Table 302-a: Recovery of Chemicals Through Method 302 (E1-E3 + DG1-DG19)

(acetone extraction, partitioning or Hydromatrix removal of water, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
(4-chlorophenyl)-urea	NR	
1,2,4,5-tetrachloro-3-(methylthio)benzene	R	
1,2,4-triazole	$\mathbf{V}$	N detector required.
2,3,5-trimethacarb	$\mathbf{C}$	N detector required.
2,4,5-trichloro-alpha-methylbenzenemethano	ol R	
2,4-dichloro-6-nitrobenzenamine	C (110%)	n=1
2,6-dichlorobenzamide	$\mathbf{C}$	
2-chloroethyl myristate	$\mathbf{C}$	
2-methoxy-3,5,6-trichloropyridine	$\mathbf{C}$	Low temperature column recommended.
3,4,5-trimethacarb	$\mathbf{C}$	N detector required.
3,4-dichloroaniline	V (44-84%)	
3,5-dichloroaniline	S (15-62%)	
3-(3,4-dichlorophenyl)-1-methoxyurea	R	GLC not reliable for quantitation.
3-carboxy-5-ethoxy-1,2,4-thiadiazole	NR	
3-chloro-5-methyl-4-nitro-1H-pyrazole	С	OV-101 peak tails severely.
3-ketocarbofuran	S (0-150%)	
3-methyl-4-nitrophenol	V (65-153%)	Interferences from sample extract may have caused variable results.
4'-hydroxy bifenthrin	$\mathbf{C}$	High temperature GLC column required.
4-(dichloroacetyl)-1-oxa-4-azapiro[4.5]decan	е С	Low level (0.05 ppm) fortification in corn grain obscured by matrix.
4-(phenylamino)phenol	$\mathbf{C}$	
4-chlorobenzenamine	S (23-43%)	
4-chlorophenoxyaniline	S (10-29%)	Poor EC detector sensitivity; halogen-selective detector required.
6-benzyladenine	$\mathbf{C}$	N detector required.
acephate	С	Wide bore or DEGS column required.
acetochlor	$\mathbf{C}$	
acrinathrin	V (80-136%)	

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

Notes assume that extract is examined by GLC with columns at 200° C and, at a minimum, halogen-selective detector (DG3 or 16) and phosphorus-selective detectors (DG2 or 14 or 19). Notes indicate those chemicals that can be determined only by use of columns, temperatures, and/or detectors other than the minimal ones.

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
alachlor	$\mathbf{C}$	
aldrin	$\mathbf{C}$	
allidochlor	$\mathbf{C}$	Low temperature DEGS column used.
alpha-cypermethrin	$\mathbf{C}$	
ametryn	$\mathbf{C}$	N or S detector required.
aminocarb	$\mathbf{C}$	N detector required.
amitraz	S (0-70%)	N detector, high temperature column required.
anilazine	$\mathbf{V}$	GLC response variable.
aramite	$\mathbf{C}$	
atrazine	$\mathbf{C}$	
azinphos-ethyl	$\mathbf{C}$	
azinphos-methyl	$\mathbf{C}$	DEGS column unsuitable.
azinphos-methyl oxygen analog	$\mathbf{C}$	
bendiocarb	$\mathbf{C}$	N detector required.
benfluralin	$\mathbf{C}$	
benodanil	$\mathbf{C}$	
benoxacor	$\mathbf{C}$	
bensulide	$\mathbf{C}$	ResultsmaybevariablewithcertainGLCsystems.
benzoylprop-ethyl	P (79%)	
BF 490-1	$\mathbf{C}$	
BF 490-2	$\mathbf{C}$	
BF 490-9	$\mathbf{C}$	
BHC, alpha-	$\mathbf{C}$	
BHC, beta-	$\mathbf{C}$	
BHC, delta-	$\mathbf{C}$	
bifenox	$\mathbf{C}$	
bifenthrin	V (66-133%)	
binapacryl	$\mathbf{C}$	N detector required.
biphenyl	$\mathbf{C}$	FID required.
bitertanol	С	GLC with high temperature column, N/P detector required.
bromacil	$\mathbf{C}$	
bromophos	$\mathbf{C}$	
bromophos-ethyl	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
bromopropylate	$\mathbf{C}$	
bromuconazole	$\mathbf{C}$	
BTS 27919	$\mathbf{C}$	N detector required.
Bulan	$\mathbf{C}$	
bupirimate	$\mathbf{C}$	N or S detector required.
butachlor	$\mathbf{C}$	
butralin	V(77-90%)	N detector required.
butylate	V (73-99%)	N detector required.
cadusafos	$\mathbf{C}$	
captafol	$\mathbf{C}$	
captan	$\mathbf{C}$	
carbaryl	С	N detector required for GLC determination; GLC not the method of choice.
carbetamide	$\mathbf{C}$	N detector required.
carbofuran	С	N detector required for GLC determination; GLC not the method of choice.
carbophenothion	$\mathbf{C}$	
carbophenothion oxygen analog	$\mathbf{C}$	
carbophenothion sulfone	$\mathbf{C}$	
carbosulfan	P (47-75%)	N or S detector required.
carboxin	$\mathbf{C}$	N or S detector required.
CGA 100255	S (37-146%)	N detector required, but response is poor.
CGA 118244	V	
CGA 14128	$\mathbf{C}$	
CGA 150829	V (40-111%)	N detector required; wide bore or DEGS column recommended.
CGA 171683	$\mathbf{C}$	Ndetector, wide boreorDEGScolumnrequired.
CGA 37734	$\mathbf{C}$	N detector required but response variable.
CGA 91305	V	
CGA 94689A	V (44-108%)	N detector required.
CGA 94689B	S (39-94%)	N detector required, but response varies widely with different columns.
CGA-232449	$\mathbf{C}$	Needs N detector.
chlorbenside	$\mathbf{C}$	
chlorbromuron	V (73-100%)	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
chlorbufam	$\mathbf{C}$	
chlordane	$\mathbf{C}$	
chlordane, cis-	$\mathbf{C}$	
chlordane, trans-	$\mathbf{C}$	
chlordimeform hydrochloride	P (80%)	
chlorethoxyfos	V (64-119%)	Recoveries performed with electron capture detector.
chlorfenapyr	P (73-82%)	
chlorfenvinphos, alpha-	$\mathbf{C}$	
chlorfenvinphos, beta-	$\mathbf{C}$	
chlorflurecol methyl ester	$\mathbf{C}$	
chlorimuron ethyl ester	P (69-70%)	
chlormephos	$\mathbf{C}$	Low temperature column required.
chlornitrofen	C (80%)	
chlorobenzilate	$\mathbf{C}$	
chloroneb	$\mathbf{C}$	Low temperature column required.
chloropropylate	P (64%)	
chlorothalonil	S	Recovery may be 0%.
chlorothalonil trichloro impurity	R	
chloroxuron	$\mathbf{C}$	
chlorpropham	$\mathbf{C}$	
chlorpyrifos	$\mathbf{C}$	
chlorpyrifos oxygen analog	$\mathbf{C}$	Wide bore or DEGS column recommended.
chlorpyrifos-methyl	$\mathbf{C}$	
chlorthiophos	$\mathbf{C}$	
chlorthiophos oxygen analog	$\mathbf{C}$	
chlorthiophos sulfone	$\mathbf{C}$	
chlorthiophos sulfoxide	$\mathbf{C}$	
clodinafop-propargyl	V	Recovery test yielded very high recoveries (>200%) from wheat.
clofentezine	R	Degrades on GLC in presence of extract.
clomazone	$\mathbf{C}$	
cloquintocet-mexyl	V (57-137%)	
coumaphos	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
coumaphos oxygen analog	C	
CP 51214	$\mathbf{C}$	
crotoxyphos	$\mathbf{C}$	
crufomate	$\mathbf{C}$	
cyanazine	$\mathbf{C}$	
cyanofenphos	$\mathbf{C}$	
cyanophos	$\mathbf{C}$	
cycloate	$\mathbf{C}$	N or S detector required.
cycluron	$\mathbf{C}$	N detector required.
cyfluthrin	$\mathbf{C}$	High temperature column required.
cymoxanil	V (70-107%)	N detector required; GLC rrts and responses variable.
cypermethrin	$\mathbf{C}$	
cyprazine	$\mathbf{C}$	
cyproconazole	$\mathbf{C}$	
cyprodinil	$\mathbf{C}$	Needs N detector
cyromazine	S (16-20%)	
dazomet	S (<10%)	
DCPA	$\mathbf{C}$	
DDE, o,p'-	$\mathbf{C}$	
DDE, p,p'-	$\mathbf{C}$	
DDT, o,p'-	$\mathbf{C}$	
DDT, p,p'-	$\mathbf{C}$	
deltamethrin	$\mathbf{C}$	
demeton-O	$\mathbf{C}$	
demeton-O sulfone	$\mathbf{C}$	
demeton-O sulfoxide	С	
demeton-S	$\mathbf{C}$	
demeton-S sulfone	$\mathbf{C}$	Wide bore or DEGS column recommended.
demeton-S sulfoxide	$\mathbf{C}$	Wide bore or DEGS column required.
des N-isopropyl isofenphos	$\mathbf{C}$	
desisopropyl iprodione	P (67-84%)	
desmethyl norflurazon	V (63-200%)	
di-allate	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
dialifor	$\mathbf{C}$	
diazinon	$\mathbf{C}$	
diazinon oxygen analog	C (80%)	
dichlobenil	$\mathbf{C}$	Low temperature column required.
dichlofenthion	$\mathbf{C}$	
dichlofluanid	$\mathbf{C}$	
dichlone	P (55%)	May break down.
dichlorvos	С	Low temperature column required; wide bore or DEGS recommended.
diclobutrazol	C	Wide bore column recommended.
diclofop-methyl	$\mathbf{C}$	
dicloran	$\mathbf{C}$	
dicofol, o,p'-	$\mathbf{C}$	
dicofol, p,p'-	C	
dicrotophos	C	Wide bore or DEGS column required.
dieldrin	$\mathbf{C}$	
diethatyl-ethyl	C	
difenoxuron	R	79-95% recovered at 1 and 5.5 ppm, but subject to interferences.
dimethachlor	$\mathbf{C}$	
dimethametryn	$\mathbf{C}$	N or S detector required.
dimethipin	$\mathbf{C}$	
dimethoate	$\mathbf{C}$	Wide bore or DEGS column recommended.
dimethomorph (prop)	V (87-133%)	High temperature column required.
dinitramine	С	N detector required.
dinobuton	$\mathbf{C}$	
dinocap	$\mathbf{C}$	N detector required.
dioxabenzofos	$\mathbf{C}$	
dioxacarb	С	N detector required; used Megabore Carbowax column.
dioxathion	V (72-94%)	
diphenamid	V (57-155%)	N detector required.
diphenyl 2-ethylhexyl phosphate	$\mathbf{C}$	mean recovery 104.2%, n=15
diphenylamine	$\mathbf{C}$	N detector required.
disulfoton	$\mathbf{C}$	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
disulfoton sulfone	$\mathbf{C}$	
disulfoton sulfoxide	$\mathbf{C}$	Wide bore or DEGS column required.
dithianon	NR	Breaks down in presence of extract.
diuron	$\mathbf{C}$	Low temperature column required.
edifenphos	$\mathbf{C}$	High recovery (113-121%) reported.
endosulfan I	$\mathbf{C}$	
endosulfan II	$\mathbf{C}$	
endosulfan sulfate	$\mathbf{C}$	
endrin	$\mathbf{C}$	
endrin aldehyde	$\mathbf{C}$	
EPN	$\mathbf{C}$	
esfenvalerate	$\mathbf{C}$	High temperature column required.
etaconazole	$\mathbf{C}$	Wide bore column recommended.
ethalfluralin	$\mathbf{C}$	
ethephon	NR	
ethiofencarb	$\mathbf{C}$	N or S detector required; responses variable.
ethiolate	С	Low temperature column, N or S detector required.
ethion	C	
ethion oxygen analog	C	
ethirimol	P (73%)	
ethofumesate	$\mathbf{C}$	S selective detector required.
ethoprop	$\mathbf{C}$	
ethoxyquin	$\mathbf{C}$	N detector required.
ethyl p-toluene sulfonamide	$\mathbf{C}$	N or S detector required.
ethylenethiourea	S (0-48%)	Short, low temperature DEGS or wide bore column, N or S detector required.
etridiazole	$\mathbf{C}$	Low temperature column recommended.
etrimfos	$\mathbf{C}$	
etrimfos oxygen analog	$\mathbf{C}$	
famphur	$\mathbf{C}$	
famphur oxygen analog	С	Quantitation affected by poor GLC.
fenamiphos	$\mathbf{C}$	
fenamiphos sulfone	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
fenamiphos sulfoxide	С	
fenarimol	C	
fenarimol metabolite B	NR	
fenarimol metabolite C	S (6%)	
fenbuconazole	$\mathbf{C}$	
fenfuram	$\mathbf{C}$	
fenitrothion	$\mathbf{C}$	
fenitrothion oxygen analog	$\mathbf{C}$	
fenoxaprop ethyl ester	S (0-40%)	
fenoxycarb	$\mathbf{C}$	N detector required.
fenpropimorph	$\mathbf{C}$	N detector required.
fensulfothion	$\mathbf{C}$	
fensulfothion oxygen analog	$\mathbf{C}$	
fensulfothion sulfone	$\mathbf{C}$	
fenthion	$\mathbf{C}$	
fenthion oxygen analog	$\mathbf{C}$	
fenthion oxygen analog sulfoxide	$\mathbf{C}$	
fenthion sulfone	$\mathbf{C}$	
fenvalerate	$\mathbf{C}$	High temperature column required.
fipronil	S (0-72%)	Corn forage sample interfered with determination.
flamprop-M-isopropyl	С	
flamprop-methyl	$\mathbf{C}$	
fluazifop butyl ester	C (78-112%)	
fluchloralin	$\mathbf{C}$	
flucythrinate	С	High temperature column required.
fludioxonil	V (49-121%)	Requires N detector.
flusilazole	С	Wide bore column recommended.
fluvalinate	$\mathbf{C}$	High temperature column required.
FOE 5043	$\mathbf{C}$	
folpet	С	
fonofos	С	
fonofos oxygen analog	V (57-108%)	
formothion	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
fosthiazate	$\mathbf{C}$	
fuberidazole	С	May break down in solution. Temp program separated from interference in tomato.
furilazole	$\mathbf{C}$	
G-27550	$\mathbf{C}$	N detector required.
Gardona	$\mathbf{C}$	
heptachlor	$\mathbf{C}$	
heptachlor epoxide	$\mathbf{C}$	
heptenophos	$\mathbf{C}$	
hexachlorobenzene	$\mathbf{C}$	
hexaconazole	$\mathbf{C}$	
hexazinone	P (57-76%)	N detector required; high temperature column may be needed.
imazalil	$\mathbf{C}$	Wide bore column recommended.
imazamethabenz methyl ester	С	N detector required, though halogen-selective detector may respond.
IN-A3928	S (23-39%)	
IN-B2838	P (75-84%)	
IN-T3935	S (20%)	
IN-T3936	S (29-34%)	
IN-T3937	S (25%)	N detector required.
iprobenfos	$\mathbf{C}$	
iprodione	$\mathbf{C}$	
iprodione metabolite isomer	$\mathbf{C}$	
isazofos	$\mathbf{C}$	
isocarbamid	$\mathbf{C}$	
isofenphos	$\mathbf{C}$	
isofenphos oxygen analog	$\mathbf{C}$	
isopropalin	$\mathbf{C}$	N detector required.
isoprothiolane	$\mathbf{C}$	
isoproturon	S (44-67%)	GLC poor; requires wide bore column; compound may degrade.
isoxaben	$\mathbf{C}$	N detector required.
isoxaflutole	NR	Crop interference may have prevented measurement of recovery.

