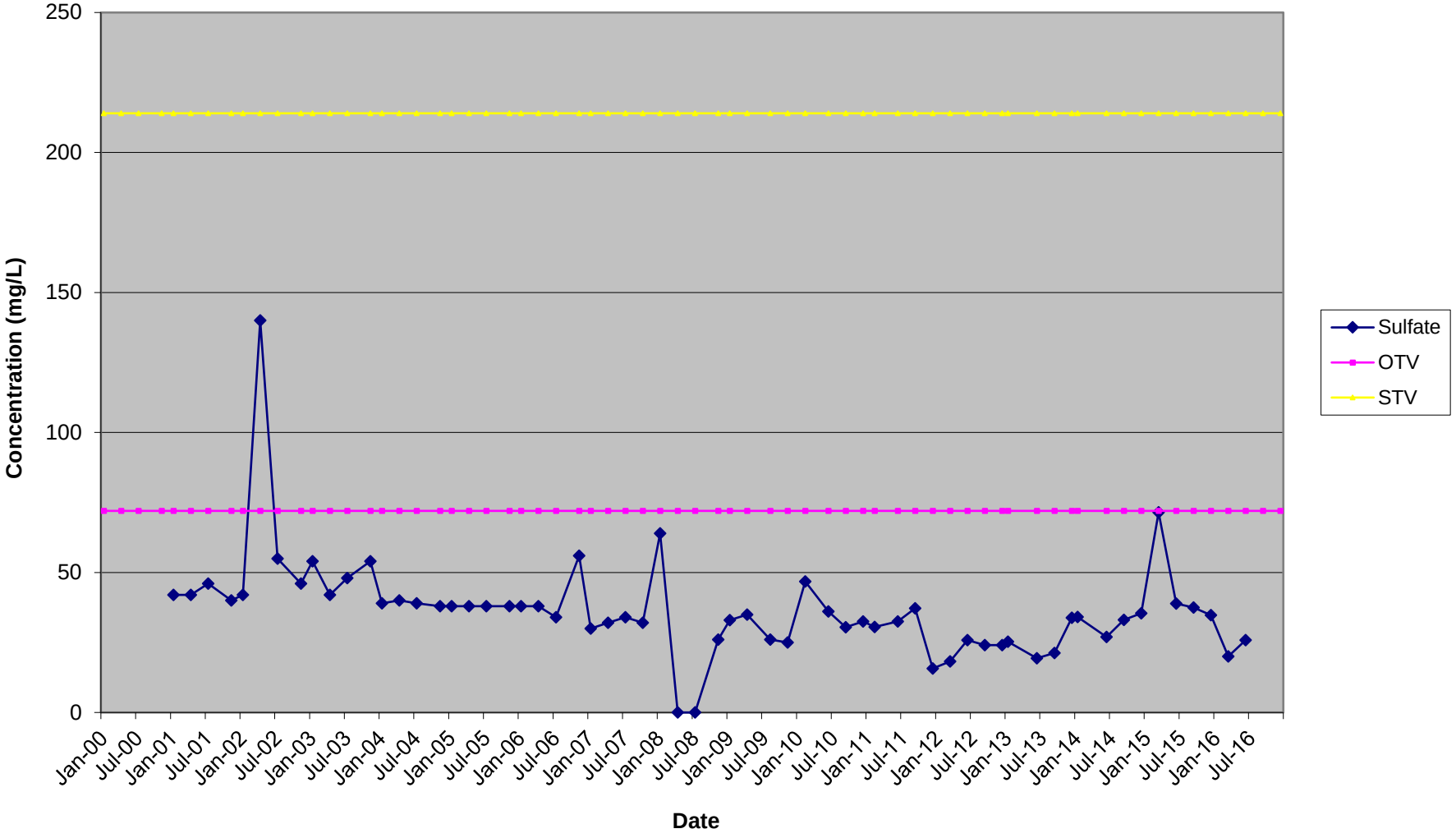
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DW-9R



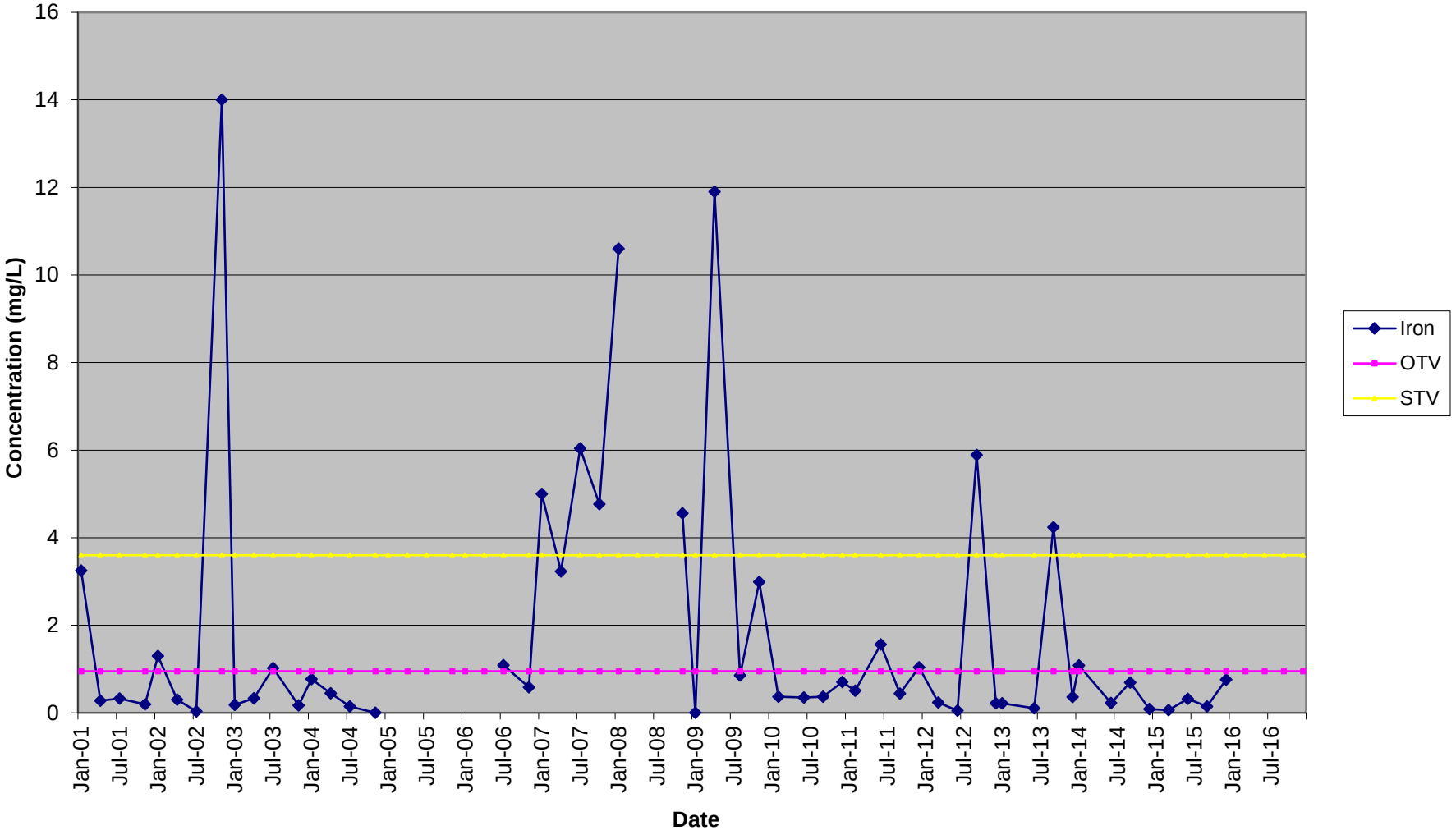
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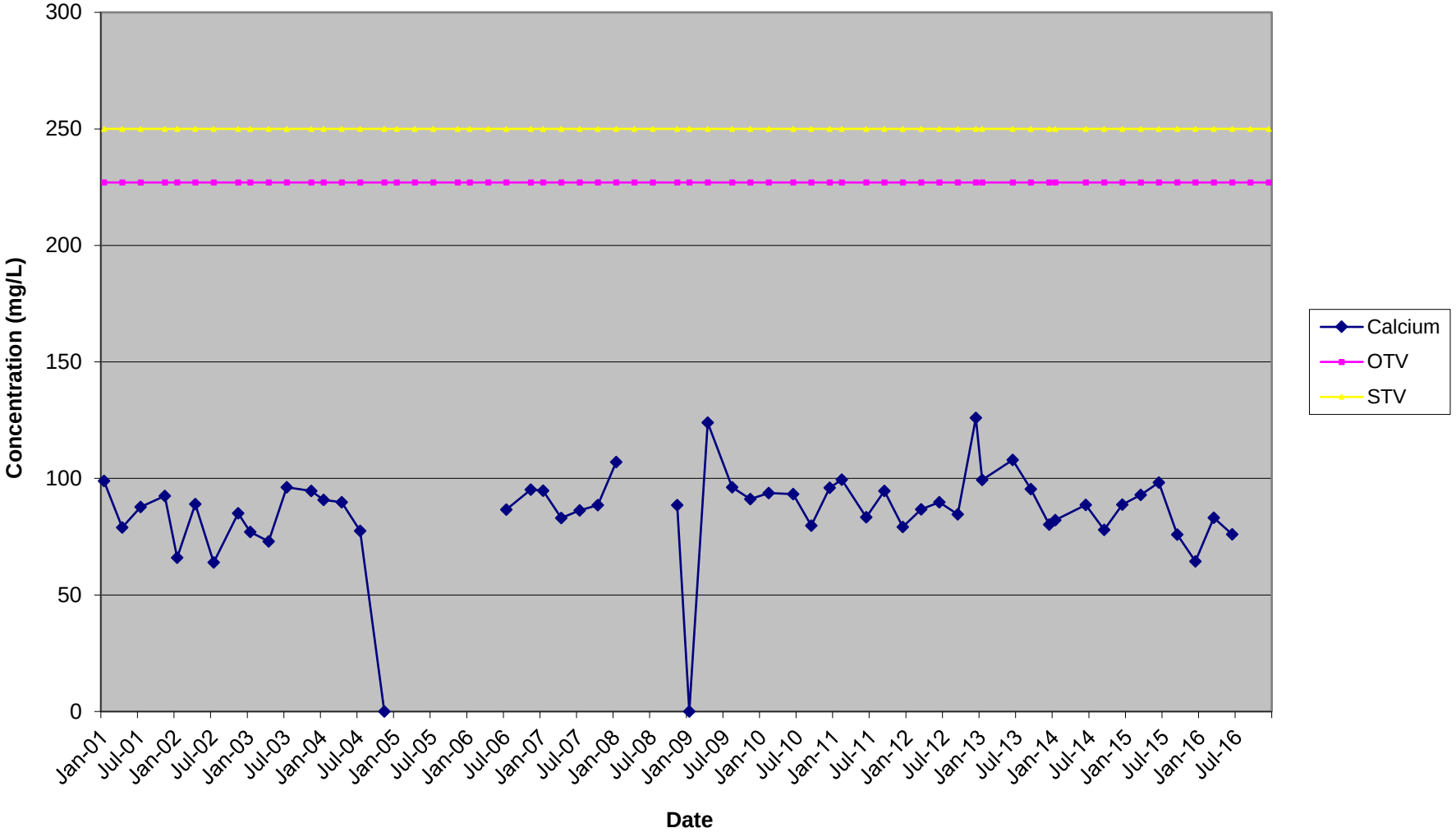
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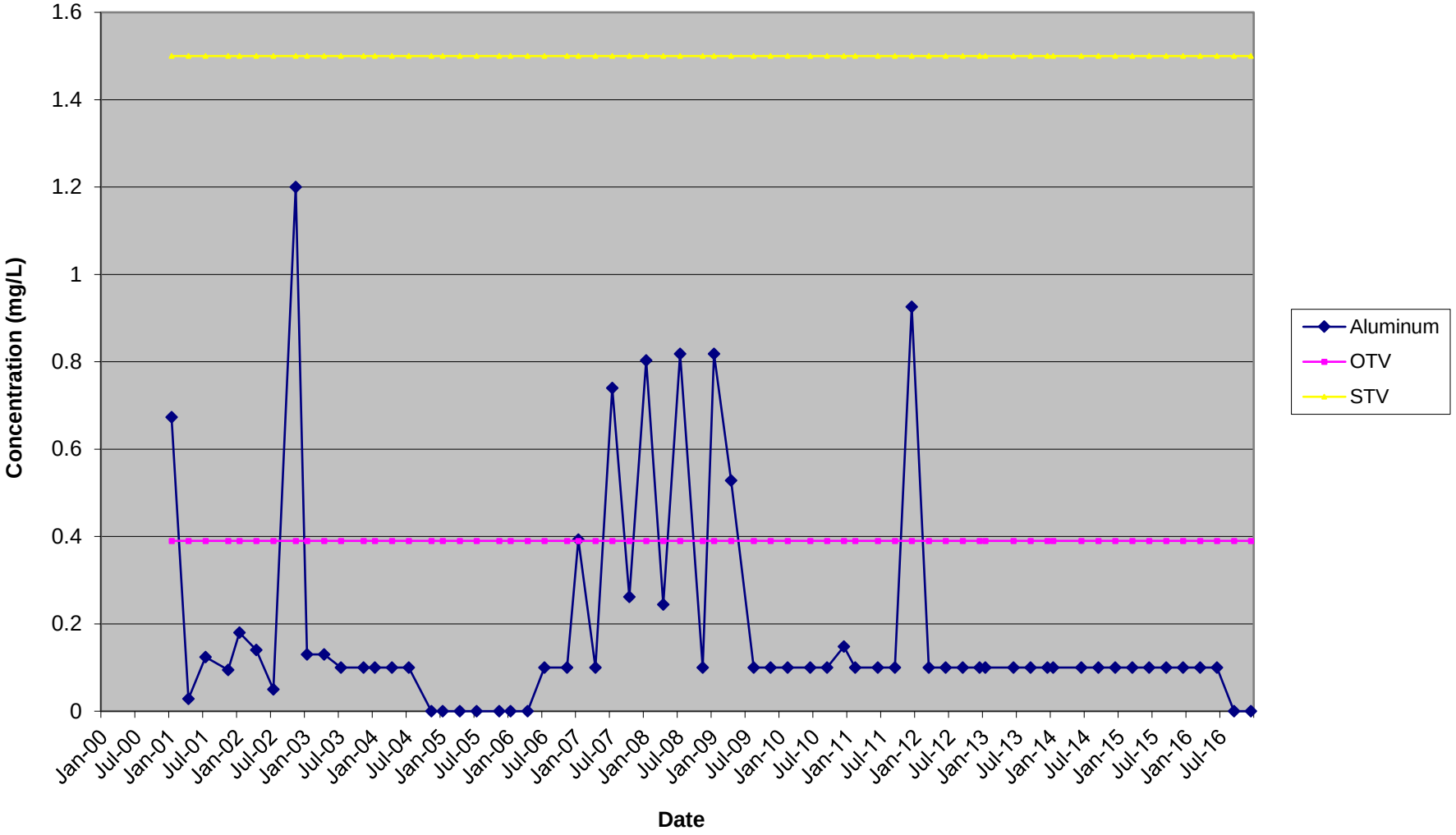
Indicator Parameter Time Trends
DW-9R



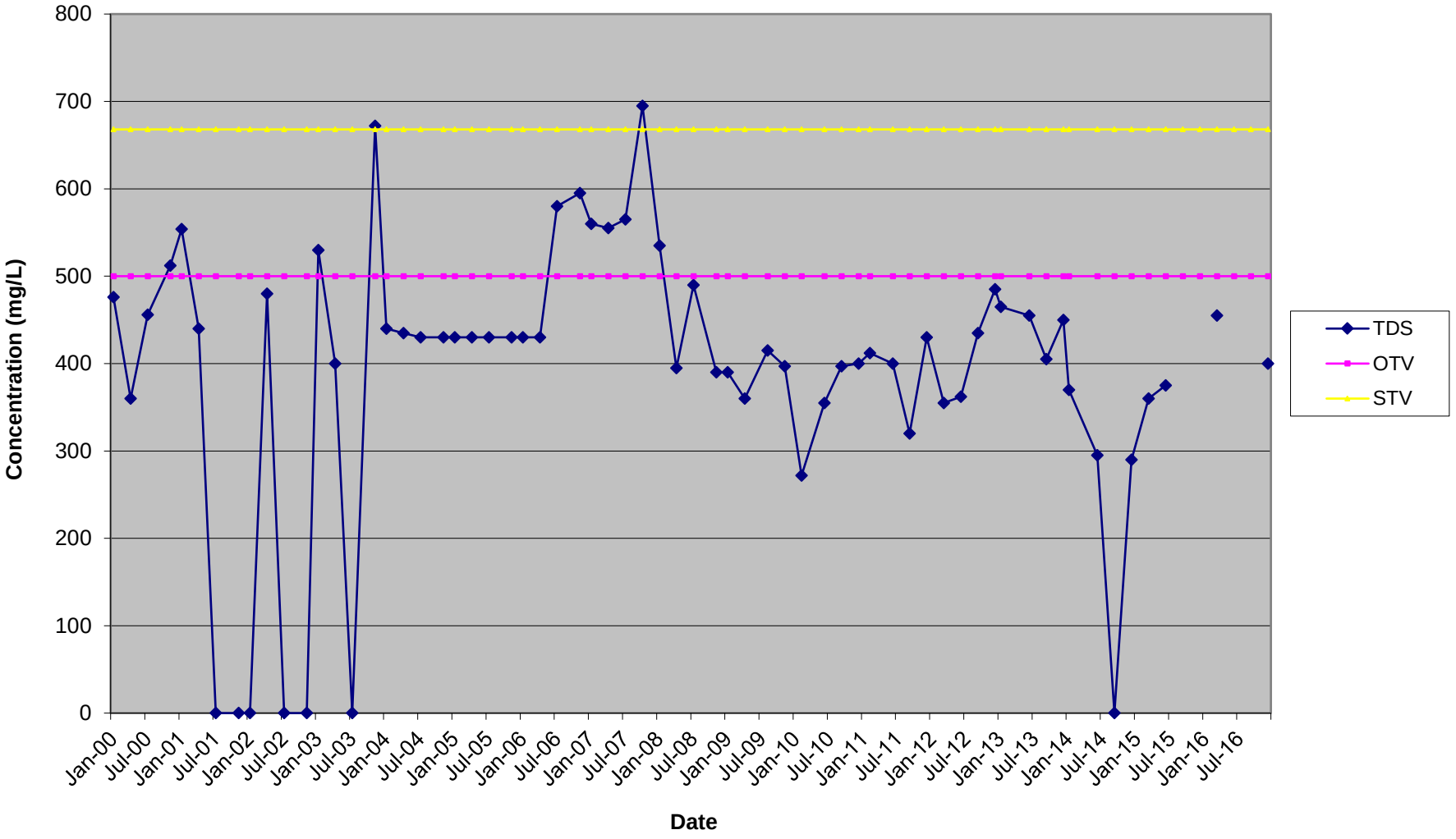
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DW-9R



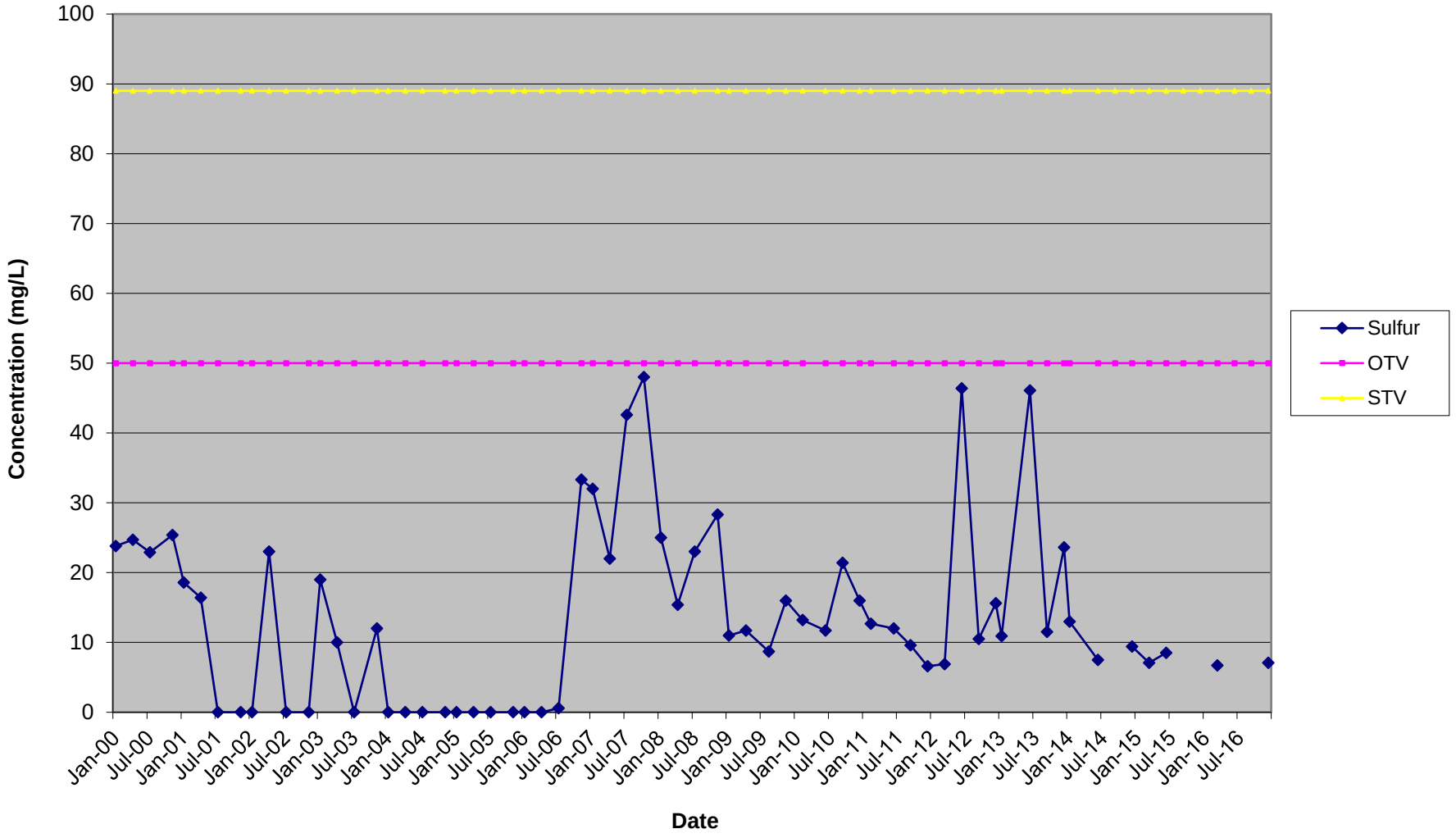
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DW-9R



