Lab Number: L2019694

Client: Anchor QEA, LLC

ATTN: Delaney Peterson

Project Name: GASCO PDI

Project Number: 000029-02.59

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Sample Delivery Group Information

Sample Delivery Group Summary

Alpha Job Number	: L2019694	Received	: 13-MAY-2020
		Reviewer	: Bethany Bedard
Account Name	: Anchor QEA, LLC		
Project Number	: 000029-02.59		
Project Name	: GASCO PDI		

Delivery Information

Samples Delivered By : Express Ship
FedEx (1001891781810000204800770447829885)

Chain of Custody   : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Present/Intact/N/A	Ice	1.6	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between sample labels & COC?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**NO**

    Following samples were received beyond the method-required holding time for listed analysis:
    -01 (PH-9045), -03 (PH-9045), -04 (PH-9045)

8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NA**

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
May 29 2020, 01:02 pm

Login Number: L2019694

Account: ANCHOR Anchor QEA, LLCProject: 000029-02.59
Received: 13MAY20   Due Date: 28MAY20

Sample #	Client ID		Mat PR Collected

L2019694-01 PDI-058SC-C-00-10.3-200512   3 S0 12MAY20 08:50

Herb: Report List made (2,4,5-TP, 2,4-D only) Ok to run/report pH QOH PREPC: TCLP for Herb Surrogates are to be reported for all Dilutions, if the surrogates are diluted out, report 0% recovery Report to the MDL; Full Narration needed DPKG-FULL Package Due Date: 05/28/20

DPKG-FULL,HERB-8151,HERB-TCLP*,IGNIT-1030,PH-9045,PREPC,TS

L2019694-02 PDI-080SC-C-00-8.6-200507   3 S0 07MAY20 14:00

Herb: Report List made (2,4,5-TP, 2,4-D only) Ok to run/report pH QOH PREPC: TCLP for Herb Surrogates are to be reported for all Dilutions, if the surrogates are diluted out, report 0% recovery Report to the MDL; Full Narration needed Package Due Date: 05/28/20

HERB-8151,HERB-TCLP*,IGNIT-1030,PH-9045,PREPC,TS

L2019694-03 PDI-051SC-C-00-6.9-200511   3 S0 11MAY20 15:15

Herb: Report List made (2,4,5-TP, 2,4-D only) Ok to run/report pH QOH PREPC: TCLP for Herb Surrogates are to be reported for all Dilutions, if the surrogates are diluted out, report 0% recovery Report to the MDL; Full Narration needed Package Due Date: 05/28/20

HERB-8151,HERB-TCLP*,IGNIT-1030,PH-9045,PREPC,TS

L2019694-04 PDI-060SC-C-00-6.8-200511   3 S0 11MAY20 14:15

Herb: Report List made (2,4,5-TP, 2,4-D only) Ok to run/report pH QOH PREPC: TCLP for Herb Surrogates are to be reported for all Dilutions, if the surrogates are diluted out, report 0% recovery Report to the MDL; Full Narration needed Package Due Date: 05/28/20

HERB-8151,HERB-TCLP*,IGNIT-1030,PH-9045,PREPC,TS

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Logged By: Elizabeth Porta

Container Tracking

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L2019694-01A	Glass-A.5	INTACT	28-MAY-20		WALK-IN CUSTODY	Phillip Renaud	W22-S1-B CUSTODY	W22-S1-B CUSTODY	Phillip Renaud
L2019694-01A	Glass-A.5	INTACT	21-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-01A	Glass-A.5	INTACT	21-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-01A	Glass-A.5	INTACT	21-MAY-20		WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-01A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-01A	Glass-A.5	INTACT	19-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-01A	Glass-A.5	INTACT	19-MAY-20		RETURN WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-01A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-01A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-01A	Glass-A.5	INTACT	15-MAY-20		RETURN WALK-IN CUSTODY	Brittney Kelley	WALK-IN CUSTODY	WALK-IN CUSTODY	Brittney Kelley
L2019694-01A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-01A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	W20-S4-C CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-01A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Phillip Renaud	W20-S4-C CUSTODY	W20-S4-C CUSTODY	Phillip Renaud
L2019694-01A	Glass-A.5	INTACT	14-MAY-20		LOGIN	Romany Ibrahim	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Romany Ibrahim
L2019694-01A	Glass-A.5	INTACT	14-MAY-20		RETURN WALK-IN CUSTODY	Romany Ibrahim	LOGIN	LOGIN	Romany Ibrahim
L2019694-01A	Glass-A.5	INTACT	14-MAY-20		WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-01A	Glass-A.5	INTACT	13-MAY-20	CUSTODY	CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L2019694-01A	Glass-A.5	INTACT	13-MAY-20	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	CUSTODY	CUSTODY	Michael Dick
L2019694-01A	Glass-A.5	INTACT	13-MAY-20	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	N
L2019694-01A	Glass-A.5	INTACT	13-MAY-20	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Bethany Bedard	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Bethany
L2019694-01A	Glass-A.5	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-01W	EAmber-A1	INTACT	21-MAY-20		ORGPREP	Jessica Westover	R66-02 CUSTODY	R66-02 CUSTODY	Jessica Westover
L2019694-01W	EAmber-A1	INTACT	21-MAY-20		R66-01 CUSTODY	Jessica Westover	ORGPREP	ORGPREP	Jessica Westover
L2019694-01W	EAmber-A1	INTACT	20-MAY-20		A2-CUSTODY-REFRIDGE	Eric Asamoah	R66-01 CUSTODY	R66-01 CUSTODY	Eric Asamoah
L2019694-01W	EAmber-A1	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L2019694-02A	Glass-A.5	INTACT	28-MAY-20	CUSTODY	WALK-IN CUSTODY	Geoffry Grace	W22-S1-B CUSTODY	W22-S1-B CUSTODY	Geoffry Grace
L2019694-02A	Glass-A.5	INTACT	21-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-02A	Glass-A.5	INTACT	21-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-02A	Glass-A.5	INTACT	21-MAY-20		WALK-IN CUSTODY	Jessica Westover	ORGPREP	ORGPREP	Jessica Westover
L2019694-02A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-02A	Glass-A.5	INTACT	19-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-02A	Glass-A.5	INTACT	19-MAY-20		RETURN WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-02A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-02A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-02A	Glass-A.5	INTACT	15-MAY-20		RETURN WALK-IN CUSTODY	Brittney Kelley	WALK-IN CUSTODY	WALK-IN CUSTODY	Brittney Kelley
L2019694-02A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-02A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	W3-S5-D CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-02A	Glass-A.5	INTACT	14-MAY-20		RETURN WALK-IN CUSTODY	Sam Bardsley	W3-S5-D CUSTODY	W3-S5-D CUSTODY	Sam Bardsley
L2019694-02A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	WETCHEM	Ariana Summit	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Ariana Summit
L2019694-02A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	WALK-IN CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L2019694-02A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Phillip Renaud	WALK-IN CUSTODY	WALK-IN CUSTODY	Phillip Renaud
L2019694-02A	Glass-A.5	INTACT	14-MAY-20		LOGIN	Romany Ibrahim	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Romany Ibrahim
L2019694-02A	Glass-A.5	INTACT	14-MAY-20		RETURN WALK-IN CUSTODY	Romany Ibrahim	LOGIN	LOGIN	Romany Ibrahim
L2019694-02A	Glass-A.5	INTACT	14-MAY-20		WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-02A	Glass-A.5	INTACT	13-MAY-20	CUSTODY	CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L2019694-02A	Glass-A.5	INTACT	13-MAY-20	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	CUSTODY	CUSTODY	Michael Dick
L2019694-02A	Glass-A.25	INTACT	13-MAY-20	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Bethany Bedard	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Betha…
L2019694-02A	Glass-A.5	INTACT	13-MAY-20	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	
L2019694-02A	Glass-A.25	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-02W	EAmber-A1	INTACT	21-MAY-20		ORGPREP	Jessica Westover	R66-02 CUSTODY	R66-02 CUSTODY	Jessica Westover

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L2019694-02W	EAmber-A1	INTACT	21-MAY-20		R66-01 CUSTODY	Jessica Westover	ORGPREP	ORGPREP	Jessica Westover
L2019694-02W	EAmber-A1	INTACT	20-MAY-20		A2-CUSTODY-REFRIDGE	Eric Asamoah	R66-01 CUSTODY	R66-01 CUSTODY	Eric Asamoah
L2019694-02W	EAmber-A1	INTACT	14-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-03A	Glass-A.5	INTACT	28-MAY-20		WALK-IN CUSTODY	Phillip Renaud	W22-S1-B CUSTODY	W22-S1-B CUSTODY	Phillip Renaud
L2019694-03A	Glass-A.5	INTACT	21-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-03A	Glass-A.5	INTACT	21-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-03A	Glass-A.5	INTACT	21-MAY-20		WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-03A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-03A	Glass-A.5	INTACT	19-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-03A	Glass-A.5	INTACT	19-MAY-20		RETURN WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-03A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-03A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-03A	Glass-A.5	INTACT	15-MAY-20		RETURN WALK-IN CUSTODY	Brittney Kelley	WALK-IN CUSTODY	WALK-IN CUSTODY	Brittney Kelley
L2019694-03A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-03A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-03A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Phillip Renaud	WALK-IN CUSTODY	WALK-IN CUSTODY	Phillip Renaud
L2019694-03A	Glass-A.5	INTACT	14-MAY-20		LOGIN	Romany Ibrahim	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Romany Ibrahim
L2019694-03A	Glass-A.5	INTACT	14-MAY-20		RETURN WALK-IN CUSTODY	Romany Ibrahim	LOGIN	LOGIN	Romany Ibrahim
L2019694-03A	Glass-A.5	INTACT	14-MAY-20		WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-03A	Glass-A.5	INTACT	13-MAY-20	CUSTODY	CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L2019694-03A	Glass-A.5	INTACT	13-MAY-20	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	CUSTODY	CUSTODY	Michael Dick
L2019694-03A	Glass-A.5	INTACT	13-MAY-20	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	
L2019694-03A	Glass-A.5	INTACT	13-MAY-20	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Bethany Bedard	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Betha
L2019694-03A	Glass-A.5	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-03W	EAmber-A1	INTACT	21-MAY-20		ORGPREP	Jessica Westover	R66-02 CUSTODY	R66-02 CUSTODY	Jessica Westover

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L2019694-03W	EAmber-A1	INTACT	21-MAY-20		R66-01 CUSTODY	Jessica Westover	ORGPREP	ORGPREP	Jessica Westover
L2019694-03W	EAmber-A1	INTACT	20-MAY-20		A2-CUSTODY-REFRIDGE	Eric Asamoah	R66-01 CUSTODY	R66-01 CUSTODY	Eric Asamoah
L2019694-03W	EAmber-A1	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-04A	Glass-A.5	INTACT	28-MAY-20		WALK-IN CUSTODY	Phillip Renaud	W22-S1-B CUSTODY	W22-S1-B CUSTODY	Phillip Renaud
L2019694-04A	Glass-A.5	INTACT	21-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-04A	Glass-A.5	INTACT	21-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-04A	Glass-A.5	INTACT	21-MAY-20		WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-04A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Sam Bardsley	WALK-IN CUSTODY	WALK-IN CUSTODY	Sam Bardsley
L2019694-04A	Glass-A.5	INTACT	19-MAY-20		ORGPREP	Eric Asamoah	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L2019694-04A	Glass-A.5	INTACT	19-MAY-20		RETURN WALK-IN CUSTODY	Eric Asamoah	ORGPREP	ORGPREP	Eric Asamoah
L2019694-04A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-04A	Glass-A.5	INTACT	19-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-04A	Glass-A.5	INTACT	15-MAY-20		RETURN WALK-IN CUSTODY	Brittney Kelley	WALK-IN CUSTODY	WALK-IN CUSTODY	Brittney Kelley
L2019694-04A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-04A	Glass-A.5	INTACT	15-MAY-20	CUSTODY	WALK-IN CUSTODY	Mitchell Vonachen	WETCHEM	WETCHEM	Mitchell Vonachen
L2019694-04A	Glass-A.5	INTACT	14-MAY-20	CUSTODY	RETURN WALK-IN CUSTODY	Phillip Renaud	WALK-IN CUSTODY	WALK-IN CUSTODY	Phillip Renaud
L2019694-04A	Glass-A.5	INTACT	14-MAY-20		LOGIN	Romany Ibrahim	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Romany Ibrahim
L2019694-04A	Glass-A.5	INTACT	14-MAY-20		RETURN WALK-IN CUSTODY	Romany Ibrahim	LOGIN	LOGIN	Romany Ibrahim
L2019694-04A	Glass-A.5	INTACT	14-MAY-20		WETCHEM	Mitchell Vonachen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Mitchell Vonachen
L2019694-04A	Glass-A.5	INTACT	13-MAY-20	CUSTODY	CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L2019694-04A	Glass-A.5	INTACT	13-MAY-20	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	CUSTODY	CUSTODY	Michael Dick
L2019694-04A	Glass-A.5	INTACT	13-MAY-20	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Bethany Bedard	TRANSIT COURIER	COOLER10-TRANSFER_TO_WESTBORO	
L2019694-04A	Glass-A.5	INTACT	13-MAY-20	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Bethany Bedard	COOLER10-TRANSFER_TO_WESTBORO	COOLER10-TRANSFER_TO_WESTBORO	Betha
L2019694-04A	Glass-A.5	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta
L2019694-04W	EAmber-A1	INTACT	21-MAY-20		ORGPREP	Jessica Westover	R66-02 CUSTODY	R66-02 CUSTODY	Jessica Westover

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L2019694-04W	EAmber-A1	INTACT	21-MAY-20		R66-01 CUSTODY	Jessica Westover	ORGPREP	ORGPREP	Jessica Westover
L2019694-04W	EAmber-A1	INTACT	20-MAY-20		A2-CUSTODY-REFRIDGE	Eric Asamoah	R66-01 CUSTODY	R66-01 CUSTODY	Eric Asamoah
L2019694-04W	EAmber-A1	INTACT	13-MAY-20	A2-LOGIN	A2-LOGIN	Elizabeth Porta	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Elizabeth Porta

Chain of Custody

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

COC ID: AWHL-20200512-094017

POC: Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

Sample Custodian: CO
Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-058SC-C-00-10.3-200512	N	SE	05/12/2020	8:50	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

	Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature		Eli	Eli			
Print Name	Seth Norwood	Eli Joyner	Eli Joyner	Brian Snook		
Company	Anchor QEA	APEX LABS	APEX LABS	Alpha Analytical		
Date/Time	5/12/20 0945	5/12/20 1008	5/12/20 1245	5/13/20 10:12		

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/12/2020

Page 1 of 1

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: ~~APEX-20200507-145042~~

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

Sample Custodian: SN

Lab: ~~Apex~~ Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-FB-2005071044	FB	WQ	05/07/2020	10:44	8	☐				
								LR Pesticides	SW8081B	30	4°C
								Arsenic	SW6020A	30	
								PAH	SW8270D	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	30	HCl(pH < 2)/4°C
002	PDI-RB-2005071052	RB	WQ	05/07/2020	10:52	8	☐				
								LR Pesticides	SW8081B	30	4°C
								Arsenic	SW6020A	30	
								PAH	SW8270D	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	~~30~~	HCl(pH < 2)/4°C
003	PDI-TB-2005070853	TB	WQ	05/07/2020	8:53	2	☐				
								VOCs (QAPP 3/4b)	SW8260C	~~30~~	HCl(pH < 2)/4°C
004	PDI-080SC-C-00-8.6-200507	N	SE	05/07/2020	14:00	6	☐				
								Herbicides	SW8081B	30	4°C
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								pH	SW9045D	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	~~30~~	MeOH
								Total solids (APEX)	SM2540G	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name Sarah Norwood	Print Name	Print Name	Print Name Dylan Snock	Print Name	Print Name
Company Anchor QEA	Company	Company	Company Alpha Analytical	Company	Company
Date/Time 5/12/20 @ 0945	Date/Time	Date/Time	Date/Time 5/13/20 10:12	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/7/2020

Page 1 of 6

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

L2019694

COC ID:	AWHL-20200507-145042

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

Sample Custodian: SN

Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-080SC-C-00-8.6-200507	N	SE	05/07/2020	14:00	1	☐				
								Ignitability	SW1030	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Erin Norwood	Print Name	Print Name	Print Name: Rylor Snoek	Print Name	Print Name
Company: Anchor QEA	Company	Company	Company: Alpha Analytical	Company	Company
Date/Time: 5/12/20 @ 0945	Date/Time	Date/Time	Date/Time: 5/13/20 10:12	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/7/2020

Page 1 of 1

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

COC ID: AWHL-20200511-155734

Sample Custodian: CO

Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-051SC-C-00-6.9-200511	N	SE	05/11/2020	15:15	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C
002	PDI-060SC-C-00-6.8-200511	N	SE	05/11/2020	14:15	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

Relinquished By Signature	Received By Signature	Relinquished By Signature	Received By Signature	Relinquished By Signature	Received By Signature
Print Name Sasha Norgan	Print Name	Print Name	Print Name Jytm Jncek	Print Name	Print Name
Company Anchor QEA	Company	Company	Company Alpha Analytical	Company	Company
Date/Time 5/12/20 @ 945	Date/Time	Date/Time	Date/Time 6/13/20 10:12	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/11/2020

Page 1 of 1

ORIGIN ID:BNOA   (503) 718-2323
APEX LABS
APEX LABORATORIES
12232 SW GARDEN PL

TIGARD, OR 97223
UNITED STATES US

SHIP DATE: 12MAY20
ACTWGT: 33.00 LB
CAD: 4716258/INET4220

BILL THIRD PARTY

TO   **SAMPLE RECEIVING**
     ALPHA ANALYTICAL
     320 FORBES BLVD.

MANSFIELD MA 02048
(508) 822-9300   REF: 000029-02 59 T0402
INV.
PO: DEPT.

FedEx.
Express

[E]

WED - 13 MAY 10:30A
PRIORITY OVERNIGHT

TRK#
0201   **7704 4782 9885**

                              02048
XE PYMA   MA-US **BOS**

1.6°C ICC

9249

Custody Seal
Apex Laboratories, LLC.
12232 SW Garden Pl. Tigard, OR 97223
Phone (503)718-2323 Fax (503)718-0333

Cooler ___ 1 ___ of ___ 1 ___

Date 5/12/20   Signature Ω - Apex labs

Organics

GC Extractable Analysis
Herbicides

Initial Calibration

```
 Method Path : I:\Pest17\200107ICAL\
 Method File : Herb17_12_19_ICAL.m
 Title      : herb
 Last Update  : Fri Jan 10 14:38:37 2020
 Response Via : Initial Calibration
```

Calibration Files
```
 1   =17200107i-02.d  2   =17200107i-03.d  3    =17200107i-04.d  4    =17200107i-05.d  5    =17200107i-06.d
 6   =17200107i-07.d
```

Compound	1	2	3	4	5	6	Avg	%RSD
1) i 4,4'-DBOB			----------------ISTD----------------------					
2) t Dalapon	0.203	0.172	0.168	0.171	0.164	0.159	0.173	9.03
3) s DCAA (surrogate)	0.200	0.170	0.160	0.160	0.146	0.147	0.164	12.29
4) t Dicamba	0.608	0.574	0.510	0.509	0.502	0.505	0.535	8.44
5) t MCPP	0.001	0.001	0.001	0.001	0.001	0.001	0.001	16.26
6) t MCPA		0.001	0.001	0.001	0.001	0.001	0.001	15.47
7) t Dichloroprop	0.192	0.160	0.150	0.146	0.138	0.136	0.154	13.43
8) t 2,4-D	0.196	0.179	0.179	0.178	0.180	0.180	0.182	3.79
9) t 2,4,5-TP (Sil...	0.799	0.709	0.689	0.688	0.685	0.691	0.710	6.26
10) t 2,4,5-T	0.931	0.800	0.755	0.752	0.744	0.750	0.789	9.23
11) t 2,4-DB		0.144	0.123	0.133	0.136	0.137	0.135	5.87
12) t Dinoseb		0.582	0.517	0.472	0.477	0.470	0.504	9.57

Signal #2 Calibration Files
```
 1   =17200107i-02.d  2   =17200107i-03.d  3    =17200107i-04.d  4    =17200107i-05.d  5    =17200107i-06.d
 6   =17200107i-07.d
```

Compound	1	2	3	4	5	6	Avg	%RSD
1) i 4,4'-DBOB			----------------ISTD----------------------					
2) t Dalapon	0.221	0.193	0.182	0.187	0.176	0.173	0.189	9.16
3) s DCAA (surrogate)	0.250	0.180	0.188	0.188	0.173	0.178	0.193	14.77
4) t Dicamba	0.678	0.446	0.550	0.552	0.540	0.548	0.552	13.34
5) t MCPP	0.001	0.001	0.001	0.001	0.001	0.001	0.001	16.00
6) t MCPA		0.002	0.001	0.001	0.001	0.001	0.001	15.45
7) t Dichloroprop	0.221	0.177	0.161	0.148	0.143	0.144	0.166	18.12
8) t 2,4-D	0.303	0.245	0.226	0.215	0.208	0.211	0.235	15.32
9) t 2,4,5-TP (Sil...	0.882	0.768	0.719	0.710	0.694	0.711	0.747	9.44
10) t 2,4,5-T	0.774	0.734	0.699	0.721	0.737	0.765	0.738	3.79
11) t 2,4-DB		0.126	0.118	0.117	0.118	0.121	0.120	3.08

Herb17_12_19_ICAL.m Fri Jan 10 18:30:16 2020   Page: 1

```
 Method Path : I:\Pest17\200107ICAL\
 Method File : Herb17_12_19_ICAL.m
 Title      : herb
 Last Update  : Fri Jan 10 14:38:37 2020
 Response Via : Initial Calibration

 Calibration Files
 1   =17200107i-02.d  2   =17200107i-03.d  3   =17200107i-04.d  4   =17200107i-05.d  5   =17200107i-06.d
 6   =17200107i-07.d


        Compound                 1     2     3     4     5     6     Avg       %RSD
 12) t   Dinoseb                0.423 0.397 0.397 0.404 0.419  0.408     3.03
        ---------------------------------------------------------------------
 (#) = Out of Range
```

```
                    Quantitation Report    (QT Reviewed)

  Data Path : I:\Pest17\200107ICAL\
  Data File : 17200107i-02.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    :  7 Jan 2020   3:05 pm
  Operator  : PEST17:dgm
  Sample    : il1herb,42e,,9499
  Misc      : wg1328992,ical
  ALS Vial  : 2    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: Jan 09 11:38:52 2020
  Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
  Quant Title  : herb
  QLast Update : Thu Jan 09 11:29:43 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.      :
  Signal #1 Phase  :                        Signal #2 Phase:
  Signal #1 Info   :                        Signal #2 Info :

  Sub List      : Default - All compounds listed

          Compound       RT#1      RT#2    Resp#1    Resp#2    mg/l        mg/l
   -------------------------------------------------------------------------
    Internal Standards
1) i   4,4'-DBOB      8.196     8.475    586.7E6   494.1E6   0.250       0.250

    System Monitoring Compounds
3) s   DCAA (surrog   6.667     7.415   22105312  23225201   0.060M4     0.065M4

  Spiked Amount     0.500 Range   30 - 150  Recovery   =   12.00%#    13.00%#

    Target Compounds
2) t   Dalapon        1.696f    1.960f  21695053  19851102   0.055       0.055
4) t   Dicamba        6.843     7.593   67103519  62956923   0.055M4     0.060M4

5) t   MCPP           7.048     7.704    9525236   9491645   6.495M4     6.526M4

6) t   MCPA           7.195     7.931   18449957  17981766   7.692M4     7.617M4

7) t   Dichloroprop   7.553     8.255   21198290  20511867   0.062       0.067M4
8) t   2,4-D          7.795f    8.546f  21598291  28124736   0.051       0.064
9) t   2,4,5-TP (Si   8.495     9.187   89073125  82792434   0.055       0.058
10) t  2,4,5-T        8.730f    9.482    103.8E6   72697501   0.058       0.050
11) t  2,4-DB         9.167f    9.855   17300109  14262372   0.057M4     0.060M4

12) t  Dinoseb        9.863    10.053   86338236  44442980   0.073       0.055

    SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------

  (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
  (#)=Recovery Exceeds Compound Acceptance Limits.
  (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.


Herb17_12_19_ICAL.m Fri Jan 10 18:29:04 2020                          Page:  1
```

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-02.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    :   7 Jan 2020   3:05 pm
Operator  : PEST17:dgm
Sample    : il1herb,42e,,9499
Misc      : wg1328992,ical
ALS Vial  : 2    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:38:52 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 11:29:43 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```


Signal: 17200107i-02.d\ECD1A.ch

Signal: 17200107i-02.d\ECD2B.ch

```
Herb17_12_19_ICAL.m Fri Jan 10 18:29:04 2020                      Page: 2
```

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #3: DCAA (surrogate)

Original Peak Response = 22151771   Manual Peak Response = 22105312 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:04 2020   Page 1

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument   : Pest 17
Sample   : il1herb,42e,,9499   Quant Date   : 1/9/2020 11:29 am

Compound #16: DCAA (surrogate) #2
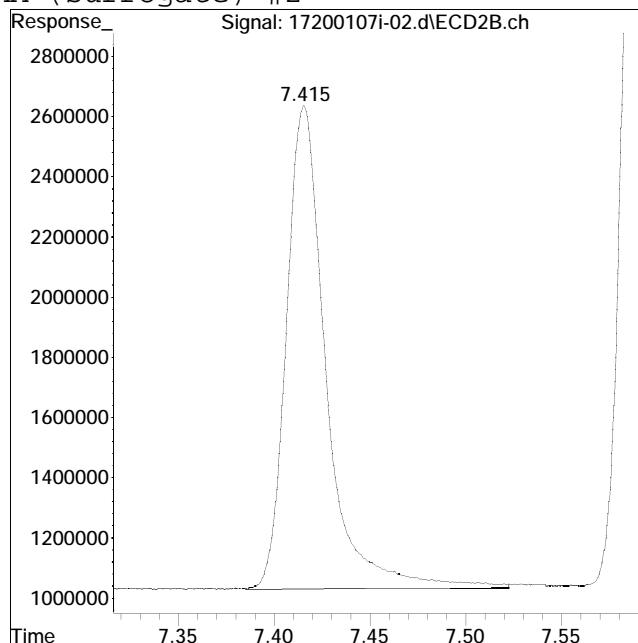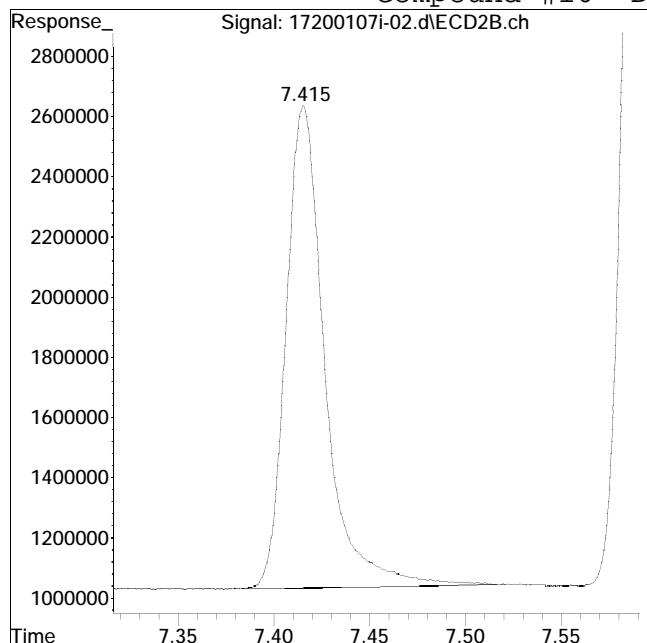
Original Peak Response = 22673952   Manual Peak Response = 23225201 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:05 2020   Page 2

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #4: Dicamba
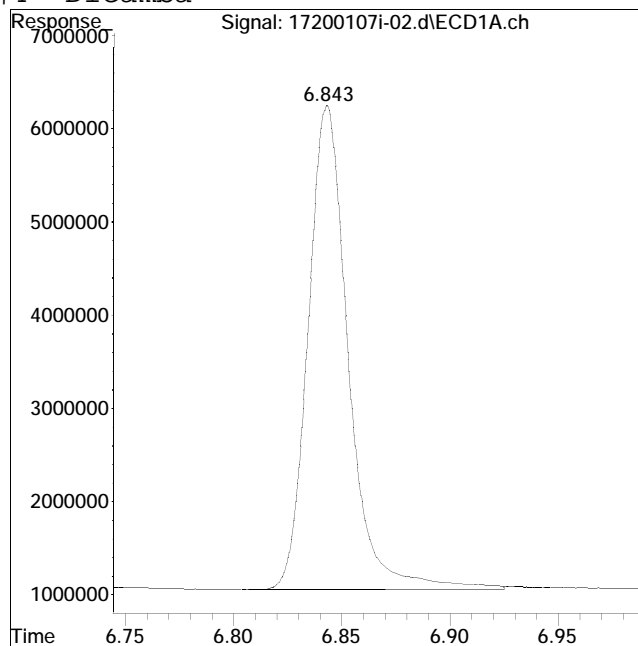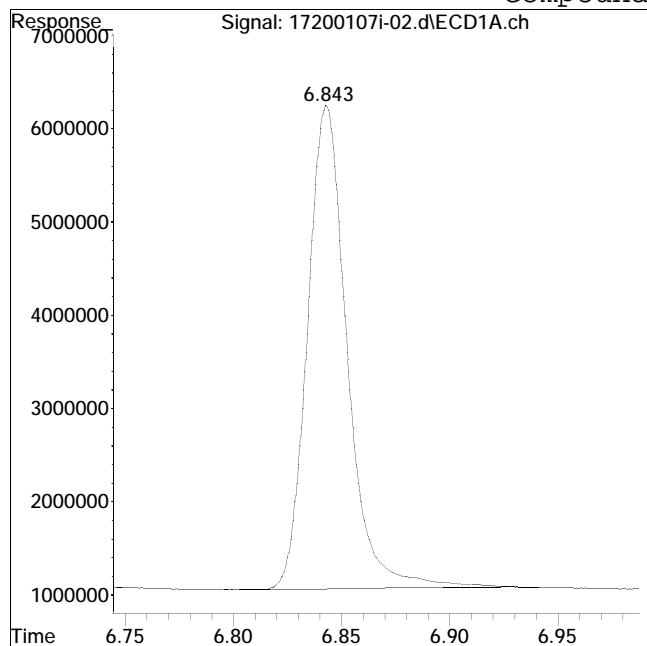
Original Peak Response = 66104922   Manual Peak Response = 67103519 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:05 2020   Page 3

Manual Integration Report

Compound #17: Dicamba #2
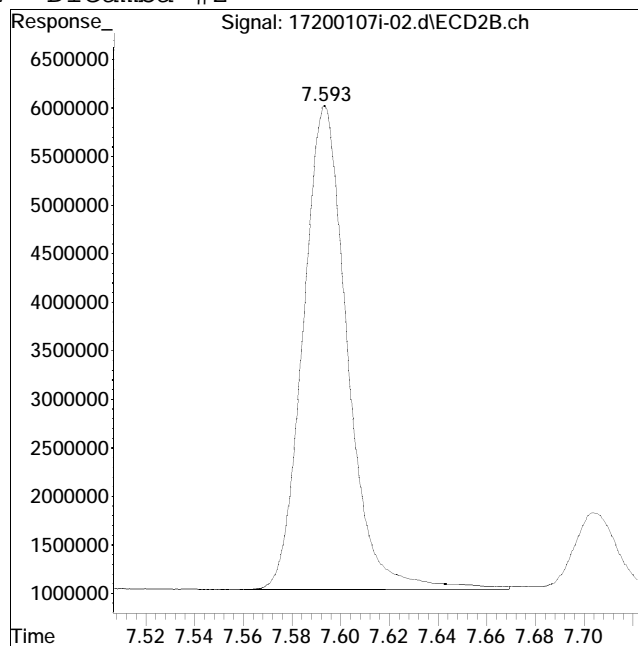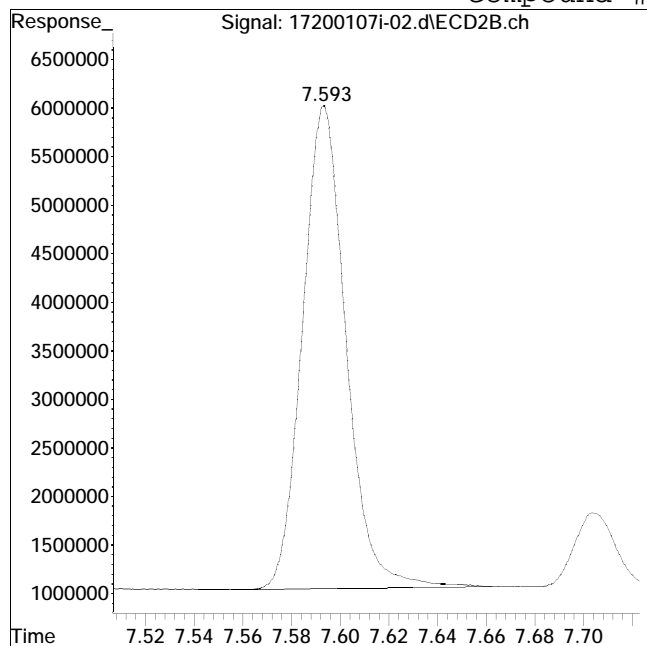
Original Peak Response = 61938753   Manual Peak Response = 62956923 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #5: MCPP
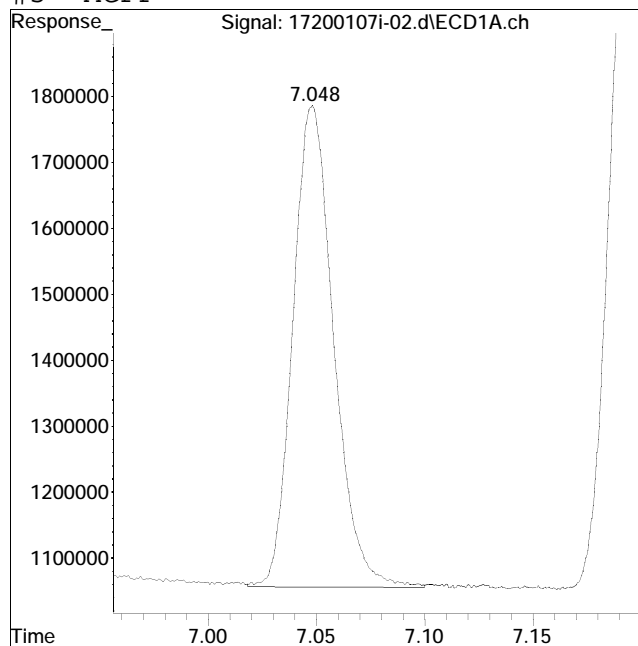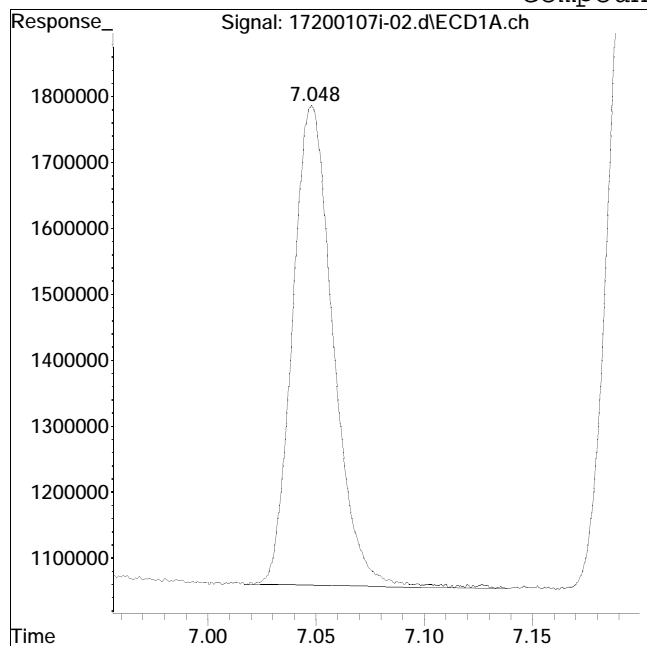
Original Peak Response = 9513207   Manual Peak Response = 9525236 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:05 2020   Page 5

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #18: MCPP #2
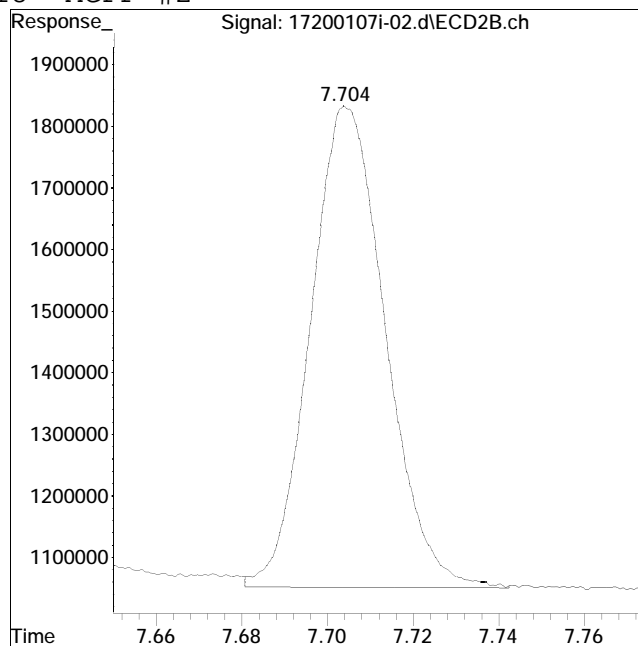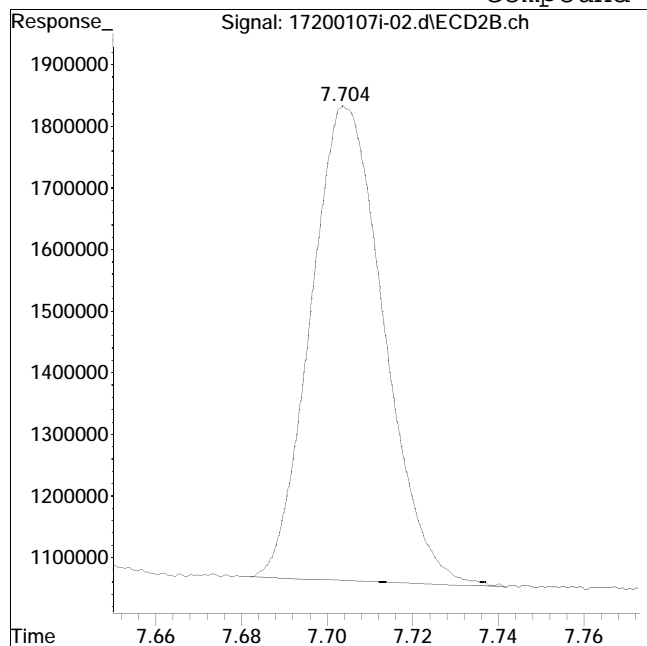
Original Peak Response = 9151489   Manual Peak Response = 9491645 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:06 2020   Page 6

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #6: MCPA
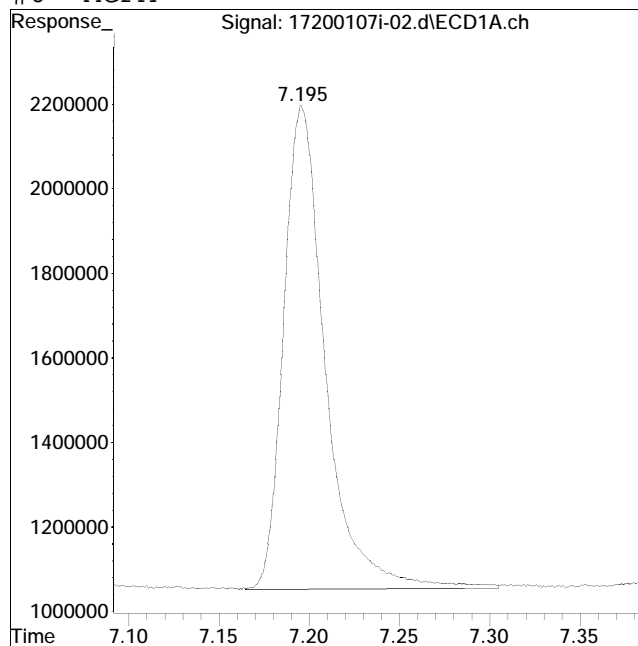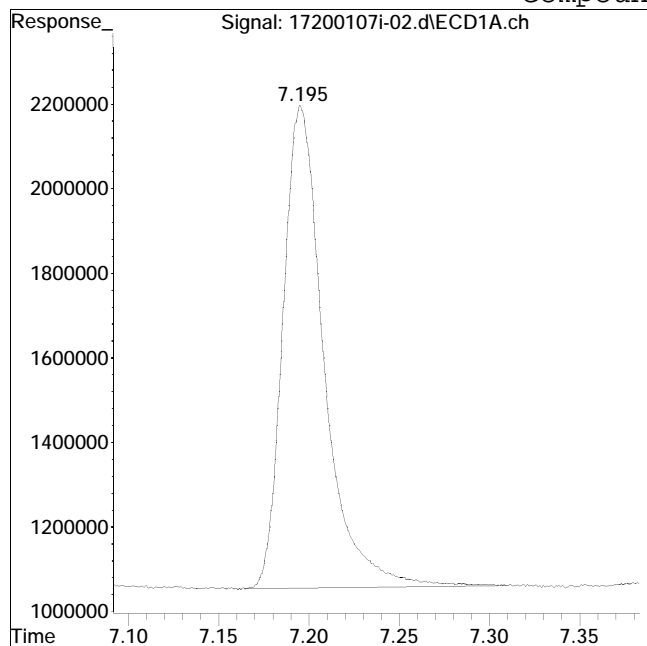
Original Peak Response = 18094249   Manual Peak Response = 18449957 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:06 2020   Page 7

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #19: MCPA #2
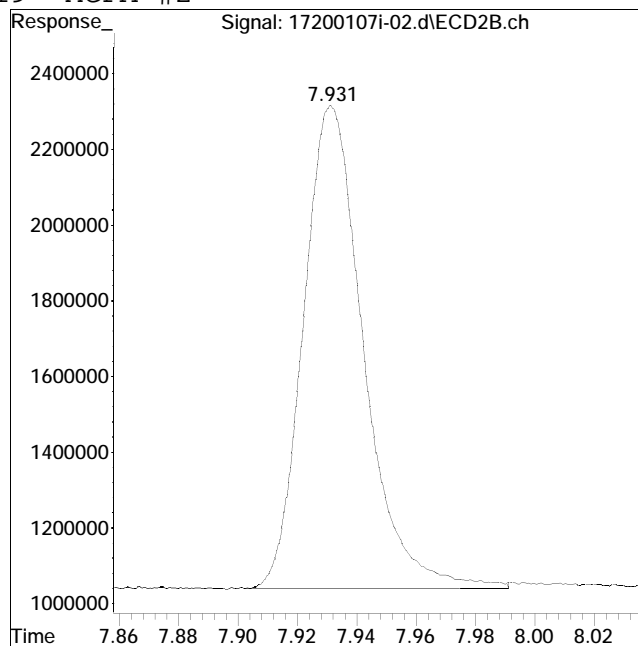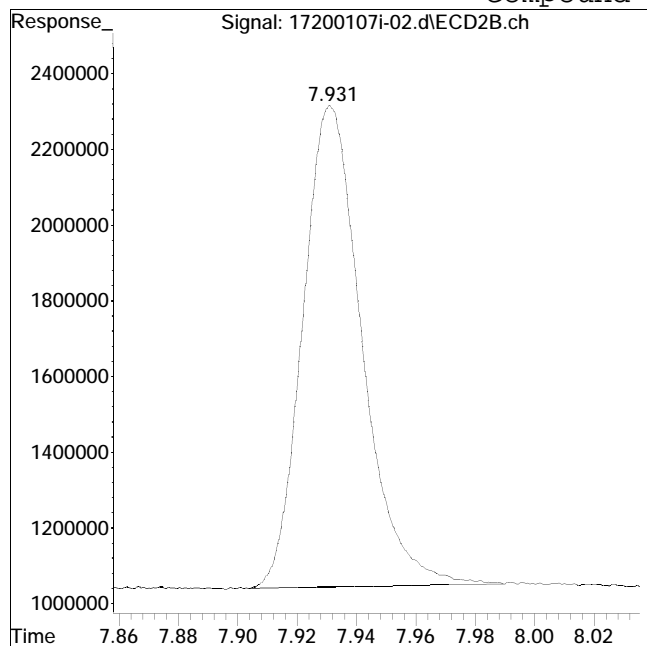
Original Peak Response = 17603988   Manual Peak Response = 17981766 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:06 2020   Page 8

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #20: Dichloroprop #2
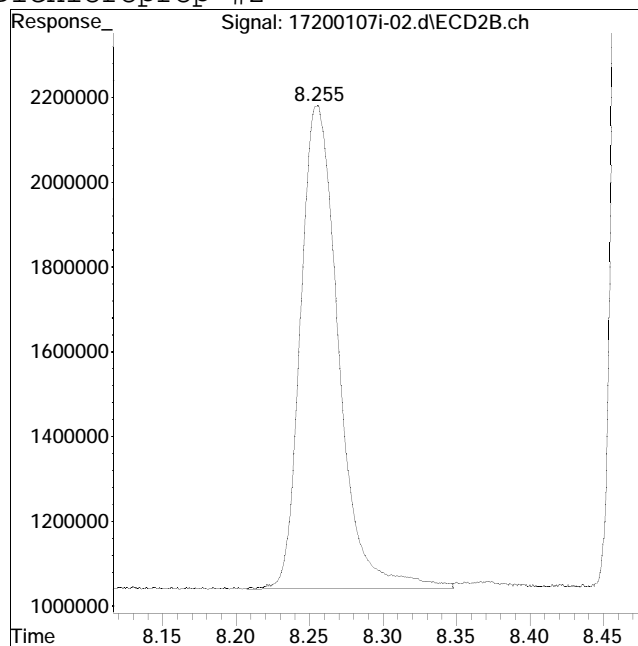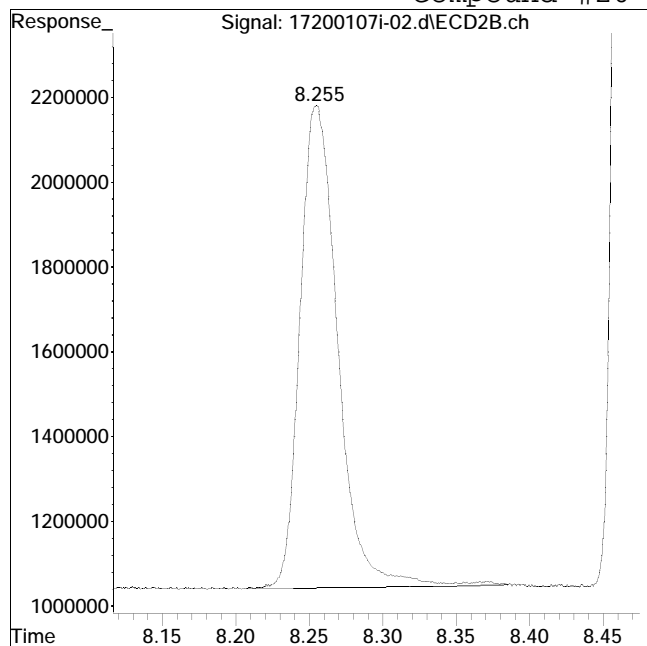
Original Peak Response = 20395077   Manual Peak Response = 20511867 M4
M4 = Poor automated baseline construction.

17200107i-02.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:29:06 2020   Page 9

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #11: 2,4-DB
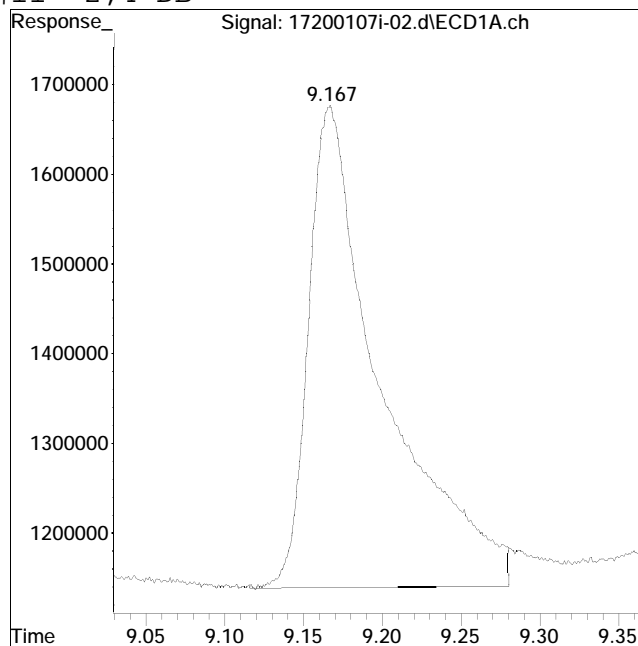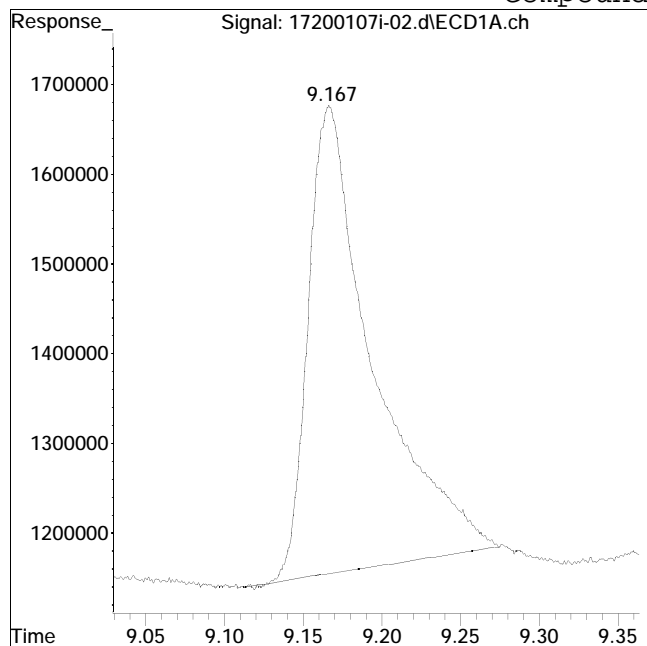
Original Peak Response = 14948606   Manual Peak Response = 17300109 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:07 2020 Page 10

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-02.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:05 pm   Instrument : Pest 17
Sample   : il1herb,42e,,9499   Quant Date : 1/9/2020 11:29 am

Compound #24: 2,4-DB #2
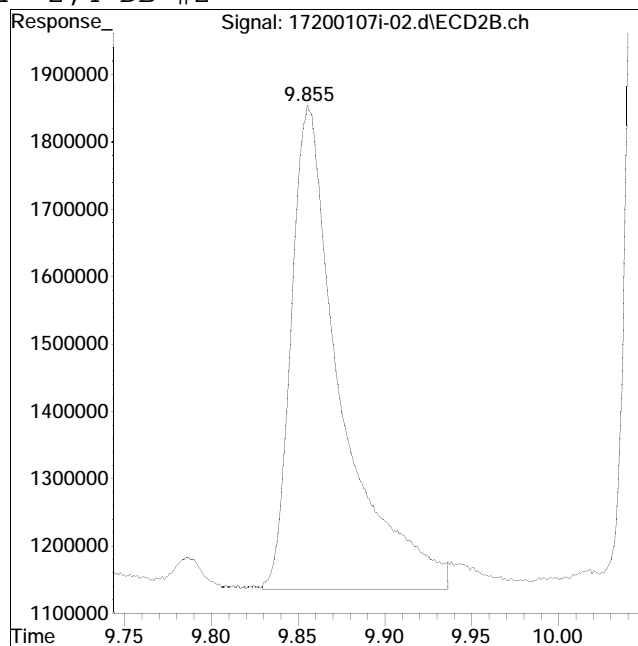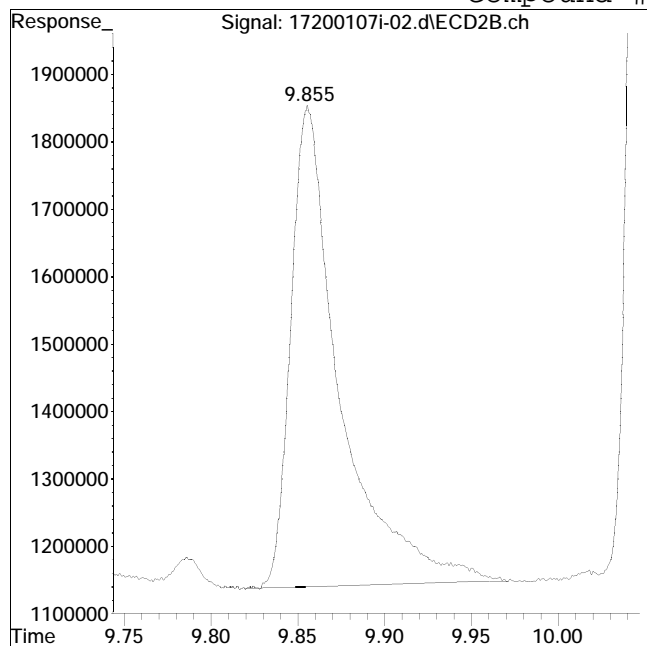
Original Peak Response = 14096296   Manual Peak Response = 14262372 M4
M4 = Poor automated baseline construction.

17200107i-02.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:07 2020   Page 11

```
                     Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-03.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   3:24 pm
   Operator  : PEST17:dgm
   Sample    : il2herb,42e,,9500
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 3    Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 09 11:39:06 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 11:26:33 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :

   Sub List      : Default - All compounds listed

         Compound        RT#1      RT#2    Resp#1    Resp#2    mg/l        mg/l
         ----------------------------------------------------------------------------
    Internal Standards
 1) i   4,4'-DBOB        8.196     8.475   762.4E6   629.6E6   0.250M4     0.250

    System Monitoring Compounds
 3) s   DCAA (surrog     6.659     7.411   48793517  42721788  0.105M4     0.093M4

  Spiked Amount     0.500 Range   30 - 150  Recovery    =   21.00%#    18.60%#

    Target Compounds
 2) t   Dalapon          1.705     1.969   47820718  44303634  0.095       0.098
 4) t   Dicamba          6.837     7.590   164.5E6   105.7E6   0.106M4     0.077
 5) t   MCPP             7.044     7.703   20231808  19548896  10.971M4    10.882
 6) t   MCPA             7.192     7.929   35911895  35448623  12.254M4    12.630M4

 7) t   Dichloroprop     7.547     8.251   45934284  41987153  0.106       0.112
 8) t   2,4-D            7.780     8.536   51420586  57991628  0.094       0.107
 9) t   2,4,5-TP (Si     8.490     9.184   205.3E6   183.7E6   0.098       0.103
10) t   2,4,5-T          8.719     9.476   231.9E6   175.7E6   0.101       0.095
11) t   2,4-DB           9.148     9.846   40709818  30394338  0.104M4     0.102
12) t   Dinoseb          9.862    10.052   168.7E6   101.2E6   0.114       0.099

    SemiQuant Compounds - Not Calibrated on this Instrument
    ----------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

Herb17_12_19_ICAL.m Fri Jan 10 18:29:11 2020   Page: 1

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-03.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    :  7 Jan 2020   3:24 pm
Operator  : PEST17:dgm
Sample    : il2herb,42e,,9500
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 3   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:39:06 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 11:26:33 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```


Signal: 17200107i-03.d\ECD1A.ch

Signal: 17200107i-03.d\ECD2B.ch

Manual Integration Report

```
Data Path   : I:\Pest17\200107ICAL\      QMethod      : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d             Operator     : PEST17:dgm
Date Inj'd  : 1/7/2020  3:24 pm          Instrument   : Pest 17
Sample      : il2herb,42e,,9500          Quant Date   : 1/9/2020 11:26 am
```

Compound #1: 4,4'-DBOB

Original Peak Response = 759300434   Manual Peak Response = 762356229 M4
M4 = Poor automated baseline construction.

17200107i-03.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:12 2020   Page 1

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:24 pm   Instrument : Pest 17
Sample   : il2herb,42e,,9500   Quant Date : 1/9/2020 11:26 am

Compound #3: DCAA (surrogate)
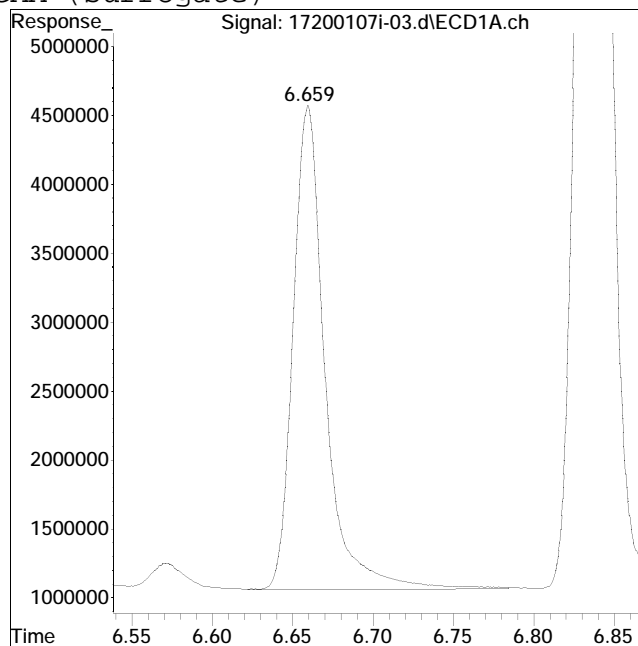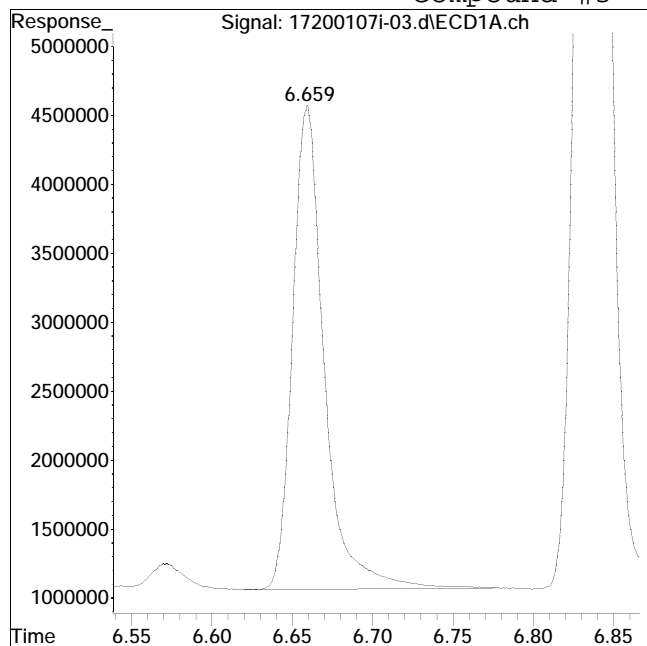
Original Peak Response = 48190088   Manual Peak Response = 48793517 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:24 pm   Instrument : Pest 17
Sample   : il2herb,42e,,9500   Quant Date : 1/9/2020 11:26 am

Compound #16: DCAA (surrogate) #2
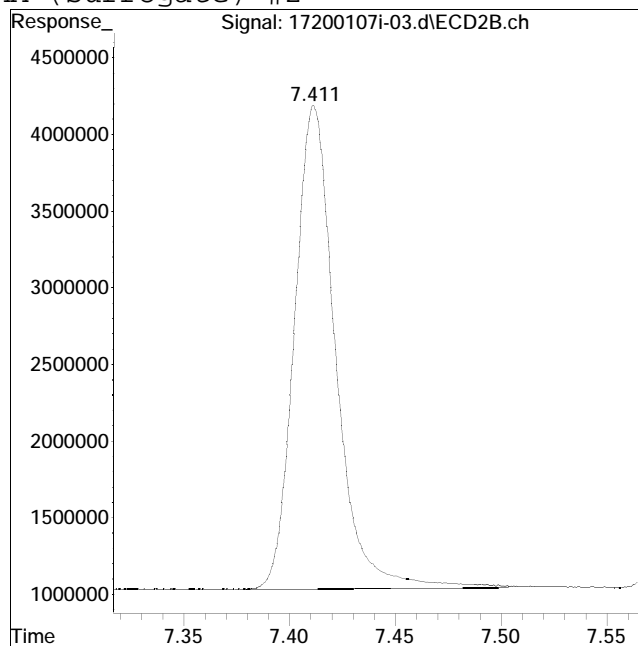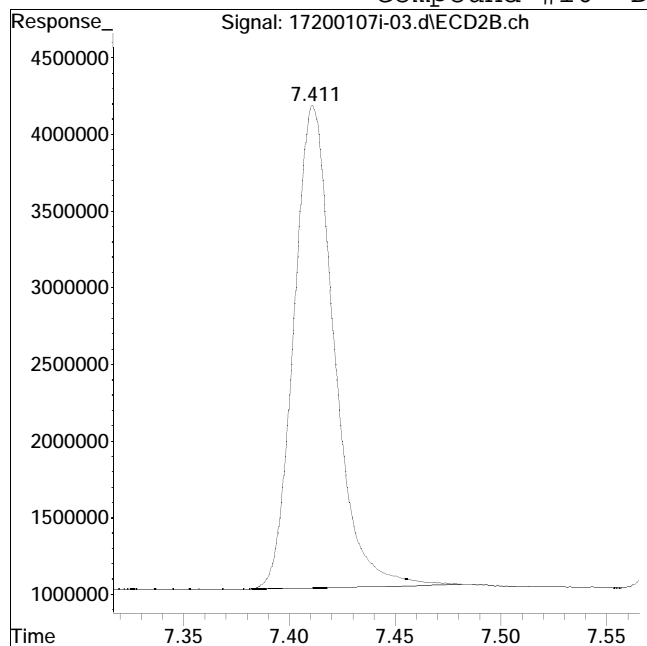
Original Peak Response = 41757231   Manual Peak Response = 42721788 M4
M4 = Poor automated baseline construction.

17200107i-03.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:13 2020   Page 3

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:24 pm   Instrument : Pest 17
Sample   : il2herb,42e,,9500   Quant Date : 1/9/2020 11:26 am

Compound #4: Dicamba
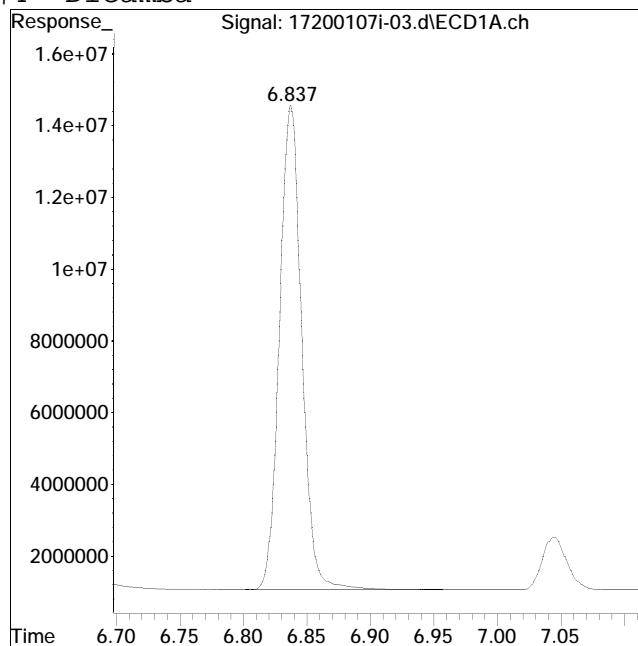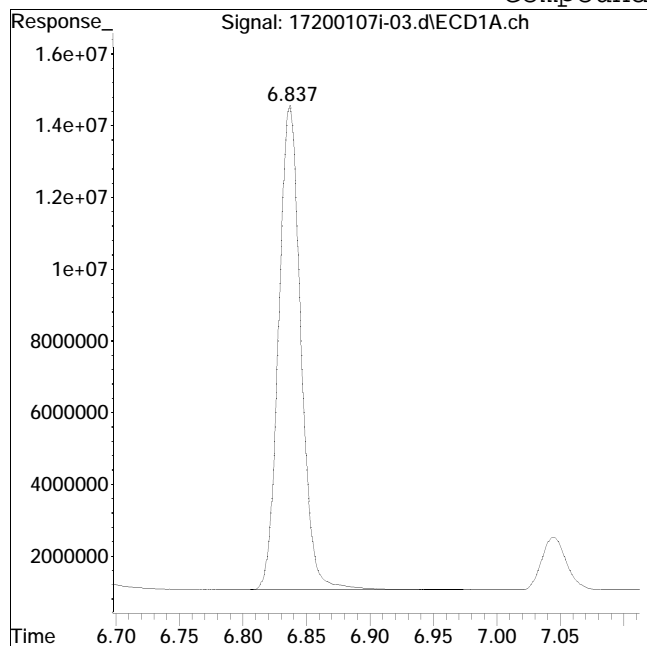
Original Peak Response = 164556374   Manual Peak Response = 164499434 M4
M4 = Poor automated baseline construction.

17200107i-03.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:13 2020   Page 4

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 3:24 pm   Instrument : Pest 17
Sample   : il2herb,42e,,9500   Quant Date : 1/9/2020 11:26 am

Compound #5: MCPP
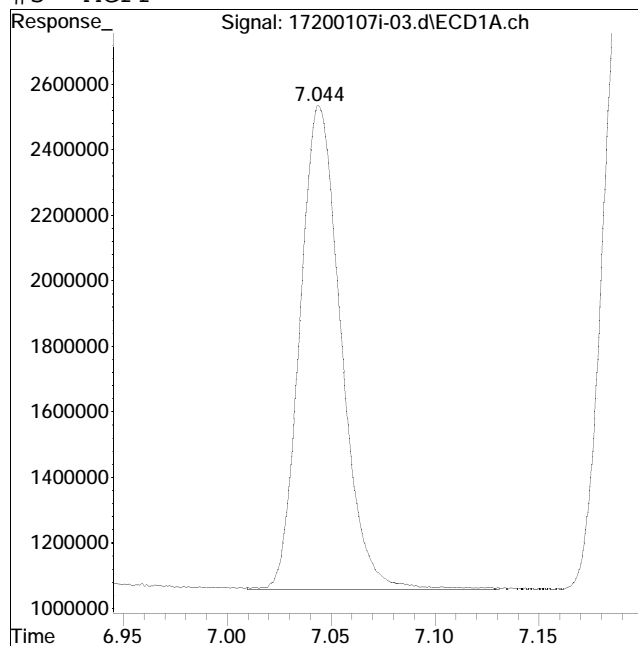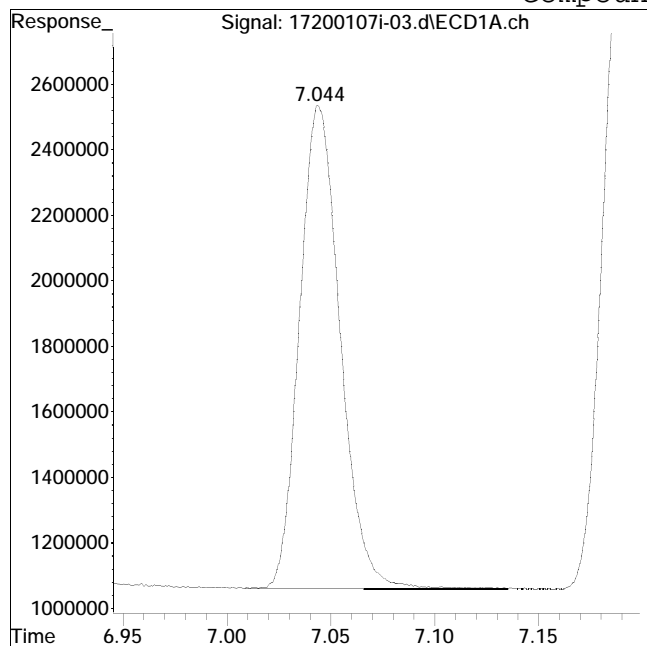
Original Peak Response = 20136019   Manual Peak Response = 20231808 M4
M4 = Poor automated baseline construction.

17200107i-03.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:13 2020   Page 5

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:24 pm   Instrument   : Pest 17
Sample   : il2herb,42e,,9500   Quant Date   : 1/9/2020 11:26 am

Compound #6: MCPA
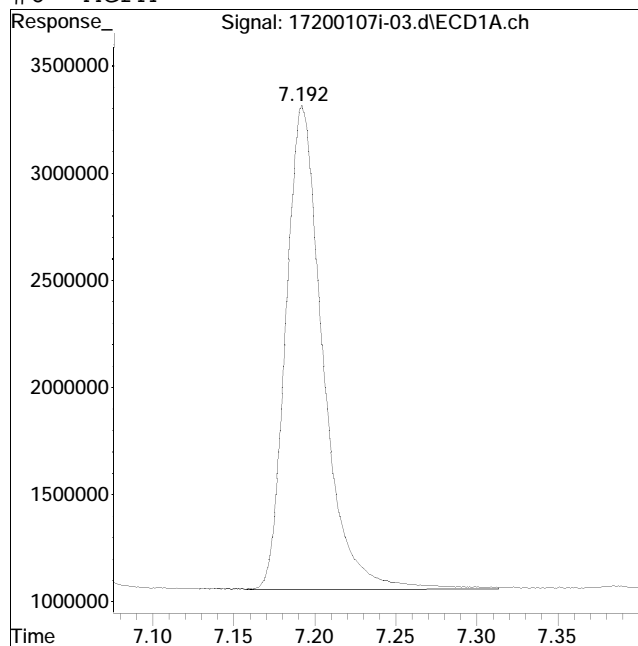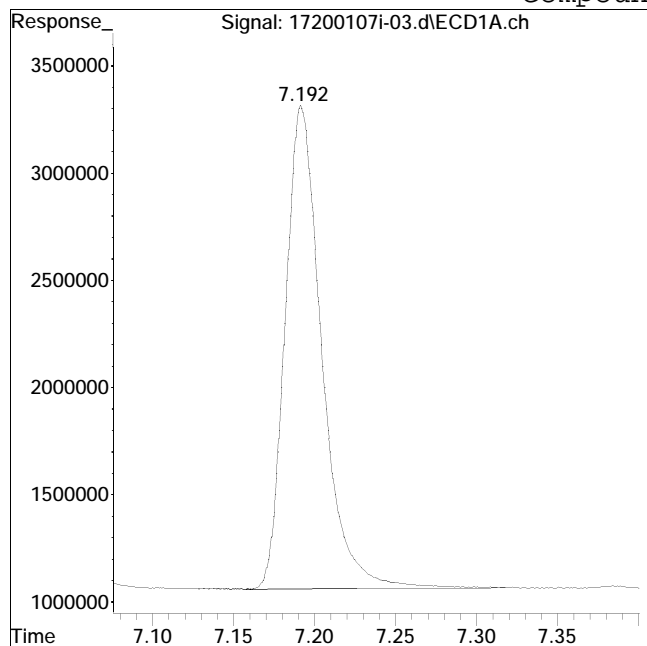
Original Peak Response = 35536478   Manual Peak Response = 35911895 M4
M4 = Poor automated baseline construction.

17200107i-03.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:29:13 2020   Page 6

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-03.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:24 pm   Instrument   : Pest 17
Sample   : il2herb,42e,,9500   Quant Date   : 1/9/2020 11:26 am

Compound #19: MCPA #2
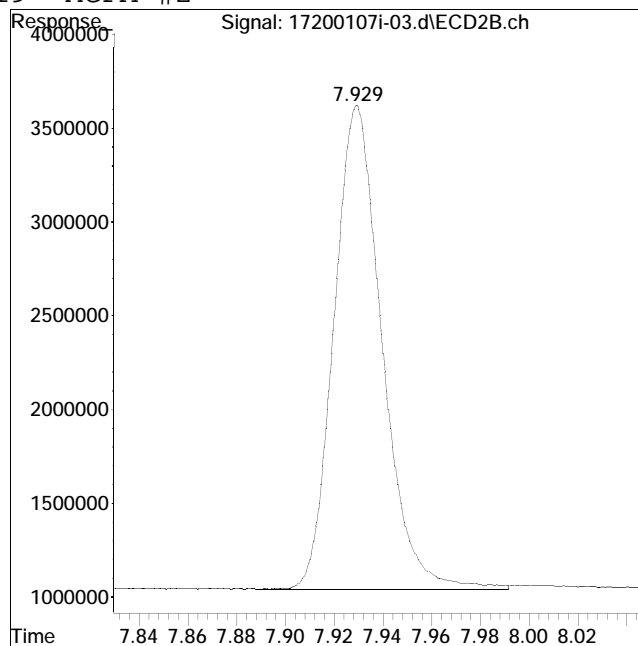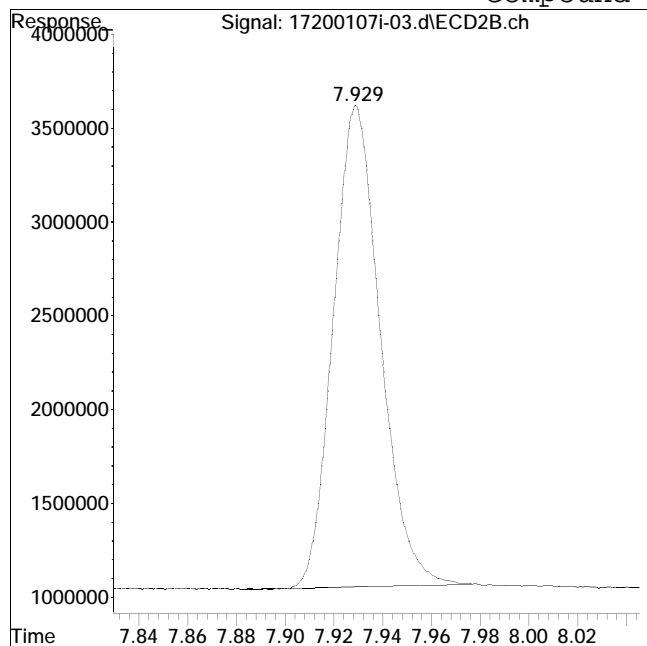
Original Peak Response = 34352027   Manual Peak Response = 35448623 M4
M4 = Poor automated baseline construction.

```
Data Path    : I:\Pest17\200107ICAL\      QMethod     : Herb17_12_19_ICAL.m
Data File    : 17200107i-03.d             Operator    : PEST17:dgm
Date Inj'd   : 1/7/2020   3:24 pm         Instrument  : Pest 17
Sample       : il2herb,42e,,9500          Quant Date  : 1/9/2020 11:26 am
```

Compound #11: 2,4-DB
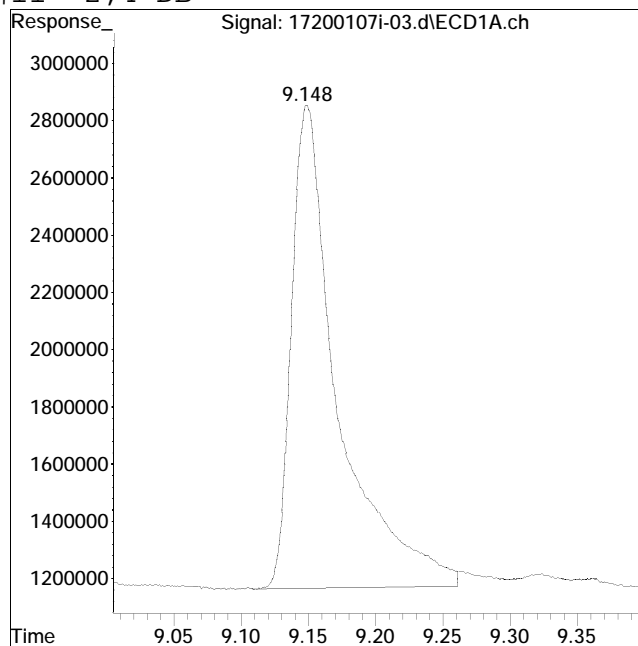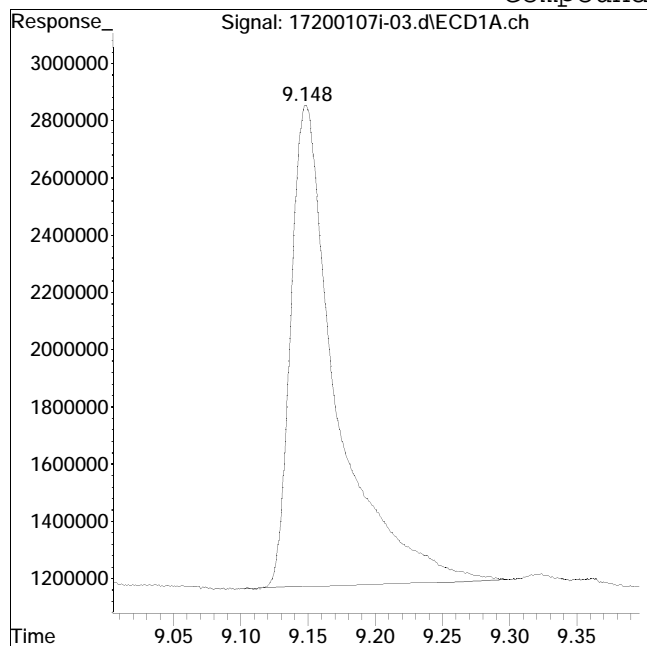
Original Peak Response = 40127567

Manual Peak Response = 40709818 M4

M4 = Poor automated baseline construction.

