

**Idaho State Police
Forensic Services
Toxicology Discipline**

Request for Departure from an Analytical Method

Date of Request

10/06/2016

Forensic Scientist

Celena Shrum

Analytical Method

Toxicology AM #13 (LCMS-QQQ Benzodiazepines) and

Toxicology AM #14 (LCMS-QQQ Cannabinoids)

Request

I am requesting permission to report any drugs found in the samples without including the pre-sample blanks. The blanks are intended to demonstrate that no carryover occurred. However, at the levels typically seen in casework, carryover is not a concern. If any case sample directly preceding another case is above the highest calibrator for that method, the sample will be reinjected and a blank will be run prior to the injection. Blanks are run after the highest calibrator and at the end of the run and if there is no carryover noted in either of these, the blanks before the samples are unnecessary.

Supervisor Review

This has been evaluated as a minor deviation. No instances of contamination or carryover have been observed in blanks since the method was implemented and in the validation. The deviation is approved with the following exception, if a sample follows a sample that has a response greater than the highest calibrator for that compound (for example 100 ng THC or 500 ng C-THC) That sample must be re-extracted and run again.

Departure approved

Comments:

Departure Not Approved

Comments:





















Rachel Cutler
Laboratory Manager

Date: 10/6/16

B. Wylie

Worklist: 1308

| <u>LAB_CASE</u> | <u>ITEM</u> | <u>TASK_ID</u> | <u>DESCRIPTION</u> | |
|-----------------|-------------|----------------|--------------------------------|--|
| M2014-1222 | 1.1 | 66323 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1176 | 1 | 66325 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1191 | 1.2 | 66327 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1283 | 1 | 66328 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1289 | 2 | 65361 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1311 | 5 | 65362 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1419 | 1 | 66329 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1546 | 1 | 66331 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1730 | 1.1 | 66332 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1796 | 1 | 66333 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1853 | 2 | 66334 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-1876 | 2 | 66335 | 6.1.2 Blood Cannabinoids by LC |  |
| M2016-2022 | 2 | 66337 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0676 | 2 | 65363 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0774 | 1 | 65367 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0780 | 1 | 66338 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0781 | 1 | 65369 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0824 | 1.1 | 66340 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0838 | 1.1 | 66341 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0839 | 1.1 | 66342 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0882 | 1.1 | 66343 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0895 | 1.1 | 66344 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-0902 | 1 | 65370 | 6.1.2 Blood Cannabinoids by LC |  |

Worklist: 1308

| <u>LAB CASE</u> | <u>ITEM</u> | <u>TASK ID</u> | <u>DESCRIPTION</u> | |
|-----------------|-------------|----------------|--------------------------------|--|
| P2016-0938 | 1 | 66346 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1030 | 1 | 66348 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1052 | 1 | 66350 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1054 | 1.1 | 66355 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1073 | 1.1 | 66360 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1085 | 1.1 | 66361 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1086 | 1.1 | 66362 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1087 | 1 | 66364 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1118 | 1 | 66365 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1189 | 1 | 66367 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1190 | 1 | 66368 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1278 | 1 | 66369 | 6.1.2 Blood Cannabinoids by LC |  |
| P2016-1776 | 1 | 66371 | 6.1.2 Blood Cannabinoids by LC |  |

Worklist Report

| | |
|----------------|--|
| Worklist Path: | C:\MassHunter\ISP Methods\worklists\CS CANN 100416.wkl |
| Date Modified: | 10/04/2016 04:54:00 PM |
| Date Printed: | 10/04/2016 04:54:16 PM |

Worklist Run Parameters

| | |
|-----------------------------------|---|
| Operator Name: | 62340 |
| Run Type: | Standard Start |
| Part of Method to Run: | Acquisition Only |
| Execution for Acquisition-DA: | Synchronous |
| Acquisition Method Path: | C:\MassHunter\ISP Methods\Acquisition |
| DA Method Path: | D:\MassHunter\methods |
| Data File Path: | C:\MassHunter\Data\2016\CANN\100416 CANN CS |
| Pre-Worklist Script: | --- |
| Post-Worklist Script: | SCP_InstrumentStandby(){MH_Acq_Scripts.exe} |
| Acquisition Clean Up Script: | --- |
| Overlapped Injection: | No |
| Clear sample selection after run: | Yes |
| Wait Time for Ready(Min): | 10 |
| Threshold Disk Value(GB): | 10 |
| Comment: | --- |

