SAN DIEGO POLICE
FORENSIC SCIENCE SECTION

QUALITY INCIDENT REPORT

UNIT	SUBJECT	DATE	INCLUDED IN CASE
Forensic Biology	Staff Contamination Affects Interpretation of Results	12/28/15	Y

Narrative: Staff contamination was identified on the swab taken from the handle of a knife in case 92100288. This contamination did affect the interpretation of the case results.

Nonconformance: Contamination of evidence.

Root Cause: This contamination was internal to DNA and the DNA Technical Manager is aware of the results and identity of the owner of the DNA profile. The sample i.d. of 88 is based on the old database that was discarded just as this case was being completed and the profiles being searched.

Policy Revision ☐ Procedure Change ☐ Administrative Issue ☐
Technical Error ☒ Analyst Error ☐ N/A ☐

Actions Taken: The DNA Tech Manager was notified of the sample i.d. since it was internal to DNA. There is a logical reason for the presence of the contaminating profile. The contamination is being tracked for purposes of identifying potential patterns.

Follow Up: Non required at this time.

Date: 12-30-15

Quality Manager [signature]	Crime Laboratory Manager [signature] (OCA for J. Shen)
Date Completed: 12-29-15	Unit Supervisor: Kristin Beyer (OCA)
Unit Supervisor:	Addt'l Kristin Beyer
Addt'l [signature]	Addt'l

LAMBERT 005121

EXHIBIT 99 - 001

SAN DIEGO POLICE DEPARTMENT - FORENSIC BILOGY UNIT
STAFF DATABASE MATCH

CASE # 92-100288

CHARGE(S) 187

PROPERTY TAG # or INCIDENT # 592638

ITEM # or BARCODE 2-1

DESCRIPTION OF ITEM: Swab taken from the handle of a knife (Item 2)

STAFF SAMPLE # ASSOCIATED W/ EVIDENCE 88

% CONTRIBUTION 16%

Interpretation of sample affected by presence of staff member? YES ☑ NO ☐

ADDITIONAL COMMENTS

A mixture of DNA from four people was obtained from the swab of the knife handle (2-1). The STRmix results indiciated a ratio of 1:13:16:70. The 70% contributor was consistent with the victim (blood), the 16% was consistent with the staff member. The 13% and 1% were not discriminating enough for CODIS. It is inconclusive as to whether the absence of the staff member would have allowed a CODIS search on the DNA types foreign to the victim. The handle of the knife was re-swabbed and a mixture of DNA from at least two people was obtained. The ratio was 1:99, with the victim being the 99% contributor. The 1% contributor was not discriminating enough for CODIS.

ANALYST Kristin Beyers

DATE 12/3/2015

Note: Please attach a copy of the STRMix Database Hit Report or Local Match Detail Report, a copy of the page of notes detailing the examination of the item(s) in question, the electropherogram, the first page of the STRMix deconvolution, and/or any other pertinent documentation.

