April 13, 2006

Mr. Matt McClincy
Oregon Department of Environmental Quality
Northwest Region
2020 S.W. Fourth Avenue
Suite 400
Portland, Oregon 97201-4987

Subject: Monthly Progress Report for March 2006, Hexavalent Chromium Reduction Interim Remedial Measure (IRM), Arkema Inc., Portland Facility

Dear Mr. McClincy:

The Hexavalent Chromium Reduction IRM Work Plan, dated June 1, 2005 (Work Plan) requires submittal of monthly progress reports summarizing the status of implementation of the IRM. The following progress report summarizes activities completed in March 2006.

Actions Completed in March 2006

Actions completed in March 2006 include evaluation of laboratory and field parameters from the Phase II injection performance monitoring events.

Changes to Work Plan Scope

No changes to the scope of work were proposed or authorized during this reporting period.

Actions Scheduled for April 2006

The activities scheduled for April 2006 include evaluating hexavalent chromium concentration trends following the second phase of injections, and developing recommendations for additional CAS injections.

ARKEMA Inc.
6400 NW Front Avenue
Portland, Oregon 97210

503-228-7655 Fax: 503-225-7279
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Groundwater Laboratory Parameters

Groundwater laboratory parameters for the baseline, 1st, 2nd, and 3rd monthly performance-monitoring events of Phase I, and the 1st, 2nd, and 3rd, monthly performance-monitoring events of Phase II are presented in Figures 1 through 9.

Groundwater Field Parameters

Groundwater field parameters for the baseline, 1st, 2nd, and 3rd monthly performance-monitoring events of Phase I, and the 1st, 2nd, and 3rd, monthly performance-monitoring events of Phase II are presented in Figures 10 through 12.

If you have any questions or require additional information, please feel free to contact me at (503) 225-7210.

Sincerely.

Arkema Inc.

Larry D. Patterson, P.E.
Environmental Manager

Attachment

cc: Todd Slater, Arkema, Inc.
William Park, ERM
Erik Ipsen, ERM

Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
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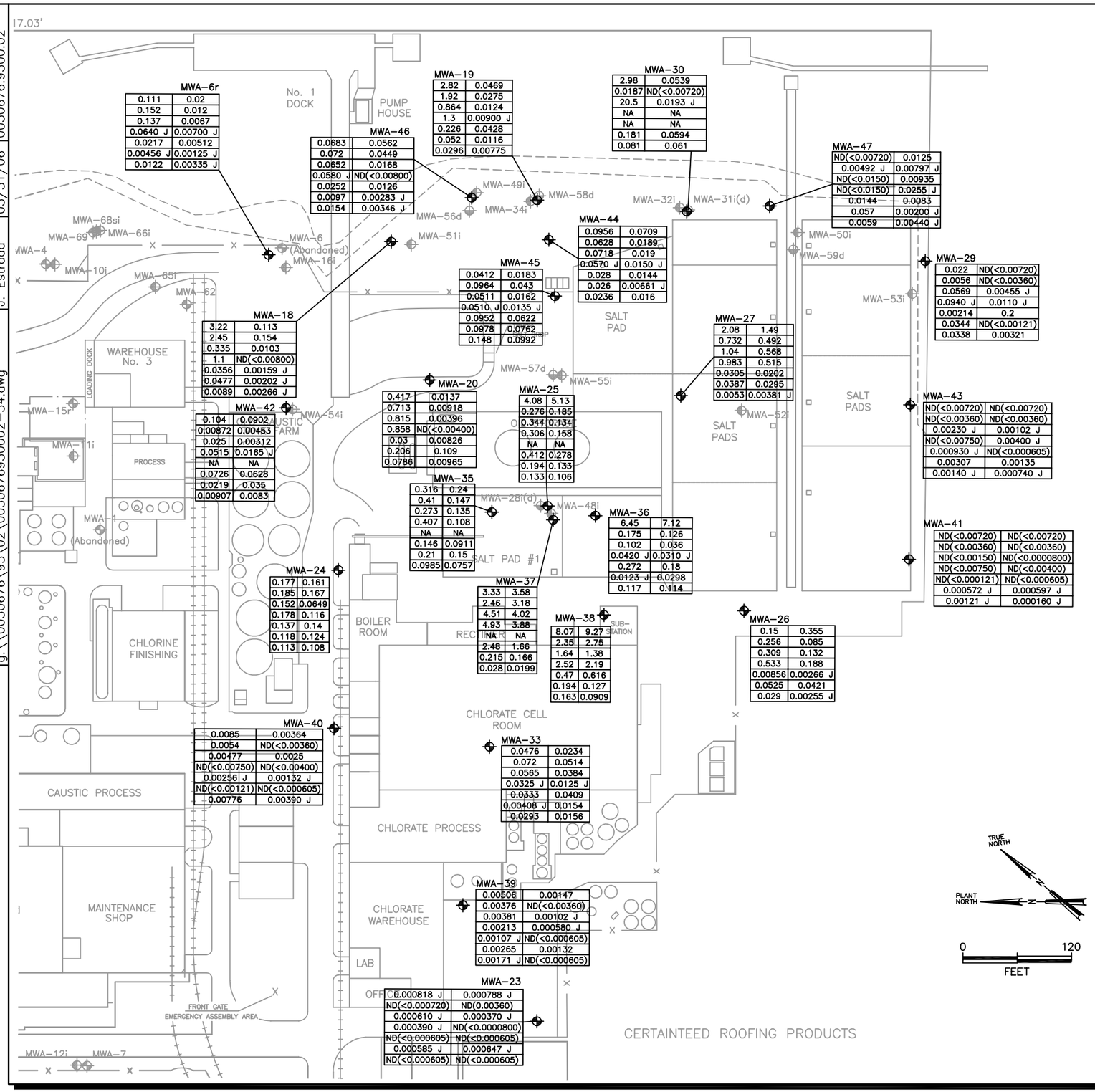

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Dry Insufficient Groundwater In Well to Collect a Sample
- Williamette River Bank

Total Chromium (mg/L)
Dissolved Chromium (mg/L)

0.022	ND(<0.00720)	Sample Baseline (May 2005)
0.0056	ND(<0.00360)	Sample Phase 1, Round 1 (July 2005)
0.0569	0.00455 J	Sample Phase 1, Round 2 (August 2005)
0.0940 J	0.0110 J	Sample Phase 1, Round 3 (September 2005)
0.00214	0.2	Sample Phase 2, Round 1 (December 2005)
0.0344	ND(<0.00121)	Sample Phase 2, Round 2 (January 2006)
0.0338	0.00321	Sample Phase 2, Round 3 (February 2006)

J = Estimated
NA = Not Analyzed/Not Tested
ND = Not Detected

Note:
Most buildings and structures noted on this diagram have been demolished and/or removed.

TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 1
Shallow Zone Total Chromium and Dissolved Chromium Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
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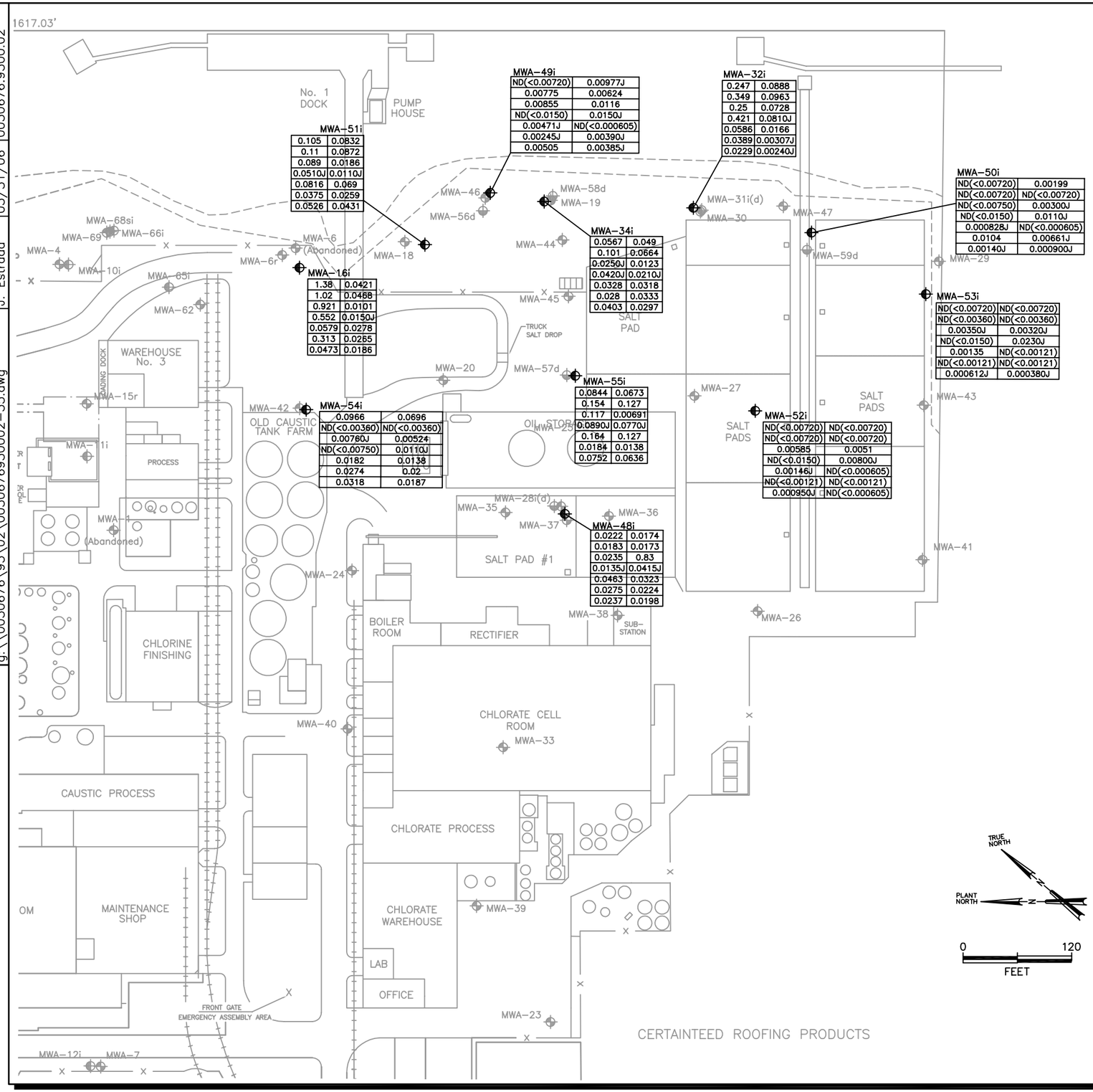

