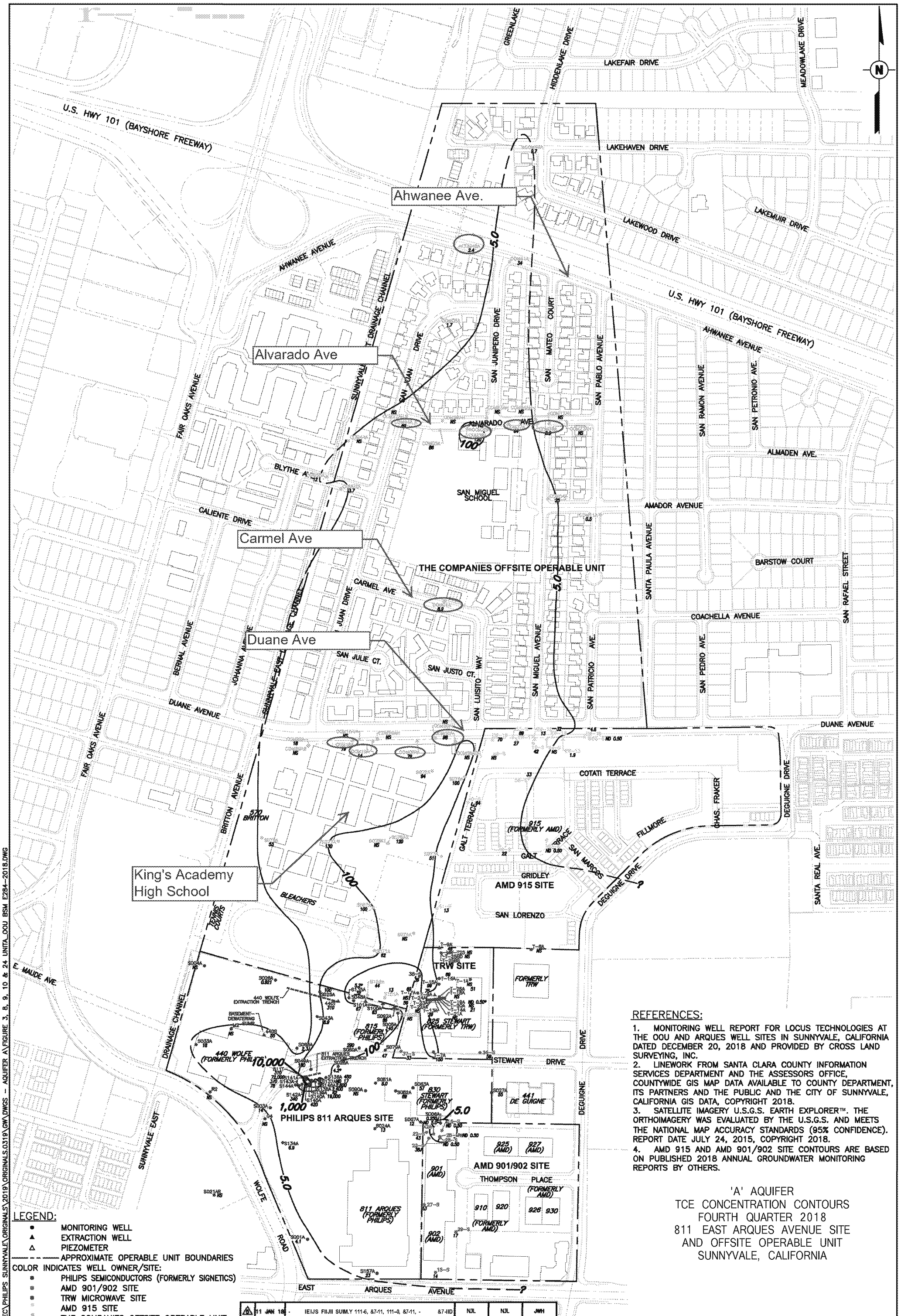
FIGURE 1

2018 TCE ISOCONCENTRATION MAP A AQUIFER ZONE



REFERENCES:

1. MONITORING WELL REPORT FOR LOCUS TECHNOLOGIES AT THE OOU AND ARQUES WELL SITES IN SUNNYVALE, CALIFORNIA DATED DECEMBER 20, 2018 AND PROVIDED BY CROSS LAND SURVEYING, INC.
2. LINEWORK FROM SANTA CLARA COUNTY INFORMATION SERVICES DEPARTMENT AND THE ASSESSORS OFFICE, COUNTYWIDE GIS MAP DATA AVAILABLE TO COUNTY DEPARTMENT, ITS PARTNERS AND THE PUBLIC AND THE CITY OF SUNNYVALE, CALIFORNIA GIS DATA, COPYRIGHT 2018.
3. SATELLITE IMAGERY U.S.G.S. EARTH EXPLORER™. THE ORTHOIMAGERY WAS EVALUATED BY THE U.S.G.S. AND MEETS THE NATIONAL MAP ACCURACY STANDARDS (95% CONFIDENCE). REPORT DATE JULY 24, 2015, COPYRIGHT 2018.
4. AMD 915 AND AMD 901/902 SITE CONTOURS ARE BASED ON PUBLISHED 2018 ANNUAL GROUNDWATER MONITORING REPORTS BY OTHERS.

'A' AQUIFER
TCE CONCENTRATION CONTOURS
FOURTH QUARTER 2018
811 EAST ARQUES AVENUE SITE
AND OFFSITE OPERABLE UNIT
SUNNYVALE, CALIFORNIA

LEGEND:

- ● MONITORING WELL
- ▲ EXTRACTION WELL
- △ PIEZOMETER
- ---- APPROXIMATE OPERABLE UNIT BOUNDARIES

COLOR INDICATES WELL OWNER/SITE:

- PHILIPS SEMICONDUCTORS (FORMERLY SIGNETICS)
- AMD 901/902 SITE
- TRW MICROWAVE SITE
- AMD 915 SITE
- THE COMPANIES OFFSITE OPERABLE UNIT

72,000 TCE CONCENTRATION (µg/L)
ND 0.50 NOT DETECTED ABOVE THE NOTED REPORTING LIMIT
NS DENOTES WELL NOT SAMPLED
5.0 TCE ISOCONCENTRATION CONTOUR IN µg/L DASHED WHERE INFERRED
NOT USED FOR CONTOURING

No.	DATE	ISSUE / REVISION	DWN BY	CKD BY	N"D BY
5	11 JAN 18	- IEIJS FIIJII SUIM.Y 111-6, &7-11, 111-0, &7-11, - &7-IID	NJL	NJL	JWH
4	17 JAN 17	HIIEI IEIJS FIIJII SUIM.Y a IIE'Alm IIEIIS/PEZIIIEE PZD1" PZD121111, PZD12112, PZDZ2II2, PZD121D, - 5011M, - , , _ ,	A.II(	NJL	JWH
3	25 JAN 07	ADDED WEU.S 157A AND S15781. DELEm SEAIID WEU.S - AND S04U1.	VZC	MIIQ	JWH
2	20 JAN 03	REIIOIIED SEAIID WEU.S SOIII5A, SOII8A, SO111A, C-3, A-8, 0-1, G-5, 11-1, SOIIIIA, S0117A, and -.	JWH	JWH	JEB

0 400 800
SCALE IN FEET

DRAWING NO. 27·008·E284

FIGURE 8

FILE NAME: Z:\LOCUS.TEC\PHILIPS SUNNYVALE\ORIGINALS\2019\ORIGINALS.0319\GW\DWGS -- AQUIFER A\FIGURE 3, 8, 9, 10 & 24 UNITA_OOU BSM E284--2018.DWG

