

**Joint Base Andrews
Case No. 26-0420PG
Surface Water Samples**

MDE sample review highlights:

1. These surface water samples were collected from near the headwaters of Piscataway Creek.
2. Locations Sample 2, Sample 1, and Sample 3 represent sample locations as you proceed downstream from the headwaters.
3. Sample location 4 is at the mouth of Piscataway Creek at Farmington Landing,
4. Identified constituents of concern demonstrate the presence of dissolved phase fuel impacts.
5. Identified constituents of concern decrease in concentration as the stream flows downstream from the headwaters.
6. Concentrations of identified constituents of concern continue to decrease over time.
7. These results demonstrate stream containment efforts are capturing free phase fuel.

Date	Collector	VOC Constituents	n-Butylbenzene	Benzene	Ethylbenzene	Naphthalene	Toluene	Total Xylenes	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	TPH-DRO	TPH-GRO	PFAS Compounds	6:2FTS	PFBA	PFBS-L	PFHpA	PFHpS-L	PFHxA	PFHxS Total	PFNA Total	PFOA Total	PFOS Total	PFOSA Total	PFPeA	PFPeS-L
Surface Water Action			2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	47 ppb	47 ppb		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample 1 - Collection location on Base																												
4/13/2026	MDE		1.4J	<1.0	<1.0	11.8	<1.0	2.6 J	11	2.8	<1.0	<1.0	441	75.1		245	64.2	95.5	84.6	27.2	343	1130	22.3	514	946	6.7	211	103
4/20/2026	MDE		<1.0	<1.0	<1.0	2.7	<1.0	3.2	6.2	2.1	<1.0	<1.0	296	51.4		206	63	83.1	78.5	24.7	337	950	20.7	449	872	7.13	191	87.1
4/20/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	610	<169,000		225	74.5	115	93.9	31.7	410	1350	22	512	1120	5.3	234	132
4/28/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	269	<169,000		208	63.5	101	82.3	41.5	332E	1280E	20.6	498E	1270E	4.83	200	140
5/4/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	216J	<169,000		207	64.6	104	82.5	36.3	344	1320	19	516	1080	3.96	206	144
5/11/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	228	30.8		202	61.9	96.5	83.4	42.3	318E	1250E	20.5	453E	1250E	4.58	191	133
5/18/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	280	<45.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/18/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	392	21.1		202	62.7	105	88.6	39.9	343E	1340E	20.2	480E	1230E	6.13	199	146
5/26/2026	JBA		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	157*	21.4		172	59.9	80.8	77.6	35.6	287E	1050E	20.6	385E	1120E	6.65	194	108
6/3/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	111	23.6		249	74.5	121	100	43.5	400	1440	22.5	570	1280	8.85	230	163
6/8/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	298*	23J		206	60.3	100	79.3	43.4	321E	1210E	19.6	479E	1210E	4.42	186	135
6/16/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	182	33.9		229	68	109	86.6	47.4	356E	1390E	21.8	527E	1360E	6.15	206	151
6/24/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	108	<45.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/24/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	112	22.8J		164	63.6	76.4	70.1	33	290E	945E	17.8	326E	1110E	6.3	201	89.7
6/29/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	0.248J	<1.0	<1.0	<1.0	334	23.4J		210	66.4	93.8	83.5	34.8	318E	1190E	18.3	427E	1120E	7.04	204	120