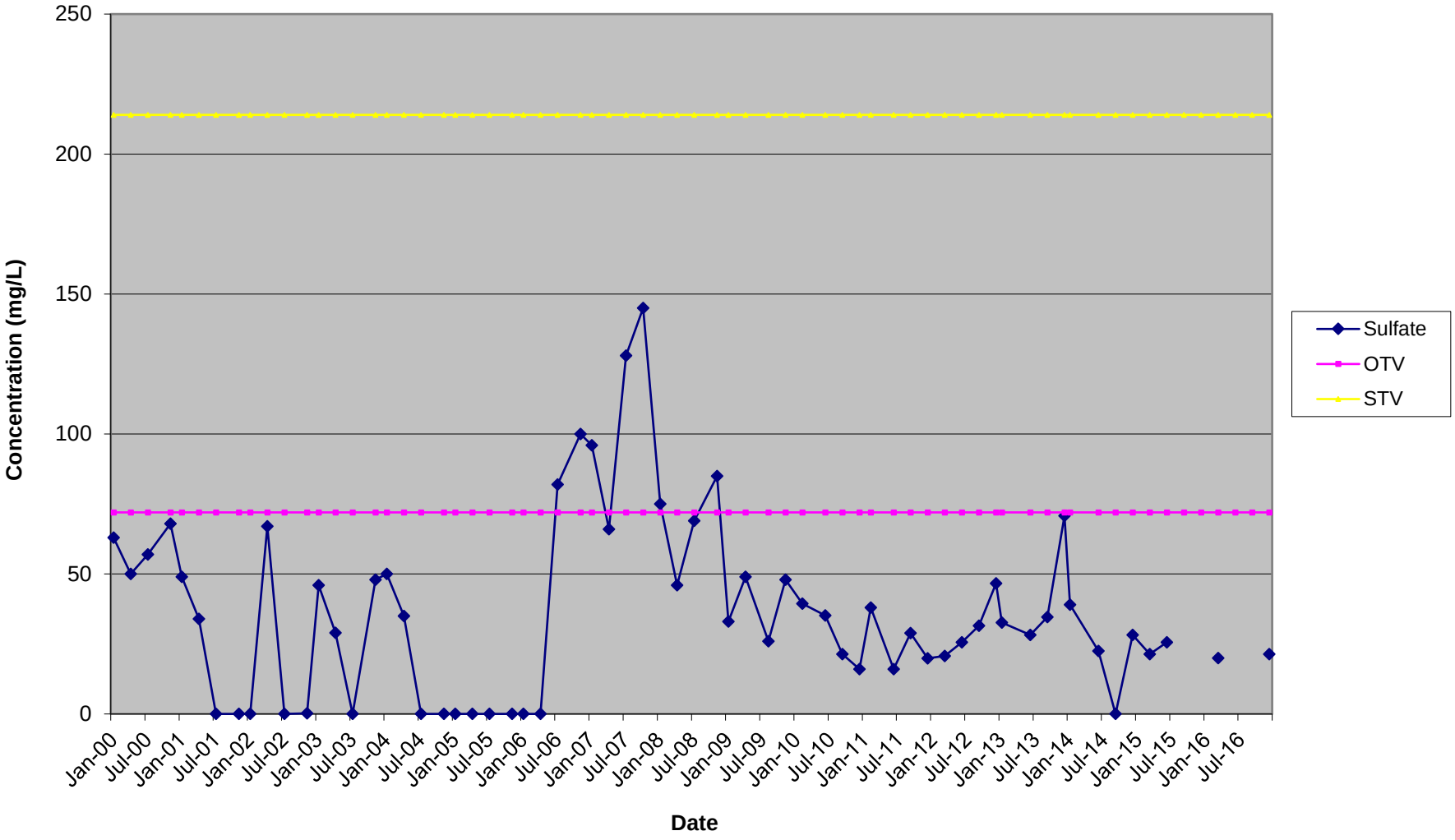
Indicator Parameter Time Trends
DW-8R



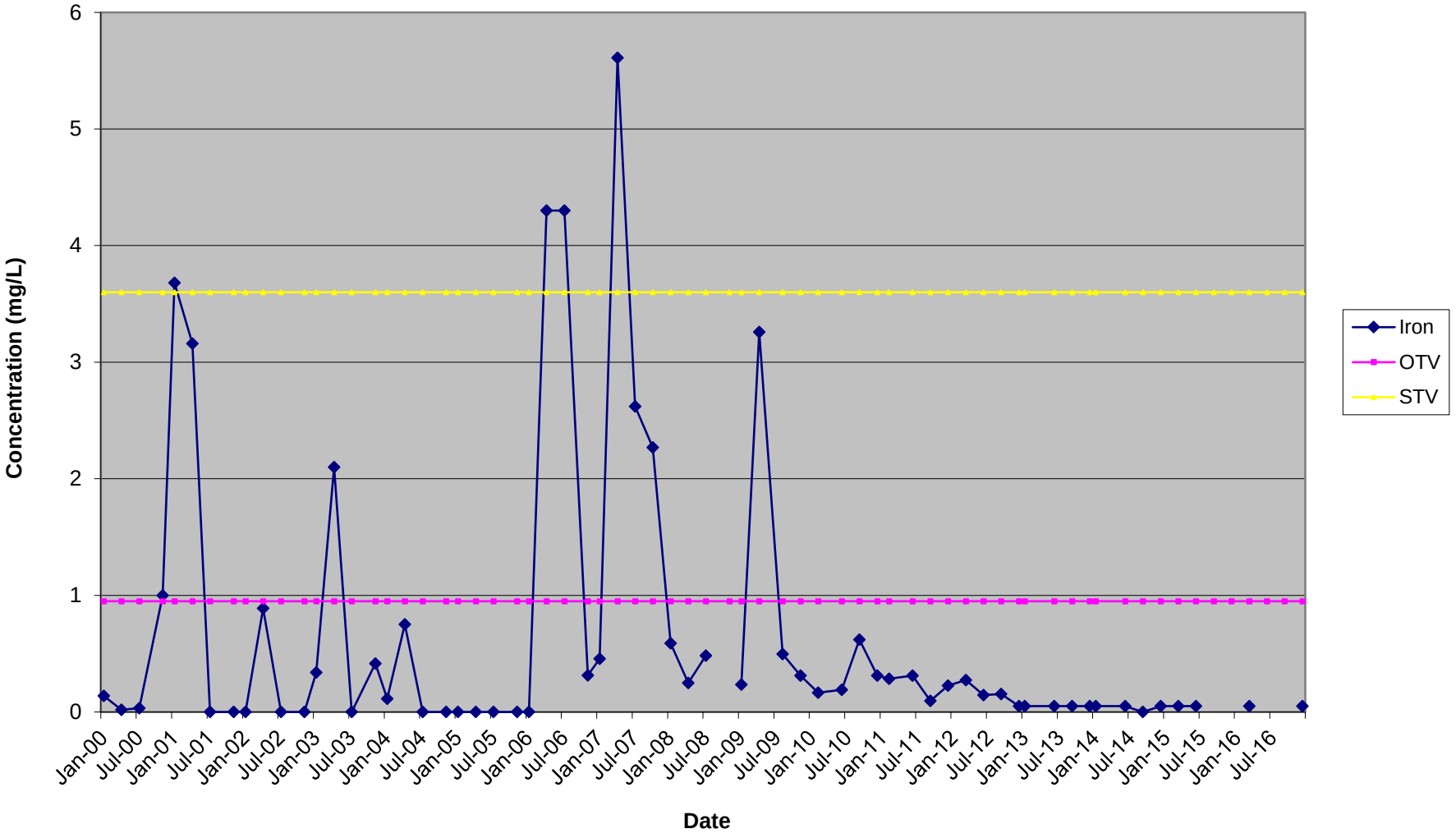
Indicator Parameter Time Trends
DW-8R



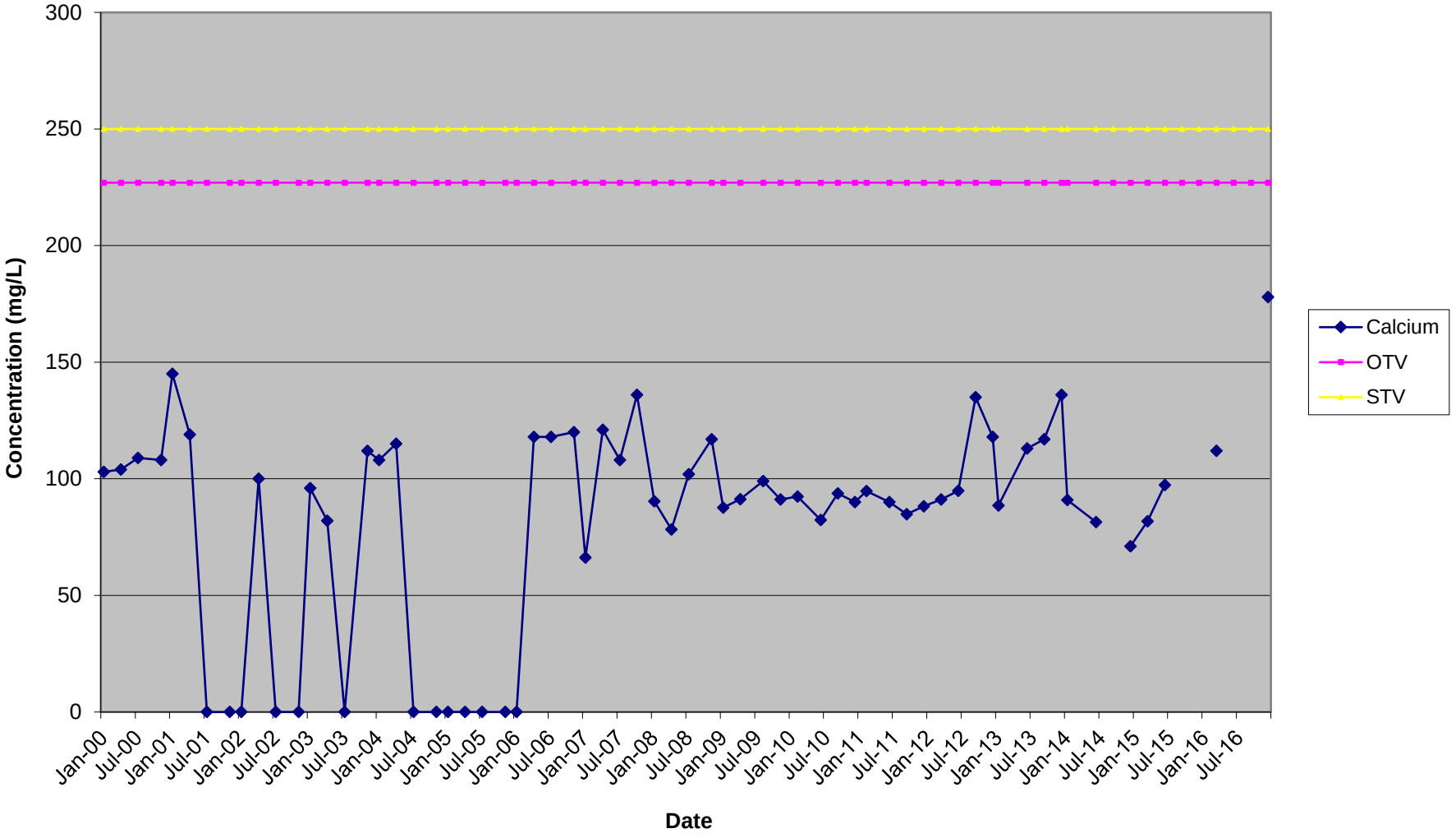
Indicator Parameter Time Trends
DW-8R



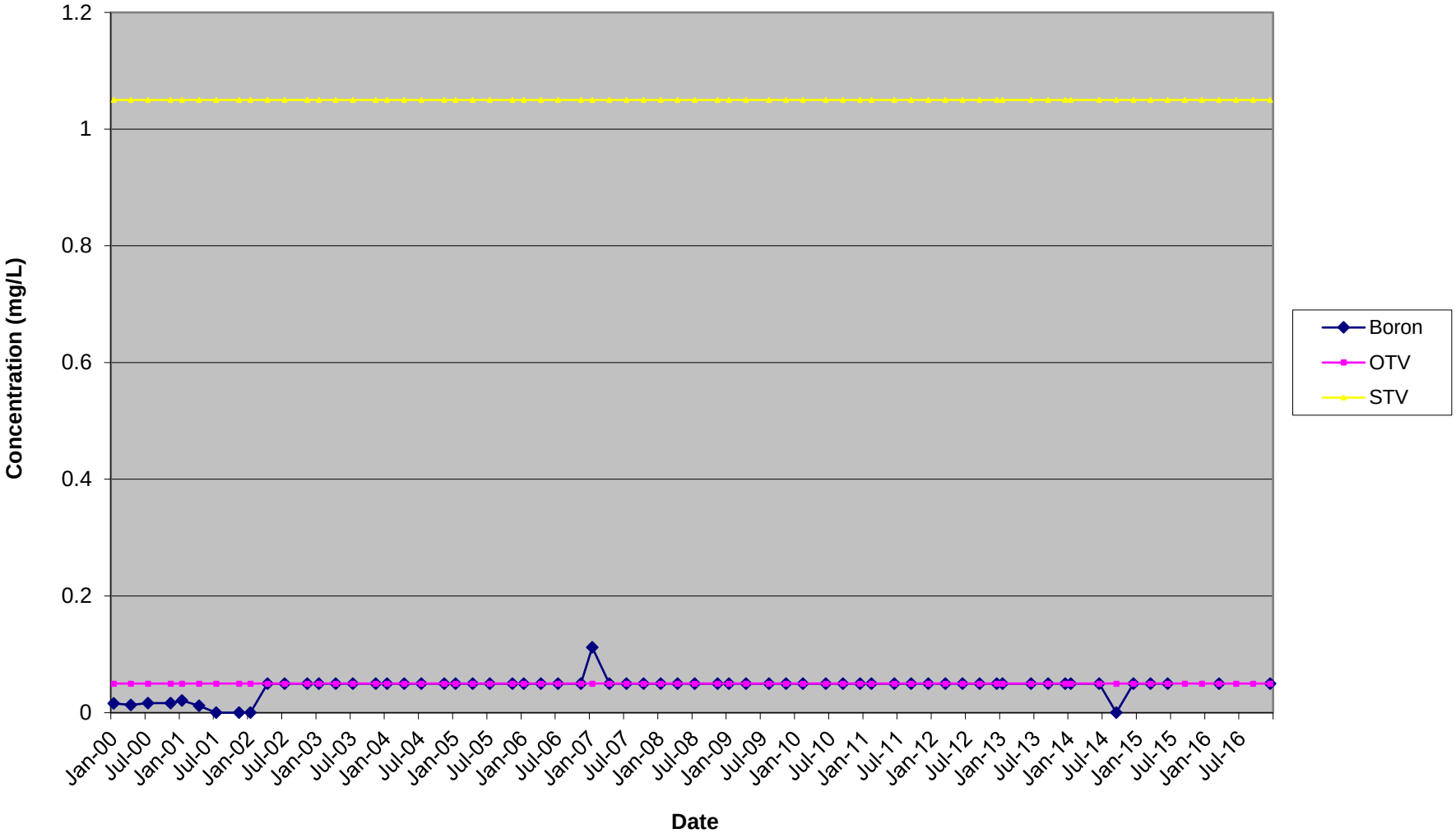
Indicator Parameter Time Trends
DW-8R



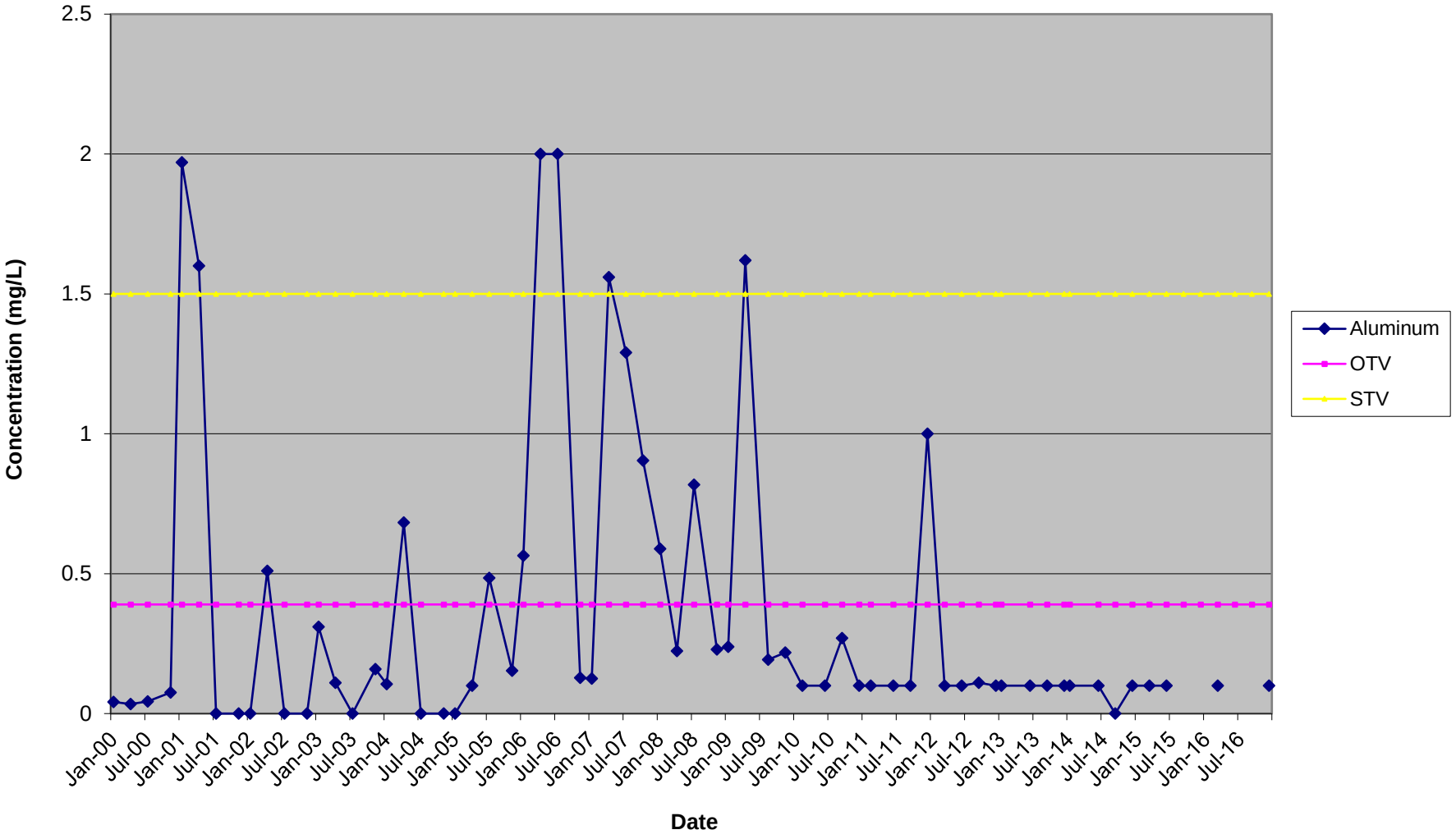
Indicator Parameter Time Trends
DW-8R



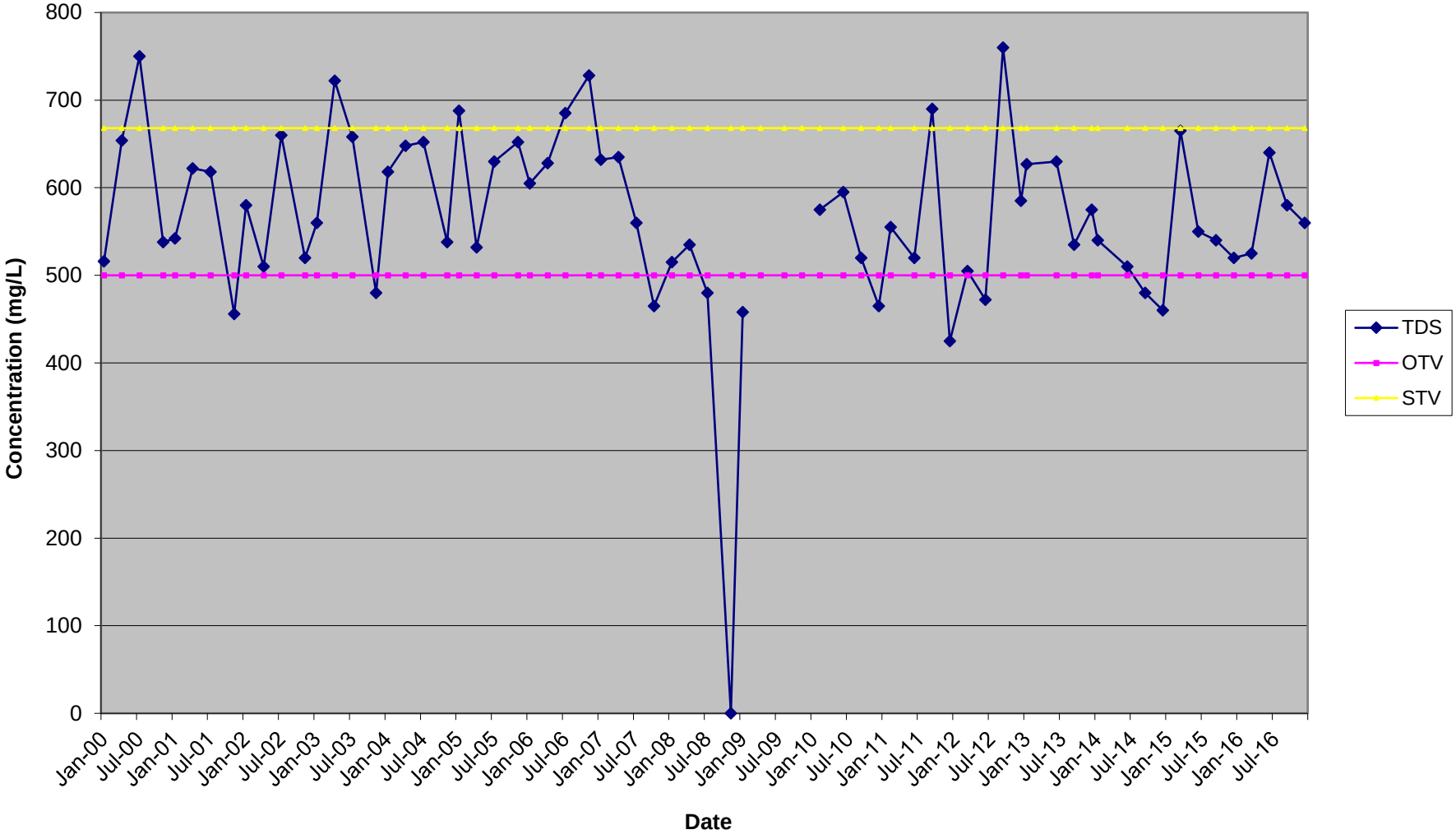
Indicator Parameter Time Trends
DW-8R



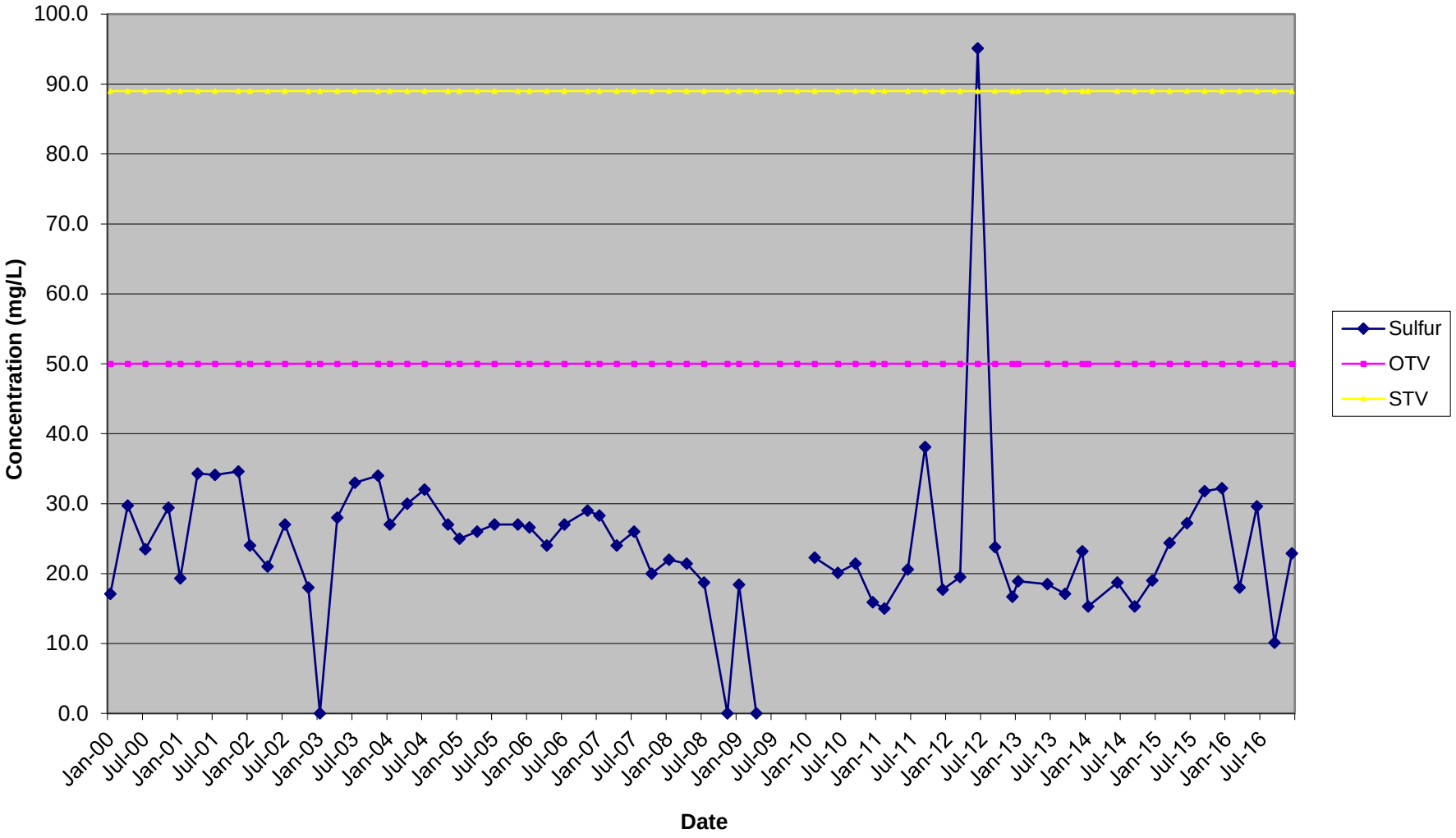
Indicator Parameter Time Trends
DW-8R



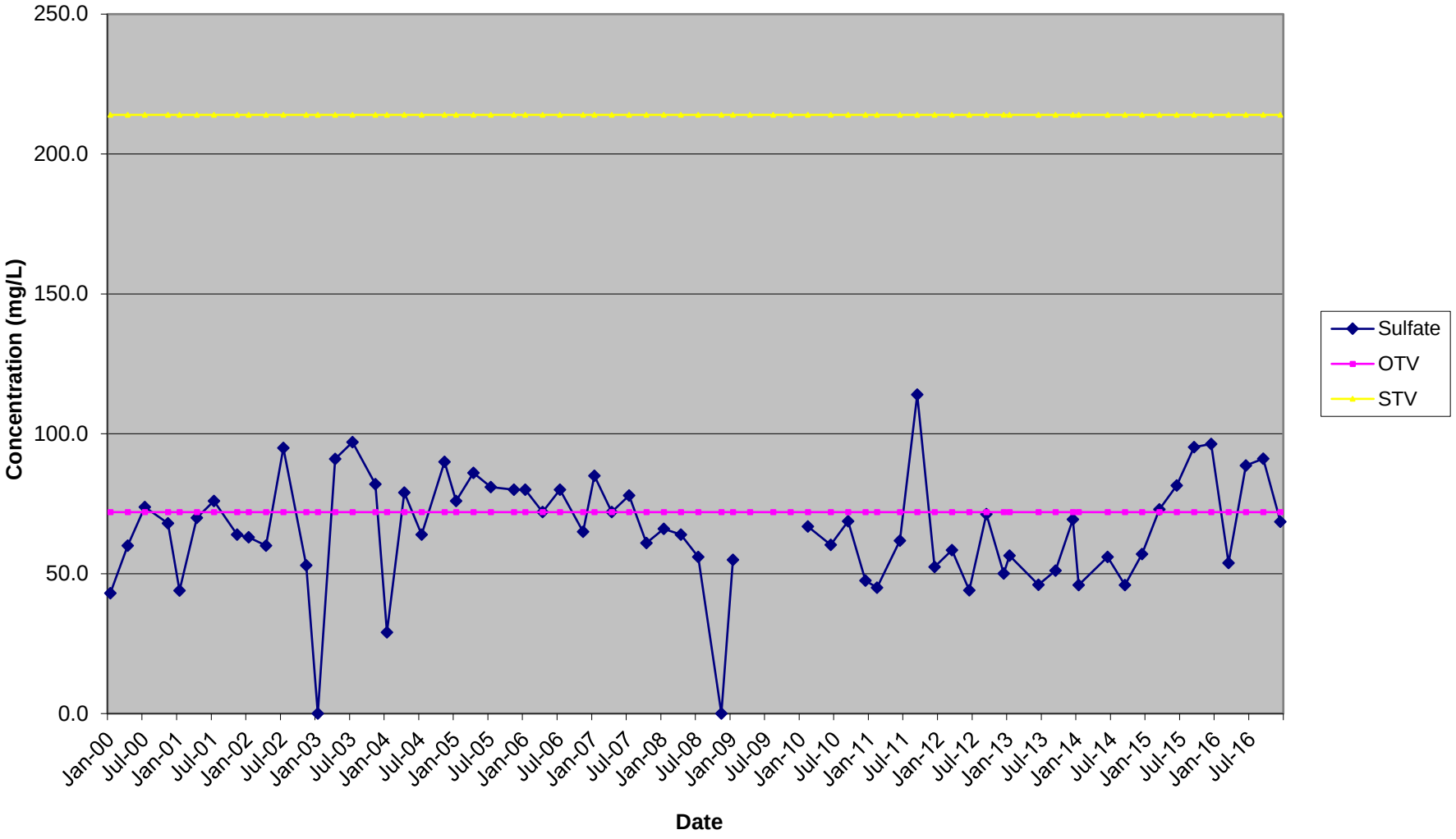
Indicator Parameter Time Trends
DW-7R



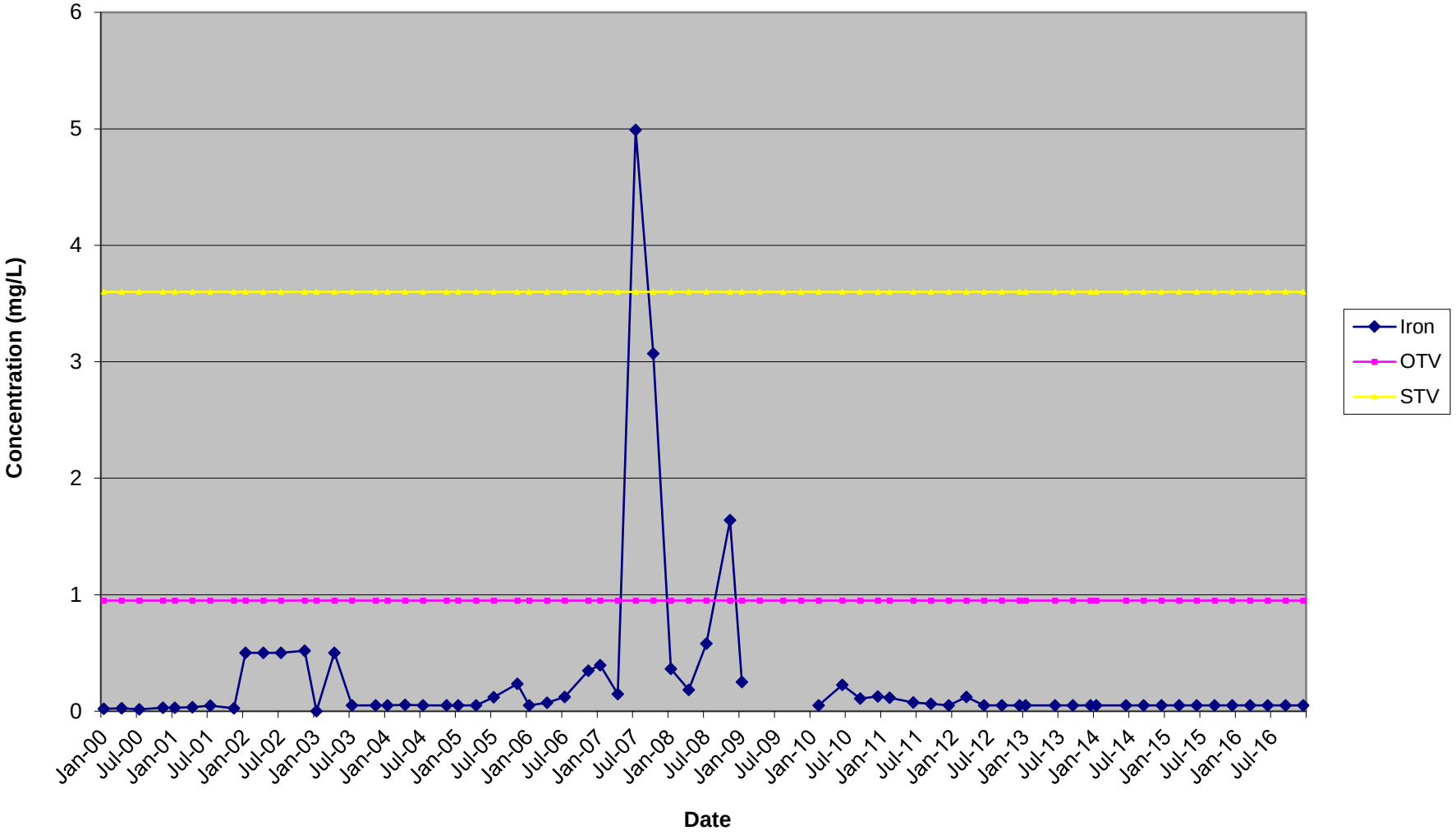
Indicator Parameter Time Trends
DW-7R



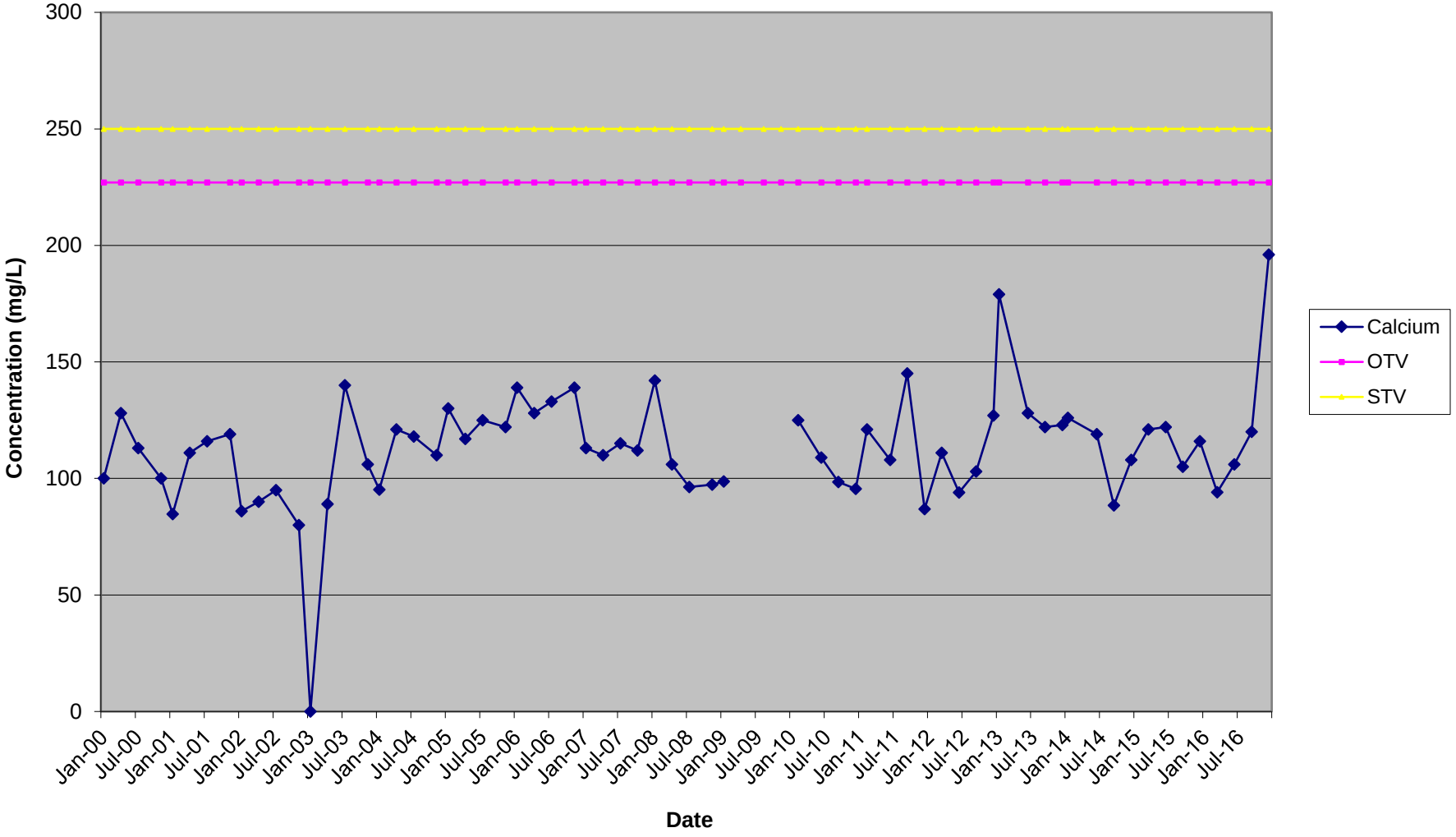
Indicator Parameter Time Trends
DW-7R



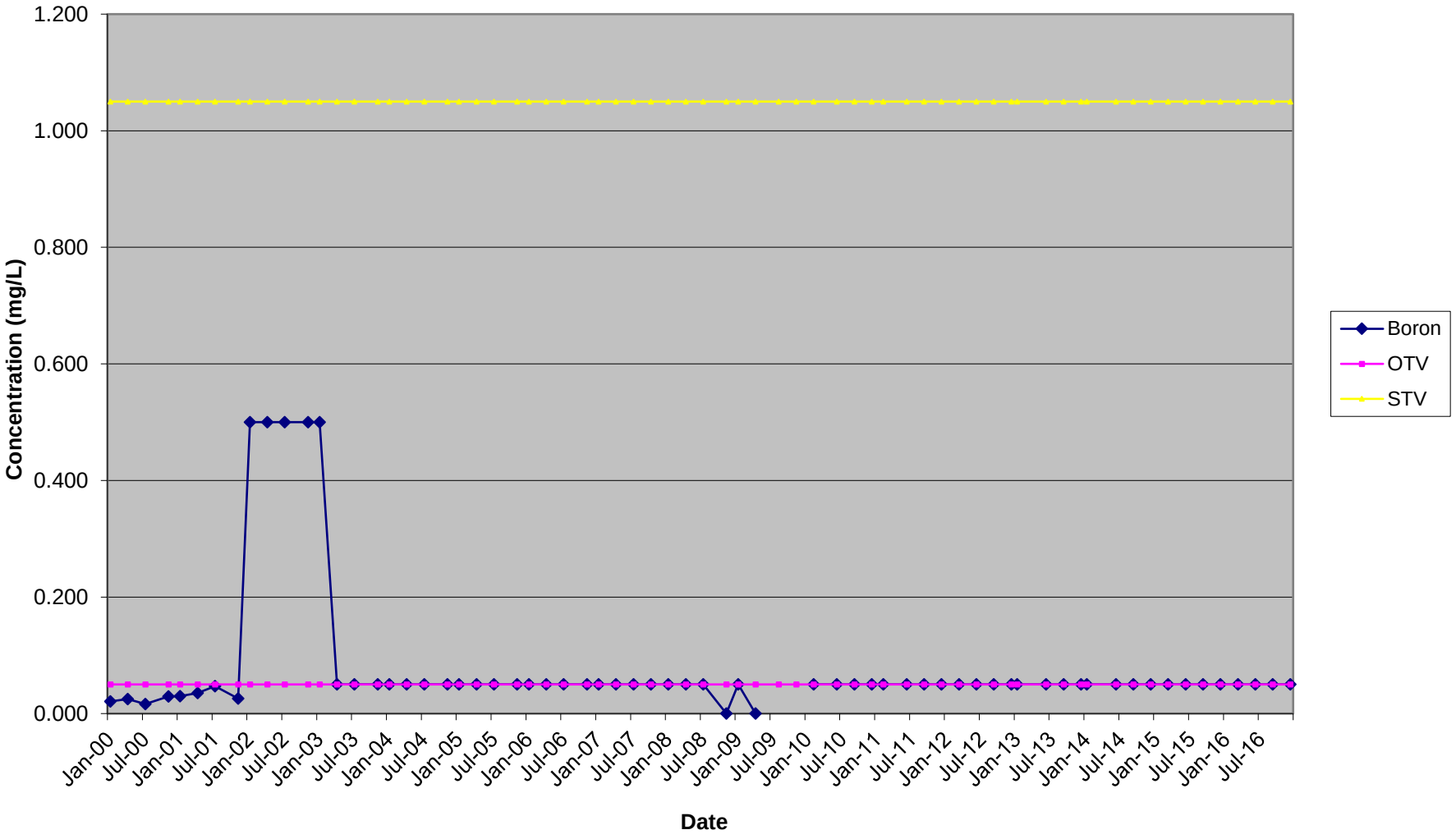
Indicator Parameter Time Trend Plots
DW-7R



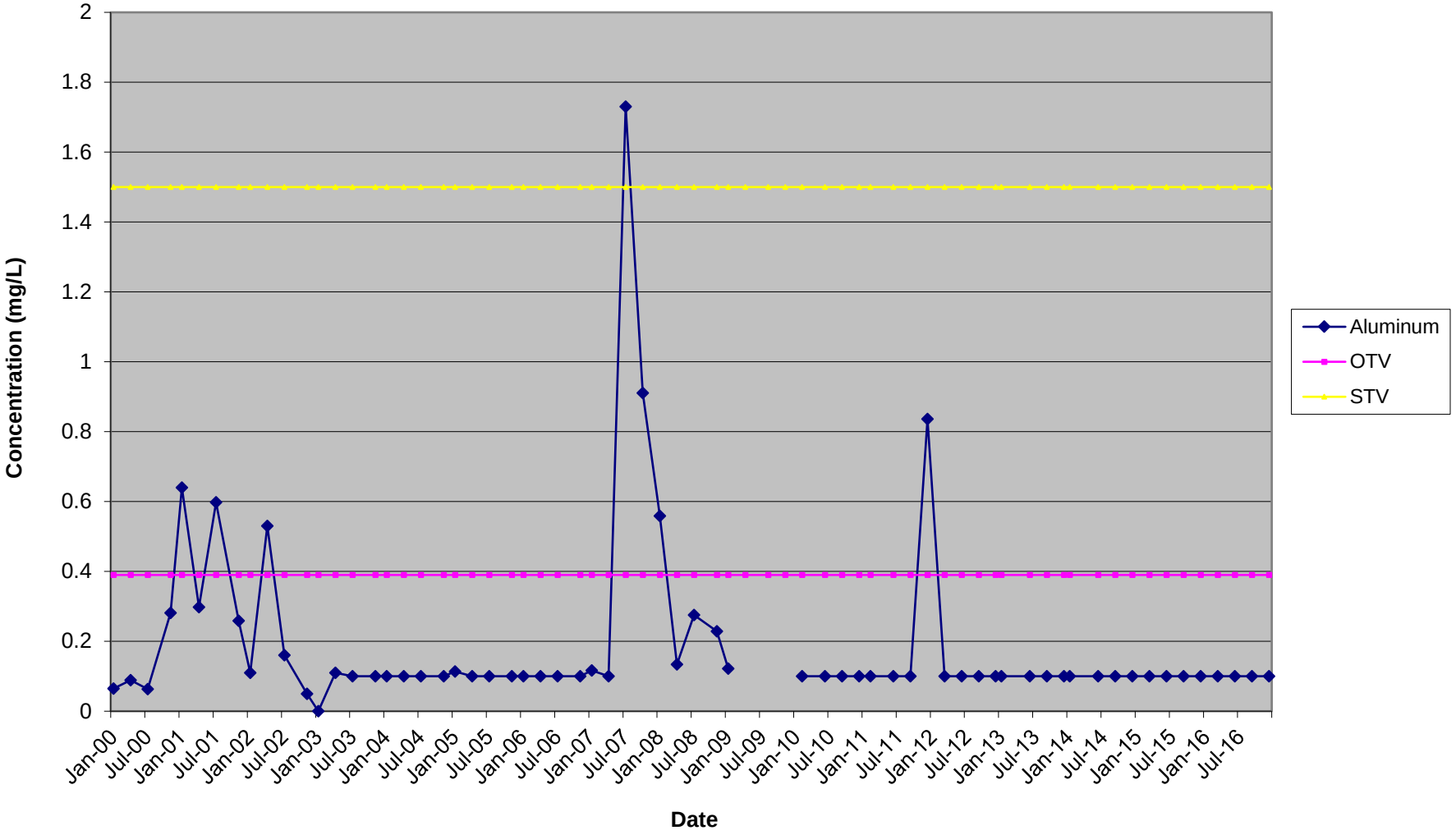
Indicator Parameter Time Trend Plots
DW-7R