Plate Barcode Information

| Plate | Barcode |
|-------|---------|
| P1 | |
| P2 | |

Worklist Table

| Sample Position | Sample Name | Method | Data File | Sample Type | Level Name | Comment | Info. |
|-----------------|-------------------|--------------------------------------|---------------|-------------|------------|--------------------------------|-------------------------------------|
| P2-A1 | Blank | isp blood cannabinoids Poky 2016-1.m | Blank1-r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-A1 | Blank | isp blood cannabinoids Poky 2016-1.m | Blank2-r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-A2 | Blood: 1_5 ng/mL | isp blood cannabinoids Poky 2016-1.m | B_CAL1-r001.d | Calibration | 1 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @5ng/mL, all others @1 ng/mL |
| P2-A3 | Blood: 2_10 ng/mL | isp blood cannabinoids Poky 2016-1.m | B_CAL2_r001.d | Calibration | 2 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @10ng/mL, all others @2 ng/mL |
| P2-A4 | | | B_CAL3_r001.d | Calibration | 3 | | |

| Sample Position | Sample Name | Method | Data File | Sample Type | Level Name | Comment | Info. |
|-----------------|------------------------|--------------------------------------|-------------------------|-------------|------------|--------------------------------|--|
| | Blood: 5_25 ngmL | isp blood cannabinoids Poky 2016-1.m | | | | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @25ng/mL, all others @5 ng/mL |
| P2-A5 | Blood: 10_50 ngmL | isp blood cannabinoids Poky 2016-1.m | B_CAL4_r001.d | Calibration | 4 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @50ng/mL, all others @10 ng/mL |
| P2-A6 | Blood: 25_125 ngmL | isp blood cannabinoids Poky 2016-1.m | B_CAL5_r001.d | Calibration | 5 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @125ng/mL, all others @25 ng/mL |
| P2-A7 | Blood: 50_250 ngmL | isp blood cannabinoids Poky 2016-1.m | B_CAL6_r001.d | Calibration | 6 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @250ng/mL, all others @50 ng/mL |
| P2-A8 | Blood: 100_500 ngmL | isp blood cannabinoids Poky 2016-1.m | B_CAL7_r001.d | Calibration | 7 | AM 6.1.2 Cannabinoids by LCQQQ | c-THC @500ng/mL, all others @100 ng/mL |
| P2-A1 | Blank | isp blood cannabinoids Poky 2016-1.m | Carryover blank1_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-A9 | Blood Negative Control | isp blood cannabinoids Poky 2016-1.m | B-NC-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Negative Blood UTAK Lot B1013 |
| P2-B1 | Blood PC 1 | isp blood cannabinoids Poky 2016-1.m | B-POS Ctrl 1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Positive Control-UTAK B1013 + WS060716 |
| P2-A1 | Blank | isp blood cannabinoids Poky 2016-1.m | Carryover blank2_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-A9 | Blank C2016-0727-1 | isp blood cannabinoids Poky 2016-1.m | C2016-0727-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B2 | C2016-0727-1 | isp blood cannabinoids Poky 2016-1.m | C2016-0727-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank M2016-1176-1 | isp blood cannabinoids Poky 2016-1.m | M2016-1176-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B4 | M2016-1176-1 | isp blood cannabinoids Poky 2016-1.m | M2016-1176-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank M2016-1283-1 | isp blood cannabinoids Poky 2016-1.m | M2016-1283-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |

| Sample Position | Sample Name | Method | Data File | Sample Type | Level Name | Comment | Info. |
|-----------------|--------------------|--------------------------------------|-------------------------|-------------|------------|--------------------------------|-------|
| P2-B5 | M2016-1283-1 | isp blood cannabinoids Poky 2016-1.m | M2016-1283-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank M2016-1289-2 | isp blood cannabinoids Poky 2016-1.m | M2016-1289-2_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B6 | M2016-1289-2 | isp blood cannabinoids Poky 2016-1.m | M2016-1289-2-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank M2016-1311-5 | isp blood cannabinoids Poky 2016-1.m | M2016-1311-5_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B7 | M2016-1311-5 | isp blood cannabinoids Poky 2016-1.m | M2016-1311-5-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0676-2 | isp blood cannabinoids Poky 2016-1.m | P2016-0676-2_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B8 | P2016-0676-2 | isp blood cannabinoids Poky 2016-1.m | P2016-0676-2-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0774-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0774-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-B9 | P2016-0774-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0774-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0780-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0780-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-C1 | P2016-0780-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0780-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0781-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0781-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-C2 | P2016-0781-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0781-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0888-2 | isp blood cannabinoids Poky 2016-1.m | P2016-0888-2_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |

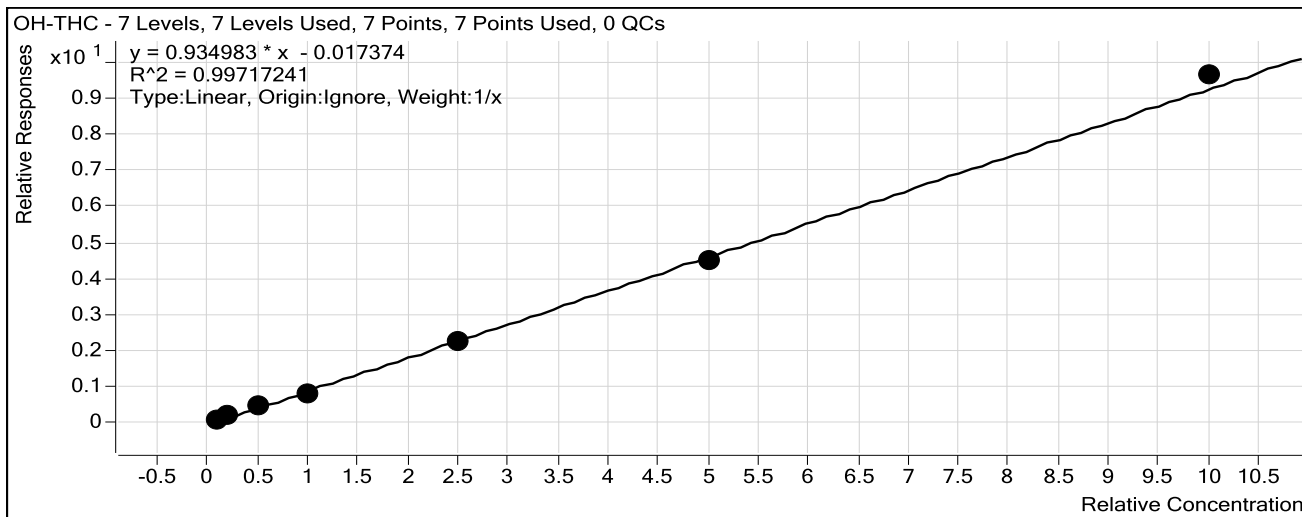
| Sample Position | Sample Name | Method | Data File | Sample Type | Level Name | Comment | Info. |
|-----------------|--------------------|--------------------------------------|-------------------------|-------------|------------|--------------------------------|-------|
| P2-E5 | P2016-0824-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0824-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0838-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0838-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-E6 | P2016-0838-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0838-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0839-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0839-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-E7 | P2016-0839-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0839-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0882-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0882-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-E8 | P2016-0882-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0882-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-0895-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0895-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-E9 | P2016-0895-1 | isp blood cannabinoids Poky 2016-1.m | P2016-0895-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-1054-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1054-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-F1 | P2016-1054-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1054-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-1073-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1073-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-F2 | P2016-1073-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1073-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-1085-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1085-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| | | | | | | | |

| Sample Position | Sample Name | Method | Data File | Sample Type | Level Name | Comment | Info. |
|-----------------|--------------------|--------------------------------------|-------------------------|-------------|------------|--------------------------------|-------|
| P2-F3 | P2016-1085-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1085-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A9 | Blank P2016-1086-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1086-1_BLK_r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | |
| P2-F4 | P2016-1086-1 | isp blood cannabinoids Poky 2016-1.m | P2016-1086-1-r001.d | Sample | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |
| P2-A1 | Blank | isp blood cannabinoids Poky 2016-1.m | Blank3-r001.d | Blank | | AM 6.1.2 Cannabinoids by LCQQQ | Blood |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Last Calib Update 10/6/2016 11:42 AM **Analyst Name** ISP TOX

Target Compound OH-THC
Internal Standard OH-THC-d3

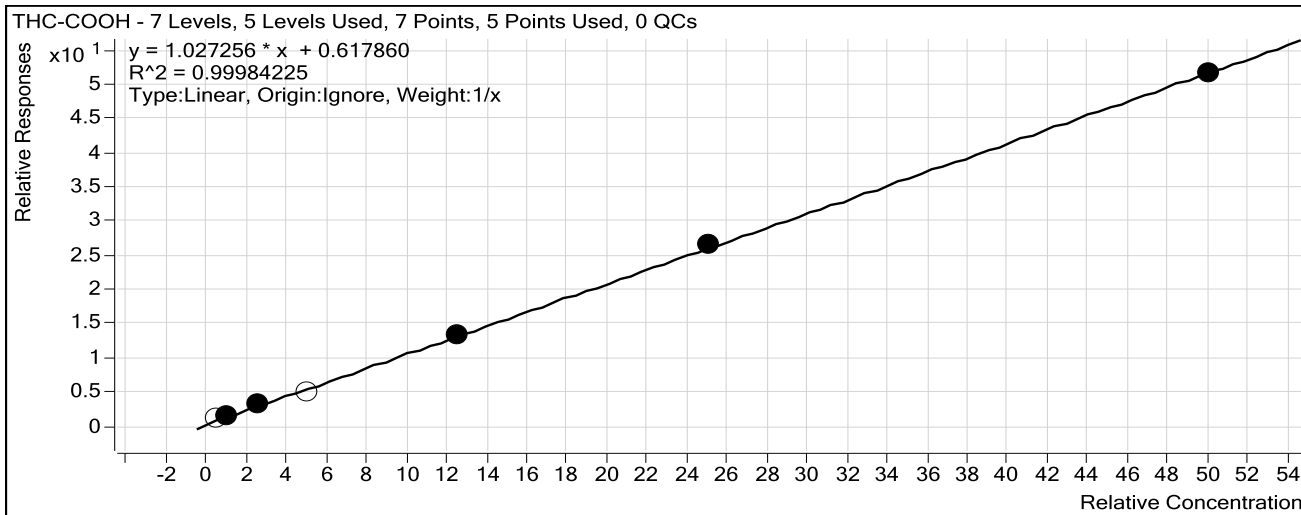


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|----------------------|-------|-------------------------------------|----------|------------|----------|
| Blood: 1_5 ng/mL | 1 | <input checked="" type="checkbox"/> | 1 | 1.2 | 116.0 |
| Blood: 2_10 ng/mL | 2 | <input checked="" type="checkbox"/> | 2 | 2.1 | 103.3 |
| Blood: 5_25 ng/mL | 3 | <input checked="" type="checkbox"/> | 5 | 4.9 | 98.6 |
| Blood: 10_50 ng/mL | 4 | <input checked="" type="checkbox"/> | 10 | 8.3 | 83.4 |
| Blood: 25_125 ng/mL | 5 | <input checked="" type="checkbox"/> | 25 | 24.6 | 98.2 |
| Blood: 50_250 ng/mL | 6 | <input checked="" type="checkbox"/> | 50 | 48.5 | 97.0 |
| Blood: 100_500 ng/mL | 7 | <input checked="" type="checkbox"/> | 100 | 103.4 | 103.4 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Last Calib Update 10/6/2016 11:42 AM **Analyst Name** ISP TOX