FIGURE 2

2018 TCE ISOCONCENTRATION MAP B1 AQUIFER ZONE

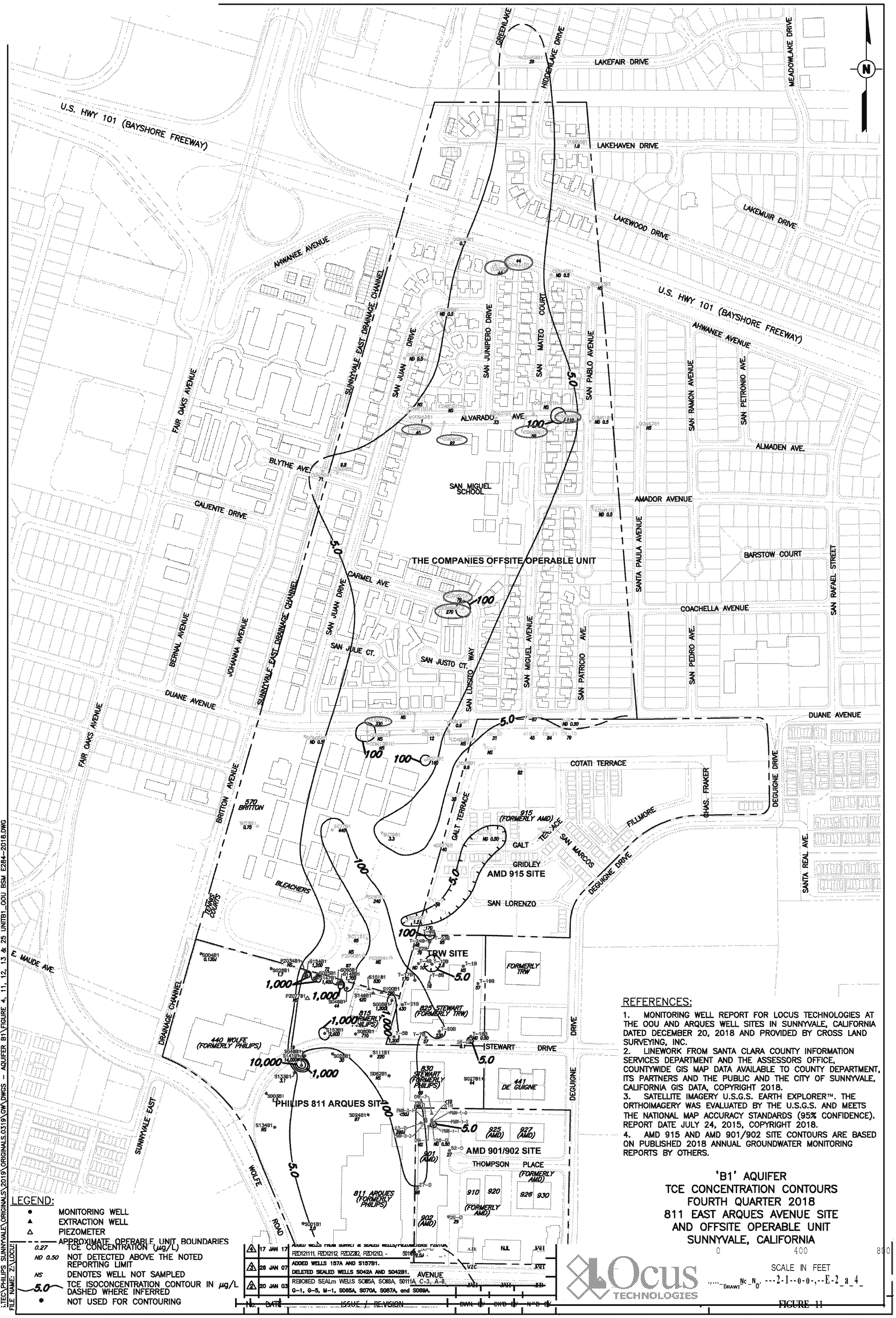
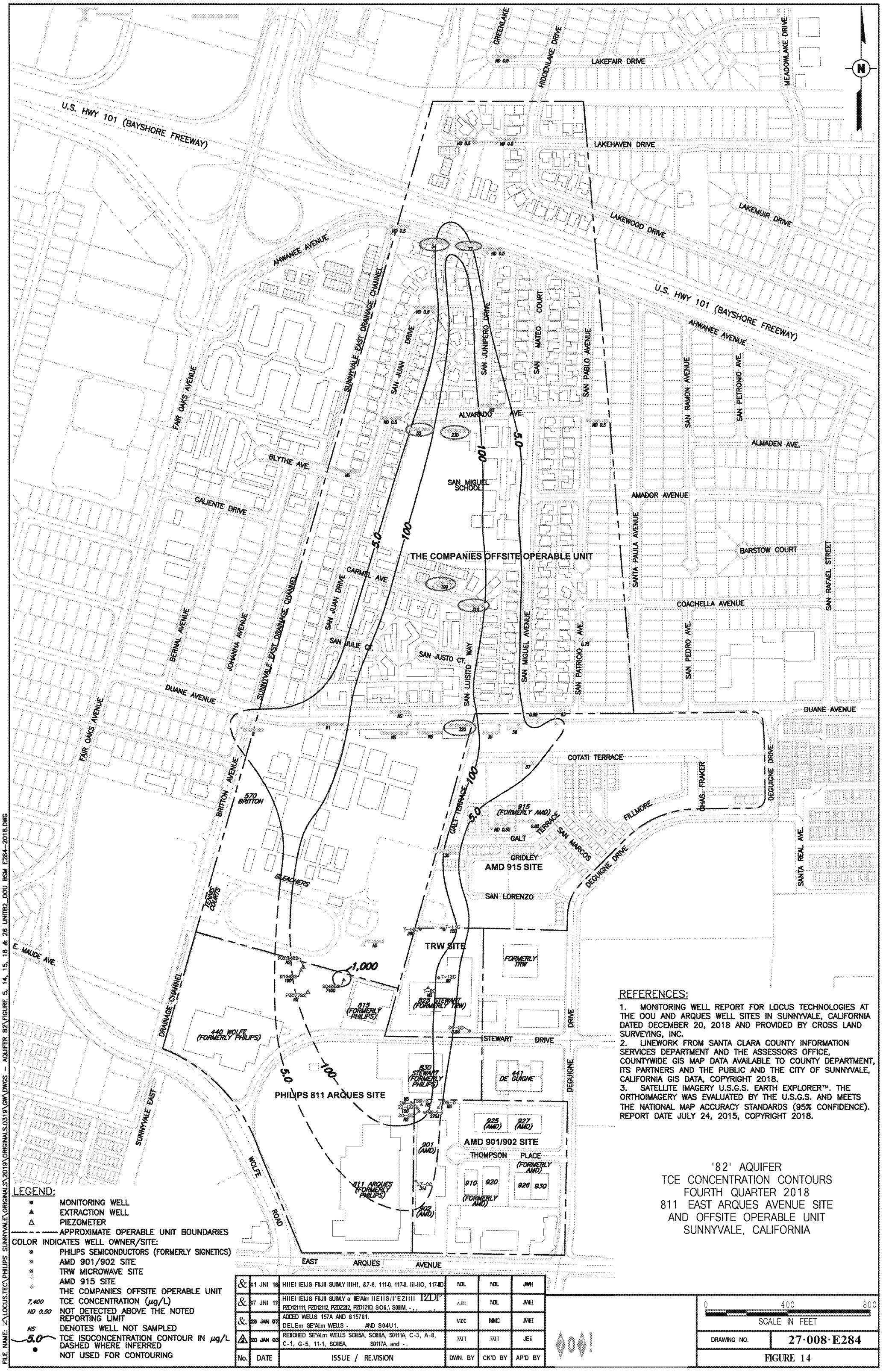

U.S. HWY 101 (BAYSHORE FREEWAY)
GREENLAKE
HIDDENLAKE DRIVE
LAKEFAIR DRIVE
MEADOWLAKE DRIVE
LAKEHAVEN DRIVE
LAKEWOOD DRIVE
LAKEMUIR DRIVE
AHWANEE AVENUE
SUNNYVALE EAST DRAINAGE CHANNEL
SAN JUAN DRIVE
SAN JUNIPERO DRIVE
SAN MATEO COURT
SAN PABLO AVENUE
SAN RAMON AVENUE
SAN PETRONIO AVE.
ALVARADO AVE.
ALMADEN AVE.
FAIR OAKS AVENUE
BLYTHE AVE.
SAN MIGUEL SCHOOL
AMADOR AVENUE
CALIENTE DRIVE
THE COMPANIES OFFSITE OPERABLE UNIT
SANTA PAULA AVENUE
BARSTOW COURT
SAN RAFAEL STREET
CARMEL AVE
COACHELLA AVENUE
BERNAL AVENUE
JOHANNA AVENUE
SAN JULIE CT.
SAN JUSTO CT.
SAN LUISITO WAY
SAN MIGUEL AVENUE
SAN PATRICIO AVE.
SAN PEDRO AVE.
DUANE AVENUE
COTATI TERRACE
CHAS. FRAKER
DEGUIGNE DRIVE
BRITTON AVENUE
570 BRITTON
GALT TERRACE
915 (FORMERLY AMD)
GALT
GRIDLEY
AMD 915 SITE
SAN MARCOS
FILLMORE
SANTA REAL AVE.
BLEACHERS
TENNIS COURTS
SAN LORENZO
E. MAUDE AVE.
TRW SITE
FORMERLY TRW
825 STEWART (FORMERLY TRW)
815 (FORMERLY PHILIPS)
440 WOLFE (FORMERLY PHILIPS)
STEWART DRIVE
830 STEWART (FORMERLY PHILIPS)
441 DE GUIGNE
PHILIPS 811 ARQUES SITE
925 (AMD)
927 (AMD)
AMD 901/902 SITE
901 (AMD)
THOMPSON PLACE (FORMERLY AMD)
910
920
926
930
(FORMERLY AMD)
811 ARQUES (FORMERLY PHILIPS)
902 (AMD)
WOLFE ROAD
SUNNYVALE EAST
N
LEGEND:
MONITORING WELL
EXTRACTION WELL
PIEZOMETER
APPROXIMATE OPERABLE UNIT BOUNDARIES
0.27 TCE CONCENTRATION (µg/L)
ND 0.50 NOT DETECTED ABOVE THE NOTED REPORTING LIMIT
NS DENOTES WELL NOT SAMPLED
5.0 TCE ISOCONCENTRATION CONTOUR IN µg/L DASHED WHERE INFERRED
NOT USED FOR CONTOURING
No. DATE ISSUE / REVISION DWN. BY CK'D BY APP'D BY
4 17 JAN 17 ADDED WELLS FROM SURVEY & SEALED WELLS/PIEZOMETERS FROM: PZD121111, PZD121112, PZDZ212, PZD121D, - S011B, S011A
3 26 JAN 07 ADDED WELLS 157A AND S157B1. DELETED SEALED WELLS S042A AND S042B1.
2 20 JAN 03 REIIOIIED SEALm WELJS SOII5A, SOII8A, S0111A, C-3, A-8, G-1, G-5, M-1, S065A, S070A, S087A, and S089A.
REFERENCES:
1. MONITORING WELL REPORT FOR LOCUS TECHNOLOGIES AT THE OOU AND ARQUES WELL SITES IN SUNNYVALE, CALIFORNIA DATED DECEMBER 20, 2018 AND PROVIDED BY CROSS LAND SURVEYING, INC.
2. LINEWORK FROM SANTA CLARA COUNTY INFORMATION SERVICES DEPARTMENT AND THE ASSESSORS OFFICE, COUNTYWIDE GIS MAP DATA AVAILABLE TO COUNTY DEPARTMENT, ITS PARTNERS AND THE PUBLIC AND THE CITY OF SUNNYVALE, CALIFORNIA GIS DATA, COPYRIGHT 2018.
3. SATELLITE IMAGERY U.S.G.S. EARTH EXPLORER™. THE ORTHOIMAGERY WAS EVALUATED BY THE U.S.G.S. AND MEETS THE NATIONAL MAP ACCURACY STANDARDS (95% CONFIDENCE). REPORT DATE JULY 24, 2015, COPYRIGHT 2018.
4. AMD 915 AND AMD 901/902 SITE CONTOURS ARE BASED ON PUBLISHED 2018 ANNUAL GROUNDWATER MONITORING REPORTS BY OTHERS.
'B1' AQUIFER
TCE CONCENTRATION CONTOURS
FOURTH QUARTER 2018
811 EAST ARQUES AVENUE SITE
AND OFFSITE OPERABLE UNIT
SUNNYVALE, CALIFORNIA
0 400 800
SCALE IN FEET
LOCUS TECHNOLOGIES
FIGURE 11
J:\TECL\PHILIPS SUNNYVALE\ORIGINALS\2019\ORIGINALS.0319\GW\DWGS – AQUIFER B1\FIGURE 4, 11, 12, 13 & 25 UNITB1_OOU BSM E284–2018.DWG
FILE NAME: ZA\LOCUS

FIGURE 3

2018 TCE ISOCONCENTRATION MAP B2 AQUIFER ZONE



REFERENCES:

1. MONITORING WELL REPORT FOR LOCUS TECHNOLOGIES AT THE OOU AND ARQUES WELL SITES IN SUNNYVALE, CALIFORNIA DATED DECEMBER 20, 2018 AND PROVIDED BY CROSS LAND SURVEYING, INC.
2. LINEWORK FROM SANTA CLARA COUNTY INFORMATION SERVICES DEPARTMENT AND THE ASSESSORS OFFICE, COUNTYWIDE GIS MAP DATA AVAILABLE TO COUNTY DEPARTMENT, ITS PARTNERS AND THE PUBLIC AND THE CITY OF SUNNYVALE, CALIFORNIA GIS DATA, COPYRIGHT 2018.
3. SATELLITE IMAGERY U.S.G.S. EARTH EXPLORER™. THE ORTHOIMAGERY WAS EVALUATED BY THE U.S.G.S. AND MEETS THE NATIONAL MAP ACCURACY STANDARDS (95% CONFIDENCE). REPORT DATE JULY 24, 2015, COPYRIGHT 2018.

