Previous

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-02		OS-HP-02		OS-HP-03		OS-HP-03		OS-HP-04		OS-HP-04		OS-HP-05	
Sample Depth (ft)		8-12		12-16		12-16		16-20		12-16		16-20		12-16	
Sample ID		180-001		180-002		178-033		178-034		176- 026		176- 027		178-031	
Sample Collection Date		06/16/2001		06/16/2001		06/19/2001		06/19/2001		06/11/2001		06/11/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,1,1-Trichloroethane	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
1,1,2,2-Tetrachloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,1,2-Trichloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,1-Dichloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,1-Dichloroethene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,1-Dichloropropene	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
1,2,3-Trichlorobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,2,3-Trichloropropane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,2,4-Trichlorobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,2,4-Trimethylbenzene	ug/L	2	J	21	J	2	UJ	5	J	5		7		0.34	J
1,2-Dibromo-3-chloropropane	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
1,2-Dibromoethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,2-Dichlorobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,2-Dichloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	2	J	2	U
1,2-Dichloropropane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,3,5-Trimethylbenzene	ug/L	10	U	100	U	2	UJ	50	UJ	2	J	2	J	2	UJ
1,3-Dichlorobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,3-Dichloropropane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
1,4-Dichlorobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
2,2-Dichloropropane	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
2-Butanone	ug/L					20	U	500	U					20	U
2-Chlorotoluene	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
2-Hexanone	ug/L					20	UJ	500	UJ					20	UJ
4-Chlorotoluene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
4-Isopropyltoluene	ug/L	10	U	100	U	2	U	50	U	4	J	2	J	0.13	J
4-Methyl-2-pentanone	ug/L					20	U	500	U					20	U
Acetone	ug/L					20	UJ	500	UJ					20	UJ
Benzene	ug/L	41		210		2	U	72		12		45		7.1	
Bromobenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Bromochloromethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Bromodichloromethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Bromoform	ug/L	10	U	100	U	2	U	50	U	5	UJ	5	UJ	2	U
Bromomethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-02		OS-HP-02		OS-HP-03		OS-HP-03		OS-HP-04		OS-HP-04		OS-HP-05	
Sample Depth (ft)		8-12		12-16		12-16		16-20		12-16		16-20		12-16	
Sample ID		180-001		180-002		178-033		178-034		176- 026		176- 027		178-031	
Sample Collection Date		06/16/2001		06/16/2001		06/19/2001		06/19/2001		06/11/2001		06/11/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L					2	U	50	U					0.96	J
Carbon tetrachloride	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Chlorobenzene	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
Chloroethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Chloroform	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Chloromethane	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
cis-1,2-Dichloroethene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
cis-1,3-Dichloropropene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	NA	
Dibromochloromethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Dibromomethane	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Dichlorodifluoromethane	ug/L	10	U	100	U	2	U	20	J	5	U	5	U	2	U
Ethylbenzene	ug/L	24		100		2	U	20	J	79		74		3.4	
Hexachlorobutadiene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Isopropyl benzene	ug/L														
m/p-Xylenes	ug/L														
Methylene chloride	ug/L	7	J	100	U	2	UJ	50	UJ	5	UJ	5	UJ	0.31	J
MTBE	ug/L	50	U	500	U	0.3	J	120	U	25	U	25	U	5	U
Naphthalene	ug/L	270		3040		0.6	J	970	J	839		821		89	J
n-Butylbenzene	ug/L	10	U	100	U	2	UJ	50	UJ	5	UJ	5	UJ	2	UJ
n-Propylbenzene	ug/L	10	U	100	U	2	U	50	U	2	J	5	U	2	U
o-Xylene	ug/L														
p-Isopropyltoluene	ug/L	10	U	100	U	2	UJ	50	UJ	1	J	5	U	2	UJ
sec-Butylbenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Dtyrene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
tert-Butylbenzene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Tetrachloroethene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Tetrachloroethylene	ug/L														
Toluene	ug/L	3	J	66	J	2	U	15	J	8	U	12		0.62	J
trans-1,2-Dichloroethene	ug/L					2	U	50	U	5	U	5	U	2	U
trans-1,3-Dichloropropene	ug/L	10	U	100	U					5	U	5	U		
Trichloroethene	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Trichlorofluoromethane	ug/L	10	U	100	U	2	UJ	50	UJ	5	U	5	U	2	UJ
Vinyl chloride	ug/L	10	U	100	U	2	U	50	U	5	U	5	U	2	U
Xylenes (total)	ug/L	23		100		2	U	22	J	52		57		2.9	J

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-02		OS-HP-02		OS-HP-03		OS-HP-03		OS-HP-04		OS-HP-04		OS-HP-05	
Sample Depth (ft)		8-12		12-16		12-16		16-20		12-16		16-20		12-16	
Sample ID		180-001		180-002		178-033		178-034		176- 026		176- 027		178-031	
Sample Collection Date		06/16/2001		06/16/2001		06/19/2001		06/19/2001		06/11/2001		06/11/2001		06/15/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	25	U	100	U	1.9	U	29	J	6	J	46	J	18	
Acenaphthylene	ug/L	6	J	70		1.5	J	62	J	10		20	U	22	
Anthracene	ug/L	3.1		9.6		0.19	U	19	J	2		1	J	4.9	
Benzo(a)anthracene	ug/L	1		4	U	3.7	J	6.8	J	0.4	J	2	U	1.8	
Benzo(a)pyrene	ug/L	0.5	J	4	U	7.3	J	13	J	1	U	2	U	4.1	
Benzo(b)fluoranthene	ug/L	2.3		4	U	4.2	J	7	J	1	U	2	U	2	
Benzo(g,h,i)perylene	ug/L	1		1	J	4.8	J	19	U	1	U	2	U	3.4	
Benzo(k)fluoranthene	ug/L	0.4	J	4	U	2	J	3.6	J	1	U	2	U	0.99	
Chrysene	ug/L	1		0.8	J	4.4	J	11	J	0.3	J	2	U	2.3	
Dibenz(a,h)anthracene	ug/L	2.5	U	10	U	0.38	U	0.38	U	2.5	U	5	U	1.9	U
Fluoranthene	ug/L	21		26		28	J	77	J	2.6		1	J	23	
Fluorene	ug/L	5	U	30		0.38	U	20	J	5	U	10	U	4.9	
Indeno(1,2,3-cd)pyrene	ug/L	1	U	4	U	4.9	J	9.9	J	1	U	2	U	2.6	
Naphthalene	ug/L	77		880		1.9	U	370	J	40		430		220	J
Phenanthrene	ug/L	4	J	67		9.9	J	93	J	13		10		26	J
Pyrene	ug/L	14		2	J	23	J	43	J	0.5	J	0.7	J	21	J
BaP equivalency	ug/L	2.1		7.6	J	8.8	J	16	J	1.9	J	3.8	U	5.7	
Methane (RSK 175)															
Methane	ug/L									2800		4200			
General Chemistry															
Alkallinity	mg/L									3530		3960			
Sulfide	mg/L									1.6		0.2	U		
Nitrate	mg/L									5		6			
Sulfate	mg/L									70		60			

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-06		OS-HP-06		OS-HP-07		OS-HP-07		OS-HP-08		OS-HP-08		OS-HP-08	
Sample Depth (ft)		6-10		10-14		10-14		14-18		6-10		11-15		15-19	
Sample ID		179-001		179-003		179-005		179-006		179-008		179-009		179-010	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1,1-Trichloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1,2-Trichloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1-Dichloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1-Dichloroethene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,1-Dichloropropene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2,3-Trichlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2,3-Trichloropropane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2,4-Trichlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2,4-Trimethylbenzene	ug/L	1	U	8		20		26		1	U	1	U	250	U
1,2-Dibromo-3-chloropropane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2-Dibromoethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2-Dichlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,2-Dichloroethane	ug/L	1	U	6		12		10		1	U	1	U	250	U
1,2-Dichloropropane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,3,5-Trimethylbenzene	ug/L	1	U	3	J	6		8	J	1	U	1	U	250	U
1,3-Dichlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,3-Dichloropropane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
1,4-Dichlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
2,2-Dichloropropane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
2-Butanone	ug/L														
2-Chlorotoluene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
2-Hexanone	ug/L														
4-Chlorotoluene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
4-Isopropyltoluene	ug/L	1	U	2	J	2	J	10	U	1	U	1	U	250	U
4-Methyl-2-pentanone	ug/L														
Acetone	ug/L														
Benzene	ug/L	1	U	148		375		351		1	U	1	U	670	
Bromobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Bromochloromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Bromodichloromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Bromoform	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Bromomethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-06		OS-HP-06		OS-HP-07		OS-HP-07		OS-HP-08		OS-HP-08		OS-HP-08	
Sample Depth (ft)		6-10		10-14		10-14		14-18		6-10		11-15		15-19	
Sample ID		179-001		179-003		179-005		179-006		179-008		179-009		179-010	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L														
Carbon tetrachloride	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Chlorobenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Chloroethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Chloroform	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Chloromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
cis-1,2-Dichloroethene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
cis-1,3-Dichloropropene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Dibromochloromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Dibromomethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Dichlorodifluoromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Ethylbenzene	ug/L	1	U	61		95		120		1	U	1	U	160	J
Hexachlorobutadiene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Isopropyl benzene	ug/L														
m/p-Xylenes	ug/L														
Methylene chloride	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	180	J
MTBE	ug/L	5	U	25	U	25	U	50	U	5	U	5	U	1300	U
Naphthalene	ug/L	2.6		1350		3180		4530		4.4		2.7		6130	
n-Butylbenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
n-Propylbenzene	ug/L	1	U	5	U	2	J	2	J	1	U	1	U	250	U
o-Xylene	ug/L														
p-Isopropyltoluene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
sec-Butylbenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Dtyrene	ug/L	1	U	7		77		61		1	U	1	U	250	U
tert-Butylbenzene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Tetrachloroethene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Tetrachloroethylene	ug/L														
Toluene	ug/L	1	U	22		85		110		1	U	1	U	180	J
trans-1,2-Dichloroethene	ug/L														
trans-1,3-Dichloropropene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Trichloroethene	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Trichlorofluoromethane	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Vinyl chloride	ug/L	1	U	5	U	5	U	10	U	1	U	1	U	250	U
Xylenes (total)	ug/L	1	U	63		175		190		1	U	1	U	400	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-06		OS-HP-06		OS-HP-07		OS-HP-07		OS-HP-08		OS-HP-08		OS-HP-08	
Sample Depth (ft)		6-10		10-14		10-14		14-18		6-10		11-15		15-19	
Sample ID		179-001		179-003		179-005		179-006		179-008		179-009		179-010	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
PNAs (EPA 8310)															
Acenaphthene	ug/L	5	U	50	U	250	U	100	U	5	U	5	U	250	U
Acenaphthylene	ug/L	2	U	19	J	330		190		2	U	2	U	100	
Anthracene	ug/L	0.2	J	2		10		8.1		0.3		0.09	J	25	
Benzo(a)anthracene	ug/L	0.2	U	2	U	10	U	4	U	0.2	U	0.2	U	10	
Benzo(a)pyrene	ug/L	0.2	U	2	U	10	U	4	U	0.2	U	0.2	U	4	J
Benzo(b)fluoranthene	ug/L	0.2	U	2	U	10	U	4	U	0.2	U	0.2	U	10	U
Benzo(g,h,i)perylene	ug/L	0.07	J	2	U	3	J	4	U	0.2	U	0.2	U	10	J
Benzo(k)fluoranthene	ug/L	0.2	U	2	U	10	U	4	U	0.2	U	0.2	U	10	U
Chrysene	ug/L	0.2	U	2	U	2	J	4	U	0.2	U	0.03	J	20	
Dibenz(a,h)anthracene	ug/L	0.5	U	5	U	25	U	10	U	0.5	U	0.5	U	25	U
Fluoranthene	ug/L	0.92		8.7		40		20		1.3		0.5		87	
Fluorene	ug/L	1	U	2	J	31	J	19	J	0.5	J	1	U	33	J
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	2	U	10	U	4	U	0.2	U	0.2	U	10	U
Naphthalene	ug/L	5	U	740		2100		1400		8		5	U	1800	
Phenanthrene	ug/L	1		10		90		48		2.4		0.6	J	110	
Pyrene	ug/L	1.6		5		10	U	1	J	0.1	J	0.04	J	10	
BaP equivalency	ug/L	0.38	U	3.8	U	19	J	7.6	U	0.38	U	0.38	J	19	
Methane (RSK 175)															
Methane	ug/L	1200		6800											
General Chemistry															
Alkallinity	mg/L	260		260											
Sulfide	mg/L	0.2	U	0.2	U										
Nitrate	mg/L	0.8	U	0.8	U										
Sulfate	mg/L	28	U	10	U										

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-09		OS-HP-09		OS-HP-09		OS-HP-10		OS-HP-10		OS-HP-10		OS-HP-11	
Sample Depth (ft)		8-12		12-16		16-20		6-10		9-13		14-18		8-12	
Sample ID		179-011		179-013		179-014		181-735		181-736		181-737		031-W-144	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
1,1,1-Trichloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,1-Dichloroethene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,1-Dichloropropene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	UJ
1,2,3-Trichloropropane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
1,2,4-Trimethylbenzene	ug/L	1	U	0.7	J	50	U	10	UJ	2	UJ	34	J	2	UJ
1,2-Dibromo-3-chloropropane	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
1,2-Dibromoethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,2-Dichloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,2-Dichloropropane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	29	J	2	UJ
1,3-Dichlorobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,3-Dichloropropane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
2-Butanone	ug/L							100	UJ	20	UJ	20	UJ	20	UJ
2-Chlorotoluene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
2-Hexanone	ug/L							100	U	20	U	20	U	20	UJ
4-Chlorotoluene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	U
4-Methyl-2-pentanone	ug/L							100	U	20	U	20	U	20	U
Acetone	ug/L							100	UJ	20	UJ	20	UJ	20	UJ
Benzene	ug/L	1	U	17		220		4.2	J	2.4		6000	J	0.49	J
Bromobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Bromochloromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Bromoform	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
Bromomethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-09		OS-HP-09		OS-HP-09		OS-HP-10		OS-HP-10		OS-HP-10		OS-HP-11	
Sample Depth (ft)		8-12		12-16		16-20		6-10		9-13		14-18		8-12	
Sample ID		179-011		179-013		179-014		181-735		181-736		181-737		031-W-144	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L							10	UJ	2	UJ	2	UJ	2	U
Carbon tetrachloride	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Chlorobenzene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Chloroethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Chloroform	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Chloromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
cis-1,2-Dichloroethene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	1.2	J
cis-1,3-Dichloropropene	ug/L	1	U	1	U	50	U								
Dibromochloromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Dibromomethane	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
Dichlorodifluoromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Ethylbenzene	ug/L	1	U	6.8		37	J	1	J	0.45	J	800	J	2	U
Hexachlorobutadiene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
Isopropyl benzene	ug/L							10	UJ	2	UJ	7.4	J	2	UJ
m/p-Xylenes	ug/L							10	U	0.24	J	5000	UJ	2	U
Methylene chloride	ug/L	1	U	1	U	31	J	10	UJ	2	UJ	2	UJ	2	U
MTBE	ug/L	5	U	5	U	250	U	25	UJ	5	UJ	5	UJ	1.1	J
Naphthalene	ug/L	30		129		1770		49		14		12000	J	0.89	J
n-Butylbenzene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	U
n-Propylbenzene	ug/L	1	U	1	U	50	U	10	UJ	2	U	8.1	J	2	UJ
o-Xylene	ug/L							10	UJ	0.38	J	5000	UJ	2	U
p-Isopropyltoluene	ug/L	1	U	1	U	50	U								
sec-Butylbenzene	ug/L	1	U	1	U	50	U	10	UJ	2	UJ	2	UJ	2	UJ
Dtyrene	ug/L	1	U	1	U	11	J	10	UJ	2	UJ	5000	UJ	2	U
tert-Butylbenzene	ug/L	1	U	1	U	50	U	10	UJ	2	U	2	U	2	UJ
Tetrachloroethene	ug/L	1	U	1	U	50	U								
Tetrachloroethylene	ug/L							10	UJ	2	UJ	2	UJ	2	UJ
Toluene	ug/L	1	U	2		47	J	1.1	J	0.25	J	620	J	0.41	J
trans-1,2-Dichloroethene	ug/L							10	U	2	U	2	U	0.25	J
trans-1,3-Dichloropropene	ug/L	1	U	1	U	50	U								
Trichloroethene	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Trichlorofluoromethane	ug/L	1	U	1	U	50	U	10	U	2	U	2	U	2	U
Vinyl chloride	ug/L	1	U	0.3	J	50	U	10	U	2	U	2	U	0.79	J
Xylenes (total)	ug/L	1	U	8.7		70									

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-09		OS-HP-09		OS-HP-09		OS-HP-10		OS-HP-10		OS-HP-10		OS-HP-11	
Sample Depth (ft)		8-12		12-16		16-20		6-10		9-13		14-18		8-12	
Sample ID		179-011		179-013		179-014		181-735		181-736		181-737		031-W-144	
Sample Collection Date		06/16/2001		06/16/2001		06/16/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	5	U	5	U	Not analyzed		1.9	U	14		9.4	U	1.9	U
Acenaphthylene	ug/L	2	U	2	U			3.8	U	19	U	800		3.8	U
Anthracene	ug/L	0.41		1.4				0.19	U	4.2		38	J	0.19	U
Benzo(a)anthracene	ug/L	0.2		0.2	U			0.65		3.7		8.4		0.19	U
Benzo(a)pyrene	ug/L	0.2	U	0.2	U			1.9		6.8		16		0.057	J
Benzo(b)fluoranthene	ug/L	0.2	U	0.2	U			1.2		3.8		8.8		0.38	U
Benzo(g,h,i)perylene	ug/L	0.2	J	0.2	J			1.6		4.1		10		0.38	U
Benzo(k)fluoranthene	ug/L	0.2	U	0.2	U			0.57		2		4.7		0.19	U
Chrysene	ug/L	0.1	J	0.04	J			0.88		5.6		23		0.19	U
Dibenz(a,h)anthracene	ug/L	0.5	U	0.5	U			0.38	U	1.9	U	1.9	U	0.38	U
Fluoranthene	ug/L	2.4		4.23				3.4		60	J	110	J	0.22	J
Fluorene	ug/L	1	U	1	U			0.22	J	1.9	U	70	J	0.38	U
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	0.2	U			1.5		4.1		9.9		0.048	J
Naphthalene	ug/L	7		53				19		15		5800	J	0.48	J
Phenanthrene	ug/L	3.4		4.1				1.2	J	4.2		170	J	0.64	
Pyrene	ug/L	0.2		2.8				4.6	J	38	J	73	J	0.78	
BaP equivalency	ug/L	0.39		0.38	J			2.4		8.9		20		0.28	J
Methane (RSK 175)															
Methane	ug/L							9200							
General Chemistry															
Alkallinity	mg/L							3280							
Sulfide	mg/L							3.2							
Nitrate	mg/L							2	U						
Sulfate	mg/L							340							

