Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

AP/STP-1D
ISRA COCs: Dioxins
RCRA R.D.s: None

APBS1038	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

BTTS0021	Result X SRG
RCRA R.D.s	None

APBS1036	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

BTTS11	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

BTTS10	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APTSTP03	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1037	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1003	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

BTTS13	Result X SRG
RCRA R.D.s	None

APBS0050	Result X SRG
RCRA R.D.s	None

APBS1044	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1004	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

BTTS01	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1035	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1002	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS0012	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS0049	Result X SRG
RCRA R.D.s	None

Data Box Information

All Result(s) Less than or equal to SRGs

ILBS0307	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	>SL

Result(s) Greater than SRGs

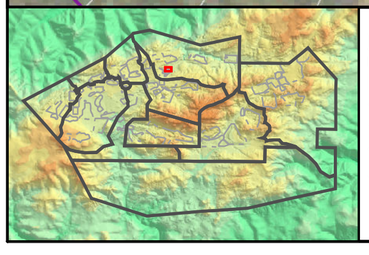
Sample Location ID — ILBS0139

ISRA COC — Mercury

Result and Comparison to SRG — Result X SRG: 0.12 mg/kg 1.3

RCRA R.D.s Compared to SL — RCRA R.D.s: >SL

[2] - Represents the number of samples collected from this sample location, in this case 2, within the depth range being assessed, in this case < 2 feet bgs. Only the maximum result is presented for each analyte.



Base Map Legend
- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Previous Excavation Area
- Elevation Contour

Figure Legend
- Planned Excavation Area
- Near Surface Well
- Chatsworth Well

ISRA Constituents of Concern
Cadmium, Copper, Lead, Mercury, Dioxin

Soil Remediation Goals (SRGs)
Cadmium: 1 mg/kg
Copper: 29 mg/kg
Lead: 34 mg/kg
Mercury: 0.09 mg/kg
Dioxin: 3.0 pg/g

RCRA R.D.s = RCRA Risk Drivers
SL = Screening Level

Chemical Data Legend

Cadmium, Copper, Lead, and/or Mercury Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Dioxin Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Sample Not Analyzed for ISRA COCs
- > SL for one or more RCRA R.D.s
- ≤ SL for all RCRA R.D.s
- Not analyzed for RCRA R.D.s

Notes:
1. Dioxin represents the sum of 17 dioxin/furan cogener results adjusted for toxicity, normalized to 2,3,7,8-TCDD-TEQ.
2. Cadmium, copper, lead, and mercury SRG is equal to the 2005 background comparison concentration, and SRG for dioxins is approximately 3 times the 2005 background comparison concentration.
3. Screening level for RCRA risk drivers is the lower of the Ecological or Residential Risk-Based Screening Level. All RCRA risk drivers identified on this figure view are evaluated at each sample location shown.
4. Aerial imagery and topographic contours from Sage, 2010. Aerial imagery was collected June 2, 2010, and represents pre-excavation conditions. Topographic contours represent pre-excavation conditions.

Outfall 009 – ISRA Area AP/STP-1D
Pre-Excavation Sample Results
SubSurface Soils (2-10 feet bgs)
SANTA SUSANA FIELD LABORATORY

