

APPENDIX A
SOIL SAMPLE RESULTS FROM
PHASE II ENVIRONMENTAL SURVEY

Soil Results - Compounds

Sample Location	Sampled By	Sample Designation	Sample Depth (feet)	Sample Type	Date Sampled	Laboratory	TPH-Gasoline (mg/kg)	TPH-Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Ethylbenzene (mg/kg)	Oil & Grease (mg/kg)	Other Analytes
WSXA-1	BSK	WSXA-1 S1	5	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S2	10	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S3	15	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S4	20	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S5	25	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S6	30	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S7	35	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S8	40	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-1	BSK	WSXA-1 S9	45	Liner	11 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-2	Spectrum	WSXA-2 5-5.6	5-5.5	Liner	11 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	61	NM
WSXA-2	Spectrum	WSXA-2 16-16.5	16-16.5	Liner	11 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	480	NM
WSXA-2	Spectrum	WSXA-2 19-20.5	19.5-20	Liner	11 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	120	NM
WSXA-2	Spectrum	WSXA-2 36-36.5	36-36.5	Liner	11 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	80	NM
WSXA-3	Spectrum	WSXA-3 6-6.5	6-6.5	Liner	14 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	<40	NM
WSXA-3	Spectrum	WSXA-3 11-11.5	11-11.5	Liner	14 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	NM	NM
WSXA-4	Spectrum	WSXA-4 5.5-6	5.5-6	Liner	14 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	0.005	<0.005	<30	NM
WSXA-4	Spectrum	WSXA-4 16-16.5	16-16.5	Liner	14 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	0.007	<0.005	NM	NM
WSXA-5	BSK	WSXA-5 S1	6-6.5	Liner	15 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	<40	NM
WSXA-5	BSK	WSXA-5 S6	29.5-30	Liner	15 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	<40	NM
WSXA-6	BSK	WSXA-6 S1	6-6.5	Liner	14 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	<30	NM
WSXA-6	BSK	WSXA-6 S6	27.5-28	Liner	14 February 1991	Anametrix	<0.5	<10	0.024	<0.005	<0.005	<0.005	<30	NM
WSXA-7	BSK	WSXA-7 S1	6-6.5	Liner	13 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	<50	BNA-DL, VOC-DL
WSXA-7	BSK	WSXA-7 S5	24.5-25	Liner	13 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	130	BNA-DL, VOC-DL
WSXA-8	Spectrum	WSXA-8 6-6.5	6-6.5	Liner	13 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	<40	NM
WSXA-8	Spectrum	WSXA-8 26-26.5	26-26.5	Liner	13 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	NM	NM
WSXA-9	Spectrum	WSXA-9 6-6.5	6-6.5	Liner	12 February 1991	D&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	1,300	NM
WSXA-9	Spectrum	WSXA-9 20-20.5	20-20.5	Liner	12 February 1991	D&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-10	Spectrum	WSXA-10 4-4.5	4-4.5	Liner	14 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	<30	VOC-DL
WSXA-10	Spectrum	WSXA-10 21-21.5	21-21.5	Liner	14 February 1991	Anametrix	<0.5	<10	<0.005	<0.005	<0.005	<0.005	NM	NM
WSXA-11	BSK	WSXA-11 S1	6-6.5	Liner	12 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	NM	VOC-DL
WSXA-11	BSK	WSXA-11 S3	16-16.5	Liner	12 February 1991	ES	<0.5	<10	<0.001	<0.002	<0.004	<0.002	NM	VOC-DL
WSXA-12	BSK	WSXA-12 S1	6-6.5	Liner	13 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	<50	NM
WSXA-12	BSK	WSXA-12 S3	16-16.5	Liner	13 February 1991	B&C	<0.1	<1	<0.005	<0.005	<0.005	<0.005	130	NM

General Notes

- (a) < indicates parameter reported below detection limits
- (b) NM indicates parameter not analyzed
- (c) TPH = Total petroleum hydrocarbons
- (d) BSK = BSK & Associates, Pleasanton CA
- (e) B&C = Brown and Caldwell, Emeryville CA
- (f) ES = Engineering Science, Berkeley CA
- (g) DNA-DL = Base, neutral, and acid extractable compounds analyzed according to EPA Method 8270. Compounds reported below detection limits.
- (h) VOC-DL = Volatile organic compounds analyzed according to EPA Method 8240. Compounds reported below detection limits.