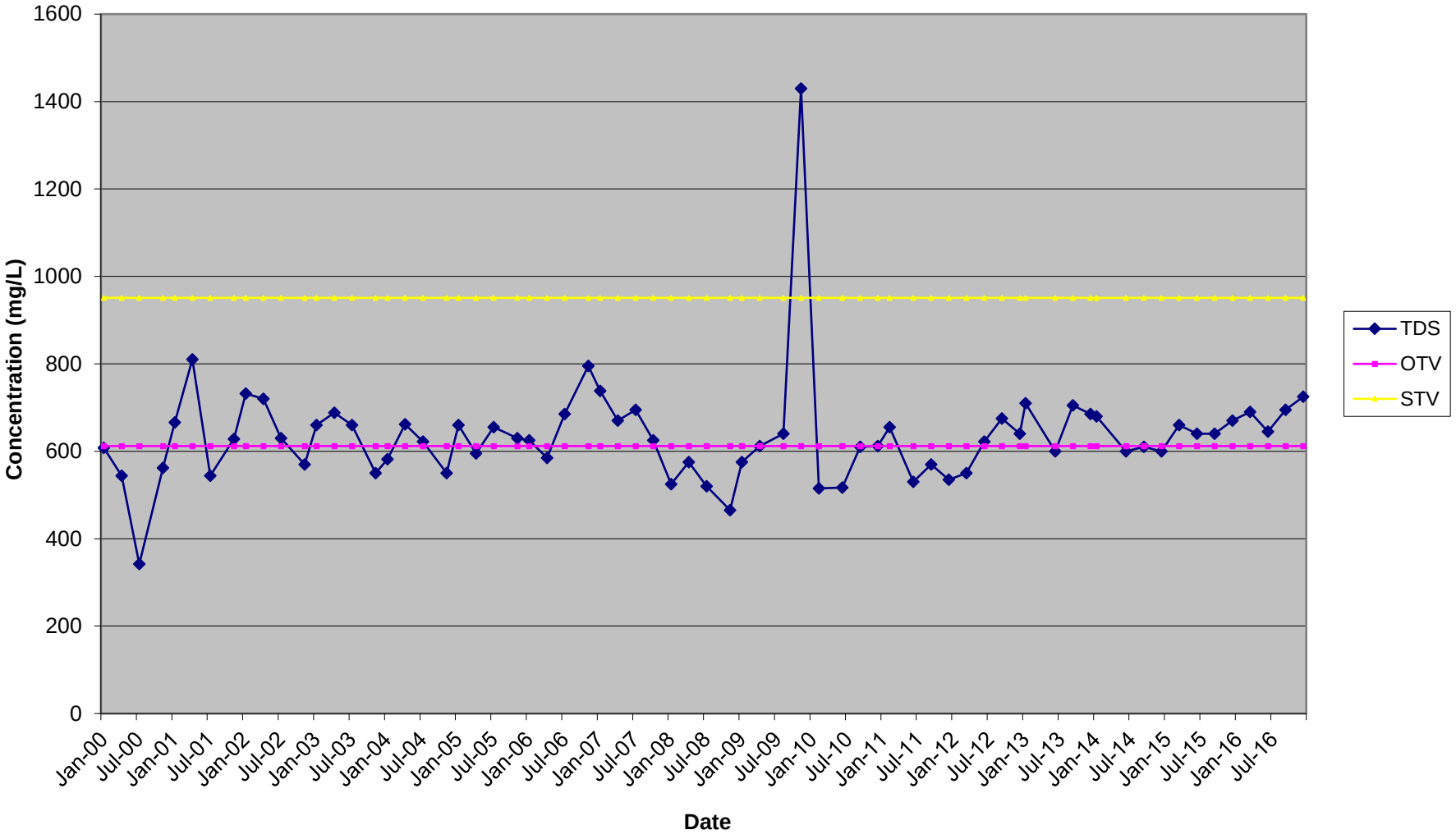
Indicator Parameter Time Trends
DW-7R



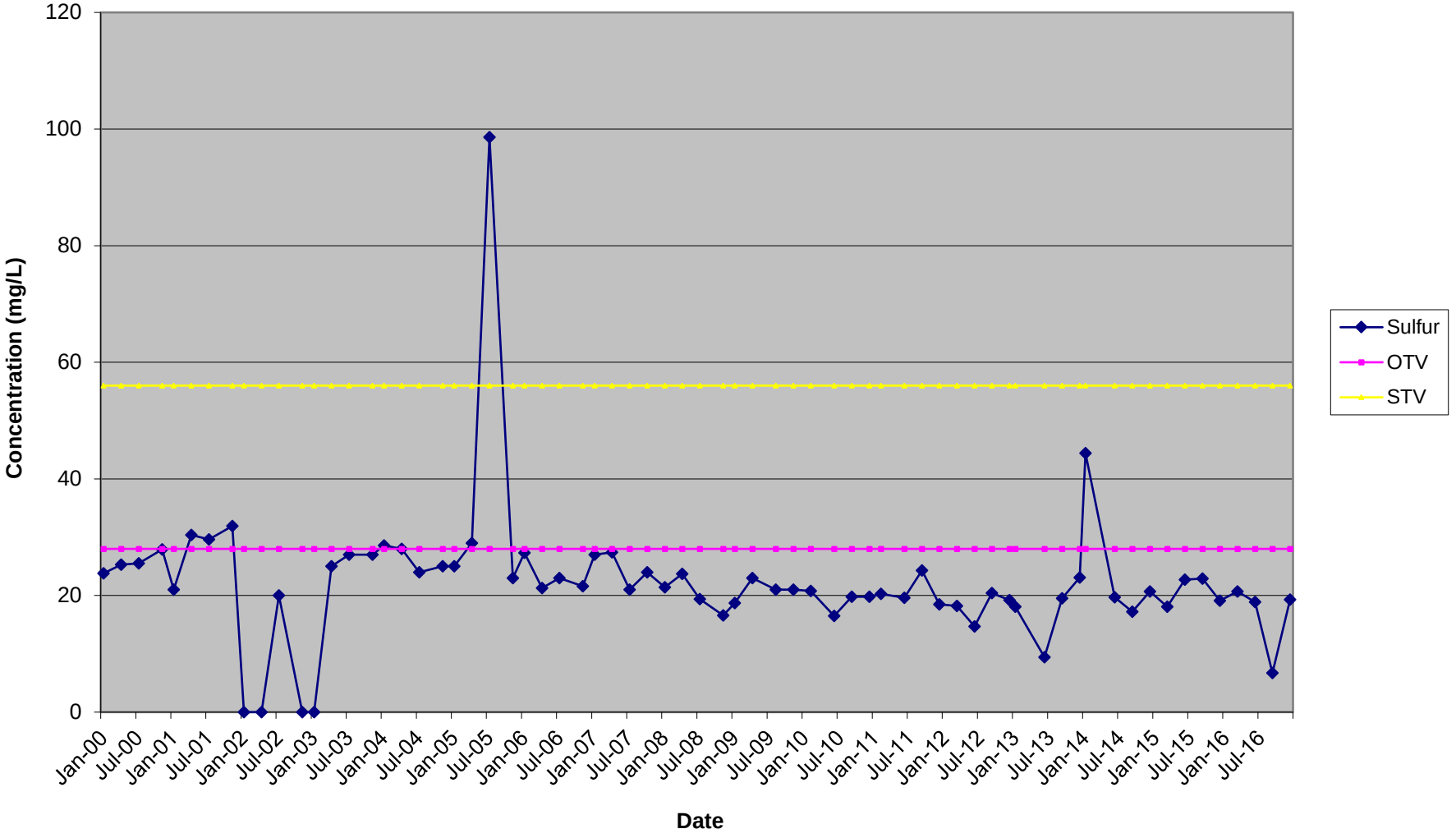
Indicator Parameter Time Trends
DW-7R



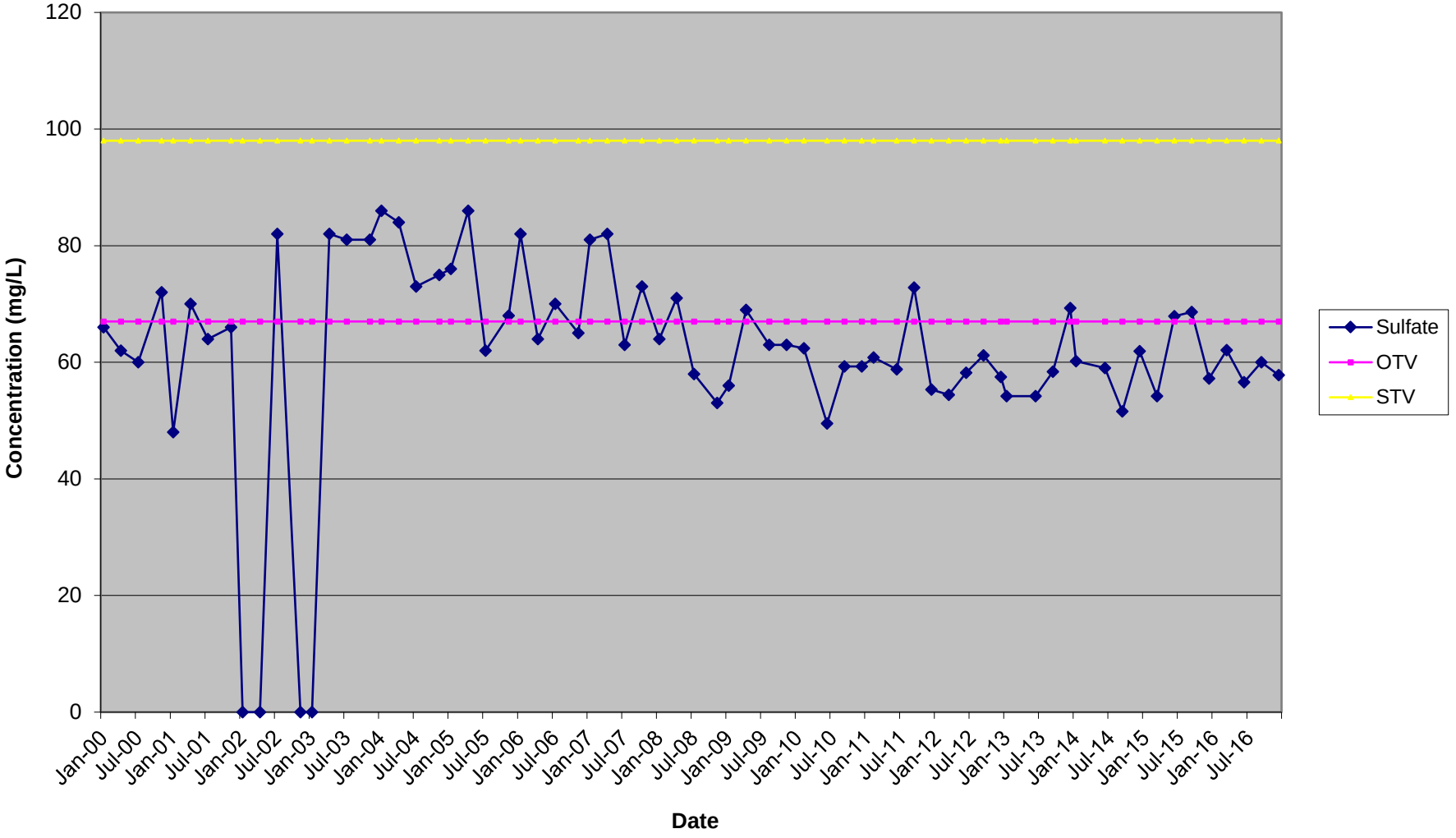
Indicator Parameter Time Trends
DW-7D



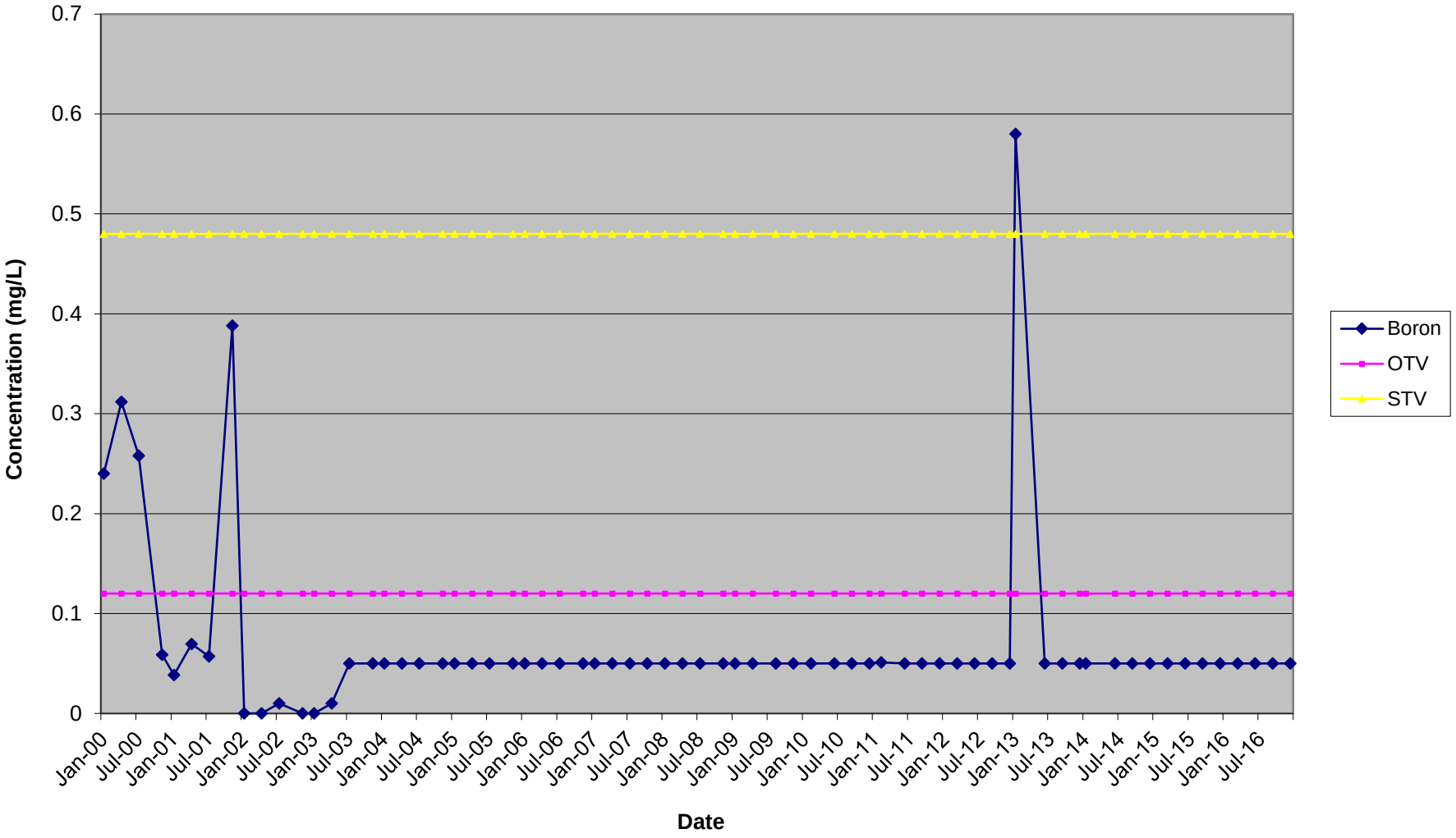
Indicator Parameter Time Trends
DW-7D



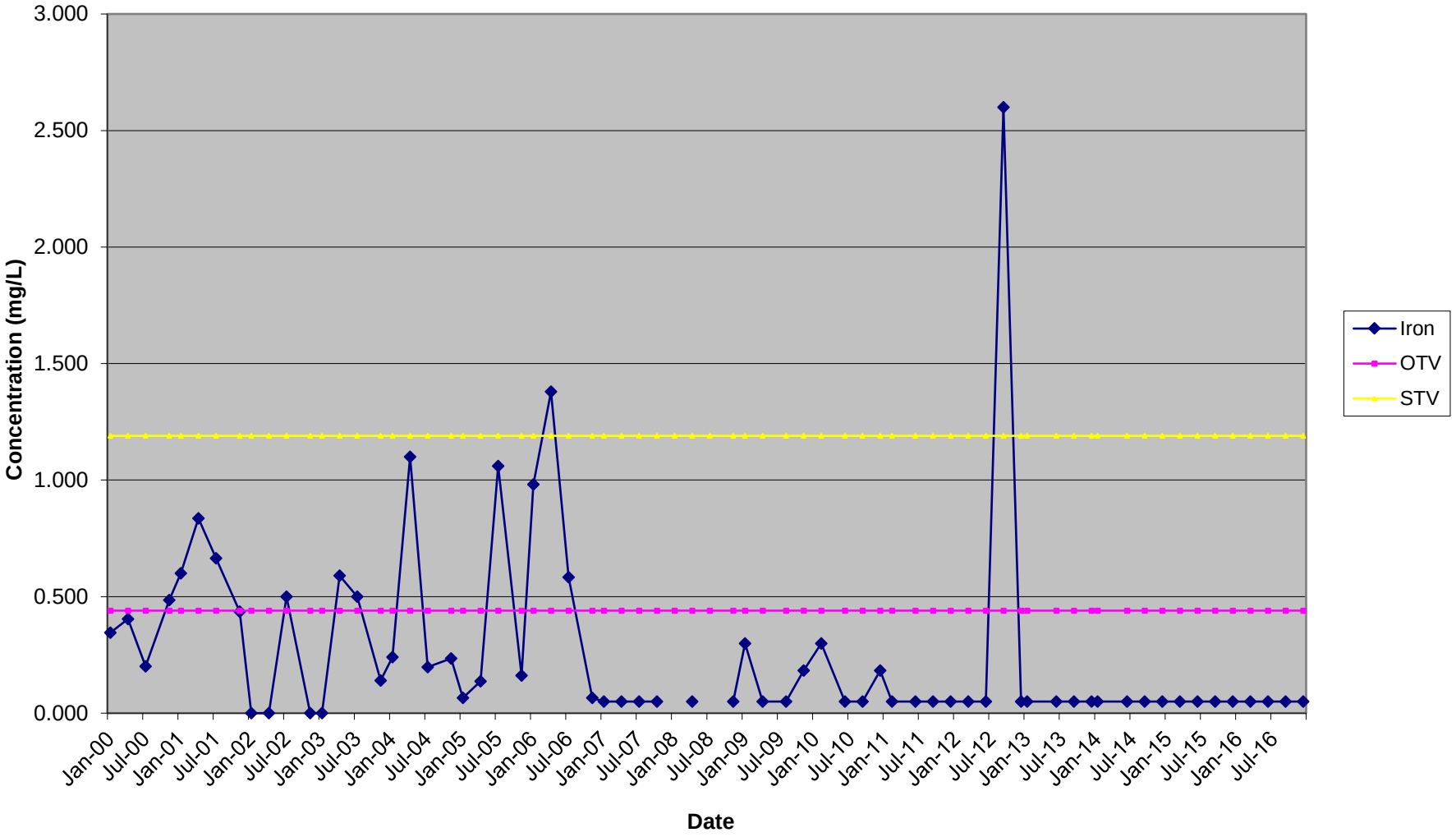
Indicator Parameter Time Trends
DW-7D



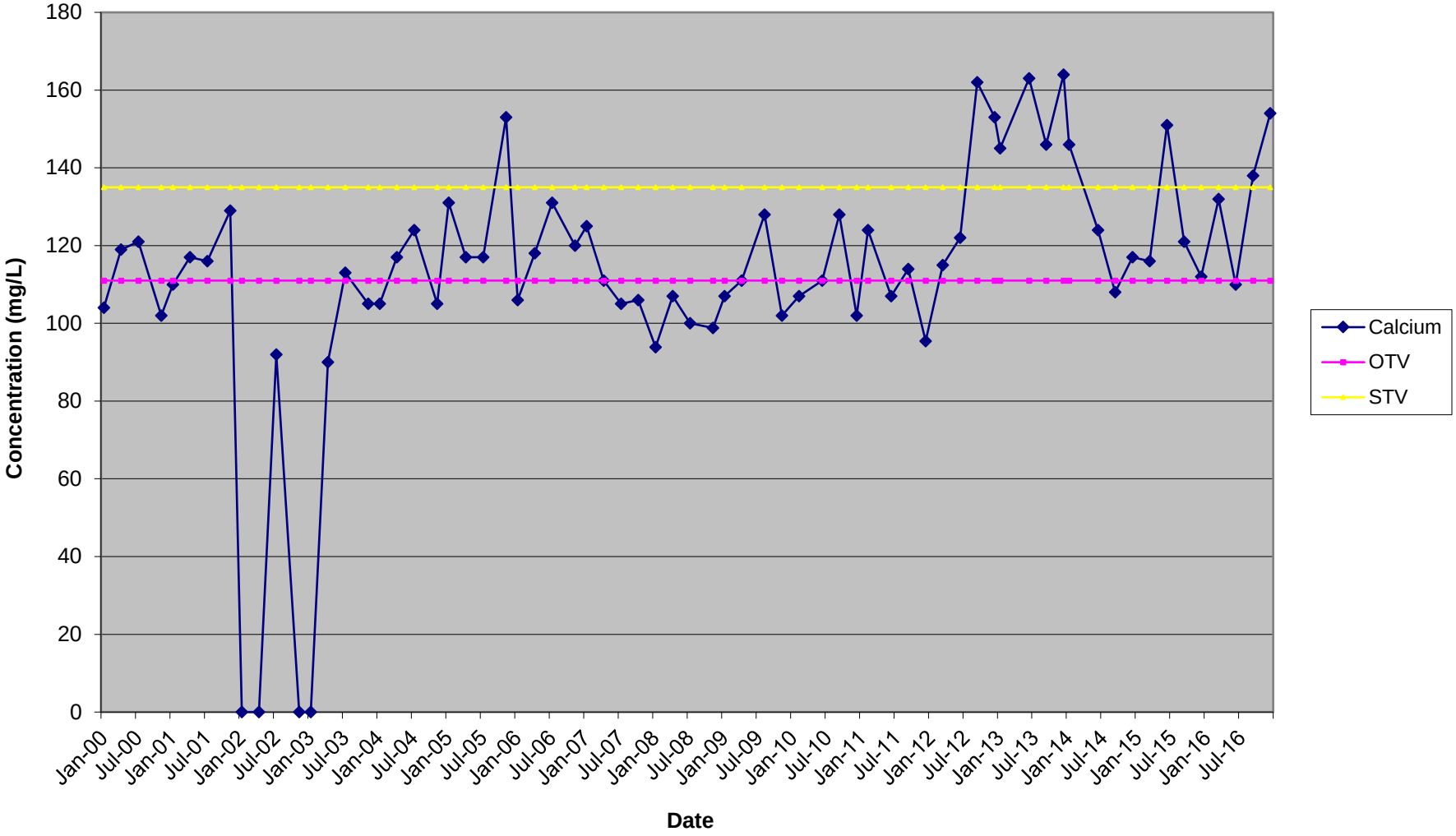
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DW-7D



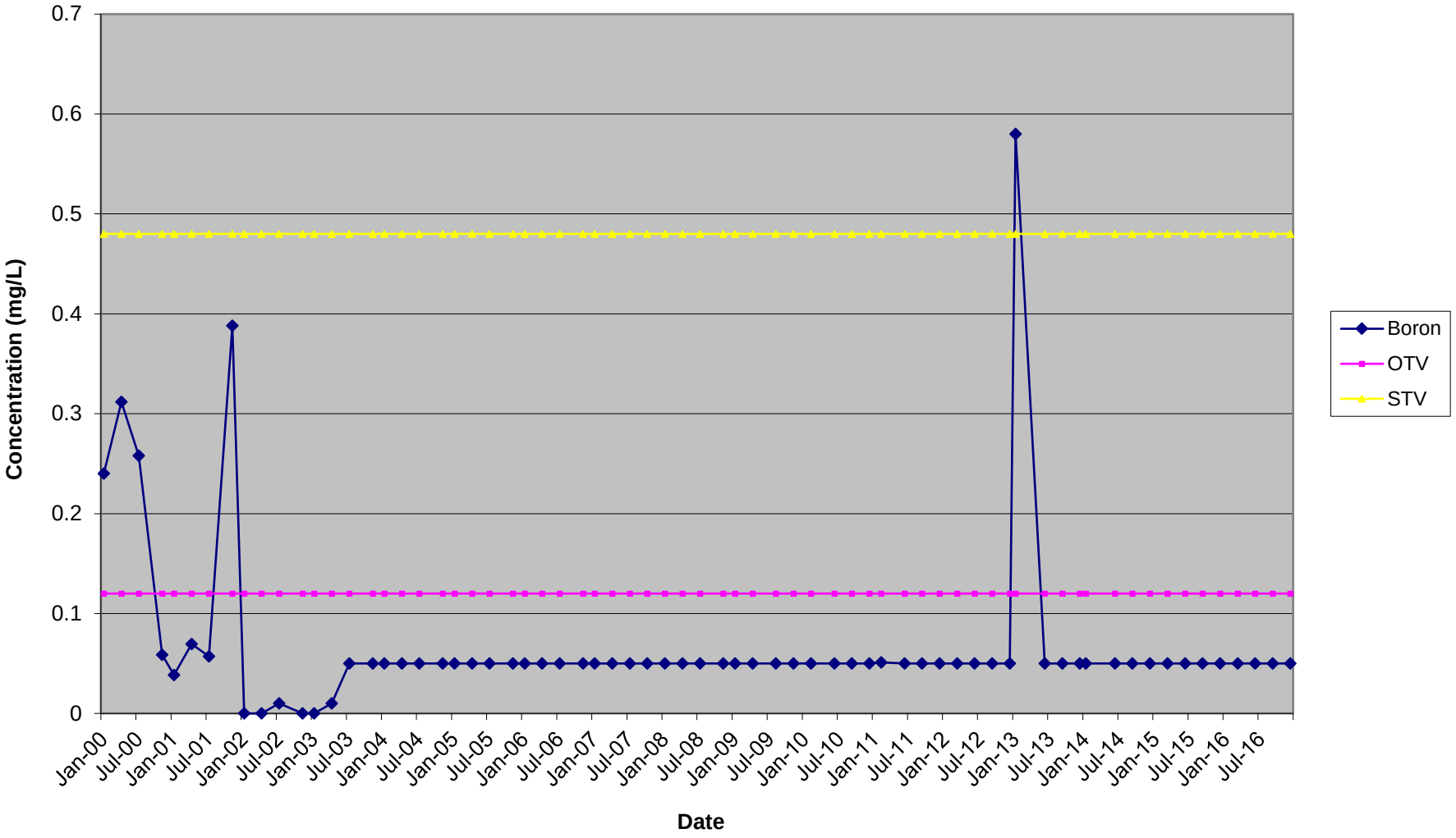
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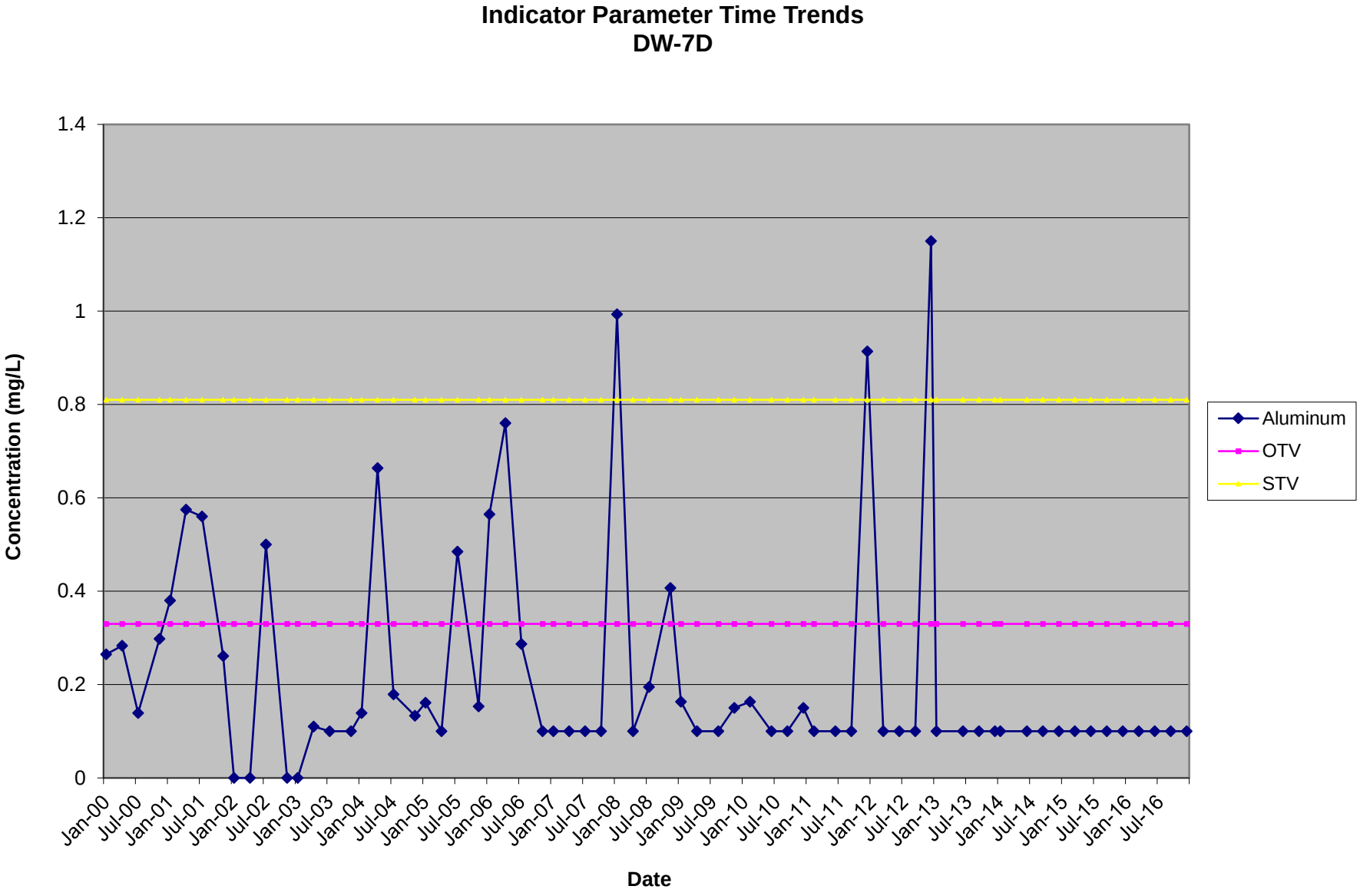


Indicator Parameter Time Trends
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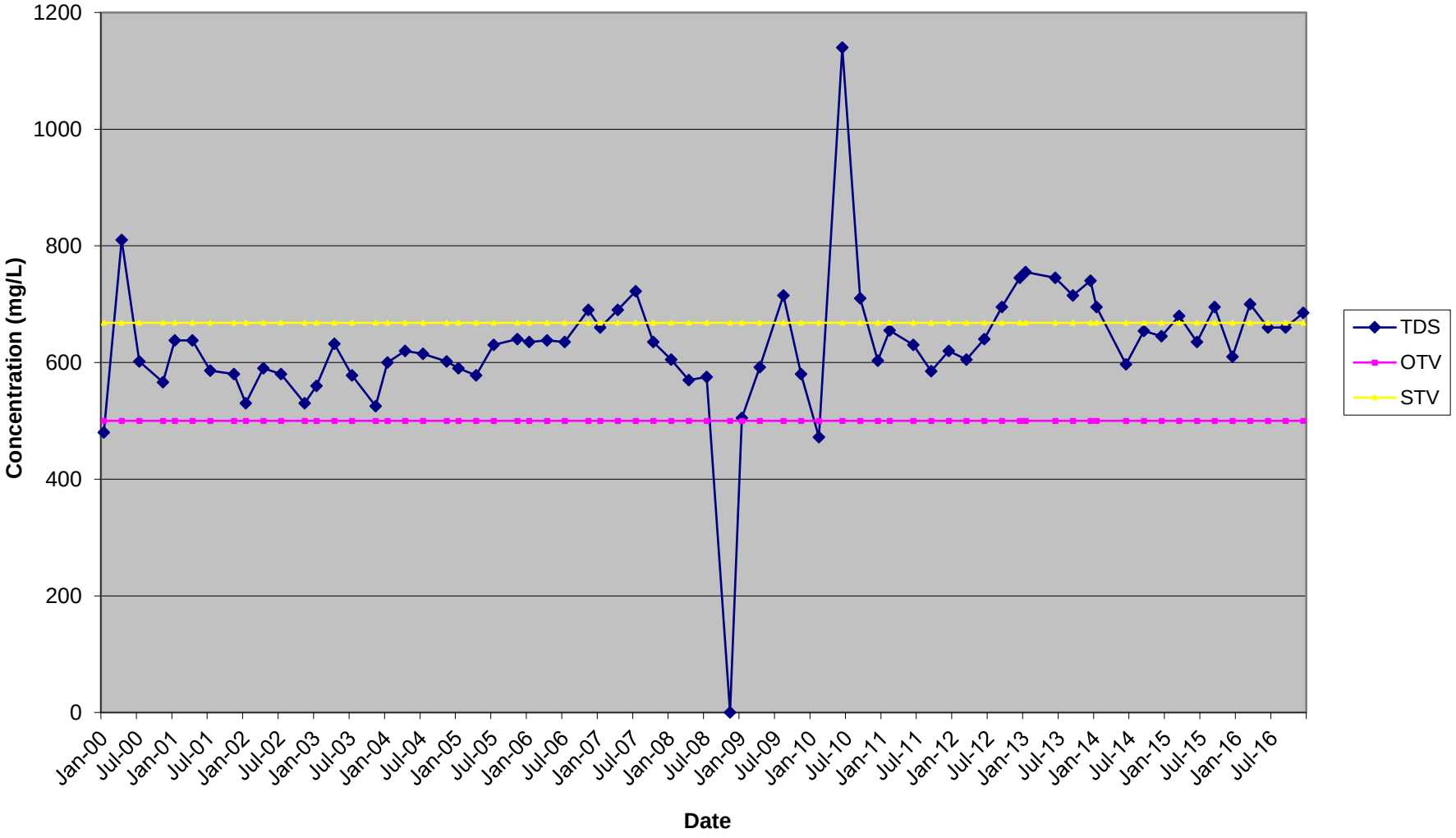


Indicator Parameter Time Trends
DW-7D

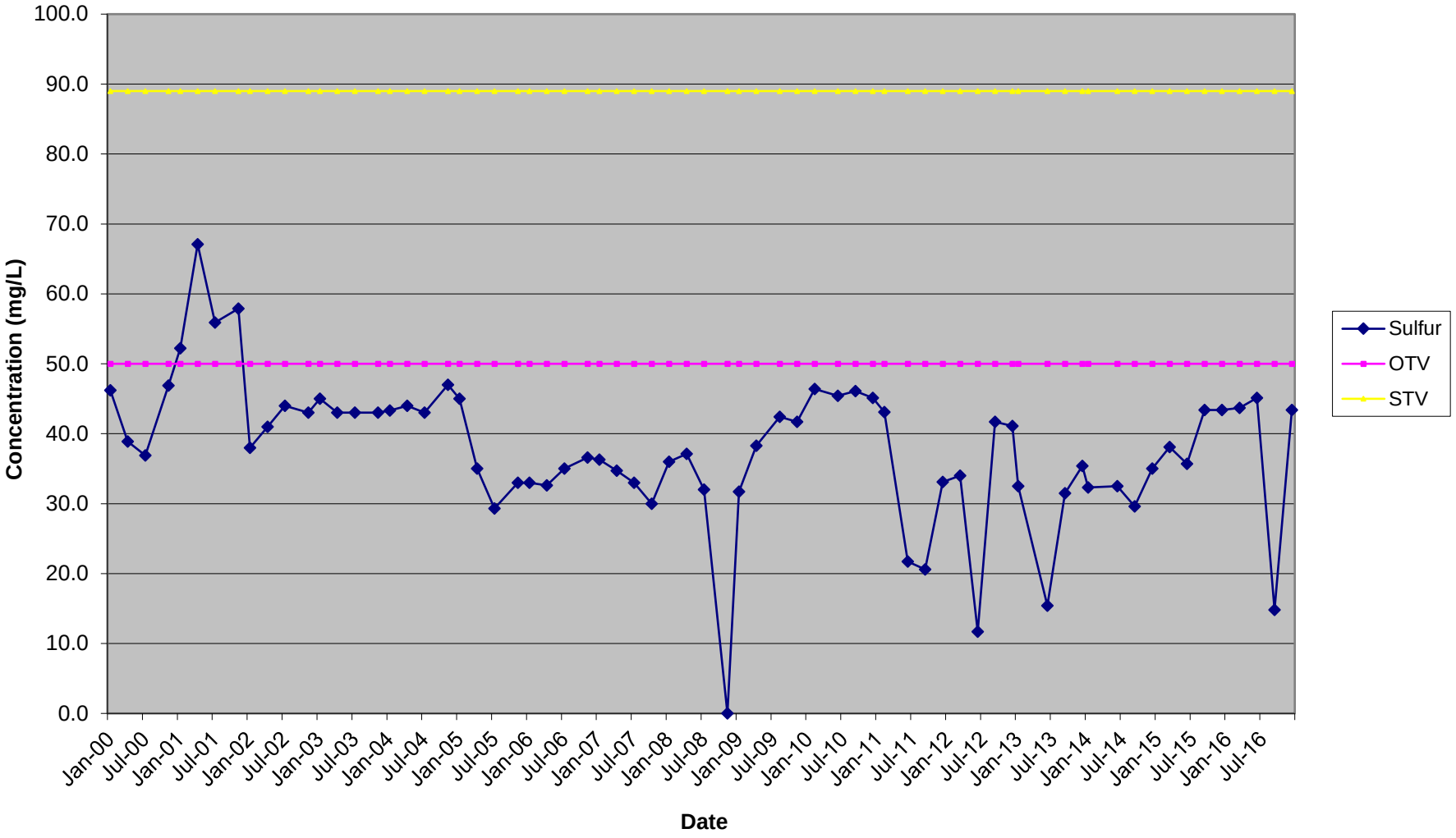



Indicator Parameter Time Trends
DW-7D
Concentration (mg/L)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
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Jul-14
Jan-15
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Jan-16
Jul-16
Date
Aluminum
OTV
STV