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-11		OS-HP-11		OS-HP-11		OS-HP-12		OS-HP-12		OS-HP-12		OS-HP-13	
Sample Depth (ft)		12-16		16-20		20-24		5.5-9.5		10-14		16-20		16-20	
Sample ID		031-W-145		031-W-146		031-W-147		176- 011		176- 013		176- 015		176- 008	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/08/2001		06/08/2001		06/08/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
1,1,1-Trichloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,1,2-Trichloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,1-Dichloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,1-Dichloroethene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,1-Dichloropropene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	UJ	2	U
1,2,3-Trichlorobenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	U	2	U
1,2,3-Trichloropropane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,2,4-Trichlorobenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
1,2,4-Trimethylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	1.8	J	15	J	27	
1,2-Dibromo-3-chloropropane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
1,2-Dibromoethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,2-Dichlorobenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	UJ	10	U	2	U
1,2-Dichloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,2-Dichloropropane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,3,5-Trimethylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	0.54	J	5	J	7.8	
1,3-Dichlorobenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,3-Dichloropropane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
1,4-Dichlorobenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
2,2-Dichloropropane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
2-Butanone	ug/L	20	UJ	20	UJ	20	UJ								
2-Chlorotoluene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
2-Hexanone	ug/L	20	UJ	20	UJ	20	UJ								
4-Chlorotoluene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
4-Isopropyltoluene	ug/L	2	UJ	2	U	2	U	2	UJ	0.24	J	1.7	J	2.2	
4-Methyl-2-pentanone	ug/L	20	UJ	20	U	20	U								
Acetone	ug/L	20	UJ	20	UJ	20	UJ								
Benzene	ug/L	2	UJ	0.76	J	2	U	2	UJ	3.7		65	J	850	J
Bromobenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Bromochloromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Bromodichloromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Bromoform	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
Bromomethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-11		OS-HP-11		OS-HP-11		OS-HP-12		OS-HP-12		OS-HP-12		OS-HP-13	
Sample Depth (ft)		12-16		16-20		20-24		5.5-9.5		10-14		16-20		16-20	
Sample ID		031-W-145		031-W-146		031-W-147		176- 011		176- 013		176- 015		176- 008	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/08/2001		06/08/2001		06/08/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	2	UJ	2	U	0.25	J								
Carbon tetrachloride	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Chlorobenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Chloroethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Chloroform	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Chloromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	UJ	10	U	2	U
cis-1,2-Dichloroethene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
cis-1,3-Dichloropropene	ug/L							2	UJ	2	UJ	10	UJ	2	U
Dibromochloromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Dibromomethane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
Dichlorodifluoromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Ethylbenzene	ug/L	2	UJ	0.52	J	0.14	J	2	UJ	3.5		72	J	140	J
Hexachlorobutadiene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
Isopropyl benzene	ug/L	2	UJ	2	UJ	2	UJ								
m/p-Xylenes	ug/L	2	UJ	0.46	J	2	U								
Methylene chloride	ug/L	2	UJ	2	U	2	U	2	UJ	2	UJ	10	U	2	U
MTBE	ug/L	5	UJ	5	U	1.1	J	1.2	J	5	UJ	25	U	2.1	J
Naphthalene	ug/L	220	J	79		0.44	J	13	J	330		3600	J	19000	J
n-Butylbenzene	ug/L	2	UJ	2	U	2	U	2	UJ	2	UJ	10	UJ	2	U
n-Propylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	1.4	J	1.5	J
o-Xylene	ug/L	2	UJ	2	U	2	U								
p-Isopropyltoluene	ug/L							2	UJ	2	UJ	10	UJ	2	U
sec-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	U	10	UJ	2	U
Dtyrene	ug/L	2	UJ	2	U	2	U	2	UJ	1.1	J	9.7	J	130	J
tert-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	10	UJ	2	U
Tetrachloroethene	ug/L							2	UJ	2	U	10	U	2	U
Tetrachloroethylene	ug/L	2	UJ	2	UJ	2	UJ								
Toluene	ug/L	2	UJ	2	U	0.28	J	2	UJ	2.3		39	J	300	J
trans-1,2-Dichloroethene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
trans-1,3-Dichloropropene	ug/L							NA		NA		NA		2	U
Trichloroethene	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Trichlorofluoromethane	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Vinyl chloride	ug/L	2	UJ	2	U	2	U	2	UJ	2	U	10	U	2	U
Xylenes (total)	ug/L							2	UJ	6.5		36	J	210	J

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-11		OS-HP-11		OS-HP-11		OS-HP-12		OS-HP-12		OS-HP-12		OS-HP-13	
Sample Depth (ft)		12-16		16-20		20-24		5.5-9.5		10-14		16-20		16-20	
Sample ID		031-W-145		031-W-146		031-W-147		176- 011		176- 013		176- 015		176- 008	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/08/2001		06/08/2001		06/08/2001		06/07/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	63		110	J	0.87	J	1.9	U	13		78	J	58	J
Acenaphthylene	ug/L	33		23		3.8	U	3.8	U	20		280	J	460	J
Anthracene	ug/L	0.95	U	9	J	0.16	J	0.19	U	0.59		10	J	13	J
Benzo(a)anthracene	ug/L	2.3		1.2		0.13	J	0.09	J	0.16	J	0.54		1.6	
Benzo(a)pyrene	ug/L	4.2		2.1		0.25		0.2		0.32		1.1		3.2	
Benzo(b)fluoranthene	ug/L	2.3		1.2		0.16	J	0.15	J	0.18	J	0.63		1.6	
Benzo(g,h,i)perylene	ug/L	3.1		1.4		0.38	U	0.2	J	0.31	J	0.89		2.1	
Benzo(k)fluoranthene	ug/L	1		0.67		0.092	J	0.099	J	0.098	J	0.27		0.79	
Chrysene	ug/L	3.1		1.6		0.2		0.19	U	0.24		0.88		2.5	
Dibenz(a,h)anthracene	ug/L	1.9	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.4	U
Fluoranthene	ug/L	36	J	27		2		0.92		4.1		26	J	35	J
Fluorene	ug/L	5.1		5.3		0.38	U	0.38	U	0.92		21	J	42	J
Indeno(1,2,3-cd)pyrene	ug/L	2.8		1.4		0.14	J	0.15	J	0.23		0.8		2	
Naphthalene	ug/L	110		67	J	5.1		2.5		250	J	2400	J	4500	J
Phenanthrene	ug/L	20	J	47	J	1.1		0.48		4.9	J	48	J	93	J
Pyrene	ug/L	26	J	15	J	1.2		1		2.5		11	J	20	J
BaP equivalency	ug/L	5.9		2.7		0.48		0.43		0.57		1.5		3.9	
Methane (RSK 175)															
Methane	ug/L														
General Chemistry															
Alkallinity	mg/L														
Sulfide	mg/L														
Nitrate	mg/L														
Sulfate	mg/L														

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-14		OS-HP-14		OS-HP-17		OS-HP-17		OS-HP-17		OS-HP-18		OS-HP-20	
Sample Depth (ft)		12-16		16-19		8-12		12-16		16-20		17.5-20		16-20	
Sample ID		176- 024		176- 025		176- 019		176- 020		176- 021		174-001		178- 029	
Sample Collection Date		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/07/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,1,1-Trichloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
1,1,2,2-Tetrachloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,1-Dichloroethene	ug/L	1	U	5		1	U	1	U	5	U	2	U	2	U
1,1-Dichloropropene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
1,2,3-Trichlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,2,3-Trichloropropane	ug/L	1		5	U	1	U	1	U	5	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,2,4-Trimethylbenzene	ug/L	18		34		1	U	1	U	15		8		1.3	J
1,2-Dibromo-3-chloropropane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
1,2-Dibromoethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,2-Dichloroethane	ug/L	16		50		1	U	1	U	18		2	U	2	U
1,2-Dichloropropane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	5.9		10		1	U	1	U	5	J	1.8	J	0.43	J
1,3-Dichlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,3-Dichloropropane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
2,2-Dichloropropane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
2-Butanone	ug/L											20	U	20	U
2-Chlorotoluene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
2-Hexanone	ug/L											20	U	20	UJ
4-Chlorotoluene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
4-Isopropyltoluene	ug/L	2		2	J	1	U	1	U	1	J	2	U	2	U
4-Methyl-2-pentanone	ug/L											20	U	20	U
Acetone	ug/L											20	UJ	20	UJ
Benzene	ug/L	742		1970		1	U	1	U	645		27		17	
Bromobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Bromochloromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Bromodichloromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Bromoform	ug/L	1	UJ	5	UJ	1	UJ	1	UJ	5	UJ	2	U	2	U
Bromomethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-14		OS-HP-14		OS-HP-17		OS-HP-17		OS-HP-17		OS-HP-18		OS-HP-20	
Sample Depth (ft)		12-16		16-19		8-12		12-16		16-20		17.5-20		16-20	
Sample ID		176- 024		176- 025		176- 019		176- 020		176- 021		174-001		178- 029	
Sample Collection Date		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/07/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L											2	U	0.27	J
Carbon tetrachloride	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Chlorobenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
Chloroethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Chloroform	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Chloromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
cis-1,2-Dichloroethene	ug/L	1	U	5		1	U	1	U	5	U	2	U	2	U
cis-1,3-Dichloropropene	ug/L	1	U	5	U	1	U	1	U	5	U			NA	
Dibromochloromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Dibromomethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Dichlorodifluoromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Ethylbenzene	ug/L	114		52		1	U	1	U	135		19		3.7	
Hexachlorobutadiene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Isopropyl benzene	ug/L											0.5	J		
m/p-Xylenes	ug/L											18			
Methylene chloride	ug/L	1	UJ	5	UJ	1	UJ	1	UJ	5	UJ	2	U	2	U
MTBE	ug/L	5	U	1	J	0.7	J	0.6	J	2	J	1.1	J	5	U
Naphthalene	ug/L	3710		5320		1	U	23		3970		2400	J	210	J
n-Butylbenzene	ug/L	1	UJ	5	UJ	1	UJ	1	UJ	5	UJ	2	U	2	U
n-Propylbenzene	ug/L	1		3	J	1	U	1		5	U	0.49	J	2	U
o-Xylene	ug/L											19			
p-Isopropyltoluene	ug/L	1		5	U	1	U	1	U	5	U			2	UJ
sec-Butylbenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Dtyrene	ug/L	81		105		1	U	1	U	70		3		2	
tert-Butylbenzene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Tetrachloroethene	ug/L	1	U	5	U	1	U	1	U	5	U			2	U
Tetrachloroethylene	ug/L											2	U		
Toluene	ug/L	150		262		0.3	J	0.4	J	168		22		4.4	
trans-1,2-Dichloroethene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
trans-1,3-Dichloropropene	ug/L	1	U	5	U	1	UJ	1	UJ	5	U				
Trichloroethene	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Trichlorofluoromethane	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	UJ
Vinyl chloride	ug/L	1	U	5	U	1	U	1	U	5	U	2	U	2	U
Xylenes (total)	ug/L	175		224		1	U	0.2	J	167				8	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-14		OS-HP-14		OS-HP-17		OS-HP-17		OS-HP-17		OS-HP-18		OS-HP-20	
Sample Depth (ft)		12-16		16-19		8-12		12-16		16-20		17.5-20		16-20	
Sample ID		176- 024		176- 025		176- 019		176- 020		176- 021		174-001		178- 029	
Sample Collection Date		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/11/2001		06/07/2001		06/14/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	500	U	Not analyzed		Not analyzed		Not analyzed		7	J	6.4	J	19	U
Acenaphthylene	ug/L	170	J							21		96	J	130	
Anthracene	ug/L	7	J							2.6		6.5	J	59	J
Benzo(a)anthracene	ug/L	20	U							0.4	J	2.4	J	26	
Benzo(a)pyrene	ug/L	20	U							1	U	4.9	J	60	J
Benzo(b)fluoranthene	ug/L	20	U							1	U	2.6	J	29	
Benzo(g,h,i)perylene	ug/L	20	U							1	U	3.2	J	37	
Benzo(k)fluoranthene	ug/L	20	U							1	U	1.3	J	14	
Chrysene	ug/L	20	U							0.3	J	4.6	J	43	
Dibenz(a,h)anthracene	ug/L	50	U							2.5	U	0.4	UJ	3.8	U
Fluoranthene	ug/L	9	J							11		35	J	280	J
Fluorene	ug/L	100	U							5	U	23	J	45	
Indeno(1,2,3-cd)pyrene	ug/L	20	U							1	U	3.2	J	38	
Naphthalene	ug/L	5400								61		1400	J	510	J
Phenanthrene	ug/L	55	J							20		54	J	250	J
Pyrene	ug/L	7	J							4.7		23	J	200	J
BaP equivalency	ug/L	38	U							1.9	J	5.9	J	71	
Methane (RSK 175)															
Methane	ug/L	7200												3000	
General Chemistry															
Alkallinity	mg/L	3640												3280	
Sulfide	mg/L	2.9												1.9	
Nitrate	mg/L	7												0.1	U
Sulfate	mg/L	50	U											1800	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-21		OS-HP-22		OS-HP-25		OS-HP-25		OS-HP-26		OS-HP-26		OS-HP-26	
Sample Depth (ft)		12-16		16-20		12-16		16-20		12-16		16-20		20-24	
Sample ID		178-032		178-030		176- 016		176- 017		031-W-140		031-W-142		031-W-143	
Sample Collection Date		06/15/2001		06/15/2001		06/08/2001		06/08/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
1,1,1-Trichloroethane	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,1-Dichloroethene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,1-Dichloropropene	ug/L	1	U	2	UJ	2	UJ	10	UJ	2	U	2	U	2	U
1,2,3-Trichlorobenzene	ug/L	1	U	2	U	2	UJ	10	U	2	UJ	2	UJ	2	UJ
1,2,3-Trichloropropane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
1,2,4-Trimethylbenzene	ug/L	1	U	0.99	J	2	UJ	52	J	2	UJ	2	UJ	2	UJ
1,2-Dibromo-3-chloropropane	ug/L	1	U	2	UJ	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
1,2-Dibromoethane	ug/L	1	U	2	U	2	UJ	10	U	2	UJ	2	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,2-Dichloroethane	ug/L	1	U	0.22	J	2	UJ	10	U	2	U	2	U	2	U
1,2-Dichloropropane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	1	U	0.37	J	2	UJ	12	J	2	UJ	2	UJ	2	UJ
1,3-Dichlorobenzene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,3-Dichloropropane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
2-Butanone	ug/L	NA		20	U					20	UJ	20	UJ	20	UJ
2-Chlorotoluene	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
2-Hexanone	ug/L	NA		20	UJ					20	UJ	20	UJ	20	UJ
4-Chlorotoluene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	1	U	0.15	J	2	UJ	11		2	U	2	U	2	U
4-Methyl-2-pentanone	ug/L	NA		20	U					20	U	20	U	20	U
Acetone	ug/L	NA		20	UJ					20	UJ	20	UJ	20	UJ
Benzene	ug/L	0.6	J	8.8		2	UJ	270	J	2	U	2	U	2	U
Bromobenzene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Bromochloromethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Bromoform	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
Bromomethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	UJ

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-21		OS-HP-22		OS-HP-25		OS-HP-25		OS-HP-26		OS-HP-26		OS-HP-26	
Sample Depth (ft)		12-16		16-20		12-16		16-20		12-16		16-20		20-24	
Sample ID		178-032		178-030		176- 016		176- 017		031-W-140		031-W-142		031-W-143	
Sample Collection Date		06/15/2001		06/15/2001		06/08/2001		06/08/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	NA		2	U					0.13	J	0.11	J	0.18	J
Carbon tetrachloride	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Chlorobenzene	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
Chloroethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Chloroform	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	0.75	J
Chloromethane	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
cis-1,2-Dichloroethene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
cis-1,3-Dichloropropene	ug/L	1	U	NA		2	UJ	10	UJ						
Dibromochloromethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Dibromomethane	ug/L	1	U	2	U	2	UJ	10	UJ	2	U	2	UJ	2	UJ
Dichlorodifluoromethane	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Ethylbenzene	ug/L	0.7	J	4		2	UJ	180		2	U	0.21	J	2	U
Hexachlorobutadiene	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
Isopropyl benzene	ug/L									2	UJ	2	UJ	2	UJ
m/p-Xylenes	ug/L									2	U	2	U	2	U
Methylene chloride	ug/L	1	U	0.22	J	2	UJ	10	U	2	U	2	U	2	U
MTBE	ug/L	1	J	5	U	5	UJ	25	U	0.26	J	0.8	J	0.44	J
Naphthalene	ug/L	0.7	J	370	J	6.6	J	6700	J	2	U	0.81	J	0.69	J
n-Butylbenzene	ug/L	1	U	2	UJ	2	UJ	10	UJ	2	U	2	U	2	U
n-Propylbenzene	ug/L	1	U	2	U	2	UJ	7.4	J	2	UJ	2	UJ	2	UJ
o-Xylene	ug/L									2	U	2	U	2	U
p-Isopropyltoluene	ug/L	1	U	2	UJ	2	UJ	10	UJ						
sec-Butylbenzene	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
Dtyrene	ug/L	1	U	0.4	J	2	UJ	24	J	2	U	2	U	2	U
tert-Butylbenzene	ug/L	1	U	2	U	2	UJ	10	UJ	2	UJ	2	UJ	2	UJ
Tetrachloroethene	ug/L	1	U	2	U	2	UJ	10	U						
Tetrachloroethylene	ug/L									2	UJ	2	UJ	2	UJ
Toluene	ug/L	1	U	1.6	J	2	UJ	120	J	0.18	J	0.31	J	0.3	J
trans-1,2-Dichloroethene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
trans-1,3-Dichloropropene	ug/L					NA		NA							
Trichloroethene	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Trichlorofluoromethane	ug/L	1	U	2	UJ	2	UJ	10	U	2	U	2	U	2	U
Vinyl chloride	ug/L	1	U	2	U	2	UJ	10	U	2	U	2	U	2	U
Xylenes (total)	ug/L	0.2	J	3.7	J	2	UJ	227	J						