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

melamine mephosfolan C metalaxyl metasystox thiol methabenzthiazuron methamidophos  C methidathion C methiocarb C  Mor S detector required but response variable.  C For complete recovery, use variation from PAM 302 E5/E6  Mor S detector required for GLC determination GLC not the method of choice.  Some reports of no recovery; N or S detector required.	Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
KWG 1323       C         lambda-cyhalothrin       C         lenacil       C       N detector required.         leptophos       C         leptophos oxygen analog       C         leptophos photoproduct       C         lindane       C         lindane       C         lindane       C         lindane       C         lindane       C         malathion       C         malathion oxygen analog       C         MB 46513       C         MB46186       S (0-35%)         MB46186       S (0-19%)         mecarbam       C         methidide       R       123% recovered of 3 ppm added; subject to interference, poor GLC.         melamine       NR       Interference, poor GLC.         metalaxyl       C       N detector required but response variable.         metasystox thiol       C       Interference, poor GLC.         metalaxyl       C       N detector required but response variable.         metasystox thiol       C       C         metasystox thiol       C       C         metasystox thiol       C       C         metasystox thiol       C       Nor	jodfenphos	C	
lambda-cyhalothrin  lenacil  C lenacil  C N detector required.  leptophos  C leptophos oxygen analog  leptophos photoproduct lindane  C linuron  V (57-101%)  malathion  C malathion oxygen analog  C MB 46136  MR45950  MB46136  S (0-19%)  mecarbam  C melamine  melamine  NR  melamine  NR  melamine  NR  mephosfolan  C metalaxyl  C metasystox thiol  C metasystox thiol  C metabenzthiazuron  metabenzthiazuron  methabenzthiazuron  methabenzthiazuron  methamidophos  R  P (60-80%)  S ome reports of no recovery; N or S detector required.  methiocarb sulfoxide  R (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoportype  C Wide bore column recommended.	kresoxim-methyl	P (73-89%)	
lenacil C Ndetector required.  leptophos C C   leptophos oxygen analog C   leptophos photoproduct C C   lindane C   lindane C C	KWG 1323	C	
leptophos C C   leptophos oxygen analog C   leptophos oxygen analog C   leptophos photoproduct C   lindane C C   l	lambda-cyhalothrin	C	
leptophos oxygen analog  leptophos photoproduct  lindane  C  linuron  V (57-101%)  malathion  C  malathion oxygen analog  C  MB 46513  C  MB45950  S (0-35%)  MB46136  S (0-19%)  mecarbam  C  melluidide  R  123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine  NR  mephosfolan  C  metalaxyl  C  metalaxyl  C  metasystox thiol  C  metabenzthiazuron  C  methabenzthiazuron  C  methamidophos  C  methamidophos  C  methiocarb  C  methiocarb  C  methiocarb  C  methiocarb sulfone  C  R  C  Some reports of no recovery, N or S detector required.  methor or DEGS column.  methoprotryne  C  Wide bore column recommended.	lenacil	C	N detector required.
leptophos photoproduct  lindane  C linuron  V (57-101%)  malathion  C malathion oxygen analog  C MB 46513  C MB45950  MB46136  MR  melhioidde  MR  melhioidde  MR  melhioidahion  C  methiocarb  Mors detector required for GLC determination of GLC not the method of choice.  methiocarb sulfone  MB46136	leptophos	C	
lindane C linuron V (57-101%)	leptophos oxygen analog	C	
linuron       V (57-101%)         malathion       C         malathion oxygen analog       C         MB 46513       C         MB45950       \$ (0-35%)         MB46136       \$ (0-19%)         mecarbam       C         mefluidide       R       123% recovered of 3 ppm added; subject to interference, poor GLC.         melamine       NR         metamine       NR         metalaxyl       C       N detector required but response variable.         metasystox thiol       C       N detector required but response variable.         metabenzthiazuron       C (85-86%)       For complete recovery, use variation from PAM 302 E5/E6         methidathion       C       N or S detector required for GLC determination GLC not the method of choice.         methiocarb       C       N or S detector required for GLC determination GLC not the method of choice.         methiocarb sulfone       S       Some reports of no recovery; N or S detector required.         methiocarb sulfoxide       P (60-80%)       GLC not preferred, requires N or S detector wide bore or DEGS column.         methoprotryne       C       Wide bore column recommended.	leptophos photoproduct	C	
malathion       C         malathion oxygen analog       C         MB 46513       C         MB45950       \$ (0-35%)         MB46136       \$ (0-19%)         mecarbam       C         melamiddde       R       123% recovered of 3 ppm added; subject to interference, poor GLC.         melamine       NR         mephosfolan       C       N detector required but response variable.         metasystox thiol       C       N detector required but response variable.         metazachlor       C       For complete recovery, use variation from PAM 302 E5/E6         methidathion       C       For complete recovery, use variation from PAM 302 E5/E6         methiocarb       C       NorS detector required for GLC determination GLC not the method of choice.         methiocarb sulfone       S       Some reports of no recovery; N or S detector required.         methiocarb sulfoxide       P (60-80%)       GLC not preferred, requires N or S detector wide bore or DEGS column.         methoprotryne       C       Wide bore column recommended.	lindane	C	
malathion oxygen analog  MB 46513  C  MB45950  S (0-35%)  MB46136  S (0-19%)  mecarbam  C  mefluidide  R  123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine  NR  mephosfolan  C  metalaxyl  C  metazyl  C  metazystox thiol  C  metazystox thiol  C  methabenzthiazuron  C (85-86%)  methamidophos  V  For complete recovery, use variation from PAM 302 E5/E6  methidathion  C  methidathion  C  methiocarb  methiocarb  S  Some reports of no recovery; N or S detector required.  methoprotryne  C  Wide bore column recommended.	linuron	V (57-101%)	
MB 46513  C MB45950  S (0-35%)  MB46136  S (0-19%)  mecarbam  C mefluidide  R 123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine  NR mephosfolan  C metalaxyl  C Metazachlor  metabenzthiazuron  C (85-86%)  methamidophos  V For complete recovery, use variation from PAM 302 E5/E6  methiocarb  methiocarb  C Methocarb  C	malathion	C	
MB45950 S (0-35%)  MB46136 S (0-19%)  mecarbam C  mefluidide R 123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine NR  mephosfolan C  metalaxyl C N detector required but response variable.  metasystox thiol C  metabenzthiazuron C (85-86%)  methabenzthiazuron C (85-86%)  methidathion C  methiocarb C Nor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone S Some reports of no recovery; N or S detector required.  methoprotryne C Wide bore column recommended.	malathion oxygen analog	C	
MB46136       S (0-19%)         mecarbam       C         mefluidide       R       123% recovered of 3 ppm added; subject to interference, poor GLC.         melamine       NR         mephosfolan       C       N detector required but response variable.         metasystox thiol       C       N detector required but response variable.         metasystox thiol       C       For complete recovery, use variation from PAM 302 E5/E6         methamidophos       V       For complete recovery, use variation from PAM 302 E5/E6         methidathion       C         methiocarb       C       Nor S detector required for GLC determination GLC not the method of choice.         methiocarb sulfone       S       Some reports of no recovery; N or S detector required.         methiocarb sulfoxide       P (60-80%)       GLC not preferred, requires N or S detector wide bore or DEGS column.         methoprotryne       C       Wide bore column recommended.	MB 46513	C	
mecarbam  mefluidide  R  123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine  NR  mephosfolan  C  metalaxyl  C  metasystox thiol  C  metabenzthiazuron  methabenzthiazuron  methamidophos  V  For complete recovery, use variation from PAM 302 E5/E6  methidathion  C  methiocarb  methiocarb  S  Some reports of no recovery; N or S detector required.  methiocarb sulfone  P  (G-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	MB45950	S (0-35%)	
mefluidide  R  123% recovered of 3 ppm added; subject to interference, poor GLC.  melamine  NR  mephosfolan  C  metalaxyl  C  metazystox thiol  C  methabenzthiazuron  methamidophos  C  methamidophos  C  methidathion  C  methiocarb  C  methiocarb  C  methiocarb sulfone  P (60-80%)  Mide bore column recommended.	MB46136	S (0-19%)	
melamine NR mephosfolan C metalaxyl C N detector required but response variable. metasystox thiol C metazachlor C methabenzthiazuron C (85-86%) methamidophos V For complete recovery, use variation from PAM 302 E5/E6 methiocarb C N or S detector required for GLC determination GLC not the method of choice. methiocarb sulfone S Some reports of no recovery; N or S detector required. methiocarb sulfoxide P (60-80%) GLC not preferred, requires N or S detector wide bore or DEGS column. methoprotryne C Wide bore column recommended.	mecarbam	C	
mephosfolanCmetalaxylCN detector required but response variable.metasystox thiolCmetazachlorCmethabenzthiazuronC (85-86%)methamidophosVFor complete recovery, use variation from PAM 302 E5/E6methidathionCmethiocarbCN or S detector required for GLC determination GLC not the method of choice.methiocarb sulfoneSSome reports of no recovery, N or S detector required.methiocarb sulfoxideP (60-80%)GLC not preferred, requires N or S detector wide bore or DEGS column.methoprotryneCWide bore column recommended.	mefluidide	R	123% recovered of 3 ppm added; subject to interference, poor GLC.
metalaxyl  metalaxyl  C  Metasystox thiol  C  methabenzthiazuron  methamidophos  V  For complete recovery, use variation from PAM 302 E5/E6  methidathion  C  methiocarb  C  Mor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  S  Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	melamine	NR	
metasystox thiol  metazachlor  C  methabenzthiazuron  methamidophos  V  For complete recovery, use variation from PAM 302 E5/E6  methidathion  C  methiocarb  C  Nor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  S  Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	mephosfolan	C	
methabenzthiazuron  methabenzthiazuron  methamidophos  V  For complete recovery, use variation from PAM 302 E5/E6  methidathion  C  methiocarb  C  Mor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  S  Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	metalaxyl	C	N detector required but response variable.
methabenzthiazuron  Methamidophos  V For complete recovery, use variation from PAM 302 E5/E6  Methidathion  C Methiocarb  C Mor S detector required for GLC determination GLC not the method of choice.  Methiocarb sulfone  S Some reports of no recovery; N or S detector required.  Methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  Methoprotryne  C Wide bore column recommended.	metasystox thiol	C	
methamidophos  V For complete recovery, use variation from PAM 302 E5/E6  methidathion  C Nor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  S Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C Wide bore column recommended.	metazachlor	C	
methidathion  C  methiocarb  C  Mor S detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	methabenzthiazuron	C (85-86%)	
methiocarb  C NorS detector required for GLC determination GLC not the method of choice.  methiocarb sulfone  S Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C Wide bore column recommended.	methamidophos	V	For complete recovery, use variation from PAM I $302~\mathrm{E}5/\mathrm{E}6$
methiocarb sulfone  S  Some reports of no recovery; N or S detector required.  methiocarb sulfoxide  P (60-80%)  GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne  C  Wide bore column recommended.	methidathion	C	
methiocarb sulfoxide P (60-80%) GLC not preferred, requires N or S detector wide bore or DEGS column.  methoprotryne C Wide bore column recommended.	methiocarb	C	N or S detector required for GLC determination; GLC not the method of choice.
wide bore or DEGS column.  methoprotryne C Wide bore column recommended.	methiocarb sulfone	S	Some reports of no recovery; N or S detector required.
• ,	methiocarb sulfoxide	P (60-80%)	GLC not preferred, requires N or S detector, wide bore or DEGS column.
methoxychlor olefin C	methoprotryne	C	Wide bore column recommended.
	methoxychlor olefin	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
methoxychlor, p, p'-	$\mathbf{C}$	
methyl 4-chloro-1H-indole-3-acetate	R	
metobromuron	$\mathbf{C}$	
metolachlor	$\mathbf{C}$	
metolcarb	С	N detector, wide bore, DEGS, or low temperature OV-17 column required.
metoxuron	V (73-110%)	Requires low temperature column.
metribuzin	V	N or S detector required.
metribuzin, deaminated diketo metabolite	NR	
metribuzin, deaminated metabolite	$\mathbf{C}$	N or S detector required.
metribuzin, diketo metabolite	NR	
mevinphos, (E)-	С	Wide bore or DEGS column required for separation from (Z)
mevinphos, (Z)-	С	Wide bore or DEGS column required for separation from (E)
MGK 264	$\mathbf{C}$	
mirex	P (71-83%)	
molinate	$\mathbf{C}$	Recovery tested at 0.053 and 0.264 ppm.
monocrotophos	С	Response enhanced by co-extractives. Wide bore or DEGS column required.
monolinuron	$\mathbf{C}$	
myclobutanil	$\mathbf{C}$	Wide bore column recommended.
myclobutanil alcohol metabolite	S (30-55%)	Poor N/P detector sensitivity.
myclobutanil dihydroxy metabolite	NR	
N, N-diallyl dichloroacetamide	$\mathbf{C}$	
naled	С	May break down to dichlorvos on GLC column. Wide bore or DEGS column required.
napropamide	$\mathbf{C}$	N detector, wide bore or DEGS column required.
neburon	$\mathbf{C}$	
nitralin	$\mathbf{C}$	N or S detector required.
nitrapyrin	$\mathbf{C}$	
nitrofen	$\mathbf{C}$	
nitrofluorfen	$\mathbf{C}$	
nitrothal-isopropyl	$\mathbf{C}$	N detector required.
nonachlor, cis-	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
nonachlor, trans-	$\mathbf{C}$	
norea	$\mathbf{C}$	N detector required.
norflurazon	V (60-200%)	
nuarimol	$\mathbf{C}$	
octachlor epoxide	C	
octhilinone	C	N or S detector required.
ofurace	C	
omethoate	C	Wide bore or DEGS column required.
ovex	$\mathbf{C}$	
oxadiazon	C	
oxadixyl	C	N detector required.
oxamyl oxime metabolite	С	Lower temperature column needed to separate from coextractives.
oxycarboxin	R	Matrix enhancement of response causes high results.
oxydemeton-methyl	$\mathbf{C}$	Wide bore or DEGS column required.
oxydemeton-methyl sulfone	С	Wide bore or DEGS column required; poor GLC makes quantitation questionable.
oxyfluorfen	$\mathbf{C}$	Poor N/P detector sensitivity.
oxythioquinox	С	N or S detector required; wide bore or short DEGS column recommended.
paclobutrazol	$\mathbf{C}$	Wide bore column recommended.
parathion	$\mathbf{C}$	
parathion oxygen analog	$\mathbf{C}$	
parathion-methyl	$\mathbf{C}$	
PB-9	V (106-215%)	
pebulate	$\mathbf{C}$	
penconazole	C	Wide bore column recommended.
pendimethalin	C	N detector required.
pentachloroaniline	C	
pentachlorobenzene	C	
pentachlorobenzonitrile	$\mathbf{C}$	
pentachlorophenyl methyl ether	$\mathbf{C}$	
pentachlorophenyl methyl sulfide	$\mathbf{C}$	
permethrin, cis-	С	High temperature column recommended.

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
permethrin, trans-	$\mathbf{C}$	High temperature column recommended.
Perthane	$\mathbf{C}$	
phenthoate	$\mathbf{C}$	
phenylphenol, o-	$\mathbf{C}$	FID required.
phorate	$\mathbf{C}$	
phorate oxygen analog	$\mathbf{C}$	
phorate oxygen analog sulfone	$\mathbf{C}$	
phorate oxygen analog sulfoxide	$\mathbf{C}$	GLC retention times and responses variable.
phorate sulfone	$\mathbf{C}$	GLC variable.
phorate sulfoxide	$\mathbf{C}$	GLC retention times and responses variable.
phosalone	$\mathbf{C}$	
phosalone oxygen analog	$\mathbf{C}$	Poor GLC detector sensitivity.
phosfolan	$\mathbf{C}$	
phosmet	$\mathbf{C}$	
phosphamidon	$\mathbf{C}$	
phoxim	С	Low temperature column required; degrades at $200^{\circ}$ .
phoxim oxygen analog	$\mathbf{C}$	
piperophos	$\mathbf{C}$	
pirimicarb	$\mathbf{C}$	N detector required.
pirimiphos-ethyl	$\mathbf{C}$	
pirimiphos-ethyl oxygen analog	$\mathbf{C}$	
pirimiphos-methyl	$\mathbf{C}$	
pretilachlor	$\mathbf{C}$	
probenazole	С	N or S detector required; FPD-S more sensitive than $N/P$ .
prochloraz	$\mathbf{C}$	High temperature column required.
procyazine	$\mathbf{C}$	
procymidone	$\mathbf{C}$	
prodiamine	С	Recoveries of 0.5 and 1 ppm from apples: 110, 125%, respectively.
profenofos	$\mathbf{C}$	
profluralin	V (40-90%)	
Prolan	P (58%)	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
promecarb	V	N detector required; GLC not determinative step of choice.
prometryn	$\mathbf{C}$	N or S detector required.
pronamide	$\mathbf{C}$	
propachlor	$\mathbf{C}$	
propanil	$\mathbf{C}$	
propargite	$\mathbf{C}$	S detector required.
propazine	$\mathbf{C}$	
propetamphos	$\mathbf{C}$	
propham	С	N detector required; low temperature column recommended.
propiconazole	$\mathbf{C}$	Wide bore column recommended.
propoxur	$\mathbf{C}$	N detector required for GLC.
prothiofos	$\mathbf{C}$	
prothoate	$\mathbf{C}$	
PYPAC	V (144-162%)	Low temperature column, N detector required.
pyracarbolid	$\mathbf{C}$	N detector required.
pyrazon	$\mathbf{C}$	Wide bore column recommended.
pyrazophos	$\mathbf{C}$	
pyridaphenthion	$\mathbf{C}$	S detector is less sensitive than FPD or N/P.
pyrimethanil	$\mathbf{C}$	
pyriproxyfen	$\mathbf{C}$	N detector required.
quinalphos	$\mathbf{C}$	
quintozene	$\mathbf{C}$	
quizalofop ethyl ester	$\mathbf{C}$	Wide bore column recommended.
RH-6467	S (0-17%)	
RH-9129	V (68-92%)	
RH-9130	P (48-71%)	
ronnel	$\mathbf{C}$	
ronnel oxygen analog	$\mathbf{C}$	
RPA202248	NR	
schradan	$\mathbf{C}$	
SDS-67131	C	
simazine	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
simetryn	С	N or S detector required.
sulfallate	$\mathbf{C}$	
sulfanilamide	NR	
sulfotep	$\mathbf{C}$	Wide bore or DEGS column recommended.
Sulphenone	$\mathbf{C}$	
sulprofos	$\mathbf{C}$	
sulprofos oxygen analog sulfone	$\mathbf{C}$	
sulprofos sulfone	$\mathbf{C}$	
sulprofos sulfoxide	$\mathbf{C}$	
TCMTB	$\mathbf{C}$	
TDE, p,p'-	$\mathbf{C}$	
TDE, p,p'-, olefin	$\mathbf{C}$	
tebuconazole	$\mathbf{C}$	
tecnazene	$\mathbf{C}$	
tefluthrin	$\mathbf{C}$	Recovery tested at 0.275 and 1.374 ppm.
TEPP	$\mathbf{C}$	
terbacil	$\mathbf{C}$	
terbufos	$\mathbf{C}$	
terbufos oxygen analog	$\mathbf{C}$	
terbufos oxygen analog sulfone	$\mathbf{C}$	
terbufos sulfone	$\mathbf{C}$	
terbumeton	С	Recoveries of $0.5$ and $1$ ppm from apples: about $120\%$ .
terbuthylazine	$\mathbf{C}$	
terbutryn	$\mathbf{C}$	N or S detector required.
tetradifon	$\mathbf{C}$	
tetramethrin	$\mathbf{C}$	
tetrasul	$\mathbf{C}$	
thiabendazole	$\mathbf{C}$	N or S detector required for GC determination.
thiazopyr	С	Recovery at 0.5 ppm; interferences prevented measurement at 0.1 ppm.
thiobencarb	$\mathbf{C}$	
thiometon	$\mathbf{C}$	Degrades while standing in extract.
thionazin	С	