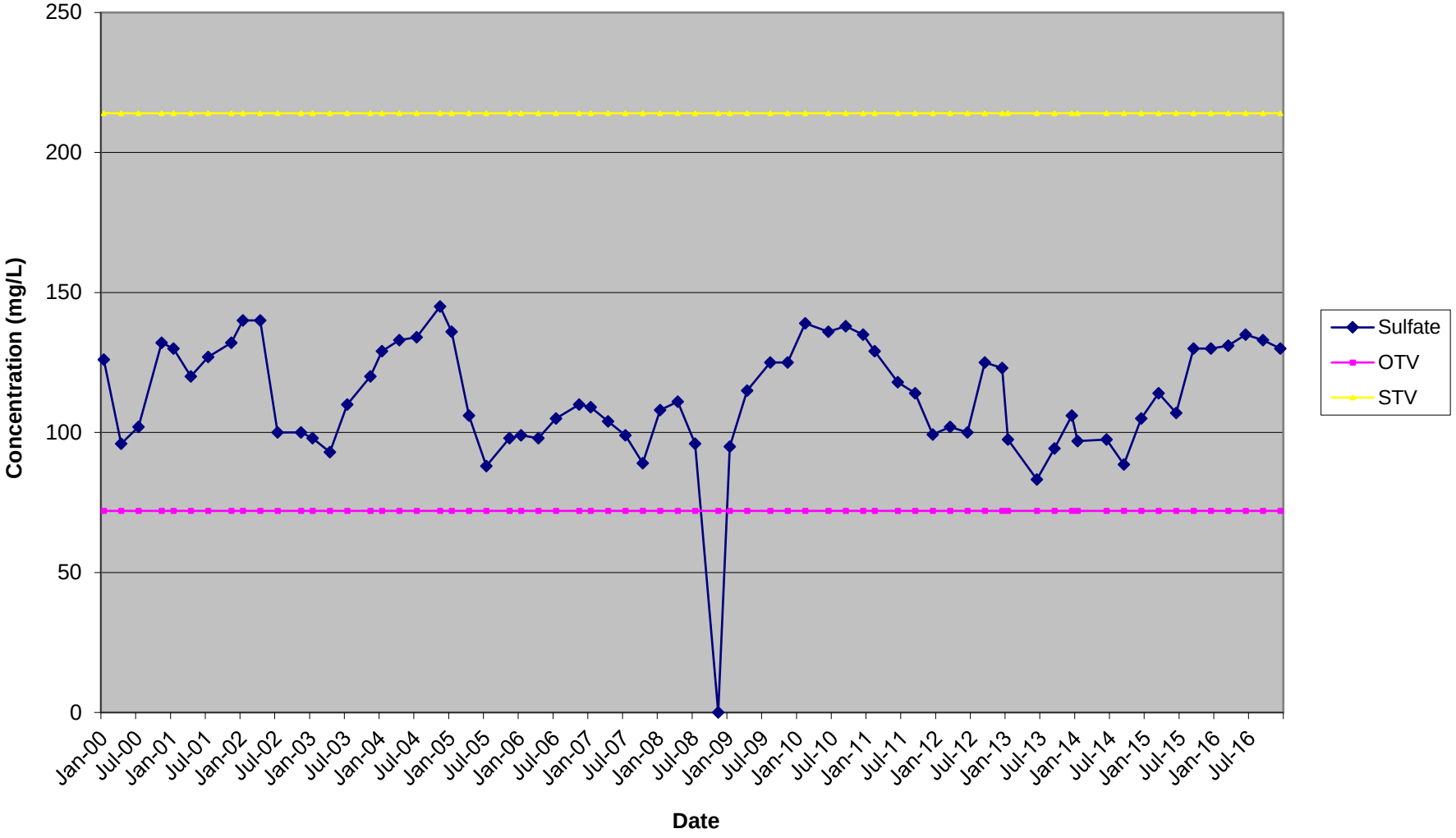
Indicator Parameter Time Trends
DW-6R



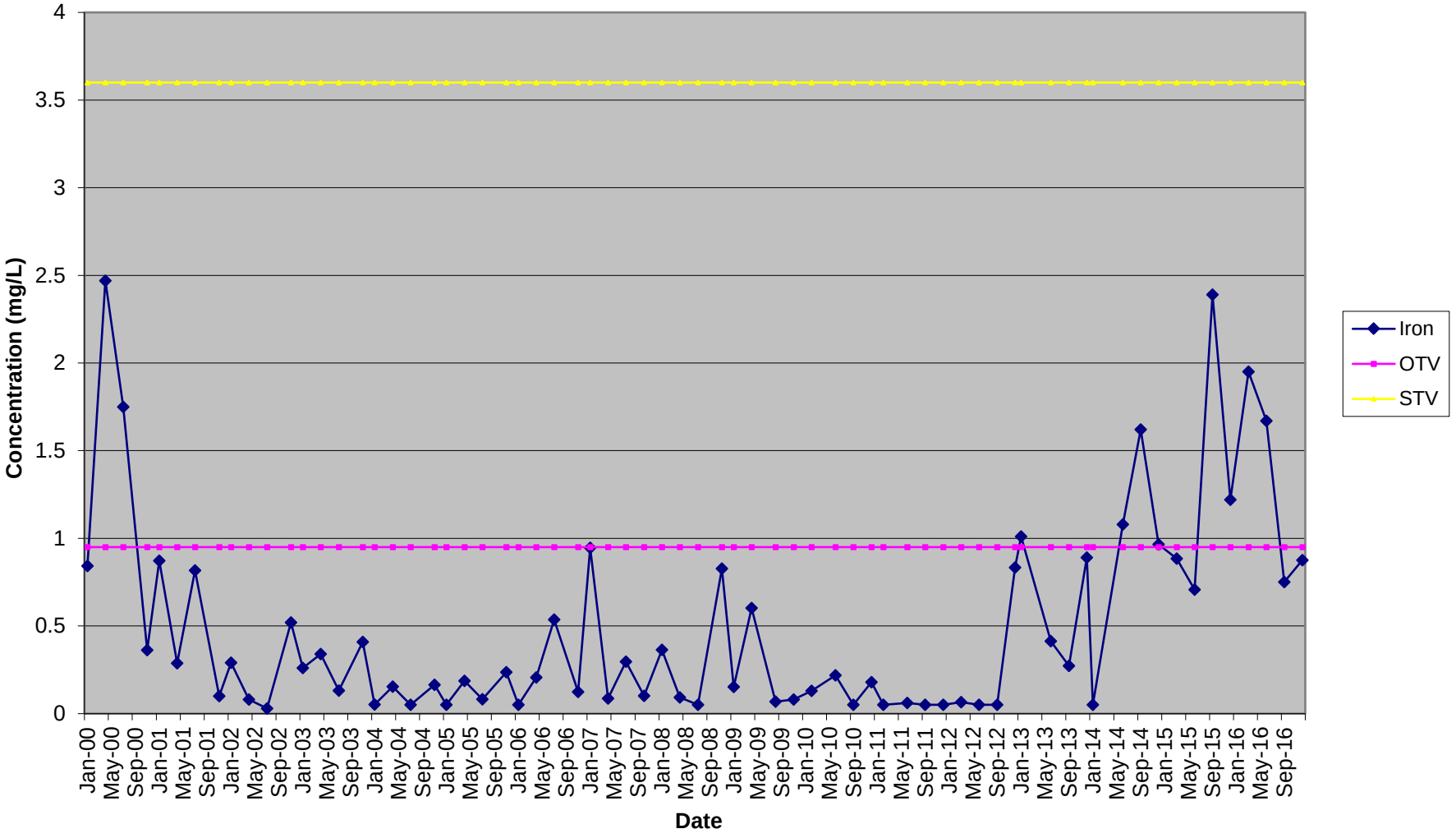
Indicator Parameter Time Trends
DW-6R



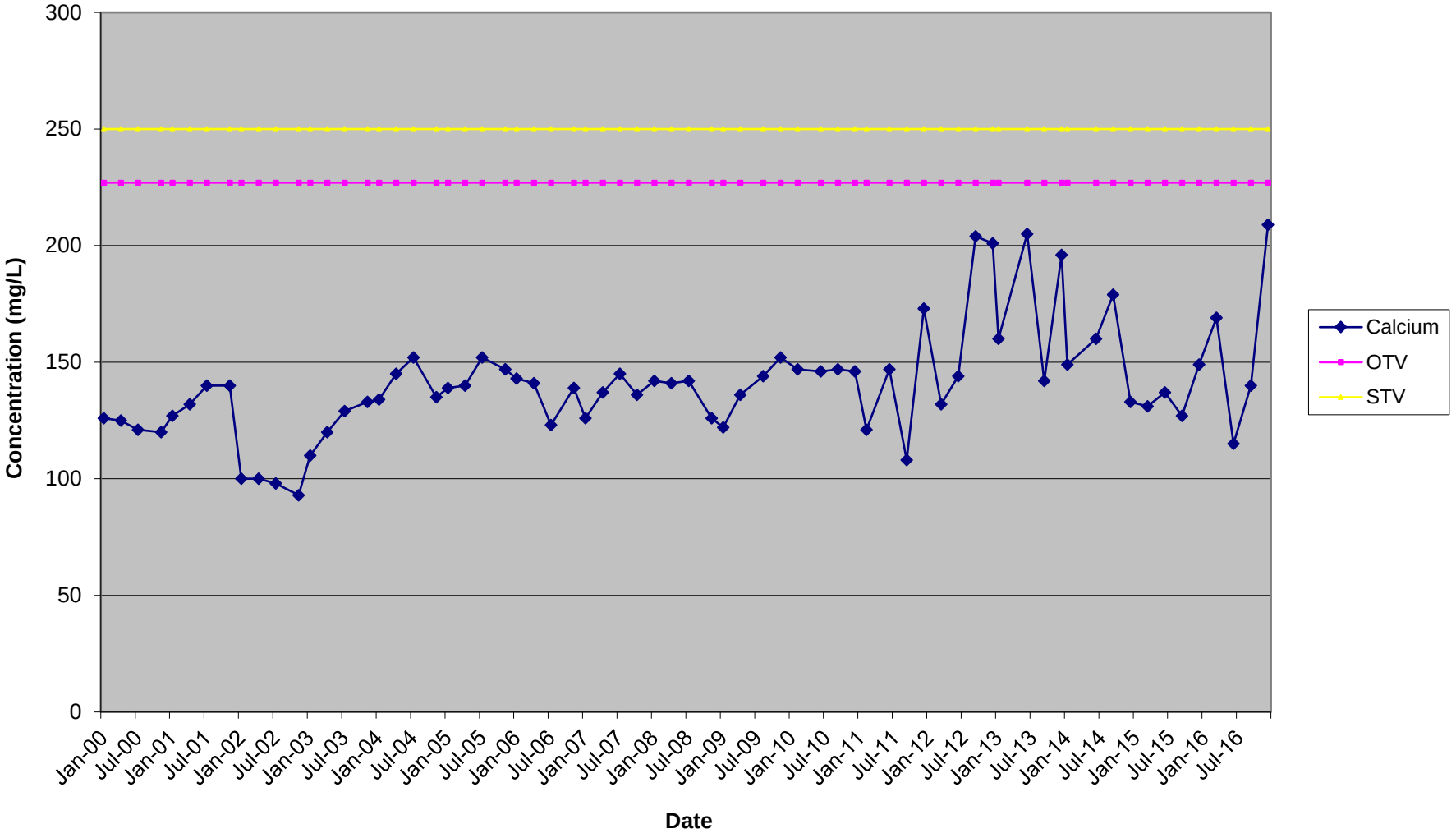
Indicator Parameter Time Trends
DW-6R



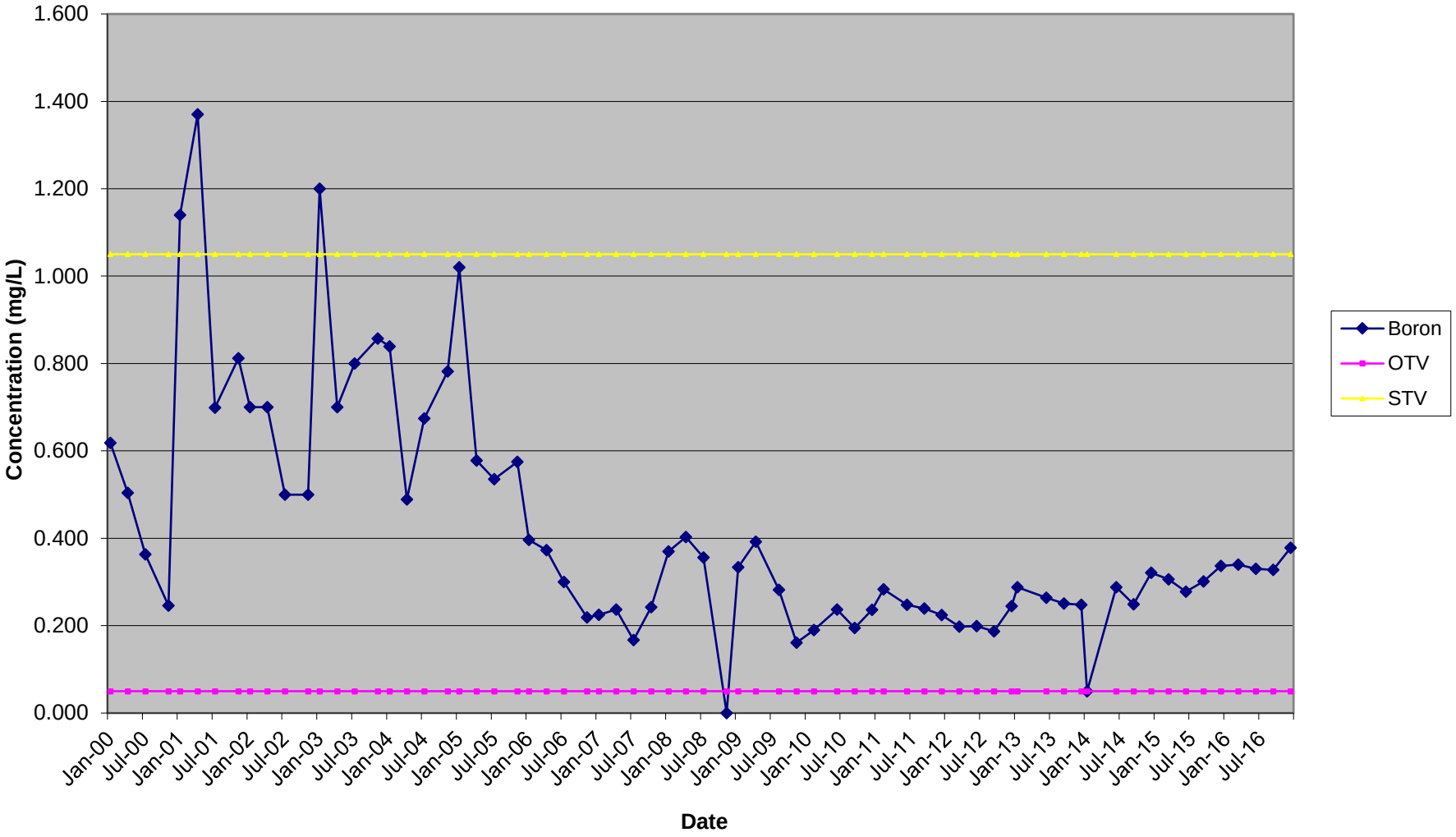
Indicator Parameter Time Trends
DW-6R



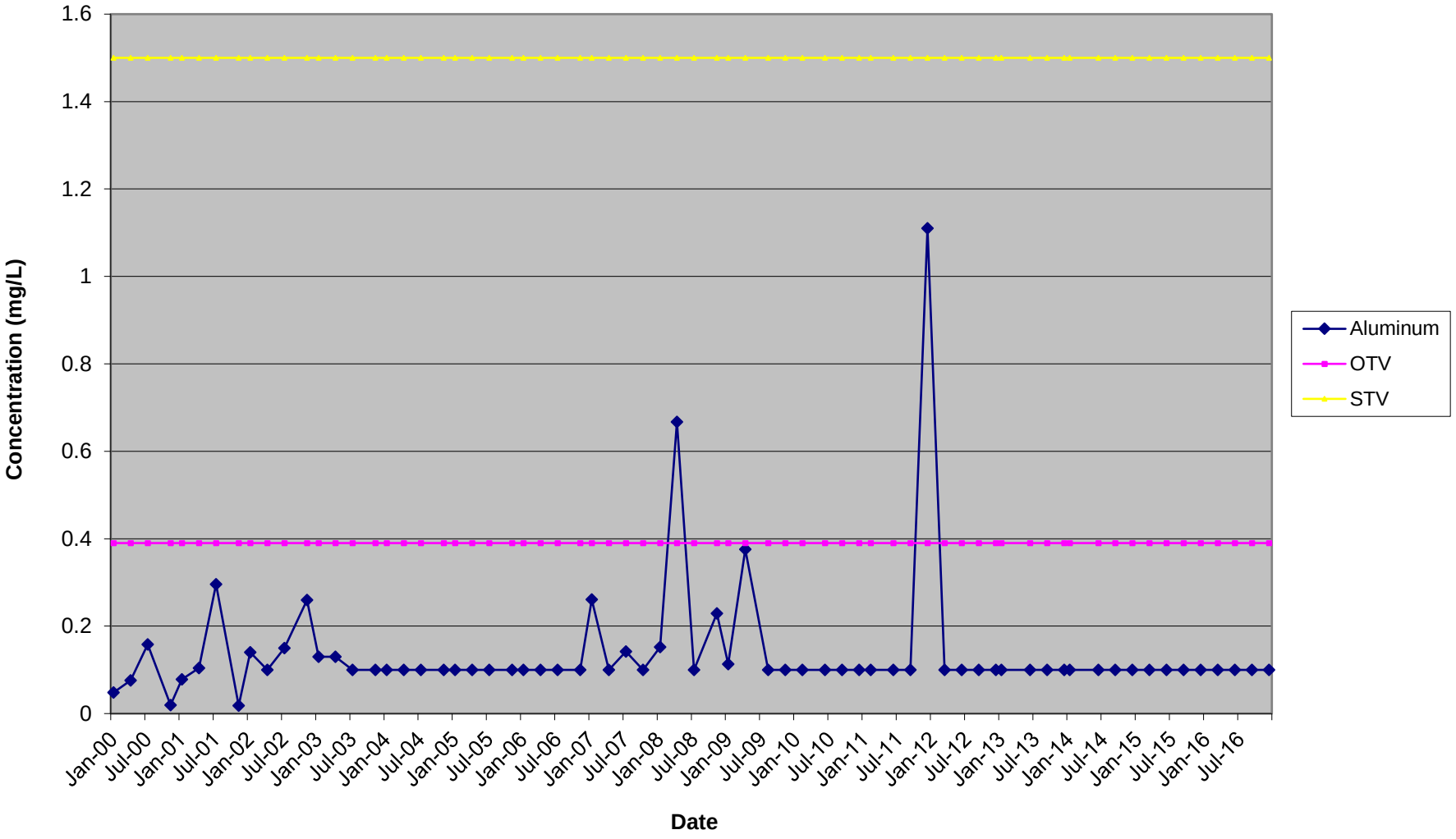
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DW-6R

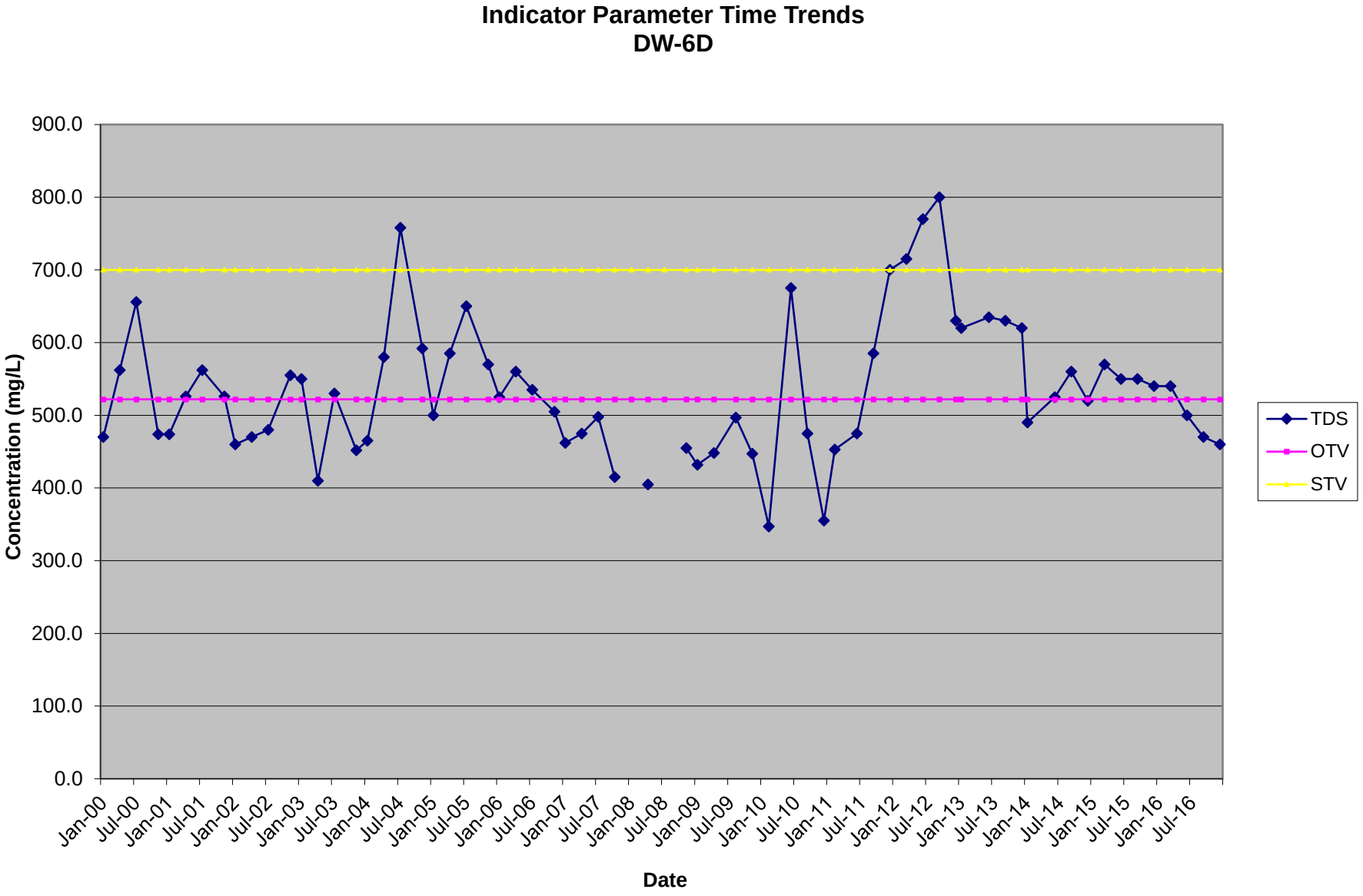


Indicator Parameter Time Trends
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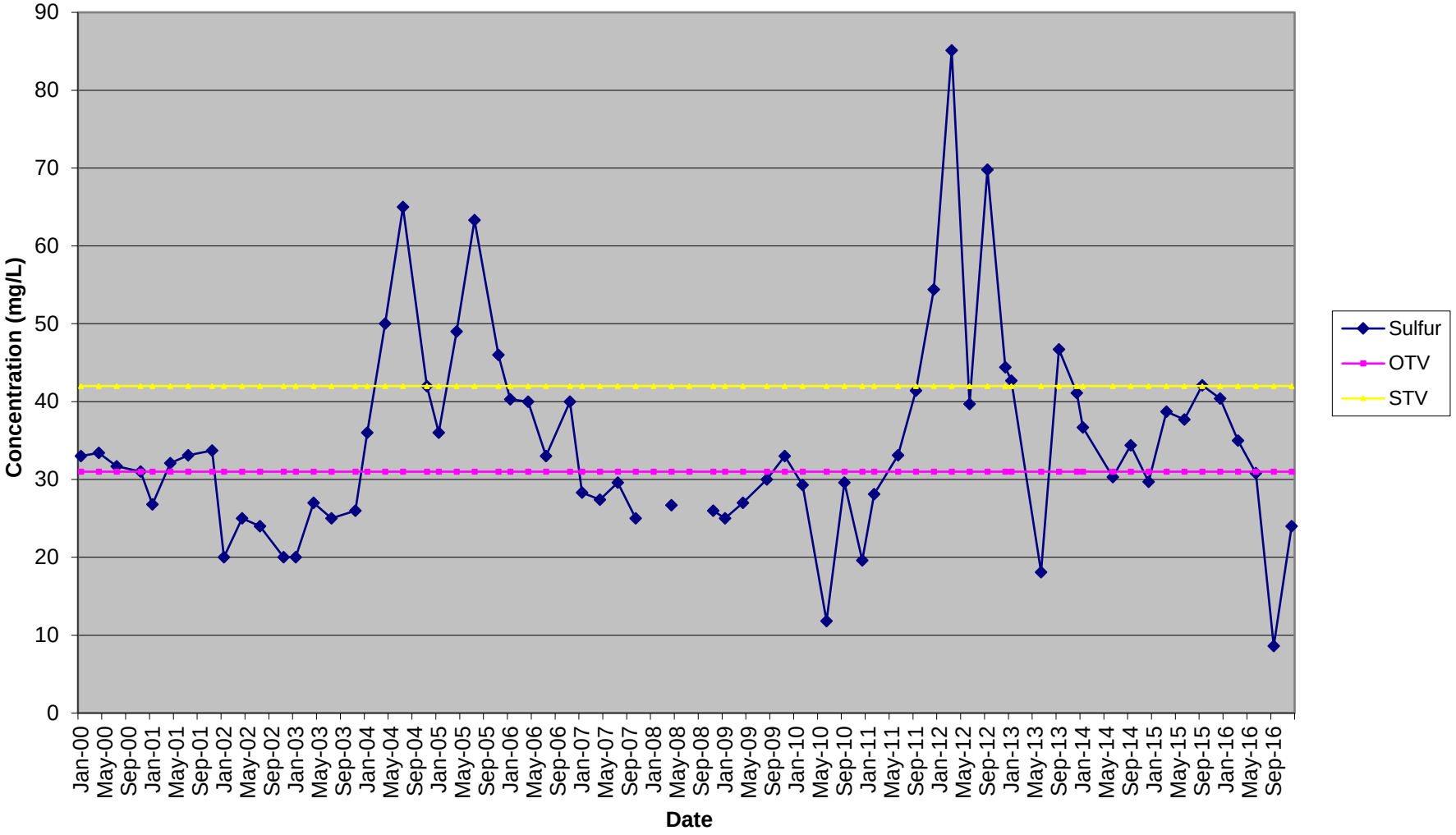


Indicator Parameter Time Trends
DW-6R

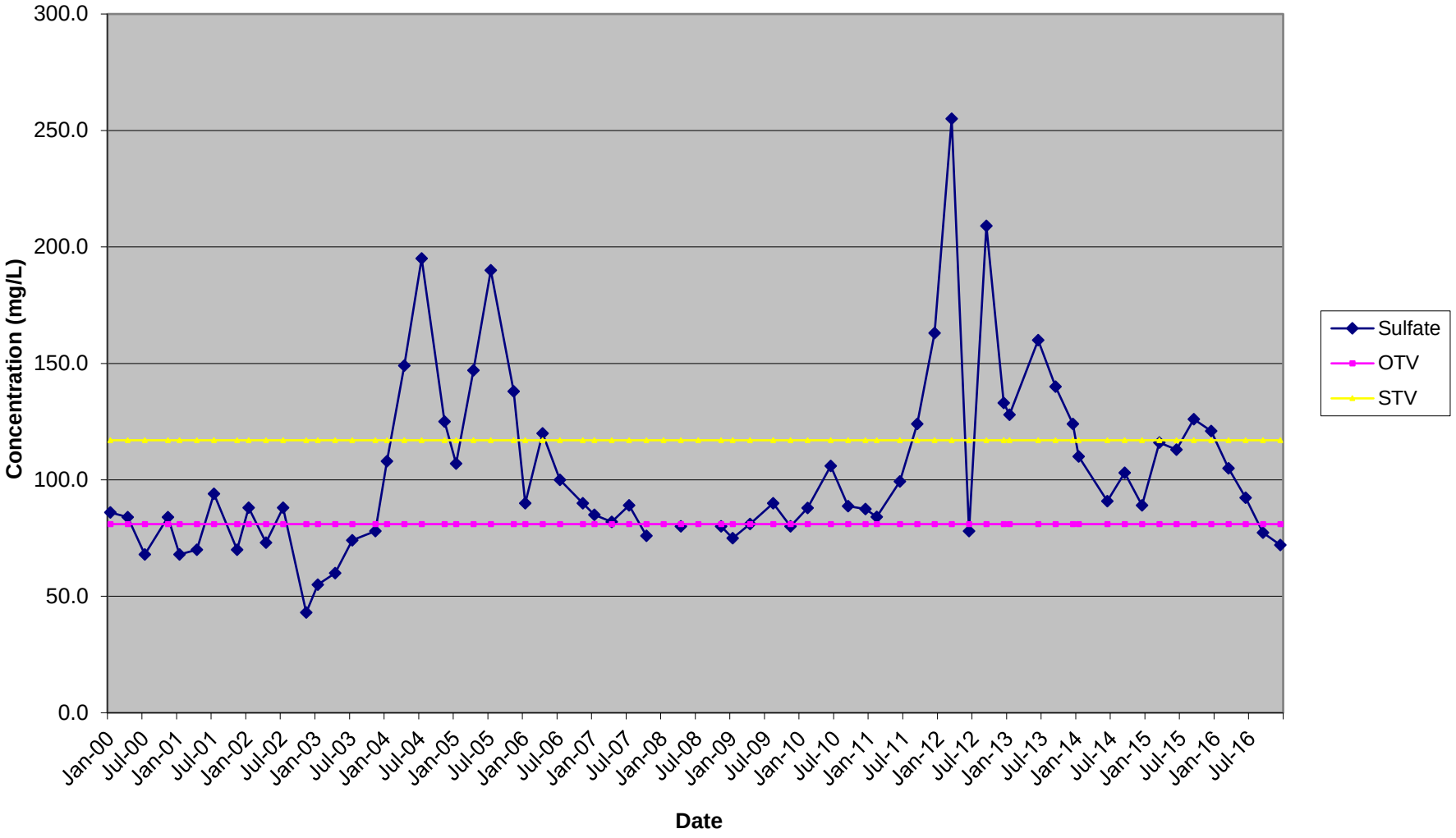



Indicator Parameter Time Trends
DW-6D
Concentration (mg/L)
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Jan-15
Jul-15
Jan-16
Jul-16
Date
TDS
OTV
STV

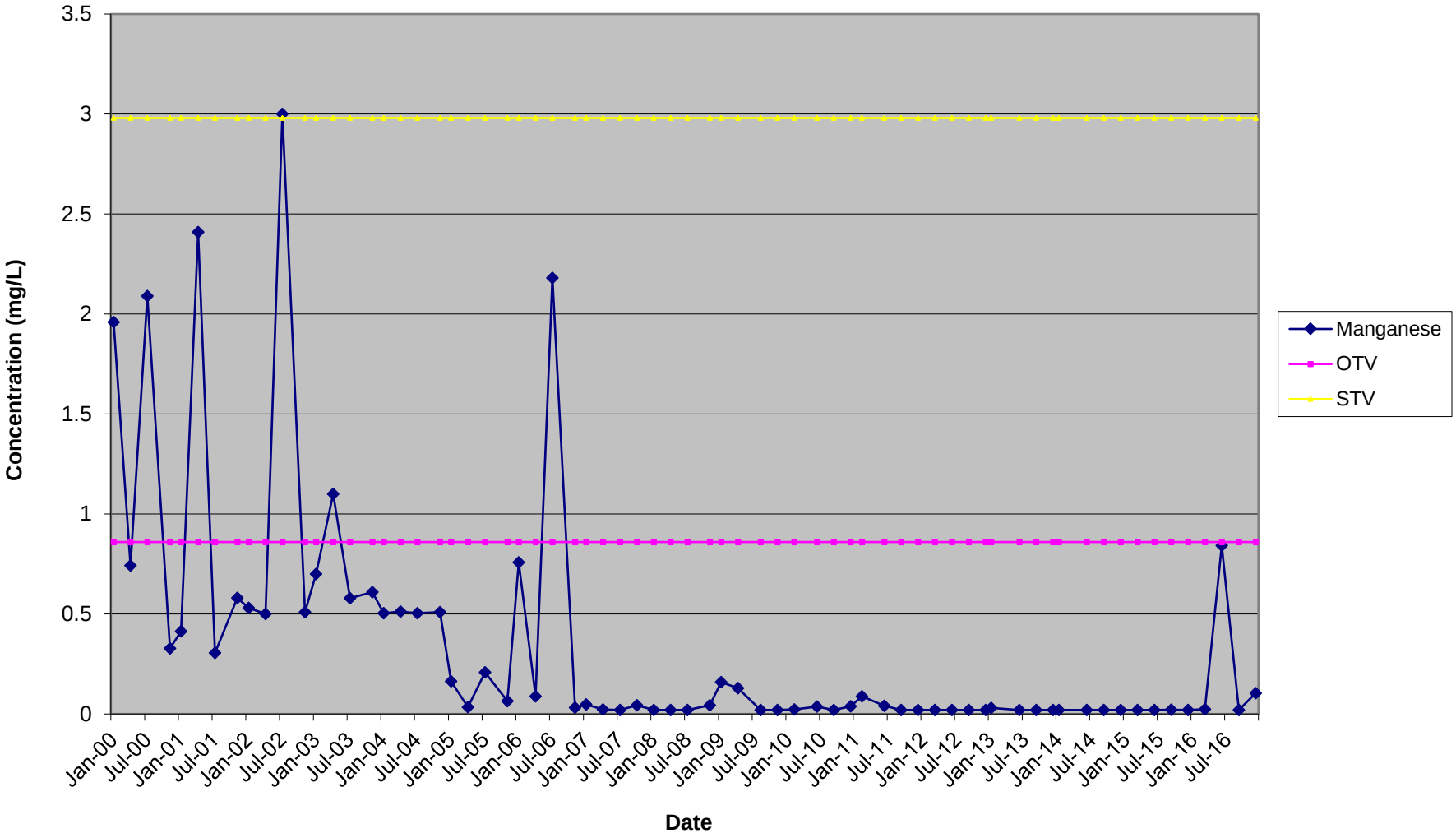
Indicator Parameter Time Trends
DW-6D

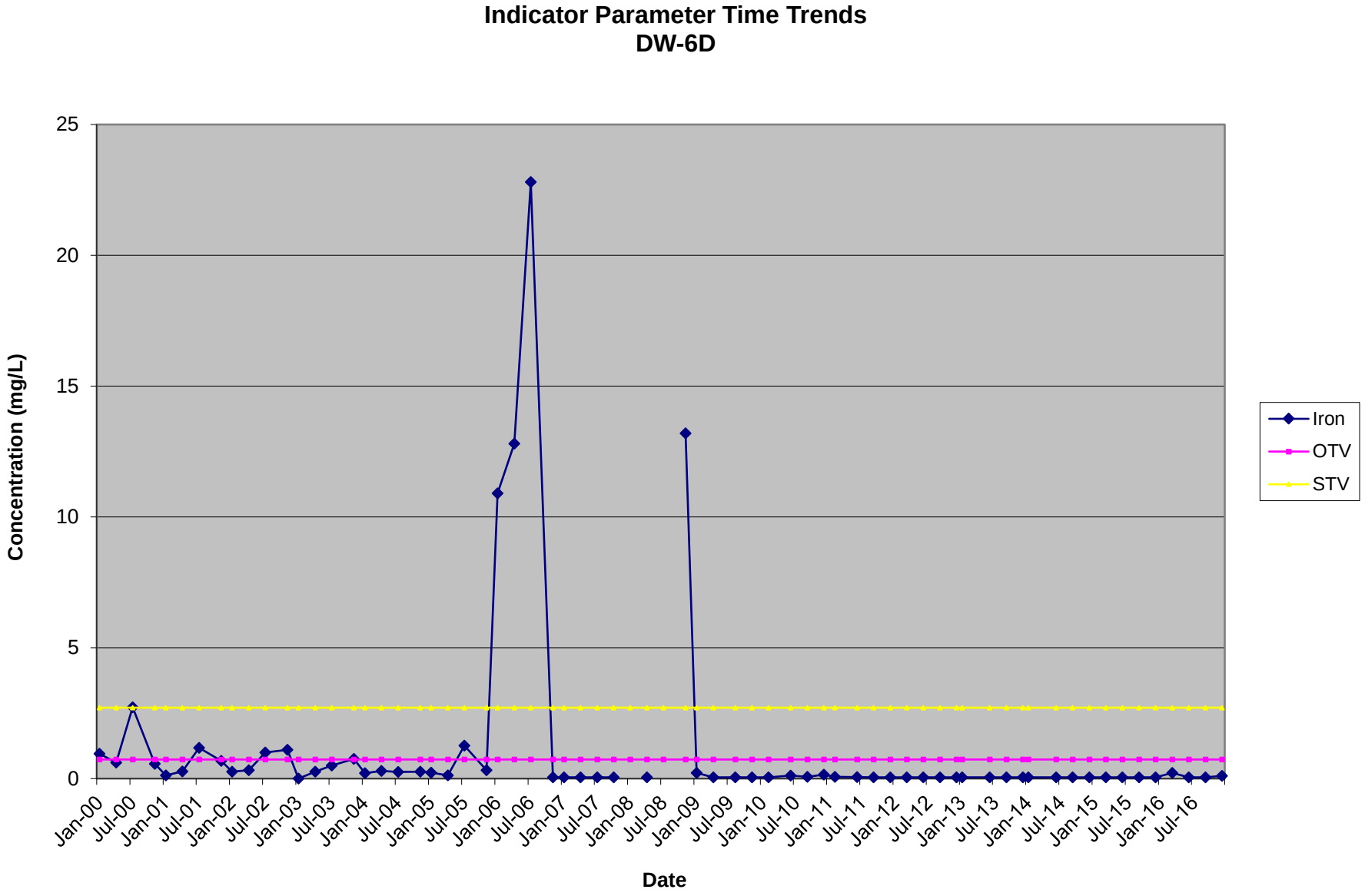


Indicator Parameter Time Trends
DW-6D

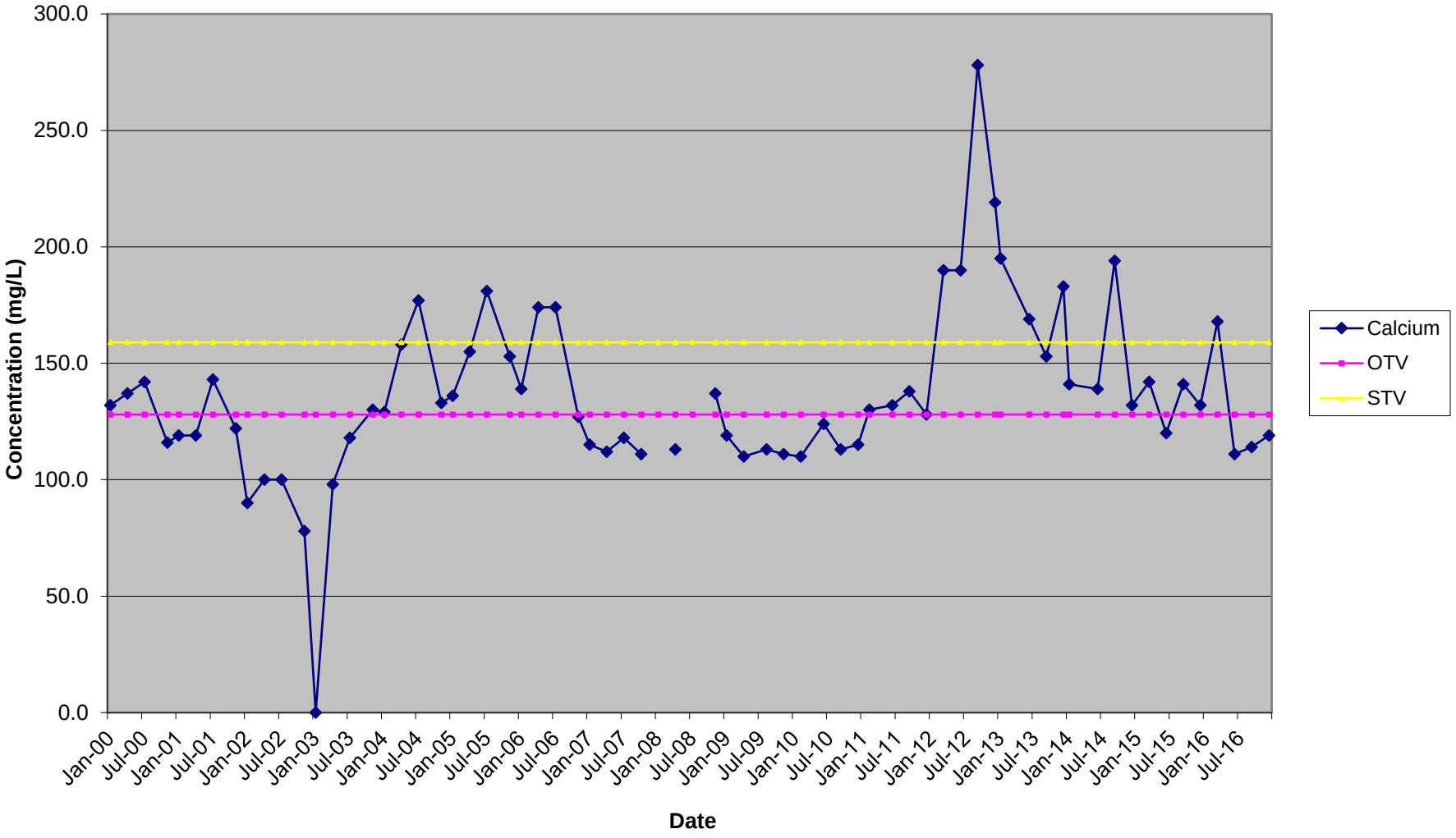


Indicator Parameter Time Trends
DW-6D

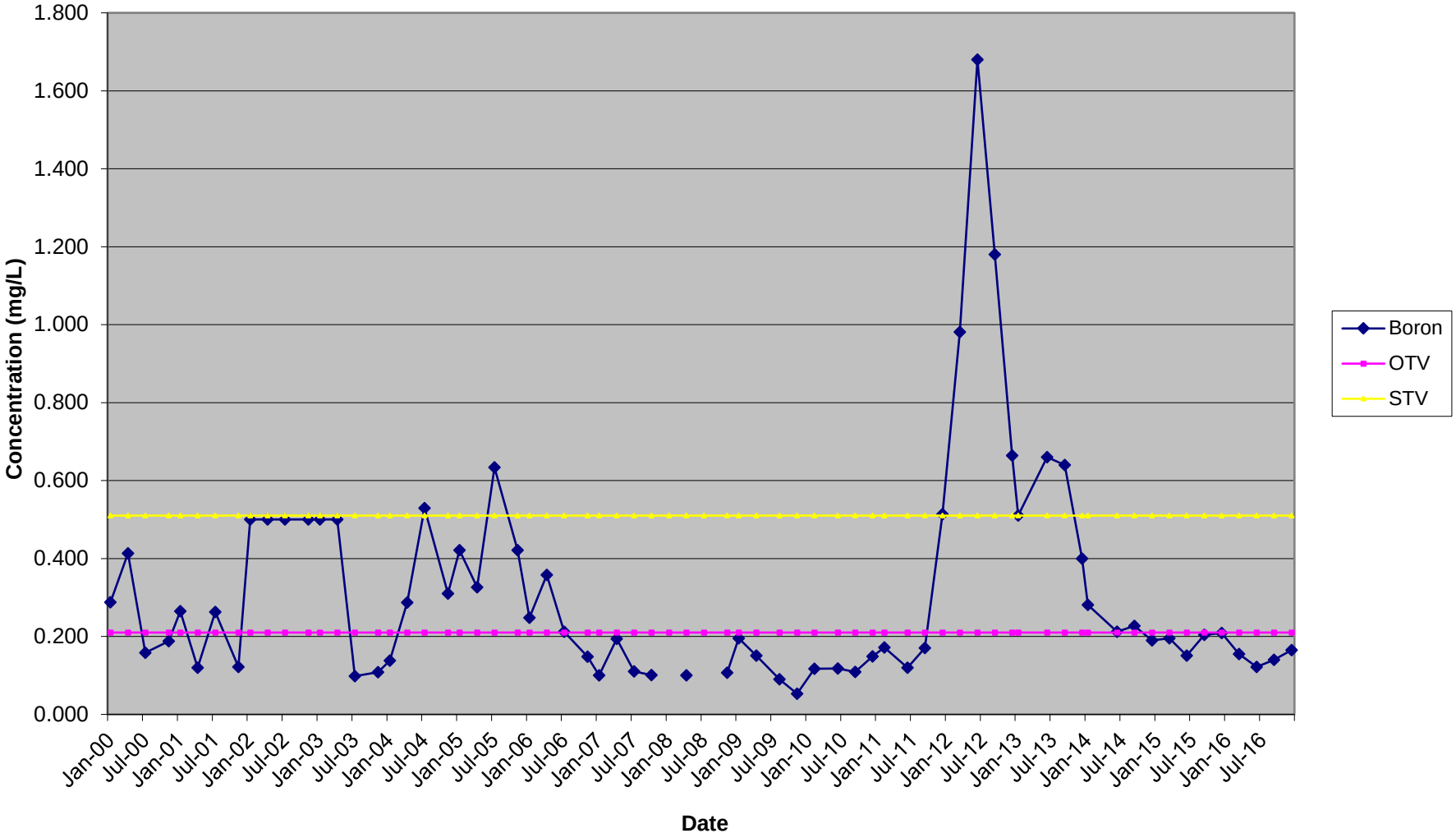


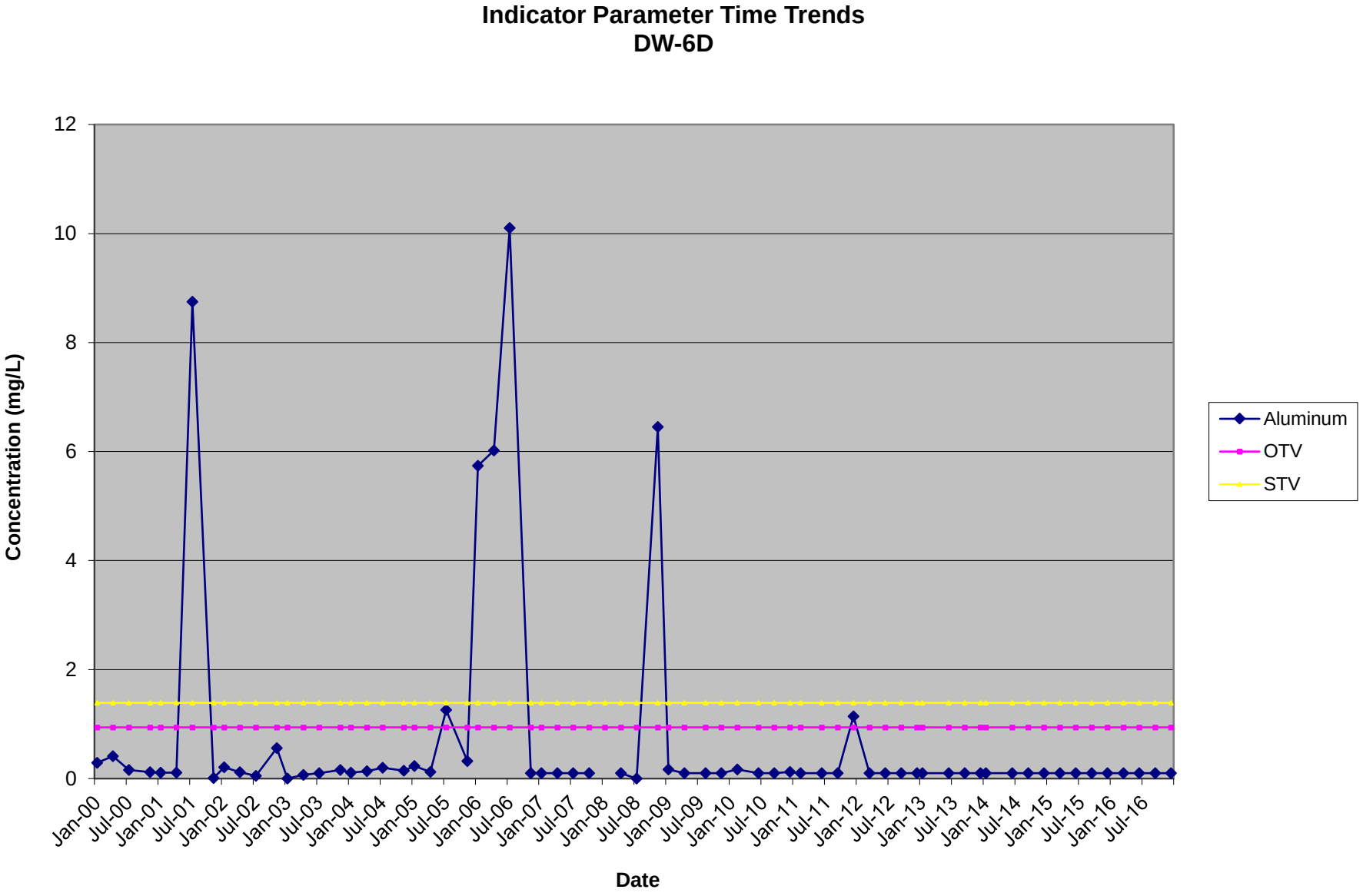

Indicator Parameter Time Trends
DW-6D
Concentration (mg/L)
25
20
15
10
5
0
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
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Jan-16
Jul-16
Date
Iron
OTV
STV