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-21		OS-HP-22		OS-HP-25		OS-HP-25		OS-HP-26		OS-HP-26		OS-HP-26	
Sample Depth (ft)		12-16		16-20		12-16		16-20		12-16		16-20		20-24	
Sample ID		178-032		178-030		176- 016		176- 017		031-W-140		031-W-142		031-W-143	
Sample Collection Date		06/15/2001		06/15/2001		06/08/2001		06/08/2001		06/12/2001		06/12/2001		06/12/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	8		9.4	U	1.9	U	190	U	1.9	U	1.9	U	1.9	U
Acenaphthylene	ug/L	2	U	19	U	7.4		280	J	3.8	U	3.8	U	3.8	U
Anthracene	ug/L	0.3		2.7		0.19	U	8.5	J	0.23		0.19	U	0.19	U
Benzo(a)anthracene	ug/L	0.1	J	1.5		0.49		1.3	J	0.27		0.19	U	0.2	
Benzo(a)pyrene	ug/L	0.1	J	2.8		0.59		1.8	J	0.55		0.083	J	0.33	
Benzo(b)fluoranthene	ug/L	0.06	J	1.5	J	0.34	J	1	J	0.35	J	0.38	U	0.2	J
Benzo(g,h,i)perylene	ug/L	0.2	U	2.6		0.39		1	J	0.46		0.38	U	0.25	J
Benzo(k)fluoranthene	ug/L	0.03	J	0.73	J	0.19		0.59	J	0.17	J	0.19	U	0.098	J
Chrysene	ug/L	0.06	J	1.9		0.58		2.1	J	0.4		0.19	U	0.33	
Dibenz(a,h)anthracene	ug/L	0.5	U	1.9	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U
Fluoranthene	ug/L	1.1		14		11	J	38	U	3		0.38	U	2.6	
Fluorene	ug/L	1	U	1.9	U	0.38	U	28	J	0.15	J	0.38	U	0.38	U
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	1.9		0.32		1	J	0.37		0.19	U	0.19	J
Naphthalene	ug/L	0.3	J	74		7.2		2300	J	1.1	J	2.8		1.9	U
Phenanthrene	ug/L	0.3	J	9.5		0.19	U	69	J	1.1		0.15	J	0.21	
Pyrene	ug/L	2.1	J	12		12	J	7.9	J	2.2		0.37		2	
BaP equivalency	ug/L	0.38	J	4.2		0.9		2.3	J	0.84		0.31	J	0.58	
Methane (RSK 175)															
Methane	ug/L					160		2100							
General Chemistry															
Alkallinity	mg/L					400		1740							
Sulfide	mg/L					1	U	1							
Nitrate	mg/L					0.1	U	0.1	U						
Sulfate	mg/L					175		0.76							

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-27		OS-HP-27		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-29	
Sample Depth (ft)		12-16		16-20		8-12		12-16		16-20		20-24		12-16	
Sample ID		031-W-135		031-W-137		031-W-136		031-W-138		031-W-139		031-W-141		176- 009	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,1,1-Trichloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1-Dichloroethene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1-Dichloropropene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,3-Trichlorobenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,2,3-Trichloropropane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,2,4-Trimethylbenzene	ug/L	2	UJ	0.18	J	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,2-Dibromo-3-chloropropane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,2-Dibromoethane	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,2-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dichloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
1,3-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Butanone	ug/L	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ		
2-Chlorotoluene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Hexanone	ug/L	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ		
4-Chlorotoluene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Methyl-2-pentanone	ug/L	20	U	20	U	20	U	20	U	20	U	20	U		
Acetone	ug/L	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ	20	UJ		
Benzene	ug/L	2	U	2	U	2	U	2	U	0.24	J	2	U	2	U
Bromobenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromochloromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromoform	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
Bromomethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-27		OS-HP-27		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-29	
Sample Depth (ft)		12-16		16-20		8-12		12-16		16-20		20-24		12-16	
Sample ID		031-W-135		031-W-137		031-W-136		031-W-138		031-W-139		031-W-141		176- 009	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	2	U	0.18	J	2	U	2	U	2	U	0.49	J		
Carbon tetrachloride	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chlorobenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chloroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chloroform	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chloromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
cis-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
cis-1,3-Dichloropropene	ug/L													2	U
Dibromochloromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibromomethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	2	U	0.15	J	2	U	2	U	2	U	2	U	2	U
Hexachlorobutadiene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
Isopropyl benzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ		
m/p-Xylenes	ug/L	2	U	2	U	2	U	2	U	2	U	2	U		
Methylene chloride	ug/L	2	U	2	U	2	U	2	U	0.71	J	2	U	2	U
MTBE	ug/L	0.35	J	0.71	J	5	U	5	U	5	U	5	U	1.6	J
Naphthalene	ug/L	1.3	J	0.69	J	2	U	1.1	J	5		3.9		2	U
n-Butylbenzene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Propylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
o-Xylene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U		
p-Isopropyltoluene	ug/L													2	U
sec-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
Dtyrene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
tert-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	U
Tetrachloroethene	ug/L													2	U
Tetrachloroethylene	ug/L	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ	2	UJ		
Toluene	ug/L	0.16	J	0.25	J	2	U	2	U	2	U	2	U	0.5	J
trans-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
trans-1,3-Dichloropropene	ug/L													2	U
Trichloroethene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trichlorofluoromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Vinyl chloride	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Xylenes (total)	ug/L													2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-27		OS-HP-27		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-28		OS-HP-29	
Sample Depth (ft)		12-16		16-20		8-12		12-16		16-20		20-24		12-16	
Sample ID		031-W-135		031-W-137		031-W-136		031-W-138		031-W-139		031-W-141		176- 009	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/12/2001		06/07/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	0.7	J	6.1		1.9	U	1.9	U	2.1		3.1	U	2	U
Acenaphthylene	ug/L	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	4	U
Anthracene	ug/L	0.19	U	0.73		0.19	U	0.19	U	0.19	U	0.55		0.2	U
Benzo(a)anthracene	ug/L	0.21		0.19	U	0.13	J	0.18	J	0.12	J	0.14	U	0.6	
Benzo(a)pyrene	ug/L	0.46		0.19	U	0.4		0.72		0.52		0.33		1.8	
Benzo(b)fluoranthene	ug/L	0.3	J	0.38	U	0.31	J	0.41		0.31	J	0.2	J	1.1	
Benzo(g,h,i)perylene	ug/L	0.37	J	0.38	U	0.45		0.69		0.39		0.28	J	1.5	
Benzo(k)fluoranthene	ug/L	0.16	J	0.19	U	0.12	J	0.24		0.16	J	0.075	J	0.41	
Chrysene	ug/L	0.3		0.19	U	0.16	J	0.3		0.19	U	0.22		0.84	
Dibenz(a,h)anthracene	ug/L	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.4	U
Fluoranthene	ug/L	2.3		4.2		0.57		1.6		0.99		4.1		9.3	J
Fluorene	ug/L	0.38	U	0.58		0.38	U	0.38	U	0.27	J	0.38	U	0.4	U
Indeno(1,2,3-cd)pyrene	ug/L	0.3		0.19	U	0.31		0.57		0.36		0.26		1.3	
Naphthalene	ug/L	1.9	UJ	1.9	UJ	0.47	J	0.71	J	14	J	1.9	J	4.2	
Phenanthrene	ug/L	1.4		2.1		0.35		0.58		0.92		1.1		1.6	
Pyrene	ug/L	2.2		2.6		1.6		1.5		1.8		2.6		7.6	J
BaP equivalency	ug/L	0.73		0.32	U	0.67		1.0		0.79		0.57		2.3	
Methane (RSK 175)															
Methane	ug/L					4400		4700		7000		3200			
General Chemistry															
Alkallinity	mg/L					374		426		1720		2770			
Sulfide	mg/L					2.08		5.69		1.99		3.79			
Nitrate	mg/L					0.1	U	0.1	U	0.1	U	2.5	U		
Sulfate	mg/L					0.47	J	0.46	J	0.56	J	0.33	J		

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-29		OS-HP-30		OS-HP-30		OS-HP-31		OS-HP-31		OS-HP-35		OS-HP-36	
Sample Depth (ft)		17-21		12-16		17-21		12-16		16-20		16-20		8-12	
Sample ID		176- 010		176- 012		176- 014		176- 022		176- 023		176- 018		175-001	
Sample Collection Date		06/07/2001		06/08/2001		06/08/2001		06/11/2001		06/11/2001		06/08/2001		06/11/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	U	1	U
1,1,1-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,1,2-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,1-Dichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,1-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,1-Dichloropropene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,2,3-Trichlorobenzene	ug/L	2	U	2	U	2	UJ	1	U	1	U	2	UJ	1	U
1,2,3-Trichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,2,4-Trichlorobenzene	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	UJ	1	U
1,2,4-Trimethylbenzene	ug/L	2	U	1.4	J	12	J	4.3		22		19		1	U
1,2-Dibromo-3-chloropropane	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	U	1	U
1,2-Dibromoethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,2-Dichlorobenzene	ug/L	2	U	2	UJ	2	UJ	0.2	J	1	U	2	UJ	1	U
1,2-Dichloroethane	ug/L	2	U	2	U	2	U	2.6		16		2	U	1	U
1,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,3,5-Trimethylbenzene	ug/L	2	U	0.6	J	4.1	J	1		7.1		11		1	U
1,3-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,3-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
1,4-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
2,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
2-Butanone	ug/L													1	U
2-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
2-Hexanone	ug/L													1	U
4-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
4-Isopropyltoluene	ug/L	2	U	0.43	J	1.9	J	0.8	J	2		3.3		1	U
4-Methyl-2-pentanone	ug/L													1	U
Acetone	ug/L													1	U
Benzene	ug/L	2	U	1.2	J	21		113		920		230	J	1	U
Bromobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Bromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Bromodichloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Bromoform	ug/L	2	U	2	UJ	2	UJ	1	UJ	1	UJ	2	U	1	UJ
Bromomethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	UJ

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-29		OS-HP-30		OS-HP-30		OS-HP-31		OS-HP-31		OS-HP-35		OS-HP-36	
Sample Depth (ft)		17-21		12-16		17-21		12-16		16-20		16-20		8-12	
Sample ID		176- 010		176- 012		176- 014		176- 022		176- 023		176- 018		175-001	
Sample Collection Date		06/07/2001		06/08/2001		06/08/2001		06/11/2001		06/11/2001		06/08/2001		06/11/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L													1	U
Carbon tetrachloride	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Chlorobenzene	ug/L	2	U	2	U	2	U	85		2		2	U	1	U
Chloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Chloroform	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Chloromethane	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	UJ	1	U
cis-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
cis-1,3-Dichloropropene	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	UJ		
Dibromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Dibromomethane	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	U	1	U
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Ethylbenzene	ug/L	0.43	J	1.7	J	32		48		177		83	J	1	U
Hexachlorobutadiene	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	U	1	U
Isopropyl benzene	ug/L														
m/p-Xylenes	ug/L														
Methylene chloride	ug/L	2	U	2	UJ	0.28	J	1	UJ	1	UJ	2	UJ	1	UJ
MTBE	ug/L	5	U	0.84	J	2	UJ	5	U	0.7	J	0.77	J	5	U
Naphthalene	ug/L	1.9	J	390		5	U	235		6260		3400	J	9.2	
n-Butylbenzene	ug/L	2	U	1	J	1800	J	1	UJ	1	UJ	2	U	1	U
n-Propylbenzene	ug/L	2	U	2	UJ	1.3	J	0.5	J	2		2.1		1	U
o-Xylene	ug/L														
p-Isopropyltoluene	ug/L	2	U	2	UJ	2	UJ	0.4	J	1		2	U		
sec-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Dtyrene	ug/L	2	U	0.73	J	4.7	J	6.1		46		14		1	U
tert-Butylbenzene	ug/L	2	U	2	UJ	2	UJ	1	U	1	U	2	U	1	U
Tetrachloroethene	ug/L	2	U	2	U	2	U	1		1	U	2	U	1	U
Tetrachloroethylene	ug/L														
Toluene	ug/L	2	U	1.1	J	8.3		34		230		73	J	0.3	J
trans-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	1		1		2	U		
trans-1,3-Dichloropropene	ug/L	2	U	NA		NA		1	U	1	U	NA		1	U
Trichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Trichlorofluoromethane	ug/L	2	U	2	U	2	U	1	U	1	U	2	U	1	U
Vinyl chloride	ug/L	2	U	2	U	2	U	0.9	J	1	U	2	U	1	U
Xylenes (total)	ug/L	2	U	4.3		33		43		151		500	U	0.3	J

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-29		OS-HP-30		OS-HP-30		OS-HP-31		OS-HP-31		OS-HP-35		OS-HP-36	
Sample Depth (ft)		**17-21**		**12-16**		**17-21**		**12-16**		**16-20**		**16-20**		**8-12**	
Sample ID		**176- 010**		**176- 012**		**176- 014**		**176- 022**		**176- 023**		**176- 018**		**175-001**	
Sample Collection Date		**06/07/2001**		**06/08/2001**		**06/08/2001**		**06/11/2001**		**06/11/2001**		**06/08/2001**		**06/11/2001**	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	2	U	43		100	J	5	U	50	U	12	J	5	U
Acenaphthylene	ug/L	1.6	J	26		3.8		7.5		42		420		2	U
Anthracene	ug/L	0.2	U	5.3		3.2		1.7		4.6		47		0.2	U
Benzo(a)anthracene	ug/L	0.13	J	0.23		0.12	J	0.3		0.8	J	12		0.2	U
Benzo(a)pyrene	ug/L	0.33		0.32		0.2	J	0.2	U	2	U	25		0.2	U
Benzo(b)fluoranthene	ug/L	0.2	J	0.12	J	0.13	J	0.2	U	2	U	13		0.2	U
Benzo(g,h,i)perylene	ug/L	0.4	U	0.13	J	0.19	J	0.2	U	2	U	17		0.2	U
Benzo(k)fluoranthene	ug/L	0.11	J	0.085	J	0.061	J	0.2	U	2	U	7.4		0.2	U
Chrysene	ug/L	0.18	J	0.29		0.19		0.2		0.3	J	25		0.2	U
Dibenz(a,h)anthracene	ug/L	0.4	U	0.38	U	0.38	U	0.5	U	5	U	3.8	U	0.5	U
Fluoranthene	ug/L	2.7		18		5.6		3.3		17		160		0.2	U
Fluorene	ug/L	0.4	U	9.3		14	J	1	U	22		40		1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.22		0.093	J	0.11	J	0.2	U	2	U	16		0.2	U
Naphthalene	ug/L	6.6		240		1100	J	73		100		2300		5	U
Phenanthrene	ug/L	0.81		44		27		7.2		37		180		0.1	J
Pyrene	ug/L	2.7		9.7		2.8		4.61		1	J	100		0.2	U
BaP equivalency	ug/L	0.59		0.56		0.43		0.4		3.8	J	31		0.38	U
Methane (RSK 175)															
Methane	ug/L														
General Chemistry															
Alkallinity	mg/L														
Sulfide	mg/L														
Nitrate	mg/L														
Sulfate	mg/L														

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-36		OS-HP-36		OS-HP-37		OS-HP-37		OS-HP-37		OS-HP-39	
Sample Depth (ft)		12-16		16-19		6-10		10-14		14-18		12-16	
Sample ID		175-002		175-003		181-741		181-743		181-745		174-002	
Sample Collection Date		06/11/2001		06/11/2001		06/13/2001		06/13/2001		06/13/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)													
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1,1-Trichloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1-Dichloroethene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,1-Dichloropropene	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
1,2,3-Trichloropropane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
1,2,4-Trimethylbenzene	ug/L	1	U	2.4		1	U	2	J	55		2.7	J
1,2-Dibromo-3-chloropropane	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
1,2-Dibromoethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,2-Dichloroethane	ug/L	1	U	0.5	J	1	U	2	J	42		2.1	
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,3,5-Trimethylbenzene	ug/L	1	U	0.9	J	1	U	5	U	16		0.75	J
1,3-Dichlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,3-Dichloropropane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
2,2-Dichloropropane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
2-Butanone	ug/L	1	U	1	U							3	J
2-Chlorotoluene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
2-Hexanone	ug/L	1	U	1	U							20	UJ
4-Chlorotoluene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
4-Isopropyltoluene	ug/L	1	U	1	U	1	U	5	U	4	J	0.21	J
4-Methyl-2-pentanone	ug/L	1	U	1	U							20	U
Acetone	ug/L	1	U	1	U							20	UJ
Benzene	ug/L	0.6	J	13		1	U	39		1,770		90	J
Bromobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Bromochloromethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Bromodichloromethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Bromoform	ug/L	1	UJ	1	UJ	1	UJ	5	UJ	5	UJ	2	U
Bromomethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-36		OS-HP-36		OS-HP-37		OS-HP-37		OS-HP-37		OS-HP-39	
Sample Depth (ft)		12-16		16-19		6-10		10-14		14-18		12-16	
Sample ID		175-002		175-003		181-741		181-743		181-745		174-002	
Sample Collection Date		06/11/2001		06/11/2001		06/13/2001		06/13/2001		06/13/2001		06/12/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	1	U	1	U							0.21	J
Carbon tetrachloride	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Chlorobenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Chloroethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Chloroform	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Chloromethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
cis-1,2-Dichloroethene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
cis-1,3-Dichloropropene	ug/L					1	U	5	U	5	U		
Dibromochloromethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Dibromomethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Dichlorodifluoromethane	ug/L	1	U	1	U	1	UJ	5	UJ	5	UJ	2	U
Ethylbenzene	ug/L	0.5	J	3		1	U	9		125		17	
Hexachlorobutadiene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Isopropyl benzene	ug/L											0.18	J
m/p-Xylenes	ug/L											10	
Methylene chloride	ug/L	1	UJ	1	UJ	1	UJ	5	UJ	5	UJ	2	UJ
MTBE	ug/L	0.5	J	5	U	0.3	J	25	U	25	U	5	U
Naphthalene	ug/L	9		472		4.9		212		8,040		1200	J
n-Butylbenzene	ug/L	1	U	1	U	1	U	5	U	5	U	0.22	J
n-Propylbenzene	ug/L	1	U	1	U	1	U	5	U	6		2	U
o-Xylene	ug/L											7.7	
p-Isopropyltoluene	ug/L					1	U	5	U	5	U		
sec-Butylbenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Dtyrene	ug/L	1	U	2		1	U	2	J	186		2.1	
tert-Butylbenzene	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Tetrachloroethene	ug/L	1	U	1	U	1	U	5	U	5	U		
Tetrachloroethylene	ug/L											2	U
Toluene	ug/L	0.3	J	3.9		1	U	4	J	271		16	
trans-1,2-Dichloroethene	ug/L					1	U	5	U	5	U	2	U
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	5	U	5	U		
Trichloroethene	ug/L	1	U	1	U	1	U	5	U	5	U	2	UJ
Trichlorofluoromethane	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Vinyl chloride	ug/L	1	U	1	U	1	U	5	U	5	U	2	U
Xylenes (total)	ug/L	0.3	J	6.4		1	U	10		423			

