

Table 6
Mann-Kendall Test Results for Trichloroethene
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000					Data Collected in the Past Five Years ^a						
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
A-1-CW05	10	10	100%	0.381	95%	Decreasing ^b	6	6	100%	0.277	90%	Stable
A-1-CW07	17	17	100%	0.460	95%	Stable	9	9	100%	0.594	90%	Decreasing
A-1-CW08	10	10	100%	0.530	95%	Stable ^b	6	6	100%	0.548	90%	Stable
A-1-CW09	22	22	100%	0.679	98%	Decreasing	10	10	100%	0.300	95%	Stable
B-1-CW12	22	22	100%	0.612	98%	Stable	9	9	100%	0.652	90%	Decreasing
B-1-CW13	20	20	100%	0.548	98%	Decreasing	6	6	100%	0.142	90%	Stable
B-1-CW16	16	9	56%	1.442	95%	No trend ^b	6	6	100%	0.445	90%	Stable
B-1-CW17	23	23	100%	0.370	98%	Stable	10	10	100%	0.178	95%	Stable
B-1-CW20	23	4	17%	3.531	98%	No trend	10	3	30%	1.636	95%	No trend
B-1-CW25	26	26	100%	1.135	98%	No trend	10	10	100%	0.474	95%	Stable
B-1-CW27	22	22	100%	3.788	98%	No trend	10	10	100%	0.290	95%	Stable
B-1-CW28	24	23	96%	0.277	98%	Increasing	10	10	100%	0.186	95%	Stable
B-1-CW29	13	13	100%	1.004	95%	No trend	9	9	100%	1.051	90%	Decreasing
B-5-CW02	20	15	75%	1.205	98%	Decreasing	12	7	58%	1.210	95%	Decreasing
B-5-CW03	15	15	100%	0.336	95%	Stable	9	9	100%	0.351	90%	Decreasing
B-6-CW01	11	0	0%	c	c	c	5	0	0%	c	c	c
B-6-CW02	13	0	0%	c	c	c	7	0	0%	c	c	c
B-6-CW03R	7	7	100%	1.219	90%	No trend	5	5	100%	0.192	90%	Stable
B-6-CW16	10	10	100%	0.898	95%	Decreasing	6	6	100%	0.567	90%	Stable
C-1-CW02	19	2	11%	3.737	95%	No trend	10	1	10%	3.162	95%	No trend
C-1-CW03	19	16	84%	0.828	95%	Decreasing	10	8	80%	0.600	95%	Stable
C-1-CW05	16	0	0%	c	c	c	10	0	0%	c	c	c
C-1-CW06	17	17	100%	0.443	95%	Decreasing	9	9	100%	0.560	90%	Decreasing
C-1-CW08	16	16	100%	0.752	95%	Decreasing	11	11	100%	0.873	95%	Decreasing

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Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000						Data Collected in the Past Five Years ^a					
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
MW-01	2	2	100%	c	c	c	2	2	100%	c	c	c
MW-02	2	2	100%	c	c	c	2	2	100%	c	c	c
MW-03	13	13	100%	0.489	95%	Stable	8	8	100%	0.486	90%	Stable
MW-04	11	11	100%	0.736	95%	Decreasing	7	7	100%	0.188	90%	Stable
MW-05	13	13	100%	0.687	95%	Decreasing	8	8	100%	0.385	90%	Stable
MW-06	12	12	100%	0.448	95%	Decreasing	7	7	100%	0.384	90%	Stable
MW-07	12	12	100%	0.361	95%	Decreasing	7	7	100%	0.225	90%	Decreasing
MW-08	13	13	100%	0.376	95%	Stable	8	8	100%	0.425	90%	Stable

Notes:

- Data collected from December 2007 to October 2012.
- No new data added to the dataset from the June 2012 statistical analysis.
- Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 7
Mann-Kendall Test Results for cis-1,2-Dichloroethene
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000						Data Collected in the Past Five Years ^a					
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
3830Q	14	0	0%	c	c	c ^b	9	0	0%	c	c	c
3830S	19	9	47%	1.265	95%	No trend ^b	9	6	67%	0.945	90%	No trend
3850M	10	6	60%	1.040	95%	No trend ^b	6	5	83%	0.736	90%	No trend
3850N	23	14	61%	1.119	98%	No trend	10	9	90%	0.662	95%	No trend
3850R	21	0	0%	c	c	c	9	0	0%	c	c	c
3850V	12	0	0%	c	c	c ^b	6	0	0%	c	c	c
3850W	8	0	0%	c	c	c ^b	6	0	0%	c	c	c
3851M	11	0	0%	c	c	c ^b	6	0	0%	c	c	c
3851N	12	0	0%	c	c	c ^b	6	0	0%	c	c	c
3852F	9	0	0%	c	c	c ^b	6	0	0%	c	c	c
3852H	12	0	0%	c	c	c ^b	6	0	0%	c	c	c
3852L	12	0	0%	c	c	c ^b	6	0	0%	c	c	c
3860J	11	0	0%	c	c	c ^b	6	0	0%	c	c	c
3860K	13	5	38%	1.366	95%	Increasing ^b	6	5	83%	0.555	90%	Stable
3861D	9	3	33%	1.853	90%	No trend ^b	4	1	25%	2.000	90%	No trend
3861F	9	0	0%	c	c	c ^b	3	0	0%	c	c	c
3862C	10	0	0%	c	c	c ^b	6	0	0%	c	c	c
3862D	10	5	50%	1.230	95%	No trend ^b	4	2	50%	1.411	90%	No trend
3862E	12	1	8%	3.464	95%	No trend ^b	6	1	17%	2.449	90%	No trend
3871G	8	0	0%	c	c	c ^b	6	0	0%	c	c	c
3872K	8	0	0%	c	c	c ^b	3	0	0%	c	c	c
3872M	12	0	0%	c	c	c ^b	6	0	0%	c	c	c
4949C	6	0	0%	c	c	c ^b	4	0	0%	c	c	c
4959H	7	0	0%	c	c	c ^b	4	0	0%	c	c	c
4959K	10	0	0%	c	c	c ^b	6	0	0%	c	c	c

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Table 7
Mann-Kendall Test Results for cis-1,2-Dichloroethene
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000						Data Collected in the Past Five Years ^a					
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
A-1-CW05	10	0	0%	c	c	c ^b	6	0	0%	c	c	c
A-1-CW07	17	2	12%	2.995	95%	No trend	9	2	22%	2.121	90%	No trend
A-1-CW08	9	0	0%	c	c	c ^b	5	0	0%	c	c	c
A-1-CW09	22	1	5%	4.690	98%	No trend	10	0	0%	c	c	c
B-1-CW12	22	19	86%	0.980	98%	No trend	9	9	100%	0.606	90%	Decreasing
B-1-CW13	22	3	14%	2.787	98%	No trend	8	0	0%	c	c	c
B-1-CW16	16	0	0%	c	c	c ^b	6	0	0%	c	c	c
B-1-CW17	23	23	100%	0.625	98%	Decreasing	10	10	100%	0.402	95%	Stable
B-1-CW20	23	0	0%	c	c	c	10	0	0%	c	c	c
B-1-CW25	26	1	4%	5.099	98%	No trend	10	0	0%	c	c	c
B-1-CW27	22	0	0%	c	c	c	10	0	0%	c	c	c
B-1-CW28	24	0	0%	c	c	c	10	0	0%	c	c	c
B-1-CW29	13	0	0%	c	c	c	9	0	0%	c	c	c
B-5-CW02	20	0	0%	c	c	c	12	0	0%	c	c	c
B-5-CW03	14	12	86%	0.645	95%	Decreasing	9	8	89%	0.527	90%	Decreasing
B-6-CW01	11	0	0%	c	c	c	5	0	0%	c	c	c
B-6-CW02	13	0	0%	c	c	c	7	0	0%	c	c	c
B-6-CW03R	7	0	0%	c	c	c	5	0	0%	c	c	c
B-6-CW16	10	0	0%	c	c	c	6	0	0%	c	c	c
C-1-CW02	20	1	5%	4.472	98%	No trend	11	1	9%	3.317	95%	No trend
C-1-CW03	18	4	22%	2.120	95%	No trend	10	1	10%	3.162	95%	No trend
C-1-CW05	16	0	0%	c	c	c	10	0	0%	c	c	c
C-1-CW06	16	6	38%	1.429	95%	No trend	9	4	44%	1.215	90%	No trend
C-1-CW08	16	0	0%	c	c	c	11	0	0%	c	c	c

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Table 7
Mann-Kendall Test Results for cis-1,2-Dichloroethene
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000						Data Collected in the Past Five Years ^a					
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
MW-01	2	0	0%	c	c	c	2	0	0%	c	c	c
MW-02	2	0	0%	c	c	c	2	0	0%	c	c	c
MW-03	13	2	15%	3.606	95%	No trend	8	1	13%	2.828	90%	No trend
MW-04	11	0	0%	c	c	c	7	0	0%	c	c	c
MW-05	13	0	0%	c	c	c	8	0	0%	c	c	c
MW-06	12	0	0%	c	c	c	7	0	0%	c	c	c
MW-07	12	0	0%	c	c	c	7	0	0%	c	c	c
MW-08	11	0	0%	c	c	c	6	0	0%	c	c	c

Notes:

- a. Data collected from December 2007 to October 2012.
- b. No new data added to the dataset from the June 2012 statistical analysis.
- c. Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 8
Mann-Kendall Test Results for 1,2,3-Trichloropropane
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000					Data Collected in the Past Five Years ^a						
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
3830Q	15	5	33%	1.829	95%	No trend ^b	9	4	44%	1.291	90%	Decreasing
3830S	21	5	24%	2.520	98%	No trend ^b	11	3	27%	1.726	95%	No trend
3850N	21	19	90%	1.734	98%	Decreasing	8	7	88%	1.669	90%	No trend
3850V	12	5	42%	2.619	95%	No trend ^b	6	3	50%	1.914	90%	No trend
3872Q	9	8	89%	0.743	90%	Decreasing ^b	6	5	83%	0.773	90%	Decreasing
A-1-CW07	16	14	88%	0.661	95%	Stable	8	8	100%	0.481	90%	Stable
A-1-CW08	8	8	100%	0.586	90%	Increasing ^b	3	3	100%	c	c	c
B-1-CW12	23	7	30%	3.958	98%	No trend	10	2	20%	3.147	95%	No trend
B-1-CW13	22	19	86%	1.164	98%	Increasing	7	7	100%	0.672	90%	Stable
B-1-CW17	23	10	43%	4.764	98%	No trend	10	4	40%	1.871	95%	No trend
B-1-CW27	23	5	22%	4.081	98%	No trend	10	1	10%	3.162	95%	No trend
B-5-CW02	20	1	5%	4.472	98%	No trend	12	1	8%	3.464	95%	No trend
B-5-CW03	15	15	100%	0.571	95%	Increasing	10	10	100%	0.344	95%	Stable
B-6-CW01	11	0	0%	c	c	c	5	0	0%	c	c	c
B-6-CW02	14	3	21%	3.078	95%	No trend	8	3	38%	2.293	90%	No trend
B-6-CW03R	9	2	22%	1.986	90%	No trend	5	1	20%	2.236	90%	No trend
B-6-CW08	5	1	20%	2.236	90%	No trend ^b	5	1	20%	2.236	90%	No trend
B-6-CW09	6	3	50%	1.122	90%	No trend ^b	3	2	67%	c	c	c
B-6-CW14	9	3	33%	2.012	90%	No trend ^b	6	3	50%	1.575	90%	No trend
B-6-CW16	13	2	15%	3.564	95%	No trend	8	0	0%	c	c	c
B-6-CW17	9	4	44%	2.969	90%	No trend ^b	6	3	50%	2.431	90%	No trend
C-1-CW02	20	3	15%	4.239	98%	No trend	11	3	27%	3.135	95%	No trend
C-1-CW03	18	4	22%	3.690	95%	No trend	10	2	20%	2.744	95%	No trend
C-1-CW05	17	3	18%	3.559	95%	No trend	10	0	0%	c	c	c
C-1-CW06	16	1	6%	4.123	95%	No trend	9	0	0%	c	c	c
C-1-CW08	18	3	17%	4.057	95%	No trend	11	1	9%	3.317	95%	No trend
MW-01	2	2	100%	0.640	c	c	2	2	100%	c	c	c
MW-02	2	2	100%	0.083	c	c	2	2	100%	c	c	c
MW-03	13	13	100%	0.912	95%	Increasing	8	8	100%	0.520	90%	Stable
MW-04	11	11	100%	0.923	95%	Increasing	7	7	100%	0.511	90%	Increasing
MW-05	13	13	100%	1.115	95%	No trend	8	8	100%	0.764	90%	Decreasing
MW-06	11	11	100%	1.587	95%	No trend	6	6	100%	1.150	90%	No trend
MW-07	12	11	92%	1.164	95%	No trend	7	6	86%	0.834	90%	Stable
MW-08	11	11	100%	1.051	95%	Increasing ^c	6	6	100%	0.525	90%	Stable

Notes:

- Data collected from December 2007 to October 2012.
- No new data added to the dataset from the June 2012 statistical analysis.
- Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 9
Mann-Kendall Test Results for 1,4-Dioxane
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000					Data Collected in the Past Five Years ^a					
	Data	Detects	Detection Rate	Coefficient of Variation	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
3830Q	15	0	0%	c	c ^b	9	0	0%	c	c	c
3830S	16	8	50%	0.089	Stable ^b	9	4	44%	1.190	95%	Increasing
3850N	14	8	57%	1.388	No trend ^b	8	3	38%	1.428	90%	No trend
3850V	8	1	13%	2.828	No trend ^b	6	0	0%	c	c	c
3872Q	9	0	0%	c	c ^b	6	0	0%	c	c	c
A-1-CW07	10	2	20%	2.131	No trend ^b	8	2	25%	1.873	90%	No trend
A-1-CW08	6	2	33%	1.620	No trend ^b	5	2	40%	1.439	90%	No trend
B-1-CW13	11	3	27%	1.726	No trend ^b	6	2	33%	1.565	90%	No trend
B-1-CW27	14	0	0%	c	c ^b	8	0	0%	c	c	c
B-5-CW02	16	7	44%	1.199	No trend ^b	10	4	40%	1.295	95%	No trend
B-5-CW03	13	5	38%	1.425	No trend ^b	8	1	13%	2.828	90%	No trend
B-6-CW02	9	0	0%	c	c ^b	6	0	0%	c	c	c
B-6-CW03R	4	0	0%	c	c ^b	3	0	0%	c	c	c
B-6-CW08	5	1	20%	2.236	No trend ^b	5	1	20%	2.236	90%	No trend
B-6-CW09	5	1	20%	2.236	No trend ^b	3	1	33%	c	c	c
B-6-CW14	8	3	38%	1.382	No trend ^b	6	3	50%	1.098	90%	No trend
B-6-CW16	7	0	0%	c	c ^b	6	0	0%	c	c	c
B-6-CW17	8	2	25%	1.874	No trend ^b	6	2	33%	1.570	90%	No trend
C-1-CW02	15	3	20%	2.077	Increasing ^b	9	3	33%	1.506	90%	No trend
C-1-CW03	14	7	50%	1.165	Decreasing ^b	8	2	25%	1.965	90%	No trend
C-1-CW05	14	1	7%	3.742	No trend ^b	8	1	13%	2.828	90%	No trend
C-1-CW06	13	2	15%	2.444	No trend ^b	8	2	25%	1.854	90%	No trend
C-1-CW08	16	6	38%	1.472	Increasing ^b	9	4	44%	1.222	90%	Increasing
MW-01	2	2	100%	c	c	2	2	100%	c	c	c
MW-02	2	1	50%	c	c	2	1	50%	c	c	c
MW-03	13	4	31%	1.641	No trend	8	3	38%	1.448	90%	No trend
MW-04	11	1	9%	3.317	No trend	7	1	14%	2.646	90%	No trend
MW-05	13	2	15%	2.486	No trend	8	2	25%	1.890	90%	No trend
MW-06	12	3	25%	1.855	Increasing	7	3	43%	1.289	90%	No trend
MW-07	12	0	0%	c	c	7	0	0%	c	c	c
MW-08	12	5	42%	1.692	No trend	7	4	57%	1.393	90%	Increasing

