



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

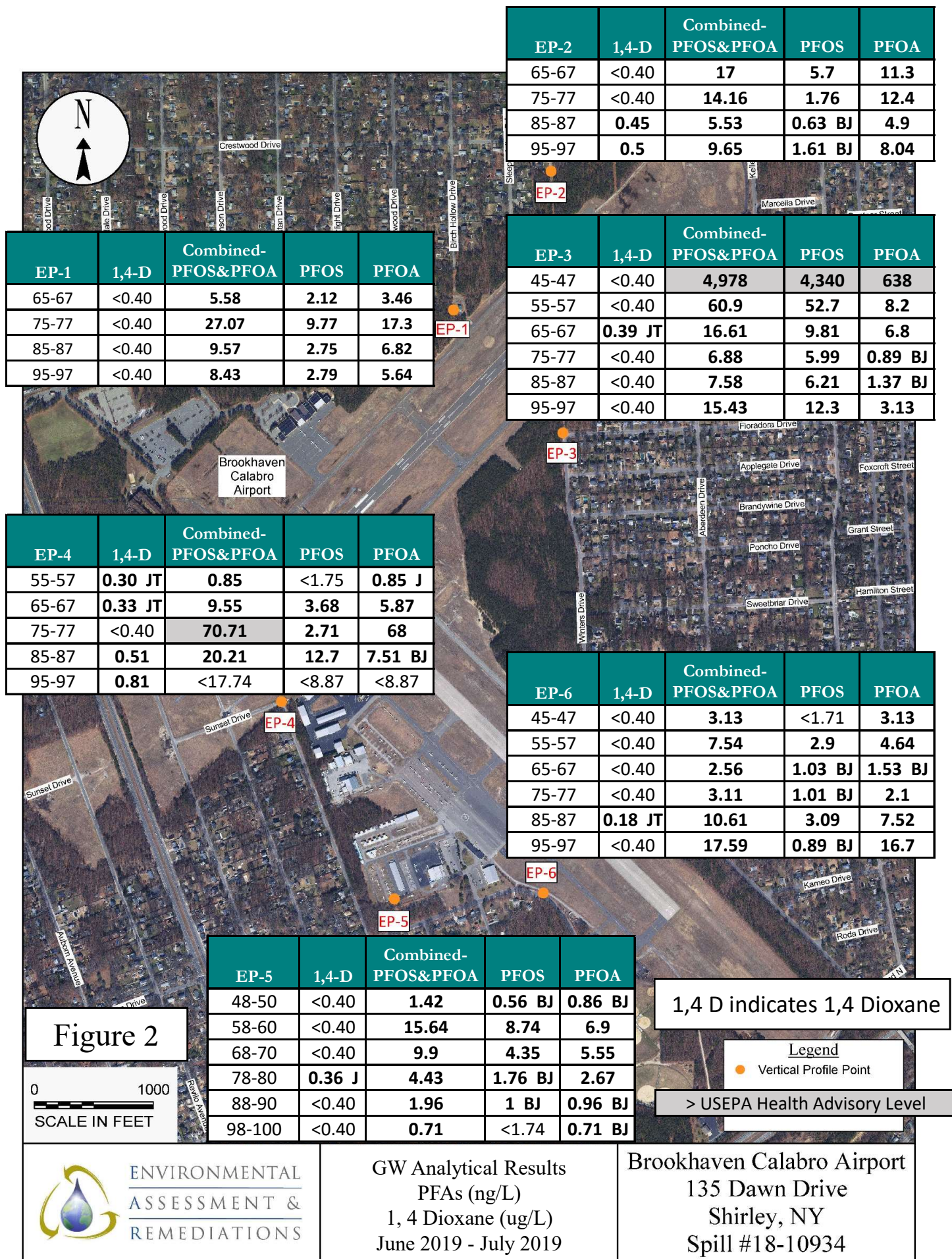
SITE INVESTIGATION INFORMATION

1. SITE NAME Brookhaven Calabro Airport/Mastic FD		2. SITE NUMBER	3. a. TOWNSHIP Brookhaven	b. CITY/VILLAGE Shirley	4. COUNTY Suffolk
5. REGION 1	6. BCP <input type="checkbox"/> ERP <input type="checkbox"/> SPILL <input type="checkbox"/> SUPERFUND <input checked="" type="checkbox"/> If Superfund: Current: <input type="checkbox"/> Proposed: <input checked="" type="checkbox"/> P				
7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)					
a. Quadrangle Moriches		b. Site Latitude 40° 49' 20.82"		Site Longitude -72° 52' 18.42"	
c. Tax Map Numbers Airport: 710.00-01-001.006 and 672.00-01-001.000 Mastic FD: 785.00-01-001.000		d. Site Street Address 135 Dawn Dr. Shirley, NY 11967			
8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)					
<p>The site is located at 135 Dawn Drive in Shirley, Town of Brookhaven, Suffolk County, New York, see figure 1. The site is known as Brookhaven Calabro Airport and Mastic Fire Department Substation. The Mastic Fire Department Substation is located at the southern end of the airport as shown on Figure 1. The Mastic Fire Department has access to the airport and responded to the 1983, 1993, and 2016 plane crashes. When the Mastic Fire Department responded to the crash in 2016, they used firefighting foam to extinguish the fire, see attached article. The firefighting foam likely contained perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). The use of firefighting foam at the airport would also require the storage of firefighting foam and maintenance and testing of equipment at the Mastic Fire Department substation adjacent to the airport.