LEGEND:

- MONITORING WELL
- EXTRACTION WELL
- PIEZOMETER
- APPROXIMATE OPERABLE UNIT BOUNDARIES

COLOR INDICATES WELL OWNER/SITE:

- PHILIPS SEMICONDUCTORS (FORMERLY SIGNETICS)
- AMD 901/902 SITE
- TRW MICROWAVE SITE
- AMD 915 SITE
- THE COMPANIES OFFSITE OPERABLE UNIT

7,400 TCE CONCENTRATION (µg/L)

ND 0.50 NOT DETECTED ABOVE THE NOTED REPORTING LIMIT

NS DENOTES WELL NOT SAMPLED

5.0 TCE ISOCONCENTRATION CONTOUR IN µg/L DASHED WHERE INFERRED

NOT USED FOR CONTOURING

'82' AQUIFER
TCE CONCENTRATION CONTOURS
FOURTH QUARTER 2018
811 EAST ARQUES AVENUE SITE
AND OFFSITE OPERABLE UNIT
SUNNYVALE, CALIFORNIA

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
4	11 JAN 18	HIIEI IEIJS FIIJII SUIMY IIIH!, &7-6. 111-0, 117-0. Iii-IIO, 117-IID	NJL	NJL	JWH
3	17 JAN 17	HIIEI IEIJS FIIJII SUIMY a IIE'Alm IIEIIS/I'EZIIII PZD121111, PZD12112, PZDZ2I2, PZD121D, SOIi,\ SOIIIM, - . ,	AJH	NJL	JWH
2	26 JAN 07	ADDED WEUS 157A AND S15781. DELEm SE'AIm WEUS - AND S04U1.	VZC	MMC	JWH
1	20 JAN 03	REIIOIIED SE'AIm WEUS SOIII5A, SOII8A, S0111A, C-3, A-8, C-1, G-5, 11-1, SOIII5A, S0117A, and - .	JWH	JWH	JEii

0 400 800
SCALE IN FEET

DRAWING NO. 27·008·E284

FIGURE 14

FILE NAME: Z:\LOCUS.TEC\PHILIPS SUNNYVALE\ORIGINALS\2019\ORIGINALS.0319\GW\DWGS -- AQUIFER B2\FIGURE 5, 14, 15, 16 & 26 UNITB2_OOU BSM E284--2018.DWG

FIGURE 4

2018 TCE ISOCONCENTRATION MAP B3 AQUIFER ZONE

U.S. HWY 101 (BAYSHORE FREEWAY)
GREENLAKE
HIDDENLAKE DRIVE
LAKEFAIR DRIVE
MEADOWLAKE DRIVE
N
LAKEHAVEN DRIVE
LAKEWOOD DRIVE
LAKEMUIR DRIVE
AHWANEE AVENUE
SUNNYVALE EAST DRAINAGE CHANNEL
SAN JUAN DRIVE
SAN JUNIPERO DRIVE
SAN MATEO COURT
SAN PABLO AVENUE
AHWANEE AVENUE
SAN RAMON AVENUE
SAN PETRONIO AVE.
FAIR OAKS AVENUE
ALVARADO AVE.
ALMADEN AVE.
BLYTHE AVE.
SAN MIGUEL SCHOOL
AMADOR AVENUE
CALIENTE DRIVE
SANTA PAULA AVENUE
BARSTOW COURT
THE COMPANIES OFFSITE OPERABLE UNIT
CARMEL AVE
SAN RAFAEL STREET
COACHELLA AVENUE
BERNAL AVENUE
JOHANNA AVENUE
SAN JULIE CT.
SAN JUSTO CT.
SAN LUISITO WAY
SAN MIGUEL AVENUE
SAN PATRICIO AVE.
SAN PEDRO AVE.
DUANE AVENUE
DUANE AVENUE
COTATI TERRACE
CHAS. FRAKER
DEGUIGNE DRIVE
BRITTON AVENUE
570 BRITTON
915 (FORMERLY AMD)
GALT TERRACE
FILLMORE
GALT
SAN MARCOS
GRIDLEY
AMD 915 SITE
SANTA REAL AVE.
BLEACHERS
TENNIS COURTS
SAN LORENZO
E. MAUDE AVE.
TRW SITE
FORMERLY TRW
825 STEWART (FORMERLY TRW)
815 (FORMERLY PHILIPS)
DRAINAGE CHANNEL
440 WOLFE (FORMERLY PHILIPS)
STEWART DRIVE
830 STEWART (FORMERLY PHILIPS)
441 DE GUIGNE
PHILIPS 811 ARQUES SITE
925 (AMD)
927 (AMD)
AMD 901/902 SITE
901 (AMD)
THOMPSON PLACE
(FORMERLY AMD)
910
920
926
930
(FORMERLY AMD)
811 ARQUES (FORMERLY PHILIPS)
902 (AMD)
WOLFE ROAD
EAST ARQUES AVENUE
5.0
10.0
410
270
130
ND 0.50
NS

REFERENCES:

1. MONITORING WELL REPORT FOR LOCUS TECHNOLOGIES AT THE OOU AND ARQUES WELL SITES IN SUNNYVALE, CALIFORNIA DATED DECEMBER 20, 2018 AND PROVIDED BY CROSS LAND SURVEYING, INC.
2. LINEWORK FROM SANTA CLARA COUNTY INFORMATION SERVICES DEPARTMENT AND THE ASSESSORS OFFICE, COUNTYWIDE GIS MAP DATA AVAILABLE TO COUNTY DEPARTMENT, ITS PARTNERS AND THE PUBLIC AND THE CITY OF SUNNYVALE, CALIFORNIA GIS DATA, COPYRIGHT 2018.
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LEGEND:

- ● MONITORING WELL
- ▲ EXTRACTION WELL
- △ PIEZOMETER
- ------ APPROXIMATE OPERABLE UNIT BOUNDARIES

COLOR INDICATES WELL OWNER/SITE:

- PHILIPS SEMICONDUCTORS (FORMERLY SIGNETICS)
- AMD 901/902 SITE
- TRW MICROWAVE SITE
- AMD 915 SITE
- THE COMPANIES OFFSITE OPERABLE UNIT
- 410 TCE CONCENTRATION (µg/L)
- ND 0.50 NOT DETECTED ABOVE THE NOTED REPORTING LIMIT
- NS DENOTES WELL NOT SAMPLED
- 5.0 TCE ISOCONCENTRATION CONTOUR IN µg/L DASHED WHERE INFERRED

No.	DATE	ISSUE / REVISION	DWN BY	CK'D BY	AP'D BY
5	11 JAN 18	ADDED WELLS FROM SURVEY 56-S, 57-S, 56-D, 57-D, 56-DD, 57-DD	NJL	NJL	JWH
4	[illegible]	MIIED IIEUS FROII SIIMY a SE'MID IEIIS/PIEZIIIIE PZ0121111, PZ012112, PZDZ2112, PZD121D, SOII,\ SOII,\ SDlm1, SDlm1	A.H(	NJL	JWH
3	25 JAN 07	ADDED WELLS 157A AND S157B1. DELETED SEALED WELLS S042A AND S042B1.	VZ.;;	IIIIG	JWH
2	20 JAN 03	REMOVED SEALED WELLS S085A, S088A, S091A, G-3, A-6, O-1, G8 1H, SCA SIIA and - .	JWH	JWH	JEB

0 400 800
SCALE IN FEET

DRAWING NO. 27·009·E284

FIGURE 17

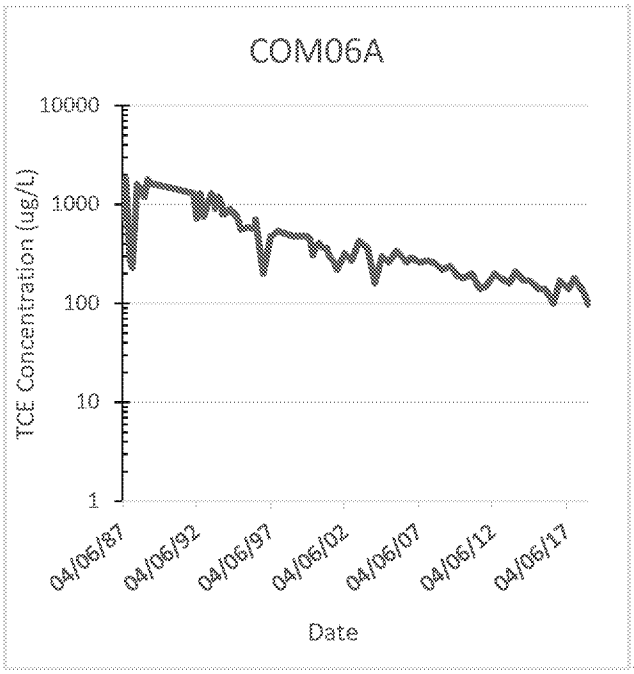
'83' AQUIFER
TCE CONCENTRATION CONTOURS
FOURTH QUARTER 2018
811 EAST ARQUES AVENUE SITE
AND OFFSITE OPERABLE UNIT
SUNNYVALE, CALIFORNIA

