reviewed 6/8/18 amn

5/31/2018

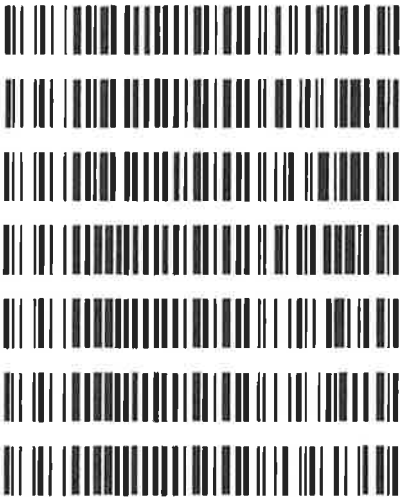
Worklist: 2436

LAB_CASE	ITEM	TASK_ID	DESCRIPTION
M2018-2208	1	117092	AM 27 Blood THC Quant by LC-QQQ
M2018-2370	2	117094	AM 27 Blood THC Quant by LC-QQQ
M2018-2440	3	117096	AM 27 Blood THC Quant by LC-QQQ
M2018-2499	2	117098	AM 27 Blood THC Quant by LC-QQQ
P2018-1155	3	117099	AM 27 Blood THC Quant by LC-QQQ
P2018-1317	1	117100	AM 27 Blood THC Quant by LC-QQQ
P2018-1329	1	117101	AM 27 Blood THC Quant by LC-QQQ
P2018-1394	2	117102	AM 27 Blood THC Quant by LC-QQQ
P2018-1408	1	117103	AM 27 Blood THC Quant by LC-QQQ
P2018-1410	1	117104	AM 27 Blood THC Quant by LC-QQQ
P2018-1431	1	117105	AM 27 Blood THC Quant by LC-QQQ

5/31/2018
TS

Worklist: 2435

LAB_CASE	ITEM	TASK_ID	DESCRIPTION
M2018-2300	1	117088	AM 27 Blood THC Quant by LC-QQQ
M2018-2495	7	117089	AM 27 Blood THC Quant by LC-QQQ
M2018-2571	3	117090	AM 27 Blood THC Quant by LC-QQQ
P2018-1475	1	117091	AM 27 Blood THC Quant by LC-QQQ
P2018-1550	1	117093	AM 27 Blood THC Quant by LC-QQQ
P2018-1551	1	117095	AM 27 Blood THC Quant by LC-QQQ
P2018-1575	1	117097	AM 27 Blood THC Quant by LC-QQQ



AM# 27: Quantitation of THC and Metabolites in Blood by LC-MS/MS

Extraction Date: 05/31/18
Plate lot#: 0515037

Analyst: Tamara Salazar
Plate Expiration: 09/28/18

Mobile phase A: 0.1% Formic Acid in LCMS Water
MTBE LCMS Methanol

Mobile phase B: 0.1% Formic acid in Acetonitrile
Hexane

Blank Blood Lot: 361331-1

Column: UCT Selectra DA 100 x 2.1mm 3um

LCMS-QQQ ID: 59740

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
☒ 3. Create worklist: Data Path: _____

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Pipette **1000µL blood (calibrated pipette) Pipette ID: 3382167** in wells of analytical (standards) plate.
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
☒ 4. Pipette **500µL 0.1% formic acid in water** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **800µL of blood+acid** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** *Manifold ID: 067104*
☒ 8. Wait 5 minutes.
☒ 9. Add **2.25mL MTBE.** ***(Add in 3 increments of 750uL)***
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **2.25mL Hexane.** ***(Add in 3 increments of 750uL)***
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Create batch and process data.
Worklist path *C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436*
Batch Name: *053118 THQ TS SP*
☒ 2. Make any necessary integration changes, Curve weighting of Linear 1/x with r^2 values ≥0.98 for each analyte
☒ 3. RT +/- 3% or 0.100 min, whichever is greater, +/- 20% Accuracy for greater than (+/- 30% for 10ng/ml or less). Ion ratios must be within +/- 20% of the averaged calibrators
☒ 4. Case sample response for THC and OH-THC 3ng/mL (quantitative), Carboxy-THC: 10ng/mL (qualitative only) will be reported. Samples with a THC or OH-THC response over 50 ng/mL will be reported out as greater than 50 ng/mL.
☒ 5. Did all QCs pass for each analyte? Y / N
☒ 6 Enter QCs into control charting.
☒ 7 Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *THC-COOH: 5-250*

AM# 27: Quantitation of THC and Metabolites in Blood by LC-MS/MS

Extraction Date: 5/31/18 Analyst: Sarah Pickle
Plate lot#: 0515037 Plate Expiration: 09/28/18

Mobile phase A: 0.1% Formic Acid in LCMS Water **Mobile phase B:** 0.1% Formic acid in Acetonitrile
MTBE LCMS Methanol Hexane
Blank Blood Lot: 361331-1 **Column**: UCT Selectra DA 100 x 2.1mm 3um
LCMS-QQQ ID: 59740

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
☒ 3. Create worklist: Data Path: _____

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Pipette **1000µL blood (calibrated pipette) Pipette ID: 3382167** in wells of analytical (standards) plate.
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
☒ 4. Pipette **500µL 0.1% formic acid in water** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **800µL of blood+acid** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** Manifold ID: 067104
☒ 8. Wait 5 minutes.
☒ 9. Add **2.25mL MTBE. (*Add in 3 increments of 750uL)***
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **2.25mL Hexane. (*Add in 3 increments of 750uL)***
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Create batch and process data.
Worklist path: 053118 THC Quant TS SP Worklist 2435 2436 Batch Name: 053118 THCQ TS SP
☒ 2. Make any necessary integration changes, Curve weighting of Linear 1/x with r^2 values ≥0.98 for each analyte
☒ 3. RT +/- 3% or 0.100 min, whichever is greater, +/- 20% Accuracy for greater than (+/- 30% for 10ng/ml or less). Ion ratios must be within +/- 20% of the averaged calibrators
☒ 4. Case sample response for THC and OH-THC 3ng/mL (quantitative), Carboxy-THC: 10ng/mL (qualitative only) will be reported. Samples with a THC or OH-THC response over 50 ng/mL will be reported out as greater than 50 ng/mL.
☒ 5. Did all QCs pass for each analyte? Y / N
☒ 6 Enter QCs into control charting.
☒ 7 Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *Curve Range Limited THC-COOH 5-250*
Steps 3-16 were performed as Tamara Salazar acting as the primary analyst. I witnessed and approved of all steps performed in the method.