Notes:

- a. Data collected from December 2007 to October 2012.
b. No new data added to the dataset from the June 2012 statistical analysis.
c. Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 10
Mann-Kendall Test Results for Total Chromium
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000					Data Collected in the Past Five Years ^a						
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
3880	9	9	100%	1.352	90%	No trend ^b	5	5	1	0.116	90%	Increasing
3850N	17	17	100%	0.517	95%	Stable	10	10	100%	0.603	95%	Decreasing
3872Q	10	5	50%	1.101	95%	No trend ^b	6	2	33%	1.595	90%	No trend
4959E	8	4	50%	1.285	90%	No trend ^b	6	3	50%	1.373	90%	No trend
4959H	9	6	67%	0.970	90%	Decreasing ^b	6	3	50%	1.382	90%	No trend
4959J	7	5	71%	1.024	90%	No trend	5	3	60%	0.985	90%	Stable
4959K	7	6	86%	0.686	90%	Stable ^b	5	4	80%	0.783	90%	Stable
A-1-CW07	15	9	60%	0.763	95%	Increasing	10	9	90%	0.508	95%	Stable
B-1-CW12	21	21	100%	1.044	98%	Decreasing	10	10	100%	0.207	95%	Stable
B-1-CW17	24	24	100%	0.390	98%	Decreasing	10	10	100%	0.314	95%	Stable
B-5-CW03	13	9	69%	0.930	95%	Stable	8	5	63%	1.109	90%	No trend
B-6-CW03R	7	1	14%	2.646	90%	No trend ^b	3	0	0%	c	c	c
B-6-CW08	7	2	29%	1.712	90%	No trend ^b	5	1	20%	2.236	90%	No trend
B-6-CW09	5	3	60%	0.952	90%	Stable ^b	3	1	33%	c	c	c
B-6-CW14	8	5	63%	0.861	90%	Stable ^b	6	3	50%	1.129	90%	No trend
B-6-CW16	13	4	31%	1.624	95%	No trend	8	3	38%	1.460	90%	No trend
B-6-CW17	8	4	50%	1.641	90%	Decreasing ^b	6	2	33%	1.549	90%	No trend
C-1-CW03	17	10	59%	1.210	95%	No trend	10	4	40%	1.459	95%	No trend
C-1-CW08	16	7	44%	2.451	95%	Decreasing	10	3	30%	1.656	95%	No trend
MW-01	2	1	50%	c	c	c	2	1	50%	c	c	c
MW-02	2	1	50%	c	c	c	2	1	50%	c	c	c
MW-03	13	8	62%	1.210	95%	No trend	8	4	50%	1.111	90%	No trend
MW-04	11	8	73%	0.776	95%	Stable	7	5	71%	0.784	90%	Stable
MW-05	13	10	77%	0.916	95%	Stable	8	3	38%	0.964	90%	Stable
MW-06	11	8	73%	0.844	95%	Decreasing	6	3	50%	1.140	90%	No trend
MW-07	12	8	67%	1.096	95%	No trend	7	4	57%	0.994	90%	Stable
MW-08	12	9	75%	0.858	95%	Stable	7	4	57%	1.073	90%	No trend

Notes:

- a. Data collected from December 2007 to October 2012.
b. No new data added to the dataset from the June 2012 statistical analysis.
c. Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 11
Mann-Kendall Test Results for Hexavalent Chromium
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Data Set Since 2000					Data Collected in the Past Five Years ^a						
	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result	Data	Detects	Detection Rate	Coefficient of Variation	Confidence	Result
3880	9	9	100%	0.549	90%	Stable ^b	5	5	100%	0.148	90%	Stable
3830Q	15	5	33%	1.715	95%	Decreasing ^b	9	0	0%	c	c	c
3830S	17	16	94%	1.287	95%	No trend ^b	9	8	89%	1.292	90%	No trend
3830N	17	17	100%	0.660	95%	Stable	10	10	100%	0.793	95%	Decreasing
3872Q	10	9	90%	0.707	95%	Stable ^b	6	6	100%	0.612	90%	Stable
4959E	8	8	100%	0.240	90%	Stable ^b	6	6	100%	0.219	90%	Stable
4959H	9	9	100%	2.977	90%	No trend ^b	6	6	100%	2.438	90%	No trend
4959J	7	7	100%	0.429	90%	Stable ^b	5	5	100%	0.304	90%	Stable
4959K	6	5	83%	0.714	90%	Stable ^b	4	3	75%	0.805	90%	Stable
A-1-CW07	13	12	92%	0.818	95%	Decreasing	10	9	90%	0.633	95%	Stable
B-1-CW12	21	21	100%	0.392	95%	Stable	10	10	100%	0.357	95%	Stable
B-1-CW17	24	24	100%	0.413	98%	Decreasing	10	10	100%	0.365	95%	Stable
B-5-CW02	18	8	44%	1.496	95%	Decreasing	12	3	25%	1.891	95%	No trend
B-5-CW03	15	14	93%	0.696	95%	Stable	9	9	100%	0.276	90%	Stable
B-6-CW01	7	7	100%	0.241	90%	Stable ^b	3	3	100%	c	c	c
B-6-CW02	10	10	100%	0.569	95%	Stable ^b	6	6	100%	0.568	90%	Stable
B-6-CW03R	6	2	33%	1.864	90%	No trend ^b	3	2	67%	c	c	c
B-6-CW08	7	0	0%	c	c	c ^b	5	0	0%	c	c	c
B-6-CW09	6	1	17%	2.449	90%	No trend ^b	3	0	0%	c	c	c
B-6-CW14	8	7	88%	1.050	90%	No trend ^b	6	5	83%	1.096	90%	No trend
B-6-CW16	10	10	100%	0.624	95%	Stable	8	8	100%	0.591	90%	Stable
B-6-CW17	8	8	100%	2.782	90%	No trend ^b	6	6	100%	2.438	90%	No trend
C-1-CW02	19	5	26%	2.059	95%	No trend	11	1	9%	3.317	95%	No trend
C-1-CW03	18	13	72%	1.046	95%	No trend	11	7	64%	1.188	95%	Increasing
C-1-CW05	17	4	24%	2.144	95%	Decreasing	11	0	0%	c	c	c
C-1-CW06	18	17	94%	0.383	95%	Stable	11	11	100%	0.283	95%	Stable
C-1-CW08	18	10	56%	1.314	95%	Decreasing	11	4	36%	2.294	95%	No trend
MW-01	2	2	100%	0.340	c	c	2	2	100%	c	c	c
MW-02	2	2	100%	0.634	c	c	2	2	100%	c	c	c
MW-03	13	12	92%	0.385	95%	Stable	8	8	100%	0.270	90%	Stable
MW-04	11	10	91%	0.354	95%	Stable	7	7	100%	0.138	90%	Stable
MW-05	13	13	100%	0.228	95%	Stable	8	8	100%	0.289	90%	Stable
MW-06	12	12	100%	0.334	95%	Stable	7	7	100%	0.446	90%	Stable
MW-07	12	11	92%	0.345	95%	Stable	7	7	100%	0.147	90%	Stable
MW-08	12	9	75%	0.621	95%	Stable	7	5	71%	0.710	90%	Increasing ^a

Notes:

- Data collected from December 2007 to October 2012.
- No new data added to the dataset from the June 2012 statistical analysis.
- Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.

Table 12
Mann-Kendall Test Summary
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Constituent	Increasing Trend	Decreasing Trend	Stable	No Trend	Insufficient Data	Total	No New Data in Data Set
Data Set Since 2000							
1,2,3-Trichloropropane	6	2	1	22	3	34	9
1,4-Dioxane	3	1	1	17	9	31	23
Chromium	1	6	8	10	2	27	10
Hexavalent Chromium	0	6	18	8	3	35	15
cis-1,2-Dichloroethene	1	2	0	15	39	57	26
Tetrachloroethene	3	23	17	10	4	57	26
Trichloroethene	2	20	16	14	5	57	26
Total	16	60	61	96	65	298	135
Data Collected in the Past 5 Years							
1,2,3-Trichloropropane	1	3	6	16	8	34	9 ^a
1,4-Dioxane	3	0	0	17	11	31	23 ^a
Chromium	1	1	8	13	4	27	10 ^a
Hexavalent Chromium	2	1	17	7	8	35	15 ^a
cis-1,2-Dichloroethene	0	2	2	11	42	57	26 ^a
Tetrachloroethene	0	15	34	1	7	57	26 ^a
Trichloroethene	1	14	29	5	8	57	26 ^a
Total	8	36	96	70	88	298	135

Note:

a. Data sets based upon the last five years with no new data are nonetheless different from the data set used in the last reporting period because data points from spring 2007 have been removed.

Table 13
Well Production Data - May through November 2012
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

Well ID	Total Monthly Production (gallons)							
	May 2012	June 2012	July 2012	August 2012	September 2012	October 2012	November 2012	
VO-1	41,951,088	50,515,430	34,618,312	35,007,432	28,388,471	0	0	
VO-2	2,623,439	347,977	10,219,795	12,176,273	36,460,480	44,720,076	36,779,442	
VO-3	43,913,718	41,378,538	31,635,403	39,489,495	28,853,557	38,170,465	42,017,348	
VO-4	25,174,018	54,651,261	44,833,278	50,181,807	52,746,049	52,814,836	43,831,689	
VO-5	24,432,067	32,626,237	41,223,135	52,629,649	49,979,605	49,857,132	26,871,778	
VO-6	61,417,241	35,665,731	38,630,955	51,112,154	45,442,571	41,346,302	52,047,497	
VO-7	49,317,812	52,644,101	72,445,580	60,410,750	53,139,704	59,640,862	51,164,949	
VO-8	56,901,659	63,627,839	57,700,609	54,457,716	63,346,898	66,317,138	61,847,548	

Note:

- a. Well production data from Monthly Department of Public Health Operations Reports for May through November 2012

Table 14
Water Table Hydrostratigraphic Unit Horizontal Gradient TIN Network
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

TIN Cell	Date	Monitoring Well Groundwater Elevations (feet amsl)			Hydraulic Gradient	Flow Direction Azimuth (degrees)
		B-5-CW03	A-1-CW09	3851M		
TIN A	October 2012	489.50	473.61	477.50	0.007	69°
		A-1-CW09	B-1-CW13	3851M		
TIN B	October 2012	473.61	466.44	477.50	0.004	56°
		B-1-CW13	3851M	3861D		
TIN C	October 2012	466.44	477.50	467.34	0.004	52°
		3861D	3851M	3852K		
TIN D	October 2012	467.34	477.50	479.02	0.003	66°
		3852K	PW-01	3861D		
TIN E	October 2012	479.02	469.77	467.34	0.004	32°
		B-1-CW13	B-1-CW25	3861D		
TIN F	October 2012	466.44	460.36	467.34	0.005	53°
		B-1-CW25	B-1-CW12	3861D		
TIN G	October 2012	460.36	464.87	467.34	0.004	353°
		PW-01	B-1-CW12	3861D		
TIN H	October 2012	469.77	464.87	467.34	0.003	356°
		B-1-CW12	PW-01	3871G		
TIN I	October 2012	464.87	469.77	466.88	0.001	52°
		B-1-CW12	B-1-CW17	3871G		
TIN J	October 2012	464.87	466.63	466.88	0.001	329°
		B-1-CW17	B-1-CW12	3880		
TIN K	October 2012	466.63	464.87	474.75	0.005	247°
		3852K	3852G	3852M		
TIN L	October 2012	479.02	474.30	471.63	0.003	159°
		3852K	3852M	PW-02		
TIN M	October 2012	479.02	471.63	470.17	0.003	117°
		3852K	PW-01	PW-02		
TIN N	October 2012	479.02	469.77	470.17	0.003	70°
		PW-01	PW-02	3871G		
TIN O	October 2012	469.77	470.17	466.88	0.001	60°
		PW-02	3852M	3862D		
TIN P	October 2012	470.17	471.63	468.22	0.002	107°
		PW-02	3862D	3871G		
TIN Q	October 2012	470.17	468.22	466.88	0.002	112°
		3872K	3862D	3871G		
TIN R	October 2012	467.00	468.22	466.88	0.0006	65°
		3872Q	3872K	3871G		
TIN S	October 2012	466.46	467.00	466.88	0.0008	66°
		3872Q	B-1-CW17	3871G		
TIN T	October 2012	466.46	466.63	466.88	0.0003	107°

Notes:

amsl - Above mean sea level
BOU - Burbank Operable Unit
gpm - Gallons per minute
NA - Not applicable
NM - Not measured
TIN - Triangular irregular network

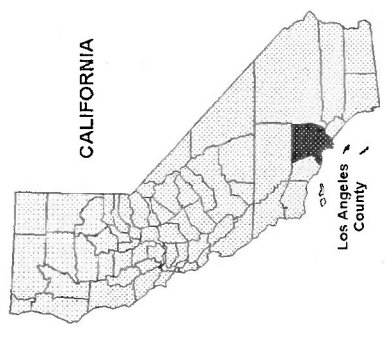
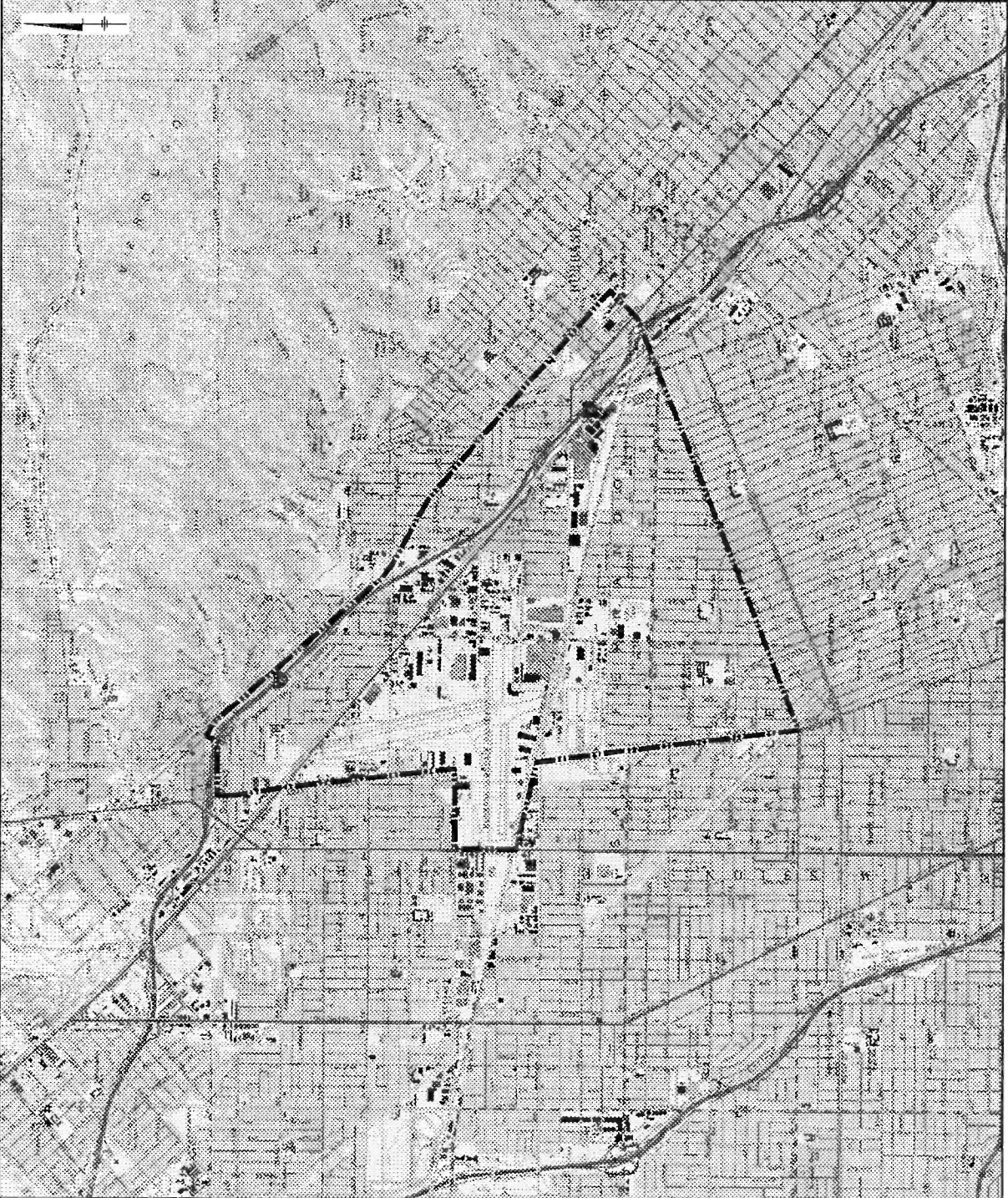
Table 15
B Hydrostratigraphic Unit Horizontal Gradient TIN Network
Semiannual Groundwater Monitoring Report - Fourth Quarter 2012
Lockheed Martin Corporation
Burbank Operable Unit, Burbank, California