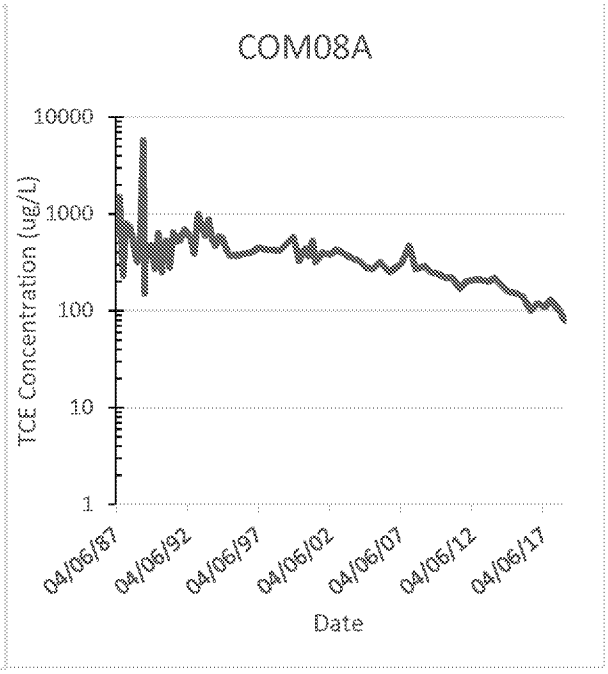
FILE NAME: Z:\LOCUS.TEC\PHILIPS SUNNYVALE\ORIGINALS\2019\ORIGINALS.0319\GW\DWGS -- AQUIFER B3\FIGURE 6, 17, 18, 19 & 27 UNITB3_OOU BSM E284-2018.DWG

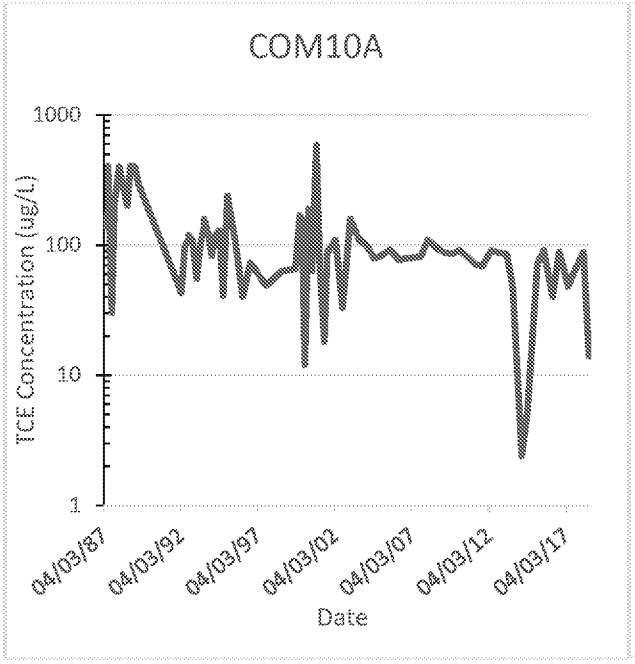
FIGURE 5

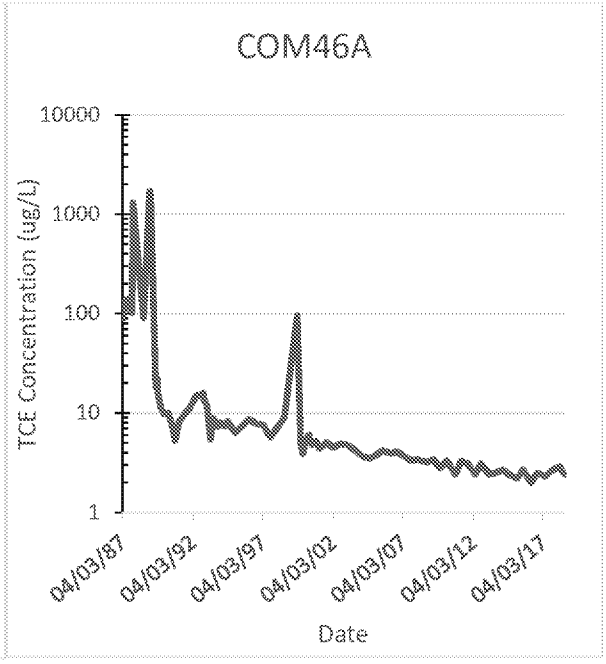
TCE CONCENTRATOIN IN A AQUIFER EXTRACTION WELLS