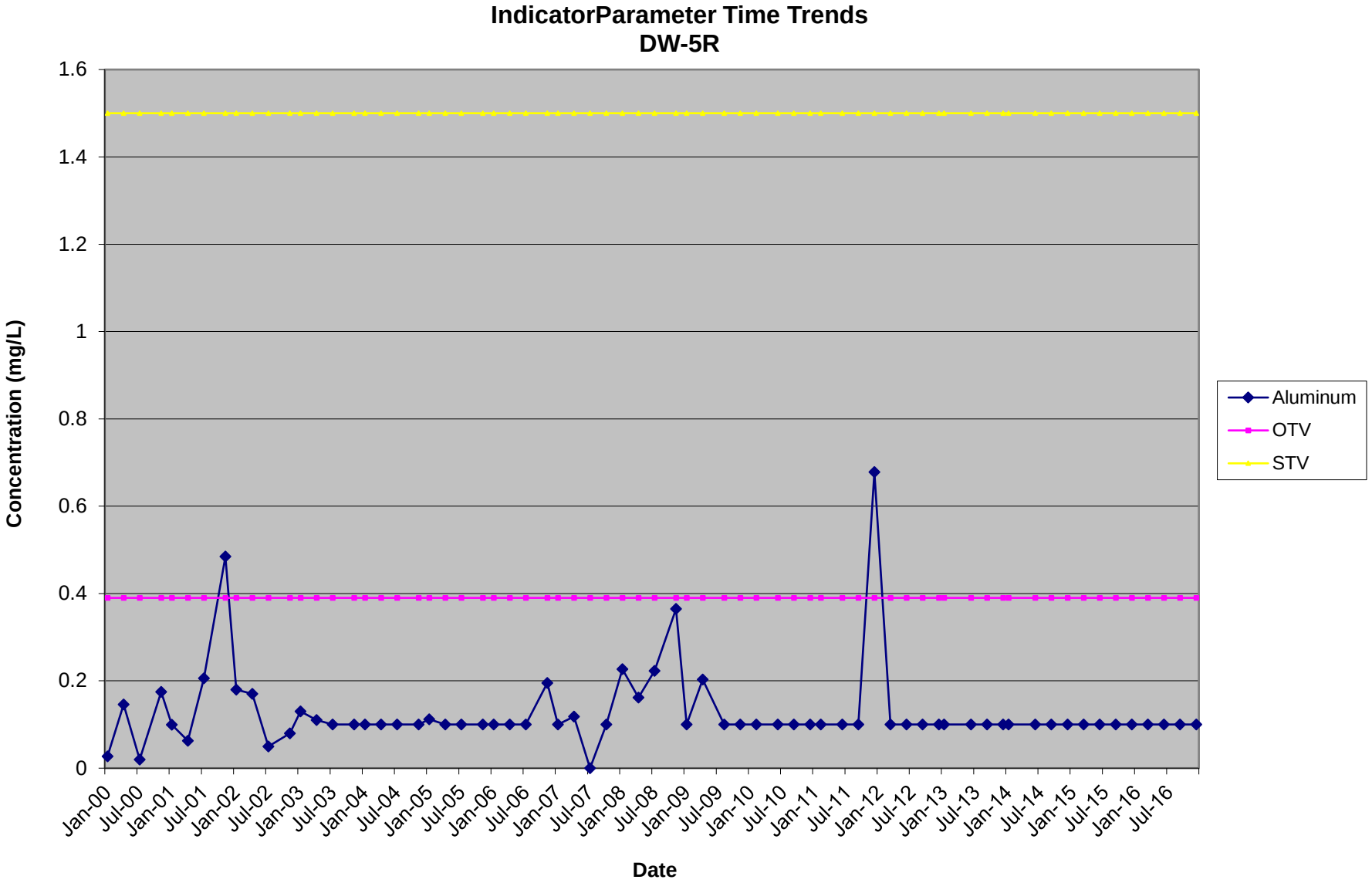
Indicator Parameter Time Trends
DW-6D



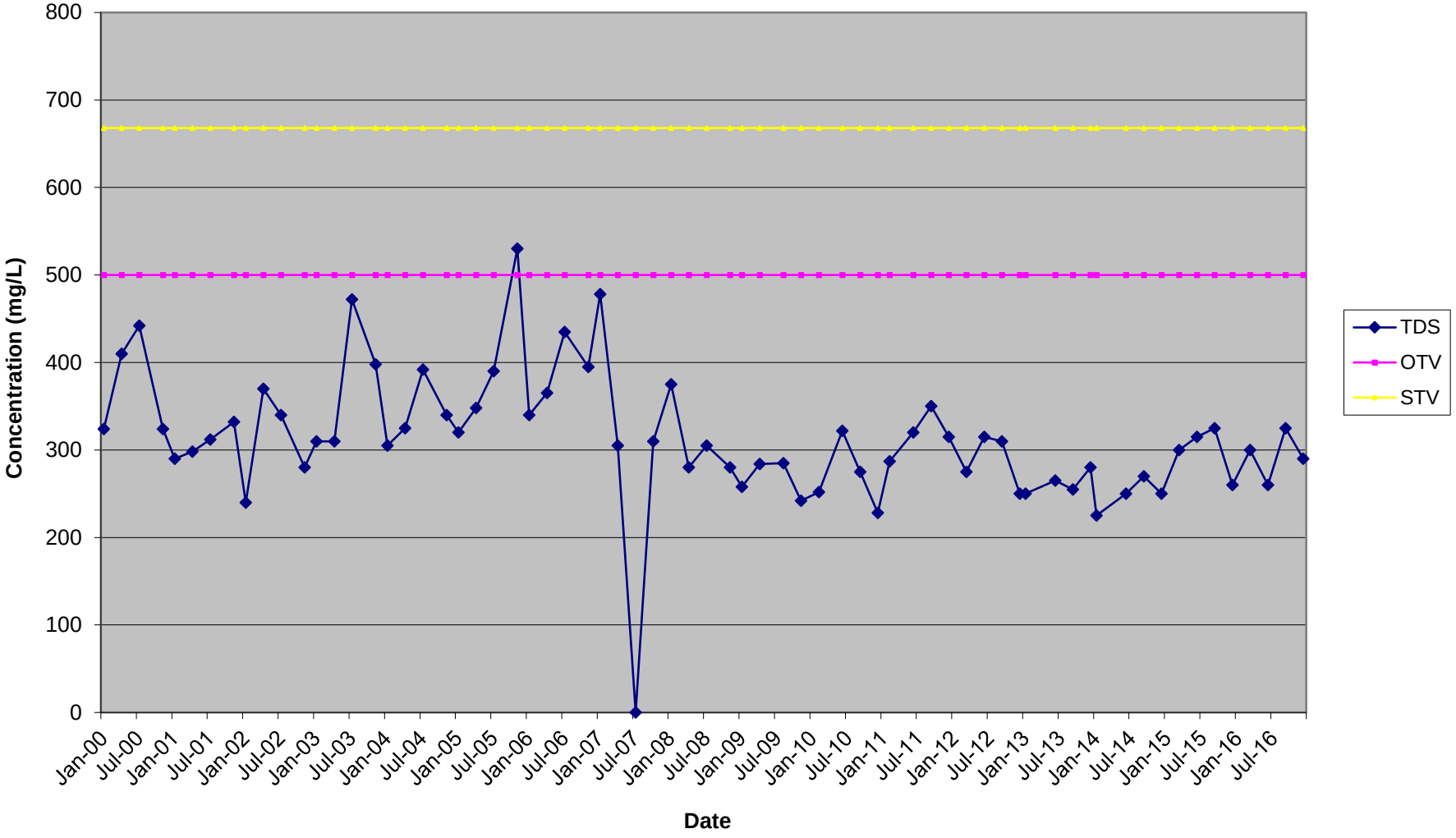
Indicator Parameter Time Trends
DW-6D



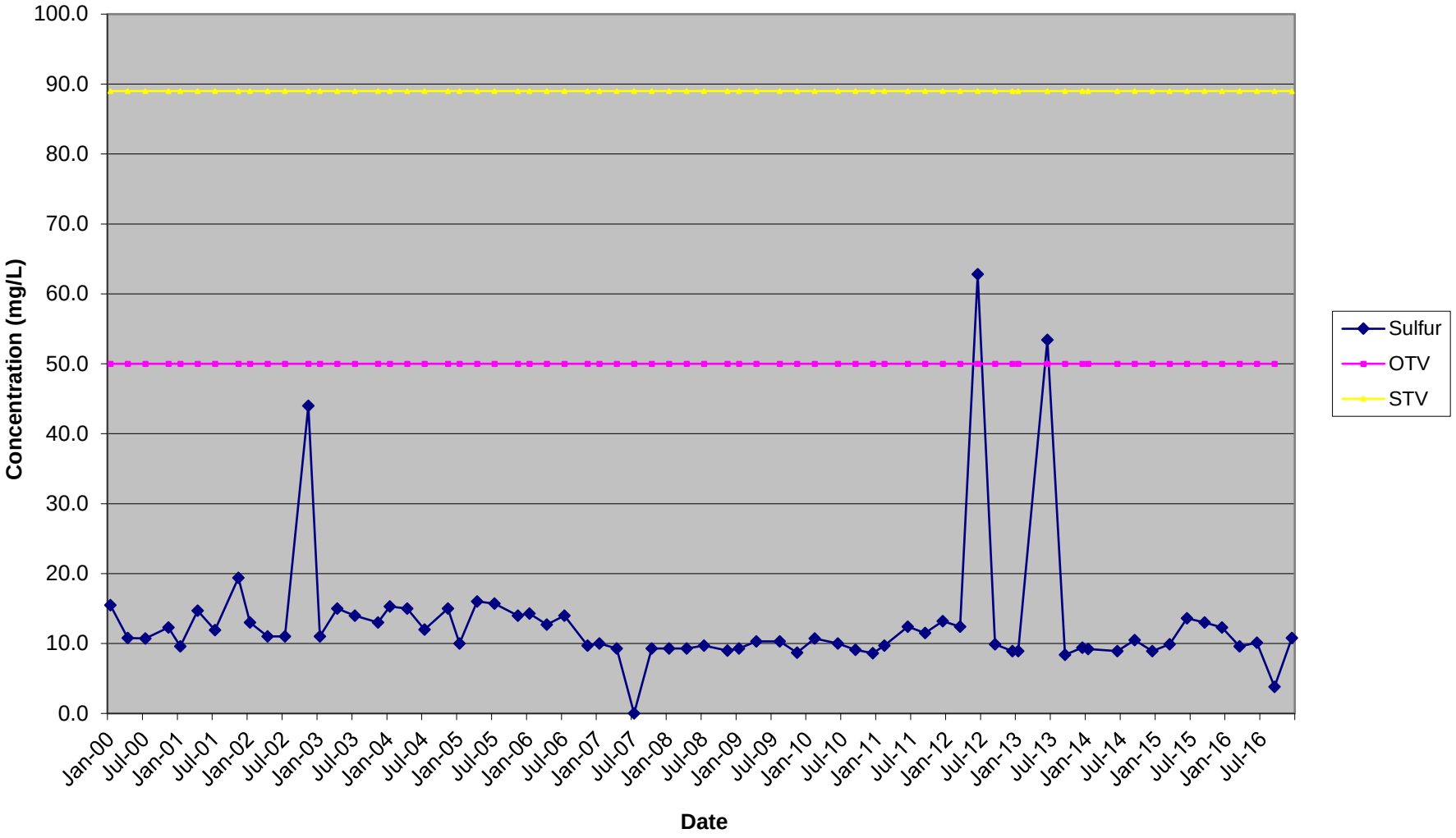

Indicator Parameter Time Trends
DW-6D
Concentration (mg/L)
12
10
8
6
4
2
0
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Jan-15
Jul-15
Jan-16
Jul-16
Date
Aluminum
OTV
STV


IndicatorParameter Time Trends
DW-5R
Concentration (mg/L)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
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Jul-16
Date
Aluminum
OTV
STV

