ACCUTEST LABORATORIES SE

DATE:	04-28-14
COLUMN TYPE:	BTXVMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	11.8 psi
ANALYST:	Melissa Mangual

MS VOA12-O ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	MSOVCOXV042314.M
CALIB. DATE:	04-23-14
EM VOLTAGE:	1047V
BFB RESPONSE:	1643901
RUN ID:	VO 906

STANDARDS

BFB:	V17063 A
ICAL/CCV:	V17036, V17033, V17060, V17061, V17029, V17031
ISTD/SURR:	V17028
ICV/QC:	V17066, V17065, V17062, V17058
Purge Volume:	5ml V17030, V17046

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
O 70	FA14261-1MS	2	W	24	8260	#20(OP)	1	NO		12.5ul/40ml
O 71	1MSD	2	↓	24	↓	#20(OP)	1	NO		12.5ul/40ml
O ~~72~~	~~Blank~~ MM 04-29-14	–	↓	↓	↓			–		✓
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MM 04-29-14

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa12_o_log.xls NF 05/11

42 of 100

ACCUTEST LABORATORIES SE

DATE:	04-29-14
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	11.2 psi
ANALYST:	Helena Chapel

MS VOA12-O ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	MSVOA12-O224.M
CALIB. DATE:	04-23-14
EM VOLTAGE:	1047V
BFB RESPONSE:	1882682
RUN ID:	VO 908

STANDARDS

BFB:	V12063A
ICAL/CCV:	V12054, V12033, V12060, V12061, V12029, V12031
ISTD/SURR:	V12028
ICV/QC:	V12066, V12062, V12062, V12058
Purge Volume:	5 mL V12030, V12046

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
o 23302	BFB	–	–	–	BFB		–	–	–	176/174 ✓
o 03	BFB			–	BFB					176/174 ✓
o 04	BFB			–	BFB					176/174 ✓
o 05	BFB			✓	BFB					(w/ 219b) ~~Pass on expanded scale~~
o 06	CC908-4 04-29-14		W	1	8260	~~#20(a)~~				20mL (→50mL)
o 07	BS			2		~~#20(a)~~				10.5mL (→ 50mL)
o 08	Blank			3						✓
o 09	MB			43						ND
o 10	FA14261-31(x8)	1		54			1	NO		ND
o 11	FA14261-2	2		65			1	NO		~~2X Fruit of~~ 04-30-14 ✓
o 12	-2,2X	2		76			1	NO		25mL (→ 50mL) ✓
o 13	FA14260-1	2		7			1	NO		✓
o 14	2	2		8			1	NO		ND
o 15	3	2		9			1	NO		✓
o 16	4	2		10			1	NO		✓
o 17	5	2		11			1	NO		ND
o 18	6	2		12			1	NO		ND
o 19	7	2		13			1	NO		ND
o 20	8	2		14			1	NO		✓
o 21	9	2		15			1	NO		✓
o 22	10	2		16			1	NO		✓
o 23	11	2		17			1	NO		ND
o 24	12	2		18			1	NO		✓
o 25	13	1		19			1	NO		✓
o 26	14	1		20			1	NO		ND
o 27	15	1		21			1	NO		✓
o 28	16	1		22			1	NO		✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature:

msvoa12_o_log.xls NF 05/11

ACCUTEST LABORATORIES FA14261

ACCUTEST LABORATORIES SE

DATE:	04-29-14
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	11.2 psi
ANALYST:	Melissa Magee

MS VOA12-O ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	MSOMVOAV1042314
CALIB. DATE:	04-23-14
EM VOLTAGE:	1047V
BFB RESPONSE:	1882682
RUN ID:	VO 908

STANDARDS

BFB:	U17063A
ICAL/CCV:	U17054, U17033, U17060, U17061, U17029, U17031
ISTD/SURR:	U17028
ICV/QC:	U17066, U17021, U17062, U17058
Purge Volume:	5ml U17030, U17046

	DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
O	29	F14260-17	1	W	23	8260		1	NO		✓
O	30	1ms	3	↓	24	↓	#20(OP)	1	NO		12.5ul→40ml
O	31	1msd	3	↓	24	↓	#28(OP), #8(SP)	1	NO		12.5ul→40ml
O	32	Blank	–	↓	25	↓		–	–		✓
O	33	FA14260-18	1	↓	26	↓		1	NO		✓
O	34	Blank	–	↓	1	↓		–	–		✓
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MM 04-30-14

Analyst's Signature: Melissa Magee

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

msvoa12_o_log.xls NF 05/11

ACCUTEST LABORATORIES SE

DATE:	04-30-14
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	11.2 psi
ANALYST:	Melissa Vazquez

MS VOA12-O ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	MSVOA12V04234.M
CALIB. DATE:	04-23-14
EM VOLTAGE:	1047 V
BFB RESPONSE:	14 28736
RUN ID:	VO 909

STANDARDS

BFB:	V12063 A
ICAL/CCV:	V12054, V12033, V12060, V12061, V12009, V12031
ISTD/SURR:	V12028
ICV/QC:	V12046, V12021, V12062, V12068
Purge Volume:	5mL V12028, V12046

	DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
O	23335	BFB 04-30-14	–	–	–	BFB		–	–	–	Pass on unbleed (ok)
O	36	CC902-4		W	1	8260					20mL → 50mL
O	37	CC902-4a			1		#20 (OP)				20mL → 50mL
O	38	DS			2		#20 (OP)				12.5mL → 40mL
O	39	Blank			3						✓
O	40	MB 04-30-14			3						ND
O	41	~~EA~~ FA14302-7	2		4			1	NO		✓
O	42	FA14302-8 (TB)	2		5			1	NO		✓
O	43	FA14302-9	2		6			1	NO		✓
O	44	FA14302-10 (TB)	2		7			1	NO		✓
O	45	FA14302-11	2		8			1	NO		✓
O	46	-12 (TB)	2		9			1	NO		✓
O	47	FA14315-1	2		10			1	NO		✓
O	48	-2	2		11			1	NO		✓
O	49	FA14261-21, 5X	1		12			1	NO	IX	10mL → 50mL
O	50	22	1		13			1	NO		✓
O	51	23	1		14			1	NO		✓
O	52	24	1		15			1	NO		✓
O	53	25, 5X	1		16			1	NO	IX	10mL → 50mL
O	54	26	1		17			1	NO		✓
O	55	27, 2X	1		18			1	NO	IX	25mL → 50mL
O	56	28	1		19			1	NO		✓
O	57	29, 5X	1		20			1	NO	IX	10mL → 50mL
O	58	30	1		21			1	NO		✓
O	59	~~FA14315-3~~ 04-30-14	2		22			1	NO		FA14261-21 ✓
O	60	FA14261-25 04-30-14	2		23			1	NO		✓
O	61	-22 ms	2		24		#20 (IP)	1	NO		12.5mL → 40mL
O	62	-22 msd	2		24		#20 (IP)	1	NO		12.5mL → 40mL

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

63 total ✓

Analyst's Signature: [signature]

msvoa12_o_log.xls NF 05/11

ACCUTEST LABORATORIES FA14261

Instrument Run Log VZ982 page 1 of 2

ACCUTEST LABORATORIES SE

DATE:	04/30/14
COLUMN TYPE:	5+x-VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA15-Z
PURGE PRESSURE:	10.1 psi
ANALYST:	RW / STUTTP / DP

MS VOA15-Z ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	8260Z app 9
CALIB. DATE:	04/30/14
EM VOLTAGE:	1576
BFB RESPONSE:	2289016
RUN ID:	VZ 982

STANDARDS

BFB:	V17063
ICAL/CCV:	V17086 V17059 V17061 V17084 V17037
ISTD/SURR:	V17053 V16959
ICV/QC:	V17064 V17078 V17062 V17085 V17046
Purge Volume:	5 ml

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	Cl ?	RR	COMMENTS
Z 25035	BFB	–					–	–		Auto 2ml
Z 36	IC 982-1	–	W	1	8260	Sp#7, mp#67, 94, 104	–	–		10 ml of level 2 → 50ml
Z 37	-2	–		2		Op#36 PII #104, mp#107	–	–		5ml → 100ml + 10ml 50ml → 50ml
Z 38	-3	–		3		Op#36, PII #104	–	–		10ml + 15ml 50ml → 50ml
Z 39	-4	–		4		Op#36,	–	–		20ml → 50ml
Z 40	-5	–		5		Sp#7, Op#36	–	–		35ml + 20ml 50ml → 50ml
Z 41	-6	–		6		Op#36	–	–		50ml + 25ml 50ml → 50ml
Z 42	BLK	–		7			–	–		
Z 43	ICV 982-4	–		8		Op#36	–	–		25ml → 50ml
Z 44	BS	–		9		Op#36	–	–		12.5ml → 40ml
Z 45	MB	–		10			–	–		✓
Z 46	FA 14261-27	2		11			1	N		✓
Z 47	29	2		12			1		5x	✓
Z 48	FA 14536-29	1		13			1			✓
Z 49	30	1		14			1			✓
Z 50	31	1		15			1			✓
Z 51	32, 100x	1		16			1			✓ 0.50ml:50ml
Z 52	33, 20x	1		17			1			✓ 2.5ml:50ml
Z 53	34	1		18			1			✓
Z 54	35, 200x	1		19			1			✓ 0.25ml:50ml
Z 55	36	1		20			1			✓
Z 56	37	1		21			1			✓
Z 57	38, 5x	1		22			1			✓ 10ml:50ml
Z 58	39	1		23			1			✓
Z 59	40	1		24			1			✓
Z 60	41	1		25			1			✓
Z 61	42	1		26		PII #103, mp#62	1		5x	✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa15_z_log.xls NF 09/11

ACCUTEST LABORATORIES SE

DATE:	04/30/14
COLUMN TYPE:	RTX - VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA15-Z
PURGE PRESSURE:	10.1 PSI
ANALYST:	STUTIP / KW / DP

MS VOA15-Z ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	8260Z APP9
CALIB. DATE:	04/30/14
EM VOLTAGE:	1974
BFB RESPONSE:	2285016
RUN ID:	VZ 982

STANDARDS

BFB	
ICAL/CCV:	CONTI_ VZ982
ISTD/SURR:	
ICV/QC:	
Purge Volume:	5 ml

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
Z 62	43	1	W	27	8260	PII #103	1	N	1X	↓IS4
Z 63	44	1	↓	28	↓	PII #103	1	↓	1X	↓
Z 64	45, 100x	1	↓	29	↓	PII #103	1	↓	10X	✓ 0.5ml/50ml
Z 65	46	1	↓	30	↓		1	↓	5/6/14 ✓	
Z 66	FA14536-32MS, 100x	1	↓	31	↓	OP#36	1	↓		12.5ul → 40ml 0.5ml/50ml
Z 67	32MSD, 100x	1	↓	31	↓	OP#36	1	↓		12.5ul → 40ml 0.5ml/50ml
Z 68	Blank	-	H_2O	32	↓		-	-		
Z 69	Blank	-	↓	1	↓		-	-		
Z 70	Blank	-	↓	1	↓		-	-		
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* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Over apping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa15_z_log.xls NF 09/11

ATTACHMENT 2

Surface Water Survey Data

Merestone Surveying

Cameron-Cole, LLC
5777 Central Ave.
Suite 200
Boulder, CO 80301

4/21/2014
Job # 14-04-775

SURVEYING FOR CLEAN HARBORS
WICHITA, SEDGWICK COUNTY, KANSAS
SURFACE WATER ELEVATIONS
Measured on April 15, 2014

WELL ID	NORTHING	EASTING	ELEVATION	
Control Pt	1701356.69	1653945.24	1317.29	"X" in FH Bolt
SK-SW 1	1699170.75	1653851.09	1294.44	Top Water Surface
SK-SW 2	1700893.94	1654059.22	1295.59	Top Water Surface
SK-SW 3	1701307.11	1654228.64	1296.34	Top Water Surface
SK-SW 4	1701377.15	1654276.03	1297.16	Top Water Surface
SK-SW 5	1701872.16	1654624.77	1298.53	Top Water Surface

TODD P. HORNBAKER
LICENSED
LS-1532
4/21/14
KANSAS
LAND SURVEYOR

Todd P. Hornbaker
KS PLS #1532

Merestone Surveying
1641 N. Andover Rd
Andover, KS 67002
P: 316.425.7770 F: 316.425.7773
www.merestoneks.com

ATTACHMENT 3

Water Purging and Sampling Logs

26 Samples + QA/QC

Clean Harbors Kansas
2549 N. New York Ave.
Wichita, KS 67219
316-269-7400
Semi-Annual Sampling

2014 Gauging Date + Time	5 stream samples 22 QA/QC Wells (VOCs-8260B)	(Feet) DTW	(Feet) TWD	Calculated Purge Volume (Gallons)	Actual Purge Volume (Gallons)	Notes / Sample Date + Time
	SK-1D	—	—	—	—	Decommissioned
	SK-1S	—	—	—	—	Decommissioned
4/14 @ 1707	SK-2D	14.90	37.25	10.93	12.0	4/16 @ 1155
4/14 @ 1710	SK-2S + DUP-2	15.14	24.68	4.67	5.0	4/16 @ 1220
	SK-3D	—	—	—	—	Decommissioned
	SK-3S	—	—	—	—	Decommissioned
4/14 @ 1658	SK-4D + FB-2	13.88	32.09	8.90	9.0	4/16 @ 1015
4/14 @ 1655	SK-4S	13.81	21.60	3.81	4.5	4/16 @ 1040
	SK-5D	—	—	—	—	Decommissioned
	SK-5S	—	—	—	—	↓
	SK-6S	—	—	—	—	↓
4/14 @ 1600	SK-7D	17.97	39.46	10.75	16.0	4/15 @ 1110
1620	SK-8D	15.90	36.10	9.88	10.75	4/15 @ 1650
1622	SK-8S	15.74	22.30	3.21	4.5	4/15 @ 1715
1645	SK-9D	17.08	39.07	10.75	13.0	4/15 @ 1515
1648	SK-10S	19.40	25.13	2.80	3.0	4/16 @ 0900
1640	SK-11S	19.54	28.06	4.17	4.5	4/16 @ 0930
1703	SK-12D	14.35	37.45	11.30	12.0	4/16 @ 1110
1700	SK-12S	14.32	20.22	2.88	3.0	4/16 @ 1125
1635	SK-13S	16.03	22.99	3.40	4.5	4/16 @ 0820
	SK-B92 1"	—	—	—	—	Decommissioned
	SK-B68 1"	—	—	—	—	Decommissioned
4/14 @ 1555	WND-32S	18.42	22.20	1.85	2.1	4/15 @ 1020
4/14 @ 1557	WNC-32DR 1"	18.80	37.61	0.77	0.9	4/15 @ 0955
	HRI-03 4"	—	—	—	—	Decommissioned
4/14 @ 1530	RSC-1 4"	16.83	36.73	38.98	39.0	4/15 @ 1800
1606	MW-10 + DUP-1	18.20	23.14	2.42	3.0	4/15 @ 1420
1612	MW-11 + FB-1	17.33	23.05	2.80	3.0	4/15 @ 1450
1605	MW-14	18.08	23.30	2.55	3.0	4/15 @ 1123
1630	MW-15	16.60	23.07	3.16	3.2	4/15 @ 1600
1540	MW-18	18.76	23.94	2.53	3.0	4/15 @ 1350
4/15 AM	SK-SW-1	—	—	—	—	4/15 @ 1230
	SK-SW-2	—	—	—	—	4/15 @ 1215
	SK-SW-3	—	—	—	—	4/15 @ 1200
	SK-SW-4	—	—	—	—	4/15 @ 1145
	SK-SW-5	—	—	—	—	4/15 @ 0840
	1 Duplicate per day					
	1 Field Blank per day					
	1 Trip Blank per cooler					
	SK-OW1	—	—	—	—	Not Sampled, Decommissioned

Groundwater Sampling Form

DUP-2 Collected

PROJECT Wichita-Spring 2014 WELL NO. SK-2S
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad _____
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 1200
   WEATHER CONDITIONS _____
   a. Location of measuring point _____
   b. Depth of water table from measuring point 15.14'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 24.68'
   e. Length of water column (line 2d-2b) 9.54'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 1200
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 4.67

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1205	1.5	7.08	-17.8	0.999	15.71	clear	34.8
1210	3.0	7.09	-22.4	0.998	15.70	↓	25.7
1215	5.0	7.10	-23.7	0.997	15.69	↓	23.2

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 1220
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-2D
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 1135
   WEATHER CONDITIONS ~30 mph wind out of S, 58°F, partly cloudy
   a. Location of measuring point _____
   b. Depth of water table from measuring point 14.90'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 37.25'
   e. Length of water column (line 2d-2b) 22.35'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 1135
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes _____

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1140	4	7.01	55.9	1.109	17.17	clear	10.1
1145	8	7.00	56.5	1.109	17.20	↓	6.15
1150	12	7.00	56.7	1.109	17.19	↓	5.90

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 1155
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-129
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 1115
   WEATHER CONDITIONS windy ≈ 30 mph winds from SE, 57°F, partly cloudy
   a. Location of measuring point _____
   b. Depth of water table from measuring point 14.32'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 20.22'
   e. Length of water column (line 2d-2b) 5.90'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 1115
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 2.88 gallons

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1118	1	6.81	59.6	0.912	14.91	Brown	54.0
1121	2	6.81	59.0	0.912	14.89	Tan	40.1
1124	3	6.82	58.6	0.912	14.88	cloudy	28.7

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 1125
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-120
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad _____
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 1050
   WEATHER CONDITIONS windy ≈ 30 mph from SE, 58°F, partly cloudy
   a. Location of measuring point _____
   b. Depth of water table from measuring point 14.35'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 37.45'
   e. Length of water column (line 2d-2b) 23.10'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 1050
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 11.30 gallons

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1055	4	7.02	52.2	1.111	16.22	clear	15.0
1100	8	6.95	52.5	1.117	16.18	↓	6.89
1105	12	6.95	52.8	1.117	16.19	↓	7.97

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 1110
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. 5K - 4S
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. WELL CONDITION CHECKLIST:

a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
b. Well visibility (paint) _____
c. Well label _____

2. WATER LEVEL MEASUREMENT:

DATE 4/16/2014 TIME 1020
WEATHER CONDITIONS windy ≈ 30 mph from SE; 57°F, partly cloudy

a. Location of measuring point _____
b. Depth of water table from measuring point 13.81'
c. Height of measuring point above ground surface _____
d. Total depth of well below measuring point 21.60'
e. Length of water column (line 2d-2b) 7.79'

3. WELL PURGING:

DATE 4/16/2014 TIME 1020
WEATHER CONDITIONS same as above

a. Purge method Bailer
b. Required purge volume at 3 well volumes 3.81 gallons

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1025	1.5	6.84	61.0	0.958	14.97	clear	38.9
1030	3.0	6.85	60.1	0.958	14.97	↓	31.4
1035	4.5	6.86	59.8	0.958	14.95	↓	28.2

4. SAMPLE COLLECTION:

DATE 4/16/2014 TIME 1040
WEATHER CONDITIONS same as above

a. Collection method Bailer
b. Meter calibration Date Model
pH meter _____
D.O. meter _____
c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

d. Chain of custody form _____ COC tape _____
e. Shipping container _____

5. COMMENTS: _____

Groundwater Sampling Form

FB-2 Collected @ 1015

PROJECT Wichita-Spring 2014 WELL NO. SK-40
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 0955
   WEATHER CONDITIONS partly cloudy, wind ≈ 30mph from SE, 55°F
   a. Location of measuring point _____
   b. Depth of water table from measuring point 13.88'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 32.09'
   e. Length of water column (line 2d-2b) 18.21'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 0955
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 8.90 gallons

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
1000	3	7.06	44.4	1.149	16.13	clear	25.4
1005	6	7.04	44.6	1.149	16.18	↓	26.5
1010	9	7.03	44.8	1.149	16.25	↓	26.3

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 1015
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-11S
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 0910
   WEATHER CONDITIONS partly cloudy, 51°F, ≈25 mph wind out of SE
   a. Location of measuring point _____
   b. Depth of water table from measuring point 19.54'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 28.06'
   e. Length of water column (line 2d-2b) 8.52'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 0910
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 4.17 gallons

~~Pumping Duration~~ Time	Volume Rmvd. Gallons	pH	Redox	Cond.	T(C)	Color	Turbidity
0915	1.5	7.21	-34.8	1,090	15.94	Clear	26.6
0920	3.0	7.19	-30.4	1,030	15.90	↓	20.7
0925	4.5	7.18	-28.7	1,022	15.88	↓	21.9

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 0930
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-105
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 0840
   WEATHER CONDITIONS partly cloudy, ≈ 20mph wind from SE, 48°F
   a. Location of measuring point _____
   b. Depth of water table from measuring point 19.40'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 25.13'
   e. Length of water column (line 2d-2b) 5.73'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 0840
   WEATHER CONDITIONS same as above
   a. Purge method bailer
   b. Required purge volume at 3 well volumes 2.8 gallons

~~Pumping Duration~~ Time	Volume Rmvd. (Gallons)	pH	Redox	Cond.	T(C)	Color	Turbidity
0845	1	7.03	-29.9	1.037	14.59	cloudy	60.4
0850	2	7.03	-33.4	1.031	14.62	clearing	40.4
0855	3	7.03	-35.1	1.029	14.67	✓	32.8

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 0900
   WEATHER CONDITIONS same as above
   a. Collection method _____
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita-Spring 2014 WELL NO. SK-135
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad _____
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/16/2014 TIME 0800
   WEATHER CONDITIONS ≈ 20 mph wind out of SE, 42°F, partly cloudy
   a. Location of measuring point _____
   b. Depth of water table from measuring point 16.03'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 22.99'
   e. Length of water column (line 2d-2b) 6.96'

3. **WELL PURGING:**
   DATE 4/16/2014 TIME 0800
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 3.40

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
0805	1.5	6.68	115.5	1.113	14.21	clear	35.6
0810	3.0	6.67	111.4	1.115	14.18	↓	28.7
0815	4.5	6.67	111.0	1.117	14.17	↓	27.8

4. **SAMPLE COLLECTION:**
   DATE 4/16/2014 TIME 0820
   WEATHER CONDITIONS same as above
   a. Collection method bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. RSC - 1
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1730
   WEATHER CONDITIONS partly Cloudy, 57°F, ≈10mph wind out of South
   a. Location of measuring point _____
   b. Depth of water table from measuring point 16.83'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 36.73'
   e. Length of water column (line 2d-2b) 19.9'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1730
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 38.98 (4" well)

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1740	13	7.21	-64.0	1.177	17.25	clear	19.8
1750	26	7.19	-58.3	1.176	17.29	↓	21.5
1800	39	7.19	-55.6	1.176	17.28	↓	24.9

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1800
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-85
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1700
   WEATHER CONDITIONS partly cloudy, 54°F, ≈10 mph wind from East
   a. Location of measuring point _____
   b. Depth of water table from measuring point 15.74'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 22.30'
   e. Length of water column (line 2d-2b) 6.56'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1700
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 3.21

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1703	1.5	7.15	-99.9	0.899	15.61	cloudy	48.4
1706	3.0	7.16	-101.0	0.899	15.58	clear	11.8
1710	4.5	7.18	-102.5	0.899	15.58	↓	10.3

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1715
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-8D
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1630
   WEATHER CONDITIONS cloudy, 53°F, Wind ≈15 mph ~~out~~ of East
   a. Location of measuring point _____
   b. Depth of water table from measuring point 15.90'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 36.10'
   e. Length of water column (line 2d-2b) 20.2'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1630
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 9.88

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1635	3.5	7.08	-56.0	1.086	16.29	Clear	6.23
1640	7.0	7.09	-54.2	1.085	16.43	↓	7.62
1645	10.5	7.14	-52.0	1.086	16.47	↓	6.18

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1650
   WEATHER CONDITIONS same as above
   a. Collection method same as above
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. MW-15
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1540
   WEATHER CONDITIONS partly cloudy, 53°F, ≈15 mph wind out of SE
   a. Location of measuring point _____
   b. Depth of water table from measuring point 16.60'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 23.07'
   e. Length of water column (line 2d-2b) 6.47'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1540
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes ~~3.53~~ 3.16

~~Pumping Duration~~ Time	~~Volume~~ Gallons Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1545	1	7.00	-119.1	0.822	17.10	clear	40.5
1550	2	7.07	-121.4	0.822	17.13	↓	36.4
1555	3.2	7.09	-122.8	0.821	17.18	↓	29.0

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1600
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-90
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1500
   WEATHER CONDITIONS partly cloudy, 10mph wind from SE, ≈53°F
   a. Location of measuring point _____
   b. Depth of water table from measuring point ~~15.90~~ 17.08'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point ~~38.10~~ 39.07'
   e. Length of water column (line 2d-2b) 21.99'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1500
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes ~~19.88~~ 10.75 gallons

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1503	3	7.03	-140.7	0.934	17.49	clear	2.69
1506	7	7.02	-119.0	0.952	17.51	↓	4.36
1510	10	7.02	-117.4	0.953	17.47	↓	4.64
1515	13	7.01	-116.8	0.954	17.45	↓	4.54

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1515
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

FB-1

Groundwater Sampling Form

PROJECT Wichita-Spring 2014 WELL NO. MW-11
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1430
   WEATHER CONDITIONS partly cloudy, 54°F, ≈10 mph wind from South
   a. Location of measuring point _____
   b. Depth of water table from measuring point 17.33'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 23.05'
   e. Length of water column (line 2d-2b) 5.72'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1430
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 2.80 gallons

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1435	1	7.22	-176.0	0.743	16.90	clear	11.4
1440	2	7.16	-173.4	0.740	16.86	↓	9.43
1445	3	7.11	-171.4	0.739	16.85	↓	

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1450
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

DUP-1 Collected

Groundwater Sampling Form

PROJECT Wichita-Spring 2014 WELL NO. MW-10
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1400
   WEATHER CONDITIONS partly cloudy, 52°F, ≈10 mph wind from South
   a. Location of measuring point _____
   b. Depth of water table from measuring point 18.20'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 23.14'
   e. Length of water column (line 2d-2b) 4.94'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1400
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 2.42

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1405	1	7.14	-237.1	0.764	17.19	Gray	41.4
1410	2	7.09	-238.4	0.761	17.16	↓	27.5
1415	3	7.08	-239.3	0.758	17.18	↓	22.9

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1420
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** DUP-1 collected marked as if collected @ 1200

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. MW-18
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts _____ Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1330
   WEATHER CONDITIONS Clear, 51°F, wind out of South @ ≈ 10 mph
   a. Location of measuring point _____
   b. Depth of water table from measuring point 18.76'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 23.94'
   e. Length of water column (line 2d-2b) 5.18'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1330
   WEATHER CONDITIONS same as ↑
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 2.53 gallons

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1335	1	7.23	-78.7	0.853	17.79	orange	74.2
1340	2	7.20	-79.9	0.851	17.81	↓	38.8
1345	3	7.19	-80.5	0.851	17.82	↓	29.1

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1350
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter _____
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. MW-14
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts_____ Prot. casing/lock_____ Surface pad cracked
   b. Well visibility (paint)_____
   c. Well label_____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1115
   WEATHER CONDITIONS clear, 52°F, light variable wind
   a. Location of measuring point_____
   b. Depth of water table from measuring point 18.08'
   c. Height of measuring point above ground surface_____
   d. Total depth of well below measuring point 23.03'
   e. Length of water column (line 2d-2b) 4.23'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1115
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 2.55 gallons

Pumping Duration	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1117	1	7.03	-89.8	1.003	15.82	clear	38.5
1119	2	7.07	-91.9	1.002	15.74	↓	32.4
1121	3	7.08	-93.8	1.00	15.66	↓	29.7

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1123
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter_____
      D.O. meter_____
   c. Sample information pH_____ Cond._____ T(C)_____ Turbidity_____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form_____ COC tape_____
   e. Shipping container_____

5. **COMMENTS:** sheen on purge water

Groundwater Sampling Form

PROJECT Wichita - Spring 2014 WELL NO. SK-70
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts_____ Prot. casing/lock_____ Surface pad OK
   b. Well visibility (paint)_____
   c. Well label_____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1030
   WEATHER CONDITIONS clear, 49°F, light wind - variable
   a. Location of measuring point_____
   b. Depth of water table from measuring point 17.97'
   c. Height of measuring point above ground surface_____
   d. Total depth of well below measuring point 39.07'
   e. Length of water column (line 2d-2b) 21.10'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1030
   WEATHER CONDITIONS same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 10.75 gallons