A AQUIFER ZONE DUANE AVENUE EXTRACTION WELLS

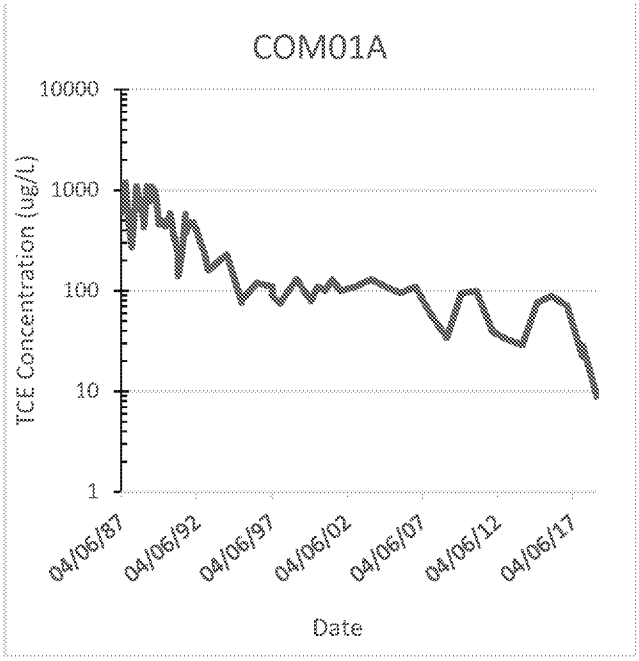




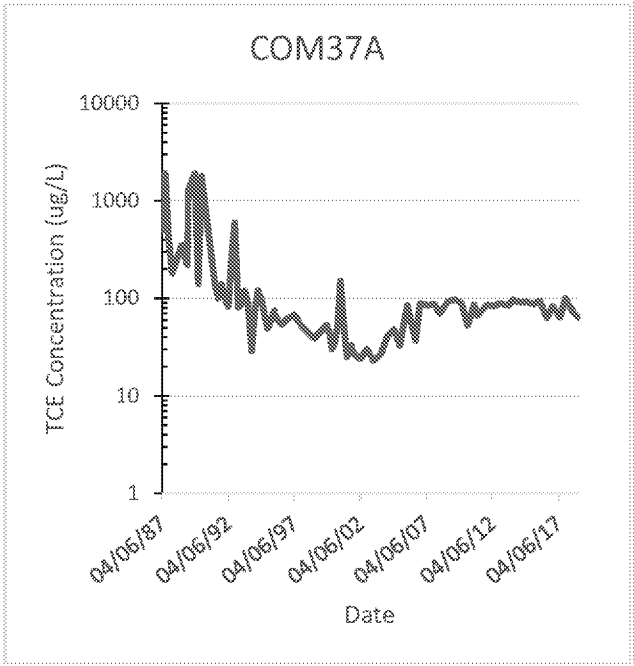


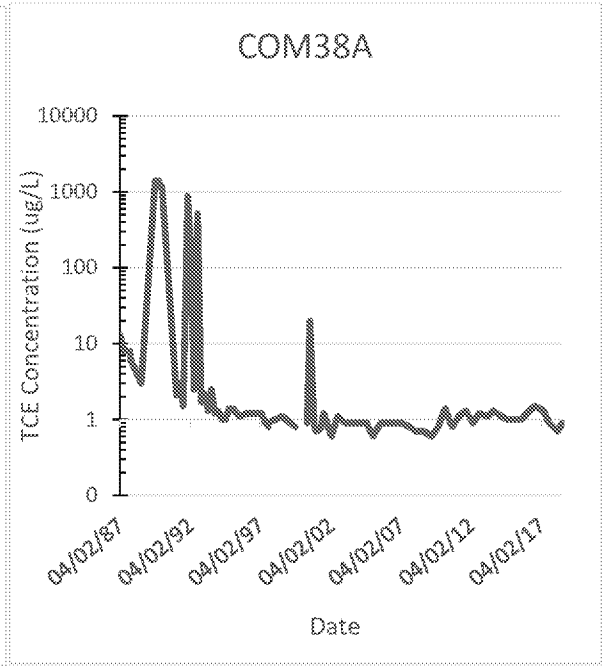


REPORTED A AQUIFER ZONE CARMEL AVENUE EXTRACTION WELL

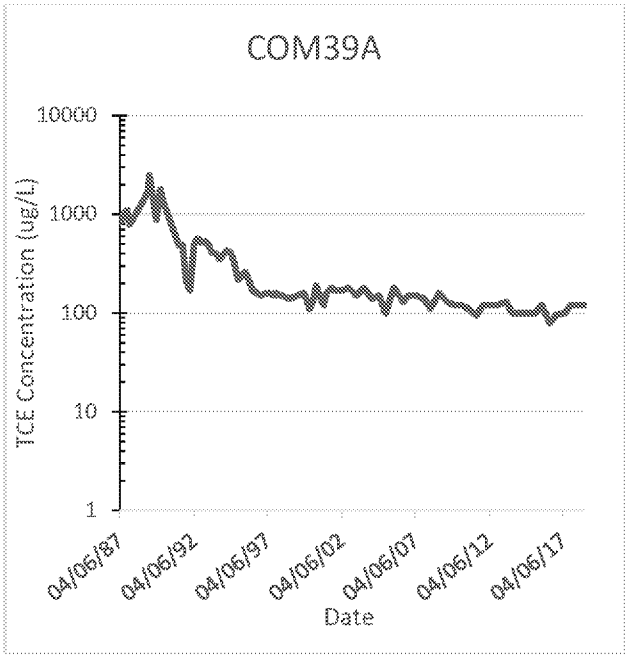


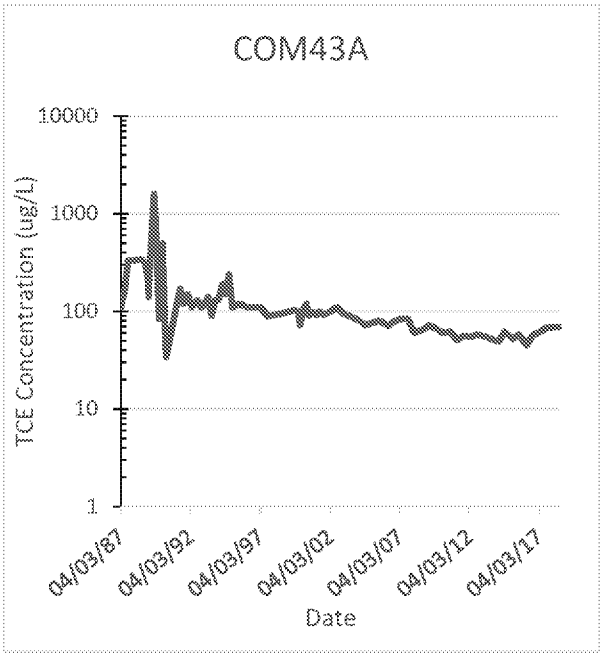
A AQUIFER ZONE ALVARADO AVENUE EXTRACTION WELLS



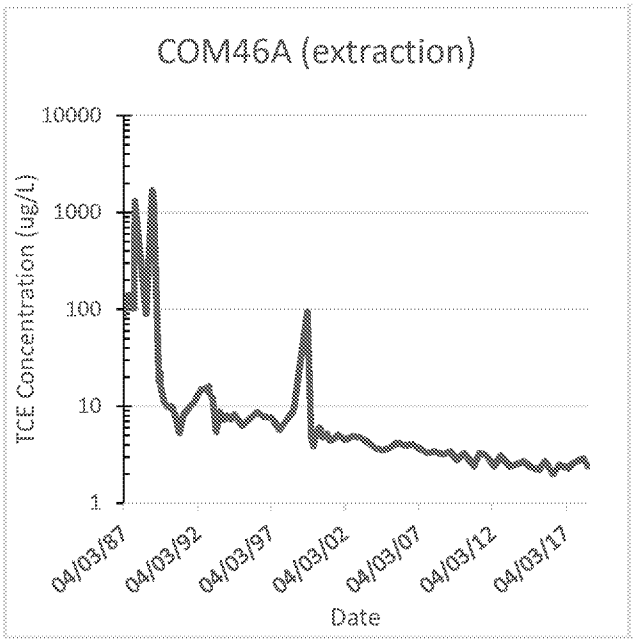


A AQUIFER ZONE ALVARADO AVENUE EXTRACTION WELLS (CONTINUED)





A AQUIFER ZONE AHWANEE AVENUE EXTRACTION/MONITORING WELLS



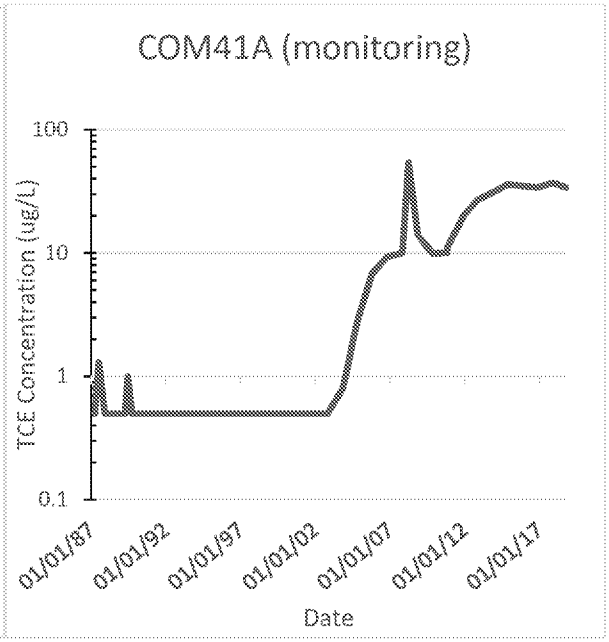
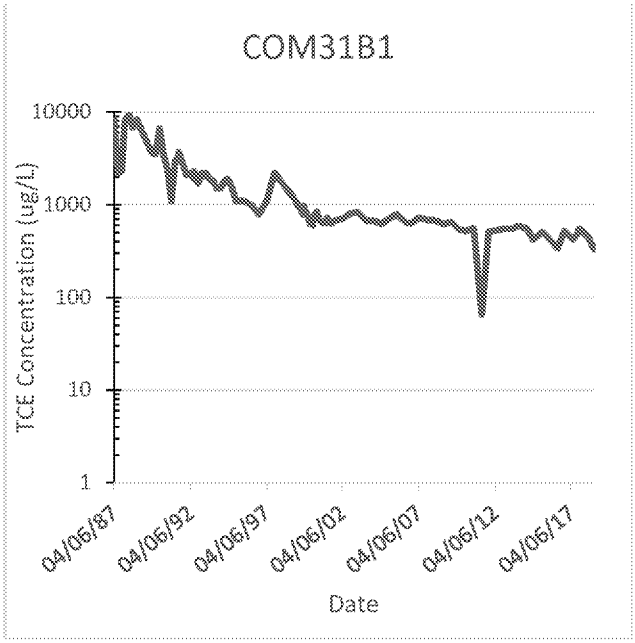


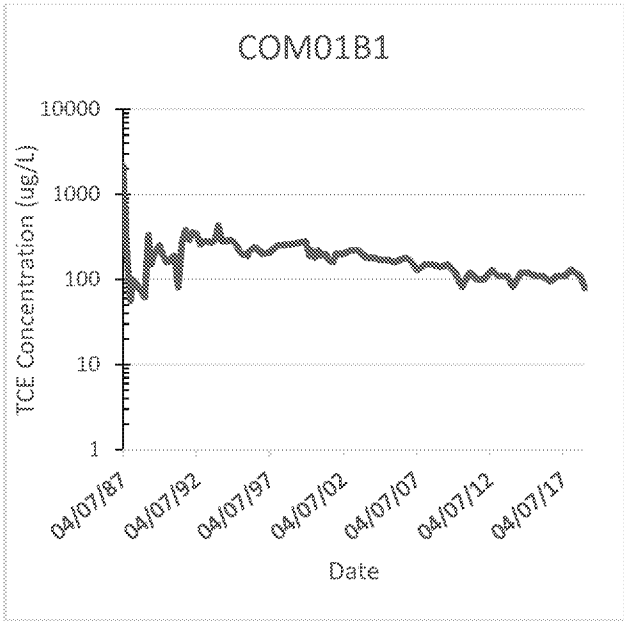
FIGURE 6

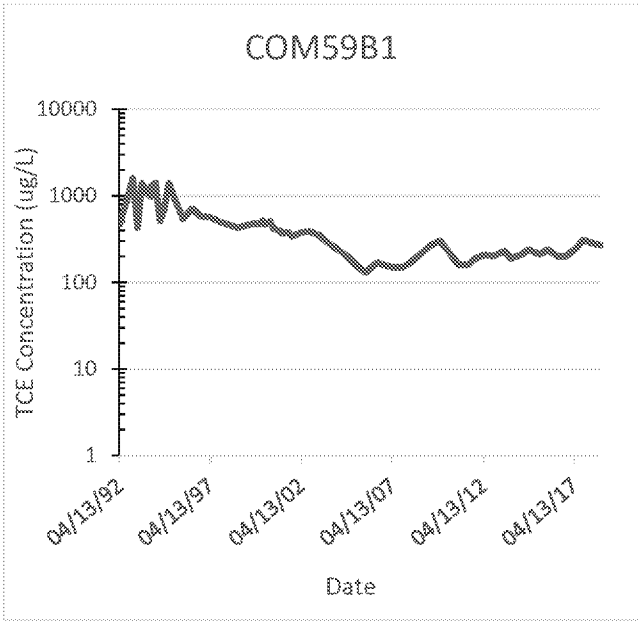
TCE CONCENTRATOIN IN B1 AQUIFER EXTRACTION WELLS

B1 AQUIFER ZONE EXTRACTION WELL DUANE AVENUE

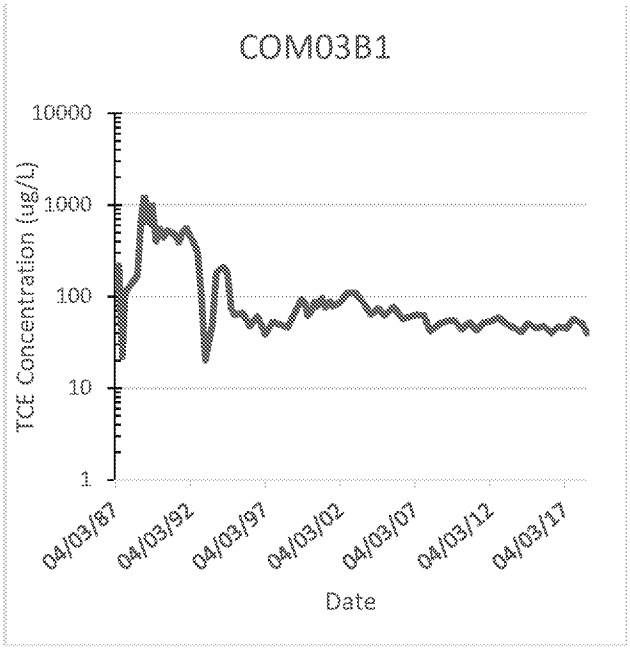


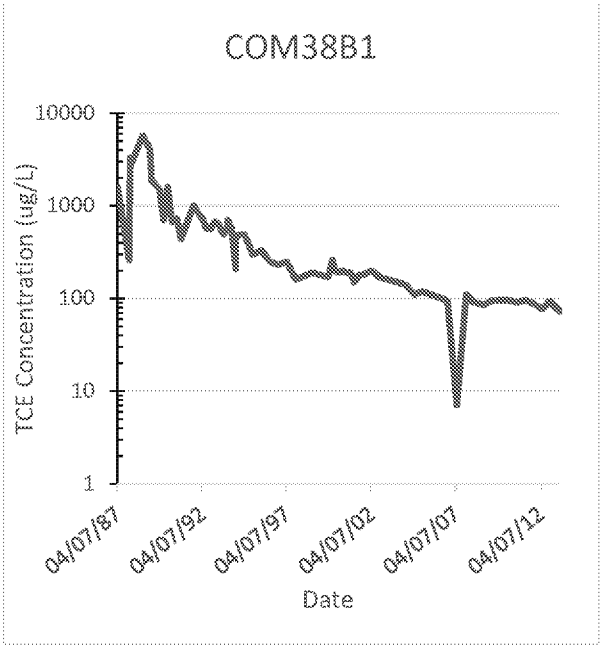
B1 AQUIFER ZONE CARMEL AVENUE EXTRACTION WELLS