TIN Cell	Date	Monitoring Well Groundwater Elevations (feet amsl)			Hydraulic Gradient	Flow Direction Azimuth (degrees)
		A-1-CW05	3850R	3851N		
TIN A	October 2012	483.15	477.88	478.48	0.003	116°
		3851N	3850R	B-1-CW28		
TIN B	October 2012	478.48	477.88	476.39	0.002	110°
		B-1-CW28	3851N	3861F		
TIN C	October 2012	476.39	478.48	473.68	0.001	107°
		3861F	B-1-CW28	B-1-CW27		
TIN D	October 2012	473.68	476.39	475.13	0.001	146°
		B-1-CW27	3861F	B-1-CW11		
TIN E	October 2012	475.13	473.68	475.64	0.0008	207°
		B-1-CW11	3861F	B-1-CW20		
TIN F	October 2012	475.64	473.68	475.39	0.0008	214°
		3851N	3852H	3861F		
TIN G	October 2012	478.48	474.20	473.68	0.002	130°
		3852N	3852H	3861F		
TIN H	October 2012	470.53	474.20	473.68	0.002	130°
		3852N	3861F	3862E		
TIN I	October 2012	470.53	473.68	473.76	0.001	246°
		3861F	3862E	3871J		
TIN J	October 2012	473.68	473.76	474.03	0.0001	259°
		3861F	3871J	B-1-CW20		
TIN K	October 2012	473.68	474.03	475.39	0.0009	208°
		3871J	B-1-CW20	3872S		
TIN L	October 2012	474.03	475.39	473.68	0.0009	211°
		3862E	3872S	3871J		
TIN M	October 2012	473.76	473.68	474.03	0.0002	157°
		3862E	3872S	3872M		
TIN N	October 2012	473.76	473.68	473.83	0.0001	357°

Notes:

- a. January BOU treatment system daily average pumping at 7.9 million gallons per day (average pumping rate of 1,213 gpm during the gauging event)
 - b. April BOU treatment system daily average pumping at 8.3 million gallons per day (average pumping rate of 1,385 gpm during the gauging event)
- amsl - Above mean sea level
BOU - Burbank Operable Unit
gpm - Gallons per minute
NA - Not applicable
NM - Not measured
TIN - Triangular irregular network

Figures



CALIFORNIA

Los Angeles County

LEGEND

 Burbank Operable Unit Boundary

REFERENCE:
U.S.G.S 7.5 Minute Series
Topographic Quadrangles:
Burbank, California, 1872/1882,
Van Nuys, California 1880.

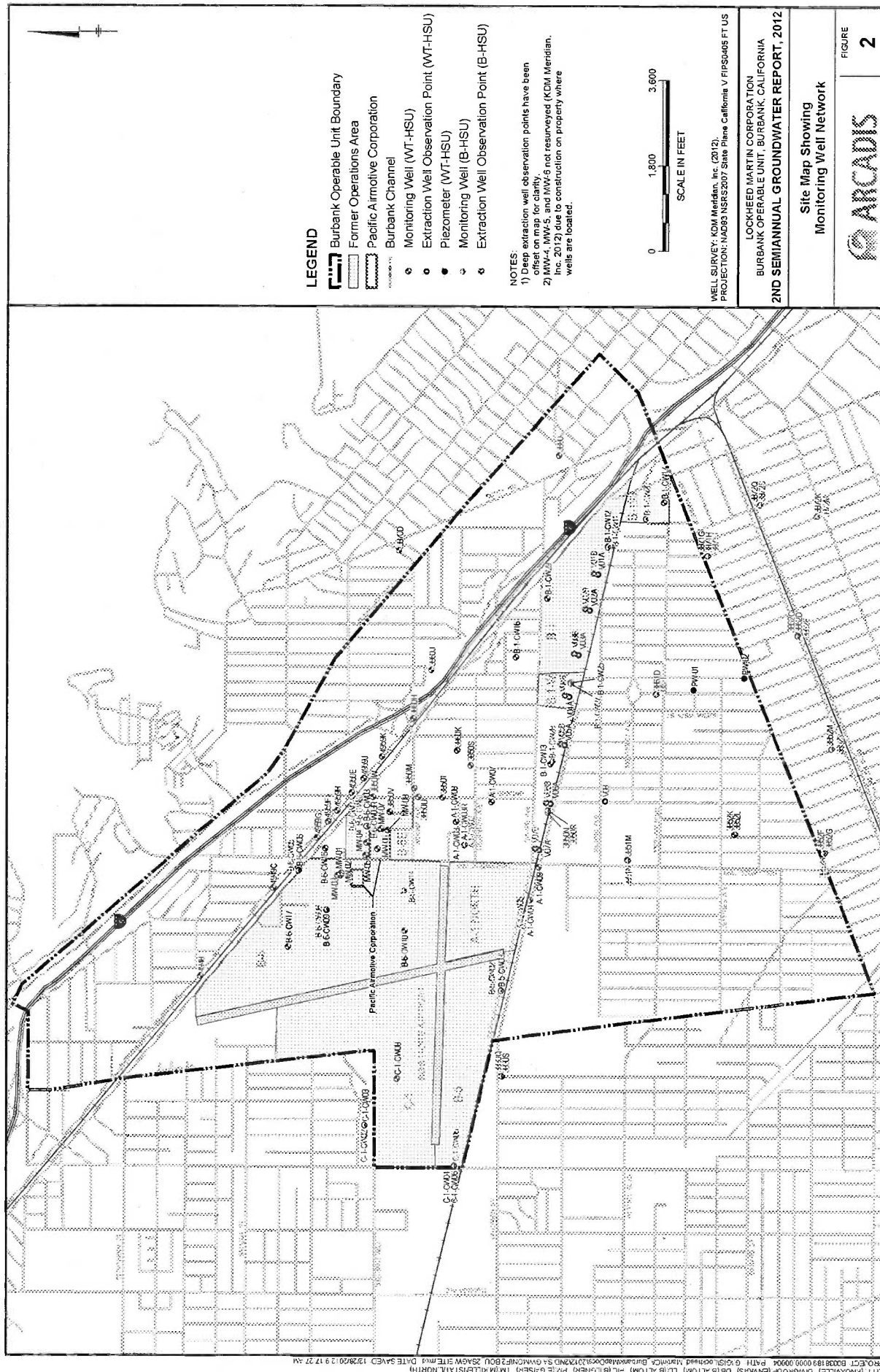
SITE LOCATION
LAT 34.1866 / LONG -118.3473

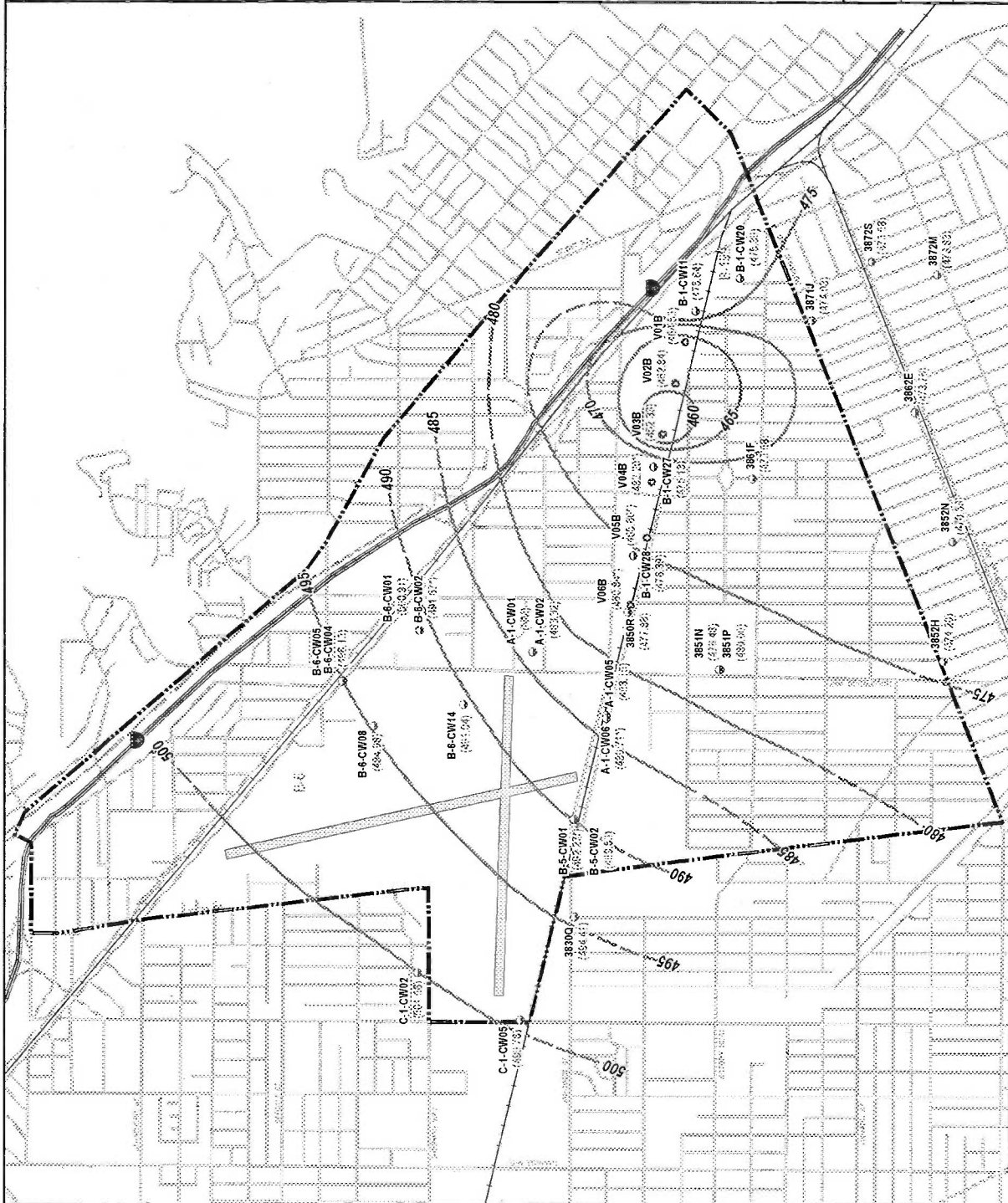


PROJECTION: NAD83 NRS2007 State Plane California V FIPS4005 FT US
SOURCE: ESRI Online Services (USA Topo Maps)

LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

Site Location Map





LEGEND

- Burbank Operable Unit Boundary
- Burbank Channel
- Monitoring Well (B-HSU)
- Extraction Well Observation Point (B-HSU)
- Water Table Contour Line (ft amsl)
- (inferred where dashed)
- Groundwater Elevation (ft amsl)
- Not Measured
- Measurement deemed anomalous and not used to construct contours.
- ft amsl - feet above mean sea level



SCALE IN FEET

WELL SURVEY: NDM Meridian, Inc. (2012).
PROJECTION: NAD83 NRSRS2007 State Plane California V FIPS5405 FT US

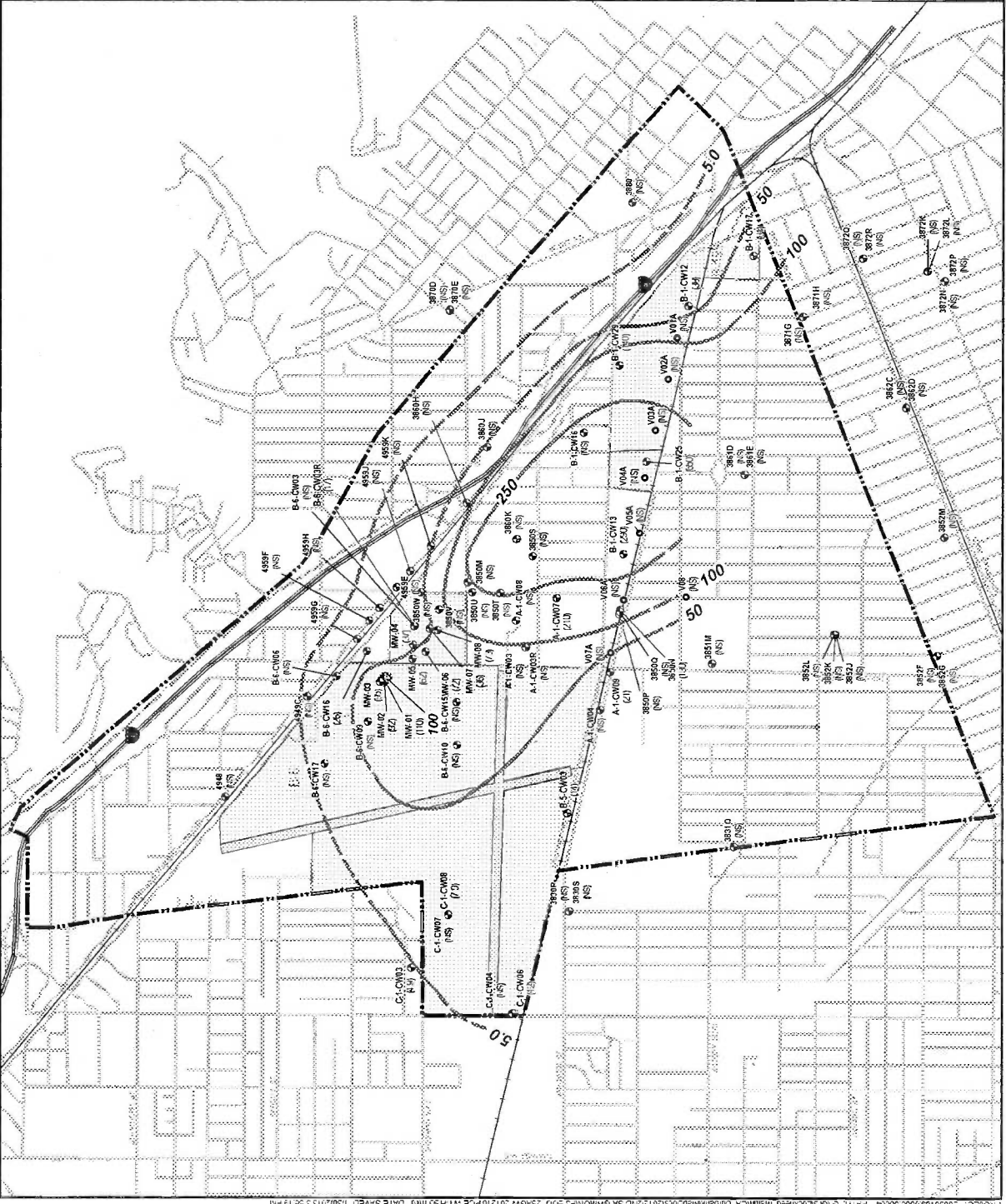
LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

