FIGURES

623238

Figure 1
Boring Locations

Siltronic Corporation
Portland, Oregon

Legend

- Manhole
- Geoprobe
- Pilot Study Injection Point
- Monitoring Well
- Approximate Boring Location Reconnaissance Borings

Source: Aerial Photograph (2007) obtained from Metro Data Resource Center

N

0 20 40
Feet

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig2_Analytical Data for Completed Boring Locations.mxd

Project: 8128.01.12 Produced By: R. Maronn Approved By: J. Peale

Figure 2
Analytical Data for Completed Boring Locations

Siltronic Corporation
Portland, Oregon

Depth	TCE	cis-1,2-DCE	VC
27	0.76	4.07	2.28
55	1740	42100	82.1
74	40500	60400	46.8
89	25500	11500	8.28
106	94200	9930	48.3
115	0.3 U	0.3 U	0.3 U
125	1.6	1.4	0.3 U

Depth	TCE	cis-1,2-DCE	VC
25	8.12	10.1	63.4
50	28.4	59400	27600
70	32300	79500	5530
90	89	3450	580
100	212000	240000	106
115	0.71	6.17	0.3 U

Depth	TCE	cis-1,2-DCE	VC
30	1.34	2.43	0.3 U
54	1.12	8.33	0.3 U
74	10300	92400	18.8
91	55200	31300	2270
110	253	6600	8.6

Depth	TCE	cis-1,2-DCE	VC
25	7.42	17.7	18.7
50	17.2	25900	123
70	169000	70200	23
90	227	601	42.6
100	357000	8230	42.8

Depth	TCE	cis-1,2-DCE	VC
71	227	1780	4350

Depth	TCE	cis-1,2-DCE	VC
98	2070	106000	45200

Depth	TCE	cis-1,2-DCE	VC
24	5	12200	441
55	25000	69800	31.2
74	24	1220	1.12
90	1.68	0.3 U	0.3 U

Depth	TCE	cis-1,2-DCE	VC
60	2300	204	0.3 U
70	135	5.14	0.3 U

Depth	TCE	cis-1,2-DCE	VC
24	0.62	11.6	2.62
50	9610	75000	123
70	448000	24900	23
90	1990	13500	4760
100	331000	11900	31.3
115	42.1	4.78	0.3 U
125	15.2	1.81	0.3 U

Depth	TCE	cis-1,2-DCE	VC
68	0.96	135	436

Depth	TCE	cis-1,2-DCE	VC
23	19.6	1140	86
55	30800	30500	27
74	26.4	31.6	0.3 U
90	2.14	0.56	0.3 U
105	13.1	198	124

Depth	TCE	cis-1,2-DCE	VC
98	1.35	77.5	200

Depth	TCE	cis-1,2-DCE	VC
25	338	15 U	15 U
55	14100	43700	17.7
74	208000	10400	10.9
91	30400	46800	32.7
110	0.71	0.3 U	0.3 U

Depth	TCE	cis-1,2-DCE	VC
105	2.7	7.03	0.93

Depth	TCE	cis-1,2-DCE	VC
64	160000	40400	26.1

Depth	TCE	cis-1,2-DCE	VC
25	3.71	729	5.5
59	35200	70700	26.1
80	5550	49400	4950
91	119000	12600	15.2
110	13.8	5.53	0.3 U

Depth	TCE	cis-1,2-DCE	VC
55	3210	78600	30 U
74	58700	44600	12.9
91	1050	13100	2.39
110	0.3 U	0.4	0.3 U

Depth	TCE	cis-1,2-DCE	VC
30.5	260000	66200	10.5
55	64700	388	22.1
75	575	670	0.3 U
85	1260	94.2	0.3 U
100	43.4	0.3 U	0.3 U

Depth	TCE	cis-1,2-DCE	VC
30	1.83	1440	360
55	13.1	0.3 U	0.3 U
65	700	35.2	0.3 U
75	3720	421	0.3 U
85	3.68	0.43	0.3 U
100	2690	291	1.71

Depth	TCE	cis-1,2-DCE	VC
55	0.3 U	41.8	0.3 U
75	47600	14300	3.09
90	3.11	262	0.3 U
110	1.56	0.83	0.3 U

Depth	TCE	cis-1,2-DCE	VC
58.5	9770	5350	8.81
75	69200	2210	1.88
84	44400	8060	12
96.5	3.84	0.3 U	0.3 U
110	3.41	0.3 U	0.3 U

Depth	TCE	cis-1,2-DCE	VC
60	22000	2440	2.4
75	102	25.2	0.3 U
85	191	64.9	0.3 U

Depth	TCE	cis-1,2-DCE	VC
30	269000	11000	6 U
55	20.3	2.64	0.3 U
65	243	65.7	0.3 U
75	5.62	0.35	0.3 U
85	1.49	0.3 U	0.3 U