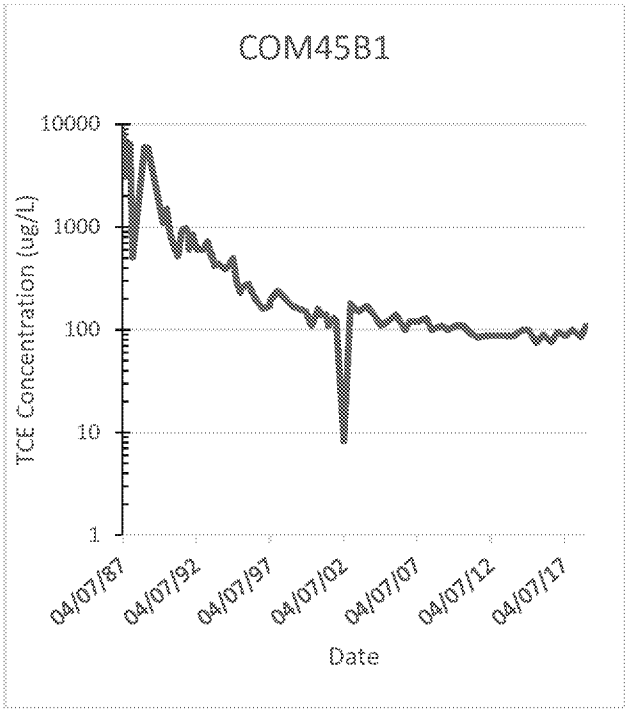


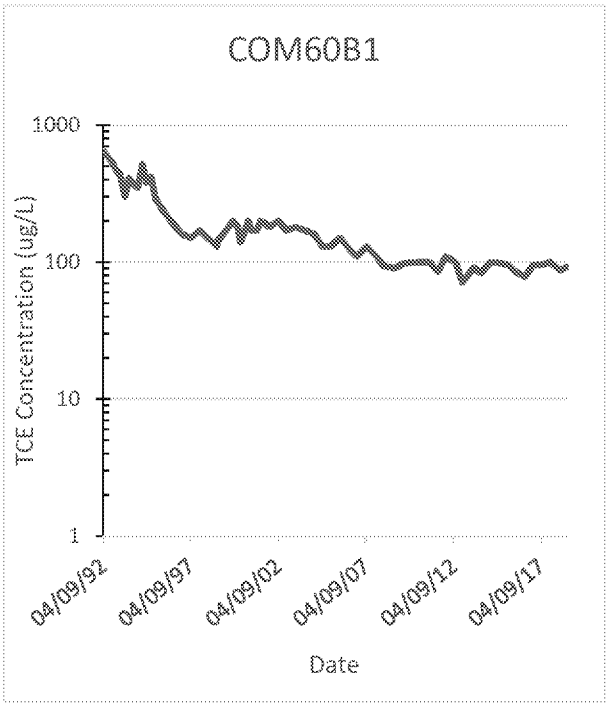


B1 AQUIFER ZONE ALVARADO AVENUE EXTRACTION WELLS

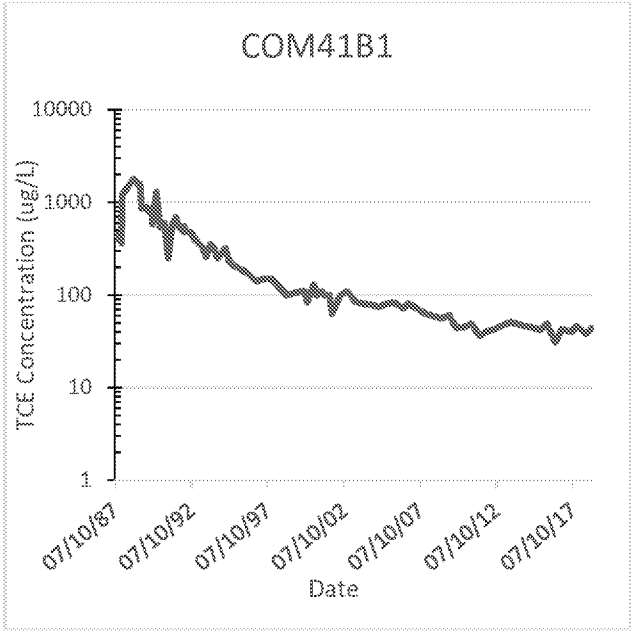








B1 AQUIFER ZONE AHWANEE AVENUE EXTRACTION WELLS



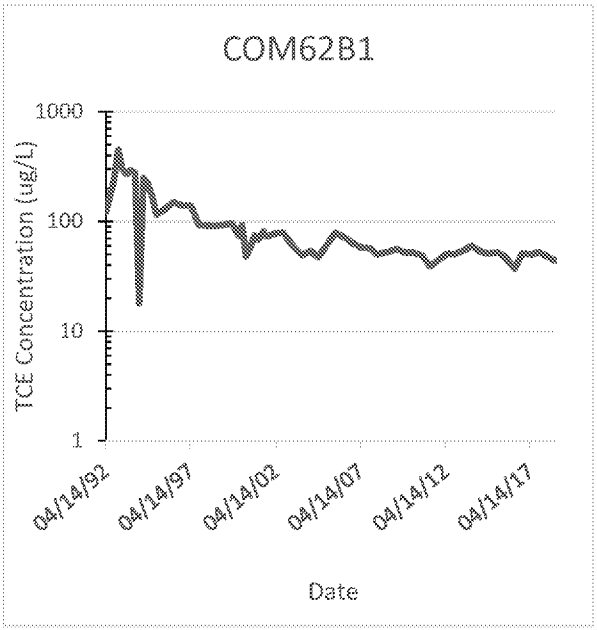
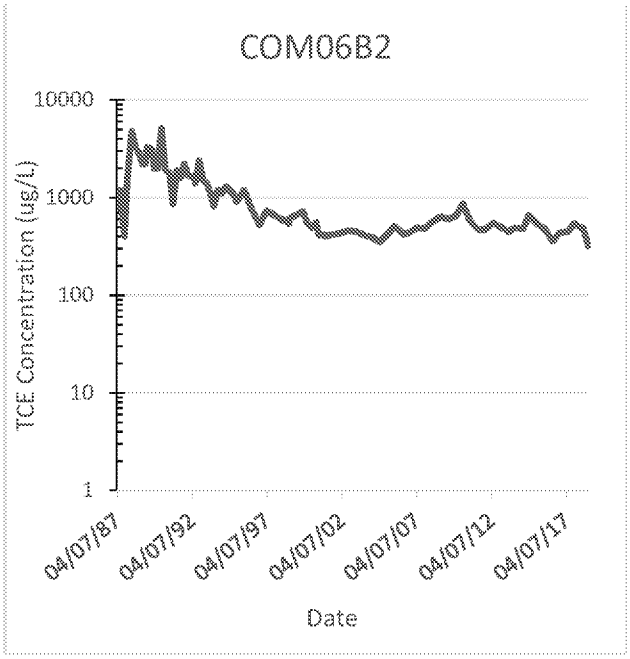


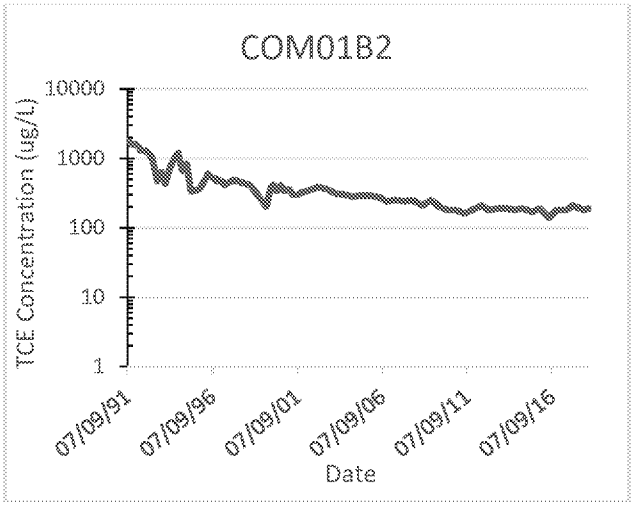
FIGURE 7

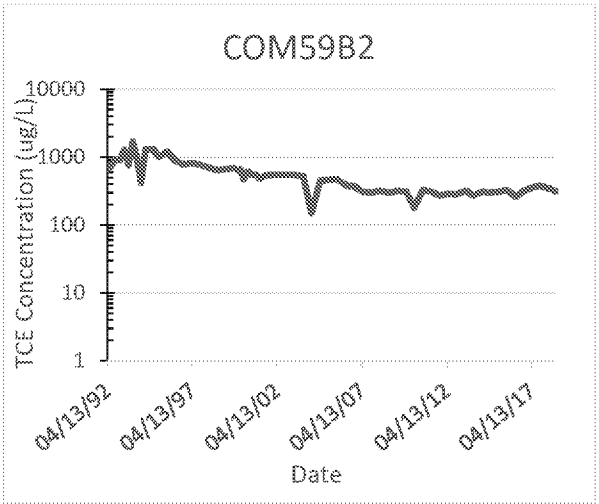
TCE CONCENTRATOIN IN B2 AQUIFER EXTRACTION WELLS