Date	Collector	VOC Constituents	n-Butylbenzene	Benzene	Ethylbenzene	Naphthalene	Toluene	Total Xylenes	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	TPH-DRO	TPH-GRO	PFAS Compounds	6:2FTS	PFBA	PFBS-L	PFHpA	PFHpS-L	PFHxA	PFHxS Total	PFNA Total	PFOA Total	PFOS Total	PFOSA Total	PFPeA	PFPeS-L
Surface Water Action			2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	47 ppb	47 ppb		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4/13/2026	MDE		<1.0	<1.0	<1.0	10	<1.0	2.5J	9.9	2.5	<1.0	<1.0	470	78.7		249	63.8	95.4	87.2	26.5	350	1080	21.7	526	866	5.57	211	96
4/20/2026	MDE		<1.0	<1.0	<1.0	2.9	<1.0	2.9	6.2	2	<1.0	<1.0	298	<45.0		229	66.1	83.8	83.86	29.2	354	1030	19.6	443	953	6.12	204	92.5
4/20/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	441	<169,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4/28/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	346	<169,000		246	73.5	117	96.9	48.6	393E	1530E	23.6	598E	1470E	5.32	231	175
5/4/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	573	<169,000		239	72.9	120	95.4	49.1	399	1530	23	564	1500	5.02	232	176
5/11/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	0.321*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	354	74*		222	68.1	101	88.3	44.4	355E	1290E	21.1	484E	1320E	1.06	213	139
5/18/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	622	<45.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/18/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	8840	21.2		242	70.9	117	98.7	48.1	374E	1510E	22.2	549E	1390E	5.8	226	183E
5/26/2026	JBA		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	213*	22.4J		193	67.9	88	87.5	36.1	329E	1150E	21.9	422E	1120E	6.73	220	119
6/3/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	113	21.6		263	75.3	124	104	52.4	406	1620	24.2	604	1430	11.1	238	192
6/8/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	166*	19.9J		273	78.2	131	102	55.7	421E	1570E	26.6	604E	1560E	5.62	244	179
6/16/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	257	27.9		257	73.5	118	96.3	65.6	399E	1440E	22.4	548E	1650E	6.51	226	168
6/24/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	103	<45.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/24/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	154	24.4J		173	65.4	78.3	76.1	34.6	293E	1000E	20.3	365E	1270E	6.51	211	99
6/29/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	0.294J	<1.0	<1.0	<1.0	392	26J		243	76.9	111	95.4	43.4	377E	1340E	21	491E	1300E	7.74	237	140
Samples 3 - Collected off -Base																												
4/13/2026	MDE		<1.0	<1.0	<1.0	4.8	<1.0	<1.0	2.8	<1.0	<1.0	<1.0	378	<45.0		194	57.2	82.4	75.4	24.3	299	1000	20.2	478	869	7.92	183	84.7
4/20/2026	MDE		<1.0	<1.0	<1.0	3.6	<1.0	4.5	6.4	2.1	<1.0	<1.0	289	<45.0		184	62.1	75.1	70.9	21.8	328	872	19.2	406	733	6.38	186	78
4/20/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	944	<169,000		188	69.7	98.8	82.2	28.6	395	1110	18.8	458	964	4.5	212	110
4/28/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	312	<169,000		202	63.4	103	81.3	41.8	335E	1330E	22.1	514E	1430E	5.91	199	139
5/4/2026	JBA		NA	<423	NA	NA	NA	NA	NA	NA	NA	<423	411	<169,000		102	32.5	52.7	42.1	22.1	176	672	9.61	260	615	4.53	99.2	76.9
5/11/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	445	22.1		192	60.7	91.8	80.6	33.6	316E	1130E	18.7	434E	1110E	3.82	184	110
5/18/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	75.7	<45.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/18/2026	JBA~		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	215	19.9		198	61.7	97.9	85.1	41	321E	1290E	19.1	488E	1200E	4.58	193	145
5/26/2026	JBA		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	194*	19.6J		173	59.9	82.3	76.3	27.3	279E	1020E	19.2	403E	890E	5.46	196	102
6/3/2026	JBA		<1.0*	<1.0*	<1.0*	<2.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	<1.0*	181	90.5		223	67.5	111	92	5035	369	1400	23.8	539	1520	20.4	208	157
6/8/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	140*	20.7J		229	69.8	114	93.9	47.3	368E	1430E	20.3	565E	1280E	3.97	215	168
6/16/2026	JBA		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	162	27.6		211	65.6	104	89.8	49.7	340E	1320E	22.8	497E	1540E	5.46	200	143
6/24/2026	MDE		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	146	<45		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/24/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	140	21J		118	53.7	59.8	55.9	23.4	227E	745E	15.1	266E	887E	4.83	169	68.4
6/29/2026	JBA		<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	297	24.3J		195	68.6	93.1	80.9	30.2	319E	1110E	18.7	420E	1020E	7.02	208	107

[illegible]

Notes:

? - Results Pending

J or E - estimated value

< - less than

ppb - parts per billion, ug/L

ppb - parts per trillion, ng/L

NA - Not analyzed

* Analyzed outside of required method or method standards