Legend

- Manhole
- Geoprobe
- Pilot Study Injection Point
- Monitoring Well
- Approximate Boring Location Reconnaissance Borings

Notes:
1. All values are expressed in ug/L.
2. U = Not Detected at or Above Method Reporting Limit

Source: Aerial Photograph (2007) obtained from Metro Data Resource Center

N

0 20 40
Feet

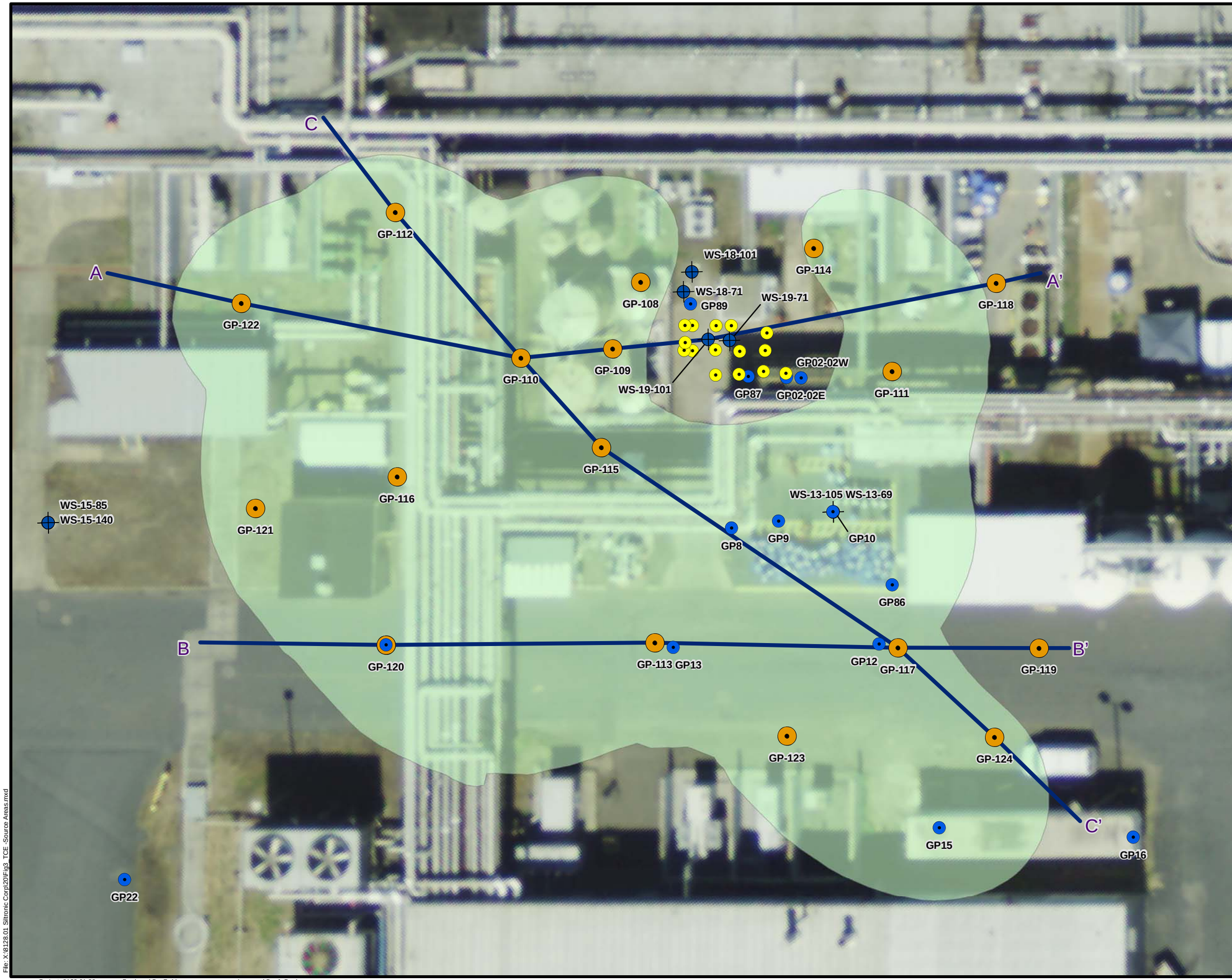
MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig2 Analytical Data for Completed Boring Locations.mxd

Project: 8128.01.12 Produced by: P. Maronn Approved by: J. Peale

Figure 3
TCE - Source Areas

Siltronic Corporation
Portland, Oregon



Legend

- Geoprobe Location
- Pilot Study Injection Point
- Monitoring Well
- Approximate Boring Location
- Cross section