</p> <p>The site is in a populated residential area, see Figure 1. The Suffolk County Water Authority operates the Lambert Ave Mastic Well Field that is located ~1,600 feet to the southeast. Two supply wells are located at this well field and they were installed to a depth of 350 feet. The majority of the residences are connected to public water, but there are select homes that utilize a potable well in the area.</p> <p>a. Area 500 acres b. Completed: () Financial Assessment () SC () IRM () RI/FS () Construction () O&M (X) Other: Initial Groundwater Assessment</p>					
9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)					
perfluorooctanesulfonic acid (PFOS) perfluorooctanoic acid (PFOA)					
10. ANALYTICAL DATA AVAILABLE () Air (X) Groundwater () Surface Water () Sediment () Soil () Waste () Leachate () EPTox () TCLP					
Contravention of Standards or Guidance Values					
<p>Figure 2 shows the six vertical profile locations that surround Brookhaven Calabro Airport, which have been sampled for per- and polyfluoroalkyl substances (PFAS). Groundwater results indicated all locations contained PFASs, and two locations, EP-3 and EP-4, exceeded the EPA Health Advisory Level (HAL) of 70 nanograms per liter for combined PFOA and PFOS (Table 1). The maximum concentration at EP-3 was 4,340 ng/l of PFOS with 638 ng/l of PFOA. This detection was in the shallow groundwater sample.</p> <p>Figure 3 shows the two vertical profile locations near the Mastic Fire Department substation. Groundwater results indicated all locations contained PFASs, and one location, EP-8, exceeded the EPA HAL for combined PFOA and PFOS (Table 1). The maximum concentration at EP-8 was 501 ng/l of PFOS and 19.1 ng/l of PFOA. This detection was in the shallow groundwater sample.</p>					
11. CONCLUSION					