```
                     Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-04.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   3:42 pm
   Operator  : PEST17:dgm
   Sample    : il3herb,42e,,9501
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 4    Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 09 11:39:30 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 10:35:23 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.   :
   Signal #1 Phase :                     Signal #2 Phase:
   Signal #1 Info  :                     Signal #2 Info :

   Sub List     : Default - All compounds listed

          Compound      RT#1     RT#2    Resp#1   Resp#2    mg/l       mg/l
   ------------------------------------------------------------------------
    Internal Standards
1) i   4,4'-DBOB      8.197    8.475   796.3E6  681.0E6   0.250M2    0.250M2


    System Monitoring Compounds
3) s   DCAA (surrog   6.654    7.408  95790309 96490189   0.184M2    0.188M2

  Spiked Amount     0.500 Range  30 - 150  Recovery   =   36.80%    37.60%

    Target Compounds
2) t   Dalapon        1.712    1.975  97289172 90365682   0.181M2    0.182M2

4) t   Dicamba        6.833    7.587   305.6E6  281.6E6   0.188M2    0.188M3

5) t   MCPP           7.041    7.700  38629061 36743297  17.563M2   18.943M2

6) t   MCPA           7.189    7.928  64248276 60240813  19.265M2   18.502M2

7) t   Dichloroprop   7.543    8.248  90098567 82221218   0.190M2    0.190M2

8) t   2,4-D          7.770    8.531   107.0E6  115.8E6   0.182M2    0.190M2

9) t   2,4,5-TP (Si   8.487    9.182   417.0E6  372.4E6   0.192M2    0.188M2

10) t  2,4,5-T        8.712    9.472   456.8E6  361.6E6   0.171M2    0.190M2

11) t  2,4-DB         9.141    9.841  72045431 61499955   0.176M4    0.189M3

12) t  Dinoseb        9.861   10.051   313.0E6  205.3E6   0.190M2    0.190M2


    SemiQuant Compounds - Not Calibrated on this Instrument
   ------------------------------------------------------------------------

Herb17_12_19_ICAL.m Fri Jan 10 18:31:38 2020                        Page: 1
```

```
Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-04.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  7 Jan 2020   3:42 pm
Operator  : PEST17:dgm
Sample    : il3herb,42e,,9501
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 4   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:39:30 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 10:35:23 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :


Sub List     : Default - All compounds listed
```
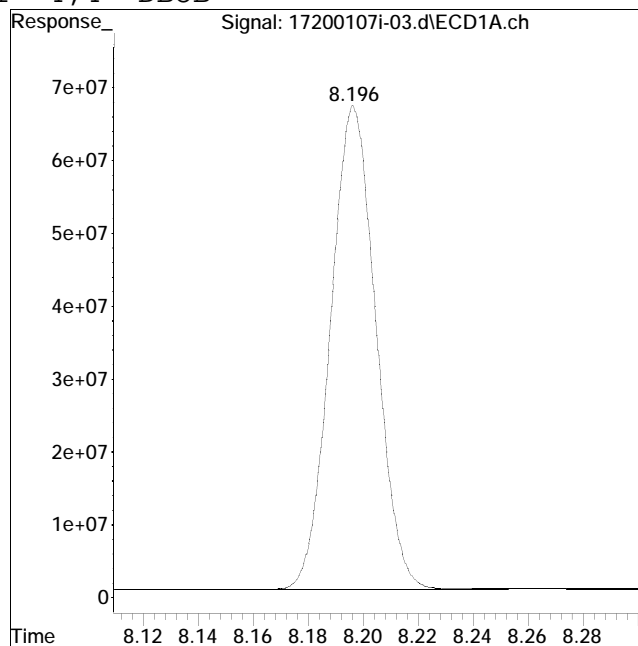
Compound	RT#1	RT#2	Resp#1	Resp#2	mg/l	mg/l

```
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

```
Sub List     : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-04.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    :   7 Jan 2020   3:42 pm
Operator  : PEST17:dgm
Sample    : il3herb,42e,,9501
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 4    Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:39:30 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 10:35:23 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```
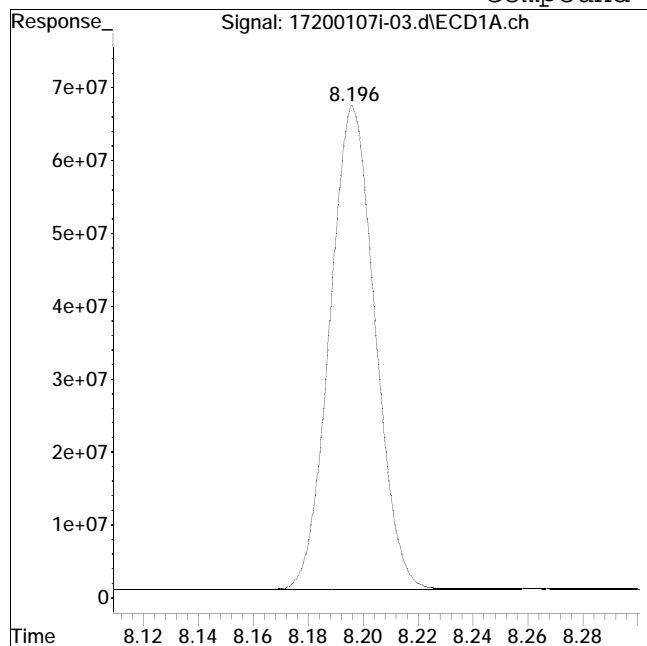

Signal: 17200107i-04.d\ECD1A.ch

Signal: 17200107i-04.d\ECD2B.ch

#2 Dalapon

```
        R.T.:     1.712 min
  Delta R.T.:     0.000 min
    Response:  97289172
        Conc:    0.18 mg/l M2
```
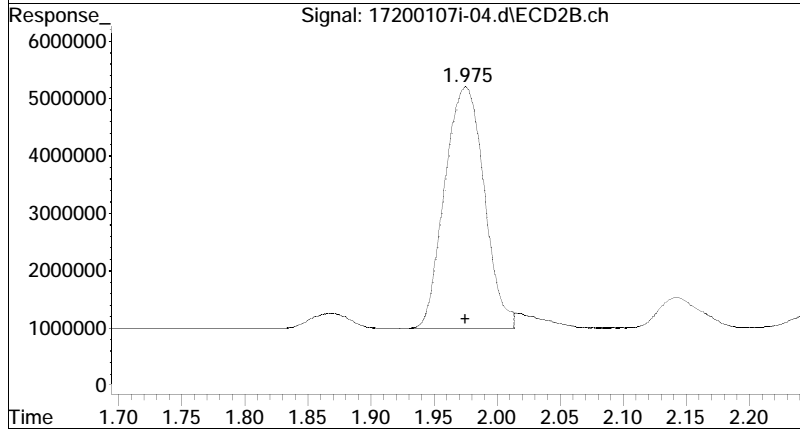
#2 Dalapon

```
        R.T.:     1.975 min
  Delta R.T.:     0.000 min
    Response:  90365682
        Conc:    0.18 mg/l m
```

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:38 2020 Page 5
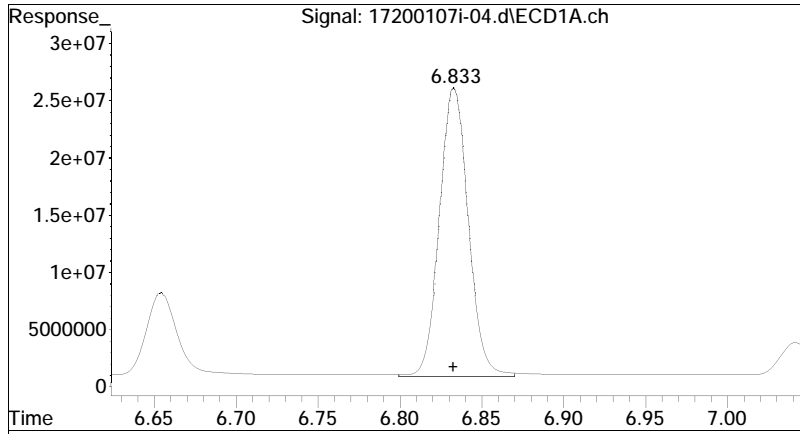
#4 Dicamba

```
        R.T.:      6.833 min
Delta R.T.:      0.000 min
   Response: 305608176
       Conc:    0.19 mg/l M3
```
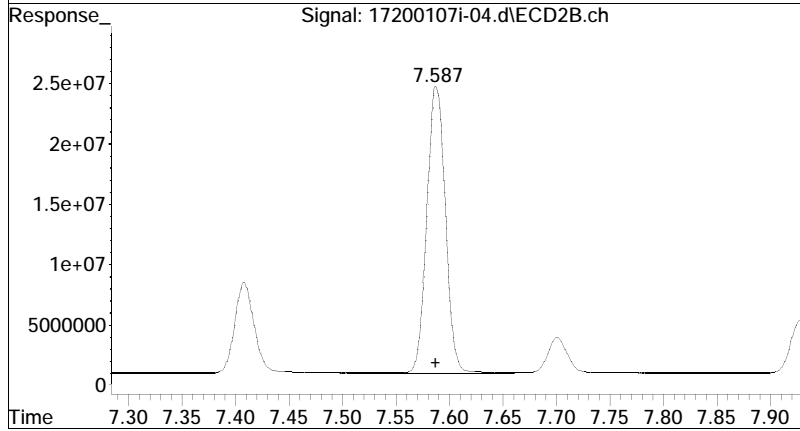
#4 Dicamba

```
        R.T.:      7.587 min
Delta R.T.:      0.000 min
   Response: 281575165
       Conc:    0.19 mg/l m
```

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:39 2020 Page 6

Signal: 17200107i-04.d\ECD1A.ch
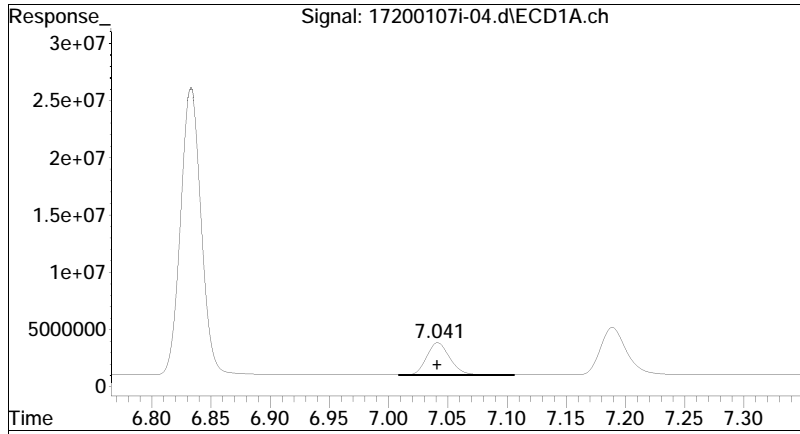
#5   MCPP

       R.T.:   7.041 min
Delta R.T.:   0.000 min
   Response: 38629061
       Conc: 17.56 mg/l M2

Signal: 17200107i-04.d\ECD2B.ch
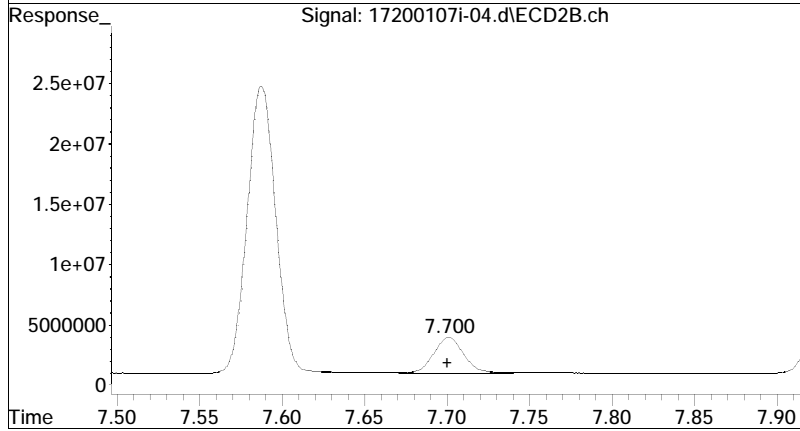
#5   MCPP

       R.T.:   7.700 min
Delta R.T.:   0.000 min
   Response: 36743297
       Conc: 18.94 mg/l m

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:39 2020 Page 7

Signal: 17200107i-04.d\ECD1A.ch
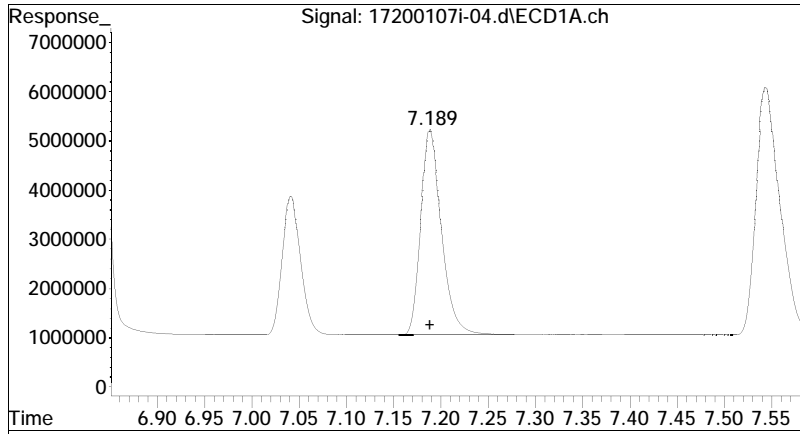
#6 MCPA

        R.T.:   7.189 min
Delta R.T.:   0.000 min
  Response: 64248276
      Conc: 19.27 mg/l M2

Signal: 17200107i-04.d\ECD2B.ch
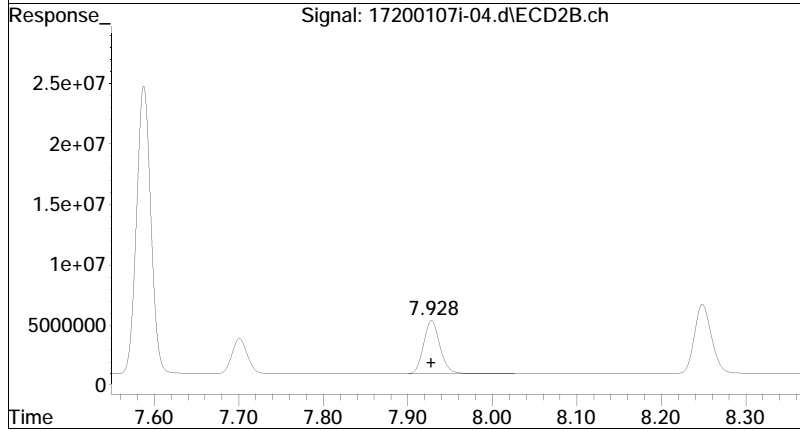
#6 MCPA

        R.T.:   7.928 min
Delta R.T.:   0.000 min
  Response: 60240813
      Conc: 18.50 mg/l m

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:39 2020 Page 8
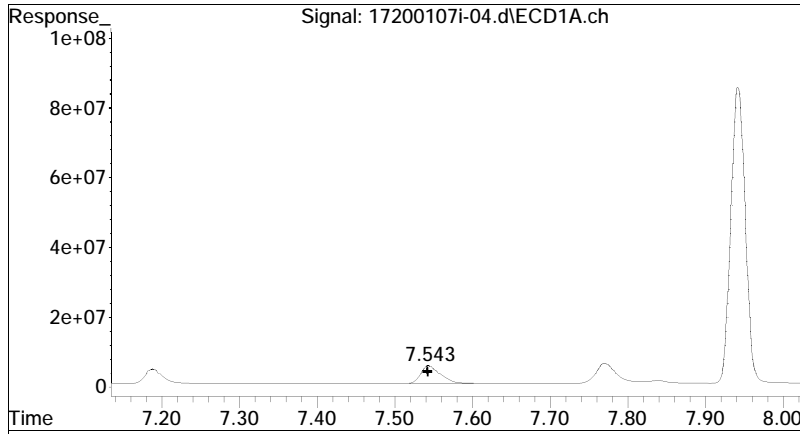
#7 Dichloroprop

            R.T.:   7.543 min
    Delta R.T.:   0.000 min
      Response: 90098567
          Conc: 0.19 mg/l M2
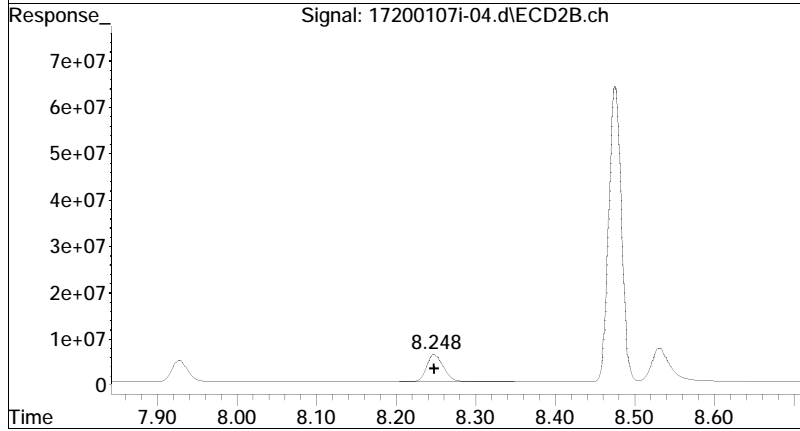
#7 Dichloroprop

            R.T.:   8.248 min
    Delta R.T.:   0.000 min
      Response: 82221218
          Conc: 0.19 mg/l m

Signal: 17200107i-04.d\ECD1A.ch
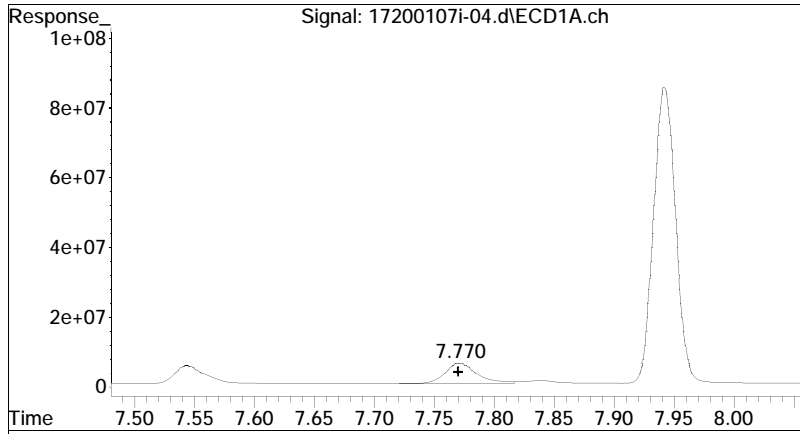
#8 2,4-D

R.T.:   7.770 min
Delta R.T.:   0.000 min
Response: 106956455
Conc: 0.18 mg/l M2

Signal: 17200107i-04.d\ECD2B.ch
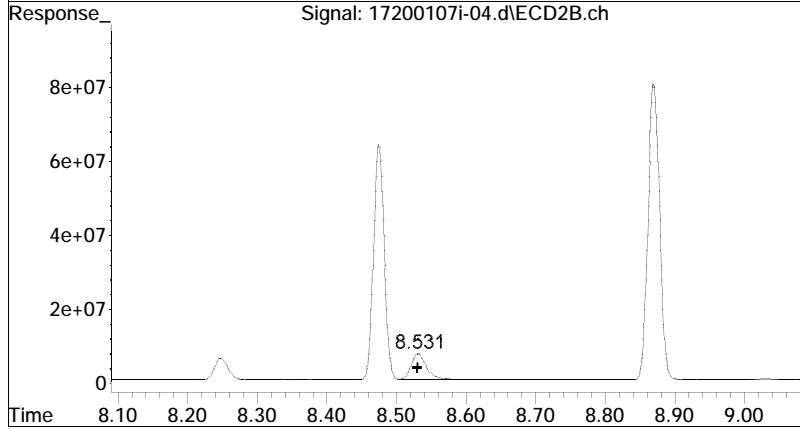
#8 2,4-D

R.T.:   8.531 min
Delta R.T.:   0.000 min
Response: 115777057
Conc: 0.19 mg/l m

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:39 2020 Page 10
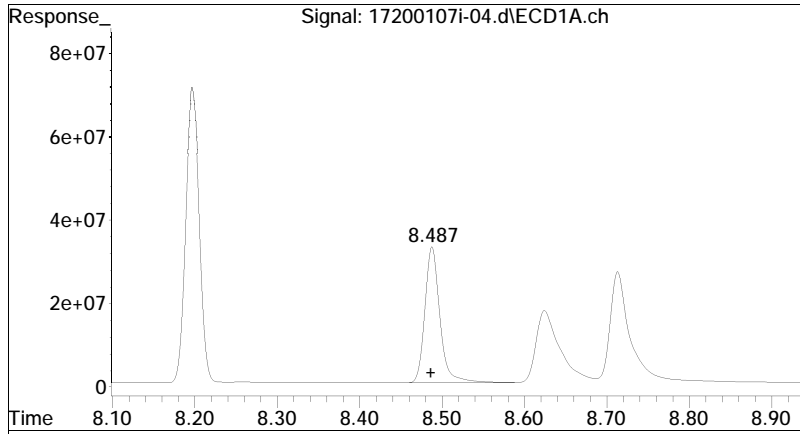
#9 2,4,5-TP (Silvex)

```
        R.T.:     8.487 min
Delta R.T.:      0.000 min
    Response: 416992286
        Conc:    0.19 mg/l M2
```
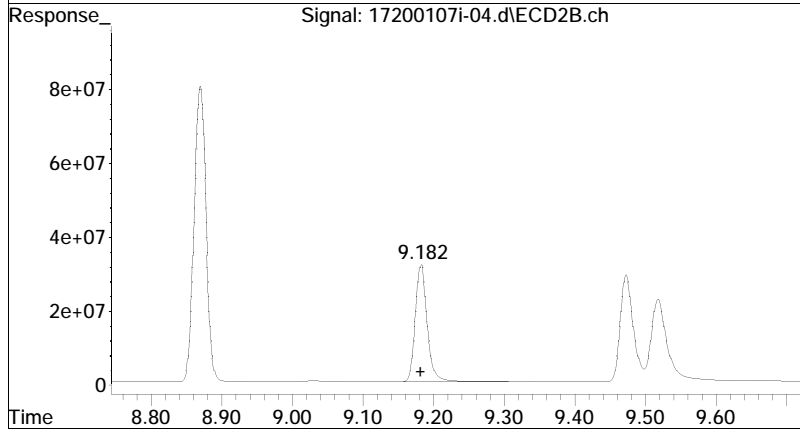
#9 2,4,5-TP (Silvex)

```
        R.T.:     9.182 min
Delta R.T.:      0.000 min
    Response: 372387702
        Conc:    0.19 mg/l m
```

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:40 2020 Page 11
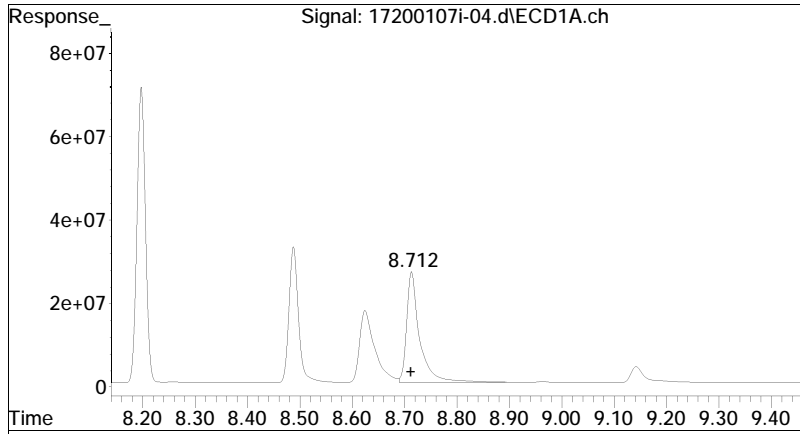
#10 2,4,5-T

       R.T.:   8.712 min
Delta R.T.:   0.000 min
  Response: 456798088
       Conc: 0.17 mg/l M2
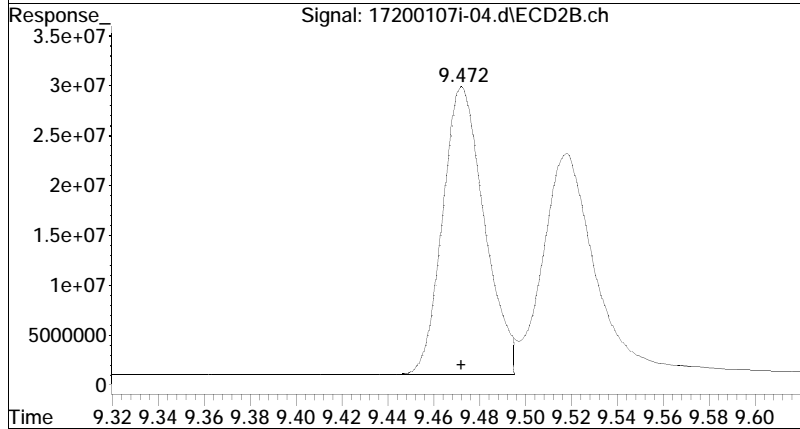
#10 2,4,5-T

       R.T.:   9.472 min
Delta R.T.:   0.000 min
  Response: 361643435
       Conc: 0.19 mg/l m

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:40 2020 Page 12

Signal: 17200107i-04.d\ECD1A.ch
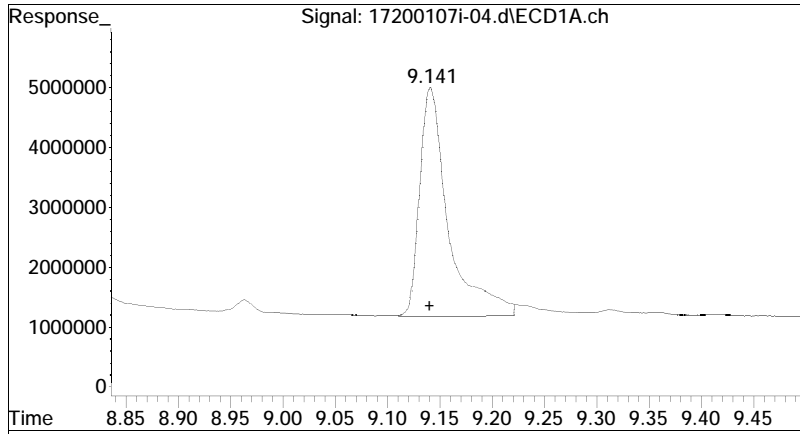
#11 2,4-DB

R.T.:   9.141 min
Delta R.T.:   0.000 min
Response: 72045431
Conc: 0.18 mg/l M3

Signal: 17200107i-04.d\ECD2B.ch
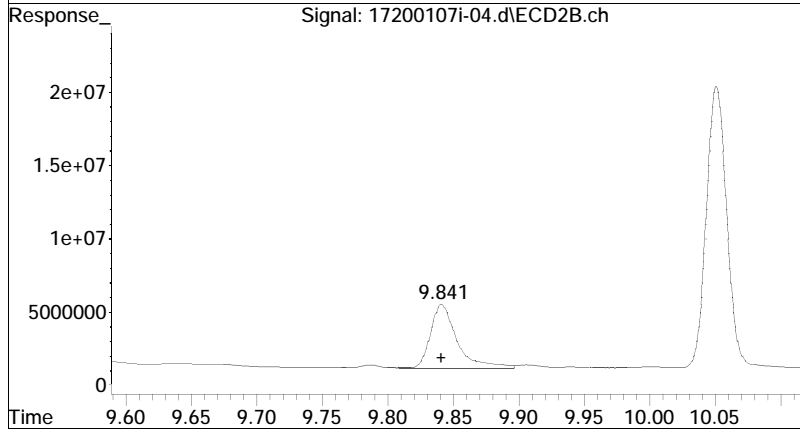
#11 2,4-DB

R.T.:   9.841 min
Delta R.T.:   0.000 min
Response: 61499955
Conc: 0.19 mg/l m

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:40 2020 Page 13
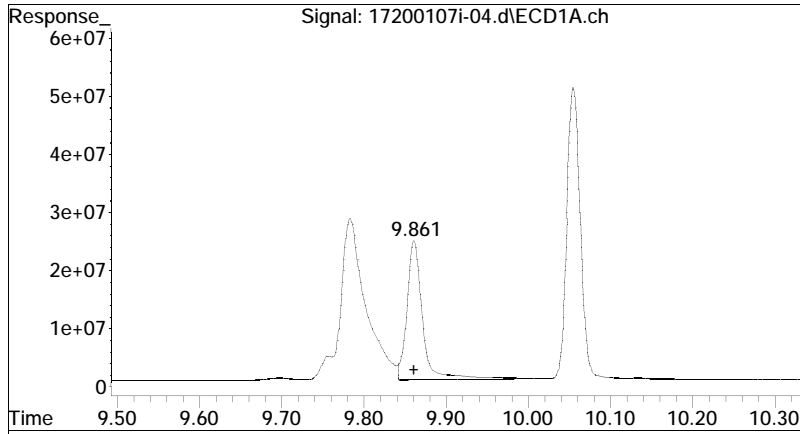
#12 Dinoseb

```
       R.T.:     9.861 min
Delta R.T.:     0.000 min
   Response: 312976309
      Conc:    0.19 mg/l M2
```
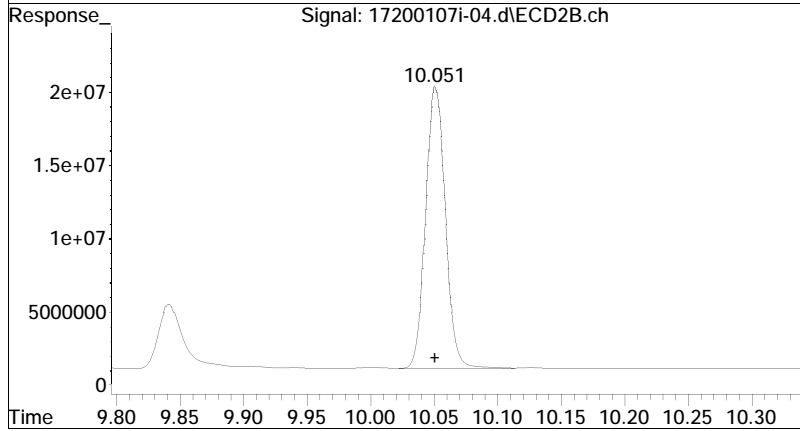

#12 Dinoseb

```
       R.T.:    10.051 min
Delta R.T.:     0.000 min
   Response: 205284200
      Conc:    0.19 mg/l m
```

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #1: 4,4'-DBOB
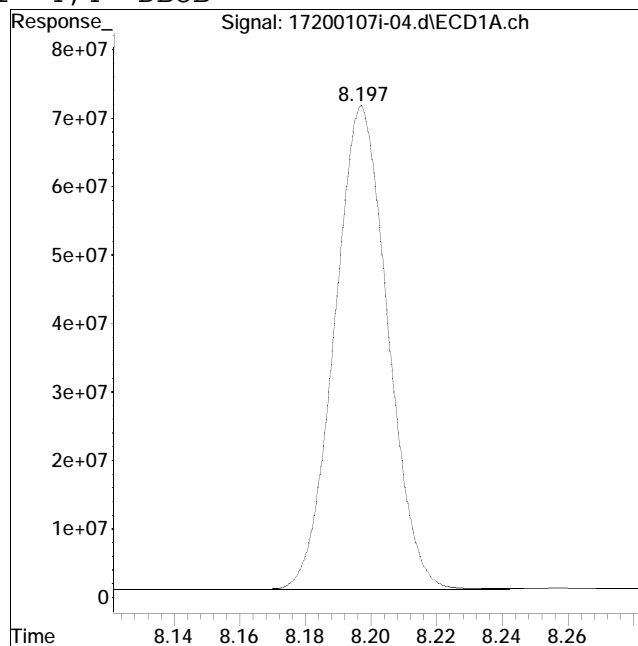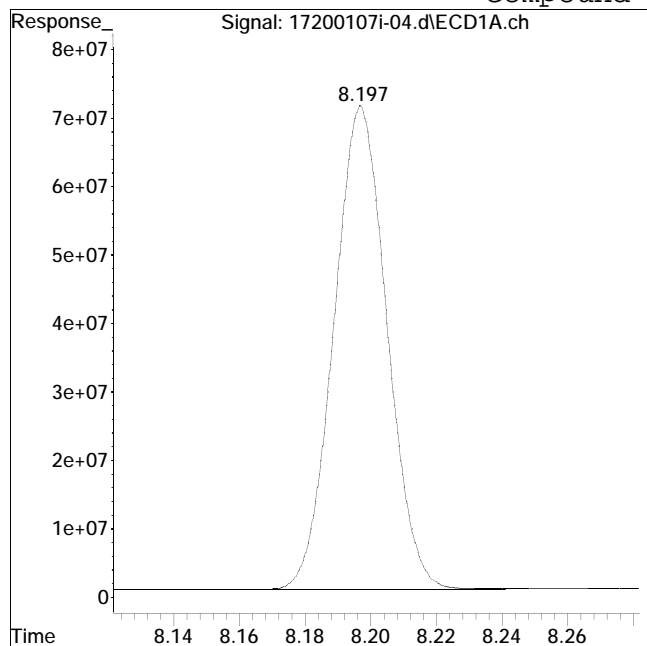
Original Peak Response = 795357346   Manual Peak Response = 796330900 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:41 2020   Page 1

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #14: 4,4'-DBOB #2

Original Peak Response = 680132229   Manual Peak Response = 681016559 M2
M2 = Peak not found by automatic integration algorithm.

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #2: Dalapon

Original Peak Response = 96688211   Manual Peak Response = 97289172 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:41 2020   Page 3

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #15: Dalapon #2

Original Peak Response = 94513643   Manual Peak Response = 90365682 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

```
Data Path   : I:\Pest17\200107ICAL\      QMethod     : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d             Operator    : PEST17:dgm
Date Inj'd  : 1/7/2020  3:42 pm          Instrument  : Pest 17
Sample      : il3herb,42e,,9501          Quant Date  : 1/9/2020 10:37 am
```

Compound #3: DCAA (surrogate)
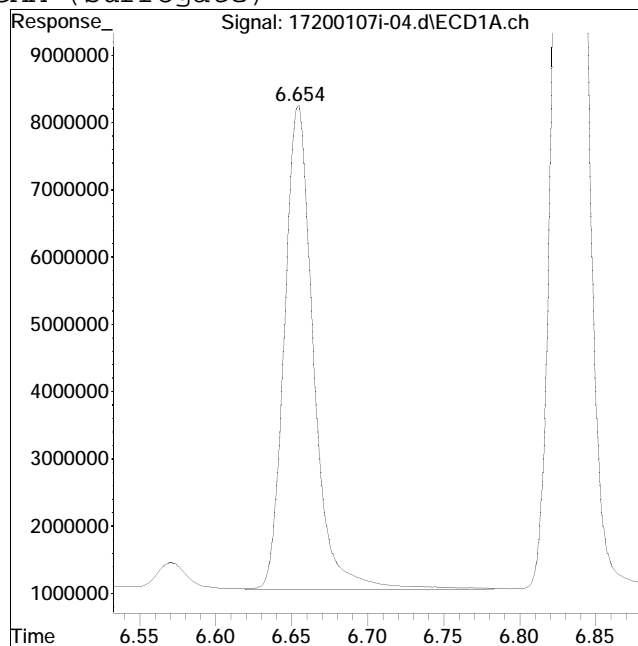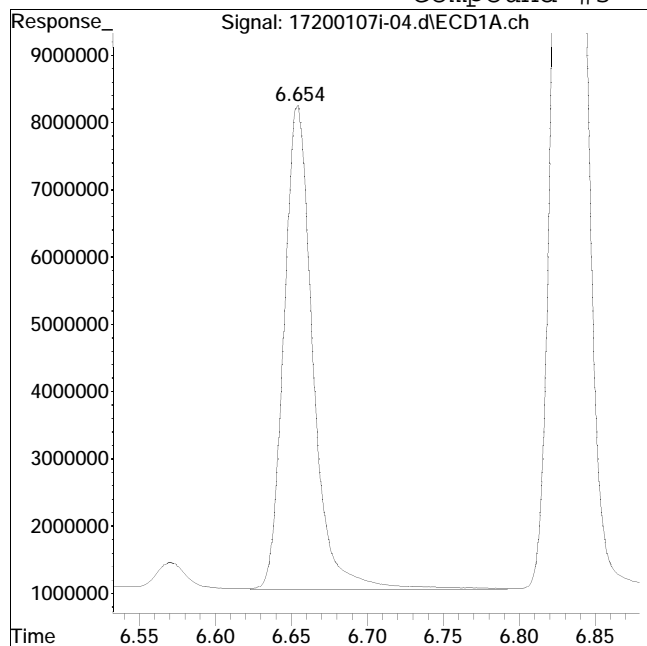
Original Peak Response = 96101209   Manual Peak Response = 95790309 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #16: DCAA (surrogate) #2
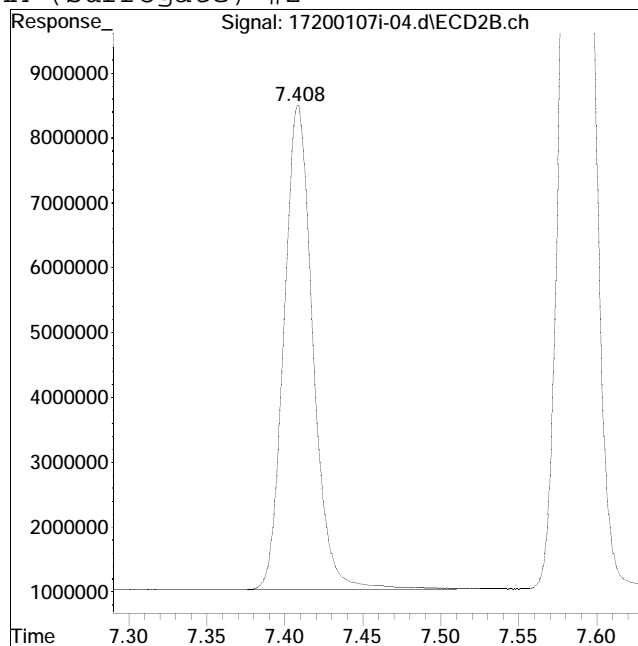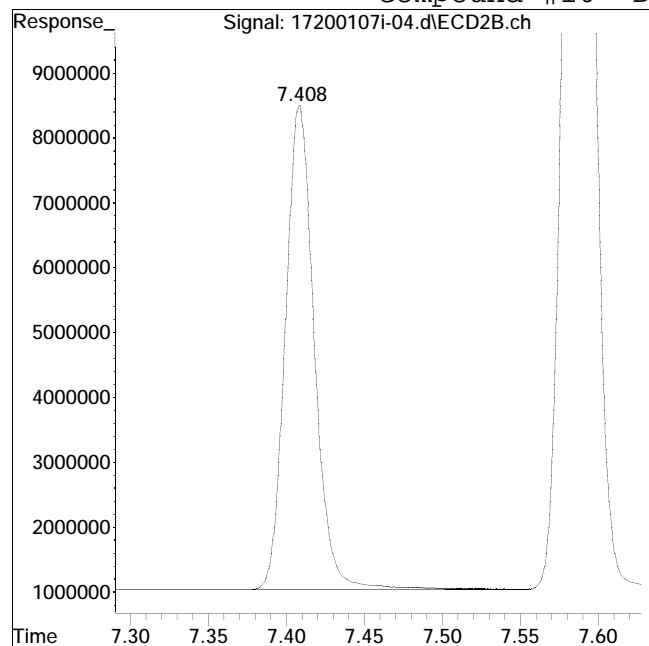
Original Peak Response = 96004591   Manual Peak Response = 96490189 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:42 2020   Page 6

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #4: Dicamba
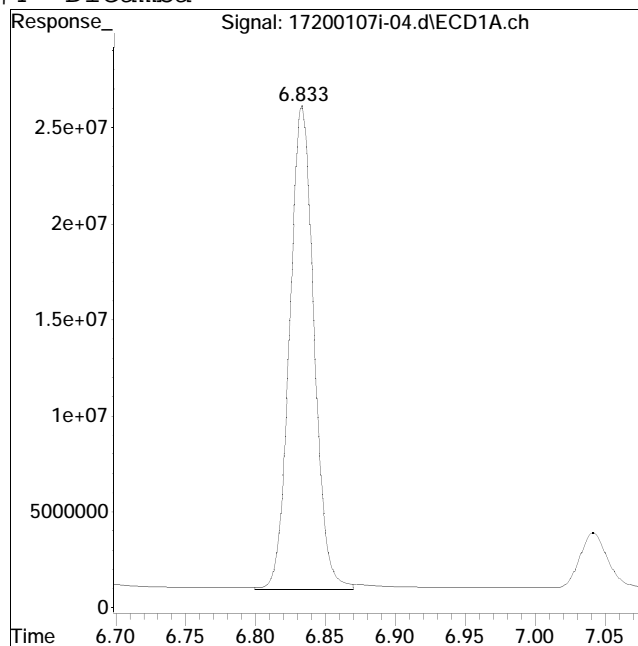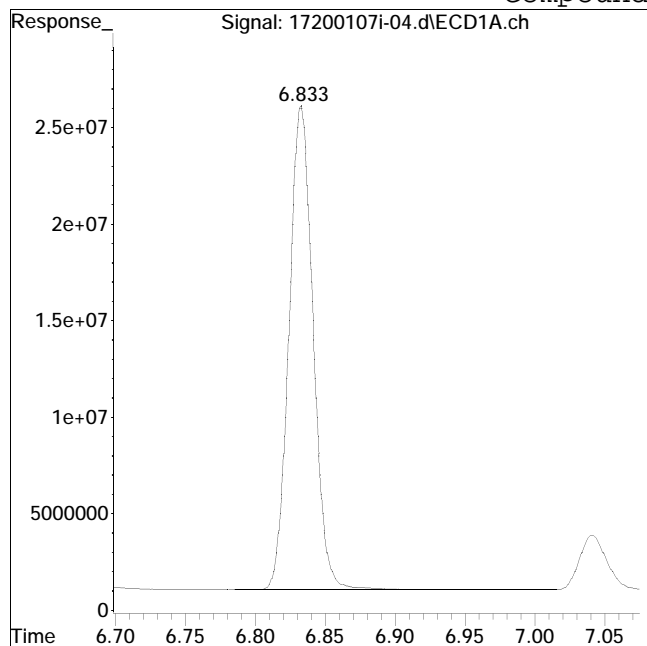
Original Peak Response = 302227486   Manual Peak Response = 305608176 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument   : Pest 17
Sample   : il3herb,42e,,9501   Quant Date   : 1/9/2020 10:37 am

Compound #17: Dicamba #2
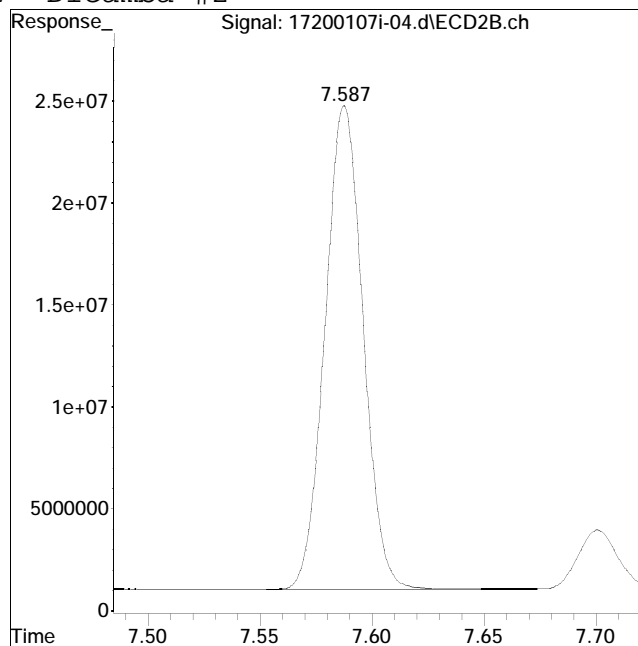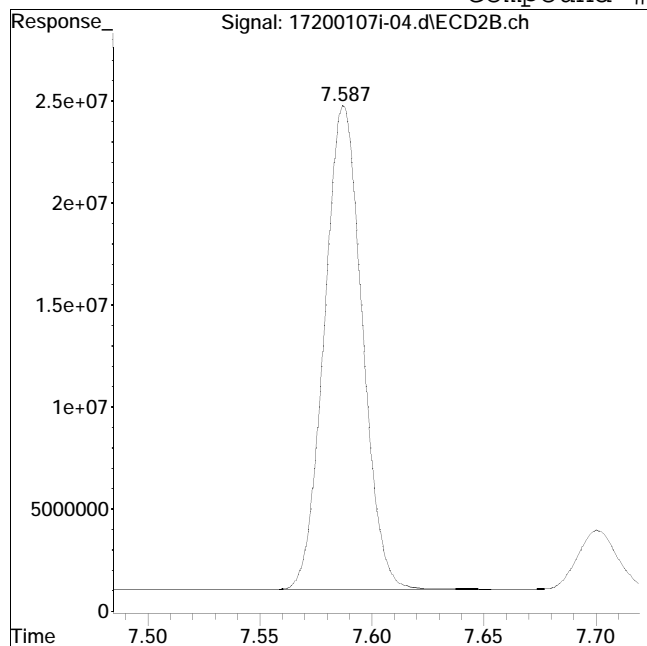
Original Peak Response = 280056900   Manual Peak Response = 281575165 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as
1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks
not being split.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #5: MCPP
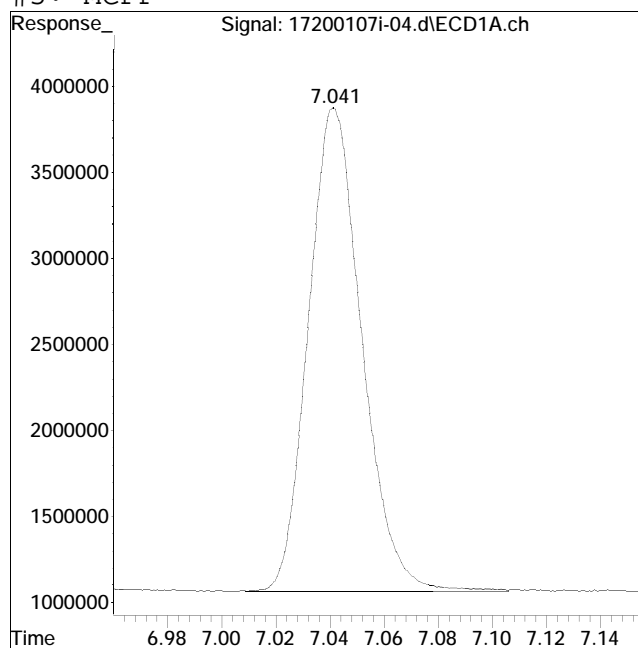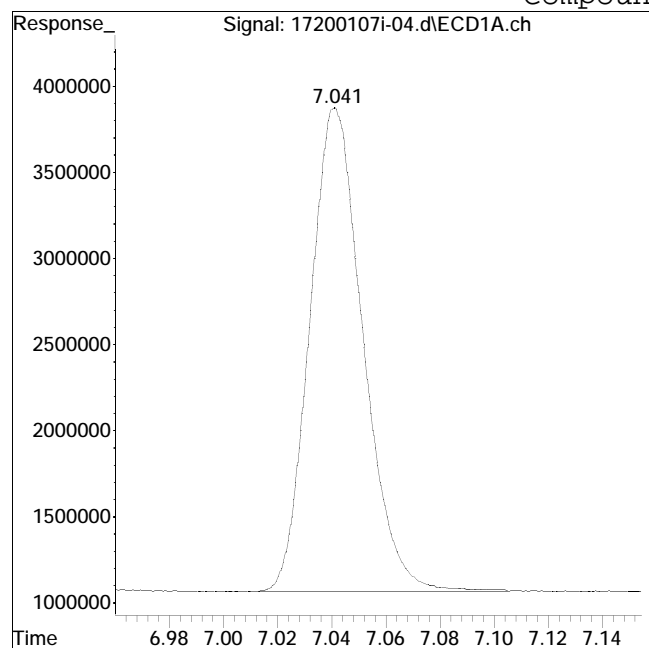
Original Peak Response = 38287527   Manual Peak Response = 38629061 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020   3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #18: MCPP #2
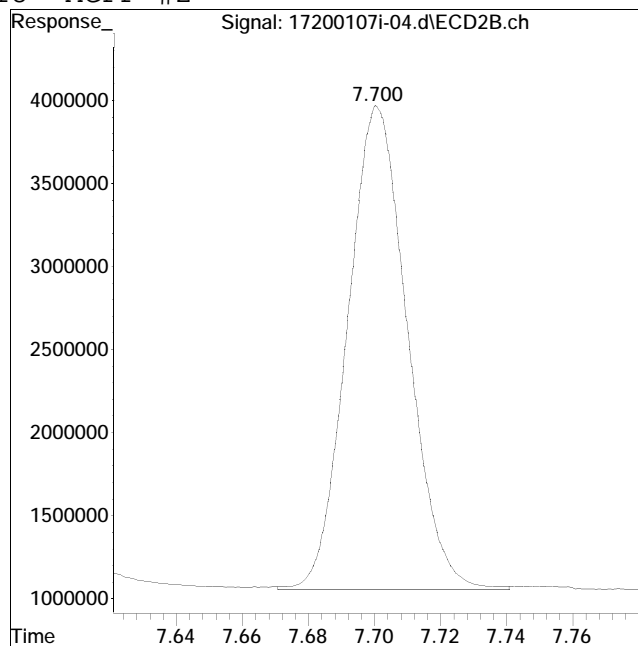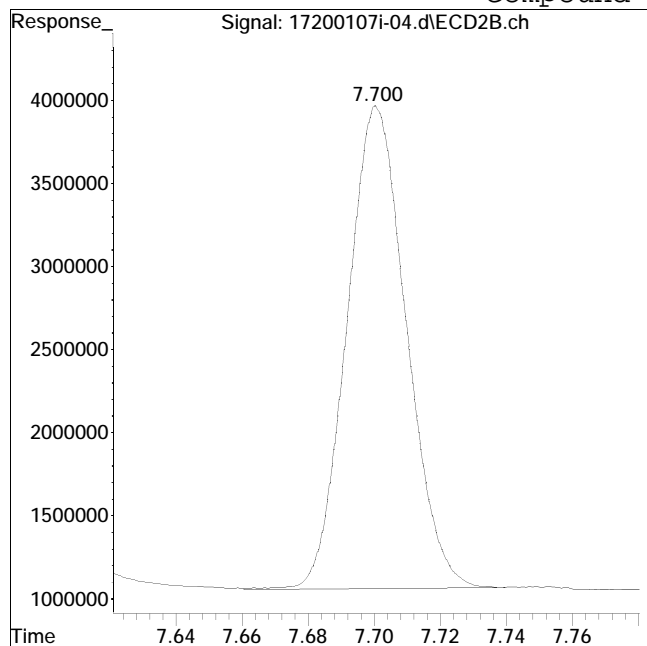
Original Peak Response = 36154051   Manual Peak Response = 36743297 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:43 2020   Page 10

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument   : Pest 17
Sample   : il3herb,42e,,9501   Quant Date   : 1/9/2020 10:37 am

Compound #6: MCPA
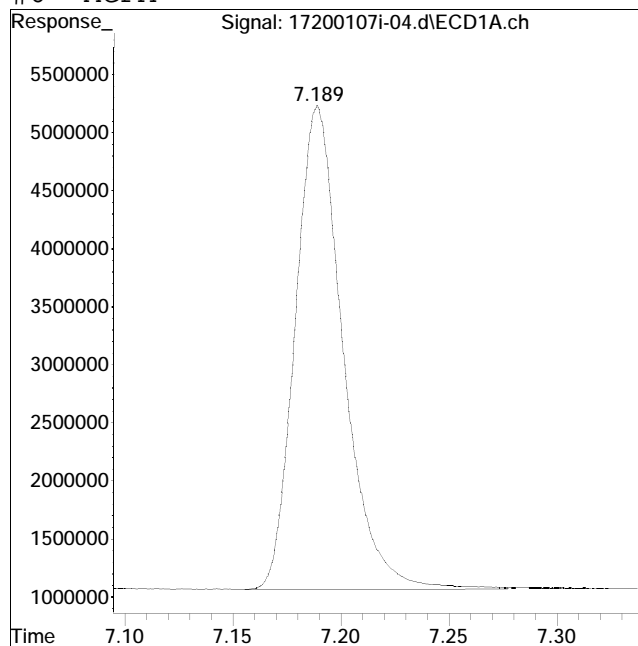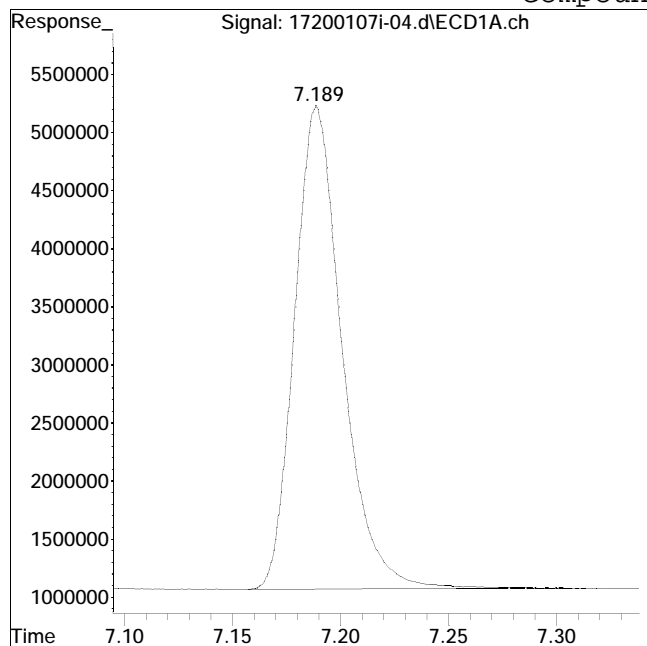
Original Peak Response = 63739076   Manual Peak Response = 64248276 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #19: MCPA #2
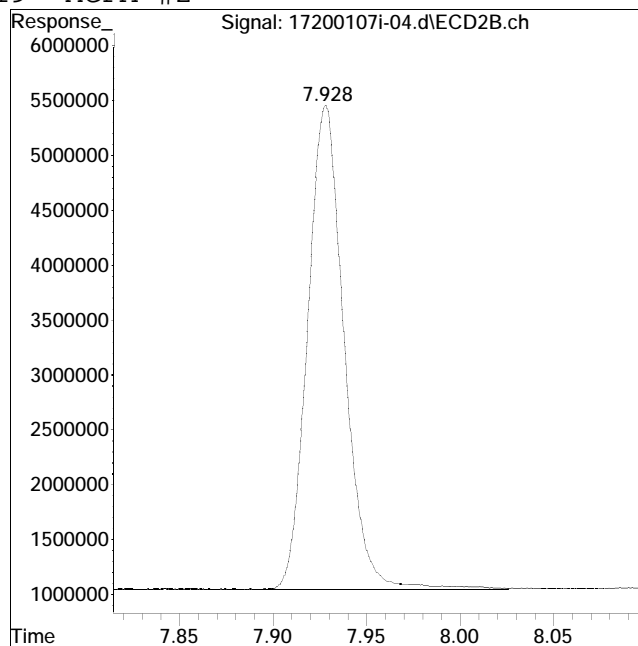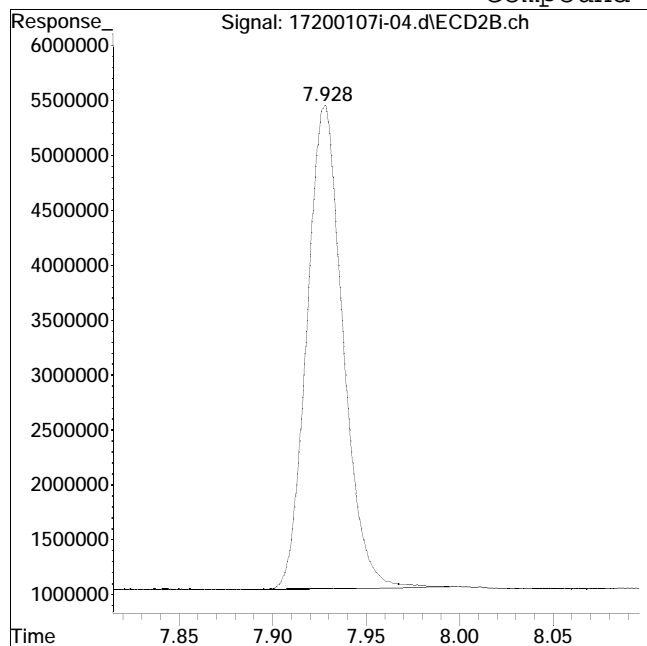
Original Peak Response = 58888680   Manual Peak Response = 60240813 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:43 2020   Page 12

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #7: Dichloroprop
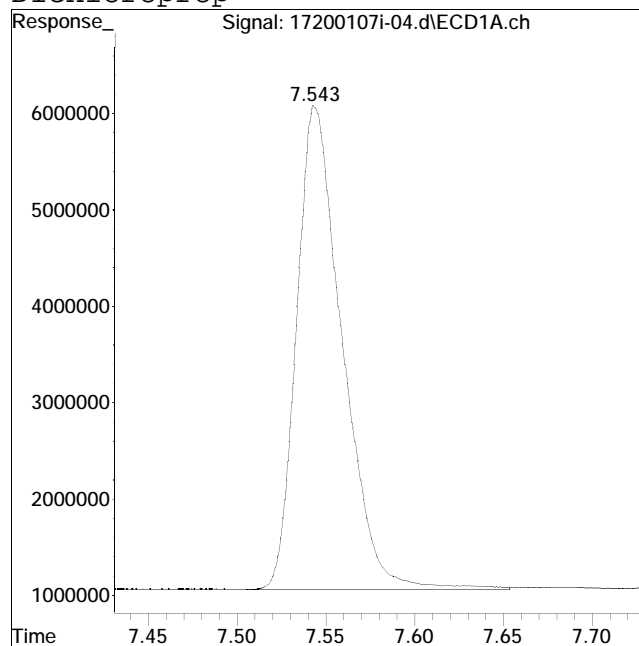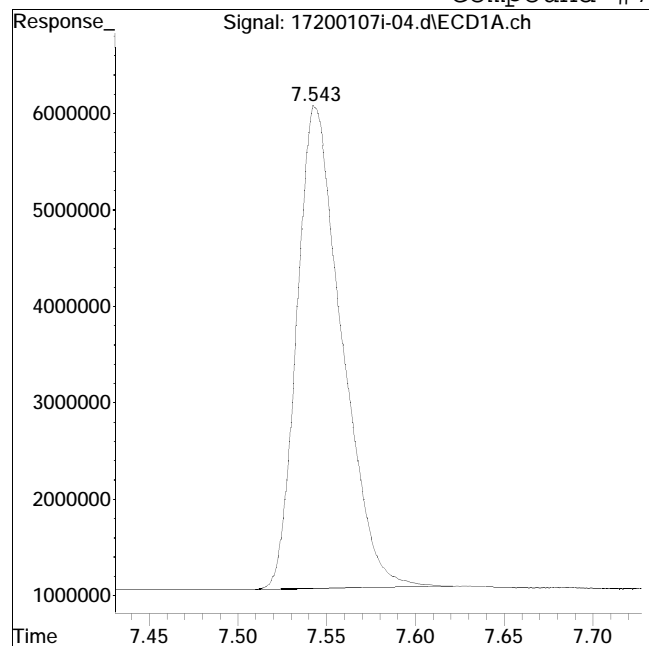
Original Peak Response = 87827393   Manual Peak Response = 90098567 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:43 2020 Page 13

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #20: Dichloroprop #2

Original Peak Response = 81224243   Manual Peak Response = 82221218 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:44 2020   Page 14

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #8: 2,4-D

Original Peak Response = 104891985   Manual Peak Response = 106956455 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:44 2020 Page 15

Manual Integration Report

```
Data Path    : I:\Pest17\200107ICAL\      QMethod     : Herb17_12_19_ICAL.m
Data File    : 17200107i-04.d             Operator    : PEST17:dgm
Date Inj'd   : 1/7/2020  3:42 pm          Instrument  : Pest 17
Sample       : il3herb,42e,,9501          Quant Date  : 1/9/2020 10:37 am
```

Compound #21: 2,4-D #2

Original Peak Response = 113277968   Manual Peak Response = 115777057 M2
M2 = Peak not found by automatic integration algorithm.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #9: 2,4,5-TP (Silvex)

Original Peak Response = 413941726   Manual Peak Response = 416992286 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #22: 2,4,5-TP (Silvex) #2
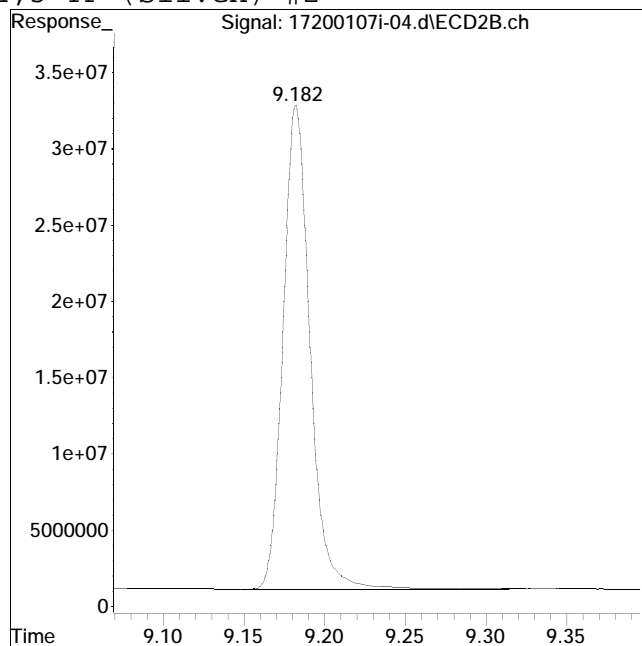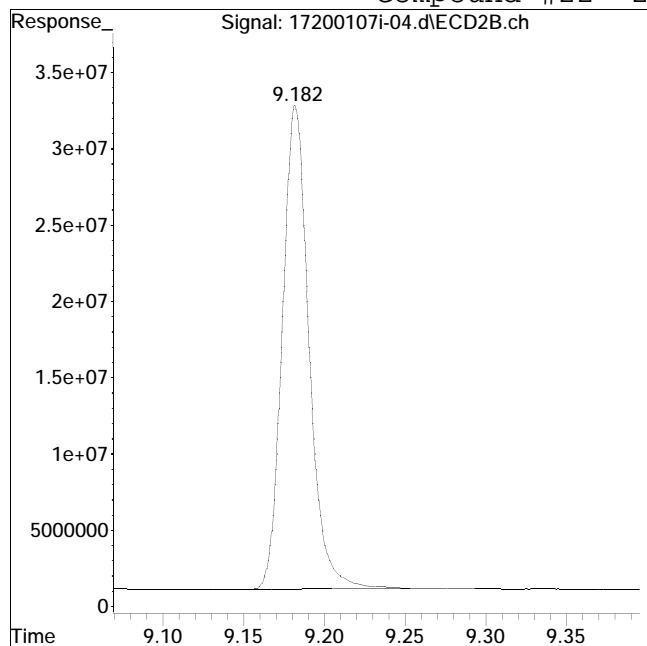
Original Peak Response = 364191063   Manual Peak Response = 372387702 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:45 2020 Page 18

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #10: 2,4,5-T
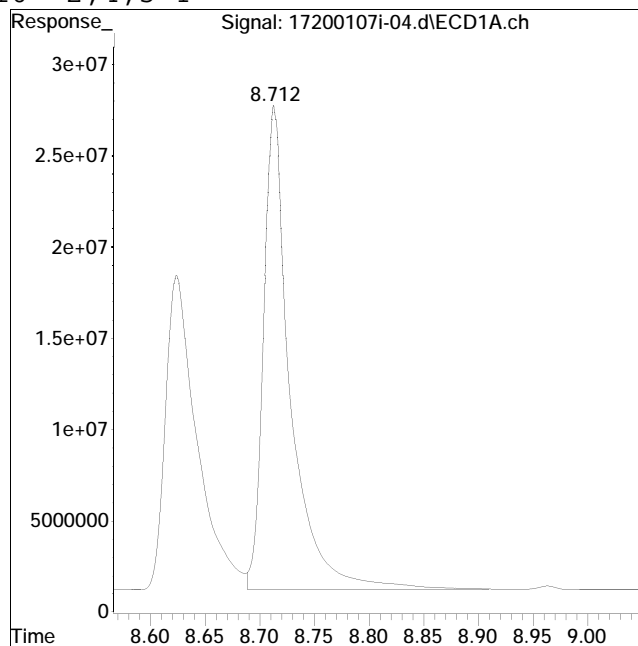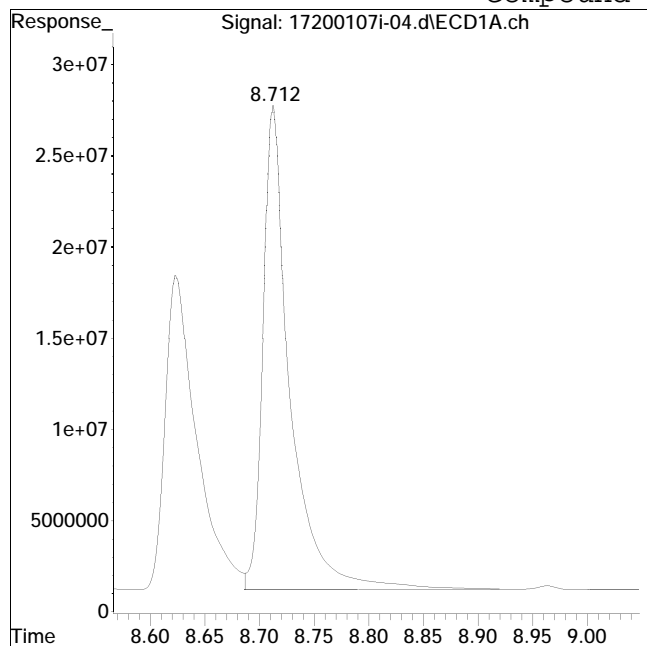
Original Peak Response = 460841466   Manual Peak Response = 456798088 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:45 2020 Page 19

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument   : Pest 17
Sample   : il3herb,42e,,9501   Quant Date   : 1/9/2020 10:37 am

Compound #23: 2,4,5-T #2
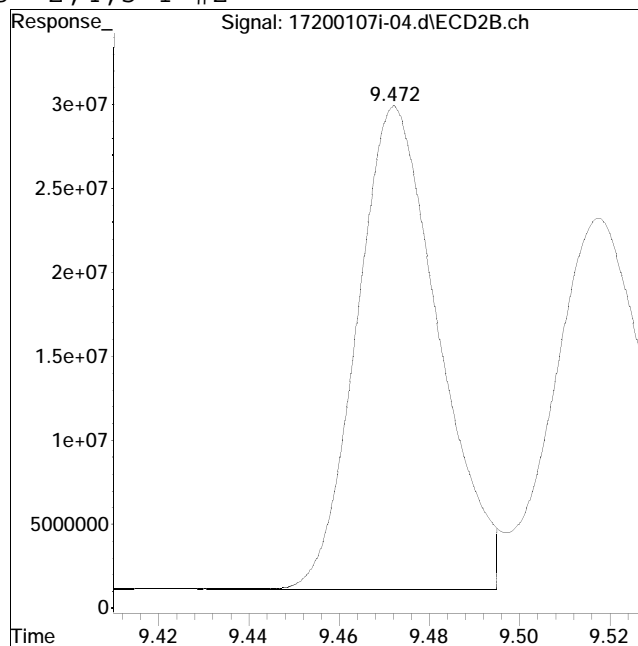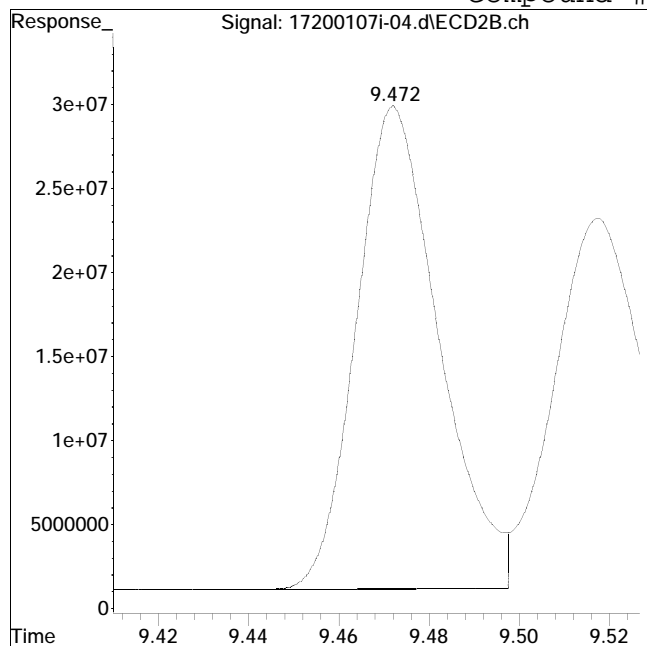
Original Peak Response = 363822709   Manual Peak Response = 361643435 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:45 2020   Page 20

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument   : Pest 17
Sample   : il3herb,42e,,9501   Quant Date   : 1/9/2020 10:37 am

Compound #11: 2,4-DB

Original Peak Response = 73615760   Manual Peak Response = 72045431 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #24: 2,4-DB #2
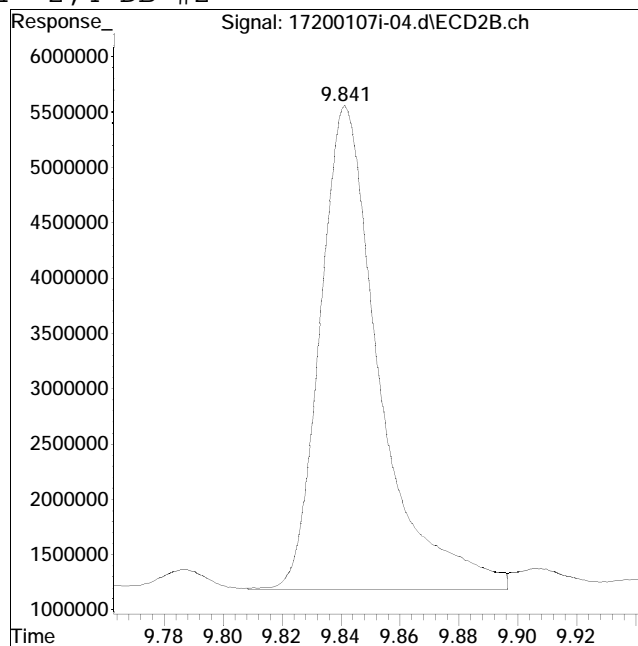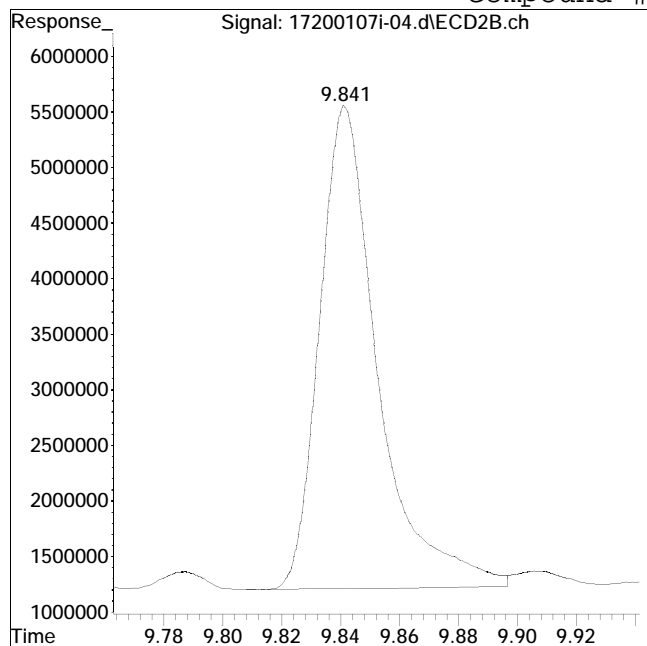
Original Peak Response = 59444920   Manual Peak Response = 61499955 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as
1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks
not being split.

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Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #12: Dinoseb
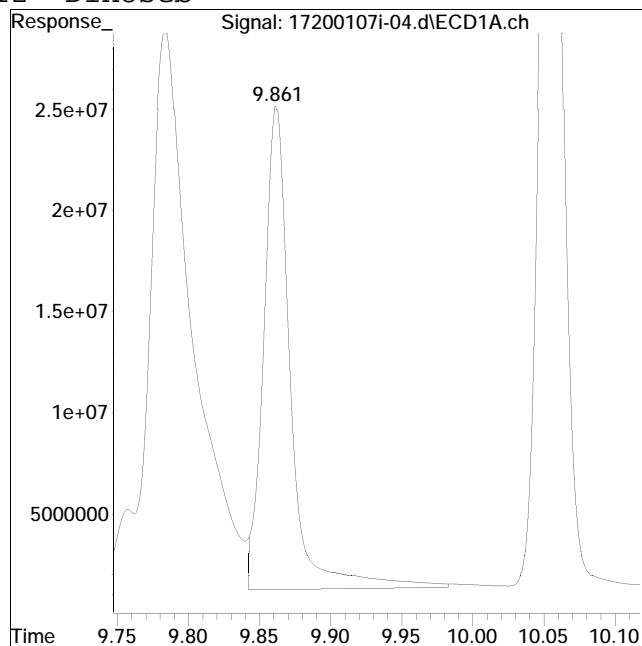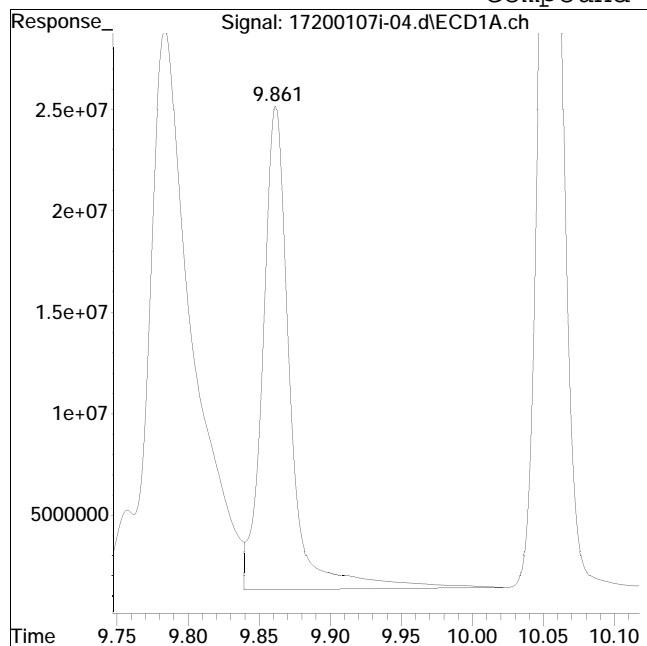
Original Peak Response = 315386356   Manual Peak Response = 312976309 M2
M2 = Peak not found by automatic integration algorithm.

17200107i-04.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:46 2020 Page 23

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-04.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 3:42 pm   Instrument : Pest 17
Sample   : il3herb,42e,,9501   Quant Date : 1/9/2020 10:37 am

Compound #25: Dinoseb #2
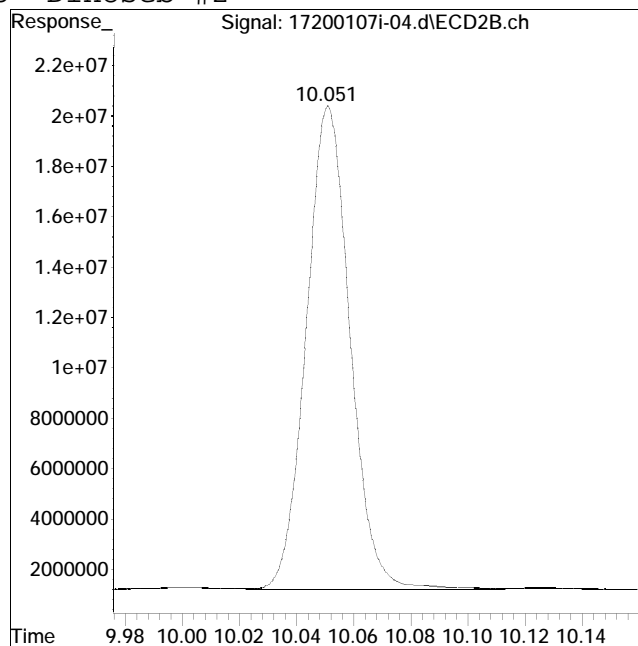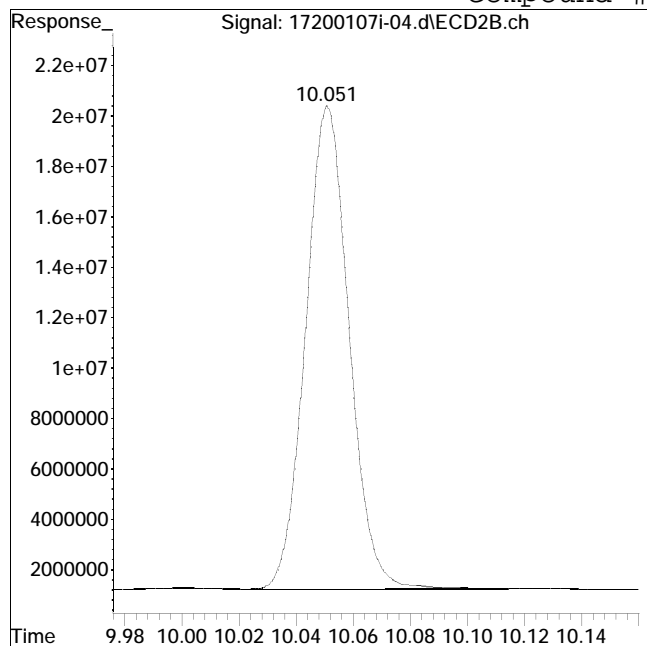
Original Peak Response = 203054367   Manual Peak Response = 205284200 M2
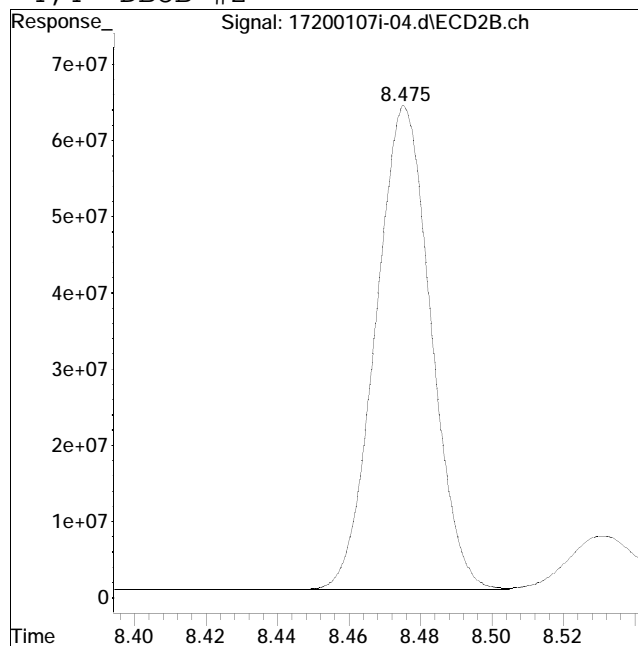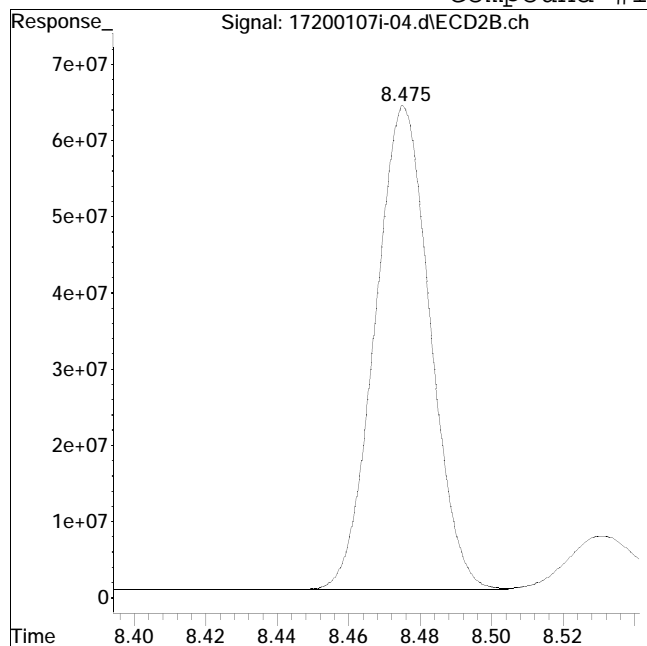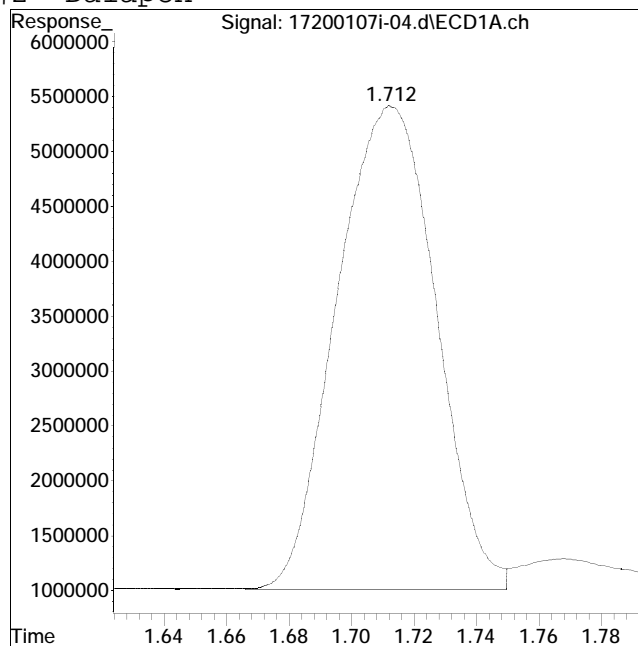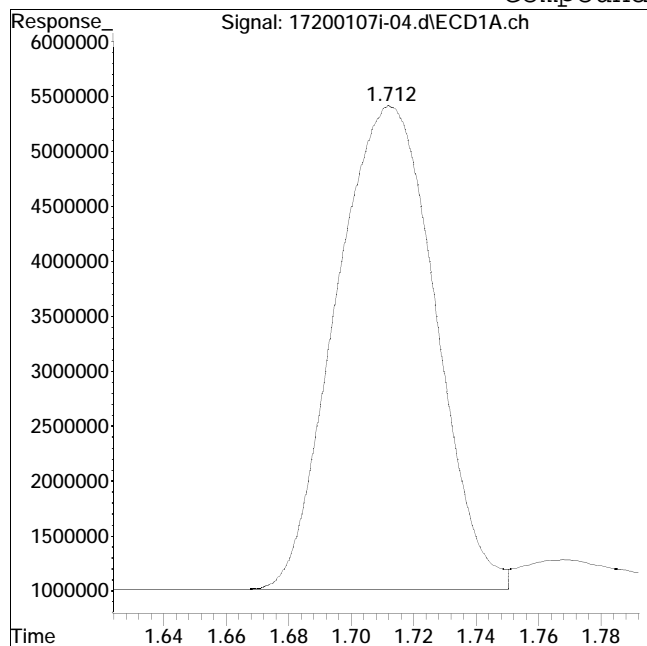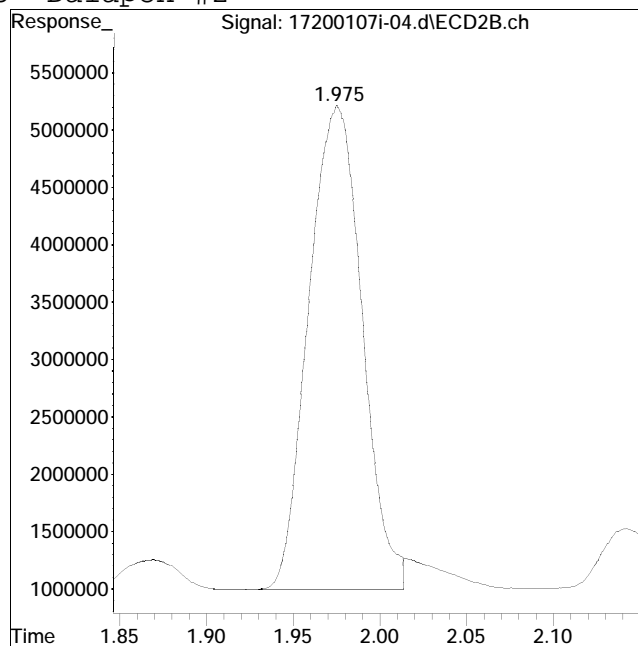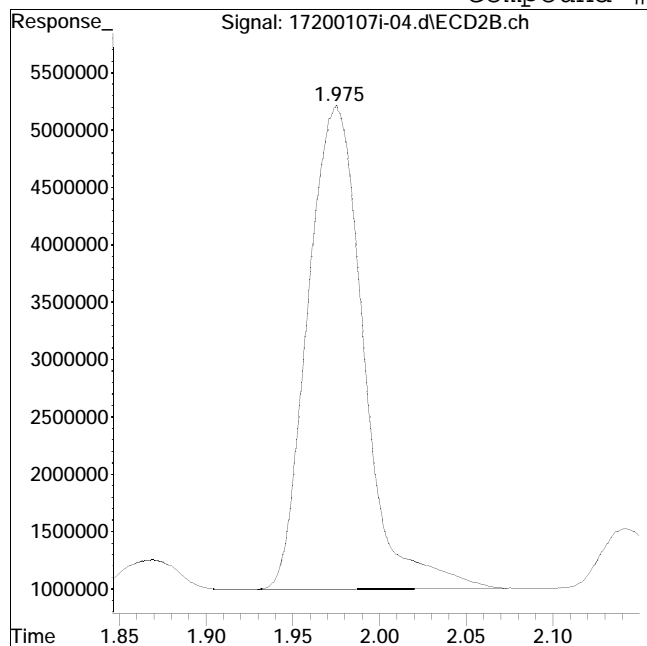M2 = Peak not found by automatic integration algorithm.