Table 302-a: Recovery Through 302 (E1-E3 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
ТНРІ	$\mathbf{C}$	Ndetector, wideboreorDEGScolumnrequired.
tolylfluanid	$\mathbf{C}$	
toxaphene	$\mathbf{C}$	
tralkoxydim	V (38-106%)	Recoveries of two OV-101 peaks are different from one another.
tralomethrin	$\mathbf{C}$	
tri-allate	$\mathbf{C}$	
triadimefon	$\mathbf{C}$	Wide bore column recommended.
triadimenol	$\mathbf{C}$	Wide bore column recommended.
triazamate	$\mathbf{C}$	
triazophos	$\mathbf{C}$	
tribufos	$\mathbf{C}$	
trichlorfon	С	Often converts to dichlorvos on GLC column. Wide bore or DEGS column required.
tricyclazole	С	N or S detector required; wide bore column recommended.
tridiphane	$\mathbf{C}$	
trietazine	$\mathbf{C}$	Recovery tested at 0.11 and 0.55 ppm.
triflumizole	$\mathbf{C}$	Wide bore column recommended.
trifluralin	$\mathbf{C}$	
triflusulfuron methyl ester	V (67-106%)	
triphenyl phosphate	$\mathbf{C}$	
tris(2-ethylhexyl) phosphate	C (68-112%)	mean recovery 97.6%, n=11
tris(beta-chloroethyl) phosphate	$\mathbf{C}$	
tris(chloropropyl) phosphate	$\mathbf{C}$	
Tycor	С	May break down in solution. Temp program separated from interference in tomato.
vamidothion sulfone	$\mathbf{C}$	
vinclozolin	$\mathbf{C}$	
vinclozolin metabolite B	С	Severely subject to influence of matrix; levels <1.0 ppm had very high recovery.
vinclozolin metabolite E	С	Severely subject to influence of matrix; levels <1.0 ppm had very high recovery.
vinclozolin metabolite F	R	Poor chromatography, influence of matrix prevent quantitation of recovery.
vinclozolin metabolite S	V (59-137%)	

Table 302-b: Recovery of Chemicals Through Method 302 (E1-E3 + C5 + DG1-DG19) (acetone extraction, partitioning or Hydromatrix removal of water, Florisil column cleanup, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
2,3-dihydro-3,3-methyl-2-oxo=			
-5-benzofuranyl methyl sulfonate	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
2,6-dichlorobenzamide	NR	50	83% elution from Florisil only in 200 mL ethyl ether.
2-hydroxy-2,3-dihydro-3,3-methyl= -5-benzofuranyl methyl sulfonate	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
2-methoxy-3,5,6-trichloropyridine	P (65%)	15	Low temperature column recommended.
acetochlor	С	15+50	80% eluted in 15% EE/PE.
alachlor	P (68%)	15	
aldrin	$\mathbf{C}$	15	
allethrin	C (80%)	15	
atrazine	$\mathbf{C}$	15+50	Eluted in 50% EE/PE.
azinphos-ethyl	$\mathbf{C}$	15	
BHC, alpha-	$\mathbf{C}$	15	
BHC, beta-	$\mathbf{C}$	15	
BHC, delta-	$\mathbf{C}$	15	
bifenthrin	$\mathbf{C}$	15	
binapacryl	C (83%)	15	
bioresmethrin	NR	15	Some elution from Florisil in 200 mL $50\%$ EE/PE, more in 200 mL $75\%$ EE/PE.
biphenyl	$\mathbf{C}$	15	FID required.
bromophos	$\mathbf{C}$	15	
bromopropylate	C (80%)	50	
bupirimate	S (10-30%)	15	
captafol	NR	15	Some elution from Florisil in $50\%$ EE/PE after $15\%$ .

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Recovery results refer to complete method; blank entry in this column indicates Florisil elution was tested but not complete method.

<sup>&</sup>lt;sup>3</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 302 C5, *i.e.*, 15 and 50% ethyl ether/petroleum ether (EE/PE). Entries for chemicals not recovered indicate which eluants were used in tests.

<sup>&</sup>lt;sup>4</sup> "Florisil only" refers to tests in which elution patterns were tested by added reference standard solutions directly to Florisil column.

Table 302-b: Recovery Through 302 (E1-E3 + C5 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
captan	S (25%)	15	Additional elution from Florisil in $50\%$ EE/PE after $15\%$ .
carfentrazone ethyl ester	$\mathbf{C}$	15	Some additional elution in 50% EE/PE possible.
chlorbenside	$\mathbf{C}$	15	
chlordane	С	15	
chlordane, cis-	C	15	
chlordane, trans-	C	15	
chlordimeform hydrochloride	NR	15-50	
chlorfenapyr	C	15+50	
chlorflurecol methyl ester	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
chlornitrofen	$\mathbf{C}$	15	
chlorothalonil	C (81%)	15	Additional elution from Florisil in 200 mL $50\%$ EE/PE.
chlorpyrifos	$\mathbf{C}$	15	
chlorpyrifos oxygen analog	NR	15	Elution from Florisil with $50\%$ EE/PE not tested.
chlorpyrifos-methyl	С	15	
chlorthiophos oxygen analog	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
chlorthiophos sulfone	S (8%)	15	
chlorthiophos sulfoxide	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
clofentezine	S (27-50%)	15	Complete elution from Florisil only; degrades on GLC in presence of extract.
cymiazole	NR	6-15-50	No elution from Florisil only in 6, 15, or $50\%$ EE/PE or $100\%$ EE.
cypermethrin	$\mathbf{C}$	15	
DCPA	$\mathbf{C}$	15	
DDE, o,p'-	$\mathbf{C}$	15	
DDE, p,p'-	$\mathbf{C}$	15	
DDT, o,p'-	$\mathbf{C}$	15	
DDT, p,p'-	$\mathbf{C}$	15	
deltamethrin	$\mathbf{C}$	15	Very poor EC detector sensitivity.
diazinon	$\mathbf{C}$	15	
dichlofluanid	C	15+50	60% eluted in 15% EE/PE

Table 302-b: Recovery Through 302 (E1-E3 + C5 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
diclobutrazol	P	15	56-70% elution from Florisil only; 50% not tested; wide bore column recommended.
dicloran	$\mathbf{C}$	15	
dicofol, o,p'-	$\mathbf{C}$	15	
dicofol, p,p'-	$\mathbf{C}$	15	May be variable.
dieldrin	$\mathbf{C}$	15	
difenoxuron	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
dimethachlor	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
dinobuton	C (83%)	15	
endosulfan I	С	15	
endosulfan II	C	15	
endosulfan sulfate	С	15	Additional elution possible in 50% EE/PE.
endrin	С	15	
esfenvalerate	С	15	
etaconazole	S	15	30% elution from Florisil only; $50%$ not tested; wide bore column recommended.
fenfuram	P (45%)	15	Partial recovery also when Florisil eluted with MeCl2 eluant #3.
fenpropathrin	$\mathbf{C}$	15	
fenson	$\mathbf{C}$	15	
fensulfothion sulfone	NR	50	No elution from Florisil only in $50\%$ EE/PE.
fenvalerate	$\mathbf{C}$	15	
flamprop-M-isopropyl	NR	15	Complete elution from Florisil only in 50% EE/PE plus additional EE.
flamprop-methyl	NR	6-15-50	No elution from Florisil only in 6, 15, or 50% EE/PE; complete elution with EE.
fluchloralin	$\mathbf{C}$	15	
flucythrinate	$\mathbf{C}$	15+50	About 80% eluted in 15% EE/PE
flusilazole	S	15	35-44% elution from Florisil only; wide bore column recommended.
fluvalinate	$\mathbf{C}$	15	
FOE 5043 thioglycolate sulfoxide	NR		not eluted from Florisil
folpet	С	15+50	78% eluted in 15% EE/PE
fonofos	С	15	

Table 302-b: Recovery Through 302 (E1-E3 + C5 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
fuberidazole	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
heptachlor	$\mathbf{C}$	15	Elution from Florisil not always complete.
heptachlor epoxide	С	15	
hexachlorobenzene	С	15	Recovery test run with $6,15,50\%$ EE/PE, elution in $6\%$ .
hexaconazole	NR	15	
imazalil	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
iprodione	S (24-97%)	15	Complete elution from Florisil requires more polar eluants.
isocarbamid	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
lindane	С	15	
metalaxyl	NR	15	
methabenzthiazuron	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
methoprotryne	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
methyl 3,5-dichlorobenzoate	С	15	
mirex	С	15	
myclobutanil	NR	15	No elution from Florisil only in $15\%$ EE/PE; $50\%$ not tested.
nitrapyrin	С	15	
nitrofen	$\mathbf{C}$	15	
nitrothal-isopropyl	$\mathbf{C}$	15	
nonachlor, trans-	$\mathbf{C}$	15	
norflurazon	NR	15	Elution from Florisil with $50\%$ EE/PE not tested.
ovex	С	15	
oxadiazon	C	15	
oxythioquinox	C (79-96%)	15	
paclobutrazol	P	15	44-55% elution from Florisil only; $50%$ not tested; wide bore column recommended.
parathion	С	15	
parathion-methyl	$\mathbf{C}$	15	

Table 302-b: Recovery Through 302 (E1-E3 + C5 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
penconazole	S	15	42-54% elution from Florisil only; 50% not tested; wide bore column recommended.
pentachloroaniline	С	15	Recovery test run with 6,15,50% EE/PE, elution in $6\%$ .
pentachlorobenzene	С	15	Recovery test run with $6,15,50\%$ EE/PE, elution in $6\%$ .
pentachlorophenyl methyl sulfide	С	15	Recovery test run with $6,15,50\%$ EE/PE, elution in $6\%$ .
permethrin, cis-	$\mathbf{C}$	15	High temperature column recommended.
permethrin, trans-	С	15	High temperature column recommended.
phenmedipham	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
phenothrin	P (60%)	15	No additional elution in 200 mL 50% EE/PE; wide bore column recommended.
phenylphenol, o-	С	15	FID required.
phorate sulfoxide	NR	15-50	Recovery test included elution from Florisil with 50% EE/PE only.
pirimicarb	S (25%)	15	
pretilachlor		15	Elution from Florisil only complete in $15\%$ EE/PE.
procymidone	C	15	
prodiamine		15	Elution from Florisil only complete in $15\%$ EE/PE.
propargite	$\mathbf{C}$	15	
propham	С	15	N detector required; low temperature column recommended.
propiconazole	P	15	46-50% elution from Florisil only; 50% not tested; wide bore column recommended.
pyrethrins	С	15+50	Most eluted in 15% EE/PE.
quintozene	С	15	
quizalofop ethyl ester	C	15	
simazine	P (69%)	15	
TDE, p,p'-	С	15	
tebufenozide	NR	15	
TEPP	NR	15	
terbumeton	NR	15-50	No elution from Florisil only in 15 or $50\%$ EE/PE.
terbuthylazine	C	15	

Table 302-b: Recovery Through 302 (E1-E3 + C5 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C5 <sup>3</sup>	Notes <sup>4</sup>
tetradifon	$\mathbf{C}$	15	
thiometon	$\mathbf{C}$	15	
THPI	NR	15-50	Only small amount recovered $(5\%)$ in subsequent elution with 200 mL EE .
toxaphene	$\mathbf{C}$	15	
tralomethrin	$\mathbf{C}$	15	
triadimefon	S (7%)	15	72-84% elution from Florisil only; 50% not tested; wide bore column recommended.
triadimenol	S	15	40-45% elution from Florisil only; $50%$ not tested; wide bore column recommended.
tricyclazole	NR	15	No elution from Florisil only in 15% EE/PE; $50\%$ not tested.
triflumizole	P	15	46-52% elution from Florisil only; 50% not tested; wide bore column recommended.
vinclozolin	$\mathbf{C}$	15	

Table 302-c: Recovery of Chemicals Through Method 302 (E1-E3 + C3 + DL1)

(acetone extraction, partitioning or Hydromatrix removal of water, charcoal/silanized Celite column cleanup, HPLC with post-column hydrolysis and derivatization, fluorescence detection)

Chemical	Recovery <sup>1</sup>	Rrt <sup>2</sup>	$\mathbf{ng}^3$	Notes
2,3,5-trimethacarb	С			
3,4,5-trimethacarb	$\mathbf{C}$			
3-hydroxycarbofuran	$\mathbf{C}$	0.6	10	mean recovery 97.6%, n=45
aldicarb	$\mathbf{C}$	0.83	14	mean recovery 89.2%, n=210
aldicarb sulfoxide	$\mathbf{C}$	0.33	9	mean recovery 98.6%, n=108
aldoxycarb	$\mathbf{C}$	0.4	9	mean recovery 102%, n=111
aminocarb	$\mathbf{C}$			
bufencarb	С	1.44	19	Major peak is listed. mean recovery $97.4\%$ , $n=27$
butocarboxim	S (0-108%)	0.75	15	mean recovery 56.1%, n=22
carbaryl	$\mathbf{C}$	1.06	7	mean recovery 98.1%, n=147
carbofuran	$\mathbf{C}$	1	10	mean recovery 97.4%, n=121
dioxacarb	P (72%)	0.67	15	
isoprocarb	$\mathbf{C}$	1.13	8	
methiocarb	$\mathbf{C}$	1.26	10	mean recovery 99.9%, n=67
methomyl	$\mathbf{C}$	0.46	10	mean recovery 94.1%, n=128
metolcarb	$\mathbf{C}$	0.85	10	mean recovery 90.7%, n=12
oxamyl	$\mathbf{C}$	0.44	10	mean recovery 94.3%, n=41
promecarb	$\mathbf{C}$	1.31	10	mean recovery 99.9%, n=29
propoxur	$\mathbf{C}$	0.98	8	mean recovery 92.2%, n=48
XMC	С	1.06	10	mean recovery 95.6%, n=28

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

 $<sup>^{\</sup>rm 2}~$  Retention time, relative to carbofuran, on C-8 column described in DL1.

<sup>&</sup>lt;sup>3</sup> ng that cause 50% full scale deflection detector response in DL1.