<p>Significant PFOS and PFOA groundwater concentrations at EP-3 and EP-8 were detected down-gradient of the airport runway and the Mastic Fire Department substation, respectively, but not upgradient of these facilities. The shallow depth of the detections suggests that a probable source of PFAS contamination is located at each of these facilities. The source of the contamination is likely attributed to the use of firefighting foam.</p> <p>It is recommended that these facilities be combined and designated as a potential Registry site and a site characterization is conducted to try and locate the source of groundwater contamination.</p>					
Describe Institutional Controls if Required: If so, are they documented? Y () N ()					
12. SITE DATA					
a. Nearest Surface Water: Distance <u>3600</u> ft.		Direction <u>W</u>		ID & Classification <u>Carman's River (C)</u>	
b. Nearest Groundwater: Depth <u>~45</u> ft.		Flow Direction <u>S</u>		(X) Sole Source () Primary () High Yield () Low Yield () Non Yield	
c. Nearest Water Supply: Distance <u>~1600</u> ft.		Direction <u>SE</u>		Active (X) Yes () No Character: <u> </u>	
d. Nearest Building: Distance <u>20</u> ft.		Direction <u>W</u>		Use <u>Commercial</u>	
e. Documented fish or wildlife mortality?		() Y (X) N		h. Exposed hazardous waste? () Y (X) N	
f. Impact on special status fish or wildlife resource?		() Y (X) N		i. EPA ID # <u> </u> HRS Score <u> </u>	
g. Controlled Site Access?		() Y (X) N		j. WEB site address: <u> </u>	
13. SITE OWNER'S NAME Calabro Airport: Town of Brookhaven Mastic Fire Department Substation: Mastic Fire District		14. ADDRESS 1 Independence Hill, Farmingville, NY 11738 1080 Mastic Road, Mastic, NY 11950		15. TELEPHONE NUMBER (631) 451-6331 (631) 281-8787	
16. PREPARER <u>Brian Jankauskas</u> <u>9/30/19</u>		17. APPROVED <u>John Swartwout</u> <u>9/30/19</u>			
Signature Date		Signature Date			
Brian Jankauskas, P.E., Project Manager, NYSDEC		John Swartwout, P.E., Section Chief, NYSDEC			