B2 AQUIFER ZONE EXTRACTION WELL DUANE AVENUE

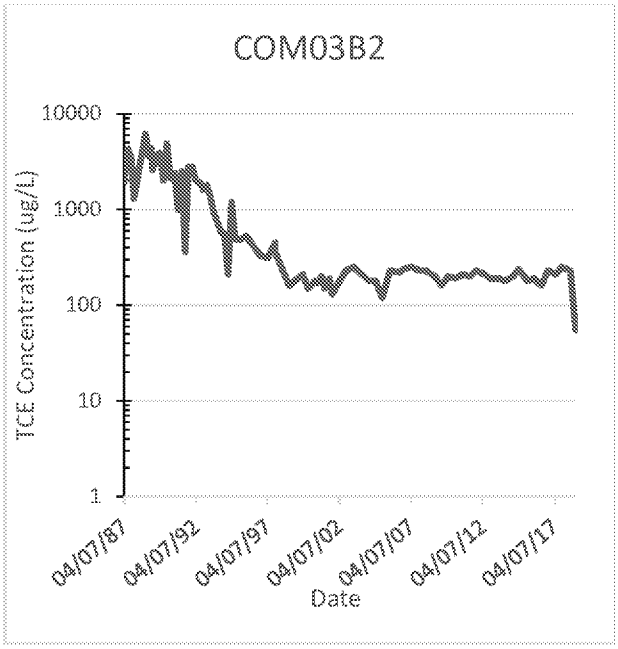


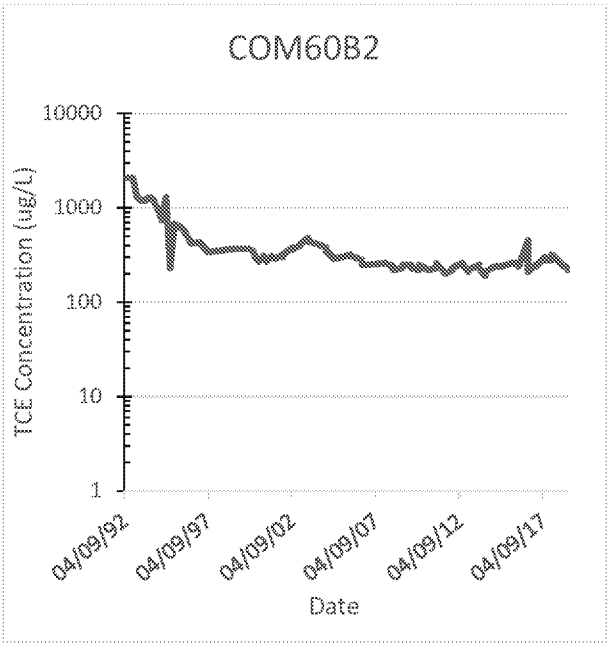
B2 AQUIFER ZONE EXTRACTION WELLS CARMEL AVENUE



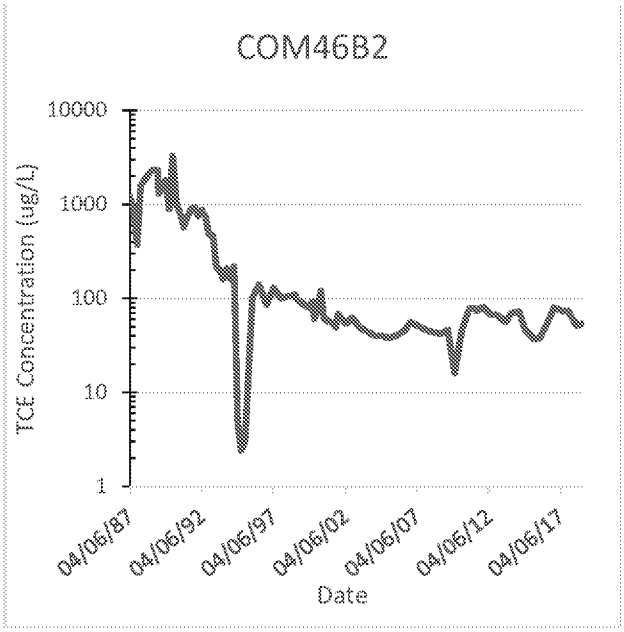


B2 AQUIFER ZONE EXTRACTION WELLS ALVARADO AVENUE





B2 AQUIFER ZONE EXTRACTION WELLS AHWANEE AVENUE



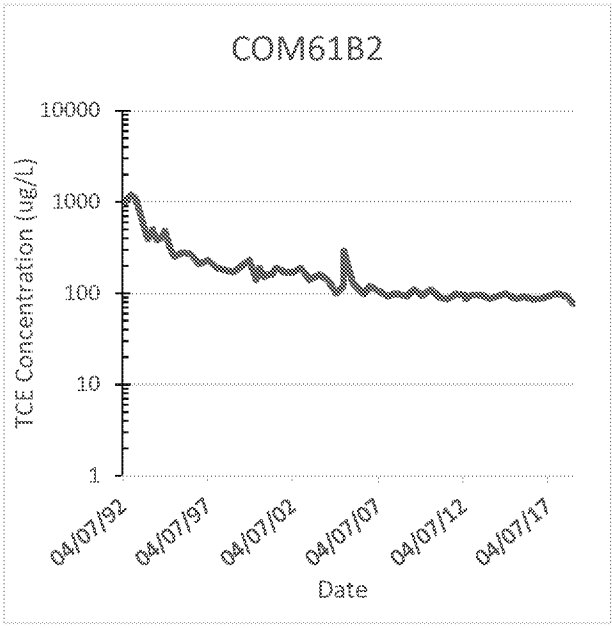
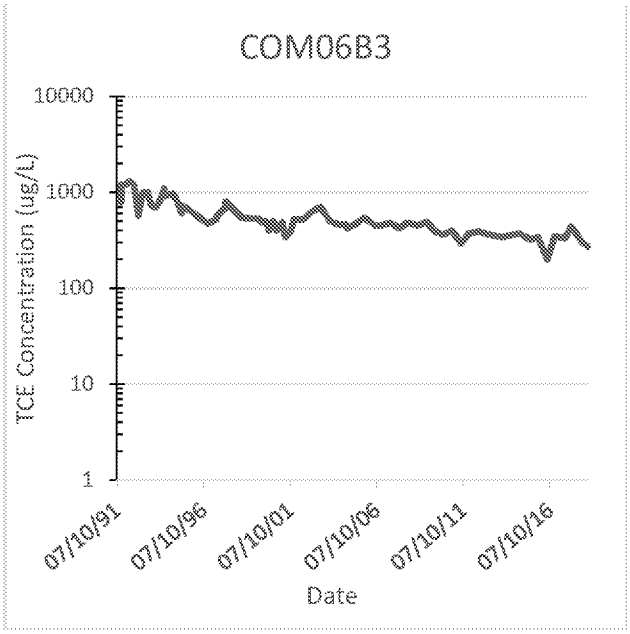


FIGURE 8

TCE CONCENTRATOIN IN B3 AQUIFER EXTRACTION WELLS

B3 AQUIFER ZONE EXTRACTION WELL DUANE AVENUE



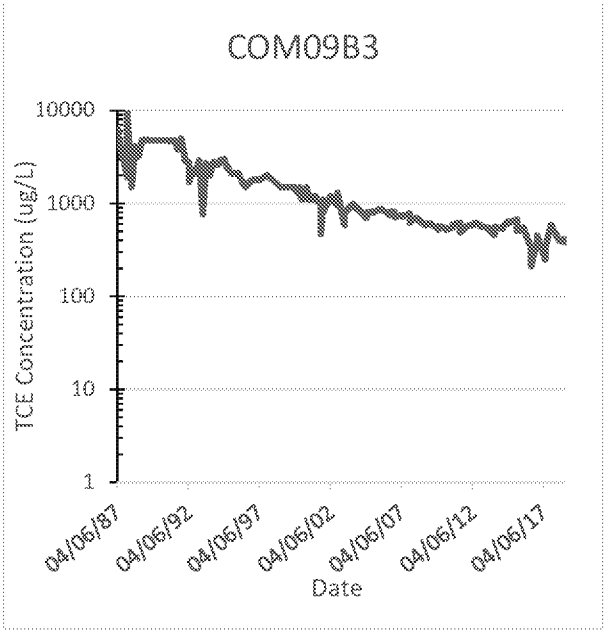
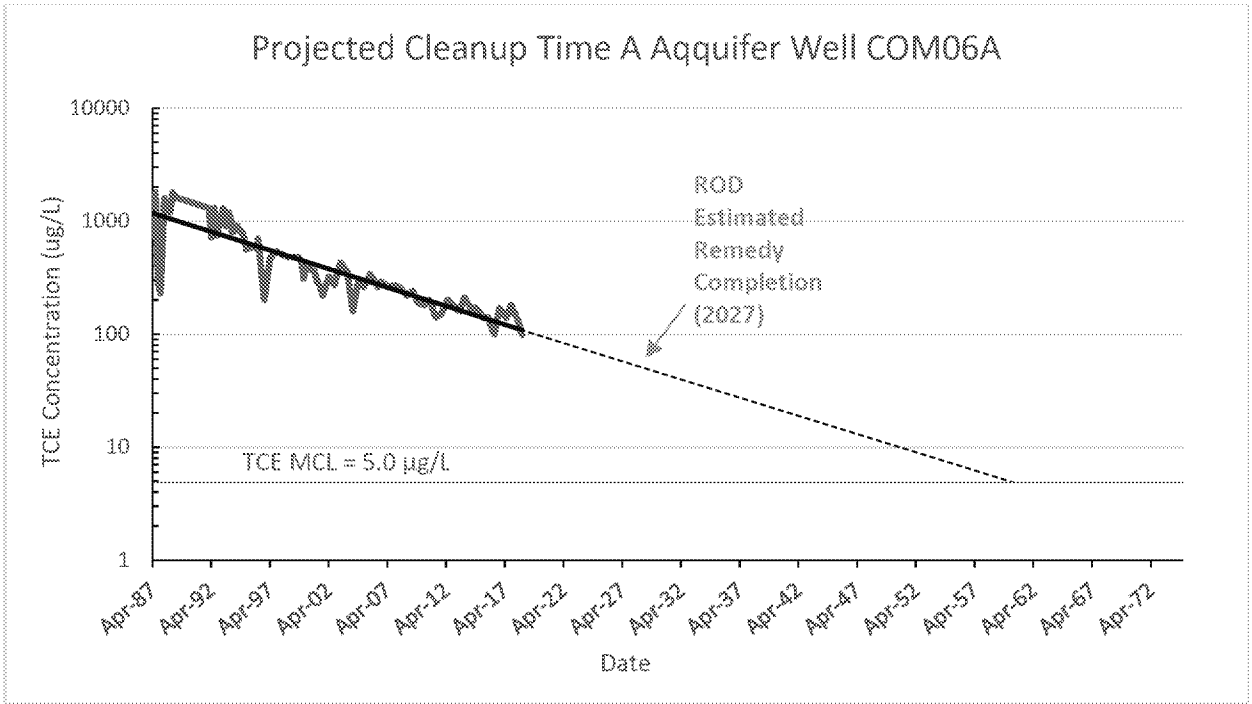