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Total Chromium (mg/L)	Dissolved Chromium (mg/L)	
0.0844	0.0673	Sample Baseline (May 2005)
0.154	0.127	Sample Phase 1, Round 1 (July 2005)
0.117	0.00691	Sample Phase 1, Round 2 (August 2005)
0.0890J	0.0770J	Sample Phase 1, Round 3 (September 2005)
0.164	0.127	Sample Phase 2, Round 1 (December 2005)
0.0184	0.0138	Sample Phase 2, Round 2 (January 2006)
0.0752	0.0636	Sample Phase 2, Round 3 (February 2006)

J = Estimated
NA = Not Analyzed/Not Tested
ND = Not Detected

Note:
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Figure 2
Intermediate Zone Total Chromium and Dissolved Chromium Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
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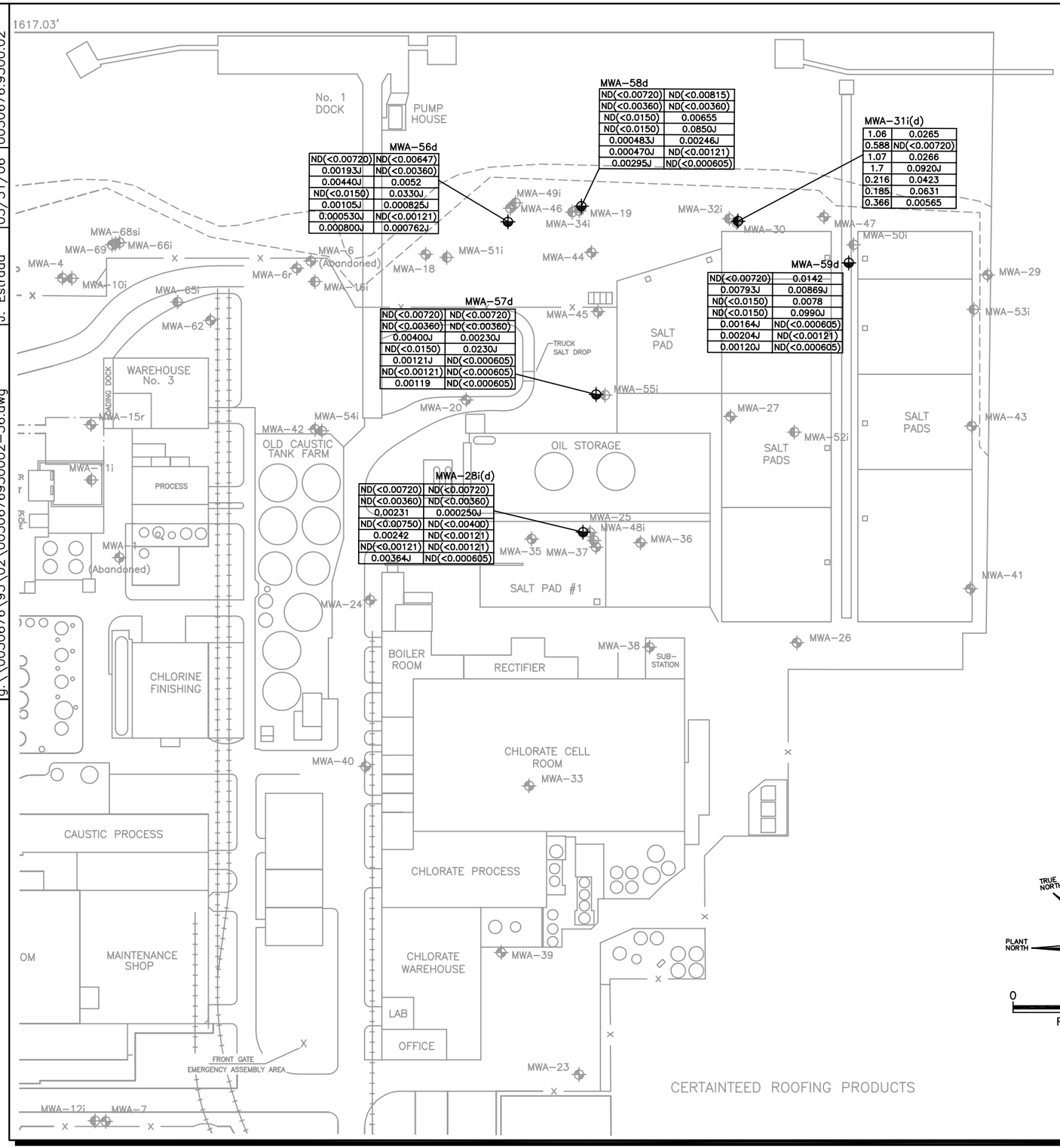

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Total Chromium (mg/L)	Dissolved Chromium (mg/L)	
ND(<0.00720)	0.0142	Sample Baseline (May 2005)
0.00793J	0.00869J	Sample Phase 1, Round 1 (July 2005)
ND(<0.0150)	0.0078	Sample Phase 1, Round 2 (August 2005)
ND(<0.0150)	0.0990J	Sample Phase 1, Round 3 (September 2005)
0.00164J	ND(<0.000605)	Sample Phase 2, Round 1 (December 2005)
0.00204J	ND(<0.00121)	Sample Phase 2, Round 2 (January 2006)
0.00120J	ND(<0.000605)	Sample Phase 2, Round 3 (February 2006)

J = Estimated
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ND = Not Detected