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OS-HP-36		OS-HP-36		OS-HP-37		OS-HP-37		OS-HP-37		OS-HP-39	
Sample Depth (ft)		12-16		16-19		6-10		10-14		14-18		12-16	
Sample ID		175-002		175-003		181-741		181-743		181-745		174-002	
Sample Collection Date		06/11/2001		06/11/2001		06/13/2001		06/13/2001		06/13/2001		06/12/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)													
Acenaphthene	ug/L	5	U	Not analyzed		5	U	21	J	90	J	Not analyzed	
Acenaphthylene	ug/L	2	U			2	U	20	U	270			
Anthracene	ug/L	0.1	J			0.81	J	4		7.2			
Benzo(a)anthracene	ug/L	0.2	U			0.3		2	J	1	J		
Benzo(a)pyrene	ug/L	0.2	U			0.2	J	2	J	1	J		
Benzo(b)fluoranthene	ug/L	0.2	U			0.07	J	0.9	J	2	U		
Benzo(g,h,i)perylene	ug/L	0.2	U			0.2	U	2	U	2	U		
Benzo(k)fluoranthene	ug/L	0.2	U			0.2	U	2	U	2	U		
Chrysene	ug/L	0.2	U			0.1	J	1	J	0.9	J		
Dibenz(a,h)anthracene	ug/L	0.5	U			0.5	U	5	U	5	U		
Fluoranthene	ug/L	0.07	J			6.42		22		9.7			
Fluorene	ug/L	1	U			1	U	3	J	35	J		
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U			0.2	U	2	U	2	U		
Naphthalene	ug/L	6				5	U	21	J	1,240			
Phenanthrene	ug/L	1				0.9	J	4	J	58			
Pyrene	ug/L	0.07	J			6.63		20		7.5			
BaP equivalency	ug/L	0.38	U			0.5		4.9	J	3.8	J		
Methane (RSK 175)													
Methane	ug/L					2,000		1,100		6,800			
General Chemistry													
Alkallinity	mg/L					478		465		1,740			
Sulfide	mg/L					0.2	U	0.2	U	0.2	U		
Nitrate	mg/L					0.08	U	0.2	U	4.0	U		
Sulfate	mg/L					27		57		50	U		

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP01		OU5-HP01		OU5-HP01		OU5-HP-02		OU5-HP-02		OU5-HP-03		OU5-HP-03	
Sample Depth (ft)		6-10		10-14		14-18		8-12		12-16		8-12		12-16	
Sample ID		181-762		181-764		181-765		181-778		181-781		181-775		181-776	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	2	U	2	U	2	U	0.4	J	4.8		1	U	0.3	J
1,2-Dibromo-3-chloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	2	U	2	U	2	U	1	U	2.4		1	U	1	U
1,3-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2-Butanone	ug/L	20	UJ	20	UJ	20	UJ								
2-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2-Hexanone	ug/L	20	U	20	U	20	U								
4-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
4-Isopropyltoluene	ug/L	2	U	2	U	2	U	0.4	J	3.5		1	U	1	
4-Methyl-2-pentanone	ug/L	20	U	20	U	20	U								
Acetone	ug/L	20	UJ	20	UJ	20	UJ								
Benzene	ug/L	2	U	2	U	3.2		2.2		9.9		1	U	0.9	J
Bromobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	2	UJ	2	UJ	2	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Bromomethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP01		OU5-HP01		OU5-HP01		OU5-HP-02		OU5-HP-02		OU5-HP-03		OU5-HP-03	
Sample Depth (ft)		6-10		10-14		14-18		8-12		12-16		8-12		12-16	
Sample ID		181-762		181-764		181-765		181-778		181-781		181-775		181-776	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	2	U	2	U	2	U								
Carbon tetrachloride	ug/L	2	UJ	2	UJ	2	UJ	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	0.4	J	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L							1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dibromomethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	2	UJ	2	UJ	2	UJ	1	U	1	U	1	UJ	1	U
Ethylbenzene	ug/L	2	U	0.18	J	0.67	J	0.6	J	16		1	U	3.4	
Hexachlorobutadiene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Isopropyl benzene	ug/L	2	U	0.22	J	2	U								
m/p-Xylenes	ug/L	2	U	0.41	J	0.42	J								
Methylene chloride	ug/L	2	UJ	2	UJ	2	UJ	1	UJ	1	UJ	1	UJ	1	UJ
MTBE	ug/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	ug/L	2	U	1.2	J	20		34		512		1	U	37	
n-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	0.4	J
n-Propylbenzene	ug/L	2	U	2	U	2	U	1	U	2		1	U	1	U
o-Xylene	ug/L	2	U	0.31	J	0.27	J								
p-Isopropyltoluene	ug/L							1	U	0.9	J	1	U	1	U
sec-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dtyrene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	2	
tert-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Tetrachloroethene	ug/L							1	U	1	U	1	U	1	U
Tetrachloroethylene	ug/L	2	U	2	U	2	U								
Toluene	ug/L	2	U	2	U	2	U	0.3	J	2.6		1	U	0.2	J
trans-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	ug/L							1	U	1	U	1	U	1	U
Trichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	2	UJ	2	UJ	2	UJ	1	U	1	U	1	U	1	U
Vinyl chloride	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Xylenes (total)	ug/L							3.3		18		1	U	3.7	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP01		OU5-HP01		OU5-HP01		OU5-HP-02		OU5-HP-02		OU5-HP-03		OU5-HP-03	
Sample Depth (ft)		**6-10**		**10-14**		**14-18**		**8-12**		**12-16**		**8-12**		**12-16**	
Sample ID		**181-762**		**181-764**		**181-765**		**181-778**		**181-781**		**181-775**		**181-776**	
Sample Collection Date		**06/13/2001**		**06/13/2001**		**06/13/2001**		**06/14/2001**		**06/14/2001**		**06/14/2001**		**06/14/2001**	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	1.9	U	19	U	220		12		11	J	7	J	13	J
Acenaphthylene	ug/L	40	J	38	U	36	J	2	U	19		2	U	10	U
Anthracene	ug/L	0.19	U	1.9	U	29		1.5	J	4.02		0.49		2	
Benzo(a)anthracene	ug/L	1.3	J	5.5		5.3		0.48		0.45		0.2		0.3	J
Benzo(a)pyrene	ug/L	2.5	J	12		11		0.57		0.2		0.2		1	U
Benzo(b)fluoranthene	ug/L	1.3	J	6.7		6.3		0.3		0.06	J	0.1	J	1	U
Benzo(g,h,i)perylene	ug/L	1.4	J	20		7.6		0.66		0.3		0.4		1	U
Benzo(k)fluoranthene	ug/L	0.64	J	3.7		3		0.2		0.1	J	0.09	J	1	U
Chrysene	ug/L	1.3	J	7.9		7.5		0.51		0.46		0.2	J	1	U
Dibenz(a,h)anthracene	ug/L	0.38	U	3.8	U	3.8	U	0.5	J	0.3	J	0.4	J	2.5	U
Fluoranthene	ug/L	29	J	7.6		130	J	9.59		9.88		4.17	J	2	
Fluorene	ug/L	0.38	U	3.8	U	3.8	U	0.5	J	2	J	0.1	J	2	J
Indeno(1,2,3-cd)pyrene	ug/L	1.5	J	7.9		7.7		0.44		0.2	J	0.2		1	U
Naphthalene	ug/L	12	J	19	UJ	91	J	2	J	11	J	2	J	40	J
Phenanthrene	ug/L	0.19	U	1.9	U	150	J	2	J	1	J	0.3	J	12	
Pyrene	ug/L	27	J	47	J	72	J	9.34		12.6		3.4		2	J
BaP equivalency	ug/L	3.1	J	16		15		1.2		0.57		0.65		1.9	J
Methane (RSK 175)															
Methane	ug/L	850		2800		5300									
General Chemistry															
Alkallinity	mg/L	262		1660		3690									
Sulfide	mg/L	1	U	1	U	1									
Nitrate	mg/L	0.1	U	0.1	U	20	U								
Sulfate	mg/L	540	J	110	J	0.36	J								

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-04		OU5-HP-04		OU5-HP-05		OU5-HP-05		OU5-HP06		OU5-HP06		OU5-HP06	
Sample Depth (ft)		8-12		12-16		12-16		16-20		6-10		10-14		14-18	
Sample ID		181-771		181-773		181-768		181-770		181- 782		181- 784		181- 785	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	J
1,1,1-Trichloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,1,2-Trichloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,1-Dichloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,1-Dichloroethene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,1-Dichloropropene	ug/L	1	U	10	U	1	U	1	U	2	UJ	2	UJ	200	UJ
1,2,3-Trichlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	UJ	2	UJ	200	UJ
1,2,3-Trichloropropane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,2,4-Trichlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	UJ
1,2,4-Trimethylbenzene	ug/L	1	U	20		0.4	J	2.1		2	UJ	1.9	J	13	J
1,2-Dibromo-3-chloropropane	ug/L	1	U	10	U	1	U	1	U	2	UJ	2	UJ	200	UJ
1,2-Dibromoethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,2-Dichlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,2-Dichloroethane	ug/L	1	U	10	U	0.2	J	0.7	J	2	U	2	U	200	U
1,2-Dichloropropane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,3,5-Trimethylbenzene	ug/L	1	U	10	U	1	U	1	U	2	U	0.23	J	200	UJ
1,3-Dichlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,3-Dichloropropane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
1,4-Dichlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
2,2-Dichloropropane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
2-Butanone	ug/L									20	UJ	20	UJ	2000	UJ
2-Chlorotoluene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
2-Hexanone	ug/L									20	UJ	20	UJ	2000	UJ
4-Chlorotoluene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
4-Isopropyltoluene	ug/L	1	U	3	J	2		2.3		2	UJ	0.17	J	200	UJ
4-Methyl-2-pentanone	ug/L									20	U	20	U	2000	UJ
Acetone	ug/L									20	UJ	20	UJ	2000	UJ
Benzene	ug/L	1	U	37		3.8		21		2	U	9.1		110	J
Bromobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	UJ
Bromochloromethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Bromodichloromethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Bromoform	ug/L	1	UJ	10	UJ	1	UJ	1	UJ	2	U	2	U	200	U
Bromomethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-04		OU5-HP-04		OU5-HP-05		OU5-HP-05		OU5-HP06		OU5-HP06		OU5-HP06	
Sample Depth (ft)		8-12		12-16		12-16		16-20		6-10		10-14		14-18	
Sample ID		181-771		181-773		181-768		181-770		181- 782		181- 784		181- 785	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L									2	U	2	U	200	U
Carbon tetrachloride	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Chlorobenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Chloroethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Chloroform	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Chloromethane	ug/L	1	U	10	U	1	U	1	U	2	UJJ	2	UJ	200	UJ
cis-1,2-Dichloroethene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
cis-1,3-Dichloropropene	ug/L	1	U	10	U	1	U	1	U						
Dibromochloromethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	UJ
Dibromomethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Dichlorodifluoromethane	ug/L	1	UJ	10	U	1	U	1	U	2	U	2	U	200	U
Ethylbenzene	ug/L	1	U	88		2		36		2	U	16		140	J
Hexachlorobutadiene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	UJ
Isopropyl benzene	ug/L									2	U	2.4		200	U
m/p-Xylenes	ug/L									2	U	4.3		42	J
Methylene chloride	ug/L	1	UJ	10	U	1	UJ	1	UJ	2	U	2	U	200	U
MTBE	ug/L	0.8	J	50	U	5	U	1	J	5	U	5	U	500	U
Naphthalene	ug/L	1	U	2530		26		159		2	U	91		1600	J
n-Butylbenzene	ug/L	1	U	10	U	1	U	1	U	2	U	0.32	J	200	U
n-Propylbenzene	ug/L	1	U	2	J	0.8	J	1	J	2	U	1.4	J	200	U
o-Xylene	ug/L									2	U	5.6		52	J
p-Isopropyltoluene	ug/L	1	U	10	U	1	U	0.3	J						
sec-Butylbenzene	ug/L	1	U	10	U	0.2	J	1	U	2	U	0.23	J	200	UJ
Dtyrene	ug/L	1	U	10		0.3	J	1	U	2	U	1	J	200	U
tert-Butylbenzene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Tetrachloroethene	ug/L	1	U	10	U	1	U	1	U						
Tetrachloroethylene	ug/L									2	U	2	U	200	U
Toluene	ug/L	0.3	J	21		0.5	J	2.8		2	U	2	U	36	J
trans-1,2-Dichloroethene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
trans-1,3-Dichloropropene	ug/L	1	U	10	U	1	U	1	U						
Trichloroethene	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Trichlorofluoromethane	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Vinyl chloride	ug/L	1	U	10	U	1	U	1	U	2	U	2	U	200	U
Xylenes (total)	ug/L	1	U	72		4.5		22							

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-04		OU5-HP-04		OU5-HP-05		OU5-HP-05		OU5-HP06		OU5-HP06		OU5-HP06	
Sample Depth (ft)		8-12		12-16		12-16		16-20		6-10		10-14		14-18	
Sample ID		181-771		181-773		181-768		181-770		181- 782		181- 784		181- 785	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
PNAs (EPA 8310)															
Acenaphthene	ug/L	5	J	12	J	50	U	40	J	1.9	U	52		160	
Acenaphthylene	ug/L	2	U	87		20	U	15	J	3.8	U	130		300	
Anthracene	ug/L	1.2	J	8.5		3	J	7.5		0.19	U	5.6		27	
Benzo(a)anthracene	ug/L	0.43		0.8	J	1	J	0.7	J	0.19		3.8		7.3	
Benzo(a)pyrene	ug/L	0.53		0.6	J	1	J	2	U	0.36		7.2		16	
Benzo(b)fluoranthene	ug/L	0.3		0.4	J	0.7	J	2	U	0.22	J	3.6		7.8	
Benzo(g,h,i)perylene	ug/L	0.46		2	U	3		2	U	0.45		4.9		11	
Benzo(k)fluoranthene	ug/L	0.2	J	0.4	J	0.7	J	2	U	0.13	J	1.6		3.6	
Chrysene	ug/L	0.3		0.7	J	2	U	2	U	0.26		5.8		10	
Dibenz(a,h)anthracene	ug/L	0.4	J	5	U	5	U	5	U	0.38	U	1.9	U	3.8	U
Fluoranthene	ug/L	4.55		7.7		6.3		7.2		1.1		67	J	110	J
Fluorene	ug/L	0.4	J	20	J	0.8	J	6	J	0.38	U	1.9	U	21	
Indeno(1,2,3-cd)pyrene	ug/L	0.4		2	U	2	J	2	U	0.3		4.2		10	
Naphthalene	ug/L	1	J	300	J	4	J	7	J	0.67	J	81		1300	J
Phenanthrene	ug/L	0.8	J	62		3	J	52		0.37		7		170	J
Pyrene	ug/L	9.11		8.9		7.6		7		2		43	J	61	J
BaP equivalency	ug/L	1.0		3.3	J	3.9	J	3.8	J	0.62		9.3		20	
Methane (RSK 175)															
Methane	ug/L									390		1300		5800	
General Chemistry															
Alkallinity	mg/L									379		636		2410	
Sulfide	mg/L									1	U	1.8		2.62	
Nitrate	mg/L									0.5	U	0.5	U	0.44	J
Sulfate	mg/L									98		140		0.34	J