Table 302-d: Recovery of Chemicals Through Method 302 (E2/E3 + C1 + DG1-DG19) (acetone extraction, Hydromatrix removal of water, Florisil cleanup with one methylene chloride eluant, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
1,2,3,5-tetrachlorobenzene	V (63-141%)	mean recovery 91.6%, n=16
2,3,5,6-tetrachloroaniline	C (67-110%%)	mean recovery 85.5%, n=10
2,4-dichloro-6-nitrobenzenamine	V (65-123%)	mean 91%, n=7
aldrin	C	mean recovery 86.9%, n=16
allethrin	C	mean recovery 91.8%, n=4
alpha-cypermethrin	C	mean recovery 98.0%, n=15
azafenidin	V (45-160%)	High Temperature column required.
BHC, alpha-	V (68-89.5%)	mean recovery 79.0%, n=2
bifenthrin	C (59-110%)	mean recovery 91.4%, n=15
bromopropylate	NR	
butachlor	C	mean recovery 91.7%, n=2
captafol	C	mean recovery 101.7%, n=4
captan	V (0-139%)	mean recovery 65.2%, n=20
carbaryl	C	recovery 107%, n=1
chlordane	P (64%)	mean recovery 64.4%, n=2
chlordane, cis-	$\mathbf{C}$	
chlordane, trans-	$\mathbf{C}$	
chlorobenzilate	NR	mean recovery 5.5%, n=11
chlorothalonil	S (0-93%)	mean recovery 36.9%, n=17
chlorpropham	V (76-95%)	mean recovery 86.1%, n=2
chlorpyrifos	C	mean recovery 88.9%, n=27
chlorpyrifos-methyl	V (54-116%)	mean recovery 80.6%, n=16
clodinafop-propargyl	V (56-104%)	
cloquintocet-mexyl	NR	Not eluted from Florisil only.
cyfluthrin	V (60-117%)	mean recovery 86.5%, n=15
cypermethrin	C	
DCPA	P	mean recovery 77.0%, n=4
DDE, o,p'-	$\mathbf{C}$	

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Notes assume that extract is examined by GLC with columns at 200° C and, at a minimum, halogen-selective detector (DG3 or 16) and phosphorus-selective detectors (DG2 or 14 or 19). Notes indicate those chemicals that can be determined only by use of columns, temperatures, and/or detectors other than the minimal ones.

Table 302-d: Recovery Through 302 (E2/E3 + C1 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
DDE, p,p'-	C	mean recovery 83.7%, n=6
DDT, o,p'-	V (58-111%)	mean recovery 86.3%, n=15
DDT, p,p'-	C	mean recovery 91.4%, n=2
deltamethrin	C	mean recovery 88.5%, n=5
diazinon	$\mathbf{C}$	
dichlone	P	recovery 58.6%, n=1
diclofop-methyl	V (56-135%)	mean recovery 88.2%, n=29
dicloran	V (57-118%)	mean recovery 82.1%, n=14
dicofol, o,p'-	C	
dicofol, p,p'-	C	mean recovery 107%, n=4
dieldrin	$\mathbf{C}$	mean recovery 88.4%, n=146
endosulfan I	V (64-89%)	mean recovery 76.2%, n=4
endosulfan II	C	mean recovery 93.6%, n=4
endosulfan sulfate	C	mean recovery 91.9%, n=28
endrin	C	mean recovery 99.1%, n=2
esfenvalerate	V (70-138%)	mean recovery 95.9%, n=16
fenarimol	S (0-33%)	mean recovery 13%, n=21
fenhexamid	NR	Not recovered from Florisil only.
fenoxaprop ethyl ester	$\mathbf{C}$	mean recovery 97.8%, n=2
fenvalerate	V (65-162%)	mean recovery 93.8%, n=21
fluchloralin	$\mathbf{C}$	mean recovery 91.8%, n=16
fluvalinate	C (64-113%)	mean recovery 93.4%, n=10
folpet	$\mathbf{C}$	mean recovery 120%, n=4
haloxyfop methyl ester	$\mathbf{C}$	recovery 126%, n=1
heptachlor	$\mathbf{C}$	mean recovery 81.7%, n=2
heptachlor epoxide	V (58-118%)	mean recovery 87.3%, n=49
hexachlorobenzene	$\mathbf{C}$	
hexythiazox	V (36-89%)	
iprodione	S (0-95%)	mean recovery 32.4%, n=26. Complete recovery requires 50% EE/PE eluant.
iprodione metabolite isomer	V (32-149%)	mean recovery 85.0%, n=24
isopropalin	$\mathbf{C}$	mean recovery 85.8%, n=4
lambda-cyhalothrin	$\mathbf{C}$	mean recovery 106%, n=16, range 87-133%
lindane	С	mean recovery 84.7%, n=54

Table 302-d: Recovery Through 302 (E2/E3 + C1 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
linuron	C	mean recovery 88.3%, n=18
methamidophos	C	mean recovery 91.2%, n=1
methoxychlor olefin	C (63-104%)	mean recovery 88.2%, n=10
methoxychlor, o, p'-	C	72-123% recoveries, TDS
methoxychlor, p, p'-	V (76-130%)	mean recovery 100.9%, n=19
metolachlor	NR	
mirex	V (37-110%)	mean recovery 79.3%, n=15
nitrapyrin	V (69-123%)	mean recovery 96.1%, n=2
nonachlor, cis-	C	
nonachlor, trans-	C	
nuarimol	NR	
octachlor epoxide	C	mean recovery 91.5%, n=23
oxadiazon	C	mean recovery 89.4%, n=2
oxyfluorfen	C	
parathion	C	mean recovery 117%, n=1
pentachloroaniline	C	
pentachlorobenzene	C	
pentachlorophenyl methyl ether	C	mean recovery 89.5%, n=1
pentachlorophenyl methyl sulfide	V (49-112%)	mean recovery 80.7%, n=15
permethrin, cis-	C	mean recovery 91.6%, n=4
permethrin, trans-	С	mean recovery 93.5%, n=4
phenylphenol, o-	V (76-129%)	FID required; mean recovery 97.6%, n=16
phosalone	V (27-116%)	mean recovery 75.4%, n=16
procymidone	C	mean recovery 90.7%, n=3
propanil	С	mean recovery 100.2%, n=2
propargite	V (71-125%)	mean recovery 93%, n=23
prothiofos	V (36-127%)	mean recovery 75.8%, n=21
pyrethrins	С	mean recovery 83.5%, n=6
quintozene	P	mean recovery 79.6%, n=14
sulfallate	V (39-87%)	mean recovery 58.9%, n=5
TDE, o,p'-	V (70-145%)	mean recovery 97.7%, n=17
TDE, p,p'-	С	
TDE, p,p'-, olefin	V (41-128%)	mean recovery 78.4%, n=21
tecnazene	С	mean recovery 83.2%, n=1

Table 302-d: Recovery Through 302 (E2/E3 + C1 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Notes <sup>2</sup>
tetradifon	C	mean recovery 111%, n=4
thiobencarb	C	mean recovery 90.4%, n=2
toxaphene	С	mean recovery 94.1%, n=5
tralomethrin	C (67-103%)	mean recovery 87.5%, n=11
tridiphane	V (54-110%)	mean recovery 85.1%, n=16
trifluralin	P	mean recovery 57.0%, n=3
vinclozolin	V (61-109%)	mean recovery 86.8%, n=14

Table 302-e: Recovery of Chemicals Through Method 302 (E1/E4 + C4 + DL1)

(acetone extraction, partitioning to remove water, C-18 cartridge cleanup, HPLC with post-column derivatization and fluorescence detection)

Chemical	Recovery <sup>1</sup>	Rrt <sup>2</sup>	$ng^3$	Notes
3-hydroxycarbofuran	$\mathbf{C}$	0.6	10	mean recovery 94.7%, n=2
aldicarb	$\mathbf{C}$	0.83	14	mean recovery 87.4%, n=8
aldicarb sulfoxide	$\mathbf{C}$	0.33	9	mean recovery 89.6%, n=9
aldoxycarb	V (70-104%)	0.4	9	mean recovery 88.7%, n=8
bitertanol	С			GLC with high temperature column, $N/P$ detector required.
bufencarb	$\mathbf{C}$	1.44	19	Major peak is listed. recovery 107%, n=1
carbaryl	$\mathbf{C}$	1.06	7	mean recovery 88.9%, n=45
carbofuran	$\mathbf{C}$	1	10	mean recovery 96.2%, n=3
dioxacarb	$\mathbf{C}$	0.67	15	recovery 91.1%, n=1
methiocarb	$\mathbf{C}$	1.26	10	mean recovery 97.9%, n=5
methiocarb sulfoxide	S	0.64	12	recovery 42.0%, n=1
methomyl	$\mathbf{C}$	0.46	10	mean recovery 96.4%, n=36
oxamyl	$\mathbf{C}$	0.44	10	mean recovery 95.8%, n=33
phenylphenol, o-	$\mathbf{C}$			DL2 required; mean recovery 86.9%, n=8.
piperonyl butoxide	C			mean recovery 91.8%, n=5
pronamide	$\mathbf{C}$			
propoxur	С	0.98	8	mean recovery 85.2%, n=6

Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Retention time, relative to carbofuran, on C-8 column described in DL1.

<sup>&</sup>lt;sup>3</sup> ng that cause 50% full scale deflection detector response in DL1.

Table 302-f: Recovery of Chemicals Through Method 302 (E7 + C6 + DG1-DG3, DG6-DG7, DG10, DG13-DG14, or DG16)

(acetone extraction and solid phase extraction cartridges, liquid-liquid partitioning, SAX cartridge cleanup, GLC determination)

Chemical	Recovery <sup>1</sup>	Notes
3-hydroxycarbofuran	C	Determination by DL1.
acephate	C	
aldicarb	C	Determination by DL1.
aldicarb sulfoxide	C	Determination by DL1.
alpha-cypermethrin	$\mathbf{C}$	
atrazine	$\mathbf{C}$	
azinphos-methyl	$\mathbf{C}$	Recoveries tend to be $>100\%$ .
BHC, alpha-	$\mathbf{C}$	
BHC, beta-	$\mathbf{C}$	Recoveries tend to be $>100\%$ .
BHC, delta-	$\mathbf{C}$	
bitertanol	С	GLC with high temperature column, N/P detector required.
carbaryl	C	Determination by DL1.
carbendazim	C	Determined by UV detector at 280 nm.
carbofuran	$\mathbf{C}$	Determination by DL1.
carbophenothion	C	
chlorothalonil	$\mathbf{C}$	based on two recoveries
chloroxuron	$\mathbf{C}$	Determination by DL3.
chlorpropham	$\mathbf{C}$	
chlorpyrifos	$\mathbf{C}$	
chlorpyrifos-methyl	$\mathbf{C}$	
chlorthiophos	$\mathbf{C}$	
cyanazine	$\mathbf{C}$	
cyfluthrin	$\mathbf{C}$	
DCPA	$\mathbf{C}$	
DDE, o,p'-	$\mathbf{C}$	
DDE, p,p'-	$\mathbf{C}$	
DDT, o,p'-	C	
DDT, p,p'-	C	

Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

Table 302-f: Recovery Through 302 (E7 + C6 + DG1-DG3, DG6-DG7, DG10, DG13-DG14, or DG16)

Chemical	4, or UG16] Recovery <sup>1</sup>	Notes
deltamethrin	C	Notes
demeton-O	C	
demeton-S sulfone	C	Recoveries tend to be >100%.
diazinon	C	Recoveries tend to be >100%.
dichlofluanid	C	Recoveries tend to be >100%.
dichlorvos	P (75%)	Recoveries tend to be >100%.
dicloran	C (75%)	
	C	
dicofol, p,p'-	C	
dicrotophos dieldrin	C	
dimethoate	C	
dioxathion	C	
	C	N datastan magninad
diphenylamine disulfoton sulfone	C	N detector required.
diuron	C	Determination by DI 9
endosulfan I	C	Determination by DL3.
endosulfan II	C	
endosulfan sulfate	C	
endrin	C	
EPN	C	
esfenvalerate	C	
etaconazole	C	
ethion	C	
fenamiphos fenarimol	P (79%)	
	V (79, 99%)	N. detector required
fenpropimorph fenthion	C C	N detector required
	C	Determination by DI 9
fenuron fluridone	P (65%)	Determination by DL3.
	C (03%)	
folpet		
hexachlorobenzene	P (76%)	
imazalil	C	
iprodione	C	
lindane	С	

Table 302-f: Recovery Through 302 (E7 + C6 + DG1-DG3, DG6-DG7, DG10, DG13-DG14, or DG16)

Chemical	Recovery <sup>1</sup>	Notes
linuron	C	Determination by DL3.
malathion	$\mathbf{C}$	
methamidophos	$\mathbf{C}$	
methidathion	$\mathbf{C}$	
methiocarb	C	Determination by DL1.
methomyl	C	Determination by DL1.
methoxychlor, o, p'-	C	
methoxychlor, p, p'-	$\mathbf{C}$	
metobromuron	$\mathbf{C}$	Determination by DL3.
metoxuron	$\mathbf{C}$	Determination by DL3.
mevinphos, (E)-	$\mathbf{C}$	
mevinphos, (Z)-	C	
monocrotophos	C	
monolinuron	С	Determination by DL3.
monuron	С	Determination by DL3.
myclobutanil	С	
neburon	C	Determination by DL3.
omethoate	C	Wide bore or DEGS column required.
oryzalin	C	N or S detector required.
oxamyl	С	Determination by DL1.
parathion	С	
parathion oxygen analog	С	
parathion-methyl	С	
parathion-methyl oxygen ana	log	$\mathbf{C}$
penconazole	С	
pentachloroaniline	С	
permethrin, cis-	С	
permethrin, trans-	С	
phenylphenol, o-	С	
phorate sulfone	С	
phosalone	С	
phosmet	С	
pirimiphos-ethyl	С	
pirimiphos-methyl	С	

Table 302-f: Recovery Through 302 (E7 + C6 + DG1-DG3, DG6-DG7, DG10, DG13-DG14, or DG16)

Recovery <sup>1</sup>	Notes
C	
C	
C	
C	
C	
C	
C	
C (122%)	n=l
C	
C	
C	
C	
С	Determined by UV detector at 280 nm; confirm, increase sensitivity with DL7.
C	
C	
C	
C	
C	
	C C C C C C C C C C C C C C C C C C C

Table 303-a: Recovery of Chemicals Through Method 303 (E1-E5 + C1 or C2 + DG1-DG19)

(acetonitrile or water/acetonitrile extraction, partitioning into petroleum ether, Florisil column cleanup, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
1,1'-(2,2-dichloroethylidene)= bis(2-methoxybenzene)	R			
1,2,3,5-tetrachlorobenzene	P (75%) C	6	1	
1,2,3-trichlorobenzene	C	6	1	Elutes in PE forerun.
1,2,4,5-tetrachloro-3-(methyl= thio)benzene	С	6	1	
1,2,4-triazole	NR	6-15-50	1-2-3	
1-hydroxychlordene	R	15		
10,10-dihydromirex	C	6		
10-monohydromirex	C	6		
2,3,5,6-tetrachloroaniline	R			
2,3,5,6-tetrachloroanisidine	C	6	2	
2,3,5,6-tetrachloroanisole	C	6	1	
2,3,5,6-tetrachloronitroanisole	$\mathbf{C}$	6	1+2	
2,3,5-trimethacarb	S (18%) NR	50	1-2-3	
2,4,5-trichloro-alpha-methyl= benzenemethanol	R	15		

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Recovery results refer to complete method; blank entry in this column indicates Florisil elution was tested but not complete method. Separate results are listed for C1 and C2 only if recovery is affected by Florisil elution system.

<sup>&</sup>lt;sup>3</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 303 C1, *i.e.*, 6, 15, and 50% ethyl ether/petroleum ether (EE/PE). Entries for chemicals not recovered indicate which eluants were used in tests.

<sup>&</sup>lt;sup>4</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 303 C2, *i.e.*, methylene chloride (CH<sub>2</sub>Cl<sub>2</sub>) eluants #1, 2, and 3. Entries for chemicals not recovered indicate which eluants were used in tests.

<sup>&</sup>lt;sup>5</sup> "Florisil only" refers to tests in which elution patterns were tested by added reference standard solutions directly to Florisil column.