Figure 1
Brookhaven Calabro Airport/
Mastic Fire Department
Shirley, NY







ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

GW Analytical Results
PFAs (ng/L)
1, 4 Dioxane (ug/L)
June 2019 - July 2019

Mastic Fire Department Station 1
Sunrise Service Road North
Shirley, NY
NYSDEC Spill #18-10934

with DEC modification to combined PFOS and PFOA at EP-8 45-47

TABLE 1

135 Dawn Drive
Shirley, NY
NYSDEC Spill # 18-10934

GW Profiling Investigation (June 2019 - July 2019)
Groundwater Analytical Results (ng/L)
TestAmerica, Inc.
EPA Method 537 Modified (21 Analytes)



Location and Depth	Date Collected	Combined PFOA & PFOS	Perfluorobutanesulfonic Acid (PFBS)	Perfluorobutyric Acid (PFBA)	Perfluorodecanoic Acid (PFDA)	Perfluorodecanoic Acid (PFDoA)	Perfluoroheptane Sulfonate (PFHpS)	Perfluoroheptanoic Acid (PFHpA)	Perfluorohexanesulfonic Acid (PFHS)	Perfluorohexanoic Acid (PFHxA)	Perfluorononanoic Acid (PFNA)	Perfluorooctane Sulfonamide (FOSA)	Perfluorooctanesulfonic Acid (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluoropentanoic Acid (PFPeA)	Perfluorotridecanoic Acid (PFTrA)	Perfluoroundecanoic Acid (PFUnA)	SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)
CALABRO AIRPORT - 135 Dawn Drive, Shirley, NY																			
EP-1_65-67	6/24/2019	5.58	<1.73	<1.73	<1.73	<1.73	<1.73	<1.73	<1.73	1.07 J	<1.73	<8.64	2.12	3.46	1.33 J	<1.73	<1.73	<17.30	<17.30
EP-1_75-77	6/24/2019	27.07	3.41	4.33	<1.78	<1.78	<1.78	5.36	19.4	6.68	0.27 J	9.4	9.77	17.3	7.5	<1.78	<1.78	<17.80	<17.80
EP-1_85-87	6/24/2019	9.57	3.92	3.12	<1.79	<1.79	<1.79	1.78 J	4.24	1.77 J	<1.79	<8.96	2.75	6.82	1.81	<1.79	<1.79	<17.90	<17.90
EP-1_95-97	6/24/2019	8.43	4.27	2.97	<1.71	<1.71	<1.71	2.13	3.19	1.74	<1.71	<8.55	2.79	5.64	1.84	<1.71	<1.71	<17.10	<17.10
EP-2_65-67	6/26/2019	17	0.51 J	3.28	<1.75	<1.75	<1.75	3.09	2.46	1.84	0.52 J	<8.74	5.7	11.3	2.39	<1.75	<1.75	<17.50	<17.50
EP-2_75-77	6/26/2019	14.16	11.8	8.31	<1.75	<1.75	<1.75	3.49	2.1	9.5	0.40 J	<8.74	1.76	12.4	10.6	<1.75	<1.75	<17.50	<17.50
EP-2_85-87	6/26/2019	5.53	3.12	5.24	<1.74	<1.74	<1.74	3.54	1.26 J	8.37	<1.74	<8.70	0.63 BJ	4.9	10.7	<1.74	<1.74	<17.40	<17.40
EP-2_95-97	6/26/2019	9.65	3.35	3.44	<1.73	<1.73	<1.73	2.77	2.74	8.23	<1.73	<8.66	1.61 BJ	8.04	6.98	<1.73	<1.73	<17.30	<17.30
EP-3_45-47	6/27/2019	4,978	23.6	94.1	0.74 J	<1.73	106	345	2,470	371	10.5	9.61	4,340	638	285	<1.73	<1.73	173	144
EP-3_55-57	6/27/2019	60.9	0.69 J	2.41	<1.73	<1.73	1 J	3.21	19.1	4.31	<1.73	<8.66	52.7	8.2	2.87	<1.73	<1.73	<17.30	<17.30
EP-3_65-67	6/27/2019	16.61	0.58 J	2.03	<1.73	<1.73	<1.73	2.16	2.81	1.34 J	0.38 J	<8.64	9.81	6.8	1.06 J	<1.73	<1.73	<17.30	<17.30