Target Compound *THC-COOH*
Internal Standard *THC-COOH-d3*

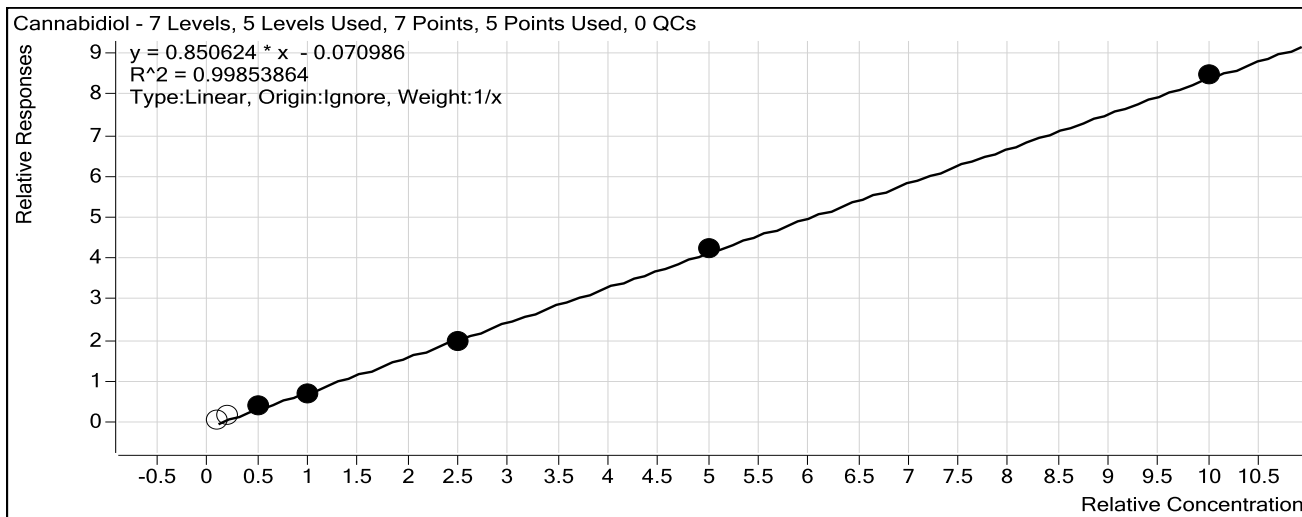


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|----------------------|-------|-------------------------------------|----------|------------|----------|
| Blood: 1_5 ng/mL | 1 | <input type="checkbox"/> | 5 | 7.5 | 149.5 |
| Blood: 2_10 ng/mL | 2 | <input checked="" type="checkbox"/> | 10 | 9.6 | 95.9 |
| Blood: 5_25 ng/mL | 3 | <input checked="" type="checkbox"/> | 25 | 25.9 | 103.5 |
| Blood: 10_50 ng/mL | 4 | <input type="checkbox"/> | 50 | 42.7 | 85.4 |
| Blood: 25_125 ng/mL | 5 | <input checked="" type="checkbox"/> | 125 | 125.0 | 100.0 |
| Blood: 50_250 ng/mL | 6 | <input checked="" type="checkbox"/> | 250 | 253.3 | 101.3 |
| Blood: 100_500 ng/mL | 7 | <input checked="" type="checkbox"/> | 500 | 496.3 | 99.3 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Last Calib Update 10/6/2016 11:42 AM **Analyst Name** ISP TOX

Target Compound *Cannabidiol*
Internal Standard *Cannabidiol-d3*



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|----------------------|-------|-------------------------------------|----------|------------|----------|
| Blood: 1_5 ng/mL | 1 | <input type="checkbox"/> | 1 | 1.7 | 173.4 |
| Blood: 2_10 ng/mL | 2 | <input type="checkbox"/> | 2 | 2.6 | 132.3 |
| Blood: 5_25 ng/mL | 3 | <input checked="" type="checkbox"/> | 5 | 5.5 | 110.5 |
| Blood: 10_50 ng/mL | 4 | <input checked="" type="checkbox"/> | 10 | 9.0 | 90.3 |
| Blood: 25_125 ng/mL | 5 | <input checked="" type="checkbox"/> | 25 | 24.3 | 97.3 |
| Blood: 50_250 ng/mL | 6 | <input checked="" type="checkbox"/> | 50 | 50.8 | 101.5 |
| Blood: 100_500 ng/mL | 7 | <input checked="" type="checkbox"/> | 100 | 100.3 | 100.3 |