<sup>&</sup>lt;sup>6</sup> Reference to petroleum ether (PE) forerun refers to Florisil elution performed as in 304 C3 or C4; not usually used in analysis of nonfatty foods.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
2,4-dichloro-6-nitrobenzenamine	R	15	2	Complete elution from Florisil only in 15% EE/PE or $\mathrm{CH_2Cl_2}$ eluant #2.
2,6-dichlorobenzamide	NR	6-15-50	1-2-3	
2,8-dihydromirex	С	6		
2-chloroethyl caprate	С	15	2	
2-chloroethyl laurate	С	15	2	
2-chloroethyl linoleate	V (36-114%)	15	2	
2-chloroethyl myristate	V (48-112%)	15	2	
2-chloroethyl palmitate	V (38-107%)	15	2	
2-methoxy-3,5,6-trichloropyridine	P(60-78%) C	6+15	1+2	
3,4,5-trimethacarb		50		Partial (20-35%) elution from
	NR		1-2-3	Florisil only in 50% EE/PE.
3,4-dichloroaniline	S (8%)	15		35% elution from Florisil only in 15% EE/PE.
3,4-dichlorophenylurea	NR	6-15-50		
3,5-dichloroaniline	S (12-48%)	6+15	1+2	Partial (73%) elution from Florisil only in 15% EE/PE.
3-(3,4-dichlorophenyl)-1- methoxyurea	NR	6-15-50		
3-desmethyl sulfentrazone	NR	6-15-50	1-2-3	
3-hydroxymethyl-2,5-dimethyl= phenyl methylcarbamate	NR	6-15-50	1-2-3	
3-ketocarbofuran	NR	6	1	$60\%$ recovered from Florisil only in $6\%$ EE/PE or $\mathrm{CH_2Cl_2}$ #1; also elutes with PE.
3-methyl-4-nitrophenol	NR	6-15-50	1-2-3	
3-tert-butyl-5-chloro-6-hydroxy= methyluracil	NR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
4-(dichloroacetyl)-1-oxa-4- azapiro[4.5]decane	P (50-62%)	50	3	Complete elution from Florisil only in $50\%$ and in $\mathrm{CH_2Cl_2}$ eluant #3.
4-chloro-6-methoxyindole	R	15		
4-chlorobenzylmethyl sulfone	NR	6-15-50	1-2-3	
4-chlorobenzylmethyl sulfoxide	NR	6-15-50	1-2-3	
4-hydroxymethyl-3,5-dimethyl= phenyl methylcarbamate	NR	15-50	1-2-3	<20% elution from Florisil only in 15+50% EE/PE; <10% in $\mathrm{CH_2Cl_2}$ eluants 1,2,3.
6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one	NR	6-15-50	1-2-3	
6-chloro-2,3-dihydro-7-hydroxy methyl-3,3-methyl-5H-oxazolo= (3,2-a)pyrimidin-5-one	NR	6-15-50	1-2-3	
6-chloronicotinic acid	NR	6-15-50	1-2-3	
8-monohydromirex	С	6		
acetochlor	C (80-86%) P (55-68%)	50	3	Complete elution from Florisil only in $CH_2Cl_2$ eluant #3.
acifluorfen	NR	6-15-50	1-2-3	
acrinathrin	V(67-100%) V(66-96%)	15	2	
alachlor	C	50	3	16% elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
aldrin	C	6	1	
allethrin	C	50	3	
allidochlor	NR	6-15	1-2-3	
alpha-cypermethrin	С		2	
anilazine	S (4-88%)	15+50	2+3	
aramite	P	15		Poor GLCsensitivity.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
Aroclor 1016	С	6	1	Elutes in PE forerun.
Aroclor 1221	C	6	1	Elutes in PE forerun.
Aroclor 1242	C	6	1	Elutes in PE forerun.
Aroclor 1248	С	6	1	Elutes in PE forerun.
Aroclor 1254	С	6	1	Elutes in PE forerun.
Aroclor 1260	С	6	1	Elutes in PE forerun.
Aroclor 1262	С	6	1	Elutes in PE forerun.
Aroclor 1268	С	6		Elutes in PE forerun.
Aroclor 4465	С	6	1	Elutes in PE forerun.
atrazine	S (25%) NR	50	1-2-3	
azinphos-ethyl	P (50%)	50	3	49-79% elution from Florisil only in $CH_2Cl_2$ eluant #3.
azinphos-methyl	NR	6-15-50	1-2-3	
benfluralin	С	6	2	
benoxacor	P	15+50	2+3	60-75% elution from Florisil only in EE/PE; 40-80% in $\mathrm{CH_2Cl_2}$ eluants.
bensulide	P (70%)	50	3	$14\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
benzoylprop-ethyl	NR	6-15-50	1-2-3	
BHC, alpha-	$\mathbf{C}$	6	1	Partially elutes in PE forerun.
BHC, beta-	C	6	1	
BHC, delta-	C	6+15	1	EE/PE elution variable.
bifenox	C	15+50	2+3	
bifenthrin	С	6+15	2	
binapacryl	P	15		

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
bis(2-ethylhexyl) phthalate	С	15+50		Poor EC detector sensitivity.
bis(trichloromethyl)disulfide	R	6		
bromacil	NR	6-15-50	1-2-3	
bromophos	С	6		
bromophos-ethyl	С	6		
bromopropylate	C NR	15+50	1-2-3	
bromoxynil butyrate	V (20-143%)	15+50	2	
bromoxynil octanoate	V (70-127%) S (15-42%)	15+50	2	
Bulan	P (60%)	15	2	Complete elution from Florisil only in $CH_2Cl_2$ eluant #2.
butachlor	С	50		Also complete (83%) recovery from Florisil only in $\mathrm{CH_2Cl_2}$ eluant 3.
butralin	C	6+15+50		Elution from Florisil variable.
butyl benzyl phthalate	C	15+50		
cadusafos	NR	6-15-50	1-2-3	
captafol	P (75-80%)	50	3	
captan	P (75%) P (50%)	50	3	
captan epoxide	NR	6-15		
carbophenothion	C	6		Elution from Florisil may be variable.
			2	<60% elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #2.
carbophenothion oxygen analog	NR	6-15-50	1-2-3	
carbophenothion sulfone	C (80%)	6	1	Elutes in PE forerun.
carboxin	NR	6-15-50		

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
carboxin sulfoxide	NR	6-15-50	1-2-3	
CGA 118244	NR	6-15-50	1-2-3	
CGA 120844	NR	6-15-50	1-2-3	
CGA 14128		50	1-2-3	9-22% elution from Florisil only in EE/PE; no elution in $\mathrm{CH_{2}Cl_{2}}$ eluants.
CGA 171683		15+50	3	Complete elution from Florisil only in 15+50% EE/PE, 70% in $\mathrm{CH_2Cl_2}$ eluant #3.
CGA 205374	NR	6-15-50	1-2-3	
CGA 37734	NR	6-15-50	1-2-3	
CGA 91305	NR	6-15-50	1-2-3	
CGA 94689A	NR	6-15-50	1-2-3	
CGA 94689B	NR	6-15-50	1-2-3	
chlorbenside	S	6	1	Recovery 25-85% using EE/PE eluants; may be better with $\mathrm{CH_2Cl_2}$ .
chlorbromuron	V (45-67%)	50	3	Complete elution from Florisil only.
chlorbufam		15	2+3	Complete elution from Florisil only in 15% EE/PE, 77% in $\mathrm{CH_2Cl_2}$ eluants 2+3.
chlordane	С	6	1	
chlordane, cis-	С	6	1	May elute in PE forerun.
chlordane, trans-	С	6	1	
chlordecone	S (45%) NR	15+50	1-2-3	Elution from Florisil variable.
chlordene	С	6	1	Elutes in PE forerun.
chlordene epoxide	С	15		
chlorethoxyfos	С	6	1	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
chlorfenvinphos, beta-	S (0-49%) NR	50	1-2-3	
chlorimuron ethyl ester	NR			Variable (75-92%) elution from Florisil only in 50% EE/PE.
chlornitrofen	С	6+15	2	Variable elution from Florisil in EE/PE.
chlorobenzilate	C NR	15+50	3	Some variable elution from Florisil only in eluant #3.
chloroneb	С	6	2	$82\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
chloropropylate	С	15+50	3	Some variable elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
chlorothalonil	NR C	6-15-50	2+3	
chlorothalonil trichloro impurity	NR R	6-15-50	2+3	
chloroxuron	NR	6-15-50	1-2-3	
chlorpropham	С	15	2	
chlorpyrifos	С	6	2	
chlorpyrifos oxygen analog	NR	6-15-50		
chlorpyrifos-methyl	С	6	2	
chlorsulfuron	NR	6-15-50		
chlorthiophos	С	6	2	$11\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
chlorthiophos oxygen analog	NR	6-15-50	1-2-3	
chlorthiophos sulfone		50		55% elution from Florisil only in $50%$ EE/PE.
	С		3	m 50 /0 EE/ I E.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
chlorthiophos sulfoxide	NR	6-15-50	1-2-3	
clofentezine	S (15-24%)	15	2	Complete elution from Florisil only; degrades on GLC in extract.
clomazone		50	3	$88\%$ elution from Florisil only in $50\%$ EE/PE, $54\text{-}74\%$ in $\mathrm{CH_2Cl_2}$ eluant #3.
clopyralid methyl ester		50		17% elution from Florisil only in $50%$ EE/PE.
Compound K	С		1	
coumaphos	NR	6-15-50	3	Complete elution from Florisil only in $CH_2Cl_2$ eluant #3.
coumaphos oxygen analog	NR	6-15-50	1-2-3	
CP 51214	NR	6-15-50	1-2-3	
crotoxyphos	NR	6-15-50	1-2-3	
crufomate	NR	6-15-50		
cyanazine	NR	6-15-50		
cycloate	V (43-65%) C	15+50	3	
cyfluthrin	P (60%)	15		
cymoxanil	NR	6-15-50	1-2-3	Not eluted from Florisil.
cypermethrin	С	15	2	
cyproconazole	NR	6-15-50	1-2-3	
cyprodinil	NR	6-15-50	1-2-3	Not eluted from Florisil.
dazomet	NR	6-15-50	1-2-3	
DCPA	С	15	2	
DDE, o,p'-	С	6	1	Partially elutes in PE forerun.
DDE, p,p'-	С	6	1	Elutes in PE forerun.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
DDMS	R	6		
DDT, o,p'-	С	6	1	
DDT, p,p'-	С	6	1	
deltamethrin	S (32-65%)	15		Very poor EC detector sensitiv-
	C		2	ity.
deltamethrin, trans-	P (50-67%) V (47-142%)	15	2	
demeton-O	NR	6-15		
demeton-S	NR	6-15-50		
des N-isopropyl isofenphos	S (30%)	50		
desdiethyl simazine	NR	6-15-50	1-2-3	
desethyl simazine		50		43% elution from Florisil only
	NR		1-2-3	in 50% EE/PE.
desisopropyl iprodione		50	1-2-3	17% eluted from Florisil only with 50% EE/PE; not eluted with $\mathrm{CH_{2}Cl_{2}}$ eluants.
desmethyl norflurazon	NR	6-15-50	1-2-3	
di-allate	C	6		
di-n-octyl phthalate	С	15+50		Poor and variable EC detector sensitivity.
dialifor	C	15	2	Complete elution from Florisil only in $CH_2Cl_2$ eluant #2.
diazinon	С	15	3	
diazinon oxygen analog	NR	6-15-50	1-2-3	
dibutyl phthalate	С	15+50		
dichlobenil	P	15	2	
dichlofenthion	С	6	2	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
dichlofluanid	C V (51-91%)	15+50	2+3	Elution from Florisil variable in $\mathrm{CH_2Cl_2}$ eluants.
dichlone	NR S (30%)	6-15-50	2+3	Elution from Florisil variable.
dichlorobenzene, p-	$\mathbf{C}$	6	1	
dichlorobenzophenone, o,p'-	$\mathbf{C}$	15	2	
dichlorobenzophenone, p,p'-	C	15	2	
dichlorvos	NR	6-15-50	1-2-3	
diclobutrazol	NR	6-15-50	1-2-3	
diclofop-methyl	С	15	2	
dicloran	S (35%)	15+50	2+3	
dicofol, o,p'-	V (50-100%)	6+15	2	Elution from Florisil may be variable.
dicofol, p,p'-	V (68-99%) V (78-90%)	6+15	1+2	Elution from Florisil variable.
dicrotophos	NR	6-15-50		
dieldrin	С	15	2	
diethatyl-ethyl	NR	6-15-50	1-2-3	
diethyl phthalate	P	15+50		Poor EC detector sensitivity.
diisobutyl phthalate	P (75%)	15+50		About 80% elution from Florisil only in 15+50% EE/PE.
diisohexyl phthalate	С	15+50		Poor EC detector sensitivity.
diisooctyl phthalate	С	15+50		Poor EC detector sensitivity.
Dilan	P (65%)	15		
dimethenamid	NR	6-15-50	1-2-3	
dimethipin	NR	6-15-50	1-2-3	
dimethoate	NR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
dimethomorph (prop)	NR	6-15-50	1-2-3	Recovery tested using high temperature column.
dimethyl phthalate	P	6+15+50		Partial elution from Florisil only in all EE/PE; poor EC detector sensitivity.
dinocap	P	15	2	$75\%$ elution from Florisil only in $15\%$ EE/PE. Complete elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
dioxabenzofos	P (72%)	15		
dioxathion	NR	6-15-50	2	$45\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
diphenamid	NR	6-15		
diphenylamine	S (<20%)	6+15		<10% elution from Florisil only in each 6 and 15% EE/PE.
disulfoton	P (50-74%)	6		25-40% elution from Florisil
	NR		1-2-3	only in 6% EE/PE.
disulfoton sulfone	NR	6-15-50		
diuron	NR	6-15-50	1-2-3	
endosulfan I	C	15	2	
endosulfan II	C	15+50	2	
endosulfan sulfate	C	50	2	
endrin	C V	15	2	60-90% elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
endrin alcohol	P (50%)	15+50	2+3	Partial (48%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2, 28% in #3.
endrin aldehyde	P (50%)	15+50		
endrin ketone	С	50	2	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
EPN	С	15	2	$71\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
EPTC	P (63%)	15		
esfenvalerate	C	15	2	
ethalfluralin	С	6	2	Elution from Florisil in $\mathrm{CH_{2}Cl_{2}}$ eluants may be variable.
ethametsulfuron methyl ester	NR	6-15-50	1-2-3	
ethephon		6+15+50	1+2+3	5-25% eluted from Florisil only in each eluate.
ethiofencarb	NR	6-15-50		
ethion	С	6	2	60-90% elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
ethoprop	P (55%) NR	50	1-2-3	
ethoxyquin	NR	6-15-50		
ethylenethiourea	NR	6-15-50	1-2-3	
etridiazole	С	6	2	Other data show poor recovery through C1. Percent elution from Florisil only varies in different reports.
etrimfos	C	15	2+3	
famphur	NR	6-15-50		
fenac	NR	6-15-50		
fenamiphos	NR	6-15-50	1-2-3	
fenamiphos sulfone	NR	6-15-50	1-2-3	
fenamiphos sulfoxide	NR	6-15-50	1-2-3	
fenarimol	P (60%)	50		Quantitation may be influenced by presence of sample
	S (40%)		3	extract.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
fenarimol metabolite B	NR	6-15-50		
fenarimol metabolite C		6		17% elution from Florisil only in 6% EE/PE; no elution in 15 or 50% EE/PE.
fenbuconazole	NR	6-15-50	1-2-3	
fenitrothion	С	15	2	
fenoxaprop ethyl ester	V (58-125%)	50	3	Partial (70%) elution from Florisil only in either elution system.
fenpropathrin	V (43-71%)	15		Complete (111-116%) elution from Florisil only in 15% EE/PE.
	P (55-65%)		2	Partial (56-62%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
fenpropimorph		50	1-2-3	Partial (49-63%) elution from Florisil only in 50% EE/PE. Not recovered from Florisil only in $\mathrm{CH_2Cl_2}$ eluates.
fensulfothion	NR	6-15-50	1-2-3	
fensulfothion oxygen analog	NR	6-15-50		
fensulfothion sulfone	NR	6-15-50		
fenthion	S (45%) NR	6+15	1-2-3	
fenthion oxygen analog	NR	6-15-50	1-2-3	
fenthion oxygen analog sulfoxide	NR	6-15-50	1-2-3	
fenthion sulfone	NR	6-15-50	1-2-3	
fenvalerate	С	15	2	
fipronil	S (21-41%)	50	3	
fluazifop butyl ester	С	15	3	Poor EC detector sensitivity with OV-225.
fluchloralin	С	6	2	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
flucythrinate	С	15	2+3	Elution from Florisil only 95% in $\mathrm{CH_2Cl_2}$ eluant 2, 6% in eluant 3.
fluridone	NR	6-15-50		
fluvalinate	С	15	2	Complete elution in Florisil only in $CH_2Cl_2$ eluant 2.
folpet	C C (80%)	15+50	2+3	Complete elution from Florisil only in $CH_2Cl_2$ eluants #2 & 3.
fonofos	C	6	2+3	
fonofos oxygen analog	NR	6-15-50	1-2-3	
formothion	NR	6-15-50	1-2-3	
fosthiazate	NR	6-15-50	1-2-3	
furilazole	S (28-50%)	50	3	Complete elution from Florisil only in 50% EE/PE, $\mathrm{CH_2Cl_2}$ #3.
Gardona	NR	6-15-50	1-2-3	
GS-31144	NR	6-15-50	1-2-3	
heptachlor	С	6	1	
heptachlor epoxide	С	6	2	
hexachlorobenzene	C	6	1	Elutes in PE forerun.
hexachlorobutadiene	V (62-88%) P (78%)	6	1	Elutes in PE forerun.
hexachlorophene	NR	6-15-50		
hexachlorophene dimethyl ether	NR	6-15		
hexazinone	NR	6-15-50	1-2-3	
hexythiazox	S (2-20%)	50		Florisil pattern and recoveries vary; may elute in 15%, may be complete.
	С		2+3	complete.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
hydroxy chloroneb	NR	6-15		
imazalil	NR	6-15-50		
imidacloprid	NR	6-15-50	1-2-3	
IN-A3928	NR	6-15-50	1-2-3	
IN-B2838	NR	6-15-50	1-2-3	
IN-T3936	NR	6-15-50	1-2-3	
iprodione	S (5-56%) NR	50	1-2-3	
iprodione metabolite isomer	S (21-100%)	50		
isazofos	С	50		Recovery test performed on
	P		2+3	corn grain and beef liver.
isofenphos	С	15+50		
isopropalin	C	6		
isoxaflutole (prop)	V (60-120%)	50		Complete elution from Florisil
	NR		3	only in 50% EE/PE 32-56% elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant 3.
Korax	NR	6-15		
KWG 1323	NR	6-15-50	1-2-3	
leptophos	С	6	2	
lindane	С	6	1	
linuron	V (42-64%) S (19-33%)	50	3	
malathion	С	15+50	3	Elution from Florisil variable in EE/PE eluants.
malathion oxygen analog	NR	6-15-50	1-2-3	
MB45950	P (50-73%)	15+50	2+3	
MB46136	S (28-55%)	50	2+3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
mecarbam		50		Partial (43%) elution from Florisil only in 50% EE/PE.
merphos	С	6+15+50	3	Elution from Florisil variable. Partial (48%) elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
metalaxyl	NR	6-15-50	1-2-3	
methabenzthiazuron	NR	6-15-50	1-2-3	
methidathion	S (35%)	50	3	Complete elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
methidathion oxygen analog	NR	6-15-50	1-2-3	
methidathion sulfone	NR	6-15-50	1-2-3	
methidathion sulfoxide	NR	6-15-50	1-2-3	
methiocarb sulfone	NR	6-15-50	1-2-3	
methomyl	NR	6-15-50	1-2-3	
methoxychlor olefin	С	6	2	
methoxychlor, o, p'-	С	6		
methoxychlor, p, p'-	С	6	2	
methyl 4-chloro-1H-indole-3-aceta	te NR	R	50 1-2-3	Not eluted from Florisil only in $CH_2Cl_2$ eluants.
metobromuron	NR	6-15-50	1-2-3	
metolachlor	S (28-70%) NR	50	1-2-3	
metoxuron	NR	6-15-50	1-2-3	
metribuzin	NR	50	1-2-3	Complete elution from Florisil only in 50% EE/PE; may be S recovery thru method.
metribuzin, deaminated diketo me	etabolite	NR	6-15-50	1-2-3
metribuzin, deaminated metaboli	teNR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
metribuzin, diketo metabolite	NR	6-15-50	1-2-3	
mevinphos, (E)-	NR	6-15-50		
mevinphos, (Z)-	NR	6-15-50		
mirex	C	6	1	Elutes in PE forerun.
monocrotophos	NR	6-15-50	1-2-3	
monuron	NR	6-15-50	1-2-3	
myclobutanil	NR	6-15-50	1-2-3	
myclobutanil alcohol metabolite	NR	6-15-50	1-2-3	
myclobutanil dihydroxy metabolit	e NR	6-15-50	1-2-3	
N, N-diallyl dichloroacetamide	S (41-51%)	15+50	2+3	Complete elution from Florisil only in 15+50% EE/PE, $\mathrm{CH_2Cl_2}$ eluants 2+3.
N-(3,4-dichlorophenyl)-N'-methyl	ırea	NR	6-15-50	
naled	NR	6-15-50	1-2-3	
neburon	NR	6-15-50	1-2-3	
nitralin	P (60%)	50	3	50-80% elution from Florisil only in 50% EE/PE. 75% elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #3.
nitrapyrin	С	6	2	Complete elution from Florisil only in $6\%$ EE/PE or $\mathrm{CH_2Cl_2}$ eluant #2.
nitrofen	С	15	2	
nitrofluorfen	С	15	2	
nonachlor, cis-	С	6	1	
nonachlor, trans-	С	6	1	Elutes in PE forerun.
norflurazon	NR	6-15-50		
NTN33823	NR	6-15-50	1-2-3	
NTN35884	NR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
nuarimol		50		35% elution from Florisil only in 50% EE/PE.
	NR		1-2-3	III 30 /0 EE/ I E.
octachlor epoxide	С	6	1	
omethoate	NR	6-15-50	1-2-3	
oryzalin	NR	6-15-50		
ovex	С	15	2	
oxadiazon	С	15		
oxadixyl	NR	6-15-50	1-2-3	
oxamyl oxime metabolite	NR	6-15-50	1-2-3	
oxyfluorfen	С	15	2	Poor N/P detector sensitivity.
parathion	C	15	2	
parathion oxygen analog	NR	6-15-50	1-2-3	
parathion-methyl	С	15	2	
parathion-methyl oxygen analog	NR	6-15-50	1-2-3	
PB-9	NR	6-15-50	1-2-3	
pebulate	P (70%)	15		68% elution from Florisil only in 15% EE/PE; none eluted in 50%.
pendimethalin	С	15	2	
pentachloroaniline	С	6	1	
pentachlorobenzene	С	6	1	Elutes in PE forerun.
pentachlorobenzonitrile	С	15	2	
pentachlorophenyl methyl ether	С	6	1	
pentachlorophenyl methyl sulfide	С	6	1	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
permethrin, cis-	V (60-115%)	6+15	2	Complete elution from Florisil only in 6+15% EE/PE; high temp column recommended. High temperature column recommended.
permethrin, trans-	V (60-115%)	6+15		Complete elution from Florisil only in 6+15% EE/PE; high
	С		2	temp column recommended. High temperature column recommended.
Perthane	С	6	1	
Perthane olefin	С	6	1	
phenthoate	С	15+50		
phorate	V (40-75%)	6		Elution from Florisil quite
	С		1	variable.
phorate oxygen analog	NR	6-15-50	1-2-3	
phorate oxygen analog sulfone	NR	6-15-50	1-2-3	
phorate oxygen analog sulfoxide	NR	6-15-50	1-2-3	
phorate sulfone	NR S (34-38%)	6-15-50	3	$38\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
phorate sulfoxide	NR	6-15-50	1-2-3	
phosalone	C	50	2+3	
phosmet	NR	6-15-50	3	Partial (60%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
phosmet oxygen analog	NR	6-15-50		
phosphamidon	NR	6-15-50	1-2-3	
photodieldrin	С	15+50	2	
pirimiphos-ethyl	С	15+50	3	
pirimiphos-methyl	С	15	3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
PPG-2597	NR	6-15-50	1-2-3	
PPG-947	NR	6-15-50	1-2-3	
procymidone	C (84%)	15		
profenofos	P (65%)	50	3	Partial (56%) elution from Florisil only in 50% EE/PE. Partial (38%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
profluralin	V (70-100%)	6		Complete elution from Florisil only in 6% EE/PE.
Prolan	S (40%)	15	2	Complete elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #2.
prometryn	P (50%)	50		Variable (22-67%) elution from Florisil only in 50% EE/PE.
	NR		1-2-3	
pronamide	P (63-71%)	15+50		39% elution from Florisil only in $6%$ EE/PE, $24%$ in $50%$ EE/PE.
propachlor	NR	6-15-50	1-2-3	Trace amount may be eluted in $CH_2Cl_2$ eluant #3.
propanil	NR	6-15	3	Partial (41%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
propargite	C	15	2	
propazine	S (41%)	15+50	3	Complete but variable elution from Florisil only in $15\%+50\%$ EE/PE. Also elution of trace amount from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
propetamphos	C (80%) P (50%)	15+50	2+3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
propham	P (53%)	15		Addn 8-16% elution from Florisil only in 50% EE/PE; none in 50% thru method.
propiconazole	NR	6-15-50	1-2-3	
prosulfuron	NR	6-15-50	1-2-3	
prothiofos	C C	6	2	$79\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
pyrazon	NR	6-15-50	1-2-3	
pyrazon metabolite B	NR	6-15-50	1-2-3	
pyrethrins	C	50		
pyrimethanil	S (11-51%)	50	3	Complete elution from Florisil only in $50\%$ EE/PE or $\mathrm{CH_2Cl_2}$ eluant #3.
quinalphos	C	15		
quintozene	C	6	1	
RH-6467	NR	6-15-50	1-2-3	
RH-9129	NR	6-15-50	1-2-3	
RH-9130	NR	6-15-50	1-2-3	
ronnel	C	6	2	
ronnel oxygen analog	NR	6-15-50		
RPA202248	NR	6-15-50	1-2-3	
S-bioallethrin	C	50		
schradan	NR	6-15-50		
sethoxydim	NR	6-15-50	3	CH <sub>2</sub> Cl <sub>2</sub> elution from Florisil only tested with eluant #3 only, not #1 or #2.
sethoxydim sulfoxide	NR	6-15-50	3	$CH_2Cl_2$ elution from Florisil only tested with eluant #3 only, not #1 or #2.

