

CERTIFIED WEIGHT REPORT

Part Number: 10017
Lot Number: 090420
Description: CLP Semi-Volatiles - PAH Standard
16 components
Expiration Date: 090425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060
Solvent(s): Methylene chloride
Lot#: 104929
Uncertainty: 5E-05 Balance Uncertainty
0.058 Flask Uncertainty

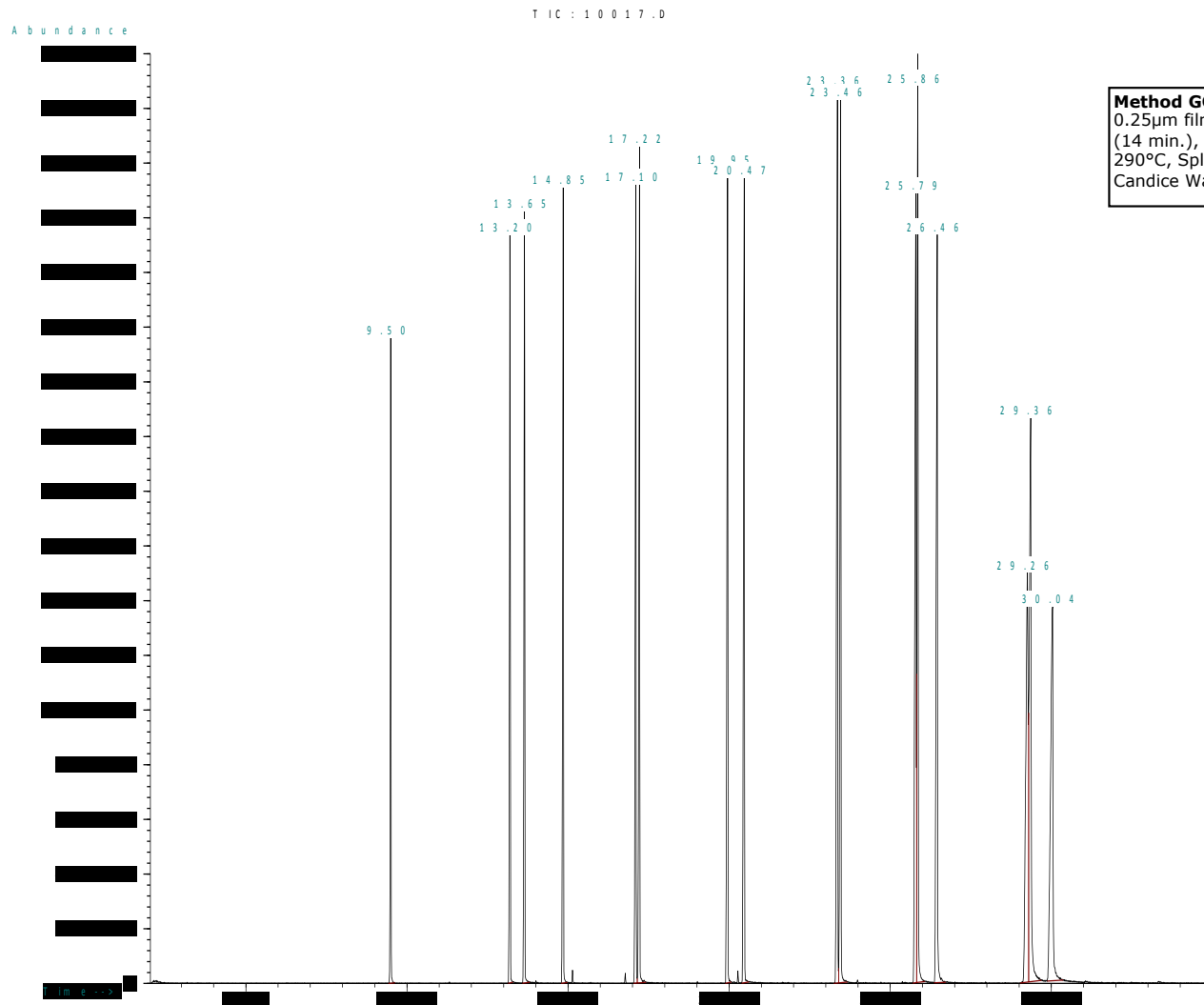
Weight(s) shown below were combined and diluted to (mL): 250.0