DNA Technical Manager [signature] Date 12-23-2015

Supervising Criminalist [signature] Date 12/23/15

Quality Assurance Manager John Simms Date 12/29/15

LAMBERT 005122

EXHIBIT 99 - 002

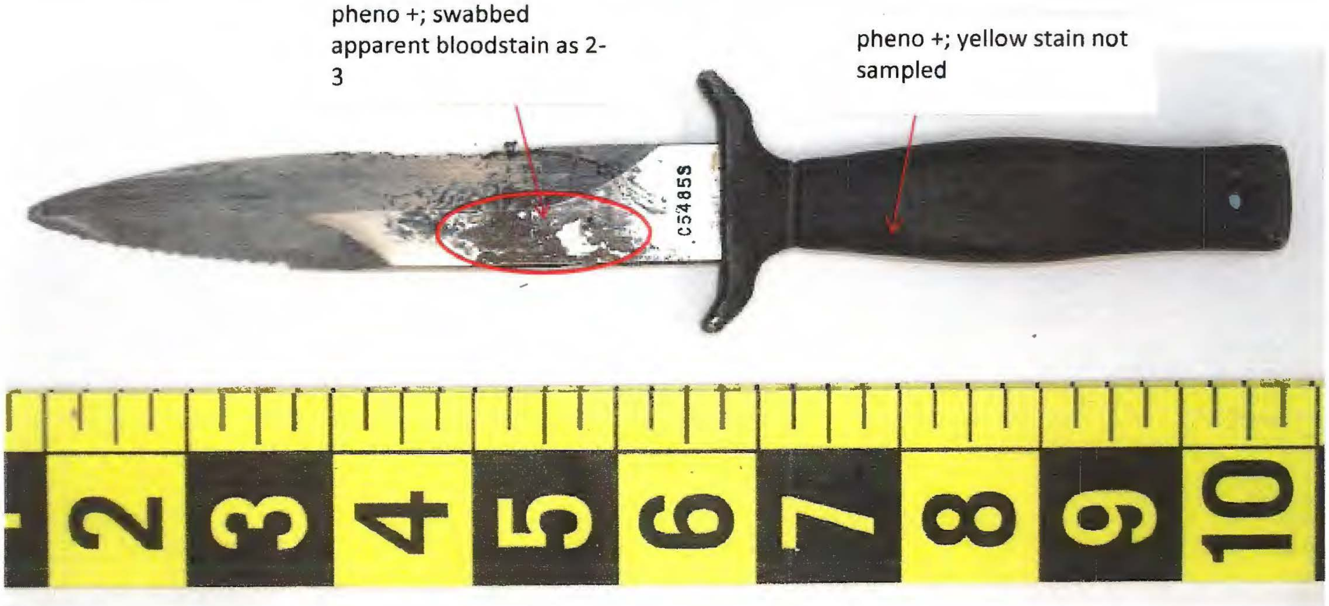
San Diego Police Department Forensic Biology Section - Evidence Inventory Worksheet

Case #: 92-100288 Item #: 2 Date: 11/3/2015 Analyst: KB

Description of Evidence	The following were tested against standards with the expected results: Pheno also on 11-23-15 KB
Packaging	Sealed Brown paper bag
Labeling (in part)	Item #: 2 Tag #: 592638 Knife w/red stains Inside dumpster on W. side of pkng [sic] lot of 631 E. San Ysidro Blvd

Item Name:

One knife with a black handle. Blue apparent dye was observed all over the knife. Brown/yellow staining was observed on the knife blade and handle. Two stains, one on each side of the knife blade, tested positive with a presumptive test for blood and were swabbed as 2-2 and 2-3 (see photos below). A yellowish stain on the knife handle tested positive with a presumptive test for blood. The entire knife handle, avoiding yellow and brown/yellow staining was swabbed as 2-1. This swab tested negative with a presumptive test for blood.



KB 11-23-15 The handle of the knife was re-swabbed on 11-23-15 + will be extracted in AB# AB-KDB-20151123

LAMBERT 005123

EXHIBIT 99 - 003

92-100288 Item #2 11-3-15 92-100288 KB PAGE# 4

pheno +; swabbed apparent bloodstain as 2-2

Sample(s) for DNA analysis	Body Fluid Test	Amount	Designated
Knife handle (avoiding stained areas)	Pheno -	1 swab	2-1
Apparent bloodstain on knife blade	Pheno +	1 swab	2-2
Apparent bloodstain on knife blade	Pheno +	1 swab	2-3
Knife Handle (avoiding stained areas) KB 11-23-15	Pheno +	1 swab	2-4

☑ Evidence marked directly w/ barcode & initials ☐ Proximal container marked ☑ Repackaged as original and sealed

LAMBERT 005124

EXHIBIT 99 - 004

STRMIX. RESOLVE MORE DNA MIXTURES.