TCE > 11,000 ug/L

- 80% Maximum Plume

Source: Aerial Photograph (2007) obtained from Metro Data Resource Center

N

0 20 40
Feet

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Fig3_TCE_Source Areas.mxd

Project: 8128.01.20 Produced By: R. Maronn Approved By: J. Peale

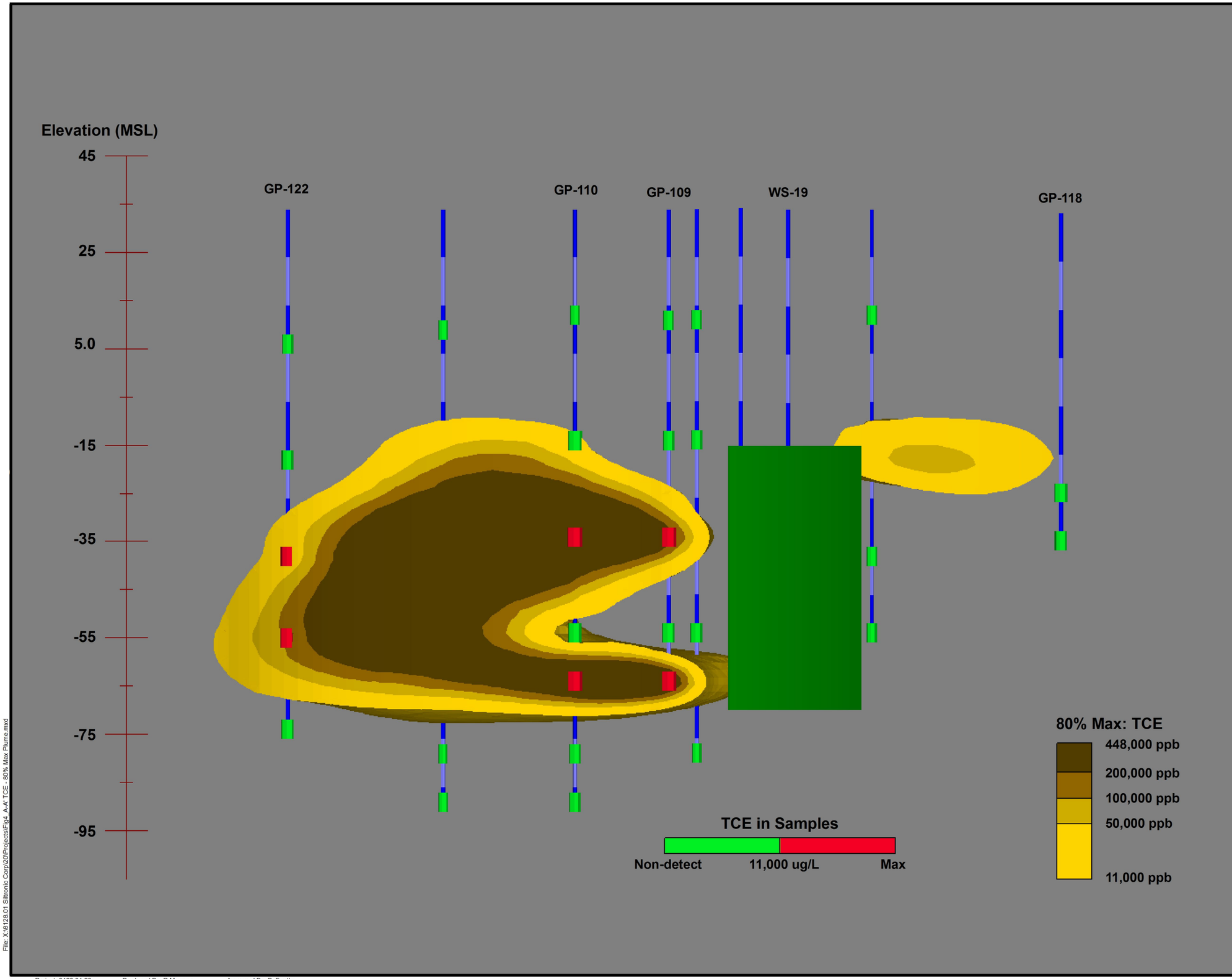


Figure 4
A-A' TCE -
80% Max Plume

Siltronic Corporation
Portland, Oregon

Legend

Pilot Study Area

Notes

* Vertical distance is based on feet above/below mean sea level (msl)
* Only a portion of monitoring well and geoprobe locations are posted; plume is based on a larger collection of sample locations
* The extrapolated plume is based on 2008 Source Delineation data
* 3D model has been "sliced" along section line A-A' illustrated on Figure 3 - TCE - Source Areas

Not to Scale

Maul Foster Alongi Inc.
Environmental & Engineering Consultants
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig4_A-A' TCE - 80% Max Plume.mxd

