PROTOCOL	cannabis
	dry commodity -plant material

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	SAMPLES					
	SPIKED	Recovery check - 200ppb (dry)	NO SPIKE	No spike	Process Blank	Blk
Homogenize/hydration/ solvent extraction	pre-mix material		pre-mix material		NA	
	weigh 1.5 ± 0.01 g homogenized sample		weigh 1.5 ± 0.01 g homogenized sample		NA	
	SPEX Geno/Grinder = 5 minutes, 1500 RPM, 2 balls		SPEX Geno/Grinder = 5 minutes, 1500 RPM, 2 balls		NA	
	add 15 mL high purity water		add 15 mL high purity water		add 15 mL high purity water	
	75 µL [10 ppm] 6 compound deuterated pest mix (gives 50ppb injection conc)		75 µL [10 ppm] 6 compound deuterated pest mix		75 µL [10 ppm] 6 compound deuterated pest mix	
	60 µL [5 ppm] Pesticide standard (gives 20ppb inj conc)		NO SPIKE		NO SPIKE	
	add 15 mL 1% acetic acid in acetonitrile, v/v		add 15 mL 1% acetic acid in acetonitrile, v/v		add 15 mL 1% acetic acid in acetonitrile, v/v	
	SPEX Geno/Grinder= 1 minute, 1500 RPM		SPEX Geno/Grinder = 1 minute, 1500 RPM		SPEX Geno/Grinder = 1 minute, 1500 RPM	
	shake for 30 minutes		shake for 30 minutes		shake for 30 minutes	
PULL OFF 1ML FOR POLAR PESTICIDES TESTING (chlormequat)						
Salting Out Partitioning Step	SPIKED	Recovery check	NO SPIKE	No spike	Process Blank	Blk
	Add contents of AOAC salt packet cat# 26237 or cat# 26238 (salts only, no tubes)		Add contents of AOAC salt packet cat# 26237 or cat# 26238 (salts only, no tubes)		Add contents of AOAC salt packet cat# 26237 or cat# 26238 (salts only, no tubes)	
	hand shake 1 minute		hand shake 1 minute		hand shake 1 minute	
	Centrifuge the tubes at >1500 rcf for 5 minutes		Centrifuge the tubes at >1500 rcf for 5 minutes		Centrifuge the tubes at >1500 rcf for 5 minutes	
Dispersive solid phase extraction (dSPE) cleanup	SPIKED	Recovery check	NO SPIKE	No spike	Process Blank	Blk
	remove and retain top acetonitrile layer		remove and retain top acetonitrile layer		remove and retain top acetonitrile layer	
	Use Universal dSPE tube, cat# 26245 for 6 mL		Use Universal dSPE tube, cat# 26245 for 6 mL (process two dSPE tubes for enough volume to make matrix-matched curve)	2x	Use Universal dSPE tube, cat# 26243 to process 1 mL and cat# 26245 for 6 mL	
	Hand shake vigorously for 2 minutes		Hand shake vigorously for 2 minutes		Hand shake vigorously for 2 minutes	
	Centrifuge the dispersive-SPE tubes at >1500 rcf for 5 minutes		Centrifuge the dispersive-SPE tubes at >1500 rcf for 5 minutes		Centrifuge the dispersive-SPE tubes at >1500 rcf for 5 minutes	
	pull off supernatant		pull off supernatant		pull off supernatant	
Prepare to Analyze	SPIKED	Recovery check	NO SPIKE	No spike	Process Blank	Blk
	syringe filter if not using filter vials (cat# 25893) (recommended based on particulates and maintaining instrument performance)		syringe filter if not using filter vials (cat# 25893) (recommended based on particulates and maintaining instrument performance)		syringe filter if not using filter vials (cat# 25893) (recommended based on particulates and maintaining instrument performance)	
	place 0.5 or 1.0 mL in a vial so formic acid and Instrument IS can be added (see below)		combine supernatant from two dSPE tubes so formic acid and Instrument IS can be added (see below) = expect 8-10 mLs		place 0.5 or 1.0 mL in a vial so formic acid and Instrument IS can be added (see below)	
	formic acid adjustment: Add 10µL 5% formic acid in acetonitrile **PER 1** mL of sample		formic acid adjustment: Add 10µL 5% formic acid in acetonitrile **PER 1 mL** of sample (scale for total volume needed for matrix-matched calibration curve)		formic acid adjustment: Add 10µL 5% formic acid in acetonitrile **PER 1 mL** of sample	
	Instrument IS: Add 5µL [10 ppm (µg/mL)] carbaryl-d7, 0.1% formic acid in acetonitrile **PER 1 mL** of sample		Instrument IS: Add 5µL [10 ppm (µg/mL)] carbaryl-d7, 0.1% formic acid in acetonitrile **PER 1 mL** of sample (scale for total volume needed for matrix-matched calibration curve)		Instrument IS: Add 5µL [10 ppm (µg/mL)] carbaryl-d7, 0.1% formic acid in acetonitrile **PER 1 mL** of sample	
	vortex few seconds to mix well		vortex few seconds to mix well		vortex few seconds to mix well	
	RECOVERY CHECK SAMPLE: place small volume in autosampler vial (filter vial uses 500 µL)		INCURRED SAMPLE: place small volume in autosampler vial (filter vial uses 500 µL)		PROCESS BLANK: place small volume in autosampler vial (filter vial uses 500 µL)	
	NA		use remaining volume to make matrix-matched calibration curve		NA	