Note:
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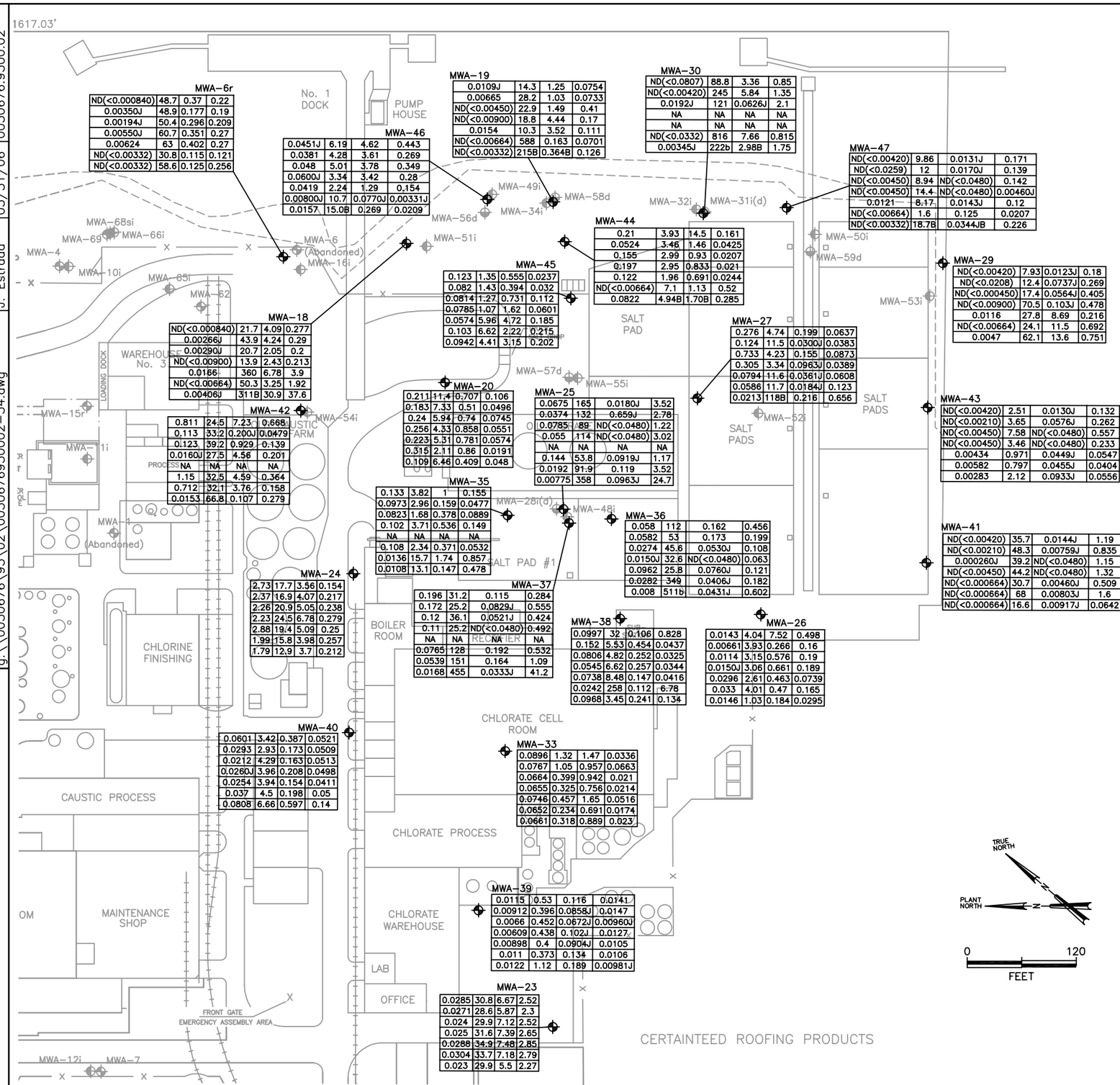
TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 3
Deep Zone Total Chromium and Dissolved Chromium Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
CAD File: g:\0030676\93\02\0030676930002-34.dwg



LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Dissolved Arsenic (mg/L)	Dissolved Calcium (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	
ND(<0.00420)	7.93	0.0123J	0.18	Sample Baseline (May 2005)
ND(<0.0208)	12.4	0.0737J	0.269	Sample Phase 1, Round 1 (July 2005)
ND(<0.000450)	17.4	0.0564J	0.405	Sample Phase 1, Round 2 (August 2005)
ND(<0.00900)	70.5	0.103J	0.478	Sample Phase 1, Round 3 (September 2005)
0.0116	27.8	8.69	0.216	Sample Phase 2, Round 1 (December 2005)
ND(<0.00664)	24.1	11.5	0.692	Sample Phase 2, Round 2 (January 2006)
0.0047	62.1	13.6	0.751	Sample Phase 2, Round 3 (February 2006)

J = Estimated
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Note:
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Figure 4
Shallow Zone Dissolved Metals Concentrations
Arkema Inc.
Portland, Oregon

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Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
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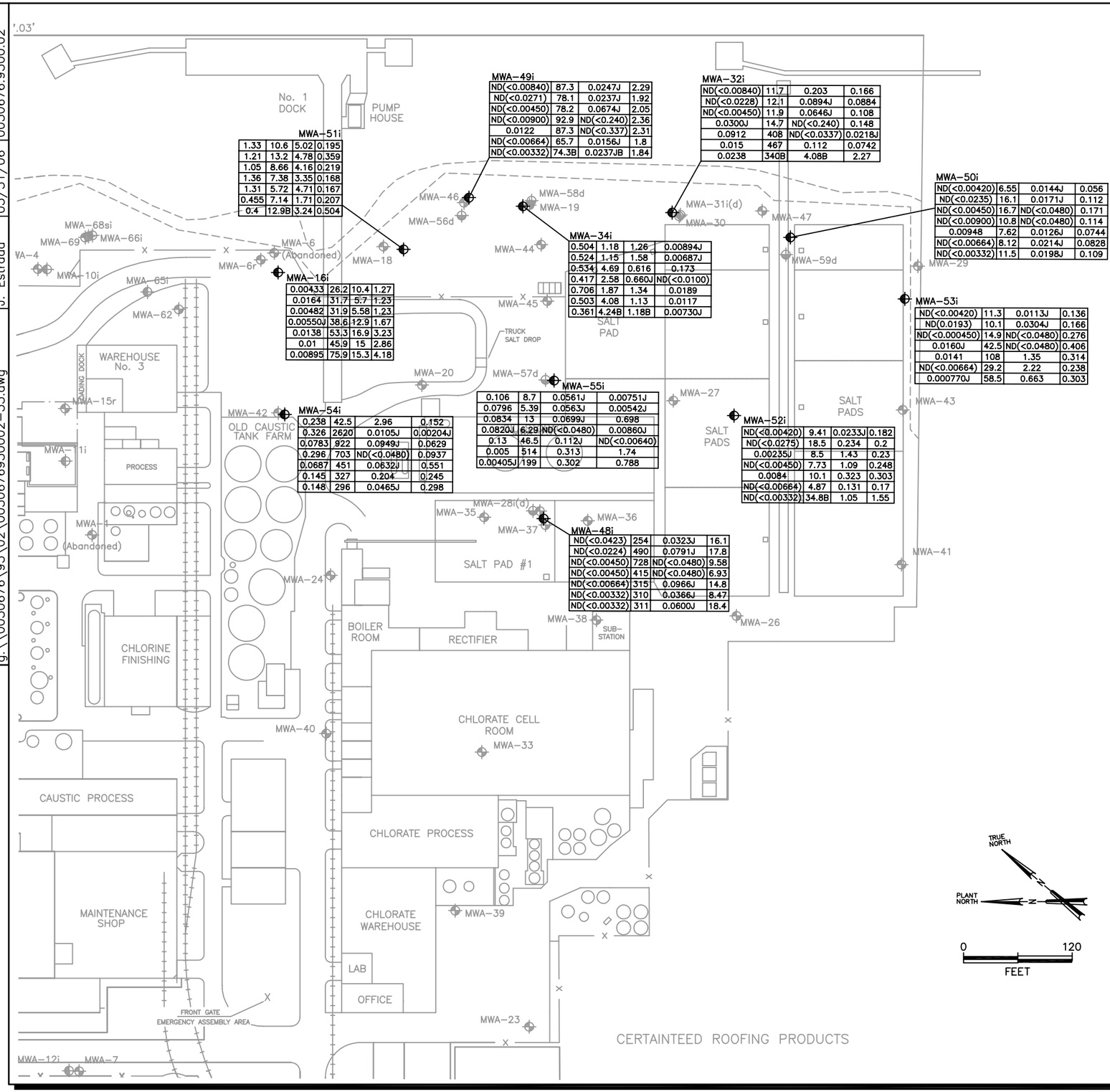

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Dissolved Arsenic (mg/L)	Dissolved Calcium (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	
1.33	10.6	5.02	0.195	Sample Baseline (May 2005)
1.21	13.2	4.78	0.359	Sample Phase 1, Round 1 (July 2005)
1.05	8.66	4.16	0.219	Sample Phase 1, Round 2 (August 2005)
1.36	7.38	3.35	0.168	Sample Phase 1, Round 3 (September 2005)
1.31	5.72	4.71	0.167	Sample Phase 2, Round 1 (December 2005)
0.455	7.14	1.71	0.207	Sample Phase 2, Round 2 (January 2006)
0.4	12.9B	3.24	0.504	Sample Phase 2, Round 3 (February 2006)