Project: 8128.01.20 Produced By: R.Maronn Approved By: B. Fauth

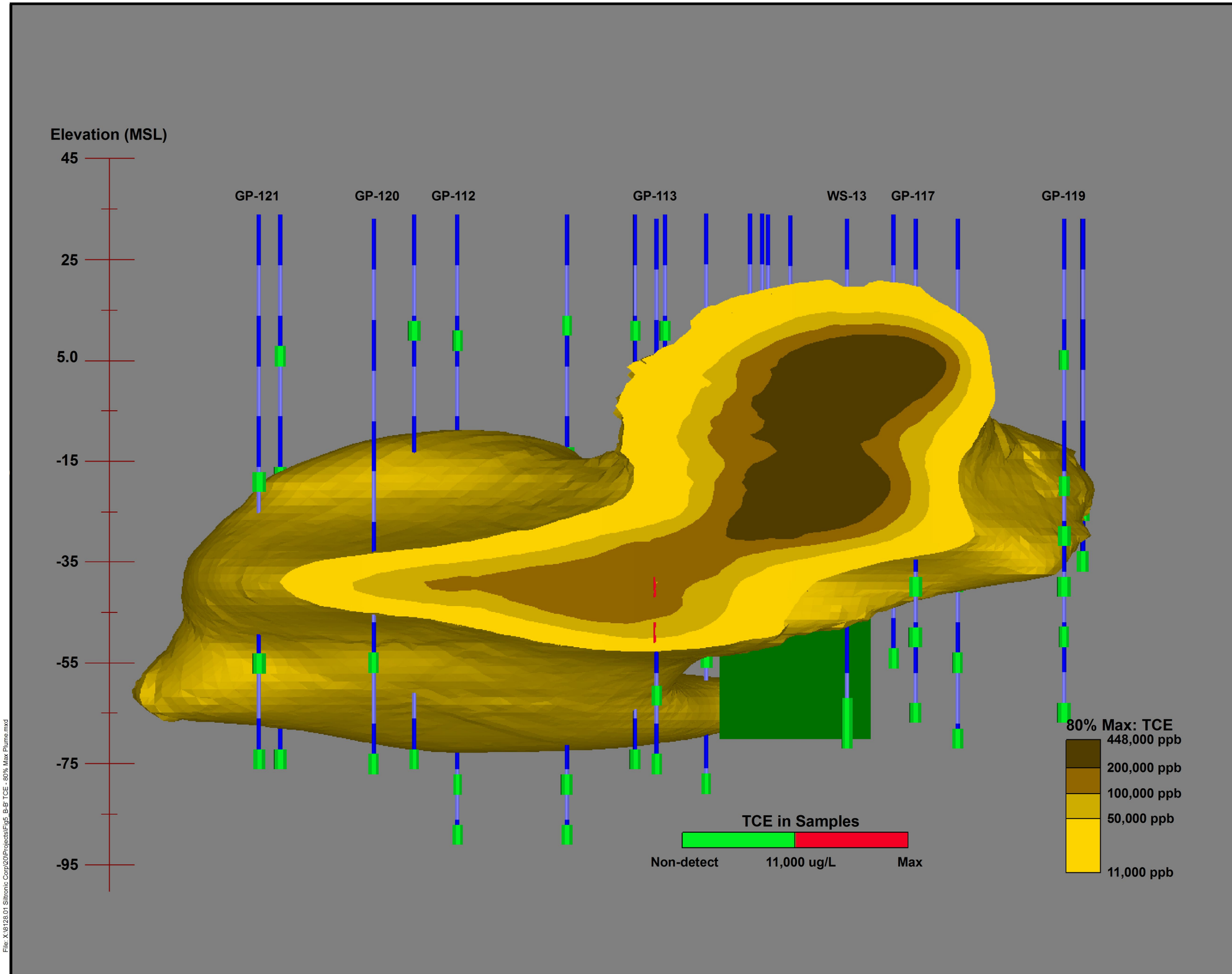


Figure 5
B-B' TCE -
80% Max Plume

Siltronic Corporation
Portland, Oregon

Legend

Pilot Study Area

Notes

* Vertical distance is based on feet above/below mean sea level (msl)
* Only a portion of monitoring well and geoprobe locations are posted; plume is based on a larger collection of sample locations
* The extrapolated plume is based on 2008 Source Delineation data
* 3D model has been "sliced" along section line B-B' illustrated on Figure 3 - TCE - Source Areas

Not to Scale

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig5_B-B' TCE - 80% Max Plume.mxd