~~Pumping Duration~~ Time	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
1040	4	6.88	-18.5	1.190	16.68	clear	8.32
1050	8	6.83	22.4	1.188	16.32	clear	6.23
1100	12	6.82	24.7	1.189	16.39	clear	9.74
1108	16	6.83	27.2	1.190	16.40	clear	8.11

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1110
   WEATHER CONDITIONS same as above
   a. Collection method Bailers
   b. Meter calibration Date Model
      pH meter_____
      D.O. meter_____
   c. Sample information pH_____ Cond._____ T(C)_____ Turbidity_____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form_____ COC tape_____
   e. Shipping container_____

5. **COMMENTS:**_____

Groundwater Sampling Form

PROJECT Wichita-Spring 2014 WELL NO. WND-32S
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts_____ Prot. casing/lock_____ Surface pad OK
   b. Well visibility (paint)_____
   c. Well label_____

2. **WATER LEVEL MEASUREMENT:**
   DATE 4/15/2014 TIME 1000
   WEATHER CONDITIONS clear, 45°F, light wind - variable
   a. Location of measuring point_____
   b. Depth of water table from measuring point 18.42'
   c. Height of measuring point above ground surface_____
   d. Total depth of well below measuring point ~~18.42~~ 22.20'
   e. Length of water column (line 2d-2b) 3.78'

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 1000
   WEATHER CONDITIONS Same as above
   a. Purge method Bailer
   b. Required purge volume at 3 well volumes 1.85

~~Pumping~~ Bailer Duration	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
5 min	.7	6.82	-19.2	0.844	15.28	clear	3.62
10 "	1.4	6.82	-21.4	0.848	15.26	↓	9.30
15 "	2.1	6.81	-22.9	0.851	15.25	✓	9.89

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 1020
   WEATHER CONDITIONS Same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter See Cal log
      D.O. meter_____
   c. Sample information pH_____ Cond._____ T(C)_____ Turbidity_____

Analysis	Containers	Sample Prep./Preservation
VOC	3	HCL

   d. Chain of custody form_____ COC tape_____
   e. Shipping container_____

5. **COMMENTS:**_____

Groundwater Sampling Form

PROJECT Wichita-Spring 2014 WELL NO. WND-320R
PROJECT NO. _____ SAMPLERS John Talley & Mike Skinner

1. **WELL CONDITION CHECKLIST:**
   a. Bump posts NA Prot. casing/lock _____ Surface pad OK
   b. Well visibility (paint) _____
   c. Well label _____

2. **WATER LEVEL MEASUREMENT:** 18.80
   DATE 4/15/2014 TIME 0940
   WEATHER CONDITIONS Clear, 40°F, light variable wind
   a. Location of measuring point _____
   b. Depth of water table from measuring point 18.80'
   c. Height of measuring point above ground surface _____
   d. Total depth of well below measuring point 37.61'
   e. Length of water column (line 2d-2b) 18.81' (1" well)

3. **WELL PURGING:**
   DATE 4/15/2014 TIME 0940 → 0955
   WEATHER CONDITIONS same as above
   a. Purge method Peristaltic Pump
   b. Required purge volume at 3 well volumes 0.77 gallons

Pumping Duration	Volume Rmvd.	pH	Redox	Cond.	T(C)	Color	Turbidity
5 min.	0.3	6.77	229.7	1.119	14.76	Clear	17.5
10 min.	0.6	6.74	227.4	1.109	14.84	↓	10.8
15 "	0.9	6.69	221.4	1.104	14.86	↓	10.4

4. **SAMPLE COLLECTION:**
   DATE 4/15/2014 TIME 0955
   WEATHER CONDITIONS same as above
   a. Collection method Bailer
   b. Meter calibration Date Model
      pH meter see calibration log
      D.O. meter _____
   c. Sample information pH _____ Cond. _____ T(C) _____ Turbidity _____

Analysis	Containers	Sample Prep./Preservation

   d. Chain of custody form _____ COC tape _____
   e. Shipping container _____

5. **COMMENTS:** _____

Accutest Laboratories Southeast
Chain of Custody

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www.accutest.com

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PAGE 1 OF 3

Accutest Quote #

SKIFF#

Client / Reporting Information

Company Name: Cameron Cole
Address: 5777 Central Ave. Suite 200
City: Boulder State: CO Zip: 80301
Project Contact: Dan Delahunty E-mail: ddelahunty@Cameron-Cole.com
Phone#: 303-938-15504
Sampler(s) Name(s) (Printed): John Talley + Mike Skinner

Project Information

Project Name: CHES Wichita
Street: 2549 New York Street
City: Wichita State: KS
Project #: X09422595
Fax #: PM = John Talley 781-247-3966
Client Purchase Order #

Analytical Information

1/0C (8260)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection: Date (2014)	Time	Sampled By:	Matrix	Total # of Bottles	Container Information: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	1/0C (8260)	LAB USE ONLY
	SK-7D	4/15	1110	JT	GW	3			✓							✓	
	SK-8D		1650						✓							✓	
	SK-8S		1715						✓							✓	
	SK-9D		1515						✓							✓	
	WND-32S		1020						✓							✓	
	WND-32DR		0955						✓							✓	
	RSC-1		1800						✓							✓	
	MW-10		1420						✓							✓	
	MW-11		1450						✓							✓	
	MW-14		1123						✓							✓	
	MW-15		1600						✓							✓	
	MW-18	↓	1350	↓	↓	↓			✓							✓	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by :	Date Time:	Received By:
1 John Talley	4/16/14@1600	2	3		4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: _____

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SKIFF#

Client / Reporting Information

Company Name: Cameron Cole
Address: 5777 Central Ave. Suite 200
City: Boulder State: CO Zip: 80301
Project Contact: Dan Delahunty E-mail: ddelahunty@Cameron-Cole.com
Phone#: 303-938-5504
Sampler(s) Name(s) (Printed): John Talley + Mike Skinner

Project Information

Project Name: CHES Wichita
Street: 2549 New York Street
City: Wichita State: KS
Project #: X09422595
Fax #: PM = John Talley - 781-247-3965
Client Purchase Order #

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection: 2014 DATE	Collection: TIME	Sampled By:	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	VOC (8260)	LAB USE ONLY
	SK-SW-1	4/15	1230	JT	GW	3			✓							✓	
	SK-SW-2		1215						✓							✓	
	SK-SW-3		1200						✓							✓	
	SK-SW-4		1145						✓							✓	
	SK-SW-5		0840						✓							✓	
	DUP-1		1200						✓							✓	
	FB-1	↓	1450						✓							✓	
	SK-2D	4/16	1155						✓							✓	
	SK-2S		1220						✓							✓	
	SK-4D		1015						✓							✓	
	SK-4S		1040						✓							✓	
	SK-10S	↓	0900	↓	↓	↓			✓							✓	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
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1 [signature]	4/16/14@1600	2	3		4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: _____

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Project Information

Project Name: CHES Wichita
Street: 2549 New York Street
City: Wichita State: KS
Project #: X09422595
Fax #: PM = John Talley (781) 247-3966
Client Purchase Order #

Analytical Information

VOC (8260)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	COLLECTION: DATE 2014	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	VOC (8260)	LAB USE ONLY
	SK-11S	4/16	0930	JT	GW	3			✓							✓	
	SK-12D		1110						✓							✓	
	SK-12S		1125						✓							✓	
	SK-13S		0820						✓							✓	
	DUP-2		1200						✓							✓	
	FB-2	↓	1015	↓	↓	↓			✓							✓	
	Trip Blank					2			✓							✓	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
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- [ ] REDT1 (EPA LEVEL 3)
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Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by :	Date Time:	Received By:
1 [signature]	4/16/14@1600	2	3		4
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: _____

ATTACHMENT 4

Data Validation Summaries

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI GROUNDWATER INVESTIGATION
APRIL 2014 GROUNDWATER SAMPLING EVENT

ACCUTEST LABORATORY PROJECT NUMBER FA14261

Detailed in the following pages is the data validation for 21 groundwater samples, five surface water samples, and five associated quality control samples collected in the vicinity of the Clean Harbors Wichita Facility between April 15 and 16, 2014. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater and QC samples were collected:

Groundwater Samples - Collected April 15 and 16, 2014

SK-2D	SK-2S	SK-4D	SK-4S	SK-7D
SK-8D	SK-8S	SK-9D	SK-10S	SK-11S
SK-12D	SK-12S	SK-13S	WND-32S	WND-32DR
RSC-1	MW-10	MW-11	MW-14	MW-15
MW-18				

Surface Water Samples - Collected April 15, 2014

SK-SW-1	SK-SW-2	SK-SW-3	SK-SW-4	SK-SW-5

Quality Control Samples
FB-1 (Field blank collected at MW-11, April 15, 2014)
FB-2 (Field blank collected at SK-4D, April 16, 2014)
DUP-1 (Field duplicate of primary sample MW-10, collected April 15, 2014)
DUP-2 (Field duplicate of primary sample SK-2S, collected April 16, 2014)
Trip Blank

The samples were shipped to Accutest laboratory located in Houston, Texas on April 16, 2014. Samples were shipped by overnight courier and were received at the laboratory in good condition on April 17, 2014. Samples were received at 2.4^{o}C.

Results of the analyses are provided in Accutest Laboratory **Report FA14261**, dated May 20, 2014. All samples were submitted for analysis of the following analytes:

- Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B.

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of an environmental professional experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The groundwater samples submitted under the chain-of-custodies (COCs) associated with this validation were analyzed and reported as requested.

HOLDING TIME COMPLIANCE

The samples were collected on April 15 and 16, 2014, and arrived at the laboratory on April 17, 2014. All samples submitted for analysis of VOCs were properly preserved with hydrochloric acid at the time of collection. All VOCs analyses were completed within the required 14-day holding time for preserved VOCs by April 30, 2014.

BLANKS

Results from two field blanks and from one trip blank were provided in support of the VOC analyses. Toluene was detected in field blank sample FB-1 at a concentration of 6.3 µg/L, and in field blank sample FB-2 at a concentration of 5.5 µg/L. However, toluene was not detected in either of the two corresponding samples, MW-11 and SK-4D, respectively. No VOCs were detected in the trip blank.

Results from four full suite method blanks were provided in support of the VOC analyses. 1,2,3-Trichlorobenzene was detected at a concentration of 0.58 µg/l in sample batch VZ982, which included samples SK-12S and DUP-2 (duplicate sample of SK-2S). However, this detection was flagged with a "J" qualifier, indicating that this is an estimated value.

SURROGATE RECOVERIES

Accutest provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits.

LABORATORY CONTROL SAMPLES

Results from four full sets of laboratory control sample (LCS) analyses (identified as blank spike analyses) were provided in support of the VOC analyses. Blank Spike Recoveries were outside of control limits for several compounds in analytical batch VO906, which

contained samples SK-7D, SK-8D, SK-8S, SK-9D, WND-32S, WND-32DR, RSC-1, MW-10, MW-11, MW-14, MW-15, MW-18, SK-SW-1, SK-SW-2, SK-SW-3, SK-SW-4, SK-SW-5, DUP-1 (duplicate of MW-10), FB-1 (collected from MW-11), and SK-2D. The following compounds were recovered outside of control limits for batch VO906: cis-1,3-Dichloropropene; trans-1,3-Dichloropropene; and 2-Hexanone. In these instances, recoveries were biased high, but the three compounds outside of control limits were not detected in any of the samples within the batch. Therefore, accuracy, as demonstrated by these analyses is acceptable.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES AND LAB DUPLICATES

Results from four sets of batch specific MS and MSD analyses were provided in support of the VOC analyses. All target VOCs were reported as part of the MS and MSD analysis. Numerous Blank Spike analyte recovery(s) were outside of control limits, but because none of these compounds were detected in any of the associated samples, and probable cause was attributed to matrix interference, no further action was required. Precision and accuracy, as determined by the MS and MSD analyses, were deemed acceptable.

Note: A total of 30 manual integrations were performed on all samples exhibiting an abundance of matrix interference. Although the identified interferences were not target analytes, they did obscure some of the target analytes detected. Manual integration of the known target analyte mass/peak is required because doing so enables the analyst to more accurately determine the abundance of a particular analyte.

FIELD AND LABORATORY DUPLICATE SAMPLE ANALYSES

Two sets of field duplicate samples were collected in support of the VOC analyses, as follows:

DUP-1, field duplicate of primary sample MW-10, and
DUP-2, field duplicate of primary sample SK-2S.

Field duplicate precision for the duplicate groundwater samples are assessed against a maximum relative percent difference (RPD) criteria of 40 percent. For RPDs greater than 40 percent, precision is considered to be poor, and the primary and duplicate results of the sample pair and analytes in question are qualified as J/Estimated.

DUP-1 is a field duplicate of primary sample MW-10:

Sample ID	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	PCE	TCE	Vinyl chloride
MW-10	ND	ND	2.9	ND	ND	ND	4	ND
DUP-1	ND	ND	3.1	ND	ND	ND	3.7	ND
RPD (%)	NA	NA	6.7	NA	NA	NA	7.8	NA

DUP-2 is a field duplicate of primary sample SK-2S:

Sample ID	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	PCE	TCE	Vinyl chloride
SK-2S	4.3	2.4	201 E	3.2	11.5	162 E	50.6	2.4
DUP-2	3.5	3.5	177 E	2	8.9	158 E	41.7	2.7
RPD (%)	20.5	37.3	12.7	46.2	25.5	2.5	19.3	11.8

Field duplicate precision was very good for the MW-10-1/DUP-1 pair. Field duplicate precision was acceptable for the SK-2S/DUP 2 pair, with the exception of trans-1,2-DCE, which exhibited a RPD of 46.2%.

RESULTS QUANTITATION

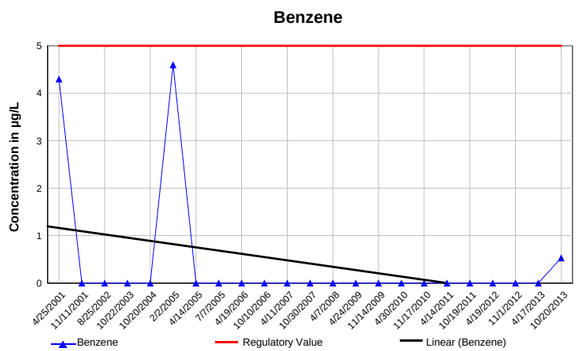
Accutest reported concentrations for some samples from dilutions in order to bring target VOC concentrations into proper calibration range.

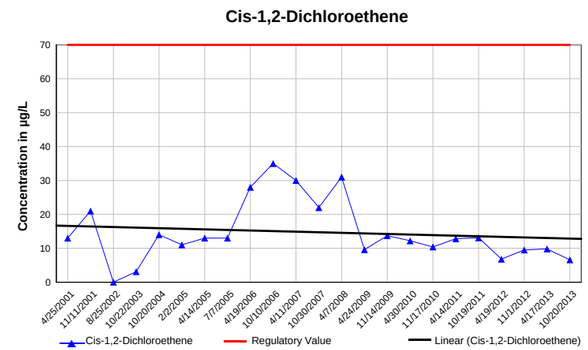
OVERALL DATA ASSESSMENT

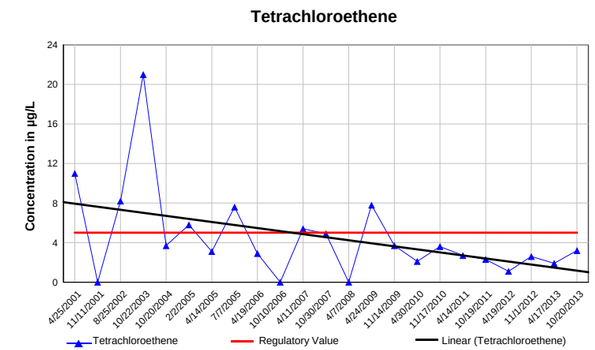
The analytical data quality for samples and analyses listed on page 1 of this validation report have been validated in accordance with the procedures described herein. Results were provided in **Report FA14261**, dated May 20, 2014. All analytical results were found to be quantitative.

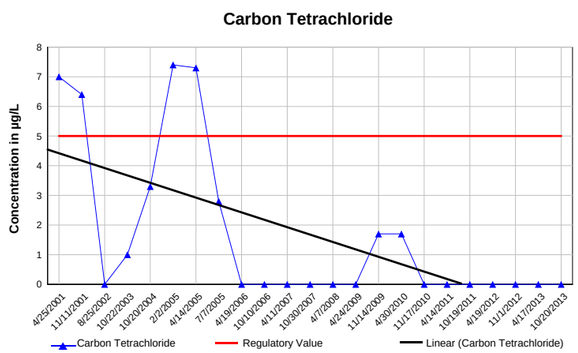
ATTACHMENT 5

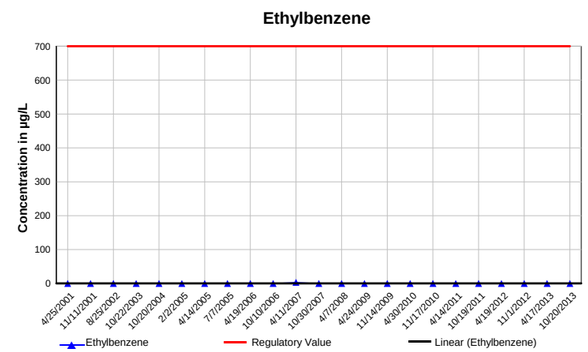
Concentration Versus Time Graphs

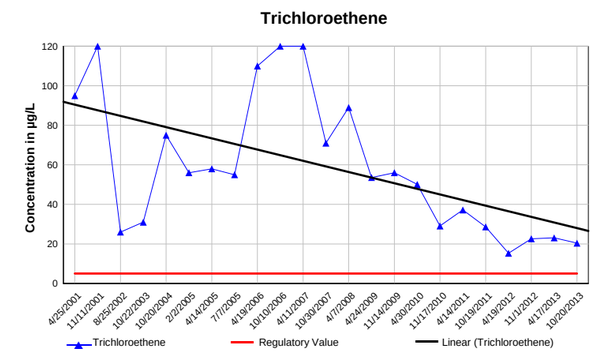


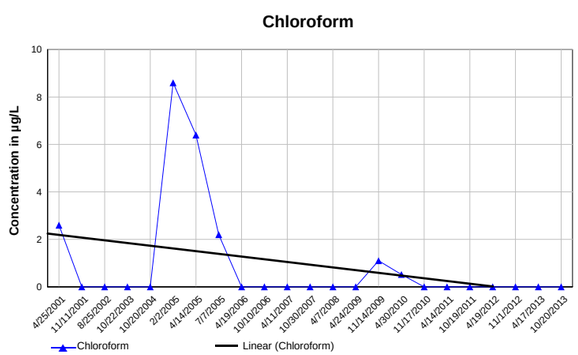


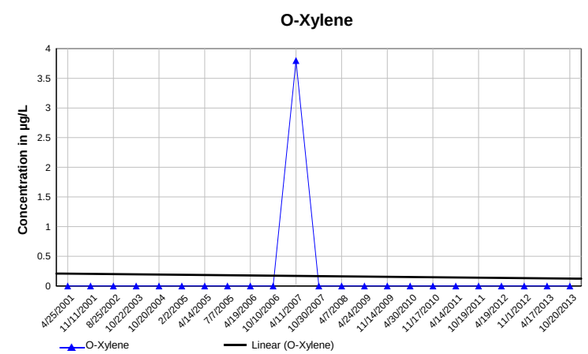


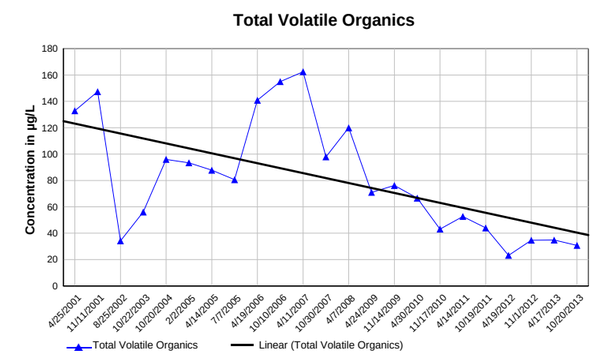












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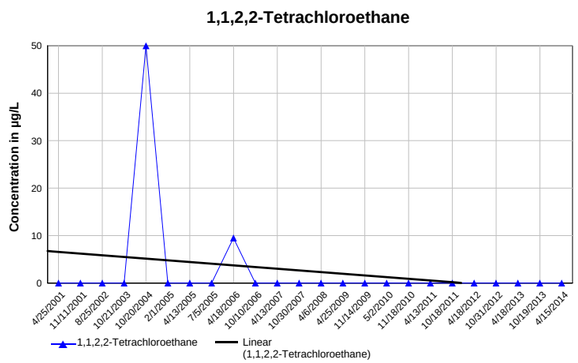
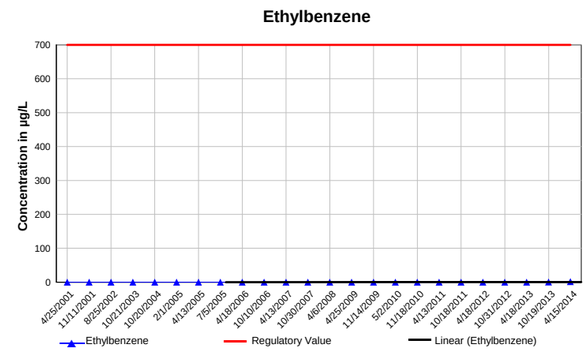
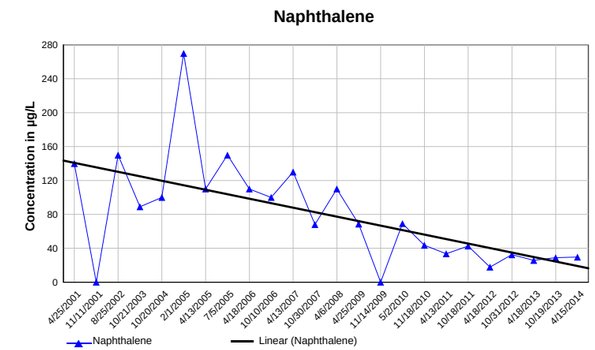
Clean Harbors Kansas, LLC Wichita, Kansas

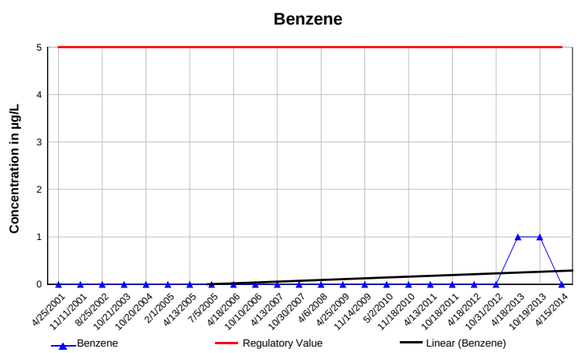
Concentration vs. Time Plots for Selected Constituents
Monitoring Well HRI-03

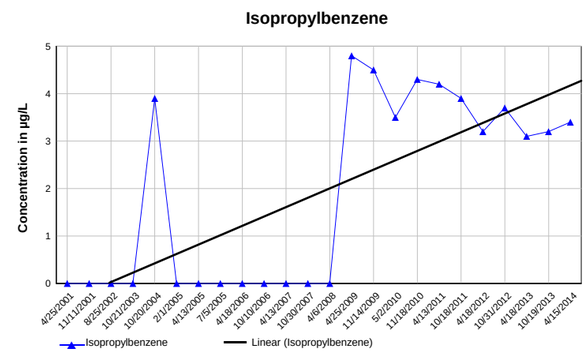
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

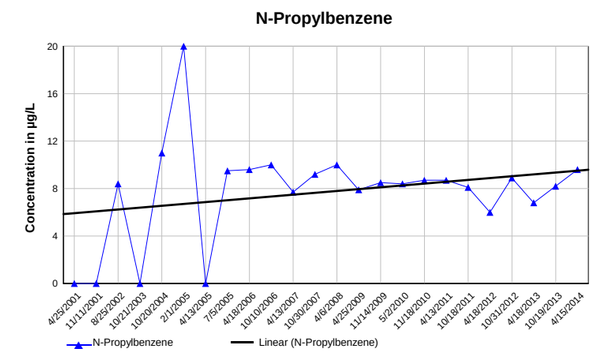


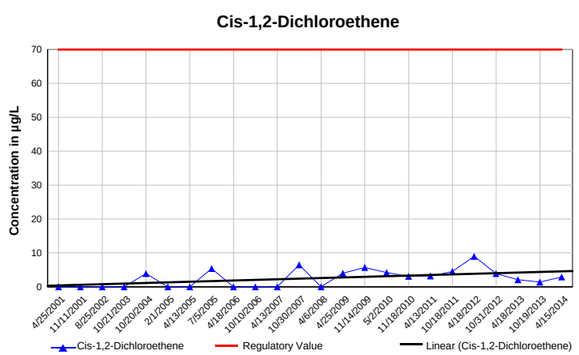


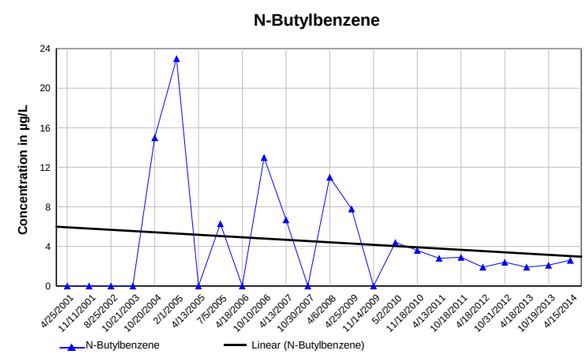


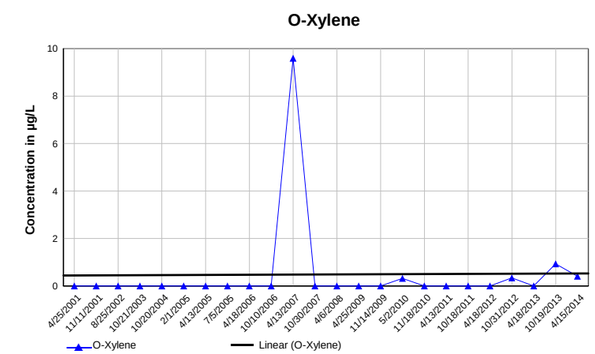












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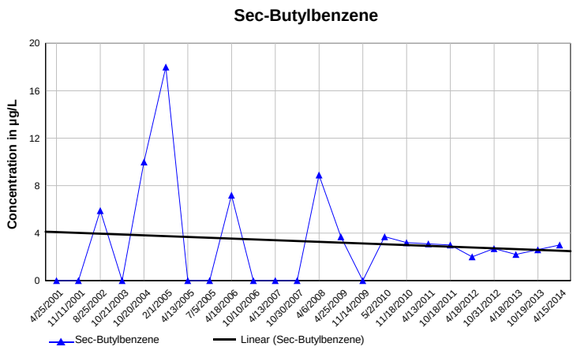
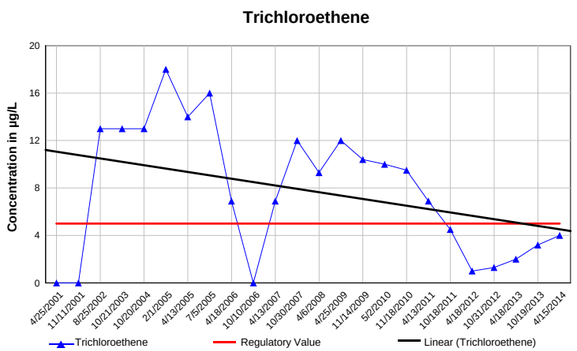
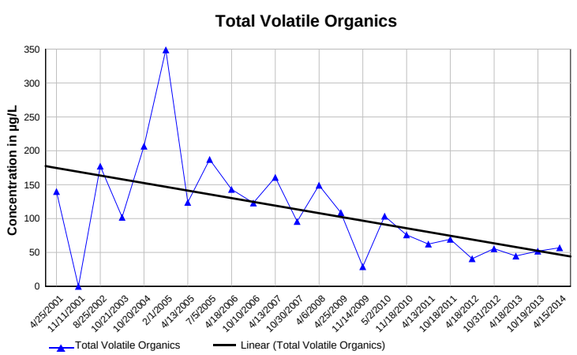
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-10 (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water