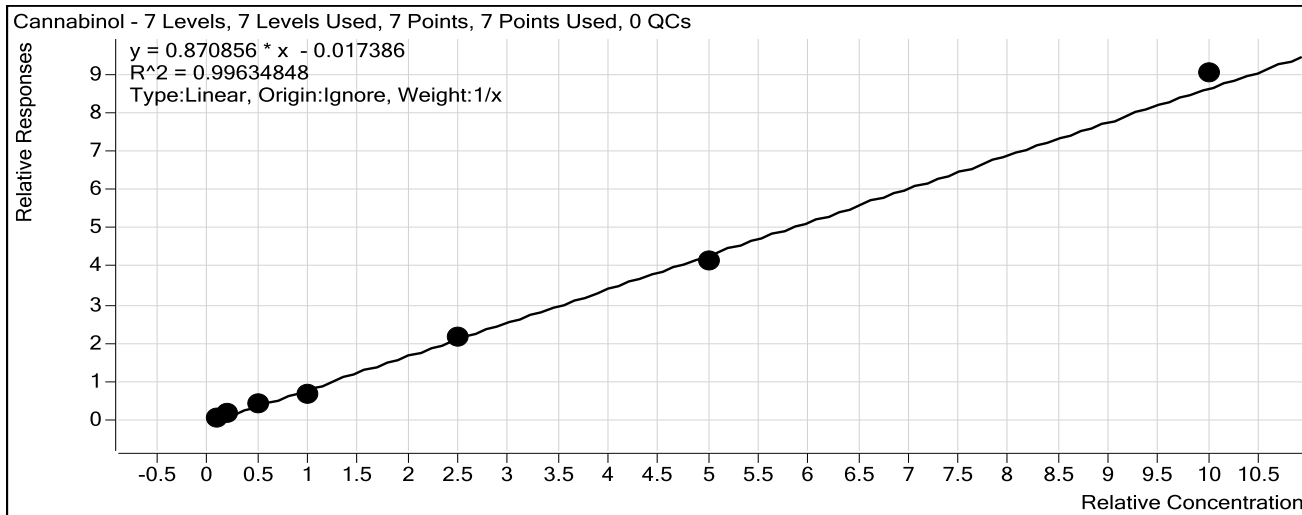
ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416
Cannabinoids.batch.bin

Last Calib Update 10/6/2016 11:42 AM **Analyst Name** ISP TOX

Target Compound *Cannabinol*
Internal Standard *Cannabinol-d3*

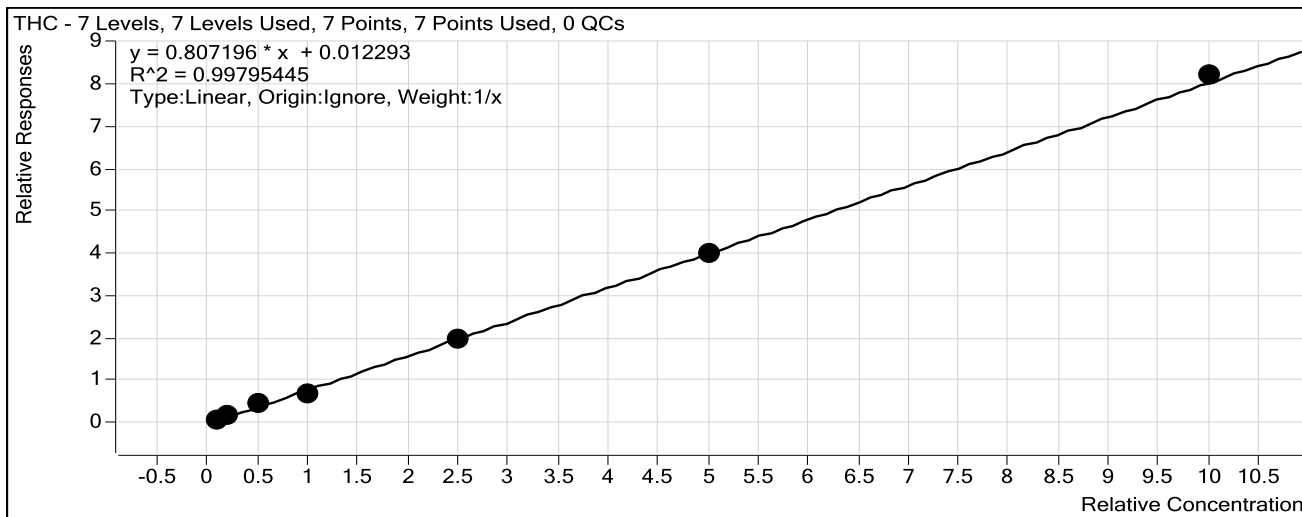


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|----------------------|-------|-------------------------------------|----------|------------|----------|
| Blood: 1_5 ng/mL | 1 | <input checked="" type="checkbox"/> | 1 | 1.2 | 115.5 |
| Blood: 2_10 ng/mL | 2 | <input checked="" type="checkbox"/> | 2 | 2.1 | 103.0 |
| Blood: 5_25 ng/mL | 3 | <input checked="" type="checkbox"/> | 5 | 5.0 | 99.7 |
| Blood: 10_50 ng/mL | 4 | <input checked="" type="checkbox"/> | 10 | 8.2 | 81.9 |
| Blood: 25_125 ng/mL | 5 | <input checked="" type="checkbox"/> | 25 | 25.2 | 101.0 |
| Blood: 50_250 ng/mL | 6 | <input checked="" type="checkbox"/> | 50 | 47.6 | 95.2 |
| Blood: 100_500 ng/mL | 7 | <input checked="" type="checkbox"/> | 100 | 103.8 | 103.8 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Last Calib Update 10/6/2016 11:42 AM **Analyst Name** ISP TOX