EP-3_75-77	6/27/2019	6.88	0.59 J	<1.69	<1.69	<1.69	<1.69	<1.69	2.39	<1.69	<1.69	<8.45	5.99	0.89 BJ	<1.69	<1.69	<1.69	<16.90	<16.90
EP-3_85-87	6/27/2019	7.58	<1.69	<1.69	<1.69	<1.69	<1.69	1.59 J	<1.69	0.46 J	<8.47	6.21	1.37 BJ	<1.69	<1.69	<1.69	<1.69	<16.90	<16.90
EP-3_95-97	6/27/2019	15.43	0.47 J	1.17 J	<1.64	<1.64	<1.64	<1.64	1.74	1.13 J	1.15 J	<8.18	12.3	3.13	1.25 J	<1.64	<1.64	<16.40	<16.40
EP-4_55-57	6/26/2019	0.85	<1.75	<1.75	<1.75	<1.75	<1.75	<1.75	0.72 J	<1.75	<8.76	<1.75	0.85 J	1.14 J	<1.75	0.46 J	<1.75	<17.50	<17.50
EP-4_65-67	6/26/2019	9.55	6.24	8.14	<1.78	<1.78	<1.78	5.25	5.62	7.56	<1.78	16	3.68	5.87	11.3	<1.78	<1.78	<17.80	<17.80
EP-4_75-77	6/26/2019	70.71	<1.72	1.55 J	<1.72	<1.72	<1.72	1.97	5.51	2.66	0.34 J	<8.58	2.71	68	2.47	<1.72	<1.72	<17.20	<17.20
EP-4_85-87	6/27/2019	20.21	<8.87	<8.87	<8.87	<8.87	<8.87	<8.87	13.1	<8.87	<8.87	<44.30	12.7	7.51 BJ	3.10 J	<8.87	<8.87	<88.70	<88.70
EP-4_95-97	6/27/2019	<17.74	<8.87	<8.87	<8.87	<8.87	<8.87	<8.87	<8.87	<8.87	<8.87	<44.30	<8.87	<8.87	<8.87	<8.87	<8.87	<88.70	<88.70
EP-5_48-50	6/24/2019	1.42	0.65 J	0.94 J	<1.73	<1.73	<1.73	0.83 J	<1.73	<1.73	<1.73	<8.65	0.56 BJ	0.86 BJ	0.58 J	<1.73	<1.73	<17.30	<17.30
EP-5_58-60	6/24/2019	15.64	1.03 J	4.57	<1.66	<1.66	<1.66	2.75	0.80 J	5.44	0.52 J	<8.28	8.74	6.9	5.7	<1.66	<1.66	<16.60	<16.60
EP-5_68-70	6/25/2019	9.9	0.67 J	1.49 J	<1.72	<1.72	<1.72	1.79	1.23 J	1.35 J	0.85 J	<8.60	4.35	5.55	1.04 J	<1.72	<1.72	<17.20	<17.20
EP-5_78-80	6/25/2019	4.43	<1.78	0.89 J	<1.78	<1.78	<1.78	<1.78	<1.78	0.53 J	<8.92	1.76 BJ	2.67	<1.78	<1.78	<1.78	<1.78	<17.80	<17.80
EP-5_88-90	6/25/2019	1.96	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<8.42	1 BJ	0.96 BJ	<1.68	<1.68	<1.68	<16.80	<16.80
EP-5_98-100	6/25/2019	0.71	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<8.68	<1.74	0.71 BJ	<1.74	<1.74	<1.74	<17.40	<17.40
EP-6_45-47	6/25/2019	3.13	0.75 J	0.85 J	<1.71	<1.71	<1.71	<1.71	3.21	<1.71	<1.71	<8.55	<1.71	3.13	<1.71	<1.71	<1.71	<17.10	<17.10
EP-6_55-57	6/25/2019	7.54	<1.73	1.98	<1.73	<1.73	<1.73	1.71 J	3.09	1.82	<1.73	13.1	2.9	4.64	3.63	<1.73	<1.73	<17.30	<17.30
EP-6_65-67	6/25/2019	2.56	<1.69	<1.69	<1.69	<1.69	<1.69	<1.69	<1.69	<1.69	<1.69	12.4	1.03 BJ	1.53 BJ	0.55 J	<1.69	<1.69	<16.90	<16.90
EP-6_75-77	6/25/2019	3.11	0.44 J	0.97 J	<1.73	<1.73	<1.73	<1.73	2.05	<1.73	<1.73	9.91	1.01 BJ	2.1	<1.73	<1.73	<1.73	<17.30	<17.30
EP-6_85-87	6/26/2019	10.61	5.81	3.63	<1.70	<1.70	<1.70	2.35	4.38	5.47	<1.70	<8.49	3.09	7.52	4.71	<1.70	<1.70	<17	<17
EP-6_95-97	6/26/2019	17.59	15.7	13	<1.76	<1.76	<1.76	6.24	1.8	30.1	<1.76	11.4	0.89 BJ	16.7	35.2	<1.76	<1.76	<17.60	<17.60