Project: 8128.01.20 Produced By: R.Maronn Approved By: B. Fauth

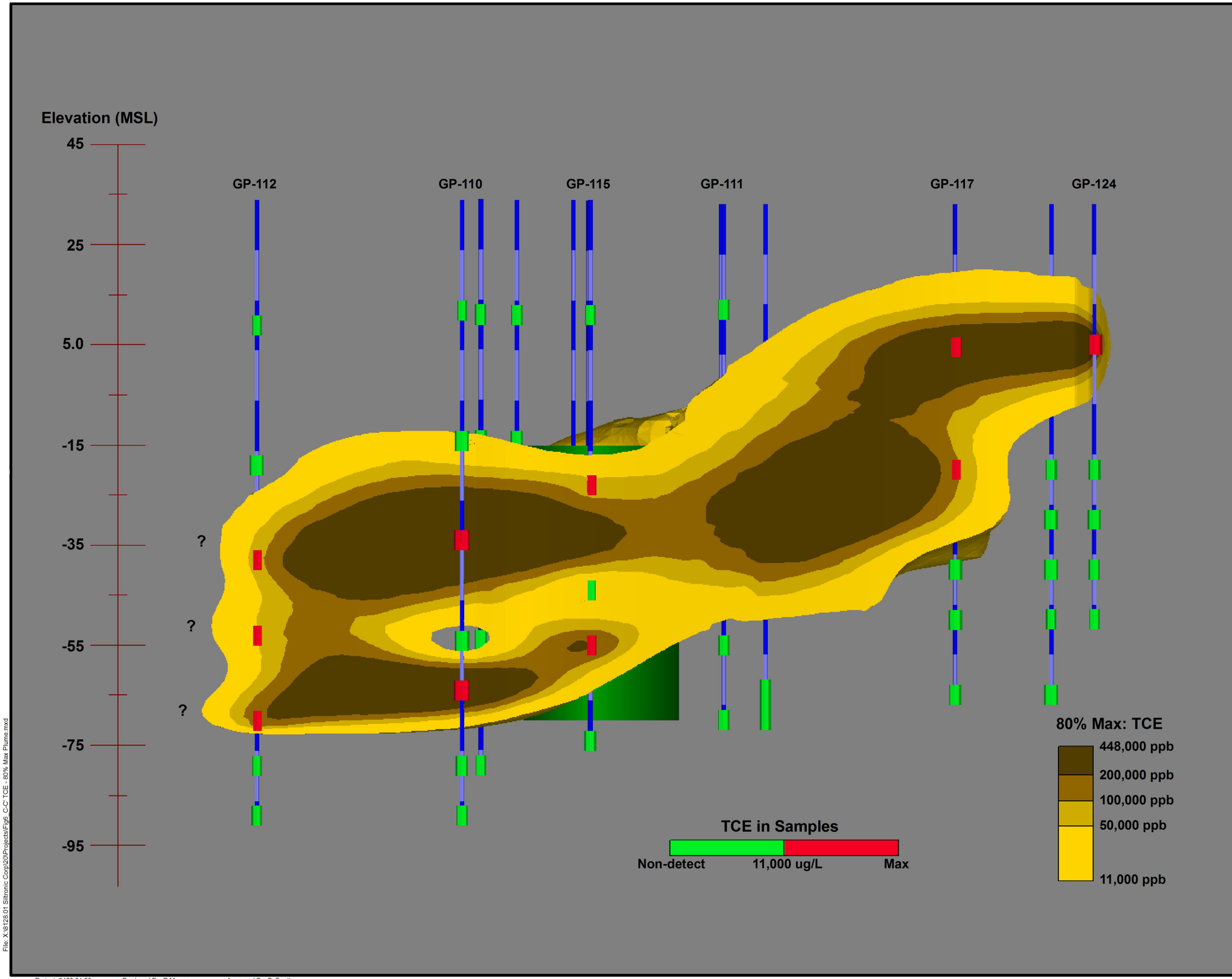


Figure 6
C-C' TCE -
80% Max Plume

Siltronic Corporation
Portland, Oregon

Legend

Pilot Study Area

Notes

* Vertical distance is based on feet above/below mean sea level (msl)
* Only a portion of monitoring well and geoprobe locations are posted; plume is based on a larger collection of sample locations
* The extrapolated plume is based on 2008 Source Delineation data
* 3D model has been "sliced" along section line C-C' illustrated on Figure 3 - TCE - Source Areas

Not to Scale

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig6_C-C' TCE - 80% Max Plume.mxd

Project: 8128.01.20 Produced By: R.Maronn Approved By: B. Fauth

Figure 7
Proposed Source Area PMW Locations

Siltronic Corporation
Portland, Oregon

Legend

- Manhole
- Geoprobe Location
- Pilot Study Injection Point
- Approximate Boring Location
- Monitoring Well
- Proposed Source Area Monitoring Wells
- Inaccessible Area
- Proposed PRB Extent

Note:
All locations and extents are subject to subsurface utility clearance and rig access.