Potentiometric Surface Map
of B-HSU, October 2012

FIGURE

ARCADIS

4



LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (WT-HSU)
- Extraction Well Observation Point (WT-HSU)
- Tetrachloroethene Isocentour (µg/L)
- (Inferred where dashed)
- (NS) Not Sampled
- (ND) Not Detected
- (B) Tetrachloroethene Concentration (µg/L)

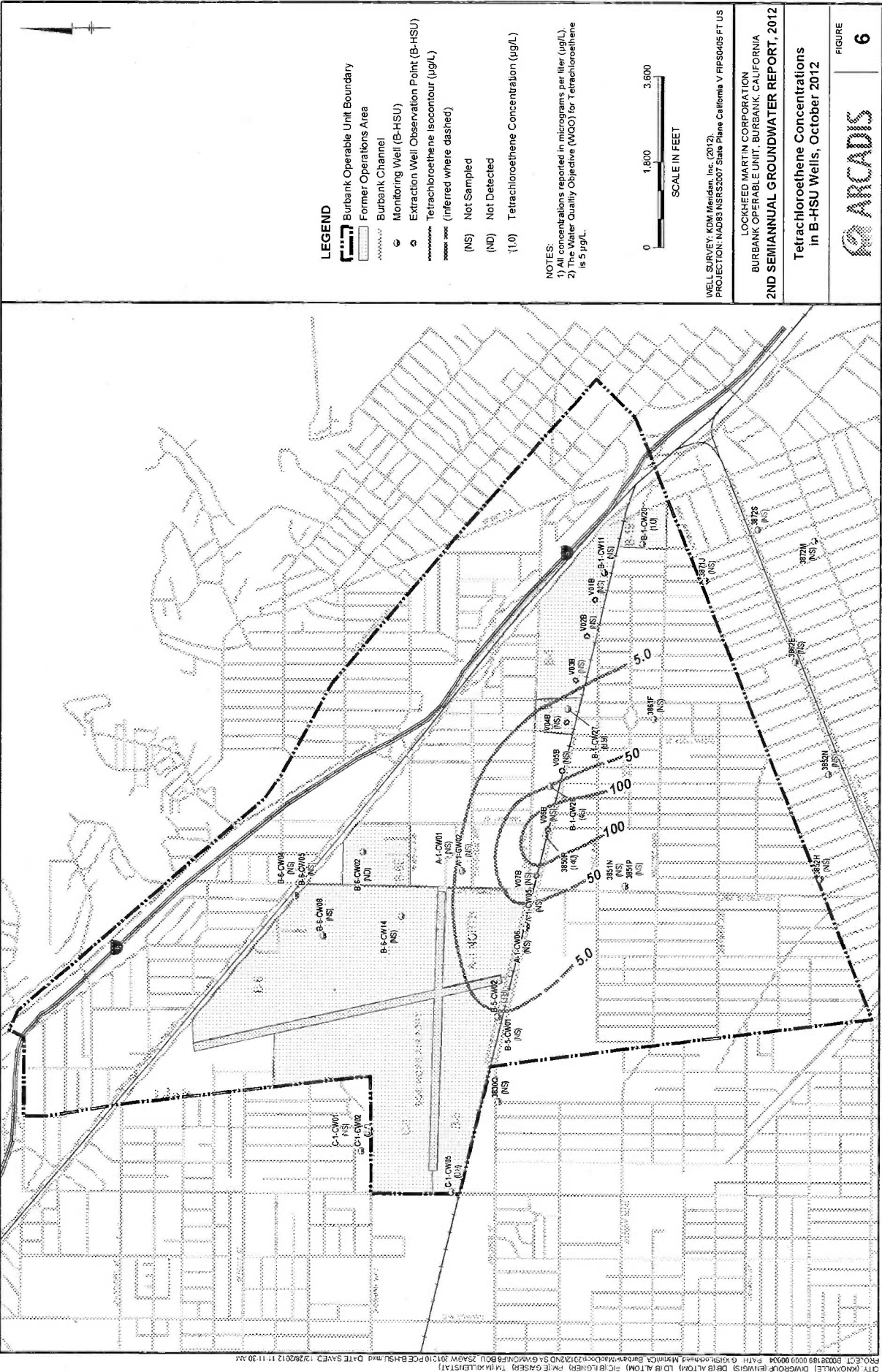
NOTES:
 1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for Tetrachloroethene is 5 µg/L.

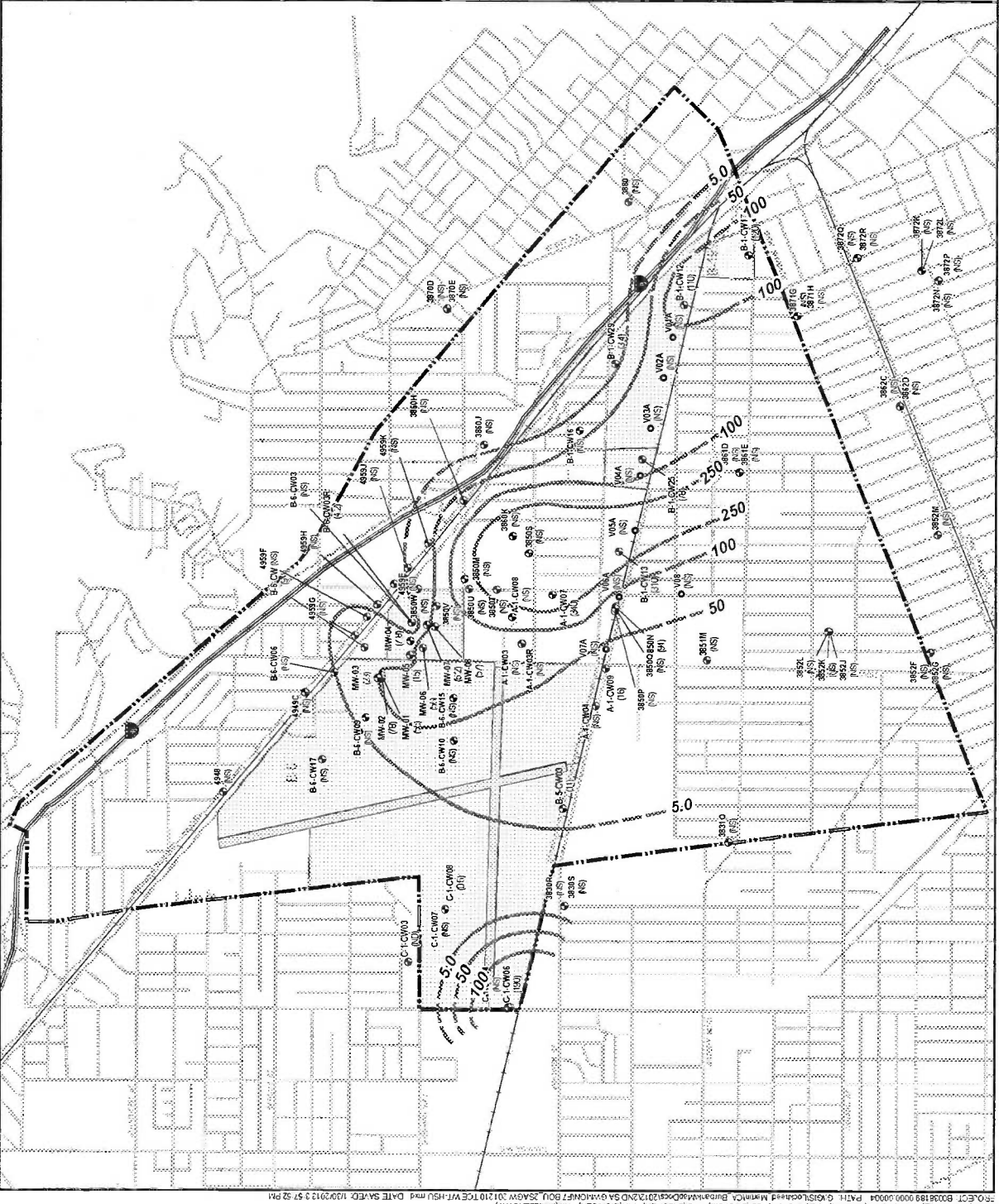


WELL SURVEY: KDM Meridian, Inc. (2012).
 PROJECTION: NAD83 NRSR207 State Plane California V/FPS0405 FT US

LOCKHEED MARTIN CORPORATION
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 2ND SEMIANNUAL GROUNDWATER REPORT, 2012

Tetrachloroethene Concentrations
 in WT-HSU Wells, October 2012





LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (WT-HSU)
- Extraction Well Observation Point (WT-HSU)
- Trichloroethene Isocontour (µg/L)
- (inferred where dashed)
- (NS) Not Sampled
- (ND) Not Detected
- (110) Trichloroethene Concentration (µg/L)

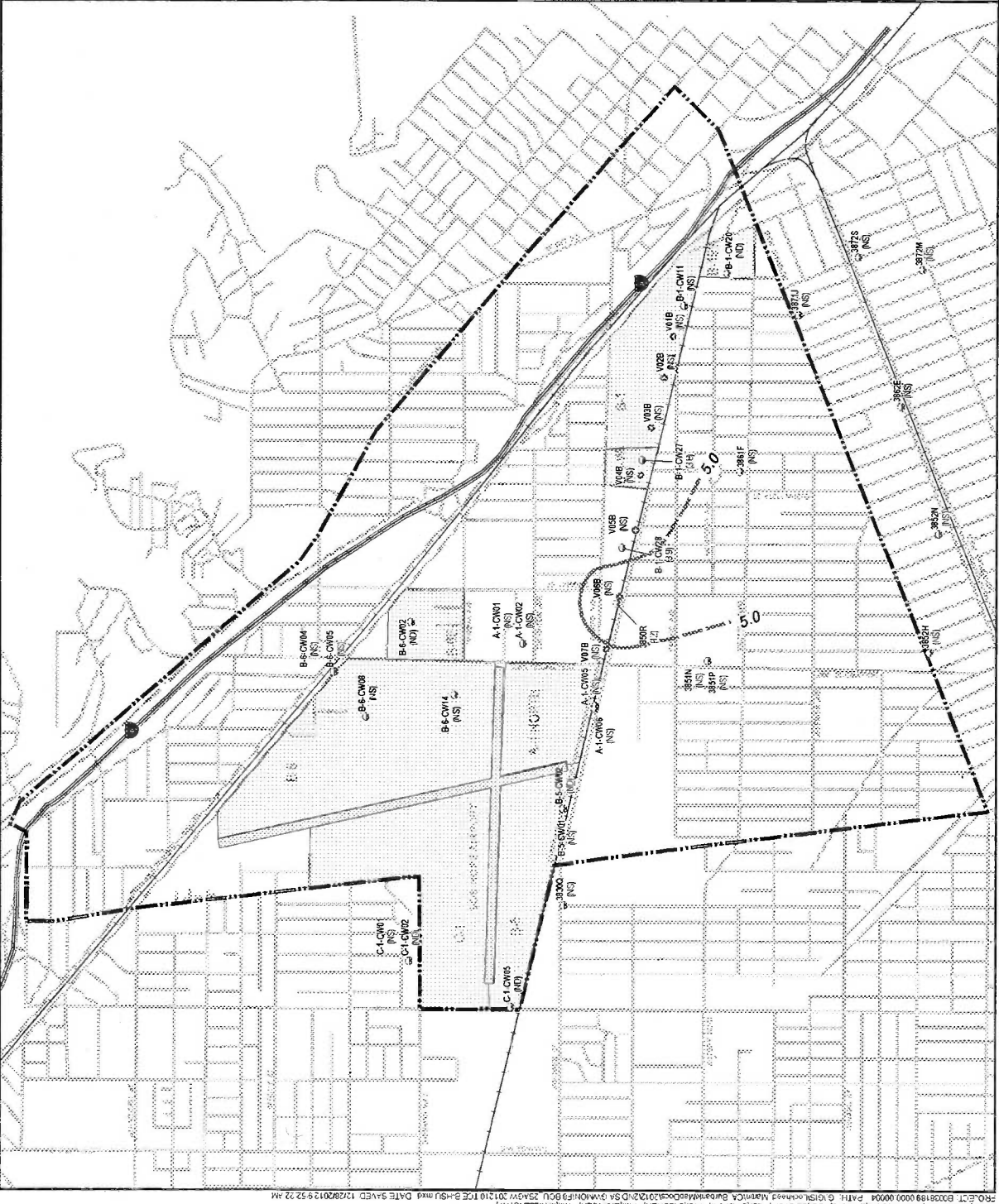
NOTES:
 1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for Trichloroethene is 5 µg/L.



WELL SURVEY: KDM Meidan, Inc. (2012).
 PROJECTION: NAD83 NRS2007 State Plane California V FIPS0405 FT US

LOCKHEED MARTIN CORPORATION
 BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
 2ND SEMIANNUAL GROUNDWATER REPORT, 2012

Trichloroethene Concentrations
 in WT-HSU Wells, October 2012



LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (B-HSU)
- Extraction Well Observation Point (B-HSU)
- Trichloroethene Isocontour (µg/L)
- Trichloroethene Concentration (µg/L)
- (NS) Not Sampled
- (ND) Not Detected
- (38) Trichloroethene Concentration (µg/L)

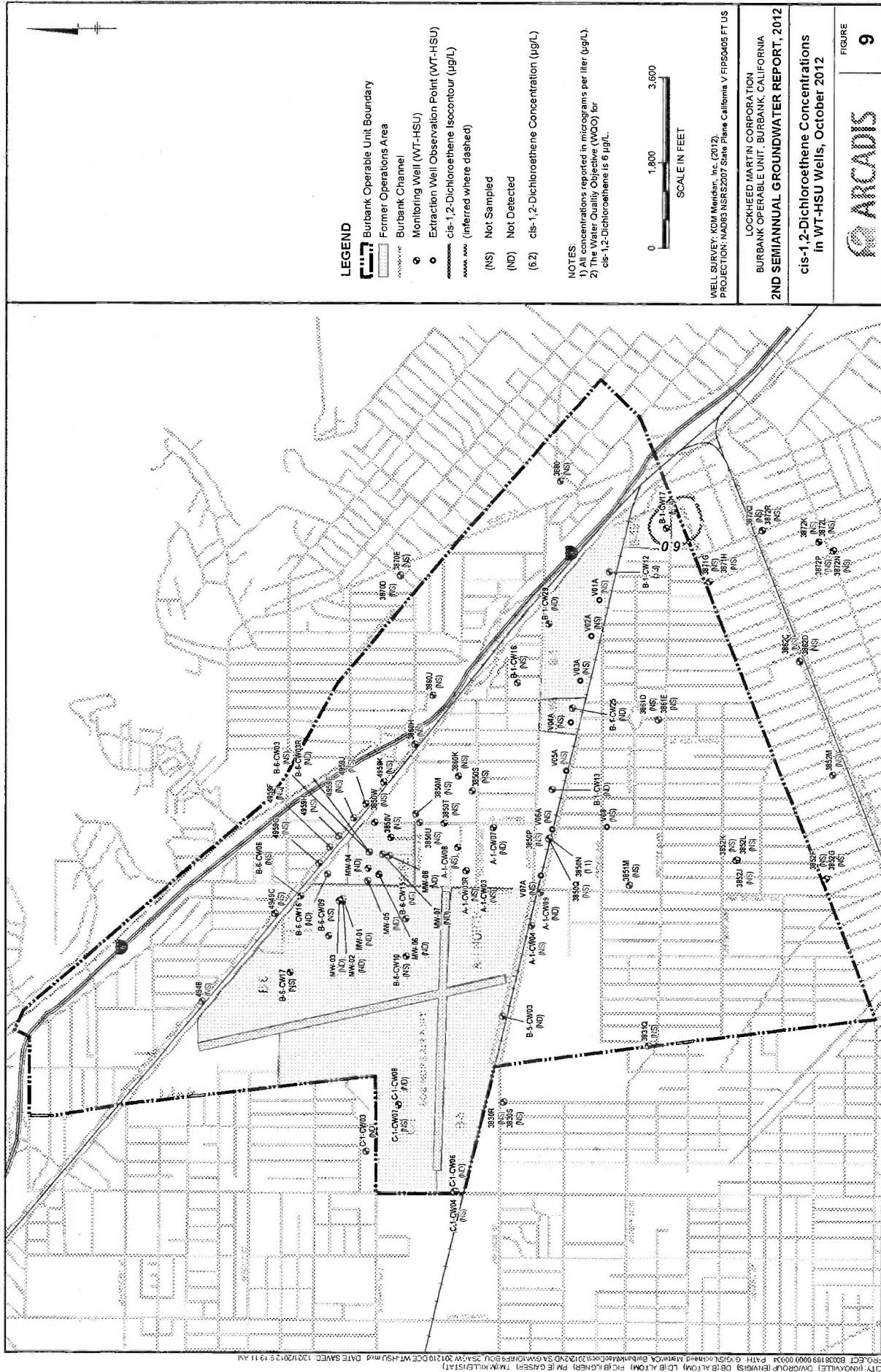
NOTES:
 1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for Trichloroethene is 5 µg/L.