Idaho State Police Forensic Services

AM #27 Quantitative Analysis of THC and Metabolites in Blood by LCMS-QQQ

Analyst: Tamara Salazar and Sarah Pickle BTS
Extraction Date: 05/31/18
Worklist Number: 2436 and 2435 BTS

Reagent	*Lot Number*	*Expiration Date*	*Date in Service*	*Date Out of Service*	*Initials*
ToxBox THC/THC Metabolite Plate	0515037	09/28/18			
Negative Blood	361331-2 1 BTS		05/25/18		
Methanol External Control Solution	WS020718	02/07/19	02/07/18		
Blood External Control Solution	020718	02/07/19	02/07/18	05/31/18	TS
Methyl Tert-Butyl Ether (MTBE) 99.9%	A0375555		06/26/17		
Hexanes (ACS)	101642		10/26/17		
Methanol (LCMS Grade)	177145		04/11/18		
0.1% Formic Acid in Water (Mobile Phase A)	166541		06/26/17		
0.1% Formic Acid in Acetonitrile (Mobile Phase B)	176190		02/06/18		
Needle Rinse--75% LCMS MeOH in LCMS Water	052918		05/29/18		

Methanol External Control Solution (Lot: WS020718)
10 ul of 1mg/mL THC, 100 ul of 100 ug/mL THC-OH, C-THC in 9790 ul MeOH

Component	*Source*	*Source Lot Number*	*Expiration Date*
Methanol (LCMS)	Fisher	172516	
THC	Cerilliant	FE04231406	04/30/2019
C-THC	Cayman	0497429	02/08/2019
THC-OH	Cerilliant	FE01121503	01/31/2020
Prepared:	02/07/18		
Prepared By:	Tamara Salazar		
Expires:	02/07/19		

Blood External Control Solution (Lot: 020718)
100 ul of methanol external control solution was added to 9900 ul of blood.

Component	*Source*	*Source Lot Number*
Negative Blood	Hemostat	361331-2
Methanol External Control Solution		WS020718
Prepared:	02/07/18	
Prepared by:	Tamara Salazar	
Expires:	02/07/19	

Needle Rinse (75% LCMS MeOH in LCMS Water) (Lot: 052918)

Component	*Source*	*Source Lot Number*
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	177528
Prepared:	05/29/18	
Prepared By:	Tamara Salazar	

ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

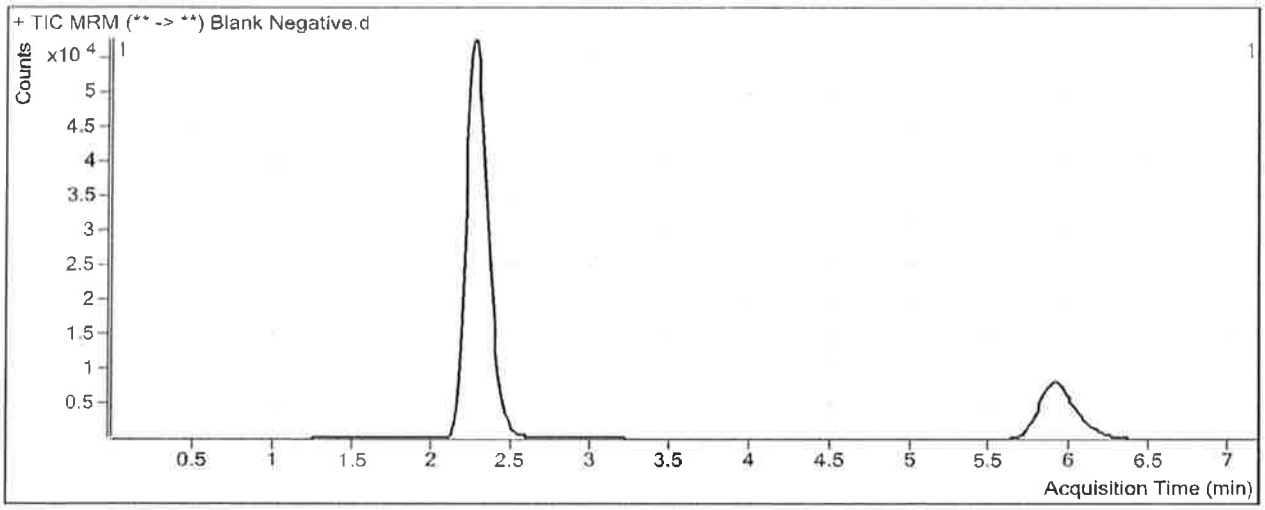
15

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResult		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 13:48	**Data File**	Blank Negative.d
Sample Type	Sample	**Sample Name**	Blank Negative
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	Vial 2	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



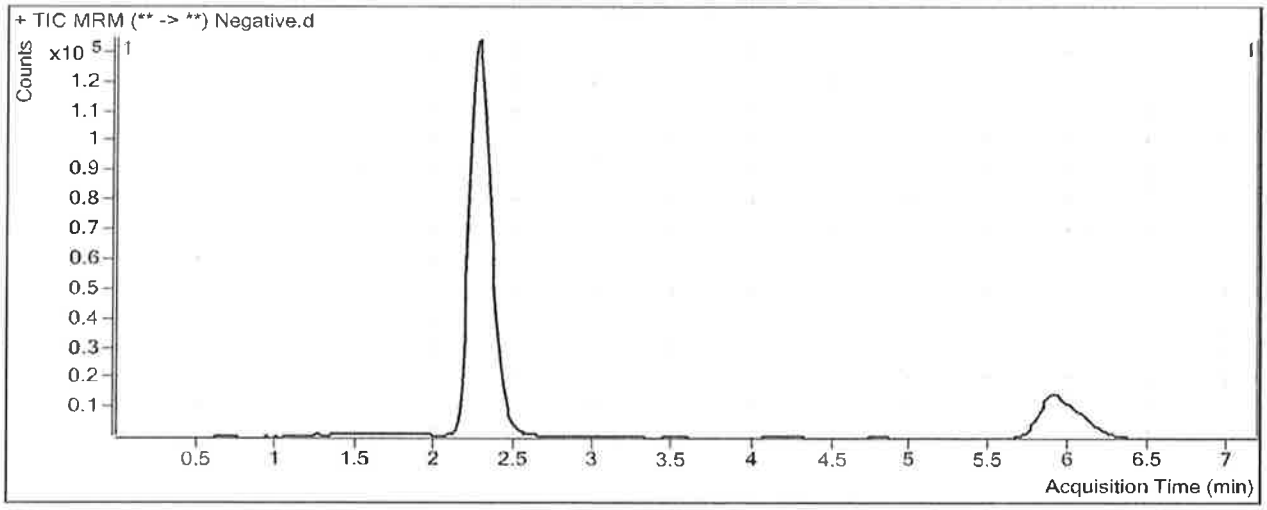
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:09 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 14:00	**Data File**	Negative.d
Sample Type	Sample	**Sample Name**	Negative
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-A6	**Sample Info**	
Inj Vol	-1	**Comment**	Hemostat 361331-3