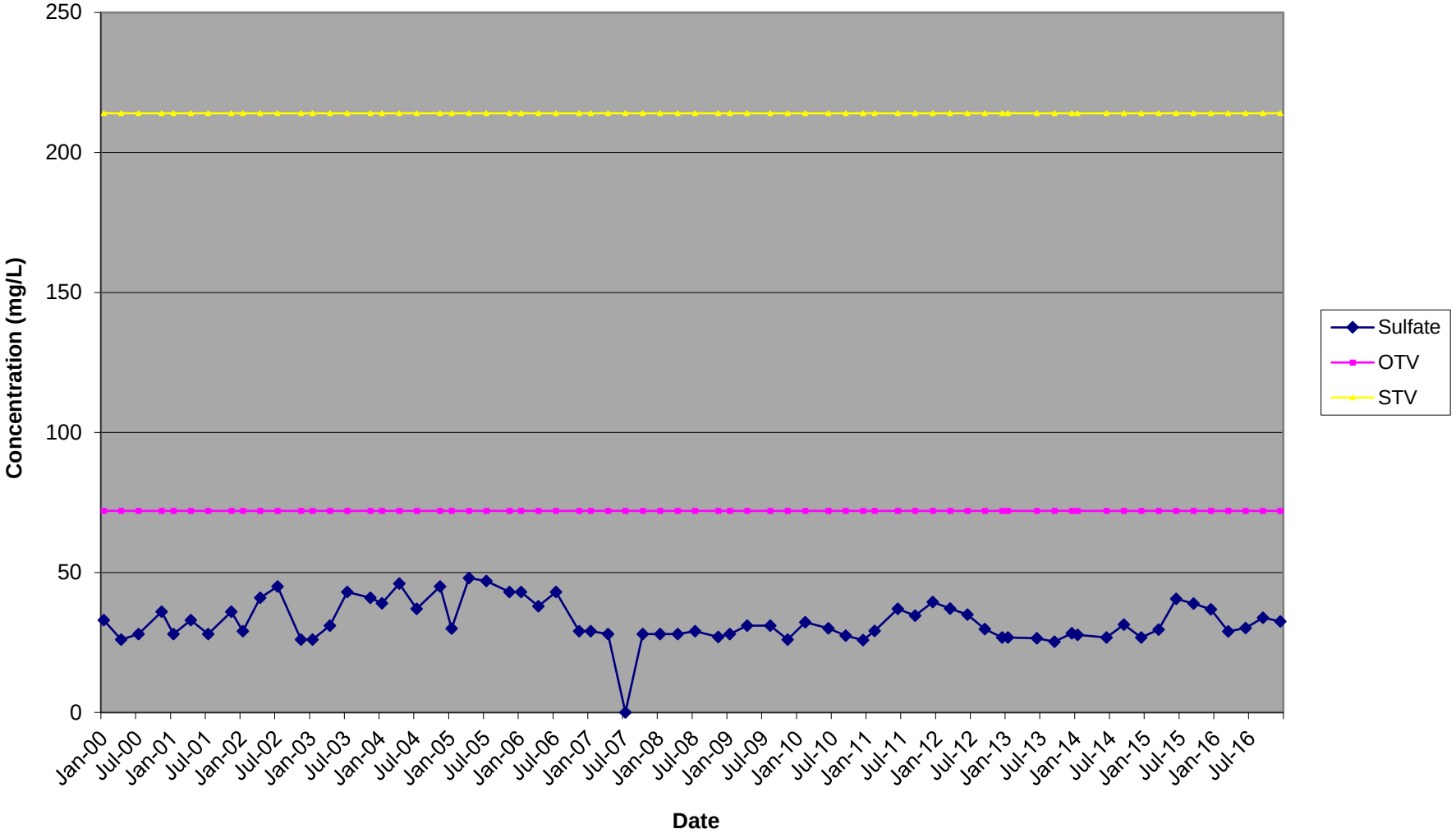
Indicator Parameter Time Trends
DW-5R



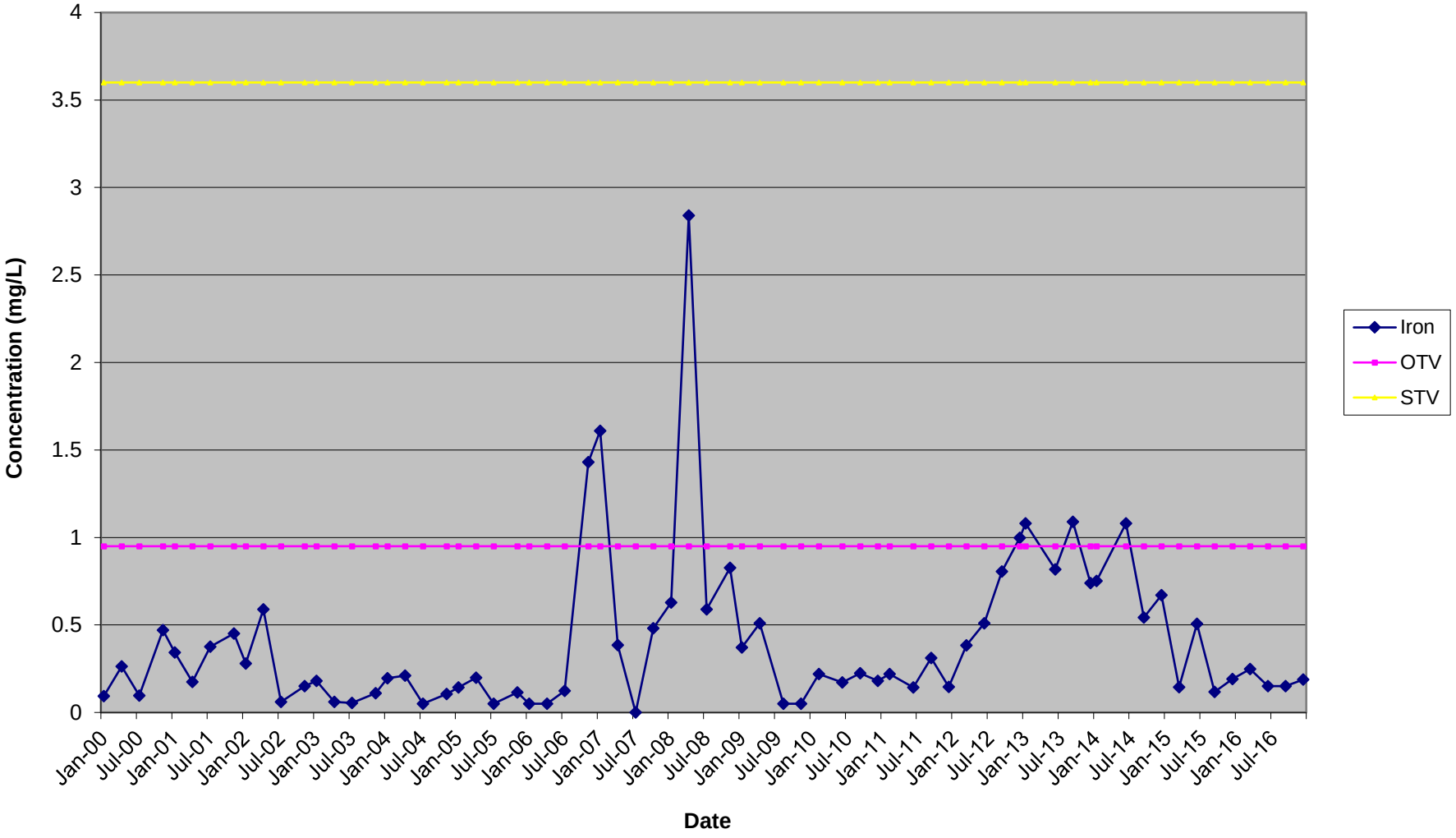
Indicator Parameter Time Trends
DW-5R



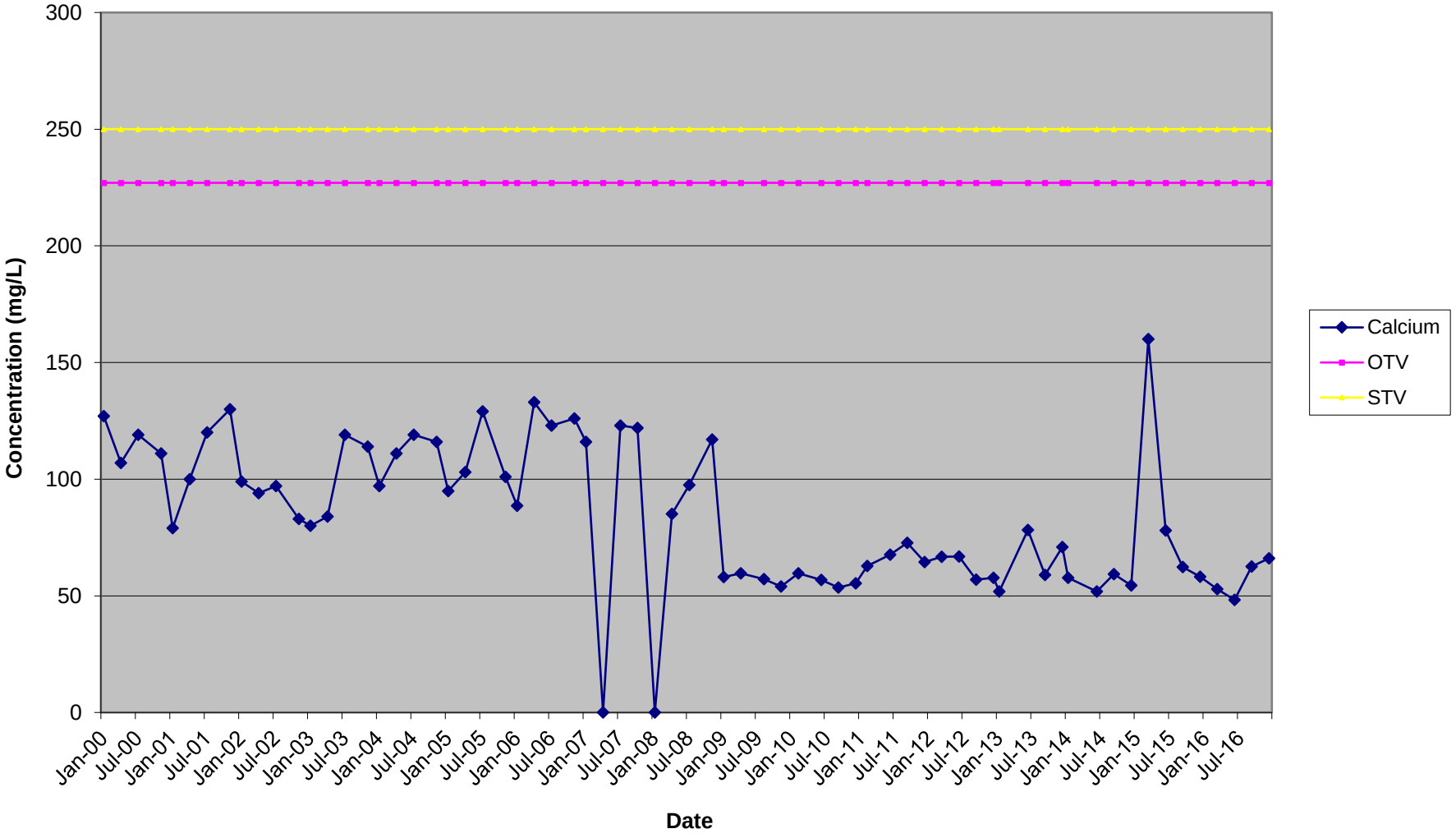
Indicator Parameter Time Trends
DW-5R



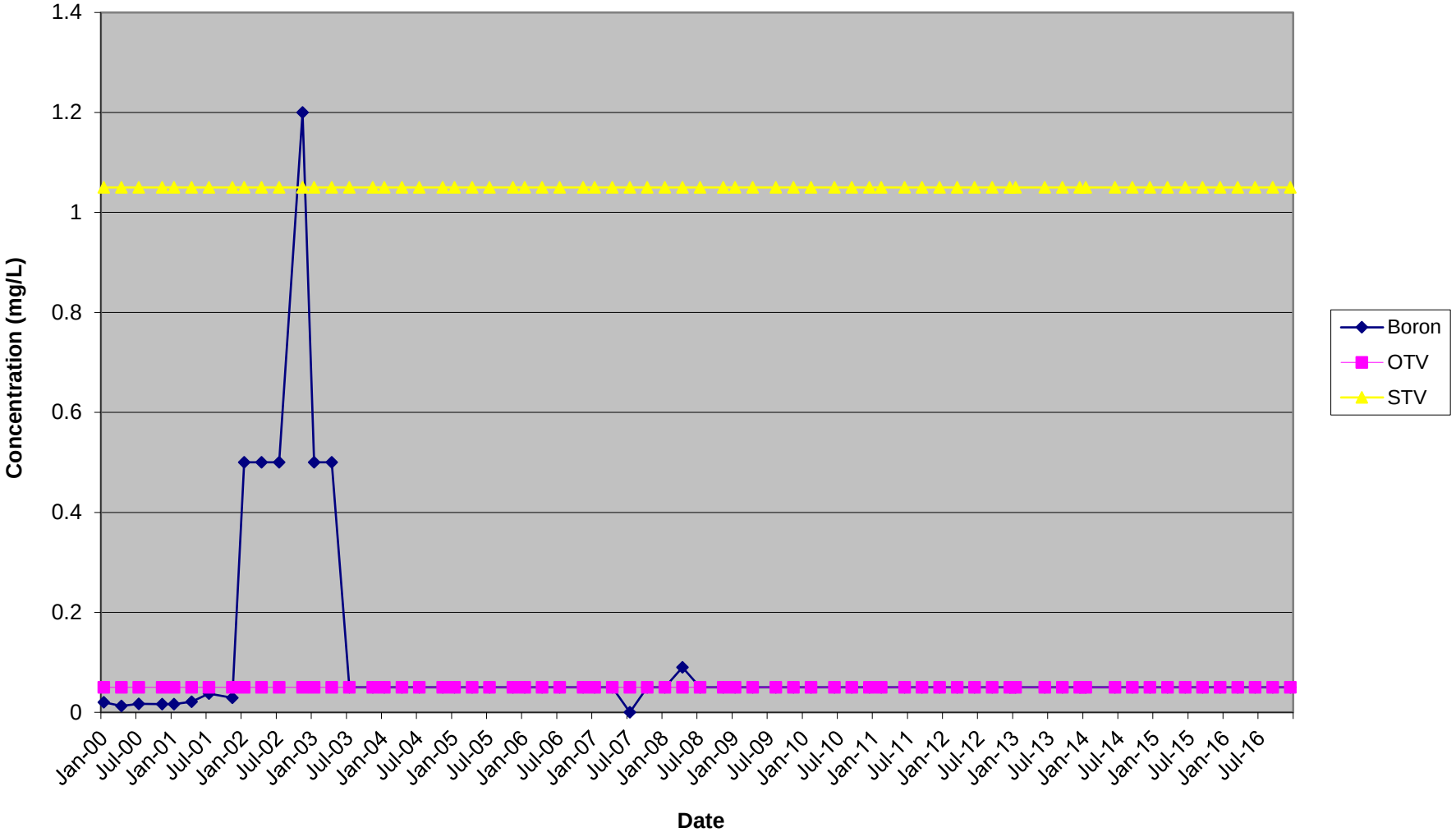
Indicator Parameter Time Trends
DW-5R



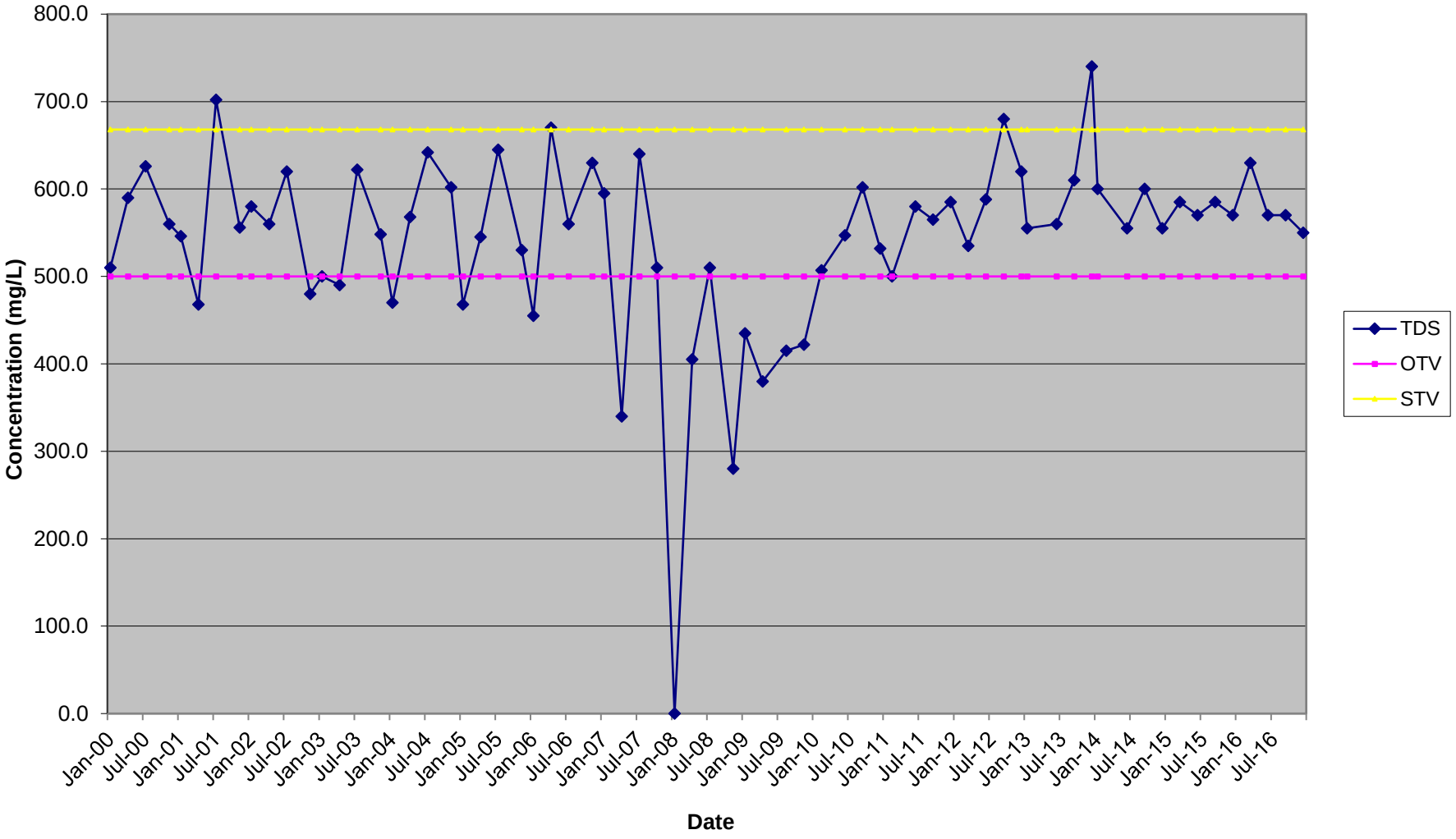
Indicator Parameter Time Trends
DW-5R



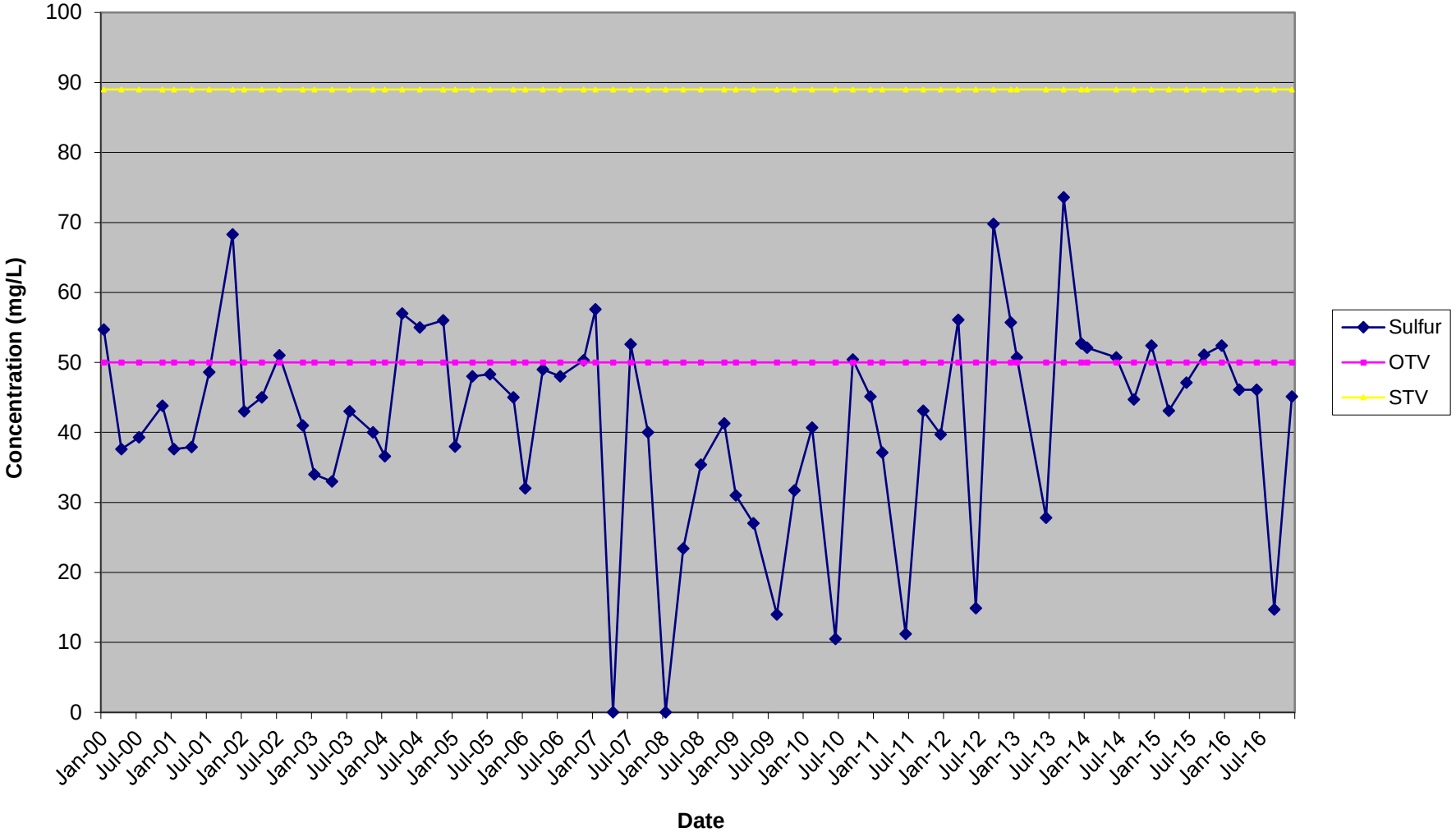
Indicator Parameter Time Trends
DW-5R



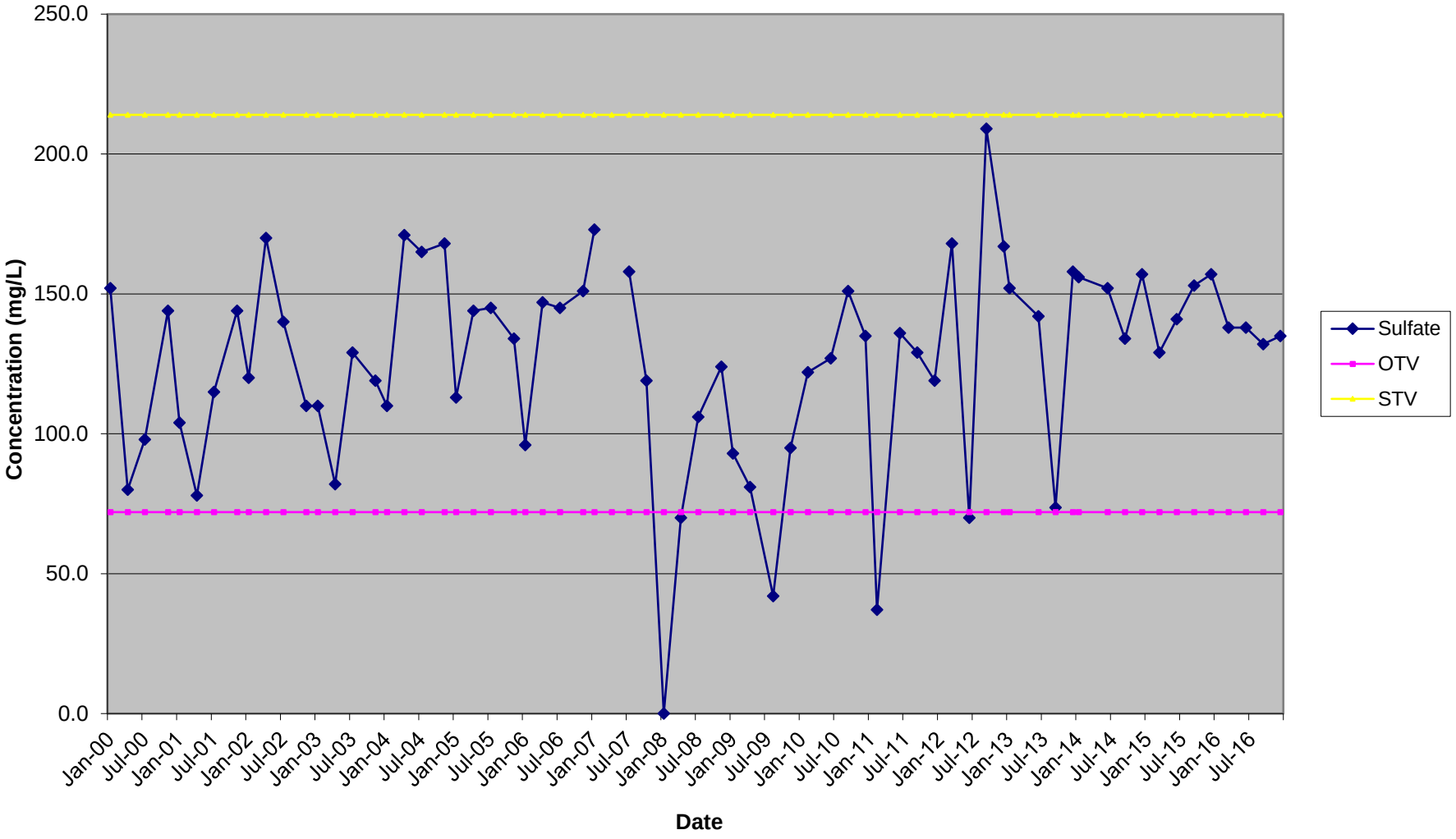
Indicator Parameter Time Trends
DW-4R



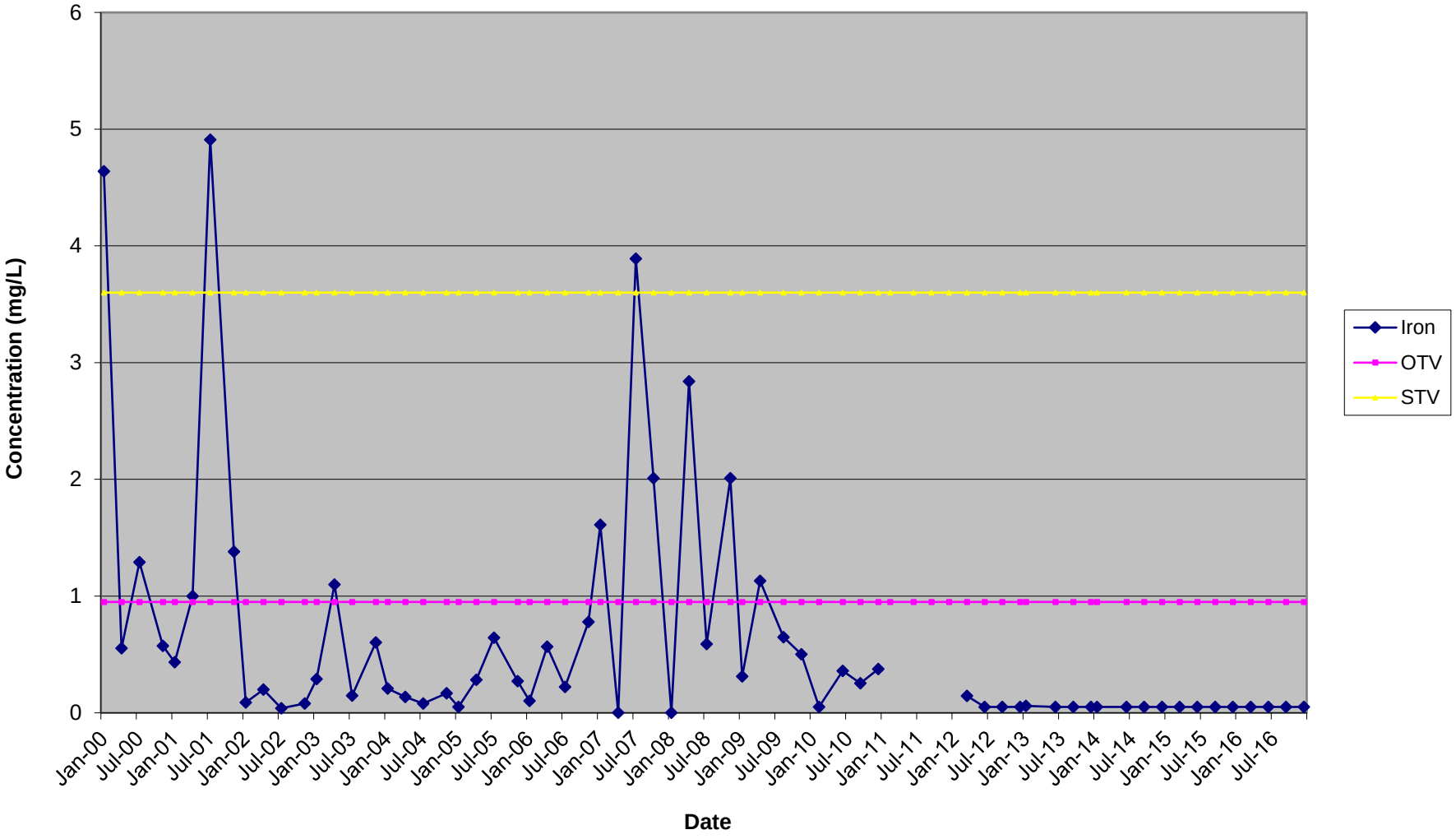
Indicator Parameter Time Trends
DW-4R



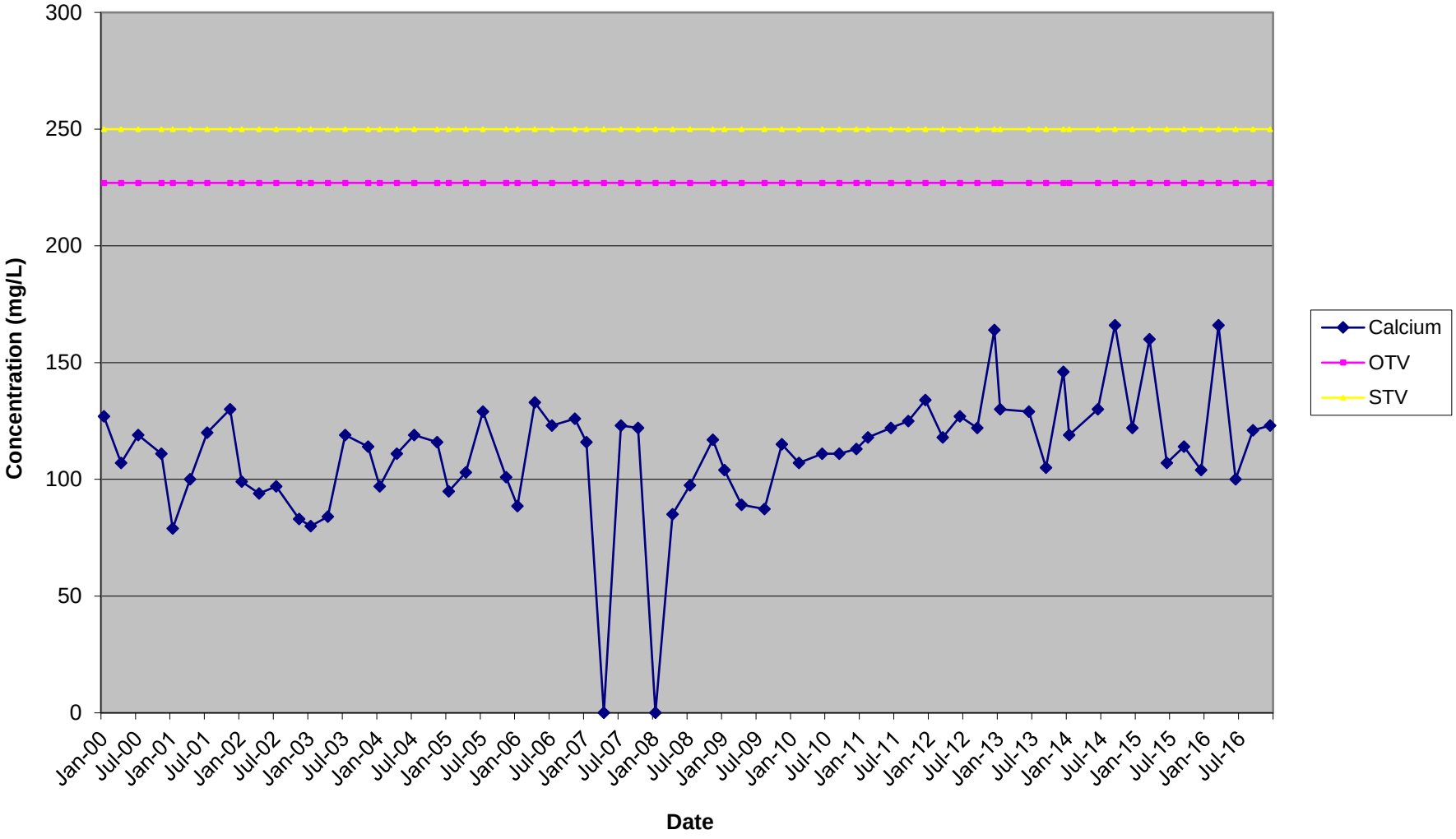
Indicator Parameter Time Trends
DW-4R



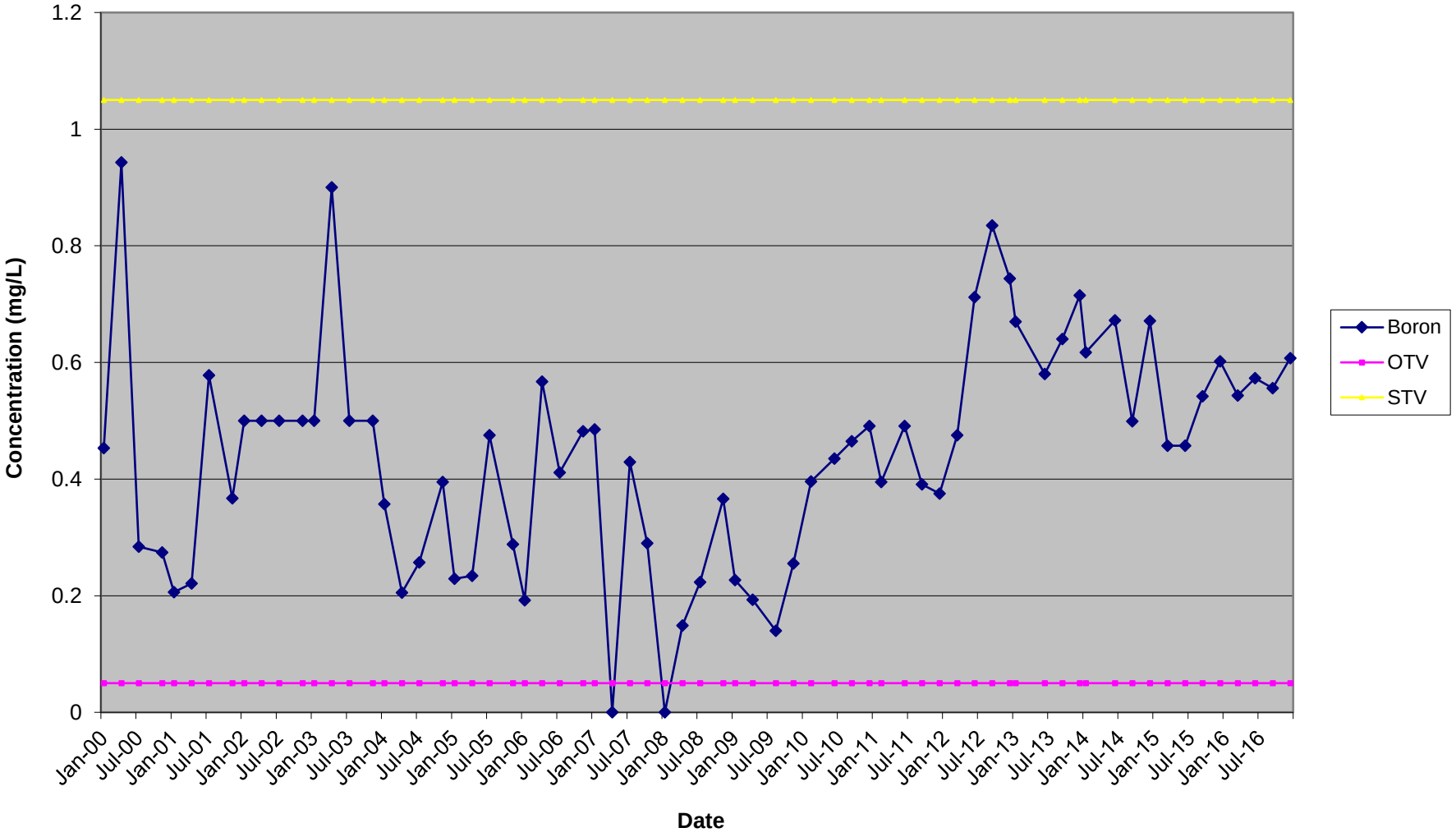
Indicator Parameter Time Trends
DW-4R



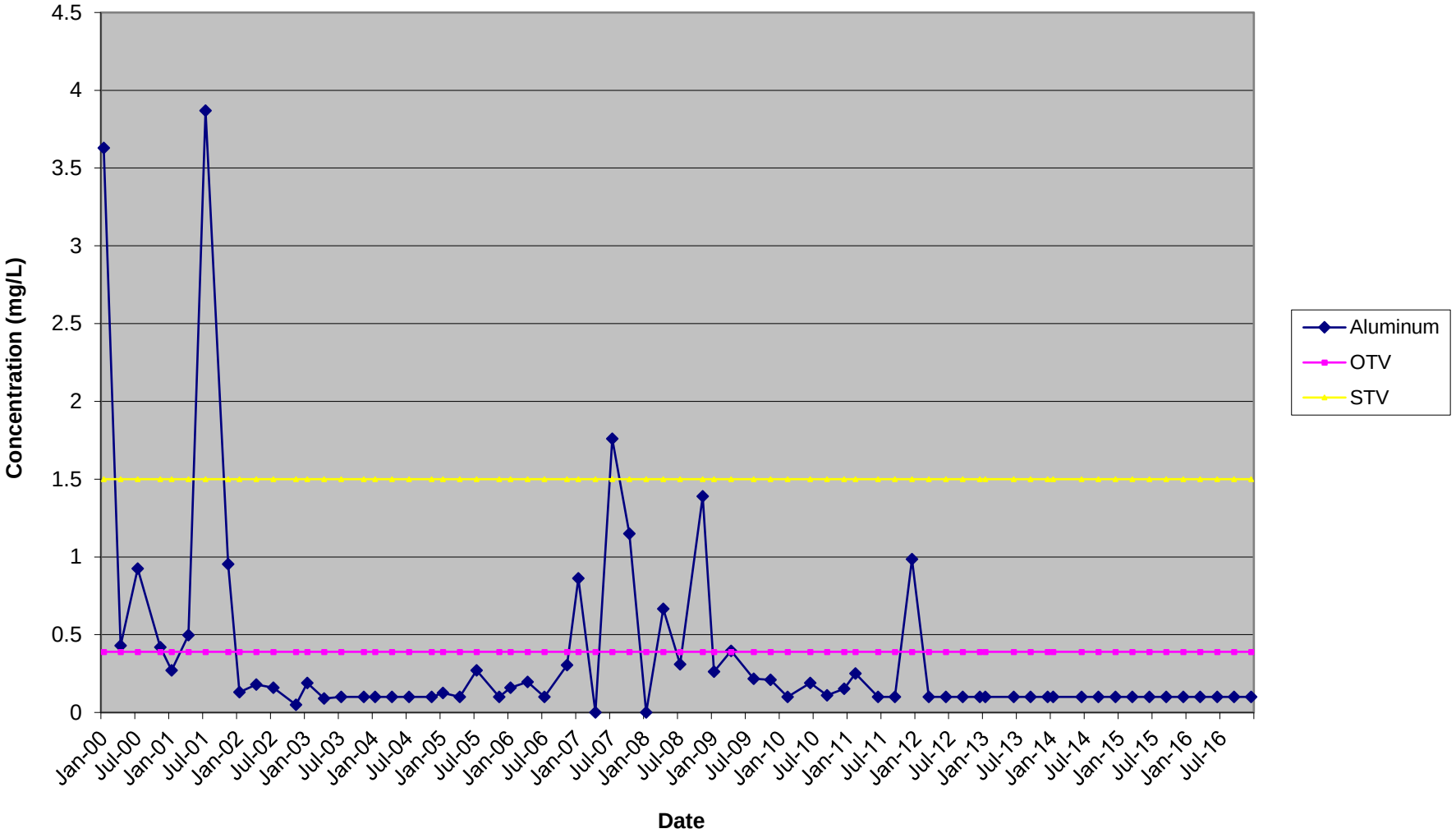
Indicator Parameter Time Trends
DW-4R



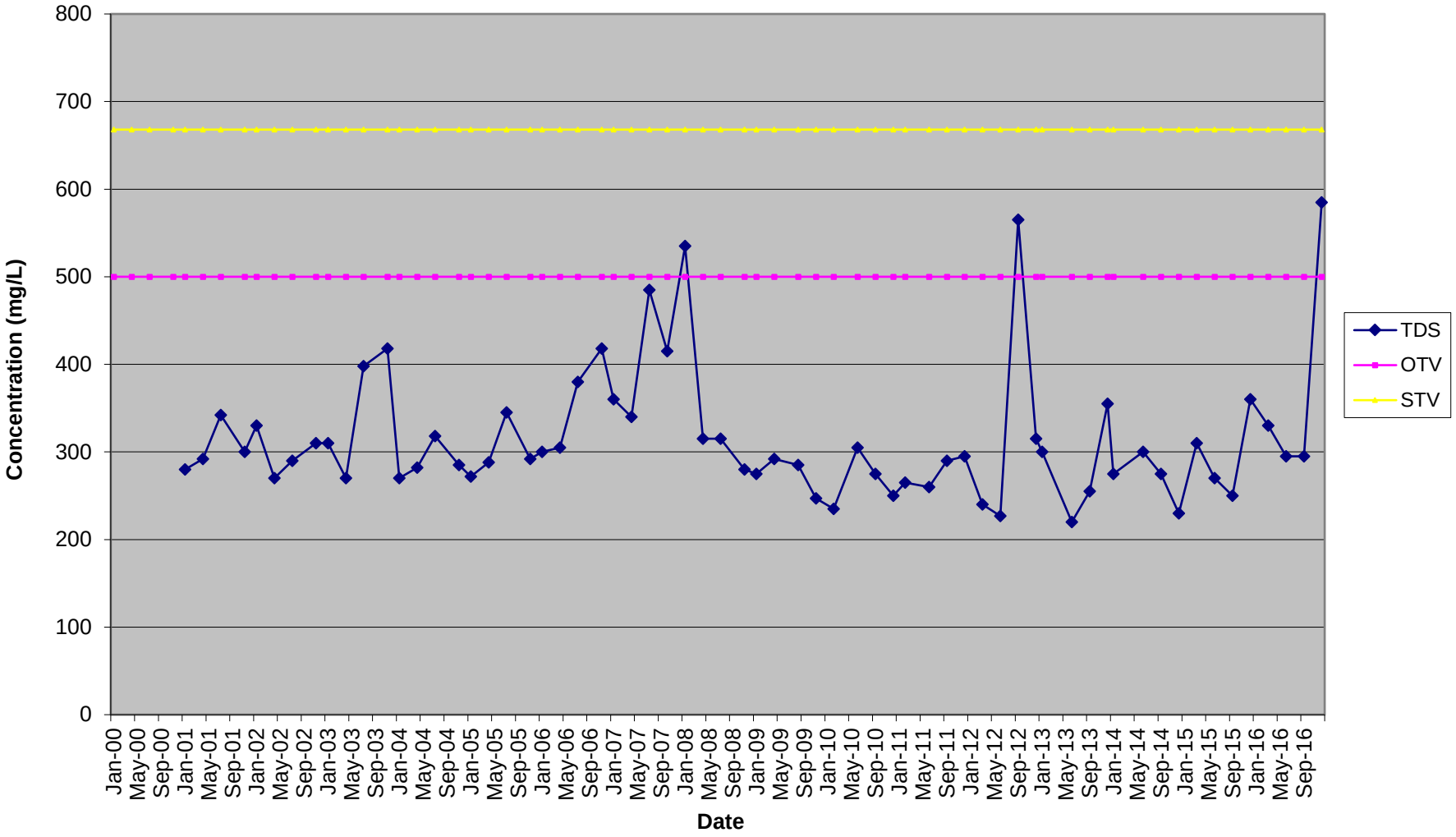
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DW-4R



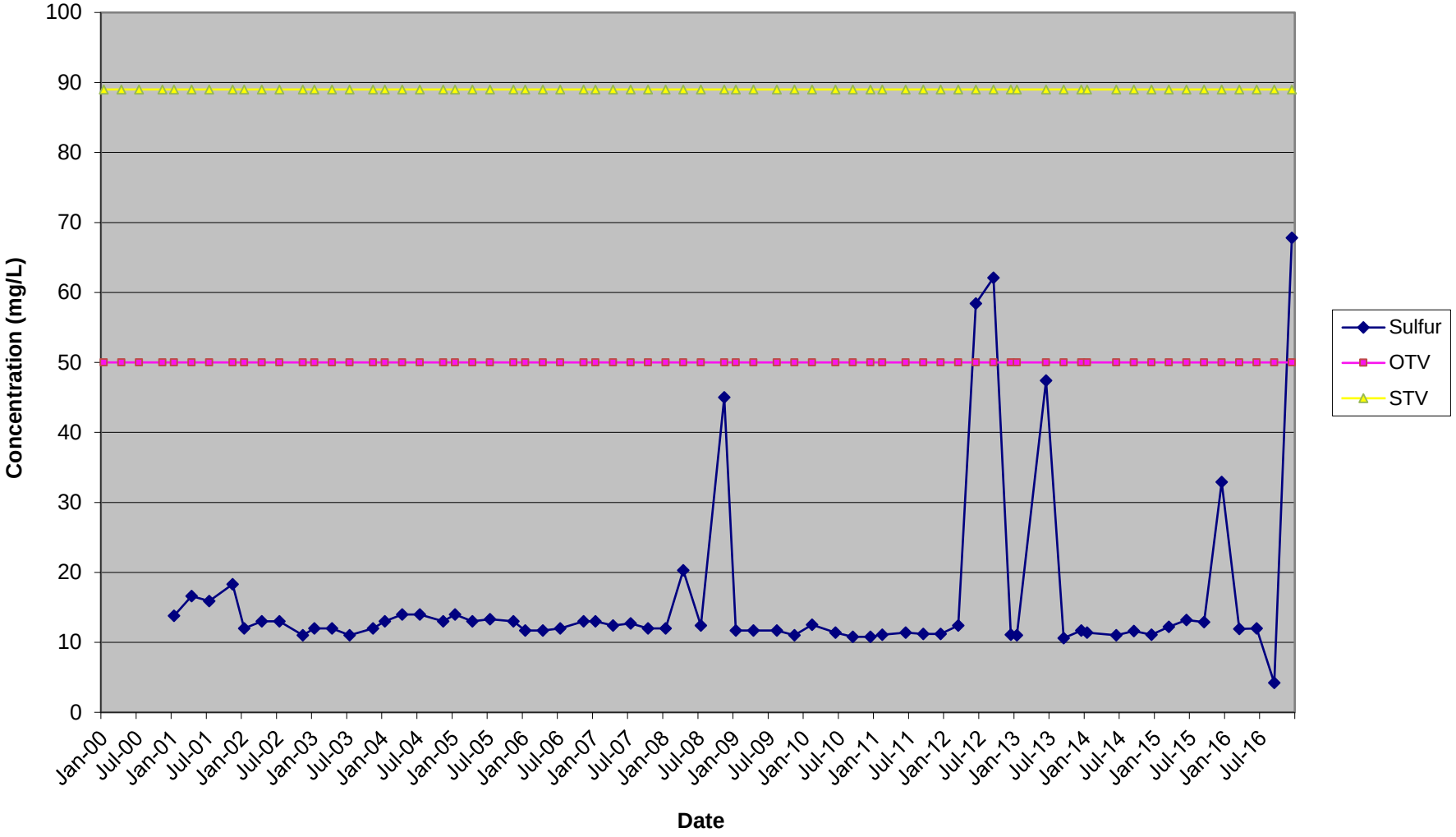
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DW-4R



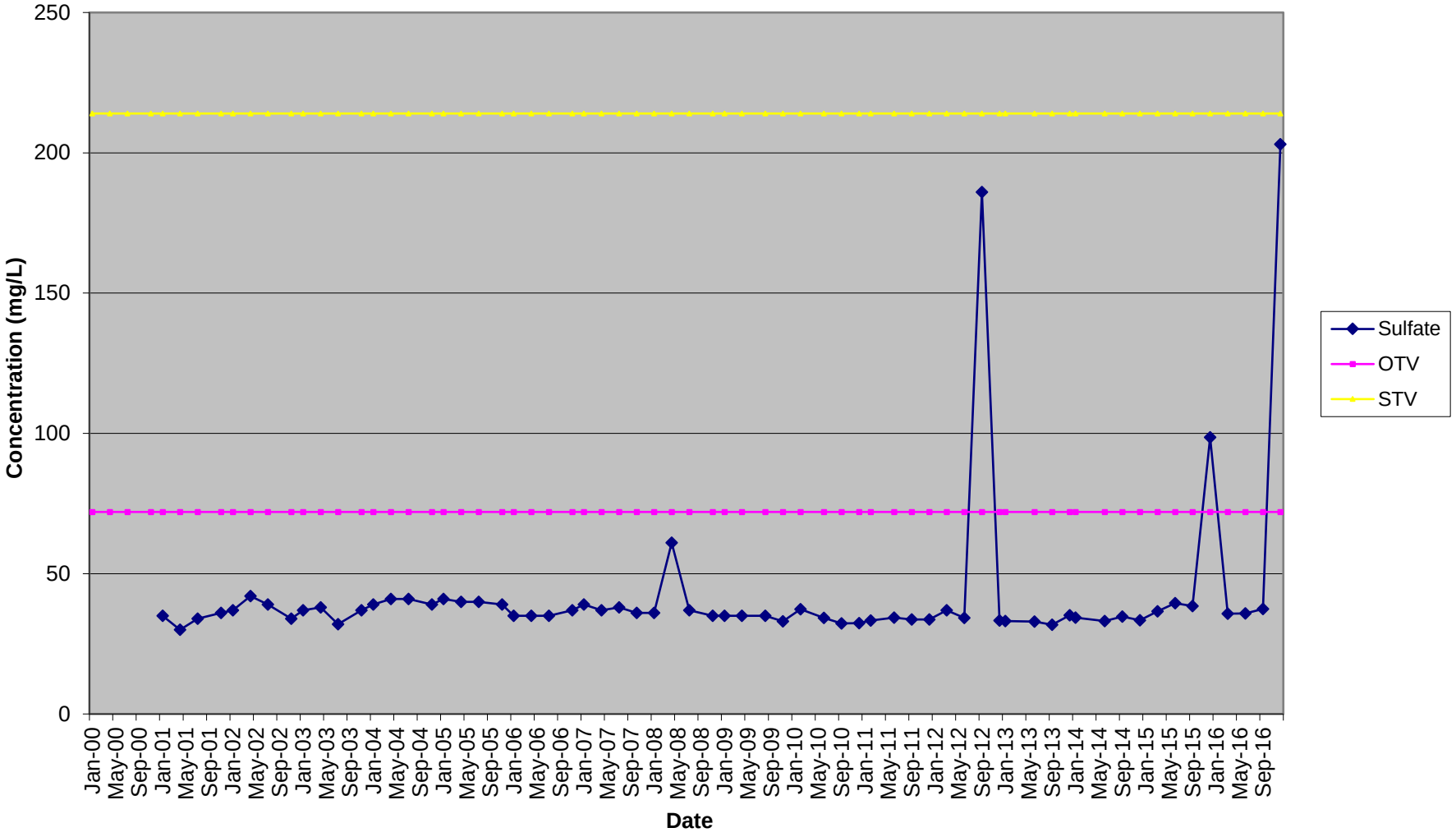
Indicator Parameter Time Trends
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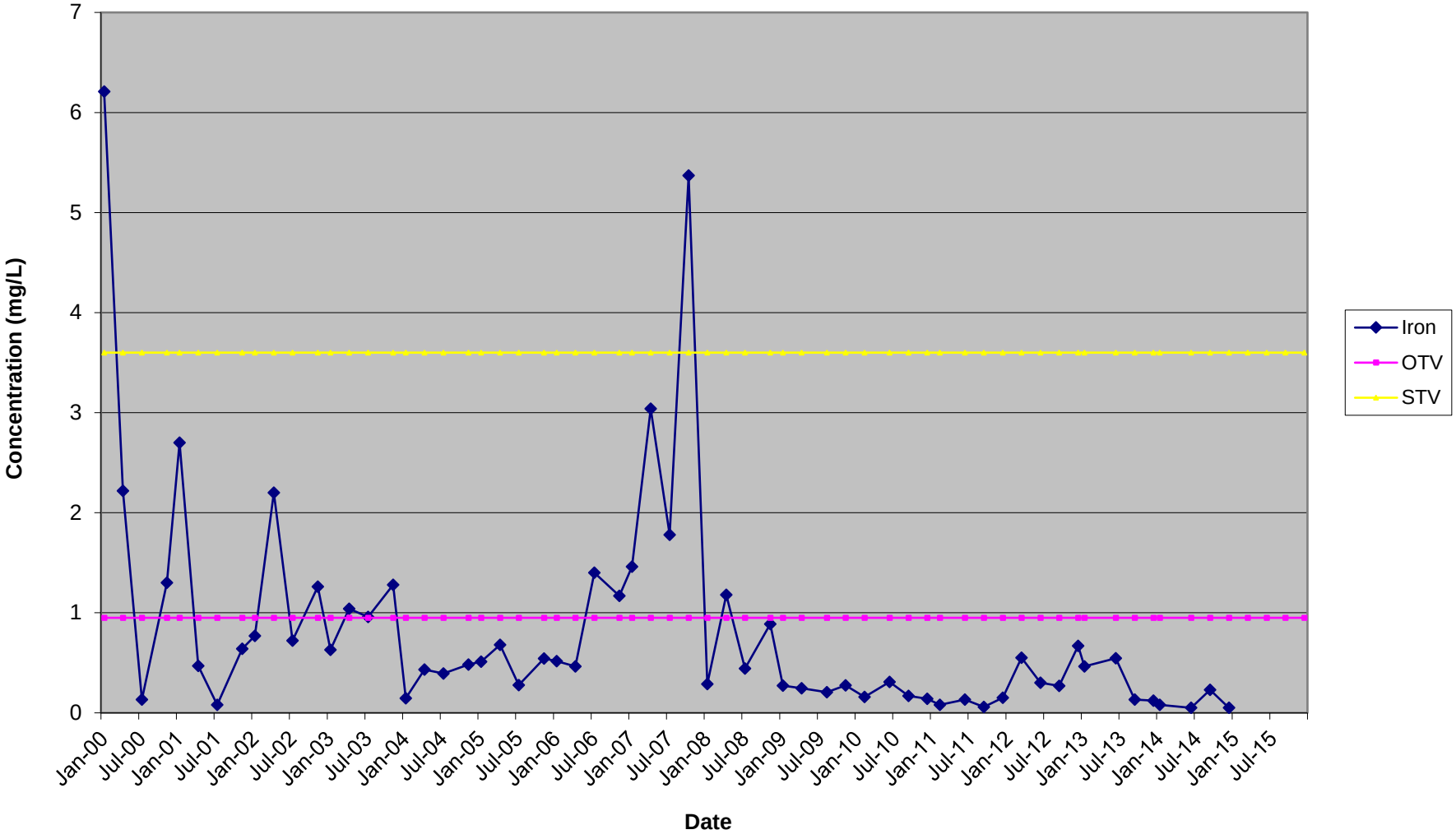
Indicator Parameter Time Trends
DW-3R



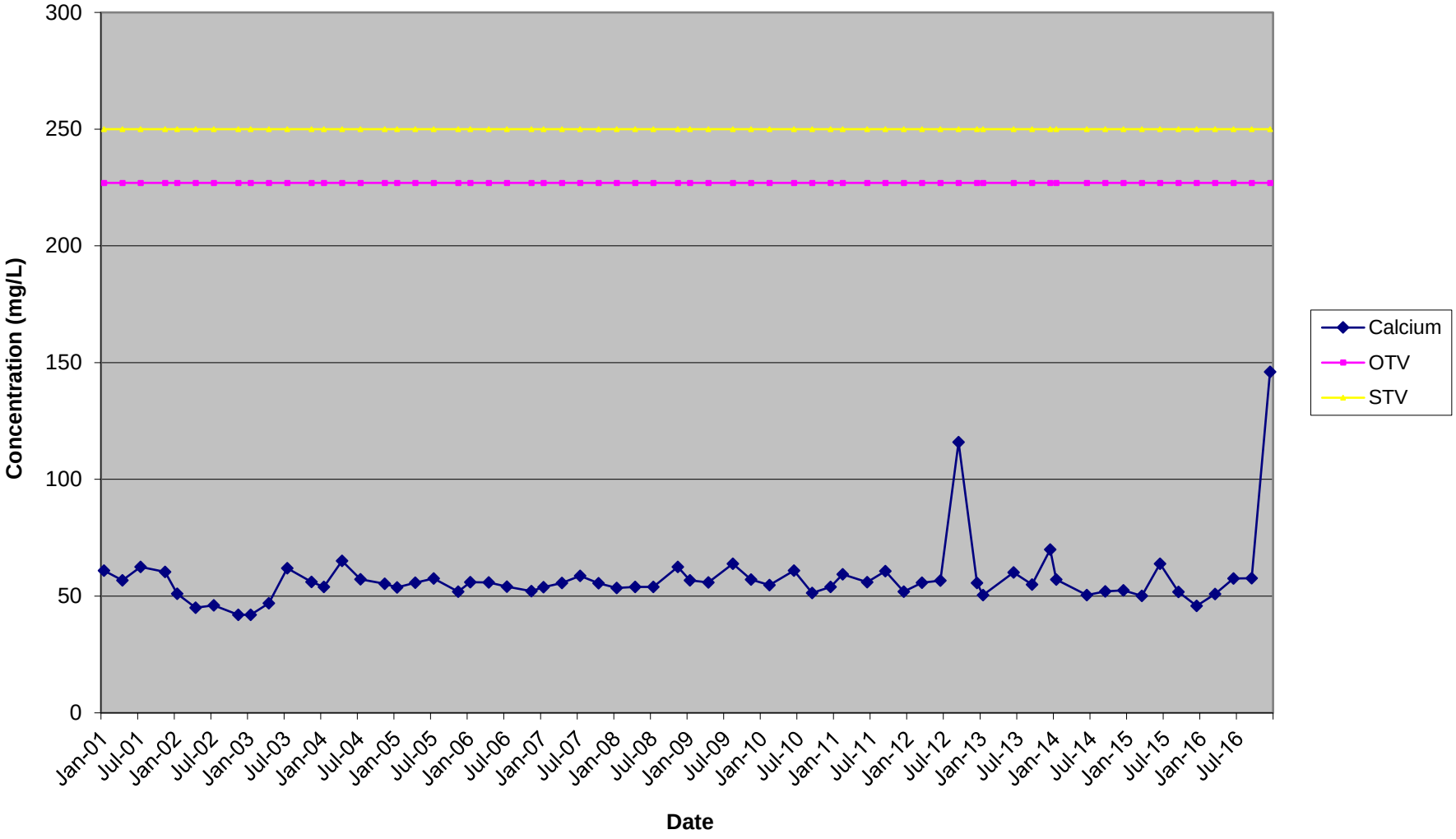
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DW-3R



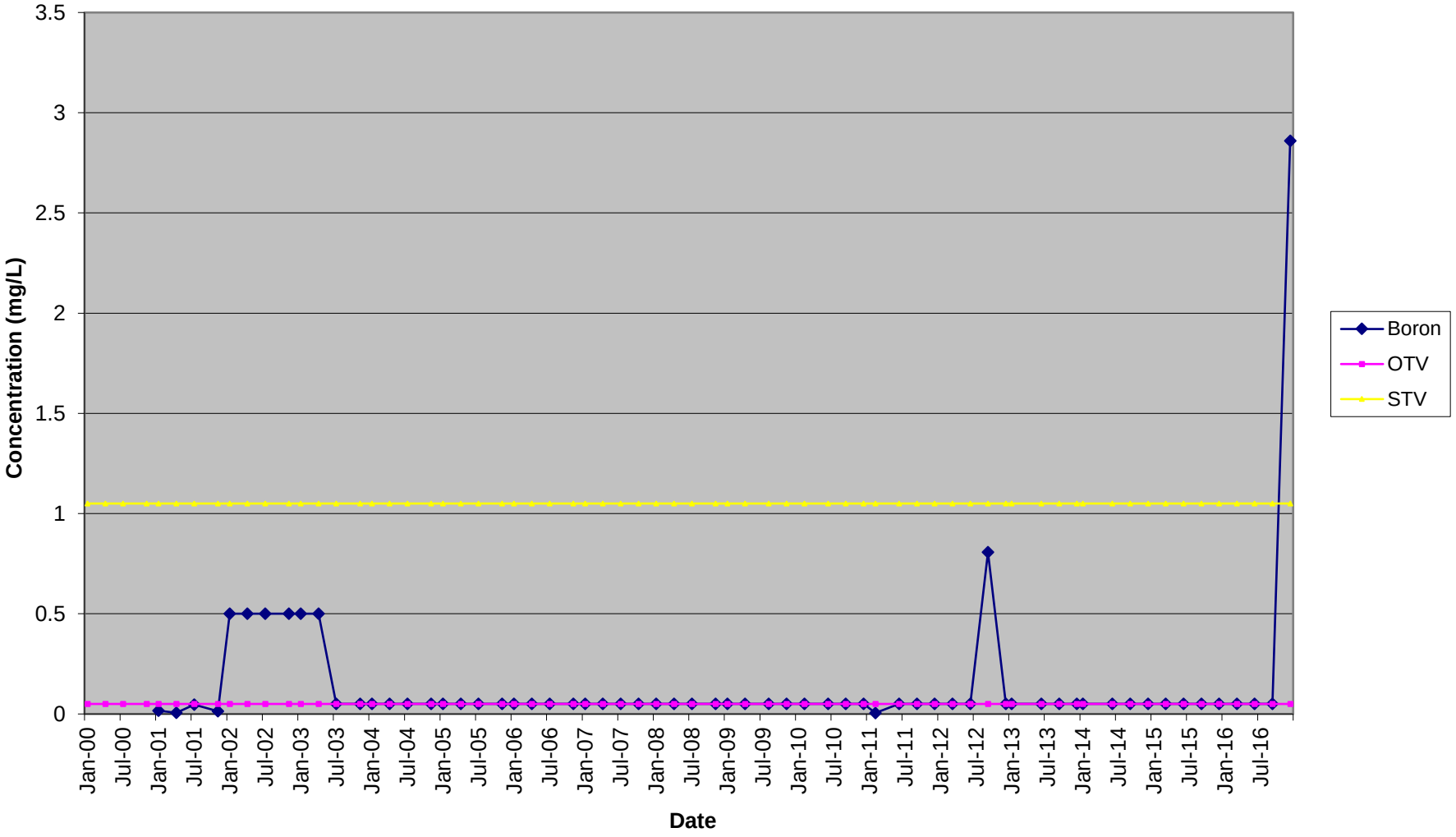
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DW-3R