Source: Aerial Photograph (2007) obtained from Metro Data Resource Center

N

0 20 40
Feet

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig7_Proposed Source PMW Locations.mxd

Project: 8128.01.20 Produced By: R. Maronn Approved By: E. Bakkom

Figure 8
Proposed Downgradient PMW Locations

Siltronic Corporation
Portland, Oregon

Legend

- Geoprobe
- Existing Monitoring Well and Depth (Feet)
- Proposed Performance Monitoring Well and Screen Interval
- Proposed PRB Extent

Notes

* Only a portion of monitoring well and geoprobe locations is posted.
* Aerial Photograph (July 2007) obtained from Metro Data Resource Center

N

0 75 150
Feet

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig8_Proposed Downgradient PMW Locations.mxd

Project: 8128.01.20 Produced By: R. Maronn Approved By: E. Bakkom

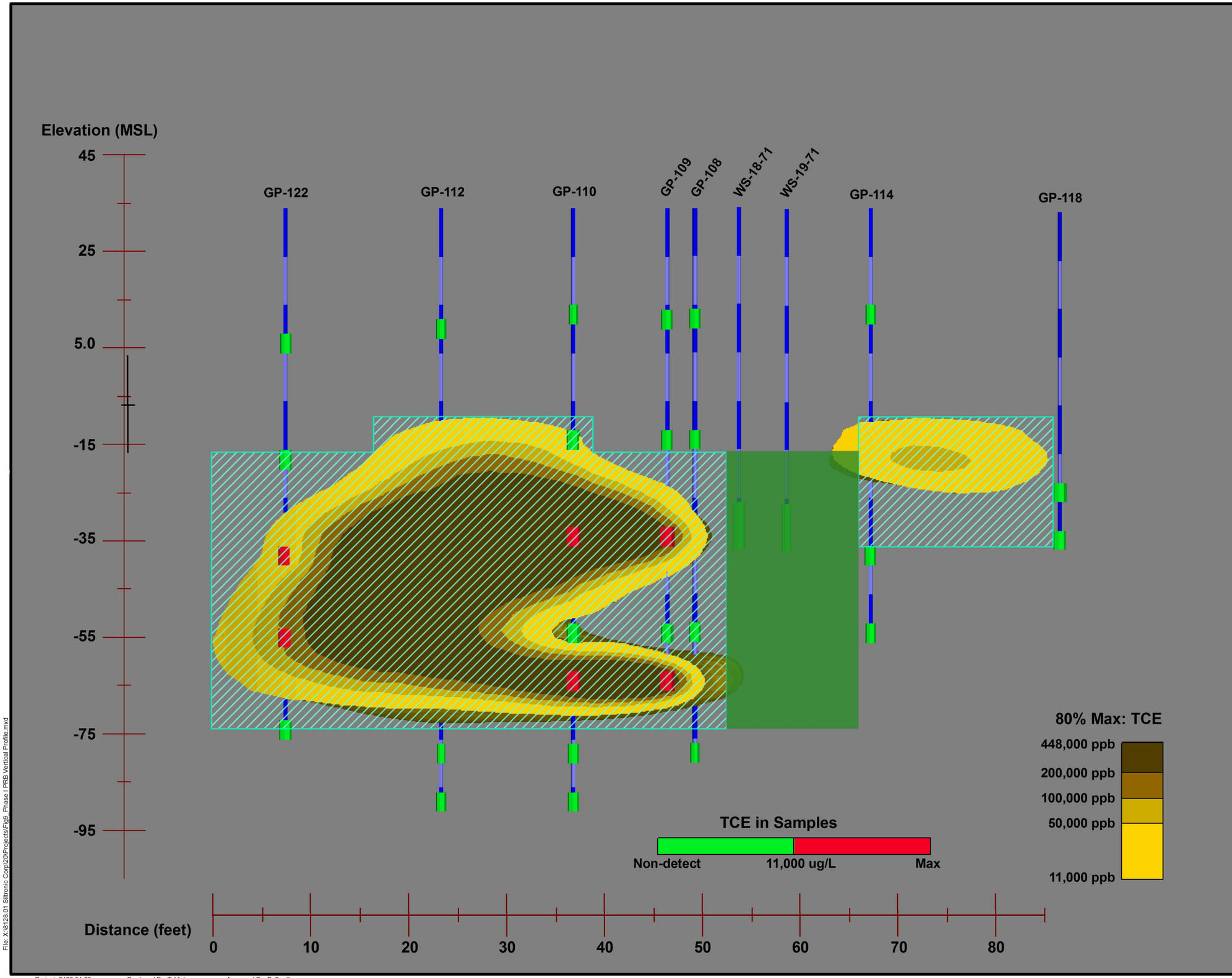


Figure 9
Phase I PRB
Vertical Profile

Siltronic Corporation
Portland, Oregon

Legend

Pilot Study Area

PRB Vertical Profile

Notes

* Vertical distance is based on feet above/below mean sea level (msl)
* Only a portion of monitoring well and geoprobe locations are posted; plume is based on a larger collection of sample locations
* The extrapolated plume is based on 2008 Source Delineation data
* 3D model has been "sliced" along section line A-A' illustrated on Figure 3 - TCE - Source Areas

Approximate Scale

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: X:\8128.01 Siltronic Corp\20\Projects\Fig9_Phase I PRB Vertical Profile.mxd