```
                      Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-05.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   4:00 pm
   Operator  : PEST17:dgm
   Sample    : il4herb,42e,,9502
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 5   Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 09 11:39:45 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 10:44:44 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :

   Sub List      : Default - All compounds listed

         Compound       RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   -------------------------------------------------------------------------
   Internal Standards
 1) i  4,4'-DBOB      8.198    8.476   687.5E6  591.1E6   0.250       0.250

   System Monitoring Compounds
 3) s  DCAA (surrog   6.649    7.406   206.3E6  208.4E6   0.469       0.468
  Spiked Amount     0.500 Range  30 - 150  Recovery  =   93.80%      93.60%

   Target Compounds
 2) t  Dalapon        1.700    1.964   213.9E6  201.5E6   0.463M4     0.467
 4) t  Dicamba        6.830    7.586   657.8E6  613.3E6   0.469       0.472
 5) t  MCPP           7.038    7.700  78912793 79712477  44.485M4    46.988M4

 6) t  MCPA           7.186    7.927   124.9E6  123.1E6  41.890M4    43.805M4

 7) t  Dichloroprop   7.540    8.246   188.9E6  164.6E6   0.457M4     0.434M4

 8) t  2,4-D          7.763    8.526   229.9E6  239.2E6   0.468       0.447M4
 9) t  2,4,5-TP (Si   8.486    9.181   898.1E6  797.5E6   0.474       0.469M4
10) t  2,4,5-T        8.709    9.470   982.0E6  810.0E6   0.473       0.490
11) t  2,4-DB         9.133    9.838   176.4E6  132.5E6   0.539M4     0.477M4

12) t  Dinoseb        9.862   10.051   616.5E6  446.0E6   0.433       0.476

   SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-05.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    :  7 Jan 2020   4:00 pm
Operator  : PEST17:dgm
Sample    : il4herb,42e,,9502
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 5    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:39:45 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 10:44:44 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #2: Dalapon

Original Peak Response = 219324586   Manual Peak Response = 213904911 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:30 2020   Page 1

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:00 pm   Instrument   : Pest 17
Sample   : il4herb,42e,,9502   Quant Date   : 1/9/2020 10:45 am

Compound #5: MCPP
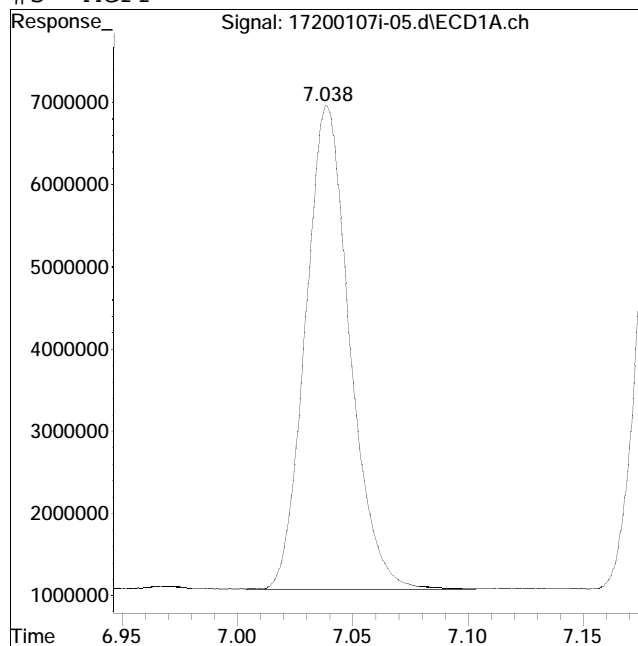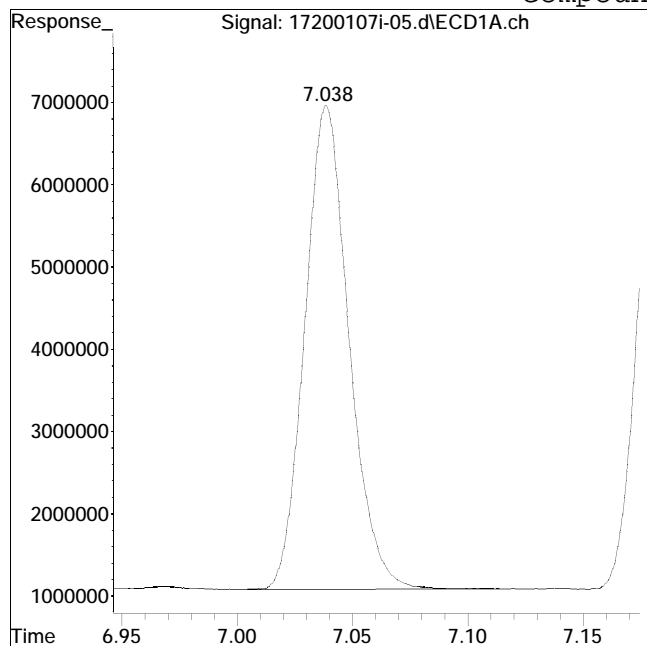
Original Peak Response = 78494057   Manual Peak Response = 78912793 M4
M4 = Poor automated baseline construction.

17200107i-05.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:29:30 2020   Page 2

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #18: MCPP #2
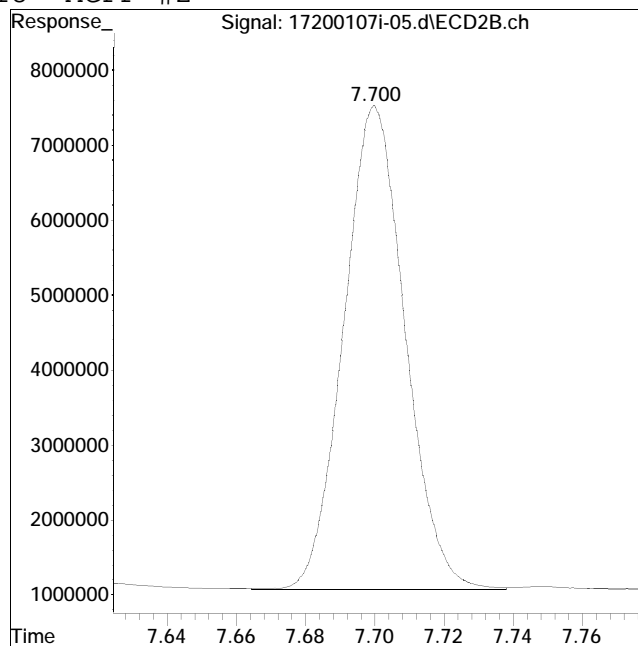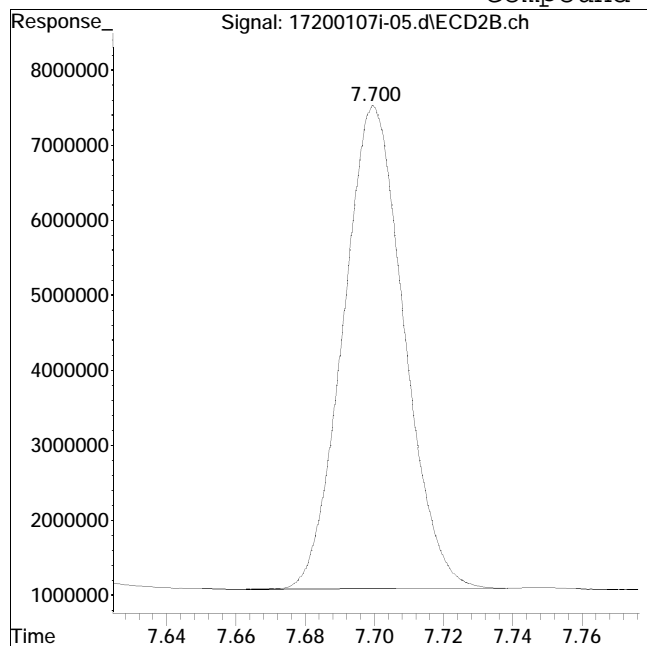
Original Peak Response = 78693090   Manual Peak Response = 79712477 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:31 2020   Page 3

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #6: MCPA
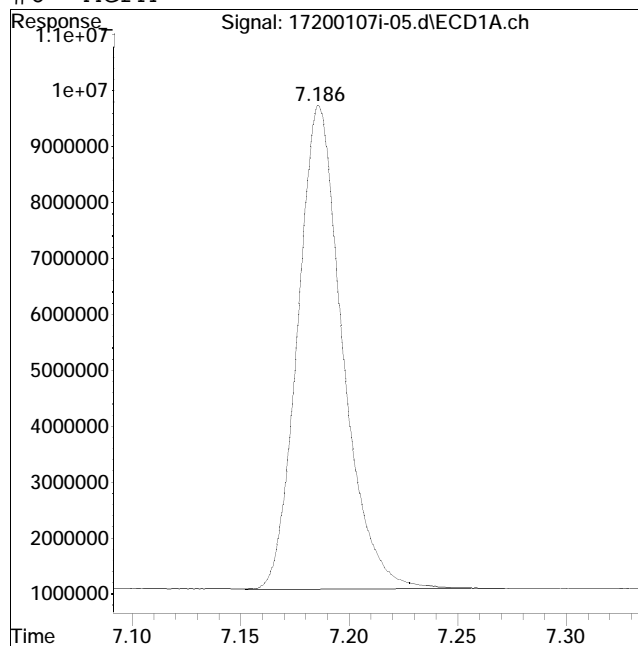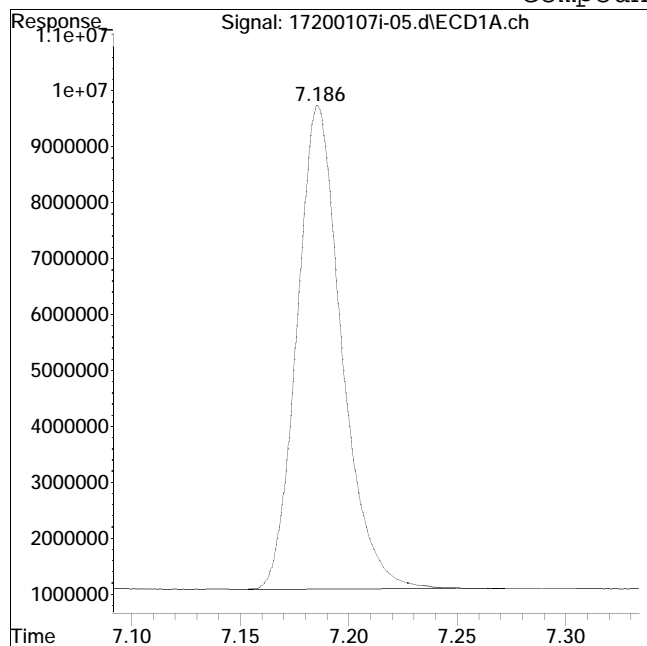
Original Peak Response = 124397723   Manual Peak Response = 124921909 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:31 2020   Page 4

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #19: MCPA #2
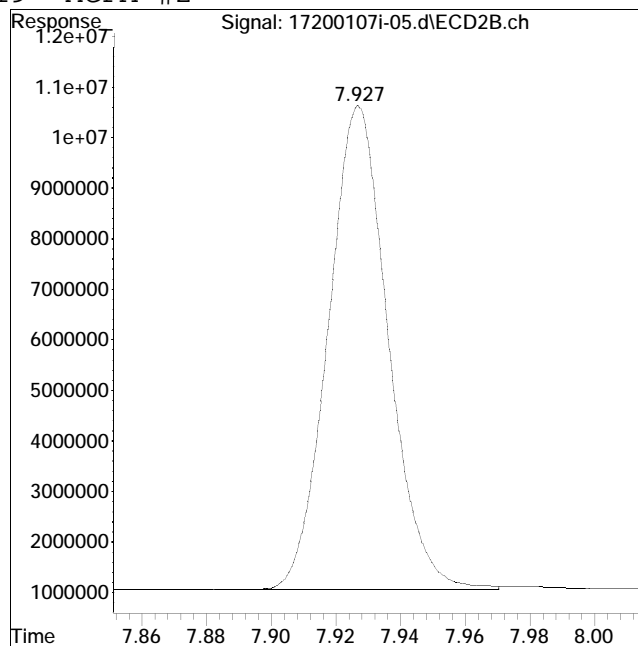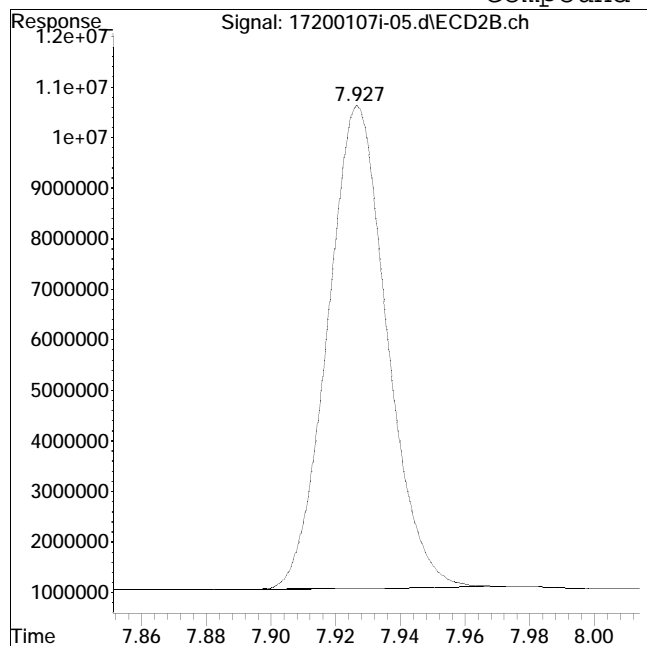
Original Peak Response = 121591879   Manual Peak Response = 123147177 M4
M4 = Poor automated baseline construction.

17200107i-05.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:29:31 2020   Page 5

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #7: Dichloroprop
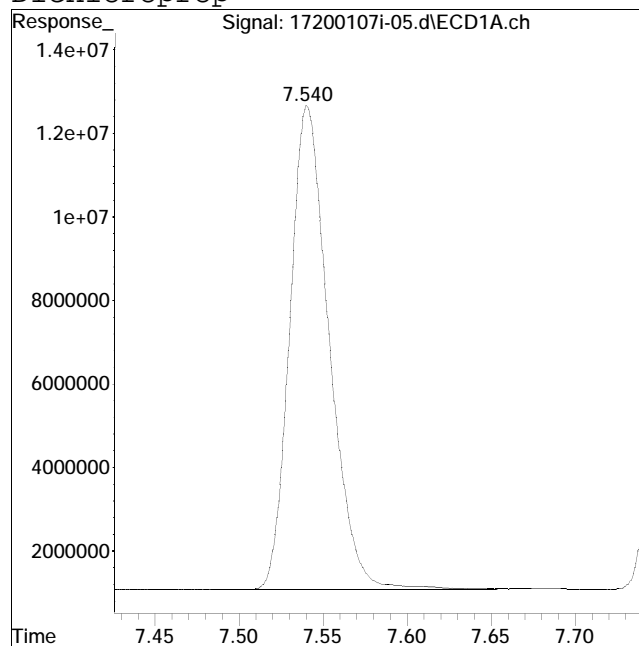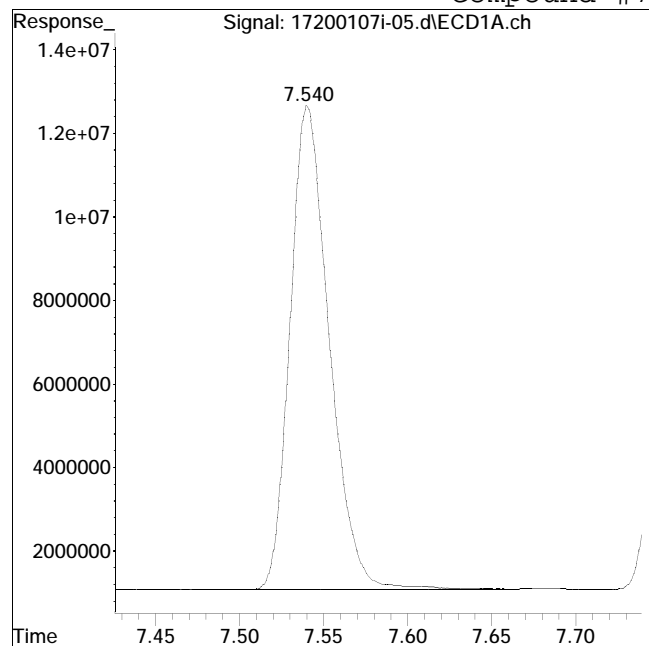
Original Peak Response = 187825023   Manual Peak Response = 188917535 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:31 2020   Page 6

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020   4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #20: Dichloroprop #2
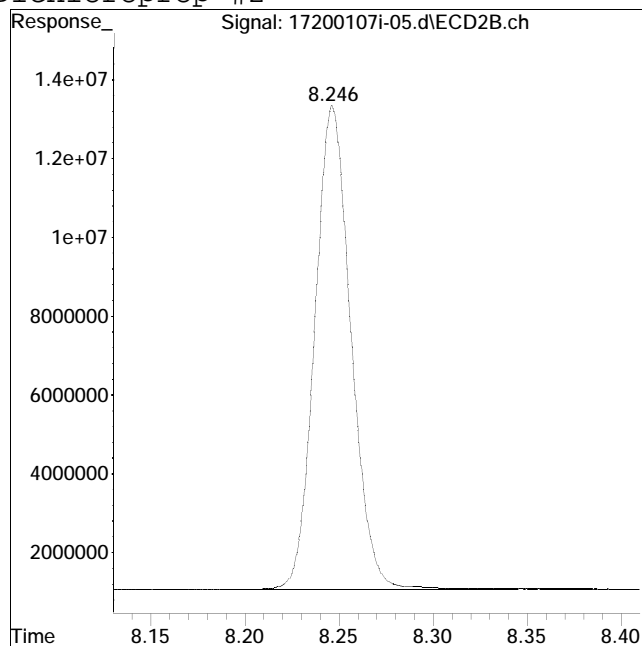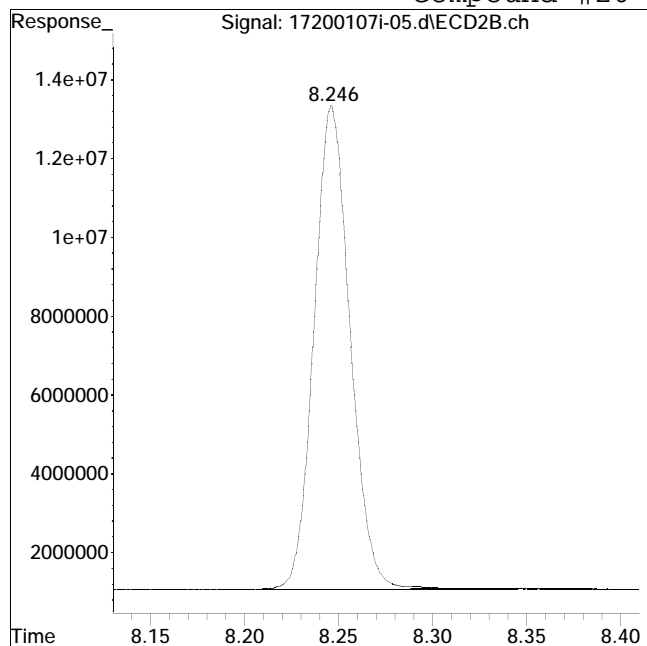
Original Peak Response = 163571839   Manual Peak Response = 164617879 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:31 2020   Page 7

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #21: 2,4-D #2
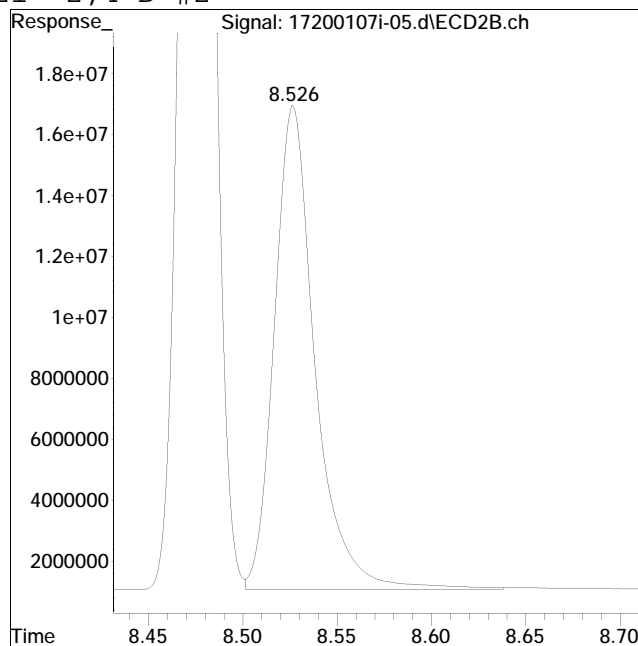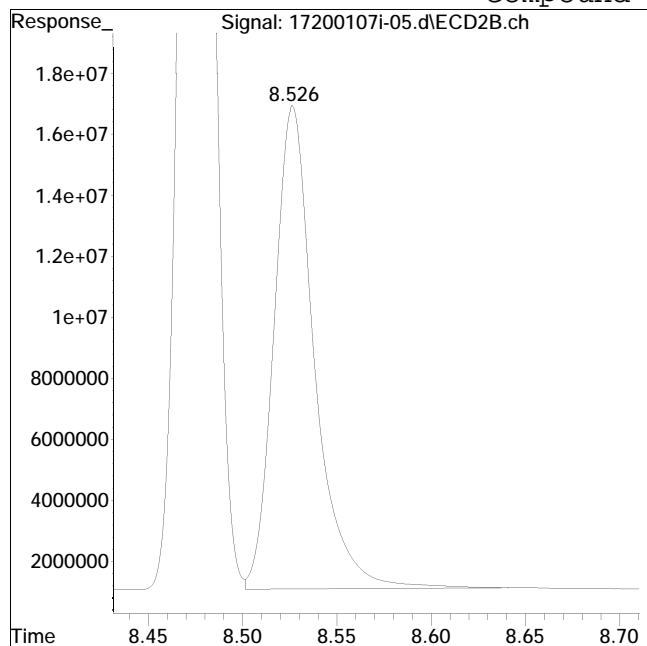
Original Peak Response = 236011837   Manual Peak Response = 239159231 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #22: 2,4,5-TP (Silvex) #2
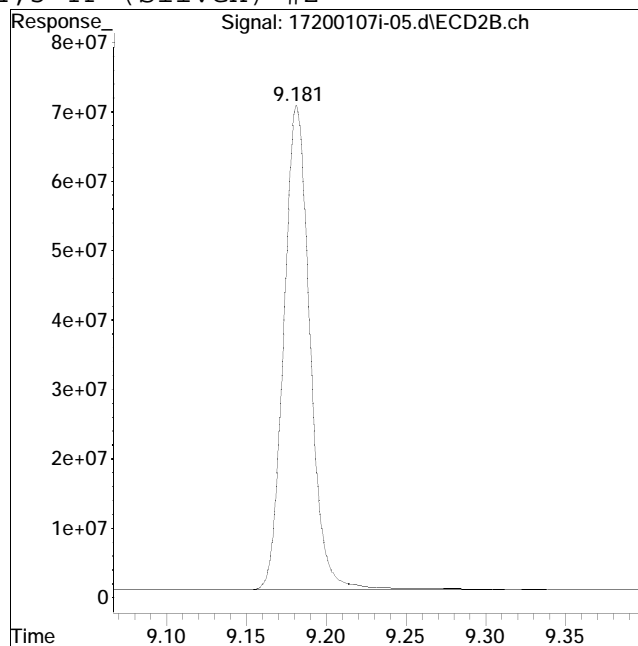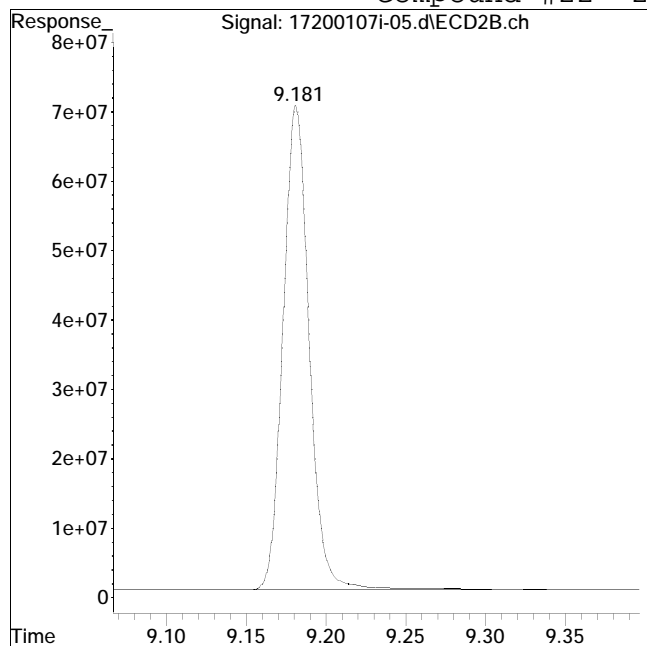
Original Peak Response = 793750320   Manual Peak Response = 797487334 M4
M4 = Poor automated baseline construction.

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #11: 2,4-DB
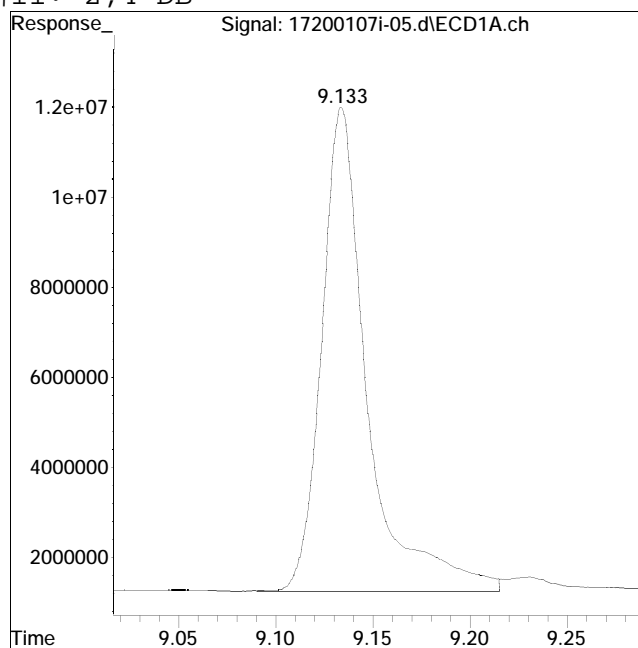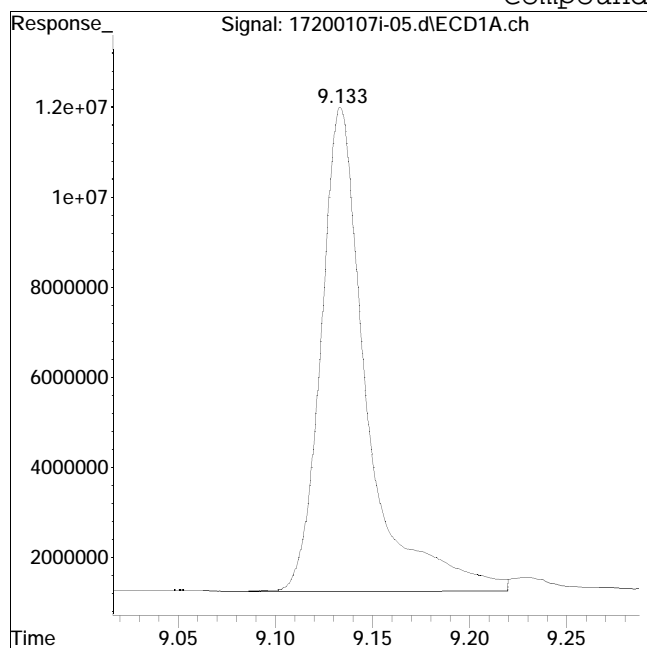
Original Peak Response = 176540366   Manual Peak Response = 176449404 M4
M4 = Poor automated baseline construction.

17200107i-05.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:32 2020   Page 10

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-05.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:00 pm   Instrument : Pest 17
Sample   : il4herb,42e,,9502   Quant Date : 1/9/2020 10:45 am

Compound #24: 2,4-DB #2
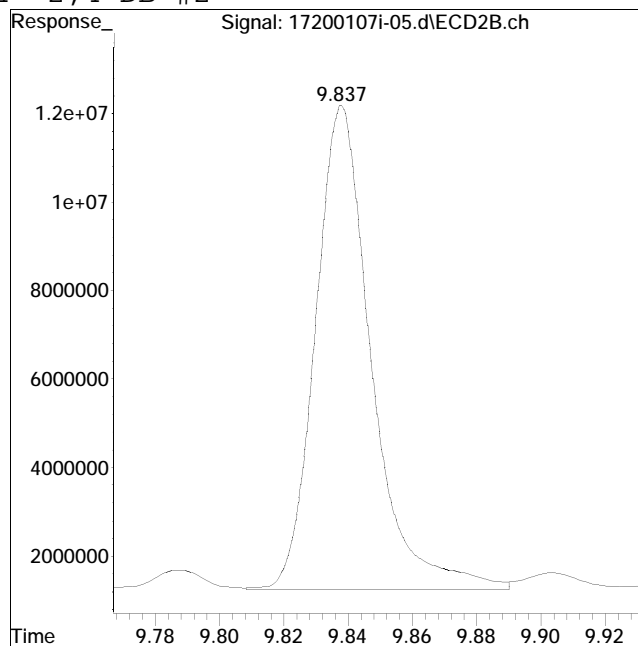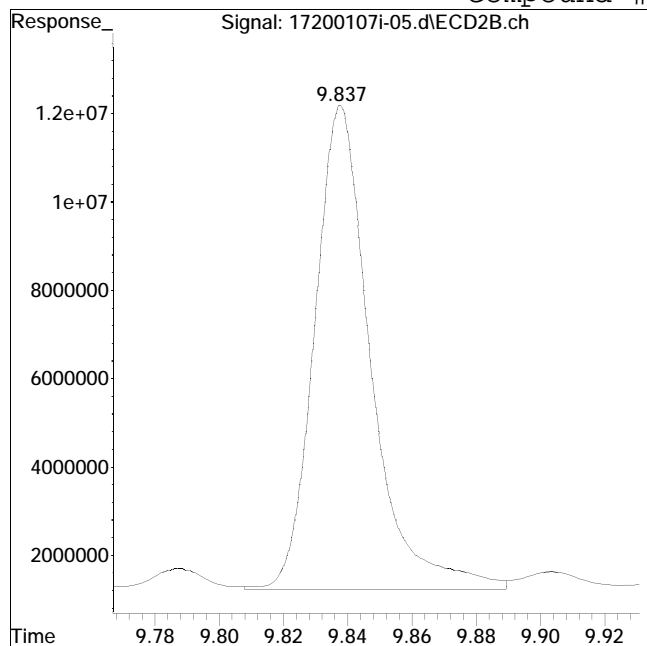
Original Peak Response = 133638485   Manual Peak Response = 132527270 M4
M4 = Poor automated baseline construction.

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                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-06.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   4:18 pm
   Operator  : PEST17:dgm
   Sample    : il5herb,42e,,9503
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 6   Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 09 11:40:03 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 11:01:04 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.   :
   Signal #1 Phase :                        Signal #2 Phase:
   Signal #1 Info  :                        Signal #2 Info :

   Sub List     : Default - All compounds listed

         Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
       ------------------------------------------------------------------------
     Internal Standards
 1) i   4,4'-DBOB       8.199    8.476   764.7E6  661.4E6   0.250       0.250

     System Monitoring Compounds
 3) s   DCAA (surrog    6.647    7.405   419.0E6  430.7E6   0.857M4     0.866M4

   Spiked Amount      0.500 Range   30 - 150  Recovery   =  171.40%#  173.20%#

     Target Compounds
 2) t   Dalapon         1.707    1.970   457.5E6  423.3E6   0.883M4     0.866
 4) t   Dicamba         6.828    7.586  1444.3E6 1341.9E6   0.926       0.921
 5) t   MCPP            7.038    7.700   167.6E6  173.5E6  87.290M4    91.413M4

 6) t   MCPA            7.186    7.927   257.4E6  264.5E6  81.658M4    86.613M4

 7) t   Dichloroprop    7.538    8.245   397.6E6  355.5E6   0.876       0.871
 8) t   2,4-D           7.756    8.523   517.0E6  517.6E6   0.948       0.887M4
 9) t   2,4,5-TP (Si    8.483    9.180  1989.5E6 1743.0E6   0.945M4     0.922
10) t   2,4,5-T         8.706    9.468  2161.2E6 1852.2E6   0.938       0.986
11) t   2,4-DB          9.128    9.835   398.9E6  299.4E6   1.080M4     0.966
12) t   Dinoseb         9.862   10.051  1384.8E6 1016.4E6   0.915       0.968

   SemiQuant Compounds - Not Calibrated on this Instrument
   ------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.


Herb17_12_19_ICAL.m Fri Jan 10 18:29:37 2020                        Page: 1
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Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-06.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    :   7 Jan 2020    4:18 pm
Operator  : PEST17:dgm
Sample    : il5herb,42e,,9503
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 6    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:40:03 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 11:01:04 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                         Signal #2 Phase:
Signal #1 Info  :                         Signal #2 Info :
```


Signal: 17200107i-06.d\ECD1A.ch

Signal: 17200107i-06.d\ECD2B.ch

```
Herb17_12_19_ICAL.m Fri Jan 10 18:29:38 2020                        Page: 2
```

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #2: Dalapon

Original Peak Response = 460847636   Manual Peak Response = 457470082 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #3: DCAA (surrogate)
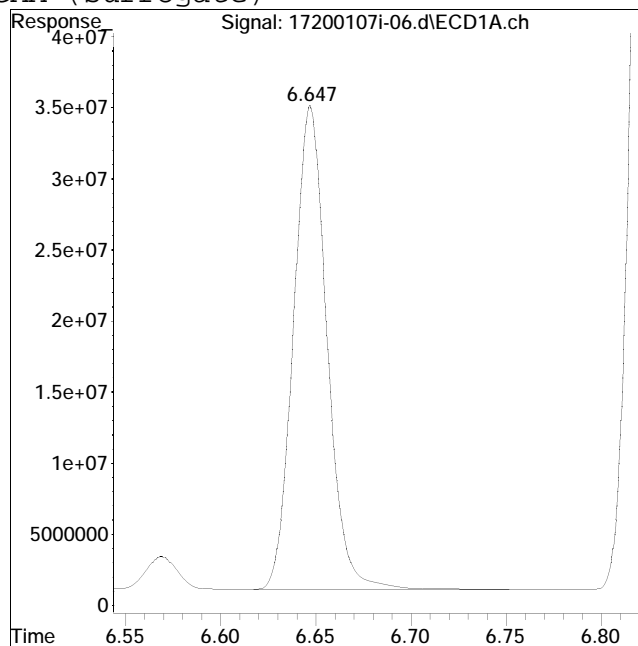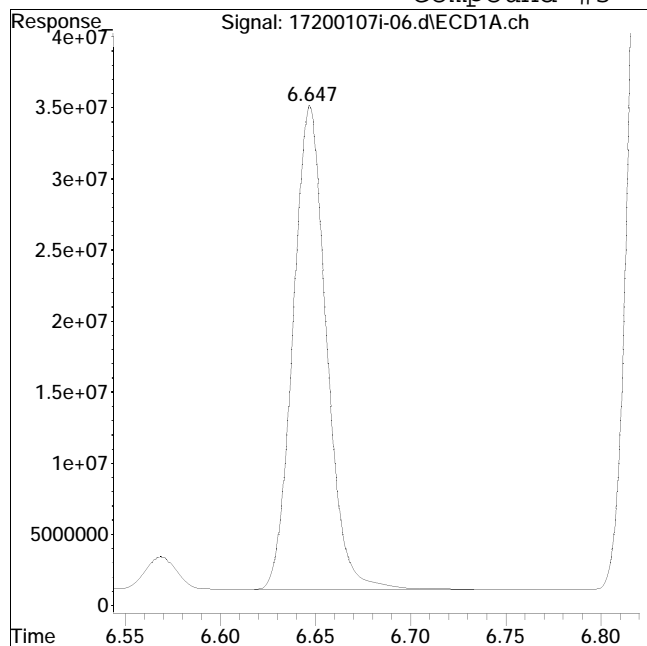
Original Peak Response = 417245083   Manual Peak Response = 418989864 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:38 2020   Page 2

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #16: DCAA (surrogate) #2
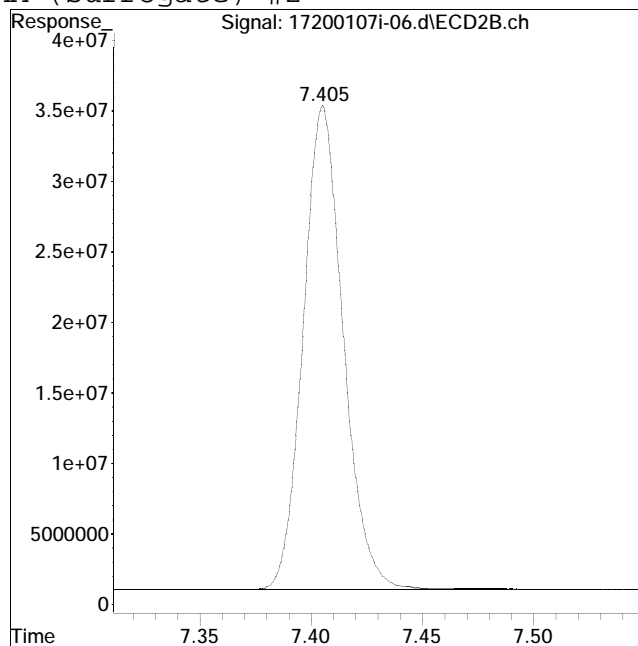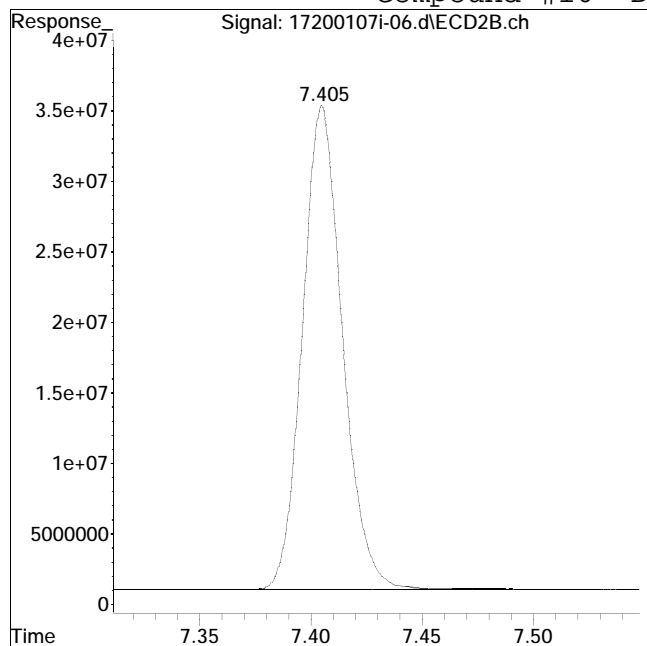
Original Peak Response = 429121963   Manual Peak Response = 430734220 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:39 2020   Page 3

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #5: MCPP
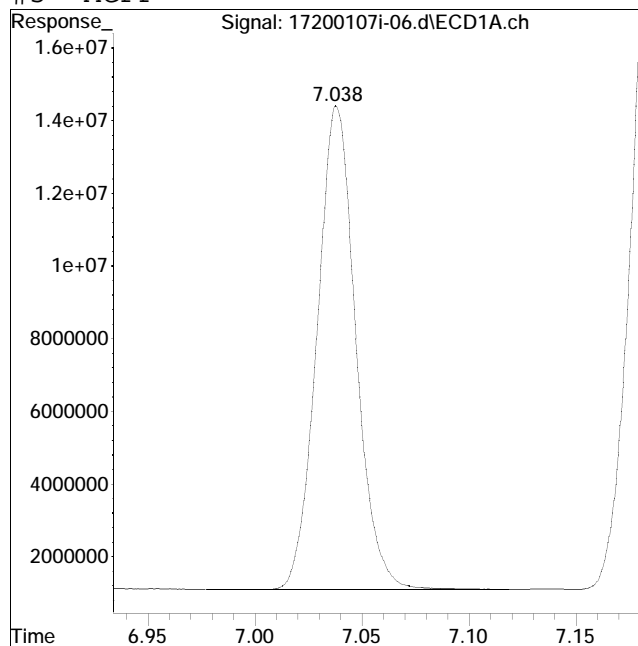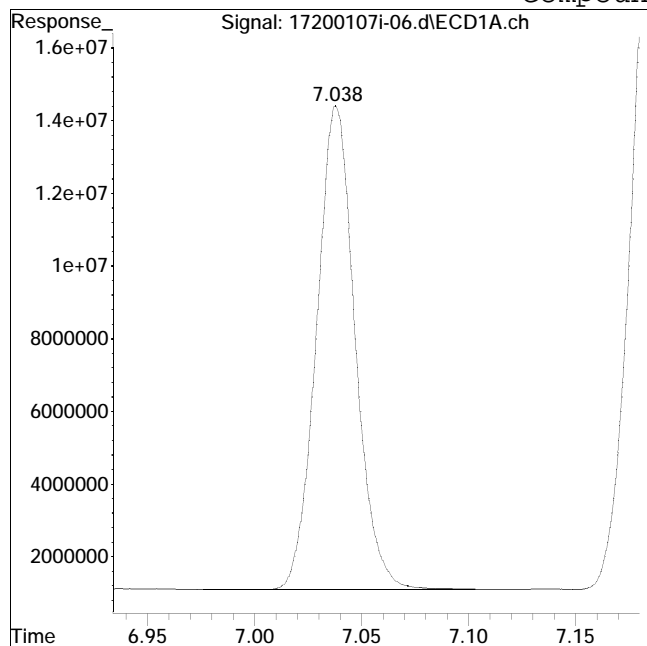
Original Peak Response = 167126192   Manual Peak Response = 167636019 M4
M4 = Poor automated baseline construction.

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #18: MCPP #2
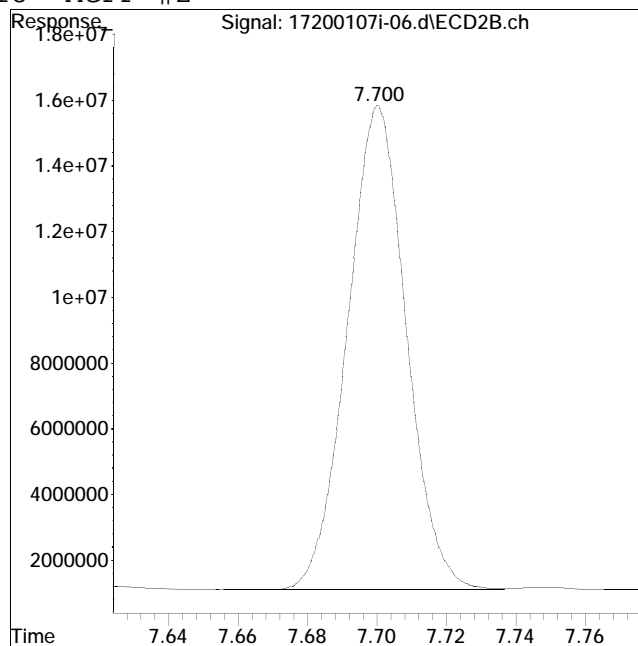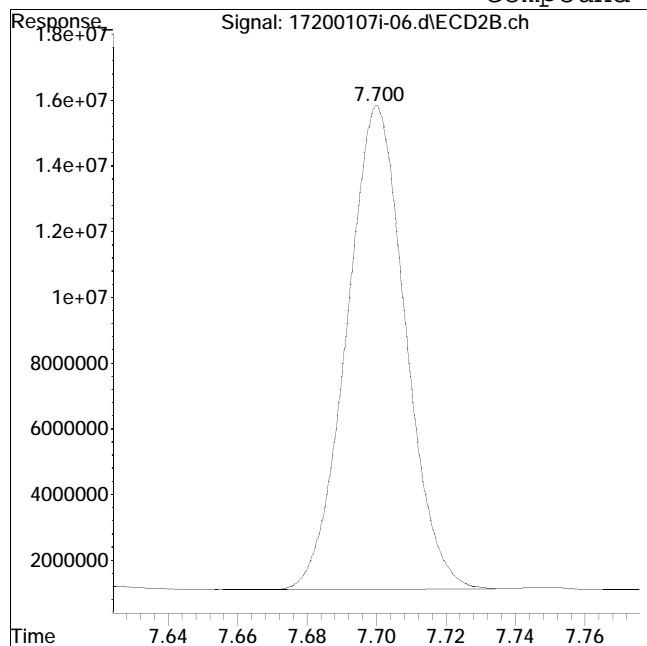
Original Peak Response = 172644687   Manual Peak Response = 173487739 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:39 2020   Page 5

Manual Integration Report

```
Data Path    : I:\Pest17\200107ICAL\     QMethod      : Herb17_12_19_ICAL.m
Data File    : 17200107i-06.d            Operator     : PEST17:dgm
Date Inj'd   : 1/7/2020   4:18 pm        Instrument   : Pest 17
Sample       : il5herb,42e,,9503         Quant Date   : 1/9/2020 11:01 am
```

Compound #6: MCPA
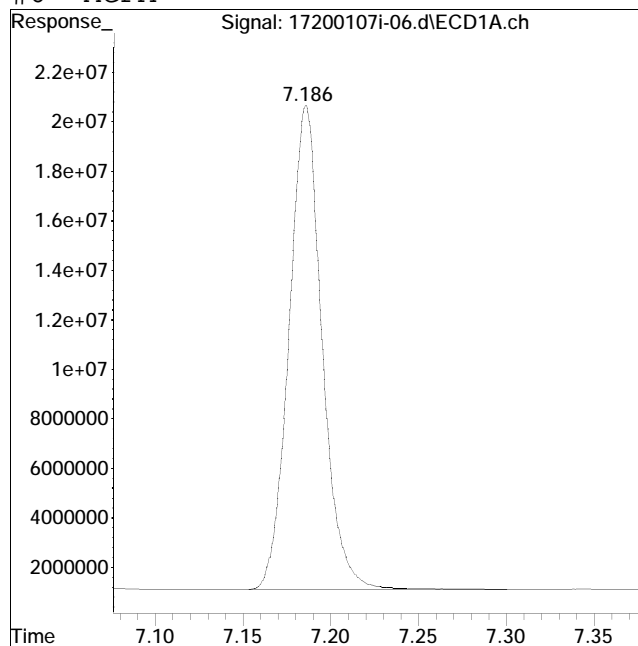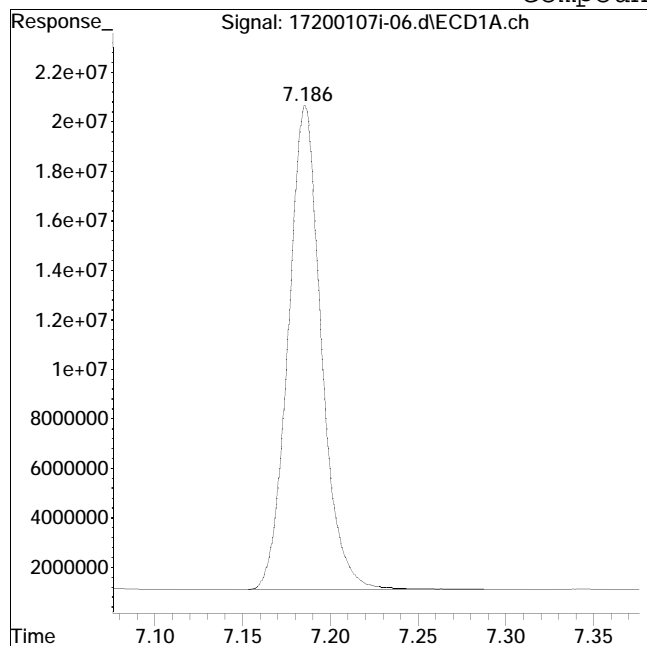
Original Peak Response = 256704439   Manual Peak Response = 257449946 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:39 2020   Page 6

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #19: MCPA #2
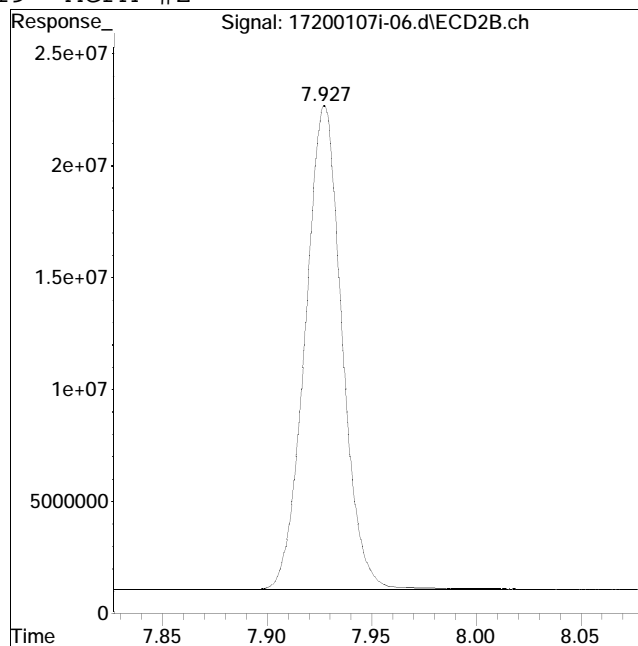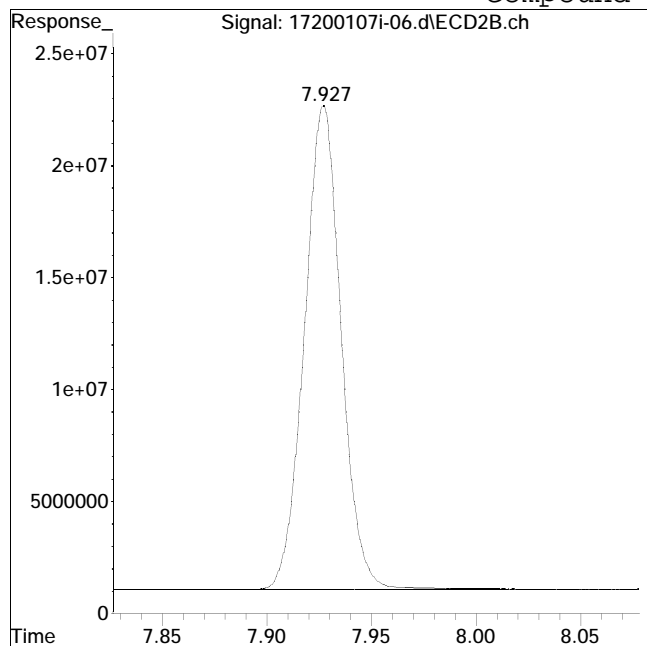
Original Peak Response = 263661953   Manual Peak Response = 264538576 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:39 2020   Page 7

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #21: 2,4-D #2
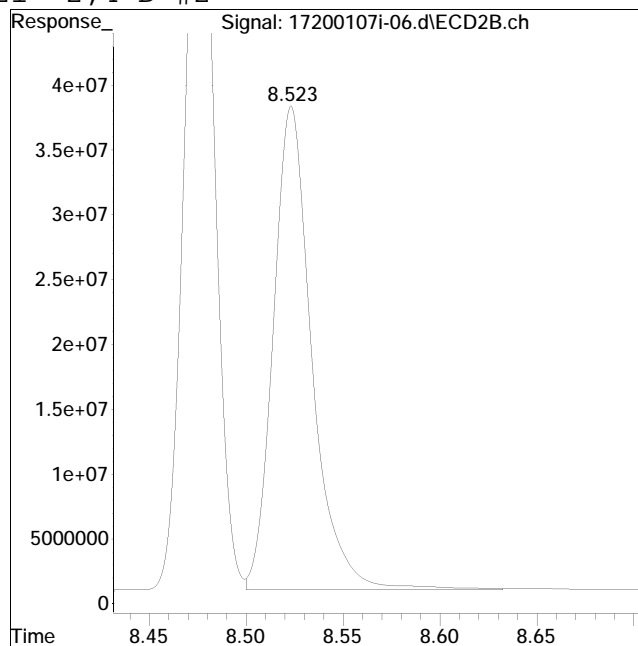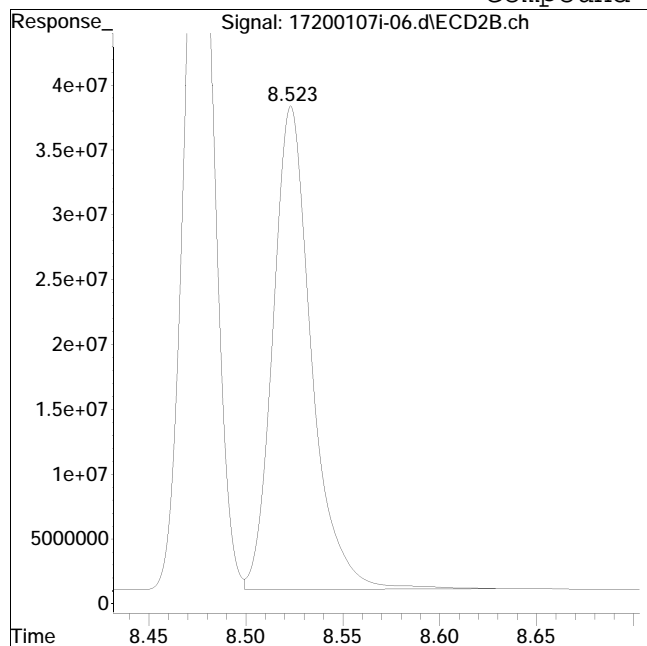
Original Peak Response = 514319673   Manual Peak Response = 517627908 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:40 2020   Page 8

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #9: 2,4,5-TP (Silvex)
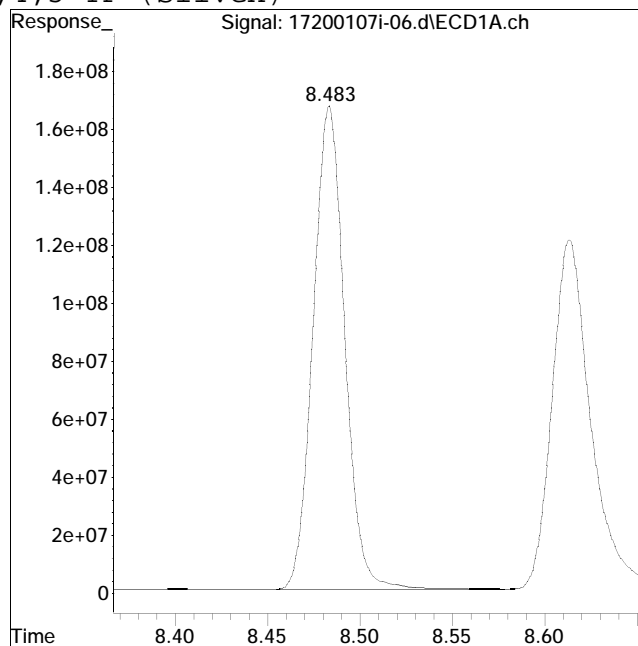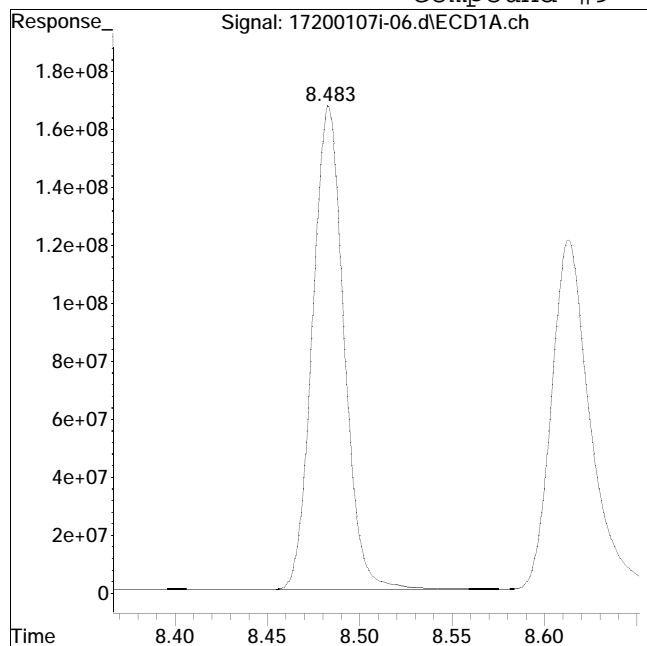
Original Peak Response = 1982225588   Manual Peak Response = 1989487455 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:40 2020   Page 9

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-06.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:18 pm   Instrument : Pest 17
Sample   : il5herb,42e,,9503   Quant Date : 1/9/2020 11:01 am

Compound #11: 2,4-DB
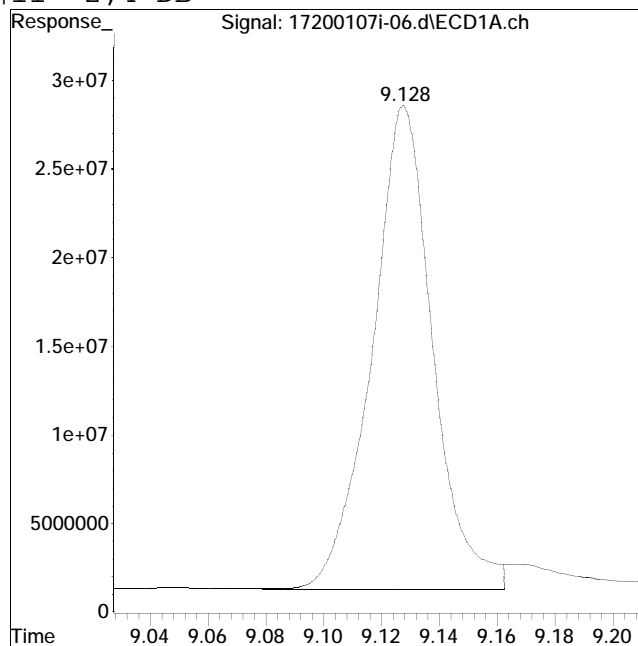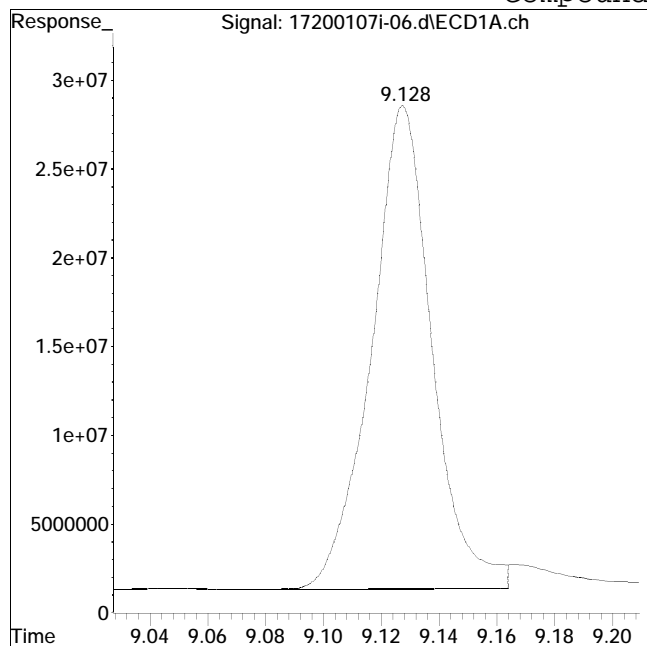
Original Peak Response = 396039471   Manual Peak Response = 398933110 M4
M4 = Poor automated baseline construction.

17200107i-06.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:40 2020 Page 10

```
                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-07.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   4:37 pm
   Operator  : PEST17:dgm
   Sample    : il6herb,42e,,9504
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 7   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 09 11:40:23 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 11:06:52 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List      : Default - All compounds listed

         Compound        RT#1      RT#2    Resp#1   Resp#2    mg/l        mg/l
   --------------------------------------------------------------------------
   Internal Standards
1) i   4,4'-DBOB       8.198     8.477   717.2E6  611.1E6   0.250       0.250

   System Monitoring Compounds
3) s   DCAA (surrog    6.645     7.405   792.3E6  819.6E6   1.781       1.832
 Spiked Amount       0.500 Range  30 - 150  Recovery   =   356.20%#   366.40%#

   Target Compounds
2) t   Dalapon         1.697f    1.961   829.2E6  770.9E6   1.724M4     1.735
4) t   Dicamba         6.827     7.585  2721.8E6 2517.3E6   1.871       1.882
5) t   MCPP            7.038     7.701   313.0E6  331.3E6 178.018M4   190.711M4

6) t   MCPA            7.187     7.929   468.4E6  488.2E6 165.149M4   177.037M4

7) t   Dichloroprop    7.539     8.246   734.4E6  661.0E6   1.766M4     1.796M4

8) t   2,4-D           7.756     8.523   968.3E6  969.1E6   1.888       1.831M4
9) t   2,4,5-TP (Si    8.482     9.180  3767.8E6 3301.4E6   1.912M4     1.909
10) t  2,4,5-T         8.704     9.468  4090.3E6 3555.0E6   1.901       2.023
11) t  2,4-DB          9.125f    9.834   756.4E6  568.5E6   2.102M4     1.981
12) t  Dinoseb         9.861    10.051  2560.3E6 1947.7E6   1.827       1.995

   SemiQuant Compounds - Not Calibrated on this Instrument
   --------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

Herb17_12_19_ICAL.m Fri Jan 10 18:29:45 2020   Page: 1

Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-07.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   :   7 Jan 2020   4:37 pm
Operator : PEST17:dgm
Sample   : il6herb,42e,,9504
Misc   : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial : 7   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 09 11:40:23 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title : herb
QLast Update : Thu Jan 09 11:06:52 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #2: Dalapon

Original Peak Response = 833754097   Manual Peak Response = 829183042 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:46 2020   Page 1

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #5: MCPP
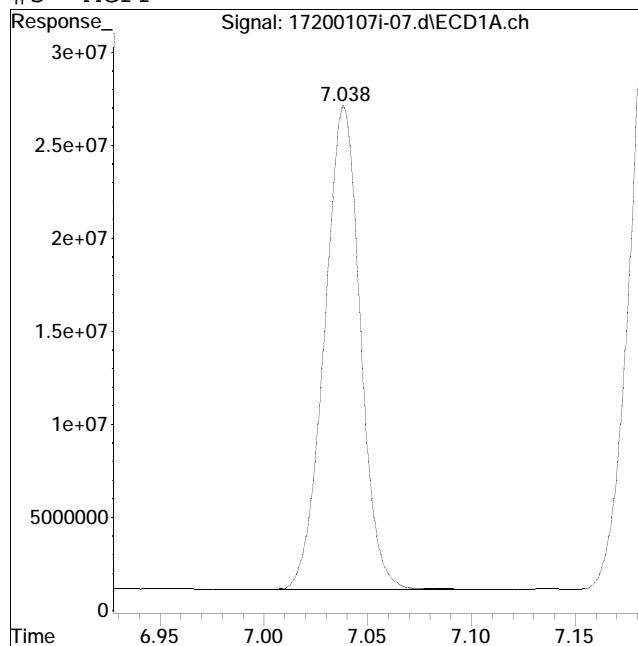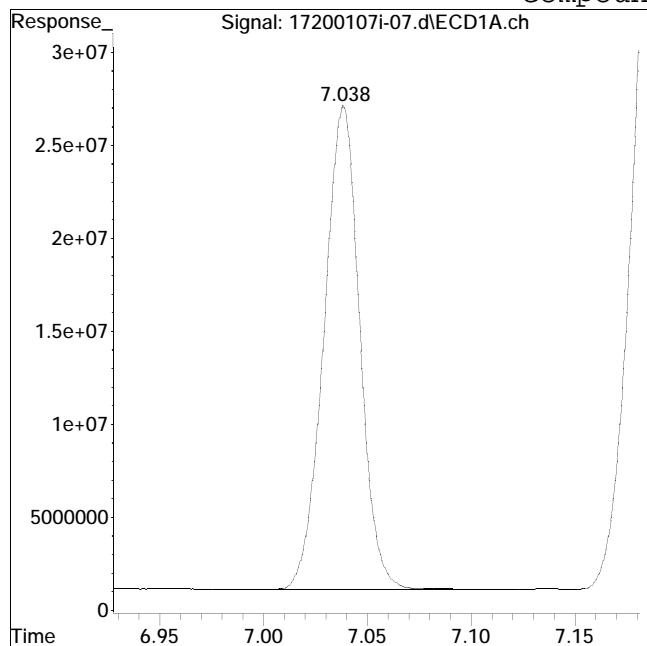
Original Peak Response = 312531185   Manual Peak Response = 312968078 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:46 2020   Page 2

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #18: MCPP #2
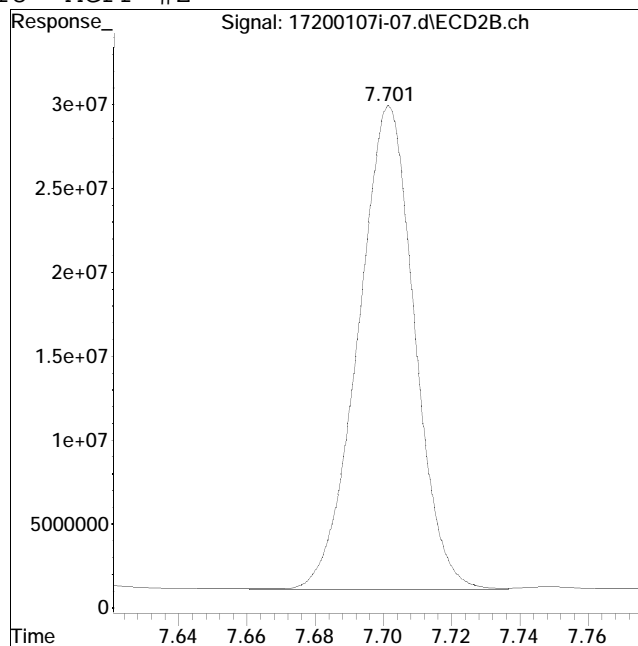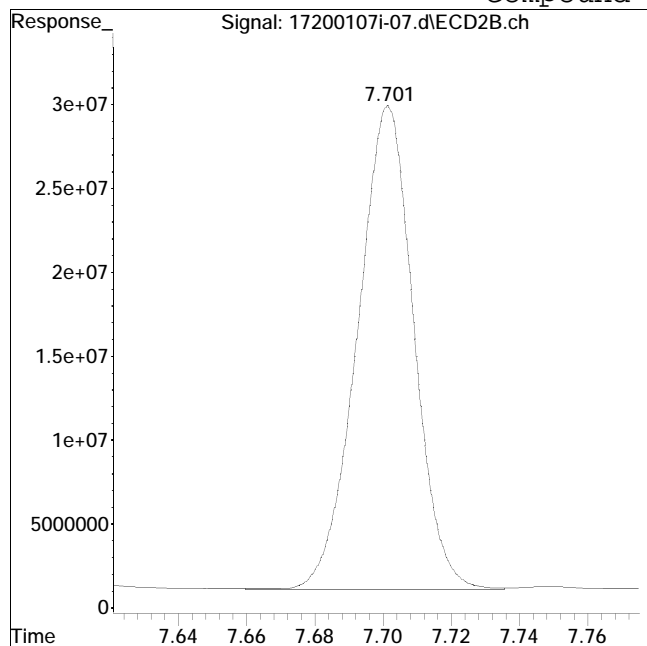
Original Peak Response = 331647940   Manual Peak Response = 331348176 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #6: MCPA
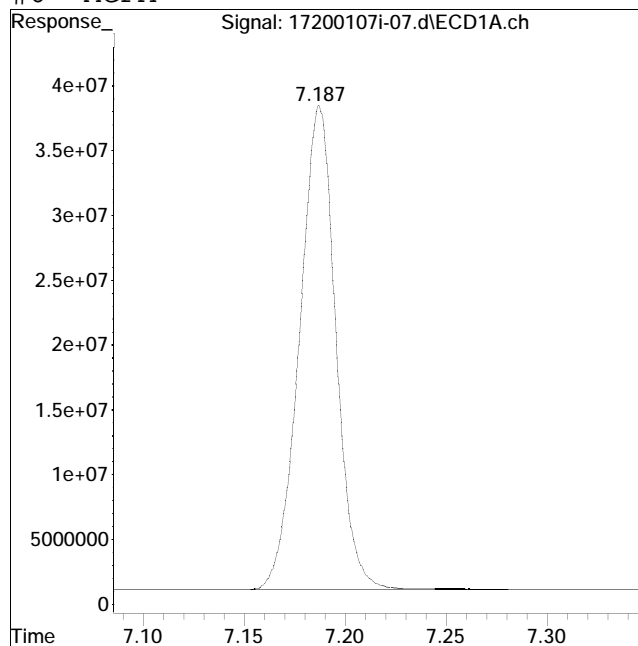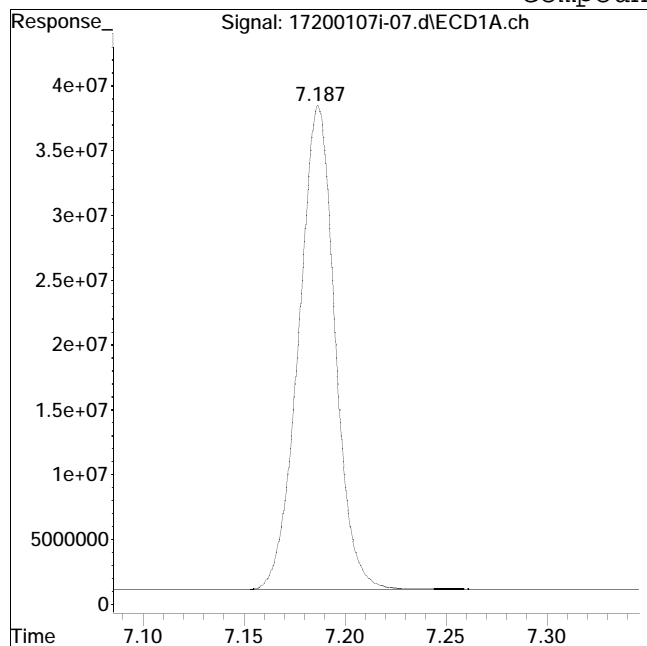
Original Peak Response = 466732302   Manual Peak Response = 468422088 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:47 2020   Page 4

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument   : Pest 17
Sample   : il6herb,42e,,9504   Quant Date   : 1/9/2020 11:07 am

Compound #19: MCPA #2
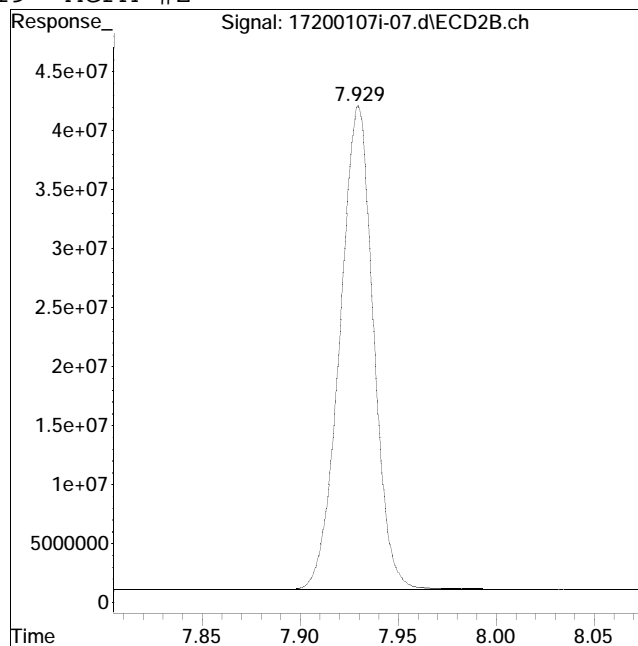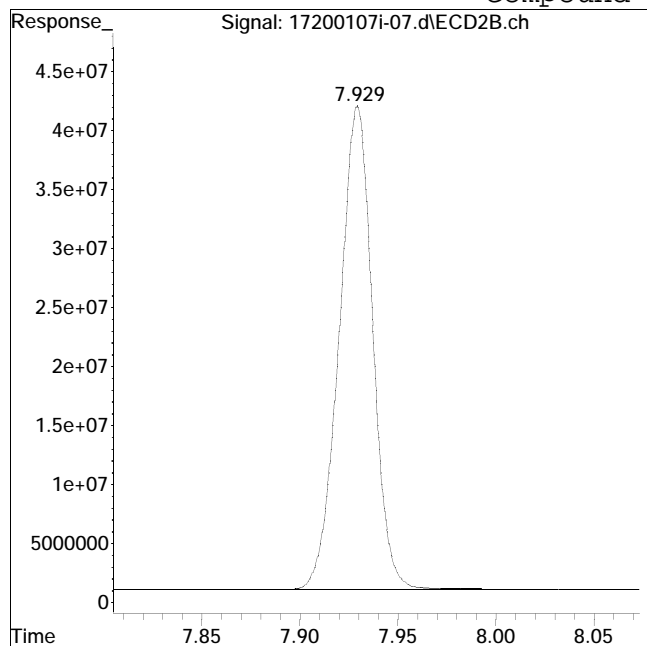
Original Peak Response = 487233521   Manual Peak Response = 488158567 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:47 2020   Page 5

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #7: Dichloroprop
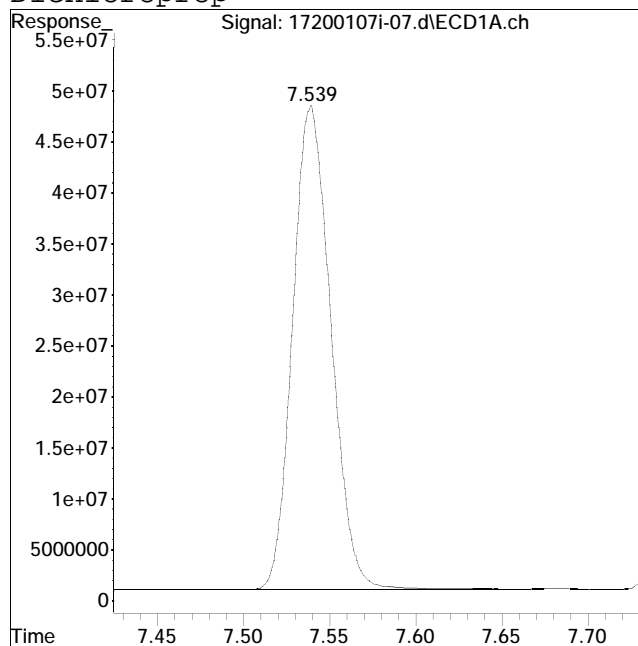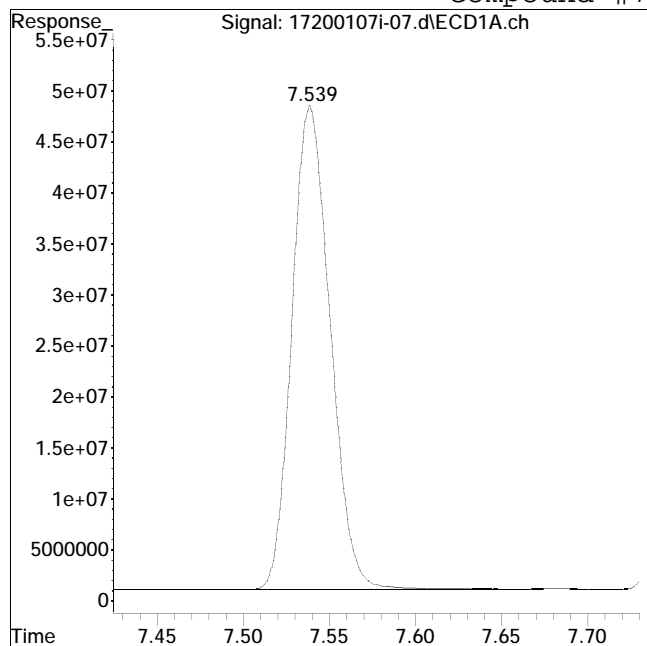
Original Peak Response = 732206929   Manual Peak Response = 734447786 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:47 2020   Page 6

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #20: Dichloroprop #2
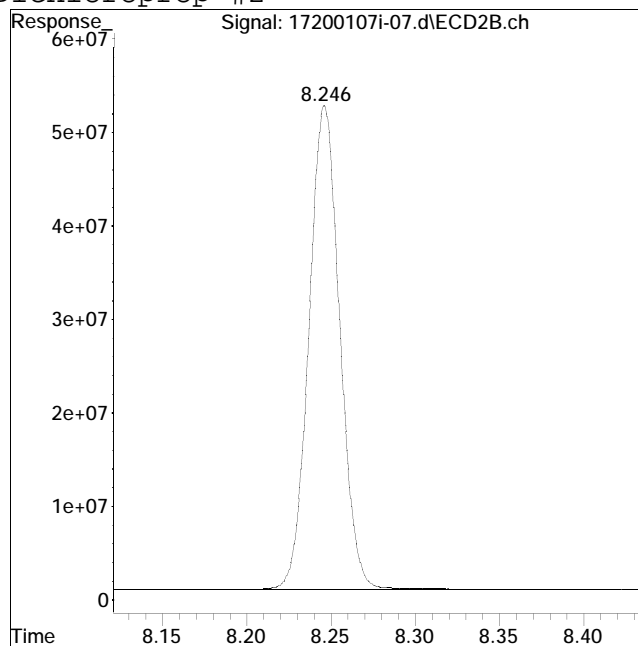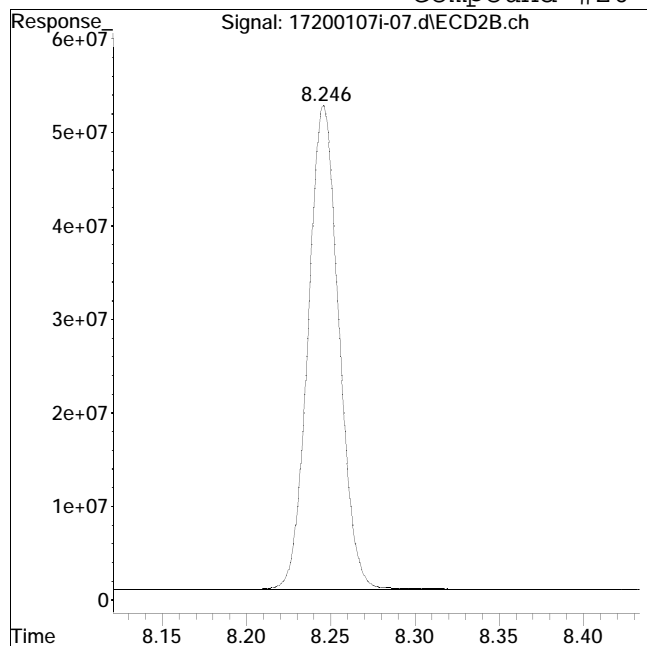
Original Peak Response = 659819774   Manual Peak Response = 660977337 M4
M4 = Poor automated baseline construction.