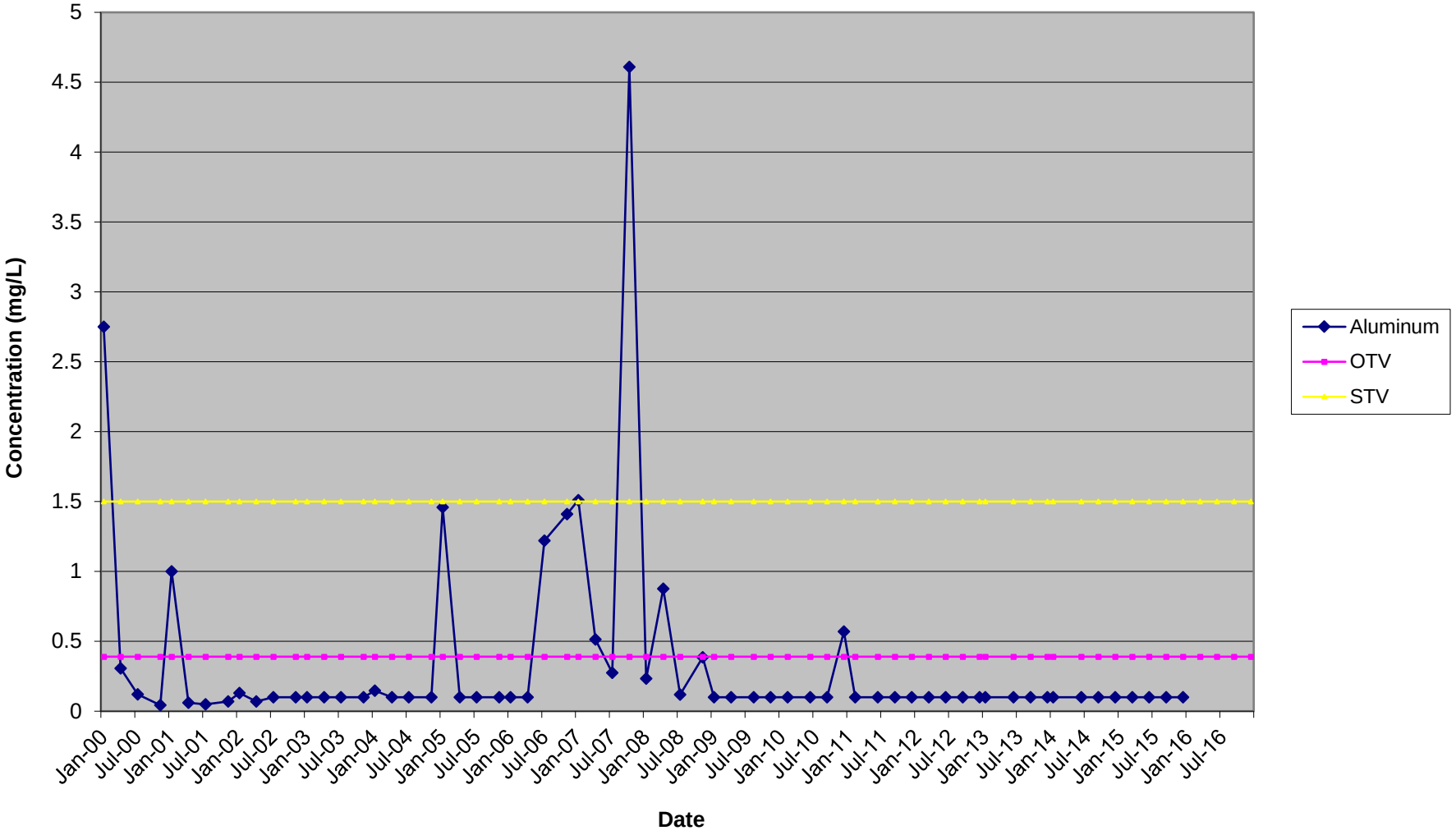
Indicator Parameter Time Trend
DW-3R



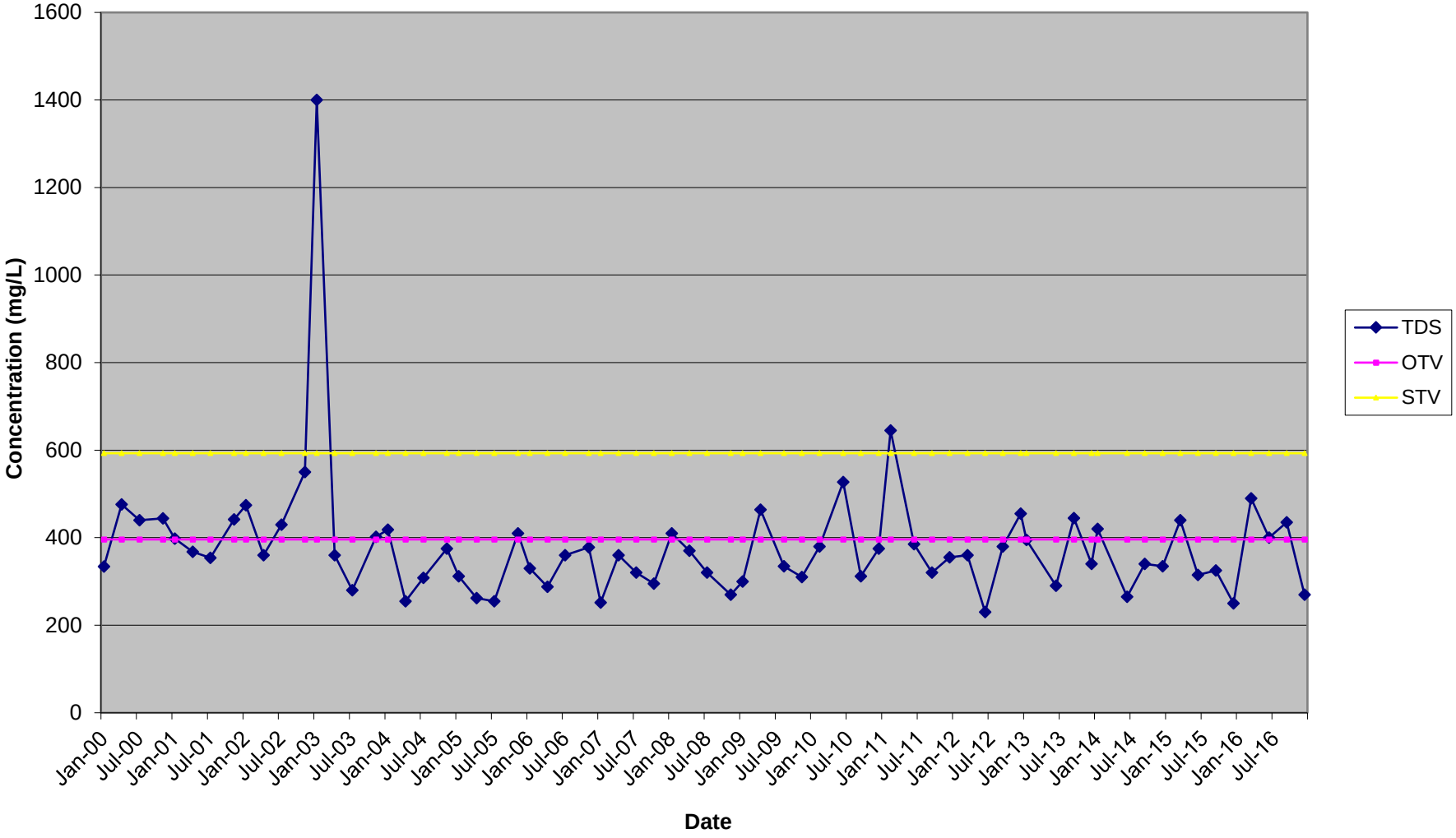
Indicator Parameter Time Trends
DW-3R



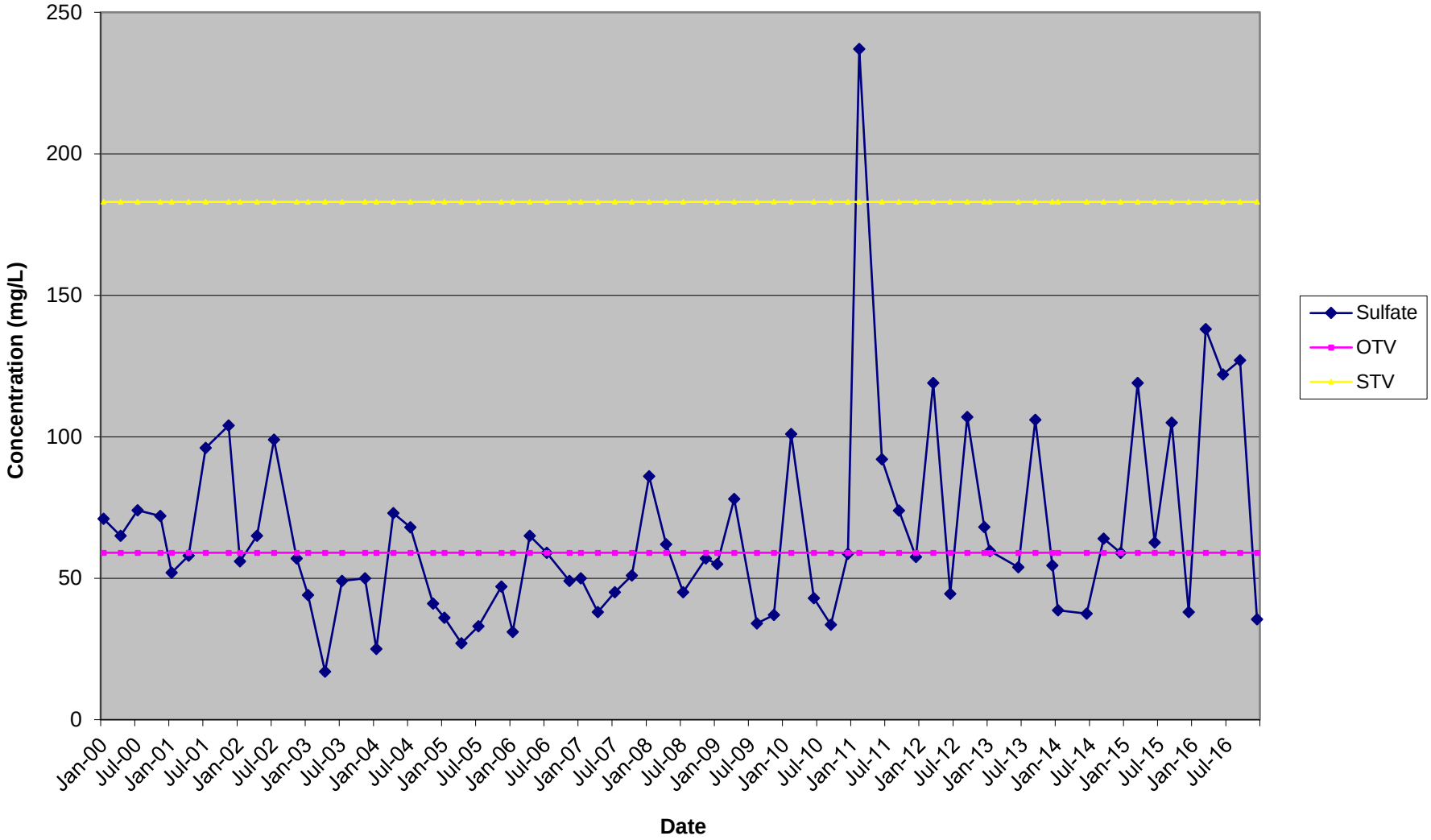
Indicator Parameter Time Trends
DW-3R



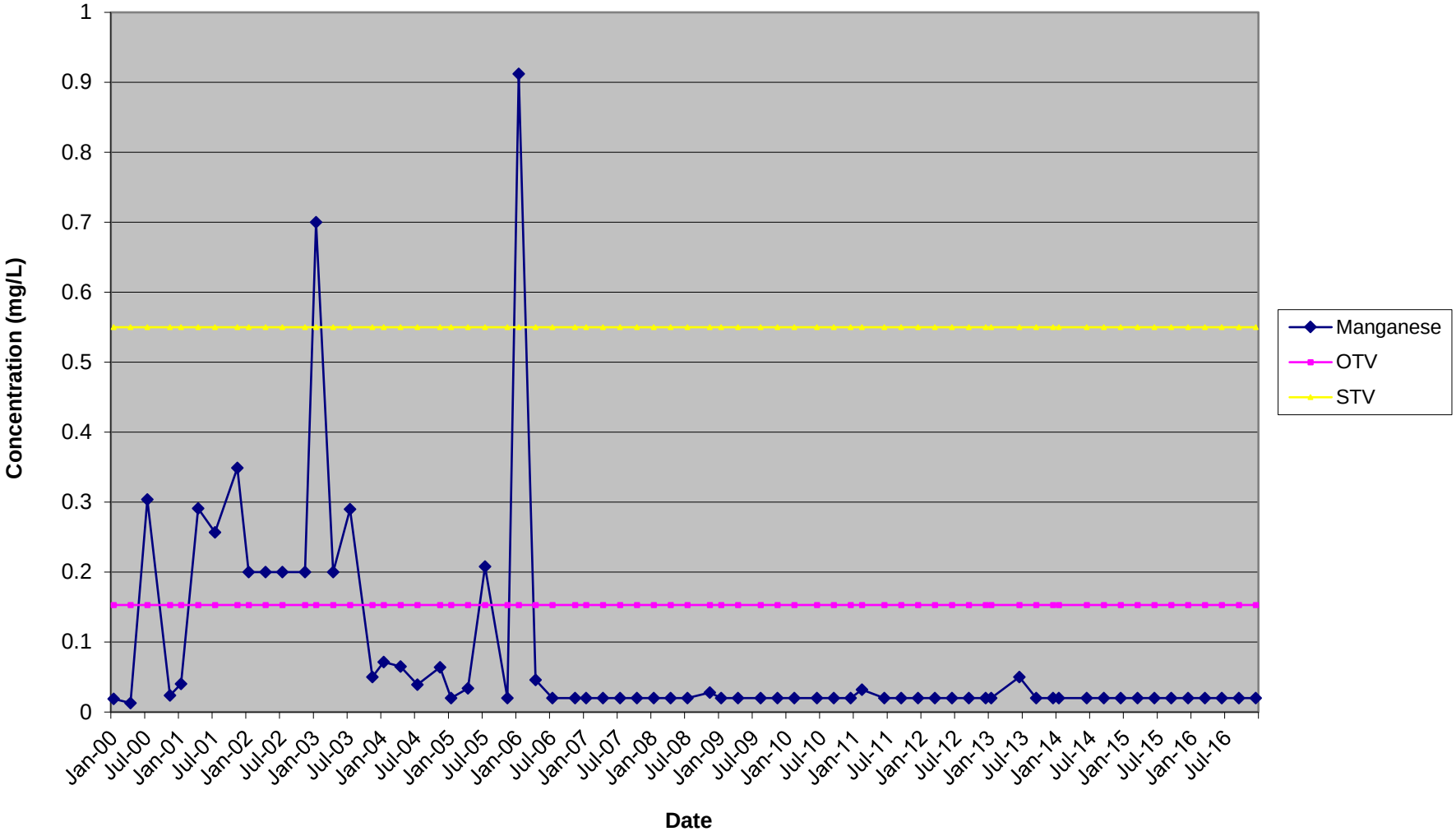
Indicator Parameter Time Trends
DW-3P



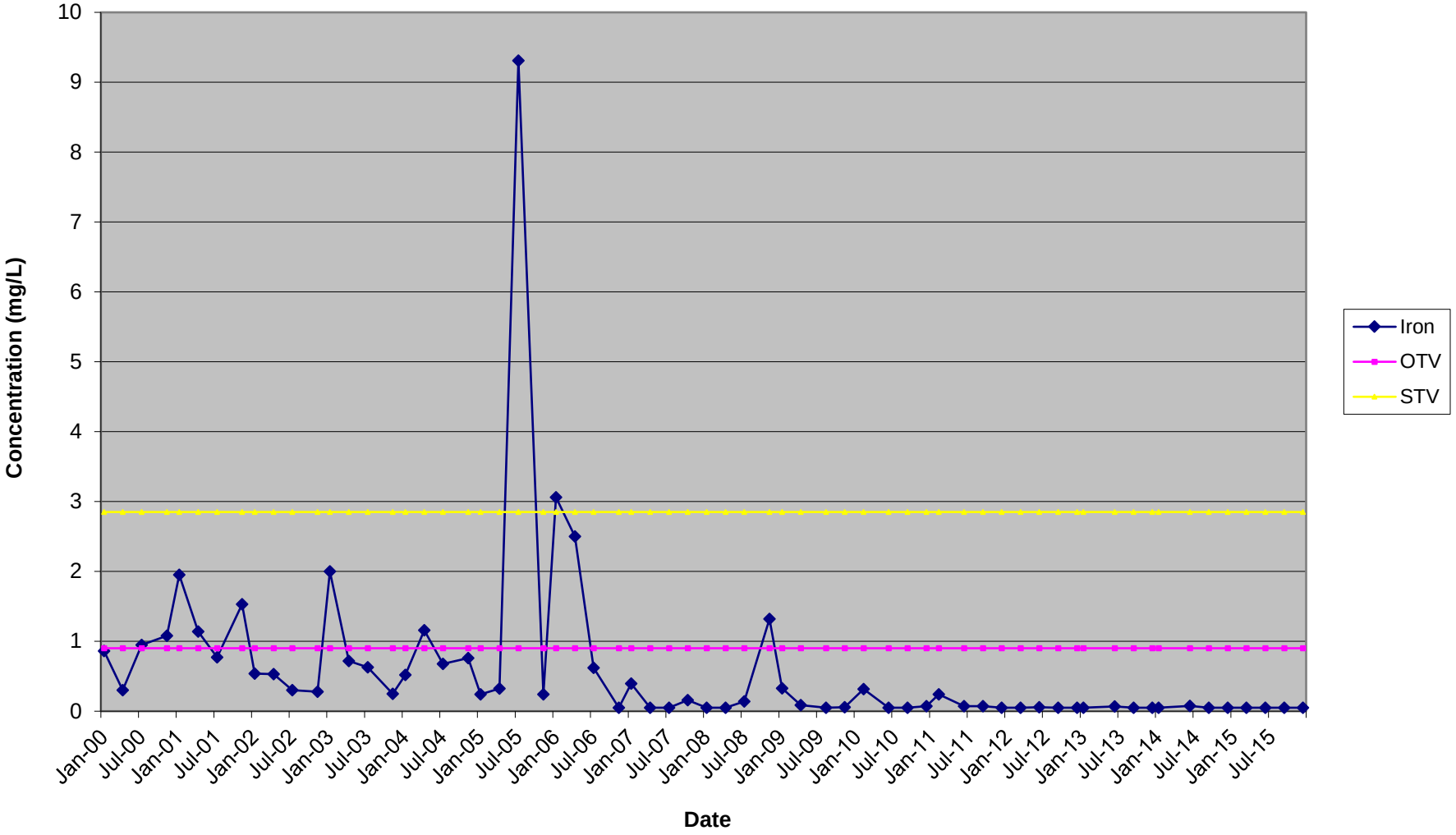
Indicator Parameter Time Trends
DW-3P



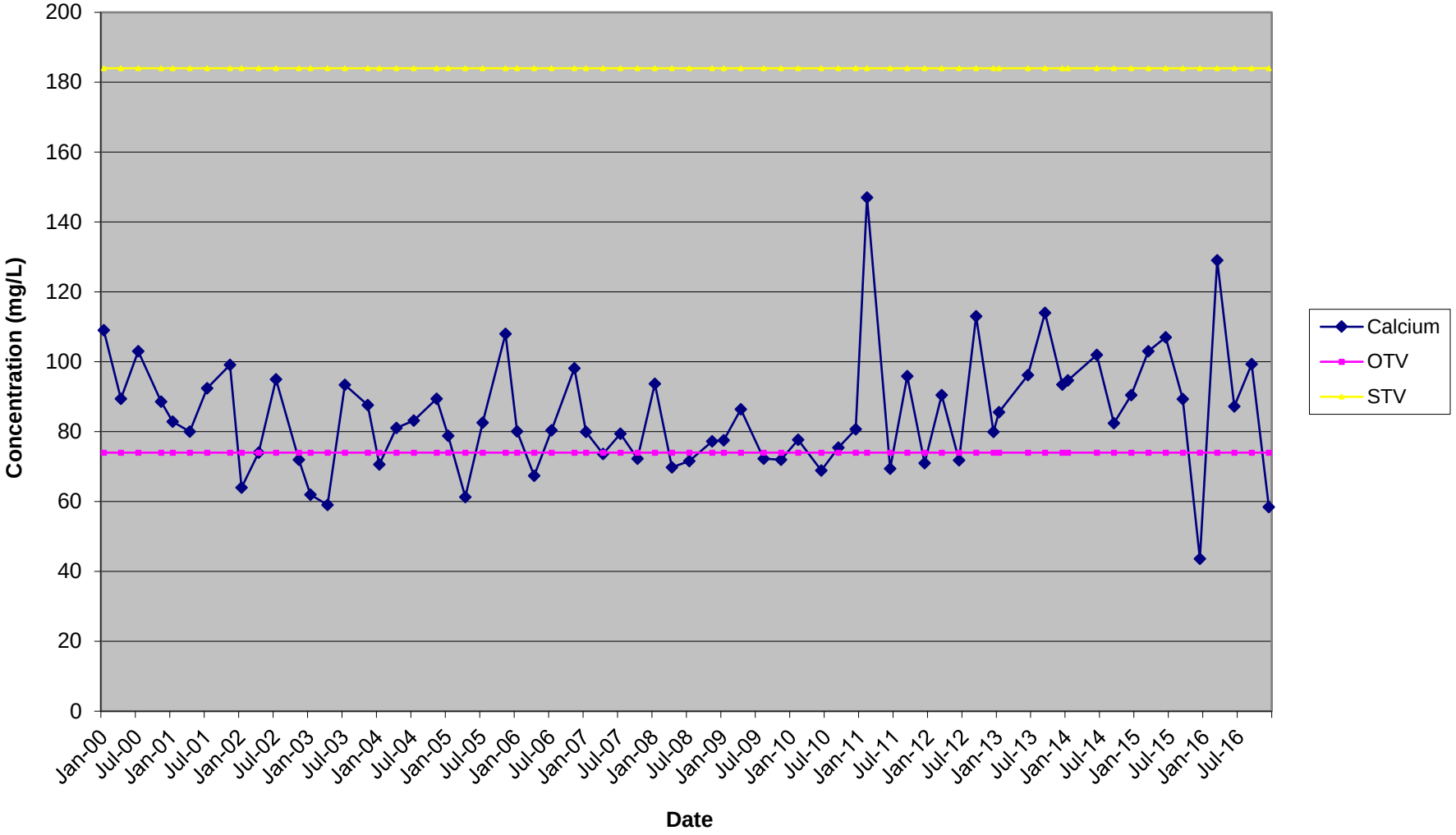
Indicator Parameter Time Trends
DW-3P



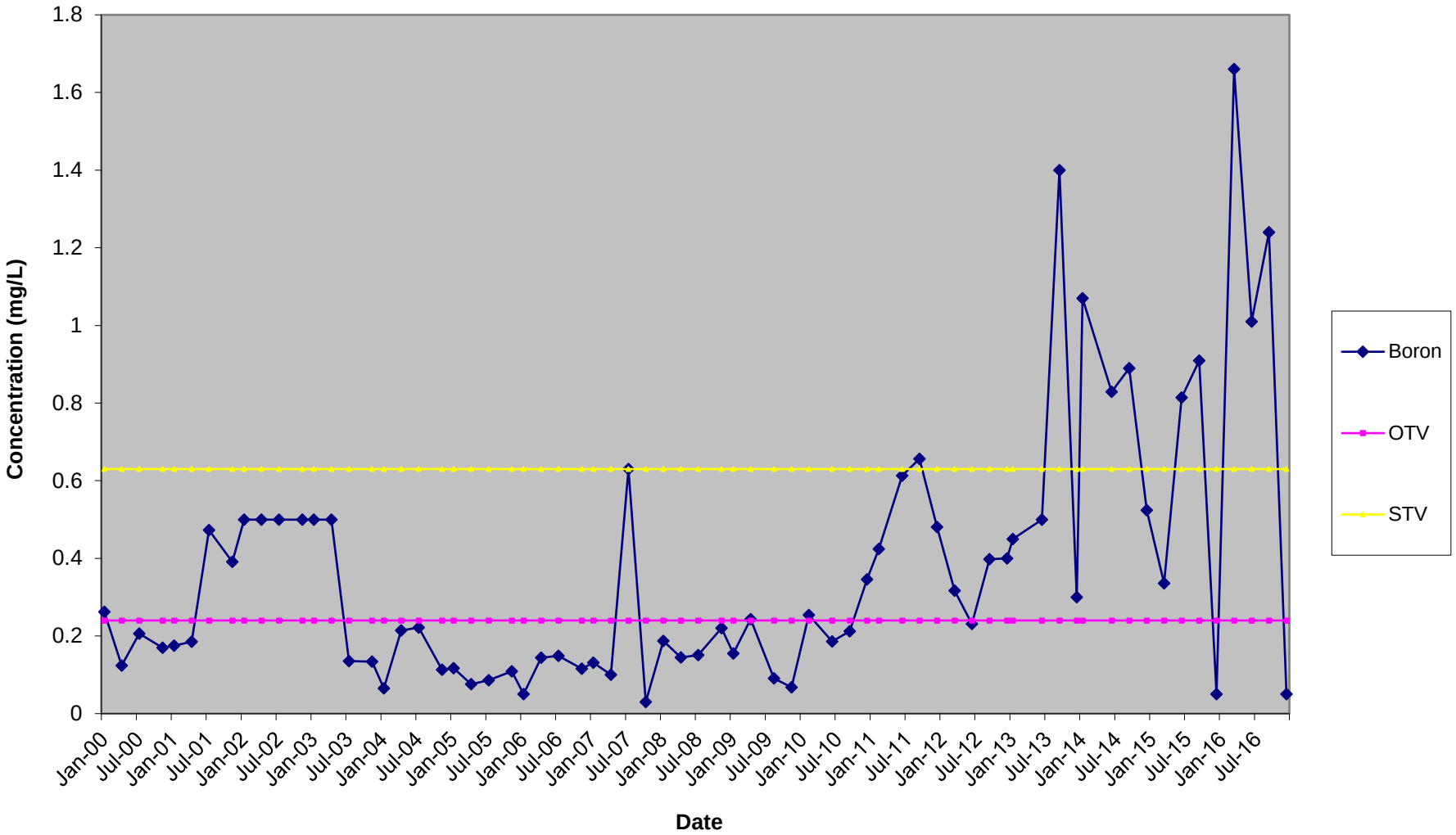
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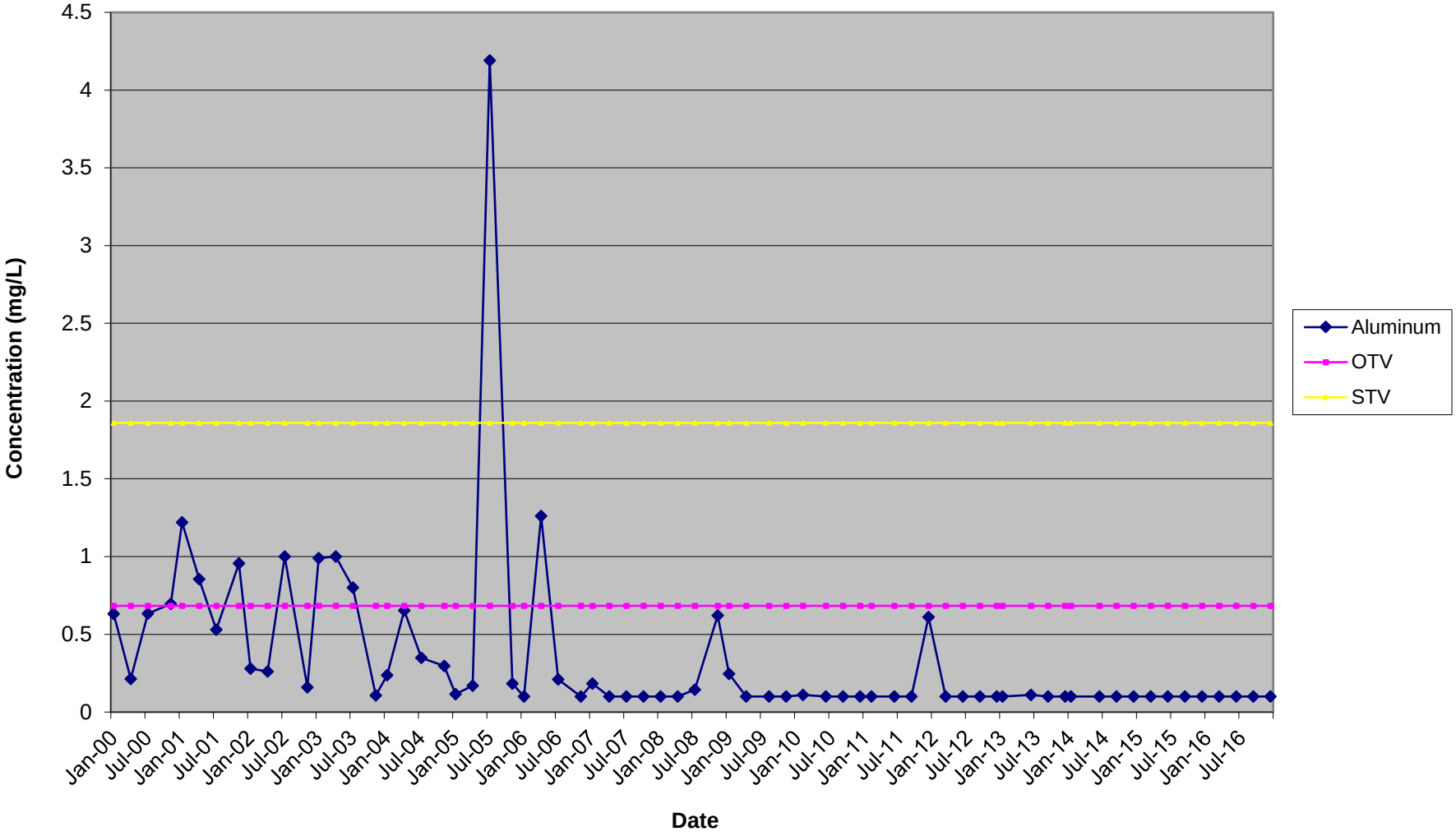
Indicator Parameter Time Trends
DW-3P



Indicator Parameter Time Trends
DW-3P



Indicator Parameter Time Trends
DW-3P

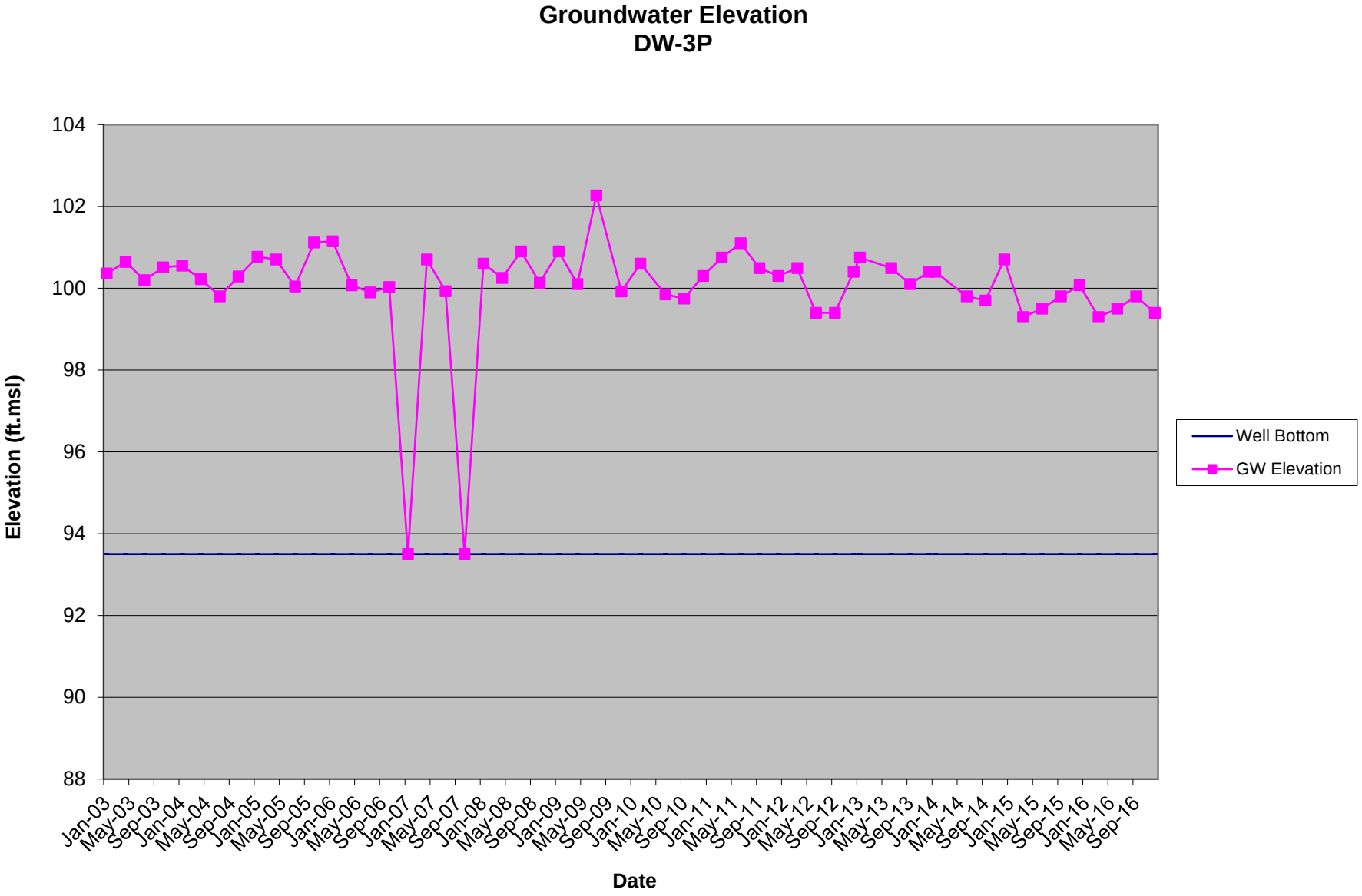


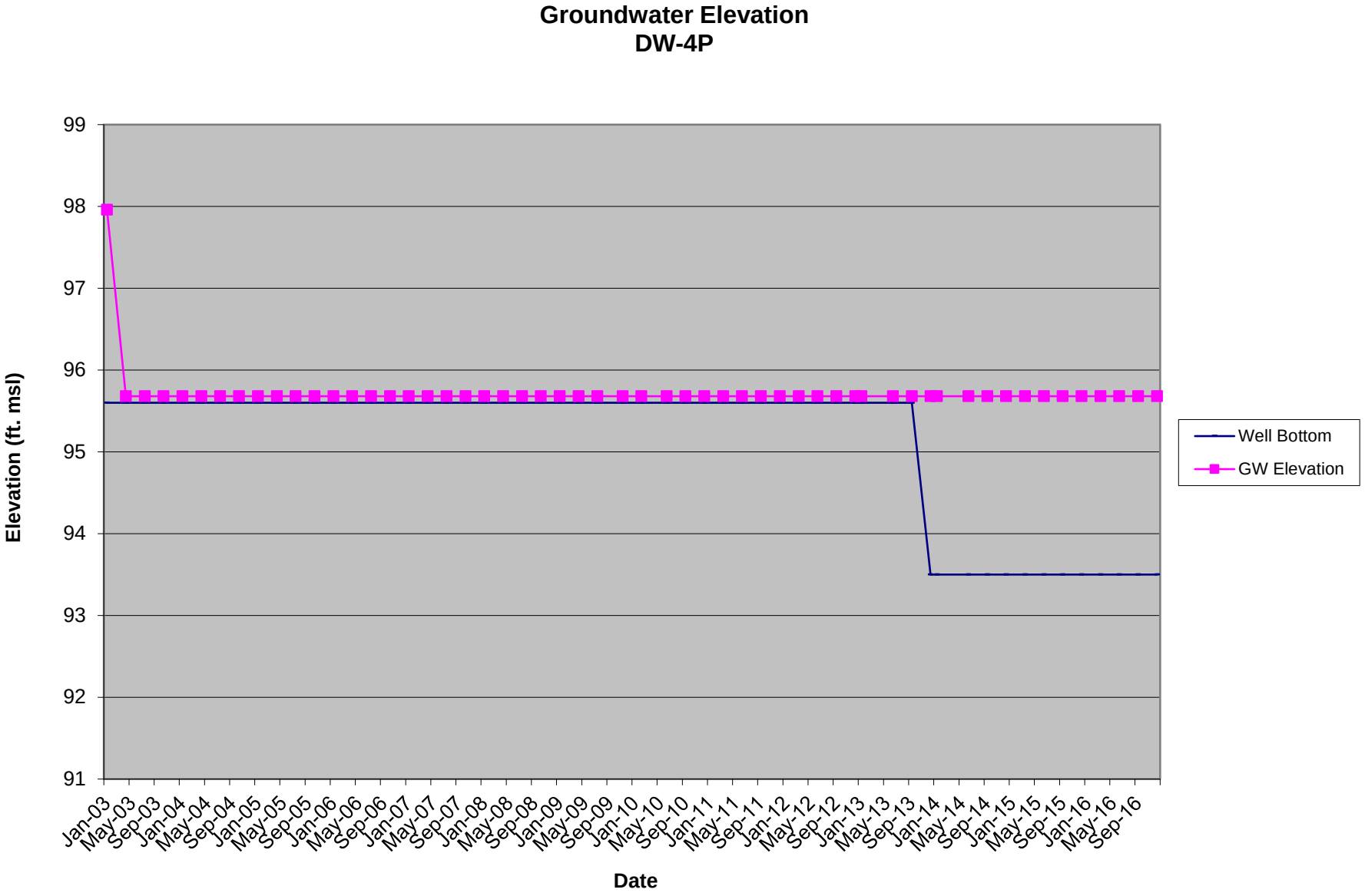
APPENDIX D
GROUNDWATER ELEVATION TIME TREND PLOTS

2016 ANNUAL REPORT

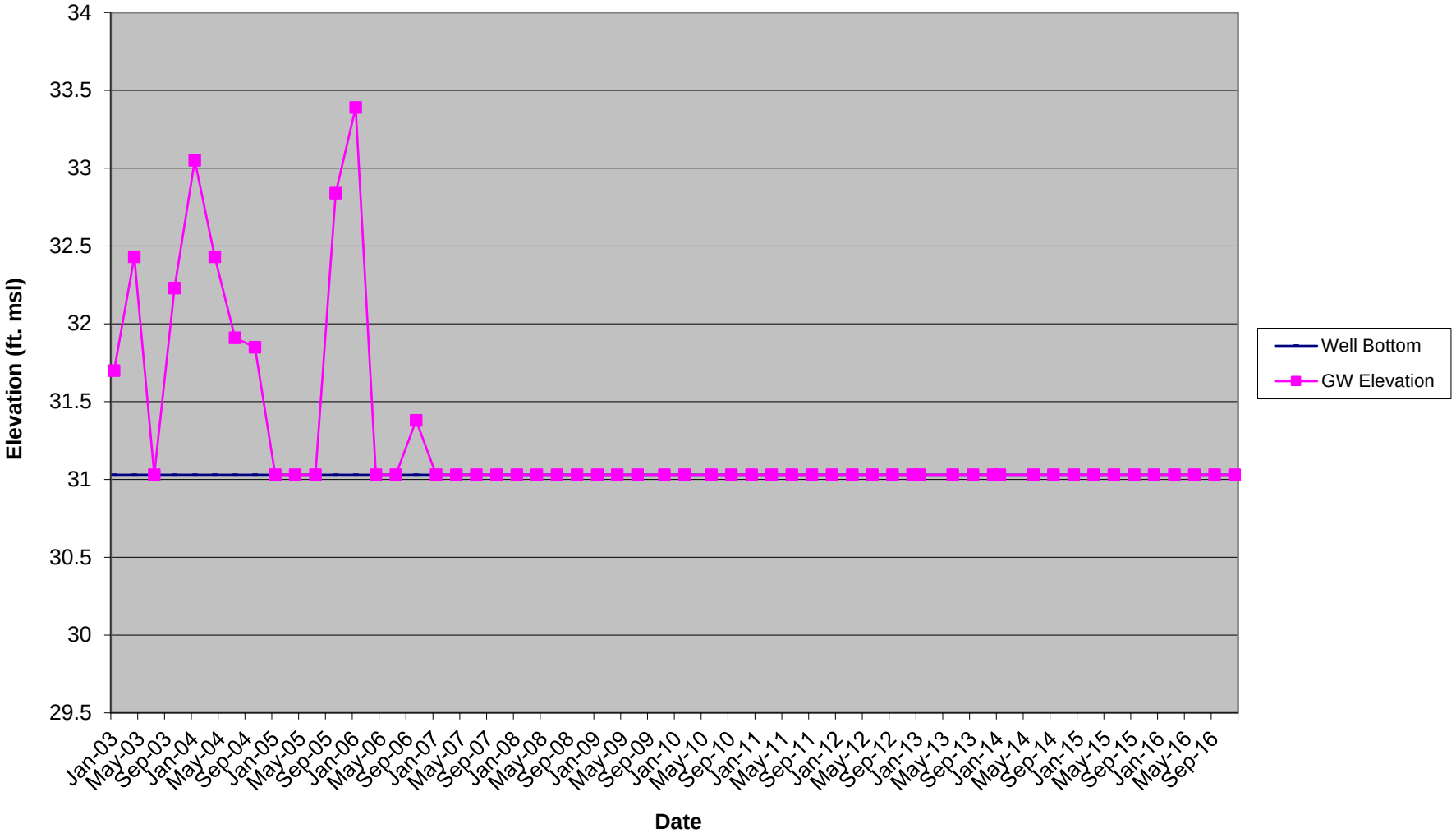
DANSKAMMER ENERGY, LLC
NEWBURGH, NEW YORK