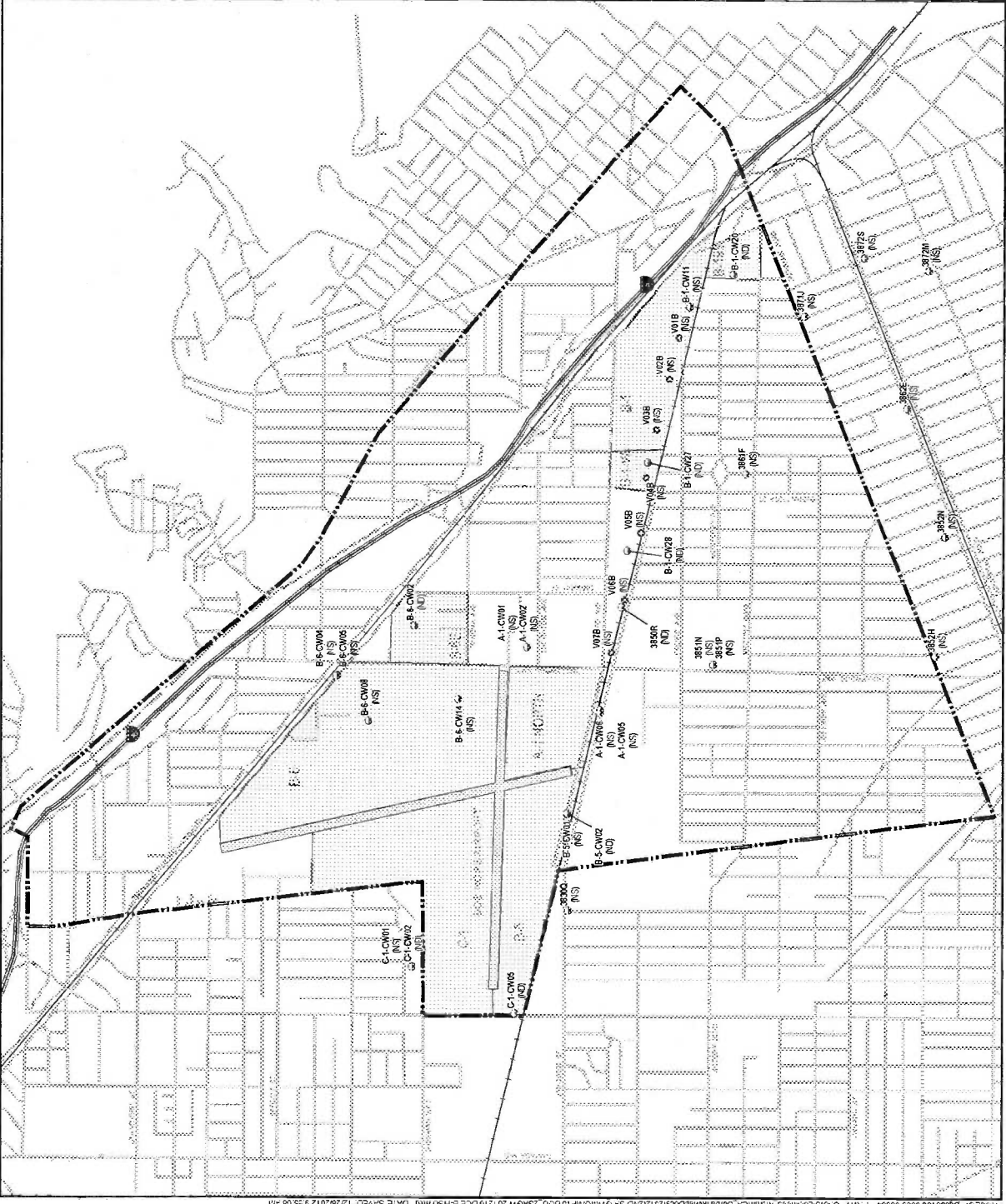


WELL SURVEY: KDM Mordan, Inc. (2012).
 PROJECTION: NAD83 NRS2007 State Plane California V FIPS9405 FT US

LOCKHEED MARTIN CORPORATION
 BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

**Trichloroethene Concentrations
 in B-HSU Wells, October 2012**





LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (B-HSU)
- Extraction Well Observation Point (B-HSU)
- (NS) Not Sampled
- (ND) Not Detected

NOTES:
 1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for cis-1,2-Dichloroethene is 6 µg/L.
 3) No 1,2-Dichloroethene results were detected in the B-HSU wells for this sampling round.

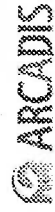


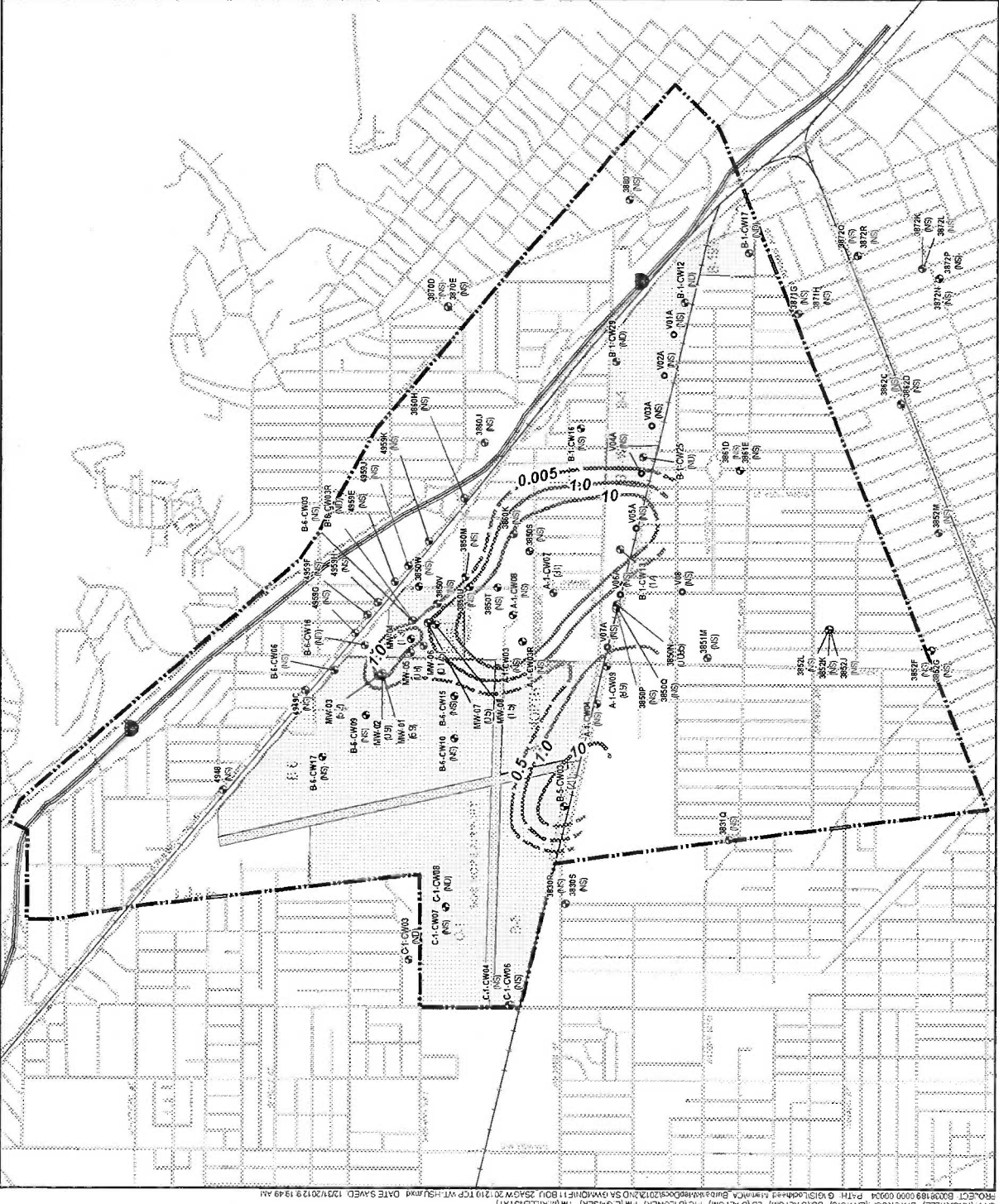
WELL SURVEY: KDM Meridian, Inc. (2012).
 PROJECTION: NAD83 NRS2007 State Plane California V FIPS405 FT US

LOCKHEED MARTIN CORPORATION
 BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
 2ND SEMIANNUAL GROUNDWATER REPORT, 2012

cis-1,2-Dichloroethene Concentrations
 in B-HSU Wells, October 2012

FIGURE
 10





LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (WT-HSU)
- Extraction Well Observation Point (WT-HSU)
- 1,2,3-Trichloropropane Isocontour (µg/L)
- (inferred where dashed)
- (NS) Not Sampled
- (ND) Not Detected
- (g1) 1,2,3-Trichloropropane Concentration (µg/L)

NOTES

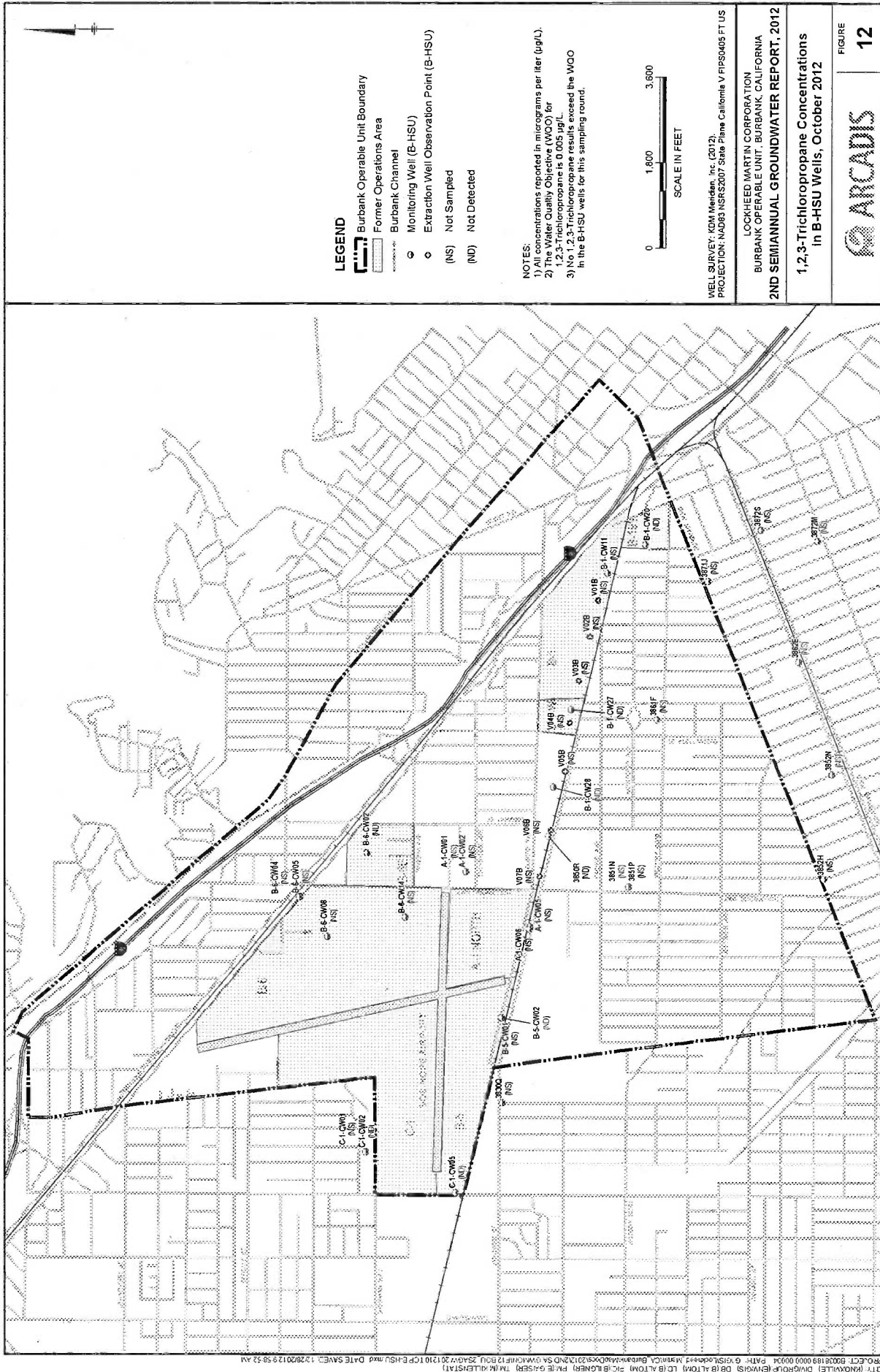
- 1) All concentrations reported in micrograms per liter (µg/L).
- 2) The Water Quality Objective (WQO) for 1,2,3-Trichloropropane is 0.005 µg/L.