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
simazine	NR	50		Complete elution from Florisil only in 50% EE/PE.
	NR		1-2-3	only in 50% EE/TE.
Strobane	С	6	1	
sulfallate	С	6+15	2	Elution with EE/PE may be variable.
sulfanilamide	NR	6-15-50	1-2-3	
sulfotep	С	6+15	2	Wide bore column recommended. $50\%$ elution from Florisil only in $CH_2Cl_2$ eluant #2.
Sulphenone		50	3	Complete elution from Florisil only in $20+25\%$ EE/PE or in $CH_2Cl_2$ eluant #3.
TCMTB	P (50-67%)	15		P (61-62%) elution from Florisil only in 15% EE/PE; no elution in 50% EE/PE.
TDE, o,p'-	C	6	1	
TDE, p,p'-	C	6	1	
TDE, p,p'-, olefin	С	6	1	Partially elutes in PE forerun.
tebufenozide	NR	6-15-50	1-2-3	
tebupirimfos	V (50-115%)	6+15	2+3	Elution from Florisil only also variable.
tebupirimfos oxygen analog	NR	6-15-50	1-2-3	
tecnazene	C	6	1	
teflubenzuron	NR	6-15-50	1-2-3	
terbacil	NR	6-15	2+3	30% elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2, 13% in eluant #3.
terbufos	P (62%)	6		
terbufos oxygen analog sulfone	NR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
terbufos sulfone	NR C (77-86%)	6-15-50	2+3	Elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #2 (46%) and #3 (37%).
terbuthylazine	P (57%)	15+50		
tetradifon	С	15	2	
tetraiodoethylene	P (65%)	6		
tetramethrin	NR	6-15-50	1-2-3	Trace amount may elute from Florisil in $CH_{2}Cl_{2}$ eluant #3.
tetrasul	С	6	1	
thiabendazole	NR	6-15-50		
thiobencarb		15	2+3	$40\%$ elution from Florisil only in $15\%$ EE/PE; $42\%$ in $\mathrm{CH_{2}Cl_{2}}$ #2, $11\%$ in $\mathrm{CH_{2}Cl_{2}}$ #3.
thiometon	NR	6-15-50		
thionazin	P (59%)	15+50		Complete (80%) elution from Florisil only in 15% and/or 50% EE/PE.
THPI	NR	6-15-50		
toxaphene	С	6	1	
tralkoxydim		50		20% elution from Florisil only
	NR		1-2-3	in 50% EE/PE.
tralomethrin	V (50-100%)	15	2	
tri-allate	С	6	2	
triadimefon	S (27-40%)	50		35% elution from Florisil only in 50% EE/PE.
	NR		1-2-3	No elution from Florisil in $CH_2Cl_2$ eluants.
triadimenol	NR	6-15-50		
triazamate	NR	6-15-50	1-2-3	

Table 303-a: Recovery Through 303 (E1-E5 + C1 or C2 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
tribufos	С	15+50	3	Partial, variable elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
tributyl phosphate	R	50		
trichlorfon	NR	6-15-50	1-2-3	
trichloronat	$\mathbf{C}$	6		
tridiphane	С	6	1+2	20% elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #1, 80% in #2.
trifluralin	$\mathbf{C}$	6	2	
triflusulfuron methyl ester	NR	6-15-50	1-2-3	
tris(chloropropyl) phosphate	NR	6-15-50	1-2-3	
Tycor	S (1-19%)	50	3	Complete elution from Florisil only in $50\%$ EE/PE, $50\text{-}60\%$ in $\text{CH}_{_2}\text{Cl}_{_2}$ #3.
vernolate	P (65%)	15		
vinclozolin	$\mathbf{C}$	15	2	
vinclozolin metabolite B	P (55-66%) V (60-105%)	6+15	2	
vinclozolin metabolite E	S (9-39%)	15+50		
vinclozolin metabolite F	NR	6-15-50	1-2-3	
vinclozolin metabolite S	P (55-70%)	15	2	
WAK4103	NR	6-15-50	1-2-3	

Table 304-a: Recovery of Chemicals Through Method 304 (E1-E5 + C1-C4 + DG1-DG19) (extraction of fat from fatty products, acetonitrile/petroleum ether partitioning, Florisil column cleanup, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
1,2,3-trichlorobenzene	P (60%)	6	1	Elutes in PE forerun. Complete elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #1; elutes in PE forerun.
1,2,4-triazole	NR	6-15-50	1-2-3	
2,3,5-trimethacarb		50		50% elution from Florisil only
	NR		1-2-3	in 50% EE/PE eluant.
2,4-dichloro-6-nitrobenzenamine		15	2	
2,6-dichlorobenzamide	NR	6-15-50	1-2-3	
2-chloroethyl caprate	С	15	2	
2-chloroethyl laurate	С	15	2	
2-chloroethyl linoleate	P (73-80%)	15	2	
2-chloroethyl myristate	V (42-80%)	15	2	
2-chloroethyl palmitate	P (50-59%)	15	2	
2-methoxy-3,5,6-trichloropyridine	$\mathbf{C}$	6+15	1+2	
3,4,5-trimethacarb		50		Partial (20-35%) elution from
	NR		1-2-3	Florisil only in 50% EE/PE.
3,4-dichlorophenylurea	NR	6-15-50		
3,5-dichloroaniline	S (22-43%)	15	2	
3-(3,4-dichlorophenyl)-1-methoxy	urea	NR	6-15-50	

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

Recovery results refer to complete method; blank entry in this column indicates Florisil elution was tested but not complete method. Separate results are listed for C1 and C2 only if recovery is affected by Florisil elution system used.

<sup>&</sup>lt;sup>3</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 304 C1, *i.e.*, 6, 15, and 50% ethyl ether/petroleum ether (EE/PE). Entries for chemicals not recovered indicate which eluants were used in tests.

<sup>&</sup>lt;sup>4</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 304 C2, *i.e.*, methylene chloride (CH<sub>2</sub>Cl<sub>2</sub>) eluants #1, 2, and 3. Entries for chemicals not recovered indicate which eluants were used in tests.

<sup>&</sup>lt;sup>5</sup> "Florisil only" refers to tests in which elution patterns were tested by added reference standard solutions directly to Florisil column.