17200107i-07.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:29:47 2020   Page 7

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #21: 2,4-D #2
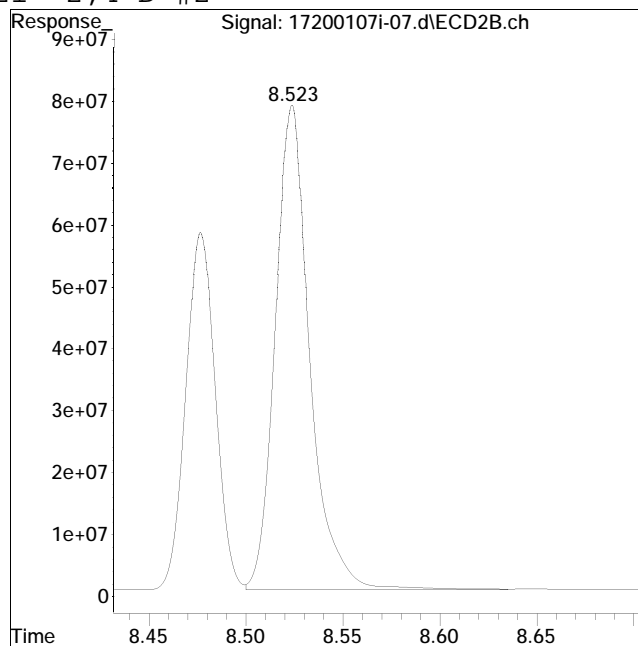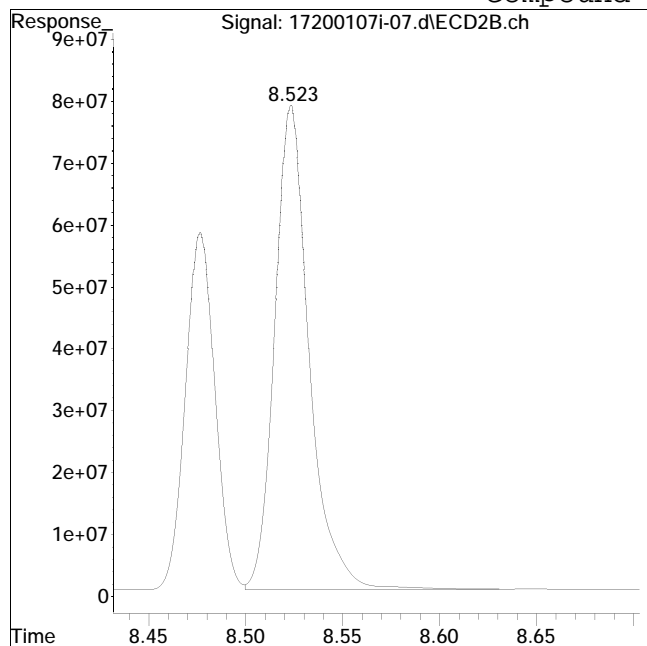
Original Peak Response = 964790474   Manual Peak Response = 969114533 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:48 2020   Page 8

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #9: 2,4,5-TP (Silvex)
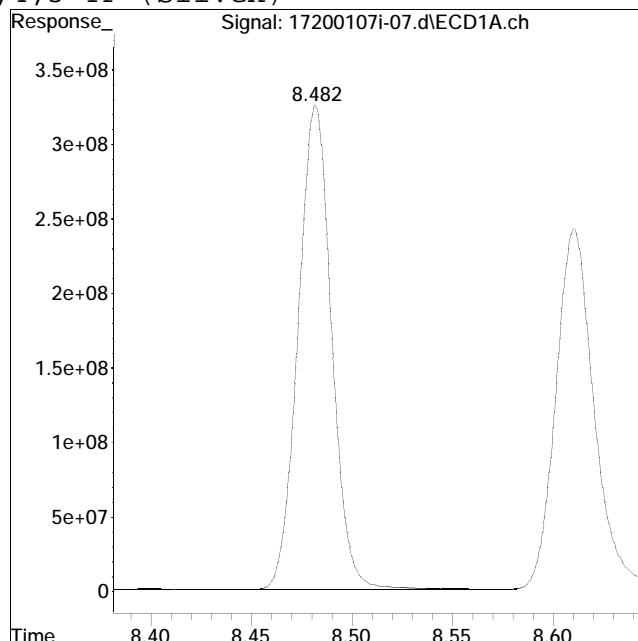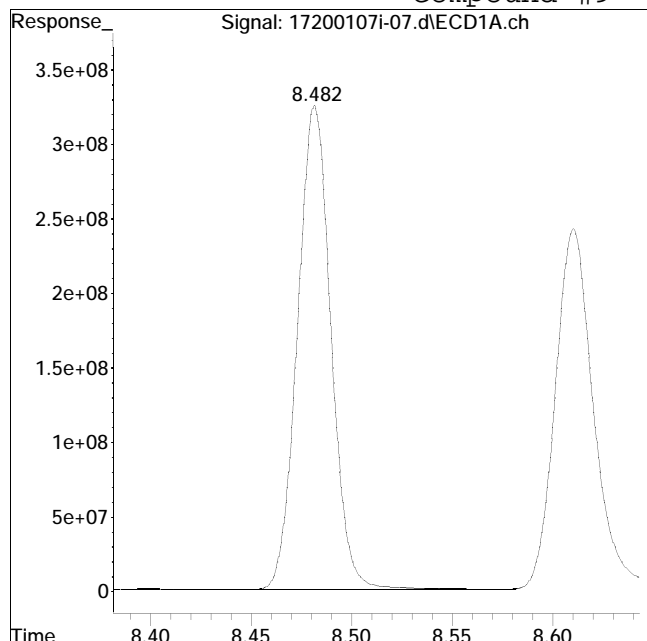
Original Peak Response = 3762096845   Manual Peak Response = 3767767403 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:48 2020   Page 9

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-07.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020 4:37 pm   Instrument : Pest 17
Sample   : il6herb,42e,,9504   Quant Date : 1/9/2020 11:07 am

Compound #11: 2,4-DB
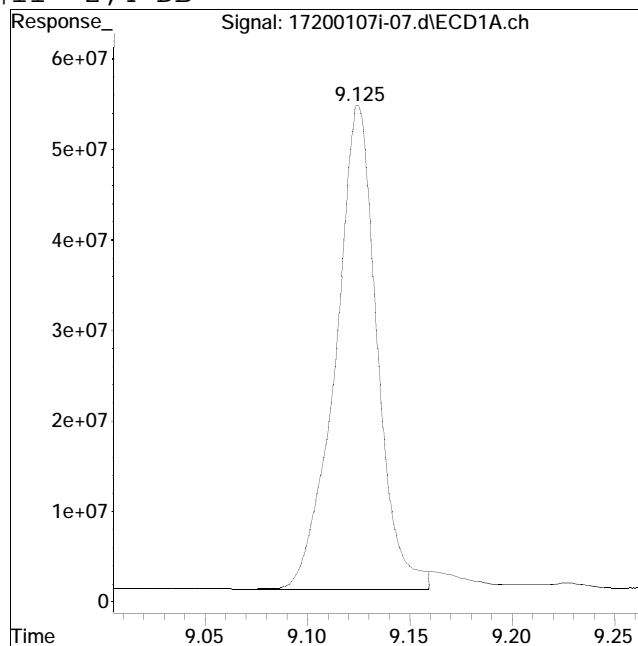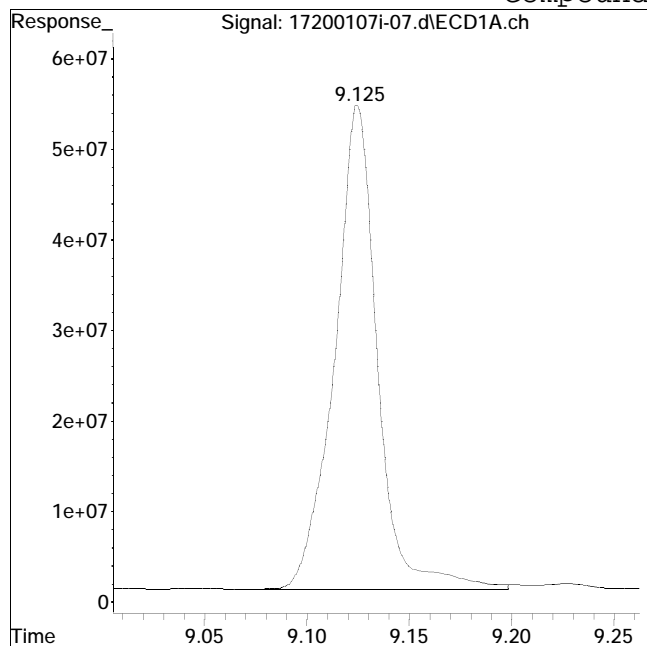
Original Peak Response = 780870951   Manual Peak Response = 756369265 M4
M4 = Poor automated baseline construction.

17200107i-07.d Herb17_12_19_ICAL.m   Fri Jan 10 18:29:48 2020 Page 10

Initial Calibration Verification

```
                  Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-08.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   4:55 pm
   Operator  : PEST17:dgm
   Sample    : cicv,42e,,9495
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 8   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 10 14:38:55 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 11:46:52 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.     :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%      Max. Rel. Area : 150%


         Compound                  Amount   Calc.      %Dev  Area% Dev(Min)
   -----------------------------------------------------------------------
    1 i   4,4'-DBOB                 0.250   0.250       0.0   107   0.00
    2 t   Dalapon                   0.182   0.156      14.3    95   0.00
    3 s   DCAA (surrogate)          0.188   0.172       8.5   101   0.00
    4 t   Dicamba                   0.188   0.170       9.6   102   0.00
    5 t   MCPP                     18.800  17.716       5.8   104   0.00
    6 t   MCPA                     18.600  19.096      -2.7   104   0.00
    7 t   Dichloroprop              0.188   0.192      -2.1   112   0.00
    8 t   2,4-D                     0.188   0.188       0.0   109   0.00
    9 t   2,4,5-TP (Silvex)         0.190   0.192      -1.1   112   0.00
   10 t   2,4,5-T                    0.190   0.183       3.7   108   0.00
   11 t   2,4-DB                     0.192   0.164      14.6   100   0.00
   12 t   Dinoseb                    0.190   0.194      -2.1   107   0.00

   Signal #2


    1 i   4,4'-DBOB                 0.250   0.250       0.0   107   0.00
    2 t   Dalapon                   0.182   0.164       9.9   100   0.00
    3 s   DCAA (surrogate)          0.188   0.169      10.1    98   0.00
    4 t   Dicamba                   0.188   0.180       4.3   103   0.00
    5 t   MCPP                     18.800  17.474       7.1   108   0.00
    6 t   MCPA                     18.600  17.725       4.7   102   0.00
    7 t   Dichloroprop              0.188   0.194      -3.2   114   0.00
    8 t   2,4-D                     0.188   0.171       9.0   101   0.00
    9 t   2,4,5-TP (Silvex)         0.190   0.193      -1.6   113   0.00
   10 t   2,4,5-T                    0.190   0.184       3.2   109   0.00
   11 t   2,4-DB                     0.192   0.193      -0.5   110   0.00
   12 t   Dinoseb                    0.190   0.188       1.1   109   0.00


          Evaluate Continuing Calibration Report - Not Founds
```

```
                 Evaluate Continuing Calibration Report

  Data Path : I:\Pest17\200107ICAL\
  Data File : 17200107i-08.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    :  7 Jan 2020   4:55 pm
  Operator  : PEST17:dgm
  Sample    : cicv,42e,,9495
  Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
  ALS Vial  : 8   Sample Multiplier: 1

  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: Jan 10 14:38:55 2020
  Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
  Quant Title  : herb
  QLast Update : Thu Jan 09 11:46:52 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.      :
  Signal #1 Phase :                    Signal #2 Phase:
  Signal #1 Info  :                    Signal #2 Info :


  Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 150%

       Compound                      Amount  Calc.     %Dev  Area% Dev(Min)
   ----------------------------------------------------------------------

  Signal #2

 ------------------------------------------------------------------------

    (#) = Out of Range            SPCC's out = 0   CCC's out = 0
```

```
                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200107ICAL\
   Data File : 17200107i-08.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    :  7 Jan 2020   4:55 pm
   Operator  : PEST17:dgm
   Sample    : cicv,42e,,9495
   Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
   ALS Vial  : 8   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: Jan 10 14:38:55 2020
   Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
   Quant Title  : herb
   QLast Update : Thu Jan 09 11:46:52 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.   :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List     : Default - All compounds listed


         Compound      RT#1     RT#2    Resp#1   Resp#2   mg/l        mg/l
        -----------------------------------------------------------------------
    Internal Standards
 1) i   4,4'-DBOB      8.200    8.478   854.9E6  727.9E6  0.250       0.250

    System Monitoring Compounds
 3) s   DCAA (surrog   6.657    7.411   96426167 94965777  0.172       0.169
  Spiked Amount       0.500 Range  30 - 150  Recovery   =    34.40%      33.80%

    Target Compounds
 2) t   Dalapon        1.705    1.967   92183885 90057407  0.156       0.164M4
 4) t   Dicamba        6.835    7.591   311.2E6  290.0E6  0.170       0.180
 5) t   MCPP           7.043    7.703   40272397 39862527 17.716      17.474
 6) t   MCPA           7.191    7.930   66747646 61633981 19.096      17.725
 7) t   Dichloroprop   7.546    8.250   101.0E6  93376777  0.192       0.194
 8) t   2,4-D          7.769    8.531   116.8E6  116.6E6  0.188       0.171
 9) t   2,4,5-TP (Si   8.488    9.184   467.0E6  420.7E6  0.192       0.193
10) t   2,4,5-T        8.713    9.473   492.6E6  395.7E6  0.183       0.184
11) t   2,4-DB         9.140    9.842   75359773 67366488  0.164M4     0.193
12) t   Dinoseb        9.863   10.053   334.4E6  223.9E6  0.194       0.188

    SemiQuant Compounds - Not Calibrated on this Instrument
   -----------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
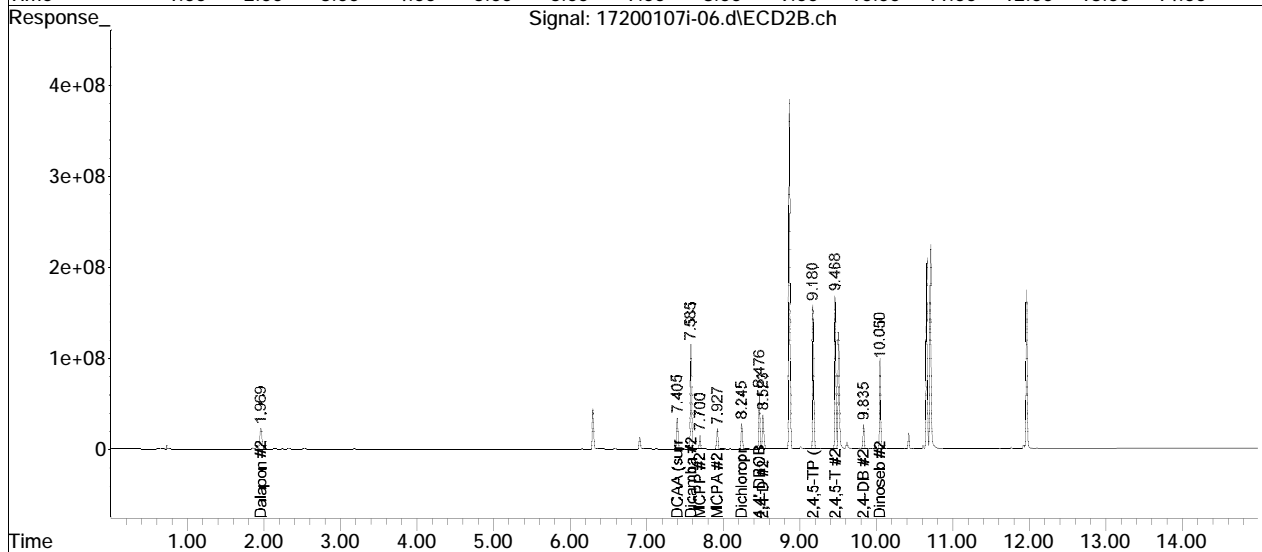
```
Sub List     : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200107ICAL\
Data File : 17200107i-08.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  7 Jan 2020   4:55 pm
Operator  : PEST17:dgm
Sample    : cicv,42e,,9495
Misc      : wg1328992,ical (Sig #1); ical (Sig #2)
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Jan 10 14:38:55 2020
Quant Method : I:\Pest17\200107ICAL\Herb17_12_19_ICAL.m
Quant Title  : herb
QLast Update : Thu Jan 09 11:46:52 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```


Signal: 17200107i-08.d\ECD1A.ch

Signal: 17200107i-08.d\ECD2B.ch

#2 Dalapon

```
      R.T.:     1.705 min
Delta R.T.:    -0.007 min
  Response:  92183885
      Conc:     0.16 mg/l
```
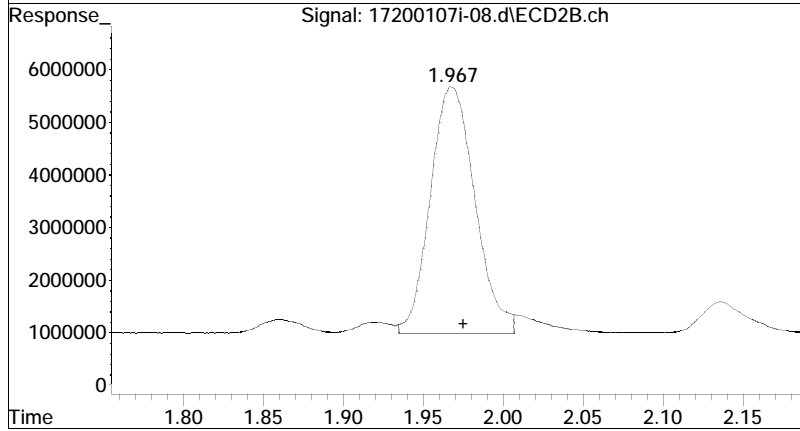

#2 Dalapon

```
      R.T.:     1.967 min
Delta R.T.:    -0.008 min
  Response:  90057407
      Conc:     0.16 mg/l m
```

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:57 2020 Page 4
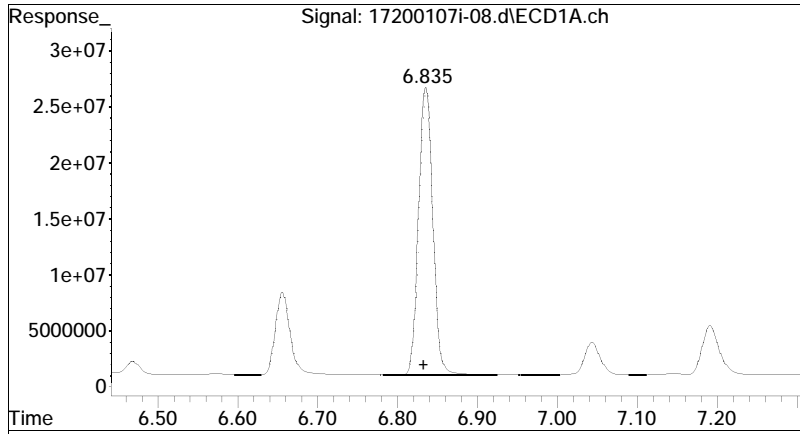
#4 Dicamba

```
      R.T.:      6.835 min
Delta R.T.:      0.002 min
  Response: 311160427
      Conc:    0.17 mg/l
```
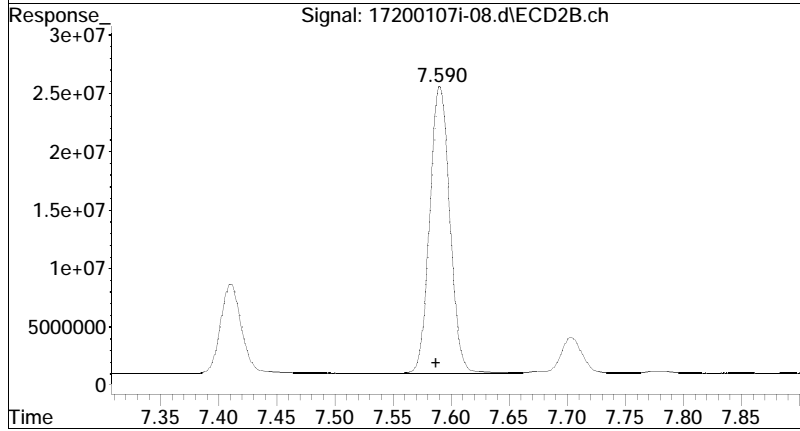

#4 Dicamba

```
      R.T.:      7.591 min
Delta R.T.:      0.004 min
  Response: 289971350
      Conc:    0.18 mg/l
```

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:57 2020 Page 5
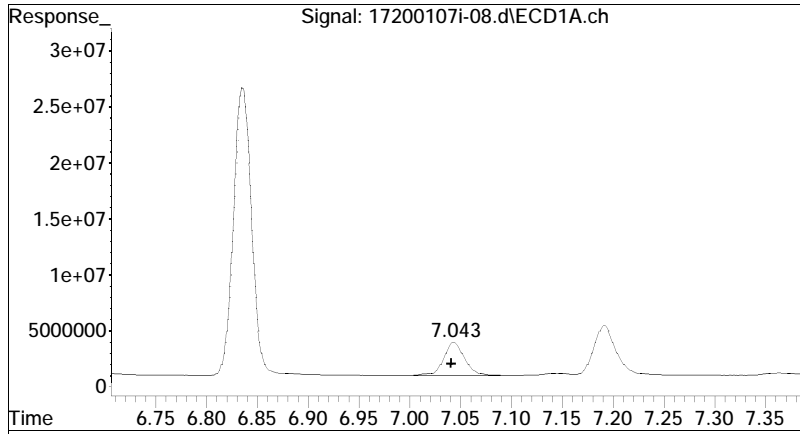
#5 MCPP

```
       R.T.:      7.043 min
Delta R.T.:      0.002 min
   Response:  40272397
       Conc:  17.72 mg/l
```
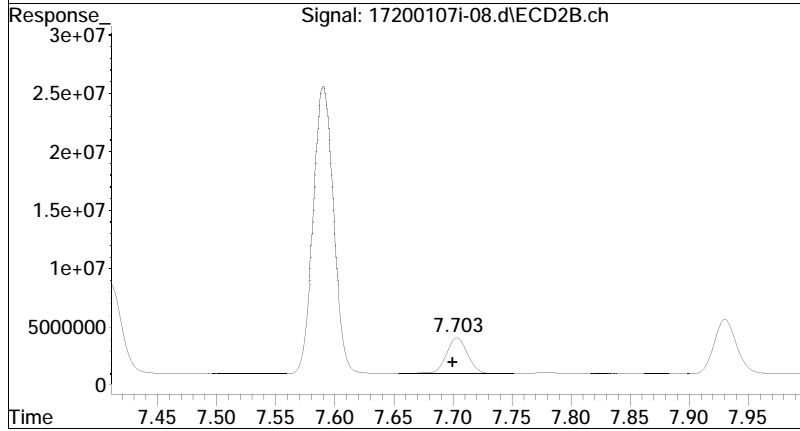
#5 MCPP

```
       R.T.:      7.703 min
Delta R.T.:      0.003 min
   Response:  39862527
       Conc:  17.47 mg/l
```

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:57 2020 Page 6
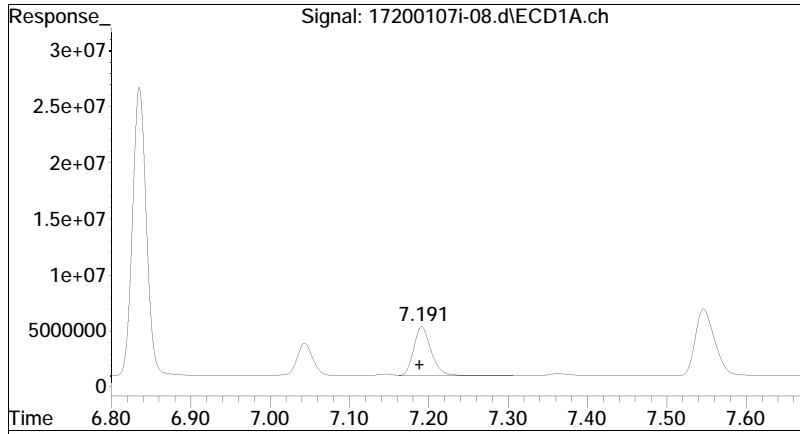
#6 MCPA

        R.T.:   7.191 min
Delta R.T.:   0.002 min
   Response: 66747646
       Conc: 19.10 mg/l
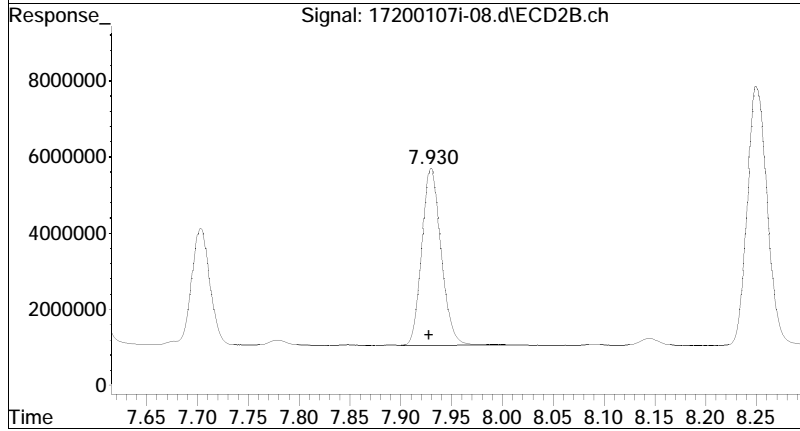
#6 MCPA

        R.T.:   7.930 min
Delta R.T.:   0.002 min
   Response: 61633981
       Conc: 17.72 mg/l

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:57 2020 Page 7
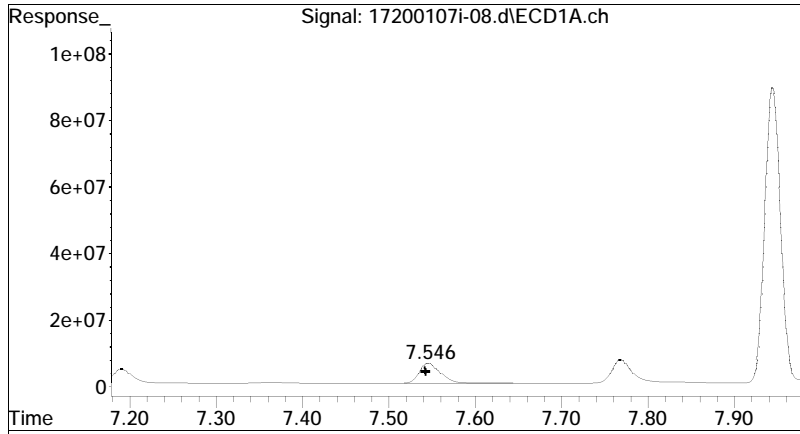
#7 Dichloroprop

        R.T.:   7.546 min
Delta R.T.:   0.003 min
   Response: 100988832
       Conc: 0.19 mg/l
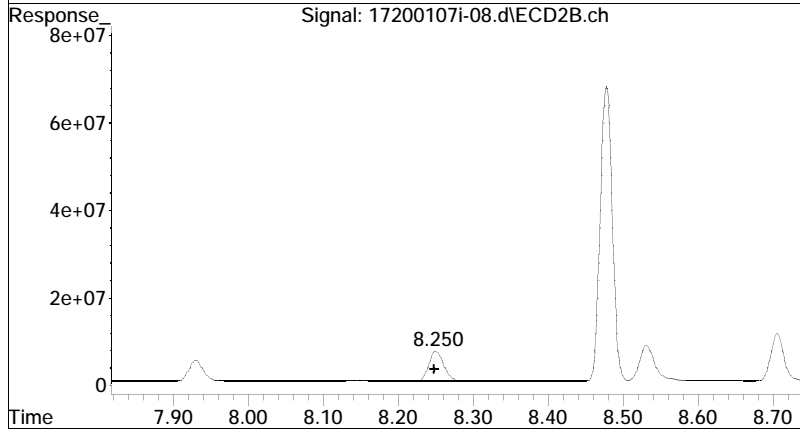
#7 Dichloroprop

        R.T.:   8.250 min
Delta R.T.:   0.002 min
   Response: 93376777
       Conc: 0.19 mg/l

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:57 2020 Page 8

Signal: 17200107i-08.d\ECD1A.ch
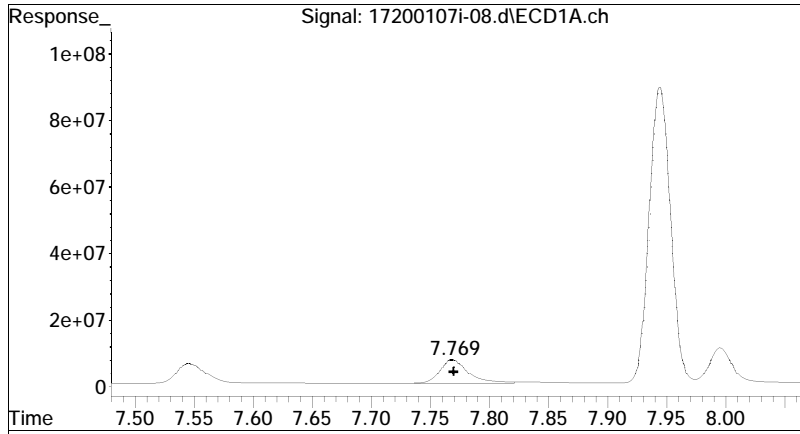
#8 2,4-D

```
       R.T.:     7.769 min
Delta R.T.:    -0.001 min
   Response: 116783698
       Conc:    0.19 mg/l
```


Signal: 17200107i-08.d\ECD2B.ch
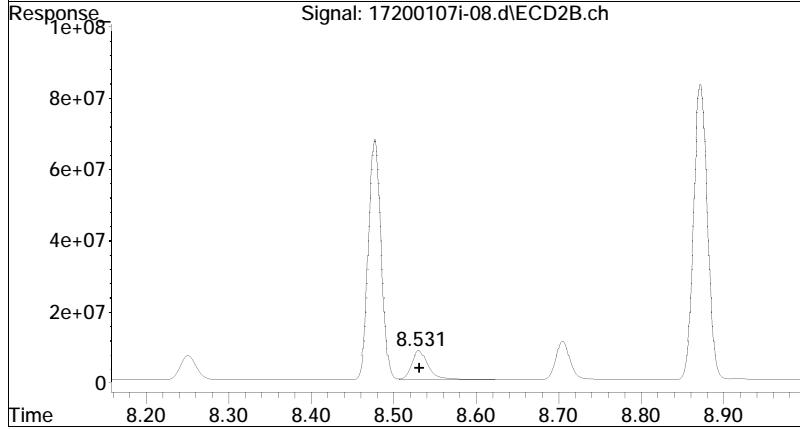
#8 2,4-D

```
       R.T.:     8.531 min
Delta R.T.:     0.000 min
   Response: 116636039
       Conc:    0.17 mg/l
```

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:58 2020 Page 9
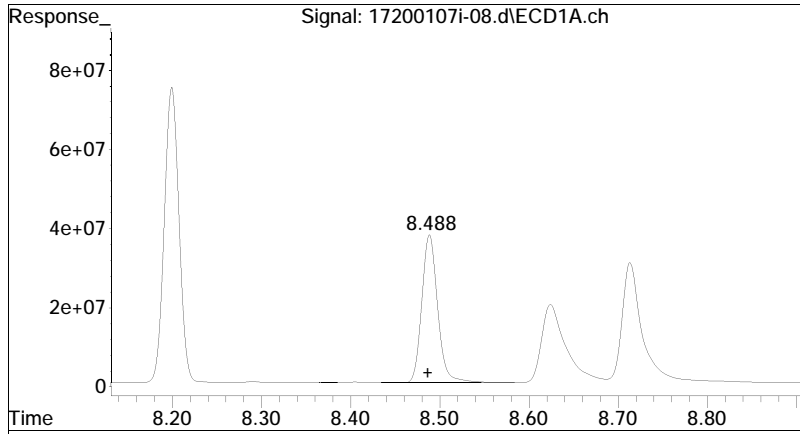
#9 2,4,5-TP (Silvex)

```
         R.T.:     8.488 min
Delta R.T.:     0.001 min
   Response: 466960314
        Conc:    0.19 mg/l
```
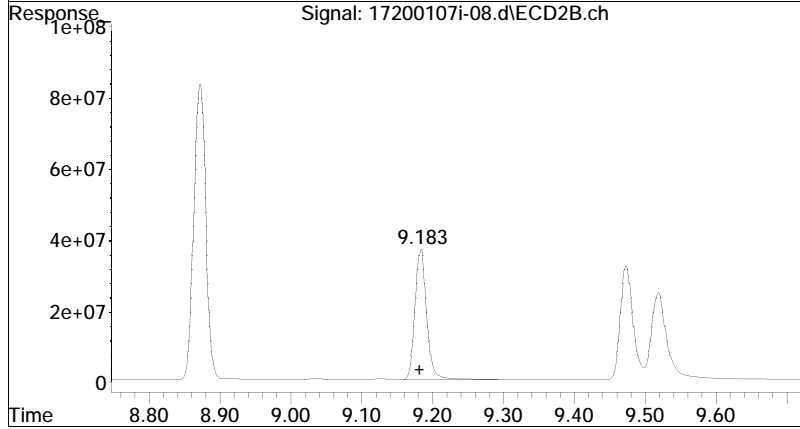

#9 2,4,5-TP (Silvex)

```
         R.T.:     9.184 min
Delta R.T.:     0.002 min
   Response: 420655482
        Conc:    0.19 mg/l
```
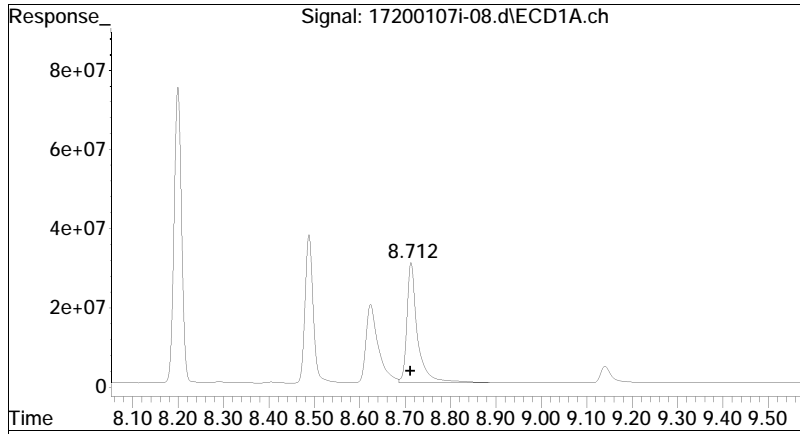
#10 2,4,5-T

         R.T.:   8.713 min
Delta R.T.:   0.000 min
   Response: 492561536
         Conc: 0.18 mg/l
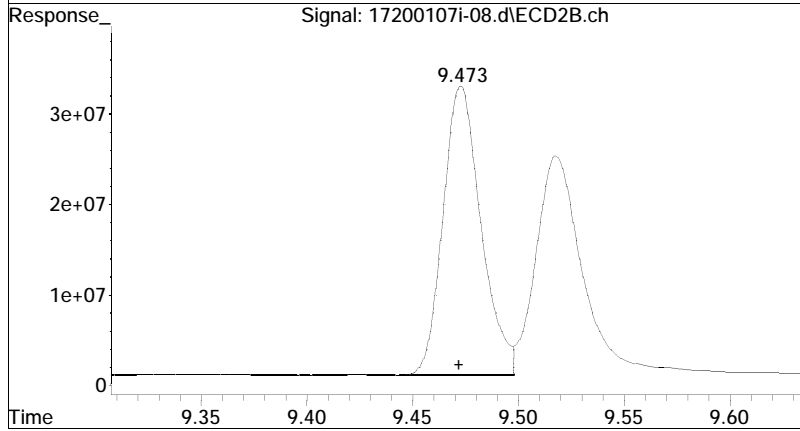
#10 2,4,5-T

         R.T.:   9.473 min
Delta R.T.:   0.001 min
   Response: 395701557
         Conc: 0.18 mg/l

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:58 2020 Page 11
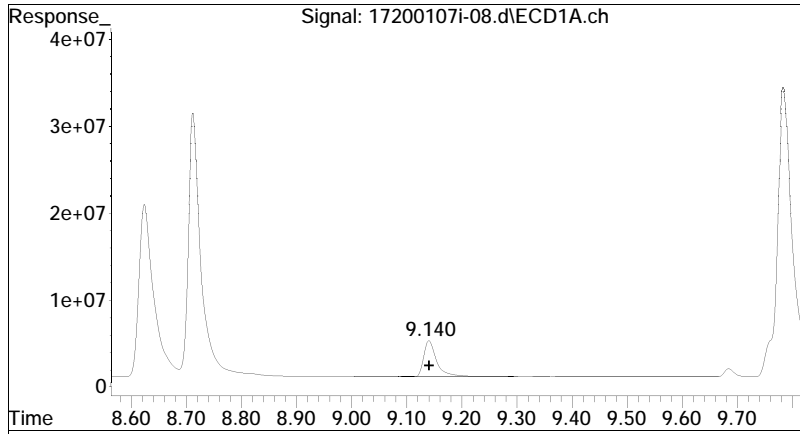
#11 2,4-DB

        R.T.:   9.140 min
Delta R.T.:   -0.001 min
    Response: 75359773
        Conc: 0.16 mg/l m
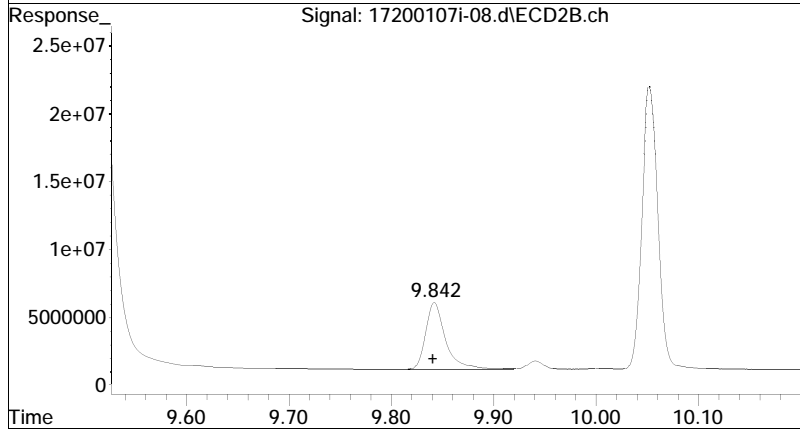
#11 2,4-DB

        R.T.:   9.842 min
Delta R.T.:   0.001 min
    Response: 67366488
        Conc: 0.19 mg/l

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:58 2020 Page 12
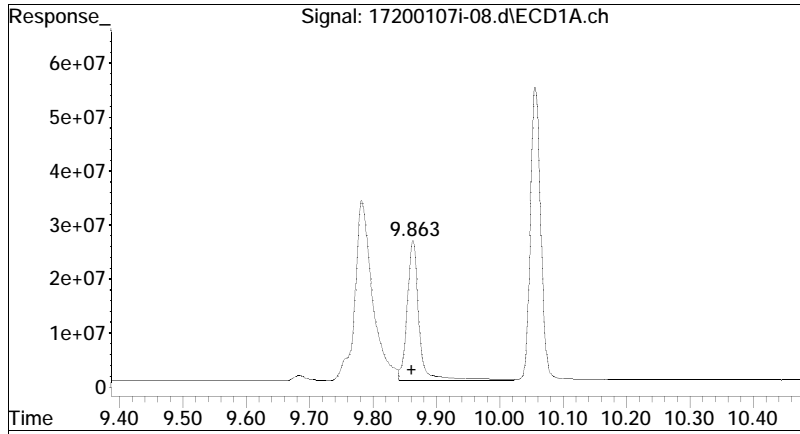
#12 Dinoseb

       R.T.:   9.863 min
Delta R.T.:   0.002 min
  Response: 334355231
      Conc: 0.19 mg/l
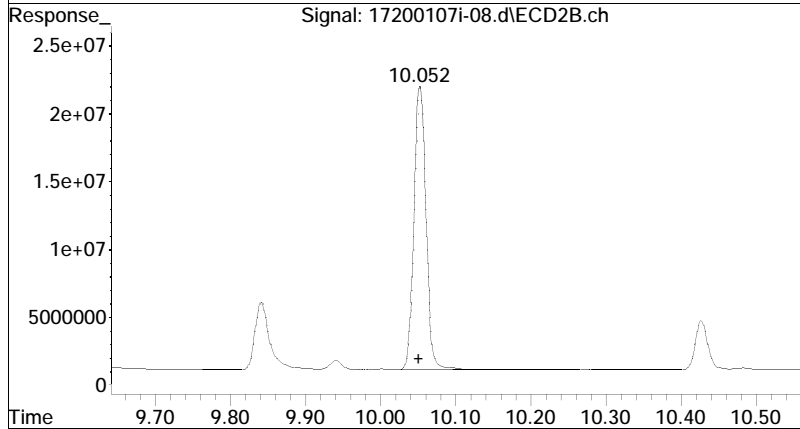
#12 Dinoseb

       R.T.:   10.053 min
Delta R.T.:   0.002 min
  Response: 223936919
      Conc: 0.19 mg/l

17200107i-08.d   Herb17_12_19_ICAL.m   Fri Jan 10 18:31:59 2020 Page 13

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-08.d   Operator   : PEST17:dgm
Date Inj'd : 1/7/2020   4:55 pm   Instrument   : Pest 17
Sample   : cicv,42e,,9495   Quant Date   : 1/10/2020   2:38 pm

Compound #15: Dalapon #2
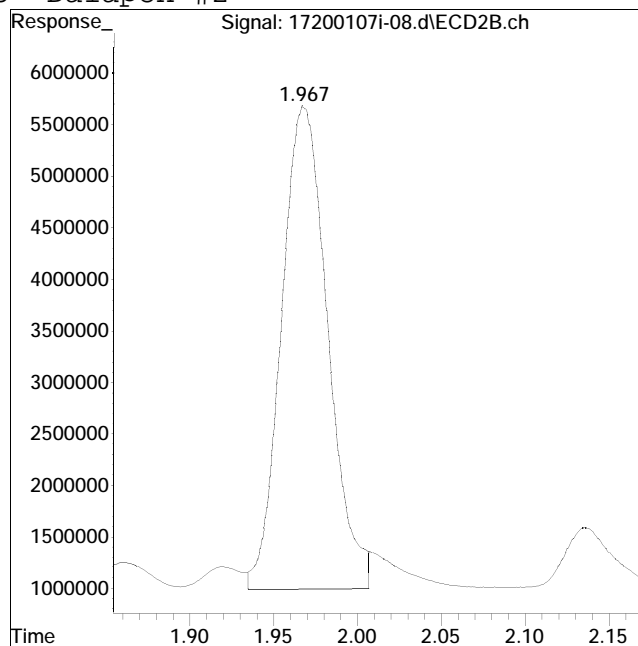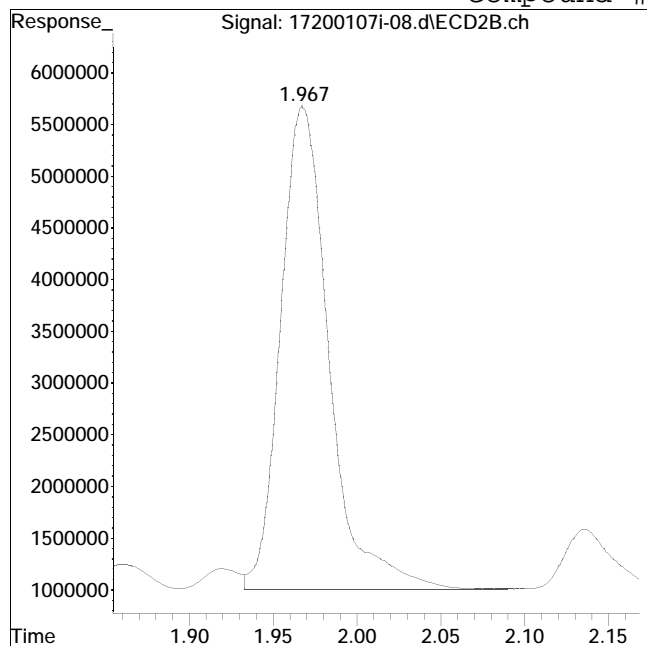
Original Peak Response = 94365488   Manual Peak Response = 90057407 M4
M4 = Poor automated baseline construction.

17200107i-08.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:59 2020   Page 1

Manual Integration Report

Data Path   : I:\Pest17\200107ICAL\   QMethod   : Herb17_12_19_ICAL.m
Data File   : 17200107i-08.d   Operator   : PEST17:dgm
Date Inj'd   : 1/7/2020   4:55 pm   Instrument : Pest 17
Sample   : cicv,42e,,9495   Quant Date : 1/10/2020   2:38 pm

Compound #11: 2,4-DB
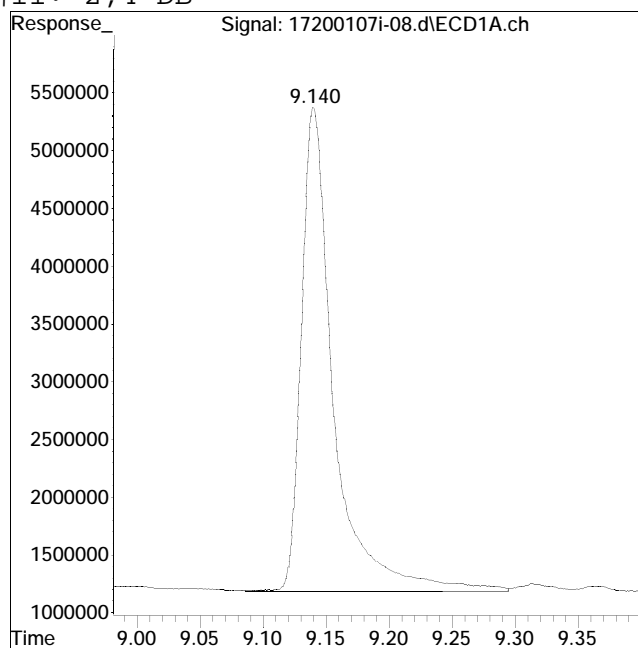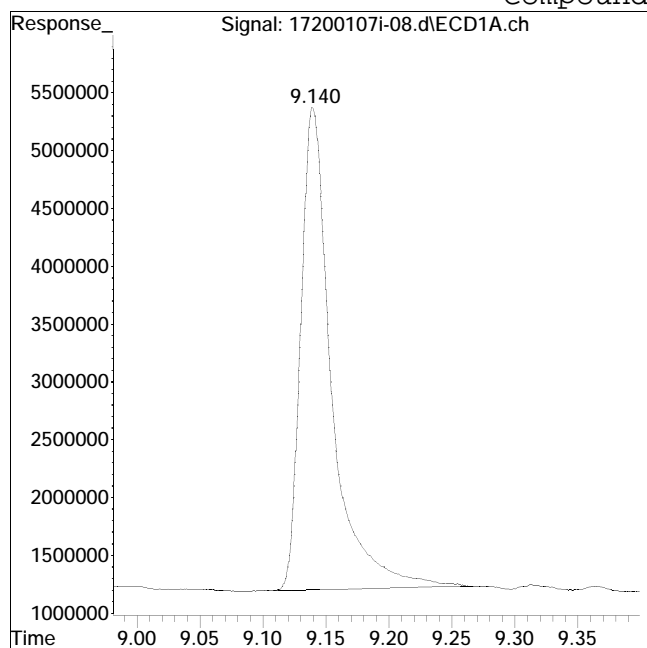
Original Peak Response = 71063846   Manual Peak Response = 75359773 M4
M4 = Poor automated baseline construction.

17200107i-08.d Herb17_12_19_ICAL.m   Fri Jan 10 18:31:59 2020   Page 2

Work Group

```
                              ALPHA ANALYTICAL LABORATORIES, INC.

                              Alpha WORK GROUP REPORT (wk02)

                                  May 29 2020, 12:14 pm

                    Work Group: WG1372978   for Department: 2 Organic Preparation

                         Created: 21-MAY-20    Due:     Operator: MCM
```

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019694-02	PDI-080SC-C-00-8.6-200507	S	HERB-8151	SOIL	DONE	U	0521	0528	S0	Glass-A.25
L2020883-01	DCS-01	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-02	DCS-02	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-03	DCS-03	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-04	DCS-04	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-05	DCS-05	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-06	DCS-06	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-07	DCS-07	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-08	DCS-08	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
L2020883-09	DCS-09	S	HERB-8151	SOIL	DONE	U	0603	0526	1C	Glass-A.25
WG1372978-1	Laboratory Method Bl	S	HERB-8151	SOIL	DONE	U				
WG1372978-2	Laboratory Control S	S	HERB-8151	SOIL	DONE	U				
WG1372978-3	LCS Duplicate	S	HERB-8151	SOIL	DONE	U				

```
Comments:

WG1372978-3          WG1372978-2
```

```
                       ALPHA ANALYTICAL LABORATORIES, INC.

                       Alpha WORK GROUP REPORT (wk02)

                          May 29 2020, 12:14 pm

              Work Group: WG1373173   for Department: 2 Organic Preparation

                  Created: 21-MAY-20   Due:    Operator: jw

Sample        Client ID                              C Product          Matrix      Stat UA HOLD DUE  PR Location


L2019694-01 PDI-058SC-C-00-10.3-200512              S HERB-TCLP*        SOIL        DONE U  0526 0528 S0 EAmber-A1
L2019694-02 PDI-080SC-C-00-8.6-200507               S HERB-TCLP*        SOIL        DONE U  0521 0528 S0 EAmber-A1
L2019694-03 PDI-051SC-C-00-6.9-200511               S HERB-TCLP*        SOIL        DONE U  0525 0528 S0 EAmber-A1
L2019694-04 PDI-060SC-C-00-6.8-200511               S HERB-TCLP*        SOIL        DONE U  0525 0528 S0 EAmber-A1
L2020443-01 377-1                                   S HERB-TCLP*        SOIL        DONE U  0601 0526 S0 EAmber-A1
L2020468-01 SODRUM01_051820                         C HERB-TCLP*        SOIL        DONE U  0601 0526 S0 EAmber-A1
L2020719-01 WC-PA-1934-200519-01                    S HERB-TCLP*        SOIL        DONE U  0602 0527 2E EAmber-A1
L2020719-02 WC-PA-1935-200519-01                    S HERB-TCLP*        SOIL        DONE U  0602 0527 2E EAmber-A1
WG1373173-1 Laboratory Method Bl                    S HERB-TCLP*        SOIL        DONE U
WG1373173-2 Laboratory Control S                    S HERB-TCLP*        SOIL        DONE U
WG1373173-3 LCS Duplicate                           S HERB-TCLP*        SOIL        DONE U

Comments:

WG1373173-3        WG1373173-2
```

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019538-01	1 1/2 GRAVEL	S	HERB-8151	SOIL	DONE	U	0525	0527	S0	Glass-A.25
L2019538-02	3/4 STONE	S	HERB-8151	SOIL	DONE	U	0525	0527	S0	Glass-A.25
L2019538-03	GEORGETOWN SAND	S	HERB-8151	SOIL	DONE	U	0525	0527	S0	Glass-A.25
L2019694-01	PDI-058SC-C-00-10.3-200512	S	HERB-8151	SOIL	DONE	U	0526	0528	S0	Glass-A.25
L2019694-03	PDI-051SC-C-00-6.9-200511	S	HERB-8151	SOIL	DONE	U	0525	0528	S0	Glass-A.25
L2019694-04	PDI-060SC-C-00-6.8-200511	S	HERB-8151	SOIL	DONE	U	0525	0528	S0	Glass-A.25
L2020598-01	TP-19	S	HERB-8151	SOIL	DONE	U	0602	0527	S0	Glass-A.25
L2020598-02	TP-21	S	HERB-8151	SOIL	DONE	U	0602	0527	S0	Glass-A.25
L2020661-01	B-1_0'-2'_20200519	S	HERB-8151	SOIL	DONE	U	0602	0526	S0	Glass-A.25
L2020661-02	B-3_0'-2'_20200519	S	HERB-8151	SOIL	DONE	U	0602	0526	S0	Glass-A.25
L2020842-01	B-4_0'-2'_20200520	S	HERB-8151	SOIL	DONE	U	0603	0527	S0	Glass-A.25
L2020842-02	B-5_0'-2'_20200520	S	HERB-8151	SOIL	DONE	U	0603	0527	S0	Glass-A.25
L2020842-03	B-2_0'-2'_20200520	S	HERB-8151	SOIL	DONE	U	0603	0527	S0	Glass-A.25
WG1373342-1	Laboratory Method Bl	S	HERB-8151	SOIL	DONE	U				
WG1373342-2	Laboratory Control S	S	HERB-8151	SOIL	DONE	U				
WG1373342-3	LCS Duplicate	S	HERB-8151	SOIL	DONE	U				

Comments:

WG1373342-3   WG1373342-2

Page 1

Sequence Logs

Dep.: Pest   Method: 8151

Inst: Pest_17   GC:

Date: **01/07/20**

Run: **ical**   Seq: ical

Vial	Data File	Sample	CCAL	notes	initials
1	17200107i-01	herb blank			
2	17200107i-02	il1herb,42e,,9499		*UG 1328992*	
3	17200107i-03	il2herb,42e,,9500			
4	17200107i-04	il3herb,42e,,9501		*ical # 16424*	
5	17200107i-05	il4herb,42e,,9502			
6	17200107i-06	il5herb,42e,,9503			
7	17200107i-07	il6herb,42e,,9504			
8	17200107i-08	cicv,42e,,9495		*15%*	

From Level 1 2,4 DB & MOP were dropped

dgu 1/9/20

Dep.: Pest   Method: 8151

Inst: Pest_17   GC:

Date: **05/24/20**

Run: **a**   Seq: wg1374081

Vial	Data File	Sample	CCAL	notes	initials
1	17200524a-01	herb cc 9707			
1	17200524a-02	herb cc9707			
2	17200524a-03	wg1373342-1,42e,,3446,3447 apa mcp			
3	17200524a-04	wg1373342-2,42e,,3446,3447 apa mcp			
4	17200524a-05	wg1373342-3,42e,,3446,3447 apa mcp			
5	17200524a-06	l2020944-01,42e,, p apa			
6	17200524a-07	wg1373446-4,42e,, ms apa			
7	17200524a-08	wg1373446-5,42e,, dup apa			
8	17200524a-09	l2020944-03,42e,, apa			
9	17200524a-10	l2019538-01,42e,, 8151			
10	17200524a-11	l2019538-02,42e,, 8151			
11	17200524a-12	l2019538-03,42e,, 8151			
12	17200524a-13	l2019694-01,42e,,8151			
13	17200524a-14	l2019694-03,42e,,8151			
14	17200524a-15	l2019694-04,42e,,8151			
15	17200524a-16	l2020598-01,42e,,8151			
16	17200524a-17	l2020598-02,42e,,8151			
17	17200524a-18	herb cc 9707			
18	17200524a-19	l2020860-01,42e,,mcp			
19	17200524a-20	l2020661-01,42e,, 8151			
20	17200524a-21	l2020661-02,42e,, 8151			
21	17200524a-22	l2020842-01,42e,, 8151			
22	17200524a-23	l2020842-02,42e,, 8151			
23	17200524a-24	l2020842-03,42e,, 8151			
24	17200524a-25	WG1374039-1,42e,, t			
25	17200524a-26	WG1374039-2,42e,, t			
26	17200524a-27	WG1374039-3,42e,, t			
27	17200524a-28	L2020600-01,42,,			
28	17200524a-29	L2020624-10,42,,			
29	17200524a-30	L2020624-11,42,,			
30	17200524a-31	L2020624-12,42,,			
31	17200524a-32	herb cc 9707			
32	17200524a-33	L2020624-13,42,,			
33	17200524a-34	L2021212-08,42,,			
34	17200524a-35	L2021212-09,42,,			
35	17200524a-36	L2021212-11,42,,			
36	17200524a-37	L2021212-12,42,,			
37	17200524a-38	L2021212-13,42,,			
38	17200524a-39	WG1373868-1,42,,			
39	17200524a-40	WG1373868-2,42,,			
40	17200524a-41	WG1373868-3,42,,			
41	17200524a-42	L2021383-01,42,,			
42	17200524a-43	L2021383-02,42,,			

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Dep.: Pest Method: 8151
Inst: Pest_17 GC:
Date: **05/24/20**
Run: **a** Seq: ___wg1374081___

Vial	Data File	Sample	CCAL	notes	initials
43	17200524a-44	L2021383-03,42,,			
44	17200524a-45	L2021383-04,42,,			
45	17200524a-46	herb cc 9707			
46	17200524a-47	L2021383-05,42,,			
47	17200524a-48	L2021383-06,42,,			
48	17200524a-49	wg1373803-1,42e,, 797			
49	17200524a-50	wg1373803-2,42e,, 797			
50	17200524a-51	wg1373803-3,42e,, 797			
51	17200524a-52	L2021212-01,42,,			
52	17200524a-53	WG1373803-4,42,,			
53	17200524a-54	WG1373803-5,42,,			
54	17200524a-55	L2021212-02,42,,			
55	17200524a-56	L2021212-03,42,,			
56	17200524a-57	L2021212-04,42,,			
57	17200524a-58	L2021212-05,42,,			
58	17200524a-59	L2021212-06,42,,			
59	17200524a-60	L2021212-07,42,,			
60	17200524a-61	L2021114-01,42,,			
61	17200524a-62	herb cc 9707			
62	17200524a-63	WG1373797-4,42,,			
63	17200524a-64	WG1373797-5,42,,			
64	17200524a-65	L2021114-04,42,,			
65	17200524a-66	L2021114-05,42,,			
66	17200524a-67	L2021114-06,42,,			
67	17200524a-68	L2021114-10,42,,			
68	17200524a-69	L2020971-01,42,,			
69	17200524a-70	L2021003-01,42,,			
70	17200524a-71	L2021089-01,42,,			

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Dep.: Pest
Inst: Pest_17
Date: **05/22/20**
Run: **a**

Method: 8151
GC:

Seq: ___wg1373624___

Vial	Data File	Sample	CCAL	notes	initials
1	17200522a-01	herb cc 9707			
2	17200522a-02	l2020923-08,42e,, apa			
3	17200522a-03	wg1373173-1,42e,, t			
4	17200522a-04	wg1373173-2,42e,, t			
5	17200522a-05	wg1373173-3,42e,, t			
6	17200522a-06	l2020261-04,42e,, RE			
7	17200522a-07	L2020443-01,42,, t			
8	17200522a-08	L2020468-01,42,, t			
9	17200522a-09	L2020883-02,42,,			
10	17200522a-10	L2020883-03,42,,			
11	17200522a-11	L2020883-04,42,,			
12	17200522a-12	L2020883-05,42,,			
13	17200522a-13	L2020883-06,42,,			
14	17200522a-14	L2020883-07,42,,			
15	17200522a-15	wg1373624-2,42e,, herb 9707			
16	17200522a-16	L2020883-08,42,,			
17	17200522a-17	L2020883-09,42,,			
18	17200522a-18	L2019694-02,42,,			
19	17200522a-19	L2020719-01,42,,			
20	17200522a-20	L2020719-02,42,,			
21	17200522a-21	L2019694-01,42,, t			
22	17200522a-22	L2019694-02,42,,t			
23	17200522a-23	L2019694-03,42,,t			
24	17200522a-24	L2019694-04,42,,t			
25	17200522a-25	wg1373624-3,42e,, herb 9707			
26	17200522a-26	WG1373190-1,42,,			
27	17200522a-27	WG1373190-2,42,,			
28	17200522a-28	WG1373190-3,42,,			
29	17200522a-29	L2020057-01,42,,			
30	17200522a-30	L2020057-02,42,,			
31	17200522a-31	L2020057-03,42,,			
32	17200522a-32	L2020057-04,42,,			

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Dep.: Pest   Method: 8151
Inst: Pest_17   GC:
Date: **05/21/20**
Run: **a**   Seq: wg1373146

Vial	Data File	Sample	CCAL	notes	initials
1	17200521a-01	herb cc 9707			
2	17200521a-02	herb cc 9707			
3	17200521a-03	l2020195-01,42e,, 8151			
4	17200521a-04	l2020320-01,42e,, 8151			
5	17200521a-05	l2020327-01,42e,, 8151			
6	17200521a-06	l2020447-01,42e,, mcp			
7	17200521a-07	l2020627-01,42e,, mcp			
8	17200521a-08	wg1372869-1,42e,, t			
9	17200521a-09	wg1372869-2,42e,, t			
10	17200521a-10	wg1372869-3,42e,, t			
11	17200521a-11	l2020296-01,42e,, t			
12	17200521a-12	l2020306-01,42e,, t			
13	17200521a-13	l2020306-02,42e,, t			
14	17200521a-14	l2020353-01,42e,, t			
15	17200521a-15	l2020354-01,42e,, t			
16	17200521a-16	wg1373146-2,42e,, herb 9707			
17	17200521a-17	wg1372555-1,42e,, apa			
18	17200521a-18	wg1372555-2,42e,, apa			
19	17200521a-19	wg1372555-3,42e,, apa			
20	17200521a-20	l2020261-01,42e,, apa			
21	17200521a-21	l2020261-02,42e,, apa			
22	17200521a-22	l2020261-03,42e,, apa			
23	17200521a-23	l2020261-04,42e,, apa			
24	17200521a-24	l2020273-01,42e,, apa			
25	17200521a-25	l2020273-02,42e,, apa			
26	17200521a-26	l2020273-03,42e,, apa			
27	17200521a-27	l2020273-04,42e,, apa			
28	17200521a-28	l2020273-05,42e,, apa			
29	17200521a-29	wg1373146-3,42e,, herb 9707			
30	17200521a-30	l2020335-02,42e,, apa			
31	17200521a-31	l2020335-03,42e,, apa			
32	17200521a-32	l2020335-05,42e,, apa			
33	17200521a-33	l2020335-06,42e,, apa			
34	17200521a-34	l2020335-07,42e,, apa			
35	17200521a-35	l2020335-08,42e,, apa			
36	17200521a-36	l2020632-02,42e,, mcp			
37	17200521a-37	l2020632-03,42e,, mcp			
38	17200521a-38	l2020632-05,42e,, mcp			
39	17200521a-39	wg1373146-4,42e,, herb 9707			
40	17200521a-40	l2020261-04,42e,, apa/rv			
41	17200521a-41	wg1373177-1,42e,, apa,2978 8151			
42	17200521a-42	wg1373177-2,42e,, apa,2978 8151			
43	17200521a-43	wg1373177-3,42e,, apa,2978 8151			

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Dep.: Pest   Method: 8151

Inst: Pest_17   GC:

Date: **05/21/20**

Run: **a**   Seq: wg1373146

Vial	Data File	Sample	CCAL	notes	initials
44	17200521a-44	l2020883-01,42e,, 8151			

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Analytical Event

Continuing Calibration

```
                    Evaluate Continuing Calibration Report

  Data Path : I:\Pest17\200521a\
  Data File : 17200521a-39.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 21 May 2020    9:19 pm
  Operator  : PEST17:jmc
  Sample    : wg1373146-4,42e,, herb 9707
  Misc      : wg1373146,wg1372409,ical16424
  ALS Vial  : 39   Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 21 22:26:30 2020
  Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.    :
  Signal #1 Phase :                       Signal #2 Phase:
  Signal #1 Info  :                       Signal #2 Info :


  Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%      Max. Rel. Area : 150%


        Compound                  Amount   Calc.      %Dev  Area% Dev(Min)
      -------------------------------------------------------------------
 1 i   4,4'-DBOB                   0.250   0.250       0.0    96   0.00
 2 t   Dalapon                     0.182   0.162      11.0    89   0.00
 3 s   DCAA (surrogate)            0.188   0.173       8.0    91   0.00
 4 t   Dicamba                     0.188   0.165      12.2    89   0.00
 5 t   MCPP                       18.800  16.012      14.8    85   0.00
 6 t   MCPA                       18.600  17.887       3.8    87   0.00
 7 t   Dichloroprop                0.188   0.167      11.2    87   0.00
 8 t   2,4-D                       0.188   0.186       1.1    97  -0.01
 9 t   2,4,5-TP (Silvex)           0.190   0.193      -1.6   101   0.00
10 t   2,4,5-T                     0.190   0.177       6.8    94   0.00
11 t   2,4-DB                      0.192   0.177       7.8    97  -0.01
12 t   Dinoseb                     0.190   0.203      -6.8   100   0.00

  Signal #2


 1 i   4,4'-DBOB                   0.250   0.250       0.0    88   0.00
 2 t   Dalapon                     0.182   0.178       2.2    89   0.00
 3 s   DCAA (surrogate)            0.188   0.185       1.6    89   0.00
 4 t   Dicamba                     0.188   0.183       2.7    86   0.00
 5 t   MCPP                       18.800  17.317       7.9    89   0.00
 6 t   MCPA                       18.600  19.218      -3.3    91   0.00
 7 t   Dichloroprop                0.188   0.177       5.9    86   0.00
 8 t   2,4-D                       0.188   0.172       8.5    84   0.00
 9 t   2,4,5-TP (Silvex)           0.190   0.185       2.6    89   0.00
10 t   2,4,5-T                     0.190   0.180       5.3    88   0.00
11 t   2,4-DB                      0.192   0.177       7.8    83   0.00
12 t   Dinoseb                     0.190   0.211     -11.1   101   0.00


          Evaluate Continuing Calibration Report - Not Founds
```

Herb17_01_20_ICAL16424.m Thu May 21 23:03:16 2020   Page: 1

```
                   Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-39.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 21 May 2020   9:19 pm
   Operator  : PEST17:jmc
   Sample    : wg1373146-4,42e,, herb 9707
   Misc      : wg1373146,wg1372409,ical16424
   ALS Vial  : 39   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:26:30 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.     :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :


   Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :   15%     Max. Rel. Area : 150%

        Compound                        Amount  Calc.     %Dev  Area% Dev(Min)
   -------------------------------------------------------------------------

   Signal #2

 -------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0   CCC's out = 0
```

```
                      Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-39.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020   9:19 pm
   Operator  : PEST17:jmc
   Sample    : wg1373146-4,42e,, herb 9707
   Misc      : wg1373146,wg1372409,ical16424
   ALS Vial  : 39   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:26:30 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List     : Default - All compounds listed

         Compound       RT#1     RT#2   Resp#1    Resp#2    mg/l       mg/l
      ----------------------------------------------------------------------
    Internal Standards
 1) i  4,4'-DBOB      8.162    8.460   767.0E6   600.2E6    0.250      0.250

    System Monitoring Compounds
 3) s  DCAA (surrog   6.607    7.386  86710159  85552065    0.173      0.185
  Spiked Amount      0.500 Range  30 - 150  Recovery   =   34.60%     37.00%

    Target Compounds
 2) t  Dalapon        1.693    1.969  86161364  80841785    0.162      0.178
 4) t  Dicamba        6.786    7.566   271.2E6   242.1E6    0.165M4     0.183
 5) t  MCPP           6.995    7.679  32653936  32575596   16.012     17.317
 6) t  MCPA           7.142    7.906  56088373  55104256   17.887     19.218
 7) t  Dichloroprop   7.494    8.225  78699317  70519674    0.167      0.177
 8) t  2,4-D          7.707    8.502   103.6E6  97028145    0.186      0.172
 9) t  2,4,5-TP (Si   8.438    9.160   420.2E6   331.1E6    0.193      0.185
10) t  2,4,5-T        8.664    9.451   427.5E6   319.3E6    0.177      0.180
11) t  2,4-DB         9.079    9.813  73015498  50943594    0.177      0.177
12) t  Dinoseb        9.825   10.035   313.3E6   206.6E6    0.203      0.211

    SemiQuant Compounds - Not Calibrated on this Instrument
      ----------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
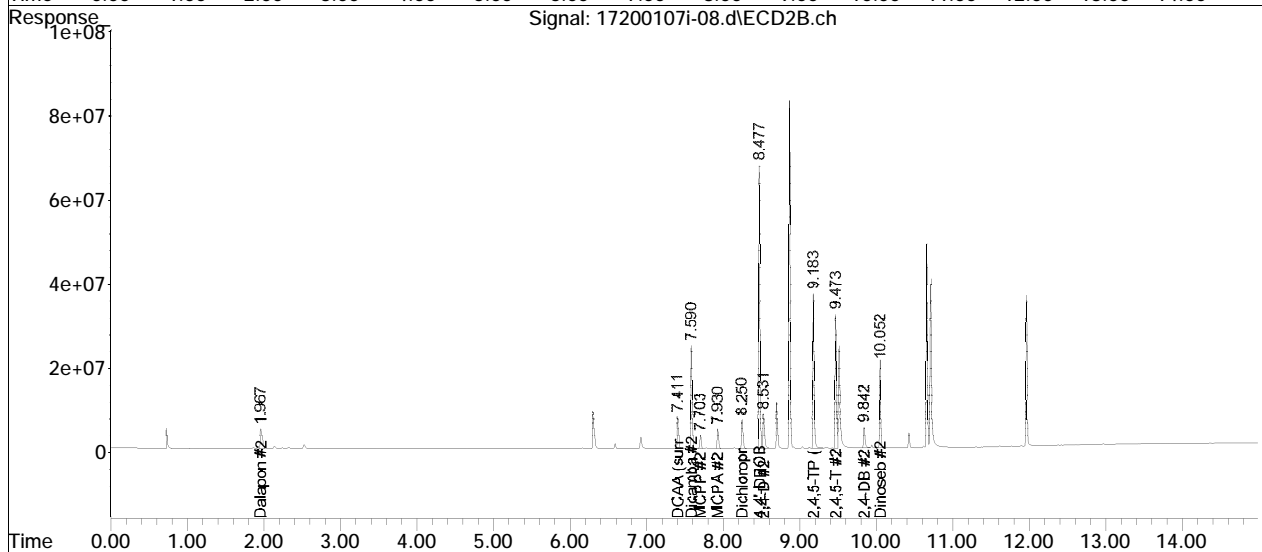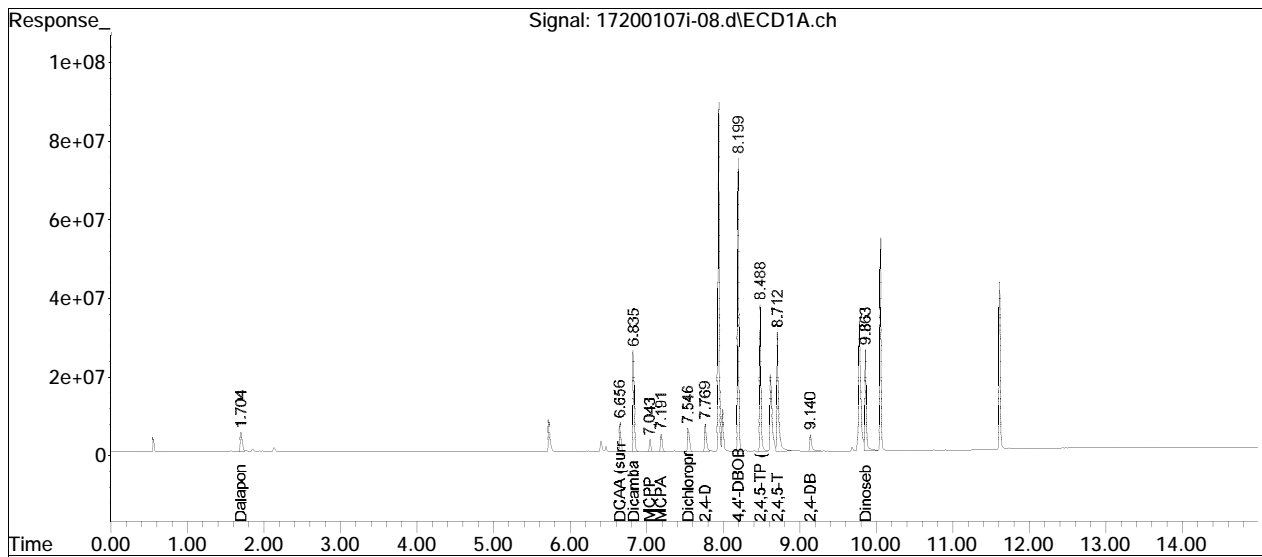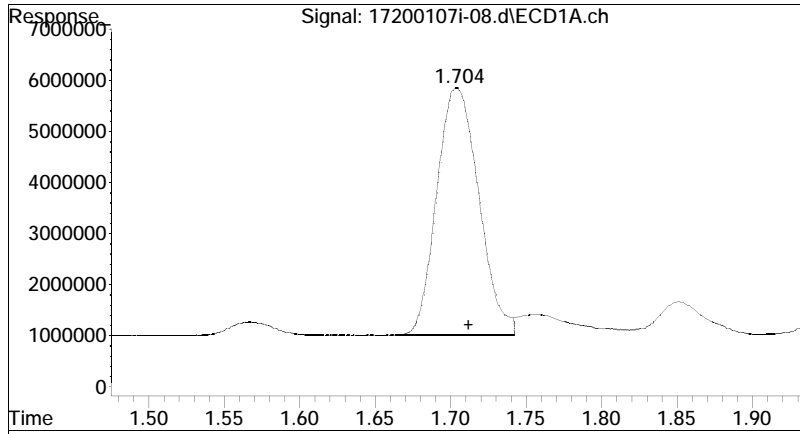
Herb17_01_20_ICAL16424.m Thu May 21 23:02:58 2020   Page: 1

Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-39.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 21 May 2020   9:19 pm
Operator : PEST17:jmc
Sample   : wg1373146-4,42e,, herb 9707
Misc   : wg1373146,wg1372409,ical16424
ALS Vial : 39   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 22:26:30 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info   :   Signal #2 Info :

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-39.d   Operator   : PEST17:jmc
Date Inj'd : 5/21/2020 9:19 pm   Instrument : Pest 17
Sample   : wg1373146-4,42e,, herb 970Quant Date : 5/21/2020 10:25 pm

Compound #4: Dicamba

Original Peak Response = 270637918   Manual Peak Response = 271241441 M4
M4 = Poor automated baseline construction.

```
                      Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-29.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020   6:15 pm
   Operator  : PEST17:jmc
   Sample    : wg1373146-3,42e,, herb 9707
   Misc      : wg1373146,wg1372555,ical16424
   ALS Vial  : 29   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 10:02:41 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.     :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List     : Default - All compounds listed


         Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   --------------------------------------------------------------------------------
    Internal Standards
 1) i   4,4'-DBOB       8.162    8.460   724.4E6  573.8E6    0.250       0.250

    System Monitoring Compounds
 3) s   DCAA (surrog    6.607    7.386  84078892 83101796    0.177       0.188
  Spiked Amount       0.500 Range  30 - 150  Recovery   =   35.40%      37.60%

    Target Compounds
 2) t   Dalapon         1.684    1.961  84323715 79086112    0.168       0.183
 4) t   Dicamba         6.786    7.566   260.9E6  234.2E6    0.168       0.185
 5) t   MCPP            6.996    7.679  31600285 31446293   16.405      17.487
 6) t   MCPA            7.142    7.906  54218139 53071947   18.306      19.361
 7) t   Dichloroprop    7.495    8.225  76229903 68523912    0.171       0.180
 8) t   2,4-D           7.707    8.502  99761363 95169539    0.189       0.177
 9) t   2,4,5-TP (Si    8.439    9.161   404.1E6  320.8E6    0.196       0.187
10) t   2,4,5-T         8.666    9.452   410.1E6  316.6E6    0.179       0.187
11) t   2,4-DB          9.080    9.814  70838506 51107703    0.182       0.186
12) t   Dinoseb         9.826   10.035   295.8E6  203.7E6    0.203       0.217

    SemiQuant Compounds - Not Calibrated on this Instrument
   --------------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




Herb17_01_20_ICAL16424.m Fri May 22 10:12:29 2020                    Page: 1
```

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-29.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020   6:15 pm
Operator  : PEST17:jmc
Sample    : wg1373146-3,42e,, herb 9707
Misc      : wg1373146,wg1372555,ical16424
ALS Vial  : 29   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 10:02:41 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

```
Data Path   : I:\Pest17\200521a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-29.d            Operator    : PEST17:jmc
Date Inj'd  : 5/21/2020  6:15 pm        Instrument  : Pest 17
Sample      : wg1373146-3,42e,, herb 970Quant Date  : 5/22/2020 10:02 am
```

There are no manual integrations or false positives in this file.