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Figure 5
Intermediate Zone Dissolved Metals Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
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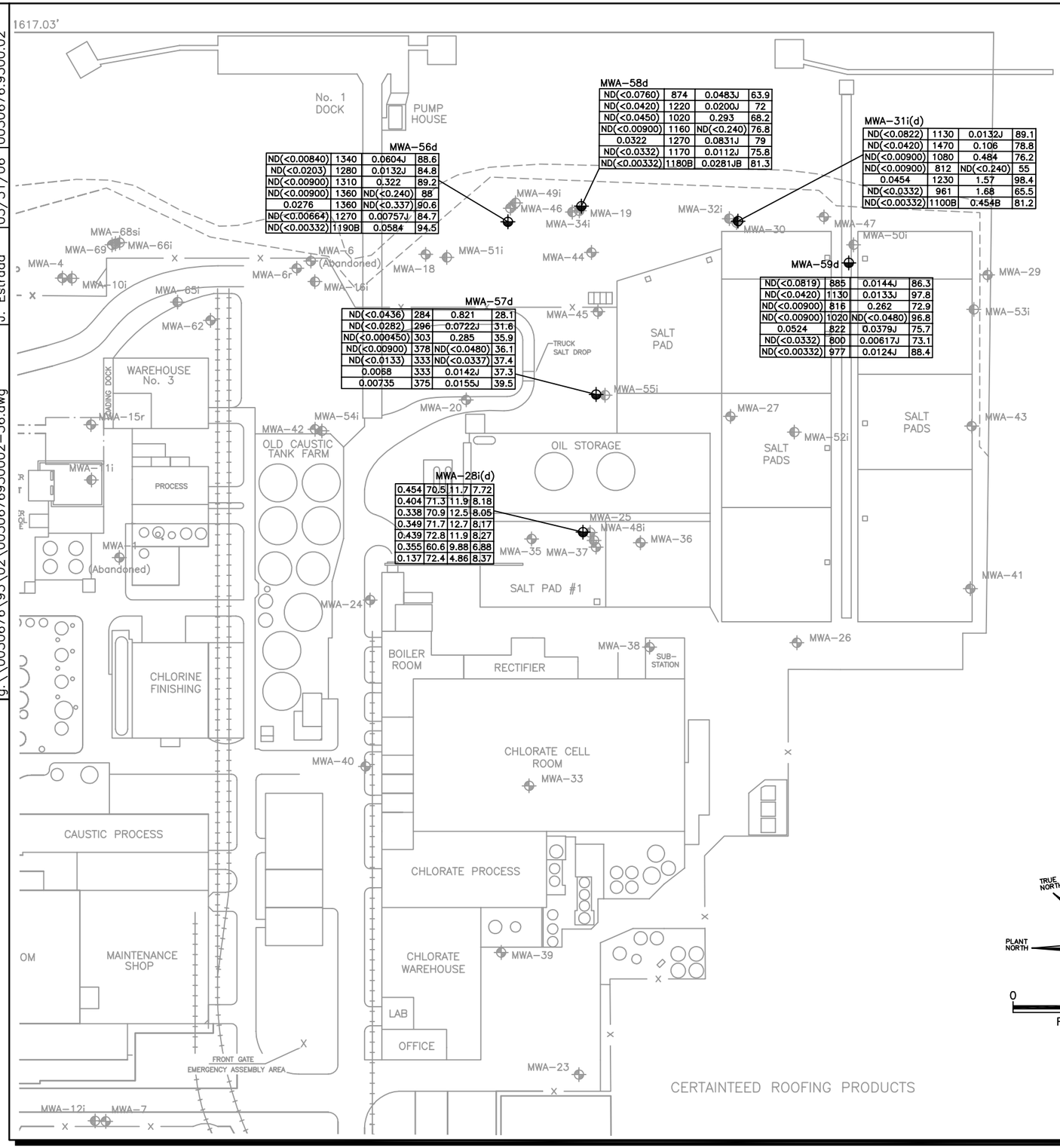

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Dissolved Arsenic (mg/L)	Dissolved Calcium (mg/L)	Dissolved Iron (mg/L)	Dissolved Manganese (mg/L)	
ND(<0.0819)	885	0.0144J	86.3	Sample Baseline (May 2005)
ND(<0.0420)	1130	0.0133J	97.8	Sample Phase 1, Round 1 (July 2005)
ND(<0.00900)	816	0.262	72.9	Sample Phase 1, Round 2 (August 2005)
ND(<0.00900)	1020	ND(<0.0480)	96.8	Sample Phase 1, Round 3 (September 2005)
0.0524	822	0.0379J	75.7	Sample Phase 2, Round 1 (December 2005)
ND(<0.0332)	800	0.00617J	73.1	Sample Phase 2, Round 2 (January 2006)
ND(<0.00332)	977	0.0124J	88.4	Sample Phase 2, Round 3 (February 2006)

J = Estimated
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Note:
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TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 6
Deep Zone Dissolved Metals Concentrations
Arkema Inc.
Portland, Oregon

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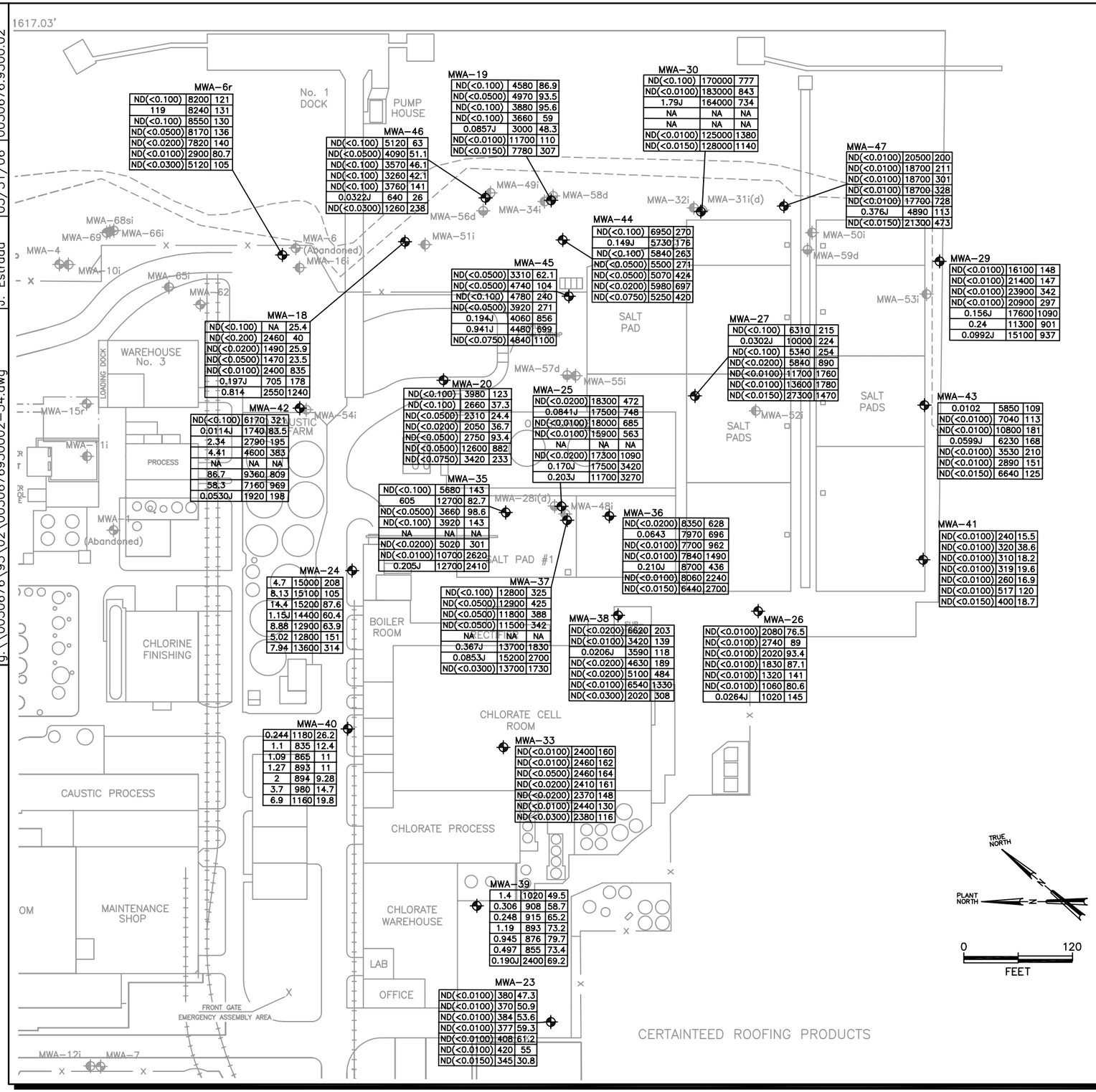

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Sulfide (mg/L)	Total Dissolved Solids (mg/L)	Sulfate (mg/L)	
ND(<0.0100)	16100	148	Sample Baseline (May 2005)
ND(<0.0100)	21400	147	Sample Phase 1, Round 1 (July 2005)
ND(<0.0100)	23900	342	Sample Phase 1, Round 2 (August 2005)
ND(<0.0100)	20900	297	Sample Phase 1, Round 3 (September 2005)
0.156J	17600	1090	Sample Phase 2, Round 1 (December 2005)
0.24	11300	901	Sample Phase 2, Round 2 (January 2006)
0.0992J	15100	937	Sample Phase 2, Round 3 (February 2006)

J = Estimated
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Note:
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TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 7
Shallow Zone Sulfide, Sulfate, and Total Dissolved Solids Concentrations
Arkema Inc.
Portland, Oregon