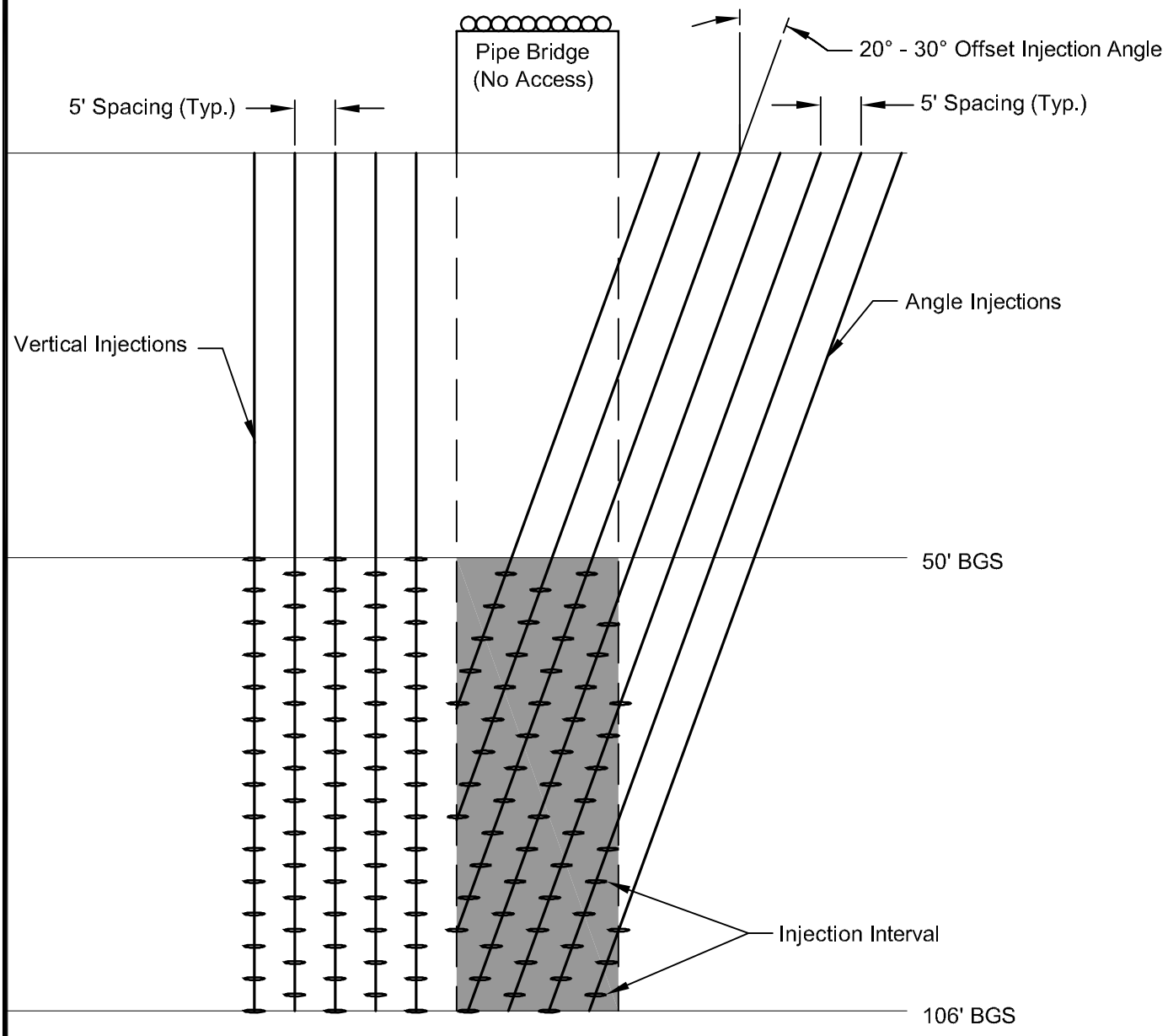
Project: 8128.01.20 Produced By: T. Vick Approved By: B. Fauth