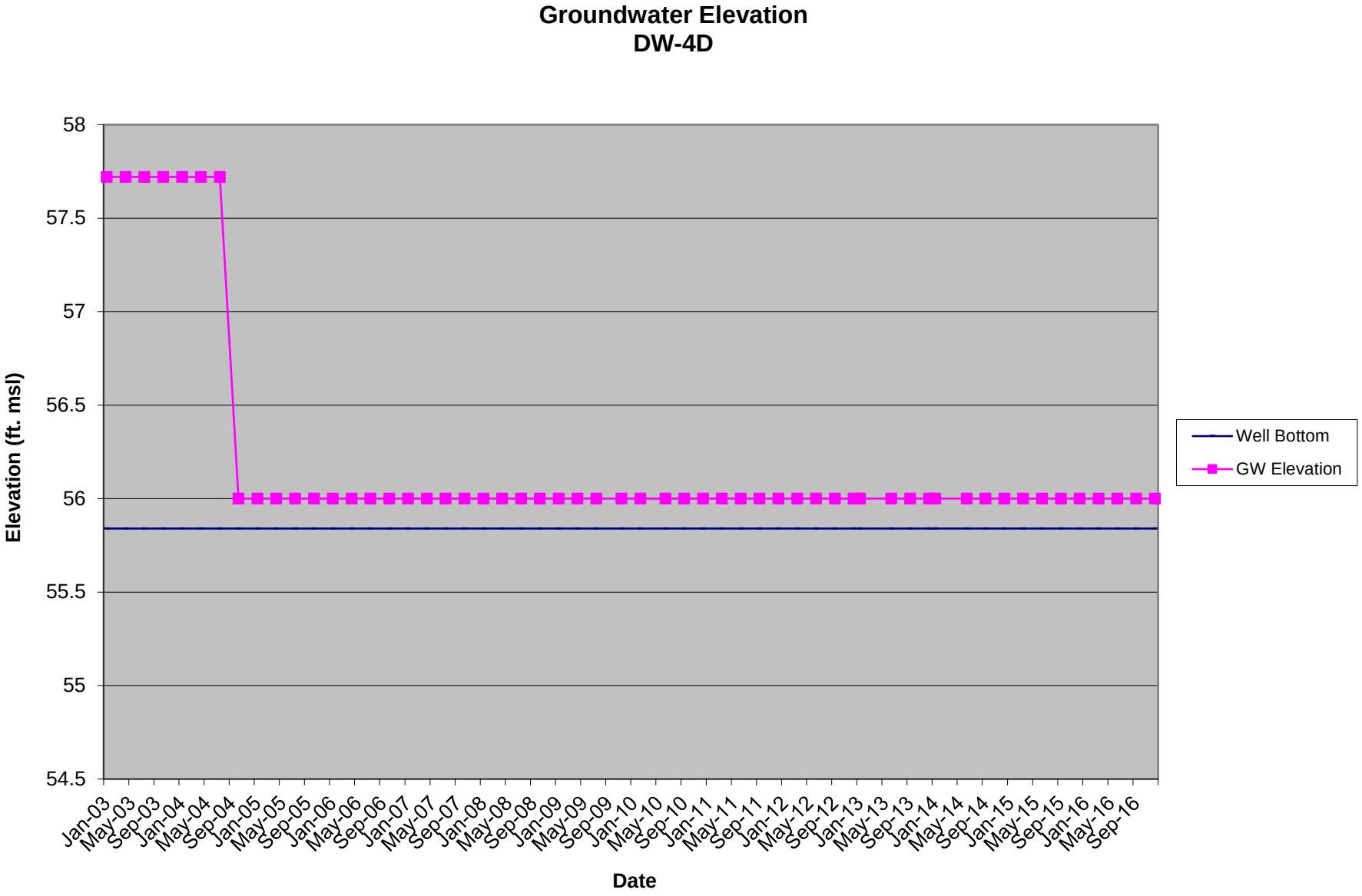
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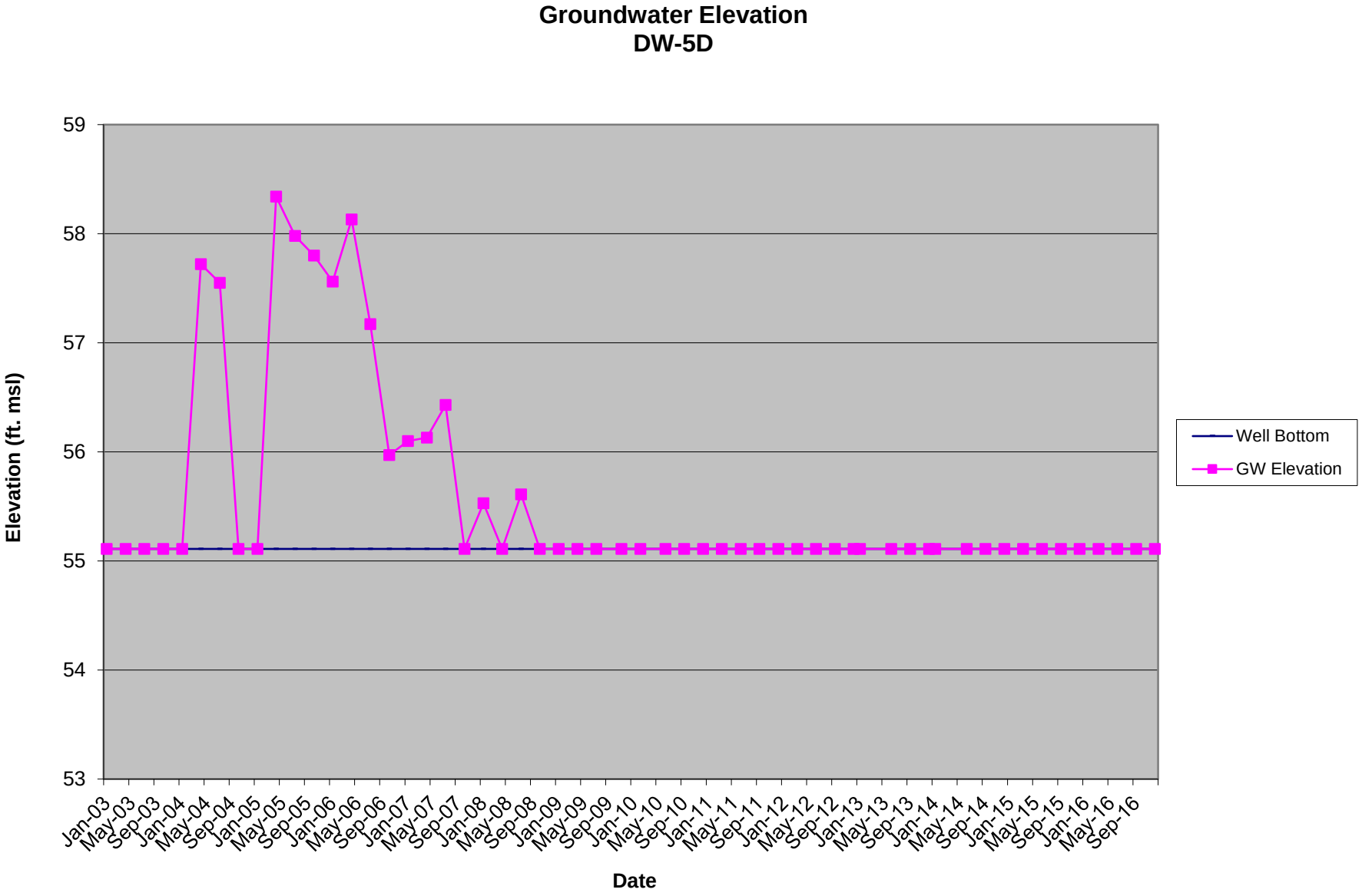

Groundwater Elevation
DW-3P
Elevation (ft.msl)
104
102
100
98
96
94
92
90
88
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

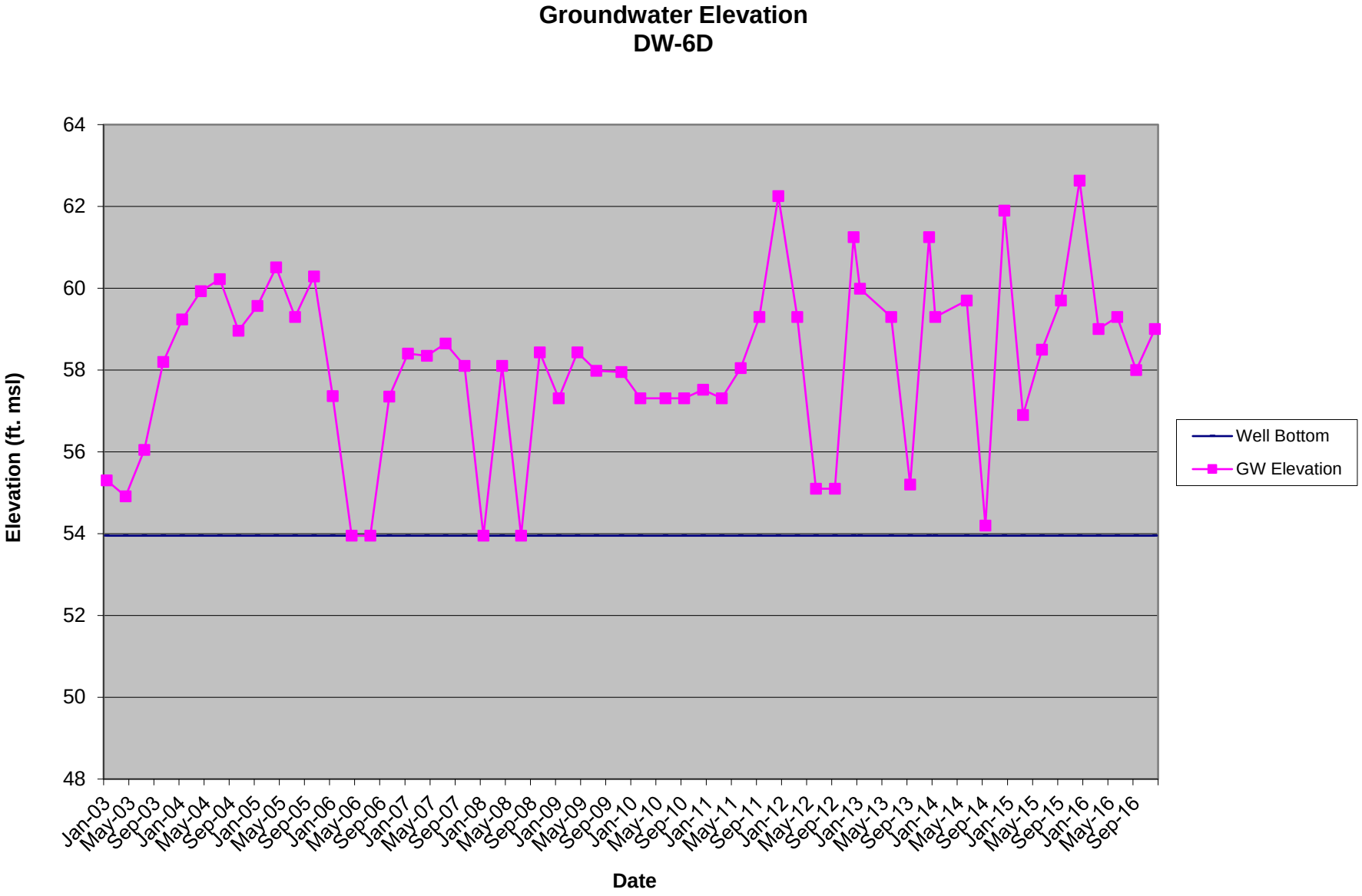

Groundwater Elevation
DW-4P
Elevation (ft. msl)
99
98
97
96
95
94
93
92
91
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

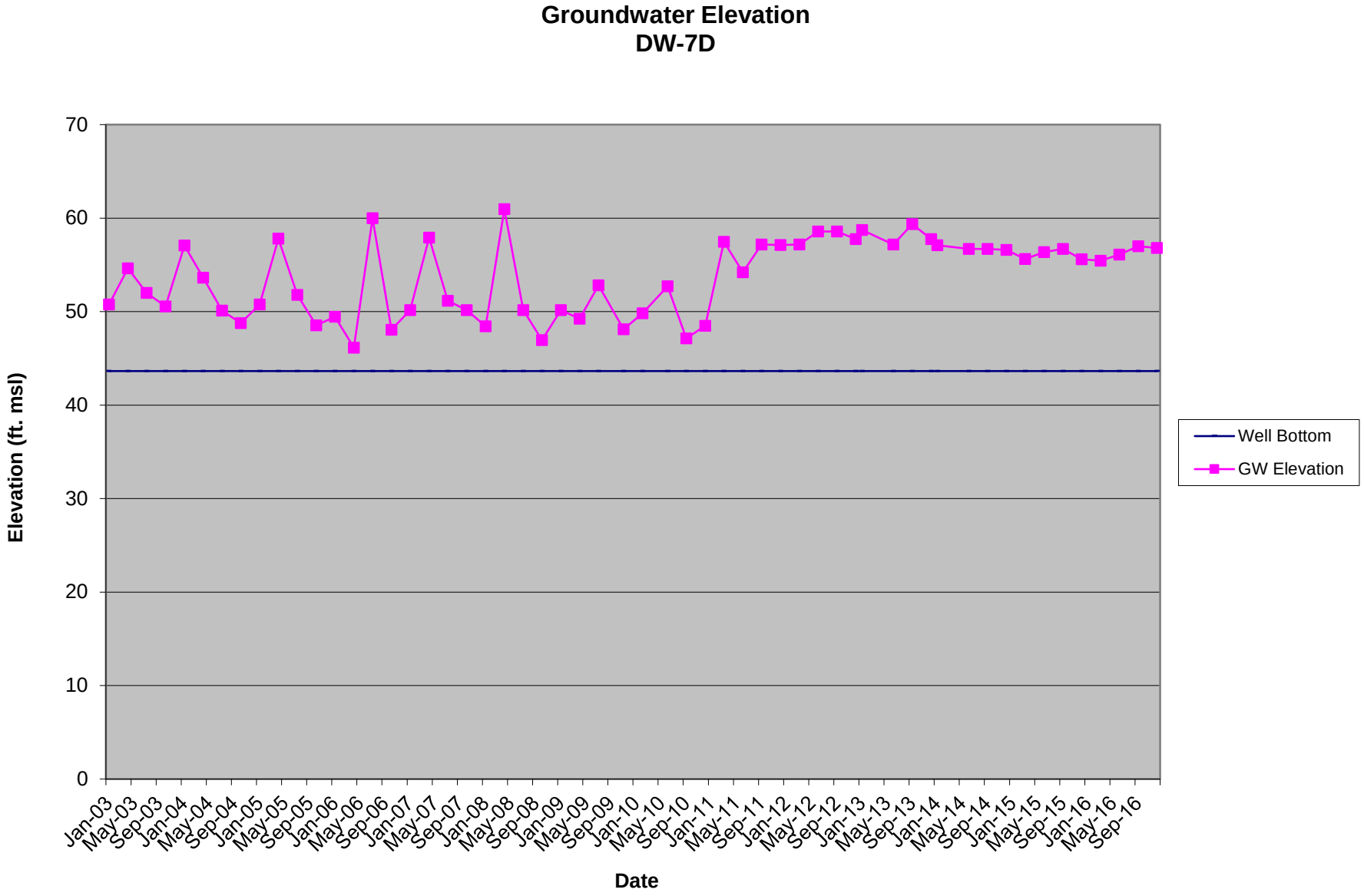
Groundwater Elevation
DW-3D

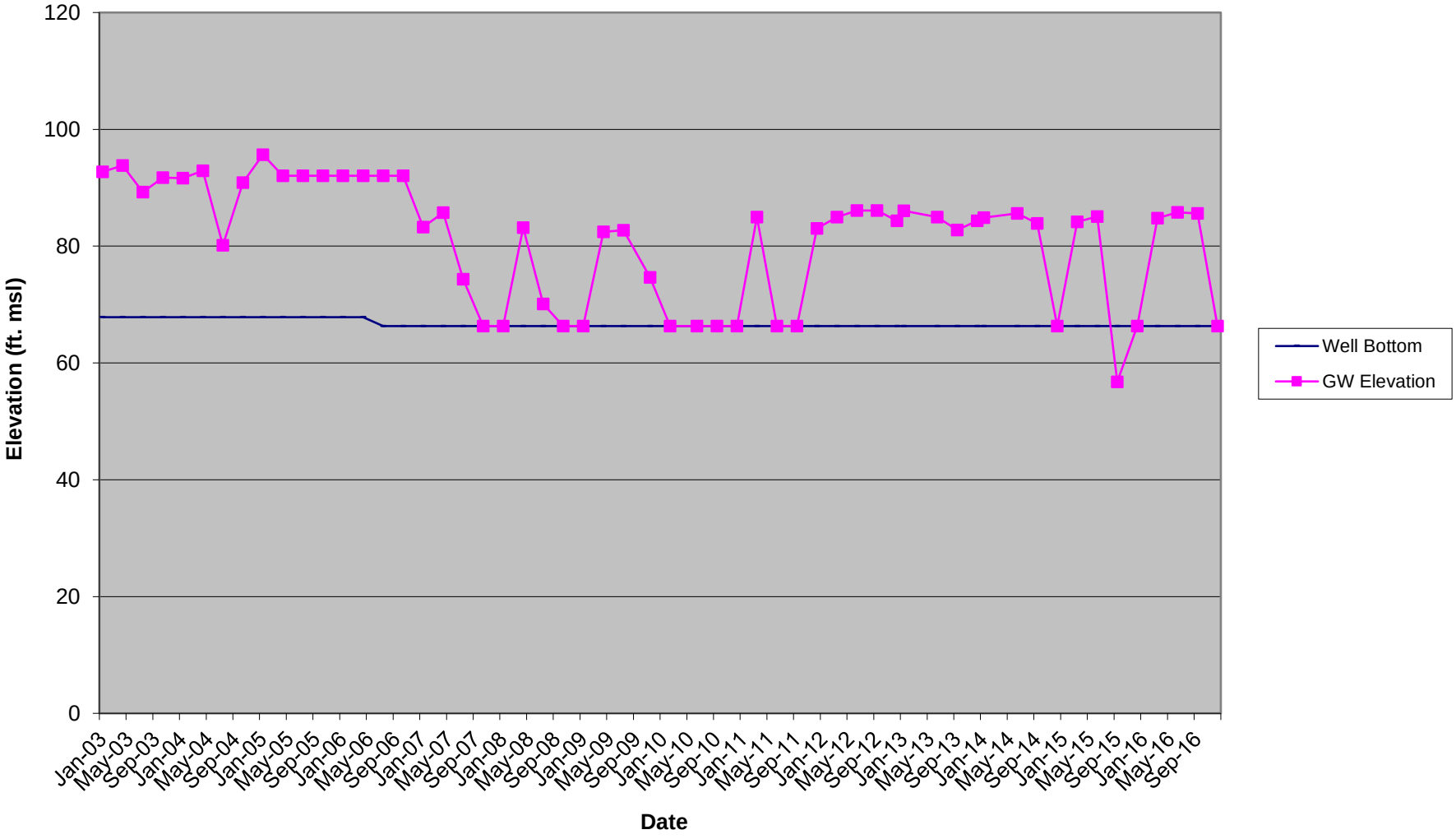


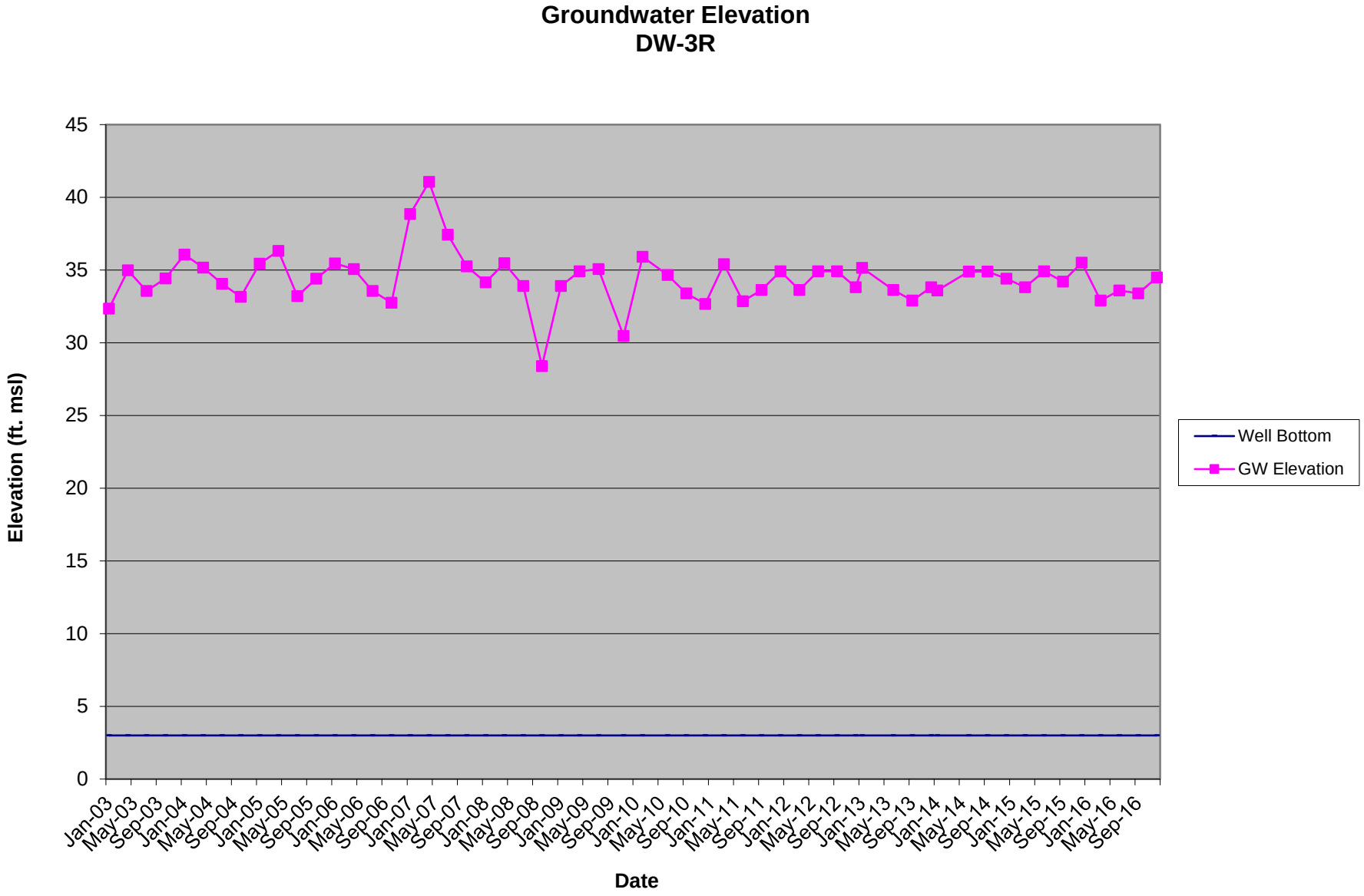

Groundwater Elevation
DW-4D
Elevation (ft. msl)
58
57.5
57
56.5
56
55.5
55
54.5
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

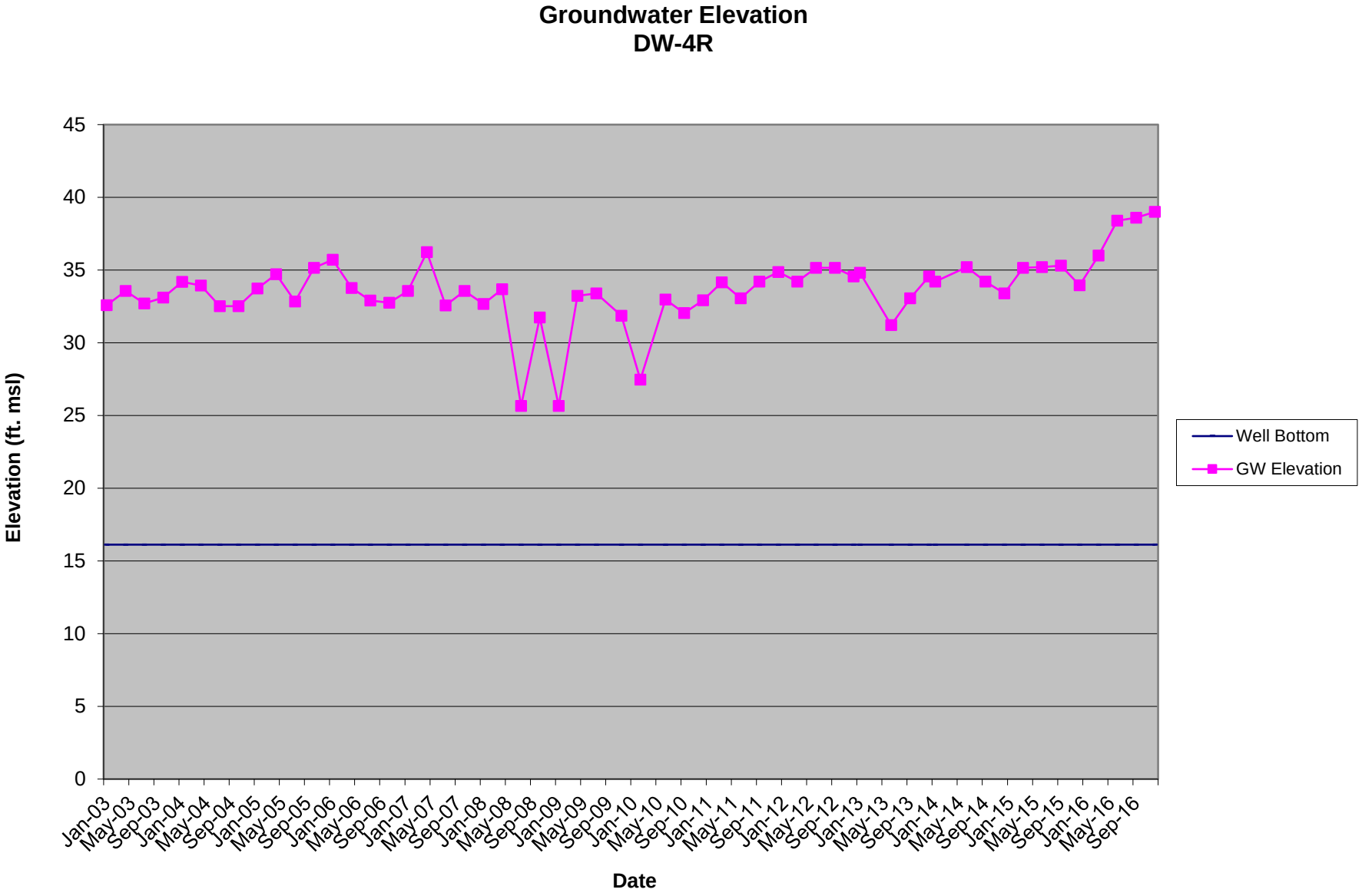

Groundwater Elevation
DW-5D
Elevation (ft. msl)
59
58
57
56
55
54
53
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

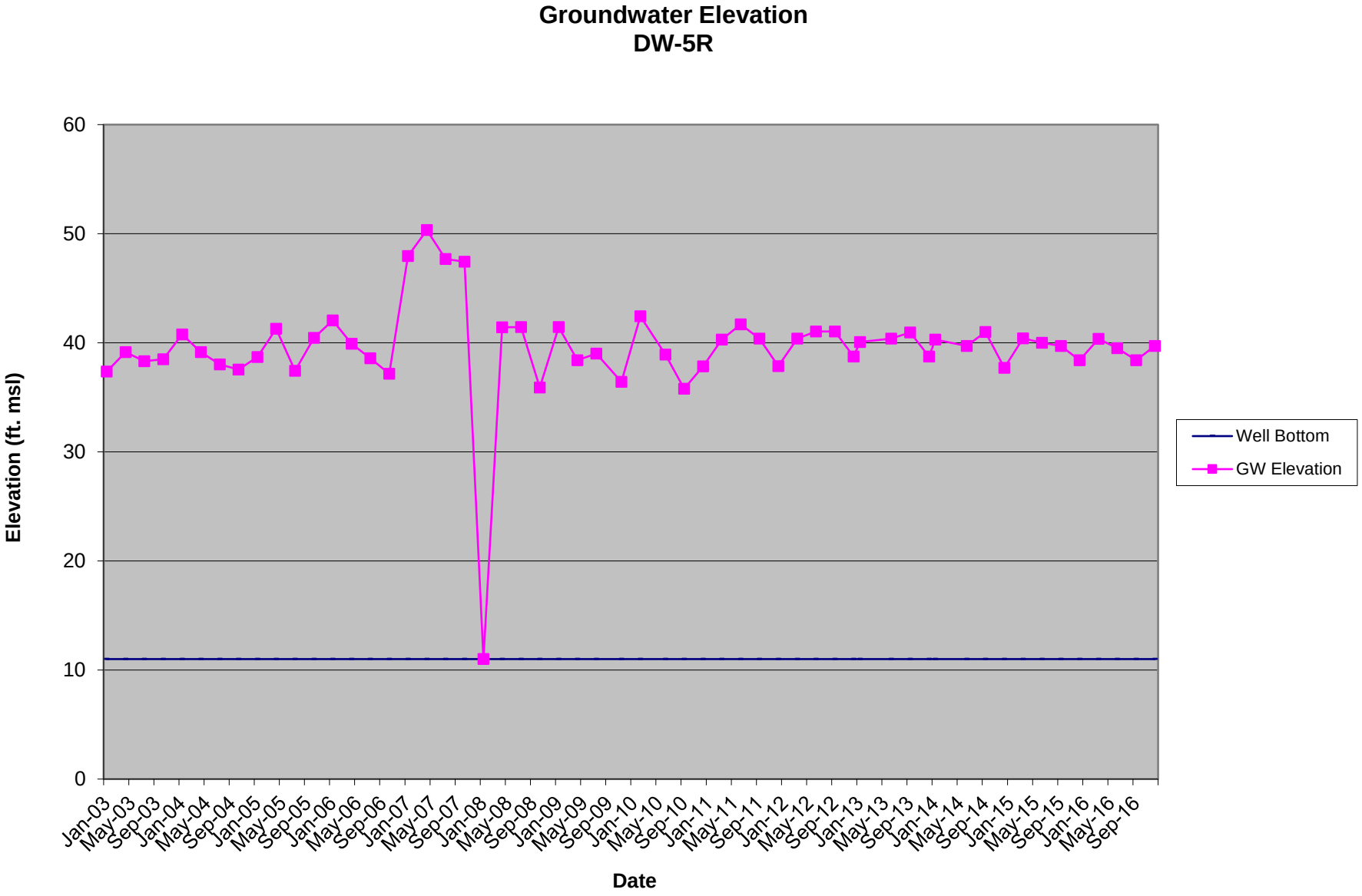

Groundwater Elevation
DW-6D
Elevation (ft. msl)
64
62
60
58
56
54
52
50
48
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

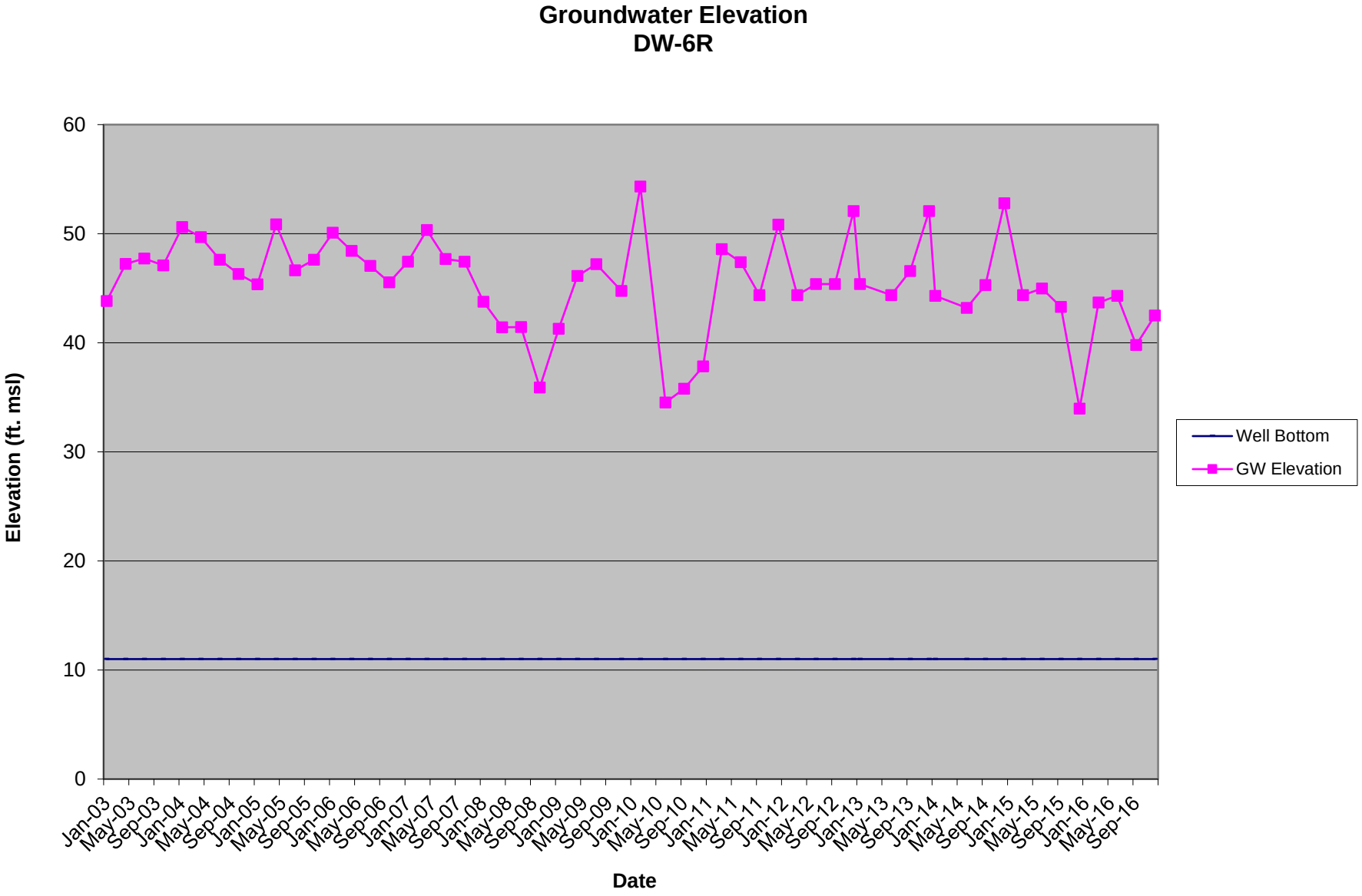

Groundwater Elevation
DW-7D
Elevation (ft. msl)
70
60
50
40
30
20
10
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

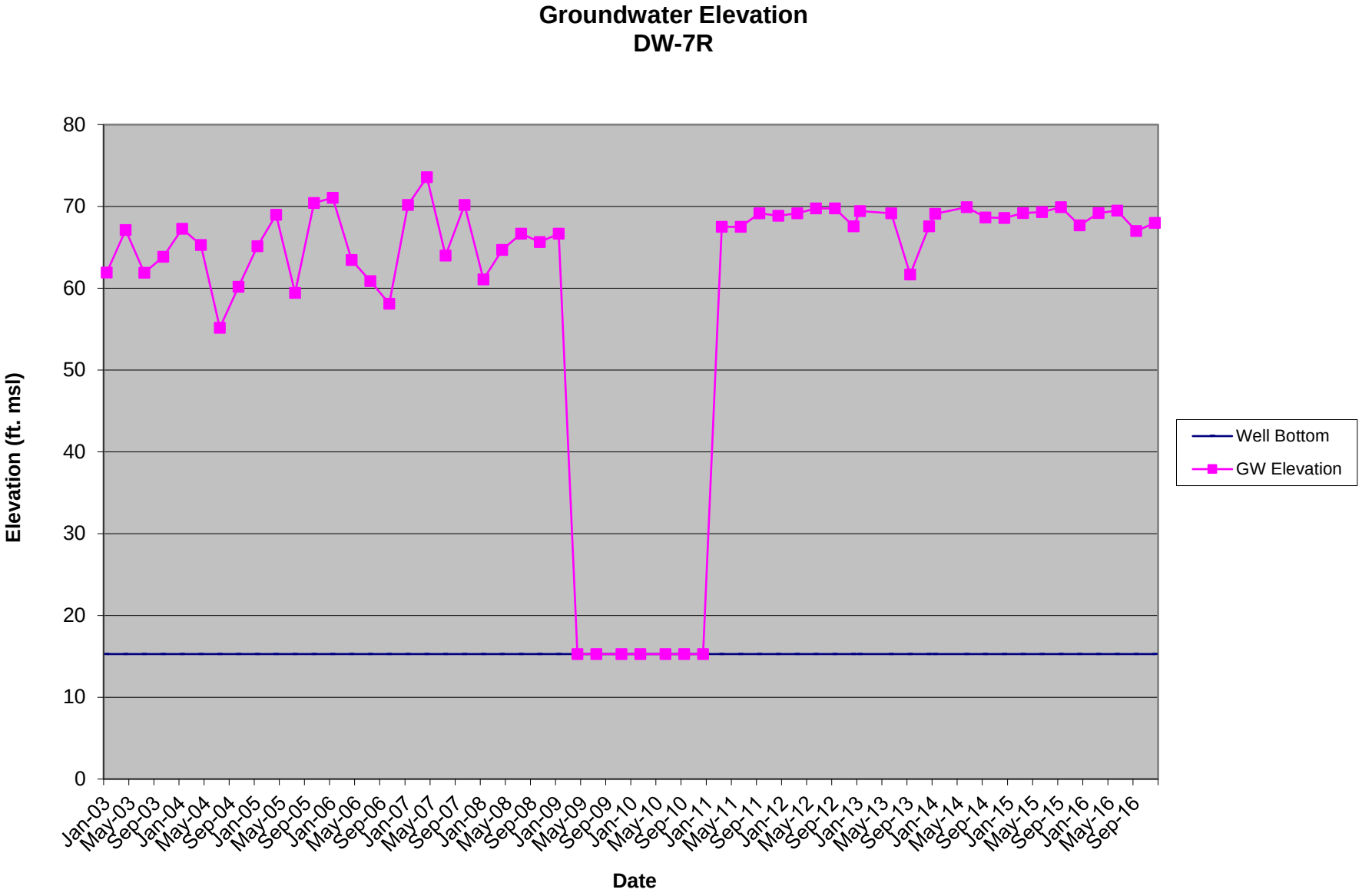

Groundwater Elevation
DW-1R
Elevation (ft. msl)
120
100
80
60
40
20
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

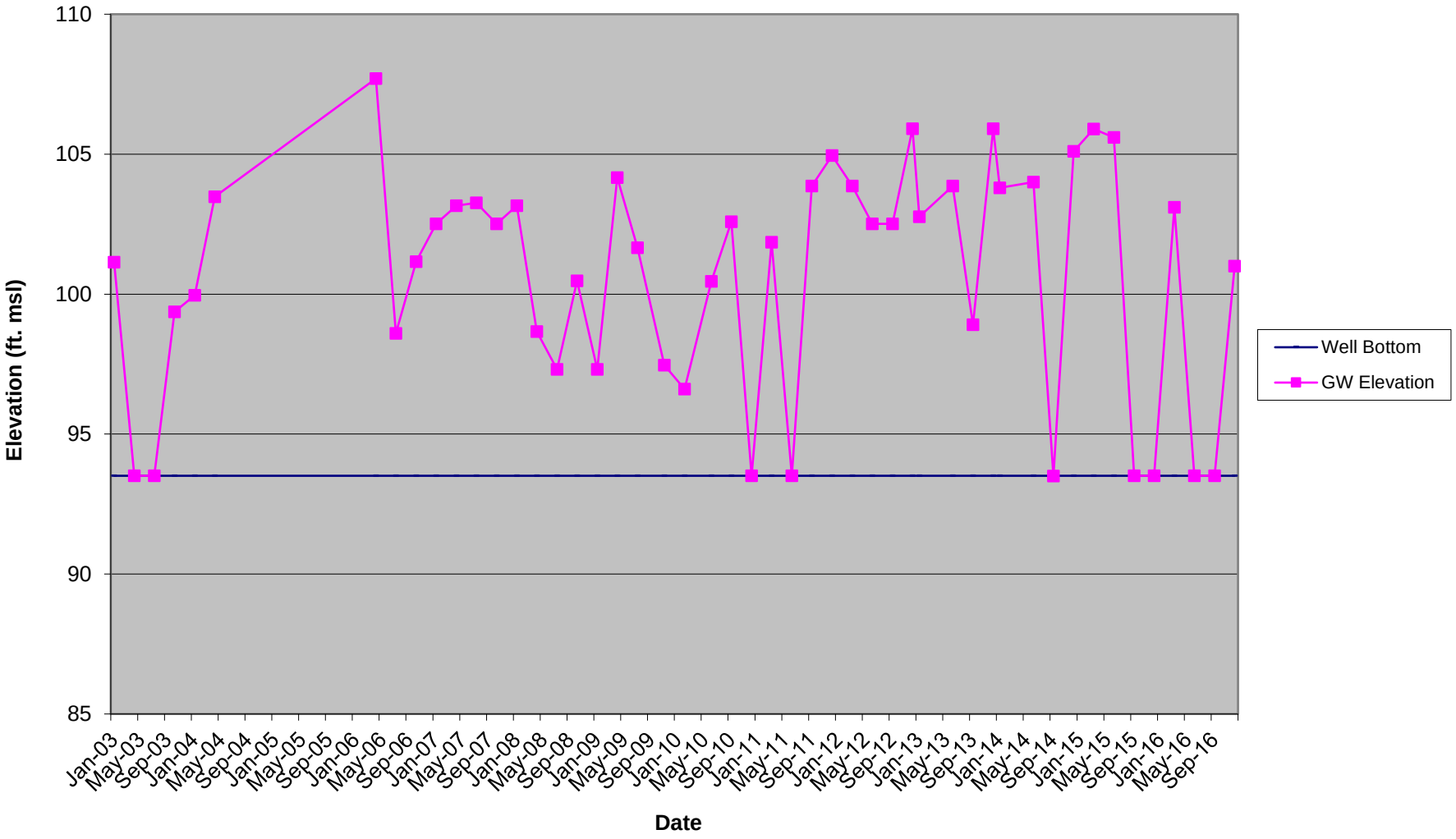

Groundwater Elevation
DW-3R
Elevation (ft. msl)
45
40
35
30
25
20
15
10
5
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation


Groundwater Elevation
DW-4R
Elevation (ft. msl)
45
40
35
30
25
20
15
10
5
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation


Groundwater Elevation
DW-5R
Elevation (ft. msl)
60
50
40
30
20
10
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
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Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation


Groundwater Elevation
DW-6R
Elevation (ft. msl)
60
50
40
30
20
10
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation


Groundwater Elevation
DW-7R
Elevation (ft. msl)
80
70
60
50
40
30
20
10
0
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation


Groundwater Elevation
DW-8R
Elevation (ft. msl)
110
105
100
95
90
85
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
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May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Jan-16
May-16
Sep-16
Date
Well Bottom
GW Elevation

Groundwater Elevation DW-9R