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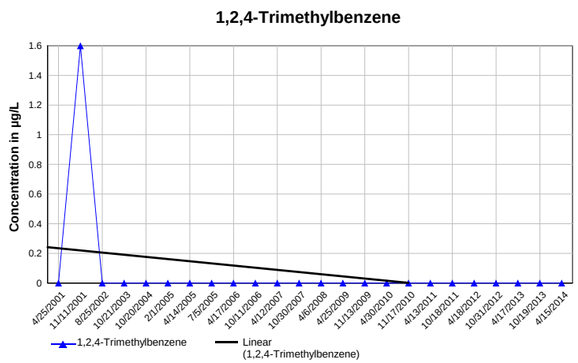
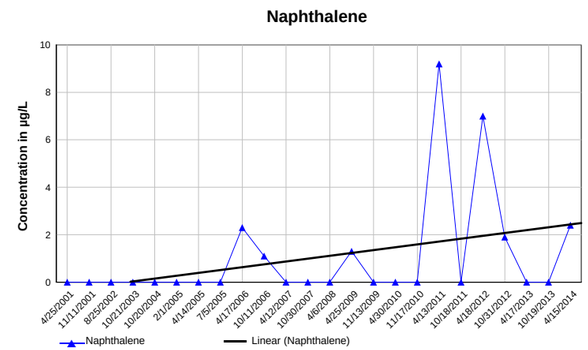
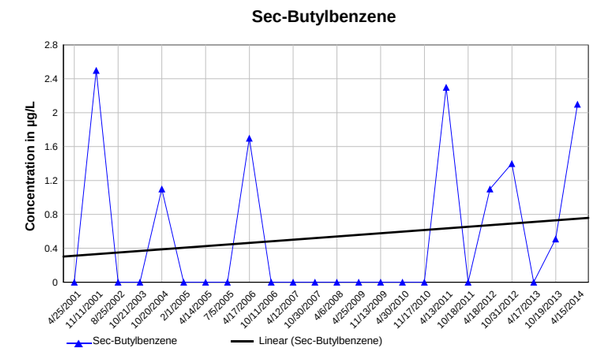
Clean Harbors Kansas, LLC Wichita, Kansas

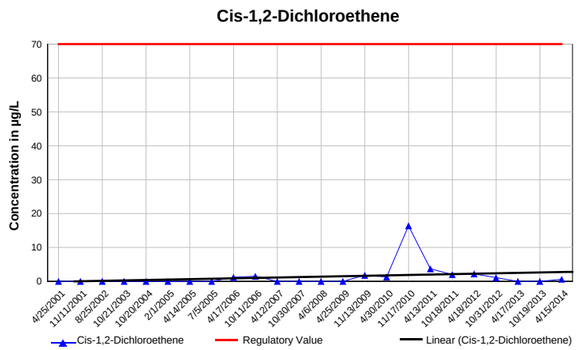
Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-10 (Page 2 of 2)

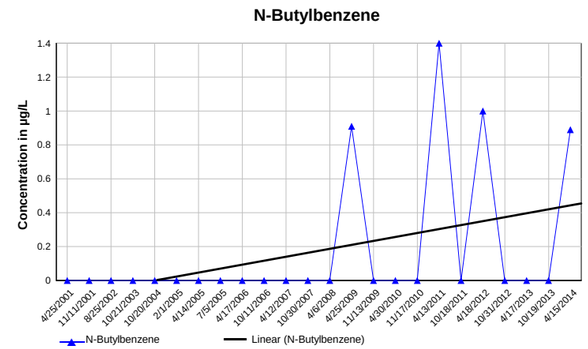
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

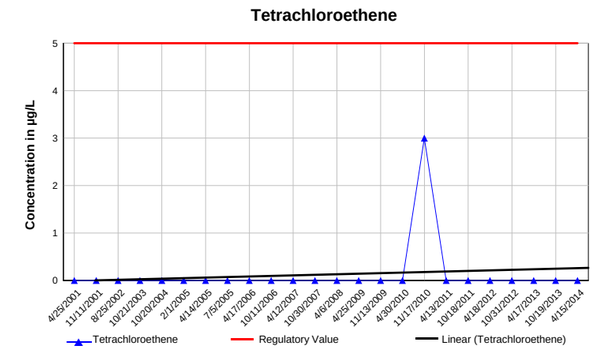


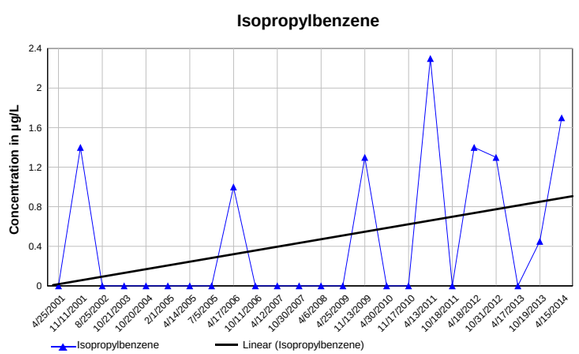


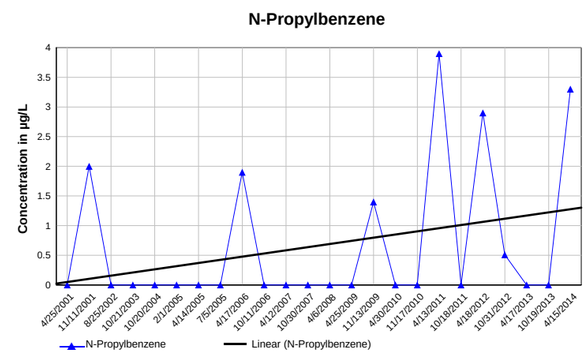


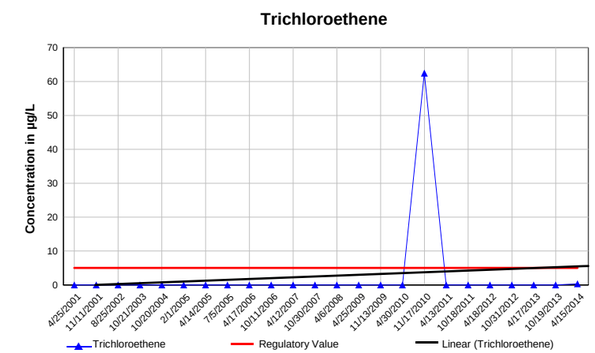












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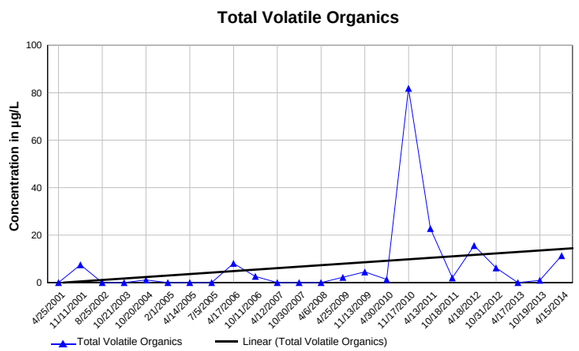
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-11 (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water



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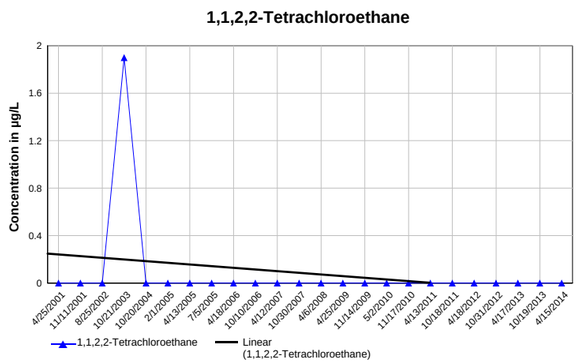
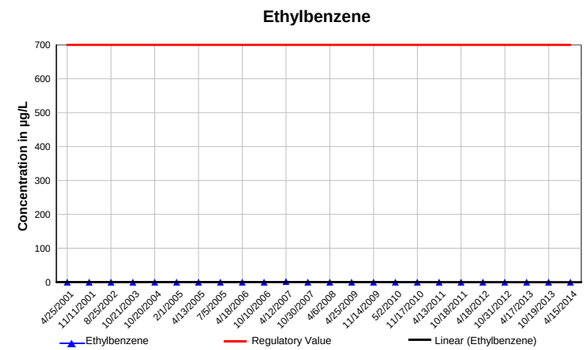
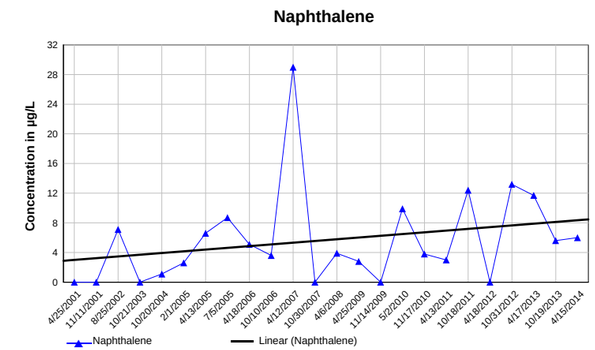
Clean Harbors Kansas, LLC Wichita, Kansas

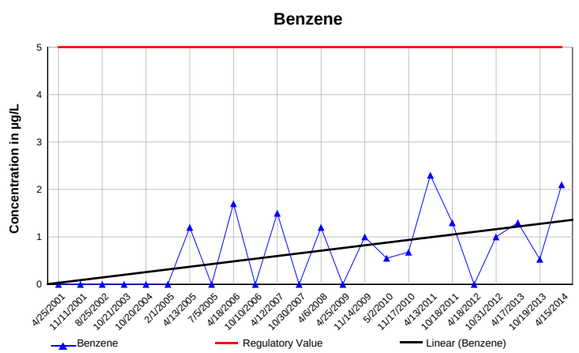
Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-11 (Page 2 of 2)

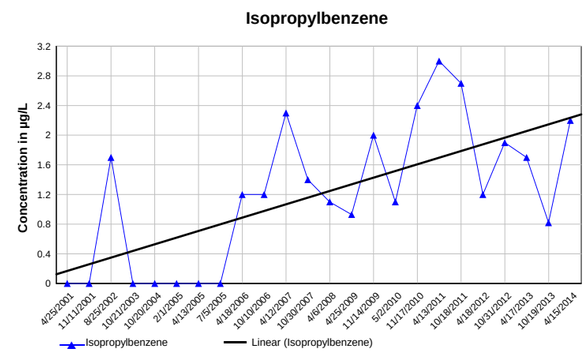
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

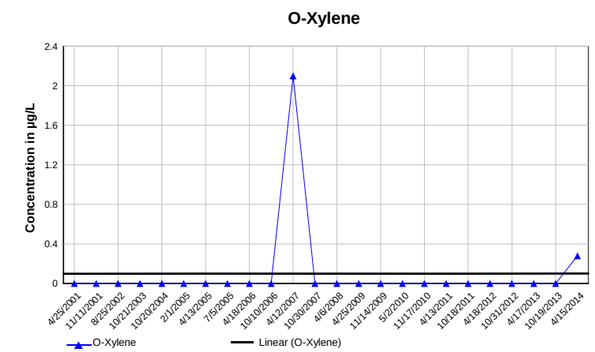


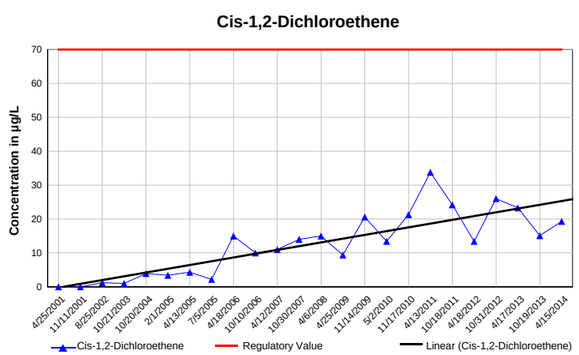


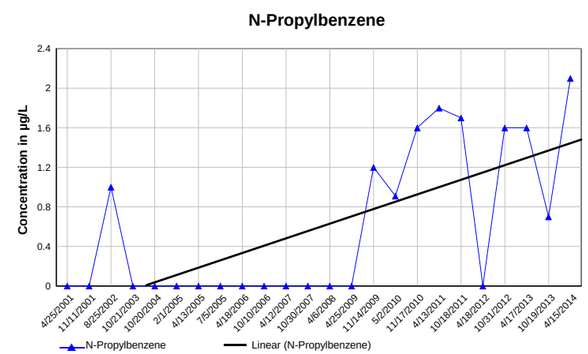


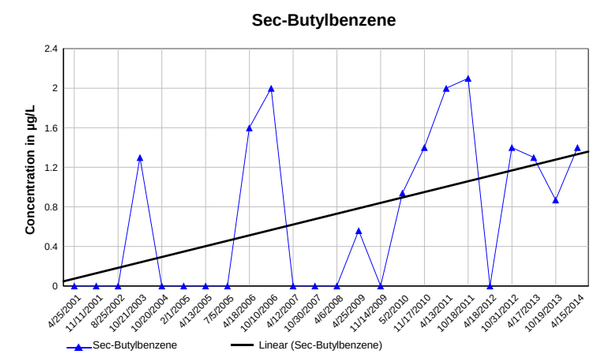












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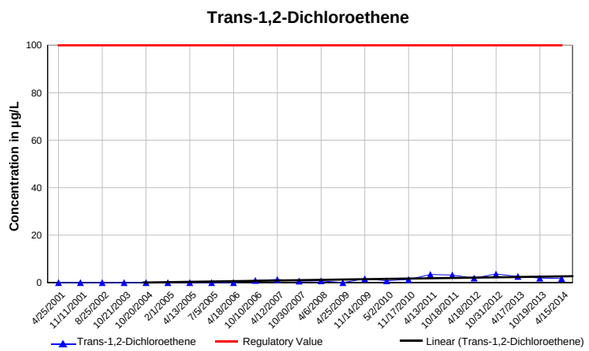
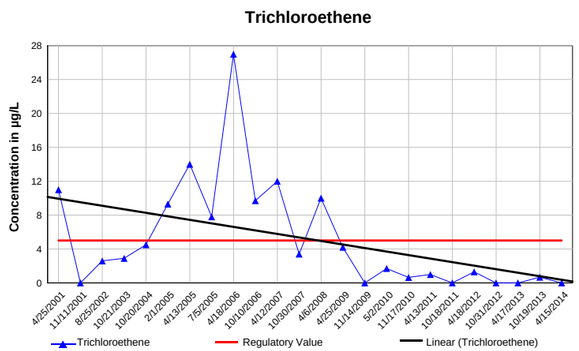
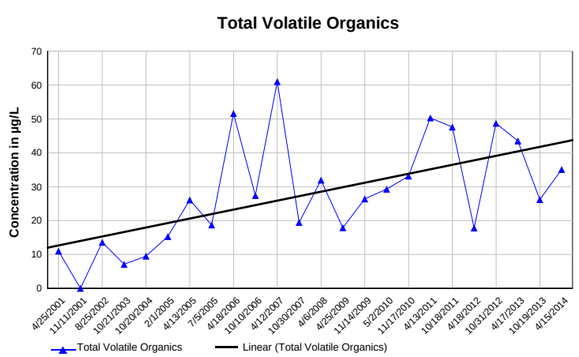
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-14 (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water







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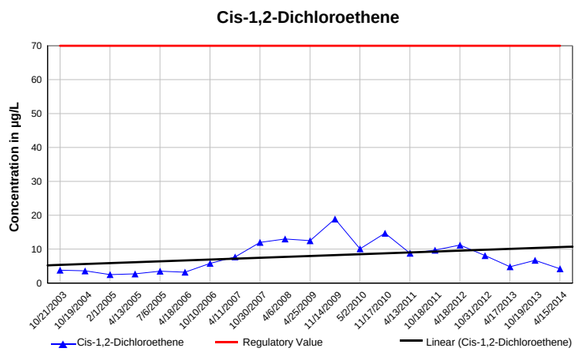
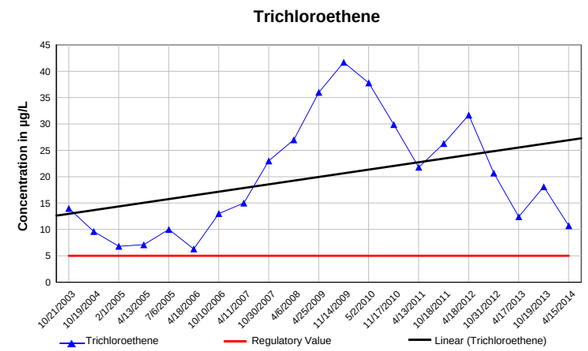
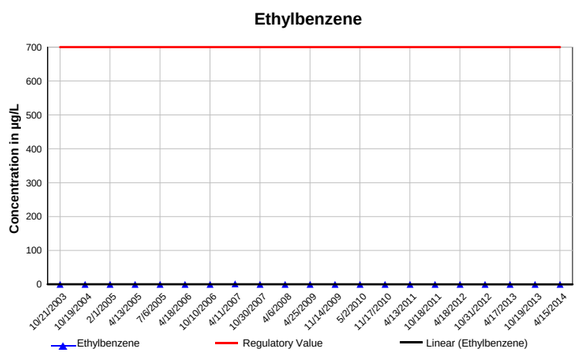
Clean Harbors Kansas, LLC Wichita, Kansas

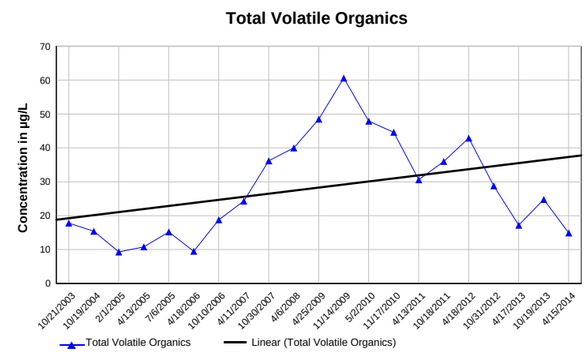
Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-14 (Page 2 of 2)

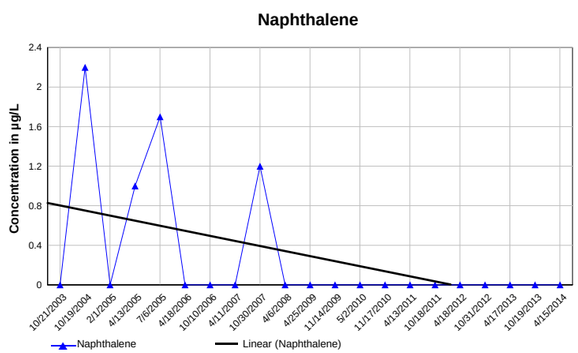
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water











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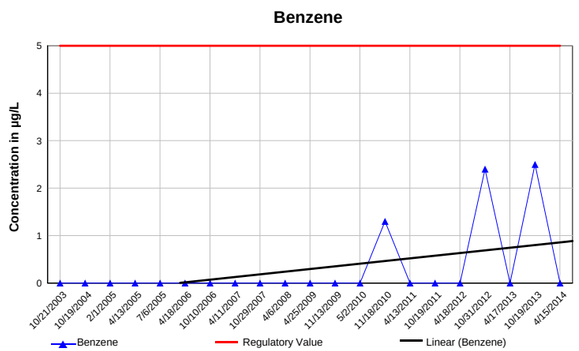
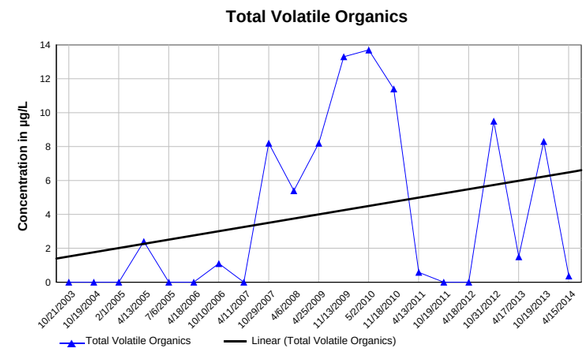
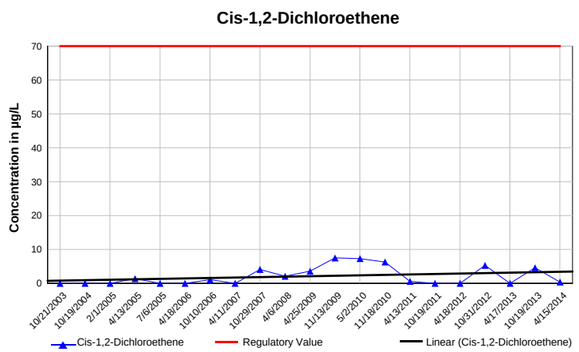
Clean Harbors Kansas, LLC Wichita, Kansas

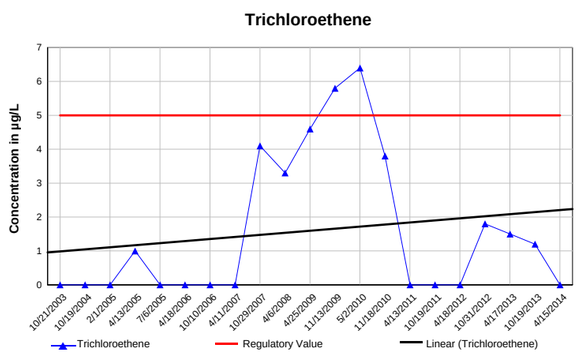
Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-15

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water





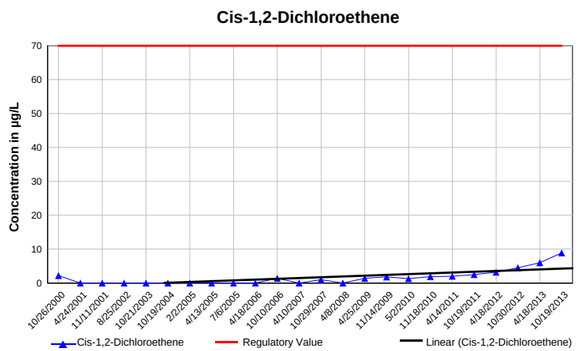


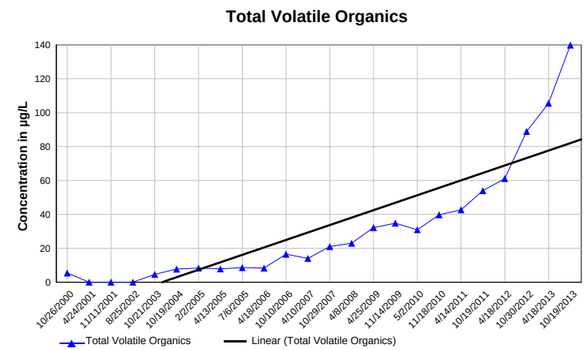


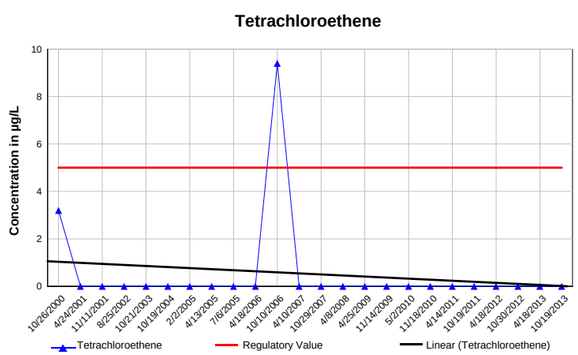
Clean Harbors Kansas, LLC Wichita, Kansas

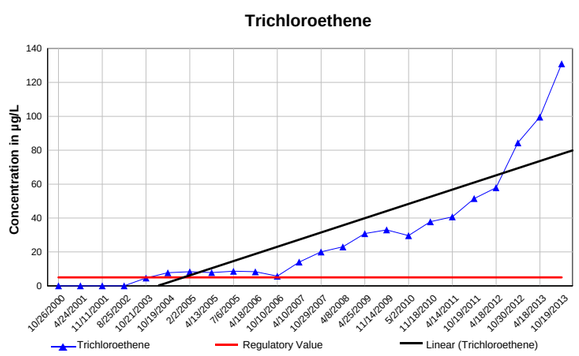
Concentration vs. Time Plots for Selected Constituents
Monitoring Well MW-18

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water









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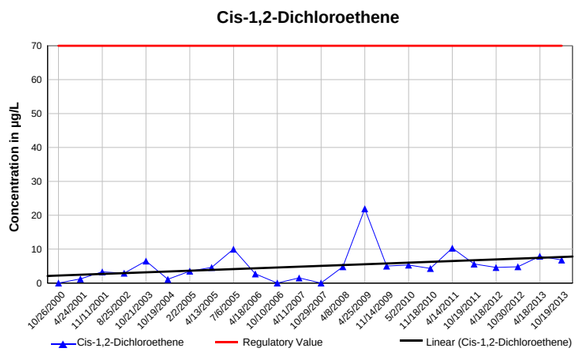
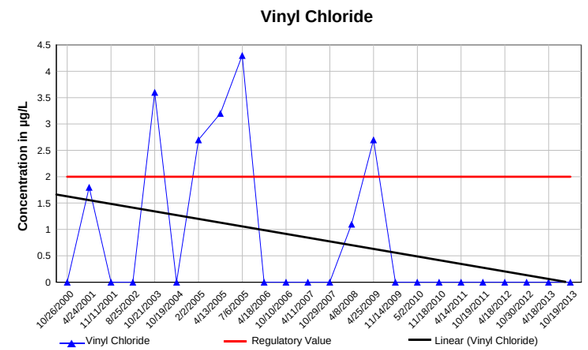
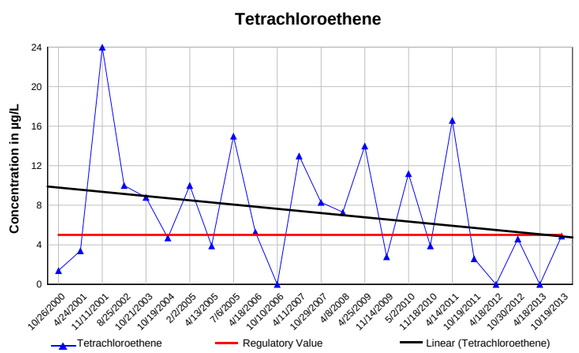
Clean Harbors Kansas, LLC Wichita, Kansas

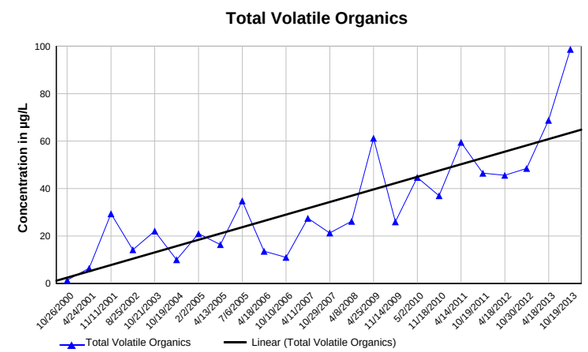
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-1D

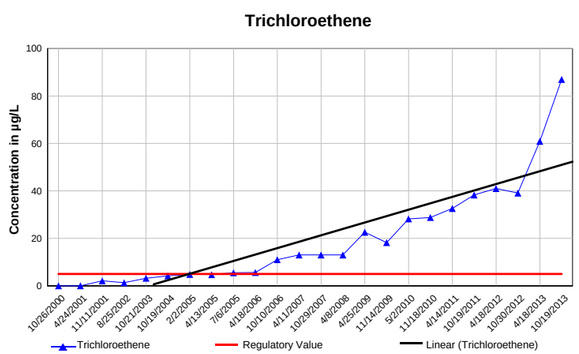
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water











