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CLIENT INFORMATION: Coroner's Office
 789 Main Street
 Pearl, MT 33333
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Investigator: Norma Williams
County, State: Marion, MT
Pathologist: Dr. Smith
Agency Case #: 18-02A

Subject: Robert Smith
Date of Death: 2/16/2018
Age: 47
Gender: M

Date Received: 2/16/2018
Date Reported: 2/27/2018

LABORATORY CASE #: 106000

SAMPLES RECEIVED			
Type (Source/Tube)	Lab Specimen #	Collected	Testing Performed
Blood (femoral/red)	20000	2/16/2018	Drugs & Alcohols
Blood (heart/red)	20001	2/16/2018	Not Tested

POSITIVE RESULTS SUMMARY	
Specimen:	20000
Compound	Result
Morphine	265 ng/mL
Cotinine	Positive
Hydrocodone	34 ng/mL
Caffeine	Positive
Citalopram	426 ng/mL

COMPREHENSIVE RESULTS			
Specimen:	20000	Sample Type:	Blood
Compound	Result	Concentration	Units
Volatile Alcohols			
Acetone	Negative		
Ethanol	Negative		
Isopropanol	Negative		
Methanol	Negative		
Amphetamines			
Amphetamine	Negative		
BDB	Negative		
MDA	Negative		
MDEA	Negative		
MDMA	Negative		
Methamphetamine	Negative		
PMA	Negative		
PPA (norephedrine)	Negative		
Analgesics			
Acetaminophen	Negative		
Ibuprofen	Negative		
Indomethacin	Negative		
Ketoprofen	Negative		
Meloxicam	Negative		
Mexilitene	Negative		
Naproxen	Negative		
Pentazocine	Negative		
Piroxicam	Negative		
Pregabalin	Negative		
Salicylic Acid	Negative		
Anticonvulsants			
10-OH-Carbazepine	Negative		
Carbamazepine Epoxide	Negative		
Carbamazepine	Negative		
Ethosuximide	Negative		
Felbamate	Negative		
Gabapentin	Negative		
Lamotrigine	Negative		
Levetiracetam	Negative		
Oxcarbazepine	Negative		
Phenytoin	Negative		
Primidone	Negative		
Tiagabine	Negative		
Tizanidine	Negative		
Topiramate	Negative		
Valproic Acid	Negative		
Zonisamide	Negative		

Compound	Result	Concentration	Units
Antidepressants			
Amitriptyline	Negative		
Amoxapine	Negative		
Bupropion	Negative		
Citalopram/Escitalopram	POSITIVE	426	ng/mL
Comment: Steady-state serum concentrations associated with therapeutic use of Citalopram range from 50 - 110 ng/mL. Toxicity may be observed at concentrations >220 ng/mL. Citalopram (Celexa) and Escitalopram (Lexapro) are structural isomers and are indistinguishable in our testing methodology.			
Clomipramine	Negative		
Desipramine	Negative		
Desmethylclomipramine	Negative		
Dothepin	Negative		
Doxepin	Negative		
Duloxetine	Negative		
Escitalopram	Negative		
Fluvoxamine	Negative		
Fluoxetine	Negative		
Imipramine	Negative		
Maprotiline	Negative		
mCPP	Negative		
Mianserin	Negative		
Milnacipran	Negative		
Mirtazepine	Negative		
Nefazodone	Negative		
Nordoxepin	Negative		
Norfluoxetine	Negative		
Norsertaline	Negative		
Nortriptyline	Negative		
Desmethylvenlafaxine	Negative		
Paroxetine	Negative		
Protriptyline	Negative		
Sertraline	Negative		
Trazodone	Negative		
Trimipramine	Negative		
Venlafaxine	Negative		
Antihistamines			
Brompheniramine	Negative		
Chlorpheniramine	Negative		
Cyclizine	Negative		
Diphenhydramine	Negative		
Doxylamine	Negative		
Hydroxyzine	Negative		
Tetrahydrolyzine	Negative		
Antipsychotics			
Aripiprazole	Negative		
Buspirone	Negative		
Chlorpromazine	Negative		
Clozapine	Negative		
Fluphenazine	Negative		
Haloperidol	Negative		
Mesoridazine	Negative		
Norclozapine	Negative		
Olanzapine	Negative		