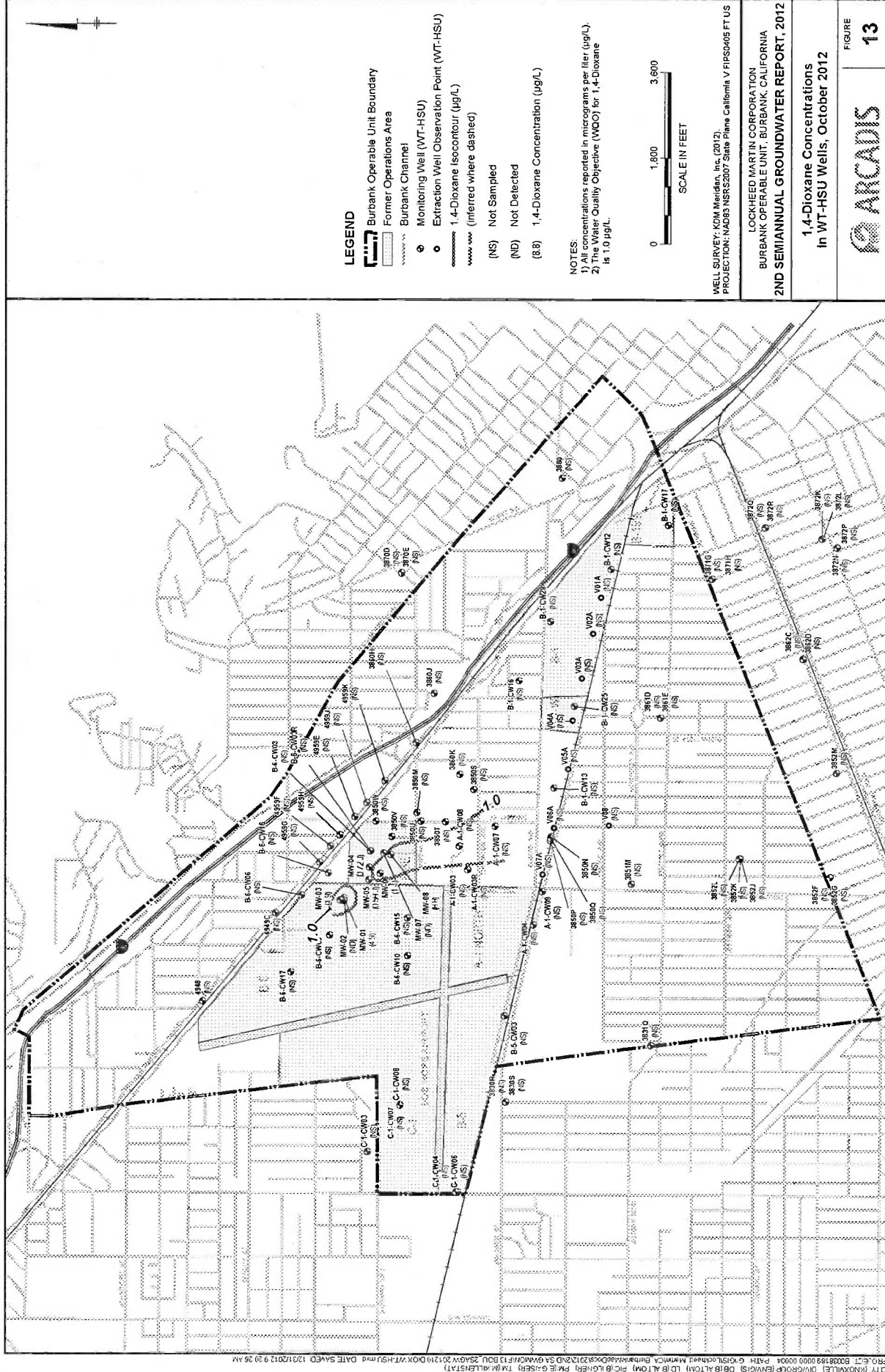


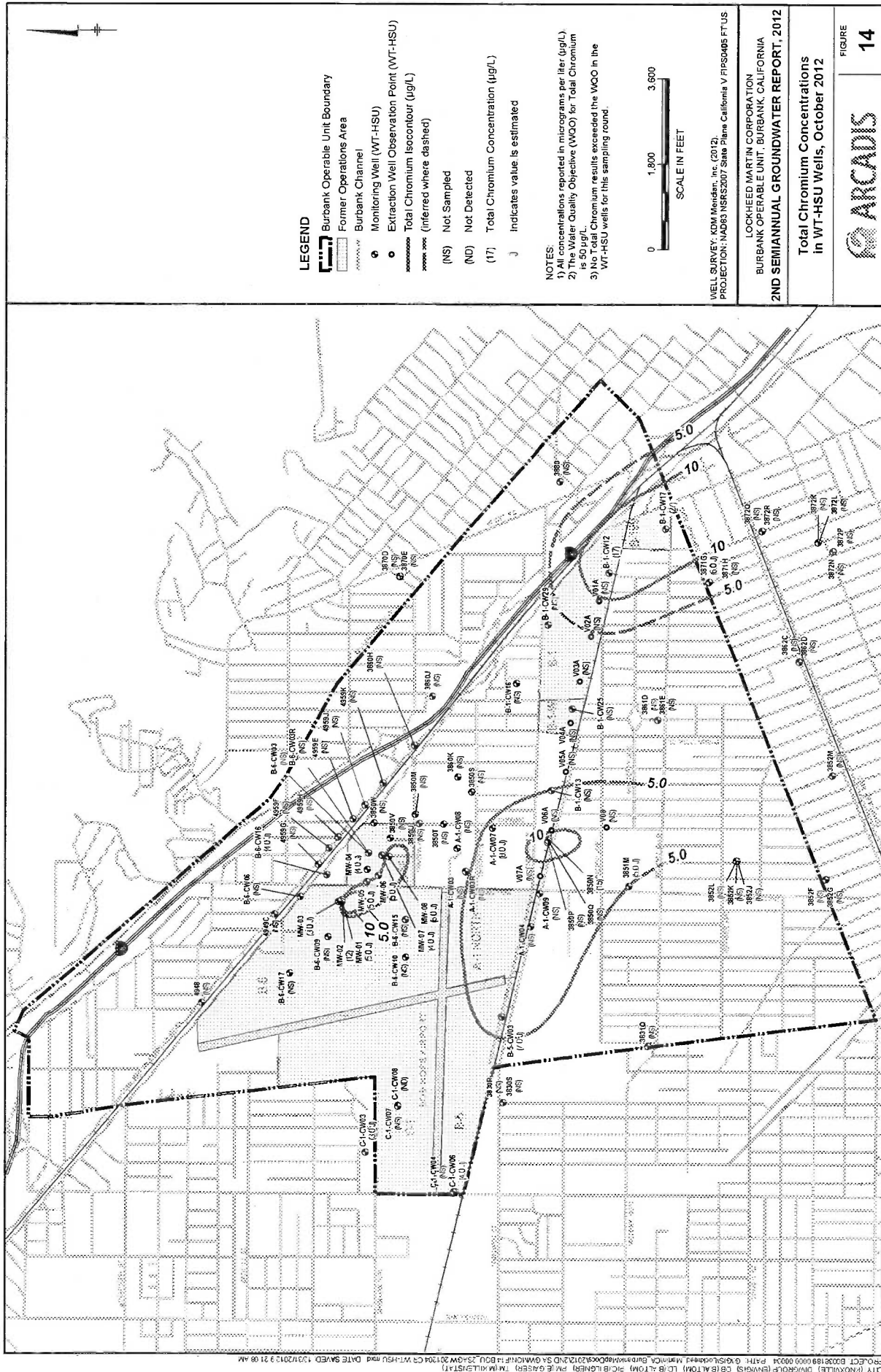
WELL SURVEY: KDM Meridian, Inc. (2012).
PROJECTION: NAD83 NRS2007 State Plane California V FIPS405 FT US

LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

1,2,3-Trichloropropane Concentrations
in WT-HSU Wells, October 2012







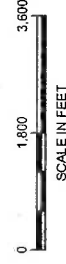


LEGEND

- Burbank Operable Unit Boundary
- Former Operations Area
- Burbank Channel
- Monitoring Well (B-HSU)
- Extraction Well Observation Point (B-HSU)
- (NS) Not Sampled
- (ND) Not Detected
- (40-J) Total Chromium Concentration (µg/L)
- J Indicates value is estimated

NOTES:

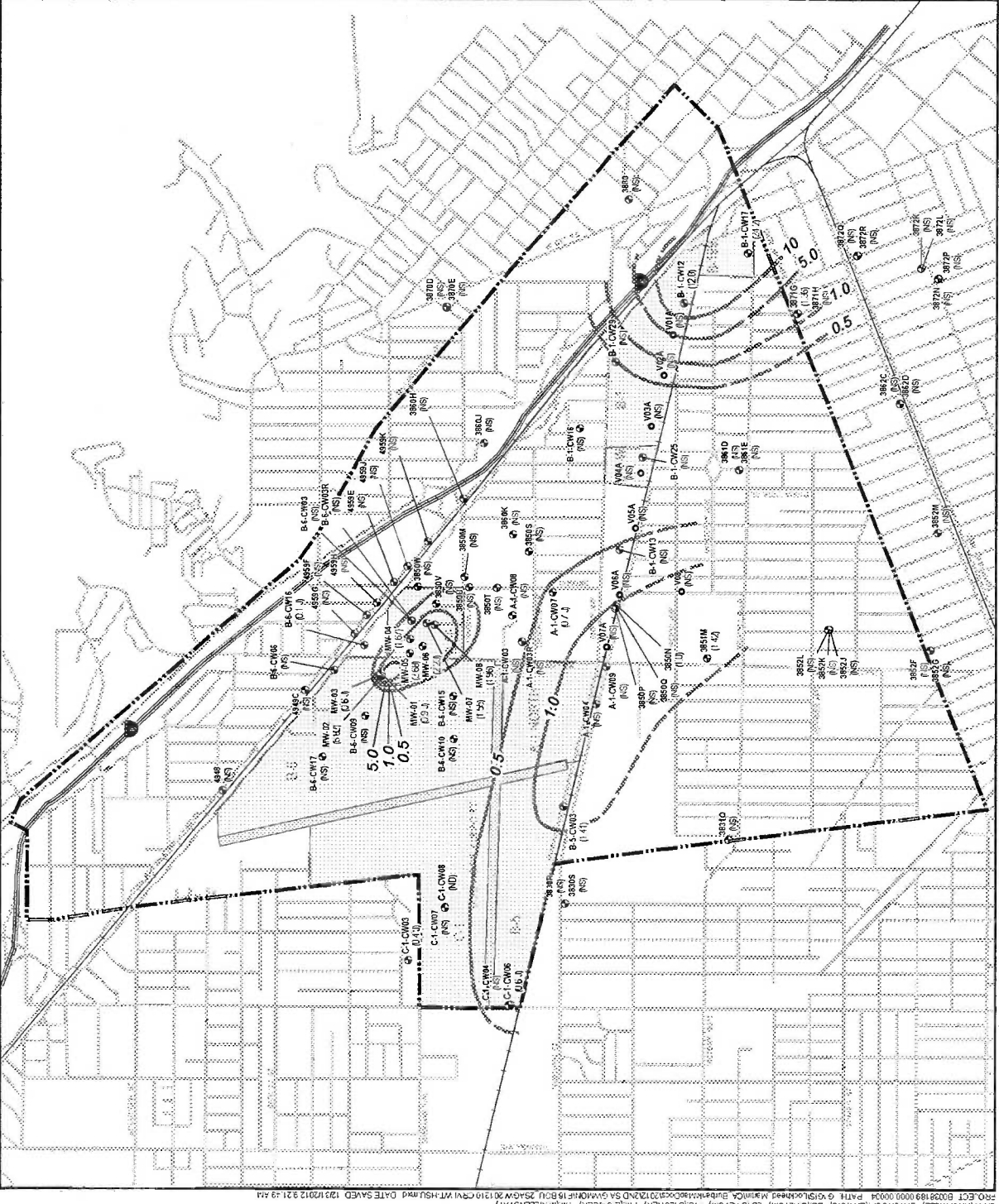
- 1) All concentrations reported in micrograms per liter (µg/L).
- 2) The Water Quality Objective (WQO) for Total Chromium is 50 µg/L.
- 3) No Total Chromium results exceeded the WQO in the B-HSU wells for this sampling round.

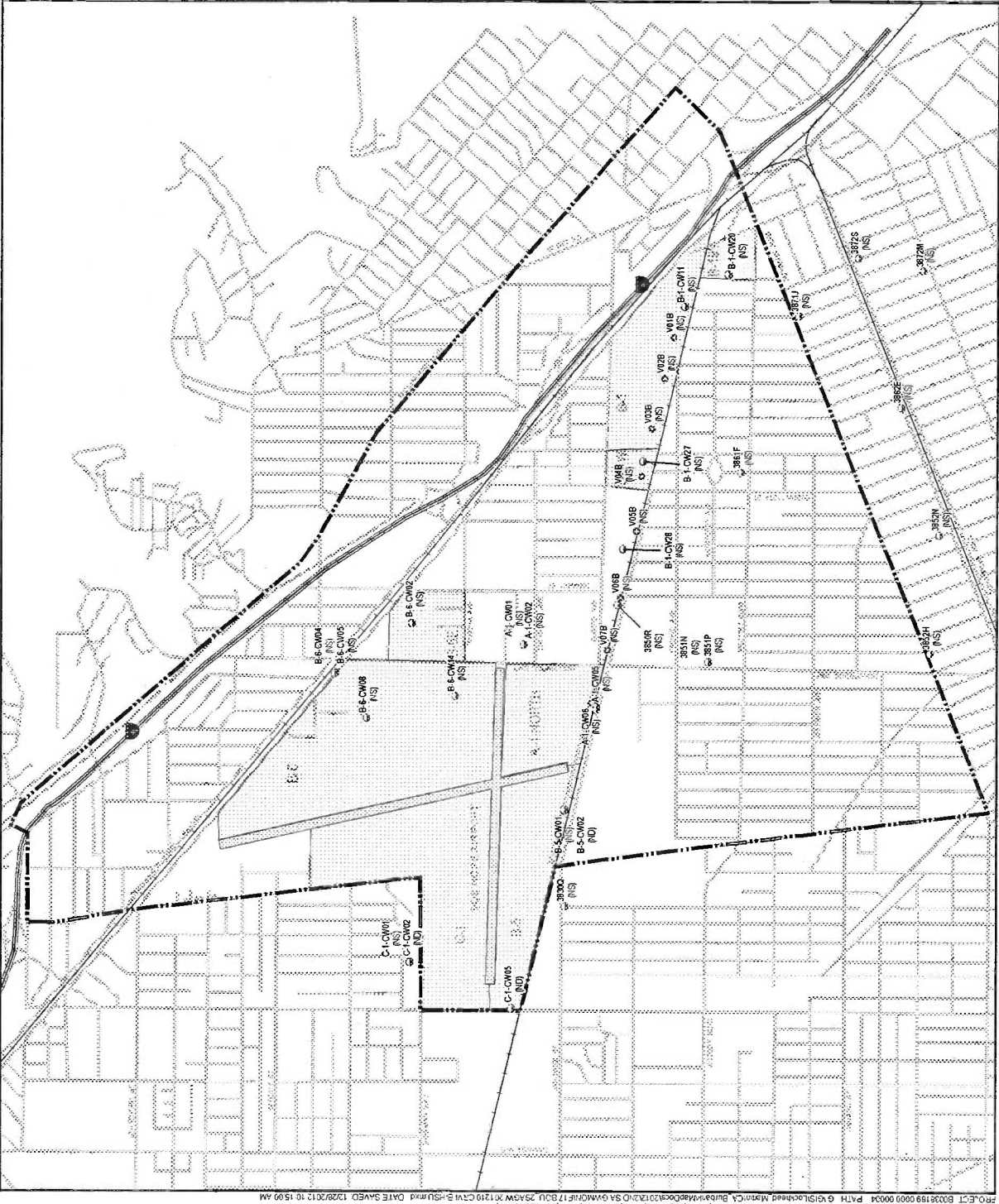


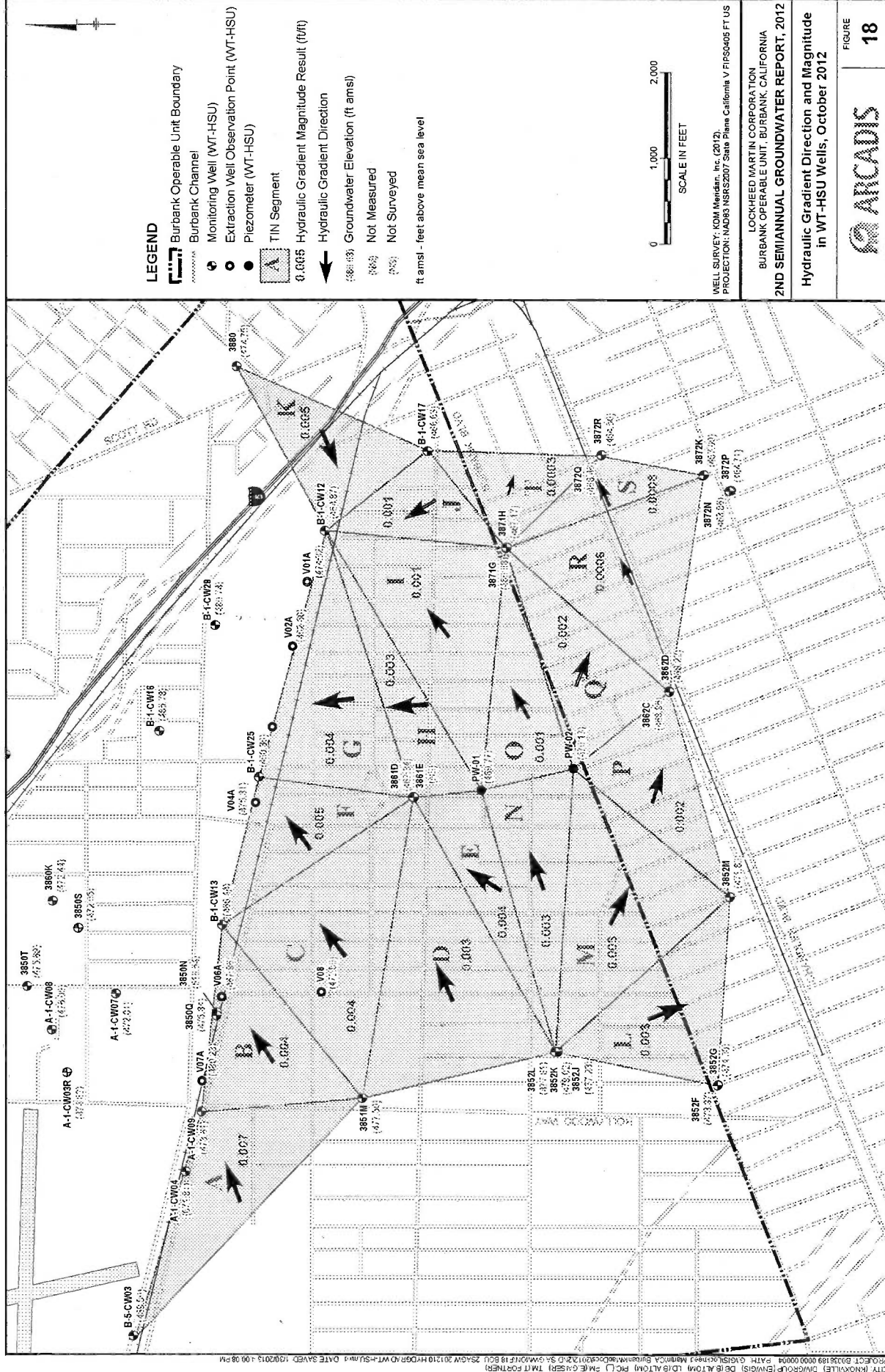
WELL SURVEY: KDM Meridian, Inc. (2012).
PROJECTION: NAD83 NRS2007 State Plane California V FIPS0405 FT US