Target Compound *THC*
Internal Standard *THC-d3*



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|----------------------|-------|-------------------------------------|----------|------------|----------|
| Blood: 1_5 ng/mL | 1 | <input checked="" type="checkbox"/> | 1 | 0.9 | 91.7 |
| Blood: 2_10 ng/mL | 2 | <input checked="" type="checkbox"/> | 2 | 2.4 | 117.8 |
| Blood: 5_25 ng/mL | 3 | <input checked="" type="checkbox"/> | 5 | 5.3 | 105.9 |
| Blood: 10_50 ng/mL | 4 | <input checked="" type="checkbox"/> | 10 | 8.5 | 85.0 |
| Blood: 25_125 ng/mL | 5 | <input checked="" type="checkbox"/> | 25 | 24.6 | 98.5 |
| Blood: 50_250 ng/mL | 6 | <input checked="" type="checkbox"/> | 50 | 49.8 | 99.6 |
| Blood: 100_500 ng/mL | 7 | <input checked="" type="checkbox"/> | 100 | 101.5 | 101.5 |

ISP FORENSICS

Pocatello

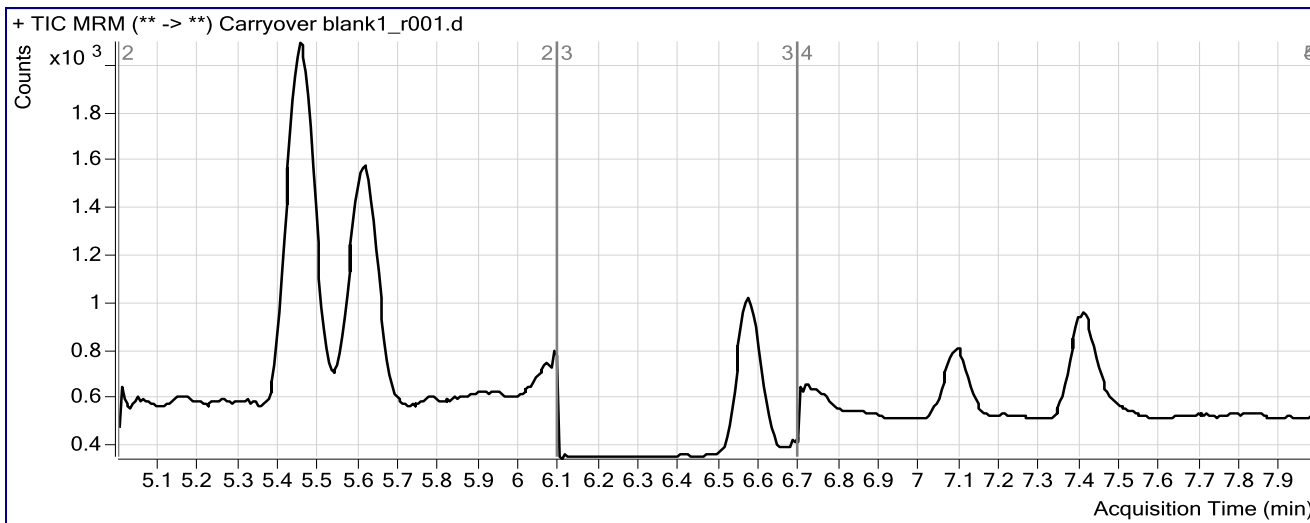
Cannabinoid Analysis Report

| | | | |
|--------------------------|--|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin | | |
| Analysis Time | 10/6/2016 11:42 AM | Analyst Name | ISPUser |
| Report Time | 10/6/2016 11:47 AM | Reporter Name | ISPUser |
| Last Calib Update | 10/6/2016 11:42 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|--------------------------------------|
| Acq Time | 2016-10-04 17:55 | Data File | Carryover blank1_r001.d |
| Sample Type | Blank | Sample Name | Blank |
| Dilution | 1 | Acq Method | isp blood cannabinoids Poky 2016-1.m |
| Position | P2-A1 | Sample Info | |
| Inj Vol | -1 | Comment | AM 6.1.2 Cannabinoids by LCQQQ |