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

Figure 10
Angled Injection Schematic

Siltronic Corporation
Portland, Oregon

LEGEND:
Angle Injection Zone

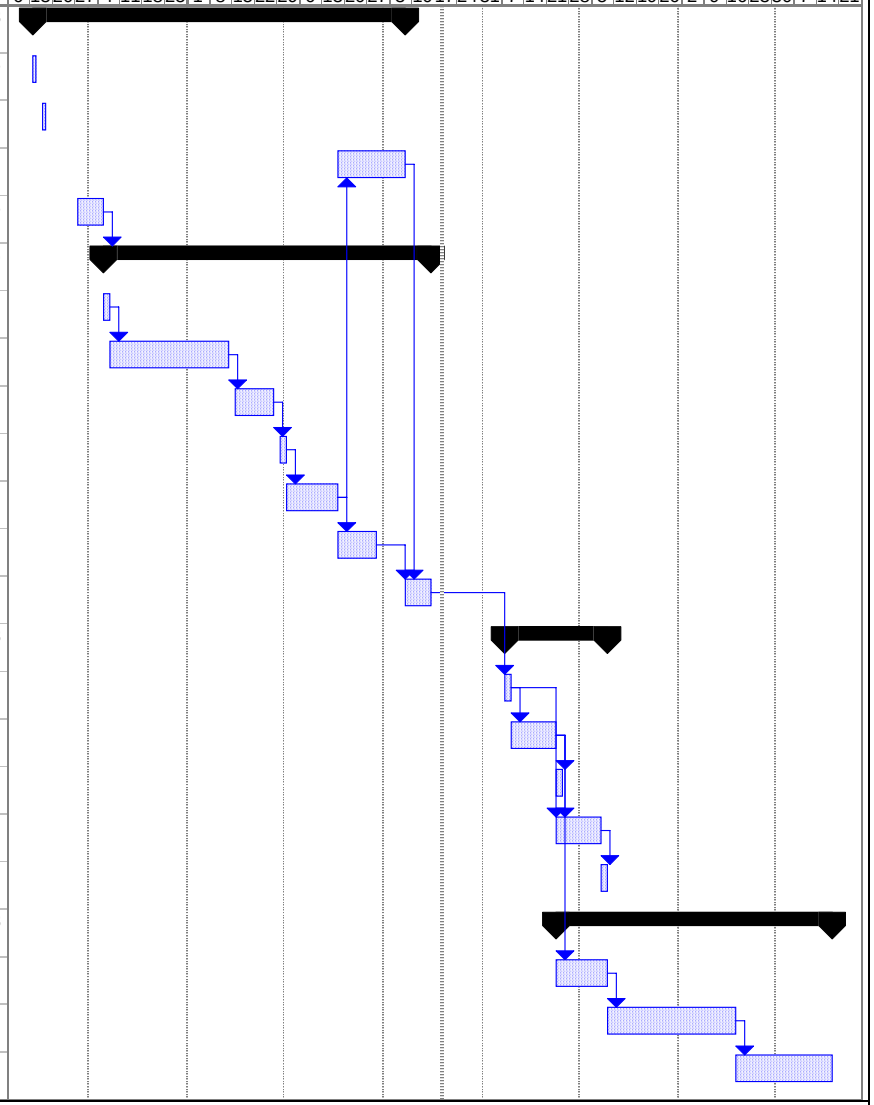


G:\8128.01 Siltronic Corporation\20_Injection Plan\Fig10_Injection Schematic.dwg, 8/19/2008 3:46:41 PM, PDF 8x11 P.pc3

Layout: 1 Project: 8128.01.20 Drawn By: J. Fisher Approved By: E. Bakkom

Figure 11
Source Area Injection Schedule
Siltronic Corporation
Summer/Fall 2008

ID	Task Name	Duration	Start	Finish
1	**Planning / Work Plans**	**84 days**	**Mon 4/14/08**	**Thu 8/7/08**
2	Demolition Coordination	1 day	Mon 4/14/08	Mon 4/14/08
3	Delineation Work Plan	1 day	Thu 4/17/08	Thu 4/17/08
4	Phase I Addendum	15 days	Fri 7/18/08	Thu 8/7/08
5	Tank Farm Demolition	6 days	Mon 4/28/08	Mon 5/5/08
6	**Delineation**	**74 days**	**Tue 5/6/08**	**Fri 8/15/08**
7	Air Knife/Utility Locate (Close Hole)	2 days	Tue 5/6/08	Wed 5/7/08
8	Borings/Samples	27 days	Thu 5/8/08	Fri 6/13/08
9	Analysis Review	10 days	Mon 6/16/08	Fri 6/27/08
10	DEQ Review	2 days	Mon 6/30/08	Tue 7/1/08
11	Additional Delineation	12 days	Wed 7/2/08	Thu 7/17/08
12	Analysis Review	8 days	Fri 7/18/08	Tue 7/29/08
13	DEQ Review	6 days	Fri 8/8/08	Fri 8/15/08
14	**Monitoring Wells**	**24 days**	**Mon 9/8/08**	**Thu 10/9/08**
15	Air Knifing (Open Hole)	2 days	Mon 9/8/08	Tue 9/9/08
16	SA Well Install	10 days	Wed 9/10/08	Tue 9/23/08
17	SA Install Pump and Sample	2 days	Wed 9/24/08	Thu 9/25/08
18	DG Well Install	10 days	Wed 9/24/08	Tue 10/7/08
19	DG Install Pump and Sample	2 days	Wed 10/8/08	Thu 10/9/08
20	**Injections**	**62 days**	**Wed 9/24/08**	**Thu 12/18/08**
21	Air Knife - Concrete Core (2 rigs - Close Hole)	12 days	Wed 9/24/08	Thu 10/9/08
22	EHC Injections	28 days	Fri 10/10/08	Tue 11/18/08
23	KB-1 Injections	22 days	Wed 11/19/08	Thu 12/18/08



Project: Source Area Injection Schedu
Date: Tue 8/19/08

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	