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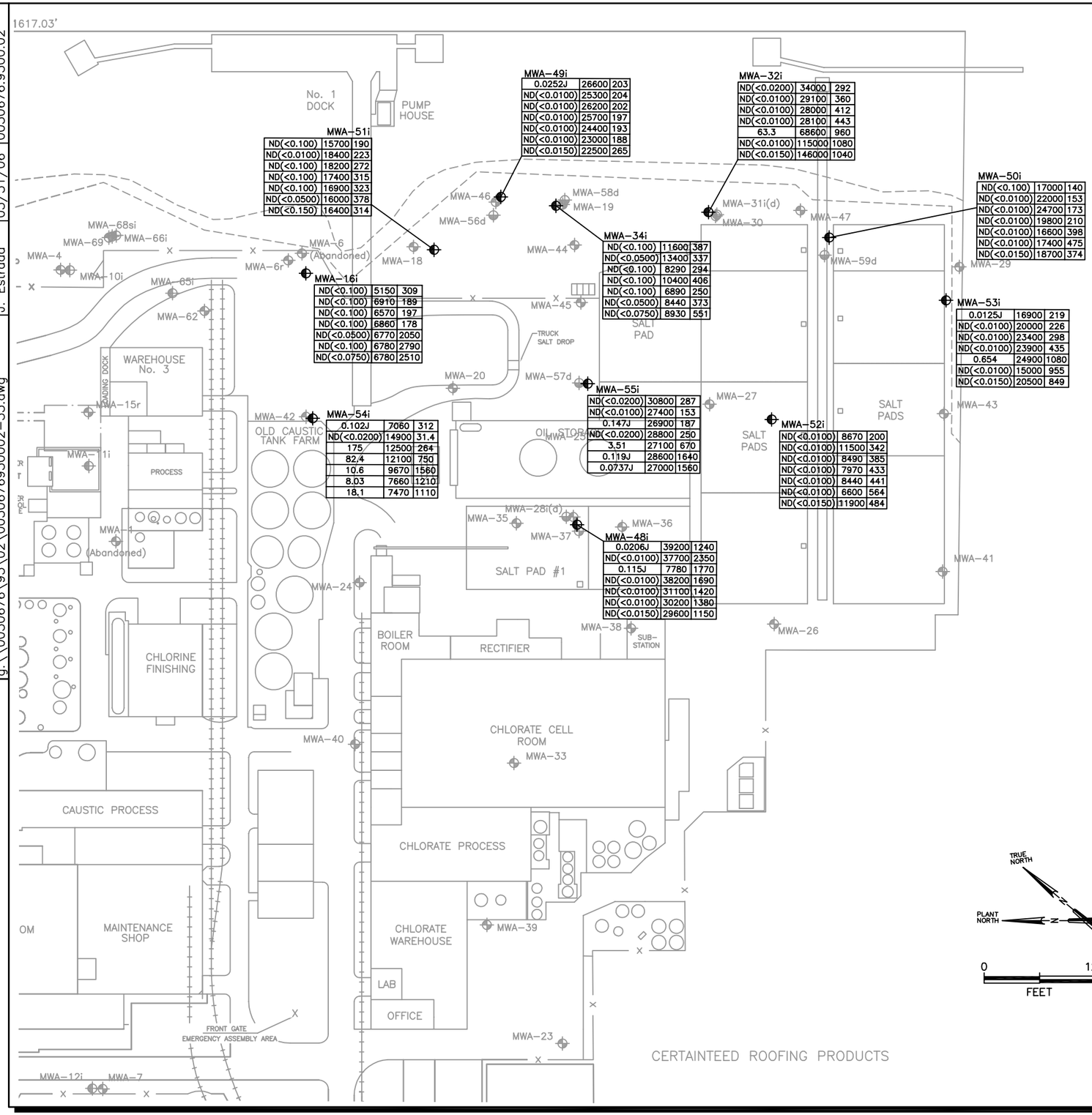

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Sulfide (mg/L)	Total Dissolved Solids (mg/L)	Sulfate (mg/L)	
ND(<0.100)	17000	140	Sample Baseline (May 2005)
ND(<0.0100)	22000	153	Sample Phase 1, Round 1 (July 2005)
ND(<0.0100)	24700	173	Sample Phase 1, Round 2 (August 2005)
ND(<0.0100)	19800	210	Sample Phase 1, Round 3 (September 2005)
ND(<0.0100)	16600	398	Sample Phase 2, Round 1 (December 2005)
ND(<0.0100)	17400	475	Sample Phase 2, Round 2 (January 2006)
ND(<0.0150)	18700	374	Sample Phase 2, Round 3 (February 2006)

J = Estimated
NA = Not Analyzed/Not Tested
ND = Not Detected

Note:
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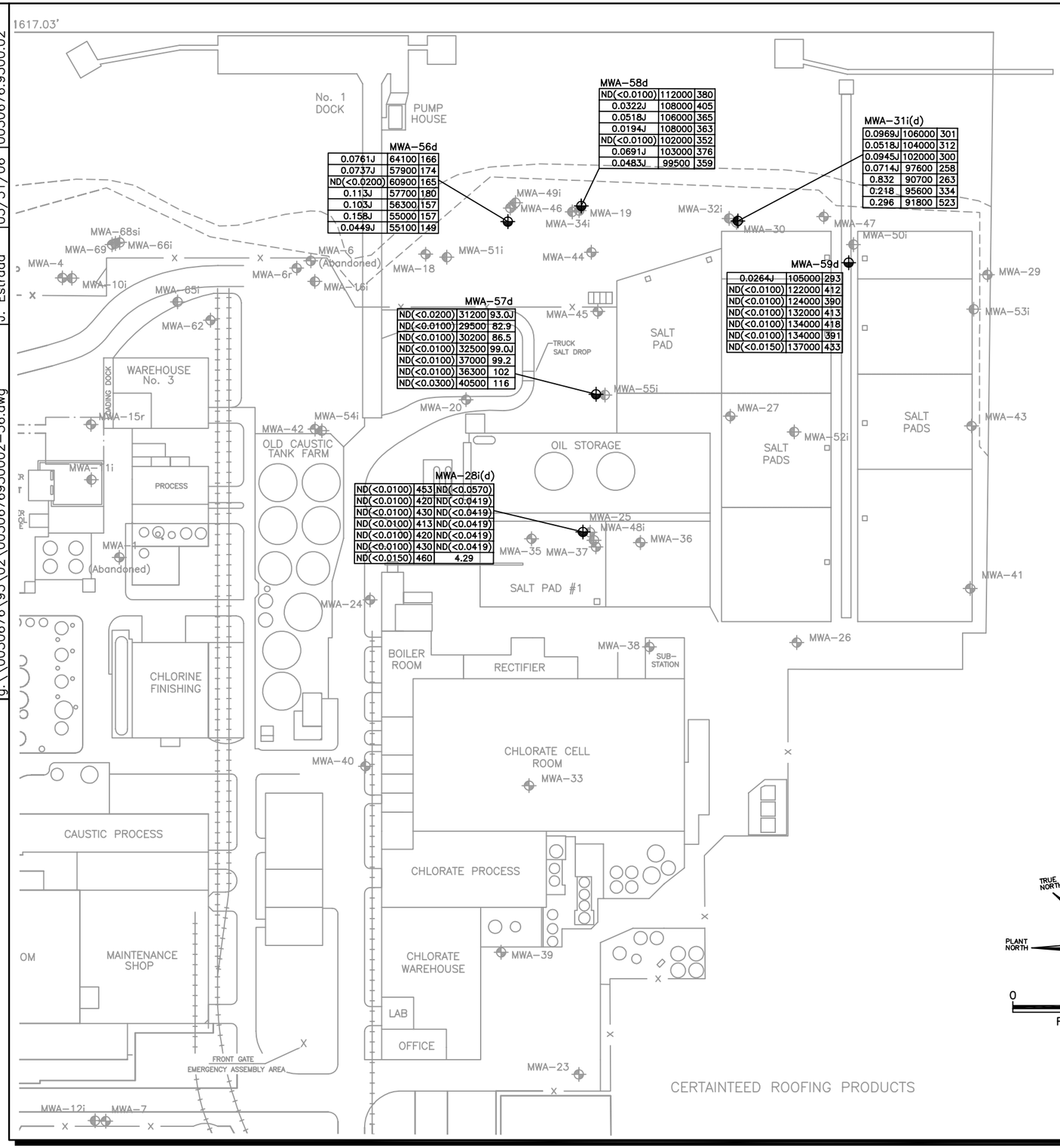
TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 8
Intermediate Zone Sulfide, Sulfate, and Total Dissolved Solids Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
CAD File: g:\0030676\93\02\0030676930002-36.dwg



LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

Sulfide (mg/L)	Total Dissolved Solids (mg/L)	Sulfate (mg/L)	
0.0969J	106000	301	Sample Baseline (May 2005)
0.0518J	104000	312	Sample Phase 1, Round 1 (July 2005)
0.0945J	102000	300	Sample Phase 1, Round 2 (August 2005)
0.0714J	97600	258	Sample Phase 1, Round 3 (September 2005)
0.832	90700	263	Sample Phase 2, Round 1 (December 2005)
0.218	95600	334	Sample Phase 2, Round 2 (January 2006)
0.296	91800	523	Sample Phase 2, Round 3 (February 2006)

J = Estimated
NA = Not Analyzed/Not Tested
ND = Not Detected

Note:
Most buildings and structures noted on this diagram have been demolished and/or removed.

TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 9
Deep Zone Sulfide, Sulfate, and Total Dissolved Solids Concentrations
Arkema Inc.
Portland, Oregon

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Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
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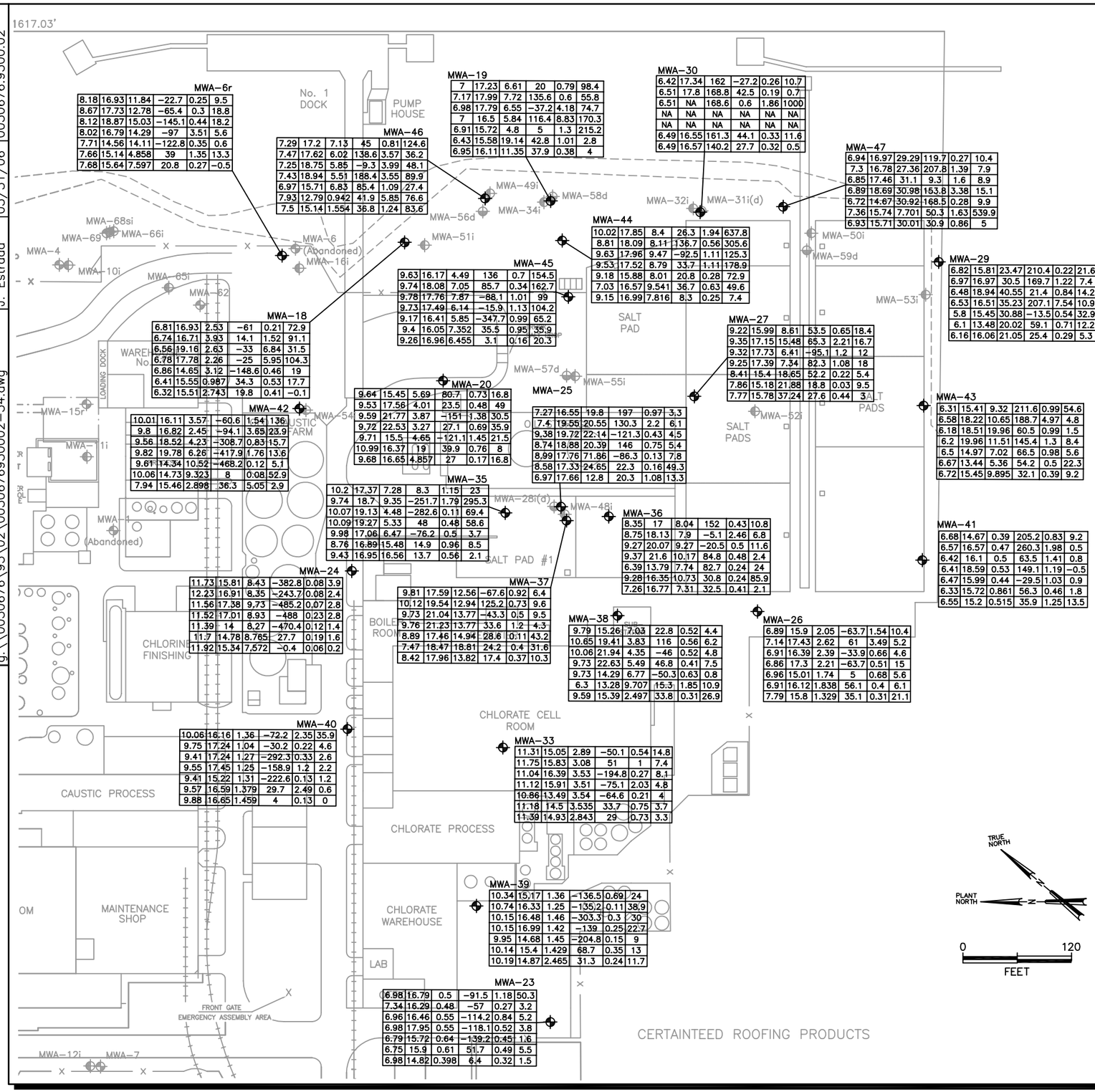


MWA-6r					
8.18	16.93	11.84	−22.7	0.25	9.5
8.67	17.73	12.78	−65.4	0.3	18.8
8.12	18.87	15.03	−145.1	0.44	18.2
8.02	16.79	14.29	−97	3.51	5.6
7.71	14.56	14.11	−122.8	0.35	0.6
7.66	15.14	4.858	39	1.35	13.3
7.68	15.64	7.597	20.8	0.27	−0.5

MWA-46					
7.29	17.2	7.13	45	0.81	124.6
7.47	17.62	6.02	138.6	3.57	36.2
7.25	18.75	5.85	−9.3	3.99	48.1
7.43	18.94	5.51	188.4	3.55	89.9
6.97	15.71	6.83	85.4	1.09	27.4
7.93	12.79	0.942	41.9	5.85	76.6
7.5	15.14	1.554	36.8	1.24	83.6

MWA-19					
7	17.23	6.61	20	0.79	98.4
7.17	17.99	7.72	135.6	0.6	55.8
6.98	17.79	6.55	−37.2	4.18	74.7
7	16.5	5.84	116.4	8.83	170.3
6.91	15.72	4.8	5	1.3	215.2
6.43	15.58	19.14	42.8	1.01	2.8
6.95	16.11	11.35	37.9	0.38	4

MWA-30					
6.42	17.34	162	−27.2	0.26	10.7
6.51	17.8	168.8	42.5	0.19	0.7
6.51	NA	168.6	0.6	1.86	1000
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
6.49	16.55	161.3	44.1	0.33	11.6
6.49	16.57	140.2	27.7	0.32	0.5

MWA-47					
6.94	16.97	29.29	119.7	0.27	10.4
7.3	16.78	27.36	207.8	1.39	7.9
6.85	17.46	31.1	9.3	1.6	8.9
6.89	18.69	30.98	153.8	3.38	15.1
6.72	14.67	30.92	168.5	0.28	9.9
7.36	15.74	7.701	50.3	1.63	539.9
6.93	15.71	30.01	30.9	0.86	5

MWA-44					
10.02	17.85	8.4	26.3	1.94	637.8
8.81	18.09	8.11	136.7	0.56	305.6
9.63	17.96	9.47	−92.5	1.11	125.3
9.53	17.52	8.79	33.7	1.11	178.9
9.18	15.88	8.01	20.8	0.28	72.9
7.03	16.57	9.541	36.7	0.63	49.6
9.15	16.99	7.816	8.3	0.25	7.4

MWA-45					
9.63	16.17	4.49	136	0.7	154.5
9.74	18.08	7.05	85.7	0.34	162.7
9.78	17.76	7.87	−88.1	1.01	99
9.73	17.49	6.14	−15.9	1.13	104.2
9.17	16.41	5.85	−347.7	0.99	65.2
9.4	16.05	7.352	35.5	0.95	35.9
9.26	16.96	6.455	3.1	0.16	20.3

MWA-29					
6.82	15.81	23.47	210.4	0.22	21.6
6.97	16.97	30.5	169.7	1.22	7.4
6.48	18.94	40.55	21.4	0.84	14.2
6.53	16.51	35.23	207.1	7.54	10.9
5.8	15.45	30.88	−13.5	0.54	32.9
6.1	13.48	20.02	59.1	0.71	12.2
6.16	16.06	21.05	25.4	0.29	5.3

MWA-18					
6.81	16.93	2.53	−61	0.21	72.9
6.74	16.71	3.93	14.1	1.52	91.1
6.56	19.16	2.63	−33	6.84	31.5
6.78	17.78	2.26	−25	5.95	104.3
6.86	14.65	3.12	−148.6	0.46	19
6.41	15.55	0.987	34.3	0.53	17.7
6.32	15.51	2.743	19.8	0.41	−0.1

MWA-27					
9.22	15.99	8.61	53.5	0.65	18.4
9.35	17.15	15.48	65.3	2.21	16.7
9.32	17.73	6.41	−95.1	1.2	12
9.25	17.39	7.34	82.3	1.08	18
8.41	15.4	18.65	52.2	0.22	5.4
7.86	15.18	21.88	18.8	0.03	9.5
7.77	15.78	37.24	27.6	0.44	3

MWA-20					
9.64	15.45	5.69	80.7	0.73	16.8
9.53	17.56	4.01	23.5	0.48	49
9.59	21.77	3.87	−151	1.38	30.5
9.72	22.53	3.27	27.1	0.69	35.9
9.71	15.5	4.65	−121.1	1.45	21.5
10.99	16.37	19	39.9	0.76	8
9.68	16.65	4.857	27	0.17	16.8