Sample Chromatogram



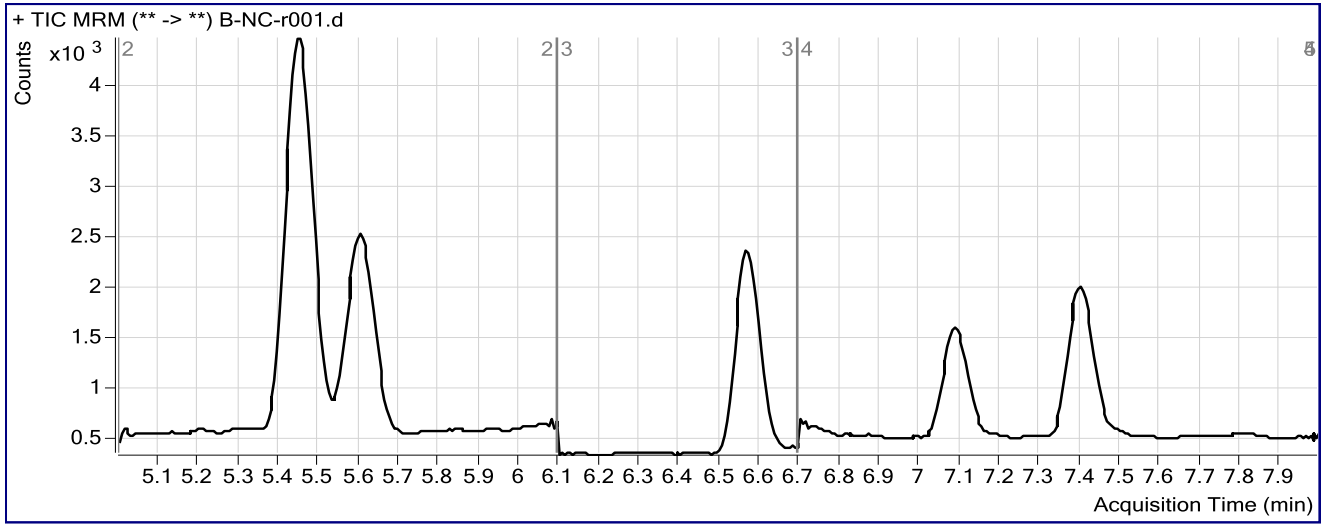
ISP FORENSICS Pocatello Cannabinoid Analysis Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Analysis Time 10/6/2016 11:42 AM **Analyst Name** ISPUser
Report Time 10/6/2016 11:47 AM **Reporter Name** ISPUser
Last Calib Update 10/6/2016 11:42 AM **Batch State** Processed

Analysis Info

Acq Time 2016-10-04 18:09 **Data File** B-NC-r001.d
Sample Type Sample **Sample Name** Blood Negative Control
Dilution 1 **Acq Method** isp blood cannabinoids Poky 2016-1.m
Position P2-A9 **Sample Info** Negative Blood UTAK Lot B1013
Inj Vol -1 **Comment** AM 6.1.2 Cannabinoids by LCQQQ

Sample Chromatogram



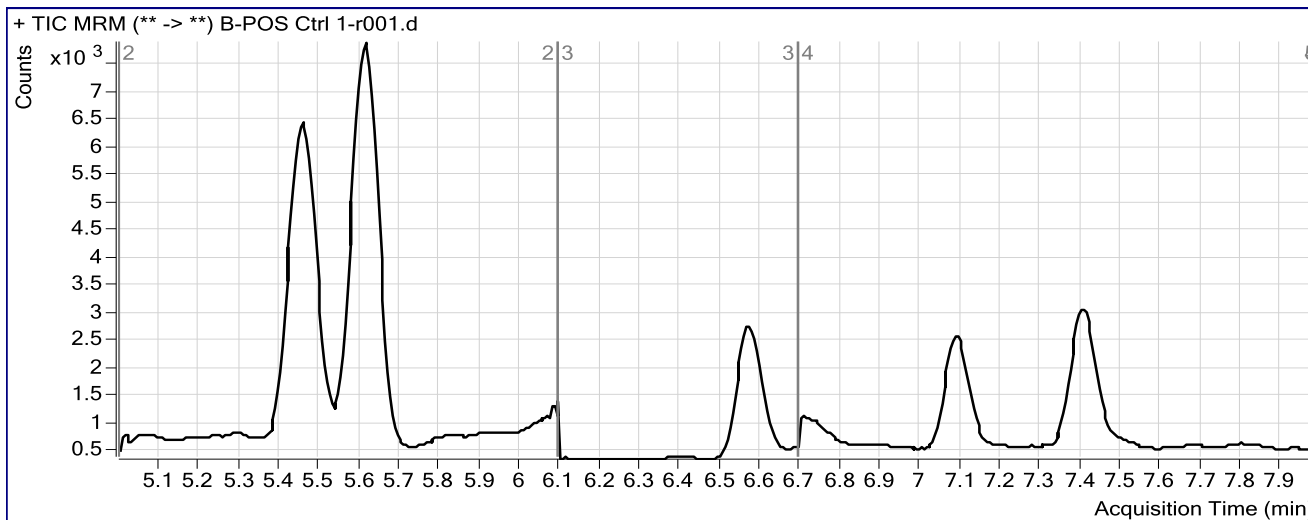
ISP FORENSICS Pocatello Cannabinoid Analysis Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Analysis Time 10/6/2016 11:42 AM **Analyst Name** ISPUser
Report Time 10/6/2016 11:47 AM **Reporter Name** ISPUser
Last Calib Update 10/6/2016 11:42 AM **Batch State** Processed