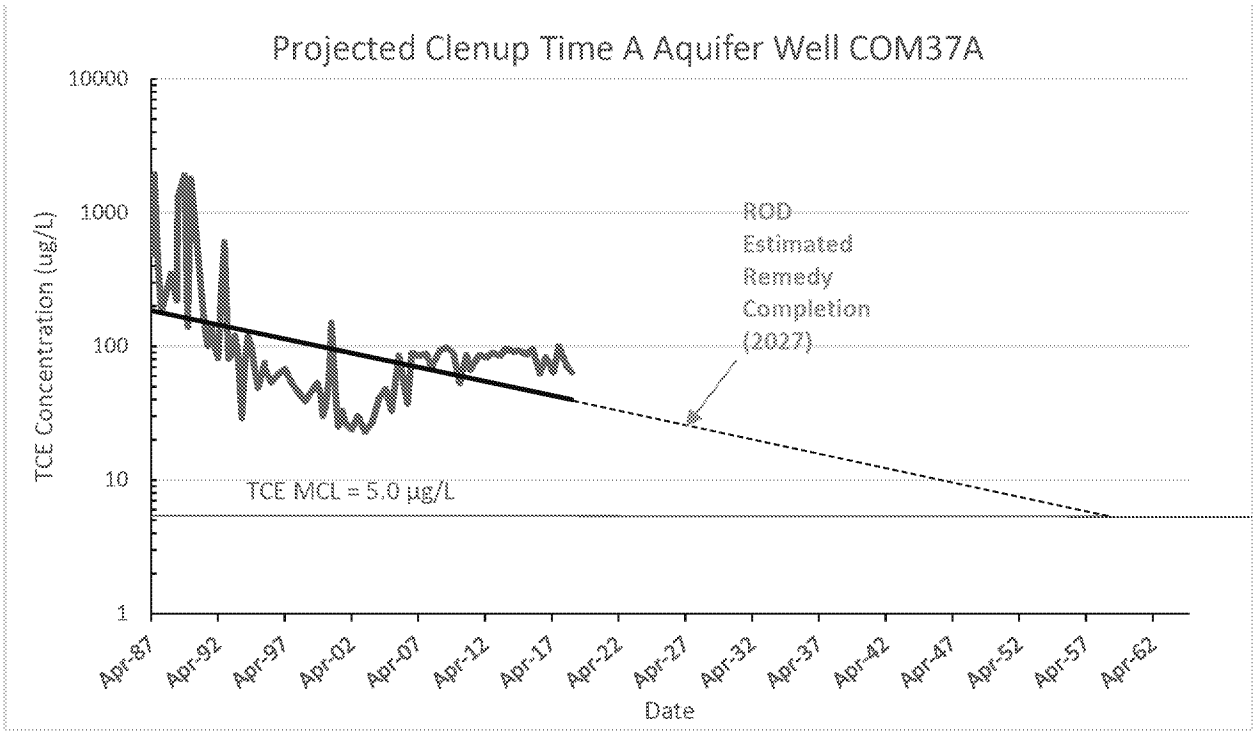
FIGURE 9

PROJECTIONS OF TCE CLEANUP TIME

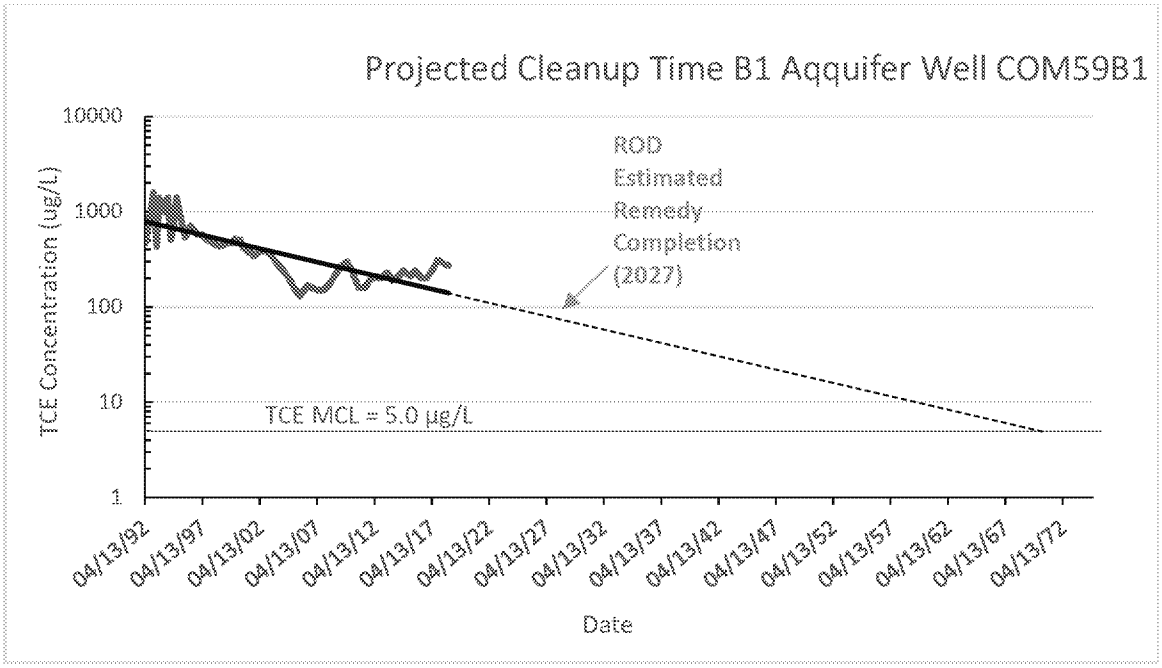
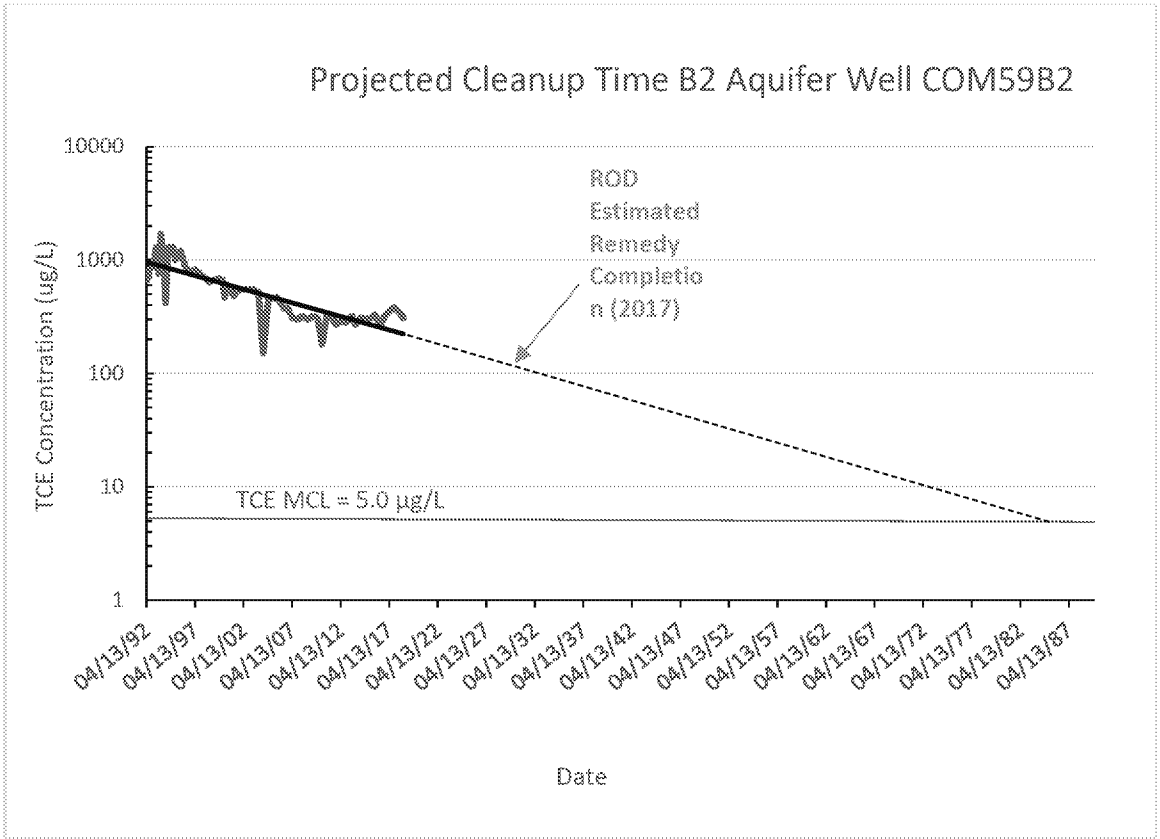
A Aquifer Zone Duane Avenue



A Aquifer Zone Alvarado Avenue



B1 Aquifer Zone Carmel Avenue



B2 Aquifer Zone Carmel Avenue