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.479	2596	984496	0.0026	1.1496
THC-COOH	THC-COOH-D9	2.325	7350	273964	0.0268	1.5148

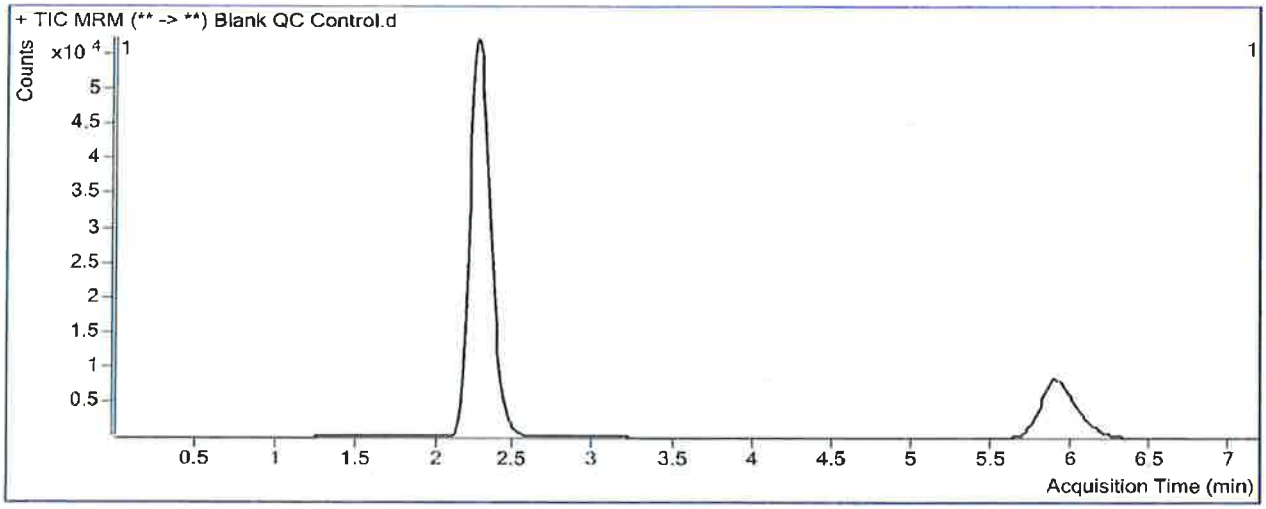
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResult		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 13:25	**Data File**	Blank QC Control.d
Sample Type	Sample	**Sample Name**	Blank QC Control
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	Vial 2	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



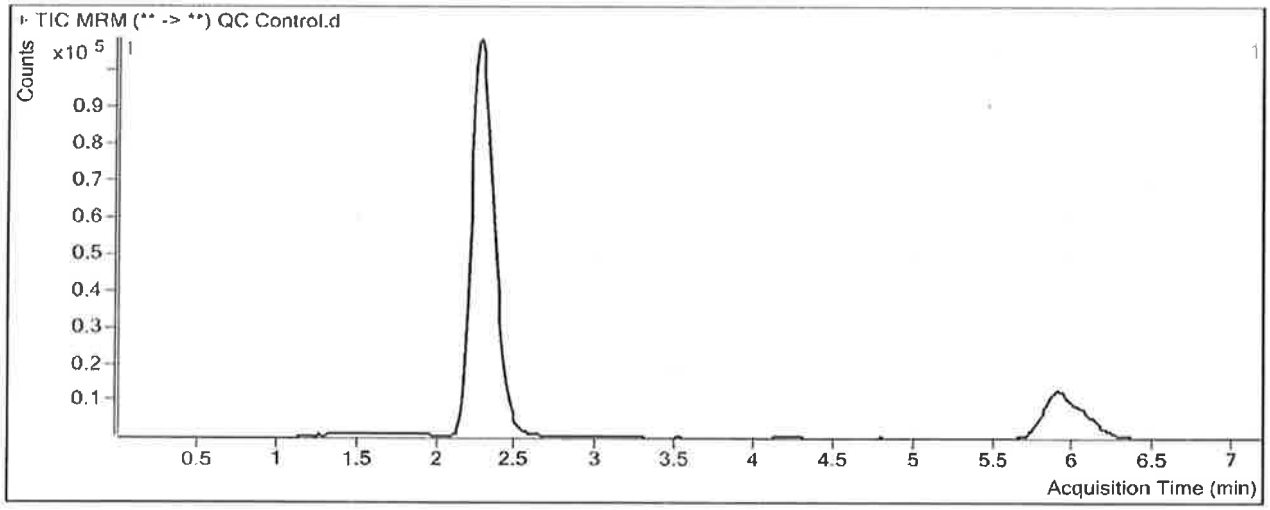
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 13:36	**Data File**	QC Control.d
Sample Type	Sample	**Sample Name**	QC Control
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-H5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.265	71776	722204	0.0994	9.4226
THC-COOH	THC-COOH-D9	2.365	42301	210245	0.2012	9.3312
THC	THC-D3	5.932	20705	196242	0.1055	10.0032

ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

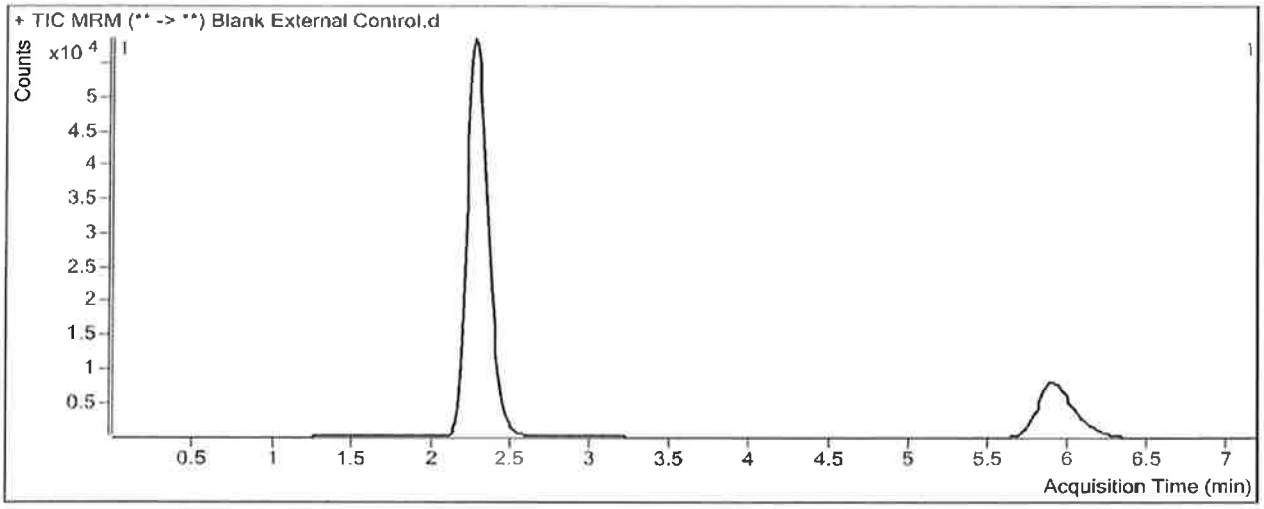
15 S

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResult		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:09 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 14:12	**Data File**	Blank External Control.d
Sample Type	Sample	**Sample Name**	Blank External Control
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	Vial 2	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



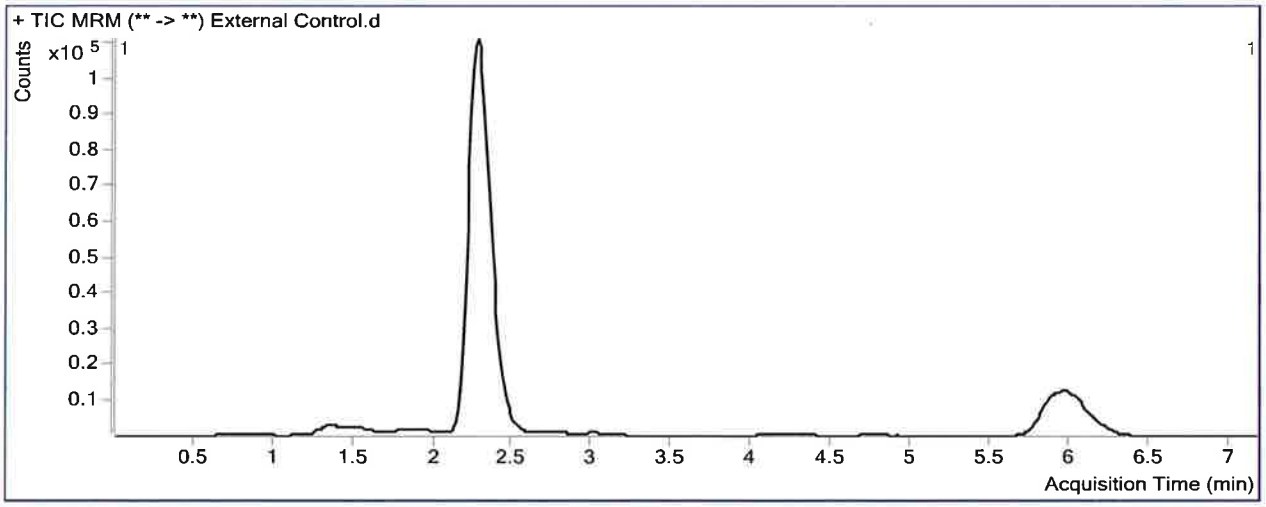
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/8/2018 12:32 PM	**Analyst Name**	ISPUser
Report Time	6/8/2018 12:33 PM	**Reporter Name**	ISPUser
Last Calib Update	6/8/2018 12:32 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 14:24	**Data File**	External Control.d
Sample Type	Sample	**Sample Name**	External Control
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-B6	**Sample Info**	
Inj Vol	-1	**Comment**	Hemostat 361331-3 + WS 020718

Sample Chromatogram



Results

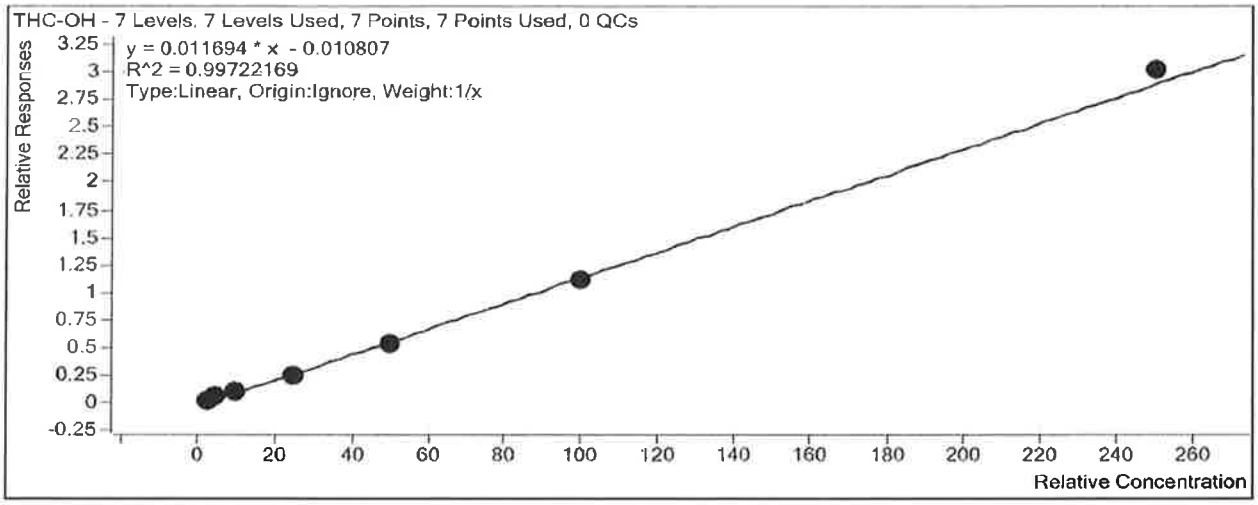
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.279	57272	753980	0.0760	7.4195
THC-COOH	THC-COOH-D9	2.365	44574	215517	0.2068	9.5833
THC	THC-D3	6.025	19670	225410	0.0873	8.3912