```
                    Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-02.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020    9:11 am
   Operator  : PEST17:jmc
   Sample    : wg1373146-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
   Misc      : wg1373146,,ical16424
   ALS Vial  : 2    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 09:51:06 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.     :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List      : Default - All compounds listed


         Compound        RT#1      RT#2    Resp#1    Resp#2    mg/l        mg/l
      ---------------------------------------------------------------------------
   Internal Standards
1) i   4,4'-DBOB       8.163    8.462    709.6E6   564.0E6    0.250      0.250

   System Monitoring Compounds
3) s   DCAA (surrog    6.611    7.390   83418171  81010300   0.179      0.186
 Spiked Amount      0.500 Range  30 - 150  Recovery   =    35.80%     37.20%

   Target Compounds
2) t   Dalapon         1.692    1.967   82796625  76808936   0.169      0.180
4) t   Dicamba         6.789    7.569    256.1E6   228.6E6    0.169      0.184
5) t   MCPP            6.997    7.682   31896668  31448888   16.906     17.793
6) t   MCPA            7.144    7.909   52661867  52519318   18.153     19.493
7) t   Dichloroprop    7.498    8.228   75434887  66905629   0.173      0.179
8) t   2,4-D           7.717    8.508   94586213  92145739   0.183      0.174
9) t   2,4,5-TP (Si    8.445    9.166    390.5E6   314.0E6    0.194      0.186
10) t  2,4,5-T         8.674    9.456    402.8E6   303.5E6    0.180      0.182
11) t  2,4-DB          9.091    9.819   69738084  51796119   0.182      0.192
12) t  Dinoseb         9.827   10.038    303.7E6   206.5E6    0.212      0.224

   SemiQuant Compounds - Not Calibrated on this Instrument
   ---------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

```
Sub List     : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-02.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020    9:11 am
Operator  : PEST17:jmc
Sample    : wg1373146-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
Misc      : wg1373146,,ical16424
ALS Vial  : 2    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 09:51:06 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

```
                            Manual Integration Report

Data Path   : I:\Pest17\200521a\          QMethod    : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-02.d              Operator   : PEST17:jmc
Date Inj'd  : 5/21/2020  9:11 am          Instrument : Pest 17
Sample      : wg1373146-1,42e,, herb cc   Quant Date : 5/21/2020  9:51 am
```

There are no manual integrations or false positives in this file.

```
                       Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-39.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020    9:19 pm
   Operator  : PEST17:jmc
   Sample    : wg1373146-4,42e,, herb 9707
   Misc      : wg1373146,wg1372409,ical16424
   ALS Vial  : 39   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:26:30 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List      : Default - All compounds listed


          Compound        RT#1      RT#2    Resp#1    Resp#2    mg/l        mg/l
     -------------------------------------------------------------------------------
     Internal Standards
 1) i   4,4'-DBOB        8.162     8.460   767.0E6   600.2E6    0.250       0.250

     System Monitoring Compounds
 3) s   DCAA (surrog     6.607     7.386  86710159  85552065    0.173       0.185
  Spiked Amount        0.500 Range   30 - 150  Recovery   =   34.60%      37.00%

     Target Compounds
 2) t   Dalapon         1.693     1.969  86161364  80841785    0.162       0.178
 4) t   Dicamba         6.786     7.566   271.2E6   242.1E6    0.165M4     0.183
 5) t   MCPP            6.995     7.679  32653936  32575596   16.012      17.317
 6) t   MCPA            7.142     7.906  56088373  55104256   17.887      19.218
 7) t   Dichloroprop    7.494     8.225  78699317  70519674    0.167       0.177
 8) t   2,4-D           7.707     8.502   103.6E6  97028145    0.186       0.172
 9) t   2,4,5-TP (Si    8.438     9.160   420.2E6   331.1E6    0.193       0.185
10) t   2,4,5-T         8.664     9.451   427.5E6   319.3E6    0.177       0.180
11) t   2,4-DB          9.079     9.813  73015498  50943594    0.177       0.177
12) t   Dinoseb         9.825    10.035   313.3E6   206.6E6    0.203       0.211

     SemiQuant Compounds - Not Calibrated on this Instrument
     -------------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-39.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 21 May 2020   9:19 pm
Operator : PEST17:jmc
Sample   : wg1373146-4,42e,, herb 9707
Misc   : wg1373146,wg1372409,ical16424
ALS Vial : 39   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 22:26:30 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Manual Integration Report

```
Data Path    : I:\Pest17\200521a\        QMethod      : Herb17_01_20_ICAL16424.m
Data File    : 17200521a-39.d            Operator     : PEST17:jmc
Date Inj'd   : 5/21/2020  9:19 pm        Instrument   : Pest 17
Sample       : wg1373146-4,42e,, herb 970Quant Date   : 5/21/2020 10:25 pm
```

Compound #4: Dicamba

Original Peak Response = 270637918   Manual Peak Response = 271241441 M4
M4 = Poor automated baseline construction.

```
                  Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-16.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 21 May 2020    2:17 pm
   Operator  : PEST17:jmc
   Sample    : wg1373146-2,42e,, herb 9707
   Misc      : wg1373146,wg1372869,ical16424
   ALS Vial  : 16    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 15:17:28 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                       Signal #2 Phase:
   Signal #1 Info  :                       Signal #2 Info :

   Sub List     : Default - All compounds listed

         Compound      RT#1     RT#2    Resp#1    Resp#2    mg/l        mg/l
        -------------------------------------------------------------------------
    Internal Standards
1) i   4,4'-DBOB     8.163    8.460   675.6E6   542.7E6    0.250      0.250

    System Monitoring Compounds
3) s   DCAA (surrog  6.608    7.387  80028912  78364391    0.181      0.187
 Spiked Amount      0.500 Range   30 - 150  Recovery   =    36.20%     37.40%

    Target Compounds
2) t   Dalapon       1.684    1.961  80237438  74557176    0.172      0.182
4) t   Dicamba       6.787    7.566   245.3E6   221.6E6    0.170      0.185
5) t   MCPP          6.996    7.679  30228427  30105104   16.828     17.702
6) t   MCPA          7.143    7.906  51285753  50675891   18.568     19.548
7) t   Dichloroprop  7.496    8.226  72110770  64728772    0.173      0.180
8) t   2,4-D         7.710    8.503  94229367  91075581    0.192      0.179
9) t   2,4,5-TP (Si  8.441    9.161   381.0E6   298.7E6    0.199      0.184
10) t  2,4,5-T       8.668    9.453   386.3E6   301.4E6    0.181      0.188
11) t  2,4-DB        9.083    9.815  69879488  50590077    0.192      0.195
12) t  Dinoseb       9.827   10.036   276.5E6   196.0E6    0.203      0.221

    SemiQuant Compounds - Not Calibrated on this Instrument
    -------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%   (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-16.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020    2:17 pm
Operator  : PEST17:jmc
Sample    : wg1373146-2,42e,, herb 9707
Misc      : wg1373146,wg1372869,ical16424
ALS Vial  : 16    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 15:17:28 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```


Signal: 17200521a-16.d\ECD1A.ch

Signal: 17200521a-16.d\ECD2B.ch

```
Data Path   : I:\Pest17\200521a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-16.d            Operator    : PEST17:jmc
Date Inj'd  : 5/21/2020  2:17 pm        Instrument  : Pest 17
Sample      : wg1373146-2,42e,, herb 970Quant Date  : 5/21/2020  3:17 pm
```

There are no manual integrations or false positives in this file.

Sample Raw Data

Analytical Event

Continuing Calibration

```
                    Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-01.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   9:57 am
   Operator  : PEST17:jmc
   Sample    : wg1373624-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
   Misc      : wg1373624,,ical16424
   ALS Vial  : 1   Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 10:29:00 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :


   Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%      Max. Rel. Area : 150%

        Compound                 Amount   Calc.      %Dev  Area% Dev(Min)
   -------------------------------------------------------------------------
   1 i  4,4'-DBOB                 0.250   0.250       0.0    87   0.00
   2 t  Dalapon                   0.182   0.160      12.1    79  -0.01
   3 s  DCAA (surrogate)          0.188   0.178       5.3    84   0.00
   4 t  Dicamba                   0.188   0.167      11.2    81   0.00
   5 t  MCPP                     18.800  16.757      10.9    80   0.00
   6 t  MCPA                     18.600  18.575       0.1    82   0.00
   7 t  Dichloroprop              0.188   0.174       7.4    82   0.00
   8 t  2,4-D                     0.188   0.191      -1.6    90   0.00
   9 t  2,4,5-TP (Silvex)         0.190   0.203      -6.8    96   0.00
  10 t  2,4,5-T                   0.190   0.180       5.3    86   0.00
  11 t  2,4-DB                    0.192   0.192       0.0    96   0.00
  12 t  Dinoseb                   0.190   0.213     -12.1    95   0.00

   Signal #2


   1 i  4,4'-DBOB                 0.250   0.250       0.0    82   0.00
   2 t  Dalapon                   0.182   0.169       7.1    79   0.00
   3 s  DCAA (surrogate)          0.188   0.186       1.1    83   0.00
   4 t  Dicamba                   0.188   0.183       2.7    80   0.00
   5 t  MCPP                     18.800  17.653       6.1    84   0.00
   6 t  MCPA                     18.600  19.516      -4.9    86   0.00
   7 t  Dichloroprop              0.188   0.181       3.7    81   0.00
   8 t  2,4-D                     0.188   0.179       4.8    81   0.00
   9 t  2,4,5-TP (Silvex)         0.190   0.186       2.1    83   0.00
  10 t  2,4,5-T                   0.190   0.191      -0.5    87   0.00
  11 t  2,4-DB                    0.192   0.202      -5.2    88   0.00
  12 t  Dinoseb                   0.190   0.230     -21.1#  102   0.00

            Evaluate Continuing Calibration Report - Not Founds


Herb17_01_20_ICAL16424.m Fri May 22 10:33:18 2020                   Page:  1
```

```
                    Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-01.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   9:57 am
   Operator  : PEST17:jmc
   Sample    : wg1373624-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
   Misc      : wg1373624,,ical16424
   ALS Vial  : 1   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 10:29:00 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.      :
   Signal #1 Phase :                   Signal #2 Phase:
   Signal #1 Info  :                   Signal #2 Info :


   Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%     Max. Rel. Area : 150%

         Compound                    Amount  Calc.     %Dev  Area% Dev(Min)
    ---------------------------------------------------------------------

   Signal #2

 ----------------------------------------------------------------------

    (#) = Out of Range            SPCC's out = 0   CCC's out = 0
```

```
                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-01.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   9:57 am
   Operator  : PEST17:jmc
   Sample    : wg1373624-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
   Misc      : wg1373624,,ical16424
   ALS Vial  : 1   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 10:29:00 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                        Signal #2 Phase:
   Signal #1 Info  :                        Signal #2 Info :


   Sub List      : Default - All compounds listed


           Compound      RT#1     RT#2   Resp#1   Resp#2    mg/l       mg/l
        ----------------------------------------------------------------------
     Internal Standards
 1) i   4,4'-DBOB      8.161    8.462   695.1E6  557.3E6   0.250      0.250

     System Monitoring Compounds
 3) s   DCAA (surrog   6.608    7.389   80866685 80195923   0.178      0.186
   Spiked Amount      0.500 Range   30 - 150  Recovery   =   35.60%    37.20%

     Target Compounds
 2) t   Dalapon        1.683    1.959   76750484 70973555   0.160      0.169
 4) t   Dicamba        6.787    7.569    248.5E6  225.2E6   0.167      0.183
 5) t   MCPP           6.995    7.681   30968861 30832632  16.757     17.653
 6) t   MCPA           7.142    7.908   52783314 51957555  18.575     19.516
 7) t   Dichloroprop   7.496    8.228   74269192 66754029   0.174      0.181
 8) t   2,4-D          7.710    8.506   96468751 93550247   0.191      0.179
 9) t   2,4,5-TP (Si   8.440    9.164    401.3E6  310.6E6   0.203      0.186
10) t   2,4,5-T        8.669    9.456    394.5E6  314.1E6   0.180      0.191
11) t   2,4-DB         9.085    9.818   72020852 53962801   0.192      0.202
12) t   Dinoseb        9.825   10.038    298.1E6  209.3E6   0.213      0.230

     SemiQuant Compounds - Not Calibrated on this Instrument
     ----------------------------------------------------------------------

  (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
  (#)=Recovery Exceeds Compound Acceptance Limits.
  (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




Herb17_01_20_ICAL16424.m Fri May 22 10:32:40 2020                    Page:  1
```

Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-01.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   9:57 am
Operator : PEST17:jmc
Sample   : wg1373624-1,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
Misc   : wg1373624,,ical16424
ALS Vial : 1   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 10:29:00 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Herb17_01_20_ICAL16424.m Fri May 22 10:32:41 2020   Page: 2

```
                        Manual Integration Report

Data Path    : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File    : 17200522a-01.d            Operator    : PEST17:jmc
Date Inj'd   : 5/22/2020  9:57 am        Instrument  : Pest 17
Sample       : wg1373624-1,42e,, herb cc Quant Date  : 5/22/2020 10:29 am




           There are no manual integrations or false positives in this file.
```

```
                    Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-25.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   6:10 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-3,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 25   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:18:42 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Sub List      : Default - All compounds listed

          Compound       RT#1     RT#2    Resp#1    Resp#2    mg/l        mg/l
     -------------------------------------------------------------------------
      Internal Standards
  1) i   4,4'-DBOB      8.161    8.460   756.4E6   603.6E6    0.250       0.250

      System Monitoring Compounds
  3) s   DCAA (surrog   6.605    7.386  86289426  85765355    0.174       0.184
   Spiked Amount       0.500 Range  30 - 150  Recovery   =    34.80%      36.80%

      Target Compounds
  2) t   Dalapon        1.684    1.961  82254243  76879817    0.157       0.169
  4) t   Dicamba        6.785    7.566   268.0E6   241.3E6    0.166       0.181
  5) t   MCPP           6.994    7.678  32352163  32350937   16.086      17.103
  6) t   MCPA           7.141    7.906  55481023  54984099   17.941      19.070
  7) t   Dichloroprop   7.493    8.224  79093590  70991921    0.170       0.178
  8) t   2,4-D          7.706    8.502   103.8E6  99193703    0.189       0.175
  9) t   2,4,5-TP (Si   8.437    9.160   418.6E6   345.2E6    0.195       0.191
 10) t   2,4,5-T        8.663    9.451   439.9E6   325.8E6    0.184       0.183
 11) t   2,4-DB         9.078    9.812  78101015  54003348    0.192       0.187
 12) t   Dinoseb        9.824   10.035   314.2E6   214.5E6    0.206       0.218

      SemiQuant Compounds - Not Calibrated on this Instrument
     -------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



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```
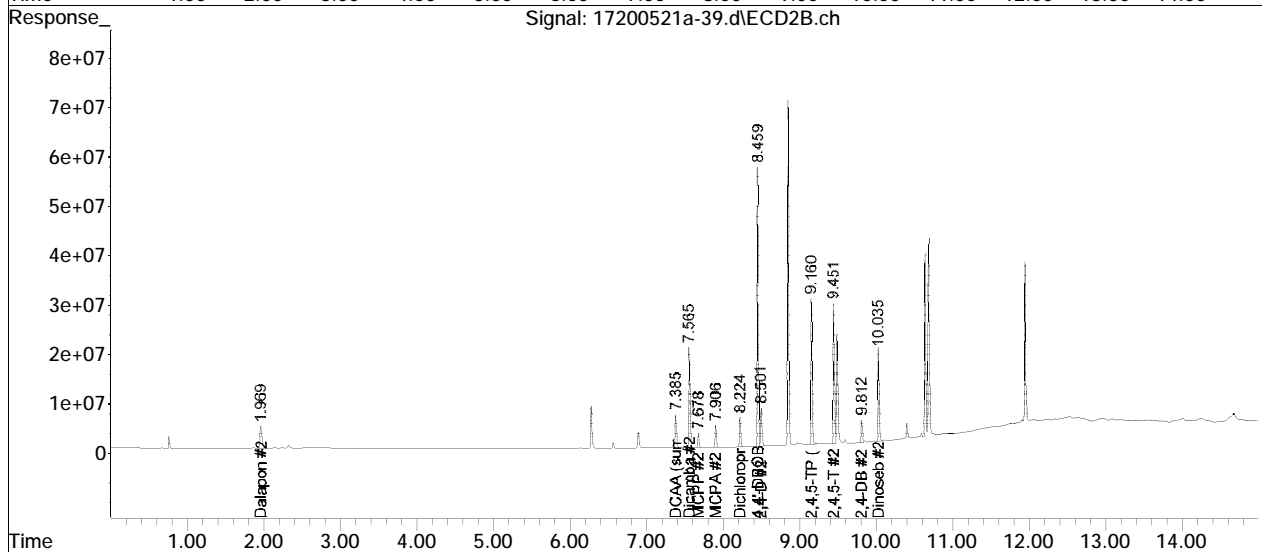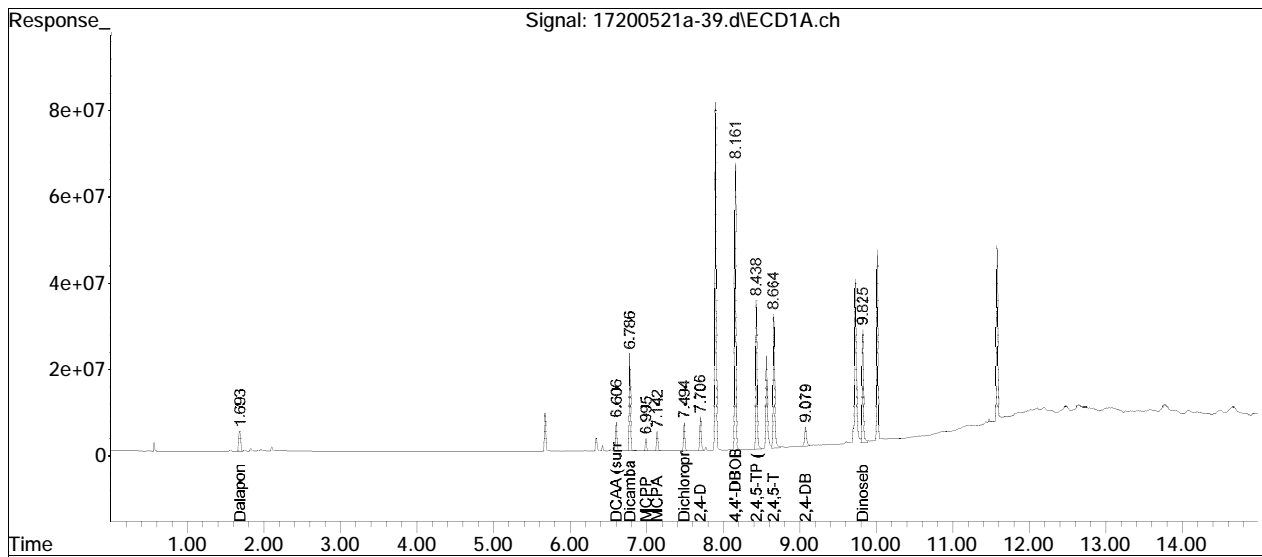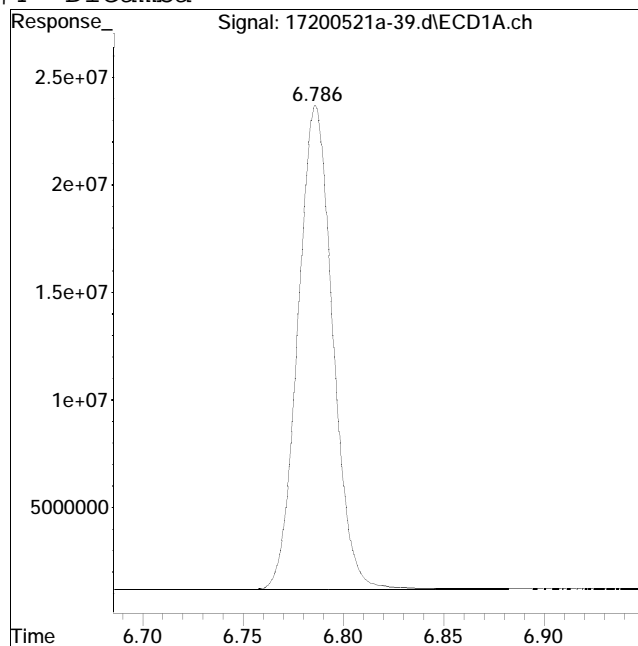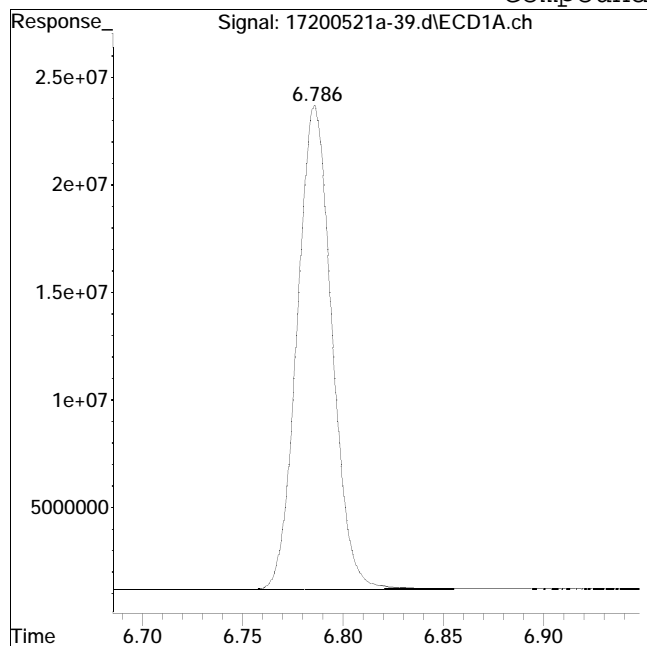
Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-25.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 May 2020   6:10 pm
Operator : PEST17:jmc
Sample   : wg1373624-3,42e,, herb 9707
Misc   : wg1373624,wg1372978,ical16424
ALS Vial : 25   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:18:42 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

```
Data Path   : I:\Pest17\200522A\        QMethod      : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-25.d            Operator     : PEST17:jmc
Date Inj'd  : 5/22/2020  6:10 pm        Instrument   : Pest 17
Sample      : wg1373624-3,42e,, herb 970Quant Date   : 5/26/2020  1:18 pm
```

There are no manual integrations or false positives in this file.

Sample Raw Data

Analytical Event

Continuing Calibration

```
                    Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-15.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    3:07 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-2,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 15    Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 15:43:05 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%      Max. Rel. Area : 150%

         Compound                Amount   Calc.      %Dev  Area% Dev(Min)
   ----------------------------------------------------------------------
    1 i   4,4'-DBOB               0.250   0.250       0.0    89   0.00
    2 t   Dalapon                 0.182   0.166       8.8    84  -0.01
    3 s   DCAA (surrogate)        0.188   0.178       5.3    86   0.00
    4 t   Dicamba                 0.188   0.168      10.6    83   0.00
    5 t   MCPP                   18.800  15.982      15.0    78   0.00
    6 t   MCPA                   18.600  17.862       4.0    80   0.00
    7 t   Dichloroprop            0.188   0.172       8.5    83   0.00
    8 t   2,4-D                   0.188   0.191      -1.6    92  -0.01
    9 t   2,4,5-TP (Silvex)       0.190   0.198      -4.2    95   0.00
   10 t   2,4,5-T                 0.190   0.184       3.2    90   0.00
   11 t   2,4-DB                  0.192   0.190       1.0    97   0.00
   12 t   Dinoseb                 0.190   0.213     -12.1    97   0.00

   Signal #2


    1 i   4,4'-DBOB               0.250   0.250       0.0    83   0.00
    2 t   Dalapon                 0.182   0.179       1.6    84   0.00
    3 s   DCAA (surrogate)        0.188   0.188       0.0    84   0.00
    4 t   Dicamba                 0.188   0.185       1.6    81   0.00
    5 t   MCPP                   18.800  17.192       8.6    82   0.00
    6 t   MCPA                   18.600  19.276      -3.6    86   0.00
    7 t   Dichloroprop            0.188   0.181       3.7    82   0.00
    8 t   2,4-D                   0.188   0.178       5.3    81   0.00
    9 t   2,4,5-TP (Silvex)       0.190   0.189       0.5    85   0.00
   10 t   2,4,5-T                 0.190   0.187       1.6    86   0.00
   11 t   2,4-DB                  0.192   0.197      -2.6    86   0.00
   12 t   Dinoseb                 0.190   0.223     -17.4#  100   0.00

              Evaluate Continuing Calibration Report - Not Founds


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```

```
                  Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-15.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   3:07 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-2,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 15   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 15:43:05 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.      :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :


   Min. RRF    :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev : 15%     Max. Rel. Area : 150%

        Compound                    Amount  Calc.     %Dev  Area% Dev(Min)
   ----------------------------------------------------------------------

   Signal #2

  ----------------------------------------------------------------------

     (#) = Out of Range            SPCC's out = 0   CCC's out = 0
```

```
                    Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-15.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    3:07 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-2,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 15   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 15:43:05 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :

   Sub List      : Default - All compounds listed

         Compound        RT#1      RT#2    Resp#1    Resp#2    mg/l        mg/l
   ----------------------------------------------------------------------------
   Internal Standards
1) i   4,4'-DBOB       8.161     8.460   707.3E6   561.9E6    0.250       0.250

   System Monitoring Compounds
3) s   DCAA (surrog    6.606     7.386  82316310  81505569    0.178       0.188
  Spiked Amount      0.500 Range   30 - 150  Recovery   =    35.60%      37.60%

   Target Compounds
 2) t   Dalapon        1.683     1.960  81378242  76043283    0.166       0.179
 4) t   Dicamba        6.785     7.566   254.8E6   229.1E6    0.168       0.185
 5) t   MCPP           6.995     7.679  30056707  30273936   15.982      17.192
 6) t   MCPA           7.141     7.906  51651053  51743347   17.862      19.276
 7) t   Dichloroprop   7.494     8.225  74923029  67235471    0.172       0.181
 8) t   2,4-D          7.707     8.502  98414825  93911235    0.191       0.178
 9) t   2,4,5-TP (Si   8.438     9.161   396.9E6   316.7E6    0.198       0.189
10) t   2,4,5-T        8.664     9.452   411.3E6   310.3E6    0.184       0.187
11) t   2,4-DB         9.079     9.814  72423156  53091984    0.190       0.197
12) t   Dinoseb        9.824    10.035   303.7E6   204.7E6    0.213       0.223

   SemiQuant Compounds - Not Calibrated on this Instrument
   ----------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
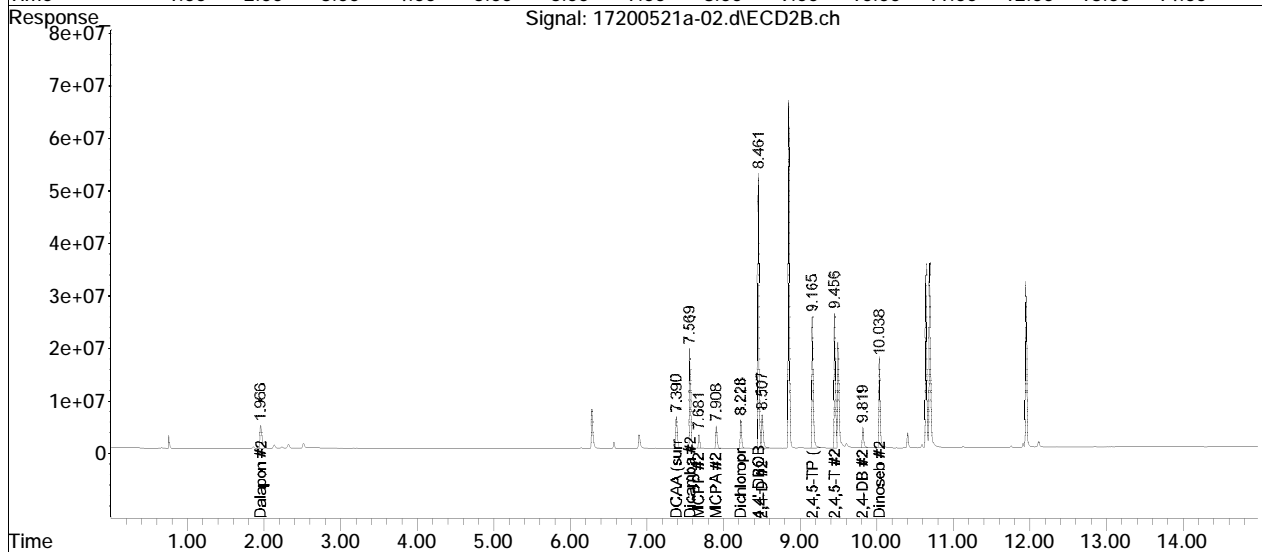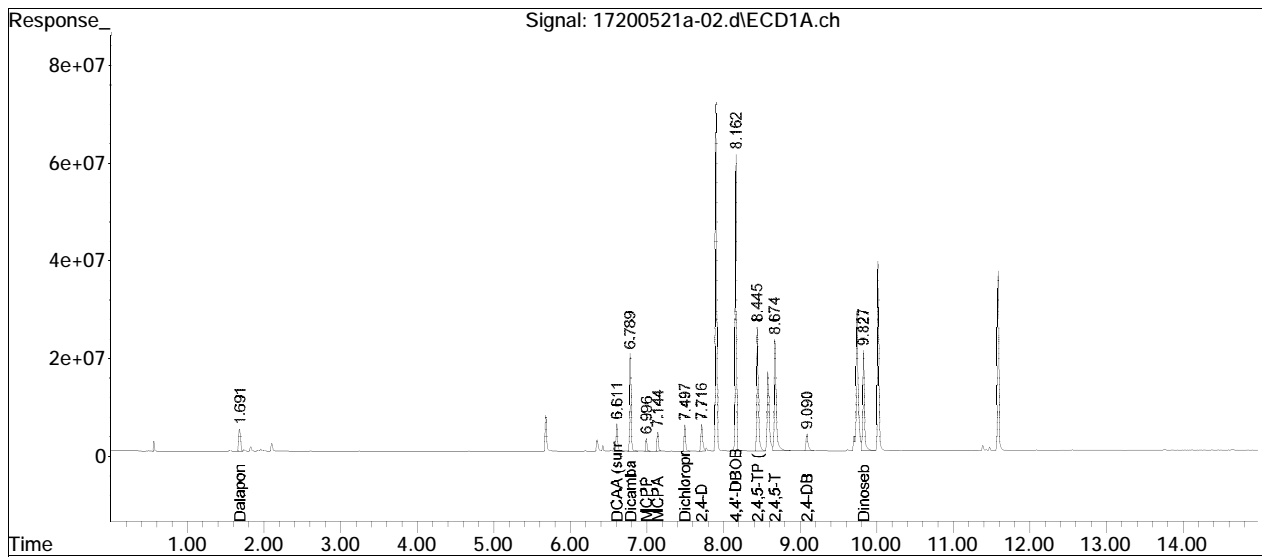
Herb17_01_20_ICAL16424.m Fri May 22 15:45:32 2020   Page: 1

Sub List   : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-15.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   3:07 pm
Operator : PEST17:jmc
Sample   : wg1373624-2,42e,, herb 9707
Misc   : wg1373624,wg1372978,ical16424
ALS Vial : 15   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 15:43:05 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

```
Data Path   : I:\Pest17\200522A\        QMethod      : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-15.d            Operator     : PEST17:jmc
Date Inj'd  : 5/22/2020  3:07 pm        Instrument   : Pest 17
Sample      : wg1373624-2,42e,, herb 970Quant Date  : 5/22/2020  3:43 pm
```

There are no manual integrations or false positives in this file.

Sample Raw Data

```
                     Quantitation Report     (QT Reviewed)

  Data Path : I:\Pest17\200522A\
  Data File : 17200522a-18.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 22 May 2020    4:02 pm
  Operator  : PEST17:jmc
  Sample    : L2019694-02,42,,
  Misc      : wg1373624,wg1372978,ical16424
  ALS Vial  : 18    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 22 16:34:10 2020
  Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.    :
  Signal #1 Phase :                      Signal #2 Phase:
  Signal #1 Info  :                      Signal #2 Info :

  CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
  Sub List     : Default - All compounds listed

         Compound          RT#1      RT#2    Resp#1   Resp#2     mg/l        mg/l
  -------------------------------------------------------------------------------
   Internal Standards
    1) i   4,4'-DBOB      8.161     8.460   843.0E6  674.5E6    0.250       0.250
         Standard Area 1 : #1 = 707282279                Recovery   = 119.19%
         Standard Area 1 : #2 = 561897358                Recovery   = 120.04%

   System Monitoring Compounds
    3) s   DCAA (surrog   6.606     7.385   199.7E6  180.7E6    0.362       0.347
         Spiked Amount       0.500 Range  30 - 150  Recovery   =   72.40%   69.40%

   Target Compounds
    8) t   2,4-D          0.000     0.000        0        0    N.D. d      N.D. d
    9) t   2,4,5-TP (Si   0.000     0.000        0        0    N.D. d      N.D. d
   SemiQuant Compounds - Not Calibrated on this Instrument
  -------------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
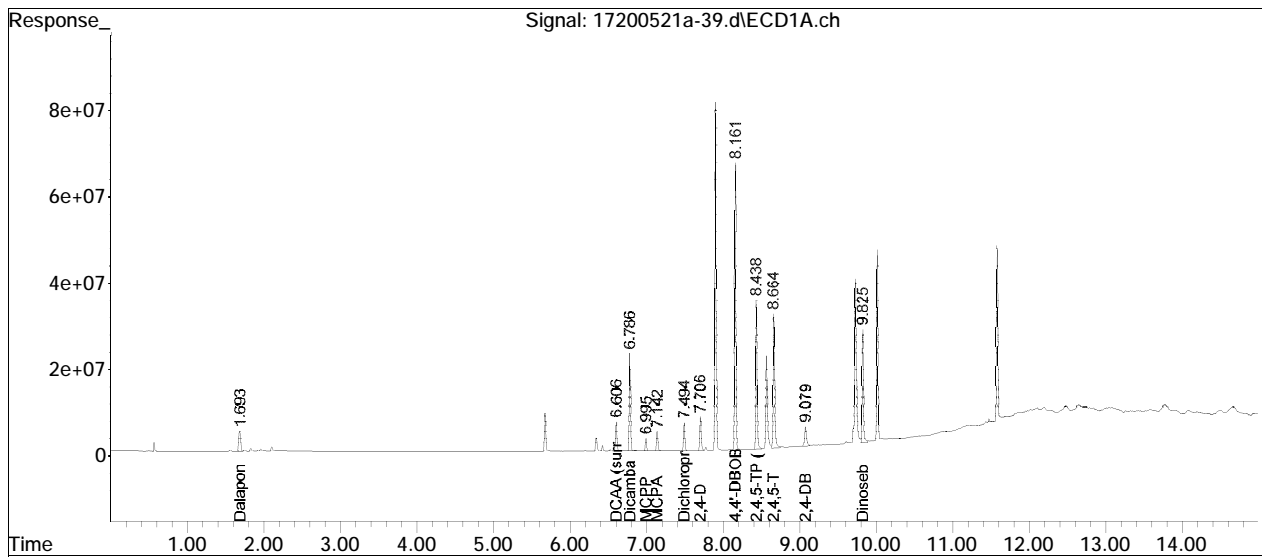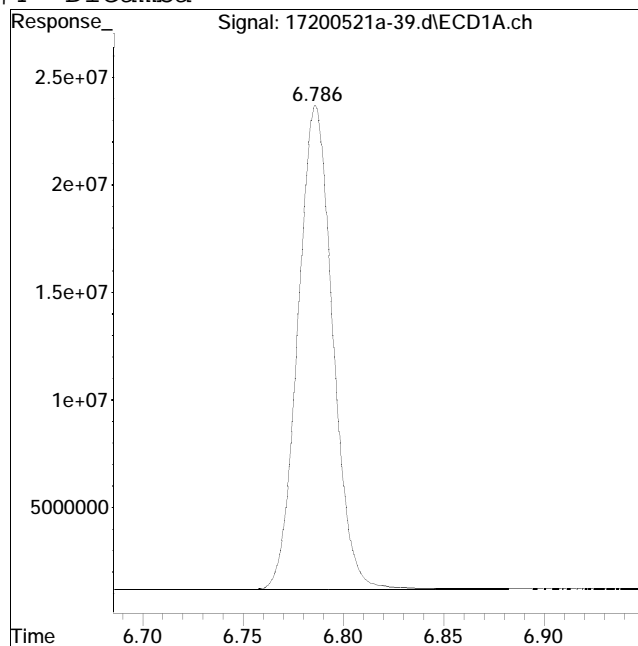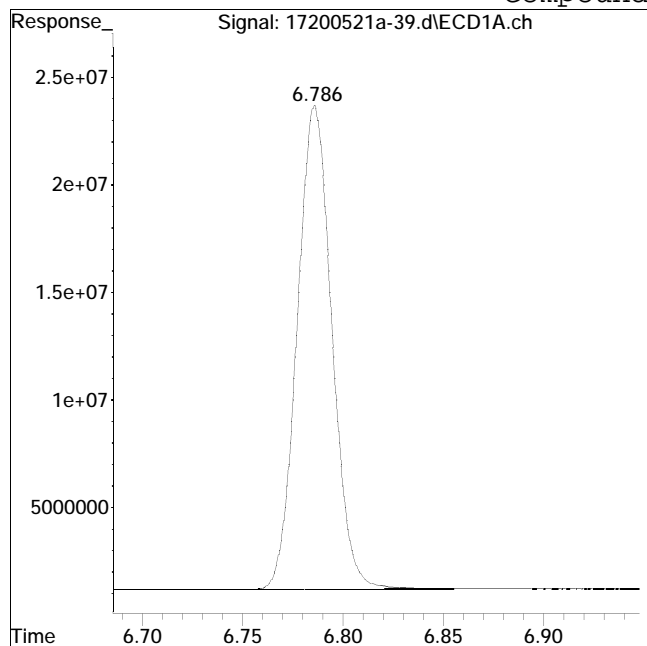
Herb17_01_20_ICAL16424.m Fri May 22 16:35:07 2020   Page: 1

Data Path : I:\Pest17\200522A\
Data File : 17200522a-18.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   4:02 pm
Operator : PEST17:jmc
Sample   : L2019694-02,42,,
Misc   : wg1373624,wg1372978,ical16424
ALS Vial : 18   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 16:34:10 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Signal: 17200522a-18.d\ECD1A.ch

Signal: 17200522a-18.d\ECD2B.ch

```
Data Path   : I:\Pest17\200522A\        QMethod      : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-18.d            Operator     : PEST17:jmc
Date Inj'd  : 5/22/2020  4:02 pm        Instrument   : Pest 17
Sample      : L2019694-02,42,,          Quant Date   : 5/22/2020  4:33 pm
```

There are no manual integrations or false positives in this file.

```
                        Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-21.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   4:57 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-01,42,, t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 21   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:21:10 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                       Signal #2 Phase:
   Signal #1 Info  :                       Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP

          Compound        RT#1      RT#2    Resp#1  Resp#2    mg/l        mg/l
   ---------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB     8.161     8.460   940.4E6 776.0E6   0.250       0.250
         Standard Area 1 : #1 = 707282279            Recovery   =  132.96%
         Standard Area 1 : #2 = 561897358            Recovery   =  138.11%

    System Monitoring Compounds
     3) s   DCAA (surrog  6.606     7.386   155.7E6 157.2E6   0.253       0.262
         Spiked Amount      0.500 Range  30 - 150  Recovery   =   50.60%    52.40%

    Target Compounds
     8) t   2,4-D         0.000     0.000       0       0    N.D. d      N.D. d
     9) t   2,4,5-TP (Si  0.000     0.000       0       0    N.D. d      N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   ---------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



   Herb17_01_20_ICAL16424.m Tue May 26 13:37:12 2020            Page: 1
```
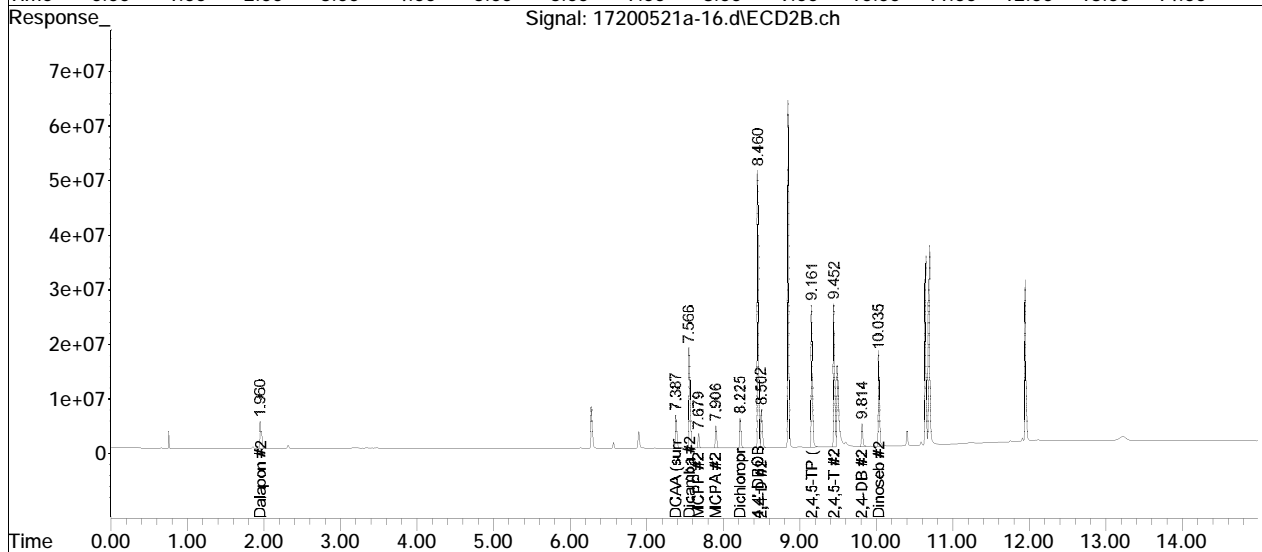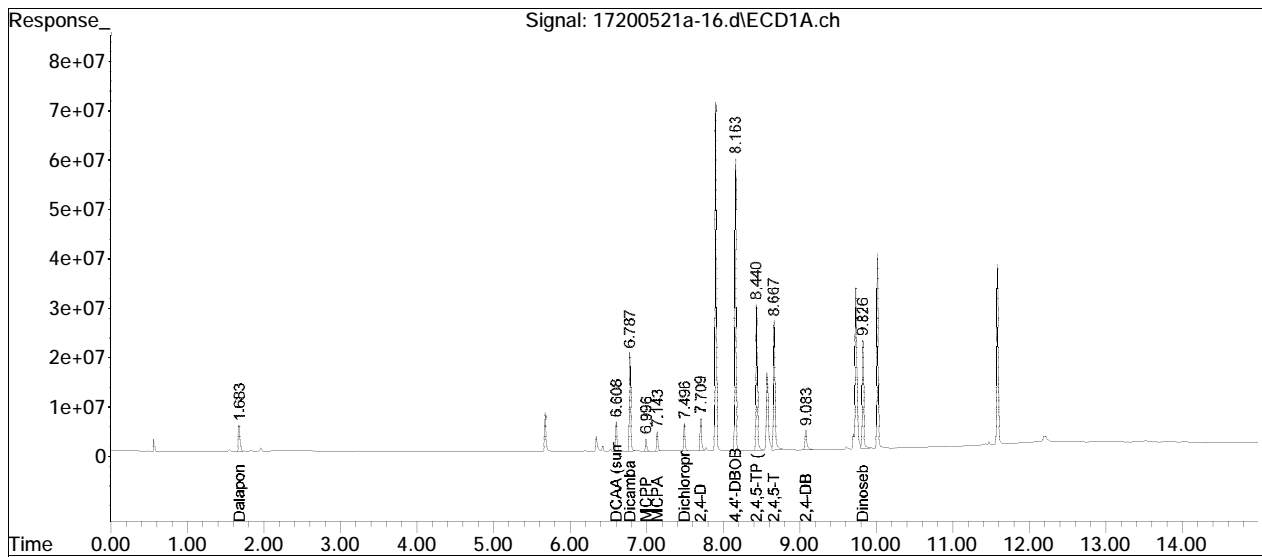
```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-21.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    4:57 pm
Operator  : PEST17:jmc
Sample    : L2019694-01,42,, t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 21    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:21:10 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```


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```
                      Manual Integration Report

Data Path   : I:\Pest17\200522A\        QMethod    : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-21.d            Operator   : PEST17:jmc
Date Inj'd  : 5/22/2020  4:57 pm        Instrument : Pest 17
Sample      : L2019694-01,42,, t        Quant Date : 5/26/2020  1:20 pm
```

There are no manual integrations or false positives in this file.

```
                      Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-22.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   5:15 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-02,42,,t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 22   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:22:00 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP

        Compound          RT#1     RT#2    Resp#1   Resp#2    mg/l         mg/l
   -------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB     8.161    8.460   947.2E6  779.5E6   0.250        0.250
         Standard Area 1 : #1 = 707282279              Recovery  = 133.92%
         Standard Area 1 : #2 = 561897358              Recovery  = 138.72%

    System Monitoring Compounds
     3) s   DCAA (surrog  6.605    7.386   184.1E6  179.3E6   0.297        0.298
         Spiked Amount      0.500 Range  30 - 150  Recovery  =   59.40%    59.60%

    Target Compounds
     8) t   2,4-D         0.000    0.000        0        0   N.D. d       N.D. d
     9) t   2,4,5-TP (Si  0.000    0.000        0        0   N.D. d       N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



   Herb17_01_20_ICAL16424.m Tue May 26 13:37:17 2020                Page: 1
```

```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-22.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    5:15 pm
Operator  : PEST17:jmc
Sample    : L2019694-02,42,,t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 22   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:22:00 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

```
                        Manual Integration Report

Data Path   : I:\Pest17\200522A\        QMethod      : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-22.d            Operator     : PEST17:jmc
Date Inj'd  : 5/22/2020  5:15 pm        Instrument   : Pest 17
Sample      : L2019694-02,42,,t         Quant Date   : 5/26/2020  1:21 pm




           There are no manual integrations or false positives in this file.
```

```
                         Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-23.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   5:34 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-03,42,,t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 23   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:22:37 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                     Signal #2 Phase:
   Signal #1 Info  :                     Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP


         Compound         RT#1     RT#2    Resp#1   Resp#2    mg/l         mg/l
   --------------------------------------------------------------------------
    Internal Standards
     1) i  4,4'-DBOB      8.161    8.459   906.4E6  742.1E6   0.250        0.250
         Standard Area 1 : #1 = 707282279              Recovery   = 128.15%
         Standard Area 1 : #2 = 561897358              Recovery   = 132.07%

    System Monitoring Compounds
     3) s  DCAA (surrog   6.606    7.385   162.6E6  151.2E6   0.274        0.264
         Spiked Amount       0.500 Range  30 - 150  Recovery   =  54.80%   52.80%

    Target Compounds
     8) t  2,4-D          0.000    0.000      0        0     N.D. d      N.D. d
     9) t  2,4,5-TP (Si   0.000    0.000      0        0     N.D. d      N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   --------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




   Herb17_01_20_ICAL16424.m Tue May 26 13:37:22 2020                Page: 1
```
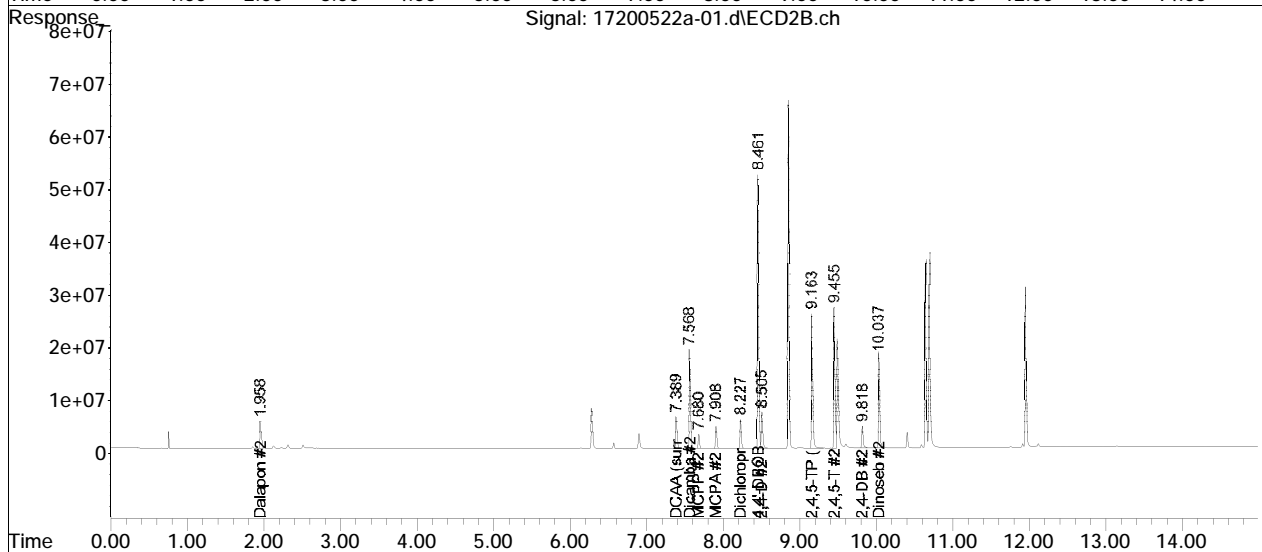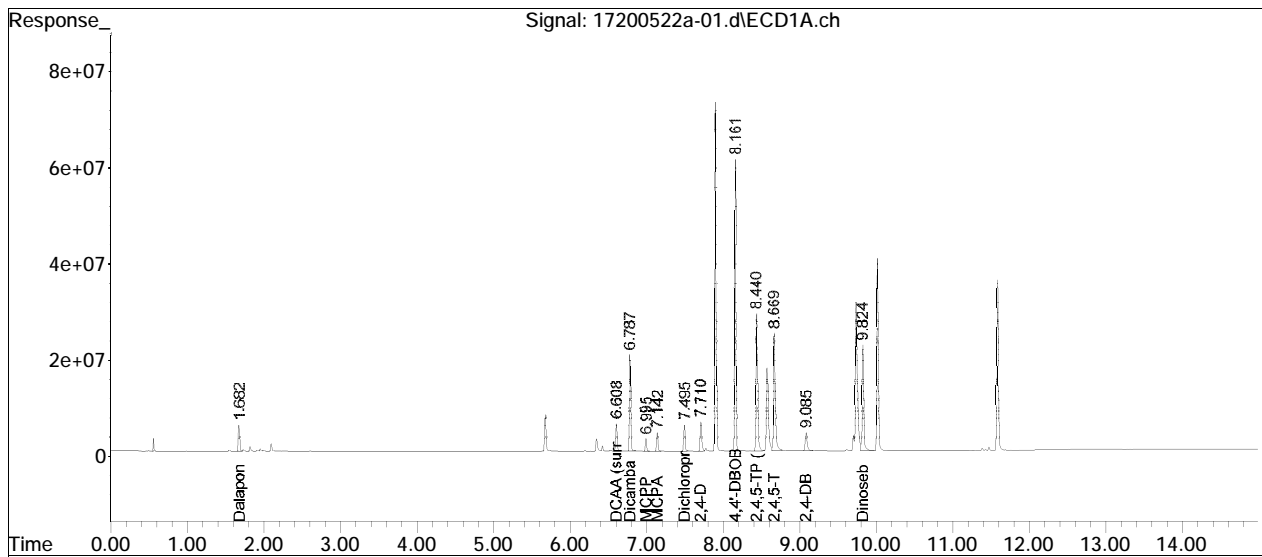
Data Path : I:\Pest17\200522A\
Data File : 17200522a-23.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   5:34 pm
Operator : PEST17:jmc
Sample   : L2019694-03,42,,t
Misc   : wg1373624,wg1373173,ical16424
ALS Vial : 23   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:22:37 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Herb17_01_20_ICAL16424.m Tue May 26 13:37:22 2020   Page: 2

```
Data Path   : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-23.d            Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020  5:34 pm        Instrument  : Pest 17
Sample      : L2019694-03,42,,t         Quant Date  : 5/26/2020  1:22 pm
```

There are no manual integrations or false positives in this file.

```
                         Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-24.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    5:52 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-04,42,,t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 24    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:23:03 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP


        Compound          RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   -----------------------------------------------------------------------------
   Internal Standards
    1) i   4,4'-DBOB      8.161    8.460   960.2E6  796.0E6   0.250       0.250
        Standard Area 1 : #1 = 707282279             Recovery   = 135.76%
        Standard Area 1 : #2 = 561897358             Recovery   = 141.67%

   System Monitoring Compounds
    3) s   DCAA (surrog   6.606    7.385   231.1E6  207.0E6   0.367       0.337
        Spiked Amount      0.500 Range  30 - 150  Recovery   =  73.40%    67.40%

   Target Compounds
    8) t   2,4-D          0.000    0.000        0        0   N.D. d      N.D. d
    9) t   2,4,5-TP (Si   0.000    0.000        0        0   N.D. d      N.D. d
   SemiQuant Compounds - Not Calibrated on this Instrument
   -----------------------------------------------------------------------------
    (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
    (#)=Recovery Exceeds Compound Acceptance Limits.
    (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



   Herb17_01_20_ICAL16424.m Tue May 26 13:37:27 2020                  Page: 1
```
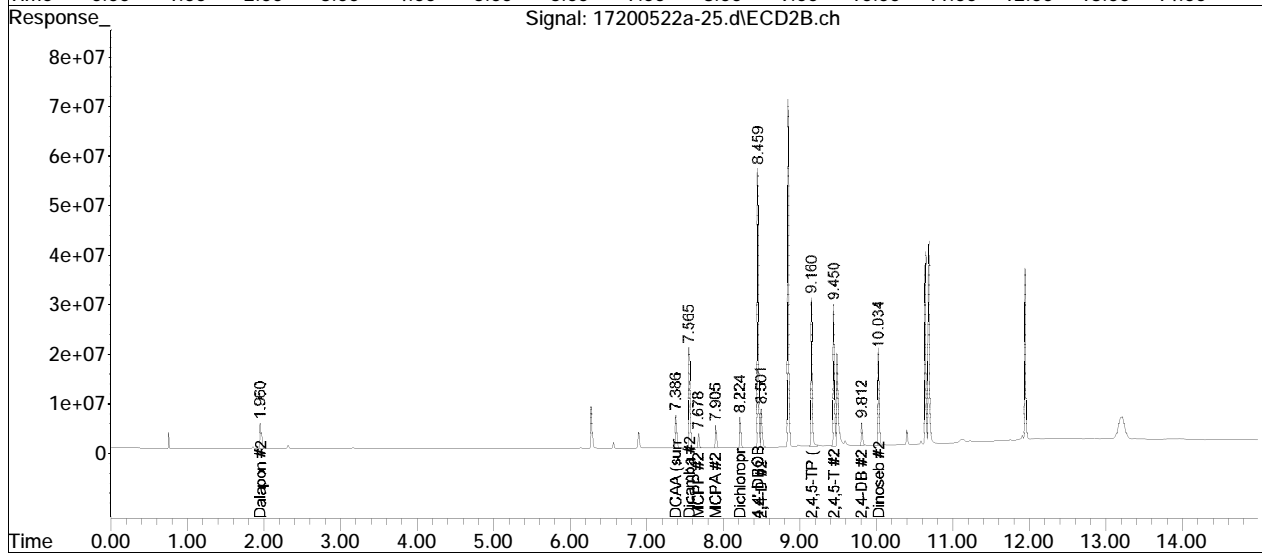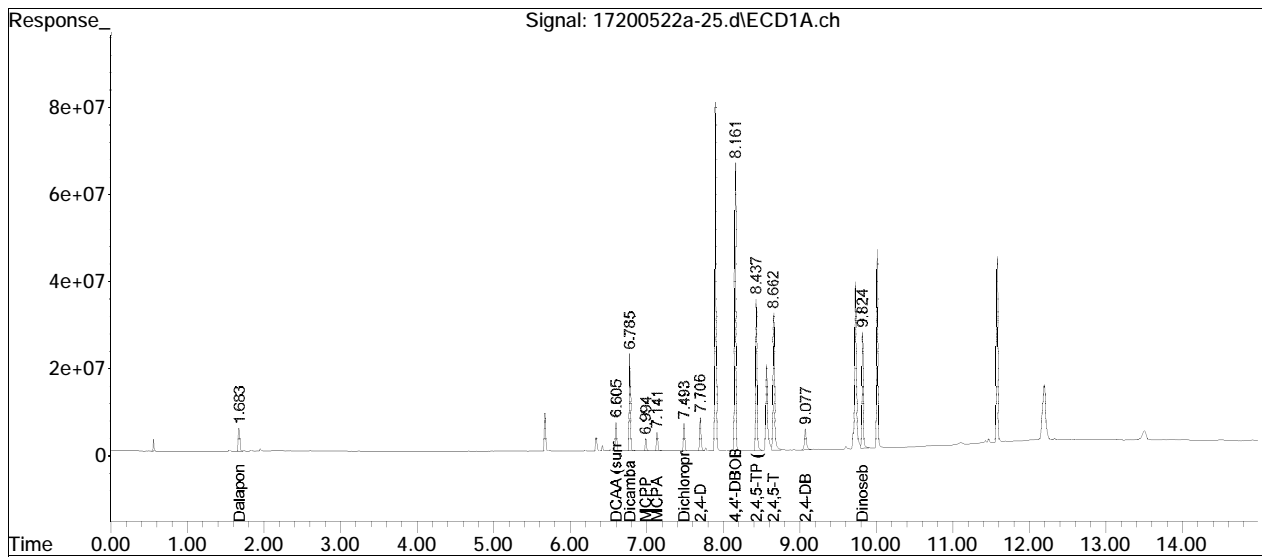
```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-24.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    5:52 pm
Operator  : PEST17:jmc
Sample    : L2019694-04,42,,t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 24    Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:23:03 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```


Signal: 17200522a-24.d\ECD1A.ch

Signal: 17200522a-24.d\ECD2B.ch

Herb17_01_20_ICAL16424.m Tue May 26 13:37:27 2020   Page: 2

```
Data Path   : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-24.d            Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020  5:52 pm        Instrument  : Pest 17
Sample      : L2019694-04,42,,t         Quant Date  : 5/26/2020  1:22 pm
```

There are no manual integrations or false positives in this file.

Analytical Event

Continuing Calibration

```
                  Evaluate Continuing Calibration Report


  Data Path : I:\Pest17\200522A\
  Data File : 17200522a-25.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    : 22 May 2020   6:10 pm
  Operator  : PEST17:jmc
  Sample    : wg1373624-3,42e,, herb 9707
  Misc      : wg1373624,wg1372978,ical16424
  ALS Vial  : 25   Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 13:18:42 2020
  Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.    :
  Signal #1 Phase :                        Signal #2 Phase:
  Signal #1 Info  :                        Signal #2 Info :


  Min. RRF    :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 150%


        Compound                   Amount   Calc.      %Dev  Area% Dev(Min)
  -----------------------------------------------------------------------
   1 i  4,4'-DBOB                   0.250   0.250       0.0    95    0.00
   2 t  Dalapon                     0.182   0.157      13.7    85   -0.01
   3 s  DCAA (surrogate)            0.188   0.174       7.4    90    0.00
   4 t  Dicamba                     0.188   0.166      11.7    88    0.00
   5 t  MCPP                       18.800  16.086      14.4    84    0.00
   6 t  MCPA                       18.600  17.941       3.5    86    0.00
   7 t  Dichloroprop                0.188   0.170       9.6    88    0.00
   8 t  2,4-D                       0.188   0.189      -0.5    97   -0.01
   9 t  2,4,5-TP (Silvex)           0.190   0.195      -2.6   100    0.00
  10 t  2,4,5-T                     0.190   0.184       3.2    96   -0.01
  11 t  2,4-DB                      0.192   0.192       0.0   104   -0.01
  12 t  Dinoseb                     0.190   0.206      -8.4   100    0.00

  Signal #2


   1 i  4,4'-DBOB                   0.250   0.250       0.0    89    0.00
   2 t  Dalapon                     0.182   0.169       7.1    85    0.00
   3 s  DCAA (surrogate)            0.188   0.184       2.1    89    0.00
   4 t  Dicamba                     0.188   0.181       3.7    86    0.00
   5 t  MCPP                       18.800  17.103       9.0    88    0.00
   6 t  MCPA                       18.600  19.070      -2.5    91    0.00
   7 t  Dichloroprop                0.188   0.178       5.3    86    0.00
   8 t  2,4-D                       0.188   0.175       6.9    86    0.00
   9 t  2,4,5-TP (Silvex)           0.190   0.191      -0.5    93    0.00
  10 t  2,4,5-T                     0.190   0.183       3.7    90    0.00
  11 t  2,4-DB                      0.192   0.187       2.6    88    0.00
  12 t  Dinoseb                     0.190   0.218     -14.7   104    0.00


          Evaluate Continuing Calibration Report - Not Founds


Herb17_01_20_ICAL16424.m Tue May 26 13:38:35 2020                    Page:  1
```

```
                    Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-25.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    6:10 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-3,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 25   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:18:42 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.     :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%     Max. Rel. Area : 150%

        Compound                      Amount  Calc.      %Dev  Area% Dev(Min)
   ----------------------------------------------------------------------

   Signal #2

 ----------------------------------------------------------------------

    (#) = Out of Range            SPCC's out = 0   CCC's out = 0
```

```
                    Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-25.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    6:10 pm
   Operator  : PEST17:jmc
   Sample    : wg1373624-3,42e,, herb 9707
   Misc      : wg1373624,wg1372978,ical16424
   ALS Vial  : 25   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:18:42 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                         Signal #2 Phase:
   Signal #1 Info  :                         Signal #2 Info :


   Sub List     : Default - All compounds listed


         Compound        RT#1      RT#2    Resp#1    Resp#2     mg/l        mg/l
   ---------------------------------------------------------------------------
    Internal Standards
 1) i   4,4'-DBOB      8.161     8.460   756.4E6   603.6E6    0.250       0.250

    System Monitoring Compounds
 3) s   DCAA (surrog   6.605     7.386  86289426  85765355    0.174       0.184
  Spiked Amount      0.500 Range   30 - 150  Recovery   =    34.80%      36.80%

    Target Compounds
 2) t   Dalapon        1.684     1.961  82254243  76879817    0.157       0.169
 4) t   Dicamba        6.785     7.566   268.0E6   241.3E6    0.166       0.181
 5) t   MCPP           6.994     7.678  32352163  32350937   16.086      17.103
 6) t   MCPA           7.141     7.906  55481023  54984099   17.941      19.070
 7) t   Dichloroprop   7.493     8.224  79093590  70991921    0.170       0.178
 8) t   2,4-D          7.706     8.502   103.8E6  99193703    0.189       0.175
 9) t   2,4,5-TP (Si   8.437     9.160   418.6E6   345.2E6    0.195       0.191
10) t   2,4,5-T        8.663     9.451   439.9E6   325.8E6    0.184       0.183
11) t   2,4-DB         9.078     9.812  78101015  54003348    0.192       0.187
12) t   Dinoseb        9.824    10.035   314.2E6   214.5E6    0.206       0.218

    SemiQuant Compounds - Not Calibrated on this Instrument
   ---------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
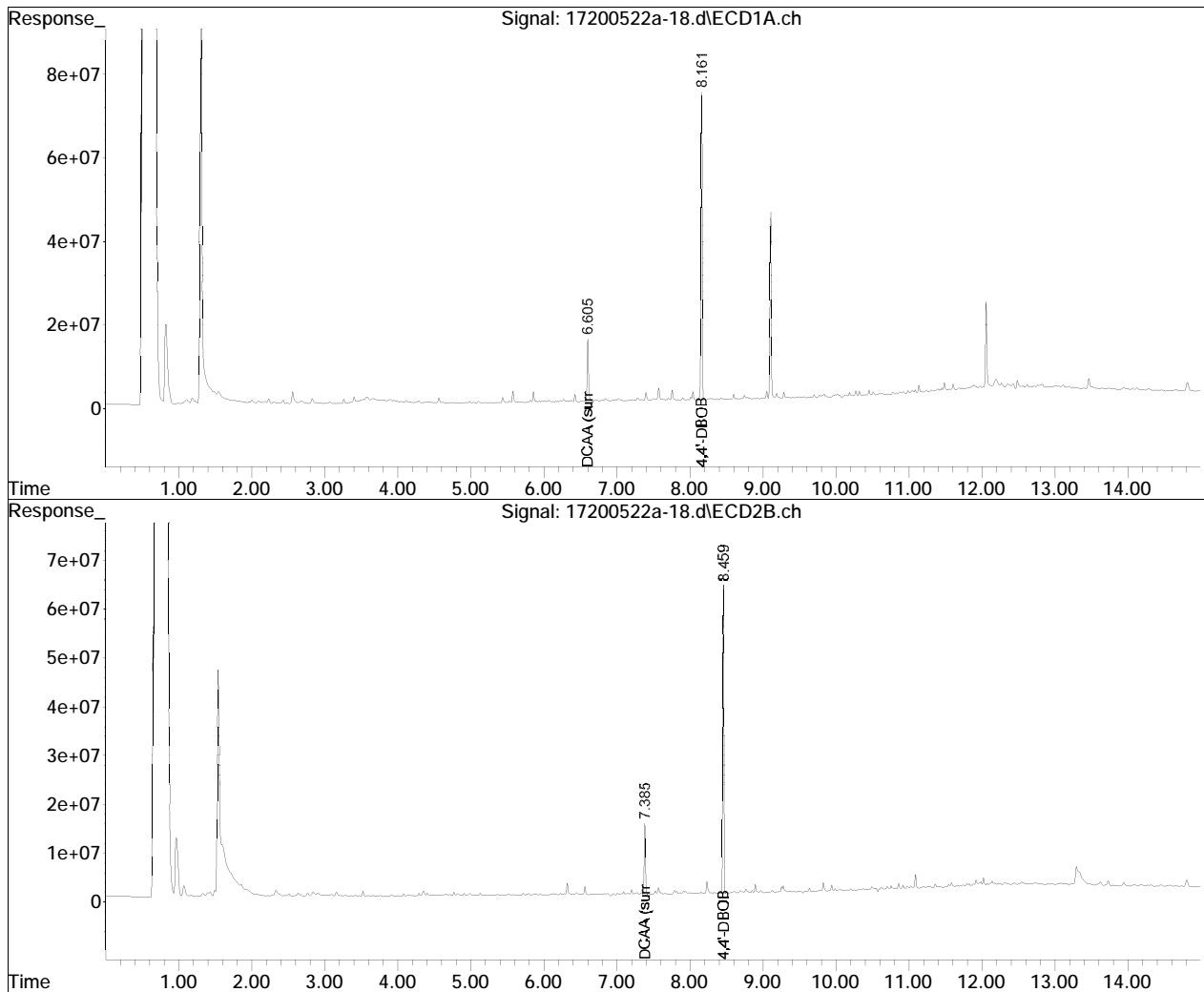
Herb17_01_20_ICAL16424.m Tue May 26 13:37:32 2020   Page: 1

```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-25.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    6:10 pm
Operator  : PEST17:jmc
Sample    : wg1373624-3,42e,, herb 9707
Misc      : wg1373624,wg1372978,ical16424
ALS Vial  : 25    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:18:42 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```


Signal: 17200522a-25.d\ECD1A.ch

Signal: 17200522a-25.d\ECD2B.ch

```
                       Manual Integration Report

Data Path    : I:\Pest17\200522A\        QMethod      : Herb17_01_20_ICAL16424.m
Data File    : 17200522a-25.d            Operator     : PEST17:jmc
Date Inj'd   : 5/22/2020  6:10 pm        Instrument   : Pest 17
Sample       : wg1373624-3,42e,, herb 970Quant Date  : 5/26/2020  1:18 pm
```

There are no manual integrations or false positives in this file.

Sample Raw Data

```
                        Quantitation Report    (QT Reviewed)

  Data Path : I:\Pest17\200522A\
  Data File : 17200522a-18.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 22 May 2020   4:02 pm
  Operator  : PEST17:jmc
  Sample    : L2019694-02,42,,
  Misc      : wg1373624,wg1372978,ical16424
  ALS Vial  : 18    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 22 16:34:10 2020
  Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.    :
  Signal #1 Phase :                      Signal #2 Phase:
  Signal #1 Info  :                      Signal #2 Info :

  CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
  Sub List     : Default - All compounds listed

        Compound         RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
  -------------------------------------------------------------------------
  Internal Standards
   1) i   4,4'-DBOB       8.161    8.460   843.0E6  674.5E6   0.250       0.250
       Standard Area 1 : #1 = 707282279              Recovery  =  119.19%
       Standard Area 1 : #2 = 561897358              Recovery  =  120.04%

  System Monitoring Compounds
   3) s   DCAA (surrog    6.606    7.385   199.7E6  180.7E6   0.362       0.347
       Spiked Amount      0.500 Range  30 - 150  Recovery  =   72.40%    69.40%

  Target Compounds
   8) t   2,4-D           0.000    0.000        0        0   N.D. d      N.D. d
   9) t   2,4,5-TP (Si    0.000    0.000        0        0   N.D. d      N.D. d
  SemiQuant Compounds - Not Calibrated on this Instrument
  -------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
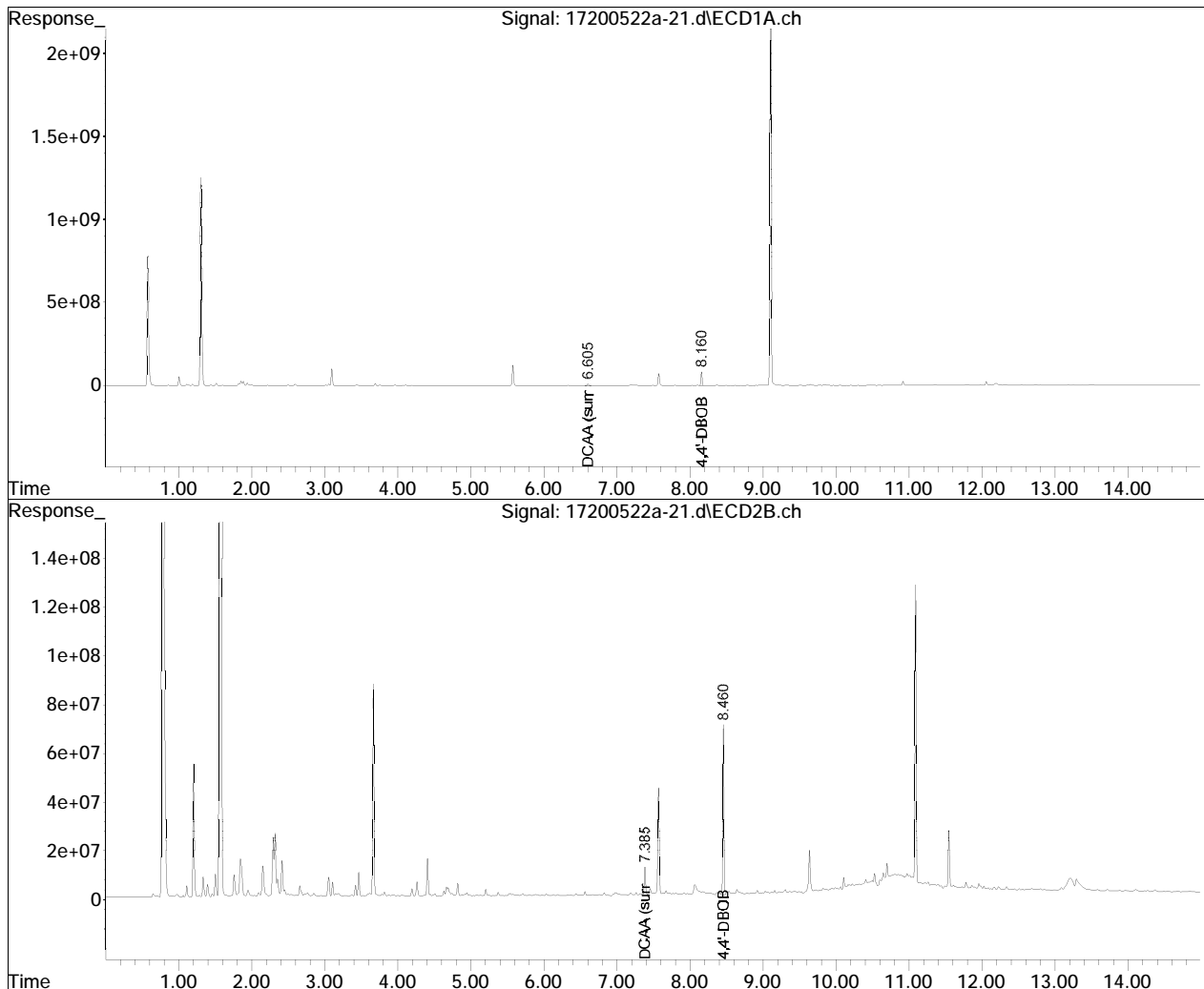
Herb17_01_20_ICAL16424.m Fri May 22 16:35:07 2020   Page: 1

```
Sub List      : Default - All compounds listeda-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-18.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    4:02 pm
Operator  : PEST17:jmc
Sample    : L2019694-02,42,,
Misc      : wg1373624,wg1372978,ical16424
ALS Vial  : 18   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 16:34:10 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```

```
                          Manual Integration Report

Data Path   : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-18.d            Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020  4:02 pm        Instrument  : Pest 17
Sample      : L2019694-02,42,,          Quant Date  : 5/22/2020  4:33 pm
```


            There are no manual integrations or false positives in this file.

```
                          Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-21.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   4:57 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-01,42,, t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 21   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:21:10 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                        Signal #2 Phase:
   Signal #1 Info  :                        Signal #2 Info :


   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP


        Compound          RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   -----------------------------------------------------------------------------
   Internal Standards
    1) i   4,4'-DBOB       8.161    8.460   940.4E6  776.0E6   0.250       0.250
        Standard Area 1 : #1 = 707282279                  Recovery   = 132.96%
        Standard Area 1 : #2 = 561897358                  Recovery   = 138.11%

   System Monitoring Compounds
    3) s   DCAA (surrog    6.606    7.386   155.7E6  157.2E6   0.253       0.262
        Spiked Amount       0.500 Range   30 - 150  Recovery   =   50.60%   52.40%

   Target Compounds
    8) t   2,4-D           0.000    0.000        0        0   N.D. d      N.D. d
    9) t   2,4,5-TP (Si    0.000    0.000        0        0   N.D. d      N.D. d
   SemiQuant Compounds - Not Calibrated on this Instrument
   -----------------------------------------------------------------------------
    (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
    (#)=Recovery Exceeds Compound Acceptance Limits.
    (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



   Herb17_01_20_ICAL16424.m Tue May 26 13:37:12 2020              Page: 1
```
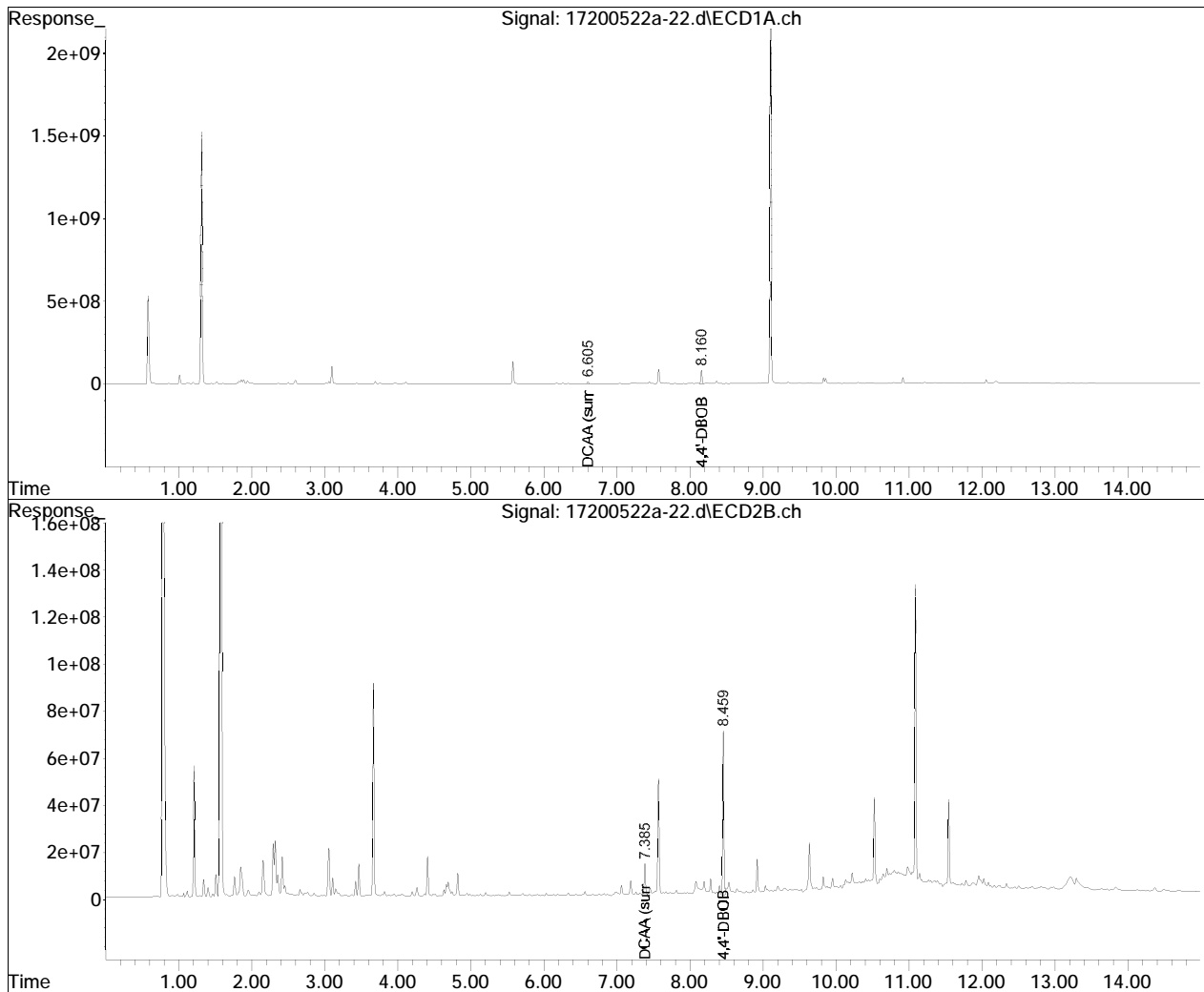
```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-21.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    4:57 pm
Operator  : PEST17:jmc
Sample    : L2019694-01,42,, t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 21    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:21:10 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                       Signal #2 Phase:
Signal #1 Info  :                       Signal #2 Info :
```

```
Data Path  : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File  : 17200522a-21.d            Operator    : PEST17:jmc
Date Inj'd : 5/22/2020  4:57 pm        Instrument  : Pest 17
Sample     : L2019694-01,42,, t        Quant Date  : 5/26/2020  1:20 pm
```

There are no manual integrations or false positives in this file.