Path: T:\projects\rock3\ISRA\Figures\NASA\AP-STP-1D\Pre-Excavation_Deep.mxd

Date: 4/28/2011

1 inch = 15 feet

0 15 30 Feet

MWH

Figure E-3.2

TABLE E-3.1 AP/STP-1D PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

Group						Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals
Preferred Analyte						**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**
Result Value Units						**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Background						**20,000**	**8.7**	**15**	**140**	**1.1**	**9.7**	**1**	**36.8**	**21**	**29**	**34**	**0.09**	**5.3**	**29**
ISRA SRG						**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**29**	**34**	**0.09**	**--**	**--**
CMS						**--**	**0.77**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**8.2**	**--**	**0.88**	**--**	**15**
Lowest Characterization RBSL						**12**	**0.095**	**0.095**	**15**	**5.1**	**6.8**	**0.021**	**930**	**8.9**	**1.1**	**0.063**	**0.1**	**0.11**	**0.1**
RBSL Type						**ECO**	**ECO**	**RES**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**
Object Name	**Sample Name**	**Collection Date**	**Sample Depth (feet bgs)**	**Matrix Type**	**ISRA Area**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
APBS1038	APBS1038S001	3/31/2009	0.0-0.1	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1038	APBS1038S002	3/31/2009	4.5-5.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1051	APBS1051S001	6/17/2009	0.0-0.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1077	APBS1077S001	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1078	APBS1078S001SP	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1078	APBS1078S001	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1201	APBS1201S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1202	APBS1202S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1203	APBS1203S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1204	APBS1204S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1206	APBS1206S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1207	APBS1207S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1208	APBS1208S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APTSTP03	APTSTP03S01	4/22/2008	0.5-1.0	Soil	AP/STP-1D	--	<0.324	3.8	107	0.48	--	0.4	18	5.1	9.6	7.1	--	0.53	11
APTSTP03	APTSTP03S02	4/22/2008	5.0-5.5	Soil	AP/STP-1D	--	<0.331	4	114	0.54	--	0.32	19.6	5.6	9.5	6.9	--	0.43	12.2
APBS03	APBS03S01	4/8/1998	0.5-0.5	Soil	--	--	--	--	97 J	--	--	--	--	--	--	--	--	--	--
APBS0012	APBS0012S01	12/13/2006	0.0-0.5	Soil	--	10,000	<1.1 J	4.3	86	0.45	<5.3 J	0.53	15	4.7	10 J	23	0.034 J	0.58 J	9.8
APBS0012	APBS0012S02	12/14/2006	2.5-3.0	Soil	--	14,000	<1.1 J	3.5	92	0.57	5.3 J	0.11 J	19	5.8	10 J	5.5	<0.0085 J	0.29 J	11
APBS0013	APBS0013S01	12/14/2006	0.0-0.5	Soil	--	--	--	--	120	--	--	--	--	--	--	--	--	--	--
APBS0015	APBS0015S01	12/14/2006	0.0-0.5	Soil	--	--	--	--	220	--	--	--	--	--	--	--	--	--	--
APBS0016	APBS0016S01	12/14/2006	0.0-0.5	Soil	--	11,000	--	5	230 ;250	0.42	<1 J	0.71	24	4.7	10 J	27	0.068 J	0.67	9.8
APBS0049	APBS0049S01	2/27/2007	0.5-1.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS0049	APBS0049S02	2/27/2007	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS0050	APBS0050S01	2/27/2007	0.5-1.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS0050	APBS0050D01	2/27/2007	0.5-1.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS0050	APBS0050S02	2/27/2007	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1002	APBS1002S01	6/3/2008	0.0-1.0	Soil	--	10,400	<0.314	4	133 J	0.54	1.9 J	0.48	21.6	5.6	10.7 J	10.7	0.055	0.5	12.1
APBS1002	APBS1002S02	6/3/2008	5.5-6.0	Soil	--	10,300	<0.333	3.3	98.4 J	0.56	1.8 J	0.24	18.7	5.1	9.7 J	6.4	<0.00158	<0.33	11.3
APBS1003	APBS1003S01	6/3/2008	0.0-1.0	Soil	--	10,500	<0.311	3.1	99.3 J	0.52	1.7 J	0.33	18.9	5.5	10.2 J	6.2	<0.00153	0.41	11.2
APBS1003	APBS1003S02	6/3/2008	5.5-6.0	Soil	--	12,600	<0.343	3.5	107 J	0.61	2.4 J	0.28	20.1	5.2	10.1 J	6.9	<0.00168	0.35	12
APBS1004	APBS1004S01	6/4/2008	0.5-1.0	Soil	--	8,600	<0.79	5.5	65.5	0.59	3.3 J	0.21	16.3	7.9 J	6.1 J	6.4	0.017 J	<0.41	7.4
APBS1004	APBS1004S02	6/4/2008	5.5-6.0	Soil	--	11,500	<1	3.4	110	0.59	3.9 J	0.38	21	6.4 J	11.7 J	6.4	<0.00163	<0.47	13.2
APBS1035	APBS1035S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1035	APBS1035S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1036	APBS1036S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1036	APBS1036S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1037	APBS1037S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1037	APBS1037S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1044	APBS1044S001	4/1/2009	4.5-5.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3.1 AP/STP-1D PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