ISP Forensics
Calibration Curve Report

TS

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 THCQ TS SP.batch.bin
Last Calib Update	6/1/2018 8:05 AM
Analyst Name	ISP TOX

Target Compound *THC-OH*
Internal Standard *THC-OH-D3*



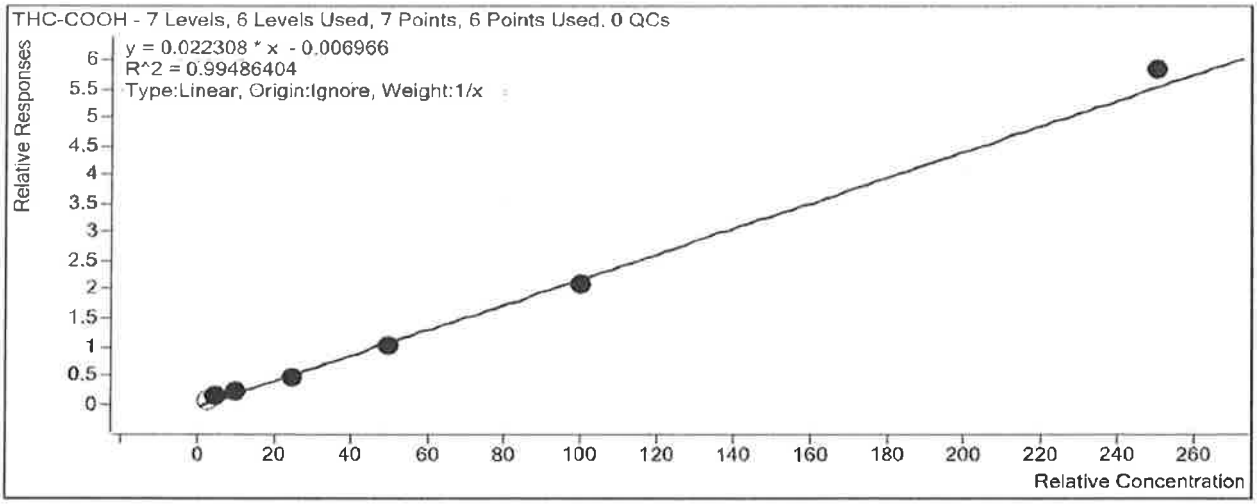
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
Cal 1	1	☑	3	3.4	113.1
Cal 2	2	☑	5	5.5	109.3
Cal 3	3	☑	10	9.4	94.3
Cal 4	4	☑	25	22.2	88.9
Cal 5	5	☑	50	47.3	94.5
Cal 6	6	☑	100	96.3	96.3
Cal 7	7	☑	250	258.9	103.6

ISP Forensics
Calibration Curve Report

TS

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 THCQ TS SP.batch.bin		
Last Calib Update	6/1/2018 8:05 AM	**Analyst Name**	ISP TOX

Target Compound *THC-COOH*
Internal Standard *THC-COOH-D9*



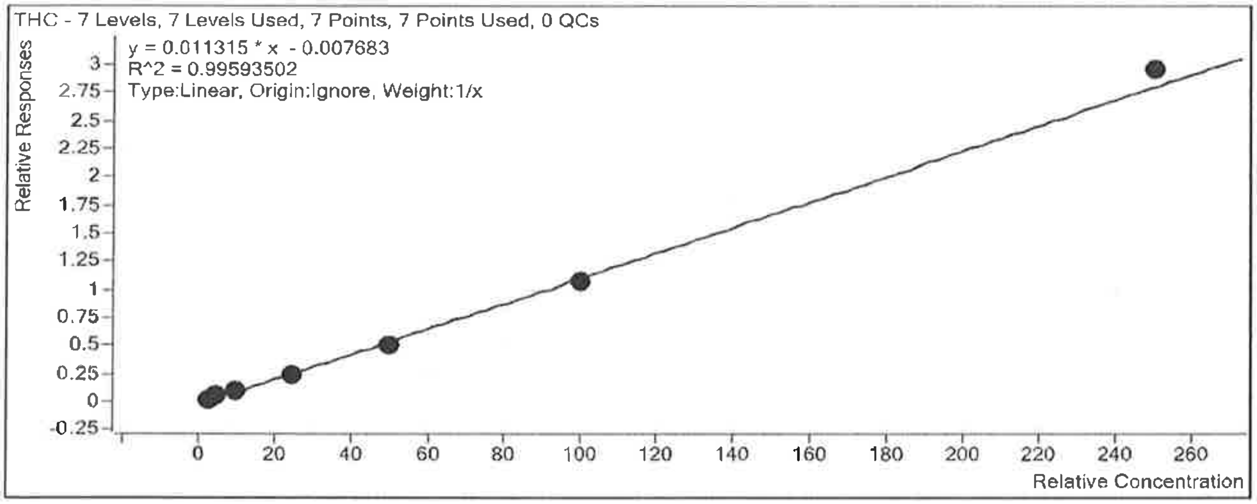
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
Cal 1	1	☐	3	3.9	129.4
Cal 2	2	☑	5	5.9	118.8
Cal 3	3	☑	10	10.2	102.4
Cal 4	4	☑	25	21.7	86.9
Cal 5	5	☑	50	46.8	93.7
Cal 6	6	☑	100	93.6	93.6
Cal 7	7	☑	250	261.7	104.7

ISP Forensics
Calibration Curve Report

TS

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 THCQ TS SP.batch.bin		
Last Calib Update	6/1/2018 8:05 AM	**Analyst Name**	ISP TOX