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-07		OU5-HP-07		OU5-HP08		OU5-HP08		OU5-HP08		OU5-HP-09		OU5-HP-09	
Sample Depth (ft)		6-10		10-14		8-12		12-16		16-20		8-12		12-16	
Sample ID		181- 793		181- 794		181-763		181-766		181-767		181-783		181-786	
Sample Collection Date		06/19/2001		06/19/2001		06/13/2001		06/13/2001		06/13/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,1-Dichloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,1-Dichloroethene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,1-Dichloropropene	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	2	UJ	9.2	J	2	U	8	J	2.9	J	1	U	0.4	J
1,2-Dibromo-3-chloropropane	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
1,2-Dibromoethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,2-Dichloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,2-Dichloropropane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	2	UJ	3.3	J	2	U	20	U	20	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,3-Dichloropropane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
2,2-Dichloropropane	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
2-Butanone	ug/L					20	UJ	200	UJ	200	U				
2-Chlorotoluene	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
2-Hexanone	ug/L					20	U	200	U	200	U				
4-Chlorotoluene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
4-Isopropyltoluene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	2	
4-Methyl-2-pentanone	ug/L					20	U	200	U	200	U				
Acetone	ug/L					20	UJ	200	UJ	200	U				
Benzene	ug/L	2	U	47	J	2	U	49		49		1	U	1	U
Bromobenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Bromochloromethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Bromodichloromethane	ug/L	0.22	J	50	U	2	U	20	U	20	U	1	U	1	U
Bromoform	ug/L	2	U	50	U	2	UJ	20	UJ	20	UJ	1	UJ	1	UJ
Bromomethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-07		OU5-HP-07		OU5-HP08		OU5-HP08		OU5-HP08		OU5-HP-09		OU5-HP-09	
Sample Depth (ft)		6-10		10-14		8-12		12-16		16-20		8-12		12-16	
Sample ID		181- 793		181- 794		181-763		181-766		181-767		181-783		181-786	
Sample Collection Date		06/19/2001		06/19/2001		06/13/2001		06/13/2001		06/13/2001		06/14/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L					2	U	20	U	20	U				
Carbon tetrachloride	ug/L	2	UJ	50	UJ	2	UJ	20	UJ	20	U	1	U	1	U
Chlorobenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Chloroethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Chloroform	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Chloromethane	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	2	U	50	U							1	U	1	U
Dibromochloromethane	ug/L	0.23	J	50	U	2	U	20	U	20	U	1	U	1	U
Dibromomethane	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Dichlorodifluoromethane	ug/L	2	U	50	U	2	UJ	20	UJ	20	U	1	UJ	1	UJ
Ethylbenzene	ug/L	0.12	J	89		2	U	72		88		1	U	4.8	
Hexachlorobutadiene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Isopropyl benzene	ug/L					2	U	4.6	J	2.6	J				
m/p-Xylenes	ug/L					2	U	27		23					
Methylene chloride	ug/L	2	UJ	50	UJ	2	UJ	20	UJ	20	U	1	UJ	1	UJ
MTBE	ug/L	0.27	J	120	U	5	U	50	U	50	U	5	U	5	U
Naphthalene	ug/L	2	UJ	2400	J	2	U	1200	J	750		1	U	1	U
n-Butylbenzene	ug/L	2	UJ	50	UJ	2	U	20	U	20	U	1	U	1	U
n-Propylbenzene	ug/L	2	U	50	U	2	U	3.3	J	20	U	1	U	0.3	J
o-Xylene	ug/L					2	U	29		33					
p-Isopropyltoluene	ug/L	2	UJ	50	UJ							1	U	1	U
sec-Butylbenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	0.3	J
Dtyrene	ug/L	2	U	50	U	2	U	10	J	20	U	1	U	1	U
tert-Butylbenzene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Tetrachloroethene	ug/L	2	U	50	U							1	U	1	U
Tetrachloroethylene	ug/L					2	U	20	U	20	U				
Toluene	ug/L	0.18	J	20	J	2	U	22		8.9	J	1	U	0.8	J
trans-1,2-Dichloroethene	ug/L					2	U	20	U	20	U	1	U	1	U
trans-1,3-Dichloropropene	ug/L	2	U	50	U							1	U	1	U
Trichloroethene	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Trichlorofluoromethane	ug/L	2	UJ	50	UJ	2	UJ	20	UJ	20	U	1	U	1	U
Vinyl chloride	ug/L	2	U	50	U	2	U	20	U	20	U	1	U	1	U
Xylenes (total)	ug/L	0.16	J	66	J							1	U	3.2	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-07		OU5-HP-07		OU5-HP08		OU5-HP08		OU5-HP08		OU5-HP-09		OU5-HP-09	
Sample Depth (ft)		**6-10**		**10-14**		**8-12**		**12-16**		**16-20**		**8-12**		**12-16**	
Sample ID		**181- 793**		**181- 794**		**181-763**		**181-766**		**181-767**		**181-783**		**181-786**	
Sample Collection Date		**06/19/2001**		**06/19/2001**		**06/13/2001**		**06/13/2001**		**06/13/2001**		**06/14/2001**		**06/14/2001**	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	1.9	U	120	J	9.4	U	100		Not analyzed		20	J	21	J
Acenaphthylene	ug/L	3.8	U	190	J	19	U	260				20	U	32	
Anthracene	ug/L	0.19	U	26	J	0.94	U	32				2	J	5.24	
Benzo(a)anthracene	ug/L	0.34		8.8	J	1.6		12				1	J	0.59	
Benzo(a)pyrene	ug/L	0.63		25	J	3.2		25				2	J	0.2	
Benzo(b)fluoranthene	ug/L	0.34	J	8	J	1.6	J	14				0.9	J	0.05	J
Benzo(g,h,i)perylene	ug/L	0.72		11	J	2.9		18				3		0.3	
Benzo(k)fluoranthene	ug/L	0.18	J	3.2	J	0.71	J	7.1				0.7	J	0.09	J
Chrysene	ug/L	0.51		13	J	2.5		18				2	J	0.46	
Dibenz(a,h)anthracene	ug/L	0.38	U	19	U	1.9	U	3.8	U			3	J	0.3	J
Fluoranthene	ug/L	1.7		130	J	14		160	J			29	J	12.9	
Fluorene	ug/L	0.38	U	26	J	1.9	U	3.8	U			0.9	J	6.6	J
Indeno(1,2,3-cd)pyrene	ug/L	0.48		44	J	2.1		15				2	J	0.2	J
Naphthalene	ug/L	1.2	J	1600	J	1.9	J	770	J			5	J	10	J
Phenanthrene	ug/L	0.45		130	J	0.99		100	J			0.2	J	0.6	J
Pyrene	ug/L	6.1	J	73	J	17		92	J			20		17.1	
BaP equivalency	ug/L	0.94		41	J	4.7		31				5.4	J	0.59	
Methane (RSK 175)															
Methane	ug/L														
General Chemistry															
Alkallinity	mg/L														
Sulfide	mg/L														
Nitrate	mg/L														
Sulfate	mg/L														

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-09		OU5-HP10		OU5-HP10		OU5-HP10		OU5-HP-11		OU5-HP-11		OU5-HP-11	
Sample Depth (ft)		16-20		8-10		10-14		14-18		8-12		12-16		16-20	
Sample ID		181-787		181- 769		181- 772		181- 774		181-738		181-739		181-740	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,1,1-Trichloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	2	UJ	2	U	2000	UJ	1	U	5	U	1	U
1,1,2-Trichloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,1-Dichloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,1-Dichloroethene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,1-Dichloropropene	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
1,2,3-Trichlorobenzene	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
1,2,3-Trichloropropane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,2,4-Trichlorobenzene	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
1,2,4-Trimethylbenzene	ug/L	1	U	2	UJ	0.76	J	2000	UJ	0.3	J	51		5.2	
1,2-Dibromo-3-chloropropane	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
1,2-Dibromoethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,2-Dichlorobenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,2-Dichloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	2	J	0.8	J
1,2-Dichloropropane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,3,5-Trimethylbenzene	ug/L	1	U	2	UJ	0.14	J	2000	UJ	1	U	12		2	
1,3-Dichlorobenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,3-Dichloropropane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
2,2-Dichloropropane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
2-Butanone	ug/L			20	UJ	20	UJ	20000	UJ						
2-Chlorotoluene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
2-Hexanone	ug/L			20	UJ	20	UJ	20000	UJ						
4-Chlorotoluene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
4-Isopropyltoluene	ug/L	0.5	J	2	UJ	2	UJ	2000	UJ	1	U	20		2	
4-Methyl-2-pentanone	ug/L			20	U	20	U	20000	U						
Acetone	ug/L			20	UJ	20	UJ	20000	UJ						
Benzene	ug/L	1	U	2	U	5.9		180	J	1	U	76		22	
Bromobenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Bromochloromethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Bromodichloromethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Bromoform	ug/L	1	UJ	2	U	2	U	2000	U	1	UJ	5	UJ	1	UJ
Bromomethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-09		OU5-HP10		OU5-HP10		OU5-HP10		OU5-HP-11		OU5-HP-11		OU5-HP-11	
Sample Depth (ft)		16-20		8-10		10-14		14-18		8-12		12-16		16-20	
Sample ID		181-787		181- 769		181- 772		181- 774		181-738		181-739		181-740	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L			2	U	2	U	2000	U						
Carbon tetrachloride	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Chlorobenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Chloroethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Chloroform	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Chloromethane	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
cis-1,2-Dichloroethene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
cis-1,3-Dichloropropene	ug/L	1	U							1	U	5	U	1	U
Dibromochloromethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Dibromomethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Dichlorodifluoromethane	ug/L	1	UJ	2	U	2	U	2000	U	1	UJ	5	UJ	1	UJ
Ethylbenzene	ug/L	0.2	J	2	U	5.4		340	J	1	U	266		41	
Hexachlorobutadiene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Isopropyl benzene	ug/L			2	U	0.58	J	2000	U						
m/p-Xylenes	ug/L			2	U	3		2000	U						
Methylene chloride	ug/L	1	UJ	2	U	2	U	2000	U	1	UJ	5	UJ	1	UJ
MTBE	ug/L	5	U	5	U	5	U	5000	U	1	J	1	J	0.8	J
Naphthalene	ug/L	3.6	U	2	UJ	48	J	8500	J	5		5,660		1,070	
n-Butylbenzene	ug/L	1	U	2	UJ	2	UJ	2000	UJ	1	U	5	U	1	U
n-Propylbenzene	ug/L	1	U	2	U	0.39	J	2000	U	1	U	11		0.9	J
o-Xylene	ug/L			2	U	2.3		2000	U						
p-Isopropyltoluene	ug/L	1	U							1	U	2	J	0.2	J
sec-Butylbenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Dtyrene	ug/L	1	U	2	U	0.78	J	2000	U	1	U	10		1	U
tert-Butylbenzene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Tetrachloroethene	ug/L	1	U							1	U	5	U	1	U
Tetrachloroethylene	ug/L			2	U	2	U	2000	U						
Toluene	ug/L	1	U	2	U	2	U	150	J	0.3	J	18		3.8	
trans-1,2-Dichloroethene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
trans-1,3-Dichloropropene	ug/L	1	U							1	U	5	U	1	U
Trichloroethene	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Trichlorofluoromethane	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Vinyl chloride	ug/L	1	U	2	U	2	U	2000	U	1	U	5	U	1	U
Xylenes (total)	ug/L	1	J							0.2	J	150		29	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-09		OU5-HP10		OU5-HP10		OU5-HP10		OU5-HP-11		OU5-HP-11		OU5-HP-11	
Sample Depth (ft)		16-20		8-10		10-14		14-18		8-12		12-16		16-20	
Sample ID		181-787		181- 769		181- 772		181- 774		181-738		181-739		181-740	
Sample Collection Date		06/14/2001		06/14/2001		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	3	J	1.9	U	52		38		5	U	36	J	36	J
Acenaphthylene	ug/L	2	U	3.8	U	31	J	550		5		20	U	18	
Anthracene	ug/L	0.46		0.19	U	1.9	U	22		1.6	J	12		1.6	J
Benzo(a)anthracene	ug/L	0.2	J	0.19	U	13		5.5		0.42		1	J	0.2	J
Benzo(a)pyrene	ug/L	0.1	J	0.19	U	28		11		0.3		2	J	0.1	J
Benzo(b)fluoranthene	ug/L	0.08	J	0.38	U	16		5.5		0.1	U	0.6	J	0.2	U
Benzo(g,h,i)perylene	ug/L	0.3		0.29	J	19		9.4		0.45		2	U	0.2	U
Benzo(k)fluoranthene	ug/L	0.06	J	0.19	U	7.6		2.7		0.07	J	0.7	J	0.2	U
Chrysene	ug/L	0.2	J	0.19	U	18		8.2		0.3		0.7	J	0.2	J
Dibenz(a,h)anthracene	ug/L	0.3	J	0.38	U	3.8	U	3.8	U	0.5	U	5	U	0.5	U
Fluoranthene	ug/L	1.8		0.38	U	190	J	74		7.16		15		3.9	
Fluorene	ug/L	0.1	J	0.38	U	3.8	U	38		1	U	21	J	1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.2	J	0.08	J	18		7.3		0.2	U	2	U	0.2	U
Naphthalene	ug/L	2	J	0.78	J	52		5100	J	5	U	70	J	61	J
Phenanthrene	ug/L	0.1	J	0.14	J	1.9	U	120	J	0.6	J	62		3.5	
Pyrene	ug/L	2.7		0.73		120	J	50	J	10.3		1	J	6.2	
BaP equivalency	ug/L	0.45	J	0.32	J	35		15		0.61		4.8	J	0.39	J
Methane (RSK 175)															
Methane	ug/L			1500		1400		3800							
General Chemistry															
Alkallinity	mg/L			164		636		3030							
Sulfide	mg/L			1	U	1	U	2.4							
Nitrate	mg/L			0.5	U	0.5	U	0.5	U						
Sulfate	mg/L			1200		1200		0.79							

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-12		OU5-HP-12		OU5-HP-12		OU5-HP-13		OU5-HP-13		OU5-HP-13		OU5-HP14	
Sample Depth (ft)		8-12		12-16		16-20		8-12		12-15		15-17.5		6-10	
Sample ID		181-742		181-744		181-746		181-729		181-730		181-731		181- 777	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/12/2001		06/12/2001		06/12/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	5	U	2	UJ	2	J	2	UJ	2	U
1,1,1-Trichloroethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,1-Dichloroethene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,1-Dichloropropene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	UJ
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	UJ
1,2,3-Trichloropropane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	5	U	2	UJ	2	UJ	2	UJ	2	UJ
1,2,4-Trimethylbenzene	ug/L	1	U	0.6	J	38		2	UJ	12	J	25	J	2	UJ
1,2-Dibromo-3-chloropropane	ug/L	1	U	1	U	5	U	2	UJ	2	UJ	2	UJ	2	UJ
1,2-Dibromoethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,2-Dichloroethane	ug/L	1	U	1	U	18		2	U	2	U	2	U	2	U
1,2-Dichloropropane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	1	U	1	U	11		2	UJ	9.9	J	21	J	2	UJ
1,3-Dichlorobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
2-Butanone	ug/L							20	UJ	20	UJ	20	UJ	20	UJ
2-Chlorotoluene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
2-Hexanone	ug/L							20	U	20	U	20	U	20	UJ
4-Chlorotoluene	ug/L	1	U	1	U	5		2	U	2.2		2	U	2	U
4-Isopropyltoluene	ug/L	1	U	1		3	J	2	UJ	2	UJ	2	UJ	2	UJ
4-Methyl-2-pentanone	ug/L							20	U	20	U	20	U	20	U
Acetone	ug/L							20	UJ	20	UJ	20	UJ	20	UJ
Benzene	ug/L	1	U	1		640		2	U	560	J	4100	J	2	U
Bromobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Bromochloromethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Bromoform	ug/L	1	UJ	1	UJ	5	UJ	2	UJ	2	UJ	2	UJ	2	U
Bromomethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-12		OU5-HP-12		OU5-HP-12		OU5-HP-13		OU5-HP-13		OU5-HP-13		OU5-HP14	
Sample Depth (ft)		8-12		12-16		16-20		8-12		12-15		15-17.5		6-10	
Sample ID		181-742		181-744		181-746		181-729		181-730		181-731		181- 777	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/12/2001		06/12/2001		06/12/2001		06/14/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L							2	UJ	2	UJ	2	UJ	2	U
Carbon tetrachloride	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Chlorobenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Chloroethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Chloroform	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Chloromethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	UJ
cis-1,2-Dichloroethene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	5	U								
Dibromochloromethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Dibromomethane	ug/L	1	U	1	U	5	U	2	UJ	2	UJ	2	UJ	2	U
Dichlorodifluoromethane	ug/L	1	UJ	1	UJ	5	UJ	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	1	U	2		388		2	U	100	J	400	J	2	U
Hexachlorobutadiene	ug/L	1	U	1	U	5	U	2	UJ	2	UJ	2	UJ	2	U
Isopropyl benzene	ug/L							2	UJ	6.2	J	5.5	J	2	U
m/p-Xylenes	ug/L							2	U	1000	UJ	5000	U	2	U
Methylene chloride	ug/L	1	UJ	1	UJ	5	UJ	2	UJ	2	UJ	2	UJ	2	U
MTBE	ug/L	1	J	0.8	J	25	U	5	UJ	5	UJ	5	UJ	5	U
Naphthalene	ug/L	14		21		6,220		2.3		3700	J	13000		2	UJ
n-Butylbenzene	ug/L	1	U	1	U	5	U	2	UJ	2	UJ	2	UJ	2	UJ
n-Propylbenzene	ug/L	1	U	1	U	3	J	2	UJ	4	J	5.1	J	2	U
o-Xylene	ug/L							2	UJ	1000	UJ	5000	UJ	2	U
p-Isopropyltoluene	ug/L	1	U	0.3	J	5	U								
sec-Butylbenzene	ug/L	1	U	0.3	J	5	U	2	UJ	2	UJ	2	UJ	2	U
Dtyrene	ug/L	1	U	1	U	5	U	2	UJ	27	J	5000	UJ	2	U
tert-Butylbenzene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Tetrachloroethene	ug/L	1	U	1	U	5	U								
Tetrachloroethylene	ug/L							2	UJ	2	UJ	2	UJ	2	U
Toluene	ug/L	0.4	J	0.5	J	143		2	U	1000	UJ	370	J	2	U
trans-1,2-Dichloroethene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
trans-1,3-Dichloropropene	ug/L	1	U	1	U	5	U								
Trichloroethene	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Trichlorofluoromethane	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Vinyl chloride	ug/L	1	U	1	U	5	U	2	U	2	U	2	U	2	U
Xylenes (total)	ug/L	0.2	J	2		357									

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-12		OU5-HP-12		OU5-HP-12		OU5-HP-13		OU5-HP-13		OU5-HP-13		OU5-HP14	
Sample Depth (ft)		**8-12**		**12-16**		**16-20**		**8-12**		**12-15**		**15-17.5**		**6-10**	
Sample ID		**181-742**		**181-744**		**181-746**		**181-729**		**181-730**		**181-731**		**181- 777**	
Sample Collection Date		**06/13/2001**		**06/13/2001**		**06/13/2001**		**06/12/2001**		**06/12/2001**		**06/12/2001**		**06/14/2001**	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	5	U	60	J	50	U	1.9	U	50		16		1.9	U
Acenaphthylene	ug/L	2	U	18	J	41		1.8	J	320		660	J	3.8	U
Anthracene	ug/L	0.87	J	14		7.3		0.19	U	47	J	23	J	0.19	U
Benzo(a)anthracene	ug/L	0.1	J	3		0.8	J	0.73		12		4.8		0.19	U
Benzo(a)pyrene	ug/L	0.1	J	4		2	U	1		24		9.6		0.087	J
Benzo(b)fluoranthene	ug/L	0.06	J	2		2	U	0.54		13		4.7		0.38	U
Benzo(g,h,i)perylene	ug/L	0.2	U	5.6		2	U	0.64		16		5.9		0.19	J
Benzo(k)fluoranthene	ug/L	0.2	U	0.9	J	0.9	J	0.27		7.3		2.8		0.19	U
Chrysene	ug/L	0.07	J	3		0.2	J	0.84		32		12		0.19	U
Dibenz(a,h)anthracene	ug/L	0.5	U	5	U	5	U	0.38	U	3.8	U	1.9	U	0.38	U
Fluoranthene	ug/L	0.68		36		7.6		4.1		140	J	62	J	0.39	
Fluorene	ug/L	1	U	10	U	23	J	0.38	U	32		53	J	0.38	U
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	3	J	2	U	0.64		16		5.9		0.089	J
Naphthalene	ug/L	5	U	50	U	320	J	9.8	J	2200	J	6000	J	1.1	J
Phenanthrene	ug/L	0.3	J	63		59		0.19	U	130	J	110	J	0.21	
Pyrene	ug/L	5.49		33		4.6	J	14	J	88	J	39	J	0.35	
BaP equivalency	ug/L	0.38	J	7.3		3.8	J	1.4		30		12		0.32	J
Methane (RSK 175)															
Methane	ug/L							2100		6700		5700		53	
General Chemistry															
Alkallinity	mg/L							274		974		1990		461	
Sulfide	mg/L							1.08	J	1	UJ	1.99	J	1	U
Nitrate	mg/L							0.1	U	0.1	U	0.1	U	0.5	U
Sulfate	mg/L							3.7		0.86		0.51		690	