		Group				Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals
		Preferred Analyte				**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**
		Result Value Units				**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
		Background				**20,000**	**8.7**	**15**	**140**	**1.1**	**9.7**	**1**	**36.8**	**21**	**29**	**34**	**0.09**	**5.3**	**29**
		ISRA SRG				**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**29**	**34**	**0.09**	**--**	**--**
		CMS				**--**	**0.77**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**8.2**	**--**	**0.88**	**--**	**15**
		Lowest Characterization RBSL				**12**	**0.095**	**0.095**	**15**	**5.1**	**6.8**	**0.021**	**930**	**8.9**	**1.1**	**0.063**	**0.1**	**0.11**	**0.1**
		RBSL Type				**ECO**	**ECO**	**RES**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**
Object Name	**Sample Name**	**Collection Date**	**Sample Depth (feet bgs)**	**Matrix Type**	**ISRA Area**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
APBS1052	APBS1052S001	6/17/2009	0.0-0.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1205	APBS1205S001	4/29/2010	0.0-1.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BTTS01	BTTS01S01	9/26/2000	6.5-7.0	Soil	--	14,100	0.69 J	1.9	91.3	0.38 B	<4.3	<0.33	26.9 J	4.9	11.9	6.3	<0.01	<10 J	8.6
BTTS06	BTTS06S02	3/29/2001	5.5-6.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BTTS10	BTTS10S01	9/29/2000	7.5-8.0	Soil	--	12,000	0.34 J	0.63 B	73.3	0.27 J	<4.3	0.67	23	4.6 B	8.9	5.4	<0.01	<10 J	6.3
BTTS11	BTTS11S01	9/29/2000	9.0-9.5	Soil	--	12,000	0.23 J	3	70.3	0.48	<4.2	<0.07	12.5	6.4	9.3	4.8	<0.01	<10 J	8.9
BTTS13	BTTS13S01	3/30/2001	8.0-8.5	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BTTS0021	BTTS0021S01	12/20/2006	3.0-3.5	Soil	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--
BTTS0021	BTTS0021S01SP	12/20/2006	3.0-3.5	Soil	--	--	--	--	--	--	--	--	19.5	--	--	--	--	--	--
APWC0301	APWC0301S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	--	1.2 J	4.3	100	0.53	--	<0.20	21	5.0	12	5.5	0.014 J	0.71 J	13
APWC0302	APWC0302S001	7/29/2010	0.5-1.0	Soil	AP/STP-1D	--	0.98 J	6.6	63	0.68	--	<0.2	17	4.4	7.5	5.8	<0.012	0.75 J	9
APWC0303	APWC0303S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	--	0.98 J	4.1	74	0.43 J	--	<0.20	17	3.9	10	9.2	<0.012	0.57 J	9.9
APWC0304	APWC0304S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	--	1.5 J	6.8	62	0.57	--	<0.20	16	4.4	7.3	6.1	<0.012	0.68 J	8.7
APWC0305	APWC0305S001	7/29/2010	0.5-1.0	Soil	AP/STP-1D	--	1.2 J	4.5	100	0.51	--	<0.2	19	5.3	11	6.1	<0.012	0.81 J	13

TABLE E-3.1 AP/STP-1D PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

			Group			Metals	Metals	Metals	Metals	Metals	Dioxins
			Preferred Analyte			**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**	**TCDD TEQ**
			Result Value Units			**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**pg/g**
			Background			**0.655**	**0.79**	**0.46**	**62**	**110**	**0.87**
			ISRA SRG			**--**	**--**	**--**	**--**	**--**	**3**
			CMS			**--**	**96**	**--**	**--**	**26**	**--**
			Lowest Characterization RBSL			**0.17**	**0.54**	**2.9**	**1.5**	**21**	**4.27**
			RBSL Type			**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**
Object Name	**Sample Name**	**Collection Date**	**Sample Depth (feet bgs)**	**Matrix Type**	**ISRA Area**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
APBS1038	APBS1038S001	3/31/2009	0.0-0.1	Soil	AP/STP-1D	--	--	--	--	--	13.9
APBS1038	APBS1038S002	3/31/2009	4.5-5.0	Soil	AP/STP-1D	--	--	--	--	--	1.15
APBS1051	APBS1051S001	6/17/2009	0.0-0.0	Soil	AP/STP-1D	--	--	--	--	--	14.6
APBS1077	APBS1077S001	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	0.218
APBS1078	APBS1078S001SP	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	1.36
APBS1078	APBS1078S001	8/25/2009	0.0-0.5	Soil	AP/STP-1D	--	--	--	--	--	1.45
APBS1201	APBS1201S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	6.37
APBS1202	APBS1202S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	4.04
APBS1203	APBS1203S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	125.7
APBS1204	APBS1204S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	20.5
APBS1206	APBS1206S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	4.27
APBS1207	APBS1207S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	36.9
APBS1208	APBS1208S001	4/29/2010	0.0-1.0	Soil	AP/STP-1D	--	--	--	--	--	5.32
APTSTP03	APTSTP03S01	4/22/2008	0.5-1.0	Soil	AP/STP-1D	<0.509	5.8	0.27	34.7	65.9	1.23
APTSTP03	APTSTP03S02	4/22/2008	5.0-5.5	Soil	AP/STP-1D	<0.519	0.76	0.3	39.2	68.3	0.00947
APBS03	APBS03S01	4/8/1998	0.5-0.5	Soil	--	--	2	--	--	--	--
APBS0012	APBS0012S01	12/13/2006	0.0-0.5	Soil	--	0.28 J	16	0.35 J	24	67	2.80
APBS0012	APBS0012S02	12/14/2006	2.5-3.0	Soil	--	<0.21	0.1 J	0.36 J	34	50 J	0.037
APBS0013	APBS0013S01	12/14/2006	0.0-0.5	Soil	--	--	8	--	--	--	--
APBS0015	APBS0015S01	12/14/2006	0.0-0.5	Soil	--	--	110	--	--	--	--
APBS0016	APBS0016S01	12/14/2006	0.0-0.5	Soil	--	<0.21	110 ;98 J	0.29 J	25	150 J	2.25
APBS0049	APBS0049S01	2/27/2007	0.5-1.0	Soil	--	--	1.2	--	--	--	--
APBS0049	APBS0049S02	2/27/2007	4.5-5.0	Soil	--	--	0.056 J	--	--	--	--
APBS0050	APBS0050S01	2/27/2007	0.5-1.0	Soil	--	--	22	--	--	--	--
APBS0050	APBS0050D01	2/27/2007	0.5-1.0	Soil	--	--	20	--	--	--	--
APBS0050	APBS0050S02	2/27/2007	4.5-5.0	Soil	--	--	0.44 J	--	--	--	--
APBS1002	APBS1002S01	6/3/2008	0.0-1.0	Soil	--	<0.52	18.8	0.27	32 J	96.9 J	--
APBS1002	APBS1002S02	6/3/2008	5.5-6.0	Soil	--	<0.537	0.7	0.29	32.1 J	<62.8	--
APBS1003	APBS1003S01	6/3/2008	0.0-1.0	Soil	--	<0.5	1.1	0.28	30.2 J	<69	--
APBS1003	APBS1003S02	6/3/2008	5.5-6.0	Soil	--	<2.75	0.14 J	0.31	35.1 J	<69.3	--
APBS1004	APBS1004S01	6/4/2008	0.5-1.0	Soil	--	<0.507 J	2.7	0.23	29.2	39.5	--
APBS1004	APBS1004S02	6/4/2008	5.5-6.0	Soil	--	<0.572 J	0.55	0.3	35.1	66.6	--
APBS1035	APBS1035S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	1.56
APBS1035	APBS1035S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	0.00584
APBS1036	APBS1036S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	0.334
APBS1036	APBS1036S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	0.050
APBS1037	APBS1037S001	3/31/2009	0.0-0.1	Soil	--	--	--	--	--	--	0.433
APBS1037	APBS1037S002	3/31/2009	4.5-5.0	Soil	--	--	--	--	--	--	0.206
APBS1044	APBS1044S001	4/1/2009	4.5-5.0	Soil	--	--	--	--	--	--	0.127