information about certified reference standards on next page →

Stock Solutions

stock solutions -IS	cat#	concentration	volume
atrazine-d5	31984	100µg/mL each in acetonitrile	1mL
carbaryl-d7	31985	100µg/mL each in acetonitrile	1mL
diazinon-d10	31986	100µg/mL each in acetonitrile	1mL
dichlorvos-d6	31987	100µg/mL each in acetonitrile	1mL
dimethoate-d6	31988	100µg/mL each in acetonitrile	1mL
diuron-d6	31989	100µg/mL each in acetonitrile	1mL
linuron-d6	31990	100µg/mL each in acetonitrile	1mL

stock solutions -Oregon Cannabis Pesticides "OR6"	cat#	concentration	volume
OR Cannabis Pesticide Std #1	570858	600µg/mL each in acetonitrile	1mL
OR Cannabis Pesticide Std #2	570859	600µg/mL each in acetonitrile	1mL
OR Cannabis Pesticide Std #3	570860	600µg/mL each in acetonitrile	1mL
OR Cannabis Pesticide Std #4	570861	600µg/mL each in acetonitrile	1mL
OR Cannabis Pesticide Std #5	570862	600µg/mL each in acetonitrile	1mL
OR Cannabis Pesticide Std #6	570863	600µg/mL each in acetonitrile	1mL

Oregon Cannabis Pesticide Standards (call to inquire 800.356.1688)

Item # 570858
OR Cannabis Pesticide Std #1
600µg/mL in Acetonitrile
24 month shelf life

Abamectin	71751-41-2
Spinosad	168316-95-8

Item # 570859
OR Cannabis Pesticide Std #2
600µg/mL in Acetonitrile
18 month shelf life

(E)-Fenpyroximate	134098-61-6
Acequinocyl	57960-19-7
Acetamiprid	135410-20-7
Azoxystrobin	131860-33-8
Bifenazate	149877-41-8
Boscalid	188425-85-6
Chlorfenapyr	122453-73-0
Etoxazole	153233-91-1
Fludioxonil	131341-86-1
Imidacloprid	138261-41-3
Kresoxim methyl	143390-89-0
Metalaxyl	57837-19-1
MGK-264	113-48-4
Piperonyl butoxide	51-03-6
Spiromesifen	283594-90-1
Spirotetramat	203313-25-1
Spiroxamine	118134-30-8
Trifloxystrobin	141517-21-7

Item # 570860
OR Cannabis Pesticide Std #3
600µg/mL in Acetonitrile
18 month shelf life

Aldicarb	116-06-3
Fipronil	120068-37-3
Flonicamid	158062-67-0
Hexythiazox	78587-05-0
Methiocarb	2032-65-7
Methomyl	16752-77-5
Oxamyl	23135-22-0
Pyridaben	96489-71-3
Thiacloprid	111988-49-9
Thiamethoxam	153719-23-4

Item # 570861
OR Cannabis Pesticide Std #4
600µg/mL in Acetonitrile
18 month shelf life

Carbaryl	63-25-2
Carbofuran	1563-66-2
Chlorantraniliprole	500008-45-7
Clofentezine	74115-24-5
Daminozide	1596-84-5
Fenoxycarb	79127-80-3
Imazalil	35554-44-0
Myclobutanil	88671-89-0
Paclobutrazol	76738-62-0
Propiconazole	60207-90-1
Propoxur	114-26-1
Tebuconazole	107534-96-3

Item # 570862
OR Cannabis Pesticide Std #5
600µg/mL in Acetonitrile
18 month shelf life

Bifenthrin	82657-04-3
Cyfluthrin	68359-37-5
Cypermethrin	52315-07-8
Etofenprox	80844-07-1
Permethrin (cis & trans)	52645-53-1
Prallethrin	23031-36-9
Pyrethrins	8003-34-7

Item #570863
OR Cannabis Pesticide Std #6
600µg/mL in Acetonitrile
12 month shelf life

Acephate	30560-19-1
Chlorpyrifos	2921-88-2
Diazinon	333-41-5
Dichlorvos (DDVP)	62-73-7
Dimethoate	60-51-5
Ethoprophos	13194-48-4
Malathion	121-75-5
Methyl parathion	298-00-0
Naled	300-76-5
Phosmet	732-11-6

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