		090420
Formulated By:	Benson Chan	DATE
		090420
Reviewed By:	Pedro L. Rentas	DATE

Expanded SDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acenaphthene	1	MKBJ4871V	2000	99	0.2	0.50511	0.50529	2000.7	8.1	83-32-9	N/A	ipr-rat 600mg/kg
2. Acenaphthylene	3	012014	2000	98	0.2	0.51027	0.51034	2000.3	8.2	208-96-8	N/A	N/A
3. Anthracene	13	A0210580	2000	99	0.2	0.50511	0.50526	2000.6	8.1	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4. Benzo(a)anthracene	28	JY2TD-JT	2000	98	0.2	0.51027	0.51085	2002.3	8.2	56-55-3	N/A	N/A
5. Benzo(a)pyrene	30	012012	2000	99.5	0.2	0.50258	0.50275	2000.7	8.1	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6. Benzo(b)fluoranthene	31	012012b	2000	99	0.2	0.50511	0.50532	2000.8	8.1	205-99-2	N/A	N/A
7. Benzo(k)fluoranthene	33	012019k	2000	99	0.2	0.50511	0.50513	2000.1	8.1	207-08-9	N/A	N/A
8. Benzo(g,h,i)perylene	32	ER05121401	2000	99	0.2	0.50511	0.50533	2000.9	8.1	191-24-2	N/A	N/A
9. Chrysene	91	012015	2000	98	0.2	0.51027	0.51045	2000.7	8.2	218-01-9	0.2mg/m3	N/A
10. Dibenzo(a,h)anthracene	112	012011	2000	98	0.2	0.51027	0.51042	2000.6	8.2	53-70-3	0.2mg/m3	N/A
11. Fluoranthene	183	04221PV	2000	98	0.2	0.51027	0.51039	2000.5	8.2	206-44-0	N/A	ori-rat 2000mg/kg
12. Fluorene	184	07211MV	2000	98	0.2	0.51027	0.51050	2000.9	8.2	86-73-7	N/A	ipr-mus 2 g/kg
13. Indeno(1,2,3-cd)pyrene	202	012014	2000	99.9	0.2	0.50056	0.50569	2020.5	8.2	193-39-5	N/A	N/A
14. Naphthalene	222	MKBZ8680V	2000	100	0.2	0.50006	0.50031	2001.0	8.1	91-20-3	10 ppm (50mg/m3/8H)	ori-rat 490mg/kg
15. Phenanthrene	248	03410PV	2000	99	0.2	0.50511	0.50531	2000.8	8.1	85-01-8	0.2mg/m3/8H	ori-mus 700mg/kg
16. Pyrene	259	010197	2000	98	0.2	0.51027	0.51048	2000.8	8.2	129-00-0	0.2mg/m3/8H	ori-rat 2700mg/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Method GC18MSD-2.M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14 min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.

Name	MSD RT (min.)
Naphthalene	9.50
Acenaphthylene	13.20
Acenaphthene	13.65
Fluorene	14.85
Phenanthrene	17.10
Anthracene	17.22
Fluoranthene	19.95
Pyrene	20.47
Chrysene	23.36
Benz(a)anthracene	23.46
Benzo(b)fluoranthene	25.79
Benzo(k)fluoranthene	25.86
Benzo(a)pyrene	26.46
Indeno(1,2,3-cd)pyrene	29.26
Dibenz(a,h)anthracene	29.36
Benzo(ghi)perylene	30.04



Run 3, "P10017 L090420 [2000µg/mL in MeCl2]"

Run Length: 40.00 min, 23999 points at 10 points/second.
Created: Fri, Sep 4, 2020 at 12:32:18 PM.
Sampled: Sequence "090420-GC4M2", Method "GC4-M2".
Analyzed using Method "GC4-M2 [2]".

Comments

GC4-M2 Analysis by Candice Warren

Column ID SPB-5 L#60062-01A 30 meter x 0.53mm x 1.5µm Film Thickness.

Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.

Hydrogen (detector) = 30 mL, Air (detector) = 360 mL Oven Temp 1 = 50°C (1 min).

Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.

FID Temp = 300°C, FID Signal = eDaq Channel 1.

Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range =4

Peak No.	Name	FID RT (min.)
1	Naphthalene	11.34
2	Acenaphthylene	15.02
3	Acenaphthene	15.46
4	Fluorene	16.64
5	Phenanthrene	18.90
6	Anthracene	19.02
7	Fluoranthene	21.74
8	Pyrene	22.27
9	Chrysene	25.13
10	Benzo(a)anthracene	25.24
11	Benzo(b)fluoranthene / Benzo(k)fluoranthene	27.87
12	Benzo(a)pyrene	28.74
13	Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene	33.25
14	Benzo(g,h,i)perylene	34.39