http://STRMIX.esr.cri.nz

KB

STRmix V2.3.06 - User:	KHill
Analysis run:	10 November 2015 15:56
Case number:	92-100288
Sample ID:	2-1
Comments:	

SUMMARY OF INPUT DATA

Kit Used	SDPD GlobalFiler
Number of Contributors	4
Input Files	2-1 (92-100288).csv
Known contributors under Hp	
Known contributors under Hd	

SUMMARY OF CONTRIBUTORS

Contributor	1	2	3	4
DNA Amounts	3288	1424	32	600
Mixture Proportions	62%	27%	1%	11%
Degradation starting at 80.0bp	6.614 rfu/bp	2.865 rfu/bp	0.173 rfu/bp	1.674 rfu/bp

RUN INFORMATION

Total iterations	6.2797223E7	**Gelman-Rubin convergence diagnostic**	1.25
Inter replicate efficiency	PCR 1 - 100.00%	**Allele variance**	17.30
Effective sample size	13528.88	**Stutter variance**	19.60
Average (log) likelihood	27.58	**Seed value**	659963
Mx prior mean	n/a	**Mx prior variance**	n/a

C_2 → database ref 88

C_4 → Emilio Ramirez

LAMBERT005125

EXHIBIT 99 - 005

STRmix V2.3.06 - User: KHill
Analysis run: 2015-11-10-16-49-38

Deconvolution chosen C:\ProgramData\STRmix\\Results\92-100288-2-1-2015-11-10-15-20-49B\
Comparison of sample(s): 2-1 (92-100288).csv,
to 76 individuals on the database (C:\ProgramData\STRmix\Databases\SDPD_Globalfiler_Database.csv)

LR cutoff set at 100000
Using population database NIST_GF_Cauc.csv
Mutation rate used 0.0 (only applicable for familial searches)

05_A05_88.hid: 88 - 3.4302311586071014E18

CaseNumber
92-100288
SampleName
1-Feb
Comments

variance
6.6346,1.6553
Stuttervariance
7.09,2.4927
detectionThreshold
########
loci
23
stutter
0.3
degradation
-1
degmax
0.01
dropin
390
dropinParameters
0.0,0.0
dropinFrequency
0.0012
minVarFactor
0.1
RWSD
0.005
ESSthinning
100000
Saturation
32000

STRMIX. RESOLVE MORE DNA MIXTURES.

http://STRMIX.esr.cri.nz

KB

STRmix V2.3.06 - User: KHill
Analysis run: 12 November 2015 07:31
Case number: 92-100288
Sample ID: 2-1 LR ref 88
Comments: LR for database reference 88

SUMMARY OF INPUT DATA

Kit Used	SDPD GlobalFiler
Number of Contributors	4
Input Files	2-1 (92-100288).csv
Known contributors under Hp	88.csv
Known contributors under Hd	