<sup>&</sup>lt;sup>6</sup> Reference to petroleum ether (PE) forerun refers to Florisil elution performed as in 304 C3 or C4.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
3-desmethyl sulfentrazone	NR	6-15-50	1-2-3	
3-hydroxymethyl-2,5-dimethyl= phenyl methylcarbamate	NR	6-15-50	1-2-3	
3-ketocarbofuran	NR	6	1	$60\%$ recovered from Florisil only in $6\%$ EE/PE or $\mathrm{CH_2Cl_2}$ #1; also elutes with PE.
3-methyl-4-nitrophenol	NR	6-15-50	1-2-3	
3-tert-butyl-5-chloro-6-hydroxy= methyluracil	NR	6-15-50	1-2-3	
4-chlorobenzylmethyl sulfone	NR	6-15-50	1-2-3	
4-chlorobenzylmethyl sulfoxide	NR	6-15-50	1-2-3	
4-hydroxymethyl-3,5-dimethyl= phenyl methylcarbamate	NR	15-50	1-2-3	<20% elution from Florisil only in 15+50% EE/PE; <10% in $\mathrm{CH_{2}Cl_{2}}$ eluants 1,2,3.
6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one		6-15-50	1-2-3	
6-chloro-2,3-dihydro-7-hydroxy= methyl-3,3-methyl-5H-oxazolo= (3,2-a)pyrimidin-5-one	NR	6-15-50	1-2-3	
6-chloronicotinic acid	NR	6-15-50	1-2-3	
acetochlor	P (52-70%)	15+50	2+3	Complete elution from Florisil only in 50% EE/PE or $\mathrm{CH_2Cl_2}$ eluant #3.
acifluorfen	NR	6-15-50	1-2-3	
acrinathrin	NR			Complete elution from Florisil
	V(27-80%)		2	only in 15% EE/PE.
alachlor	C S (23%)	50	3	$16\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
aldrin	С	6	1	
allethrin	С	50		Elution from Florisil in EE/PE
	P (66-75%)		3	may be variable.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
anilazine	P	15+50	2+3	
aramite	NR			
Aroclor 1016	C	6	1	Elutes in PE forerun.
Aroclor 1221	C	6	1	Elutes in PE forerun.
Aroclor 1242	C	6	1	Elutes in PE forerun.
Aroclor 1248	C	6	1	Elutes in PE forerun.
Aroclor 1254	C	6	1	Elutes in PE forerun.
Aroclor 1260	C	6	1	Elutes in PE forerun.
Aroclor 1262	C	6	1	Elutes in PE forerun.
Aroclor 4465	C	6	1	Elutes in PE forerun.
atrazine	NR		1-2-3	
azinphos-ethyl	S (14%)	50	3	$49-79\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
azinphos-methyl	NR	6-15	1-2-3	
benfluralin	C	6	2	
benoxacor	C	15+50	2+3	
bensulide	С	50	3	$14\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
benzoylprop-ethyl	NR	6-15-50	1-2-3	
BHC, alpha-	C	6	1	Partially elutes in PE forerun.
BHC, beta-	C	6	1	
BHC, delta-	C	6+15	1	EE/PE elution variable.
bifenox	P (51-78%)	15+50	2+3	$51\text{-}58\%$ elution from Florisil with EE/PE; $56\text{-}78\%$ with $\mathrm{CH_{2}Cl_{2}}$ .
bifenthrin		6+15	2	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
binapacryl	P (65%)	15		
bis(2-ethylhexyl) phthalate	C	15+50		Poor EC detector sensitivity.
bromacil	NR	6-15-50	1-2-3	
bromophos	С	6		
bromophos-ethyl	P (59-78%)	6		
bromopropylate	C NR	15+50	1-2-3	
Bulan	P (75%)	15	2	Complete elution from Florisil only in $CH_{2}Cl_{2}$ eluant #2.
butyl benzyl phthalate	P (70%)	15+50		Complete elution from Florisil only in 15+50% EE/PE.
cadusafos	NR	6-15-50	1-2-3	
captan	C (80%)	50		
carbophenothion	P (60%)	6	2	Elution from Florisil may be variable. $<60\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
carbophenothion oxygen analog	NR	6-15-50	1-2-3	
carbophenothion sulfone	P (66%)	6	1	Elutes in PE forerun.
carboxin	NR	6-15-50		
carboxin sulfoxide	NR	6-15-50	1-2-3	
CGA 118244	NR	6-15-50	1-2-3	
CGA 120844	NR	6-15-50	1-2-3	
CGA 14128		50	1-2-3	9-22% elution from Florisil only in EE/PE; not recovered in $CH_2Cl_2$ eluants.
CGA 171683		15+50	3	Complete elution from Florisil only in 15+50% EE/PE, 70% in $\mathrm{CH_2Cl_2}$ eluant #3.
CGA 205374	NR	6-15-50	1-2-3	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
CGA 37734	NR	6-15-50	1-2-3	
CGA 91305	NR	6-15-50	1-2-3	
CGA 94689A	NR	6-15-50	1-2-3	
CGA 94689B	NR	6-15-50	1-2-3	
chlorbenside	P	6	1	Recovery 50% using EE/PE eluants; may be better with $\mathrm{CH_2Cl_2}$ .
chlorbromuron	V (44-100%)	50	3	Complete elution from Florisil only.
chlorbufam		15	2+3	Complete elution from Florisil only in 15% EE/PE, 77% in $\mathrm{CH_2Cl_2}$ eluants 2+3.
chlordane	С	6	1	
chlordane, cis-	С	6	1	May elute in PE forerun.
chlordane, trans-	C	6	1	
chlordecone	P NR	15+50	1-2-3	Elution from Florisil variable.
chlordene	С	6	1	Elutes in PE forerun.
chlorfenapyr (prop)	S (30-50%)	50	2	Complete elution from Florisil only in $50\%$ EE/PE and $\mathrm{CH_2Cl_2}$ eluant 2.
chlorfenvinphos, alpha-	NR	6-15-50		
chlornitrofen	С	6+15	2	Variable elution from Florisil in EE/PE.
chlorobenzilate	P (75%) NR	15+50	3	Some variable elution from Florisil in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
chloroneb			2	82% elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
chloropropylate	С	15+50	3	Some variable elution from Florisil in $\mathrm{CH_2Cl_2}$ eluant #3.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
chlorothalonil	NR C (80-90%)	6-15-50	2+3	
chlorothalonil trichloro impurity	NR	6-15-50		
chloroxuron	NR	6-15-50	1-2-3	
chlorpropham	С	15	2	
chlorpyrifos	P (74-83%)	6	2	
chlorsulfuron	NR	6-15-50		
chlorthiophos	С	6	2	$11\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
chlorthiophos oxygen analog	NR	6-15-50	1-2-3	
chlorthiophos sulfone		50		55% elution from Florisil only in $50%$ EE/PE.
chlorthiophos sulfoxide	NR	6-15-50	1-2-3	
clomazone		50	3	$88\%$ elution from Florisil only in $50\%$ EE/PE, $54$ - $74\%$ in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
clopyralid methyl ester		50		17% elution from Florisil only in $50%$ EE/PE.
coumaphos	NR C (76-93%)	6-15-50	3	High temperature or short column GLC needed.
coumaphos oxygen analog	NR	6-15-50	1-2-3	
CP 51214	NR	6-15-50	1-2-3	
crotoxyphos	NR	6-15-50	1-2-3	
crufomate	NR	6-15-50		
cycloate	S (39-61%) S (24-37%)	15+50	3	
cymoxanil	NR	6-15-50	1-2-3	Not eluted from Florisil.
cypermethrin	C (81%)	15	2	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
cyproconazole	NR	6-15-50	1-2-3	
cyprodinil	NR	6-15-50	1-2-3	Not eluted from Florisil.
DCPA	C	15	2	
DDE, o,p'-	$\mathbf{C}$	6	1	Partially elutes in PE forerun.
DDE, p,p'-	$\mathbf{C}$	6	1	Elutes in PE forerun.
DDT, o,p'-	C	6	1	
DDT, p,p'-	C	6	1	
deltamethrin	P (77-80%)	15	2	Very poor EC detector sensitivity.
deltamethrin, trans-	NR			Partial (33%) elution from Florisil only in 15% EE/PE, complete in $\mathrm{CH_2Cl_2}$ eluant #2.
desdiethyl simazine	NR	6-15-50	1-2-3	
desethyl simazine		50		43% elution from Florisil only
	NR		1-2-3	in 50% EE/PE.
desmethyl norflurazon	NR	6-15-50	1-2-3	
di-n-octyl phthalate	С	15+50		Poor and variable EC detector sensitivity.
dialifor	P (50%)	15	2	Complete elution from Florisil only in $CH_2Cl_2$ eluant #2.
diazinon	C	15	3	
diazinon oxygen analog	NR	6-15-50	1-2-3	
dibutyl phthalate	C	15+50		
dichlobenil	C (80%)	15	2	
dichlofenthion	V (69-89%)	6	2	
dichlone	NR S (25%)	6-15-50	2+3	Elution from Florisil variable.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
dichlorobenzene, p-	C	6	1	
dichlorobenzophenone, o,p'-	С	15	2	
dichlorobenzophenone, p,p'-	C	15	2	
dichlorvos	NR	6-15-50	1-2-3	
diclobutrazol	NR	6-15-50	1-2-3	
diclofop-methyl	С	15	2	
dicloran	P (50%)	15+50	2+3	
dicofol, o,p'-	S (25-50%)	6+15	2	Elution from Florisil may be variable.
dicofol, p,p'-	P (61-85%) S (36-58%)	6+15	1+2	Elution from Florisil variable.
dieldrin	C	15	2	
diethatyl-ethyl	NR	6-15-50	1-2-3	
diethyl phthalate	P	15+50		Poor EC detector sensitivity.
diisobutyl phthalate		15+50		About 80% elution from Florisil only in 15+50% EE/PE.
diisohexyl phthalate		15+50		Complete elution from Florisil only in 15+50% EE/PE; poor EC sensitivity.
diisooctyl phthalate	С	15+50		Poor EC detector sensitivity.
Dilan	P (65%)	15		
dimethenamid	NR	6-15-50	1-2-3	
dimethipin	NR	6-15-50	1-2-3	
dimethoate	NR	6-15-50	1-2-3	
dimethomorph (prop)	NR	6-15-50	1-2-3	
dimethyl phthalate		6+15+50		Partial elution from Florisil only in all EE/PE; poor EC detector sensitivity.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
dinitramine	P (78-80%)	15		Some elution from Florisil in 6% EE/PE.
dinocap	P (60%)	15		75% elution from Florisil only
			2	in 15% EE/PE. Elution from Florisil only, complete in $\mathrm{CH_2Cl_2}$ eluant #2.
dioxathion			2	$45\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
disulfoton		6		25-40% elution from Florisil
	NR		1-2-3	only in 6% EE/PE.
diuron	NR	6-15-50	1-2-3	
endosulfan I	$\mathbf{C}$	15	2	
endosulfan II	C	15+50	2	
endosulfan sulfate	C	50	2	
endrin	C V	15	2	60-90% elution from Florisil only in $CH_2Cl_2$ eluant #2.
endrin alcohol	С	15+50	2+3	Partial (48%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2, 28% in #3.
endrin aldehyde	C	15+50		
endrin ketone	C	50	2	
EPN	С	15	2	$71\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
esfenvalerate	C	15	2	
ethalfluralin	С	6	2	Elution from Florisil in $CH_2Cl_2$ eluants may be variable.
ethametsulfuron methyl ester	NR	6-15-50	1-2-3	
ethephon		6+15+50	1+2+3	5-25% eluted from Florisil only in each eluant.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
ethiofencarb	NR	6-15-50		
ethion	С	6	2	60-90% elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
ethoprop	S (45%) NR	50	1-2-3	
ethoxyquin	NR	6-15-50		
ethylenethiourea	NR	6-15-50	1-2-3	
etridiazole	P (68-73%)	6	2	Other data shows poor recovery through C1. Percent elution from Florisil only varies in different reports.
etrimfos	С	15	2+3	
fenac	NR	6-15-50		
fenamiphos	NR	6-15-50	1-2-3	
fenamiphos sulfone	NR	6-15-50	1-2-3	
fenamiphos sulfoxide	NR	6-15-50	1-2-3	
fenarimol	С	50		Quantitation may be influenced by presence of sample
	V (72-110%)		3	extract.
fenarimol metabolite B	NR	6-15-50		
fenarimol metabolite C		6		17% elution from Florisil only in 6% EE/PE; no elution in 15 or 50% EE/PE.
fenbuconazole	NR	6-15-50	1-2-3	
fenitrothion	С	15	2	
fenoxaprop ethyl ester	V (65-110%)	50	3	Partial (70%) elution from Florisil only in either elution system.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
fenpropathrin	V (59-114%) V (58-91%)	15	2	Elution from Florisil only, complete (111-116%) in 15% EE/PE. Elution from Florisil only, partial (56-62%) in $\mathrm{CH_2Cl_2}$ eluant #2.
fenpropimorph		50	1-2-3	Partial (49-63%) elution from Florisil only in 50% EE/PE. Not recovered from Florisil only in $\mathrm{CH_2Cl_2}$ eluates.
fensulfothion	NR	6-15-50	1-2-3	
fenthion	NR	6-15	1-2-3	
fenthion oxygen analog	NR	6-15-50	1-2-3	
fenthion oxygen analog sulfoxide	NR	6-15-50	1-2-3	
fenthion sulfone	NR	6-15-50	1-2-3	
fenvalerate		15		Complete elution from Florisil
	C (81%)		2	only in 15% EE/PE.
fipronil	V (55-97%)	50	3	
fluazifop butyl ester	V (50-110%)	15	3	Poor EC detector sensitivity with OV-225.
fluridone	NR	6-15-50		
folpet	P (50%)	15+50	2+3	Complete elution from Florisil only in $CH_2Cl_2$ eluants #2 & 3.
fonofos	С	6	2+3	
fonofos oxygen analog	NR	6-15-50	1-2-3	
formothion	NR	6-15-50	1-2-3	
fosthiazate	NR	6-15-50	1-2-3	
Gardona	NR	6-15-50	1-2-3	
GS-31144	NR	6-15-50	1-2-3	
heptachlor	С	6	1	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
heptachlor epoxide	С	6	2	
hexachlorobenzene	P (60%)	6	1	Loss in partitioning from PE to acetonitrile/water; elutes in PE forerun.  Complete elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #1; elutes in PE forerun.
hexachlorobutadiene	P (63%)		1	Elutes in PE forerun.
hexachlorophene	NR	6-15-50		
hexachlorophene dimethyl ether	NR	6-15		
hexazinone	NR	6-15-50	1-2-3	
hexythiazox	NR	6-15-50	1-2-3	Complete elution from Florisil only in 15+50% EE/PE, $\mathrm{CH_2Cl_2}$ eluants 2+3.
imazalil	NR	6-15-50		
imidacloprid	NR	6-15-50	1-2-3	
IN-A3928	NR	6-15-50	1-2-3	
IN-B2838	NR	6-15-50	1-2-3	
IN-T3936	NR	6-15-50	1-2-3	
iprodione		50		Partial (4-19%) elution from Florisil only in 50% EE/PE.
	NR		1-2-3	FIGURE OHLY HI 30 /6 EE/ FE.
isoxaflutole (prop)	S (37-126%)	50		Complete elution from Florisil only in 50% EE/PE.
	NR			32-56% elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant 3.
KWG 1323	NR	6-15-50	1-2-3	
lactofen	С	50	2+3	
leptophos	С	6	2	
lindane	С	6	1	
linuron	V (42-62%)	50	3	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
malathion	С	15+50	3	Variable elution from Florisil in EE/PE eluants.
malathion oxygen analog	NR	6-15-50	1-2-3	
MB45950	V (60-190%)	15+50	2+3	
MB46136	V (54-140%)	50	2+3	
mecarbam		50		Partial (43%) elution from Florisil only in 50% EE/PE.
merphos	С	6+15+50	3	Variable elution from Florisil in EE/PE eluants. Partial (48%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
metalaxyl	NR	6-15-50	1-2-3	
methabenzthiazuron	NR	6-15-50	1-2-3	
methidathion	P (50%) C (80%)	50	3	
methidathion oxygen analog	NR	6-15-50	1-2-3	
methidathion sulfone	NR	6-15-50	1-2-3	
methidathion sulfoxide	NR	6-15-50	1-2-3	
methiocarb sulfone	NR	6-15-50	1-2-3	
methomyl	NR	6-15-50	1-2-3	
methoxychlor olefin	С	6	2	
methoxychlor, p, p'-	C	6	2	
methyl 4-chloro-1H-indole- 3-acetate	NR		1-2-3	Not eluted from Florisil only in $CH_2Cl_2$ eluants.
metobromuron	NR	6-15-50	1-2-3	
metolachlor	NR		1-2-3	
metoxuron	NR	6-15-50	1-2-3	
metribuzin	NR	50	1-2-3	Complete elution from Florisil only in 50% EE/PE; may be S recovery thru method.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
metribuzin, deaminated diketo metabolite	NR	6-15-50	1-2-3	
metribuzin, deaminated metabolite	NR	6-15-50	1-2-3	
metribuzin, diketo metabolite	NR	6-15-50	1-2-3	
mevinphos, (E)-	NR	6-15-50		
mirex	P (75%)	6	1	Loss in partitioning from PE to acetonitrile/water; elutes in PE forerun.
monocrotophos	NR	6-15-50	1-2-3	
monuron	NR	6-15-50	1-2-3	
myclobutanil	NR	6-15-50	1-2-3	
myclobutanil alcohol metabolite	NR	6-15-50	1-2-3	
myclobutanil dihydroxy metabolite	NR	6-15-50	1-2-3	
N, N-diallyl dichloroacetamide	S (32-47%)	15+50	2+3	Complete elution from Florisil only in 15+50% EE/PE, $\mathrm{CH_2Cl_2}$ eluants 2+3.
N-(3,4-dichlorophenyl)-N'- methylurea	NR	6-15-50		
naled	NR	6-15-50	1-2-3	
neburon	NR	6-15-50	1-2-3	
nitralin	P (70%)	50		50-80% elution from Florisil
			3	only in $50\%$ EE/PE. $75\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
nitrapyrin	V (32-111%)	6	2	Complete elution from Florisil only in $6\%$ EE/PE or $\mathrm{CH_2Cl_2}$ eluant #2.
nitrofen	С	15	2	
nitrofluorfen	C	15	2	
nonachlor, cis-	С	6	1	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
nonachlor, trans-	$\mathbf{C}$	6	1	Elutes in PE forerun.
norflurazon	NR	6-15-50		
NTN33823	NR	6-15-50	1-2-3	
NTN35884	NR	6-15-50	1-2-3	
nuarimol	С	50		35% elution from Florisil only
	NR		1-2-3	in 50% EE/PE.
octachlor epoxide	C	6	1	
omethoate	NR	6-15-50	1-2-3	
oryzalin	NR	6-15-50		
ovex	C	15	2	
oxadiazon	P (75%)	15		
oxadixyl	NR	6-15-50	1-2-3	
oxamyl oxime metabolite	NR	6-15-50	1-2-3	
oxyfluorfen	С	15	2	
parathion	С	15	2	
parathion oxygen analog	NR	6-15-50	1-2-3	
parathion-methyl	С	15	2	
parathion-methyl oxygen analog	NR	6-15-50	1-2-3	
PB-9	NR	6-15-50	1-2-3	
pendimethalin	P (33-56%) P (66-82%)	15	2	
pentachloroaniline	С	6	1	
pentachlorobenzene	С	6	1	Elutes in PE forerun.
pentachlorobenzonitrile	P (60%)	15	2	Complete elution from Florisil only in $CH_2Cl_2$ eluant #2.
pentachlorophenyl methyl ether	С	6	1	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
pentachlorophenyl methyl sulfide	С	6	1	
permethrin, cis-	C (82%)	6+15	2	Complete elution from Florisil only in 6+15% EE/PE; high temp column recommended. High temperature column recommended.
permethrin, trans-	C (82%)	6+15	2	Complete elution from Florisil only in 6+15% EE/PE; high temp col recommended. High temperature column
				recommended.
Perthane	C	6	1	
Perthane olefin	С	6	1	
phorate	V (80%)	6		Elution from Florisil quite
	C		1	variable, may be 0%.
phorate oxygen analog	NR	6-15-50	1-2-3	
phorate oxygen analog sulfone	NR	6-15-50	1-2-3	
phorate oxygen analog sulfoxide	NR	6-15-50	1-2-3	
phorate sulfone	NR S (12-20%)	6-15-50	3	38% elution from Florisil only in eluant 3.
phorate sulfoxide	NR	6-15-50	1-2-3	
phosalone	С	50	2+3	
phosmet			3	Partial (60%) elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #3.
phosmet oxygen analog	NR	6-15-50		
phosphamidon	NR	6-15-50	1-2-3	
photodieldrin	C	15+50	2	
pirimiphos-ethyl	С	15+50	3	
pirimiphos-methyl	С	15	3	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
PPG-1576	P	50	2+3	$72-85\%$ elution from Florisil only in EE/PE; $54-75\%$ in $\mathrm{CH_{2}Cl_{2}}$ eluants.
PPG-2597	NR	6-15-50	1-2-3	
PPG-947	NR	6-15-50	1-2-3	
procymidone	P (76%)	15		
profenofos	P (50%)	50	3	Partial (56%) elution from Florisil only in 50% EE/PE. Partial (38%) elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
Prolan	S (25%)	15	2	Complete elution from Florisil only in CH <sub>2</sub> Cl <sub>2</sub> eluant #2.
prometryn	P (70%)	50		Variable (22-67%) elution from Florisil only in 50% EE/ PE.
	NR		1-2-3	12.
propachlor	NR	6-15-50	1-2-3	Trace amount may be eluted in $CH_2Cl_2$ eluant #3.
propanil	NR	6-15	3	Partial (41%) elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #3.
propargite		15	2	Complete elution from Florisil only in 15% EE/PE or $\mathrm{CH_2Cl_2}$ eluant #2.
propazine	NR	15+50	3	Complete but variable elution from Florisil only in $15\%+50\%$ EE/PE. Also elution of trace amount from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2.
propham	P (80%)	15		Addition 8-16% elution from Florisil only in 50% EE/PE; none in 50% thru method.
propiconazole	NR	6-15-50	1-2-3	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
prosulfuron	NR	6-15-50	1-2-3	
prothiofos	С	6	2	$79\%$ elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2.
pyrazon	NR	6-15-50	1-2-3	
pyrazon metabolite B	NR	6-15-50	1-2-3	
pyrethrins	C	50		
pyrimethanil	S (0-40%)	50	3	Complete elution from Florisil only in 50% EE/PE or $\mathrm{CH_2Cl_2}$
	P (75-82%	50	3	eluant 3.
quintozene	С	6	1	
RH-6467	NR	6-15-50	1-2-3	
RH-9129	NR	6-15-50	1-2-3	
RH-9130	NR	6-15-50	1-2-3	
ronnel	C	6	2	
RPA202248	NR	6-15-50	1-2-3	
sethoxydim	NR	6-15-50	3	$CH_2Cl_2$ elution from Florisil tested with eluant #3 only, not #1 or #2.
sethoxydim sulfoxide	NR	6-15-50	3	$CH_2Cl_2$ elution from Florisil tested with eluant #3 only, not #1 or #2.
simazine		50		Complete elution from Florisil
	NR		1-2-3	only in 50%EE/PE.
Strobane	С	6	1	
sulfallate	С	6+15	2	Elution with EE/PE may be variable.
sulfanilamide	NR	6-15-50	1-2-3	