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP14		OU5-HP14		OU5-HP15		OU5-HP15		OU5-HP-16		OU5-HP-16		OU5-HP-16	
Sample Depth (ft)		10-14		14-18		7-11		12-16		8-12		12-16		16-20	
Sample ID		181- 779		181- 780		181-760		181-761		181- 790		181- 791		181- 792	
Sample Collection Date		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/15/2001		06/15/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	2	U	2	UJ	2	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	2	U	2	U	2	UJ	2	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	2	U	2	U	2	UJ	2	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
1,2-Dibromoethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,2-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	2	UJ	2	UJ	2	J	2	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
2,2-Dichloropropane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
2-Butanone	ug/L	20	UJ	20	UJ	20	UJ	20	UJ						
2-Chlorotoluene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
2-Hexanone	ug/L	20	UJ	20	UJ	20	UJ	20	U						
4-Chlorotoluene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
4-Isopropyltoluene	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
4-Methyl-2-pentanone	ug/L	20	U	20	U	20	U	20	U						
Acetone	ug/L	20	UJ	20	UJ	20	UJ	20	UJ						
Benzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Bromobenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Bromochloromethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Bromoform	ug/L	2	U	2	U	2	UJ	2	UJ	1	U	1	U	1	U
Bromomethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP14		OU5-HP14		OU5-HP15		OU5-HP15		OU5-HP-16		OU5-HP-16		OU5-HP-16	
Sample Depth (ft)		10-14		14-18		7-11		12-16		8-12		12-16		16-20	
Sample ID		181- 779		181- 780		181-760		181-761		181- 790		181- 791		181- 792	
Sample Collection Date		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/15/2001		06/15/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	2	U	0.43	J	2	U	2	U						
Carbon tetrachloride	ug/L	2	U	2	U	2	UJ	2	UJ	1	U	1	U	1	U
Chlorobenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Chloroethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Chloroform	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Chloromethane	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L									1	U	1	U	1	U
Dibromochloromethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Dibromomethane	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	2	UJ	1	U	1	U	1	U
Ethylbenzene	ug/L	2	U	0.19	J	2	U	2	U	1	U	1	U	0.3	J
Hexachlorobutadiene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Isopropyl benzene	ug/L	2	U	2	U	2	U	2	U						
m/p-Xylenes	ug/L	2	U	2	U	2	U	2	U						
Methylene chloride	ug/L	2	U	2	U	2	UJ	2	UJ	1	UJ	1	UJ	1	UJ
MTBE	ug/L	5	U	5	U	1.1	J	0.53	J	0.5	J	0.5	J	0.9	J
Naphthalene	ug/L	1.6	J	1.2	J	2	UJ	0.83	J	1	U	2	U	0.4	J
n-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	2	U	1	U	1	U	1	U
n-Propylbenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
o-Xylene	ug/L	2	U	2	U	2	U	2	U						
p-Isopropyltoluene	ug/L									1	U	1	U	1	U
sec-Butylbenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Dtyrene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
tert-Butylbenzene	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Tetrachloroethene	ug/L									1	U	1	U	1	U
Tetrachloroethylene	ug/L	2	U	2	U	2	U	2	U						
Toluene	ug/L	2	U	2	U	2	U	2	U	1	U	0.2	J	1	U
trans-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	2	U						
trans-1,3-Dichloropropene	ug/L									1	U	1	U	1	U
Trichloroethene	ug/L	2	U	2	U	2	U	2	UJ	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	2	U	2	U	2	UJ	2	U	1	U	1	U	1	U
Vinyl chloride	ug/L	2	U	2	U	2	U	2	U	1	U	1	U	1	U
Xylenes (total)	ug/L									1	U	0.2	J	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP14		OU5-HP14		OU5-HP15		OU5-HP15		OU5-HP-16		OU5-HP-16		OU5-HP-16	
Sample Depth (ft)		10-14		14-18		7-11		12-16		8-12		12-16		16-20	
Sample ID		181- 779		181- 780		181-760		181-761		181- 790		181- 791		181- 792	
Sample Collection Date		06/14/2001		06/14/2001		06/13/2001		06/13/2001		06/15/2001		06/15/2001		06/15/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	1.9	U	Not analyzed		1.9	U	3.8		1	J	8		0.3	J
Acenaphthylene	ug/L	3.8	U			3.8	U	3.8	U	2	U	2	U	2	U
Anthracene	ug/L	0.19	U			0.19	U	0.19	U	0.61		1.2		0.2	
Benzo(a)anthracene	ug/L	0.63				0.12	J	0.14	J	0.1	J	0.2	J	0.09	J
Benzo(a)pyrene	ug/L	1.2				0.19	U	0.16	J	0.1	J	0.1	J	0.1	J
Benzo(b)fluoranthene	ug/L	0.7				0.38	U	0.13	J	0.05	J	0.05	J	0.04	J
Benzo(g,h,i)perylene	ug/L	0.92				0.38	U	0.29	J	0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	ug/L	0.33				0.19	U	0.067	J	0.03	J	0.03	J	0.03	J
Chrysene	ug/L	0.91				0.19	U	0.2		0.06	J	0.09	J	0.03	J
Dibenz(a,h)anthracene	ug/L	0.38	U			0.38	U	0.38	U	0.5	U	0.5	U	0.5	U
Fluoranthene	ug/L	6.2				0.38	U	2.8		1.8		4.67		0.78	
Fluorene	ug/L	0.38	U			0.38	U	0.38	U	1	U	1	U	1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.82				0.05	J	0.14	J	0.2	U	0.2	U	0.2	U
Naphthalene	ug/L	1.5	J			1.8	J	1.7	J	5	U	5	U	5	U
Phenanthrene	ug/L	1.3				0.19	U	0.52		0.3	J	0.2	J	0.2	J
Pyrene	ug/L	6.7	J			6.7	J	2.6		3.9		7.64		1.2	
BaP equivalency	ug/L	1.6				0.32	J	0.39		0.38	J	0.39	J	0.37	J
Methane (RSK 175)															
Methane	ug/L	4700		5100											
General Chemistry															
Alkallinity	mg/L	1040													
Sulfide	mg/L	1.62													
Nitrate	mg/L	0.5	U												
Sulfate	mg/L	140													

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-17		OU5-HP-17		OU5-HP-17		OU5-HP18		OU5-HP18		OU5-HP18		OU5-HP18	
Sample Depth (ft)		6-10		10-14		14-18		8-12		12-16		16-20		20-24	
Sample ID		181-754		181-757		181-759		181-753		181-755		181-756		181-758	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1,1-Trichloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1,2-Trichloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1-Dichloroethene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,1-Dichloropropene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2,3-Trichloropropane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2,4-Trimethylbenzene	ug/L	1	U	1	U	0.4	J	2	U	2	U	2	U	0.37	J
1,2-Dibromo-3-chloropropane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2-Dibromoethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2-Dichloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,3,5-Trimethylbenzene	ug/L	1	U	1	U	0.3	J	2	U	2	U	2	U	0.25	J
1,3-Dichlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
2-Butanone	ug/L							20	UJ	20	UJ	20	UJ	20	UJ
2-Chlorotoluene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
2-Hexanone	ug/L							20	U	20	U	20	U	20	U
4-Chlorotoluene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	1	U	1	U	0.3	J	2	U	2	U	2	U	0.24	J
4-Methyl-2-pentanone	ug/L							20	U	20	U	20	U	20	U
Acetone	ug/L							20	UJ	20	UJ	20	UJ	20	UJ
Benzene	ug/L	1	U	1	U	2		2	U	2	U	2	U	0.38	J
Bromobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Bromochloromethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Bromoform	ug/L	1	UJ	1	UJ	1	UJ	2	UJ	2	UJ	2	UJ	2	UJ
Bromomethane	ug/L	1	U	1	U	1	UJ	2	U	2	U	2	U	2	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-17		OU5-HP-17		OU5-HP-17		OU5-HP18		OU5-HP18		OU5-HP18		OU5-HP18	
Sample Depth (ft)		6-10		10-14		14-18		8-12		12-16		16-20		20-24	
Sample ID		181-754		181-757		181-759		181-753		181-755		181-756		181-758	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L							2	U	2	U	2	U	0.56	J
Carbon tetrachloride	ug/L	1	U	1	U	1	U	2	UJ	2	UJ	2	UJ	2	UJ
Chlorobenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Chloroethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Chloroform	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Chloromethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
cis-1,2-Dichloroethene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U								
Dibromochloromethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Dibromomethane	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Dichlorodifluoromethane	ug/L	1	UJ	1	UJ	1	UJ	2	UJ	2	UJ	2	UJ	2	UJ
Ethylbenzene	ug/L	1	U	1	U	0.5	J	2	U	2	U	2	U	0.16	J
Hexachlorobutadiene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Isopropyl benzene	ug/L							0.16	J	2	U	2	U	0.16	J
m/p-Xylenes	ug/L							0.28	J	2	U	2	U	0.55	J
Methylene chloride	ug/L	1	UJ	1	UJ	1	UJ	2	UJ	2	UJ	2	UJ	2	UJ
MTBE	ug/L	5	U	5	U	5	U	0.56	J	5	U	5	U	5	U
Naphthalene	ug/L	2.2		2		29		0.79	J	2	U	2	U	29	
n-Butylbenzene	ug/L	1	U	1	U	0.5	J	2	U	2	U	2	U	2	U
n-Propylbenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
o-Xylene	ug/L							2	U	2	U	2	U	0.32	J
p-Isopropyltoluene	ug/L	1	U	1	U	1	U								
sec-Butylbenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Dtyrene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
tert-Butylbenzene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Tetrachloroethene	ug/L	1	U	1	U	1	U								
Tetrachloroethylene	ug/L							2	U	2	U	2	U	2	U
Toluene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
trans-1,2-Dichloroethene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U								
Trichloroethene	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Trichlorofluoromethane	ug/L	1	U	1	U	1	U	2	UJ	2	UJ	2	UJ	2	UJ
Vinyl chloride	ug/L	1	U	1	U	1	U	2	U	2	U	2	U	2	U
Xylenes (total)	ug/L	1	U	1	U	0.9	J								

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-17		OU5-HP-17		OU5-HP-17		OU5-HP18		OU5-HP18		OU5-HP18		OU5-HP18	
Sample Depth (ft)		6-10		10-14		14-18		8-12		12-16		16-20		20-24	
Sample ID		181-754		181-757		181-759		181-753		181-755		181-756		181-758	
Sample Collection Date		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	5	U	50	U	5	U	13	J	1.9	U	1.9	U	51	J
Acenaphthylene	ug/L	2	U	20	U	2	U	38	U	3.8	U	3.8	U	1.7	J
Anthracene	ug/L	0.1	J	2	J	0.2	U	1.9	U	0.19	U	0.19	U	11	J
Benzo(a)anthracene	ug/L	0.1	J	1	J	0.07	J	5.4		0.15	J	0.33		0.26	
Benzo(a)pyrene	ug/L	0.1	J	2	J	0.2	U	14		0.32		0.52		0.25	
Benzo(b)fluoranthene	ug/L	0.08	J	0.8	J	0.05	J	8.3		0.22	J	0.32	J	0.16	J
Benzo(g,h,i)perylene	ug/L	0.4		4		0.2	U	13		0.4		0.48		0.37	J
Benzo(k)fluoranthene	ug/L	0.2	U	0.4	J	0.03	J	4.2		0.1	J	0.16	J	0.084	J
Chrysene	ug/L	0.1	J	0.5	J	0.03	J	8.3		0.22		0.46		0.38	
Dibenz(a,h)anthracene	ug/L	0.5	U	5	U	0.5	U	3.8	U	0.38	U	0.38	U	0.38	U
Fluoranthene	ug/L	0.3		4.1		0.05	J	47		1.1		3.6		26	J
Fluorene	ug/L	1	U	10	U	1	U	3.8	U	0.38	U	0.38	U	3.4	
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	2	U	0.2	U	11		0.24		0.35		0.19	J
Naphthalene	ug/L	5	U	50	U	5	U	19	U	1.8	J	3.3		29	
Phenanthrene	ug/L	0.4	J	0.4	J	0.08	J	4.1		0.32		0.49		54	
Pyrene	ug/L	3.5		21		0.02	J	38		5.9	J	6.6	J	14	J
BaP equivalency	ug/L	0.38	J	4.8	J	0.37	J	18		0.57		0.81		0.5	
Methane (RSK 175)															
Methane	ug/L	20		780		8,400									
General Chemistry															
Alkallinity	mg/L	270		469		2,610									
Sulfide	mg/L	0.2	U	0.2	U	0.2	U								
Nitrate	mg/L	0.4	U	0.4	U	4.0	U								
Sulfate	mg/L	266		150		50	U								

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-19		OU5-HP-19		OU5-HP-19		OU5-HP-20		OU5-HP-20		OU5-HP-20		OU5-HP-21	
Sample Depth (ft)		8-12		12-16		16-20		6-10		10-14		15-19		8-12	
Sample ID		181-732		181-733		181-734		181-748		181-751		181-752		181-747	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)															
1,1,1,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	2	UJ	2	UJ	2	UJ	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	2	UJ	2	U	2	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	0.12	J	0.17	J	0.62	J	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	2	UJ	2	UJ	0.26	J	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2,2-Dichloropropane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2-Butanone	ug/L	20	U	20	U	20	U								
2-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
2-Hexanone	ug/L	20	UJ	20	UJ	20	UJ								
4-Chlorotoluene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
4-Isopropyltoluene	ug/L	2	UJ	2	U	0.15	J	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	ug/L	20	U	20	U	20	U								
Acetone	ug/L	20	UJ	20	U	20	U								
Benzene	ug/L	2	U	2	U	1.6	J	0.4	J	1	U	1	U	1	U
Bromobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	2	U	2	U	2	U	1	UJ	1	UJ	1	UJ	1	UJ
Bromomethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-19		OU5-HP-19		OU5-HP-19		OU5-HP-20		OU5-HP-20		OU5-HP-20		OU5-HP-21	
Sample Depth (ft)		8-12		12-16		16-20		6-10		10-14		15-19		8-12	
Sample ID		181-732		181-733		181-734		181-748		181-751		181-752		181-747	
Sample Collection Date		06/12/2001		06/12/2001		06/12/2001		06/13/2001		06/13/2001		06/13/2001		06/13/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L	2	U	2	U	2	U								
Carbon tetrachloride	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloroethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Chloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L							1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dibromomethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	1	UJ	1	UJ	1	UJ	1	UJ
Ethylbenzene	ug/L	2	U	2	U	0.31	J	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Isopropyl benzene	ug/L	0.28	J	0.5	J	0.24	J								
m/p-Xylenes	ug/L	0.31	J	0.6	J	0.68	J								
Methylene chloride	ug/L	2	U	2	U	2	U	1	UJ	1	UJ	1	UJ	1	UJ
MTBE	ug/L	0.63	J	0.28	J	0.56	J	0.2	J	0.9	J	5	U	0.7	J
Naphthalene	ug/L	4.7	J	3	J	34	J	27		5.7		10		21	
n-Butylbenzene	ug/L	2	UJ	2	UJ	2	UJ	1	U	1	U	1	U	1	U
n-Propylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
o-Xylene	ug/L	2	U	0.25	J	0.49	J								
p-Isopropyltoluene	ug/L							1	U	1	U	1	U	1	U
sec-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Dtyrene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
tert-Butylbenzene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Tetrachloroethene	ug/L							1	U	1	U	1	U	1	U
Tetrachloroethylene	ug/L	2	U	2	U	2	U								
Toluene	ug/L	0.21	J	0.19	J	0.28	J	1	U	0.3	J	1	U	0.3	J
trans-1,2-Dichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	ug/L							1	U	1	U	1	U	1	U
Trichloroethene	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Vinyl chloride	ug/L	2	U	2	U	2	U	1	U	1	U	1	U	1	U
Xylenes (total)	ug/L							1	U	1	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-19		OU5-HP-19		OU5-HP-19		OU5-HP-20		OU5-HP-20		OU5-HP-20		OU5-HP-21	
Sample Depth (ft)		**8-12**		**12-16**		**16-20**		**6-10**		**10-14**		**15-19**		**8-12**	
Sample ID		**181-732**		**181-733**		**181-734**		**181-748**		**181-751**		**181-752**		**181-747**	
Sample Collection Date		**06/12/2001**		**06/12/2001**		**06/12/2001**		**06/13/2001**		**06/13/2001**		**06/13/2001**		**06/13/2001**	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)															
Acenaphthene	ug/L	8.9		17		20		5	U	5	U	8	J	5	U
Acenaphthylene	ug/L	3.8	U	3.8	U	3.8	U	2	U	2	U	10	U	0.2	J
Anthracene	ug/L	0.19	U	0.19	U	2.3		0.1	J	0.1	J	2.8		0.1	J
Benzo(a)anthracene	ug/L	0.84		0.12	J	0.86		0.1	J	0.1	J	0.5	J	0.1	J
Benzo(a)pyrene	ug/L	2.5		0.24		1.5		0.2	U	0.2	U	0.6	J	0.2	U
Benzo(b)fluoranthene	ug/L	1.8		0.18	J	0.78		0.2	U	0.05	J	0.2	J	0.08	J
Benzo(g,h,i)perylene	ug/L	2.1		0.38	U	0.96		0.2	U	0.2	U	1	U	0.2	U
Benzo(k)fluoranthene	ug/L	0.9		0.1	J	0.38		0.2	U	0.2	U	0.1	J	0.2	U
Chrysene	ug/L	1.3		0.18	J	1.3		0.03	J	0.04	J	0.2	J	0.06	J
Dibenz(a,h)anthracene	ug/L	0.38	U	0.38	U	0.38	U	0.5	U	0.5	U	2.5	U	0.5	U
Fluoranthene	ug/L	7.7	J	1.3		22	J	0.3		0.4		4.5	J	0.42	
Fluorene	ug/L	0.38	U	0.38	U	3.7		1	U	1	U	3	J	1	U
Indeno(1,2,3-cd)pyrene	ug/L	2		0.17	J	0.87		0.2	U	0.2	U	1	U	0.2	U
Naphthalene	ug/L	9.1		5.2		26		9		5	U	7	J	5	U
Phenanthrene	ug/L	1.7		0.82		13	J	1	J	0.8	J	11		0.9	J
Pyrene	ug/L	10	J	5.8	J	16	J	0.48		0.76		7.2		0.53	
BaP equivalency	ug/L	3.2		0.48		1.9		0.38	J	0.38	J	2	J	0.38	J
Methane (RSK 175)															
Methane	ug/L							310		1,300		10,000			
General Chemistry															
Alkallinity	mg/L							280		999		999			
Sulfide	mg/L							0.2	U	0.2	U	0.2	U		
Nitrate	mg/L							0.1	U	0.2	U	4.0	U		
Sulfate	mg/L							13		8		50	U		