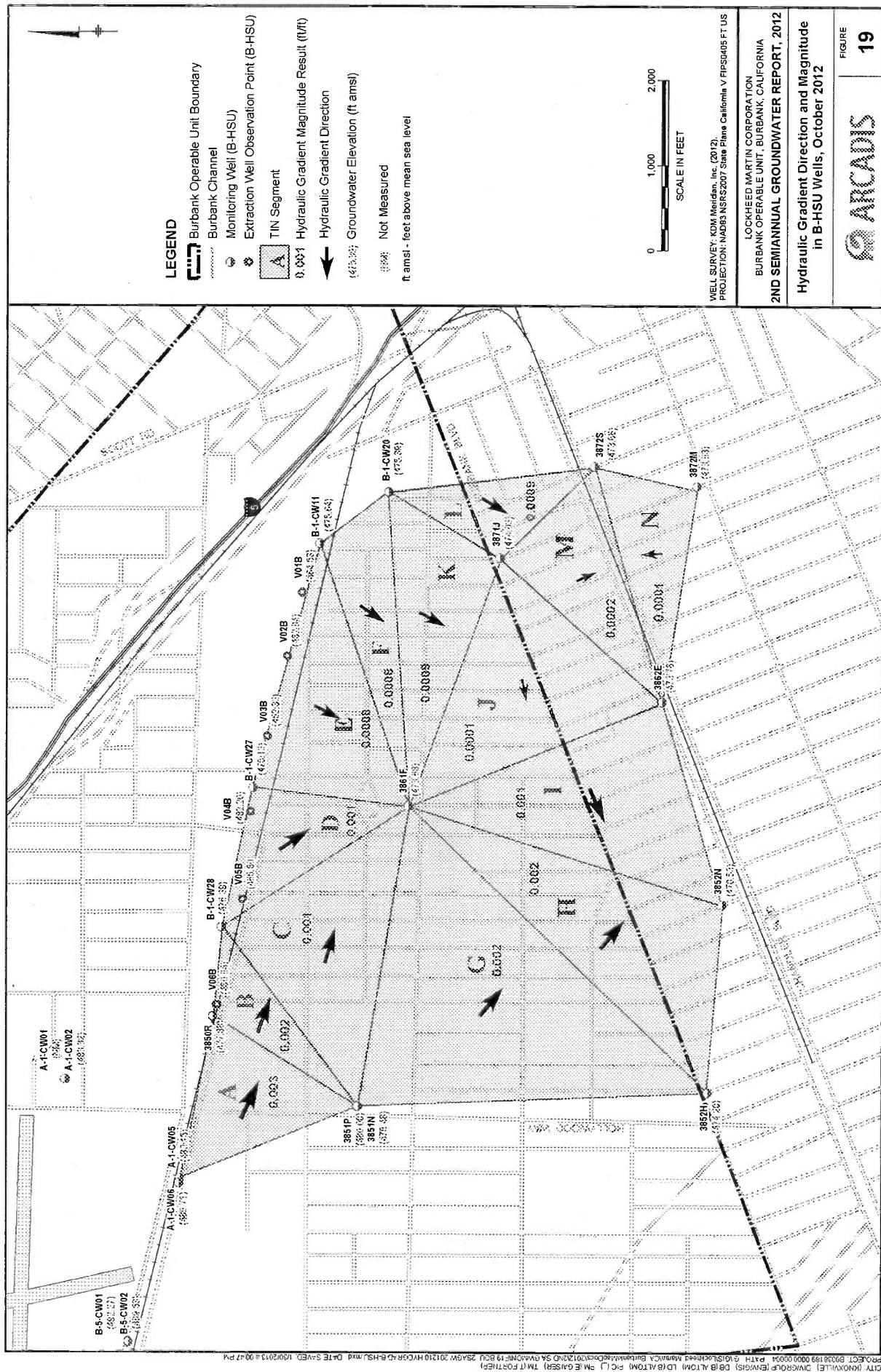
LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

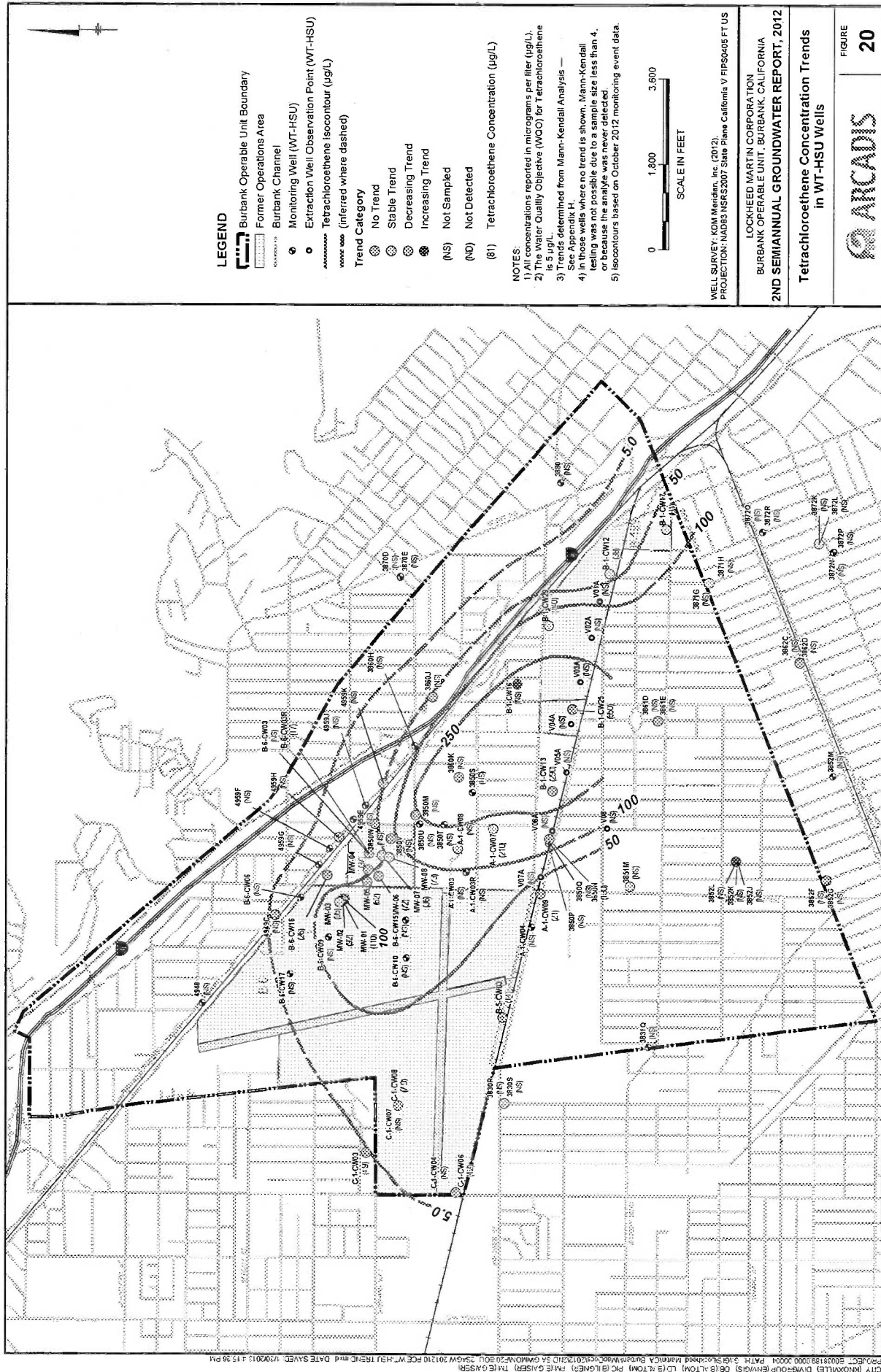
Total Chromium Concentrations
in B-HSU Wells, October 2012