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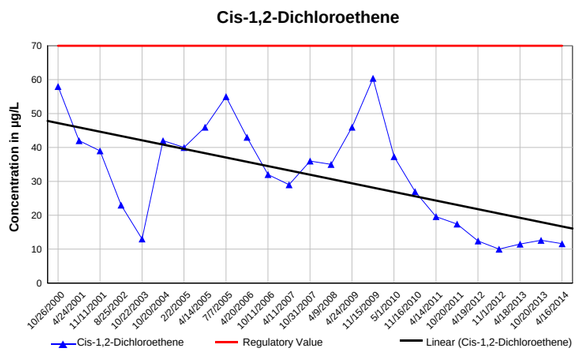
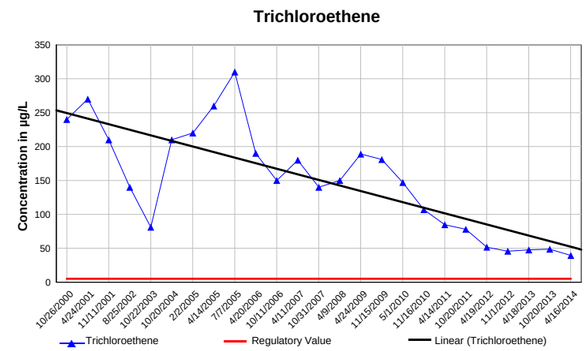
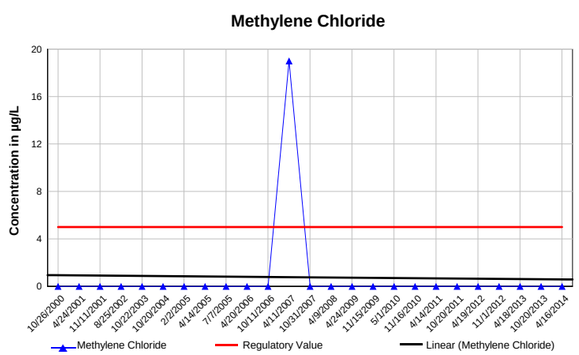
Clean Harbors Kansas, LLC Wichita, Kansas

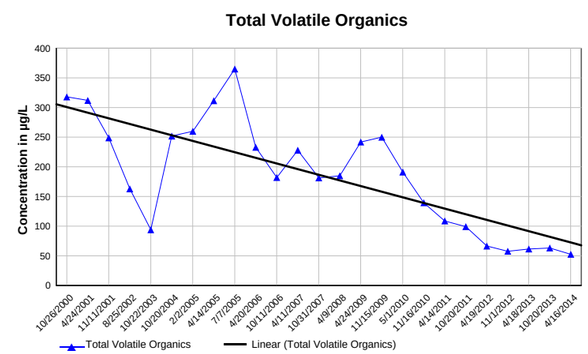
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-1S

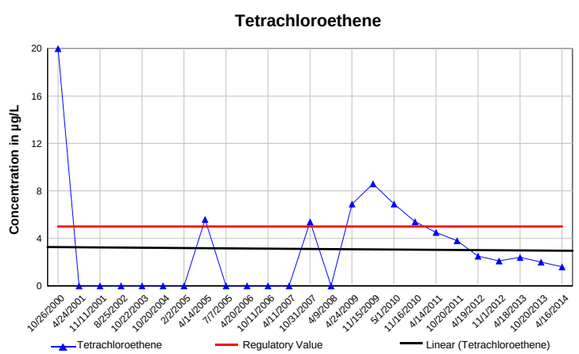
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water







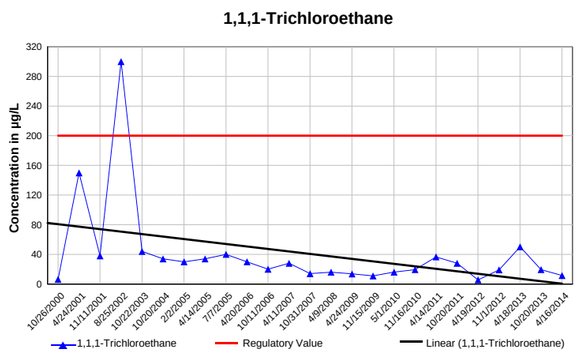


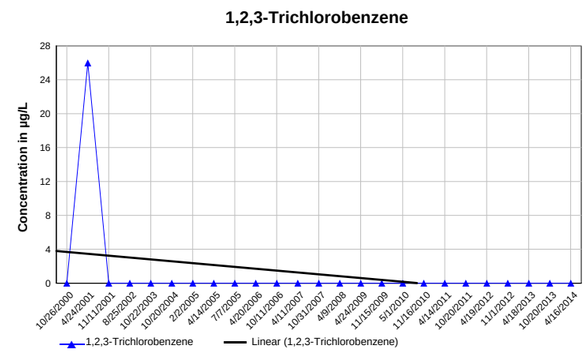


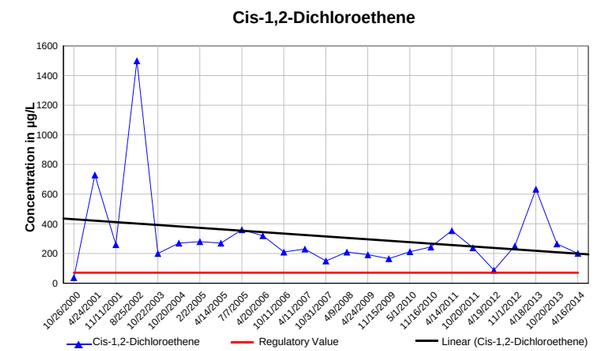
Clean Harbors Kansas, LLC Wichita, Kansas

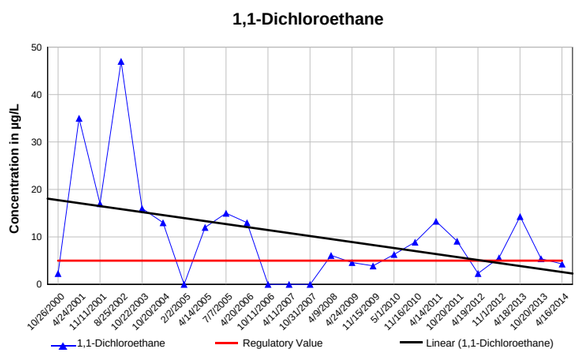
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-2D

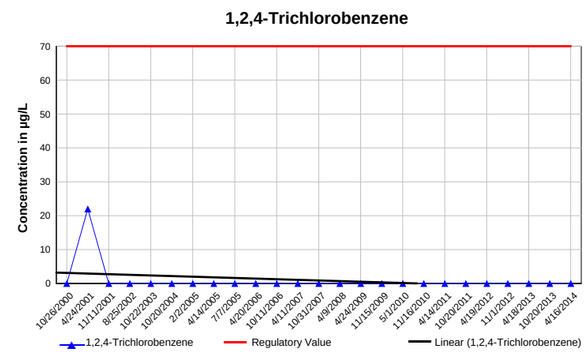
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

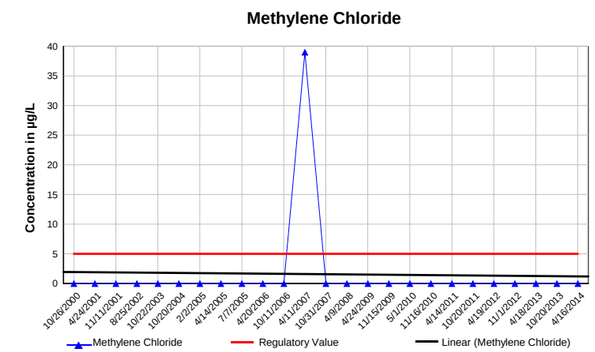


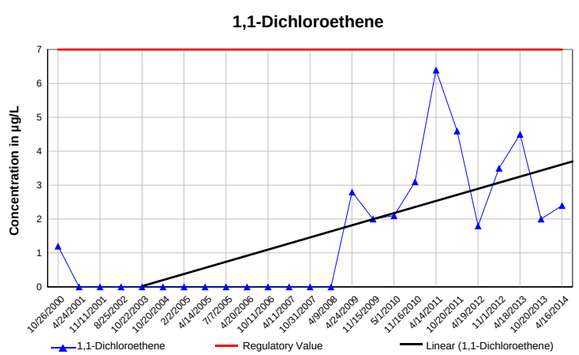


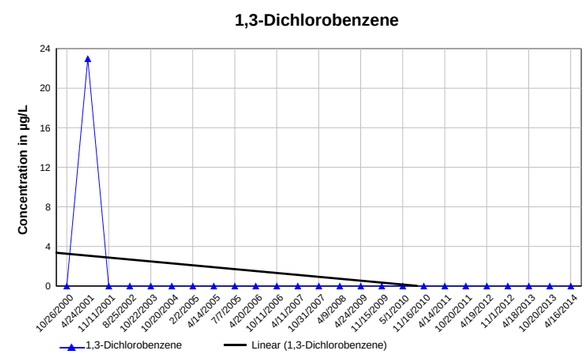


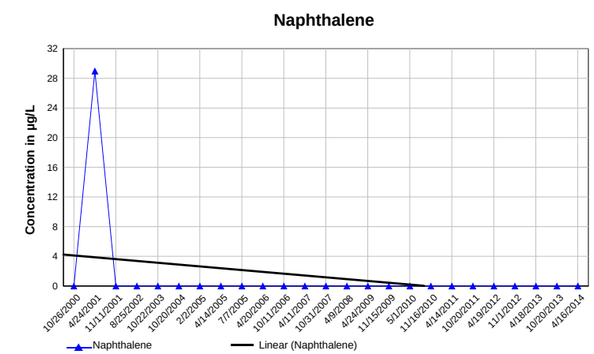












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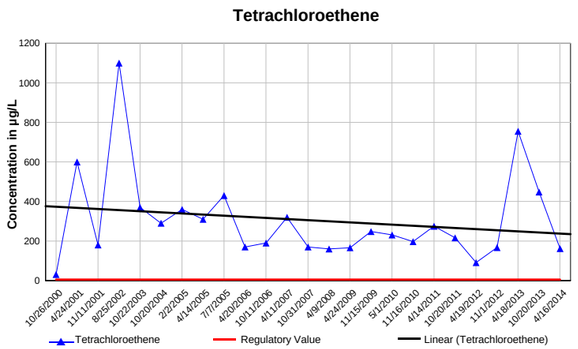
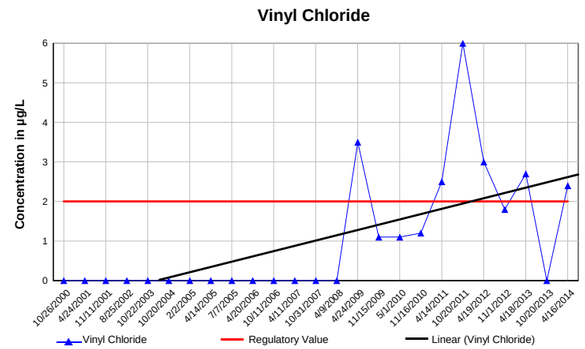
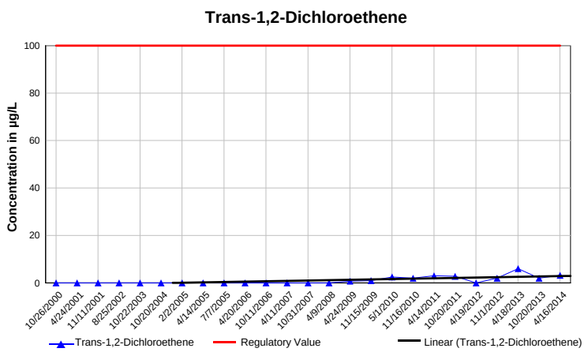
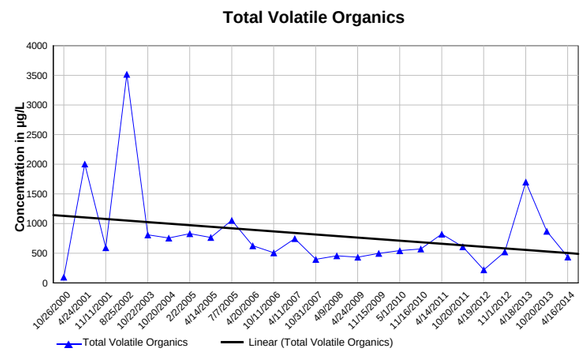
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-2S (Page 1 of 2)

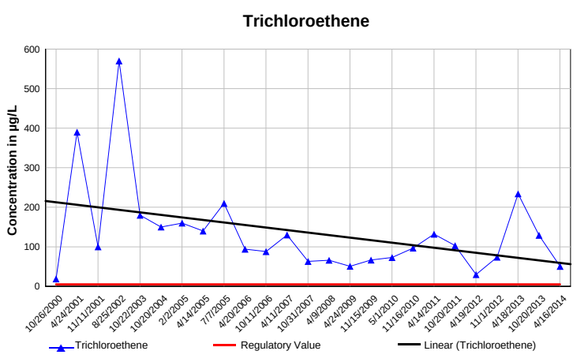
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water











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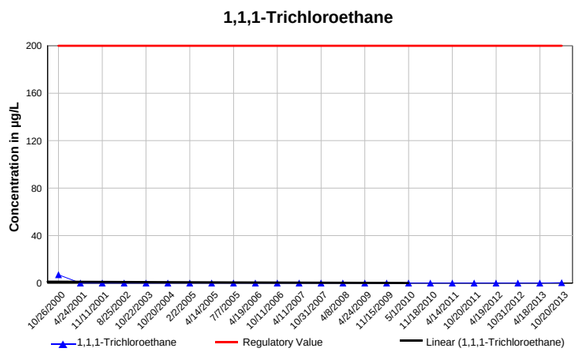
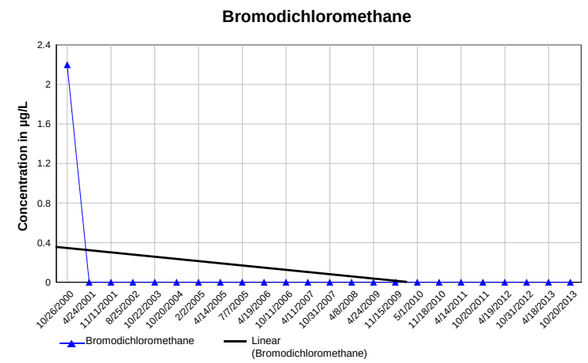
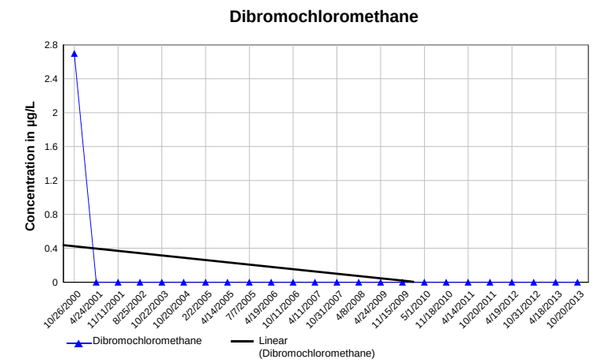
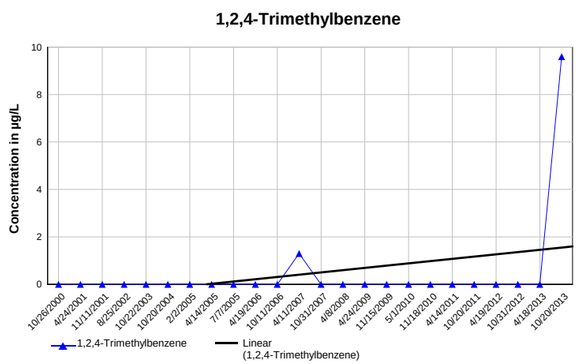
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-2S (Page 2 of 2)

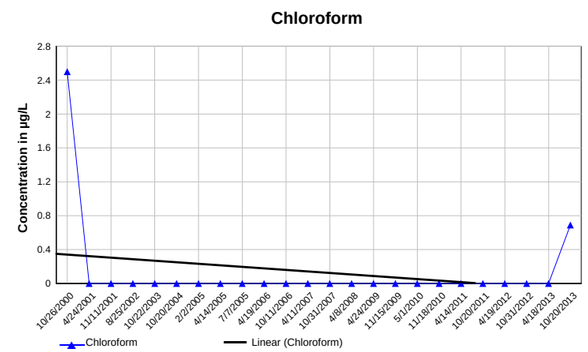
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

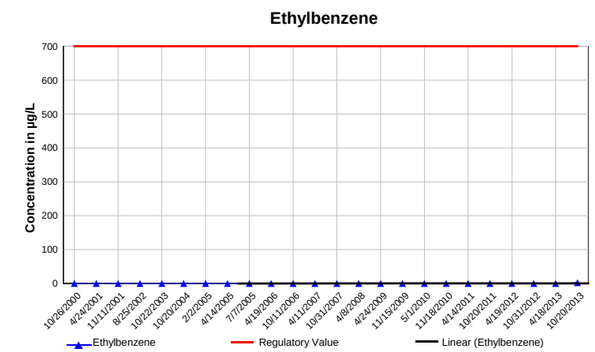


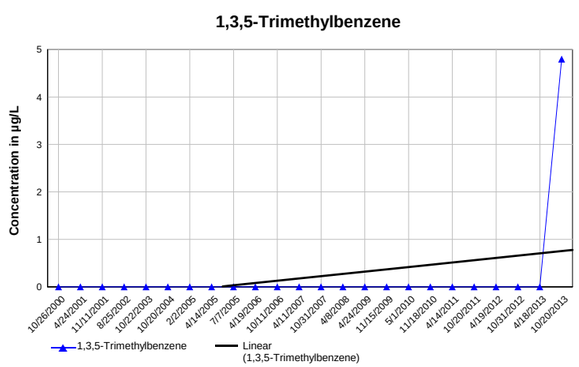


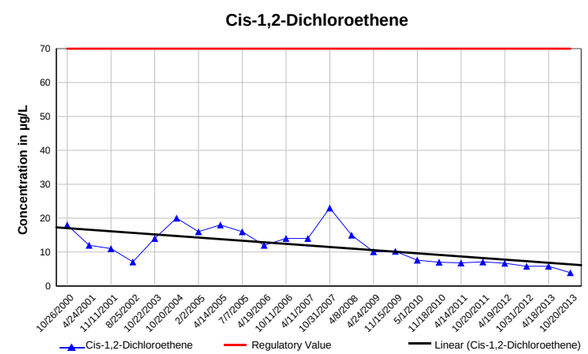


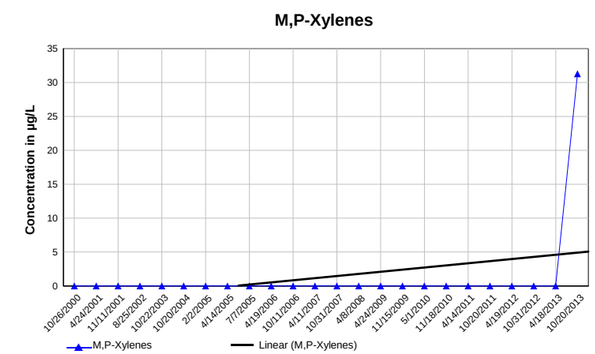












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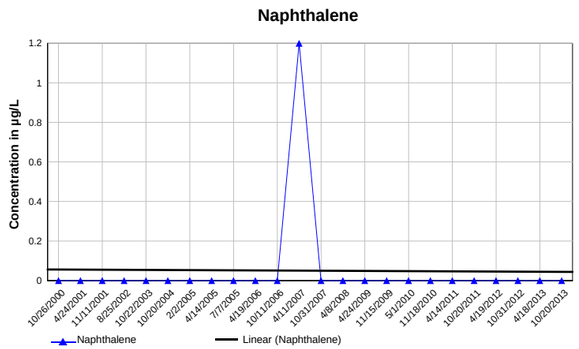
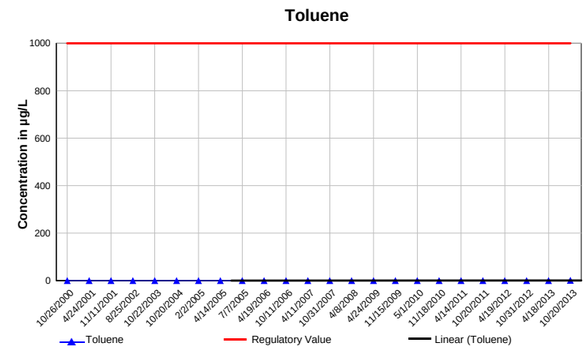
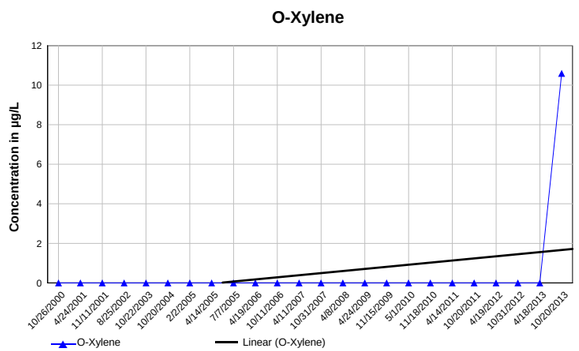
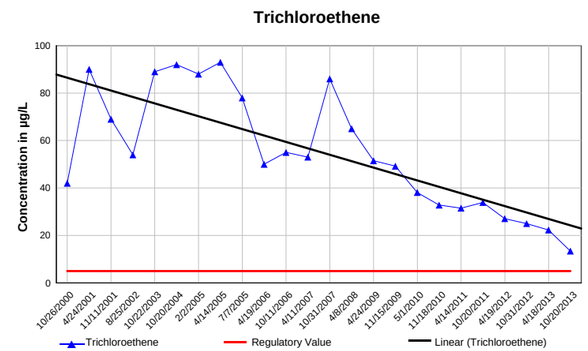
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-3D (Page 1 of 2)

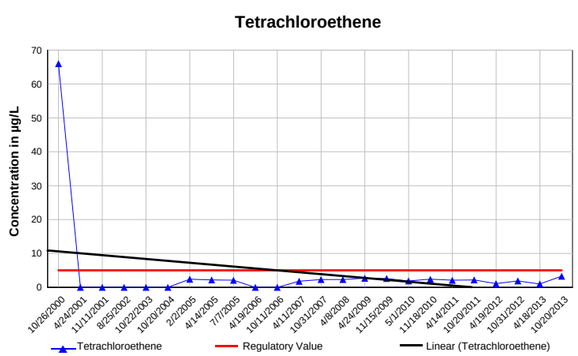
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

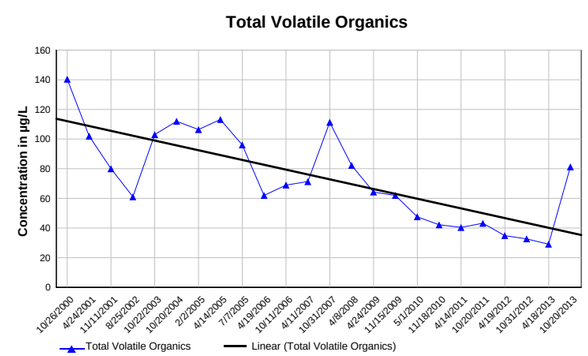












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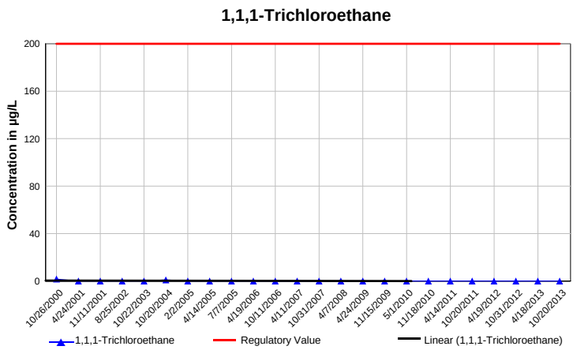
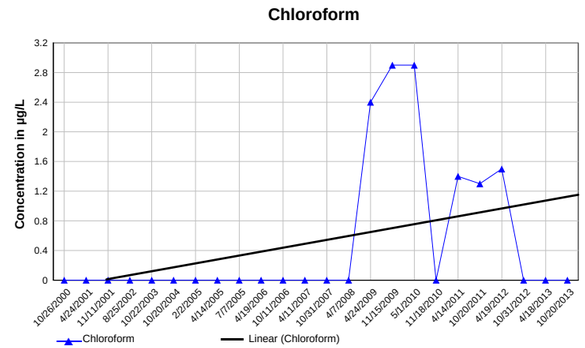
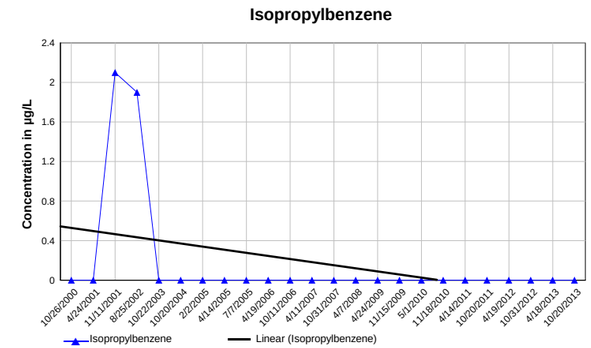
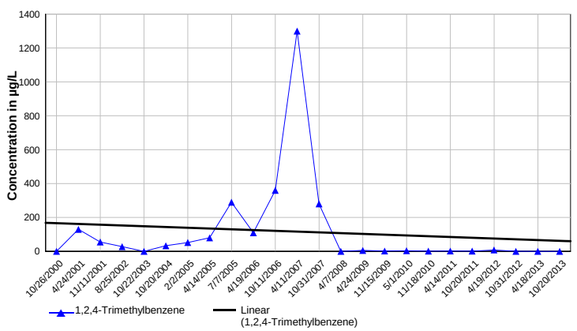
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-3D (Page 2 of 2)

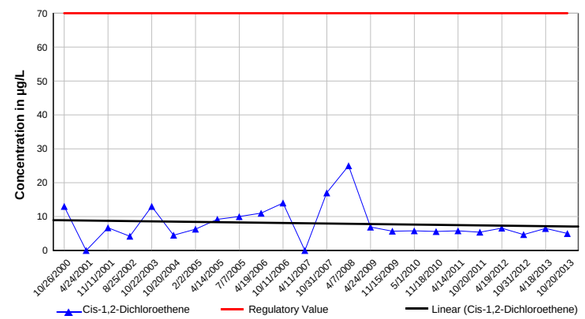
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

