Gas Flow Proportional Counter Run Log

Detector: Purple7 (Continued)

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
01/17/16 23:37	30	ICVABT 160-233504/11		233504			PS
11/09/19 17:15	1000	ICB 160-449741/8		449741			PS
11/23/19 00:09	200	CCB 160-451797/8		451797			AJD
11/23/19 09:53	2	CCVA 160-451797/24		451797			AJD
11/23/19 10:11	2	CCVB 160-451797/40		451797			AJD
11/23/19 11:03	200	160-36160-4	F-SU3-B07-S001	451797	448689	905.0	AJD
11/23/19 19:02	200	MB 160-448689/19-A		451797	448689	905.0	AJD

Detector: Purple10

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
02/03/13 17:22	5	ICABT 160-233506/12		233506			PS
02/03/13 17:29	5	ICABT 160-233506/13		233506			PS
02/03/13 17:43	5	ICABT 160-233506/14		233506			PS
02/03/13 17:51	5	ICABT 160-233506/15		233506			PS
02/03/13 18:07	5	ICABT 160-233506/16		233506			PS
02/03/13 18:19	5	ICABT 160-233506/17		233506			PS
02/03/13 18:32	5	ICABT 160-233506/18		233506			PS
02/03/13 18:51	5	ICABT 160-233506/19		233506			PS
02/04/13 18:35	5	ICVABT 160-233506/20		233506			PS
02/04/13 18:57	5	ICVABT 160-233506/21		233506			PS
02/04/13 19:02	5	ICVABT 160-233506/22		233506			PS
01/17/16 17:25	40	ICABT 160-233506/1		233506			PS
01/17/16 18:09	40	ICABT 160-233506/2		233506			PS
01/17/16 19:02	40	ICABT 160-233506/3		233506			PS
01/17/16 19:57	40	ICABT 160-233506/4		233506			PS
01/17/16 20:45	40	ICABT 160-233506/5		233506			PS
01/17/16 21:41	40	ICABT 160-233506/6		233506			PS
01/17/16 22:54	40	ICABT 160-233506/7		233506			PS
01/17/16 23:37	40	ICABT 160-233506/8		233506			PS
01/18/16 21:07	30	ICVABT 160-233506/9		233506			PS
01/19/16 00:27	30	ICVABT 160-233506/10		233506			PS
01/19/16 01:35	30	ICVABT 160-233506/11		233506			PS
11/09/19 17:15	1000	ICB 160-449741/11		449741			PS
11/23/19 00:09	200	CCB 160-451797/11		451797			AJD
11/23/19 09:58	2	CCVA 160-451797/27		451797			AJD
11/23/19 10:16	2	CCVB 160-451797/43		451797			AJD
11/23/19 11:03	200	160-36160-5	F-SU3-B09-S001	451797	448689	905.0	AJD

Detector: Purple11

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
12/18/15 09:33	5	ICABT 160-233507/12		233507			PS
12/18/15 09:41	5	ICABT 160-233507/13		233507			PS
12/18/15 09:48	5	ICABT 160-233507/14		233507			PS
12/18/15 09:58	5	ICABT 160-233507/15		233507			PS
12/18/15 11:20	5	ICABT 160-233507/16		233507			PS
12/18/15 11:31	5	ICABT 160-233507/17		233507			PS
12/18/15 11:37	5	ICABT 160-233507/18		233507			PS
12/18/15 11:44	5	ICABT 160-233507/19		233507			PS
12/18/15 13:10	5	ICVABT 160-233507/20		233507			PS
12/18/15 13:16	5	ICVABT 160-233507/21		233507			PS

Gas Flow Proportional Counter Run Log

Detector: Purple11 (Continued)

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
12/18/15 13:22	5	ICVABT 160-233507/22		233507			PS
01/17/16 17:25	40	ICABT 160-233507/1		233507			PS
01/17/16 18:09	40	ICABT 160-233507/2		233507			PS
01/17/16 19:02	40	ICABT 160-233507/3		233507			PS
01/17/16 19:57	40	ICABT 160-233507/4		233507			PS
01/17/16 20:45	40	ICABT 160-233507/5		233507			PS
01/17/16 21:41	40	ICABT 160-233507/6		233507			PS
01/17/16 22:54	40	ICABT 160-233507/7		233507			PS
01/17/16 23:37	40	ICABT 160-233507/8		233507			PS
01/19/16 00:27	30	ICVABT 160-233507/9		233507			PS
01/19/16 01:36	30	ICVABT 160-233507/10		233507			PS
01/19/16 02:31	30	ICVABT 160-233507/11		233507			PS
11/09/19 17:15	1000	ICB 160-449741/12		449741			PS
11/23/19 00:09	200	CCB 160-451797/12		451797			AJD
11/23/19 09:58	2	CCVA 160-451797/28		451797			AJD
11/23/19 10:16	2	CCVB 160-451797/44		451797			AJD
11/23/19 11:03	200	160-36160-6	F-SU3-B11-S001	451797	448689	905.0	AJD