Analysis Info

Acq Time 2016-10-04 18:22 **Data File** B-POS Ctrl 1-r001.d
Sample Type Sample **Sample Name** Blood PC 1
Dilution 1 **Acq Method** isp blood cannabinoids Poky 2016-1.m
Position P2-B1 **Sample Info** Positive Control- UTAK B1013 + WS060716
Inj Vol -1 **Comment** AM 6.1.2 Cannabinoids by LCQQQ

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|------------|---------------|-------|----------|-----------|------------|------------|
| THC-COOH | THC-COOH-d3 | 5.620 | 11943 | 5460 | 2.1875 | 15.2795 |
| Cannabinol | Cannabinol-d3 | 7.097 | 1640 | 5025 | 0.3264 | 3.9477 |
| THC | THC-d3 | 7.408 | 1029 | 3973 | 0.2590 | 3.0566 |

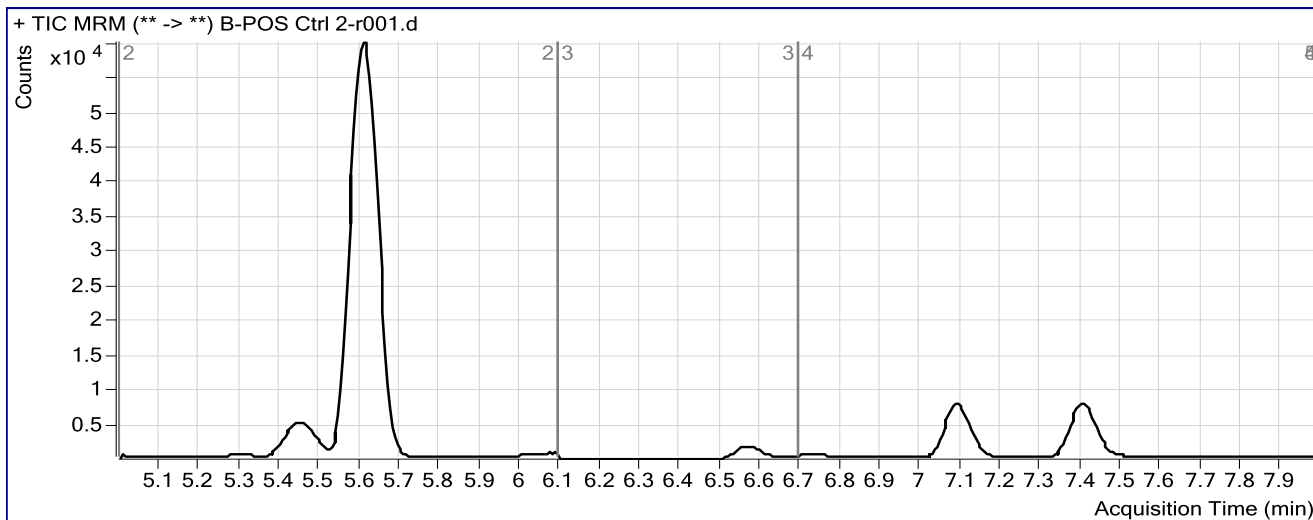
ISP FORENSICS Pocatello Cannabinoid Analysis Report

Batch Data Path C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin
Analysis Time 10/6/2016 11:42 AM **Analyst Name** ISPUser
Report Time 10/6/2016 11:51 AM **Reporter Name** ISPUser
Last Calib Update 10/6/2016 11:42 AM **Batch State** Processed

Analysis Info

Acq Time 2016-10-05 03:13 **Data File** B-POS Ctrl 2-r001.d
Sample Type Sample **Sample Name** Blood PC 2
Dilution 1 **Acq Method** isp blood cannabinoids Poky 2016-1.m
Position P2-F5 **Sample Info** Positive Control- UTAK B1013 + WS060716
Inj Vol -1 **Comment** AM 6.1.2 Cannabinoids by LCQQQ

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|------------|---------------|-------|----------|-----------|------------|------------|
| THC-COOH | THC-COOH-d3 | 5.614 | 127875 | 4665 | 27.4102 | 260.8148 |
| Cannabinol | Cannabinol-d3 | 7.091 | 21020 | 3631 | 5.7891 | 66.6762 |
| THC | THC-d3 | 7.402 | 11186 | 2674 | 4.1835 | 51.6752 |

ISP FORENSICS

Pocatello

Cannabinoid Analysis Report

| | | | |
|--------------------------|--|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2016\CANN\100416 CANN CS\QuantResults\100416 Cannabinoids.batch.bin | | |
| Analysis Time | 10/6/2016 11:42 AM | Analyst Name | ISPUser |
| Report Time | 10/6/2016 11:55 AM | Reporter Name | ISPUser |
| Last Calib Update | 10/6/2016 11:42 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|--------------------------------------|
| Acq Time | 2016-10-05 12:04 | Data File | Blank3-r001.d |
| Sample Type | Blank | Sample Name | Blank |
| Dilution | 1 | Acq Method | isp blood cannabinoids Poky 2016-1.m |
| Position | P2-A1 | Sample Info | Blood |
| Inj Vol | -1 | Comment | AM 6.1.2 Cannabinoids by LCQQQ |

Sample Chromatogram