INTERIM SOURCE REMOVAL ACTION (ISRA)

TABLE E-3.1 AP/STP-1D PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

		Group				Metals	Metals	Metals	Metals	Metals	Dioxins
		Preferred Analyte				**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**	**TCDD TEQ**
		Result Value Units				**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**pg/g**
		Background				**0.655**	**0.79**	**0.46**	**62**	**110**	**0.87**
		ISRA SRG				**--**	**--**	**--**	**--**	**--**	**3**
		CMS				**--**	**96**	**--**	**--**	**26**	**--**
		Lowest Characterization RBSL				**0.17**	**0.54**	**2.9**	**1.5**	**21**	**4.27**
		RBSL Type				**ECO**	**ECO**	**ECO**	**ECO**	**ECO**	**ECO**
Object Name	**Sample Name**	**Collection Date**	**Sample Depth (feet bgs)**	**Matrix Type**	**ISRA Area**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
APBS1052	APBS1052S001	6/17/2009	0.0-0.0	Soil	--	--	--	--	--	--	0.0173
APBS1205	APBS1205S001	4/29/2010	0.0-1.0	Soil	--	--	--	--	--	--	1.58
BTTS01	BTTS01S01	9/26/2000	6.5-7.0	Soil	--	<3.5	61.7 J	1.6	34.9	61.1	--
BTTS06	BTTS06S02	3/29/2001	5.5-6.0	Soil	--	--	3.8	--	--	--	--
BTTS10	BTTS10S01	9/29/2000	7.5-8.0	Soil	--	<0.35	33.2 J	2.6	26.5	57.6	--
BTTS11	BTTS11S01	9/29/2000	9.0-9.5	Soil	--	<0.35	6.1 J	2.7	23	45.9	--
BTTS13	BTTS13S01	3/30/2001	8.0-8.5	Soil	--	--	<0.41	--	--	--	--
BTTS0021	BTTS0021S01	12/20/2006	3.0-3.5	Soil	--	--	<0.052 J	--	--	--	--
BTTS0021	BTTS0021S01SP	12/20/2006	3.0-3.5	Soil	--	--	0.066 J	--	--	--	--
APWC0301	APWC0301S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	<0.99	<0.79	<0.79	34	55 B	--
APWC0302	APWC0302S001	7/29/2010	0.5-1.0	Soil	AP/STP-1D	<0.99	<0.79	<0.79	31	39	--
APWC0303	APWC0303S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	<0.99	1.5	<0.79	26	45 B	--
APWC0304	APWC0304S001	7/28/2010	0.5-1.0	Soil	AP/STP-1D	<1.0	<0.80	<0.80	30	42 B	--
APWC0305	APWC0305S001	7/29/2010	0.5-1.0	Soil	AP/STP-1D	<0.99	<0.79	<0.79	34	58	--