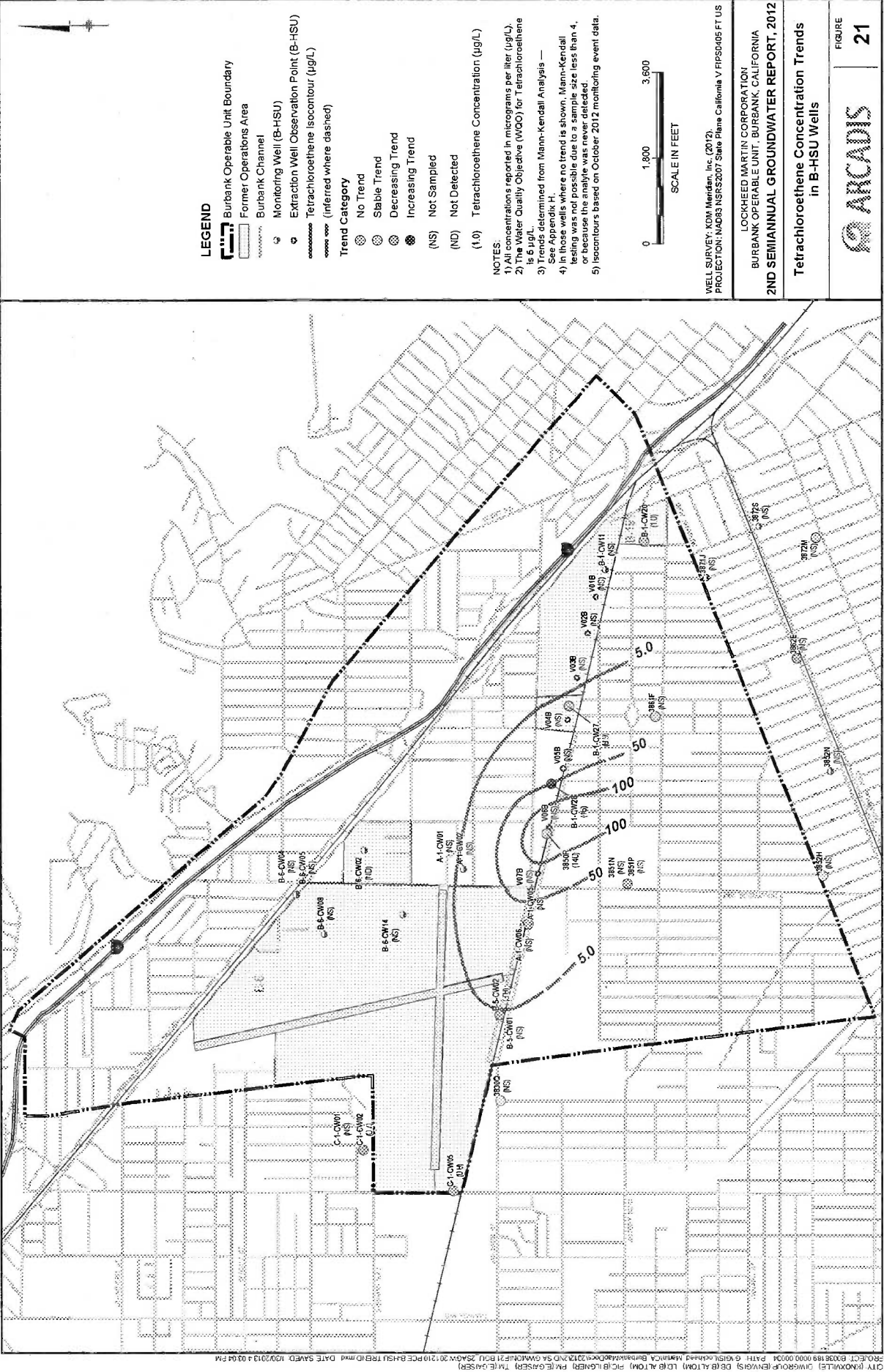


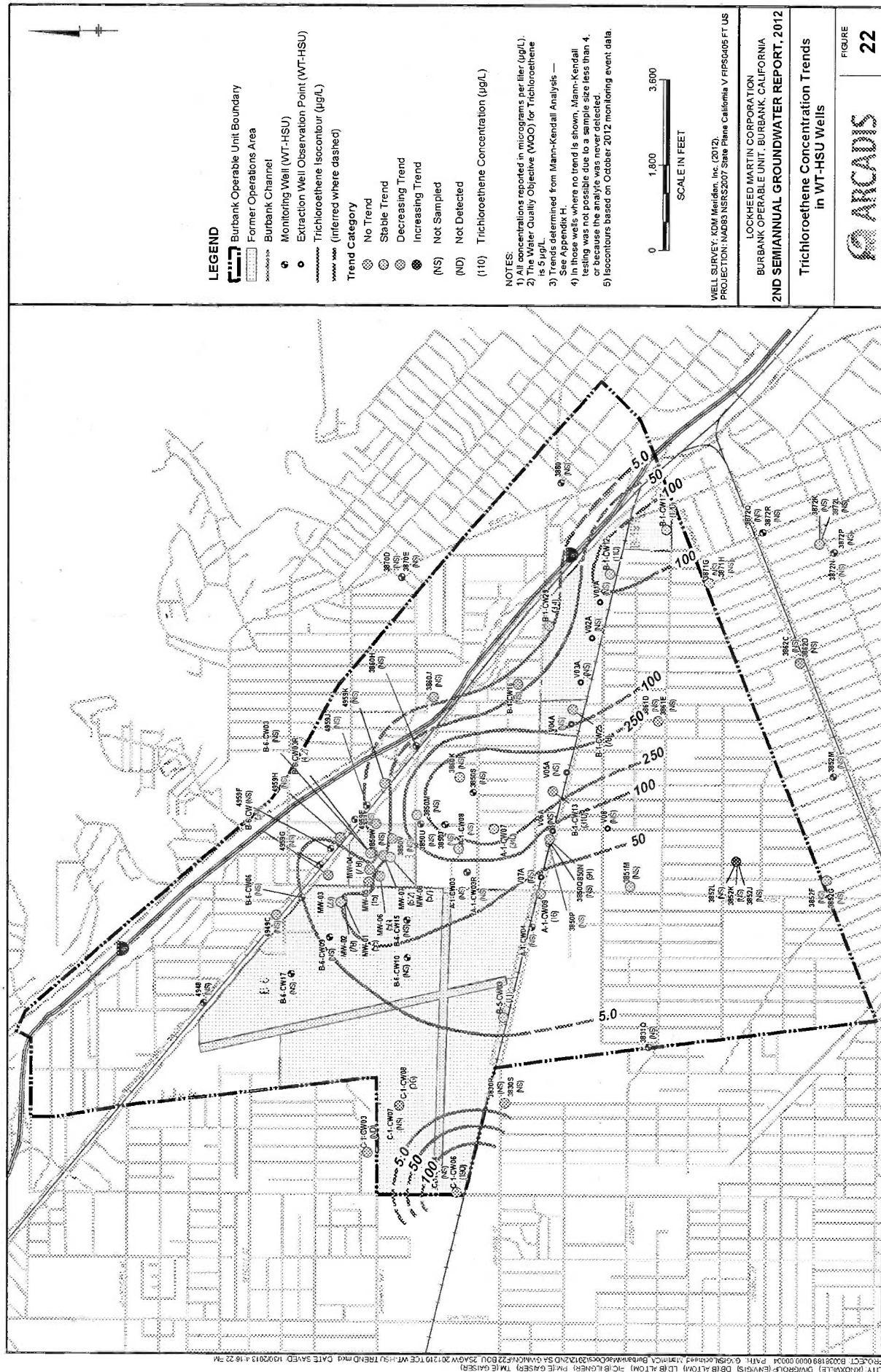


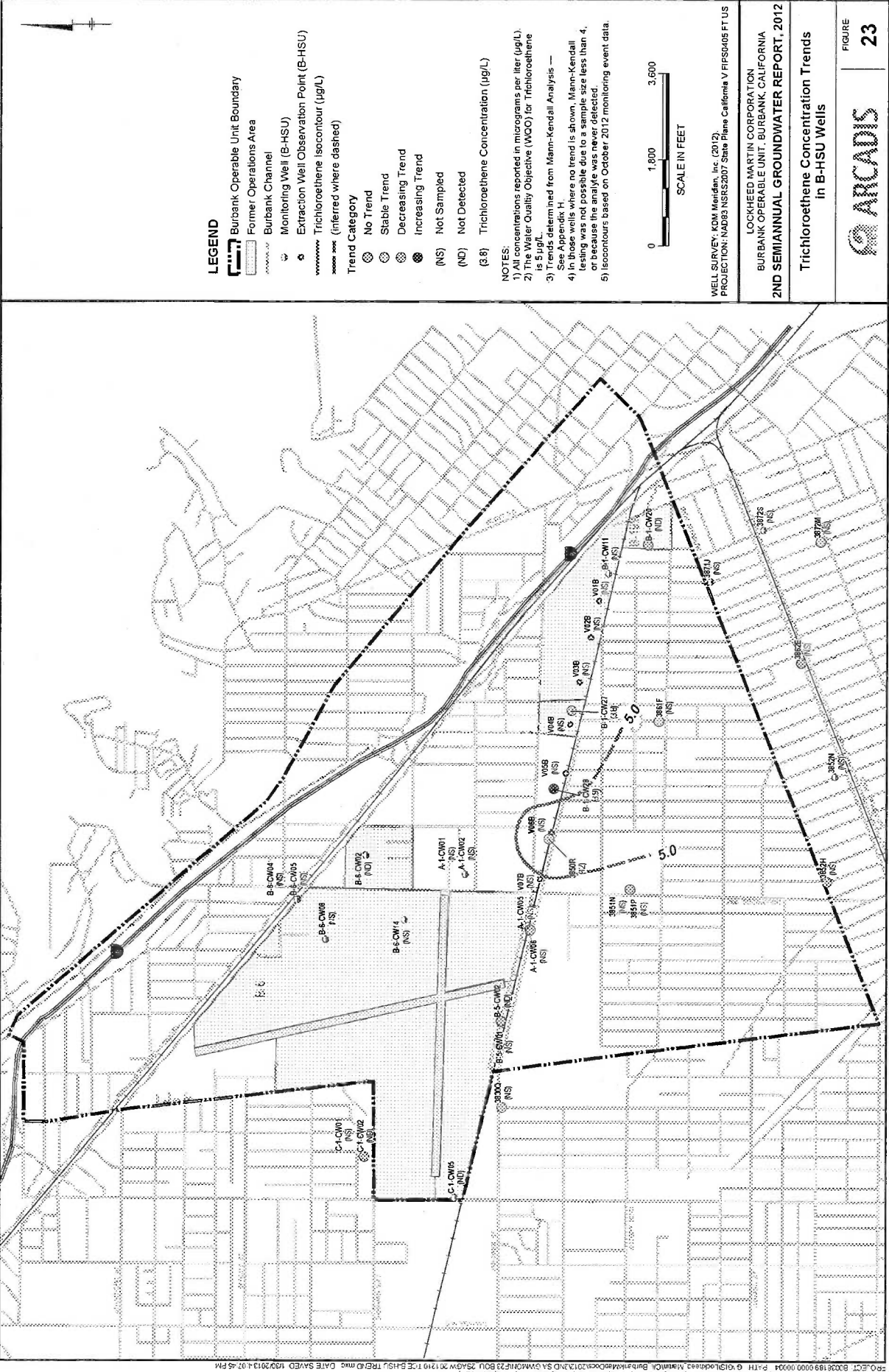












LEGEND

Burbank Operable Unit Boundary
 Former Operations Area
 Burbank Channel
 Monitoring Well (B-HSU)
 Extraction Well Observation Point (B-HSU)
 Trichloroethene Isocountour (µg/L)
 (inferred where dashed)

Trend Category

○ No Trend
 ● Stable Trend
 ● Decreasing Trend
 ● Increasing Trend
 ● Not Sampled
 ● Not Detected
 (ND)
 (38) Trichloroethene Concentration (µg/L)

NOTES:

1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for Trichloroethene is 5 µg/L.
 3) Trends determined from Mann-Kendall Analysis — See Appendix H.
 4) In those wells where no trend is shown, Mann-Kendall testing was not possible due to a sample size less than 4, or because the analyte was never detected.
 5) Isocountours based on October 2012 monitoring event data.

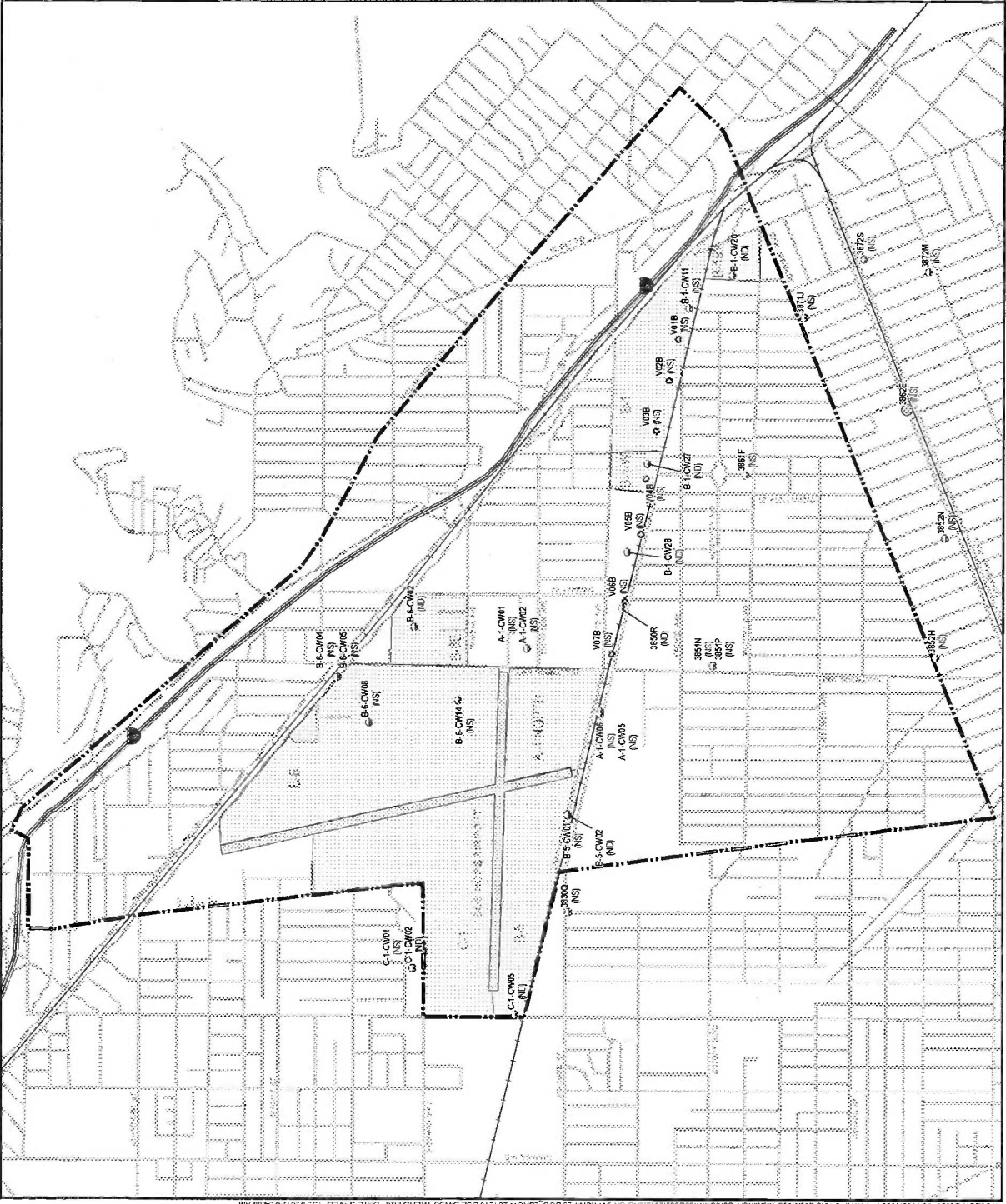


WELL SURVEY: KDM Meridian, Inc. (2012).
 PROJECTION: NAD83 NRS52007 State Plane California V FIPS406 FT US

LOCKHEED MARTIN CORPORATION
 BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
 2ND SEMIANNUAL GROUNDWATER REPORT, 2012

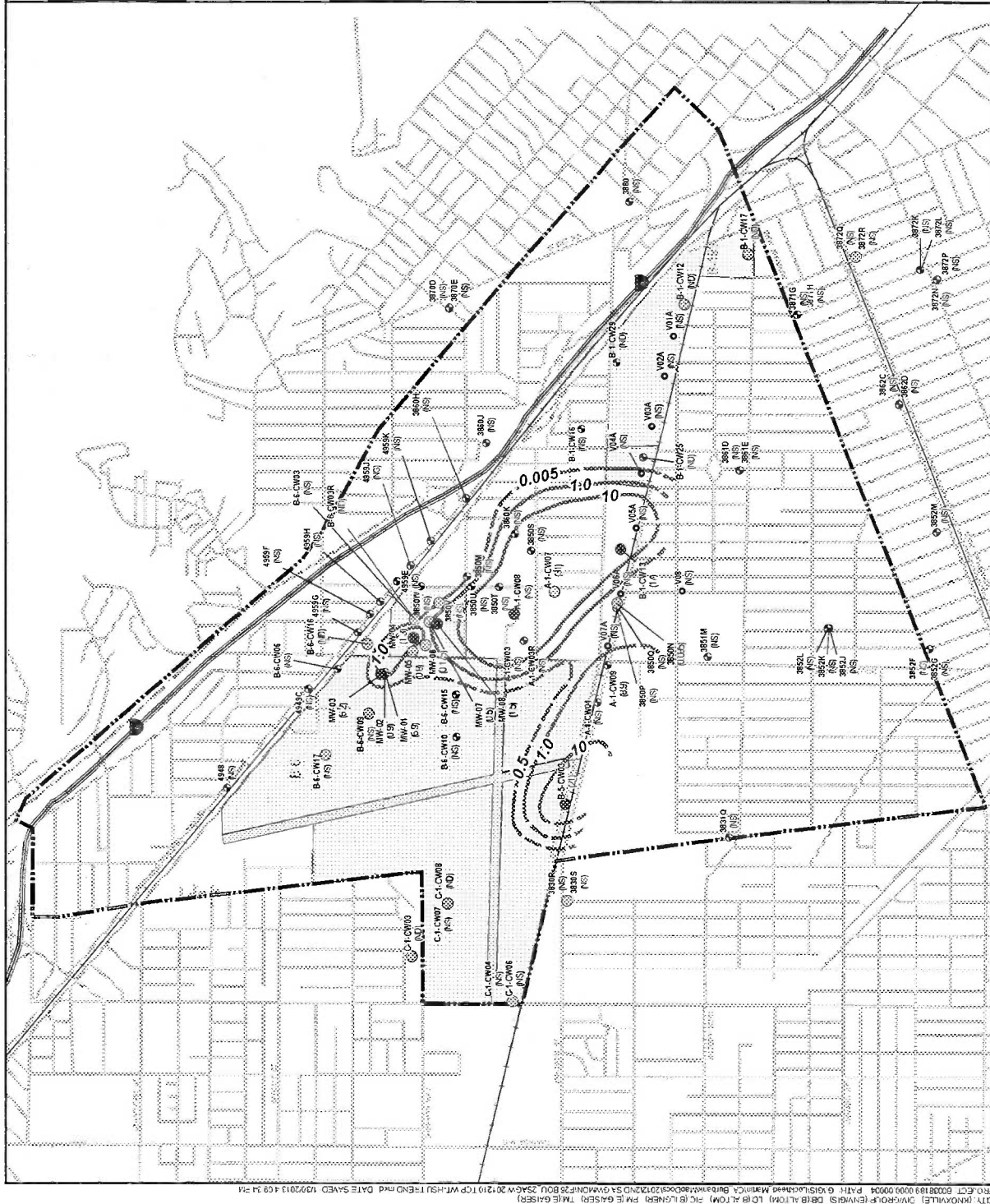
Trichloroethene Concentration Trends
 in B-HSU Wells

FIGURE
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WELL SURVEY: KDM Meridian, Inc. (2012).
PROJECTION: NAD83 NRS2007 State Plane California V FIPS0405 FT US

LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012
cis-1,2-Dichloroethene Concentration Trends
in B-HSU Wells



LEGEND

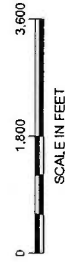
Burbank Operable Unit Boundary
 Former Operations Area
 Burbank Channel
 Monitoring Well (WT-HSU)
 Extraction Well Observation Point (WT-HSU)
 1,2,3-Trichloropropane Isoconcentration (µg/L)
 Trend Category (inferred where dashed)

Trend Category

No Trend
 Stable Trend
 Decreasing Trend
 Increasing Trend
 (NS) Not Sampled
 (ND) Not Detected
 (BT) 1,2,3-Trichloropropane Concentration (µg/L)

NOTES:

1) All concentrations reported in micrograms per liter (µg/L).
 2) The Water Quality Objective (WQO) for 1,2,3-Trichloropropane is 0.005 µg/L.
 3) Trends determined from Mann-Kendall Analysis — See Appendix H.
 4) In those wells where no trend is shown, Mann-Kendall testing was not possible due to a sample size less than 4, or because the analysis was never detected.
 5) Isoconcentrations based on October 2012 monitoring event data.



SCALE IN FEET

WELL SURVEY: KDM Meridian, Inc. (2012).
PROJECTION: NAD83 NRS2007 State Plane California V FIPS9405 FT US

LOCKHEED MARTIN CORPORATION
BURBANK OPERABLE UNIT, BURBANK, CALIFORNIA
2ND SEMIANNUAL GROUNDWATER REPORT, 2012

1,2,3-Trichloropropane Concentration Trends
in WT-HSU Wells

FIGURE

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