Soil Residue Inorganic Compounds

Sample Location	Sampled By	Sample Designation	Sample Type	Sample Depth (feet)	Laboratory	Date Sampled	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)		
WSXA-5	Spectrom	WSXA-5 S1	liner	6-6.5	ES	15 February 1991	<10	2.1	210	0.72	<1	88	17	23	15	<0.1	<10	120	<0.5	<1	<10	55	58		
WSXA-5	Spectrom	WSXA-5 S6	liner	29.5-30	ES	15 February 1991	<10	2.7	230	0.58	<1	75	18	29	14	<0.1	<10	130	<0.5	<1	<10	44	67		
WSXA-7	Spectrom	WSXA-7 S1	liner	6-6.5	BAC	13 February 1991	<4	4.4	230	0.7	5	76	13	21	<4	<0.05	<4	83	0.6	<1	<4	54	58		
WSXA-7	Spectrom	WSXA-7 S5	liner	24.5-25	BAC	13 February 1991	<4	2.6	330	0.7	6	92	16	24	5	0.07	<4	99	<0.4	<1	<4	60	66		
California Hazardous Waste Office (Total Threshold Limit Criteria from 22 CFR 66099)							500	500	10,000	75	100	500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000		
Literature-Cited Average Background Concentration (Lindsey, W.L., 1979. Chemical Equilibria in Soils. John Wiley & Sons)								5	430	6	0.06	100	8	30	10	0.3	2	40							

General Notes

- (a) < indicates parameter reported below detection limits
- (b) ES = Engineering Science, Berkeley CA
- (c) BAC = Brown and Caldwell, Emeryville CA

Groundwater Results - Organic Compounds

Sample Location	Sampled By	Sample Designation	Sample Type	Date Sampled	Laboratory	TPH-Gasoline (µg/l)	TPH-Diesel (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Xylenes (µg/l)	Ethylbenzene (µg/l)	Oil & Grease (µg/l)	Other Analytes
WSX-1	Anametric	WSX-1	Grab (bailer)	11 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-3	Anametric	WSX-3	Grab (bailer)	14 January 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-4	Anametric	WSX-4	Grab (bailer)	14 January 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-5	Anametric	WSX-5	Grab (bailer)	15 January 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-6	Anametric	WSX-6	Grab (bailer)	11 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-7	Anametric	WSX-7	Grab (bailer)	16 January 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-10	Anametric	WSX-10	Grab (bailer)	11 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-14	Anametric	WSX-14	Grab (bailer)	16 January 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSXA-2	Spectrum	WSXA-2	Grab (bailer)	11 February 1991	B&C	<50	60	<0.5	<0.5	<0.5	<0.5	NM	NM
WSXA-3	Spectrum	WSXA-3	Grab (bailer)	14 February 1991	ES	<500	<500	<1	<2	<4	<2	NM	NM
WSXA-4	Spectrum	WSXA-4	Grab (bailer)	14 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSXA-5	BSK	WSXA-5 WS1 & WS2	Grab (bailer)	15 February 1991	ES	<500	<500	<1	<2	<4	<2	1,000	NM
WSXA-5	BSK	WSXA-5 WS3	Grab (bailer)	15 February 1991	ES	<500	NM	<1	<2	<4	<2	NM	NM
WSXA-6	BSK	WSXA-6	Grab (bailer)	14 February 1991	Anametric	6,000	1,100	1,800	<0.5	52	220	NM	NM
WSXA-7	BSK	WSXA-7	Grab (bailer)	13 February 1991	B&C	<50	60	<0.5	<0.5	<0.5	<0.5	NM	BNA's Due VOC-DL
WSXA-8	Spectrum	WSXA-8	Grab (bailer)	13 February 1991	ES	<500	<500	<1	<2	<4	<2	NM	NM
WSXA-9	Spectrum	WSXA-9	Grab (bailer)	12 February 1991	B&C	<50	<50	<0.5	0.8	0.9	<0.5	NM	NM
WSXA-10	Spectrum	WSXA-10	Grab (bailer)	14 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	VOC-DL
WSXA-10	Spectrum	WSXA-10 Dup	Grab (bailer)	14 February 1991	Anametric	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	VOC-DL
WSXA-11	BSK	WSXA-11	Grab (bailer)	12 February 1991	ES	<500	<500	<1	<2	<4	<2	NM	VOC-DL
WSXA-12	BSK	WSXA-12	Grab (bailer)	13 February 1991	B&C	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	VOC-DL

General Notes

- (a) < Indicates parameter reported below detection limits
- (b) NM Indicates parameter not analyzed
- (c) TPH = Total petroleum hydrocarbons
- (d) BSK = BSK & Associates, Pleasanton CA
- (e) B&C = Brown and Caldwell, Emeryville CA
- (f) ES = Engineering Science, Berkeley CA
- (g) BNA <DL = Base, neutral, and acid extractable compounds analyzed according to EPA Method 8270. Compounds reported below detection limits.
- (h) VOC <DL = Volatile organic compounds analyzed according to EPA Method 8240. Compounds reported below detection limits.
- (i) Samples from WSX locations were collected from monitoring wells which were purged prior to sampling. Field parameters were measured and are reported in a separate table.
- (j) Samples from WSA locations were collected during hollow stem auger drilling by immersing bailer within the water column standing within the hollow stem. Purging was not performed nor were field parameters measured.