Compound	Result	Concentration	Units
Antipsychotics (cont.)			
Paliperidone	Negative		
Perphenazine	Negative		
Prochloroperazine	Negative		
Quetiapine	Negative		
Risperidone	Negative		
Thioridazine	Negative		
Trifluoperazine	Negative		
Ziprasidone	Negative		
Barbiturates			
Amobarbital	Negative		
Butabarbital	Negative		
Butalbital	Negative		
Pentobarbital	Negative		
Phenobarbital	Negative		
Secobarbital	Negative		
Benzodiazepines			
Hydroxyethylflurazepam	Negative		
7-Aminoclonazepam	Negative		
Alpha-Hydroxytriazolam	Negative		
Alprazolam	Negative		
Chlordiazepoxide	Negative		
Clonazepam	Negative		
Desalkylflurazepam	Negative		
Diazepam	Negative		
Estazolam	Negative		
Flurazepam	Negative		
Lorazepam	Negative		
Lormetazepam	Negative		
Nordiazepam	Negative		
Oxazepam	Negative		
Temazepam	Negative		
Triazolam	Negative		
Cannabinoids (Natural)			
THC	Negative		
THC-COOH	Negative		
Cannabinoids (Synthetic)			
HU-210	Negative		
JWH-018	Negative		
JWH-073	Negative		
JWH-250	Negative		
Cathinones (Bath Salts)			
Alpha PVP	Negative		
Cathinone	Negative		
MDPV	Negative		
Mephedrone	Negative		
Methcathinone	Negative		
Methedrone	Negative		
Methylone	Negative		

Compound	Result	Concentration	Units
Cocaine			
Benzoylcegonine	Negative		
Cocaethylene	Negative		
Cocaine	Negative		
Fentanyl Class			
Acetylfentanyl	Negative		
Alfentanil	Negative		
Carfentanil	Negative		
Fentanyl	Negative		
Methylfentanyl	Negative		
Norfentanyl	Negative		
Remifentanil	Negative		
Sufentanil	Negative		
Hallucinogens			
25I-NBOMe	Negative		
2C-T-7	Negative		
Ketamine	Negative		
LSD	Negative		
Norketamine	Negative		
PCP	Negative		
Methadone			
EDDP	Negative		
Methadone	Negative		
Miscellaneous			
Bupivacaine	Negative		
Cyclobenzaprine	Negative		
Dextromethorphan	Negative		
Guaifenesin	Negative		
Levamisole	Negative		
Lidocaine	Negative		
Mepivacaine	Negative		
Metaxolone	Negative		
Naloxone	Negative		
Naltrexone	Negative		
Opioid/Narcotic Analgesics			
6-MAM	Negative		
Buprenorphine	Negative		
Butorphanol	Negative		
Codeine	Negative		
Desomorphine	Negative		
Dihydrocodeine	Negative		
Hydrocodone	POSITIVE	34	ng/mL
Comment: Blood concentrations following therapeutic use of Hydrocodone generally range from 10 - 50 ng/mL. During chronic use, tolerance should be considered when interpreting the blood concentrations of this drug.			
Hydromorphone	Negative		
Levorphanol	Negative		
Meperidine	Negative		
Morphine	POSITIVE	265	ng/mL
Comment: Blood concentrations following therapeutic use of Morphine generally range from 10 - 100 ng/mL. During chronic use, tolerance should be considered when interpreting the blood concentrations of this drug.			
Nalbuphine	Negative		

Compound	Result	Concentration	Units
Opioid/Narcotic Analgesics (cont)			
Norbuprenorphine	Negative		
Norhydrocodone	Negative		
Normeperidine	Negative		
Norpropoxyphene	Negative		
Desmethyltramadol	Negative		
Oxycodone	Negative		
Oxymorphone	Negative		
Propoxyphene	Negative		
Tapentadol	Negative		
Thebaine	Negative		
Tramadol	Negative		
Sedatives/Hypnotics			
7-Aminoflunitrazepam	Negative		
Carisoprodol	Negative		
Desmethylflunitrazepam	Negative		
Droperidol	Negative		
Flunitrazepam	Negative		
Glutethimide	Negative		
Meprobamate	Negative		
Methaqualone	Negative		
Midazolam	Negative		
Orphenadrine	Negative		
Promethazine	Negative		
Ramelteon	Negative		
Zaleplon	Negative		
Zolpidem	Negative		
Zopiclone	Negative		
Stimulants			
Atomoxetine	Negative		
BZP	Negative		
Caffeine	POSITIVE	N/A - qualitative	
Cotinine	POSITIVE	N/A - qualitative	
Ephedrine	Negative		
Methylphenidate	Negative		
Mitragynine	Negative		
Nicotine	Negative		
Phentermine	Negative		
Pseudoephedrine	Negative		
Ritalinic Acid	Negative		
TFMPP	Negative		



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 Reviewing Toxicologist