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

AP/STP-1D
ISRA COCs: Dioxins
RCRA R.D.s: None

APET0411	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0400	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0402	Result X SRG
Dioxins	3.5 pg/g 1.2
RCRA R.D.s	None

APBS1077	Result X SRG
ISRA COCs	**<= SRG**
RCRA R.D.s	**None**

APET0401	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0403	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0404	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1078	Result X SRG
ISRA COCs	**<= SRG**
RCRA R.D.s	**None**

APET0405	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0407	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0408	Result X SRG
Dioxins	**[2] 6.2 pg/g 2.1**
RCRA R.D.s	**None**

APET0406	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0410	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0409	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APTSTP03	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	[2] None

Data Box Information

All Result(s) Less than or equal to SRGs

ILBS0307	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	>SL

Result(s) Greater than SRGs

Sample Location ID

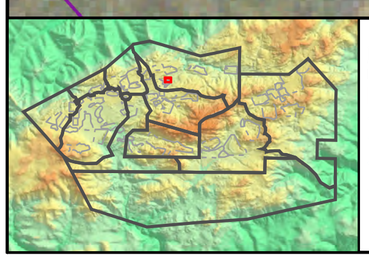
ISRA COC

Result and Comparison to SRG

RCRA R.D.s Compared to SL

ILBS0139	Result X SRG
Mercury	0.12 mg/kg 1.3
RCRA R.D.s	>SL

[2] - Represents the number of samples collected from this sample location, in this case 2, within the depth range being assessed, in this case < 2 feet bgs. Only the maximum result is presented for each analyte.



Base Map Legend
- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Previous Excavation Area

Figure Legend
- Planned Excavation Area
- Actual Excavation Area
- Additional Excavation Area
- Soil Not Excavated to Preserve Protected Species
- Near Surface Well
- Chatsworth Well

ISRA Constituents of Concern
Cadmium, Copper, Lead, Mercury, Dioxin

Soil Remediation Goals (SRGs)
Cadmium: 1 mg/kg
Copper: 29 mg/kg
Lead: 34 mg/kg
Mercury: 0.09 mg/kg
Dioxin: 3.0 pg/g

RCRA R.D.s = RCRA Risk Drivers
SL = Screening Level

Chemical Data Legend

Cadmium, Copper, Lead, and/or Mercury Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Dioxin Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Sample Not Analyzed for ISRA COCs
- > SL for one or more RCRA R.D.s
- ≤ SL for all RCRA R.D.s
- Not analyzed for RCRA R.D.s

Notes:
1. Dioxin represents the sum of 17 dioxin/furan cogener results adjusted for toxicity, normalized to 2,3,7,8-TCDD-TEQ.
2. Cadmium, copper, lead, and mercury SRG is equal to the 2005 background comparison concentration, and SRG for dioxins is approximately 3 times the 2005 background comparison concentration.
3. Screening level for RCRA risk drivers is the lower of the Ecological or Residential Risk-Based Screening Level. All RCRA risk drivers identified on this figure view are evaluated at each sample location shown.
4. Aerial imagery and topographic contours from Sage, 2010. Aerial imagery was collected June 2, 2010, and represents pre-excavation conditions. Topographic contours represent post-excavation conditions.

Outfall 009 – ISRA Area AP/STP-1D Confirmation Sample Results

SANTA SUSANA FIELD LABORATORY

Path: T:\projects\rock3\ISRA\Figures\NASA\AP-STP-1D\Confirmation.mxd

Date: 4/29/2011

1 inch = 15 feet

0 15 30 Feet

MWH

Figure E-3.3

INTERIM SOURCE REMOVAL ACTION (ISRA)

TABLE E-3.2 AP/STP-1D CONFIRMATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