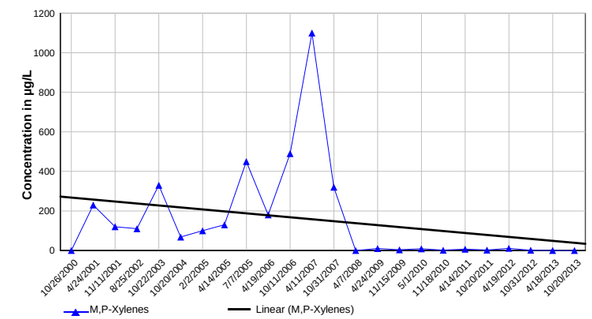


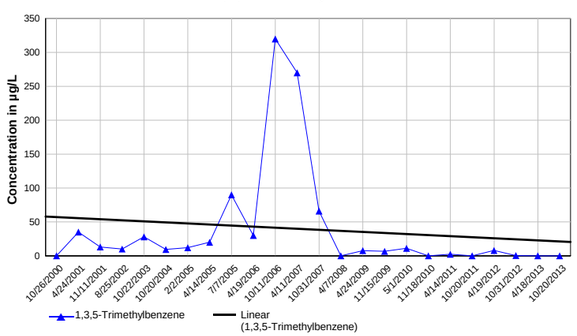


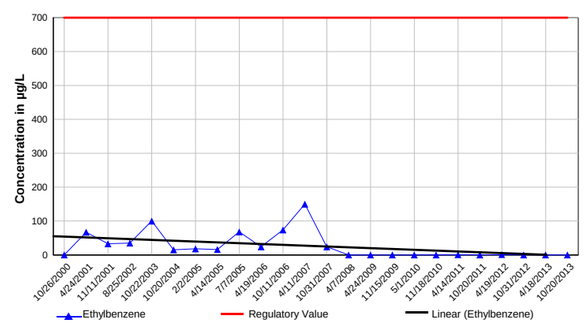


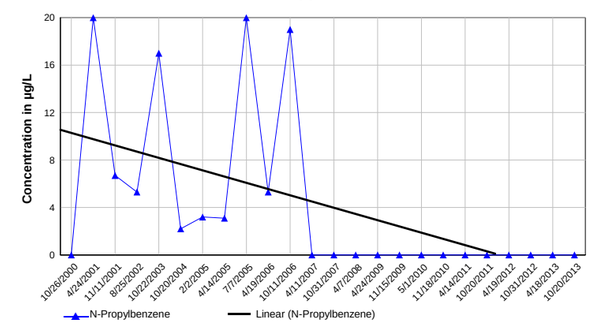












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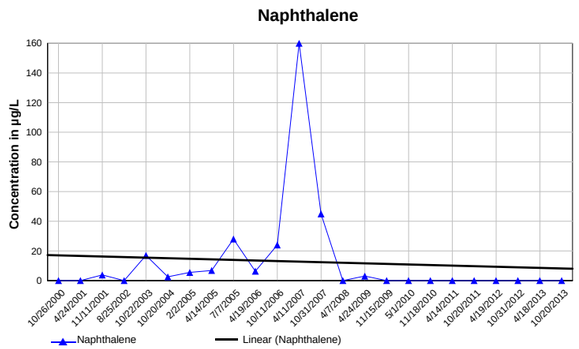
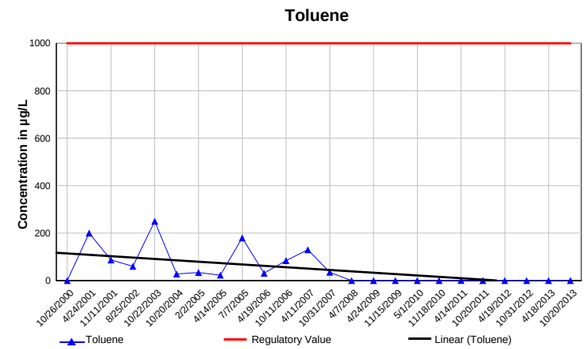
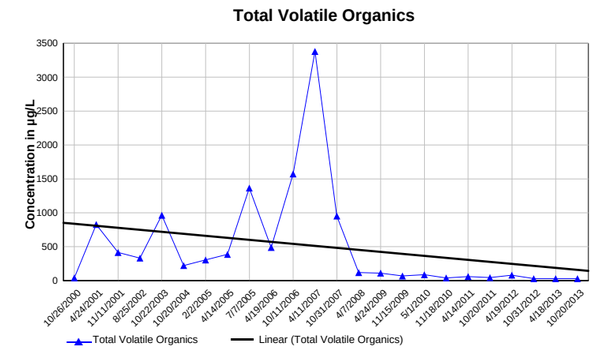
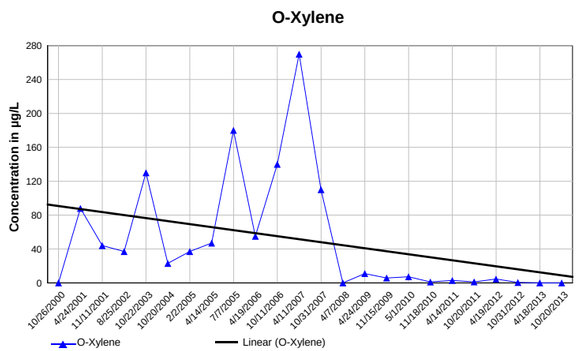
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-3S (Page 1 of 2)

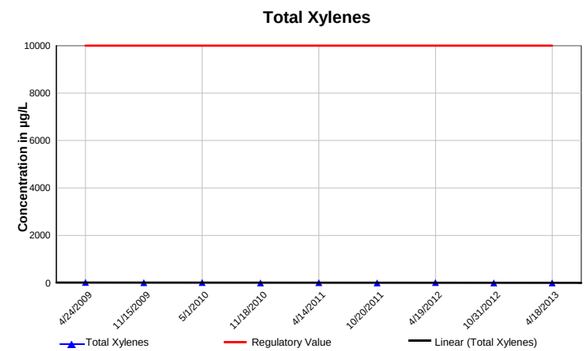
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

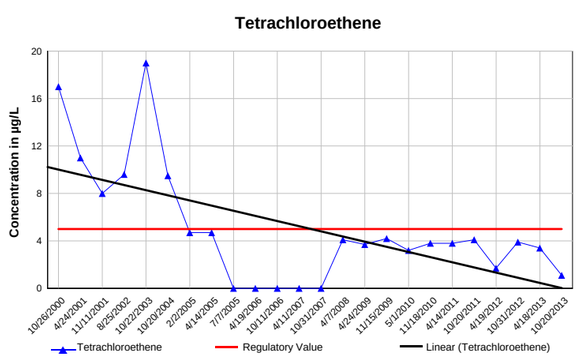


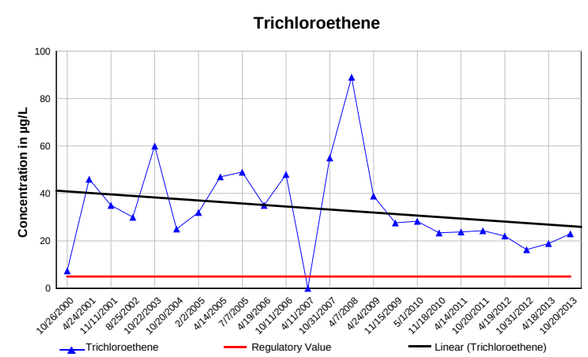












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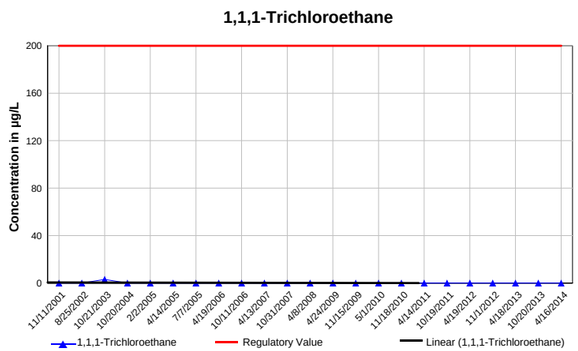
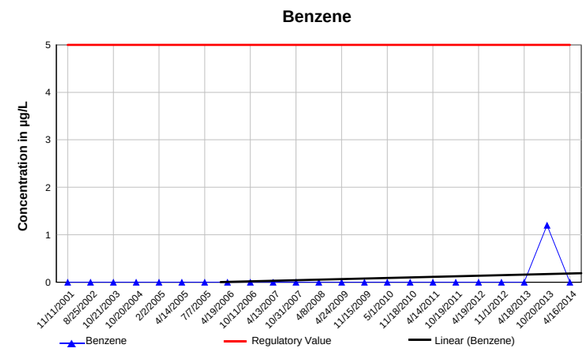
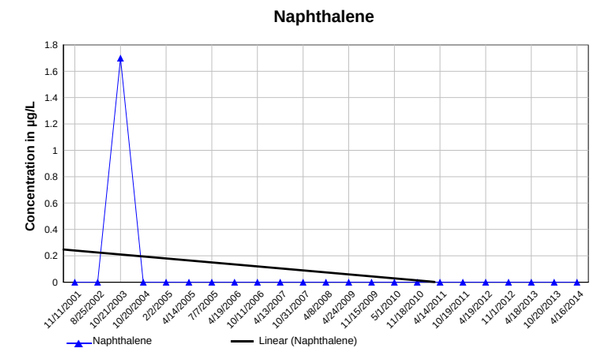
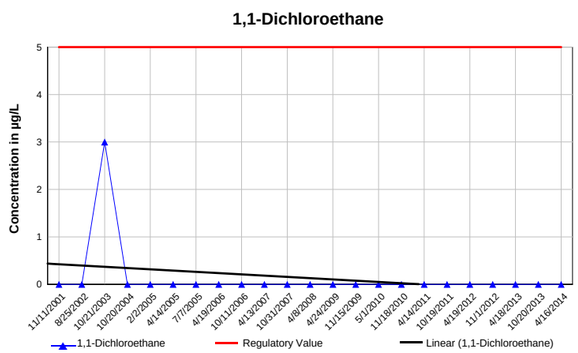
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-3S (Page 2 of 2)

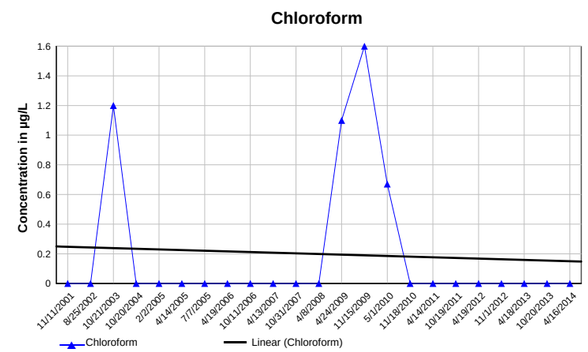
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

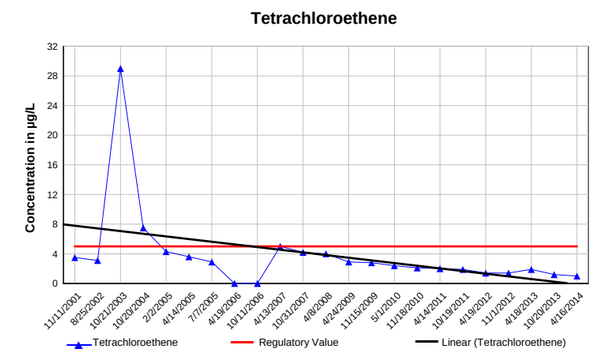


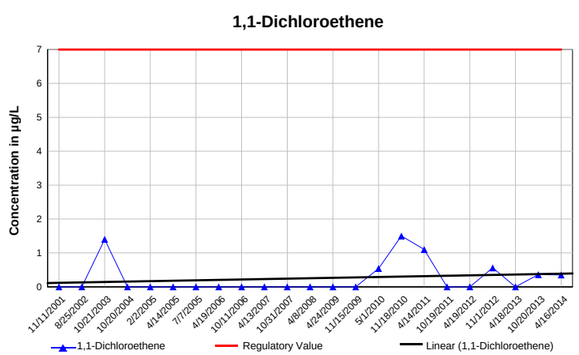


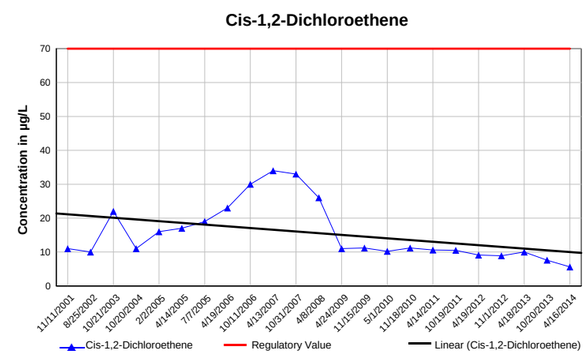


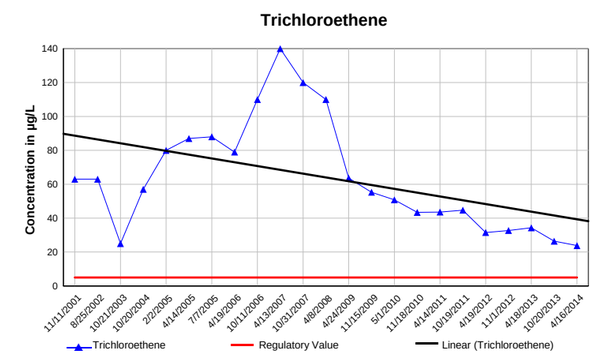












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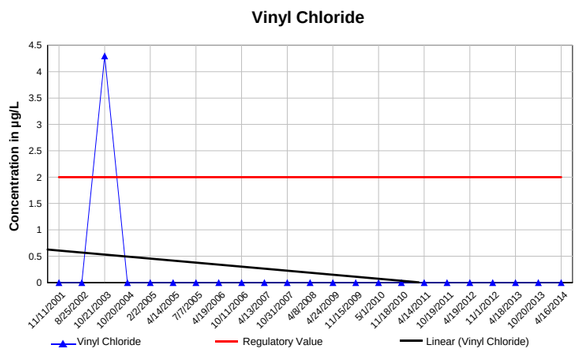
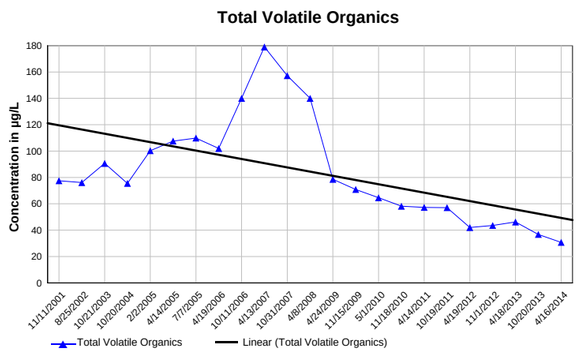
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-4D (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water





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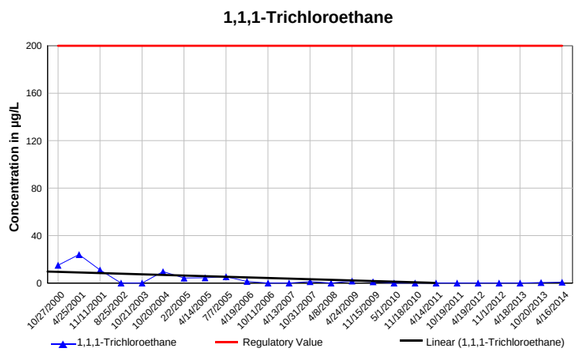
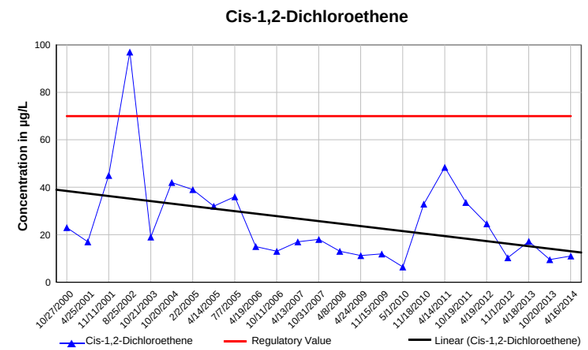
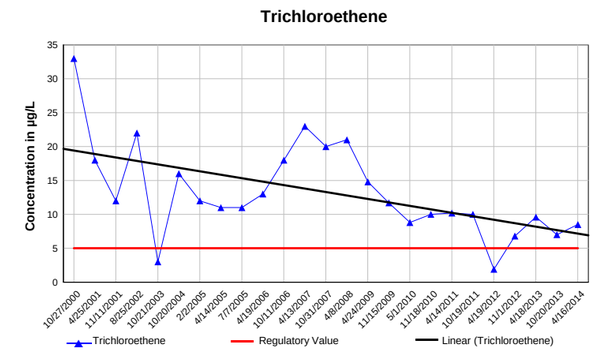
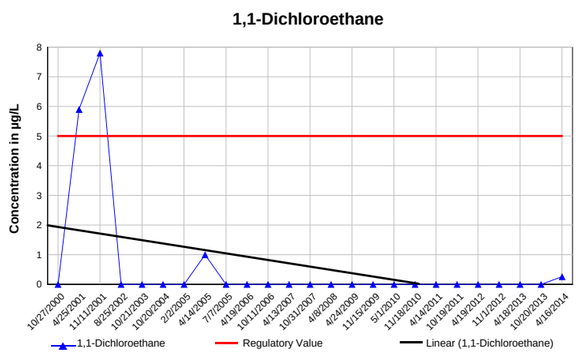
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-4D (Page 2 of 2)

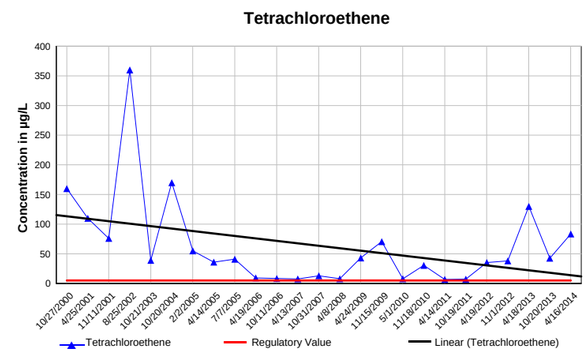
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

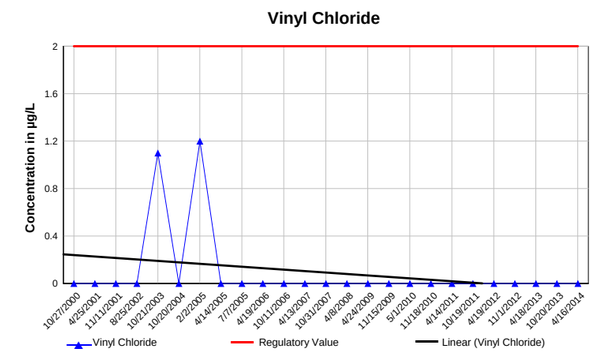


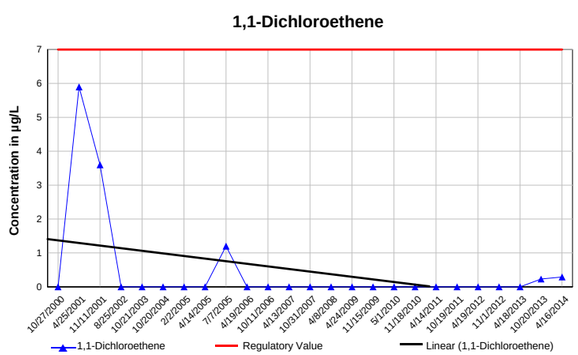


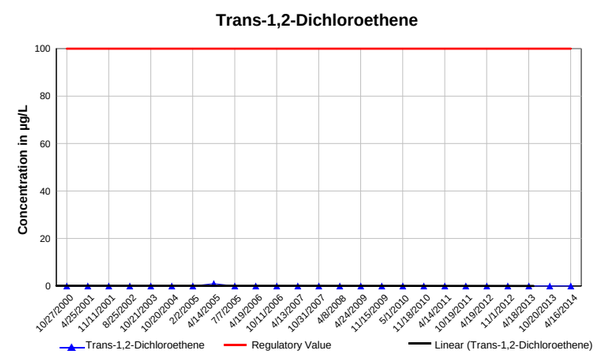


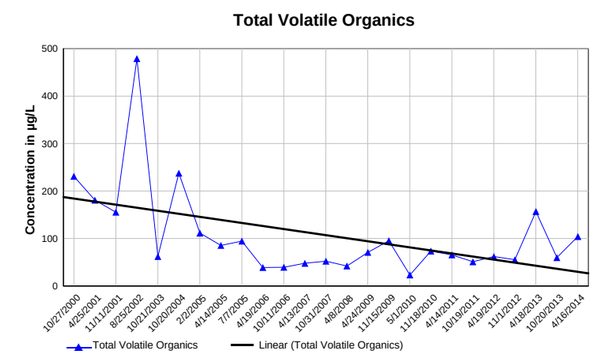












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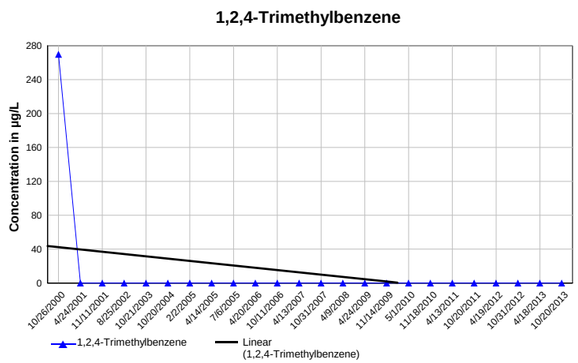
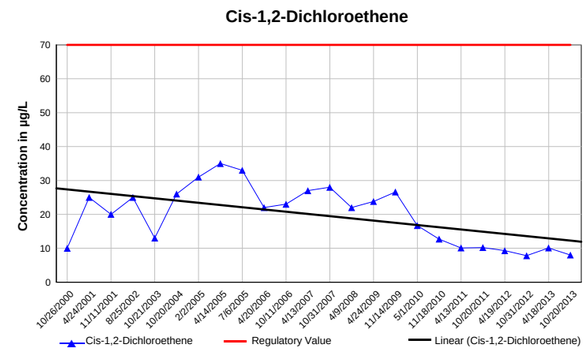
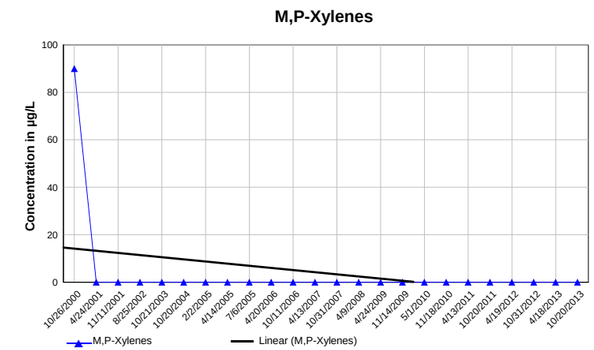
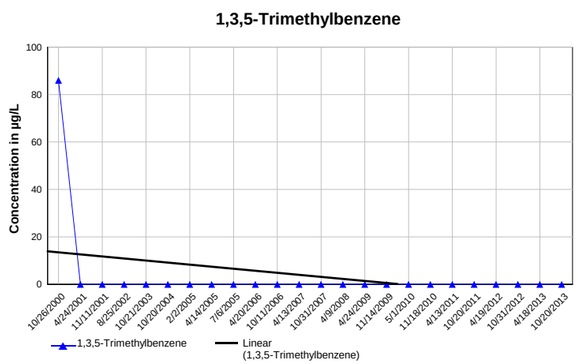
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-4S

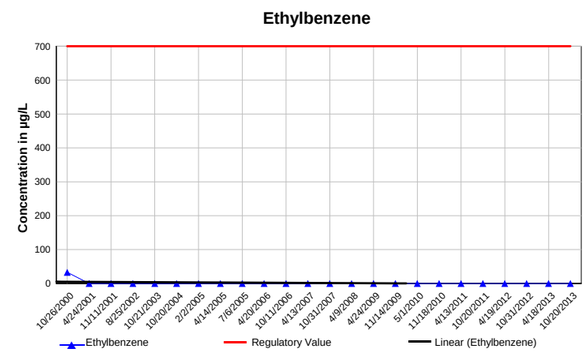
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

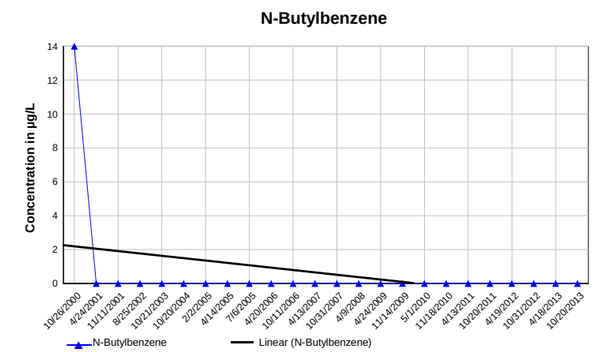


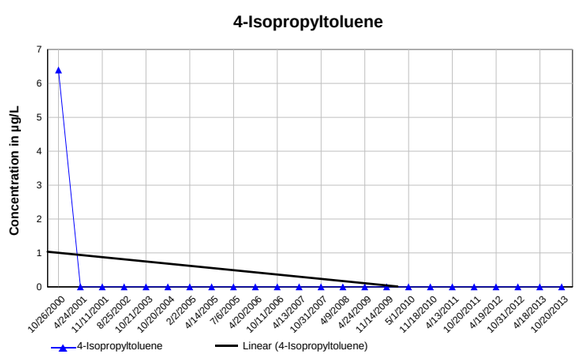


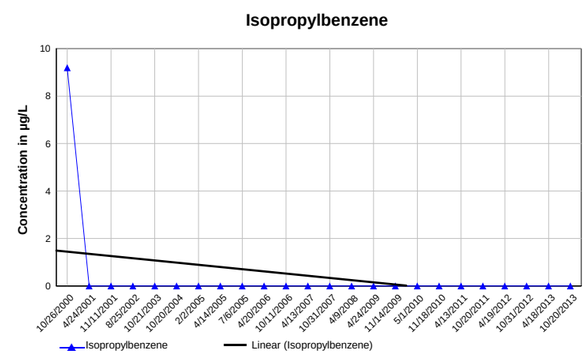


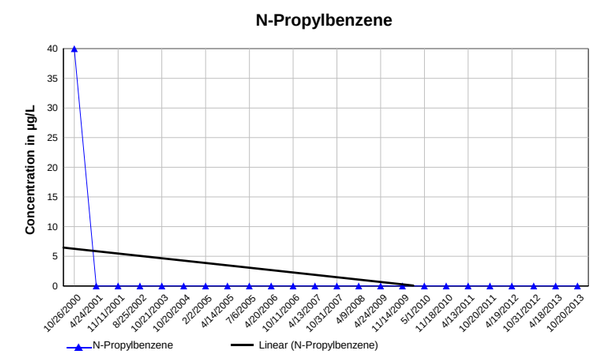












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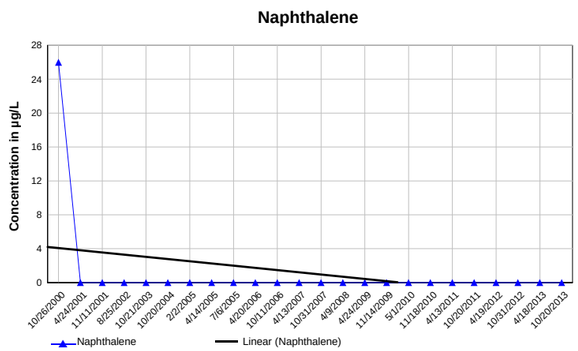
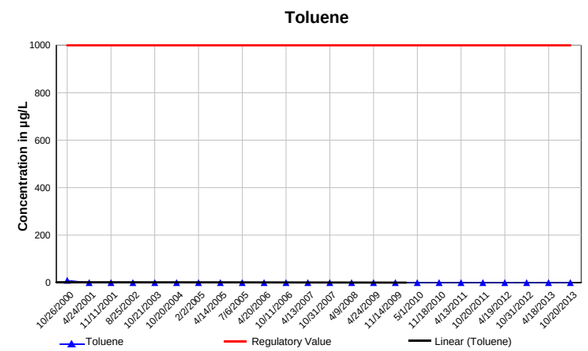
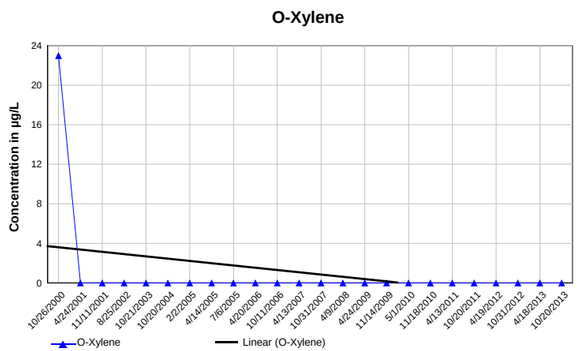
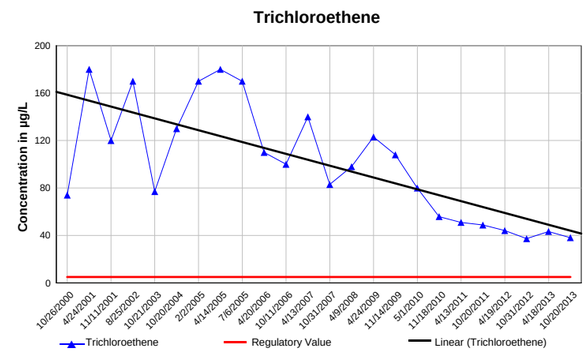
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-5D (Page 1 of 2)

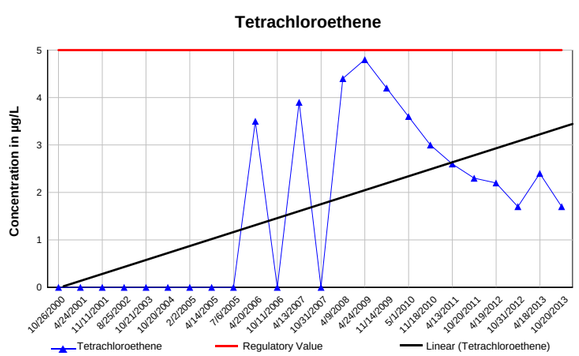
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