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-21		OU5-HP-21		OU5-HP-22		OU5-HP-22	
Sample Depth (ft)		12-16		16-20		8-12		12-16	
Sample ID		181-749		181-750		181- 788		181- 789	
Sample Collection Date		06/13/2001		06/13/2001		06/15/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA 8260B)									
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	1	U	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	1	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	ug/L	1	U	1	U	1	U	1	U
1,2-Dibromoethane	ug/L	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	1	U	1	U	1	U	1	U
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
2,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
2-Butanone	ug/L								
2-Chlorotoluene	ug/L	1	U	1	U	1	U	1	U
2-Hexanone	ug/L								
4-Chlorotoluene	ug/L	1	U	1	U	1	U	1	U
4-Isopropyltoluene	ug/L	1	U	0.3	J	1	U	1	U
4-Methyl-2-pentanone	ug/L								
Acetone	ug/L								
Benzene	ug/L	1	U	1	U	1	U	0.8	J
Bromobenzene	ug/L	1	U	1	U	1	U	1	U
Bromochloromethane	ug/L	1	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	1	U	1	U	1	U	1	U
Bromoform	ug/L	1	UJ	1	UJ	1	U	1	U
Bromomethane	ug/L	1	U	1	U	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-21		OU5-HP-21		OU5-HP-22		OU5-HP-22	
Sample Depth (ft)		12-16		16-20		8-12		12-16	
Sample ID		181-749		181-750		181- 788		181- 789	
Sample Collection Date		06/13/2001		06/13/2001		06/15/2001		06/15/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Carbon disulfide	ug/L								
Carbon tetrachloride	ug/L	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	1	U	1	U	1	U	1	U
Chloroethane	ug/L	1	U	1	U	1	U	1	U
Chloroform	ug/L	1	U	1	U	1	U	1	U
Chloromethane	ug/L	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	1	U	1	U	1	U	1	U
Dibromomethane	ug/L	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	1	UJ	1	UJ	1	U	1	U
Ethylbenzene	ug/L	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	1	U	1	U	1	U	1	U
Isopropyl benzene	ug/L								
m/p-Xylenes	ug/L								
Methylene chloride	ug/L	1	UJ	1	UJ	1	UJ	1	UJ
MTBE	ug/L	0.6	J	1	J	0.8	J	0.7	J
Naphthalene	ug/L	7.3		3.3		1	U	1	U
n-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
n-Propylbenzene	ug/L	1	U	1	U	1	U	1	U
o-Xylene	ug/L								
p-Isopropyltoluene	ug/L	1	U	1	U	1	U	1	U
sec-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
Dtyrene	ug/L	1	U	1	U	1	U	1	U
tert-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
Tetrachloroethene	ug/L	1	U	1	U	1	U	1	U
Tetrachloroethylene	ug/L								
Toluene	ug/L	0.2	J	0.3	J	1	U	1	U
trans-1,2-Dichloroethene	ug/L	1	U	1	U				
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
Trichloroethene	ug/L	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	1	U	1	U	1	U	1	U
Vinyl chloride	ug/L	1	U	1	U	1	U	1	U
Xylenes (total)	ug/L	1	U	0.7	J	1	U	1	U

Table D-2 Hydropunch Groundwater Sampling Analytical Results

Sample Location		OU5-HP-21		OU5-HP-21		OU5-HP-22		OU5-HP-22	
Sample Depth (ft)		12-16		16-20		8-12		12-16	
Sample ID		181-749		181-750		181- 788		181- 789	
Sample Collection Date		06/13/2001		06/13/2001		06/15/2001		06/15/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
PNAs (EPA 8310)									
Acenaphthene	ug/L	0.5	J	9	J	59		13	
Acenaphthylene	ug/L	0.4	J	2	U	2	U	3	
Anthracene	ug/L	0.3	J	0.82	J	0.91		1.3	
Benzo(a)anthracene	ug/L	0.71		0.2		0.1	J	0.2	
Benzo(a)pyrene	ug/L	0.57		0.2	J	0.1	J	0.2	J
Benzo(b)fluoranthene	ug/L	0.3		0.08	J	0.05	J	0.07	J
Benzo(g,h,i)perylene	ug/L	0.66		0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	ug/L	0.2	J	0.2	U	0.04	J	0.04	J
Chrysene	ug/L	0.42		0.2	U	0.05	J	0.1	J
Dibenz(a,h)anthracene	ug/L	0.6		0.5	U	0.5	U	0.5	U
Fluoranthene	ug/L	1.8		4.21		3.9		4.79	
Fluorene	ug/L	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.4	J	0.2	U	0.2	U	0.2	U
Naphthalene	ug/L	5	U	5	U	1	J	1	J
Phenanthrene	ug/L	0.7	J	0.2	J	0.2	J	0.4	J
Pyrene	ug/L	6.06		6.76		4.26		6.87	
BaP equivalency	ug/L	1.3		0.49		0.38	J	0.49	
Methane (RSK 175)									
Methane	ug/L								
General Chemistry									
Alkallinity	mg/L								
Sulfide	mg/L								
Nitrate	mg/L								
Sulfate	mg/L								

Table D-3
Soil Gas Analytical Results

Sample Location		OS-SG-01		OS-SG-02		OS-SG-03		OS-SG-03		OS-SG-04		OS-SG-05		OS-SG-06		OS-SG-07	
Sample Depth (ft)		2		2		2		5		2		2		2		2	
Sample ID		180-003		178-021		178-027		178-028		179-002		179-004		179-007		179-012	
Sample Collection Date		06/16/2001		06/08/2001		06/11/2001		06/11/2001		06/16/2001		06/16/2001		06/16/2001		06/16/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)																	
1,1,1-Trichloroethane (TCA)	ug/m^3	4.0	U	13		5.2		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloropropane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-Butanone (MEK)	ug/m^3	63		10	U	5.1		13		240		3.8		110		5.7	
2-Hexanone	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	29		2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	14		10	U	2.0	U	2.0	U	7.5		2.0	U	19		2.0	U
Acetone	ug/m^3	310		24		120		73		120		21		310		39	
Benzene	ug/m^3	20		10	U	5.1		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromodichloromethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromoform	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromomethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon tetrachloride	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chlorobenzene	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	5.2		2.0	U
Chloroform	ug/m^3	4.0	U	38		92		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloromethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Dibromochloromethane	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	ug/m^3	28		390		9.7		24		48		9.8		46		6.3	
m,p-Xylene	ug/m^3	65		2000		20		44		69		15		65		14	
Methyl tert-butyl ether (MTBE)	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Methylene chloride	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	ug/m^3	11		10	U	7.4		13		12		2.0	U	18		3.6	
o-Xylene	ug/m^3	39		810		12		27		53		11		54		8.1	
Styrene	ug/m^3	7.2		10	U	2.0	U	2.0	U	2.0	U	2.0	U	4.1		4.0	
Tetrachloroethene (PCE)	ug/m^3	4.0	U	44		4.4		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	ug/m^3	40		10	U	15		30		15		6.7		14		6.2	
trans 1,3-Dichloropropene	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	ug/m^3	4.0	U	130		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Vinyl acetate	ug/m^3	4.0	U	10	U	2.0	U	2.0	U	2.0	U	2.0	U	76		2.0	U

Table D-3
Soil Gas Analytical Results

Sample Location		OS-SG-08		OS-SG-09		OS-SG-09		OS-SG-10		OS-SG-11		OS-SG-11		OS-SG-12		OS-SG-12	
Sample Depth (ft)		2		2		5.5		2		2		6		2		5	
Sample ID		178-026		178-024		178-025		181-717		176-003		176-004		176-001		176-002	
Sample Collection Date		06/11/2001		06/11/2001		06/11/2001		06/06/2001		06/06/2001		06/06/2001		06/05/2001		06/05/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)																	
1,1,1-Trichloroethane (TCA)	ug/m^3	2.0	U	10		2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	2.0	U	38		6.0		2.0	U	2.0	U	2.0	U	2	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
1,2-Dichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
1,2-Dichloropropane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
2-Butanone (MEK)	ug/m^3	3.5		10		15		7.2		6.7		2.7		5.2		21	
2-Hexanone	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	2.0	U	2.0	U	2.0	U	3.6		4.1		4.7		9.4		12	
Acetone	ug/m^3	35		70		2.0	U	45		33		12		31		73	
Benzene	ug/m^3	2.0	U	8.0		2.0	U	2.0	U	4.4		3.9		3.9		14	
Bromodichloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
Bromoform	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromomethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon tetrachloride	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
Chlorobenzene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	28		2.0	U
Chloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	ug/m^3	11		2.5		2.0	U	7.2		2.0	U	2.5		5.2		4.5	
Chloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	19		2.0	U	2.0	U	2.0	U	2	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
Dibromochloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	ug/m^3	11		21		39		11		46		47		2.0	U	120	
m,p-Xylene	ug/m^3	22		40		69		35		160		160		98		390	
Methyl tert-butyl ether (MTBE)	ug/m^3	2.0	U	2.0	U	2.0	U	26		26		32		30		64	
Methylene chloride	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
Naphthalene	ug/m^3	4.7		17		28		14		13		17		19		38	
o-Xylene	ug/m^3	12		26		44		17		65		69		44		180	
Styrene	ug/m^3	2.0	U	2.0	U	2.0	U	2.9		2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene (PCE)	ug/m^3	2.0	U	13		12		3.5		49		86		2.0	U	2.0	U
Toluene	ug/m^3	14		47		41		44		150		150		26		300	
trans 1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2	U	2.0	U
Trichloroethene	ug/m^3	2.0	U	4.3		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Vinyl acetate	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	13		2.0	U

Table D-3
Soil Gas Analytical Results

Sample Location		OS-SG-13		OS-SG-14		OS-SG-14		OS-SG-15		OS-SG-16		OS-SG-16		OS-SG-17	
Sample Depth (ft)		2		2		7		2		2		5.5		2	
Sample ID		172-001		176-005		176-006		176-007		178-022		178-023		181-718	
Sample Collection Date		06/05/2001		06/06/2001		06/06/2001		06/06/2001		06/11/2001		06/11/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)															
1,1,1-Trichloroethane (TCA)	ug/m^3	2.0	U	2.0	U	2.0	U	3.1		27		6.0	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
1,2-Dichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
1,2-Dichloropropane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
2-Butanone (MEK)	ug/m^3	9.1		2.8		5.5		3.8		6.5		30		6.5	
2-Hexanone	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	7.7		3.0		7.0		4.4		13		78		2.0	U
Acetone	ug/m^3	44		28		63		23		2.0	U	140		60	
Benzene	ug/m^3	2.0	U	4.9		15		4.3		2.5		10		3.2	
Bromodichloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Bromoform	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Bromomethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Carbon tetrachloride	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Chlorobenzene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Chloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Chloroform	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.5		6.0	U	8.6	
Chloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Dibromochloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Ethylbenzene	ug/m^3	51		38		58		27		48		290		23	
m,p-Xylene	ug/m^3	190		130		190		91		77		420		78	
Methyl tert-butyl ether (MTBE)	ug/m^3	34		33		170		33		2.0	U	6.9		7.5	
Methylene chloride	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Naphthalene	ug/m^3	44		13		15		19		19		180		9.0	
o-Xylene	ug/m^3	77		52		80		37		65		360		31	
Styrene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Tetrachloroethene (PCE)	ug/m^3	65		2.0	U	3.3		13		31		6.0	U	2.0	U
Toluene	ug/m^3	130		150		230		120		82		190		79	
trans 1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	6.0	U	2.0	U
Trichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	5.3		2.0	U	2.0	U
Vinyl acetate	ug/m^3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

Table D-3
Soil Gas Analytical Results

Sample Location		OU5-SG-01		OU5-SG-02		OU5-SG-03		OU5-SG-04		OU5-SG-04		OU5-SG-05		OU5-SG-06		OU5-SG-07	
Sample Depth (ft)		2		7		2		2		5.5		2		2		2	
Sample ID		181-728		181-723		181-714		181-720		181-721		181-719		181-715		181-716	
Sample Collection Date		06/08/2001		06/07/2001		06/06/2001		06/07/2001		06/07/2001		06/07/2001		06/06/2001		06/06/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)																	
1,1,1-Trichloroethane (TCA)	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	4	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloropropane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-Butanone (MEK)	ug/m^3	4.2		8.6		7		28		24		2.0	U	2.0	U	5.5	
2-Hexanone	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	3.6		4.6		4.1		12		8.7		2.0	U	2.9		4.9	
Acetone	ug/m^3	27		49		31		180		85		2.0	U	20		23	
Benzene	ug/m^3	2.0	U	3.1		2.0	U	6.8		5.2		3.0		2.0	U	2.0	U
Bromodichloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromoform	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromomethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon tetrachloride	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chlorobenzene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	ug/m^3	2.0	U	2.0	U	8.3		4.0	U	2.0	U	2.0	U	8.6		31	
Chloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	4.0		2.0	U	2.0	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Dibromochloromethane	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	ug/m^3	15		14		21		86		66		23		11		15	
m,p-Xylene	ug/m^3	28		44		70		300		230		83		37		49	
Methyl tert-butyl ether (MTBE)	ug/m^3	2.0	U	40		29		35		31		6.6		19		23	
Methylene chloride	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	ug/m^3	21		17		22		54		42		9.1		14		18	
o-Xylene	ug/m^3	19		22		36		130		100		33		20		27	
Styrene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene (PCE)	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	7.3		2.0	U	2.0	U
Toluene	ug/m^3	8.6		39		39		230		180		65		20		31	
trans 1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U	4.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Vinyl acetate	ug/m^3	2.0	U	2.0	U	2.0	U	26		2.0	U	2.0	U	2.0	U	2.0	U

Table D-3
Soil Gas Analytical Results

Sample Location		OU5-SG-08		OU5-SG-09		OU5-SG-10		OU5-SG-10		OU5-SG-11		OU5-SG-11		OU5-SG-12		OU5-SG-12	
Sample Depth (ft)		2		2		2		5.5		2		5		2		5	
Sample ID		181-722		181-725		181-726		181-727		181-711		181-712		181-709		181-710	
Sample Collection Date		06/07/2001		06/07/2001		06/08/2001		06/08/2001		06/06/2001		06/06/2001		06/06/2001		06/06/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)																	
1,1,1-Trichloroethane (TCA)	ug/m^3	2.0	U	2.0	U	Not Analyzed		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	2.0	U	2.0	U			3.9		2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloropropane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2-Butanone (MEK)	ug/m^3	11		2.6				2.0	U	4.6		13		5.4		7.3	
2-Hexanone	ug/m^3	4.1		2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	2.0	U	4.6				2.0	U	4.5		5.4		5.6		3.6	
Acetone	ug/m^3	70		29				2.0	U	25		60		33		40	
Benzene	ug/m^3	2.0	U	4.4				13		2.0	U	2.0	U	7.2		2.0	U
Bromodichloromethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromoform	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromomethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon tetrachloride	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chlorobenzene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	ug/m^3	3.2		8.4				2.0	U	4.7		2.0	U	7.0		35	
Chloromethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Dibromochloromethane	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	ug/m^3	11		2.8				7.8		23		31		25		19	
m,p-Xylene	ug/m^3	38		37				15		78		110		80		63	
Methyl tert-butyl ether (MTBE)	ug/m^3	8.1		62				2.0	U	28		30		77		21	
Methylene chloride	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	ug/m^3	9.3		2.1				4.3		24		31		17		14	
o-Xylene	ug/m^3	16		16				9.2		38		50		36		29	
Styrene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene (PCE)	ug/m^3	22		2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	ug/m^3	35		49				7.2		50		65		100		47	
trans 1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	ug/m^3	2.0	U	2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Vinyl acetate	ug/m^3	8.8		2.0	U			2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

Table D-3
Soil Gas Analytical Results

Sample Location		OU5-SG-13		OU5-SG14		OU5-SG-15	
Sample Depth (ft)		2		2		2	
Sample ID		181-713		182-0028		181-724	
Sample Collection Date		06/06/2001		06/11/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.
VOCs (EPA TO-15)							
1,1,1-Trichloroethane (TCA)	ug/m^3	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	ug/m^3	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane (1,1-DCA)	ug/m^3	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene (1,1-DCE)	ug/m^3	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	ug/m^3	2.0	U	2.0	U	2.0	U
1,2-Dichloropropane	ug/m^3	2.0	U	2.0	U	2.0	U
2-Butanone (MEK)	ug/m^3	4.3		5.3		3.4	
2-Hexanone	ug/m^3	2.0	U	2.0	U	2.0	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	5.7		2.0	U	4.6	
Acetone	ug/m^3	31		31		2.0	U
Benzene	ug/m^3	6.6		2.0	U	3.1	
Bromodichloromethane	ug/m^3	2.0	U	2.0	U	2.0	U
Bromoform	ug/m^3	2.0	U	2.0	U	2.0	U
Bromomethane	ug/m^3	2.0	U	2.0	U	2.0	U
Carbon tetrachloride	ug/m^3	2.0	U	2.0	U	2.0	U
Chlorobenzene	ug/m^3	2.0	U	2.0	U	2.0	U
Chloroethane	ug/m^3	2.0	U	2.0	U	2.0	U
Chloroform	ug/m^3	15		2.0	U	11	
Chloromethane	ug/m^3	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U
cis-1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U
Dibromochloromethane	ug/m^3	2.0	U	2.0	U	2.0	U
Ethylbenzene	ug/m^3	28		9.4		4.5	
m,p-Xylene	ug/m^3	92		16		14	
Methyl tert-butyl ether (MTBE)	ug/m^3	75		2.0	U	8.8	
Methylene chloride	ug/m^3	2.0	U	2.0	U	2.0	U
Naphthalene	ug/m^3	17		12		8.2	
o-Xylene	ug/m^3	44		10		6.6	
Styrene	ug/m^3	2.0	U	2.0	U	2.0	U
Tetrachloroethene (PCE)	ug/m^3	2.0	U	2.0	U	2.0	U
Toluene	ug/m^3	88		11		15	
trans 1,3-Dichloropropene	ug/m^3	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U
Trichloroethene	ug/m^3	2.0	U	2.0	U	2.0	U
Vinyl acetate	ug/m^3	2.0	U	2.0	U	2.0	U