```
                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-22.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020   5:15 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-02,42,,t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 22   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:22:00 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP


         Compound         RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   -------------------------------------------------------------------------
   Internal Standards
     1) i  4,4'-DBOB     8.161    8.460   947.2E6  779.5E6   0.250       0.250
         Standard Area 1 : #1 = 707282279              Recovery  = 133.92%
         Standard Area 1 : #2 = 561897358              Recovery  = 138.72%

   System Monitoring Compounds
     3) s  DCAA (surrog   6.605    7.386   184.1E6  179.3E6   0.297       0.298
         Spiked Amount      0.500 Range  30 - 150  Recovery  =   59.40%   59.60%

   Target Compounds
     8) t  2,4-D          0.000    0.000        0        0   N.D. d      N.D. d
     9) t  2,4,5-TP (Si   0.000    0.000        0        0   N.D. d      N.D. d
   SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




   Herb17_01_20_ICAL16424.m Tue May 26 13:37:17 2020                 Page: 1
```
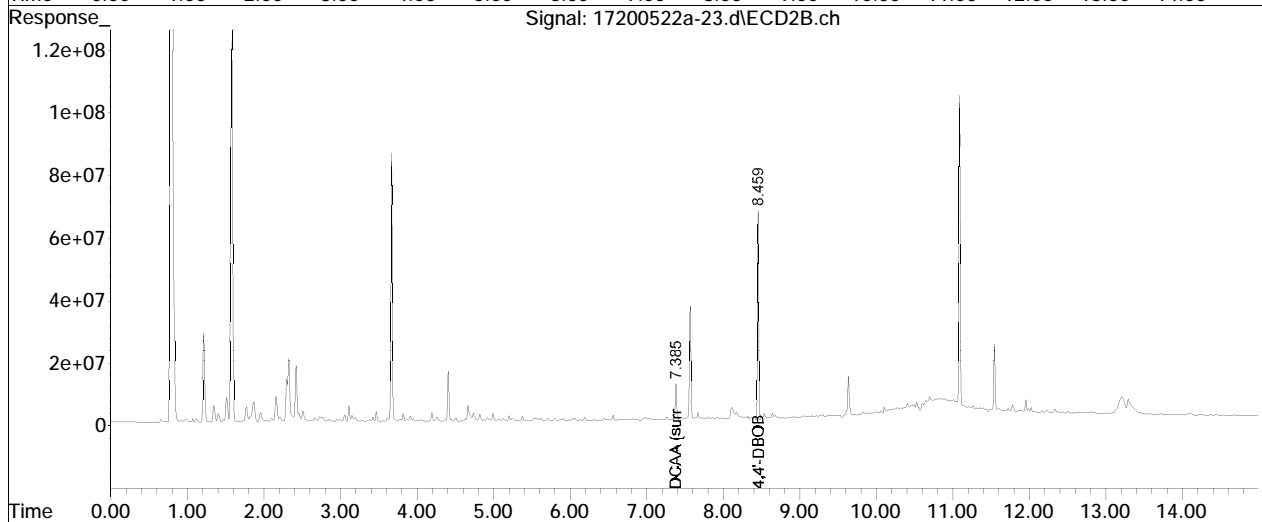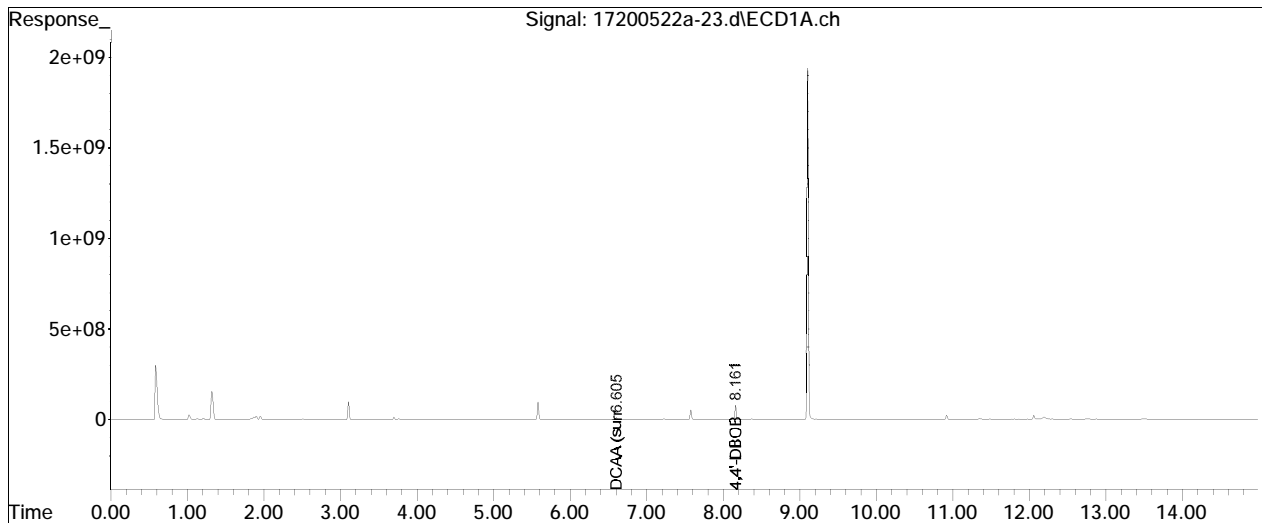
```
Sub List       : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-22.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020    5:15 pm
Operator  : PEST17:jmc
Sample    : L2019694-02,42,,t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 22    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:22:00 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```


Signal: 17200522a-22.d\ECD1A.ch

Signal: 17200522a-22.d\ECD2B.ch

```
                        Manual Integration Report

Data Path   : I:\Pest17\200522A\       QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-22.d           Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020  5:15 pm       Instrument  : Pest 17
Sample      : L2019694-02,42,,t        Quant Date  : 5/26/2020  1:21 pm
```

           There are no manual integrations or false positives in this file.

```
                        Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-23.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020    5:34 pm
   Operator  : PEST17:jmc
   Sample    : L2019694-03,42,,t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 23   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 13:22:37 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.      :
   Signal #1 Phase  :                       Signal #2 Phase:
   Signal #1 Info   :                       Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
   Sub List     : HERB-TCLP - TCLP


        Compound          RT#1     RT#2    Resp#1  Resp#2    mg/l         mg/l
   ------------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB      8.161    8.459   906.4E6 742.1E6   0.250        0.250
         Standard Area 1 : #1 = 707282279                  Recovery  = 128.15%
         Standard Area 1 : #2 = 561897358                  Recovery  = 132.07%

    System Monitoring Compounds
     3) s   DCAA (surrog   6.606    7.385   162.6E6 151.2E6   0.274        0.264
         Spiked Amount     0.500 Range  30 - 150  Recovery  =   54.80%     52.80%

    Target Compounds
     8) t   2,4-D          0.000    0.000        0       0    N.D. d       N.D. d
     9) t   2,4,5-TP (Si   0.000    0.000        0       0    N.D. d       N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   ------------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




   Herb17_01_20_ICAL16424.m Tue May 26 13:37:22 2020                  Page: 1
```
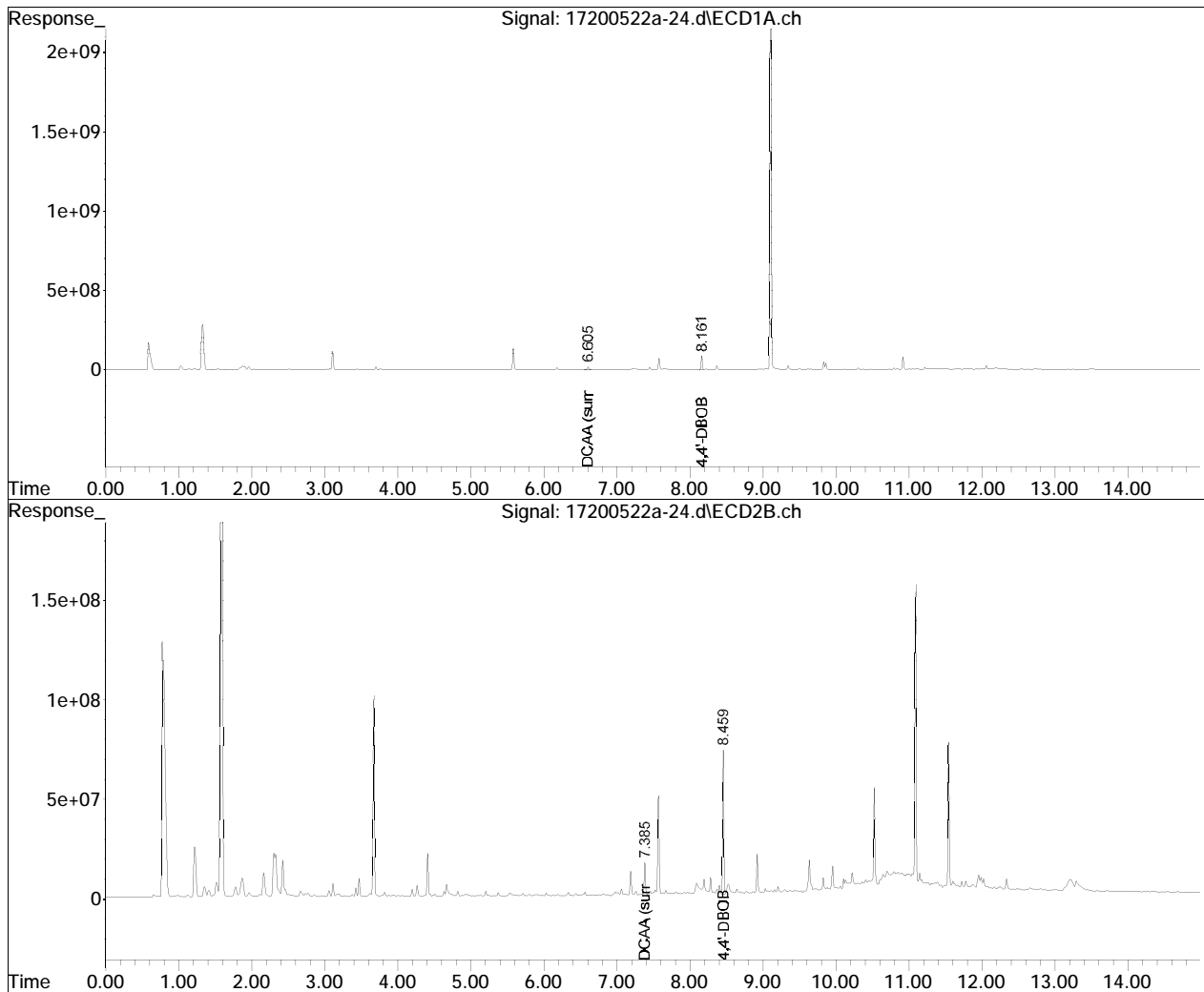
Sub List   : HERB-TCLP - TCLP0522A\17200522a-15.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-23.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   5:34 pm
Operator : PEST17:jmc
Sample   : L2019694-03,42,,t
Misc   : wg1373624,wg1373173,ical16424
ALS Vial : 23   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:22:37 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-23.d   Operator   : PEST17:jmc
Date Inj'd : 5/22/2020 5:34 pm   Instrument : Pest 17
Sample   : L2019694-03,42,,t   Quant Date : 5/26/2020 1:22 pm

There are no manual integrations or false positives in this file.

```
                     Quantitation Report      (QT Reviewed)

  Data Path : I:\Pest17\200522A\
  Data File : 17200522a-24.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 22 May 2020    5:52 pm
  Operator  : PEST17:jmc
  Sample    : L2019694-04,42,,t
  Misc      : wg1373624,wg1373173,ical16424
  ALS Vial  : 24    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 13:23:03 2020
  Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.    :
  Signal #1 Phase :                        Signal #2 Phase:
  Signal #1 Info  :                        Signal #2 Info :


  CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-15.d
  Sub List     : HERB-TCLP - TCLP


        Compound          RT#1      RT#2    Resp#1   Resp#2    mg/l        mg/l
  -----------------------------------------------------------------------------
  Internal Standards
   1) i  4,4'-DBOB       8.161     8.460   960.2E6  796.0E6   0.250       0.250
         Standard Area 1 : #1 = 707282279            Recovery   =  135.76%
         Standard Area 1 : #2 = 561897358            Recovery   =  141.67%

  System Monitoring Compounds
   3) s   DCAA (surrog   6.606     7.385   231.1E6  207.0E6   0.367       0.337
          Spiked Amount       0.500 Range  30 - 150  Recovery   =   73.40%   67.40%

  Target Compounds
   8) t   2,4-D          0.000     0.000        0        0   N.D. d      N.D. d
   9) t   2,4,5-TP (Si   0.000     0.000        0        0   N.D. d      N.D. d
  SemiQuant Compounds - Not Calibrated on this Instrument
  -----------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




  Herb17_01_20_ICAL16424.m Tue May 26 13:37:27 2020                  Page: 1
```

Data Path : I:\Pest17\200522A\
Data File : 17200522a-24.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   5:52 pm
Operator : PEST17:jmc
Sample   : L2019694-04,42,,t
Misc   : wg1373624,wg1373173,ical16424
ALS Vial : 24   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 13:23:03 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

```
                        Manual Integration Report

Data Path   : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-24.d            Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020  5:52 pm        Instrument  : Pest 17
Sample      : L2019694-04,42,,t         Quant Date  : 5/26/2020  1:22 pm
```

There are no manual integrations or false positives in this file.

Analytical Event

Continuing Calibration

```
                  Evaluate Continuing Calibration Report

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-02.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 24 May 2020   10:36 am
  Operator  : PEST17:jmc
  Sample    : wg1374081-1,42e,, herb cc9707 (Sig #1); herb cc9707 (Sig #2)
  Misc      : wg1374081,,ical16424
  ALS Vial  : 1    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 24 11:15:36 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.    :
  Signal #1 Phase :                       Signal #2 Phase:
  Signal #1 Info  :                       Signal #2 Info :


  Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%     Max. Rel. Area : 150%

          Compound                  Amount   Calc.      %Dev   Area% Dev(Min)
      ----------------------------------------------------------------------
  1 i   4,4'-DBOB                    0.250   0.250       0.0     91    0.00
  2 t   Dalapon                      0.182   0.160      12.1     83    0.00
  3 s   DCAA (surrogate)             0.188   0.171       9.0     85    0.00
  4 t   Dicamba                      0.188   0.164      12.8     83    0.00
  5 t   MCPP                        18.800  16.263      13.5     81    0.00
  6 t   MCPA                        18.600  18.476       0.7     86    0.00
  7 t   Dichloroprop                 0.188   0.166      11.7     83    0.00
  8 t   2,4-D                        0.188   0.181       3.7     89    0.00
  9 t   2,4,5-TP (Silvex)            0.190   0.189       0.5     93    0.00
 10 t   2,4,5-T                      0.190   0.174       8.4     87    0.00
 11 t   2,4-DB                       0.192   0.185       3.6     97    0.00
 12 t   Dinoseb                      0.190   0.209     -10.0     98    0.00

  Signal #2


  1 i   4,4'-DBOB                    0.250   0.250       0.0     84    0.00
  2 t   Dalapon                      0.182   0.173       4.9     83   -0.01
  3 s   DCAA (surrogate)             0.188   0.183       2.7     83    0.00
  4 t   Dicamba                      0.188   0.179       4.8     80    0.00
  5 t   MCPP                        18.800  17.403       7.4     85    0.00
  6 t   MCPA                        18.600  19.198      -3.2     87    0.00
  7 t   Dichloroprop                 0.188   0.178       5.3     82    0.00
  8 t   2,4-D                        0.188   0.175       6.9     81    0.00
  9 t   2,4,5-TP (Silvex)            0.190   0.183       3.7     84    0.00
 10 t   2,4,5-T                      0.190   0.183       3.7     86    0.00
 11 t   2,4-DB                       0.192   0.194      -1.0     86    0.00
 12 t   Dinoseb                      0.190   0.223     -17.4#   101    0.00

              Evaluate Continuing Calibration Report - Not Founds


Herb17_01_20_ICAL16424.m Tue May 26 10:43:04 2020                    Page:  1
```

```
                    Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-02.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 24 May 2020  10:36 am
   Operator  : PEST17:jmc
   Sample    : wg1374081-1,42e,, herb cc9707 (Sig #1); herb cc9707 (Sig #2)
   Misc      : wg1374081,,ical16424
   ALS Vial  : 1   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 24 11:15:36 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.     :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   Min. RRF    :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%     Max. Rel. Area : 150%

         Compound                     Amount  Calc.     %Dev  Area% Dev(Min)
      ------------------------------------------------------------------------

   Signal #2

  -------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
```

```
                    Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-02.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 24 May 2020  10:36 am
   Operator  : PEST17:jmc
   Sample    : wg1374081-1,42e,, herb cc9707 (Sig #1); herb cc9707 (Sig #2)
   Misc      : wg1374081,,ical16424
   ALS Vial  : 1   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 24 11:15:36 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                     Signal #2 Phase:
   Signal #1 Info  :                     Signal #2 Info :


   Sub List    : Default - All compounds listed

          Compound       RT#1     RT#2    Resp#1    Resp#2    mg/l        mg/l
        -------------------------------------------------------------------------
     Internal Standards
 1) i   4,4'-DBOB       8.168    8.458   727.3E6   571.4E6    0.250       0.250

     System Monitoring Compounds
 3) s   DCAA (surrog    6.615    7.385   81338706  80557150   0.171       0.183
  Spiked Amount      0.500 Range   30 - 150  Recovery   =    34.20%      36.60%

     Target Compounds
 2) t   Dalapon         1.689    1.956   80462385  74672737   0.160       0.173
 4) t   Dicamba         6.793    7.565   255.2E6   226.2E6    0.164M4      0.179
 5) t   MCPP            7.002    7.677   31447499  31164892   16.263M4    17.403M4

 6) t   MCPA            7.150    7.905   54934947  52403554   18.476M4    19.198
 7) t   Dichloroprop    7.502    8.224   74542887  67288206   0.166       0.178M4
 8) t   2,4-D           7.718    8.503   95599527  93678967   0.181       0.175
 9) t   2,4,5-TP (Si    8.448    9.162   389.4E6   313.2E6    0.189       0.183
10) t   2,4,5-T         8.680    9.456   398.1E6   309.7E6    0.174       0.183
11) t   2,4-DB          9.098    9.820   72510982  53125715   0.185       0.194
12) t   Dinoseb         9.831   10.037   305.6E6   207.8E6    0.209       0.223M4

     SemiQuant Compounds - Not Calibrated on this Instrument
     -------------------------------------------------------------------------

   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%   (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
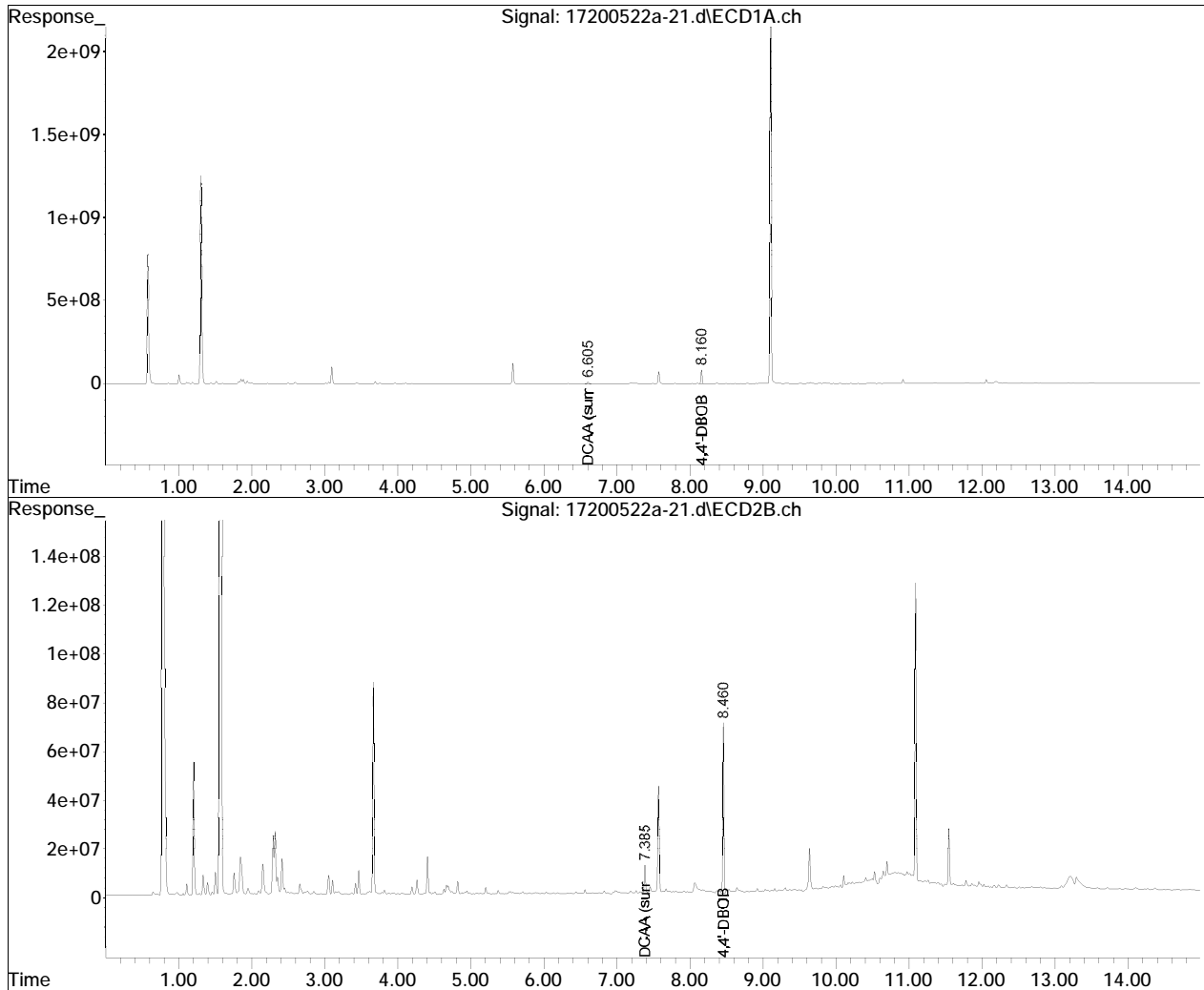
```
Sub List     : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-02.d
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 24 May 2020  10:36 am
Operator  : PEST17:jmc
Sample    : wg1374081-1,42e,, herb cc9707 (Sig #1); herb cc9707 (Sig #2)
Misc      : wg1374081,,ical16424
ALS Vial  : 1    Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 24 11:15:36 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9Quant Date   : 5/24/2020 11:13 am

Compound #4: Dicamba

Original Peak Response = 252754845   Manual Peak Response = 255170342 M4
M4 = Poor automated baseline construction.

17200524a-02.d Herb17_01_20_ICAL16424.m   Tue May 26 10:40:43 2020 Page 1

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9 Quant Date : 5/24/2020 11:13 am

Compound #5: MCPP
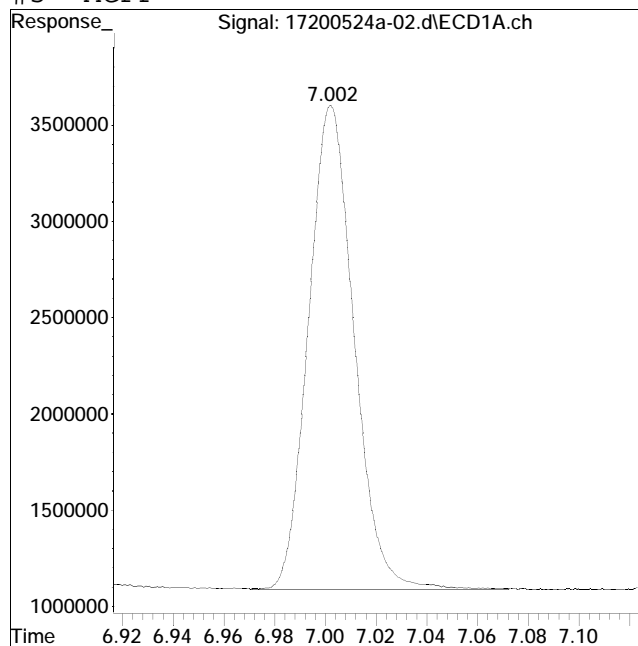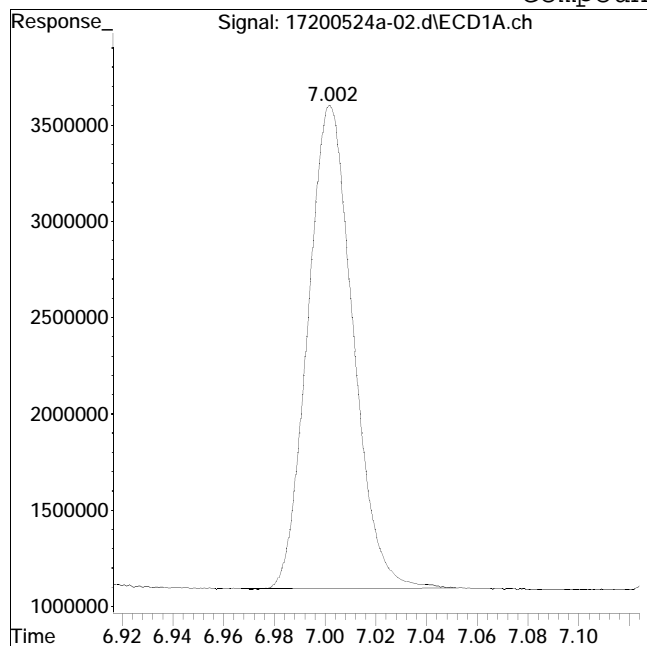
Original Peak Response = 30944191   Manual Peak Response = 31447499 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9 Quant Date : 5/24/2020 11:13 am

Compound #18: MCPP #2
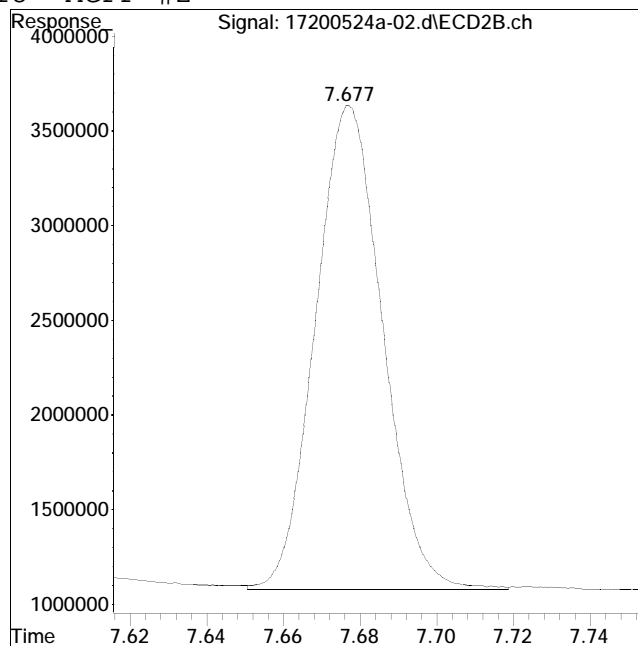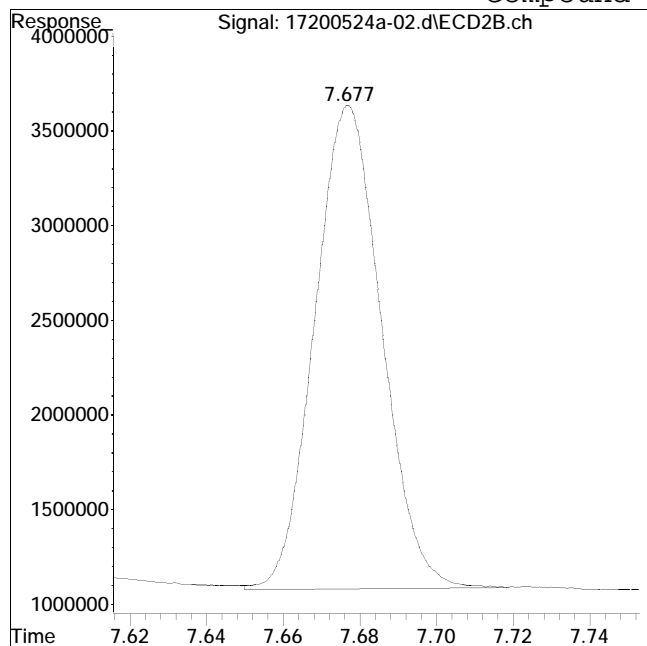
Original Peak Response = 30922304   Manual Peak Response = 31164892 M4
M4 = Poor automated baseline construction.

17200524a-02.d Herb17_01_20_ICAL16424.m   Tue May 26 10:40:43 2020   Page 3

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9Quant Date : 5/24/2020 11:13 am

Compound #6: MCPA
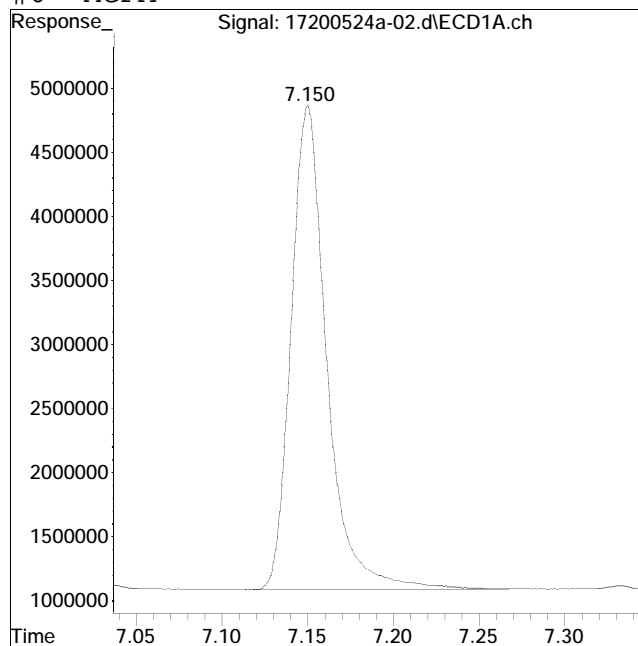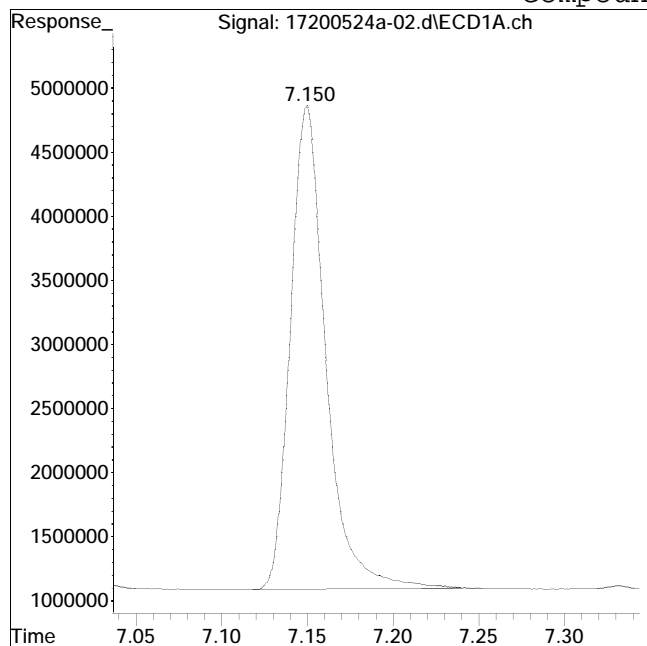
Original Peak Response = 53973064   Manual Peak Response = 54934947 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9 Quant Date : 5/24/2020 11:13 am

Compound #20: Dichloroprop #2
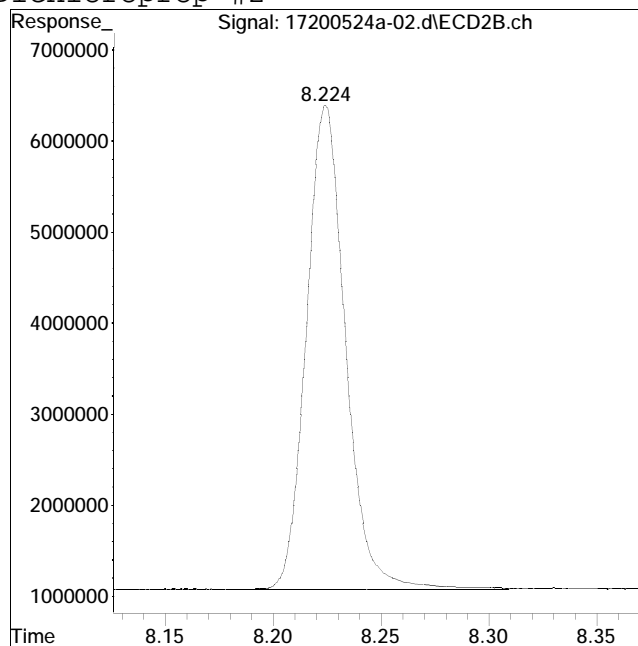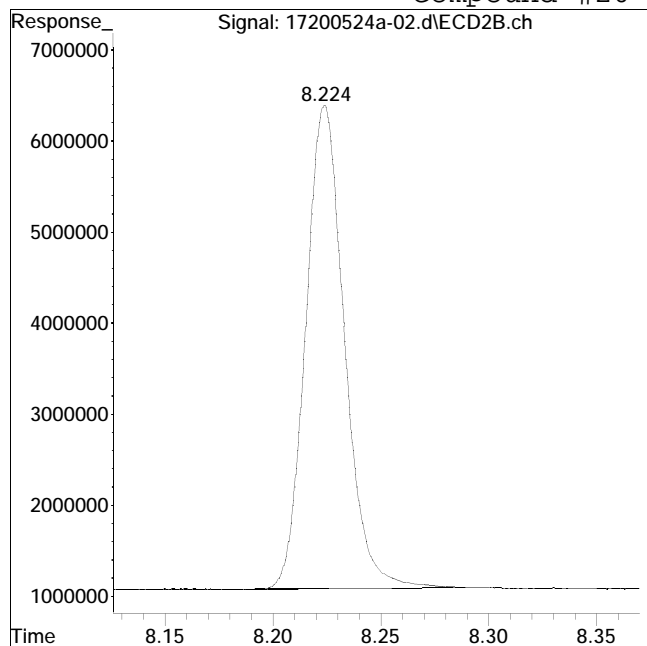
Original Peak Response = 66233336   Manual Peak Response = 67288206 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-02.d   Operator   : PEST17:jmc
Date Inj'd : 5/24/2020 10:36 am   Instrument : Pest 17
Sample   : wg1374081-1,42e,, herb cc9Quant Date : 5/24/2020 11:13 am

Compound #25: Dinoseb #2
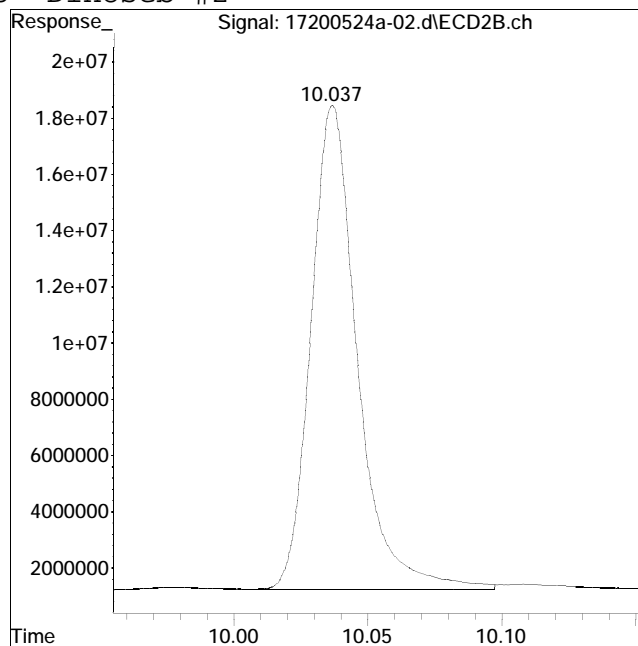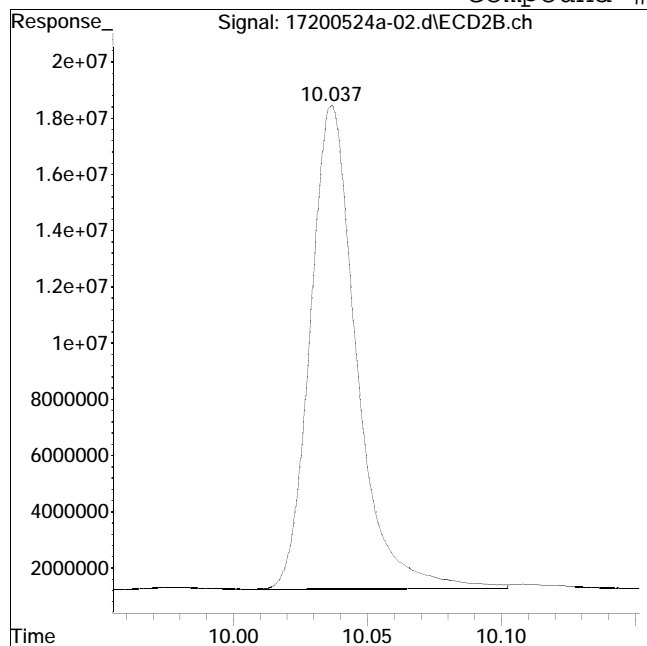
Original Peak Response = 207157159   Manual Peak Response = 207824794 M4
M4 = Poor automated baseline construction.

```
                     Evaluate Continuing Calibration Report

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-18.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 24 May 2020    4:39 pm
  Operator  : PEST17:jmc
  Sample    : wg1374081-2,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
  Misc      : wg1374081,wg1373342,ical16424
  ALS Vial  : 17   Sample Multiplier: 1

  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 10:14:53 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.     :
  Signal #1 Phase :                        Signal #2 Phase:
  Signal #1 Info  :                        Signal #2 Info :


  Min. RRF     :    0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  15%      Max. Rel. Area : 150%


        Compound                   Amount  Calc.      %Dev  Area% Dev(Min)
  ---------------------------------------------------------------------------
  1 i   4,4'-DBOB                   0.250   0.250       0.0    97   0.00
  2 t   Dalapon                     0.182   0.162      11.0    89   0.00
  3 s   DCAA (surrogate)            0.188   0.169      10.1    89   0.00
  4 t   Dicamba                     0.188   0.162      13.8    87   0.00
  5 t   MCPP                       18.800  15.677      16.6#   83   0.00
  6 t   MCPA                       18.600  17.647       5.1    86   0.00
  7 t   Dichloroprop                0.188   0.165      12.2    87   0.00
  8 t   2,4-D                       0.188   0.184       2.1    96   0.00
  9 t   2,4,5-TP (Silvex)           0.190   0.194      -2.1   101   0.00
 10 t   2,4,5-T                     0.190   0.171      10.0    91   0.00
 11 t   2,4-DB                      0.192   0.181       5.7   100   0.00
 12 t   Dinoseb                     0.190   0.189       0.5    93   0.00

  Signal #2


  1 i   4,4'-DBOB                   0.250   0.250       0.0    89   0.00
  2 t   Dalapon                     0.182   0.175       3.8    88   0.00
  3 s   DCAA (surrogate)            0.188   0.180       4.3    87   0.00
  4 t   Dicamba                     0.188   0.178       5.3    84   0.00
  5 t   MCPP                       18.800  16.643      11.5    86   0.00
  6 t   MCPA                       18.600  18.743      -0.8    90   0.00
  7 t   Dichloroprop                0.188   0.172       8.5    84   0.00
  8 t   2,4-D                       0.188   0.171       9.0    84   0.00
  9 t   2,4,5-TP (Silvex)           0.190   0.175       7.9    85   0.00
 10 t   2,4,5-T                     0.190   0.182       4.2    89   0.00
 11 t   2,4-DB                      0.192   0.176       8.3    83   0.00
 12 t   Dinoseb                     0.190   0.225     -18.4#  108   0.00

           Evaluate Continuing Calibration Report - Not Founds


Herb17_01_20_ICAL16424.m Tue May 26 10:43:09 2020                    Page:  1
```

```
                     Evaluate Continuing Calibration Report

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-18.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 24 May 2020    4:39 pm
   Operator  : PEST17:jmc
   Sample    : wg1374081-2,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
   Misc      : wg1374081,wg1373342,ical16424
   ALS Vial  : 17   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 10:14:53 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :


   Min. RRF    :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
   Max. RRF Dev :  15%     Max. Rel. Area : 150%

        Compound                   Amount  Calc.    %Dev  Area% Dev(Min)
     ---------------------------------------------------------------------

   Signal #2

   ---------------------------------------------------------------------

     (#) = Out of Range           SPCC's out = 0   CCC's out = 0
```

```
                    Quantitation Report     (QT Reviewed)

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-18.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    : 24 May 2020   4:39 pm
  Operator  : PEST17:jmc
  Sample    : wg1374081-2,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
  Misc      : wg1374081,wg1373342,ical16424
  ALS Vial  : 17   Sample Multiplier: 1

  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 10:14:53 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.     :
  Signal #1 Phase :                       Signal #2 Phase:
  Signal #1 Info  :                       Signal #2 Info :

  Sub List      : Default - All compounds listed

        Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
  ---------------------------------------------------------------------------
   Internal Standards
1) i  4,4'-DBOB       8.161    8.461   769.0E6  603.5E6    0.250       0.250

   System Monitoring Compounds
3) s  DCAA (surrog    6.607    7.387  85349269 84002265    0.169       0.180
 Spiked Amount       0.500 Range  30 - 150  Recovery   =   33.80%     36.00%

   Target Compounds
2) t  Dalapon         1.684    1.960  86135890 79892190    0.162       0.175
4) t  Dicamba         6.786    7.567   266.0E6  237.3E6    0.162       0.178
5) t  MCPP            6.995    7.680  32053060 31478498   15.677      16.643
6) t  MCPA            7.142    7.908  55477770 54036179   17.647      18.743
7) t  Dichloroprop    7.495    8.226  78245051 68929425    0.165       0.172
8) t  2,4-D           7.709    8.504   102.8E6 96741163    0.184       0.171
9) t  2,4,5-TP (Si    8.439    9.162   422.7E6  315.5E6    0.194       0.175
10) t  2,4,5-T         8.668    9.455   414.8E6  323.6E6    0.171       0.182
11) t  2,4-DB          9.084    9.818  75025085 51036691    0.181       0.176
12) t  Dinoseb         9.825   10.037   292.6E6  222.1E6    0.189       0.225

   SemiQuant Compounds - Not Calibrated on this Instrument
  ---------------------------------------------------------------------------

  (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
  (#)=Recovery Exceeds Compound Acceptance Limits.
  (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.



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```
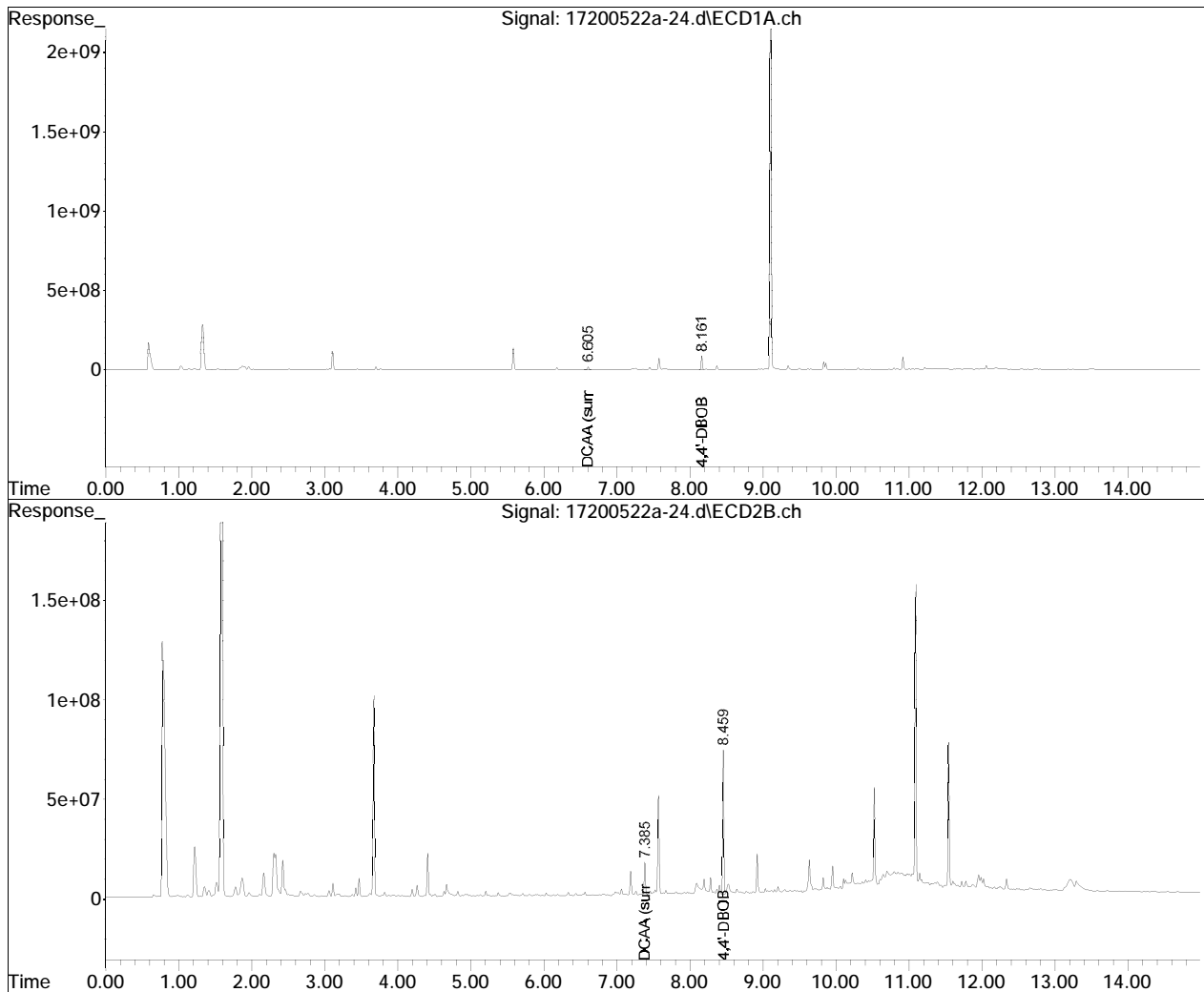
```
Sub List      : Default - All compounds listed Reviewed)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-18.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 24 May 2020    4:39 pm
Operator  : PEST17:jmc
Sample    : wg1374081-2,42e,, herb cc 9707 (Sig #1); herb cc 9707 (Sig #2)
Misc      : wg1374081,wg1373342,ical16424
ALS Vial  : 17    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 10:14:53 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.        :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```

```
                       Manual Integration Report

Data Path   : I:\Pest17\200524a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-18.d            Operator    : PEST17:jmc
Date Inj'd  : 5/24/2020  4:39 pm        Instrument  : Pest 17
Sample      : wg1374081-2,42e,, herb cc Quant Date  : 5/26/2020 10:14 am
```

There are no manual integrations or false positives in this file.

Sample Raw Data

```
                     Quantitation Report    (QT Reviewed)

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-13.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    : 24 May 2020   3:08 pm
  Operator  : PEST17:jmc
  Sample    : l2019694-01,42e,,8151
  Misc      : wg1374081,wg1373342,ical16424
  ALS Vial  : 12   Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 15:39:25 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.    :
  Signal #1 Phase :                    Signal #2 Phase:
  Signal #1 Info  :                    Signal #2 Info :

  CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
  Sub List     : Default - All compounds listed

        Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
  ----------------------------------------------------------------------------
  Internal Standards
   1) i   4,4'-DBOB      8.161    8.461   994.2E6  782.9E6   0.250       0.250
        Standard Area 1 : #1 = 727261488              Recovery   = 136.70%
        Standard Area 1 : #2 = 571405614              Recovery   = 137.02%

  System Monitoring Compounds
   3) s   DCAA (surrog   6.606    7.387   214.9E6  198.0E6   0.330       0.328
        Spiked Amount        0.500 Range  30 - 150  Recovery   =  66.00%    65.60%

  Target Compounds
   8) t   2,4-D          0.000    0.000        0        0   N.D. d      N.D. d
   9) t   2,4,5-TP (Si   0.000    0.000        0        0   N.D. d      N.D.
  SemiQuant Compounds - Not Calibrated on this Instrument
  ----------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

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```
Sub List      : Default - All compounds listeda-02.d••d)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-13.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 24 May 2020    3:08 pm
Operator  : PEST17:jmc
Sample    : l2019694-01,42e,,8151
Misc      : wg1374081,wg1373342,ical16424
ALS Vial  : 12    Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 15:39:25 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      :
Signal #1 Phase  :                        Signal #2 Phase:
Signal #1 Info   :                        Signal #2 Info :
```

```
Data Path   : I:\Pest17\200524a\        QMethod      : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-13.d            Operator     : PEST17:jmc
Date Inj'd  : 5/24/2020  3:08 pm        Instrument   : Pest 17
Sample      : l2019694-01,42e,,8151     Quant Date   : 5/26/2020  3:39 pm
```

There are no manual integrations or false positives in this file.

```
                    Quantitation Report    (QT Reviewed)

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-14.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 24 May 2020   3:26 pm
   Operator  : PEST17:jmc
   Sample    : l2019694-03,42e,,8151
   Misc      : wg1374081,wg1373342,ical16424
   ALS Vial  : 13   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 15:39:57 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.   :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
   Sub List     : Default - All compounds listed

         Compound         RT#1     RT#2    Resp#1   Resp#2    mg/l       mg/l
   -------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB      8.161    8.460   945.2E6  757.7E6   0.250      0.250
         Standard Area 1 : #1 = 727261488            Recovery   = 129.97%
         Standard Area 1 : #2 = 571405614            Recovery   = 132.61%

    System Monitoring Compounds
     3) s   DCAA (surrog   6.606    7.386   191.5E6  187.4E6   0.309      0.320
         Spiked Amount       0.500 Range  30 - 150  Recovery   =  61.80%    64.00%

    Target Compounds
     8) t   2,4-D          0.000    0.000      0        0   N.D. d     N.D. d
     9) t   2,4,5-TP (Si   0.000    0.000      0        0   N.D. d     N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
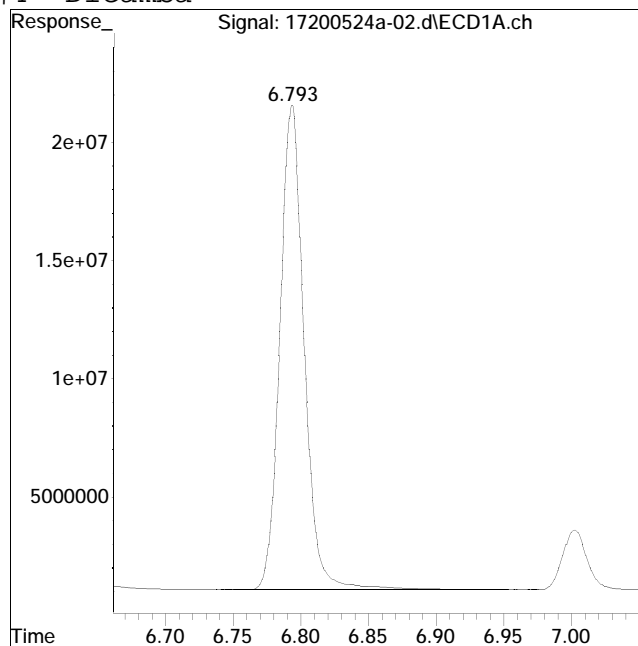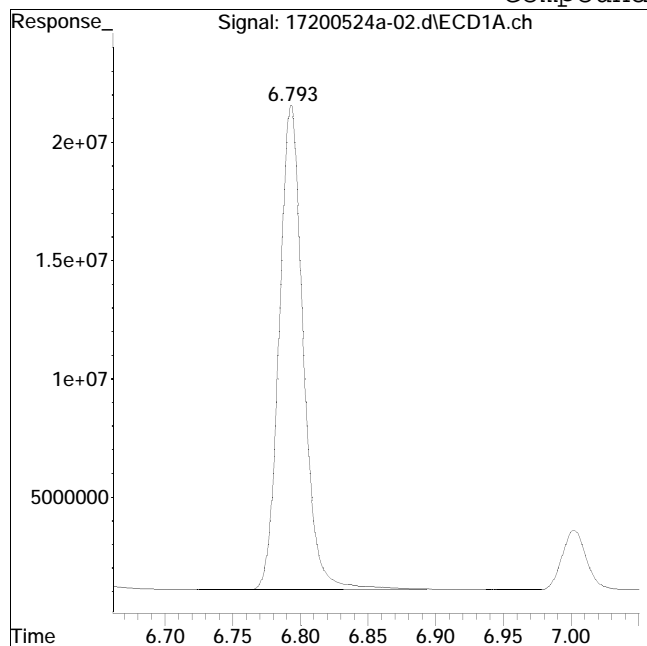
Data Path : I:\Pest17\200524a\
Data File : 17200524a-14.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 24 May 2020   3:26 pm
Operator : PEST17:jmc
Sample   : l2019694-03,42e,,8151
Misc   : wg1374081,wg1373342,ical16424
ALS Vial : 13   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 15:39:57 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

```
                        Manual Integration Report

Data Path   : I:\Pest17\200524a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-14.d            Operator    : PEST17:jmc
Date Inj'd  : 5/24/2020  3:26 pm        Instrument  : Pest 17
Sample      : l2019694-03,42e,,8151     Quant Date  : 5/26/2020  3:39 pm
```

There are no manual integrations or false positives in this file.

```
                          Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-15.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 24 May 2020   3:44 pm
   Operator  : PEST17:jmc
   Sample    : l2019694-04,42e,,8151
   Misc      : wg1374081,wg1373342,ical16424
   ALS Vial  : 14    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 15:40:24 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
   Sub List     : Default - All compounds listed

          Compound          RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   --------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB     8.161    8.460  1010.9E6  804.1E6   0.250       0.250
         Standard Area 1 : #1 = 727261488               Recovery   = 139.00%
         Standard Area 1 : #2 = 571405614               Recovery   = 140.72%

    System Monitoring Compounds
     3) s   DCAA (surrog   6.606    7.387   211.6E6  192.6E6   0.319       0.310
         Spiked Amount      0.500 Range  30 - 150  Recovery   =   63.80%    62.00%

    Target Compounds
     8) t   2,4-D          0.000    0.000        0        0   N.D. d      N.D. d
     9) t   2,4,5-TP (Si   0.000    0.000        0        0   N.D. d      N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
    --------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

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Data Path : I:\Pest17\200524a\
Data File : 17200524a-15.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 24 May 2020   3:44 pm
Operator : PEST17:jmc
Sample   : l2019694-04,42e,,8151
Misc   : wg1374081,wg1373342,ical16424
ALS Vial : 14   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 15:40:24 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

```
                          Manual Integration Report

Data Path   : I:\Pest17\200524a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-15.d            Operator    : PEST17:jmc
Date Inj'd  : 5/24/2020  3:44 pm        Instrument  : Pest 17
Sample      : l2019694-04,42e,,8151     Quant Date  : 5/26/2020  3:40 pm
```

              There are no manual integrations or false positives in this file.

Batch Quality Control

Method Blank
Raw Data

```
                     Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-41.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020   9:55 pm
   Operator  : PEST17:jmc
   Sample    : wg1372978-1,42e,, apa,3177 8151 (Sig #1); wg1373177-1,42e,, apa,29
78 8151 (Sig #2)
   Misc      : wg1373146,wg1372978,ical16424
   ALS Vial  : 41   Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:28:46 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200521a\17200521a-39.d
   Sub List     : Default - All compounds listed

         Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l         mg/l
   ------------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB     8.161    8.460   871.2E6  714.1E6   0.250M4      0.250
          Standard Area 1 : #1 = 766970412              Recovery  =  113.59%
          Standard Area 1 : #2 = 600228594              Recovery  =  118.96%

    System Monitoring Compounds
     3) s   DCAA (surrog  6.605    7.381   161.0E6  309.2E6   0.282M4      0.561M4

          Spiked Amount     0.500 Range  30 - 150  Recovery  =   56.40%   112.20%

    Target Compounds
     8) t   2,4-D         0.000    0.000        0        0    N.D. d       N.D. d
     9) t   2,4,5-TP (Si  0.000    0.000        0        0    N.D. d       N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
    ------------------------------------------------------------------------------
    (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
    (#)=Recovery Exceeds Compound Acceptance Limits.
    (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




Herb17_01_20_ICAL16424.m Thu May 21 23:07:23 2020                    Page: 1
```

```
Sub List      : Default - All compounds listeda-39.d••d)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-41.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020    9:55 pm
Operator  : PEST17:jmc
Sample    : wg1372978-1,42e,, apa,3177 8151 (Sig #1); wg1373177-1,42e,, apa,29
Misc      : wg1373146,wg1372978,ical16424
ALS Vial  : 41    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 22:28:46 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```


Signal: 17200521a-41.d\ECD1A.ch

Signal: 17200521a-41.d\ECD2B.ch

Herb17_01_20_ICAL16424.m Thu May 21 23:07:24 2020   Page: 2

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-41.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 9:55 pm   Instrument : Pest 17
Sample   : wg1372978-1,42e,, apa,3177Quant Date : 5/21/2020 10:25 pm

Compound #1: 4,4'-DBOB

Original Peak Response = 898628386   Manual Peak Response = 871220501 M4
M4 = Poor automated baseline construction.

17200521a-41.d Herb17_01_20_ICAL16424.m   Thu May 21 23:07:24 2020 Page 1

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-41.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 9:55 pm   Instrument : Pest 17
Sample   : wg1372978-1,42e,, apa,3177Quant Date : 5/21/2020 10:25 pm

Compound #3: DCAA (surrogate)
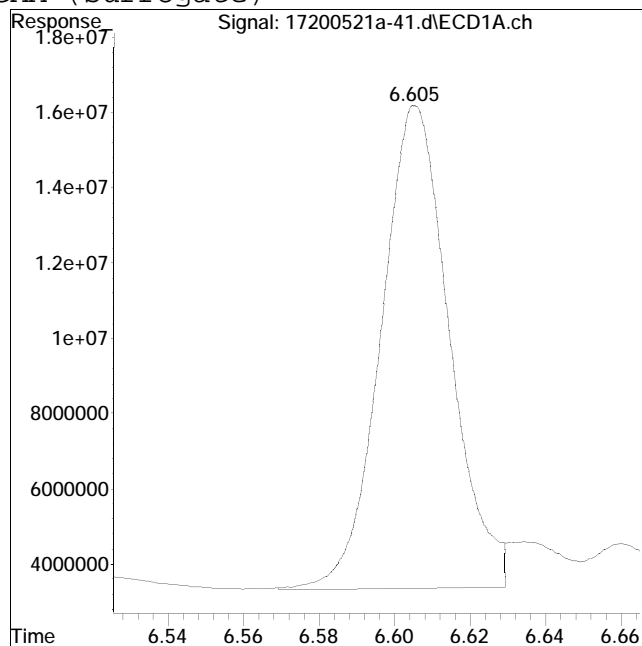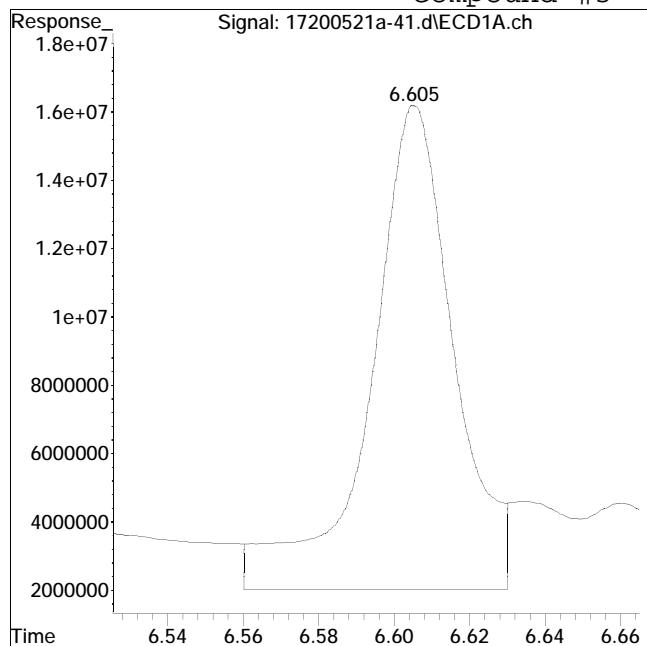
Original Peak Response = 217330732   Manual Peak Response = 160959595 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-41.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 9:55 pm   Instrument : Pest 17
Sample   : wg1372978-1,42e,, apa,3177Quant Date : 5/21/2020 10:25 pm

Compound #16: DCAA (surrogate) #2

Original Peak Response = 469843683   Manual Peak Response = 309188991 M4
M4 = Poor automated baseline construction.

```
                        Quantitation Report    (QT Reviewed)

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-03.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    : 24 May 2020  12:05 pm
  Operator  : PEST17:jmc
  Sample    : wg1373342-1,42e,,3446,3447 apa mcp
  Misc      : wg1374081,wg1373342,ical16424
  ALS Vial  : 2   Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 10:13:06 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.     :
  Signal #1 Phase :                    Signal #2 Phase:
  Signal #1 Info  :                    Signal #2 Info :

  CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
  Sub List     : Default - All compounds listed

         Compound          RT#1     RT#2    Resp#1   Resp#2    mg/l         mg/l
  -------------------------------------------------------------------------------
  Internal Standards
   1) i  4,4'-DBOB      8.168    8.458   985.3E6  783.0E6   0.250       0.250
         Standard Area 1 : #1 = 727261488              Recovery   = 135.49%
         Standard Area 1 : #2 = 571405614              Recovery   = 137.03%

  System Monitoring Compounds
   3) s  DCAA (surrog   6.614    7.383   221.2E6  229.5E6   0.343       0.380
         Spiked Amount      0.500 Range  30 - 150  Recovery   =  68.60%   76.00%

  Target Compounds
   8) t  2,4-D          0.000    0.000        0        0   N.D. d      N.D.
   9) t  2,4,5-TP (Si   0.000    0.000        0        0   N.D. d      N.D. d
  SemiQuant Compounds - Not Calibrated on this Instrument
  -------------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

```
Sub List      : Default - All compounds listeda-02.d••d)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-03.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 24 May 2020  12:05 pm
Operator  : PEST17:jmc
Sample    : wg1373342-1,42e,,3446,3447 apa mcp
Misc      : wg1374081,wg1373342,ical16424
ALS Vial  : 2    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 10:13:06 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                     Signal #2 Phase:
Signal #1 Info  :                     Signal #2 Info :
```


Signal: 17200524a-03.d\ECD1A.ch

Signal: 17200524a-03.d\ECD2B.ch

```
                          Manual Integration Report

Data Path   : I:\Pest17\200524a\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-03.d            Operator    : PEST17:jmc
Date Inj'd  : 5/24/2020 12:05 pm        Instrument  : Pest 17
Sample      : wg1373342-1,42e,,3446,3447Quant Date  : 5/26/2020 10:09 am
```


                 There are no manual integrations or false positives in this file.

```
                        Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-03.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 22 May 2020  10:48 am
   Operator  : PEST17:jmc
   Sample    : wg1373173-1,42e,, t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 3    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 11:47:42 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.    :
   Signal #1 Phase :                    Signal #2 Phase:
   Signal #1 Info  :                    Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-01.d
   Sub List     : HERB-TCLP - TCLP


         Compound         RT#1    RT#2   Resp#1   Resp#2    mg/l        mg/l
   -------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB      8.166   8.459  941.3E6  770.3E6   0.250       0.250
           Standard Area 1 : #1 = 695061275           Recovery  =  135.42%
           Standard Area 1 : #2 = 557299339           Recovery  =  138.22%

    System Monitoring Compounds
     3) s   DCAA (surrog   6.612   7.384  214.4E6  218.2E6   0.348       0.367
           Spiked Amount        0.500 Range  30 - 150  Recovery  =   69.60%   73.40%

    Target Compounds
     8) t   2,4-D          0.000   0.000       0        0   N.D. d      N.D. d
     9) t   2,4,5-TP (Si   0.000   0.000       0        0   N.D. d      N.D. d
    SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.




   Herb17_01_20_ICAL16424.m Fri May 22 11:50:27 2020                    Page: 1
```
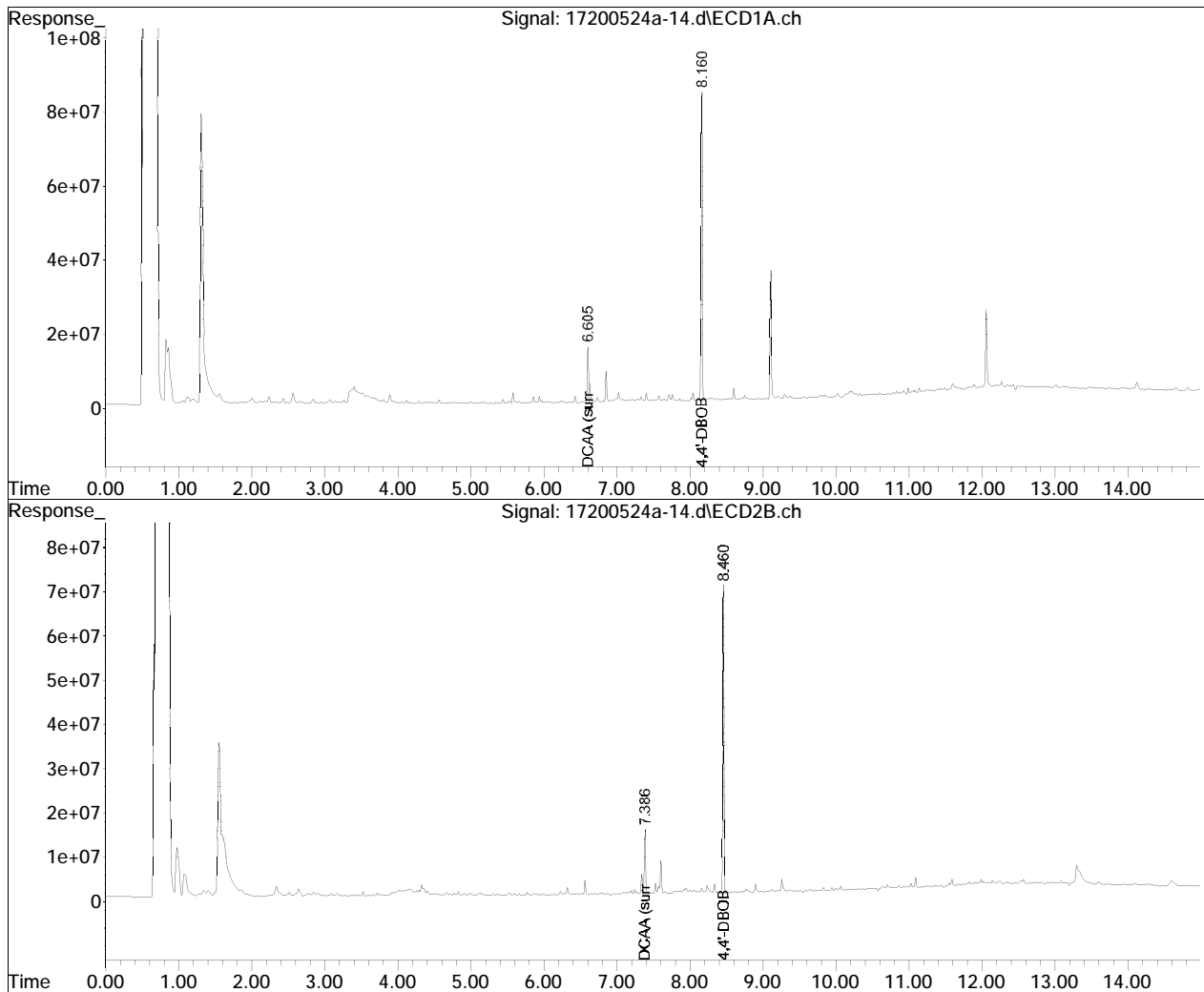
```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-01.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-03.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020  10:48 am
Operator  : PEST17:jmc
Sample    : wg1373173-1,42e,, t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 3    Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 11:47:42 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.       :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

```
Data Path   : I:\Pest17\200522A\        QMethod     : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-03.d            Operator    : PEST17:jmc
Date Inj'd  : 5/22/2020 10:48 am        Instrument  : Pest 17
Sample      : wg1373173-1,42e,, t       Quant Date  : 5/22/2020 11:47 am
```

There are no manual integrations or false positives in this file.

LCS Raw Data

```
                        Quantitation Report     (QT Reviewed)

   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-42.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 21 May 2020  10:13 pm
   Operator  : PEST17:jmc
   Sample    : wg1372978-2,42e,, apa,3177  8151 (Sig #1); wg1373177-2,42e,, apa,2
978 8151 (Sig #2)
   Misc      : wg1373146,wg1372978,ical16424
   ALS Vial  : 42   Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:29:40 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.    :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200521a\17200521a-39.d
   Sub List     : Default - All compounds listed

        Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
       --------------------------------------------------------------------
   Internal Standards
    1) i   4,4'-DBOB     8.162    8.460   865.4E6  659.7E6   0.250       0.250
        Standard Area 1 : #1 = 766970412              Recovery  =  112.83%
        Standard Area 1 : #2 = 600228594              Recovery  =  109.91%

   System Monitoring Compounds
    3) s   DCAA (surrog  6.605    7.385   177.0E6  190.7E6   0.312M4     0.374M4

        Spiked Amount      0.500 Range  30 - 150  Recovery  =   62.40%     74.80%

   Target Compounds
    8) t   2,4-D         7.705    8.501   214.2E6  187.8E6   0.340       0.303
    9) t   2,4,5-TP (Si  8.438    9.160   785.8E6  636.4E6   0.320       0.323
   SemiQuant Compounds - Not Calibrated on this Instrument
       --------------------------------------------------------------------
    (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
    (#)=Recovery Exceeds Compound Acceptance Limits.
    (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
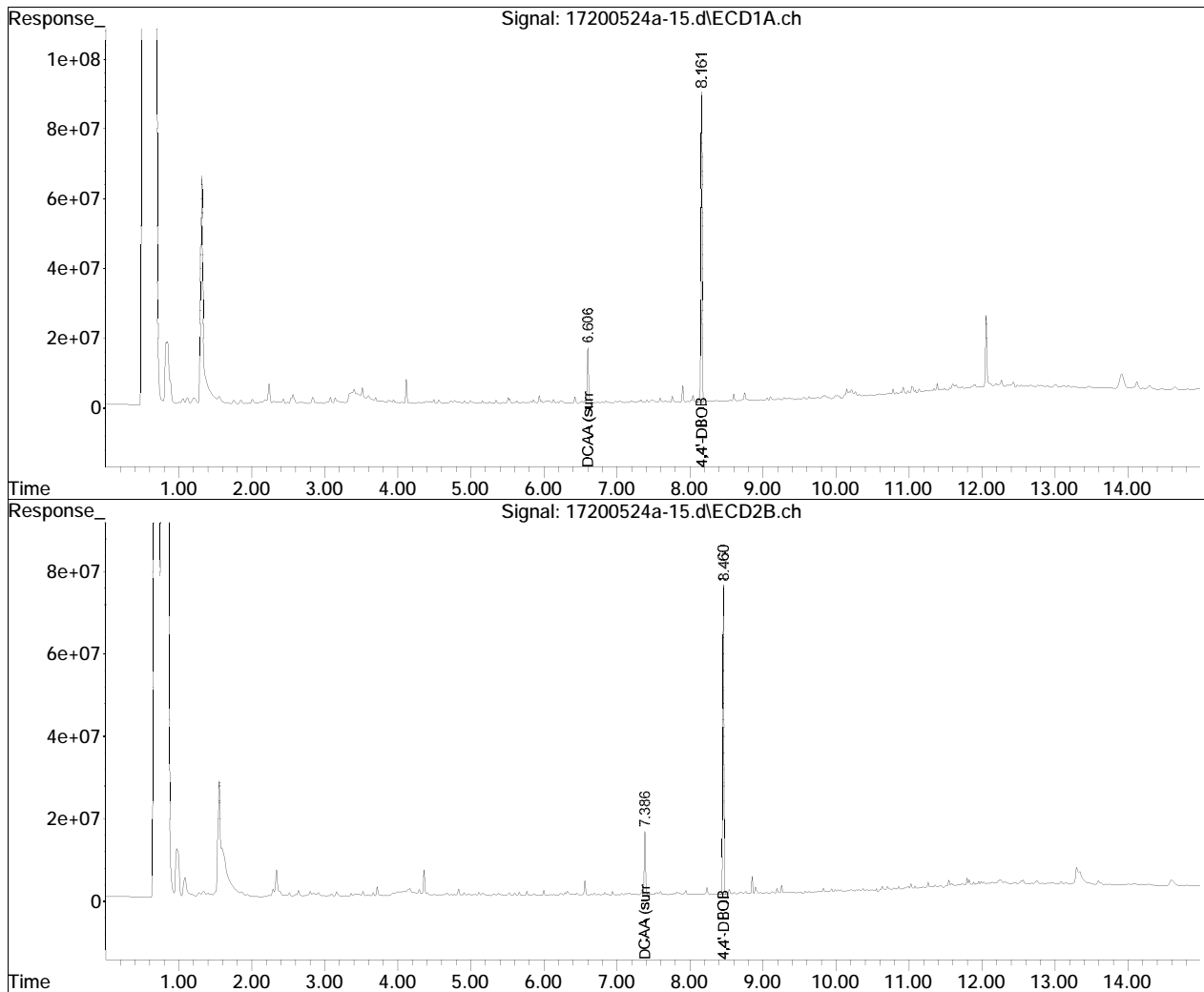
Herb17_01_20_ICAL16424.m Thu May 21 23:07:29 2020   Page: 1

```
Sub List      : Default - All compounds listeda-39.d••d)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-42.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020  10:13 pm
Operator  : PEST17:jmc
Sample    : wg1372978-2,42e,, apa,3177  8151 (Sig #1); wg1373177-2,42e,, apa,2
Misc      : wg1373146,wg1372978,ical16424
ALS Vial  : 42   Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 22:29:40 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```


Signal: 17200521a-42.d\ECD1A.ch

Signal: 17200521a-42.d\ECD2B.ch

Herb17_01_20_ICAL16424.m Thu May 21 23:07:30 2020   Page: 2

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-42.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:13 pm   Instrument : Pest 17
Sample   : wg1372978-2,42e,, apa,3177Quant Date : 5/21/2020 10:29 pm

Compound #3: DCAA (surrogate)

Original Peak Response = 207365308   Manual Peak Response = 176994424 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-42.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:13 pm   Instrument : Pest 17
Sample   : wg1372978-2,42e,, apa,3177Quant Date : 5/21/2020 10:29 pm

Compound #16: DCAA (surrogate) #2

Original Peak Response = 224248360   Manual Peak Response = 190665117 M4
M4 = Poor automated baseline construction.