				Group			**Dioxins**
				Preferred Analyte			**TCDD TEQ**
				Result Value Units			**pg/g**
				Background			**0.87**
				ISRA SRG			**3**
				CMS			**--**
				Lowest Characterization RBSL			**4.27**
				RBSL Type			**ECO**
Object Name	**Sample Name**	**Sample Date**	**Sample Depth**	**Sample Status**	**Floor/Sidewall**	**ISRA Area**	**RESULTS**
APBS1077	APBS1077S001	8/25/2009	0.0-0.5	In Place	Sidewall	AP/STP-1D	0.218
APBS1078	APBS1078S001SP	8/25/2009	0.0-0.5	In Place	Sidewall	AP/STP-1D	1.36
APBS1078	APBS1078S001	8/25/2009	0.0-0.5	In Place	Sidewall	AP/STP-1D	1.45
APET0400	APET0400S001	10/18/2010	0.5-1.0	In Place	Floor	AP/STP-1D	0.84
APET0401	APET0401S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1D	0.013
APET0402	APET0402S001	10/18/2010	0.5-1.0	Excavated	Floor	AP/STP-1D	3.49
APET0403	APET0403S001	10/18/2010	0.5-1.0	In Place	Floor	AP/STP-1D	1.67
APET0404	APET0404S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1D	1.189
APET0405	APET0405S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1D	0.042
APET0406	APET0406S001-RWQCB	10/18/2010	1.5-2.0	In Place	Floor	AP/STP-1D	1.97
APET0406	APET0406S001	10/18/2010	1.5-2.0	In Place	Floor	AP/STP-1D	0.77
APET0407	APET0407S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1D	0.289
APET0408	APET0408S001-RWQCB	10/18/2010	1.5-2.0	Excavated	Floor	AP/STP-1D	6.17
APET0408	APET0408S001	10/18/2010	1.5-2.0	Excavated	Floor	AP/STP-1D	3.20
APET0409	APET0409S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1D	2.07
APET0410	APET0410S001	11/8/2010	3.0-3.5	In Place	Floor	AP/STP-1D	0
APET0410	APET0410S001-RWQCB	11/8/2010	3.0-3.5	In Place	Floor	AP/STP-1D	0.20
APET0411	APET0411S001	11/8/2010	2.0-2.5	In Place	Floor	AP/STP-1D	0
APTSTP03	APTSTP03S01	4/22/2008	0.5-1.0	In Place	Sidewall	AP/STP-1D	1.23

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

APBS1057	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1239	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1246	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1243	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APWC0701	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APWC0704	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1244	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1061	Result X SRG
Dioxins	3.6 pg/g 1.2
RCRA R.D.s	None

APBS1079	Result X SRG
Dioxins	3.2 pg/g 1.1
RCRA R.D.s	None

APBS1242	Result X SRG
Dioxins	3.4 pg/g 1.1
RCRA R.D.s	None

APBS1245	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1259	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APWC0702	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1085	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APWC0703	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1241	Result X SRG
Dioxins	3.6 pg/g 1.2
RCRA R.D.s	None

APBS1258	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

AP/STP-1F
ISRA COCs: Dioxins
RCRA R.D.s: None

Data Box Information

All Result(s) Less than or equal to SRGs

ILBS0307	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	>SL

Result(s) Greater than SRGs

Sample Location ID

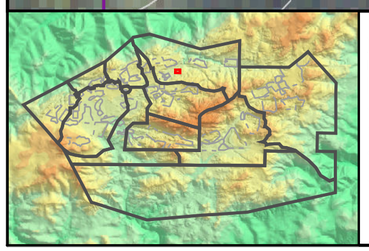
ISRA COC

ILBS0139	Result X SRG
Mercury	0.12 mg/kg 1.3
RCRA R.D.s	>SL

Result and Comparison to SRG

RCRA R.D.s Compared to SL

[2] - Represents the number of samples collected from this sample location, in this case 2, within the depth range being assessed, in this case < 2 feet bgs. Only the maximum result is presented for each analyte.



Base Map Legend
- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Previous Excavation Area
- Elevation Contour

Figure Legend
- Planned Excavation Area
- Near Surface Well
- Chatsworth Well

ISRA Constituents of Concern
Cadmium, Copper, Lead, Mercury, Dioxin

Soil Remediation Goals (SRGs)
Cadmium: 1 mg/kg
Copper: 29 mg/kg
Lead: 34 mg/kg
Mercury: 0.09 mg/kg
Dioxin: 3.0 pg/g

RCRA R.D.s = RCRA Risk Drivers
SL = Screening Level

Chemical Data Legend

Cadmium, Copper, Lead, and/or Mercury Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Dioxin Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Sample Not Analyzed for ISRA COCs
- > SL for one or more RCRA R.D.s
- ≤ SL for all RCRA R.D.s
- Not analyzed for RCRA R.D.s

Notes:
1. Dioxin represents the sum of 17 dioxin/furan cogener results adjusted for toxicity, normalized to 2,3,7,8-TCDD-TEQ.
2. Cadmium, copper, lead, and mercury SRG is equal to the 2005 background comparison concentration, and SRG for dioxins is approximately 3 times the 2005 background comparison concentration.
3. Screening level for RCRA risk drivers is the lower of the Ecological or Residential Risk-Based Screening Level. All RCRA risk drivers identified on this figure view are evaluated at each sample location shown.
4. Aerial imagery and topographic contours from Sage, 2010. Aerial imagery was collected June 2, 2010, and represents pre-excavation conditions. Topographic contours represent pre-excavation conditions.