Target Compound *THC*
Internal Standard *THC-D3*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
Cal 1	1	☑	3	3.3	111.0
Cal 2	2	☑	5	5.5	110.3
Cal 3	3	☑	10	9.7	96.9
Cal 4	4	☑	25	23.1	92.3
Cal 5	5	☑	50	45.0	90.0
Cal 6	6	☑	100	95.0	95.0
Cal 7	7	☑	250	261.4	104.6

ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

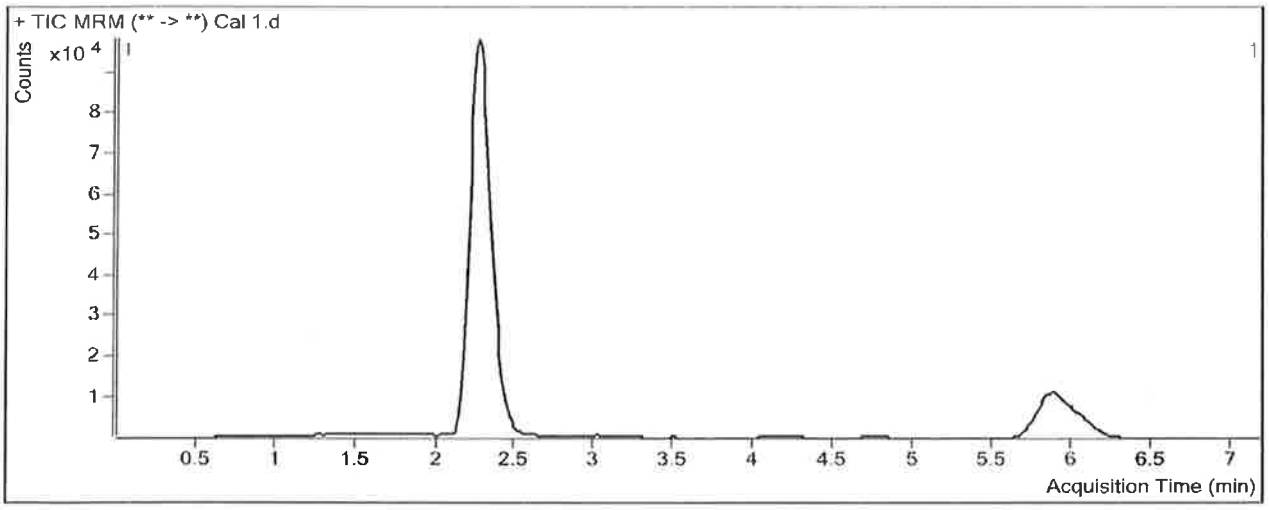
TS

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 12:02	**Data File**	Cal 1.d
Sample Type	Calibration	**Sample Name**	Cal 1
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-A5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.252	19818	686628	0.0289	3.3922
THC-COOH	THC-COOH-D9	2.352	15843	198957	0.0796	3.8818
THC	THC-D3	5.892	5601	186773	0.0300	3.3292

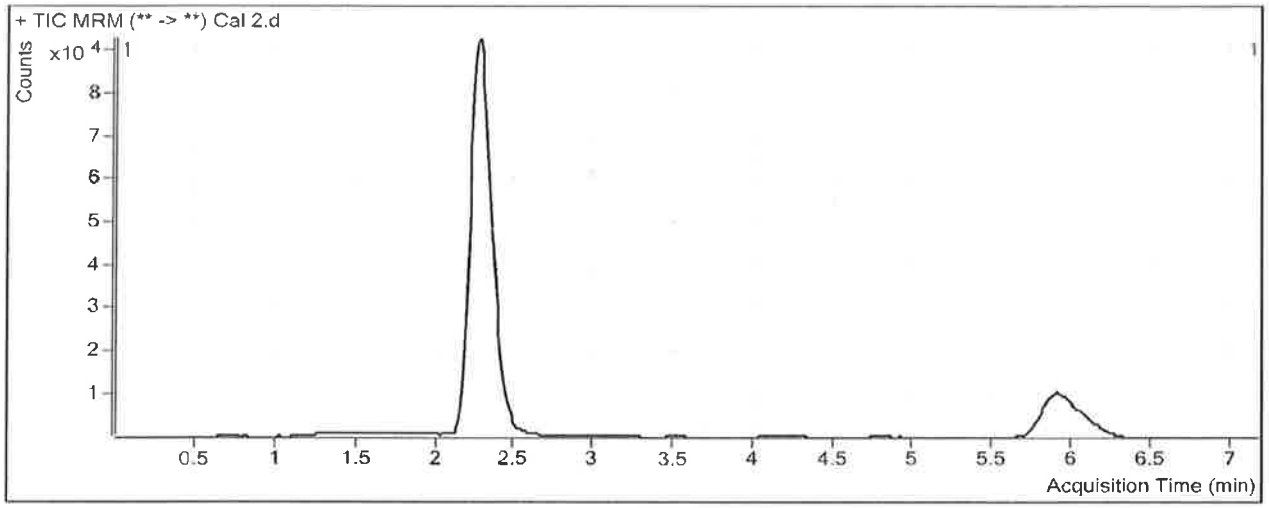
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 12:14	**Data File**	Cal 2.d
Sample Type	Calibration	**Sample Name**	Cal 2
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-B5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.279	33810	636580	0.0531	5.4658
THC-COOH	THC-COOH-D9	2.365	23311	185709	0.1255	5.9390
THC	THC-D3	5.945	9111	166540	0.0547	5.5139