Detector: Purple17

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
12/22/15 12:04	5	ICABT 160-233514/12		233514			PS
12/22/15 12:09	5	ICABT 160-233514/13		233514			PS
12/22/15 12:15	5	ICABT 160-233514/14		233514			PS
12/22/15 12:57	5	ICABT 160-233514/15		233514			PS
12/22/15 14:52	5	ICABT 160-233514/16		233514			PS
12/22/15 14:58	5	ICABT 160-233514/17		233514			PS
12/22/15 15:10	5	ICABT 160-233514/18		233514			PS
12/22/15 15:18	5	ICABT 160-233514/19		233514			PS
12/22/15 15:29	5	ICVABT 160-233514/21		233514			PS
12/22/15 16:45	5	ICVABT 160-233514/22		233514			PS
12/22/15 17:21	5	ICVABT 160-233514/20		233514			PS
01/18/16 07:03	40	ICABT 160-233514/1		233514			PS
01/18/16 08:07	40	ICABT 160-233514/2		233514			PS
01/18/16 09:22	40	ICABT 160-233514/3		233514			PS
01/18/16 11:01	40	ICABT 160-233514/4		233514			PS
01/18/16 11:45	40	ICABT 160-233514/5		233514			PS
01/18/16 12:30	40	ICABT 160-233514/6		233514			PS
01/18/16 15:14	40	ICABT 160-233514/7		233514			PS
01/18/16 21:03	40	ICABT 160-233514/8		233514			PS
01/19/16 09:39	30	ICVABT 160-233514/9		233514			PS
01/19/16 11:09	30	ICVABT 160-233514/10		233514			PS
01/20/16 01:28	30	ICVABT 160-233514/11		233514			PS
11/09/19 17:15	1000	ICB 160-449741/18		449741			PS
11/23/19 00:09	200	CCB 160-451797/14		451797			AJD
11/23/19 10:05	2	CCVA 160-451797/30		451797			AJD
11/23/19 10:21	2	CCVB 160-451797/46		451797			AJD
11/23/19 11:03	200	160-36160-7	F-SU3-B12-S001	451797	448689	905.0	AJD

Gas Flow Proportional Counter Run Log

Detector: Purple18

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
02/03/13 19:04	5	ICABT 160-233549/12		233549			PS
02/03/13 19:13	5	ICABT 160-233549/13		233549			PS
02/03/13 19:21	5	ICABT 160-233549/14		233549			PS
02/03/13 19:53	5	ICABT 160-233549/15		233549			PS
02/03/13 20:01	5	ICABT 160-233549/16		233549			PS
02/03/13 20:08	5	ICABT 160-233549/17		233549			PS
02/03/13 20:17	5	ICABT 160-233549/18		233549			PS
02/03/13 20:25	5	ICABT 160-233549/19		233549			PS
02/04/13 20:45	5	ICVABT 160-233549/20		233549			PS
02/04/13 20:54	5	ICVABT 160-233549/21		233549			PS
02/04/13 21:00	5	ICVABT 160-233549/22		233549			PS
01/18/16 07:03	40	ICABT 160-233549/2		233549			PS
01/18/16 08:07	40	ICABT 160-233549/1		233549			PS
01/18/16 10:08	40	ICABT 160-233549/3		233549			PS
01/18/16 11:01	40	ICABT 160-233549/4		233549			PS
01/18/16 11:46	40	ICABT 160-233549/5		233549			PS
01/18/16 12:30	40	ICABT 160-233549/6		233549			PS
01/18/16 15:14	40	ICABT 160-233549/7		233549			PS
01/18/16 21:03	40	ICABT 160-233549/8		233549			PS
01/19/16 09:39	30	ICVABT 160-233549/9		233549			PS
01/19/16 11:09	30	ICVABT 160-233549/10		233549			PS
01/19/16 12:08	30	ICVABT 160-233549/11		233549			PS
11/09/19 17:16	1000	ICB 160-449741/19		449741			PS
11/23/19 00:09	200	CCB 160-451797/15		451797			AJD
11/23/19 10:05	2	CCVA 160-451797/31		451797			AJD
11/23/19 10:21	2	CCVB 160-451797/47		451797			AJD
11/23/19 11:03	200	160-36160-8	F-SU3-B14-S001	451797	448689	905.0	AJD