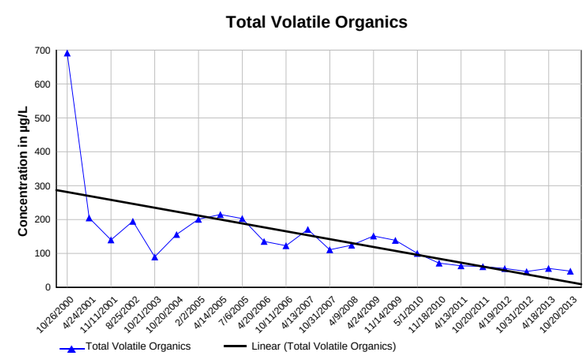












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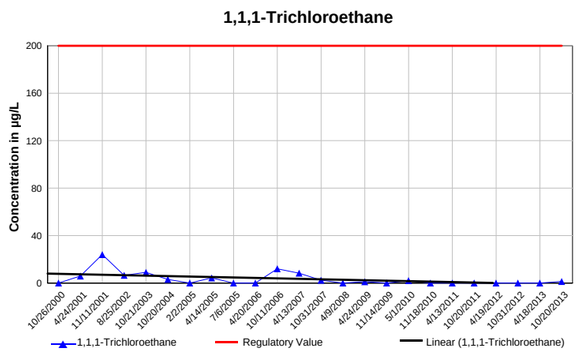
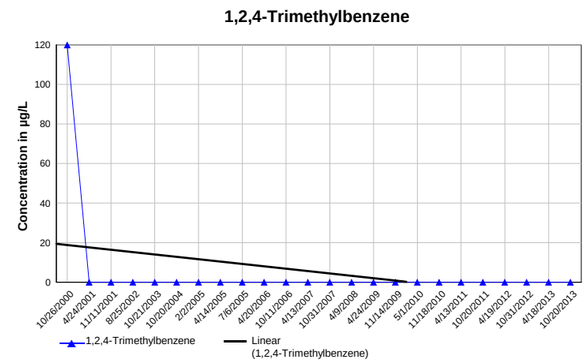
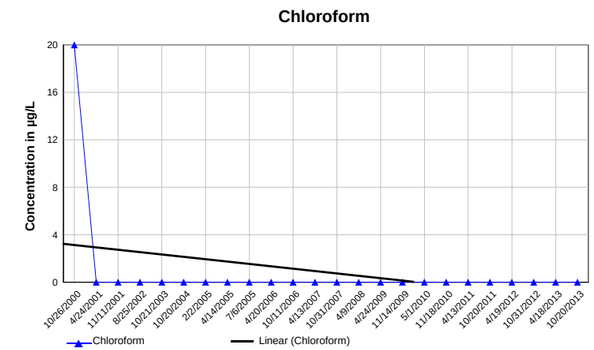
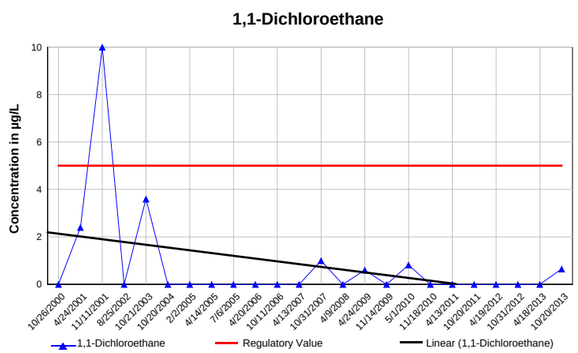
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-5D (Page 2 of 2)

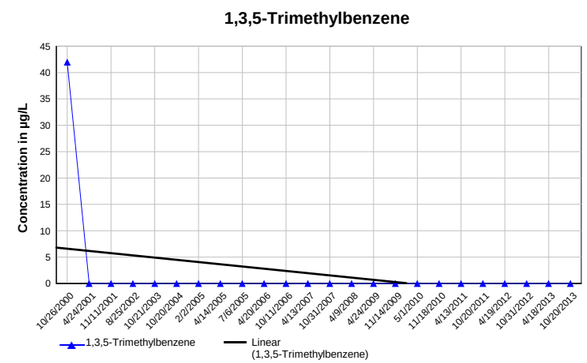
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

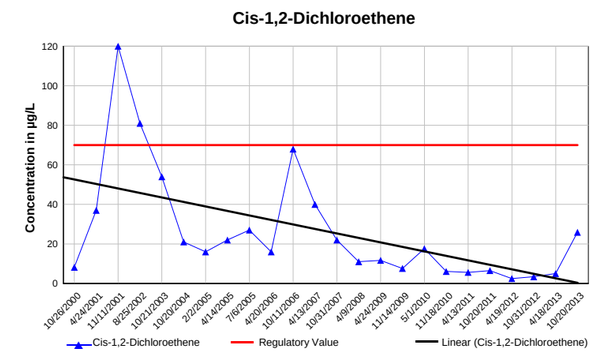


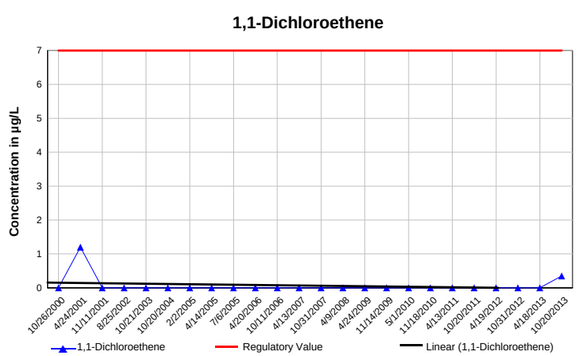


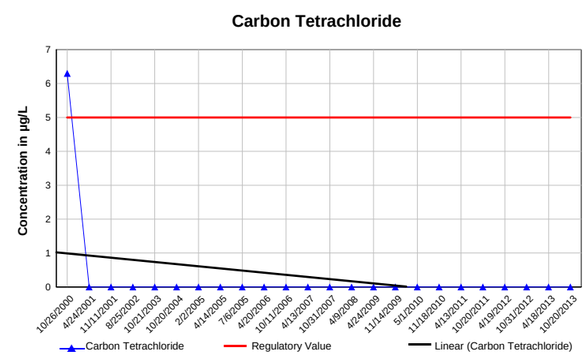


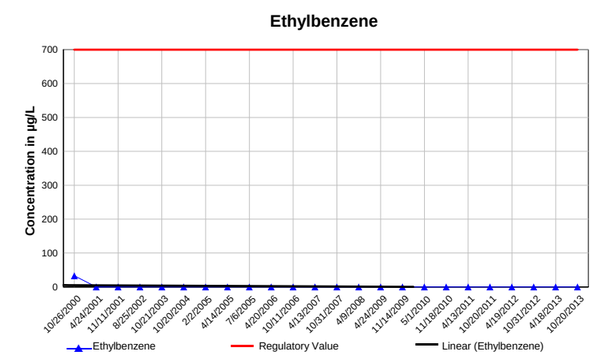












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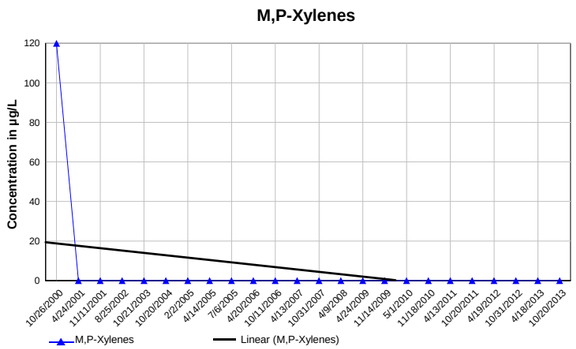
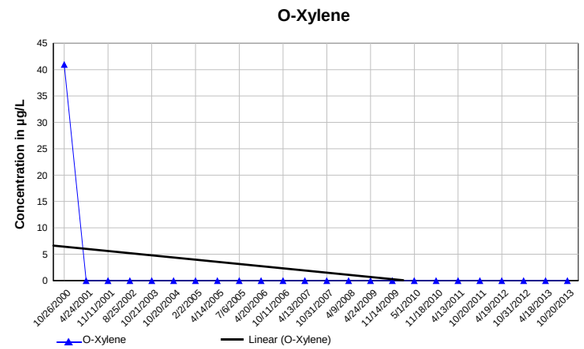
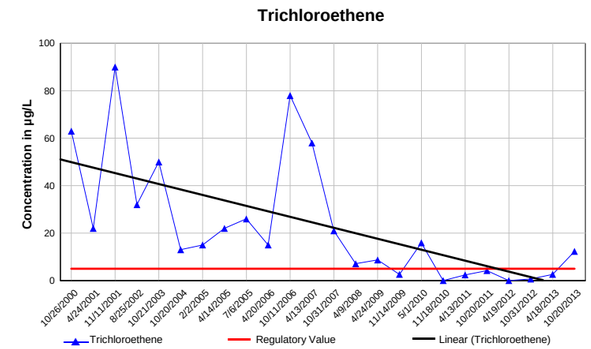
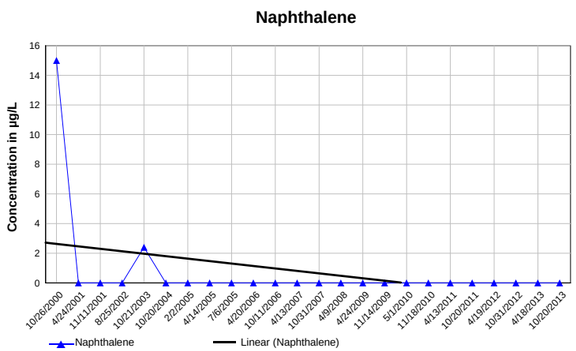
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-5S (Page 1 of 2)

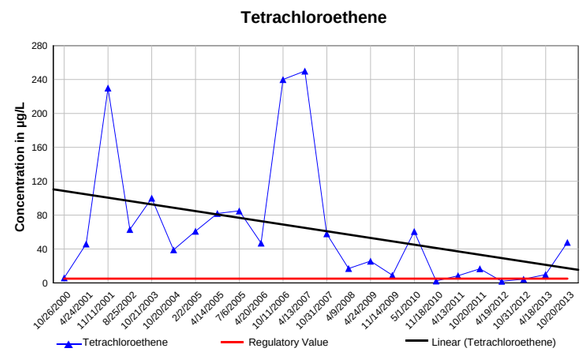
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

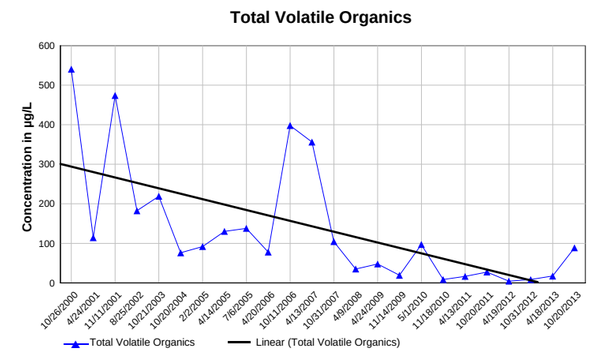


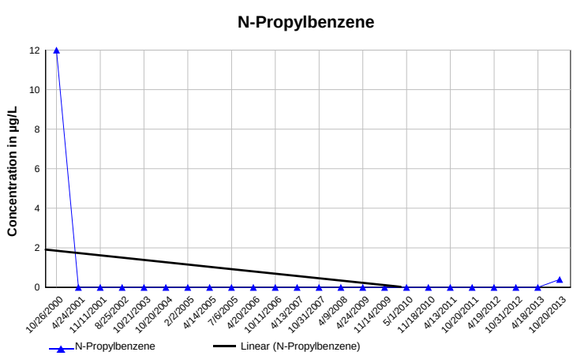


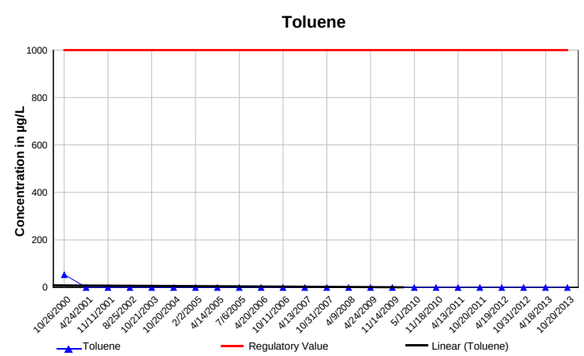












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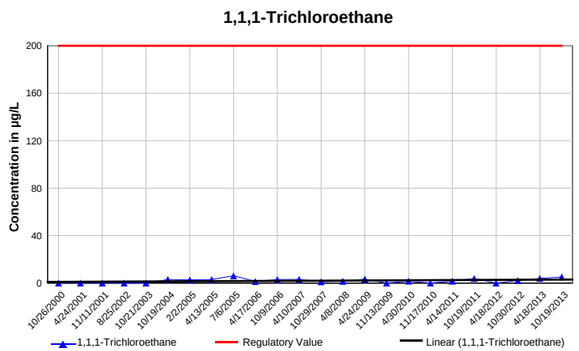
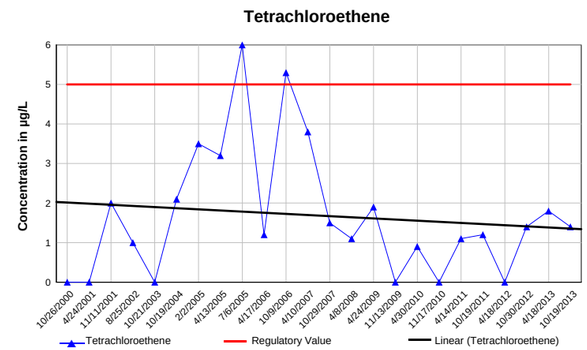
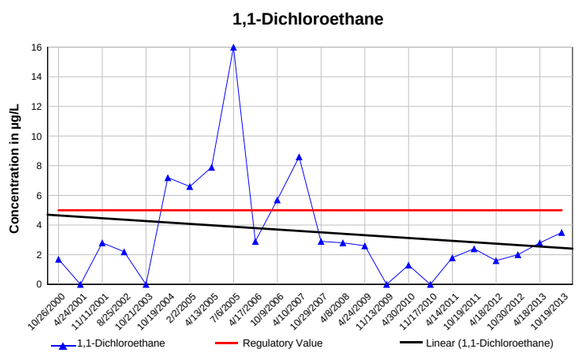
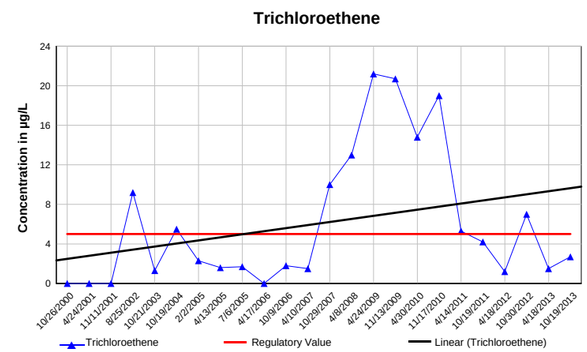
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-5S (Page 2 of 2)

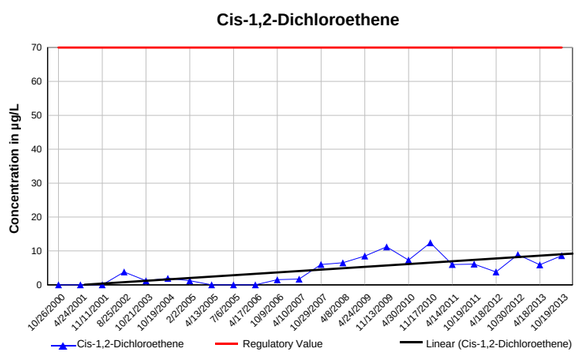
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

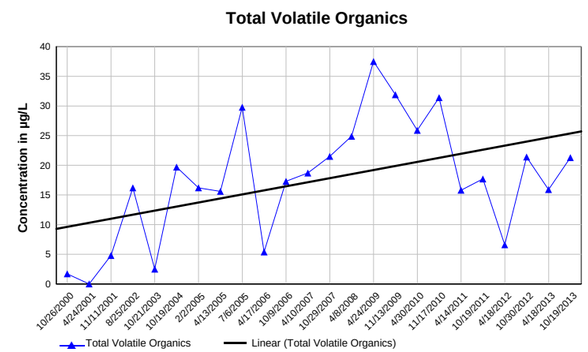












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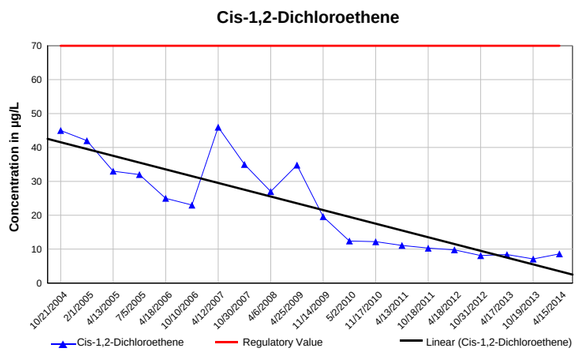
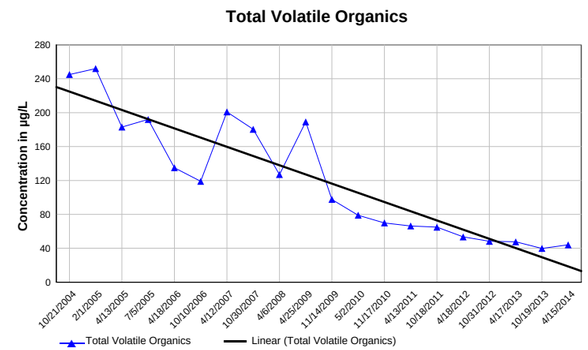
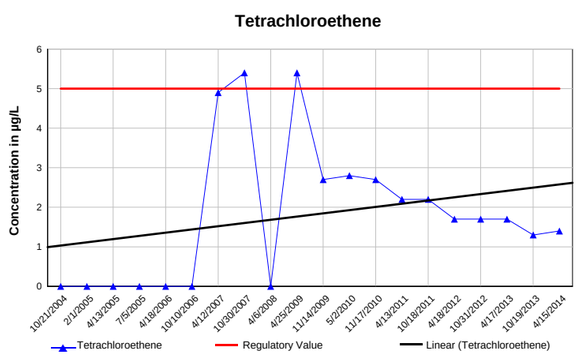
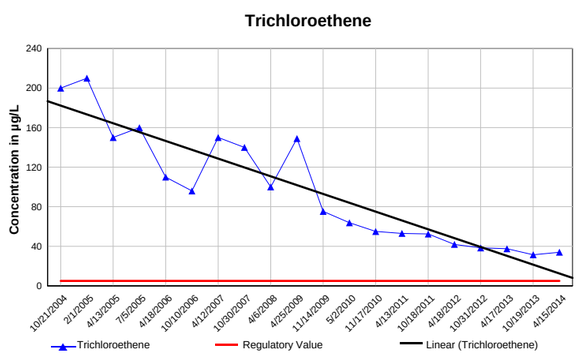
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-6S

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water







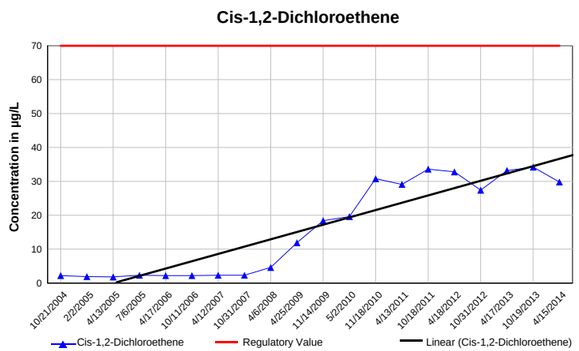


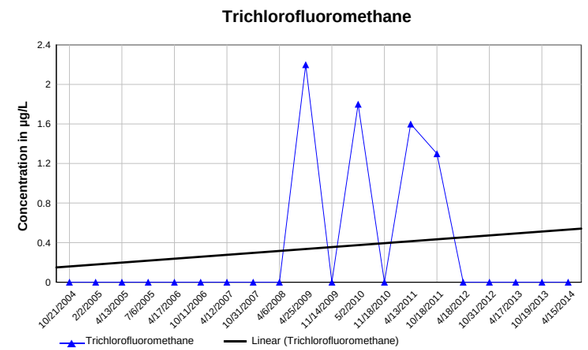
Cameron-Cole

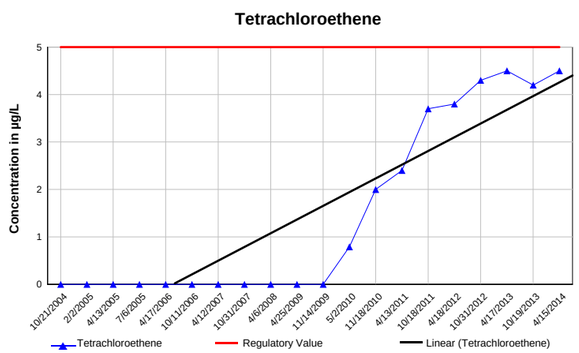
Clean Harbors Kansas, LLC Wichita, Kansas

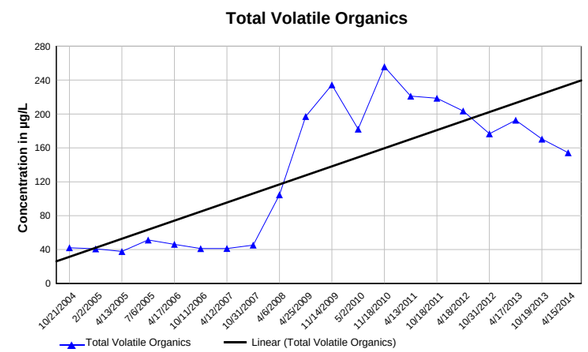
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-7D

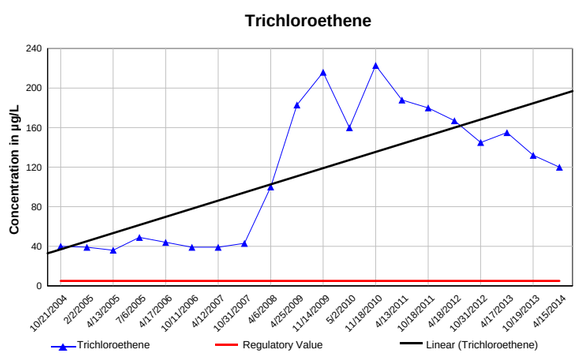
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water









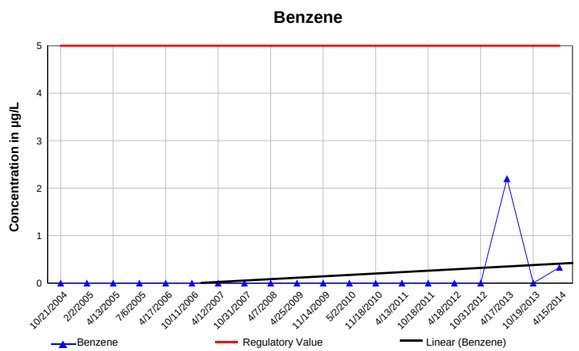


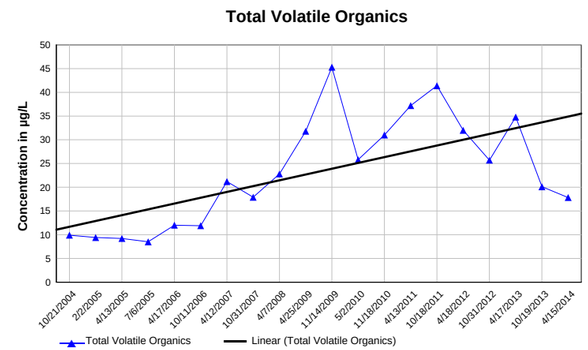
Cameron-Cole

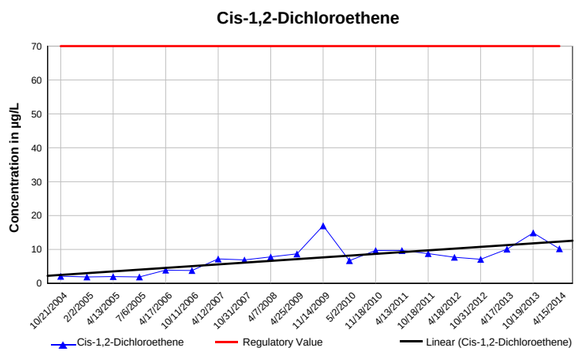
Clean Harbors Kansas, LLC Wichita, Kansas

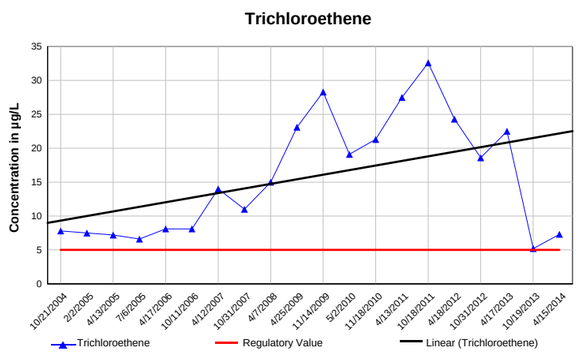
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-8D

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water





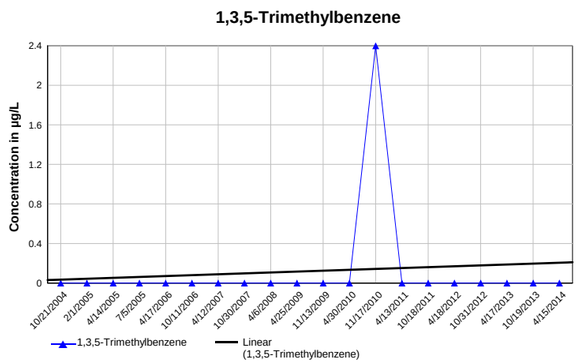


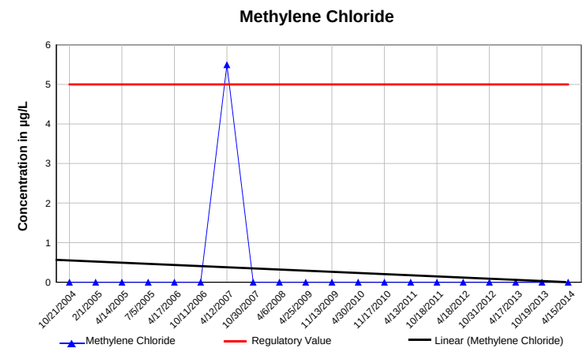


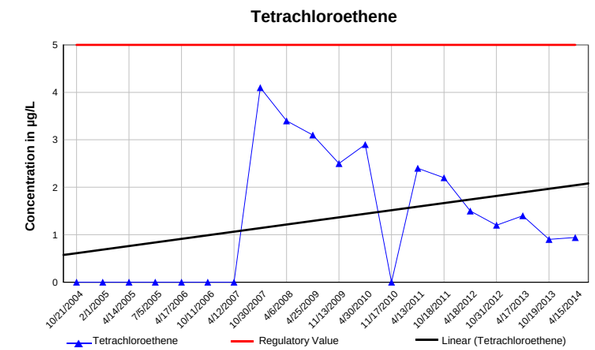
Clean Harbors Kansas, LLC Wichita, Kansas

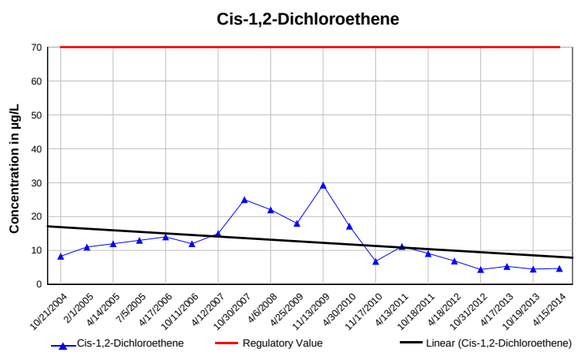
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-8S

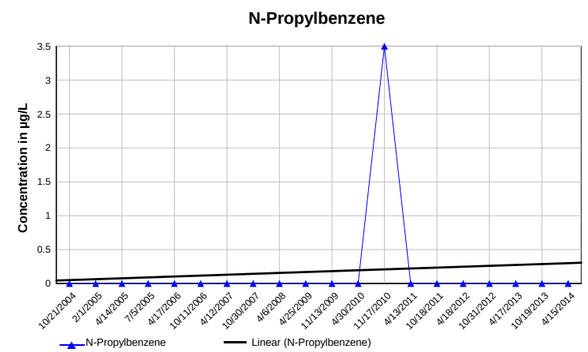
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