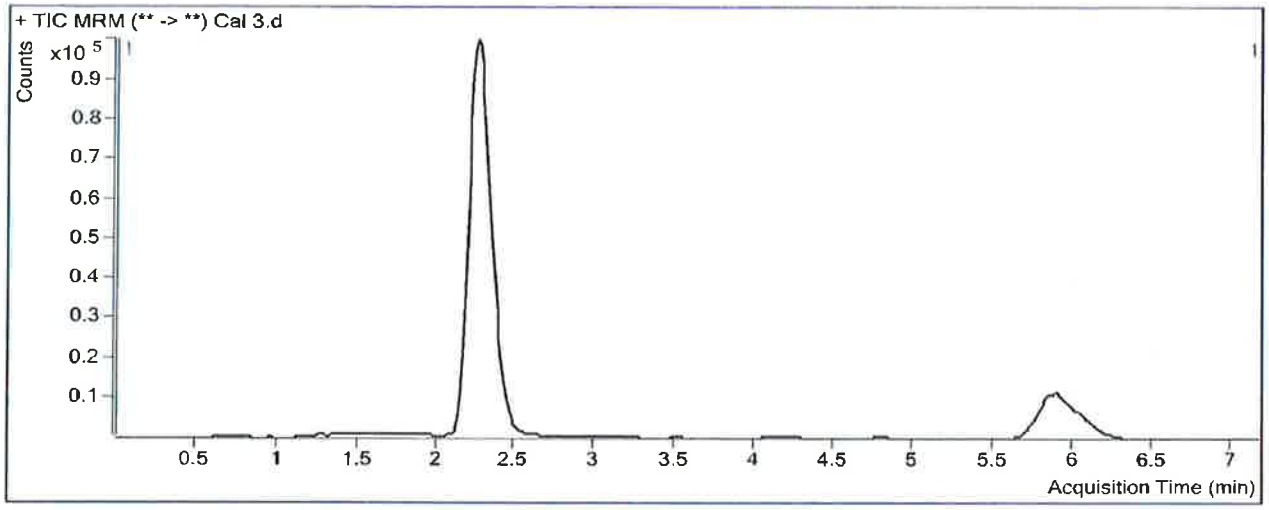
ISP FORENSICS - Pocatello Instrument # 59740
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 12:25	**Data File**	Cal 3.d
Sample Type	Calibration	**Sample Name**	Cal 3
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-C5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.265	65635	659792	0.0995	9.4306
THC-COOH	THC-COOH-D9	2.365	41739	188428	0.2215	10.2417
THC	THC-D3	5.892	18096	177448	0.1020	9.6914

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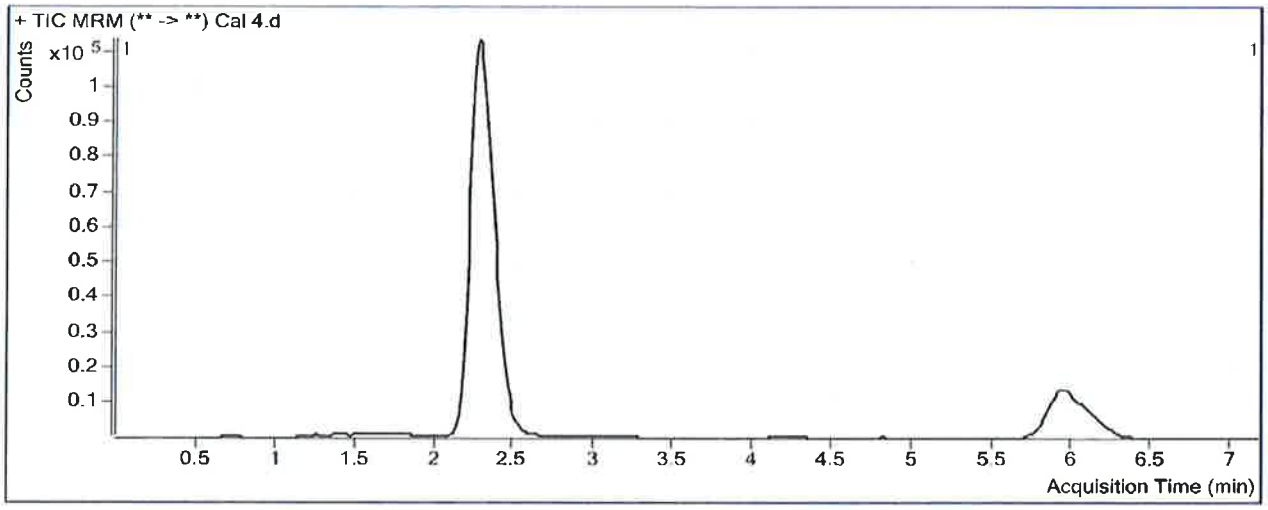
TS P

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 12:37	**Data File**	Cal 4.d
Sample Type	Calibration	**Sample Name**	Cal 4
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-D5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.279	164642	660692	0.2492	22.2333
THC-COOH	THC-COOH-D9	2.379	90060	188567	0.4776	21.7214
THC	THC-D3	5.959	44659	176187	0.2535	23.0803

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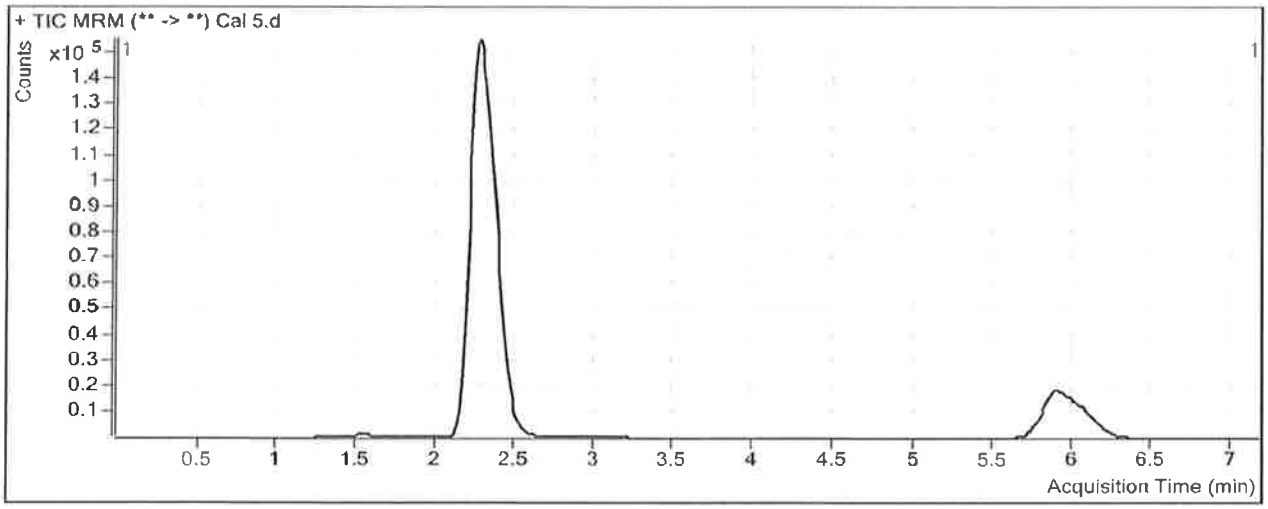
Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 12:49	**Data File**	Cal 5.d
Sample Type	Calibration	**Sample Name**	Cal 5
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-E5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.265	389462	718853	0.5418	47.2527
THC-COOH	THC-COOH-D9	2.365	211946	204199	1.0379	46.8391
THC	THC-D3	5.905	97921	195297	0.5014	44.9909