MWA-25					
7.27	16.55	19.8	197	0.97	3.3
7.4	19.55	20.55	130.3	2.2	6.1
9.38	19.72	22.14	−121.3	0.43	4.5
8.74	18.88	20.39	146	0.75	5.4
8.99	17.76	71.86	−86.3	0.13	7.8
8.58	17.33	24.65	22.3	0.16	49.3
6.97	17.66	12.8	20.3	1.08	13.3

MWA-43					
6.31	15.41	9.32	211.6	0.99	54.6
6.58	18.22	10.65	188.7	4.97	4.8
6.18	18.51	19.96	60.5	0.99	1.5
6.2	19.96	11.51	145.4	1.3	8.4
6.5	14.97	7.02	66.5	0.98	5.6
6.67	13.44	5.36	54.2	0.5	22.3
6.72	15.45	9.895	32.1	0.39	9.2

MWA-42					
10.01	16.11	3.57	−60.6	1.54	136
9.8	16.82	2.45	−94.1	3.65	23.9
9.56	18.52	4.23	−308.7	0.83	15.7
9.82	19.78	6.26	−417.9	1.76	13.6
9.61	14.34	10.52	−468.2	0.12	5.1
10.06	14.73	9.323	8	0.08	52.9
7.94	15.46	2.898	36.3	5.05	2.9

MWA-35					
10.2	17.37	7.28	8.3	1.15	23
9.74	18.7	9.35	−251.7	1.79	295.3
10.07	19.13	4.48	−282.6	0.11	69.4
10.09	19.27	5.33	48	0.48	58.6
9.98	17.06	6.47	−76.2	0.5	3.7
8.76	16.89	15.48	14.9	0.96	8.5
9.43	16.95	16.56	13.7	0.56	2.1

MWA-36					
8.35	17	8.04	152	0.43	10.8
8.75	18.13	7.9	−5.1	2.46	6.8
9.27	20.07	9.27	−20.5	0.5	11.6
9.37	21.6	10.17	84.8	0.48	2.4
6.39	13.79	7.74	82.7	0.24	24
9.28	16.35	10.73	30.8	0.24	85.9
7.26	16.77	7.31	32.5	0.41	2.1

MWA-41					
6.68	14.67	0.39	205.2	0.83	9.2
6.57	16.57	0.47	260.3	1.98	0.5
6.42	16.1	0.5	63.5	1.41	0.8
6.41	18.59	0.53	149.1	1.19	−0.5
6.47	15.99	0.44	−29.5	1.03	0.9
6.33	15.72	0.861	56.3	0.46	1.8
6.55	15.2	0.515	35.9	1.25	13.5

MWA-24					
11.73	15.81	8.43	−382.8	0.08	3.9
12.23	16.91	8.35	−243.7	0.08	2.4
11.56	17.38	9.73	−485.2	0.07	2.8
11.52	17.01	8.93	−488	0.23	2.8
11.39	14	8.27	−470.4	0.12	1.4
11.7	14.78	8.765	27.7	0.19	1.6
11.92	15.34	7.572	−0.4	0.06	0.2

MWA-37					
9.81	17.59	12.56	−67.6	0.92	6.4
10.12	19.54	12.94	125.2	0.73	9.6
9.73	21.04	13.77	−43.3	0.5	9.5
9.76	21.23	13.77	33.6	1.2	4.3
8.89	17.46	14.94	28.6	0.11	43.2
7.47	18.47	18.81	24.2	0.4	31.6
8.42	17.96	13.82	17.4	0.37	10.3

MWA-38					
9.79	15.26	7.03	22.8	0.52	4.4
10.65	19.41	3.83	116	0.56	6.2
10.06	21.94	4.35	−46	0.52	4.8
9.73	22.63	5.49	46.8	0.41	7.5
9.73	14.29	6.77	−50.3	0.63	0.8
6.3	13.28	9.707	15.3	1.85	10.9
9.59	15.39	2.497	33.8	0.31	26.9

MWA-26					
6.89	15.9	2.05	−63.7	1.54	10.4
7.14	17.43	2.62	61	3.49	5.2
6.91	16.39	2.39	−33.9	0.66	4.6
6.86	17.3	2.21	−63.7	0.51	15
6.96	15.01	1.74	5	0.68	5.6
6.91	16.12	1.838	56.1	0.4	6.1
7.79	15.8	1.329	35.1	0.31	21.1

MWA-40					
10.06	16.16	1.36	−72.2	2.35	35.9
9.75	17.24	1.04	−30.2	0.22	4.6
9.41	17.24	1.27	−292.3	0.33	2.6
9.55	17.45	1.25	−158.9	1.2	2.2
9.41	15.22	1.31	−222.6	0.13	1.2
9.57	16.59	1.379	29.7	2.49	0.6
9.88	16.65	1.459	4	0.13	0

MWA-33					
11.31	15.05	2.89	−50.1	0.54	14.8
11.75	15.83	3.08	51	1	7.4
11.04	16.39	3.53	−194.8	0.27	8.1
11.12	15.91	3.51	−75.1	2.03	4.8
10.86	13.49	3.54	−64.6	0.21	4
11.18	14.5	3.535	33.7	0.75	3.7
11.39	14.93	2.843	29	0.73	3.3

MWA-39					
10.34	15.17	1.36	−136.5	0.69	24
10.74	16.33	1.25	−135.2	0.11	38.9
10.15	16.48	1.46	−303.3	0.3	30
10.15	16.99	1.42	−139	0.25	22.7
9.95	14.68	1.45	−204.8	0.15	9
10.14	15.4	1.429	68.7	0.35	13
10.19	14.87	2.465	31.3	0.24	11.7

MWA-23					
6.98	16.79	0.5	−91.5	1.18	50.3
7.34	16.29	0.48	−57	0.27	3.2
6.96	16.46	0.55	−114.2	0.84	5.2
6.98	17.95	0.55	−118.1	0.52	3.8
6.79	15.72	0.64	−139.2	0.45	1.6
6.75	15.9	0.61	51.7	0.49	5.5
6.98	14.82	0.398	6.4	0.32	1.5

LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

pH	Temperature °C	Electrical Conductivity (mS/cm)	ORP (mv)	Dissolved Oxygen (mgO2/L)	Turbidity (NTU)	
6.82	15.81	23.47	210.4	0.22	21.6	Sample Baseline (May 2005)
6.97	16.97	30.5	169.7	1.22	7.4	Sample Phase 1, Round 1 (July 2005)
6.48	18.94	40.55	21.4	0.84	14.2	Sample Phase 1, Round 2 (August 2005)
6.53	16.51	35.23	207.1	7.54	10.9	Sample Phase 1, Round 3 (September 2005)
5.8	15.45	30.88	−13.5	0.54	32.9	Sample Phase 2, Round 1 (December 2005)
6.1	13.48	20.02	59.1	0.71	12.2	Sample Phase 2, Round 2 (January 2006)
6.16	16.06	21.05	25.4	0.29	5.3	Sample Phase 2, Round 3 (February 2006)