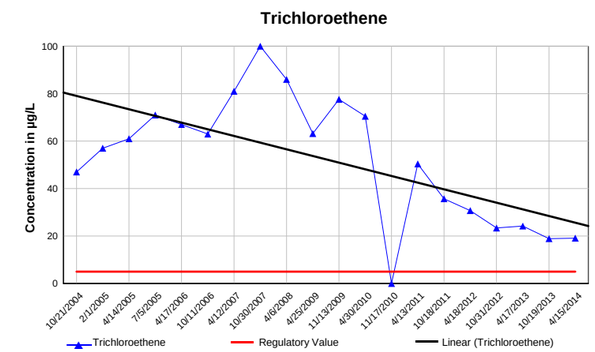


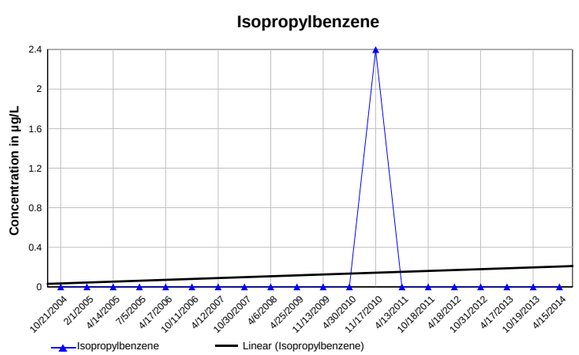


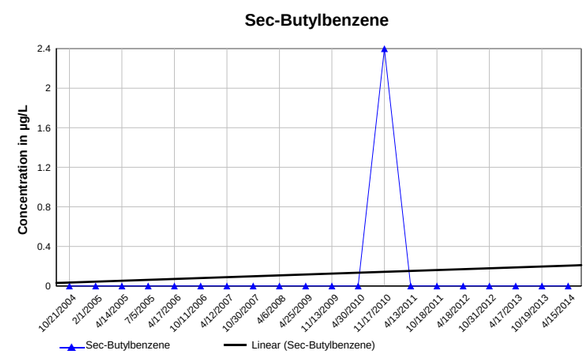


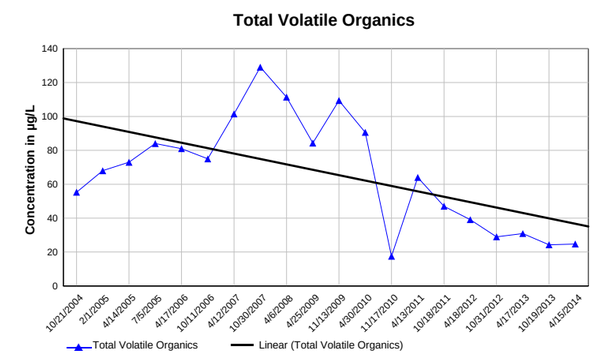












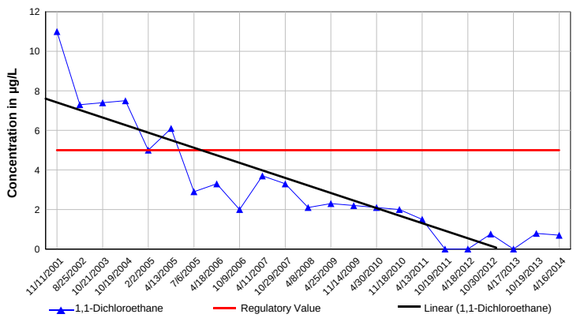
Cameron-Cole

Clean Harbors Kansas, LLC Wichita, Kansas

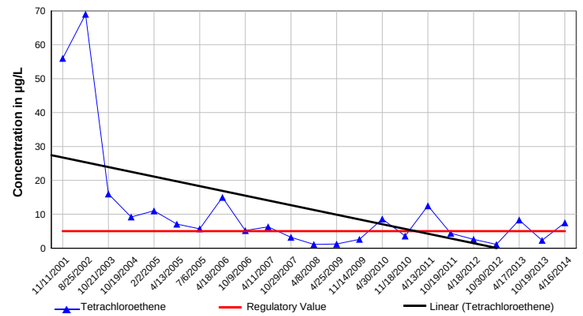
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-9D

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

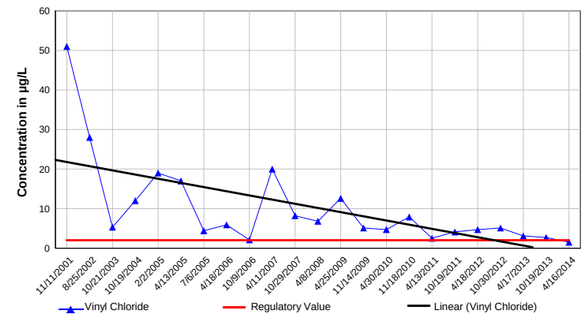
1,1-Dichloroethane



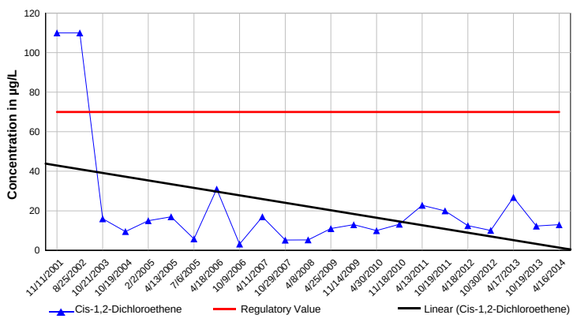
Tetrachloroethene



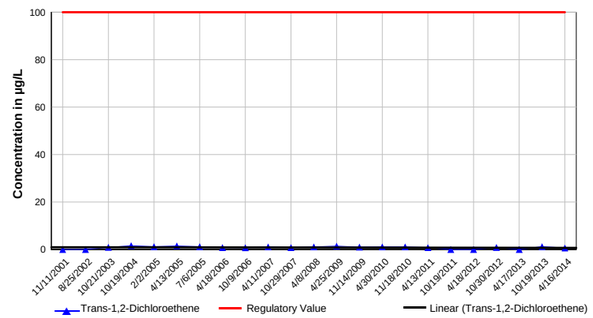
Vinyl Chloride



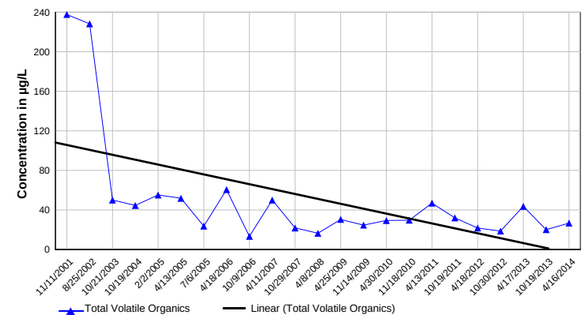
Cis-1,2-Dichloroethene



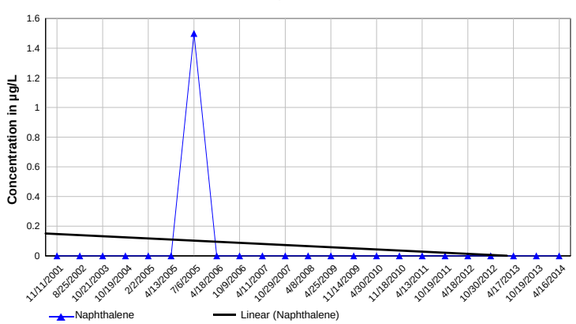
Trans-1,2-Dichloroethene



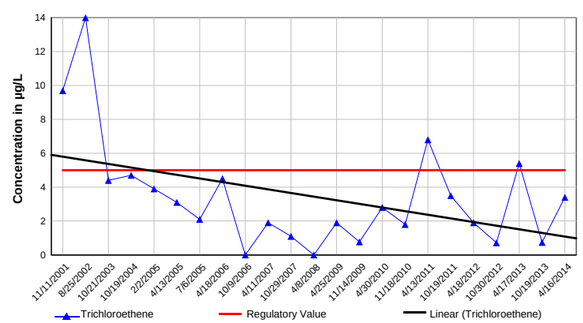
Total Volatile Organics



Naphthalene



Trichloroethene



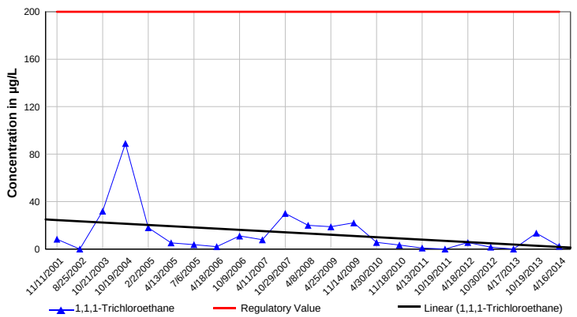
Cameron-Cole

Clean Harbors Kansas, LLC Wichita, Kansas

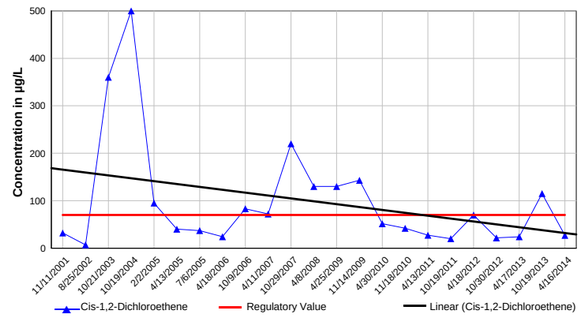
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-10S

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

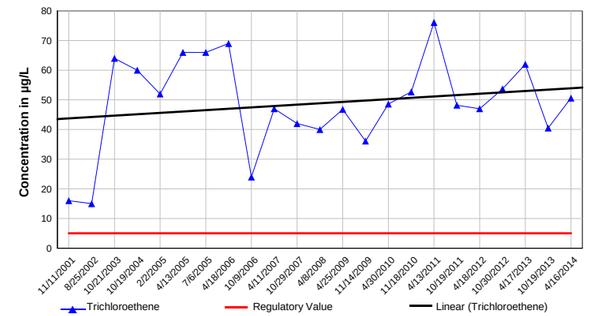
1,1,1-Trichloroethane



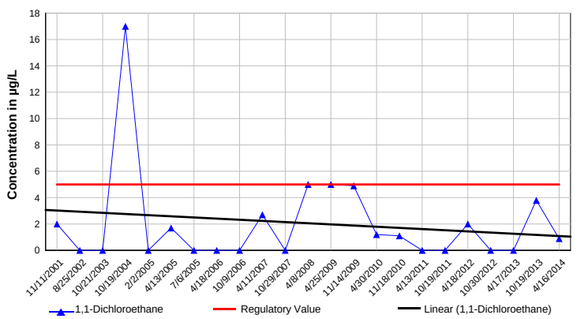
Cis-1,2-Dichloroethene



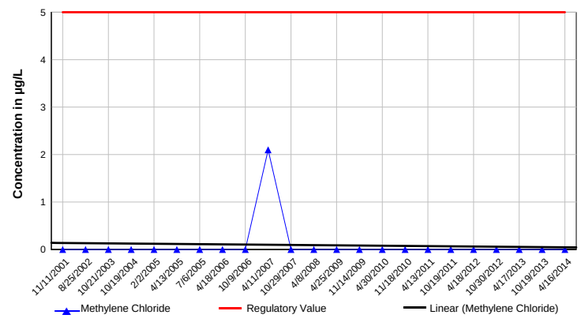
Trichloroethene



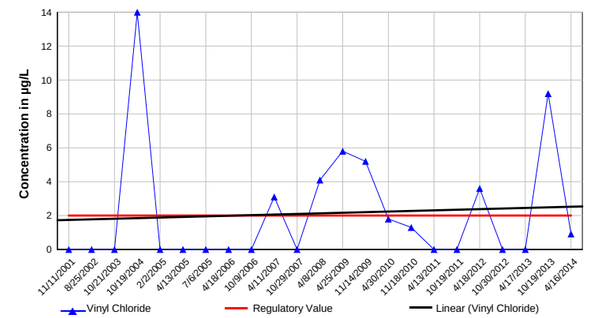
1,1-Dichloroethane



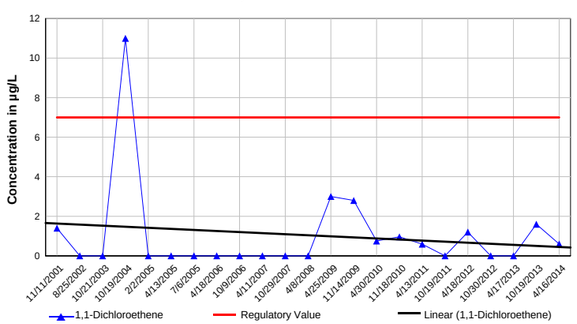
Methylene Chloride



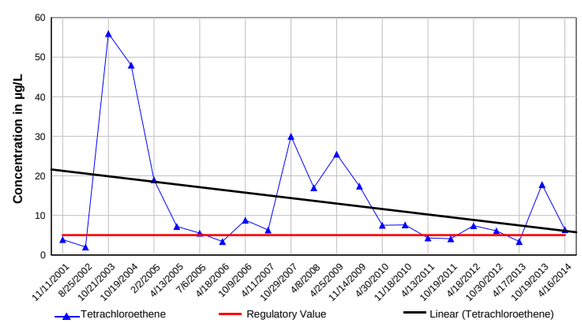
Vinyl Chloride



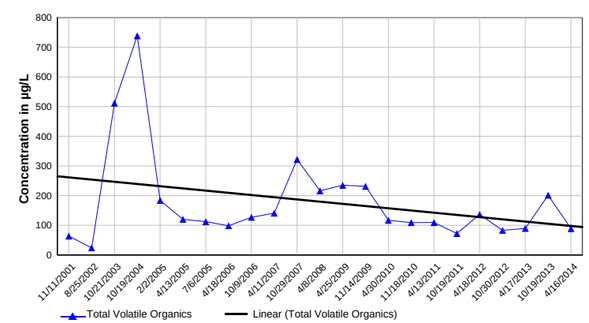
1,1-Dichloroethene



Tetrachloroethene



Total Volatile Organics



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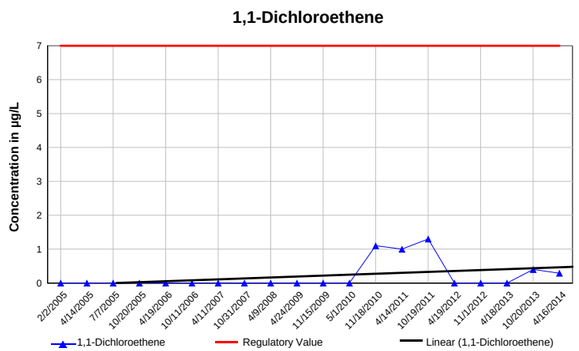
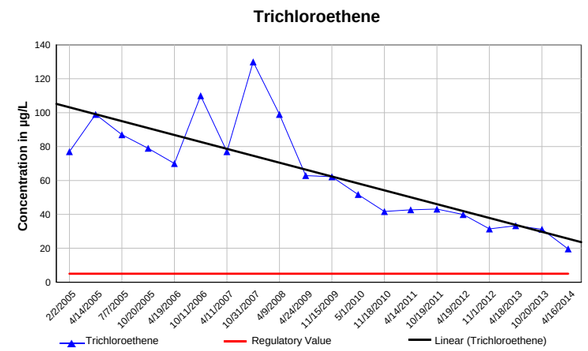
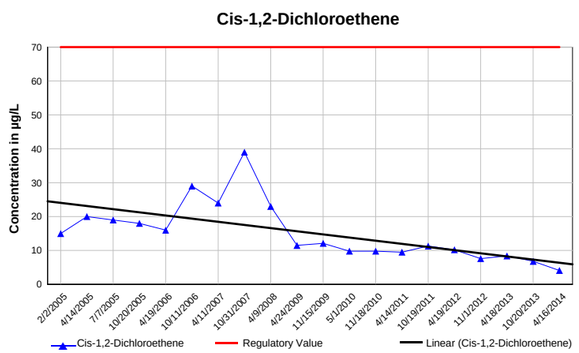
Clean Harbors Kansas, LLC Wichita, Kansas

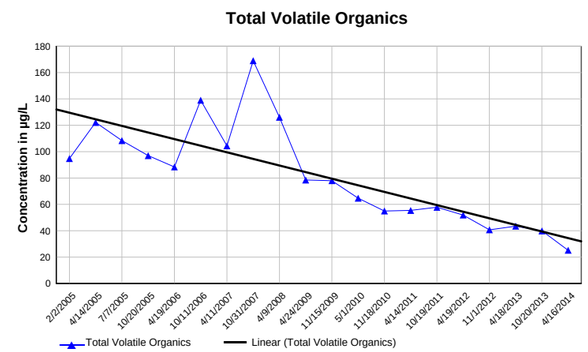
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-11S

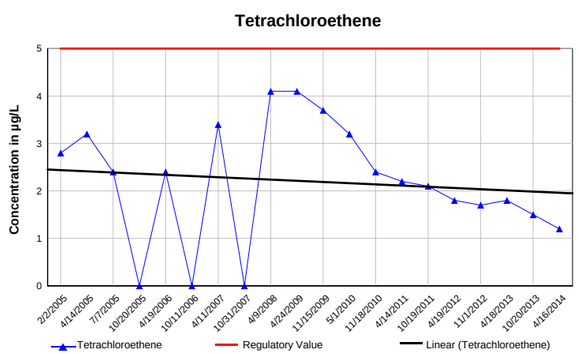
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water









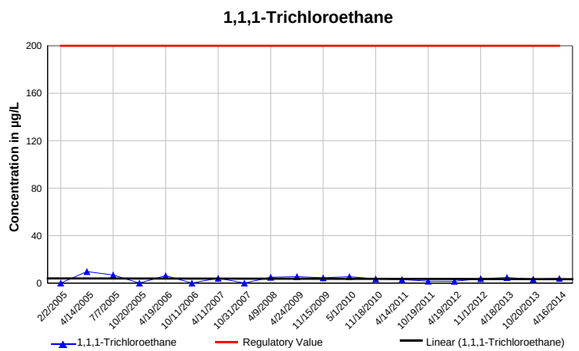


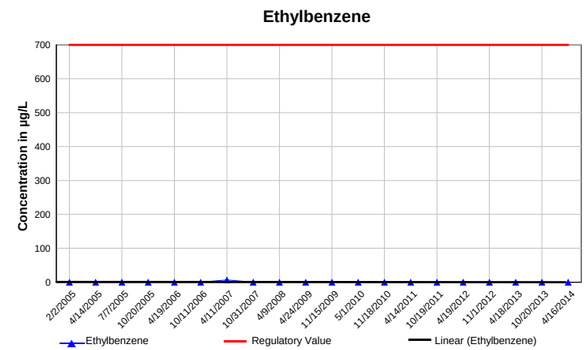
Cameron-Cole

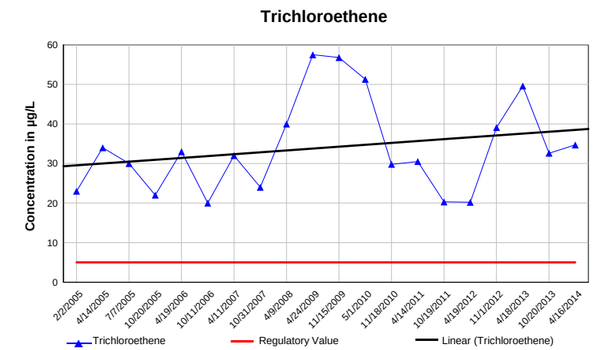
Clean Harbors Kansas, LLC Wichita, Kansas

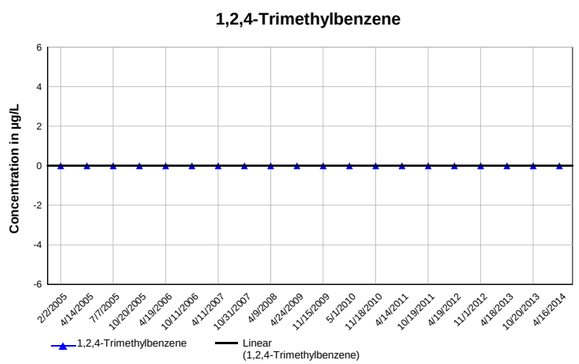
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-12D

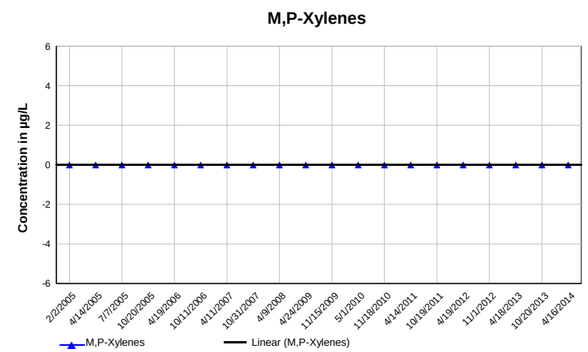
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

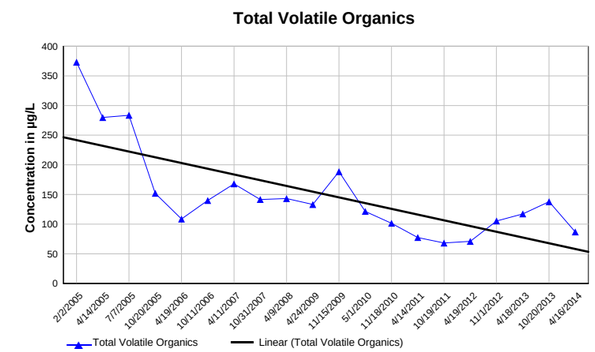


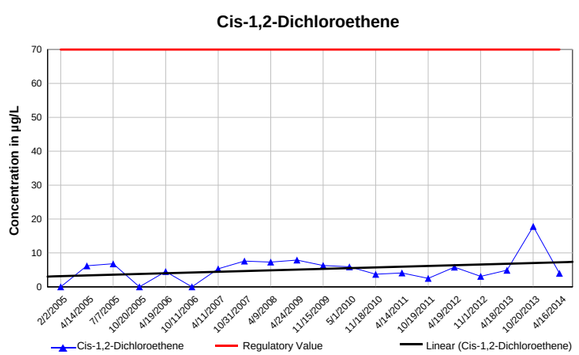


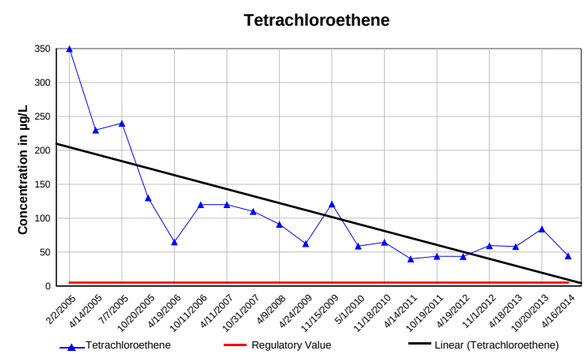










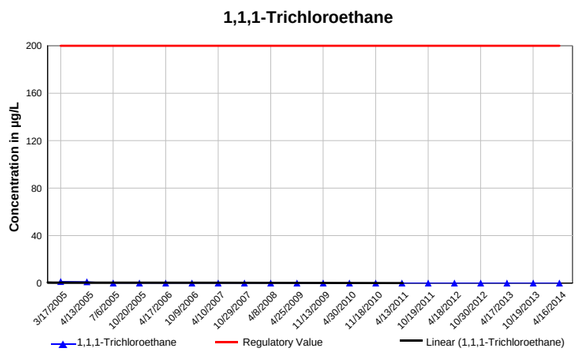


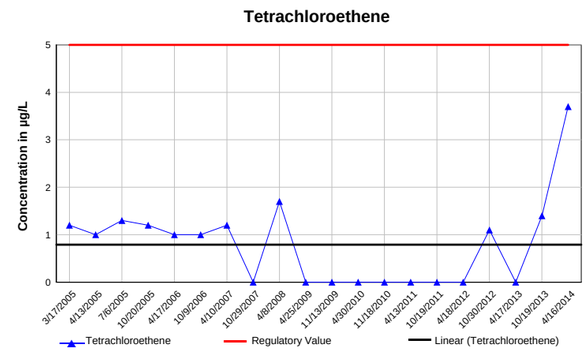
Cameron-Cole

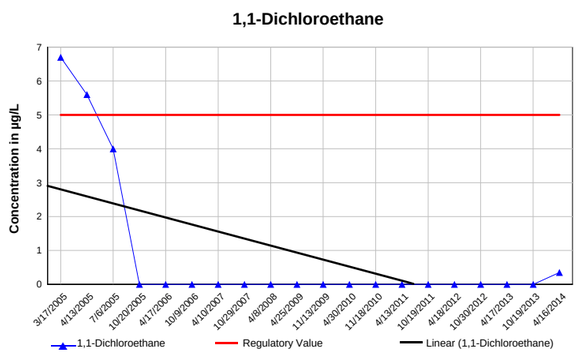
Clean Harbors Kansas, LLC Wichita, Kansas

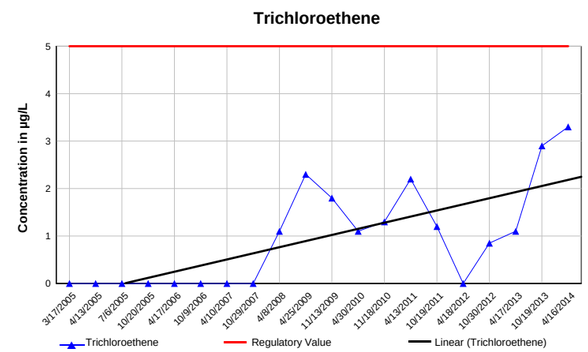
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-12S

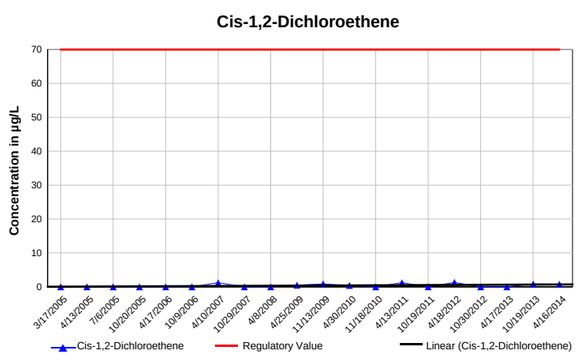
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

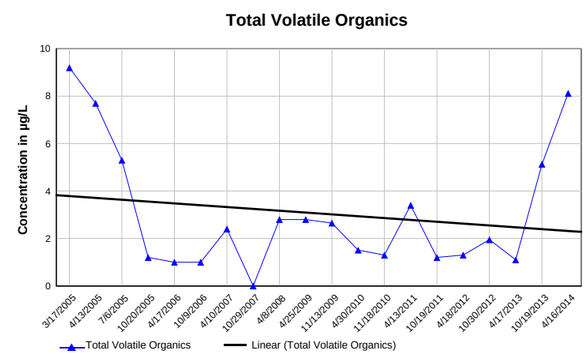












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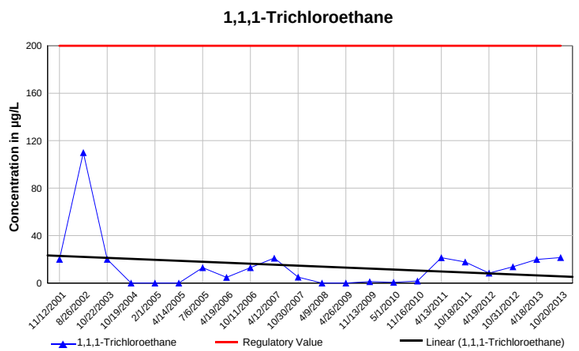
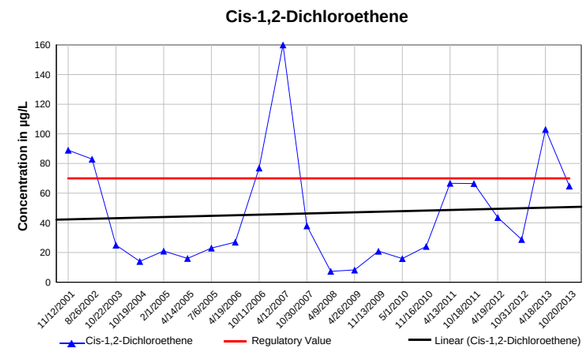
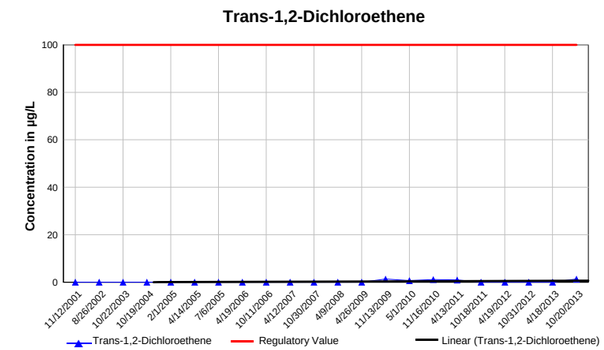
Clean Harbors Kansas, LLC Wichita, Kansas