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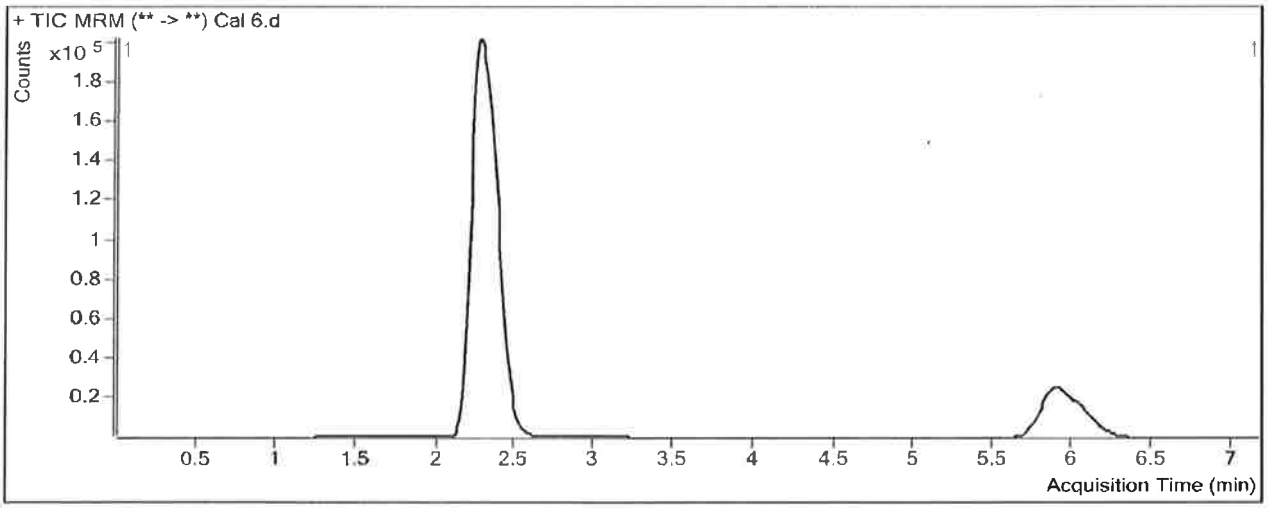
Cannabinoids Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 13:01	**Data File**	Cal 6.d
Sample Type	Calibration	**Sample Name**	Cal 6
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-F5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.265	757654	679361	1.1152	96.2901
THC-COOH	THC-COOH-D9	2.365	397144	190919	2.0802	93.5583
THC	THC-D3	5.905	191474	179490	1.0668	94.9563

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Cannabinoids Analysis Report

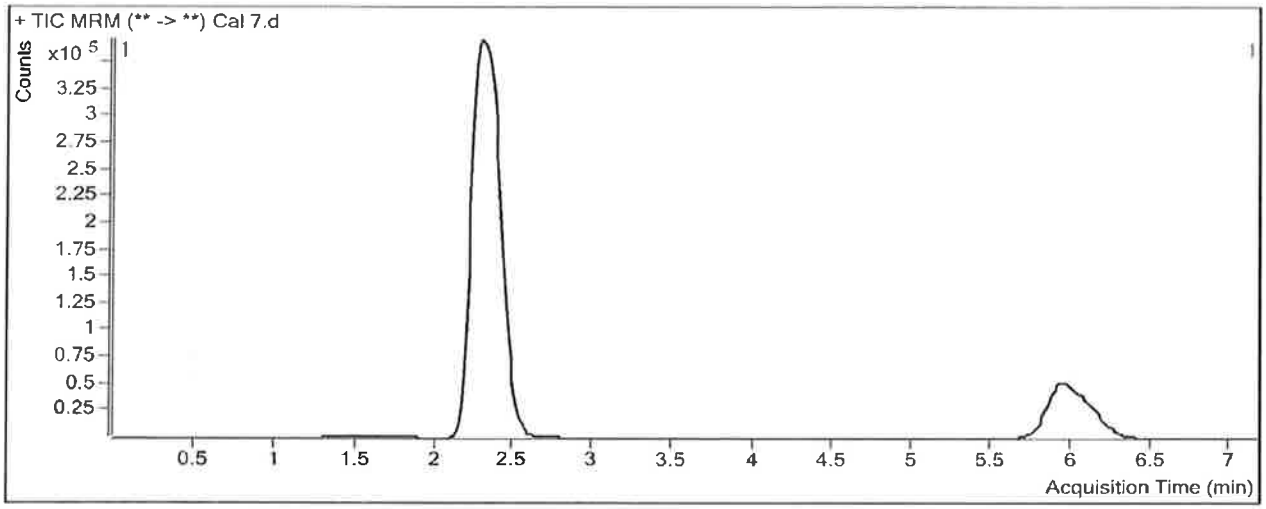
15 D

Batch Data Path	C:\MassHunter\Data\2018\THC Quant\053118 THC Quant TS SP Worklist 2435 2436\QuantResults\053118 TH		
Analysis Time	6/1/2018 8:05 AM	**Analyst Name**	ISPUser
Report Time	6/1/2018 8:08 AM	**Reporter Name**	ISPUser
Last Calib Update	6/1/2018 8:05 AM	**Batch State**	Processed

Analysis Info

Acq Time	2018-05-31 13:13	**Data File**	Cal 7.d
Sample Type	Calibration	**Sample Name**	Cal 7
Dilution	1	**Acq Method**	THC Quant 051517 workingmm.m
Position	P1-G5	**Sample Info**	
Inj Vol	-1	**Comment**	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	THC-OH-D3	2.279	1983678	657440	3.0173	258.9352
THC-COOH	THC-COOH-D9	2.379	1025598	175883	5.8311	261.7005
THC	THC-D3	5.945	517026	175231	2.9505	261.4379