PER LOCUS LIKELIHOOD RATIOS

	NIST_GF_AfAm.csv Theta 0.01b(1.0,1.0)			NIST_GF_Asian.csv Theta 0.02b(1.0,1.0)			NIST_GF_Cauc.csv Theta 0.01b(1.0,1.0)			NIST_GF_Hisp.csv Theta 0.01b(1.0,1.0)		
Locus	Pr(E|Hp)	Pr(E|Hd)	LR	Pr(E|Hp)	Pr(E|Hd)	LR	Pr(E|Hp)	Pr(E|Hd)	LR	Pr(E|Hp)	Pr(E|Hd)	LR
D3S1358	2.60E-4	1.03E-4	2.52	3.06E-4	1.39E-4	2.21	1.74E-4	4.81E-5	3.61	2.20E-4	7.64E-5	2.88
vWA	1.02E-4	7.06E-5	1.45	6.48E-6	4.98E-6	1.30	4.86E-5	3.65E-5	1.33	9.16E-5	6.70E-5	1.37
D16S539	1.04E-4	5.90E-5	1.76	6.01E-5	2.09E-5	2.88	8.21E-5	6.33E-5	1.30	1.45E-4	8.69E-5	1.67
CSF1PO	3.05E-3	3.11E-4	9.80	2.28E-3	2.20E-4	1.04E1	2.17E-3	1.81E-4	1.20E1	2.65E-3	2.48E-4	1.07E1
TPOX	1.08E-3	5.22E-4	2.06	2.67E-3	2.19E-3	1.22	2.30E-3	1.65E-3	1.39	2.00E-3	1.36E-3	1.47
Yindel												
D8S1179	7.09E-5	2.54E-6	2.79E1	3.39E-5	2.81E-6	1.21E1	8.40E-5	4.78E-6	1.76E1	6.79E-5	5.53E-6	1.23E1
D21S11	1.21E-6	2.96E-7	4.09	1.74E-6	4.28E-7	4.08	1.03E-6	1.62E-7	6.33	1.35E-6	2.28E-7	5.91
D18S51	6.55E-6	1.36E-6	4.80	1.54E-5	1.99E-6	7.73	9.97E-6	1.62E-6	6.16	1.15E-5	1.82E-6	6.34
DYS391												
D2S441	1.38E-6	8.28E-7	1.66	1.54E-5	5.75E-6	2.68	8.66E-6	7.61E-6	1.14	2.21E-5	2.04E-5	1.09
D19S433	3.01E-6	2.09E-8	1.44E2	2.45E-6	1.29E-8	1.90E2	9.09E-7	1.52E-8	5.98E1	6.22E-6	5.34E-8	1.16E2
TH01	3.32E-5	2.22E-5	1.49	2.37E-5	7.65E-6	3.10	1.31E-5	1.06E-5	1.25	1.78E-5	1.22E-5	1.46
FGA	1.94E-5	1.36E-6	1.42E1	2.31E-5	2.04E-6	1.13E1	3.28E-5	2.95E-6	1.11E1	2.05E-5	2.29E-6	8.94
D22S1045	3.65E-5	9.90E-6	3.68	9.62E-5	4.54E-5	2.12	3.56E-4	1.77E-4	2.01	4.69E-4	8.91E-5	5.26
D5S818	5.80E-8	1.67E-8	3.48	1.05E-6	6.61E-7	1.58	2.41E-7	1.42E-7	1.70	3.78E-6	2.82E-6	1.34
D13S317	1.03E-4	2.27E-5	4.53	1.64E-6	3.51E-7	4.66	1.28E-4	3.06E-5	4.18	6.37E-5	8.30E-6	7.67
D7S820	1.27E-4	1.90E-5	6.70	3.12E-4	6.83E-5	4.56	1.72E-4	3.12E-5	5.52	2.76E-4	5.80E-5	4.77
SE33	4.17E-7	1.33E-9	3.13E2	3.23E-6	5.86E-8	5.50E1	7.71E-7	3.75E-9	2.05E2	6.74E-7	3.03E-9	2.22E2
D10S1248	1.17E-4	2.47E-5	4.73	2.43E-4	6.02E-5	4.03	2.93E-4	8.51E-5	3.45	2.11E-4	6.30E-5	3.36
D1S1656	6.95E-7	8.73E-9	7.96E1	5.13E-7	1.60E-8	3.21E1	1.66E-6	5.80E-8	2.87E1	1.78E-6	4.39E-8	4.06E1
D12S391	1.31E-6	2.12E-7	6.19	3.00E-7	7.26E-8	4.14	2.18E-7	3.34E-8	6.52	5.80E-7	5.52E-8	1.05E1
D2S1338	6.06E-6	2.59E-7	2.34E1	4.67E-5	6.72E-6	6.95	1.31E-5	7.42E-7	1.77E1	2.85E-5	2.57E-6	1.11E1
LR Total			2.41E18			1.04E16			1.24E16			7.14E16
99.0% 1-sided lower HPD			7.84E17			2.38E15			5.50E15			9.79E15

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EXHIBIT 99 - 008