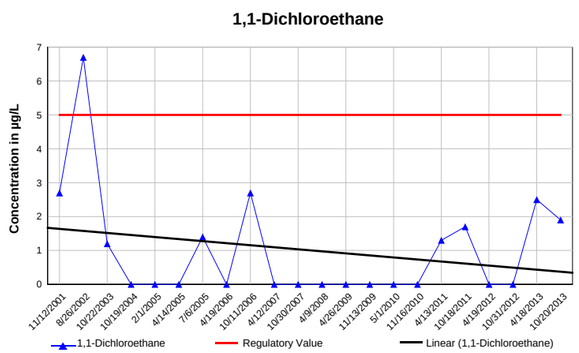
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-13S

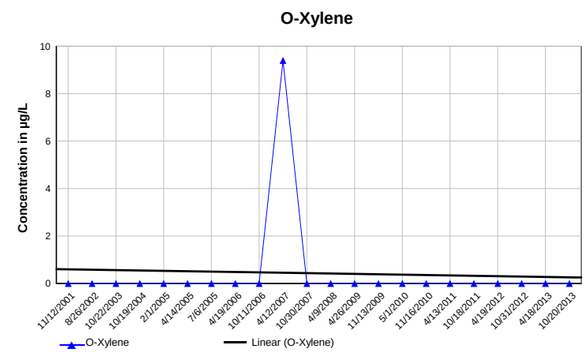
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

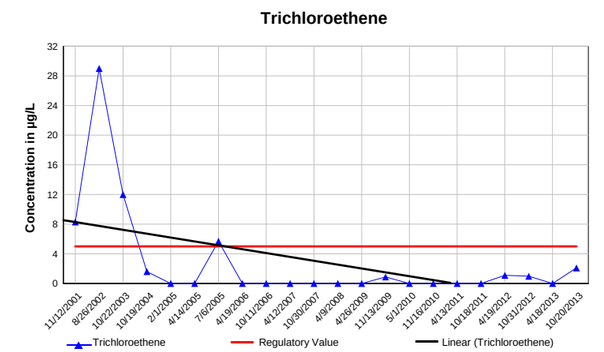


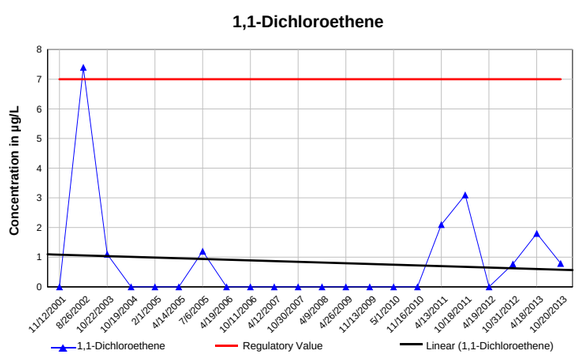


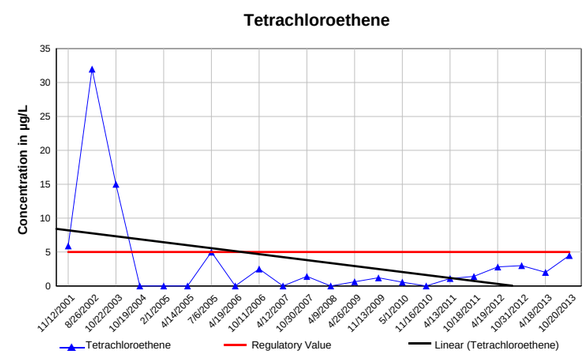


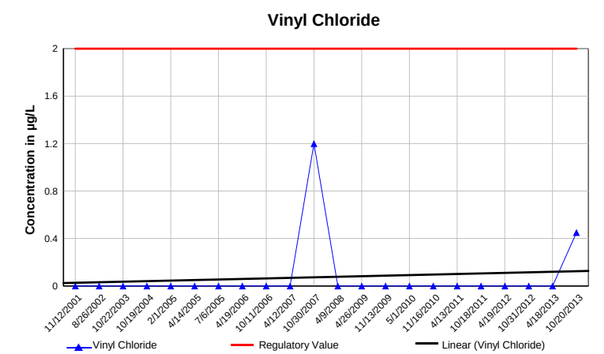












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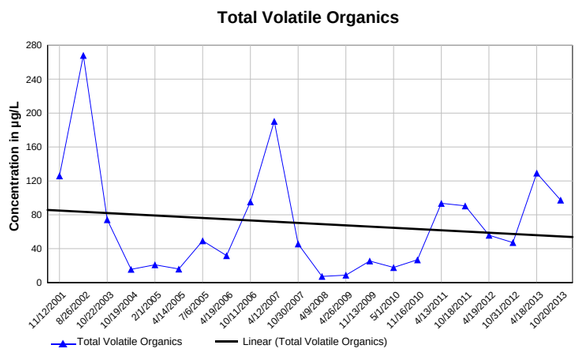
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-B68 (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water



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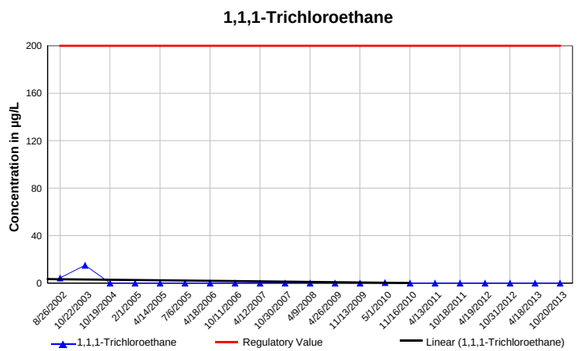
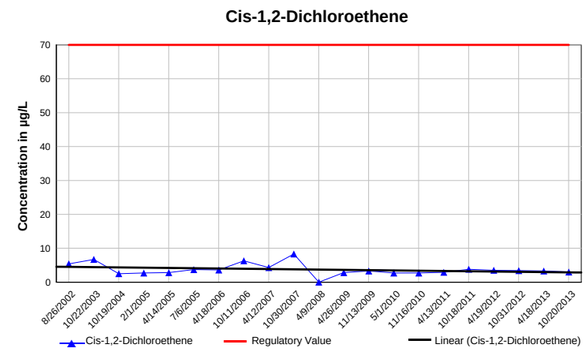
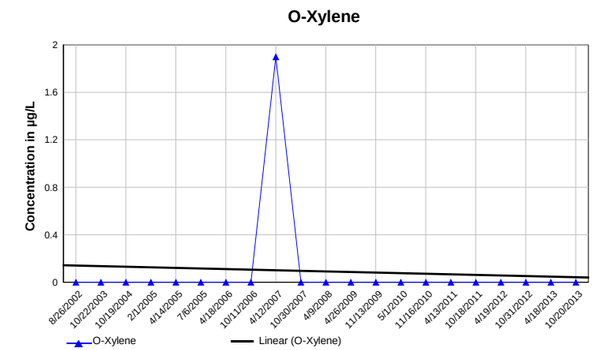
Clean Harbors Kansas, LLC Wichita, Kansas

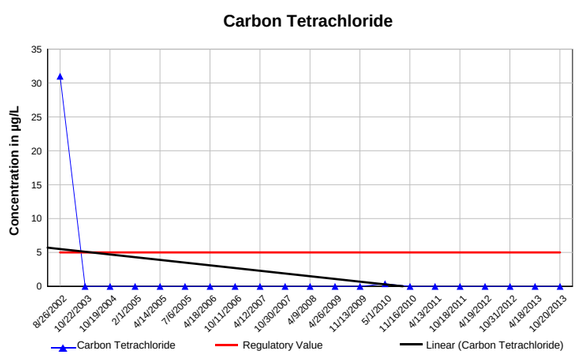
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-B68 (Page 2 of 2)

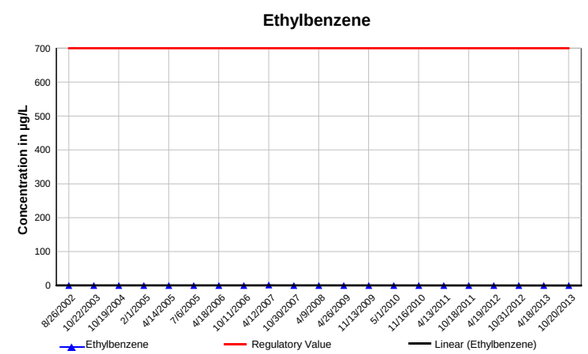
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

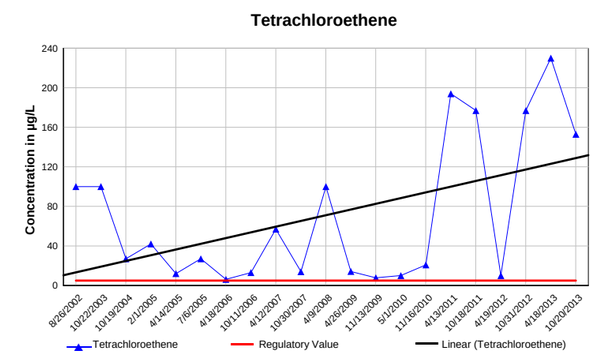


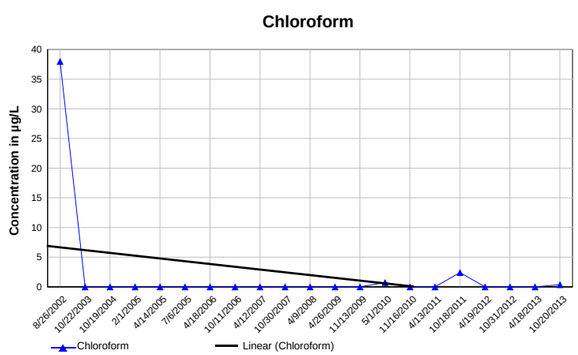


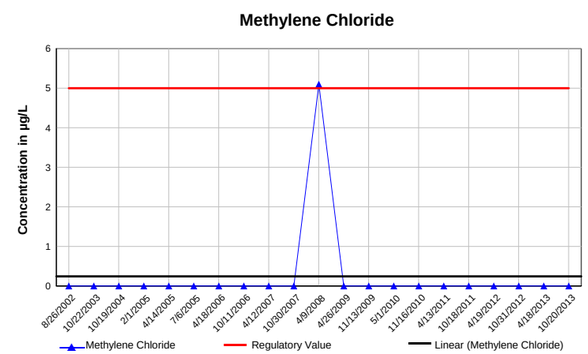


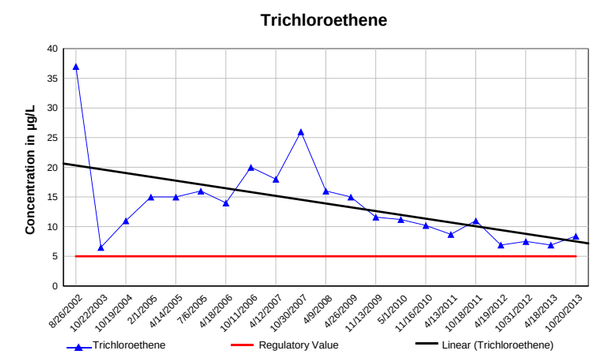












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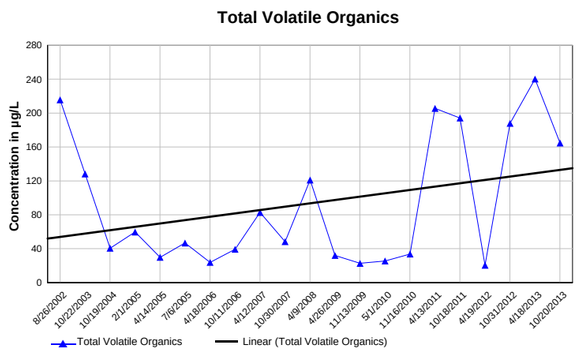
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-B92 (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water



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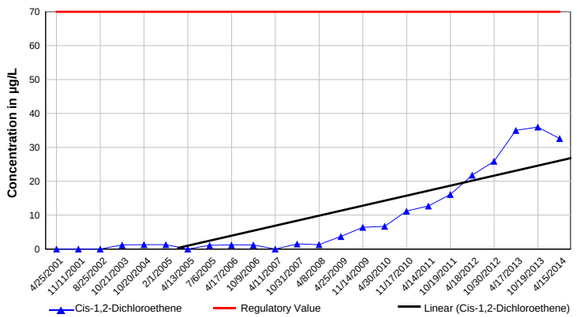
Clean Harbors Kansas, LLC Wichita, Kansas

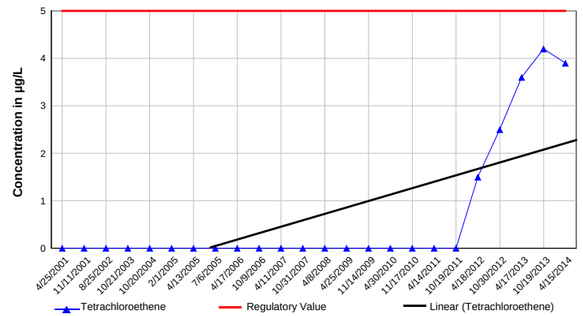
Concentration vs. Time Plots for Selected Constituents
Monitoring Well SK-B92 (Page 2 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

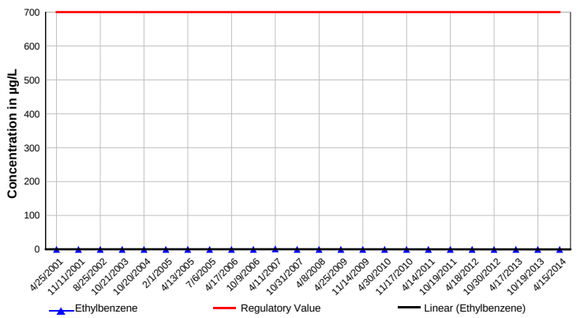
Cis-1,2-Dichloroethene



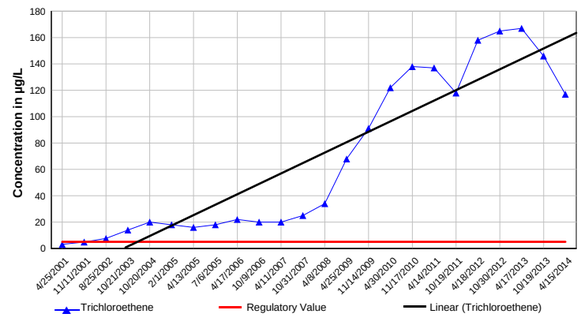
Tetrachloroethene



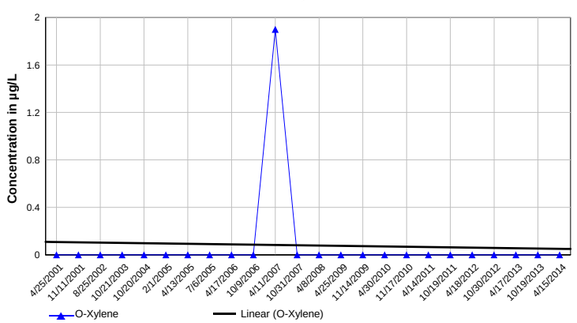
Ethylbenzene



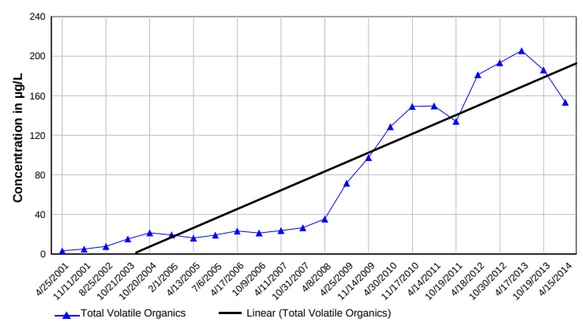
Trichloroethene



O-Xylene



Total Volatile Organics



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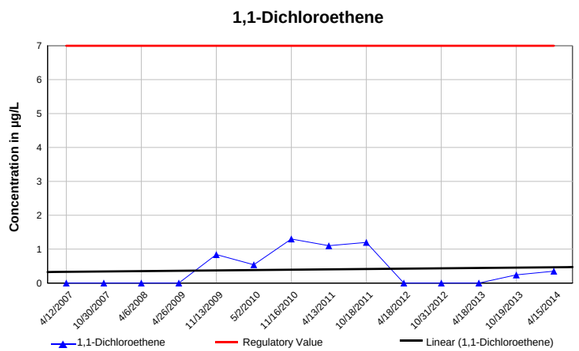
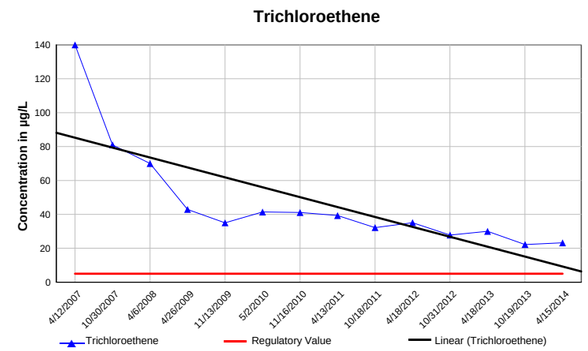
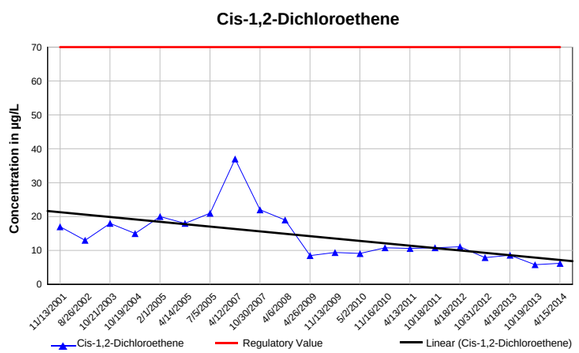
Clean Harbors Kansas, LLC Wichita, Kansas

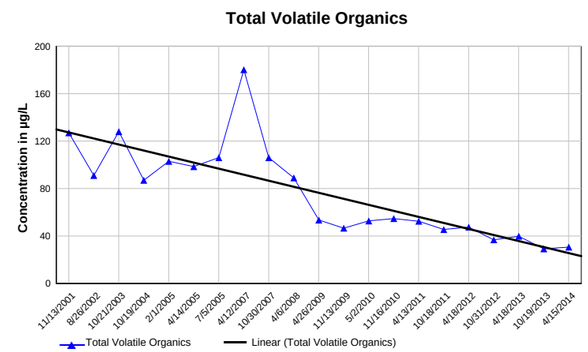
Concentration vs. Time Plots for Selected Constituents
Monitoring Well RSC-1

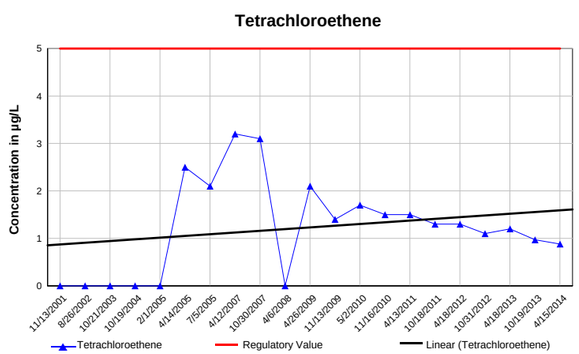
Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water







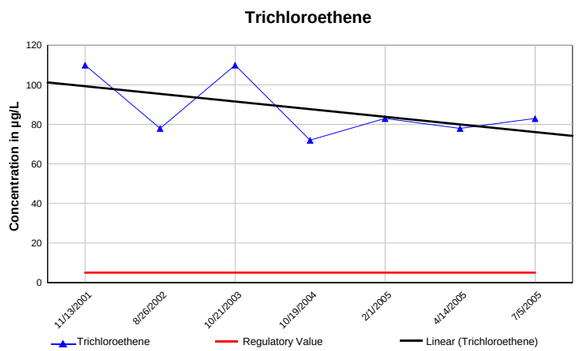




Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well WND-32D

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water



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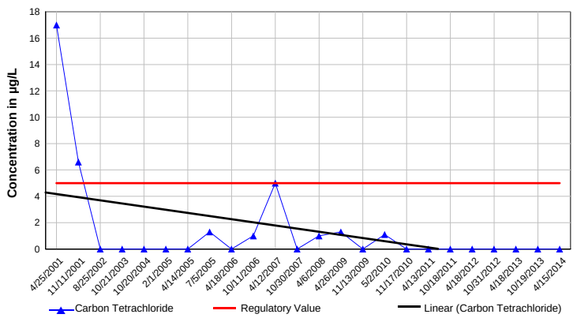
Clean Harbors Kansas, LLC Wichita, Kansas

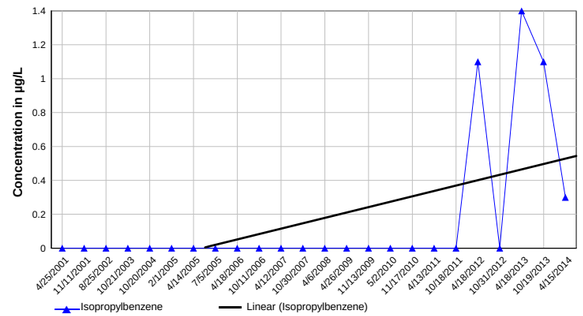
Concentration vs. Time Plots for Selected Constituents
Monitoring Well WND-32D

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water

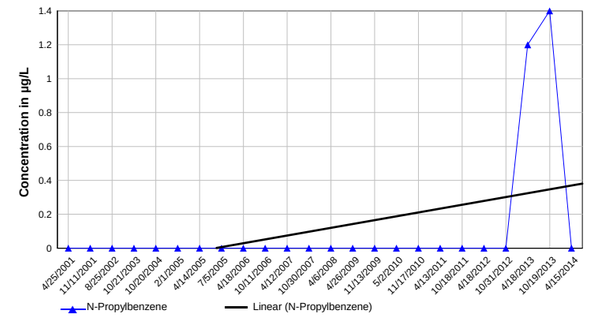
Carbon Tetrachloride



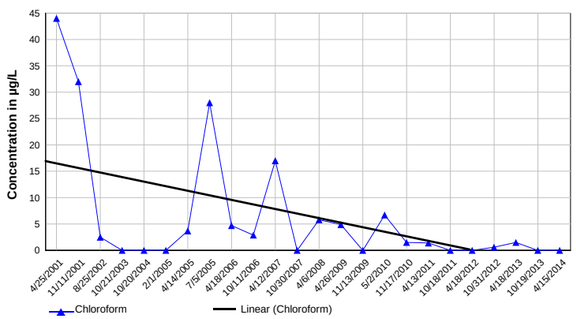
Isopropylbenzene



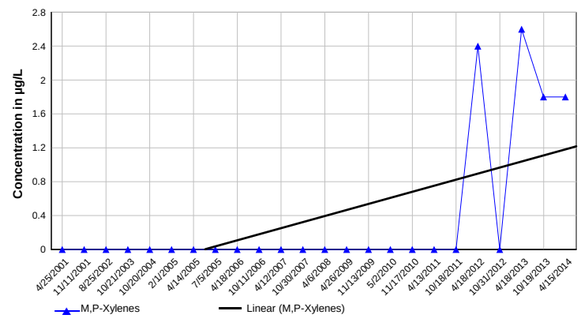
N-Propylbenzene



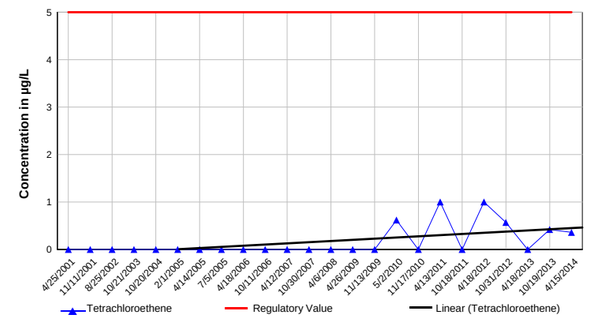
Chloroform



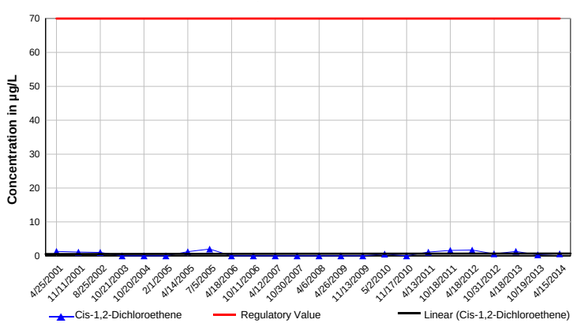
M,P-Xylenes



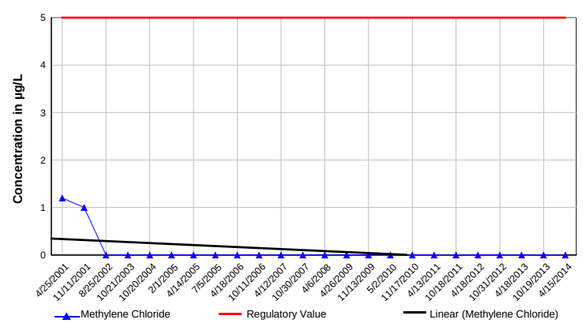
Tetrachloroethene



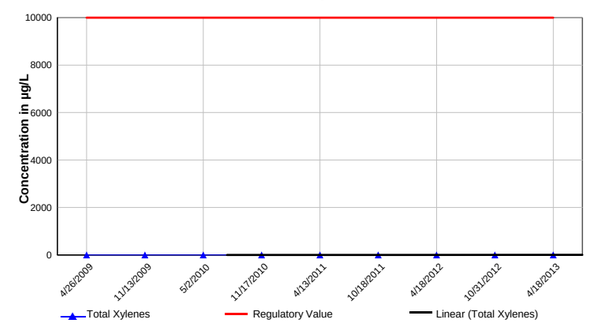
Cis-1,2-Dichloroethene



Methylene Chloride



Total Xylenes



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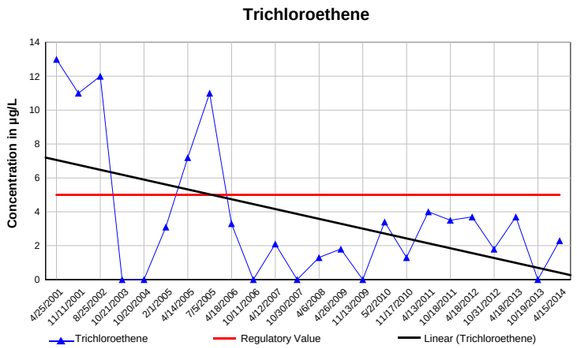
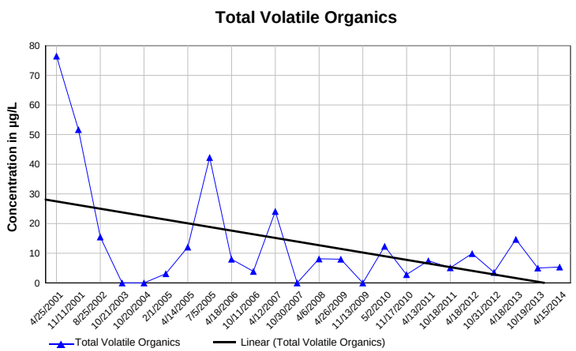
Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well WND-32S (Page 1 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water





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Clean Harbors Kansas, LLC Wichita, Kansas

Concentration vs. Time Plots for Selected Constituents
Monitoring Well WND-32S (Page 2 of 2)

Regulatory Levels depicted are the USAEPA Maximum Contaminant Levels for Drinking Water