Table 11
Groundwater Quality Control Results-Organic Compounds

Sample Location	Sampled By	Sample Designation	Sample Type	Date Sampled	Laboratory	TPH-Gasoline (µg/l)	TPH-Diesel (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Xylenes (µg/l)	Ethylbenzene (µg/l)	Oil & Grease (µg/l)	Other Analytes
WSX-3 & 4	Anamnetix	BB-1	Field Blank	14 January 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-3 & 4	Anamnetix	Trip Blank	Travel Blank	14 January 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-5	Anamnetix	BB-1	Field Blank	15 January 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-5	Anamnetix	Trip Blank	Travel Blank	15 January 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-10 & 14	Anamnetix	Trip Blank	Travel Blank	16 January 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-1, 6, & 7	Anamnetix	BB-1	Field Blank	11 February 1991	Anamnetix	<50	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSX-1, 6, & 7	Anamnetix	Trip Blank	Travel Blank	11 February 1991	Anamnetix	<50	NM	<0.5	1.4	<0.5	<0.5	NM	NM
WSXA-2	Spectrum	27278 Trip Blank	Travel Blank	11 February 1991	B&C	NM	NM	<0.5	<0.5	<0.5	<0.5	NM	NM
WSXA-3	Spectrum	Trip Blank	Travel Blank	14 February 1991	ES	NM	NM	<1	<2	<4	<2	NM	NM
WSXA-8	Spectrum	Travel Blank	Travel Blank	13 February 1991	ES	NM	NM	<1	<2	<4	<2	NM	NM
WSXA-9	Spectrum	Travel Blank	Travel Blank	12 February 1991	B&C	NM	NM	<0.5	<0.5	0.6	<0.5	NM	NM
WSXA-10	Spectrum	WSXA-10 Dup	Replicate	14 February 1991	Anamnetix	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	VOC<DL
WSXA-10	Spectrum	Travel Blank	Travel Blank	14 February 1991	Anamnetix	NM	NM	Due	Due	Due	Due	NM	VOC<DL
WSXA-10	Spectrum	WSXA-10BR	Field Blank	14 February 1991	Anamnetix	<50	<50	<0.5	<0.5	<0.5	<0.5	NM	NM
WSXA-11	BSK	VBLANK	Travel Blank	12 February 1991	ES	<500	<500	<1	<2	<4	<2	NM	0.7 µg/l, Methylene Chloride Other VOC<DL

General Notes

- (a) < Indicates parameter reported below detection limits
- (b) NM Indicates parameter not analyzed
- (c) TPH = Total petroleum hydrocarbons
- (d) BSK = BSK & Associates, Pleasanton CA
- (e) B&C = Brown and Caldwell, Emeryville CA
- (f) ES = Engineering Sciences, Berkeley CA
- (g) VOC<DL = Volatile organic compounds analyzed according to EPA Method 8240. Excepted as noted, compounds reported below detection limits.
- (h) Field blank collected by passing distilled water around and through decontaminated sampling equipment.
- (i) Travel blank consisted of sample container filled with distilled water.

Groundwater Results Inorganic Compounds

Sample Location	Sampled By	Sample Designation	Type of Sample	Date Sampled	Laboratory	Filtered or Unfiltered	Cyanide (mg/l)	Arsenic (mg/l)	Barium (mg/l)	Beryllium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Cobalt (mg/l)	Copper (mg/l)	Lead (mg/l)	Mercury (mg/l)	Molybdenum (mg/l)	Nickel (mg/l)	Selenium (mg/l)	Silver (mg/l)	Thallium (mg/l)	Vanadium (mg/l)	Zinc (mg/l)
WSXA-4	BISK & Associates	WSXA-4	Grab (Bailey)	14 February 1991	Asensia			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
WSXA-5	Spectrum	WSXA-5	Grab (Bailey)	15 February 1991	ES	Filtered	NM	<0.01	0.44	<0.005	<0.005	<0.01	<0.05	<0.025	<0.1	<0.0002	<0.1	<0.04	<0.005	<0.01	<0.05	<0.05	0.055
WSXA-7	Spectrum	WSXA-7 WS1A, B	Grab (Bailey)	13 February 1991	Brown and Caldwell	Unfiltered	NM	0.30	2.3	<0.1	<0.05	0.42	<0.05	0.10	<0.2	0.0006	<0.2	0.6	<0.002	<0.05	<0.2	<0.32	0.29
Drinking Water Standard							0.2	0.01	5	0.001	0.015	0.1		1.3	0.005	0.002		0.1	0.05	0.05	0.002		

General Note

(a) < indicates parameter reported below detection limits

(b) IS = Engineering Sciences, Berkeley CA

(c) Filtration performed by

(d) Samples were collected during hollow-stem auger drilling by immersing bailer within the water column standing within the hollow stem. Purging was not performed nor were field parameters measured.