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
sulfotep	P (65-70%)	6+15	2	65% elution from Florisil with EE/PE; 70% with $\mathrm{CH_2Cl_2}$ ; need wide bore column.
Sulphenone		50	3	Complete elution from Florisil only in $20+25\%$ EE/PE or in $\mathrm{CH_2Cl_2}$ eluant #3.
TCMTB	P (61-62%)	15		P (61-62%) elution from Florisil only in 15% EE/PE; no elution in 50% EE/PE.
TDE, o,p'-	С	6	1	
TDE, p,p'-	C	6	1	
TDE, p,p'-, olefin	C	6	1	Partially elutes in PE forerun.
tebufenozide	NR	6-15-50	1-2-3	
tebupirimfos	V (57-171%)	6+15	2+3	Elution from Florisil only also variable.
tebupirimfos oxygen analog	NR	6-15-50	1-2-3	
tecnazene	С	6	1	
teflubenzuron	NR	6-15-50	1-2-3	
terbacil	NR	6-15	2+3	30% elution from Florisil only in $\mathrm{CH_{2}Cl_{2}}$ eluant #2, 13% in eluant #3.
terbufos	S (16%)	6		
terbufos oxygen analog	NR	6-15-50	1-2-3	
terbufos oxygen analog sulfone	NR	6-15-50	1-2-3	No elution from Florisil in either elution system.
terbufos sulfone	NR C	6-15-50	2+3	Elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #2 (46%) and #3 (37%).
tetradifon	С	15	2	
tetraiodoethylene	P (65%)	6		

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
tetramethrin	NR	6-15-50	1-2-3	May be elution of trace amount from Florisil in $\mathrm{CH_2Cl_2}$ eluant #3.
tetrasul	C	6	1	
thiobencarb	V (<50-86%)	15	2+3	$40\%$ elution from Florisil only in 15% EE/PE. $42\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ #2, 11% in $\mathrm{CH_2Cl_2}$ #3.
thiometon	NR	6-15-50		
thionazin	NR	15+50		Complete (80%) elution from Florisil only in 15% and/or 50% EE/PE.
THPI	NR	6-15-50		
toxaphene	C	6	1	
tralkoxydim		50		20% elution from Florisil only in $50%$ EE/PE.
	NR		1-2-3	III 30 /0 EE/ I E.
tralomethrin	S (0-50%)	15	2	
tri-allate	$\mathbf{C}$	6	2	
triadimefon	S (13-62%)	50		35% elution from Florisil only in 50% EE/PE.
	NR		1-2-3	No elution from Florisil in $CH_2Cl_2$ eluants.
triadimenol	NR	6-15-50		
triazamate	NR	6-15-50	1-2-3	
tribufos	P (60%)	15+50	3	Partial, variable elution from Florisil only in eluant #3.
trichlorfon	NR	6-15-50	1-2-3	
trichloronat		6		Complete elution from Florisil only in 6% EE/PE.
tridiphane		6	1+2	$20\%$ elution from Florisil only in $\mathrm{CH_2Cl_2}$ eluant #1, 80% in #2.

Table 304-a: Recovery Through 304 (E1-E5 + C1-C4 + DG1-DG19)

Chemical	Recovery <sup>1,2</sup>	Eluant, C1 <sup>3</sup>	Eluant, C2 <sup>4</sup>	Notes <sup>5,6</sup>
trifluralin	С	6	2	
triflusulfuron methyl ester	NR	6-15-50	1-2-3	
tris(chloropropyl) phosphate	NR	6-15-50	1-2-3	
Tycor	S (12-162%)	50	3	Complete elution from Florisil only in $50\%$ EE/PE, $50\text{-}60\%$ in $\text{CH}_{_2}\text{Cl}_{_2}$ #3.
vinclozolin	С	15	2	
vinclozolin metabolite B	С	6+15	2	Recovery in 6% EE/PE; other studies showed split into 15%.
vinclozolin metabolite E	NR	6-15-50		
vinclozolin metabolite F	NR	6-15-50	1-2-3	
vinclozolin metabolite S	V (47-81%) C	15	2	
WAK4103	NR	6-15-50	1-2-3	

Table 304-b: Recovery of Chemicals Through Method 304 (E1-E5 + C6 + DG1-DG19) (extraction of fat from fatty products, cleanup with gel permeation and Florisil column chromatography, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1</sup>	Eluant <sup>2</sup>	Notes
1,2,3,5-tetrachlorobenzene	V (41-138%)	1	mean recovery 85.9%, n=15
1,2,4,5-tetrachloro-3-(methylthio)= benzene	С	1	mean recovery 86%, n=11
2,3,5,6-tetrachloroanisidine	V (47-108%)	2	mean recovery 82.8%, n=10
2,3,5,6-tetrachloroanisole	$\mathbf{C}$	1	mean recovery 89.6%, n=10
2,3,5,6-tetrachloronitroanisole	V (47-135%)	1+2	mean recovery 76.4%, n=10
2-chloroethyl linoleate	V (0-102%)	2	mean recovery 66.86%, n=7
2-chloroethyl palmitate	V (0-105%)	2	mean recovery 68.0%, n=7
alachlor	S (0-121%)	3	mean recovery 47.6%, n=13
aldrin	$\mathbf{C}$	1	mean recovery 85.2%, n=21
alpha-cypermethrin	$\mathbf{C}$	2	mean recovery 89.3%, n=12
anilazine	S (4-87%)	2+3	mean recovery 32%, n=11
bromopropylate	NR	1-2-3	
captan	S (0-88%)	3	mean recovery 33.4%, n=13
carbophenothion	NR	1-2-3	mean recovery 3%, n=12
chlorfenvinphos, beta-	NR	1-2-3	mean recovery 2%, n=13
chlornitrofen	$\mathbf{C}$	2	69-114% recovered, TDS
chlorobenzilate	NR	1-2-3	
chlorothalonil	S (0-86%)	2+3	mean recovery 37%, n=26
chlorpropham	$\mathbf{C}$	2	mean recovery 82%, n=14
chlorpyrifos	$\mathbf{C}$	2	mean recovery 83%, n=39
chlorpyrifos-methyl	$\mathbf{C}$	2	mean recovery 83.4%, n=14
cyfluthrin	P	2	mean recovery 77.8%, n=14
DDE, p,p'-	P	1	recovery 75.3%, n=1
DDT, o,p'-	$\mathbf{C}$	1	mean recovery 88.2%, n=13
diazinon	$\mathbf{C}$	3	69-114% recovery, TDS
dichlofenthion	$\mathbf{C}$	2	mean recovery 87.5%, n=12
diclofop-methyl	$\mathbf{C}$	2	mean recovery 88.1%, n=25
dicloran	V (49-111%)	2+3	mean recovery 76.8%, n=12
dieldrin	С	2	mean recovery 87.7%, n=130

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 304 C6, *i.e.*, methylene chloride (CH<sub>2</sub>Cl<sub>2</sub>) eluants #1, 2, and 3. Entries for chemicals not recovered indicate which eluants were used in tests.

Table 304-b: Recovery Through 304 (E1-E5 + C6 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Eluant <sup>2</sup>	Notes
endosulfan I	$\mathbf{C}$	2	mean recovery 89.0%, n=12
endosulfan sulfate	$\mathbf{C}$	2	mean recovery 88.9%, n=27
endrin	$\mathbf{C}$	2	recovery 82.7%, n=1
esfenvalerate	$\mathbf{C}$	2	mean recovery 88.8%, n=12
ethion oxygen analog	NR	1-2-3	
fenarimol	S (0-58%)	3	mean recovery 13.5%, n=13
fenthion	NR	1-2-3	mean recovery 0.5%, n=13
fenvalerate	V (69-130%)	2	mean recovery 91%, n=14
fluchloralin	C	2	mean recovery 81%, n=11
haloxyfop methyl ester	С	2+3	mean recovery $91.3\%$ , $n=4$ , $80\%$ eluant 2 remainder in 3.
heptachlor	$\mathbf{C}$	1	recovery 96.7%, n=1
heptachlor epoxide	$\mathbf{C}$	2	mean recovery 84.4%, n=28
iprodione	S (0-52%)	3	mean recovery 16.2%, n=16; trace amount eluated by elauant 3.
iprodione metabolite isomer	V (12-120%)	3	mean recovery $73.2\%$ , $n=28$ .
lindane	C	1	mean recovery 87.2%, n=40
linuron	V (43-114%)	3	mean recovery 73.5%, n=24
mecarbam	V (13-92%)	3	mean recovery $71.6\%$ , $n=15$ .
methidathion	С	3	
methoxychlor, o, p'-	C	2	83-124% recoveries, TDS
methoxychlor, p, p'-	C	2	mean recovery 88.2%, n=12
metolachlor	NR	1-2-3	
mirex	C	1	mean recovery 89.4%, n=17
nonachlor, cis-	$\mathbf{C}$	1	
nuarimol	NR	1-2-3	
octachlor epoxide	$\mathbf{C}$	1	mean recovery 90.5%, n=32
parathion	$\mathbf{C}$	2	mean recovery 81.7%, n=82
pentachlorophenyl methyl sulfide	$\mathbf{C}$	1	mean recovery 84.7%, n=17
Perthane	$\mathbf{C}$	1	mean recovery 87.5%, n=15
phenthoate	P		mean recovery 76.0%, n=12; eluant data to be tested.
phosalone	S (17-78%)	2+3	mean recovery 39.8%, n=16
phosmet	S	3	37%, 67% recoveries, TDS
pirimiphos-ethyl	V (29-109%)	3	mean recovery 67.2%, n=13

Table 304-b: Recovery Through 304 (E1-E5 + C6 + DG1-DG19)

Chemical	Recovery <sup>1</sup>	Eluant <sup>2</sup>	Notes
propargite	P	2	mean recovery 79.5%, n=12
prothiofos	P	2	mean recovery 71.9%, n=13
pyrazophos	С		recovery $107\%$ , $n=1$ ; eluant data to be tested.
sulprofos	NR	1-2-3	
TDE, o,p'-	С	1	mean recovery 95.9%, n=15
TDE, p,p'-	$\mathbf{C}$	1	mean recovery102.4%, n=14
TDE, p,p'-, olefin	$\mathbf{C}$	1	mean recovery 86.0%, n=13
tecnazene	$\mathbf{C}$	1	58-108% recoveries, TDS
tetradifon	$\mathbf{C}$	2	
tridiphane	С	1+2	mean recovery 84.5%, n=13
vinclozolin	$\mathbf{C}$	2	mean recovery 83.3%, n=12

Table 304-c: Recovery of Chemicals Through Method 304 (E2 + C7 + DG1-DG19) (extraction of fat from fatty products, Florisil column cleanup, GLC determination with various columns and detectors)

Chemical	Recovery <sup>1, 2</sup>	Eluant <sup>3</sup>	Notes
aldrin	С	6	mean recovery 94.8%, n=19
Aroclor 1254	C	6	mean recovery 80.0%, n=18
chlordane	C	6	recovery 83.0%, n=1
chlordane, cis-	$\mathbf{C}$	6	recovery 93.0%, n=1
chlordane, trans-	$\mathbf{C}$	6	recovery 124%, n=1
chlorpyrifos	C	6	mean recovery 88.0%, n=12
DDE, p,p'-	$\mathbf{C}$	6	recovery 107%, n=1
DDT, p,p'-	$\mathbf{C}$	6	mean recovery 87.2%, n=8
diazinon	$\mathbf{C}$	15	mean recovery 107%, n=1
dieldrin	$\mathbf{C}$	15	mean recovery 97.1%, n=31
heptachlor epoxide	$\mathbf{C}$	6	
nonachlor, cis-	$\mathbf{C}$	6	recovery 103%, n=1
nonachlor, trans-	S(0.8-32%)	6	mean recovery 16.4%, n=2
octachlor epoxide	C	6	recovery 83.0%, n=1
pentachlorobenzene	$\mathbf{C}$	6	recovery 100%, n=1
TDE, p,p'-	V (59-93%)	6	mean recovery 75.5%, n=4

<sup>&</sup>lt;sup>1</sup> Codes: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable (approximate percentage when known); R: recovered but no quantitative information available; NR: not recovered.

<sup>&</sup>lt;sup>2</sup> Recovery results do not include the optional alkaline hydrolysis step.

<sup>&</sup>lt;sup>3</sup> Eluants(s) in which chemical is eluted from Florisil, according to directions in 304 C7, *i.e.*, 6 and 15% ethyl ether/petroleum ether (EE/PE). Entries for chemicals not recovered indicate which eluants were used in tests.