```
                        Quantitation Report      (QT Reviewed)

   Data Path : I:\Pest17\200524a\
   Data File : 17200524a-04.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 24 May 2020  12:23 pm
   Operator  : PEST17:jmc
   Sample    : wg1373342-2,42e,,3446,3447 apa mcp
   Misc      : wg1374081,wg1373342,ical16424
   ALS Vial  : 3   Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 26 10:13:53 2020
   Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.     :
   Signal #1 Phase :                       Signal #2 Phase:
   Signal #1 Info  :                       Signal #2 Info :


   CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
   Sub List     : Default - All compounds listed

        Compound            RT#1      RT#2    Resp#1   Resp#2    mg/l        mg/l
   -----------------------------------------------------------------------------
    Internal Standards
     1) i   4,4'-DBOB       8.162     8.460   960.9E6  757.0E6   0.250       0.250
         Standard Area 1 : #1 = 727261488                  Recovery   =  132.12%
         Standard Area 1 : #2 = 571405614                  Recovery   =  132.48%

    System Monitoring Compounds
     3) s   DCAA (surrog    6.607     7.386   201.5E6  203.4E6   0.320       0.348M3
         Spiked Amount        0.500 Range  30 - 150  Recovery   =    64.00%   69.60%

    Target Compounds
     8) t   2,4-D           7.708     8.502   239.6E6  216.3E6   0.343       0.304
     9) t   2,4,5-TP (Si    8.440     9.161   968.2E6  734.0E6   0.355       0.324
    SemiQuant Compounds - Not Calibrated on this Instrument
   -----------------------------------------------------------------------------
     (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
     (#)=Recovery Exceeds Compound Acceptance Limits.
     (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
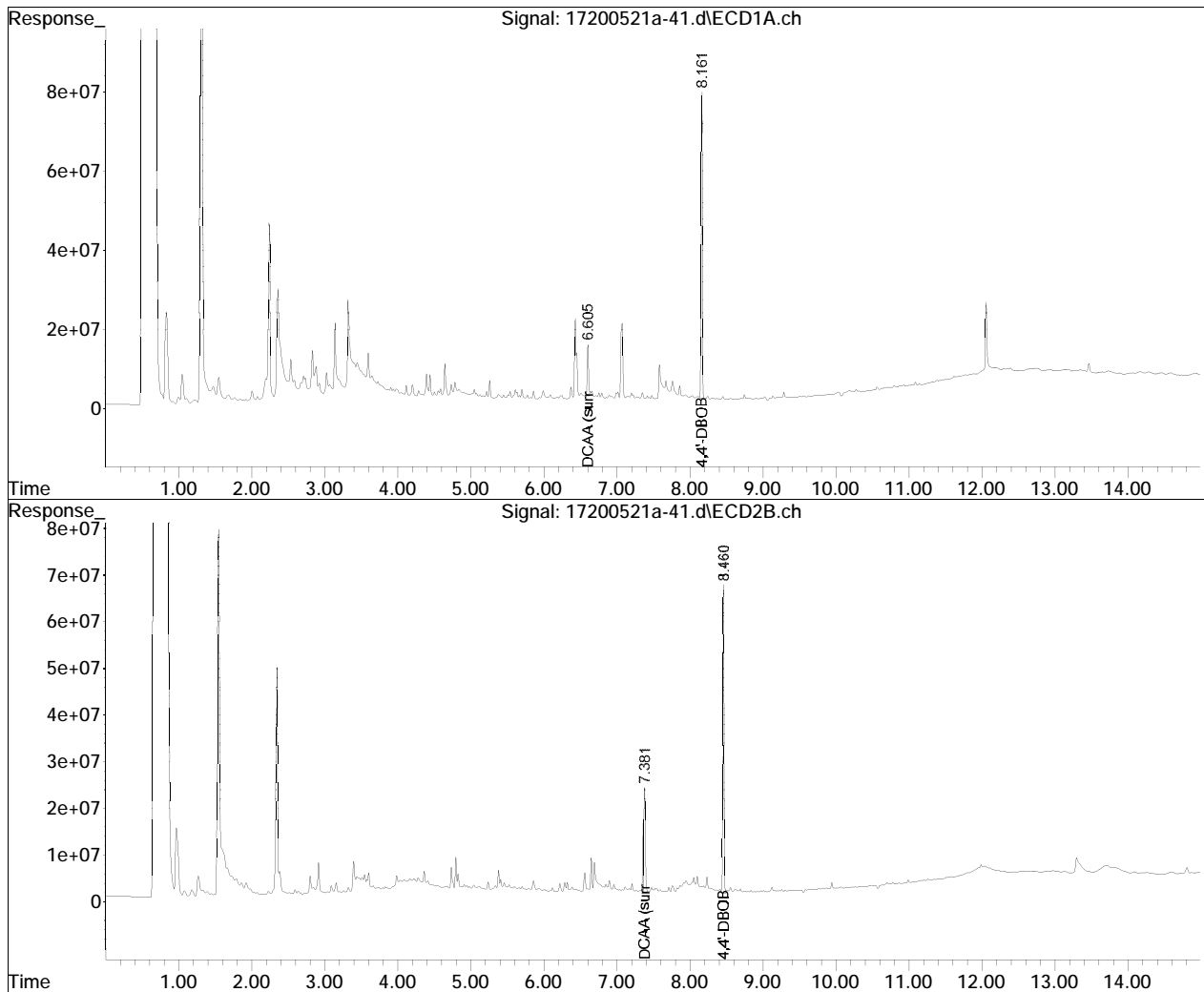
Sub List   : Default - All compounds listeda-02.d••d)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-04.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 24 May 2020 12:23 pm
Operator : PEST17:jmc
Sample   : wg1373342-2,42e,,3446,3447 apa mcp
Misc   : wg1374081,wg1373342,ical16424
ALS Vial : 3   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 10:13:53 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
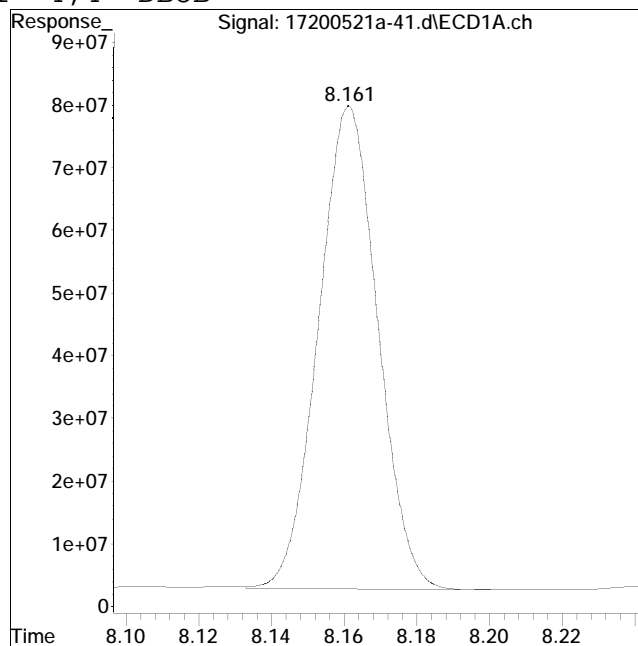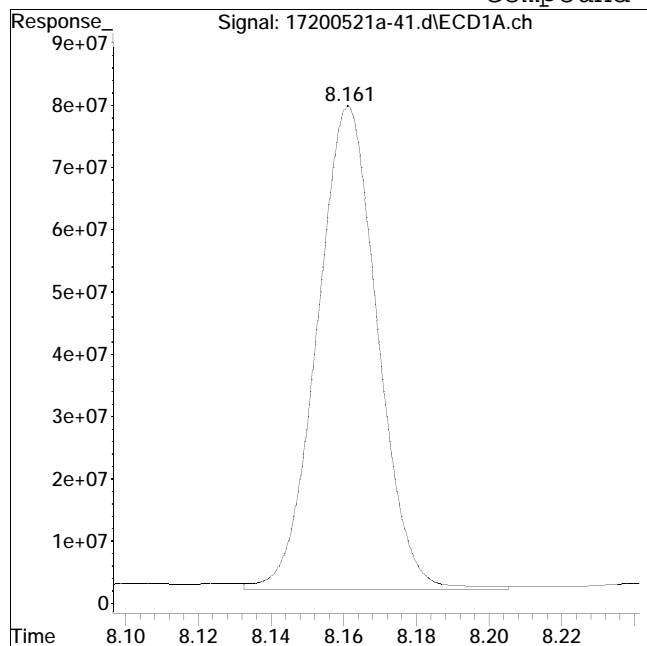Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Herb17_01_20_ICAL16424.m Tue May 26 10:40:53 2020   Page: 2

Manual Integration Report

Data Path   : I:\Pest17\200524a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200524a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/24/2020 12:23 pm   Instrument : Pest 17
Sample   : wg1373342-2,42e,,3446,3447 Quant Date : 5/26/2020 10:13 am

Compound #16: DCAA (surrogate) #2

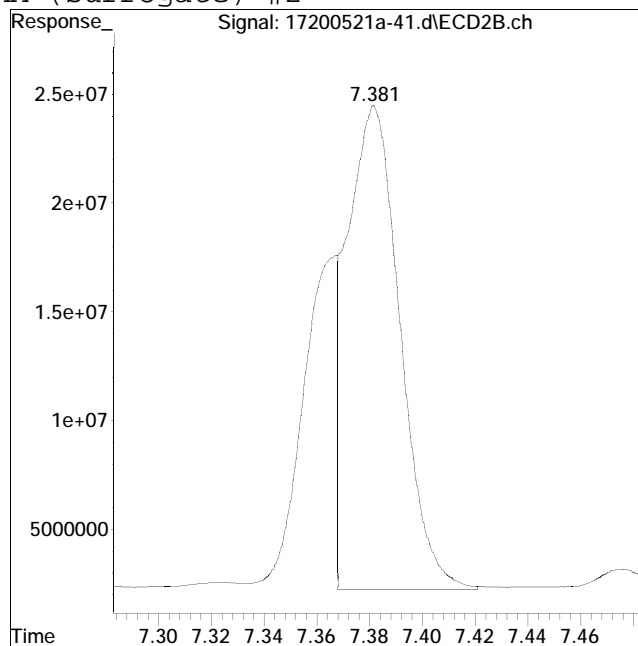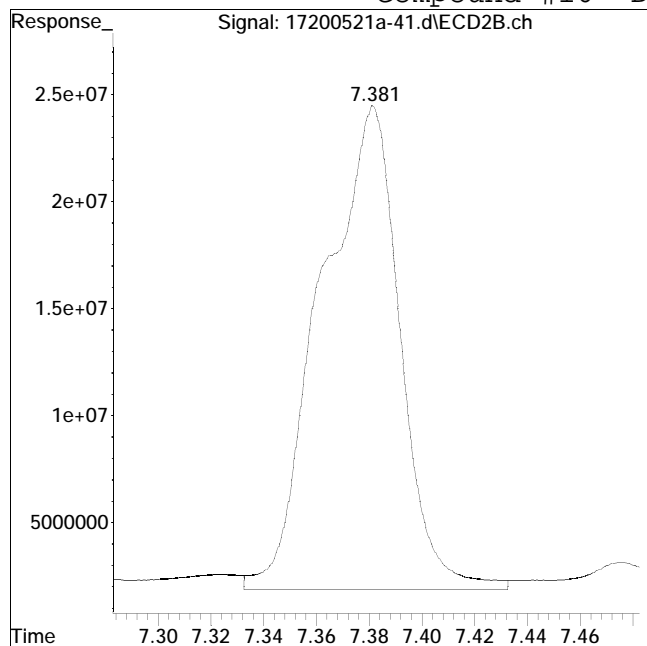Original Peak Response = 228340277   Manual Peak Response = 203360612 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as
1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks
not being split.

```
                        Quantitation Report    (QT Reviewed)


  Data Path : I:\Pest17\200522A\
  Data File : 17200522a-04.d
  Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
  Acq On    : 22 May 2020  11:06 am
  Operator  : PEST17:jmc
  Sample    : wg1373173-2,42e,, t
  Misc      : wg1373624,wg1373173,ical16424
  ALS Vial  : 4    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 22 11:49:03 2020
  Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation


  Volume Inj.      :
  Signal #1 Phase :                      Signal #2 Phase:
  Signal #1 Info  :                      Signal #2 Info :


  CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-01.d
  Sub List     : HERB-TCLP - TCLP


       Compound        RT#1      RT#2    Resp#1   Resp#2    mg/l       mg/l
   -------------------------------------------------------------------------
   Internal Standards
1) i   4,4'-DBOB     8.161    8.460   901.1E6  761.7E6   0.250M4     0.250
     Standard Area 1 : #1 = 695061275              Recovery  =  129.64%
     Standard Area 1 : #2 = 557299339              Recovery  =  136.68%

   System Monitoring Compounds
3) s   DCAA (surrog   6.607    7.386   216.0E6  198.4E6   0.366M4    0.337M4

     Spiked Amount      0.500 Range  30 - 150  Recovery  =   73.20%    67.40%

   Target Compounds
8) t   2,4-D          7.705    8.502   346.9E6  811.8E6   0.529M4    1.135M3
9) t   2,4,5-TP (Si   8.437    9.159   964.4E6  829.8E6   0.377M4    0.364M4
   SemiQuant Compounds - Not Calibrated on this Instrument
   -------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```

Sub List   : HERB-TCLP - TCLP0522A\17200522a-01.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-04.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On   : 22 May 2020   11:06 am
Operator : PEST17:jmc
Sample   : wg1373173-2,42e,, t
Misc   : wg1373624,wg1373173,ical16424
ALS Vial : 4   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 11:49:03 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #1: 4,4'-DBOB

Original Peak Response = 1249596226   Manual Peak Response = 901112040 M4
M4 = Poor automated baseline construction.

17200522a-04.d Herb17_01_20_ICAL16424.m   Fri May 22 11:50:33 2020 Page 1

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #3: DCAA (surrogate)
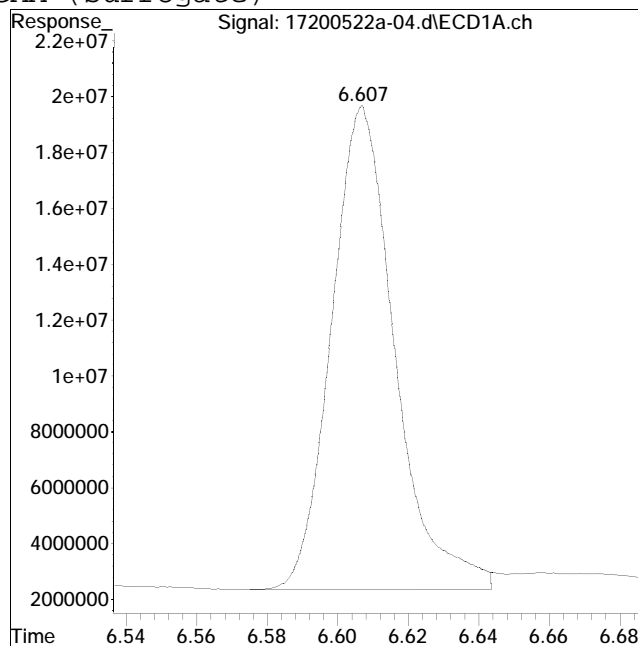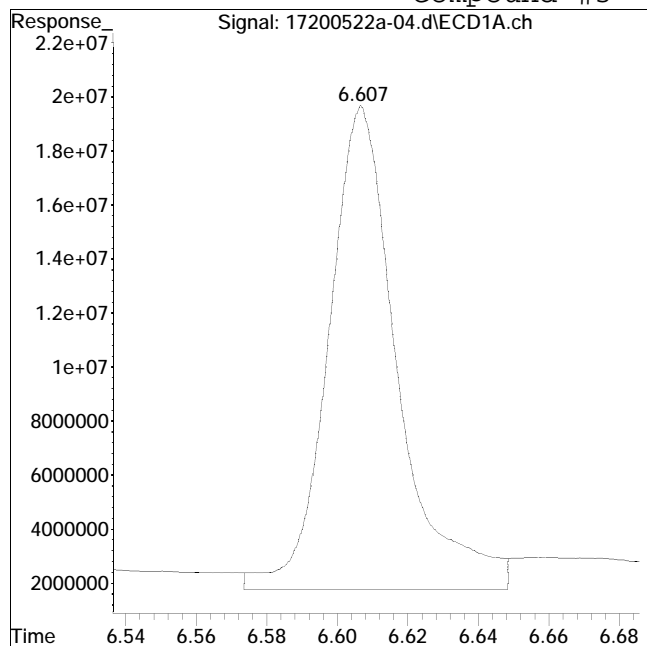
Original Peak Response = 244329408   Manual Peak Response = 216027508 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #16: DCAA (surrogate) #2
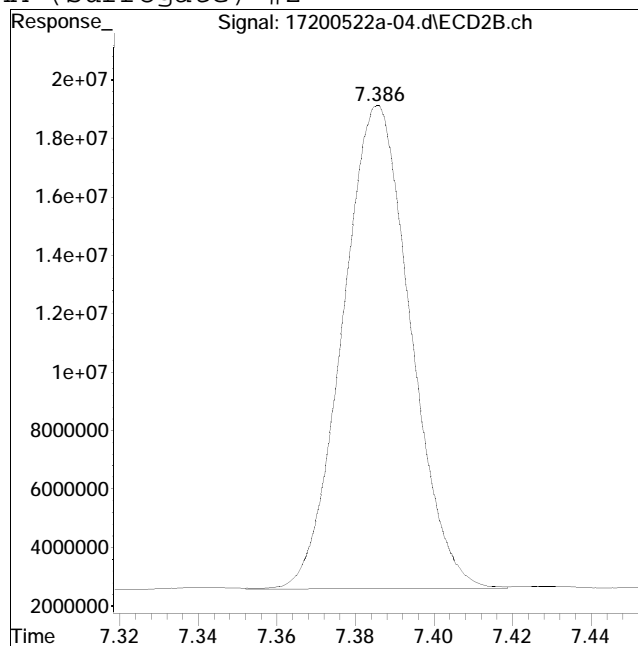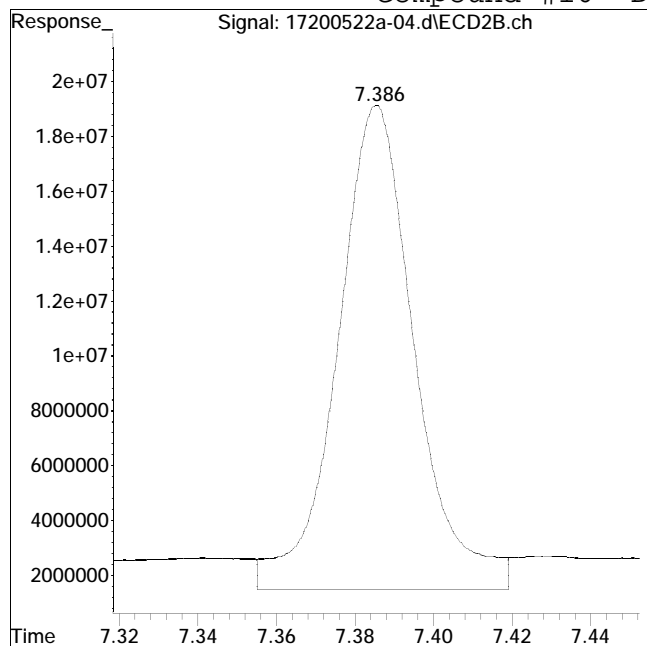
Original Peak Response = 240693044   Manual Peak Response = 198375379 M4
M4 = Poor automated baseline construction.

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #8: 2,4-D
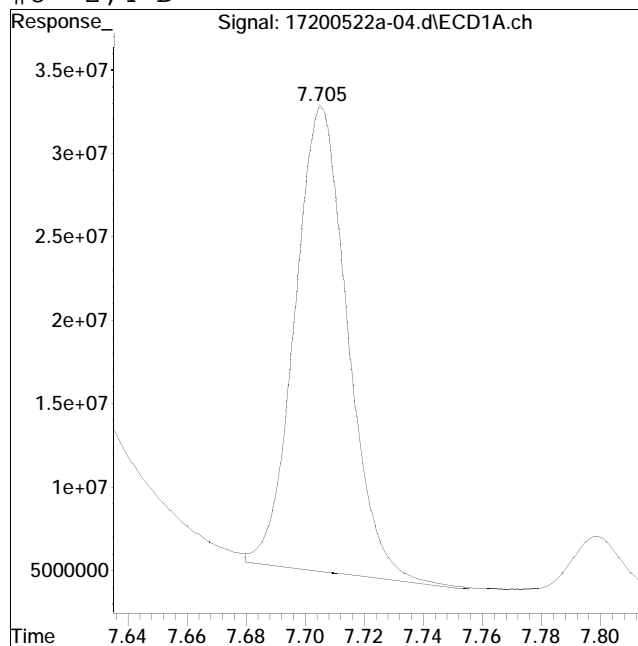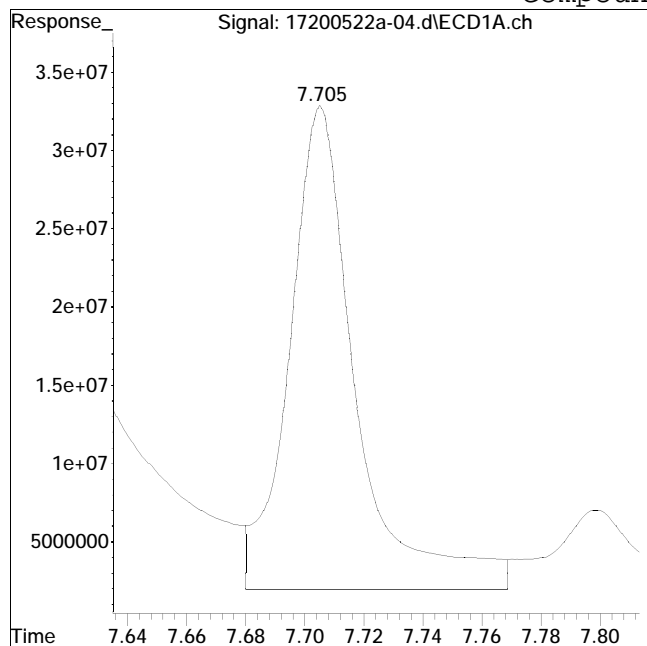
Original Peak Response = 486394843   Manual Peak Response = 346945066 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #21: 2,4-D #2
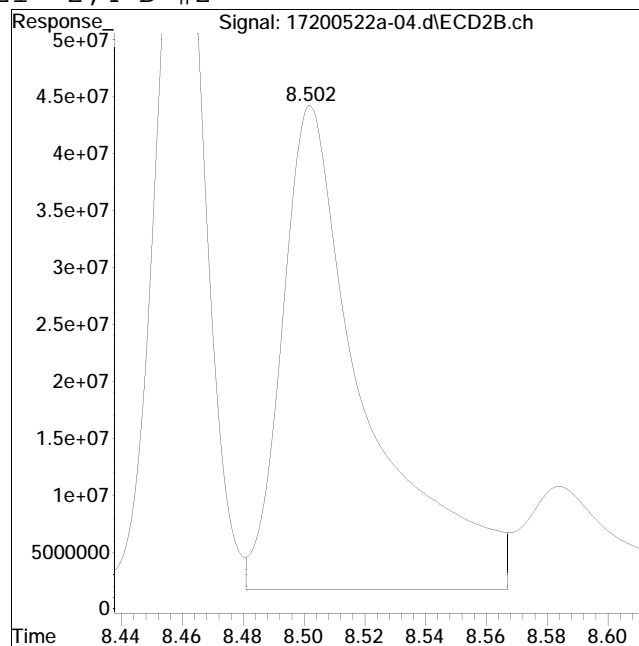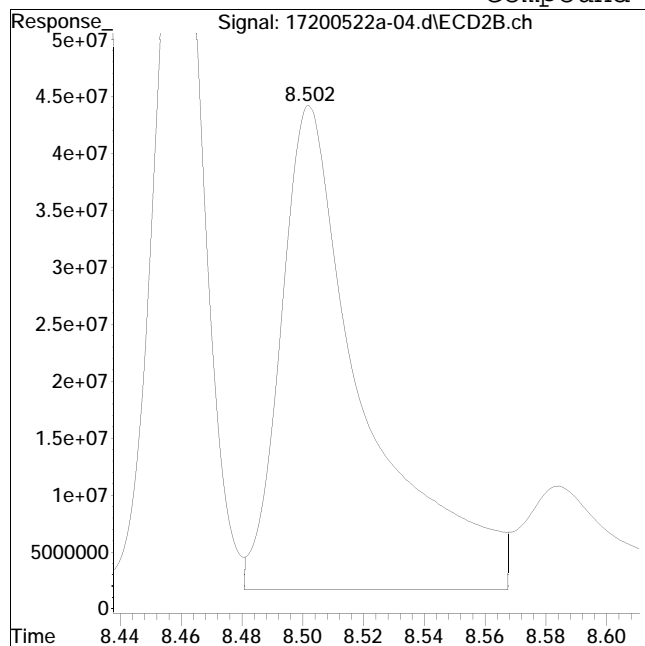
Original Peak Response = 813691485   Manual Peak Response = 811843739 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as
1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks
not being split.

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #9: 2,4,5-TP (Silvex)
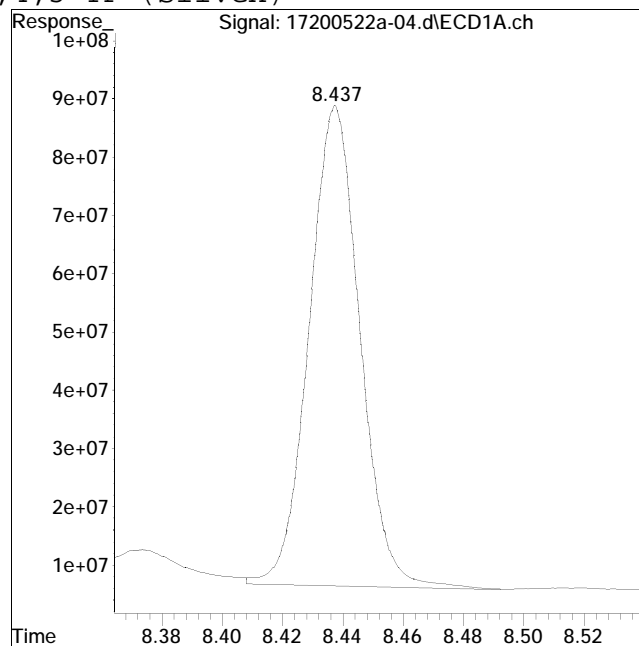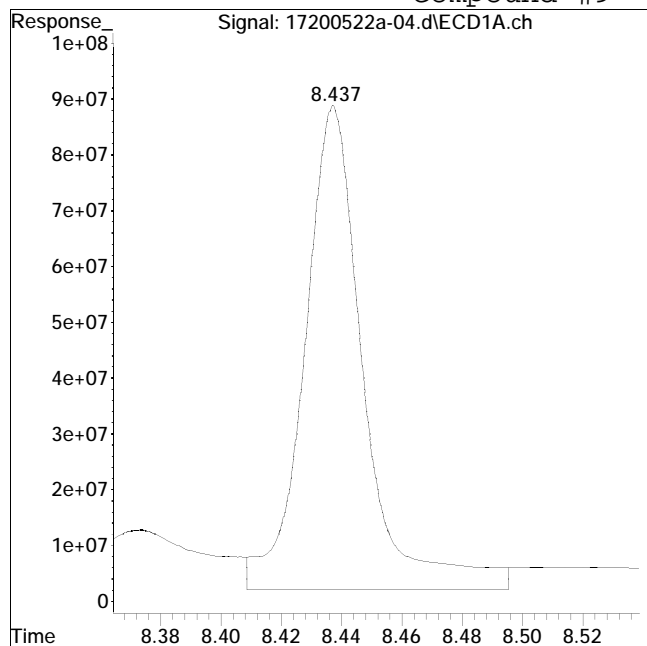
Original Peak Response = 1183887429   Manual Peak Response = 964395784 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-04.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:06 am   Instrument : Pest 17
Sample   : wg1373173-2,42e,, t   Quant Date : 5/22/2020 11:47 am

Compound #22: 2,4,5-TP (Silvex) #2
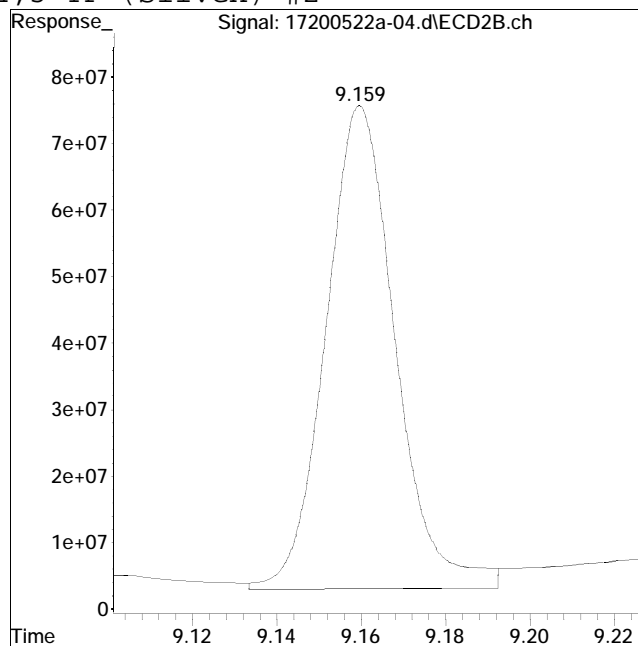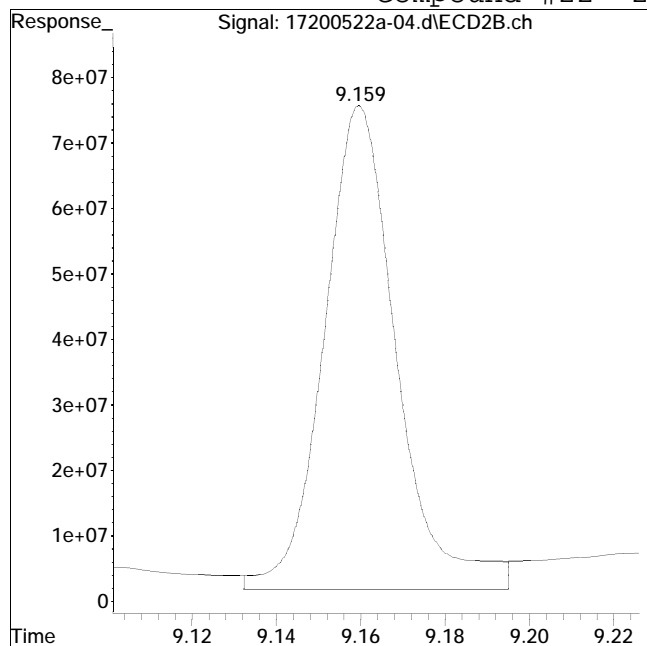
Original Peak Response = 882135182   Manual Peak Response = 829818783 M4
M4 = Poor automated baseline construction.

LCS Duplicate Raw Data

```
   Data Path : I:\Pest17\200521a\
   Data File : 17200521a-43.d
   Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
   Acq On    : 21 May 2020   10:32 pm
   Operator  : PEST17:jmc
   Sample    : wg1372978-3,42e,, apa,3177  8151 (Sig #1); wg1373177-3,42e,, apa,2
978 8151 (Sig #2)
   Misc      : wg1373146,wg1372978,ical16424
   ALS Vial  : 43    Sample Multiplier: 1

   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 21 22:57:36 2020
   Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation

   Volume Inj.     :
   Signal #1 Phase :                     Signal #2 Phase:
   Signal #1 Info  :                     Signal #2 Info :

   CCAL FILE(s) : 1 - I:\Pest17\200521a\17200521a-39.d
   Sub List     : Default - All compounds listed
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/l	mg/l
Internal Standards
1) i	4,4'-DBOB	8.161	8.460	859.1E6	717.3E6	0.250M4	0.250
	Standard Area 1 : #1 = 766970412				Recovery	=	112.01%
	Standard Area 1 : #2 = 600228594				Recovery	=	119.51%
System Monitoring Compounds
3) s	DCAA (surrog	6.605	7.384	140.3E6	154.9E6	0.249M4	0.280M4
	Spiked Amount	0.500	Range	30 - 150	Recovery	= 49.80%	56.00%
Target Compounds
8) t	2,4-D	7.704	8.500	181.1E6	187.4E6	0.290M4	0.278M4
9) t	2,4,5-TP (Si	8.437	9.160	726.4E6	633.1E6	0.298M4	0.295

```
 SemiQuant Compounds - Not Calibrated on this Instrument
 ----------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
```

```
Sub List      : Default - All compounds listeda-39.d••d)

Data Path : I:\Pest17\200521a\
Data File : 17200521a-43.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 21 May 2020  10:32 pm
Operator  : PEST17:jmc
Sample    : wg1372978-3,42e,, apa,3177  8151 (Sig #1); wg1373177-3,42e,, apa,2
Misc      : wg1373146,wg1372978,ical16424
ALS Vial  : 43    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 21 22:57:36 2020
Quant Method : I:\Pest17\200521a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.       :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```


Signal: 17200521a-43.d\ECD1A.ch

Signal: 17200521a-43.d\ECD2B.ch

Herb17_01_20_ICAL16424.m Thu May 21 23:07:37 2020   Page: 3

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument : Pest 17
Sample   : wg1372978-3,42e,, apa,3177Quant Date : 5/21/2020 10:54 pm

Compound #1: 4,4'-DBOB

Original Peak Response = 940800614   Manual Peak Response = 859107809 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument : Pest 17
Sample   : wg1372978-3,42e,, apa,3177Quant Date : 5/21/2020 10:54 pm

Compound #3: DCAA (surrogate)
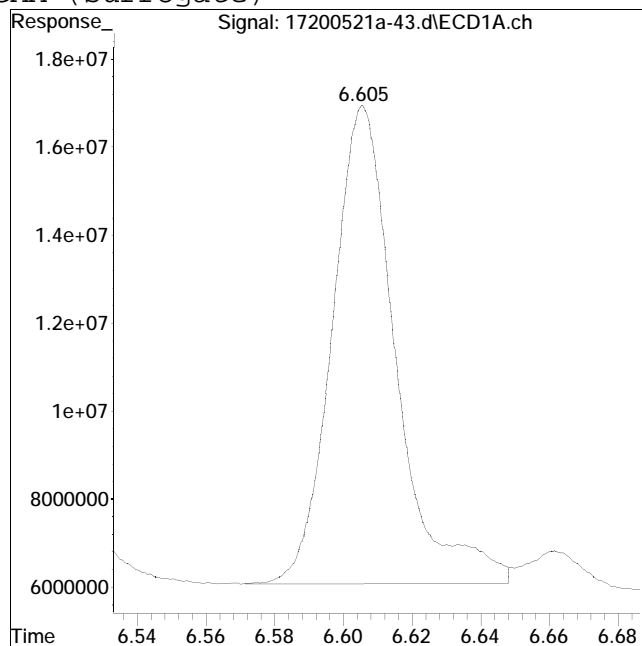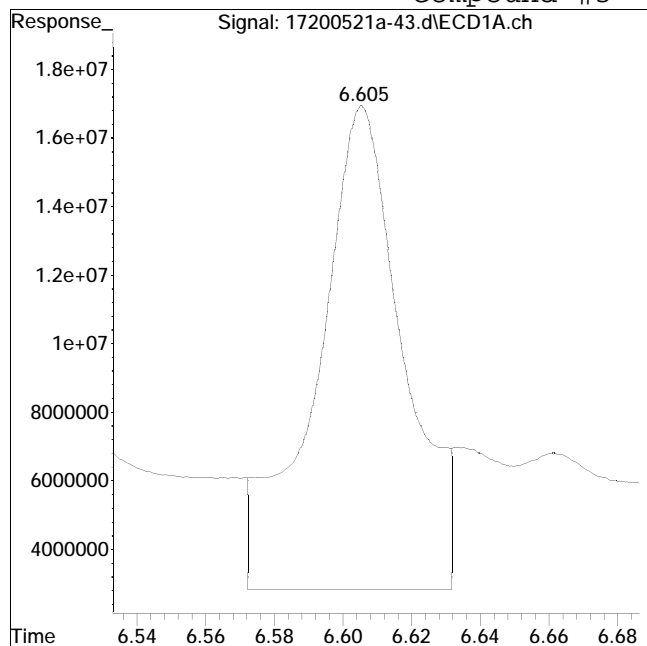
Original Peak Response = 249376037   Manual Peak Response = 140251880 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument   : Pest 17
Sample   : wg1372978-3,42e,, apa,3177 Quant Date   : 5/21/2020 10:54 pm

Compound #16: DCAA (surrogate) #2
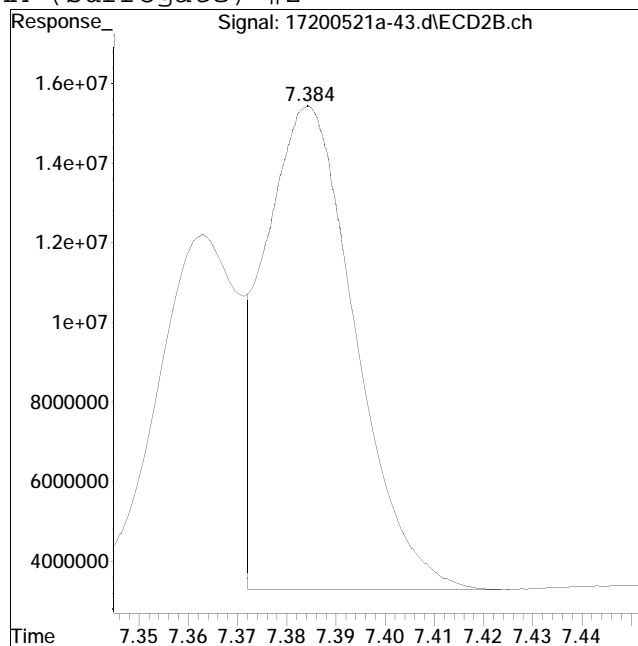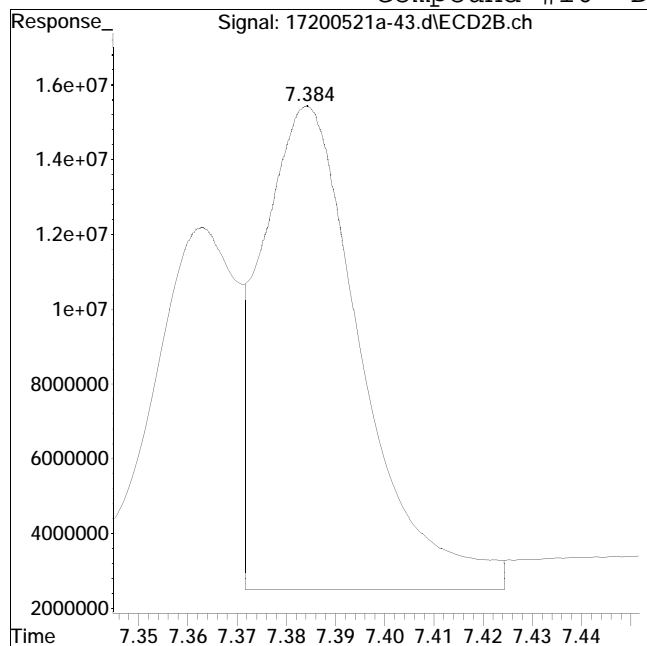
Original Peak Response = 183939016   Manual Peak Response = 154878281 M4
M4 = Poor automated baseline construction.

17200521a-43.d Herb17_01_20_ICAL16424.m   Thu May 21 23:07:39 2020   Page 5

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument : Pest 17
Sample   : wg1372978-3,42e,, apa,3177Quant Date : 5/21/2020 10:54 pm

Compound #8: 2,4-D
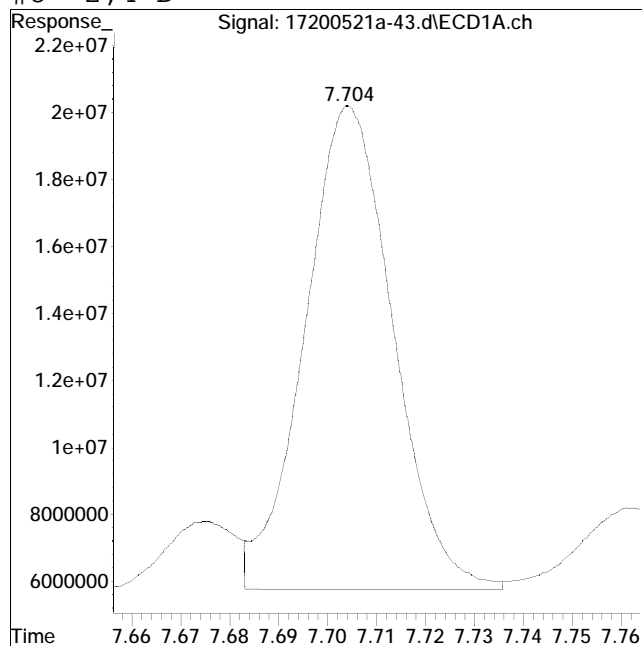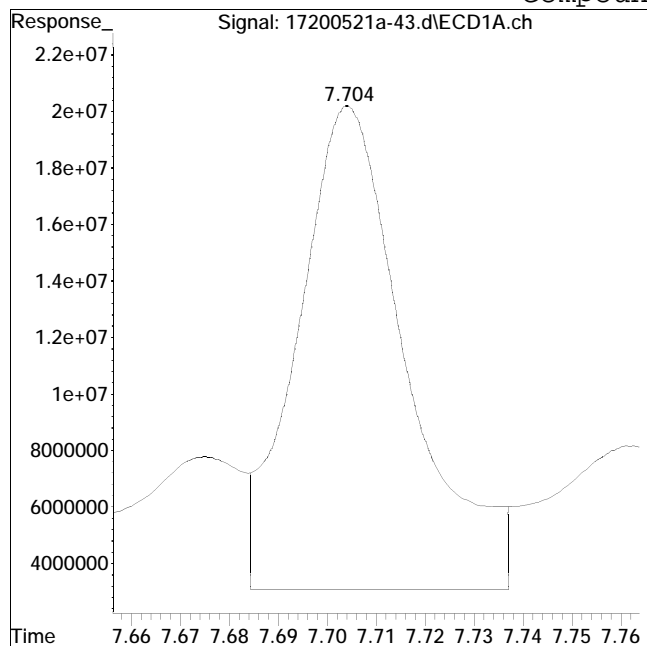
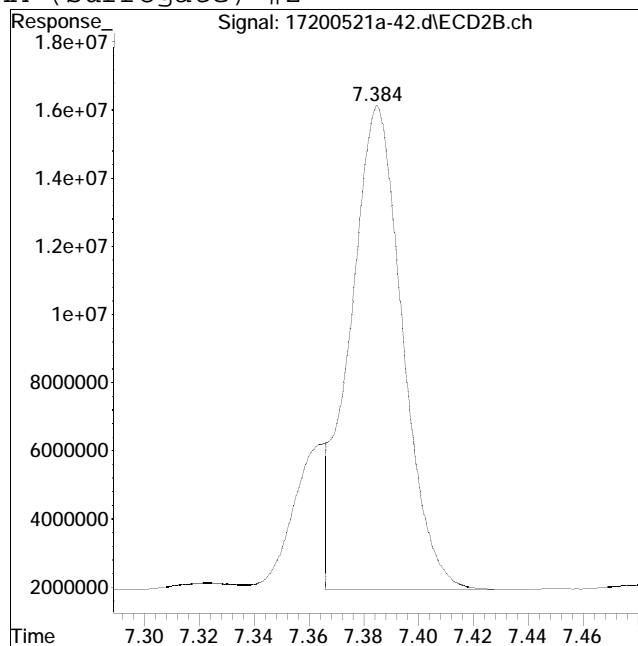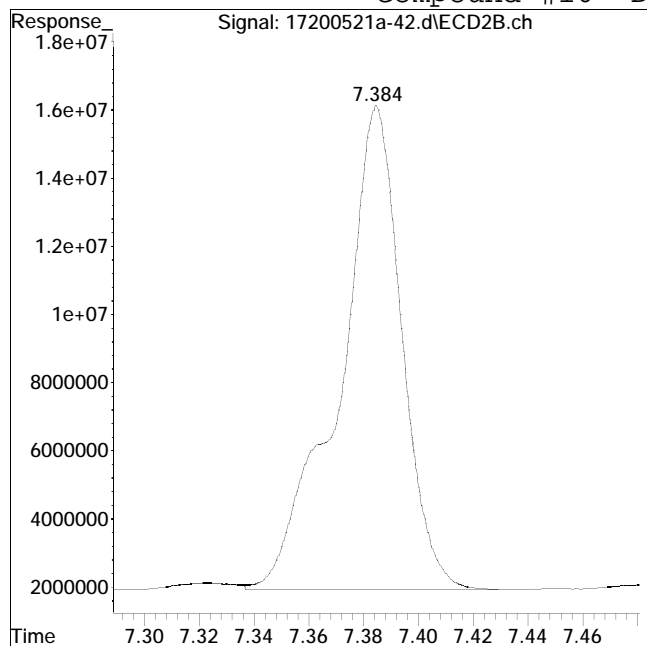Original Peak Response = 265163742   Manual Peak Response = 181116063 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument   : Pest 17
Sample   : wg1372978-3,42e,, apa,3177Quant Date   : 5/21/2020 10:54 pm

Compound #21: 2,4-D #2
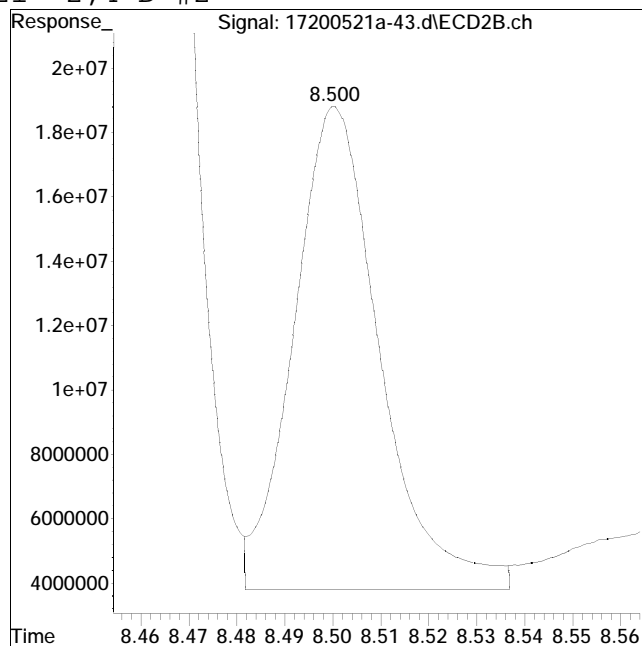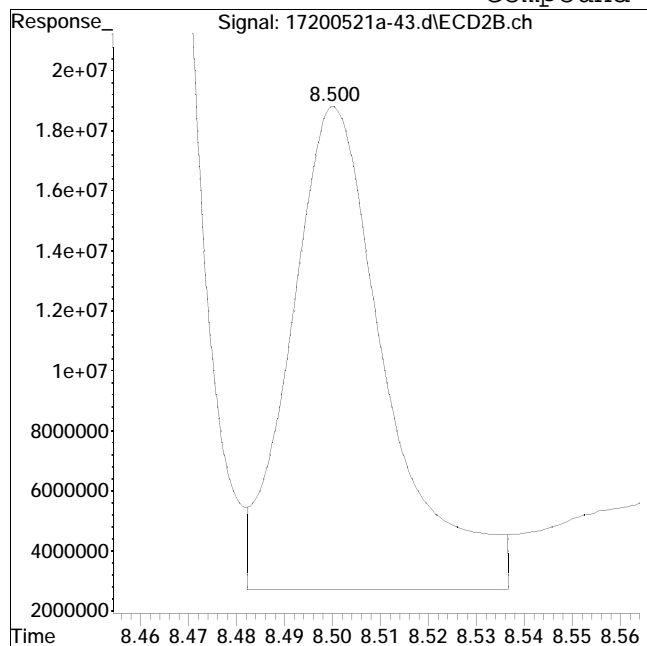
Original Peak Response = 222161345   Manual Peak Response = 187368118 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200521a\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200521a-43.d   Operator   : PEST17:jmc
Date Inj'd   : 5/21/2020 10:32 pm   Instrument : Pest 17
Sample   : wg1372978-3,42e,, apa,3177Quant Date : 5/21/2020 10:54 pm

Compound #9: 2,4,5-TP (Silvex)
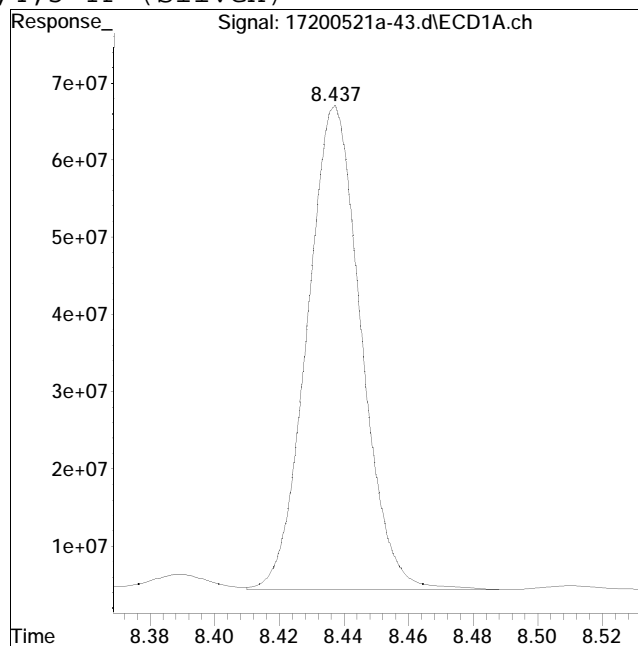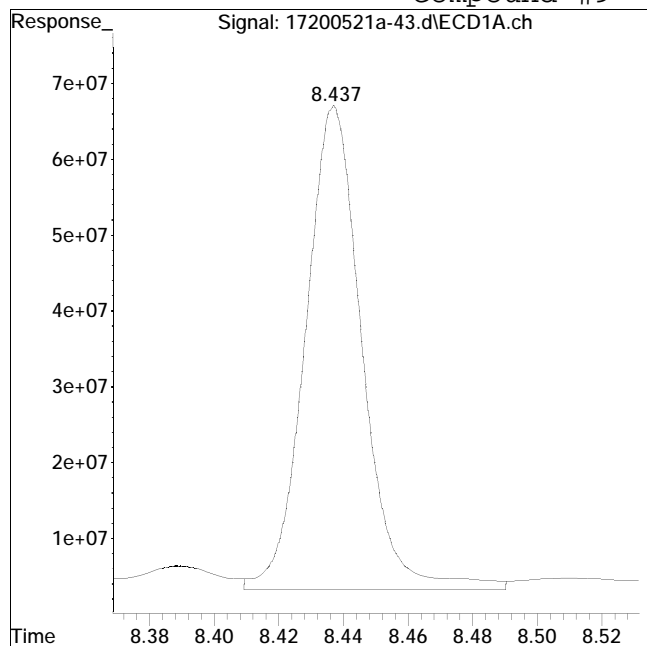
Original Peak Response = 780275263   Manual Peak Response = 726399032 M4
M4 = Poor automated baseline construction.

```
                    Quantitation Report     (QT Reviewed)

  Data Path : I:\Pest17\200524a\
  Data File : 17200524a-05.d
  Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
  Acq On    : 24 May 2020   12:41 pm
  Operator  : PEST17:jmc
  Sample    : wg1373342-3,42e,,3446,3447 apa mcp
  Misc      : wg1374081,wg1373342,ical16424
  ALS Vial  : 4    Sample Multiplier: 1


  Integration File signal 1: events.e
  Integration File signal 2: events2.e
  Quant Time: May 26 10:14:29 2020
  Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
  Quant Title  : herb
  QLast Update : Mon May 18 15:01:38 2020
  Response via : Initial Calibration
  Integrator: ChemStation

  Volume Inj.     :
  Signal #1 Phase :                      Signal #2 Phase:
  Signal #1 Info  :                      Signal #2 Info :

  CCAL FILE(s) : 1 - I:\Pest17\200524a\17200524a-02.d
  Sub List     : Default - All compounds listed

        Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l         mg/l
  -------------------------------------------------------------------------
  Internal Standards
   1) i   4,4'-DBOB      8.161    8.460  1041.2E6  818.9E6    0.250        0.250
          Standard Area 1 : #1 = 727261488              Recovery   = 143.17%
          Standard Area 1 : #2 = 571405614              Recovery   = 143.31%

  System Monitoring Compounds
   3) s   DCAA (surrog   6.606    7.386   180.8E6  201.8E6    0.265        0.319
          Spiked Amount       0.500 Range  30 - 150  Recovery   =   53.00%   63.80%

  Target Compounds
   8) t   2,4-D          7.707    8.502   214.1E6  194.0E6    0.283        0.252
   9) t   2,4,5-TP (Si   8.439    9.161   863.6E6  656.4E6    0.292        0.268
  SemiQuant Compounds - Not Calibrated on this Instrument
  -------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
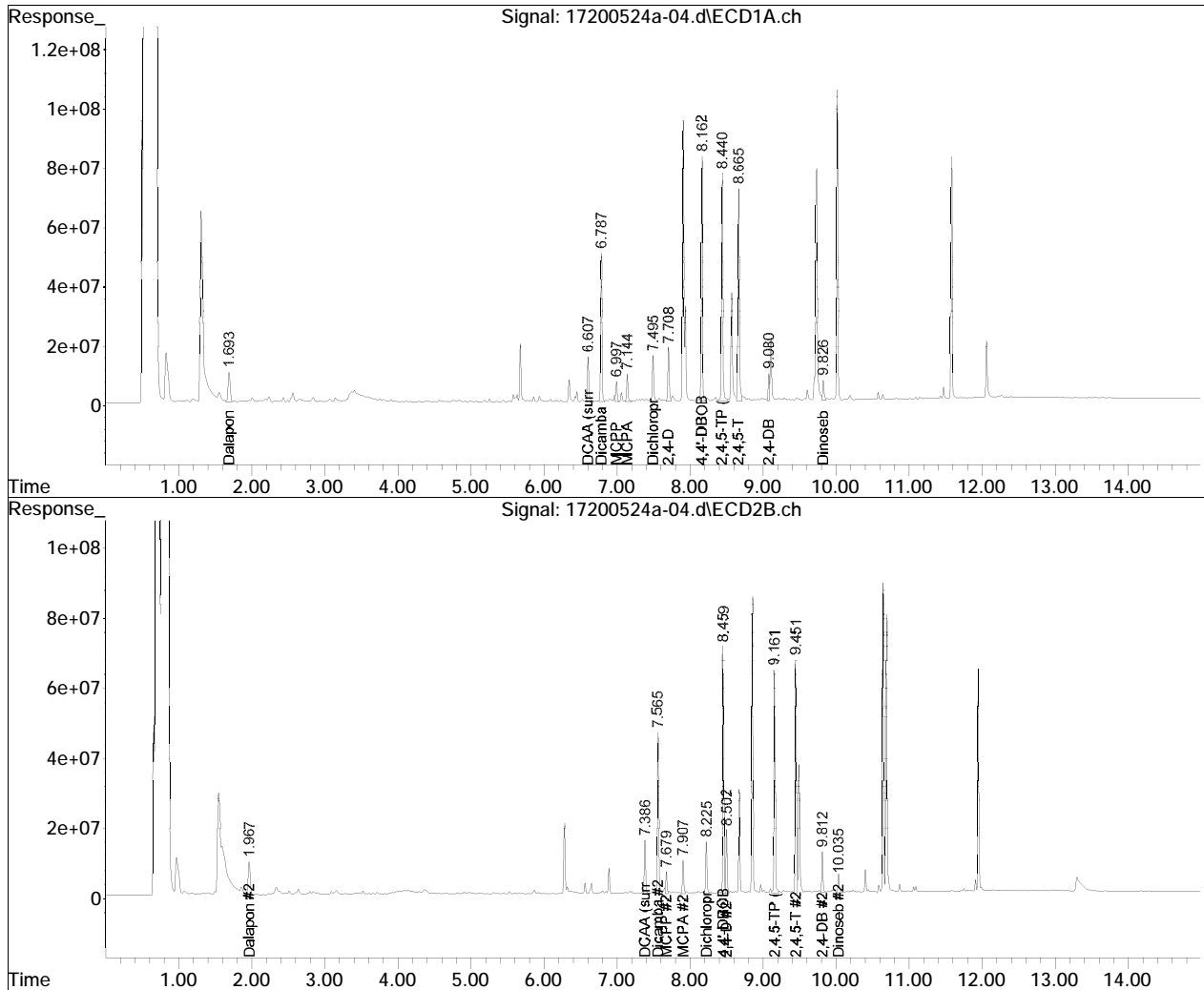
Herb17_01_20_ICAL16424.m Tue May 26 10:40:58 2020   Page: 1

```
Sub List      : Default - All compounds listeda-02.d••d)

Data Path : I:\Pest17\200524a\
Data File : 17200524a-05.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 24 May 2020  12:41 pm
Operator  : PEST17:jmc
Sample    : wg1373342-3,42e,,3446,3447 apa mcp
Misc      : wg1374081,wg1373342,ical16424
ALS Vial  : 4    Sample Multiplier: 1


Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 26 10:14:29 2020
Quant Method : I:\Pest17\200524a\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation


Volume Inj.      :
Signal #1 Phase :                      Signal #2 Phase:
Signal #1 Info  :                      Signal #2 Info :
```
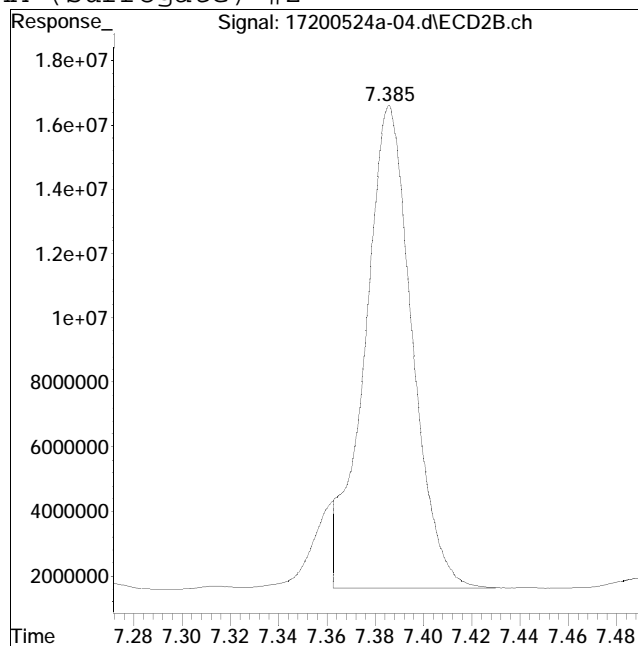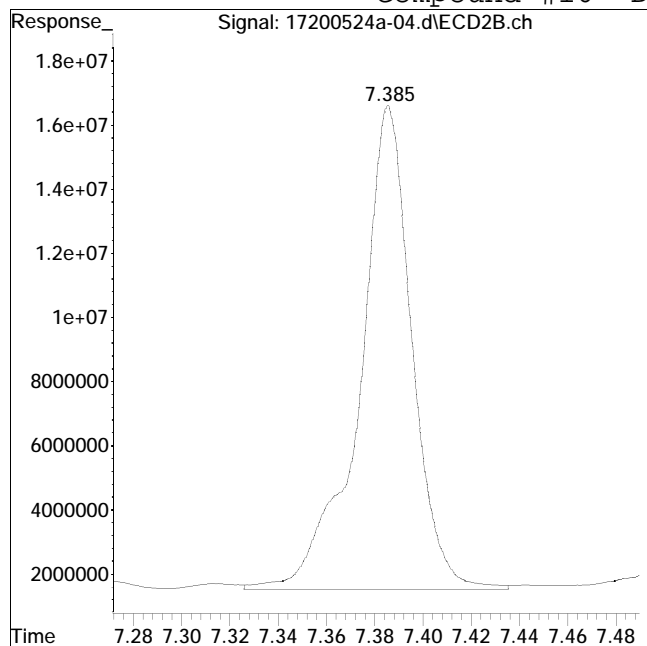
```
                          Quantitation Report      (QT Reviewed)


   Data Path : I:\Pest17\200522A\
   Data File : 17200522a-05.d
   Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
   Acq On    : 22 May 2020  11:24 am
   Operator  : PEST17:jmc
   Sample    : wg1373173-3,42e,, t
   Misc      : wg1373624,wg1373173,ical16424
   ALS Vial  : 5    Sample Multiplier: 1


   Integration File signal 1: events.e
   Integration File signal 2: events2.e
   Quant Time: May 22 11:50:03 2020
   Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
   Quant Title  : herb
   QLast Update : Mon May 18 15:01:38 2020
   Response via : Initial Calibration
   Integrator: ChemStation


   Volume Inj.      :
   Signal #1 Phase :                      Signal #2 Phase:
   Signal #1 Info  :                      Signal #2 Info :


   CCAL FILE(s) : 1 - I:\Pest17\200522A\17200522a-01.d
   Sub List     : HERB-TCLP - TCLP


        Compound        RT#1     RT#2    Resp#1   Resp#2    mg/l        mg/l
   ------------------------------------------------------------------------------
    Internal Standards
 1) i   4,4'-DBOB       8.162    8.460   900.6E6  775.0E6   0.250M4     0.250
      Standard Area 1 : #1 = 695061275                   Recovery   =  129.56%
      Standard Area 1 : #2 = 557299339                   Recovery   =  139.07%

    System Monitoring Compounds
 3) s   DCAA (surrog    6.606    7.385   132.5E6  121.0E6   0.225M4     0.202M4

      Spiked Amount        0.500 Range  30 - 150  Recovery  =   45.00%     40.40%

    Target Compounds
 8) t   2,4-D           7.705    8.503   241.9E6  587.5E6   0.369M4     0.807M3
 9) t   2,4,5-TP (Si    8.437    9.160   530.2E6  442.5E6   0.207M4     0.191M4
    SemiQuant Compounds - Not Calibrated on this Instrument
   ------------------------------------------------------------------------------
   (f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40%  (m)=manual int.
   (#)=Recovery Exceeds Compound Acceptance Limits.
   (I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
```
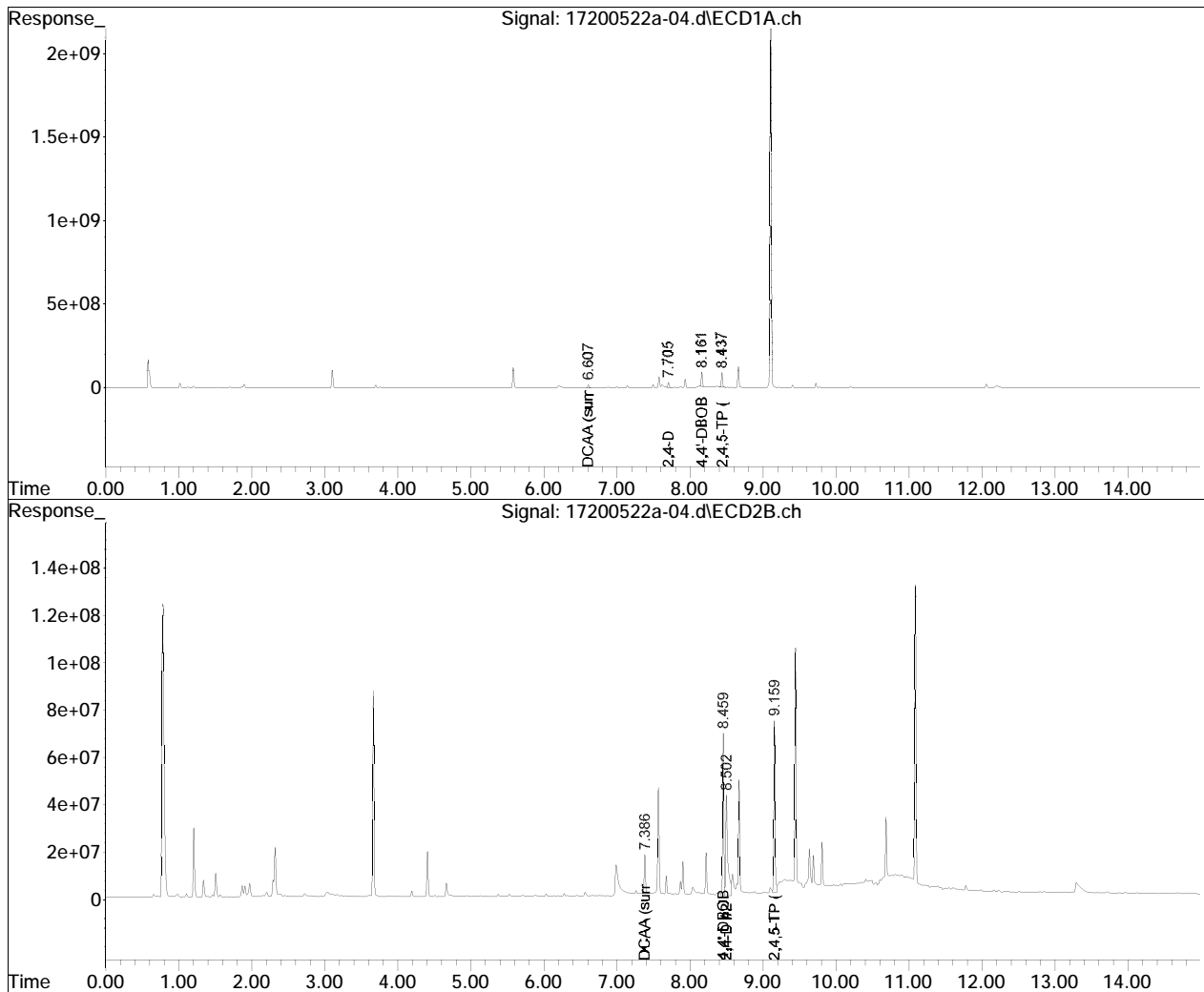
Herb17_01_20_ICAL16424.m Fri May 22 11:50:38 2020   Page: 1

```
Sub List      : HERB-TCLP - TCLP0522A\17200522a-01.d••d)

Data Path : I:\Pest17\200522A\
Data File : 17200522a-05.d
Signal(s) : Signal #1: ECD1A.ch   Signal #2: ECD2B.ch
Acq On    : 22 May 2020  11:24 am
Operator  : PEST17:jmc
Sample    : wg1373173-3,42e,, t
Misc      : wg1373624,wg1373173,ical16424
ALS Vial  : 5   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 22 11:50:03 2020
Quant Method : I:\Pest17\200522A\Herb17_01_20_ICAL16424.m
Quant Title  : herb
QLast Update : Mon May 18 15:01:38 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      :
Signal #1 Phase :                        Signal #2 Phase:
Signal #1 Info  :                        Signal #2 Info :
```
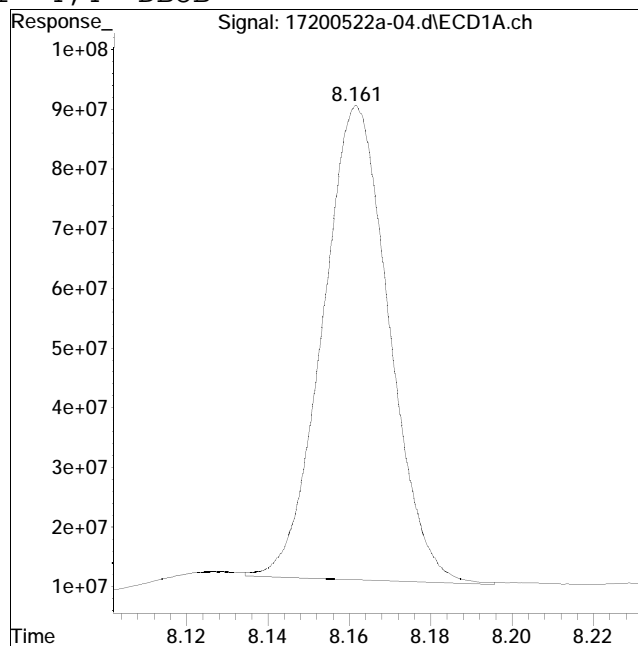

Signal: 17200522a-05.d\ECD1A.ch

Signal: 17200522a-05.d\ECD2B.ch

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #1: 4,4'-DBOB

Original Peak Response = 1043732959   Manual Peak Response = 900555863 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #3: DCAA (surrogate)
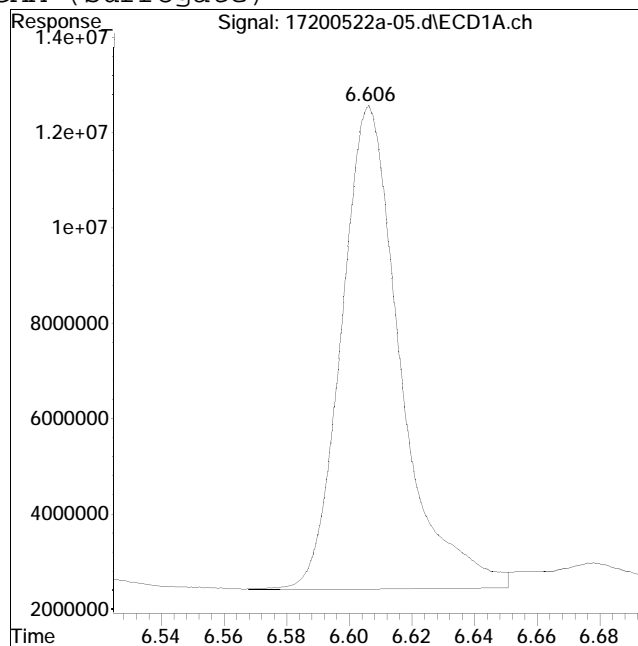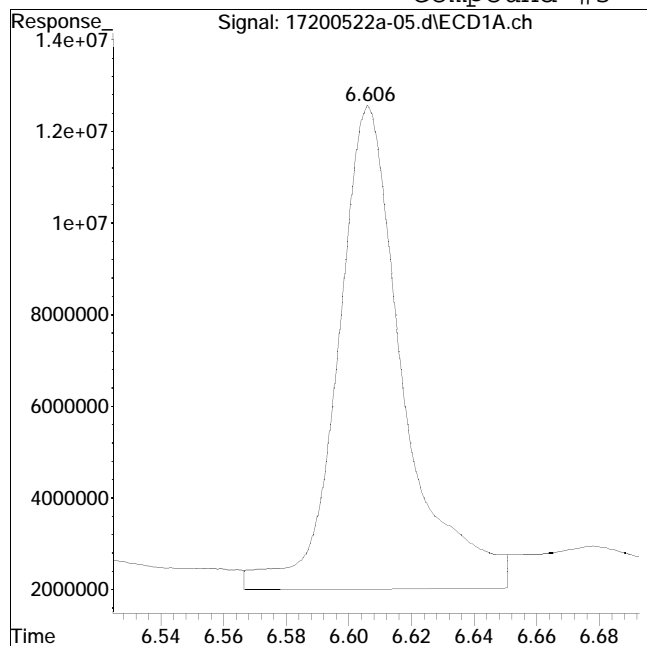
Original Peak Response = 152932202   Manual Peak Response = 132501576 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #16: DCAA (surrogate) #2
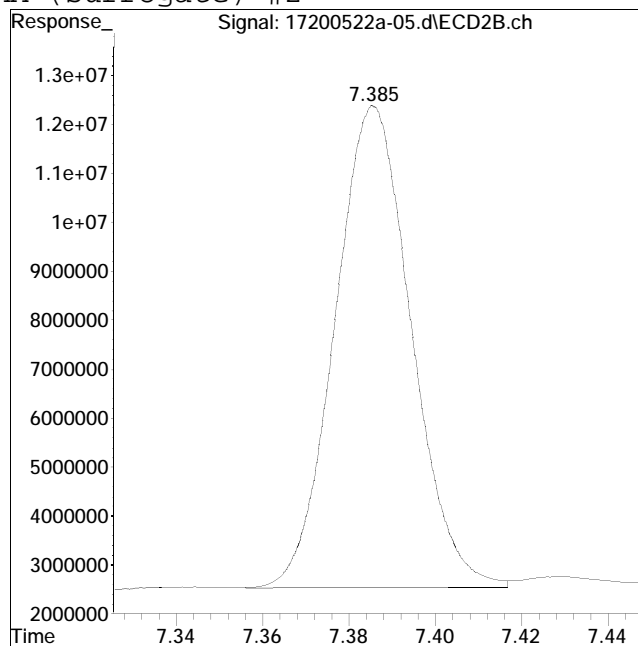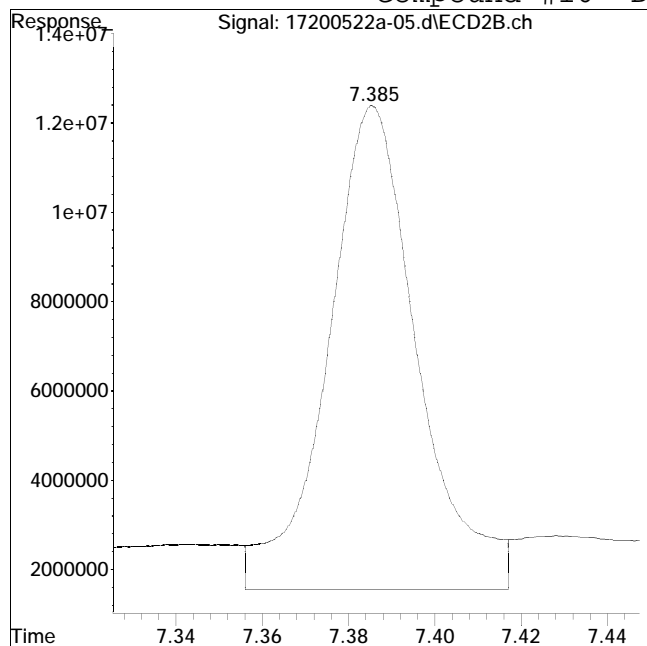
Original Peak Response = 156832653   Manual Peak Response = 120953910 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #8: 2,4-D
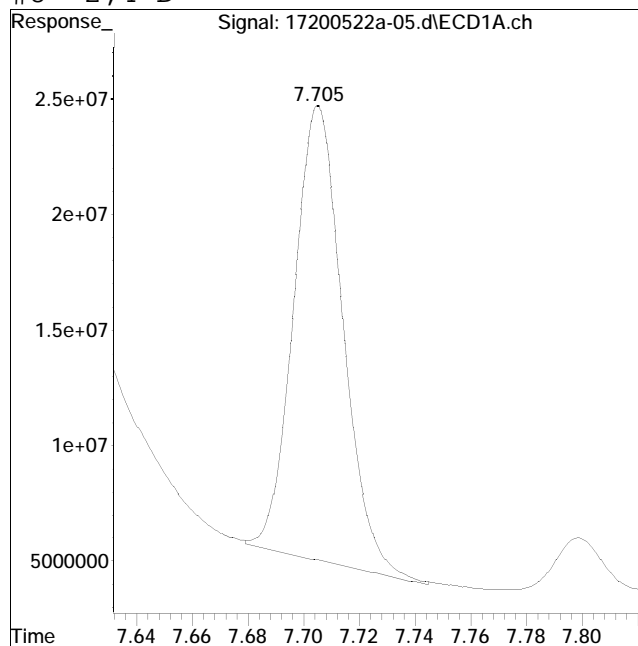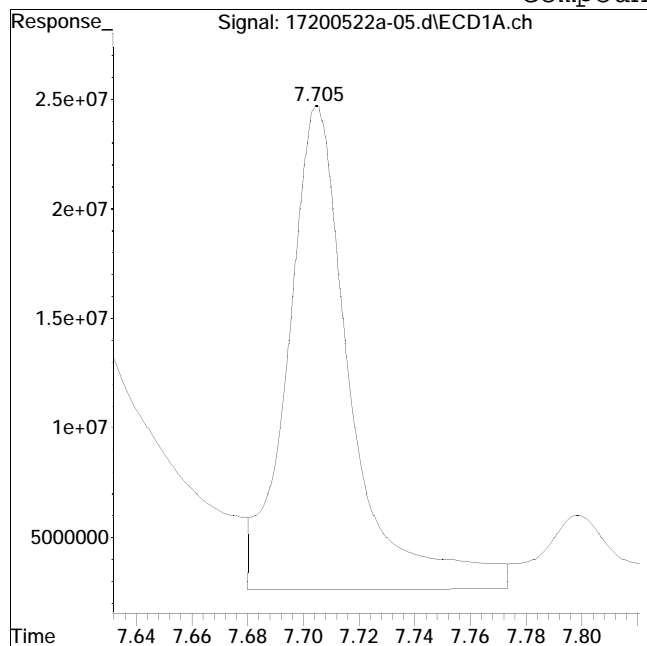
Original Peak Response = 349316302   Manual Peak Response = 241929911 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #21: 2,4-D #2
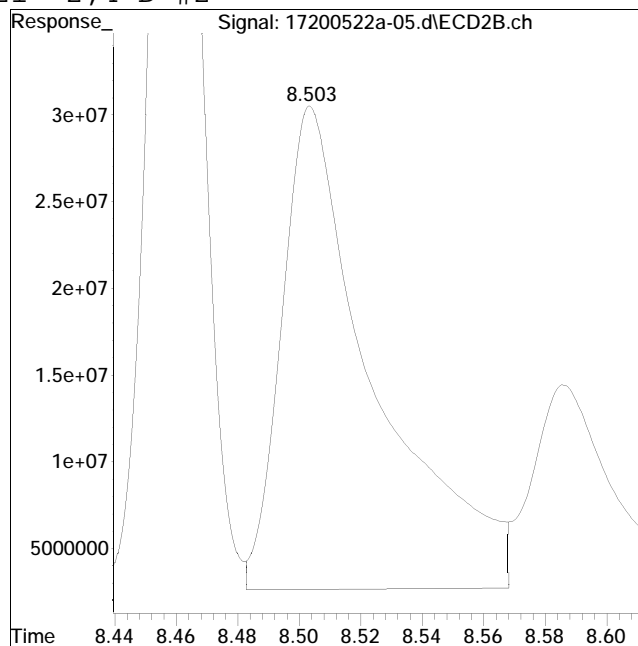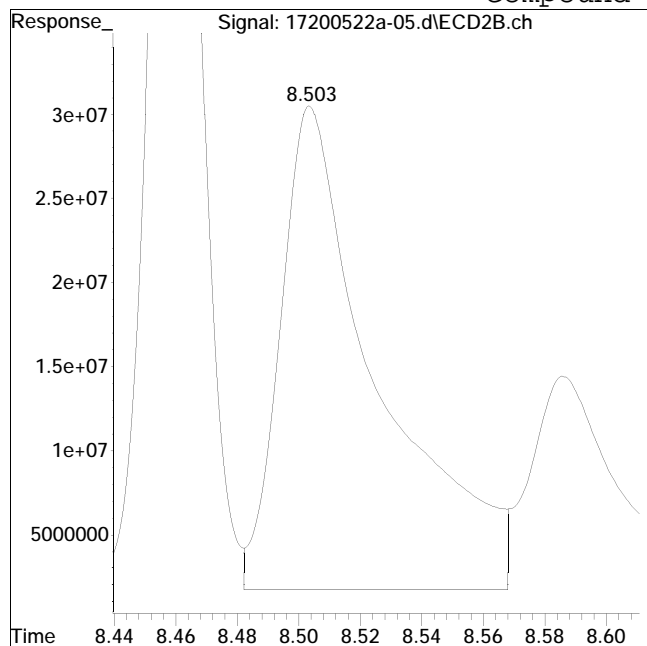
Original Peak Response = 636024650   Manual Peak Response = 587460161 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as
1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks
not being split.

Manual Integration Report

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date : 5/22/2020 11:49 am

Compound #9: 2,4,5-TP (Silvex)
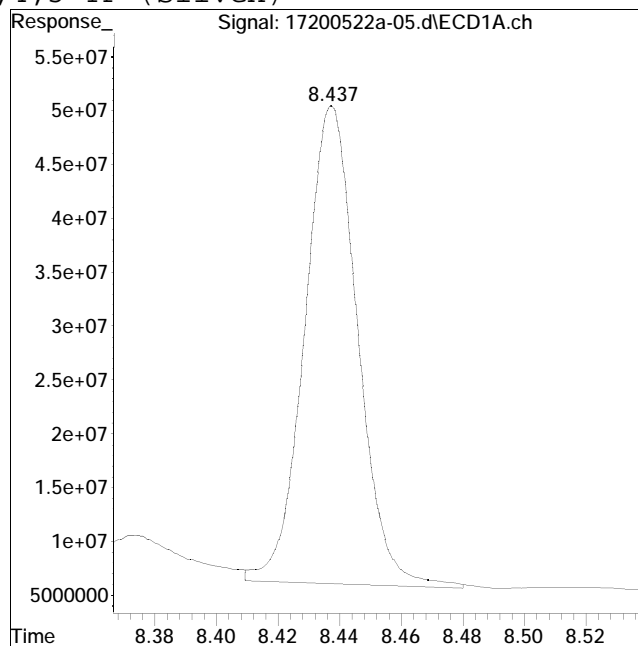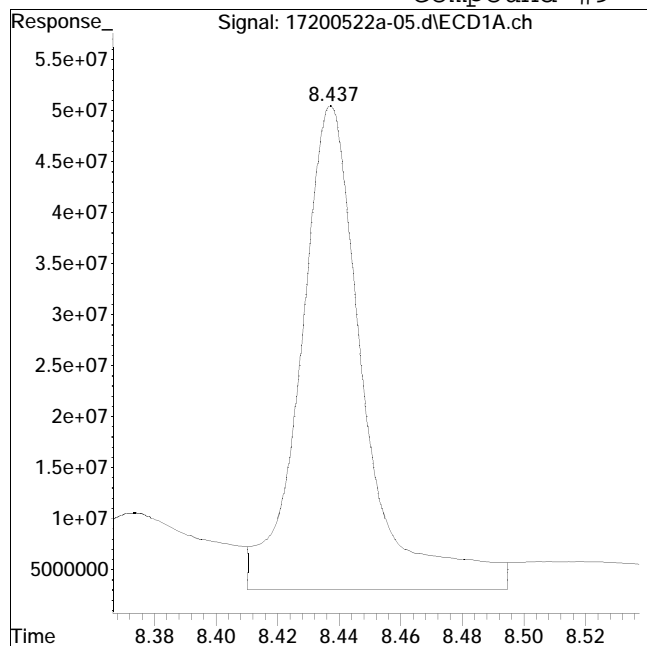
Original Peak Response = 678293143   Manual Peak Response = 530224335 M4
M4 = Poor automated baseline construction.

Data Path   : I:\Pest17\200522A\   QMethod   : Herb17_01_20_ICAL16424.m
Data File   : 17200522a-05.d   Operator   : PEST17:jmc
Date Inj'd   : 5/22/2020 11:24 am   Instrument   : Pest 17
Sample   : wg1373173-3,42e,, t   Quant Date   : 5/22/2020 11:49 am

Compound #22: 2,4,5-TP (Silvex) #2
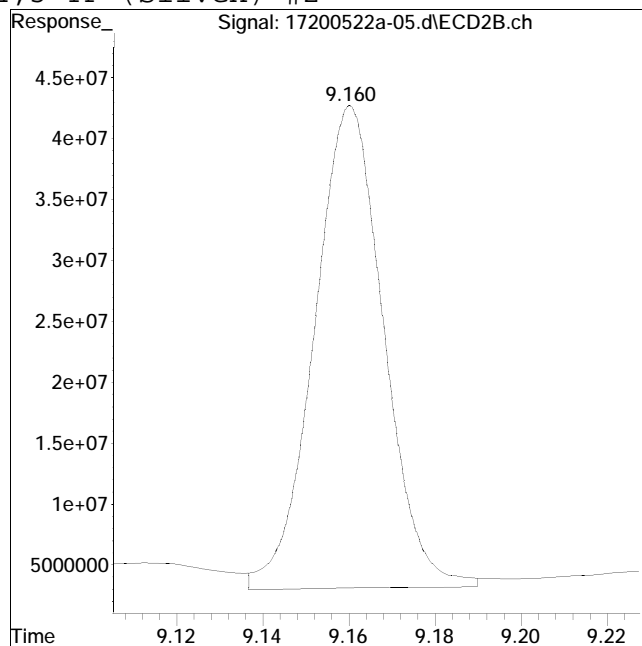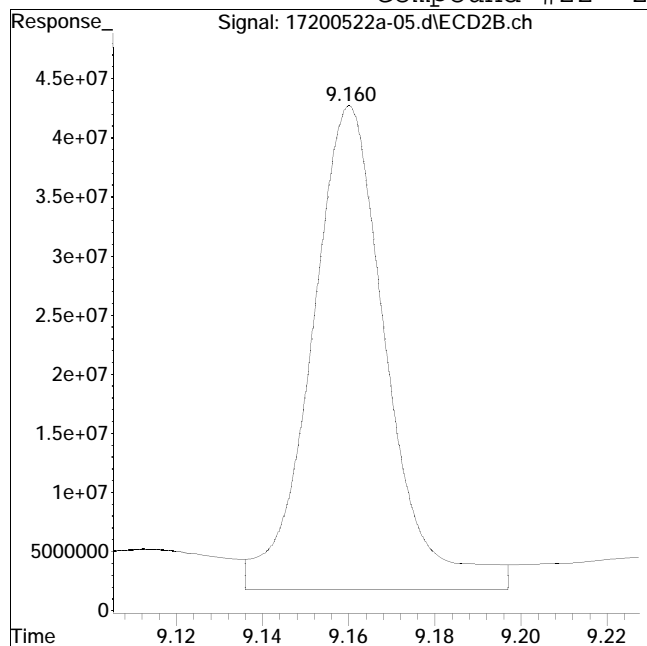
Original Peak Response = 495720696   Manual Peak Response = 442547962 M4
M4 = Poor automated baseline construction.