Detector: Purple19

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
02/03/13 19:04	5	ICABT 160-233516/12		233516			PS
02/03/13 19:14	5	ICABT 160-233516/13		233516			PS
02/03/13 19:21	5	ICABT 160-233516/14		233516			PS
02/03/13 19:53	5	ICABT 160-233516/15		233516			PS
02/03/13 20:01	5	ICABT 160-233516/16		233516			PS
02/03/13 20:08	5	ICABT 160-233516/17		233516			PS
02/03/13 20:18	5	ICABT 160-233516/18		233516			PS
02/03/13 20:25	5	ICABT 160-233516/19		233516			PS
02/04/13 20:54	5	ICVABT 160-233516/20		233516			PS
02/04/13 21:00	5	ICVABT 160-233516/21		233516			PS
02/04/13 21:06	5	ICVABT 160-233516/22		233516			PS
01/18/16 07:04	40	ICABT 160-233516/1		233516			PS
01/18/16 08:07	40	ICABT 160-233516/2		233516			PS
01/18/16 10:08	40	ICABT 160-233516/3		233516			PS
01/18/16 11:00	40	ICABT 160-233516/4		233516			PS
01/18/16 11:46	40	ICABT 160-233516/5		233516			PS
01/18/16 12:31	40	ICABT 160-233516/6		233516			PS
01/18/16 15:14	40	ICABT 160-233516/7		233516			PS
01/18/16 21:03	40	ICABT 160-233516/8		233516			PS
01/19/16 11:09	30	ICVABT 160-233516/9		233516			PS
01/19/16 12:08	30	ICVABT 160-233516/10		233516			PS
01/19/16 12:54	30	ICVABT 160-233516/11		233516			PS

Gas Flow Proportional Counter Run Log

Detector: Purple19 (Continued)

Analysis Date	Count Minutes	Lab Sample ID	Client Sample ID	Analysis Batch	Prep Batch	Method	Analyst Initials
11/09/19 17:16	1000	ICB 160-449741/20		449741			PS
11/23/19 00:09	200	CCB 160-451797/16		451797			AJD
11/23/19 10:06	2	CCVA 160-451797/32		451797			AJD
11/23/19 10:21	2	CCVB 160-451797/48		451797			AJD
11/23/19 11:03	200	160-36160-9	F-SU3-B15-S001	451797	448689	905.0	AJD

Radiological
Pre-Preparation Data

Shipping and Receiving Documents

APTIM

CHAIN OF CUSTODY

Ref. Document # F_B01_002
Page 1 of 3

APTIM Federal Services, LLC
4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 501008
Project Name: CTO-4550 Rad Works Task
Project Location: HPNS - Parcel F
Purchase Order #: 204589
Shipment/Pickup Date: 10.25.19
Waybill Number: 12 894 462 139 206 3748
Lab Destination: TestAmerica (St. Louis Lab) 13715 Rider Trail North Earth City, MO 63045
Lab Contact Name / ph. #: Rhonda Ridenhower (344) 298-8566

Project Manager: *Lisa Bercik*
(Name & phone #)

Send Report To: *Eddie Kalombo*
Phone/Fax Number: *415-987-0760*
Address: *4005 Port Chicago Hwy*
City: *Concord, CA, 94520*
Sampler's Name(s): EDWIN CARTER

Analyses Requested

Sample ID Number	Sample Description	Collection Information: Date	Time	Method	Matrix	# of containers	Preservative (water) / Preservative (soil) / Container Type	Gamma Spec (EPA 1911 M) (7 day in-growth preliminary results and full 21 day in growth for full gamma results)	Isotopic Plutonium (Alpha Spec)	Total Strontium (EPA 905 MOD)	Strontium 90 (EPA 905 MOD)			Dose Rate µR/Hr
							Preservative (soil)	N/A	N/A	N/A	N/A			
							Container Type							6
F-SU3-B01-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 1	10/24/19	1150	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B04-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 4	10/24/19	1041	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B05-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 5	10/24/19	1008	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B07-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 7	10/24/19	0940	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B09-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 9	10/24/19	0917	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B11-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 11	10/24/19	1132	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B12-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 12	10/24/19	1100	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B14-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 14	10/24/19	1023	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B15-S001	Parcel F Survey Unit 3 Drydock 7 Surface Sample 15	10/24/19	0952	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B23-S001	Parcel F Survey Unit 3 Berth 64 Surface Sample 23	10/24/19	1346	G	SO	1	16 oz. plastic jar	X	X	X	X			6

Special Instructions:
7 days ingrown draft and follow with 21 days final.
Analyze for Total Strontium as a screening step, and isotopic Sr-90 only if Total Strontium is above project action limit of 0.331 pCi/g.