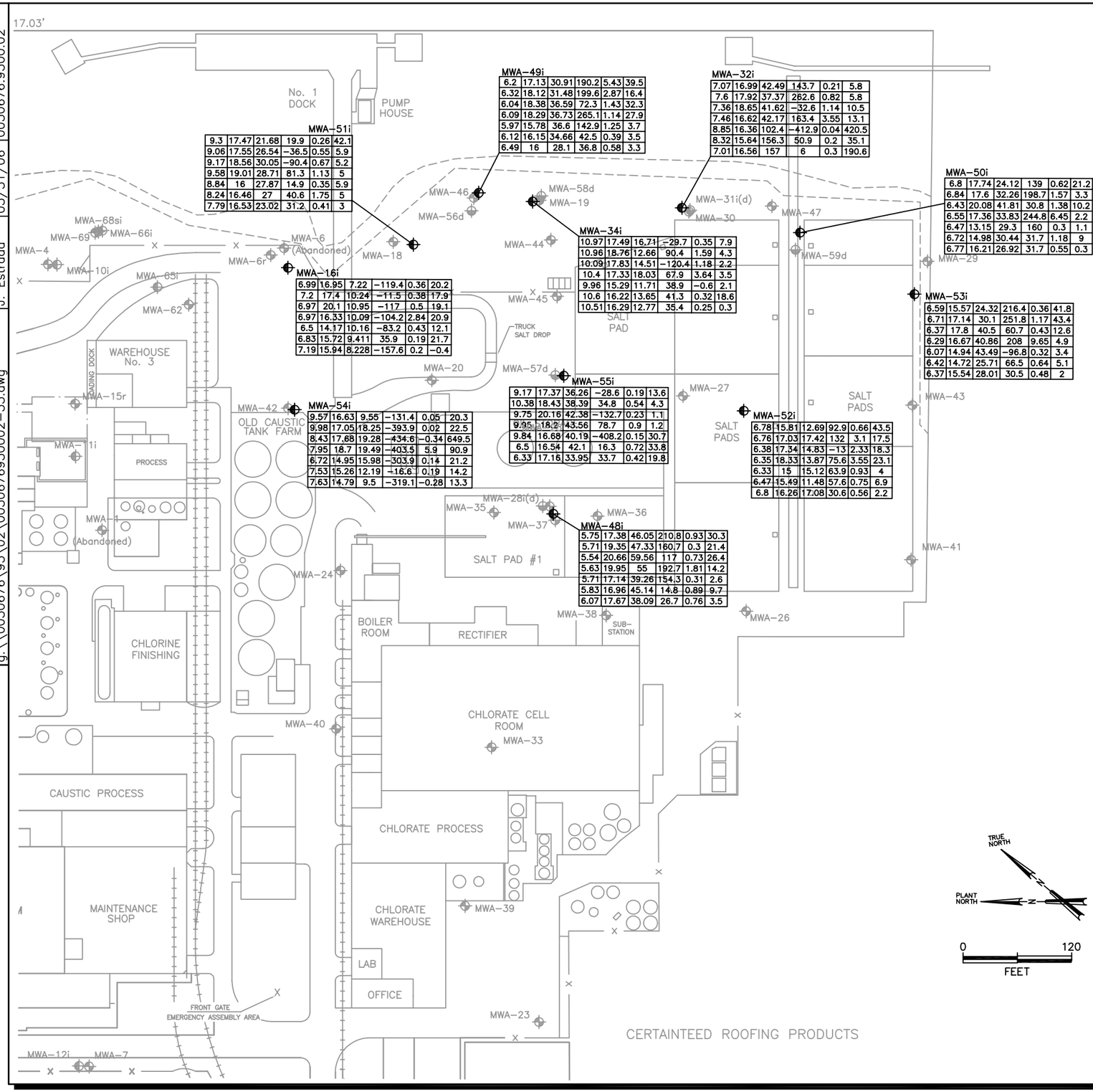
NA = Not Analyzed/Not Tested

Note:
Most buildings and structures noted on this diagram have been demolished and/or removed.

Figure 10
Shallow Zone Groundwater Field Parameter Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
CAD File: g:\0030676\93\02\0030676930002-35.dwg



LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

pH	Temperature °C	Electrical Conductivity (mS/cm)	ORP (mv)	Dissolved Oxygen (mgO2/L)	Turbidity (NTU)	
6.8	17.74	24.12	139	0.62	21.2	Sample Baseline (May 2005)
6.84	17.6	32.26	198.7	1.57	3.3	Sample Phase 1, Round 1 (July 2005)
6.43	20.08	41.81	30.8	1.38	10.2	Sample Phase 1, Round 2 (August 2005)
6.55	17.36	33.83	244.8	6.45	2.2	Sample Phase 1, Round 3 (September 2005)
6.47	13.15	29.3	160	0.3	1.1	Sample Phase 2, Round 1 (December 2005)
6.72	14.98	30.44	31.7	1.18	9	Sample Phase 2, Round 2 (January 2006)
6.77	16.21	26.92	31.7	0.55	0.3	Sample Phase 2, Round 3 (February 2006)

NA = Not Analyzed/Not Tested

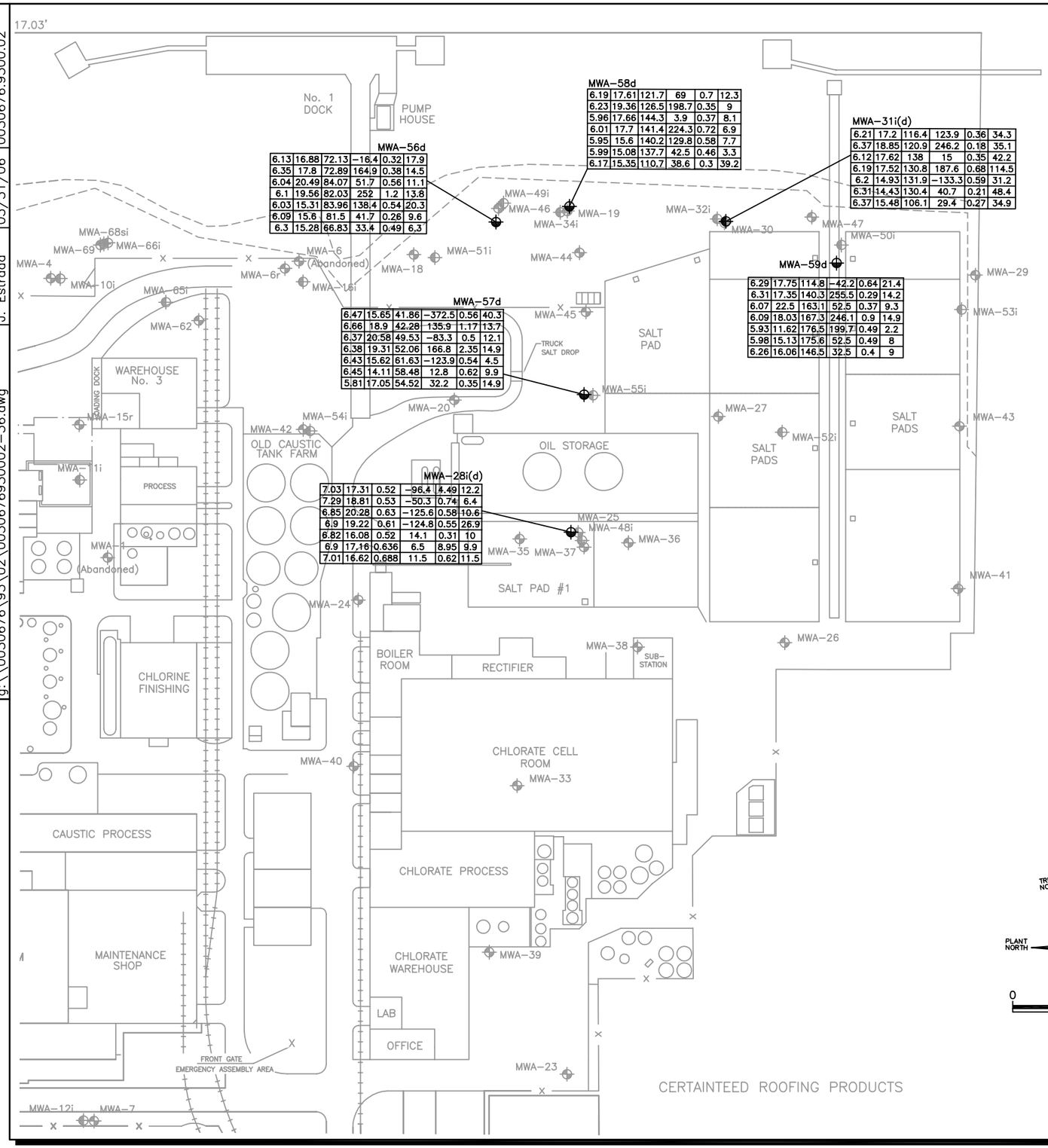
Note:
Most buildings and structures noted on this diagram have been demolished and/or removed.

TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 11
Intermediate Zone Groundwater Field Parameter Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06

Project No. 0030676.9300.02
Date: 03/31/06
Drawn By: J. Estrada
CAD File: g:\0030676\93\02\0030676930002-36.dwg



LEGEND

- Monitoring Well, Shallow Zone
- Monitoring Well, Intermediate Zone
- Monitoring Well, Deep Zone
- (d) Indicates Intermediate Zone Well Actually Completed in the Deep Zone
- Williamette River Bank

pH	Temperature °C	Electrical Conductivity (mS/cm)	ORP (mv)	Dissolved Oxygen (mgO2/L)	Turbidity (NTU)	
6.21	17.2	116.4	123.9	0.36	34.3	Sample Baseline (May 2005)
6.37	18.85	120.9	246.2	0.18	35.1	Sample Phase 1, Round 1 (July 2005)
6.12	17.62	138	15	0.35	42.2	Sample Phase 1, Round 2 (August 2005)
6.19	17.52	130.8	187.6	0.68	114.5	Sample Phase 1, Round 3 (September 2005)
6.2	14.93	131.9	-133.3	0.59	31.2	Sample Phase 2, Round 1 (December 2005)
6.31	14.43	130.4	40.7	0.21	48.4	Sample Phase 2, Round 2 (January 2006)
6.37	15.48	106.1	29.4	0.27	34.9	Sample Phase 2, Round 3 (February 2006)

NA = Not Analyzed/Not Tested

Note:
Most buildings and structures noted on this diagram have been demolished and/or removed.

TRUE NORTH
PLANT NORTH
0 120
FEET

Figure 12
Deep Zone Groundwater Field Parameter Concentrations
Arkema Inc.
Portland, Oregon

ERM 03/06