TABLE 1

135 Dawn Drive
Shirley, NY
NYSDEC Spill # 18-10934

GW Profiling Investigation (June 2019 - July 2019)
Groundwater Analytical Results (ng/L)
TestAmerica, Inc.
EPA Method 537 Modified (21 Analytes)

with DEC modification to combined PFOS and PFOA at EP-8 45-47



Location and Depth	Date Collected	Combined PFOA & PFOS	Perfluorobutanesulfonic Acid (PFBS)	Perfluorobutyric Acid (PFBA)	Perfluorodecanoic Acid (PFDA)	Perfluorododecanoic Acid (PFDoA)	Perfluorooheptane Sulfonate (PFHpS)	Perfluorooheptanoic Acid (PFHpA)	Perfluorohexanesulfonic Acid (PFHxS)	Perfluorohexanoic Acid (PFHxA)	Perfluorononanoic Acid (PFNA)	Perfluorooctane Sulfonamide (FOSA)	Perfluorooctanesulfonic Acid (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluoropentanoic Acid (PFPeA)	Perfluorotridecanoic Acid (PFTrA)	Perfluoroundecanoic Acid (PFUnA)	SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)
MASTIC FD STATION 1 - Shirley, NY																			
EP-7_45-47	7/1/2019	10.14	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	0.35 J	16.7	8.45	1.69 BJ	1.09 J	<1.74	<1.74	<17.40	<17.40
EP-7_55-57	7/1/2019	7.85	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	0.72 J	<1.76	<1.76	<8.80	6.67	1.18 BJ	0.57 J	<1.76	<1.76	<17.60	<17.60
EP-7_65-67	7/1/2019	7.14	<1.75	1.06 J	<1.75	<1.75	<1.75	0.91 J	1 J	0.97 J	<1.75	<8.73	5.34	1.8	1.24 J	<1.75	<1.75	<17.50	<17.50
EP-7_75-77	7/1/2019	6.82	<1.73	2.16	<1.73	<1.73	<1.73	0.81 J	0.91 J	0.74 J	0.32 J	<8.65	4.36	2.46	1.08 J	<1.73	<1.73	<17.30	<17.30
EP-8_45-47	7/1/2019	520.1	4.01	37.6	<1.72	<1.72	1.96	55	59.2	81.1	7.28	<8.59	501	19.1	118	<1.72	<1.72	<17.20	<17.20
EP-8_55-57	7/1/2019	68.09	0.75 JHT	5	<1.78	<1.78	<1.78	9.91	11.6	10.9	0.87 JHT	<8.89	65.8	2.29	13.3	<1.78	0.53 JHT	<17.80	<17.80
EP-8_65-67	7/1/2019	7.12	0.45 J	1.82	<1.74	<1.74	<1.74	1.64 J	3.7	1.77	<1.74	<1.74	6.27	0.85 J	2.43	<1.74	<1.74	<17.40	<17.40
EP-8_75-77	7/1/2019	38.5	0.71 J	3.59	<1.75	<1.75	<1.75	6.11	5.07	6.99	0.87 J	<1.75	35.7	2.8	9.71	<1.75	<1.75	<17.50	<17.50

LONG ISLAND / SUFFOLK**Plane fire at Brookhaven Calabro Airport reported, officials say**

Emergency crews respond to a plane on fire at Brookhaven Calabro Airport in Shirley on Friday, Feb. 12, 2016. Photo Credit: Kevin Conn

By John Valenti

john.valenti@newsday.com

Updated February 12, 2016 2:18 PM

A small, private single-engine plane was significantly damaged by a fire that started after it touched down Friday morning at Brookhaven Calabro Airport in Shirley, officials said.

A spokesman for the Town of Brookhaven, which operates the airport, said the plane, a two-seat Cessna 152, had just landed and was “taxiing down the runway” when the engine caught fire.

The Federal Aviation Administration said its initial characterization of the incident was a crash-landing.

The incident was reported in a 911 call at 10:12 a.m.

The FAA and Suffolk County police said there were two people aboard the plane, which had earlier departed from Long Island MacArthur Airport. Neither person was injured.

Town spokesman Jack Krieger said indications are the pilot was scheduled to fly from MacArthur to Calabro.

Krieger said Calabro Airport had been closed as a result of the incident.

It was not immediately clear how long the airport would be closed.

Photos from the scene showed the high-wing Cessna off to one side of the runway, its wing collapsed and the cockpit section of the plane virtually destroyed.

Fire officials said that, in addition to Suffolk police, firefighters from the Mastic Fire Department responded.

The FAA said it would investigate the incident.



By John Valenti

john.valenti@newsday.com

John Valenti, a reporter at Newsday since 1981, has been honored nationally by the Associated Press and Society of the Silurians for investigative, enterprise and breaking news reporting, as well as column writing, and is the author of "Swee'pea," a book about former New York playground basketball star Lloyd Daniels. Valenti is featured in the Emmy Award-winning ESPN 30-for-30 film "Big Shot."

Didn't find what you were looking for?

Try our new Search