Outfall 009 – ISRA Area AP/STP-1F
Pre-Excavation Sample Results
Surface Soils (0-2 feet bgs)

SANTA SUSANA FIELD LABORATORY

Path: T:\projects\rock3\ISRA\Figures\NASA\AP-STP-1F\Pre-Excavation_Shallow.mxd

Date: 4/28/201

1 inch = 11 feet

0 10 20 Feet

MWH

Figure E-4.1

TABLE E-4.1 AP/STP-1F PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

		Group				Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals
		Preferred Analyte				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium
		Result Value Units				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Background				8.7	15	140	1.1	1	36.8	21	29	34	0.09	5.3	29	0.655
		ISRA SRG				--	--	--	--	1	--	--	29	34	0.09	--	--	--
		CMS				0.77	--	--	--	--	--	--	8.2	--	0.88	--	15	--
		Lowest Characterization RBSL				0.095	0.095	15	5.1	0.021	930	8.9	1.1	0.063	0.1	0.11	0.1	0.17
		RBSL Type				ECO	RES	ECO	ECO	ECO	ECO	ECO	ECO	ECO	ECO	ECO	ECO	ECO
Object Name	Sample Name	Collection Date	Sample Depth (feet bgs)	Matrix Type	ISRA Area	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
APBS1057	APBS1057S001	6/17/2009	0.0-0.0	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1061	APBS1061S001	6/17/2009	0.0-0.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1079	APBS1079S001	8/25/2009	0.0-0.5	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1239	APBS1239S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1241	APBS1241S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1242	APBS1242S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1243	APBS1243S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1244	APBS1244S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1245	APBS1245S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1246	APBS1246S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1258	APBS1258S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1259	APBS1259S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	--	--	--	--	--	--	--	--	--
APBS1085	APBS1085S001	2/8/2010	0.0-0.5	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APWC0701	APWC0701S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	0.99 J	7.6	91	0.64	<0.2	17	4.5	9.1	8.6	0.018 J	0.81 J	9.7	<0.99
APWC0702	APWC0702S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	0.87 J	4.9	92	0.61	<0.2	18	5	10	6.2	<0.012	0.73 J	10	<0.99
APWC0703	APWC0703S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	<0.87	5	110	0.62	<0.2	20	5.4	10	8.4	0.015 J	0.81 J	11	<0.99
APWC0704	APWC0704S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	<0.87	4.6	75	0.55	<0.2	15	4	8	7.6	<0.012	0.61 J	8.4	<0.99

INTERIM SOURCE REMOVAL ACTION (ISRA)

TABLE E-4.1 AP/STP-1F PRE-EXCAVATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

		Group				Metals	Metals	Metals	Metals	Dioxins
		Preferred Analyte				Silver	Thallium	Vanadium	Zinc	TCDD TEQ
		Result Value Units				mg/kg	mg/kg	mg/kg	mg/kg	pg/g
		Background				0.79	0.46	62	110	0.87
		ISRA SRG				--	--	--	--	3
		CMS				96	--	--	26	--
		Lowest Characterization RBSL				0.54	2.9	1.5	21	4.27
		RBSL Type				ECO	ECO	ECO	ECO	ECO
Object Name	Sample Name	Collection Date	Sample Depth (feet bgs)	Matrix Type	ISRA Area	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
APBS1057	APBS1057S001	6/17/2009	0.0-0.0	Soil	--	--	--	--	--	1.09
APBS1061	APBS1061S001	6/17/2009	0.0-0.0	Soil	AP/STP-1F	--	--	--	--	3.62
APBS1079	APBS1079S001	8/25/2009	0.0-0.5	Soil	AP/STP-1F	--	--	--	--	3.20
APBS1239	APBS1239S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	0.62
APBS1241	APBS1241S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	3.57
APBS1242	APBS1242S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	3.43
APBS1243	APBS1243S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	0.348
APBS1244	APBS1244S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	0.122
APBS1245	APBS1245S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	0.271
APBS1246	APBS1246S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	2.58
APBS1258	APBS1258S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	0.396
APBS1259	APBS1259S001	4/29/2010	0.0-1.0	Soil	AP/STP-1F	--	--	--	--	1.30
APBS1085	APBS1085S001	2/8/2010	0.0-0.5	Soil	--	--	--	--	--	0.036
APWC0701	APWC0701S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	<0.79	<0.79	34	49 B	--
APWC0702	APWC0702S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	<0.79	<0.79	37	48 B	--
APWC0703	APWC0703S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	<0.79	<0.79	41	58 B	--
APWC0704	APWC0704S001	7/30/2010	0.5-1.0	Soil	AP/STP-1F	0.79 J	<0.79	28	42 B	--

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

AP/STP-1F
ISRA COCs: Dioxins
RCRA R.D.s: None

APBS1243	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0602	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1244	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1239	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0604	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0600	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0605	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1245	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0601	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APBS1259	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0607	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0606	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