Sample Preparation

ALPHA

ORGANIC ELN REPORT

Workgroup: WG1372978

Prep Method: EPA 8151A		
Solvent Type: DCM/Acetone	**Lot #:** AD051520	
Surrogate Type: Herbicide	**Lot #:** PP 9791 (09/30/20)	
Spike Type: Herbicides	**Lot #:** PP 9790 (09/30/20)	
Spike Verify by: MCM		
Lims Spikelot: HERB8151		

Additional Reagents/Stds

Acidified Na2SO4	AS052020A
DCM	DY 594
H2SO4	2019120361

Conc.Method: S-EVAP/N-EVAP	
Solvent Type: Diethyl ether	
Lot #: 20030525	

Additional Reagents/Stds

12N H2SO4	12A051920
37% KOH	K052020
Acidified Na2SO4	AS052120
DCM	DY594
Diazomethane	D052120
Hexane	DY420
Isooctane	SHBK2546
Methanol	59164
Silicic Acid	MKCJ8025

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Extraction / Concentration

Sample/ Type	Extract Date	Analyst	Sample Weight g	Balance Id	Ph	Surr Amt ml	Spike Amt ml	Extract Unit Id	Conc Date	Analyst	Ph	Conc Volume	Hydrolysis Stop
L2019694-02 SAMP	05/21/20 10:51	Jessica Westover	30.15	#39	<2	.5		3	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 15:03 05/21/20 16:33
L2020883-01 SOIL	05/21/20 01:38	Mathias Mulondo	30.46	#39	<2	.5		3	05/21/20 18:10	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-02 SOIL	05/21/20 01:38	Mathias Mulondo	30.82	#39	<2	.5		3	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-03 SOIL	05/21/20 01:38	Mathias Mulondo	30.67	#39	<2	.5		3	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-04 SOIL	05/21/20 01:38	Mathias Mulondo	30.74	#39	<2	.5		4	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37

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| Sample/ Type | **Extraction** | | | | | | | | **Concentration** | | | | |
	Extract Date	Analyst	Sample Weight g	Balance Id	Ph	Surr Amt ml	Spike Amt ml	Extract Unit Id	Conc Date	Analyst	Ph	Conc Volume	Hydrolysis Stop
L2020883-05 SOIL	05/21/20 01:38	Mathias Mulondo	30.62	#39	<2	.5		4	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-06 SOIL	05/21/20 01:38	Mathias Mulondo	30.69	#39	<2	.5		3	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-07 SOIL	05/21/20 01:38	Mathias Mulondo	30.16	#39	<2	.5		3	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-08 SOIL	05/21/20 01:38	Mathias Mulondo	30.15	#39	<2	.5		4	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
L2020883-09 SOIL	05/21/20 01:38	Mathias Mulondo	30.65	#39	<2	.5		4	05/21/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
WG1372978-1 BLANK **WG1373177**	05/21/20 01:38	Mathias Mulondo	30.40	#39	<2	.5		3	05/21/20 18:10	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
WG1372978-2 LCS **WG1373177**	05/21/20 01:38	Mathias Mulondo	30.70	#39	<2	.5	.5	4	05/21/20 18:10	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37
WG1372978-3 LCSD **WG1373177**	05/21/20 01:38	Mathias Mulondo	30.30	#39	<2	.5	.5	4	05/21/20 18:10	Frederick Opoku	PH>12/ <2	0.5	05/21/20 06:07 05/21/20 07:37

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ORGANIC ELN REPORT

Workgroup: WG1373173

Prep Method: EPA 8151A	
Solvent Type: Diethyl ether	**Lot #:** shbl1675
Surrogate Type: Herbicide	**Lot #:** pp9791
Spike Type: Herbicides	**Lot #:** pp9790
Spike Verify by: JW	
Lims Spikelot: HERB8151	

Additional Reagents/Stds   **TCLP Extraction Date** 05/19/20 16:25

12N H2SO4	12a051920
25% NaOH	na041820
Acidified Na2SO4	as052120
DCM	dy594
Diethyl ether	shbl1675
Na2S2O3	na
NaCl	20b2556917

Conc.Method: S-EVAP/N-EVAP
Solvent Type: Benzene
Lot #: SHBK7357

Additional Reagents/Stds

Acidified Na2SO4	AS052120A
BF3 Methanol	BCCC0453

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Extraction / Concentration

Sample/ Type	Extract Date	Analyst	Sample Vol ml	Ph	Trc Check	Surr Amt ml	Spike Amt ml	Hydrolysis Start	Hydrolysis Stop	Conc Date	Analyst	Conc Volume ml	Methylation Date	ml ml	Final Vol ml
L2019694-01 SAMP	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
	tumbled 05/19/20 16:25														
L2019694-02 SAMP	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
	tumbled 05/19/20 16:25														
L2019694-03 SAMP	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
	tumbled 05/19/20 16:25														
L2019694-04 SAMP	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
	tumbled 05/19/20 16:25														
L2020443-01 SOIL	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
	tumbled 05/19/20 16:25														

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ORGANIC ELN REPORT

Workgroup: WG1373173

Sample/Type	**Extraction**									**Concentration**					
	Extract Date	Analyst	Sample Vol ml	Ph	Trc Check	Surr Amt ml	Spike Amt ml	Hydrolysis Start	Hydrolysis Stop	Conc Date	Analyst	Conc Volume ml	Methylation Date	ml ml	Final Vol ml
L2020468-01 SOIL	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
tumbled 05/19/20 16:25															
L2020719-01 SOIL	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
tumbled 05/20/20 07:19															
L2020719-02 SOIL	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
tumbled 05/20/20 07:19															
WG1373173-1 BLANK	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25		05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
WG1373173-2 LCS	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25	.25	05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5
WG1373173-3 LCSD	05/21/20 10:56	Jessica Westover	200	>12,<2	NA	.25	.25	05/21/20 11:30	05/21/20 13:00	05/22/20 02:00	Samy Dakkash	5	05/22/20 03:00	2/5	5

ALPHA

ORGANIC ELN REPORT

Workgroup: WG1373342

Prep Method: EPA 8151A	
Solvent Type: DCM/Acetone	**Lot #:** AD051520
Surrogate Type: Herbicide	**Lot #:** PP 9791 (09/30/20)
Spike Type: Herbicides	**Lot #:** PP 9790 (09/30/20)
Spike Verify by: EYA	
Lims Spikelot: HERB8151	

Additional Reagents/Stds

Acidified Na2SO4	AS052020A
DCM	DY594
H2SO4	2019120361

Conc.Method: S-EVAP/N-EVAP	
Solvent Type: Diethyl ether	
Lot #: 20030525	

Additional Reagents/Stds

12N H2SO4	12A051920
37% KOH	K052020
Acidified Na2SO4	AS052120
DCM	DY594
Diazomethane	D052120
Hexane	DY420
Isooctane	SHBK2546
Methanol	59164
Silicic Acid	MKCJ8025

Cleanup 1

Cleanup Method 1:

Cleanup Method 2:

Solvent Type: **Lot #:**

Additional Reagents/Stds

Extraction / Concentration

Sample/ Type	Extract Date	Analyst	Sample Weight g	Balance Id	Ph	Surr Amt ml	Spike Amt ml	Extract Unit Id	Conc Date	Analyst	Ph	Conc Volume	Hydrolysis Stop
L2019538-01 SOIL	05/21/20 17:18	Eric Asamoah	30.89	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30
L2019538-02 SOIL	05/21/20 17:18	Eric Asamoah	30.49	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30
L2019538-03 SOIL	05/21/20 17:18	Eric Asamoah	30.28	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2019694-01 SAMP	05/21/20 17:18	Eric Asamoah	30.28	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2019694-03 SAMP	05/21/20 17:18	Eric Asamoah	30.64	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30

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ALPHA

ORGANIC ELN REPORT

Workgroup: WG1373342

Sample/ Type	Extraction Extract Date	Analyst	Sample Weight g	Balance Id	Ph	Surr Amt ml	Spike Amt ml	Extract Unit Id	Concentration Conc Date	Analyst	Ph	Conc Volume	Hydrolysis Stop
L2019694-04 SAMP	05/21/20 17:18	Eric Asamoah	30.29	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020598-01 SAMP	05/21/20 17:18	Eric Asamoah	30.68	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020598-02 SAMP	05/21/20 17:18	Eric Asamoah	30.19	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020661-01 SOIL	05/21/20 17:18	Eric Asamoah	30.75	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30
L2020661-02 SOIL	05/21/20 17:18	Eric Asamoah	30.95	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020842-01 SOIL	05/21/20 17:18	Eric Asamoah	30.88	39	<2	.5		4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020842-02 SOIL	05/21/20 17:18	Eric Asamoah	30.16	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
L2020842-03 SOIL	05/21/20 17:19	Eric Asamoah	30.42	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 23:30 05/22/20 01:00
WG1373342-1 BLANK **WG1373447,WG1373446**	05/21/20 17:18	Eric Asamoah	30.82	39	<2	.5		3	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30
WG1373342-2 LCS **WG1373447,WG1373446**	05/21/20 17:18	Eric Asamoah	30.79	39	<2	.5	.5	4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30

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ORGANIC ELN REPORT

Workgroup: WG1373342

Sample/ Type	Extraction								Concentration				
	Extract Date	Analyst	Sample Weight **g**	Balance Id	Ph	Surr Amt **ml**	Spike Amt **ml**	Extract Unit Id	Conc Date	Analyst	Ph	Conc Volume	Hydrolysis Stop
WG1373342-3 LCSD	05/21/20 17:18	Eric Asamoah	30.91	39	<2	.5	.5	4	05/22/20 20:05	Frederick Opoku	PH>12/ <2	0.5	05/21/20 22:00 05/21/20 23:30
WG1373447,WG1373446													

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Wet Chemistry

Total Solids / Percent Moisture Analysis

Sample Raw Data

Alpha Analytical

Wet Chemistry Gravimetric ELN

Printed: MAY-14-20 16:35:51

WorkGroup	WG1370556	**Temp In (C)**	105	**Temp In (C)**		**Temp In (C)**		**Temp In (C)**	
Title	Solids, Total	**Temp Out (C)**	105	**Temp Out (C)**		**Temp Out (C)**		**Temp Out (C)**	
Method	SM2540G	**Time In**	14-MAY-20 08:14	**Time In**		**Time In**		**Time In**	
Instrument	BALANCE#47	**Time Out**	14-MAY-20 16:15	**Time Out**		**Time Out**		**Time Out**	

Sample #	Analysis Date	Analyst	Tare Weight (gm)	Gross Weight (gm)	Net Weight (1) (gm)	Net Weight (2) (gm)	Net Weight (3) (gm)	Net Weight (4) (gm)	Result %	Comment
L2019694-01	14-MAY-20 08:03	ROMANY IBRAHIM	1.18	8.19	5.37				59.77	
L2019694-02	14-MAY-20 08:03	ROMANY IBRAHIM	1.17	8.91	6.26				65.76	
L2019694-03	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.68	4.96				50.53	
L2019694-04	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.42	5.73				62.95	
L2019700-01	14-MAY-20 08:03	ROMANY IBRAHIM	1.17	8.41	6.46				73.07	
L2019700-02	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.88	6.9				74.35	
L2019700-03	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.86	7.25				79.12	
L2019700-04	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.7	6.83				75.23	
L2019700-05	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.06	6.77				81.33	
L2019700-06	14-MAY-20 08:03	ROMANY IBRAHIM	1.14	8.81	6.99				76.27	
L2019725-31	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.36	8.07				95.98	
L2019768-01	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.29	7.58				90.06	
L2019768-02	14-MAY-20 08:03	ROMANY IBRAHIM	1.18	8.89	8.21				91.18	
L2019768-03	14-MAY-20 08:03	ROMANY IBRAHIM	1.15	8.74	8.42				95.78	
L2019768-04	14-MAY-20 08:03	ROMANY IBRAHIM	1.17	8.89	8.29				92.23	
L2019768-05	14-MAY-20 08:03	ROMANY IBRAHIM	1.17	8.08	7.63				93.49	
L2019768-06	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.9	8.6				96.12	
L2019768-07	14-MAY-20 08:03	ROMANY IBRAHIM	1.17	8.48	7.97				93.02	
L2019821-01	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.69	7.56				84.99	
WG1370556-1	14-MAY-20 08:03	ROMANY IBRAHIM	1.16	8.18	5.38				60.11	

Work Group

```
                    ALPHA ANALYTICAL LABORATORIES, INC.

                    Alpha WORK GROUP REPORT (wk02)

                       May 18 2020, 06:25 pm

        Work Group: WG1370556   for Department: 7 Wet Chemistry

            Created: 14-MAY-20   Due:     Operator: RI
```

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019694-01	PDI-058SC-C-00-10.3-200512	S	TS	SOIL	DONE	U	0519	0528	S0	Plastic-A-TS
L2019694-02	PDI-080SC-C-00-8.6-200507	S	TS	SOIL	DONE	U	0514	0528	S0	Plastic-A-TS
L2019694-03	PDI-051SC-C-00-6.9-200511	S	TS	SOIL	DONE	U	0518	0528	S0	Plastic-A-TS
L2019694-04	PDI-060SC-C-00-6.8-200511	S	TS	SOIL	DONE	U	0518	0528	S0	Plastic-A-TS
L2019700-01	PE-1-10.5	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019700-02	PE-2-10.5	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019700-03	PE-3-10.5	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019700-04	PE-4-10.5	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019700-05	PE-5-9	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019700-06	BASE-1-11.5	S	TS	SOIL	DONE	U	0519	0520	S0	Glass-A.25
L2019725-31	DUP-1	S	TS	SOIL	DONE	U	0519	0520	S0	Plastic-A-TS
L2019768-01	P-12 (8-10)	S	TS	SOIL	DONE	U	0520	0520	S0	Plastic-A-TS
L2019768-02	P-12 (8-12)	C	TS	SOIL	DONE	U	0520	0520	S0	Glass-A.5
L2019768-03	B-15 (6-8)	S	TS	SOIL	DONE	U	0520	0520	S0	Plastic-A-TS
L2019768-04	B-15 (10-12)	S	TS	SOIL	DONE	U	0520	0520	S0	Plastic-A-TS
L2019768-05	B-15 (6-14)	C	TS	SOIL	DONE	U	0520	0520	S0	Glass-A.5
L2019768-06	P-1 (6-8)	S	TS	SOIL	DONE	U	0520	0520	S0	Plastic-A-TS
L2019768-07	P-1 (6-12)	C	TS	SOIL	DONE	U	0520	0520	S0	Glass-A.5
L2019821-01	201993-01	S	TS	SOIL	DONE	U	0515	0519	1D	Plastic-A-TS
WG1370556-1	Duplicate Sample	S	TS	SOIL	DONE	U				

```
Comments:

WG1370556-1          L2019694-01
```

pH
Analysis

Sample Raw Data

ALPHA ANALYTICAL LABS
WET CHEMISTRY DEPARTMENT
pH

Sample Number: _____

Client: _____

Analysis: **pH**

Method: **EPA 9045C**

Product: pH-9045
Analyte: pH,
Analysis Date: 5/13/2020 23:54
Technician: cb
Work group: wg1370448
RL: None

	Sample Number	Meter	Matrix	Comments		RESULT pH, SU	
DUP	WG1370448-2	White	Soil/Solid		1	8.39	L2019809-01
SAMP	L2019694-01	White	Soil/Solid		1	6.21	
SAMP	L2019694-03	White	Soil/Solid		1	6.59	
SAMP	L2019694-04	White	Soil/Solid		1	6.60	
	L2019809-01	White	Soil/Solid		1	8.29	
	L2019809-02	White	Soil/Solid		1	10.29	
SAMP	L2019811-01	White	Soil/Solid		1	6.94	
SAMP	L2019811-02	White	Soil/Solid		1	7.62	
SAMP	L2019811-03	White	Soil/Solid		1	7.48	
SAMP	L2019811-04	White	Soil/Solid		1	7.88	
SAMP	L2019811-05	White	Soil/Solid		1	7.76	
	L2019838-01	White	Soil/Solid		1	6.97	
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		

	Sample Number	Meter		True Value of Lcs	Result	%
LCS	WG1370448-1	White		7	7.04	101

Page 321 of 411

ALPHA ANALYTICAL LABS
WET CHEMISTRY DEPARTMENT
pH

Sample Number: _____

Client: _____

Analysis: **pH**

Method: **EPA 9045C**

Product: **pH-9045**
Analyte: **pH,**
Analysis Date: **5/14/2020 18:28**
Technician: **as**
Work group: **wg1370869**
RL: **None**

	Sample Number	Meter	Matrix	Comments		RESULT pH, SU	
DUP	WG1370869-2	White	Soil/Solid		1	6.36	L2019694-02
SAMP	L2019694-02	White	Soil/Solid		1	6.37	
	L2019744-02	White	Soil/Solid		1	7.62	
	L2019837-01	White	Soil/Solid		1	9.88	
	L2019874-07	White	Soil/Solid		1	7.96	
	L2019874-08	White	Soil/Solid		1	8.03	
	L2019874-09	White	Soil/Solid		1	8.54	
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		
					1		

	Sample Number	Meter			True Value of Lcs	Result	%
LCS	WG1370869-1	White			7	7.04	101

Work Group

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019694-01	PDI-058SC-C-00-10.3-200512	S	PH-9045	SOIL	DONE	U	0513	0528	S0	Glass-A.25
L2019694-03	PDI-051SC-C-00-6.9-200511	S	PH-9045	SOIL	DONE	U	0512	0528	S0	Glass-A.25
L2019694-04	PDI-060SC-C-00-6.8-200511	S	PH-9045	SOIL	DONE	U	0512	0528	S0	Glass-A.25
L2019809-01	B5-C15_0-5	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019809-02	B5-C15_5-9	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019811-01	B4-E3_5-7	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019811-02	B4-E3_14-16	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019811-03	B4-E3_19-21	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019811-04	B4-E3_24-26	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019811-05	B4-E3_29-33	C	PH-9045	SOIL	DONE	U	0514	0519	S0	Glass-A.25
L2019838-01	SOIL COMP	S	PH-9045	SOIL	DONE	U	0514	0520	S0	Glass-A.25
WG1370448-1	Laboratory Control S	S	PH-9045	SOIL	DONE	U				
WG1370448-2	Duplicate Sample	S	PH-9045	SOIL	DONE	U				

Comments:

WG1370448-2   L2019809-01

```
                        ALPHA ANALYTICAL LABORATORIES, INC.

                        Alpha WORK GROUP REPORT (wk02)

                            May 26 2020, 10:14 am

           Work Group: WG1370869   for Department: 7 Wet Chemistry

                   Created: 14-MAY-20   Due:     Operator: as
```

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019694-02	PDI-080SC-C-00-8.6-200507	S	PH-9045	SOIL	DONE	U	0508	0528	S0	Glass-A.25
L2019744-02	IDW	C	PH-9045	SOIL	DONE	U	0514	0520	S0	Glass-A.25
L2019837-01	WC-PA-1933-200513-01	S	PH-9045	SOIL	DONE	U	0514	0520	1C	Glass-A.25
L2019874-07	CWA-7	C	PH-9045	SOIL	DONE	U	0514	0520	S0	Glass-A.25
L2019874-08	CWA-1	C	PH-9045	SOIL	DONE	U	0514	0520	S0	Glass-A.25
L2019874-09	CWA-8	C	PH-9045	SOIL	DONE	U	0514	0520	S0	Glass-A.25
WG1370869-1	Laboratory Control S	S	PH-9045	SOIL	DONE	U				
WG1370869-2	Duplicate Sample	S	PH-9045	SOIL	DONE	U				

Comments:

WG1370869-2   L2019694-02

Sample Preparation

Alpha Analytical, Inc.
Facility: Westborough, MA
Department: Wet Chemistry
Title: pH Analysis Logbook

ID: 32410
Revision: 1
Published Date:
Page 38 of 101

23:54

Date:	5/13/20
Time:	22:54
Initials:	CB

5/13/8
CB

Sample	Temp (°C)	Weight (g)	Meter	Method	Reading	Comments
LCS (wc- 2783)	-	-	white	9045D	7.04	
19644-01	18.4	19.8			6.21	
-03	18.6	20.4			6.59	
-04	19.0	20.9			6.60	
19804-01D	19.3	16.0			8.39	
-01	19.6	15.0			8.29	
-02	19.7	15.6			10.29	
19811-01	20.0	15.7			6.94	
-02	20.2	15.3			7.62	
-03	19.9	15.6			7.48	
-04	20.1	14.7			7.88	
CCV (wc- 2783)	-	-			7.03	
-05	20.4	15.0			7.76	
19838 -01		15.5			6.97	
CCV (wc-2785)	-	-			7.05	
LCS (wc 2783)	-	-	white	4500	7.03	CB 5/17/20
19787-01 ND	19.0	-			7.74	4:25
-01	19.4	-			-7.76	CB
19788 -01	18.5	-			7.45	
ccv (wc 2783	-	-			7.05	
CCV (wc-)	-	-				
			SAM			
			5/14			
CCV (wc-)		-				

CB
5/14/8

Alpha Analytical, Inc.
Facility: Westborough, MA
Department: Wet Chemistry
Title: pH Analysis Logbook

ID: 32410
Revision: 1
Published Date:
Page 41 of 101

Date:
Time:
Initials:

Sample	Temp (°C)	Weight (g)	Meter	Method	Reading	Comments
LCS (wc-2783)	-	-	White	9045D	7.04	5/14/20
19694-21	21.2	19.9			0.58	15:28
-2	20.5	21.3			2.37	AS
19714-2	20.8	20.4			7.66	
19837-1	20.8	17.9			9.33	
19874-7	20.7	20.0			7.96	
-8	20.7	21.2			8.05	
-9	20.9	20.0			8.54	
LCS (wc 2783)	-	-			7.12	
CCV (wc-2783)	-	-	White	9045D	7.03	5/14/20
20050-31	20.3	5.8			7.9	20:37
-3	20.6	5.1			7.13	AS
-4	20.6	5.7			5.62	
-7	20.6	5.2			6.15	
-9	20.4	5.9			7.31	
-10	20.6	5.5			6.61	
-11	20.4	4.9			6.38	
-12	20.6	5.2			8.17	
-13	20.8	4.9			8.49	
20078-1	20.5	5.5			7.24	
CCV (wc 2783)					7.03	
-2	20.4	5.5			7.26	
-3	20.2	5.7			7.13	
CCV (wc 2783)	-	-			7.07	

Ignitability Analysis

Sample Raw Data

ALPHA ANALYTICAL LABS
WET CHEMISTRY DEPARTMENT

Sample #:

Analyzing: **IGNITABILITY**
Method: **1030**

Sample Weight (g):

Product: IGNIT-TEST
Analyte: Ignitability
Analysis Date: 5/19/2020 7:30
Technician: MV
Work group: WG1372096

NOTE: Columns H through S need only be populated if sample is ignitable
If Sample is ignitable, leave Ignitability blank

	Sample Number	Source of Material	Description of Material	Particle Size	Preliminary Burning Time (sec)	Ignitability	Date of Burn Rate Test	Temperature of Test Material (oC)	Air Velocity Through Fume Hood (m/s)	Time Between Flame and Ignition (Rep1)	Burning Time Over 100mm (Rep1)	Burning Rate (Rep1)	Time Between Flame and Ignition (Rep2)	Burning Time Over 100mm (Rep2)	Burning Rate (Rep2)	Time Between Flame and Ignition (Rep3)	Burning Time Over 100mm (Rep3)	Burning Rate (Rep3)
Samp. 1	L2019694-01	Unknown	Non-Metallic - Wet Soil	Medium	120	NI												
Samp. 2	L2019694-02	Unknown	Non-Metallic - Wet Soil	Medium	120	NI												
Samp. 3	L2019694-03	Unknown	Non-Metallic - Wet Soil	Medium	120	NI												
Samp. 4	L2019694-04	Unknown	Non-Metallic - Wet Soil	Medium	120	NI												
Samp. 5																		
Samp. 6																		
Samp. 7																		
Samp. 8																		
Samp. 9																		
Samp. 10																		
Samp. 11																		
Samp. 12																		
Samp. 13																		
Samp. 14																		
Samp. 15																		
Samp. 16																		
Samp. 17																		
Samp. 18																		
Samp. 19																		
Samp. 20																		
Samp. 21																		
Samp. 22																		
Samp. 23																		
Samp. 24																		
Samp. 25																		

Work Group

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2019694-01	PDI-058SC-C-00-10.3-200512	S	IGNIT-1030	SOIL	DONE	U	0526	0528	S0	Glass-A.25
L2019694-02	PDI-080SC-C-00-8.6-200507	S	IGNIT-1030	SOIL	DONE	U	0521	0528	S0	Glass-A.25
L2019694-03	PDI-051SC-C-00-6.9-200511	S	IGNIT-1030	SOIL	DONE	U	0525	0528	S0	Glass-A.25
L2019694-04	PDI-060SC-C-00-6.8-200511	S	IGNIT-1030	SOIL	DONE	U	0525	0528	S0	Glass-A.25

Sample Preparation

Alpha Analytical, Inc.
Facility: Westborough, MA
Department: Wet Chemistry
Title: Ignitability Logbook

Sample	Description	Ambient Temp (°C)	Flame Temp (°C)	Air Flow (m/sec)	Analyst	Date (Month/Day/Year)	Start Time	Results (No Ignition-NI or Ignition- I)
19694-01	Wet soil mu	21.6	>1000	0.93	MV	5/19/20	7:30	NI
-02	" "							
-03	" "							
-04	" "							

Pre-Qualtrax Document ID: 07-30

Document Type: Form

Alpha Report

ANALYTICAL REPORT

Lab Number:	L2019694
Client:	Anchor QEA, LLC
	1605 Cornwall Avenue
	Bellingham, WA 98225
ATTN:	Delaney Peterson
Phone:	(360) 715-2707
Project Name:	GASCO PDI
Project Number:	000029-02.59
Report Date:	05/29/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806

508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

| **Project Name:** | GASCO PDI | | **Lab Number:** | L2019694 |
| **Project Number:** | 000029-02.59 | | **Report Date:** | 05/29/20 |

Alpha Sample ID	**Client ID**	**Matrix**	**Sample Location**	**Collection Date/Time**	**Receive Date**
L2019694-01	PDI-058SC-C-00-10.3-200512	SEDIMENT	SEATTLE, WA	05/12/20 08:50	05/13/20
L2019694-02	PDI-080SC-C-00-8.6-200507	SEDIMENT	SEATTLE, WA	05/07/20 14:00	05/13/20
L2019694-03	PDI-051SC-C-00-6.9-200511	SEDIMENT	SEATTLE, WA	05/11/20 15:15	05/13/20
L2019694-04	PDI-060SC-C-00-6.8-200511	SEDIMENT	SEATTLE, WA	05/11/20 14:15	05/13/20

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

Case Narrative (continued)

Report Reissue

This report replaces the report issued May 28, 2020. The Herbicide list of targets has been revised.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Herbicides

The WG1373342-2/-3 LCS/LCSD RPD(s), associated with L2019694-01, -03, and -04, are above the acceptance criteria for 2,4-D (58%) and 2,4,5-TP (silvex) (55%).

TCLP Herbicides

The WG1373173-2/-3 LCS/LCSD RPD(s), associated with L2019694-01 through -04, are above the acceptance criteria for 2,4-D (36%) and 2,4,5-TP (silvex) (59%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Galt Port* Elizabeth Porta

Title: Technical Director/Representative

Date: 05/29/20

ORGANICS

PESTICIDES

Project Name:	GASCO PDI
Project Number:	000029-02.59

Lab Number:	L2019694
Report Date:	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-01
Client ID:	PDI-058SC-C-00-10.3-200512
Sample Location:	SEATTLE, WA
Sample Depth:	
Matrix:	Sediment
Analytical Method:	1,8151A
Analytical Date:	05/22/20 16:57
Analyst:	JMC
Percent Solids:	60%
TCLP/SPLP Ext. Date:	05/19/20 16:25
Methylation Date:	05/22/20 03:00

Date Collected:	05/12/20 08:50
Date Received:	05/13/20
Field Prep:	Not Specified

Extraction Method:	EPA 8151A
Extraction Date:	05/21/20 10:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	51		30-150	A
DCAA	52		30-150	B

Project Name: GASCO PDI

Lab Number: L2019694

Project Number: 000029-02.59

Report Date: 05/29/20

SAMPLE RESULTS

Lab ID: L2019694-01
Client ID: PDI-058SC-C-00-10.3-200512
Sample Location: SEATTLE, WA

Date Collected: 05/12/20 08:50
Date Received: 05/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8151A
Analytical Date: 05/24/20 15:08
Analyst: JMC
Percent Solids: 60%
Methylation Date: 05/22/20 21:48

Extraction Method: EPA 8151A
Extraction Date: 05/21/20 17:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	276	17.4	1	A
2,4,5-TP (Silvex)	ND		ug/kg	276	7.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	66		30-150	A
DCAA	66		30-150	B

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-02	Date Collected:	05/07/20 14:00
Client ID:	PDI-080SC-C-00-8.6-200507	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:

Matrix:	Sediment	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	05/21/20 10:56
Analytical Date:	05/22/20 17:15		
Analyst:	JMC		
Percent Solids:	66%		
TCLP/SPLP Ext. Date:	05/19/20 16:25		
Methylation Date:	05/22/20 03:00		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	59		30-150	A
DCAA	60		30-150	B

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-02	Date Collected:	05/07/20 14:00
Client ID:	PDI-080SC-C-00-8.6-200507	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Sediment	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	05/21/20 10:51
Analytical Date:	05/22/20 16:02		
Analyst:	JMC		
Percent Solids:	66%		
Methylation Date:	05/21/20 20:31		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	252	15.9	1	A
2,4,5-TP (Silvex)	ND		ug/kg	252	6.70	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	72		30-150	A
DCAA	69		30-150	B

| **Project Name:** | GASCO PDI | | **Lab Number:** | L2019694 |
| **Project Number:** | 000029-02.59 | | **Report Date:** | 05/29/20 |

SAMPLE RESULTS

Lab ID:	L2019694-03	Date Collected:	05/11/20 15:15
Client ID:	PDI-051SC-C-00-6.9-200511	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:

Matrix:	Sediment	Extraction Method: EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	05/21/20 10:56
Analytical Date:	05/22/20 17:34	
Analyst:	JMC	
Percent Solids:	51%	
TCLP/SPLP Ext. Date:	05/19/20 16:25	
Methylation Date:	05/22/20 03:00	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	55		30-150	A
DCAA	53		30-150	B

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-03	Date Collected:	05/11/20 15:15
Client ID:	PDI-051SC-C-00-6.9-200511	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:	
Matrix:	Sediment
Analytical Method:	1,8151A
Analytical Date:	05/24/20 15:26
Analyst:	JMC
Percent Solids:	51%
Methylation Date:	05/22/20 21:48

Extraction Method:	EPA 8151A
Extraction Date:	05/21/20 17:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	323	20.4	1	A
2,4,5-TP (Silvex)	ND		ug/kg	323	8.60	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	64		30-150	B

| **Project Name:** | GASCO PDI | | **Lab Number:** | L2019694 |
| **Project Number:** | 000029-02.59 | | **Report Date:** | 05/29/20 |

SAMPLE RESULTS

Lab ID:	L2019694-04		Date Collected:	05/11/20 14:15
Client ID:	PDI-060SC-C-00-6.8-200511		Date Received:	05/13/20
Sample Location:	SEATTLE, WA		Field Prep:	Not Specified

Sample Depth:

Matrix:	Sediment		Extraction Method:	EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	05/21/20 10:56
Analytical Date:	05/22/20 17:52			
Analyst:	JMC			
Percent Solids:	63%			
TCLP/SPLP Ext. Date:	05/19/20 16:25			
Methylation Date:	05/22/20 03:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	73		30-150	A
DCAA	67		30-150	B

Project Name:	GASCO PDI
Project Number:	000029-02.59

Lab Number:	L2019694
Report Date:	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-04
Client ID:	PDI-060SC-C-00-6.8-200511
Sample Location:	SEATTLE, WA
Sample Depth:	
Matrix:	Sediment
Analytical Method:	1,8151A
Analytical Date:	05/24/20 15:44
Analyst:	JMC
Percent Solids:	63%
Methylation Date:	05/22/20 21:48

Date Collected:	05/11/20 14:15
Date Received:	05/13/20
Field Prep:	Not Specified
Extraction Method:	EPA 8151A
Extraction Date:	05/21/20 17:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	262	16.5	1	A
2,4,5-TP (Silvex)	ND		ug/kg	262	6.97	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	64		30-150	A
DCAA	62		30-150	B

Project Name:	GASCO PDI		**Lab Number:**	L2019694
Project Number:	000029-02.59		**Report Date:**	05/29/20

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8151A		Extraction Method:	EPA 8151A
Analytical Date:	05/21/20 21:55		Extraction Date:	05/21/20 01:38
Analyst:	JMC			

Methylation Date: 05/21/20 20:16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 02 Batch: WG1372978-1						
2,4-D	ND		ug/kg	164	10.4	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.38	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	56		30-150	A
DCAA	112		30-150	B

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8151A	Extraction Method:	EPA 8151A
Analytical Date:	05/22/20 10:48	Extraction Date:	05/21/20 10:56
Analyst:	JMC		
TCLP/SPLP Extraction Date:	05/19/20 16:25		
Methylation Date:	05/22/20 03:00		

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01-04 Batch: WG1373173-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	70		30-150	A
DCAA	73		30-150	B

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8151A	Extraction Method:	EPA 8151A
Analytical Date:	05/24/20 12:05	Extraction Date:	05/21/20 17:18
Analyst:	JMC		

Methylation Date: 05/22/20 21:48

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01,03-04 Batch: WG1373342-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	69		30-150	A
DCAA	76		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1372978-2 WG1372978-3									
2,4-D	68		58		30-150	16		30	A
2,4,5-TP (Silvex)	64		60		30-150	6		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	62		50		30-150	A
DCAA	75		56		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: GASCO PDI	**Lab Number:** L2019694
Project Number: 000029-02.59	**Report Date:** 05/29/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01-04 Batch: WG1373173-2 WG1373173-3									
2,4-D	106		74		30-150	36	Q	25	A
2,4,5-TP (Silvex)	75		41		30-150	59	Q	25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	73		45		30-150	A
DCAA	67		40		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1373342-2 WG1373342-3									
2,4-D	69		57		30-150	58	Q	30	A
2,4,5-TP (Silvex)	71		58		30-150	55	Q	30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	64		53		30-150	A
DCAA	70		64		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-01	Date Collected:	05/12/20 08:50
Client ID:	PDI-058SC-C-00-10.3-200512	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:
Matrix: Sediment

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Wet Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	05/19/20 07:30	1,1030	MV

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-02	Date Collected:	05/07/20 14:00
Client ID:	PDI-080SC-C-00-8.6-200507	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:
Matrix: Sediment

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Wet Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	05/19/20 07:30	1,1030	MV

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

SAMPLE RESULTS

Lab ID: L2019694-03

Client ID: PDI-051SC-C-00-6.9-200511

Sample Location: SEATTLE, WA

Date Collected: 05/11/20 15:15

Date Received: 05/13/20

Field Prep: Not Specified

Sample Depth:

Matrix: Sediment

Test Material Information

Source of Material: Unknown

Description of Material: Non-Metallic - Wet Soil

Particle Size: Medium

Preliminary Burning Time (sec): 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	05/19/20 07:30	1,1030	MV

Project Name: GASCO PDI
Project Number: 000029-02.59

Lab Number: L2019694
Report Date: 05/29/20

SAMPLE RESULTS

Lab ID: L2019694-04
Client ID: PDI-060SC-C-00-6.8-200511
Sample Location: SEATTLE, WA

Date Collected: 05/11/20 14:15
Date Received: 05/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Test Material Information

Source of Material: Unknown
Description of Material: Non-Metallic - Wet Soil
Particle Size: Medium
Preliminary Burning Time (sec): 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	05/19/20 07:30	1,1030	MV

Project Name:	GASCO PDI		Lab Number:	L2019694
Project Number:	000029-02.59		Report Date:	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-01	Date Collected:	05/12/20 08:50
Client ID:	PDI-058SC-C-00-10.3-200512	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	59.8		%	0.100	NA	1	-	05/14/20 08:03	121,2540G	RI
pH (H)	6.2		SU	-	NA	1	-	05/13/20 23:54	1,9045D	CB

Project Name:	GASCO PDI	Lab Number:	L2019694
Project Number:	000029-02.59	Report Date:	05/29/20

SAMPLE RESULTS

Lab ID:	L2019694-02	Date Collected:	05/07/20 14:00
Client ID:	PDI-080SC-C-00-8.6-200507	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	65.8		%	0.100	NA	1	-	05/14/20 08:03	121,2540G	RI
pH (H)	6.4		SU	-	NA	1	-	05/14/20 18:28	1,9045D	AS

Project Name: GASCO PDI	**Lab Number:** L2019694
Project Number: 000029-02.59	**Report Date:** 05/29/20

SAMPLE RESULTS

Lab ID: L2019694-03	Date Collected: 05/11/20 15:15
Client ID: PDI-051SC-C-00-6.9-200511	Date Received: 05/13/20
Sample Location: SEATTLE, WA	Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	50.5		%	0.100	NA	1	-	05/14/20 08:03	121,2540G	RI
pH (H)	6.6		SU	-	NA	1	-	05/13/20 23:54	1,9045D	CB

| **Project Name:** | GASCO PDI | | **Lab Number:** | L2019694 |
| **Project Number:** | 000029-02.59 | | **Report Date:** | 05/29/20 |

SAMPLE RESULTS

Lab ID:	L2019694-04	Date Collected:	05/11/20 14:15
Client ID:	PDI-060SC-C-00-6.8-200511	Date Received:	05/13/20
Sample Location:	SEATTLE, WA	Field Prep:	Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	63.0		%	0.100	NA	1	-	05/14/20 08:03	121,2540G	RI
pH (H)	6.6		SU	-	NA	1	-	05/13/20 23:54	1,9045D	CB

Lab Control Sample Analysis
Batch Quality Control

Project Name:	GASCO PDI	
Project Number:	000029-02.59	

Lab Number:	L2019694
Report Date:	05/29/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1370448-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1370869-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-04 QC Batch ID: WG1370448-2 QC Sample: L2019809-01 Client ID: DUP Sample						
pH	8.3	8.4	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1370556-1 QC Sample: L2019694-01 Client ID: PDI-058SC-C-00-10.3-200512						
Solids, Total	59.8	60.1	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1370869-2 QC Sample: L2019694-02 Client ID: PDI-080SC-C-00-8.6-200507						
pH (H)	6.4	6.4	SU	0		5

Project Name: GASCO PDI

Project Number: 000029-02.59

Lab Number: L2019694

Report Date: 05/29/20

Sample Receipt and Container Information

Were project specific reporting limits specified?   YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2019694-01A	Glass 500ml/16oz unpreserved	A	NA		1.6	Y	Present/Intact		IGNIT-1030(14),TS(7),PH-9045(1),HERB-8151(14)
L2019694-01W	Amber 1000ml unpreserved Extracts	A	NA		1.6	Y	Present/Intact		HERB-TCLP*(14)
L2019694-01X9	Tumble Vessel	A	NA		1.6	Y	Present/Intact		-
L2019694-02A	Glass 500ml/16oz unpreserved	A	NA		1.6	Y	Present/Intact		IGNIT-1030(14),TS(7),PH-9045(1),HERB-8151(14)
L2019694-02W	Amber 1000ml unpreserved Extracts	A	NA		1.6	Y	Present/Intact		HERB-TCLP*(14)
L2019694-02X9	Glass 250ml/8oz unpreserved	A	NA		1.6	Y	Present/Intact		-
L2019694-03A	Glass 500ml/16oz unpreserved	A	NA		1.6	Y	Present/Intact		IGNIT-1030(14),TS(7),PH-9045(1),HERB-8151(14)
L2019694-03W	Amber 1000ml unpreserved Extracts	A	NA		1.6	Y	Present/Intact		HERB-TCLP*(14)
L2019694-03X9	Tumble Vessel	A	NA		1.6	Y	Present/Intact		-
L2019694-04A	Glass 500ml/16oz unpreserved	A	NA		1.6	Y	Present/Intact		IGNIT-1030(14),TS(7),PH-9045(1),HERB-8151(14)
L2019694-04W	Amber 1000ml unpreserved Extracts	A	NA		1.6	Y	Present/Intact		HERB-TCLP*(14)
L2019694-04X9	Tumble Vessel	A	NA		1.6	Y	Present/Intact		-

*Values in parentheses indicate holding time in days

Project Name: GASCO PDI	**Lab Number:** L2019694
Project Number: 000029-02.59	**Report Date:** 05/29/20

GLOSSARY

Acronyms

DL   - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL   - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC   - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA   - Environmental Protection Agency.

LCS   - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD   - Laboratory Control Sample Duplicate: Refer to LCS.

LFB   - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD   - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ   - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL   - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS   - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD   - Matrix Spike Sample Duplicate: Refer to MS.

NA   - Not Applicable.

NC   - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA   - N-Nitrosodiphenylamine/Diphenylamine.

NI   - Not Ignitable.

NP   - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL   - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD   - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM   - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP   - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF   - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ   - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC   - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

1   - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A   - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B   - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C   - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D   - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E   - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G   - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H   - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I   - The lower value for the two columns has been reported due to obvious interference.

J   - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M   - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND   - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ   - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P   - The RPD between the results for the two columns exceeds the method-specified criteria.

Q   - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers

ΛLPHΛ
A N A L Y T I C A L

| Project Name: | GASCO PDI | Lab Number: | L2019694 |
| Project Number: | 000029-02.59 | Report Date: | 05/29/20 |

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R   - Analytical results are from sample re-analysis.

RE   - Analytical results are from sample re-extraction.

S   - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	GASCO PDI	**Lab Number:**	L2019694
Project Number:	000029-02.59	**Report Date:**	05/29/20

REFERENCES

1   Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121   Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Alpha Analytical, Inc.
Facility: **Company-wide**
Department: **Quality Assurance**
Title: **Certificate/Approval Program Summary**

ID No.:**17873**
Revision 17
Published Date: 4/28/2020 9:42:21 AM
Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L2019694

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

COC ID: AWHL-20200512-094017

POC: Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI
Client: NW Natural

Sample Custodian: CO
Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-058SC-C-00-10.3-200512	N	SE	05/12/2020	8:50	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Seth Norwood	Print Name: Eli Joyner	Print Name: Eli Joyner	Print Name: Dylan Snook	Print Name:	Print Name:
Company: Anchor QEA	Company: APEX LABS	Company: APEX LABS	Company: Alpha Analytical	Company:	Company:
Date/Time: 5/12/20 0945	Date/Time: 5/12/20 1008	Date/Time: 5/12/20 1245	Date/Time: 5/13/20 10:12	Date/Time:	Date/Time:

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Page 1 of 1

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Alpha

COC ID: ~~APEX-20200507-145042~~

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

Sample Custodian: SN

Lab: ~~Apex~~ Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-FB-2005071044	FB	WQ	05/07/2020	10:44	8	☐				
								LR Pesticides	SW8081B	30	4°C
								Arsenic	SW6020A	30	
								PAH	SW8270D	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	30	HCl(pH < 2)/4°C-f
002	PDI-RB-2005071052	RB	WQ	05/07/2020	10:52	8	☐				
								LR Pesticides	SW8081B	30	4°C
								Arsenic	SW6020A	30	
								PAH	SW8270D	30	4°C
								VOCs (QAPP 3/4b)	SW8260C	30	HCl(pH < 2)/4°C-f
003	PDI-TB-2005070853	TB	WQ	05/07/2020	8:53	2	☐				
								VOCs (QAPP 3/4b)	SW8260C	30	HCl(pH < 2)/4°C-f
004	PDI-080SC-C-00-8.6-200507	N	SE	05/07/2020	14:00	6	☐				
								Herbicides	SW8081B	30	4°C
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								pH	SW9045D	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C

SN 07May

SN 07May20

SN 07May20

Comment:

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Sasha Norwood	Print Name	Print Name	Print Name: Dylan Snook	Print Name	Print Name
Company: Anchor QEA	Company	Company	Company: Alpha Analytical	Company	Company
Date/Time: 5/12/20 @ 0945	Date/Time	Date/Time	Date/Time: 5/13/20 10:12	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

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L2019694

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: AWHL-20200507-145042

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

Sample Custodian: SN

Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-080SC-C-00-8.6-200507	N	SE	05/07/2020	14:00	1	☐				
								Ignitability	SW1030	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature	Signature	Signature	Signature	Signature	Signature
Print Name Josh Norwood	Print Name	Print Name	Print Name Rylor Snoek	Print Name	Print Name
Company Anchor QEA	Company	Company	Company Alpha Analytical	Company	Company
Date/Time 5/12/20 @ 0945	Date/Time	Date/Time	Date/Time 5/13/20 10MZ	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Page 1 of 1

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

POC: # Delaney Peterson (360-715-2707)

1605 Cornwall Avenue, Bellingham, WA 98225

Project: Gasco PDI

Client: NW Natural

COC ID: AWHL-20200511-155734

Sample Custodian: CO

Lab: Alpha Analytical

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-051SC-C-00-6.9-200511	N	SE	05/11/2020	15:15	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C
002	PDI-060SC-C-00-6.8-200511	N	SE	05/11/2020	14:15	1	☐				
								Herbicides	SW8081B	30	4°C
								Ignitability	SW1030	30	4°C
								pH	SW9045D	30	4°C
								TCLP Herbicides	SW8151A	30	4°C
								Total solids (ALPHA)	SM2540G	30	4°C

Comment:

Relinquished By Signature	Received By Signature	Relinquished By Signature	Received By Signature	Relinquished By Signature	Received By Signature
Print Name Sasha Norwood	Print Name	Print Name	Print Name Dylan Jacek	Print Name	Print Name
Company Anchor QEA	Company	Company	Company Alpha Analytical	Company	Company
Date/Time 5/12/20 @ 945	Date/Time	Date/Time	Date/Time 6/13/20 10:12	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

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Apex Laboratories, LLC.
12232 SW Garden Pl. Tigard, OR 97223
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Apex Labs

Date 5/12/20   Signature

Alpha
Summary Forms

Organic Summary Forms

Results Summary
Form 1
TCLP Herbicides by EPA 1311

Client	: **Anchor QEA, LLC**	**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**	**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-01**	**Date Collected**	: **05/12/20 08:50**
Client ID	: **PDI-058SC-C-00-10.3-200512**	**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**	**Date Analyzed**	: **05/22/20 16:57**
Sample Matrix	: **Sediment**	**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**	**Dilution Factor**	: **1**
Lab File ID	: **17200522a-21**	**Analyst**	: **JMC**
Sample Amount	: **200 ml**	**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**	**GC Column**	: **STX-CLP1**
Extract Volume	: **5000 uL**	**%Solids**	: **60**
GPC Cleanup	: **N**	**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**		

			mg/l		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	**2,4-D**	**ND**	**0.025**	**0.001**	**U**
93-72-1	**2,4,5-TP (Silvex)**	**ND**	**0.005**	**0.001**	**U**

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-01**		**Date Collected**	: **05/12/20 08:50**
Client ID	: **PDI-058SC-C-00-10.3-200512**		**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**		**Date Analyzed**	: **05/24/20 15:08**
Sample Matrix	: **Sediment**		**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**		**Dilution Factor**	: **1**
Lab File ID	: **17200524a-13**		**Analyst**	: **JMC**
Sample Amount	: **30.28 g**		**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**		**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**		**%Solids**	: **60**
GPC Cleanup	: **N**		**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**			

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	276	17.4	U
93-72-1	2,4,5-TP (Silvex)	ND	276	7.34	U

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-02**		**Date Collected**	: **05/07/20 14:00**
Client ID	: **PDI-080SC-C-00-8.6-200507**		**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**		**Date Analyzed**	: **05/22/20 16:02**
Sample Matrix	: **Sediment**		**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**		**Dilution Factor**	: **1**
Lab File ID	: **17200522a-18**		**Analyst**	: **JMC**
Sample Amount	: **30.15 g**		**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**		**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**		**%Solids**	: **66**
GPC Cleanup	: **N**		**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**			

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	252	15.9	U
93-72-1	2,4,5-TP (Silvex)	ND	252	6.70	U

Results Summary
Form 1
TCLP Herbicides by EPA 1311

Client	: Anchor QEA, LLC		**Lab Number**	: L2019694
Project Name	: GASCO PDI		**Project Number**	: 000029-02.59
Lab ID	: L2019694-02		**Date Collected**	: 05/07/20 14:00
Client ID	: PDI-080SC-C-00-8.6-200507		**Date Received**	: 05/13/20
Sample Location	: SEATTLE, WA		**Date Analyzed**	: 05/22/20 17:15
Sample Matrix	: Sediment		**Date Extracted**	: 05/21/20
Analytical Method	: 1,8151A		**Dilution Factor**	: 1
Lab File ID	: 17200522a-22		**Analyst**	: JMC
Sample Amount	: 200 ml		**Instrument ID**	: PEST17
Extraction Method	: EPA 8151A		**GC Column**	: STX-CLP1
Extract Volume	: 5000 uL		**%Solids**	: 66
GPC Cleanup	: N		**Injection Volume**	: 1 uL
Sulfur Cleanup	: N			

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	0.025	0.001	U
93-72-1	2,4,5-TP (Silvex)	ND	0.005	0.001	U

Results Summary
Form 1
TCLP Herbicides by EPA 1311

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-03**		**Date Collected**	: **05/11/20 15:15**
Client ID	: **PDI-051SC-C-00-6.9-200511**		**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**		**Date Analyzed**	: **05/22/20 17:34**
Sample Matrix	: **Sediment**		**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**		**Dilution Factor**	: **1**
Lab File ID	: **17200522a-23**		**Analyst**	: **JMC**
Sample Amount	: **200 ml**		**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**		**GC Column**	: **STX-CLP1**
Extract Volume	: **5000 uL**		**%Solids**	: **51**
GPC Cleanup	: **N**		**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**			

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	**2,4-D**	**ND**	**0.025**	**0.001**	**U**
93-72-1	**2,4,5-TP (Silvex)**	**ND**	**0.005**	**0.001**	**U**

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-03**		**Date Collected**	: **05/11/20 15:15**
Client ID	: **PDI-051SC-C-00-6.9-200511**		**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**		**Date Analyzed**	: **05/24/20 15:26**
Sample Matrix	: **Sediment**		**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**		**Dilution Factor**	: **1**
Lab File ID	: **17200524a-14**		**Analyst**	: **JMC**
Sample Amount	: **30.64 g**		**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**		**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**		**%Solids**	: **51**
GPC Cleanup	: **N**		**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**			

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	323	20.4	U
93-72-1	2,4,5-TP (Silvex)	ND	323	8.60	U

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**	**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**	**Project Number**	: **000029-02.59**
Lab ID	: **L2019694-04**	**Date Collected**	: **05/11/20 14:15**
Client ID	: **PDI-060SC-C-00-6.8-200511**	**Date Received**	: **05/13/20**
Sample Location	: **SEATTLE, WA**	**Date Analyzed**	: **05/24/20 15:44**
Sample Matrix	: **Sediment**	**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**	**Dilution Factor**	: **1**
Lab File ID	: **17200524a-15**	**Analyst**	: **JMC**
Sample Amount	: **30.29 g**	**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**	**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**	**%Solids**	: **63**
GPC Cleanup	: **N**	**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**		

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	262	16.5	U
93-72-1	2,4,5-TP (Silvex)	ND	262	6.97	U

Results Summary
Form 1
TCLP Herbicides by EPA 1311

Client	: Anchor QEA, LLC			**Lab Number**	: L2019694	
Project Name	: GASCO PDI			**Project Number**	: 000029-02.59	
Lab ID	: L2019694-04			**Date Collected**	: 05/11/20 14:15	
Client ID	: PDI-060SC-C-00-6.8-200511			**Date Received**	: 05/13/20	
Sample Location	: SEATTLE, WA			**Date Analyzed**	: 05/22/20 17:52	
Sample Matrix	: Sediment			**Date Extracted**	: 05/21/20	
Analytical Method	: 1,8151A			**Dilution Factor**	: 1	
Lab File ID	: 17200522a-24			**Analyst**	: JMC	
Sample Amount	: 200 ml			**Instrument ID**	: PEST17	
Extraction Method	: EPA 8151A			**GC Column**	: STX-CLP1	
Extract Volume	: 5000 uL			**%Solids**	: 63	
GPC Cleanup	: N			**Injection Volume**	: 1 uL	
Sulfur Cleanup	: N					

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	0.025	0.001	U
93-72-1	2,4,5-TP (Silvex)	ND	0.005	0.001	U

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**
Lab ID	: **WG1372978-1**		**Date Collected**	: **NA**
Client ID	: **WG1372978-1BLANK**		**Date Received**	: **NA**
Sample Location	:		**Date Analyzed**	: **05/21/20 21:55**
Sample Matrix	: **SOIL**		**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**		**Dilution Factor**	: **1**
Lab File ID	: **17200521a-41**		**Analyst**	: **JMC**
Sample Amount	: **30.4 g**		**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**		**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**		**%Solids**	: **NA**
GPC Cleanup	: **N**		**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**			

		ug/Kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	164	10.4	U
93-72-1	2,4,5-TP (Silvex)	ND	164	4.38	U

Results Summary
Form 1
TCLP Herbicides by EPA 1311

Client	: Anchor QEA, LLC	**Lab Number**	: L2019694
Project Name	: GASCO PDI	**Project Number**	: 000029-02.59
Lab ID	: WG1373173-1	**Date Collected**	: NA
Client ID	: WG1373173-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 05/22/20 10:48
Sample Matrix	: SOIL	**Date Extracted**	: 05/21/20
Analytical Method	: 1,8151A	**Dilution Factor**	: 1
Lab File ID	: 17200522a-03	**Analyst**	: JMC
Sample Amount	: 200 ml	**Instrument ID**	: PEST17
Extraction Method	: EPA 8151A	**GC Column**	: STX-CLP1
Extract Volume	: 5000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
94-75-7	2,4-D	ND	0.025	0.001	U
93-72-1	2,4,5-TP (Silvex)	ND	0.005	0.001	U

Results Summary
Form 1
Chlorinated Herbicides by GC

Client	: **Anchor QEA, LLC**	**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**	**Project Number**	: **000029-02.59**
Lab ID	: **WG1373342-1**	**Date Collected**	: **NA**
Client ID	: **WG1373342-1BLANK**	**Date Received**	: **NA**
Sample Location	:	**Date Analyzed**	: **05/24/20 12:05**
Sample Matrix	: **SOIL**	**Date Extracted**	: **05/21/20**
Analytical Method	: **1,8151A**	**Dilution Factor**	: **1**
Lab File ID	: **17200524a-03**	**Analyst**	: **JMC**
Sample Amount	: **30.82 g**	**Instrument ID**	: **PEST17**
Extraction Method	: **EPA 8151A**	**GC Column**	: **STX-CLP1**
Extract Volume	: **10000 uL**	**%Solids**	: **NA**
GPC Cleanup	: **N**	**Injection Volume**	: **1 uL**
Sulfur Cleanup	: **N**		

CAS NO.	Parameter	ug/Kg Results	RL	MDL	Qualifier
94-75-7	**2,4-D**	**ND**	**162**	**10.2**	**U**
93-72-1	**2,4,5-TP (Silvex)**	**ND**	**162**	**4.32**	**U**

Surrogate Recovery Summary
Form 2
Pesticides

Client: Anchor QEA, LLC
Project Name: GASCO PDI

Lab Number: L2019694
Project Number: 000029-02.59
Matrix: Sediment

GC Column 1: STX-CLP1
GC Column 2: STX-CLP2

CLIENT ID (LAB SAMPLE NO.)	1 %REC	2 %REC	1 %REC	2 %REC	OTHER (1)	OTHER (2)	TOT OUT
PDI-058SC-C-00-10.3-200512 (L2019694-01)	51	52	--	--			0
PDI-080SC-C-00-8.6-200507 (L2019694-02)	59	60	--	--			0
PDI-051SC-C-00-6.9-200511 (L2019694-03)	55	53	--	--			0
PDI-060SC-C-00-6.8-200511 (L2019694-04)	73	67	--	--			0
WG1373173-1BLANK	70	73	--	--			0
WG1373173-2LCS	73	67	--	--			0
WG1373173-3LCSD	45	40	--	--			0

QC LIMITS
(30-150)   S1 = DCAA

* Values outside of QC limits

FORM II HERB-TCLP*

Surrogate Recovery Summary
Form 2
Pesticides

Client: Anchor QEA, LLC
Project Name: GASCO PDI

Lab Number: L2019694
Project Number: 000029-02.59
Matrix: Sediment

GC Column 1: STX-CLP1
GC Column 2: STX-CLP2

CLIENT ID (LAB SAMPLE NO.)	1 %REC	2 %REC	1 %REC	2 %REC	OTHER (1)	OTHER (2)	TOT OUT
PDI-058SC-C-00-10.3-200512 (L2019694-01)	66	52	--	--			0
PDI-080SC-C-00-8.6-200507 (L2019694-02)	72	60	--	--			0
PDI-051SC-C-00-6.9-200511 (L2019694-03)	62	53	--	--			0
PDI-060SC-C-00-6.8-200511 (L2019694-04)	64	67	--	--			0
WG1372978-1BLANK	56	112	--	--			0
WG1372978-2LCS	62	75	--	--			0
WG1372978-3LCSD	50	56	--	--			0
WG1373342-1BLANK	69	76	--	--			0
WG1373342-2LCS	64	70	--	--			0
WG1373342-3LCSD	53	64	--	--			0

QC LIMITS
(30-150)   S1 = DCAA

* Values outside of QC limits

FORM II HERB-TCLP*

Laboratory Control Sample Summary
Form 3
Pesticides

Client	: **Anchor QEA, LLC**	**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**	**Project Number**	: **000029-02.59**
Matrix	: **SOIL**		
LCS Sample ID	: **WG1372978-2** **Analysis Date : 05/21/20 22:13**	**File ID**	: **17200521a-42**
LCSD Sample ID	: **WG1372978-3** **Analysis Date : 05/21/20 22:32**	**File ID**	: **17200521a-43**

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (ug/kg)**	**Found (ug/kg)**	**%R**	**True (ug/kg)**	**Found (ug/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
2,4-D	163	111	68	165	95.7	58	16	30-150	30
2,4,5-TP (Silvex)	163	104	64	165	98.3	60	6	30-150	30

Laboratory Control Sample Summary
Form 3
Pesticides

Client	**: Anchor QEA, LLC**	**Lab Number** : **L2019694**
Project Name	**: GASCO PDI**	**Project Number** : **000029-02.59**
Matrix	**: SOIL**	
LCS Sample ID	**: WG1373173-2**	**Analysis Date : 05/22/20 11:06** **File ID : 17200522a-04**
LCSD Sample ID	**: WG1373173-3**	**Analysis Date : 05/22/20 11:24** **File ID : 17200522a-05**

| Parameter | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | Recovery | RPD |
	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD		Limits	Limit
2,4-D	0.0125	0.013	106	0.0125	0.009	74	36	Q	30-150	25
2,4,5-TP (Silvex)	0.0125	0.009	75	0.0125	0.005	41	59	Q	30-150	25

Laboratory Control Sample Summary
Form 3
Pesticides

Client	: **Anchor QEA, LLC**	**Lab Number** : **L2019694**
Project Name	: **GASCO PDI**	**Project Number** : **000029-02.59**
Matrix	: **SOIL**	
LCS Sample ID	: **WG1373342-2** **Analysis Date** : **05/24/20 12:23**	**File ID** : **17200524a-04**
LCSD Sample ID	: **WG1373342-3** **Analysis Date** : **05/24/20 12:41**	**File ID** : **17200524a-05**

| Parameter | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | Recovery | RPD |
	True (ug/kg)	Found (ug/kg)	%R	True (ug/kg)	Found (ug/kg)	%R	RPD		Limits	Limit
2,4-D	162	111	69	162	91.6	57	58	Q	30-150	30
2,4,5-TP (Silvex)	162	115	71	162	94.5	58	55	Q	30-150	30

Method Blank Summary
Form 4
Pesticides

Client	**: Anchor QEA, LLC**	**Lab Number**	**: L2019694**
Project Name	**: GASCO PDI**	**Project Number**	**: 000029-02.59**
Lab Sample ID	**: WG1372978-1**	**Lab File ID**	**: 17200521a-41**
Matrix	**: SOIL**	**Extraction Date**	**: 05/21/20**
Analysis Date (1)	**: 05/21/20 21:55**	**Analysis Date (2)**	**: 05/21/20 21:55**
Instrument ID (1)	**: PEST17**	**Instrument ID (2)**	**: PEST17**

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1372978-2LCS	WG1372978-2	05/21/20 22:13	05/21/20 22:13
WG1372978-3LCSD	WG1372978-3	05/21/20 22:32	05/21/20 22:32
PDI-080SC-C-00-8.6-200507	L2019694-02	05/22/20 16:02	05/22/20 16:02

Method Blank Summary
Form 4
Pesticides

Client	**: Anchor QEA, LLC**		**Lab Number**	**: L2019694**
Project Name	**: GASCO PDI**		**Project Number**	**: 000029-02.59**
Lab Sample ID	**: WG1373173-1**		**Lab File ID**	**: 17200522a-03**
Matrix	**: SOIL**		**Extraction Date**	**: 05/21/20**
Analysis Date (1)	**: 05/22/20 10:48**		**Analysis Date (2)**	**: 05/22/20 10:48**
Instrument ID (1)	**: PEST17**		**Instrument ID (2)**	**: PEST17**

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1373173-2LCS	**WG1373173-2**	**05/22/20 11:06**	**05/22/20 11:06**
WG1373173-3LCSD	**WG1373173-3**	**05/22/20 11:24**	**05/22/20 11:24**
PDI-058SC-C-00-10.3-200512	**L2019694-01**	**05/22/20 16:57**	**05/22/20 16:57**
PDI-080SC-C-00-8.6-200507	**L2019694-02**	**05/22/20 17:15**	**05/22/20 17:15**
PDI-051SC-C-00-6.9-200511	**L2019694-03**	**05/22/20 17:34**	**05/22/20 17:34**
PDI-060SC-C-00-6.8-200511	**L2019694-04**	**05/22/20 17:52**	**05/22/20 17:52**

Method Blank Summary
Form 4
Pesticides

Client	**: Anchor QEA, LLC**	**Lab Number**	**: L2019694**	
Project Name	**: GASCO PDI**	**Project Number**	**: 000029-02.59**	
Lab Sample ID	**: WG1373342-1**	**Lab File ID**	**: 17200524a-03**	
Matrix	**: SOIL**	**Extraction Date**	**: 05/21/20**	
Analysis Date (1)	**: 05/24/20 12:05**	**Analysis Date (2)**	**: 05/24/20 12:05**	
Instrument ID (1)	**: PEST17**	**Instrument ID (2)**	**: PEST17**	

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1373342-2LCS	WG1373342-2	05/24/20 12:23	05/24/20 12:23
WG1373342-3LCSD	WG1373342-3	05/24/20 12:41	05/24/20 12:41
PDI-058SC-C-00-10.3-200512	L2019694-01	05/24/20 15:08	05/24/20 15:08
PDI-051SC-C-00-6.9-200511	L2019694-03	05/24/20 15:26	05/24/20 15:26
PDI-060SC-C-00-6.8-200511	L2019694-04	05/24/20 15:44	05/24/20 15:44

Initial Calibration Summary
Form 6
Pesticides

Client	: Anchor QEA, LLC	
Project Name	: GASCO PDI	
Instrument ID	: PEST17	
Calibration dates	: 01/07/20 15:05	01/07/20 16:37

Lab Number	: L2019694
Project Number	: 000029-02.59
Ical Ref	: ICAL16424

```
Calibration Files

1   =17200107i-02.d  2   =17200107i-03.d  3   =17200107i-04.d  4   =17200107i-05.d  5   =17200107i-06.d

6   =17200107i-07.d
```

	Compound	1	2	3	4	5	6	Avg	%RSD
1) i	4,4'-DBOB			---------------ISTD--------------------					
2) t	Dalapon	0.203	0.172	0.168	0.171	0.164	0.159	0.173	9.03
3) s	DCAA (surrogate)	0.200	0.170	0.160	0.160	0.146	0.147	0.164	12.29
4) t	Dicamba	0.608	0.574	0.510	0.509	0.502	0.505	0.535	8.44
5) t	MCPP	0.001	0.001	0.001	0.001	0.001	0.001	0.001	16.26
6) t	MCPA		0.001	0.001	0.001	0.001	0.001	0.001	15.47
7) t	Dichloroprop	0.192	0.160	0.150	0.146	0.138	0.136	0.154	13.43
8) t	2,4-D	0.196	0.179	0.179	0.178	0.180	0.180	0.182	3.79
9) t	2,4,5-TP (Silvex)	0.799	0.709	0.689	0.688	0.685	0.691	0.710	6.26
10) t	2,4,5-T	0.931	0.800	0.755	0.752	0.744	0.750	0.789	9.23
11) t	2,4-DB		0.144	0.123	0.133	0.136	0.137	0.135	5.87
12) t	Dinoseb		0.582	0.517	0.472	0.477	0.470	0.504	9.57

Initial Calibration Summary
Form 6
Pesticides

Client	: Anchor QEA, LLC		**Lab Number**	: L2019694
Project Name	: GASCO PDI		**Project Number**	: 000029-02.59
Instrument ID	: PEST17		**Ical Ref**	: ICAL16424
Calibration dates	: 01/07/20 15:05	01/07/20 16:37		

```
Signal #2  Calibration Files
  1  =17200107i-02.d  2  =17200107i-03.d  3  =17200107i-04.d  4  =17200107i-05.d  5  =17200107i-06.d
  6  =17200107i-07.d
```

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	i	4,4'-DBOB	---------------ISTD--------------------							
2)	t	Dalapon	0.221	0.193	0.182	0.187	0.176	0.173	0.189	9.16
3)	s	DCAA (surrogate)	0.250	0.180	0.188	0.188	0.173	0.178	0.193	14.77
4)	t	Dicamba	0.678	0.446	0.550	0.552	0.540	0.548	0.552	13.34
5)	t	MCPP	0.001	0.001	0.001	0.001	0.001	0.001	0.001	16.00
6)	t	MCPA		0.002	0.001	0.001	0.001	0.001	0.001	15.45
7)	t	Dichloroprop	0.221	0.177	0.161	0.148	0.143	0.144	0.166	18.12
8)	t	2,4-D	0.303	0.245	0.226	0.215	0.208	0.211	0.235	15.32
9)	t	2,4,5-TP (Sil	0.882	0.768	0.719	0.710	0.694	0.711	0.747	9.44
10)	t	2,4,5-T	0.774	0.734	0.699	0.721	0.737	0.765	0.738	3.79
11)	t	2,4-DB		0.126	0.118	0.117	0.118	0.121	0.120	3.08
12)	t	Dinoseb		0.423	0.397	0.397	0.404	0.419	0.408	3.03

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**	
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**	
Instrument ID	: **PEST17**		**Calibration Date**	: **05/21/20 21:19**	
Lab File ID	: **17200521a-39**		**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1373146-4**		**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **A**				

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	**0.25**	**0.25**	**-**	**0**	**15**	**96**	**0**
Dalapon	**0.182**	**0.162**	**-**	**11**	**15**	**89**	**0**
DCAA (surrogate)	**0.188**	**0.173**	**-**	**8**	**15**	**91**	**0**
Dicamba	**0.188**	**0.165**	**-**	**12.2**	**15**	**89**	**0**
MCPP	**18.8**	**16.012**	**-**	**14.8**	**15**	**85**	**0**
MCPA	**18.6**	**17.887**	**-**	**3.8**	**15**	**87**	**0**
Dichloroprop	**0.188**	**0.167**	**-**	**11.2**	**15**	**87**	**0**
2,4-D	**0.188**	**0.186**	**-**	**1.1**	**15**	**97**	**-.01**
2,4,5-TP (Silvex)	**0.19**	**0.193**	**-**	**-1.6**	**15**	**101**	**0**
2,4,5-T	**0.19**	**0.177**	**-**	**6.8**	**15**	**94**	**0**
2,4-DB	**0.192**	**0.177**	**-**	**7.8**	**15**	**97**	**-.01**
Dinoseb	**0.19**	**0.203**	**-**	**-6.8**	**15**	**100**	**0**

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**	
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**	
Instrument ID	: **PEST17**		**Calibration Date**	: **05/21/20 21:19**	
Lab File ID	: **17200521a-39**		**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1373146-4**		**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **B**				

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	**0.25**	**0.25**	**-**	**0**	**15**	**88**	**0**
Dalapon	**0.182**	**0.178**	**-**	**2.2**	**15**	**89**	**0**
DCAA (surrogate)	**0.188**	**0.185**	**-**	**1.6**	**15**	**89**	**0**
Dicamba	**0.188**	**0.183**	**-**	**2.7**	**15**	**86**	**0**
MCPP	**18.8**	**17.317**	**-**	**7.9**	**15**	**89**	**0**
MCPA	**18.6**	**19.218**	**-**	**-3.3**	**15**	**91**	**0**
Dichloroprop	**0.188**	**0.177**	**-**	**5.9**	**15**	**86**	**0**
2,4-D	**0.188**	**0.172**	**-**	**8.5**	**15**	**84**	**0**
2,4,5-TP (Silvex)	**0.19**	**0.185**	**-**	**2.6**	**15**	**89**	**0**
2,4,5-T	**0.19**	**0.18**	**-**	**5.3**	**15**	**88**	**0**
2,4-DB	**0.192**	**0.177**	**-**	**7.8**	**15**	**83**	**0**
Dinoseb	**0.19**	**0.211**	**-**	**-11.1**	**15**	**101**	**0**

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**			**Lab Number**	: **L2019694**		
Project Name	: **GASCO PDI**			**Project Number**	: **000029-02.59**		
Instrument ID	: **PEST17**			**Calibration Date**	: **05/22/20 09:57**		
Lab File ID	: **17200522a-01**			**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**	
Sample No	: **WG1373624-1**			**Init. Calib. Times**	: **15:05**	**16:37**	
Channel	: **A**						

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	**0.25**	**0.25**	**-**	**0**	**15**	**87**	**0**
Dalapon	0.182	0.16	-	12.1	15	79	-.01
DCAA (surrogate)	0.188	0.178	-	5.3	15	84	0
Dicamba	0.188	0.167	-	11.2	15	81	0
MCPP	18.8	16.757	-	10.9	15	80	0
MCPA	18.6	18.575	-	0.1	15	82	0
Dichloroprop	0.188	0.174	-	7.4	15	82	0
2,4-D	0.188	0.191	-	-1.6	15	90	0
2,4,5-TP (Silvex)	0.19	0.203	-	-6.8	15	96	0
2,4,5-T	0.19	0.18	-	5.3	15	86	0
2,4-DB	0.192	0.192	-	0	15	96	0
Dinoseb	0.19	0.213	-	-12.1	15	95	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**	
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**	
Instrument ID	: **PEST17**		**Calibration Date**	: **05/22/20 09:57**	
Lab File ID	: **17200522a-01**		**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1373624-1**		**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **B**				

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	**0.25**	**0.25**	**-**	**0**	**15**	**82**	**0**
Dalapon	**0.182**	**0.169**	**-**	**7.1**	**15**	**79**	**0**
DCAA (surrogate)	**0.188**	**0.186**	**-**	**1.1**	**15**	**83**	**0**
Dicamba	**0.188**	**0.183**	**-**	**2.7**	**15**	**80**	**0**
MCPP	**18.8**	**17.653**	**-**	**6.1**	**15**	**84**	**0**
MCPA	**18.6**	**19.516**	**-**	**-4.9**	**15**	**86**	**0**
Dichloroprop	**0.188**	**0.181**	**-**	**3.7**	**15**	**81**	**0**
2,4-D	**0.188**	**0.179**	**-**	**4.8**	**15**	**81**	**0**
2,4,5-TP (Silvex)	**0.19**	**0.186**	**-**	**2.1**	**15**	**83**	**0**
2,4,5-T	**0.19**	**0.191**	**-**	**-0.5**	**15**	**87**	**0**
2,4-DB	**0.192**	**0.202**	**-**	**-5.2**	**15**	**88**	**0**
Dinoseb	**0.19**	**0.23**	**-**	**-21.1***	**15**	**102**	**0**

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**	**Lab Number**	: **L2019694**
Project Name	: **GASCO PDI**	**Project Number**	: **000029-02.59**
Instrument ID	: **PEST17**	**Calibration Date**	: **05/22/20 15:07**
Lab File ID	: **17200522a-15**	**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1373624-2**	**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **A**		

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	**0.25**	**0.25**	**-**	**0**	**15**	**89**	**0**
Dalapon	**0.182**	**0.166**	**-**	**8.8**	**15**	**84**	**-.01**
DCAA (surrogate)	**0.188**	**0.178**	**-**	**5.3**	**15**	**86**	**0**
Dicamba	**0.188**	**0.168**	**-**	**10.6**	**15**	**83**	**0**
MCPP	**18.8**	**15.982**	**-**	**15**	**15**	**78**	**0**
MCPA	**18.6**	**17.862**	**-**	**4**	**15**	**80**	**0**
Dichloroprop	**0.188**	**0.172**	**-**	**8.5**	**15**	**83**	**0**
2,4-D	**0.188**	**0.191**	**-**	**-1.6**	**15**	**92**	**-.01**
2,4,5-TP (Silvex)	**0.19**	**0.198**	**-**	**-4.2**	**15**	**95**	**0**
2,4,5-T	**0.19**	**0.184**	**-**	**3.2**	**15**	**90**	**0**
2,4-DB	**0.192**	**0.19**	**-**	**1**	**15**	**97**	**0**
Dinoseb	**0.19**	**0.213**	**-**	**-12.1**	**15**	**97**	**0**

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: Anchor QEA, LLC		**Lab Number**	: L2019694
Project Name	: GASCO PDI		**Project Number**	: 000029-02.59
Instrument ID	: PEST17		**Calibration Date**	: 05/22/20 15:07
Lab File ID	: 17200522a-15		**Init. Calib. Date(s)**	: 01/07/20 01/07/20
Sample No	: WG1373624-2		**Init. Calib. Times**	: 15:05 16:37
Channel	: B			

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	0.25	0.25	-	0	15	83	0
Dalapon	0.182	0.179	-	1.6	15	84	0
DCAA (surrogate)	0.188	0.188	-	0	15	84	0
Dicamba	0.188	0.185	-	1.6	15	81	0
MCPP	18.8	17.192	-	8.6	15	82	0
MCPA	18.6	19.276	-	-3.6	15	86	0
Dichloroprop	0.188	0.181	-	3.7	15	82	0
2,4-D	0.188	0.178	-	5.3	15	81	0
2,4,5-TP (Silvex)	0.19	0.189	-	0.5	15	85	0
2,4,5-T	0.19	0.187	-	1.6	15	86	0
2,4-DB	0.192	0.197	-	-2.6	15	86	0
Dinoseb	0.19	0.223	-	-17.4*	15	100	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**	
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**	
Instrument ID	: **PEST17**		**Calibration Date**	: **05/24/20 10:36**	
Lab File ID	: **17200524a-02**		**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1374081-1**		**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **A**				

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	0.25	0.25	-	0	15	91	0
Dalapon	0.182	0.16	-	12.1	15	83	0
DCAA (surrogate)	0.188	0.171	-	9	15	85	0
Dicamba	0.188	0.164	-	12.8	15	83	0
MCPP	18.8	16.263	-	13.5	15	81	0
MCPA	18.6	18.476	-	0.7	15	86	0
Dichloroprop	0.188	0.166	-	11.7	15	83	0
2,4-D	0.188	0.181	-	3.7	15	89	0
2,4,5-TP (Silvex)	0.19	0.189	-	0.5	15	93	0
2,4,5-T	0.19	0.174	-	8.4	15	87	0
2,4-DB	0.192	0.185	-	3.6	15	97	0
Dinoseb	0.19	0.209	-	-10	15	98	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: **Anchor QEA, LLC**		**Lab Number**	: **L2019694**	
Project Name	: **GASCO PDI**		**Project Number**	: **000029-02.59**	
Instrument ID	: **PEST17**		**Calibration Date**	: **05/24/20 10:36**	
Lab File ID	: **17200524a-02**		**Init. Calib. Date(s)**	: **01/07/20**	**01/07/20**
Sample No	: **WG1374081-1**		**Init. Calib. Times**	: **15:05**	**16:37**
Channel	: **B**				

Compound	Amount	Calc.	Min RRF	%D	Max %D	Area%	Dev(min)
4,4'-DBOB	0.25	0.25	-	0	15	84	0
Dalapon	0.182	0.173	-	4.9	15	83	-.01
DCAA (surrogate)	0.188	0.183	-	2.7	15	83	0
Dicamba	0.188	0.179	-	4.8	15	80	0
MCPP	18.8	17.403	-	7.4	15	85	0
MCPA	18.6	19.198	-	-3.2	15	87	0
Dichloroprop	0.188	0.178	-	5.3	15	82	0
2,4-D	0.188	0.175	-	6.9	15	81	0
2,4,5-TP (Silvex)	0.19	0.183	-	3.7	15	84	0
2,4,5-T	0.19	0.183	-	3.7	15	86	0
2,4-DB	0.192	0.194	-	-1	15	86	0
Dinoseb	0.19	0.223	-	-17.4*	15	101	0

* Value outside of QC limits.

Analytical Sequence
Form 8b
Pesticides

Client	**: Anchor QEA, LLC**	**Lab Number** : L2019694
Project Name	**: GASCO PDI**	**Project Number** : 000029-02.59
Instrument ID	**: PEST17**	**Initial Calib. Date(s) :** 01/07/20 01/07/20

Client ID	Lab ID	Date/Time Analyzed
Level 1 Herbicides	R1273517-1	01/07/20 15:05
Level 2 Herbicides	R1273517-2	01/07/20 15:24
Level 3 Herbicides	R1273517-3	01/07/20 15:42
Level 4 Herbicides	R1273517-5	01/07/20 16:00
Level 5 Herbicides	R1273517-4	01/07/20 16:18
Level 6 Herbicides	R1273517-6	01/07/20 16:37
R1273517-7 ICV	R1273517-7	01/07/20 16:55
WG1373146-4 CCAL	WG1373146-4	05/21/20 21:19
WG1372978-1 BLANK	WG1372978-1	05/21/20 21:55
WG1372978-2 LCS	WG1372978-2	05/21/20 22:13
WG1372978-3 LCSD	WG1372978-3	05/21/20 22:32
WG1373624-1 CCAL	WG1373624-1	05/22/20 09:57
WG1373173-1 BLANK	WG1373173-1	05/22/20 10:48
WG1373173-2 LCS	WG1373173-2	05/22/20 11:06
WG1373173-3 LCSD	WG1373173-3	05/22/20 11:24
WG1373624-2 CCAL	WG1373624-2	05/22/20 15:07
PDI-080SC-C-00-8.6-200507	L2019694-02	05/22/20 16:02
PDI-058SC-C-00-10.3-200512	L2019694-01	05/22/20 16:57
PDI-080SC-C-00-8.6-200507	L2019694-02	05/22/20 17:15
PDI-051SC-C-00-6.9-200511	L2019694-03	05/22/20 17:34
PDI-060SC-C-00-6.8-200511	L2019694-04	05/22/20 17:52
WG1374081-1 CCAL	WG1374081-1	05/24/20 10:36
WG1373342-1 BLANK	WG1373342-1	05/24/20 12:05
WG1373342-2 LCS	WG1373342-2	05/24/20 12:23
WG1373342-3 LCSD	WG1373342-3	05/24/20 12:41
PDI-058SC-C-00-10.3-200512	L2019694-01	05/24/20 15:08
PDI-051SC-C-00-6.9-200511	L2019694-03	05/24/20 15:26
PDI-060SC-C-00-6.8-200511	L2019694-04	05/24/20 15:44

Identification Summary
Form 10
Pesticides

Client	: Anchor QEA, LLC		**Lab Number**	: L2019694
Project Name	: GASCO PDI		**Project Number**	: 000029-02.59

No Detections Found