Standard TAT -10-day ☐ 24-hr ☐ 3-day ☒ 10-day

Level Of QC Required: I II III Project Specific

Relinquished By	Date / Time	Received By	Date / Time
Edwin Carter / S. [illegible]	10-24-19 1055	[illegible]	10/24/19 1604
[illegible]	10/24/19 1630	Locked Storage	10/24/19 1630
Retrieve From Storage	10/25/19 0900	[illegible]	10/25/19 0900
[illegible]	10/25/19 0945	Eddie Kalombo	10.25.19 0945
Eddie Kalombo	10.25.19 1500	[illegible]	10-29-19 0900

Method Codes: C = Composite G = Grab

Matrix Codes:
DW = Drinking Water
GW = Ground Water
WW = Waste Water
A = Air
SO = Soil
SL = Sludge
CP = Chip Samples
ABS=Asbestos, PO=Pipe Opening

180-36160 Chain of Custody

APTIM

CHAIN OF CUSTODY

Ref. Document # F_B01_002
Page 2 of 2

APTIM Federal Services, LLC
4005 Port Chicago Hwy
Concord, CA 94520

Project Number: 501008
Project Name: CTO-4550 Rad Works Task
Project Location: HPNS - Parcel F
Purchase Order #: 204589
Shipment/Pickup Date: 10.25.19
Waybill Number: 12 89V 462 1382065748
Lab Destination: TestAmerica (St. Louis Lab) 13715 Rider Trail North Earth City, MO 63045
Lab Contact Name / ph. #: Rhonda Ridenhower (344) 298-8566

Project Manager: Lisa Bercik
(Name & phone #)

Send Report To: Eddie Kalombo
Phone/Fax Number: 415-987-0760
Address: 4005 Port Chicago Hwy
City: Concord, CA 94520
Sampler's Name(s): EDWIN CARTER

Analyses Requested

Sample ID Number	Sample Description	Collection Information: Date	Time	Method	Matrix	# of containers	Preservative (water) / Preservative (soil) / Container Type	Gamma Spec (EPA 191.1 M) (7 day in-growth preliminary results and full 21 day in growth for full gamma results)	Isotopic Plutonium (Alpha Spec)	Total Strontium (EPA 905 MOD)	Strontium 90 (EPA 905 MOD)			Dose Rate uR/Hr
							Preservative (water)							
							Preservative (soil)	N/A	N/A	N/A	N/A			
							Container Type							6
F-SU3-B29-S001	Parcel F Survey Unit 3 Berth 64 Surface Sample 29	10/24/19	1421	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU3-B30-S001	Parcel F Survey Unit 3 Berth 64 Surface Sample 30	10/24/19	1404	G	SO	1	16 oz. plastic jar	X	X	X	X			6
~~F-SU3-B52-S001~~	~~Parcel F Survey Unit 3 Berth 64 Sidewall Sample 52~~			~~G~~	~~SO~~	~~1~~	~~16 oz. plastic jar~~	~~X~~	~~X~~	~~X~~	~~X~~			
F-SU4-B04-S001	Parcel F Survey Unit 4 Finger Pier 1 Surface Sample 4	10/24/19	1504	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU5-B05-S001	Parcel F Survey Unit 5 Finger Pier 2 Surface Sample 5	10/24/19	1558	G	SO	1	16 oz. plastic jar	X	X	X	X			6
F-SU5-B10-S001	Parcel F Survey Unit 5 Finger Pier 2 Surface Sample 10	10/24/19	1538	G	SO	1	16 oz. plastic jar	X	X	X	X			6

N/A

Special Instructions:
7 days ingrown draft and follow with 21 days final.
Analyze for Total Strontium as a screening step, and isotopic Sr-90 only if Total Strontium is above project action limit of 0.331 pCi/g.

Standard TAT -10-day ☐ 24-hr ☐ 3 day ☒ 10 day

Level Of QC Required: I II III Project Specific:

Relinquished By	Date / Time	Received By	Date / Time
Edwin Carter / E. C.	10-24-19 1604	[signature]	10/24/19 1604
[signature]	10/24/19 1630	LOCKED STORAGE	10/24/19 1630
RETRIEVED FROM STORAGE	10/25/19 0900	[signature]	10/25/19 0900
[signature]	10/25/19 0945	EDDIE KALOMBO [signature]	10.25.19 0945
EDDIE KALOMBO [signature]	10.25.19 1500	Nicholas Hess	10-29-19 0900

Method Codes: C = Composite G = Grab

Matrix Codes: DW = Drinking Water; GW = Ground Water; WW = Waste Water; A = Air; SO = Soil; SL = Sludge; CP = Chip Samples; ABS=Asbestos; PO=Pipe Opening

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12/04/2019

J-1706

ED_006061A_00000075-05008

Login Sample Receipt Checklist

Client: Aptim Federal Services LLC

Job Number: 160-36160-2

Login Number: 36160
List Number: 1
Creator: Press, Nicholas B

List Source: Eurofins TestAmerica, St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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