APET0603	Result X SRG
Dioxins	7.5 pg/g 2.5
RCRA R.D.s	None

APBS1258	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	None

Data Box Information

All Result(s) Less than or equal to SRGs

ILBS0307	Result X SRG
ISRA COCs	<= SRG
RCRA R.D.s	>SL

Result(s) Greater than SRGs

Sample Location ID

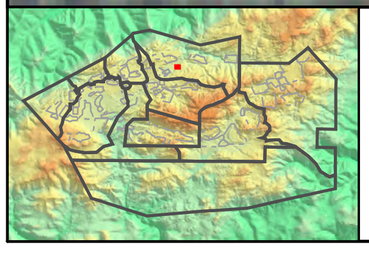
ISRA COC

Result and Comparison to SRG

RCRA R.D.s Compared to SL

ILBS0139	Result X SRG
Mercury	0.12 mg/kg 1.3
RCRA R.D.s	>SL

[2] - Represents the number of samples collected from this sample location, in this case 2, within the depth range being assessed, in this case < 2 feet bgs. Only the maximum result is presented for each analyte.



Base Map Legend
- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Previous Excavation Area

Figure Legend
- Planned Excavation Area
- Actual Excavation Area
- Additional Excavation Area
- Soil Not Excavated to Preserve Protected Species
- Near Surface Well
- Chatsworth Well

ISRA Constituents of Concern
Cadmium, Copper, Lead, Mercury, Dioxin

Soil Remediation Goals (SRGs)
Cadmium: 1 mg/kg
Copper: 29 mg/kg
Lead: 34 mg/kg
Mercury: 0.09 mg/kg
Dioxin: 3.0 pg/g

RCRA R.D.s = RCRA Risk Drivers
SL = Screening Level

Chemical Data Legend

Cadmium, Copper, Lead, and/or Mercury Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Dioxin Sample Locations
- ≤ SRG
- > SRG and < 2x SRG
- ≥ 2x SRG and < 10 x SRG
- ≥ 10x SRG

Sample Not Analyzed for ISRA COCs
- > SL for one or more RCRA R.D.s
- ≤ SL for all RCRA R.D.s
- Not analyzed for RCRA R.D.s

Notes:
1. Dioxin represents the sum of 17 dioxin/furan cogener results adjusted for toxicity, normalized to 2,3,7,8-TCDD-TEQ.
2. Cadmium, copper, lead, and mercury SRG is equal to the 2005 background comparison concentration, and SRG for dioxins is approximately 3 times the 2005 background comparison concentration.
3. Screening level for RCRA risk drivers is the lower of the Ecological or Residential Risk-Based Screening Level. All RCRA risk drivers identified on this figure view are evaluated at each sample location shown.
4. Aerial imagery and topographic contours from Sage, 2010. Aerial imagery was collected June 2, 2010, and represents pre-excavation conditions. Topographic contours represent post-excavation conditions.

Outfall 009 – ISRA Area AP/STP-1F Confirmation Sample Results

SANTA SUSANA FIELD LABORATORY

Path: T:\projects\rock3\ISRA\Figures\NASA\AP-STP-1F\Confirmation.mxd

Date: 4/29/2011

1 inch = 10 feet

0 10 20 Feet

MWH

Figure E-4.2

TABLE E-4.2 AP/STP-1F CONFIRMATION SAMPLE RESULTS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

				Group			**Dioxins**
				Preferred Analyte			**TCDD TEQ**
				Result Value Units			**pg/g**
				Background			**0.87**
				ISRA SRG			**3**
				CMS			**--**
				Lowest Characterization RBSL			**4.27**
				RBSL Type			**ECO**
Object Name	**Sample Name**	**Sample Date**	**Sample Depth**	**Sample Status**	**Floor/Sidewall**	**ISRA Area**	**RESULTS**
APBS1243	APBS1243S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	0.348
APBS1244	APBS1244S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	0.122
APBS1245	APBS1245S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	0.271
APBS1258	APBS1258S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	0.396
APBS1259	APBS1259S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	1.30
APET0600	APET0600S001-RWQCB	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.182
APET0600	APET0600S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.032
APET0601	APET0601S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.013
APET0602	APET0602S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.065
APET0603	APET0603S001	10/18/2010	1.0-1.5	Excavated	Floor	AP/STP-1F	7.46
APET0604	APET0604S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.000107
APET0605	APET0605S001-RWQCB	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.896
APET0605	APET0605S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.884
APET0606	APET0606S001-RWQCB	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.143
APET0606	APET0606S001	10/18/2010	1.0-1.5	In Place	Floor	AP/STP-1F	0.107
APET0607	APET0607S001	11/8/2010	2.0-2.5	In Place	Floor	AP/STP-1F	0
APET0607	APET0607S001-RWQCB	11/8/2010	2.0-2.5	In Place	Floor	AP/STP-1F	0.09
APBS1239	APBS1239S001	4/29/2010	0.0-1.0	In Place	Sidewall	AP/STP-1F	0.62