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		MW45		MW45		MW-45		MW46		MW-46		MW47		MW-47	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 430		181- 431		181- 440		181- 429		181- 441		181- 428		181- 442	
Sample Collection Date		05/31/2001		05/31/2001		06/06/2001		05/31/2001		06/06/2001		05/31/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs															
1,1,1,2-Tetrachloroethane	ug/L	5	U	5	U	Not analyzed		1	UJ	Not analyzed		5	U	Not analyzed	
1,1,1-Trichloroethane	ug/L	5	U	5	U			1	U			5	U		
1,1,2,2-Tetrachloroethane	ug/L	5	U	5	U			1	U			5	U		
1,1,2-Trichloroethane	ug/L	5	U	5	U			1	U			5	U		
1,1-Dichloroethane	ug/L	5	U	5	U			1	U			5	U		
1,1-Dichloroethene	ug/L	5	U	5	U			1	U			5	U		
1,1-Dichloropropene	ug/L	5	U	5	U			1	U			5	U		
1,2,3-Trichlorobenzene	ug/L	5	U	5	U			1	U			5	U		
1,2,3-Trichloropropane	ug/L	5	U	5	U			1	U			5	U		
1,2,4-Trichlorobenzene	ug/L	5	U	5	U			1	U			5	U		
1,2,4-Trimethylbenzene	ug/L	5	U	5	U			1	U			5	U		
1,2-Dibromo-3-chloropropane	ug/L	5	U	5	U			1	U			5	U		
1,2-Dibromoethane	ug/L	5	U	5	U			1	U			5	U		
1,2-Dichlorobenzene	ug/L	5	U	5	U			1	U			5	U		
1,2-Dichloroethane	ug/L	4	J	5	J			1	U			39			
1,2-Dichloropropane	ug/L	5	U	5	U			1	U			5	U		
1,3,5-Trimethylbenzene	ug/L	5		5				2				8			
1,3-Dichlorobenzene	ug/L	5	U	5	U			1	U			5	U		
1,3-Dichloropropane	ug/L	5	U	5	U			1	U			5	U		
1,4-Dichlorobenzene	ug/L	5	U	5	U			1	U			5	U		
2,2-Dichloropropane	ug/L	5	U	5	U			1	U			5	U		
2-Chlorotoluene	ug/L	5	U	5	U			1	U			5	U		
4-Chlorotoluene	ug/L	5	U	5	U			1	U			5	U		
Benzene	ug/L	134		149				1	U			1620			
Bromobenzene	ug/L	5	U	5	U			1	U			5	U		
Bromochloromethane	ug/L	5	U	5	U			1	U			5	U		
Bromodichloromethane	ug/L	5	U	5	U			1	U			5	U		
Bromoform	ug/L	5	U	5	U			1	UJ			5	U		

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		MW45		MW45		MW-45		MW46		MW-46		MW47		MW-47	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 430		181- 431		181- 440		181- 429		181- 441		181- 428		181- 442	
Sample Collection Date		05/31/2001		05/31/2001		06/06/2001		05/31/2001		06/06/2001		05/31/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Bromomethane	ug/L	5	U	5	U			1	UJ			5	U		
Carbon tetrachloride	ug/L	5	U	5	U			1	U			5	U		
Chlorobenzene	ug/L	5	U	5	U			1	U			5	U		
Chloroethane	ug/L	5	U	5	U			1	U			5	U		
Chloroform	ug/L	5	U	5	U			1	U			5	U		
chloromethane	ug/L	5	U	5	U			1	U			5	U		
cis-1,2-Dichloroethene	ug/L	5	U	5	U			1	U			5	U		
cis-1,3-Dichloropropene	ug/L	5	U	5	U			1	U			5	U		
cis-1,3-Dichloropropene	ug/L	5	U	5	U			1	U			5	U		
Cumene	ug/L	1	J	1	J			0.3	J			2	J		
Dibromochloromethane	ug/L	5	U	5	U			1	UJ			5	U		
Dibromomethane	ug/L	5	U	5	U			1	U			5	U		
Dichlorodifluoromethane	ug/L	5	UJ	5	UJ			1	UJ			5	UJ		
Ethylbenzene	ug/L	34		42				2.3				112			
Hexachlorobutadiene	ug/L	5	U	5	U			1	U			5	U		
Methylene chloride	ug/L	5	UJ	5	UJ			1	UJ			2	J		
MTBE	ug/L	25	U	25	U			19				25	U		
Naphthalene	ug/L	5	U	5	U			0.4	UJ			10			
n-Butylbenzene	ug/L	5	U	5	U			1	U			5	U		
n-Propylbenzene	ug/L	1	J	2	J			1	U			2	J		
p-Isopropyltoluene	ug/L	5	U	5	U			1	U			5	U		
sec-Butylbenzene	ug/L	5	U	5	U			1	U			5	U		
Styrene	ug/L	5	U	5	U			1	U			57			
tert-Butylbenzene	ug/L	5	U	5	U			1	U			5	U		
Tetrachloroethene	ug/L	5	U	5	U			1	U			5	U		
Toluene	ug/L	21		23				1	U			124			
trans-1,3-Dichloropropene	ug/L	5	U	5	U			1	U			5	U		
Trichloroethene	ug/L	5	U	5	U			1	U			5	U		
Trichlorofluoromethane	ug/L	5	U	5	U			1	UJ			5	U		

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		MW45		MW45		MW-45		MW46		MW-46		MW47		MW-47	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 430		181- 431		181- 440		181- 429		181- 441		181- 428		181- 442	
Sample Collection Date		05/31/2001		05/31/2001		06/06/2001		05/31/2001		06/06/2001		05/31/2001		06/07/2001	
Parameter	**Units**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
Vinyl chloride	ug/L	5	U	5	U			1	U			5	U		
Xylenes(total)	ug/L	12		16				1	U			100			
PNAs (EPA 8310)															
Acenaphthene	ug/L	50	U	50	U	Not analyzed		25	U	Not analyzed		200	U	Not analyzed	
Acenaphthylene	ug/L	90		69				24				190			
Anthracene	ug/L	5.1		4.1				2				8	J		
Benzo(a)anthracene	ug/L	2	U	2	U			0.4	J			8	U		
Benzo(a)pyrene	ug/L	2	U	2	U			1	U			8	U		
Benzo(b)fluoranthene	ug/L	2	U	2	U			1	U			8	U		
Benzo(g,h,i)perylene	ug/L	2	U	2	U			1	U			8	U		
Benzo(k)fluoranthene	ug/L	2	U	2	U			1	U			8	U		
Chrysene	ug/L	2	U	2	U			1				8	U		
Dibenz(a,h)anthracene	ug/L	5	U	5	U			2.5	U			20	U		
Fluoranthene	ug/L	7.2		5.3				5.2				6	J		
Fluorene	ug/L	10	J	10	J			3	J			36	J		
Indeno(1,2,3-cd)pyrene	ug/L	2	U	2	U			1	U			8	U		
Naphthalene	ug/L	980		860				400				2200			
Phenanthrene	ug/L	46		39				7				80			
Pyrene	ug/L	4.2		3				8.7				7	J		
BaP equivalency	ug/L	3.8	U	3.8	U			1.9				15	U		
Methane (RSK 175)															
Methane	ug/L	Not analyzed		Not analyzed		11000		Not analyzed		7200		Not analyzed		10000	
General Chemistry															
Alkallinity	mg/L	Not analyzed		Not analyzed		2780		Not analyzed		2820		Not analyzed		1800	
Sulfide	mg/L					0.2	U			0.2	J			0.1	J
Nitrate	mg/L					0.16	U			0.4	U			0.2	U
Sulfate	mg/L					3				54				2.5	U

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		EW2		EW2		PW12		PW12		S12		S13		S13	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 434		181-444		181- 432		181-445		181- 436		181- 433		181-443	
Sample Collection Date		06/01/2001		06/07/2001		06/01/2001		06/07/2001		06/04/2001		06/01/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs															
1,1,1,2-Tetrachloroethane	ug/L	25	U	Not analyzed		1	U	Not analyzed		1	U	5	UJ	Not analyzed	
1,1,1-Trichloroethane	ug/L	25	U			1	U			1	U	5	U		
1,1,2,2-Tetrachloroethane	ug/L	25	U			1	U			1	U	5	U		
1,1,2-Trichloroethane	ug/L	25	U			1	U			1	U	5	U		
1,1-Dichloroethane	ug/L	25	U			1	U			1	U	5	U		
1,1-Dichloroethene	ug/L	25	U			1	U			1	U	5	U		
1,1-Dichloropropene	ug/L	25	U			1	U			1	U	5	U		
1,2,3-Trichlorobenzene	ug/L	25	U			1	U			1	U	5	U		
1,2,3-Trichloropropane	ug/L	25	U			1	U			1	U	5	U		
1,2,4-Trichlorobenzene	ug/L	25	U			1	U			1	U	5	U		
1,2,4-Trimethylbenzene	ug/L	11	J			0.4	J			1	U	3	J		
1,2-Dibromo-3-chloropropane	ug/L	25	U			1	U			1	U	5	U		
1,2-Dibromoethane	ug/L	25	U			1	U			1	U	5	U		
1,2-Dichlorobenzene	ug/L	25	U			1	U			1	U	5	U		
1,2-Dichloroethane	ug/L	23	J			0.9	J			1	U	5	U		
1,2-Dichloropropane	ug/L	25	U			1	U			1	U	5	U		
1,3,5-Trimethylbenzene	ug/L	25	U			1	U			0.8	J	5	U		
1,3-Dichlorobenzene	ug/L	25	U			1	U			1	U	5	U		
1,3-Dichloropropane	ug/L	25	U			1	U			1	U	5	U		
1,4-Dichlorobenzene	ug/L	25	U			1	U			1	U	5	U		
2,2-Dichloropropane	ug/L	25	U			1	U			1	U	5	U		
2-Chlorotoluene	ug/L	25	U			1	U			1	U	5	U		
4-Chlorotoluene	ug/L	25	U			1	U			1	U	5	U		
Benzene	ug/L	673				29				37		38			
Bromobenzene	ug/L	25	U			1	U			1	U	5	U		
Bromochloromethane	ug/L	25	U			1	U			1	U	5	U		
Bromodichloromethane	ug/L	25	U			1	U			1	U	5	U		
Bromoform	ug/L	25	UJ			1	UJ			1	U	5	UJ		

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		EW2		EW2		PW12		PW12		S12		S13		S13	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 434		181-444		181- 432		181-445		181- 436		181- 433		181-443	
Sample Collection Date		06/01/2001		06/07/2001		06/01/2001		06/07/2001		06/04/2001		06/01/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Bromomethane	ug/L	25	U			1	U			1	U	5	UJ		
Carbon tetrachloride	ug/L	25	U			1	U			1	U	5	U		
Chlorobenzene	ug/L	25	U			1	U			1	U	5	U		
Chloroethane	ug/L	25	U			1	U			1	U	5	U		
Chloroform	ug/L	25	U			1	U			1	U	5	U		
chloromethane	ug/L	25	U			1	U			1	U	5	U		
cis-1,2-Dichloroethene	ug/L	25	U			1	U			1	U	5	U		
cis-1,3-Dichloropropene	ug/L	25	U			1	U			1	U	5	U		
cis-1,3-Dichloropropene	ug/L	25	U			1	U			1	U	5	U		
Cumene	ug/L	25	U			0.4	J			0.6	J	2	J		
Dibromochloromethane	ug/L	25	U			1	U			1	U	5	U		
Dibromomethane	ug/L	25	U			1	U			1	U	5	U		
Dichlorodifluoromethane	ug/L	25	UJ			1	UJ			1	U	5	UJ		
Ethylbenzene	ug/L	90				4.8				7.3		40			
Hexachlorobutadiene	ug/L	25	U			1	U			1	U	5	U		
Methylene chloride	ug/L	25	UJ			1	UJ			1	U	5	UJ		
MTBE	ug/L	130	U			5	U			3	J	25	U		
Naphthalene	ug/L	2400				1	U			1	U	111			
n-Butylbenzene	ug/L	25	U			1	U			1	U	5	UJ		
n-Propylbenzene	ug/L	25	U			0.2	J			0.3	J	5	U		
p-Isopropyltoluene	ug/L	25	U			1	U			1	U	5	U		
sec-Butylbenzene	ug/L	25	U			1	U			1	U	5	U		
Styrene	ug/L	25	U			1	U			1	U	5	U		
tert-Butylbenzene	ug/L	25	U			1	U			1	U	5	U		
Tetrachloroethene	ug/L	25	U			1	U			1	U	5	U		
Toluene	ug/L	140				3.8				8.2		8			
trans-1,3-Dichloropropene	ug/L	25	U			1	U			1	U	5	U		
Trichloroethene	ug/L	25	U			1	U			1	U	5	U		
Trichlorofluoromethane	ug/L	25	U			1	U			1	U	5	UJ		

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		EW2		EW2		PW12		PW12		S12		S13		S13	
Sample Depth (ft)		Screen		Screen		Screen		Screen		Screen		Screen		Screen	
Sample ID		181- 434		181-444		181- 432		181-445		181- 436		181- 433		181-443	
Sample Collection Date		06/01/2001		06/07/2001		06/01/2001		06/07/2001		06/04/2001		06/01/2001		06/07/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Vinyl chloride	ug/L	25	U			1	U			1	U	5	U		
Xylenes(total)	ug/L	120				4.3				2.1		18			
PNAs (EPA 8310)															
Acenaphthene	ug/L	6	J	Not analyzed		8		Not analyzed		5	U	66		Not analyzed	
Acenaphthylene	ug/L	10	U			2	U			2	U	2	U		
Anthracene	ug/L	1	U			3.3				0.2	U	0.8			
Benzo(a)anthracene	ug/L	1	U			0.2				0.2	U	0.2	U		
Benzo(a)pyrene	ug/L	1	U			0.2	U			0.2	U	0.2	U		
Benzo(b)fluoranthene	ug/L	1	U			0.2	U			0.2	U	0.2	U		
Benzo(g,h,i)perylene	ug/L	1	U			0.2	U			0.2	U	0.2	U		
Benzo(k)fluoranthene	ug/L	1	U			0.2	U			0.2	U	0.2	U		
Chrysene	ug/L	1	U			0.3				0.2	U	21.1			
Dibenz(a,h)anthracene	ug/L	2.5	U			0.5	U			0.5	U	0.5	U		
Fluoranthene	ug/L	5.6				7.34				0.2	U	0.84			
Fluorene	ug/L	3	J			1				1	U	1	U		
Indeno(1,2,3-cd)pyrene	ug/L	1	U			0.2	U			0.2	U	0.2	U		
Naphthalene	ug/L	566				83				5	U	19			
Phenanthrene	ug/L	21				2				1	U	0.9	J		
Pyrene	ug/L	5.7				10.6				0.2	U	2.1			
BaP equivalency	ug/L	1.9	U			0.39				0.38	U	0.4			
Methane (RSK 175)															
Methane	ug/L	Not analyzed		32000		Not analyzed		2600		3900		Not analyzed		12000	
General Chemistry															
Alkallinity	mg/L	Not analyzed		1910		Not analyzed		3370		552		Not analyzed		1740	
Sulfide	mg/L			4.0				0.7		0.2	U			4.1	
Nitrate	mg/L			0.4	U			8.0	U	0.2	U			2.0	U
Sulfate	mg/L			8.0				540		49				170	

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		S16		S35		S35		Rinse Blank	
Sample Depth (ft)		Screen		Screen		Screen		-	
Sample ID		181- 435		181- 437		181- 438		181- 439	
Sample Collection Date		06/05/2001		06/06/2001		06/06/2001		06/06/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
VOCs									
1,1,1,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	1	UJ	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	1	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	0.7	J	1		1		1	U
1,2-Dibromo-3-chloropropane	ug/L	1.6	U	1	UJ	1	UJ	1	U
1,2-Dibromoethane	ug/L	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	1	U	1		2		1	J
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	1	U	0.6	J	0.6	J	1	U
1,3-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U
2,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U
2-Chlorotoluene	ug/L	1	U	1	U	1	U	1	U
4-Chlorotoluene	ug/L	1	U	1	U	1	U	1	U
Benzene	ug/L	9.6		38		46		1	U
Bromobenzene	ug/L	1	U	1	U	1	U	1	U
Bromochloromethane	ug/L	1	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	1	U	1	U	1	U	1	U
Bromoform	ug/L	1	U	1	U	1	U	1	U

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		S16		S35		S35		Rinse Blank	
Sample Depth (ft)		Screen		Screen		Screen		-	
Sample ID		181- 435		181- 437		181- 438		181- 439	
Sample Collection Date		06/05/2001		06/06/2001		06/06/2001		06/06/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Bromomethane	ug/L	1	U	1	U	1	U	1	U
Carbon tetrachloride	ug/L	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	1	U	1	U	1	U	1	U
Chloroethane	ug/L	1	U	1	U	1	U	1	U
Chloroform	ug/L	1	U	1	U	1	U	1	U
chloromethane	ug/L	1	U	0.6	J	0.6	J	1	U
cis-1,2-Dichloroethene	ug/L	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
Cumene	ug/L	1	U	2		2		1	U
Dibromochloromethane	ug/L	1	U	1	U	1	U	1	U
Dibromomethane	ug/L	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	1	U	1	U	1	U	1	U
Ethylbenzene	ug/L	2		5.7		6.1		1	U
Hexachlorobutadiene	ug/L	1	U	1	U	1	U	1	U
Methylene chloride	ug/L	1	U	1	U	1	U	1	UJ
MTBE	ug/L	1	J	3	J	2	J	5	U
Naphthalene	ug/L	7.9	U	116		131		1	U
n-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
n-Propylbenzene	ug/L	1	U	0.5	J	0.5	J	1	J
p-Isopropyltoluene	ug/L	1	U	1	U	1	U	1	U
sec-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
Styrene	ug/L	1	U	1	U	1	U	1	U
tert-Butylbenzene	ug/L	1	U	1	U	1	U	1	U
Tetrachloroethene	ug/L	1	U	1	U	1	U	1	U
Toluene	ug/L	1	U	2		2		0.3	J
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U
Trichloroethene	ug/L	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	1	U	1	U	1	U	1	U

Table D-4
Monitoring Well Groundwater Analytical Results

Sample Location		S16		S35		S35		Rinse Blank	
Sample Depth (ft)		Screen		Screen		Screen		-	
Sample ID		181- 435		181- 437		181- 438		181- 439	
Sample Collection Date		06/05/2001		06/06/2001		06/06/2001		06/06/2001	
Parameter	Units	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Vinyl chloride	ug/L	1	U	1	U	1	U	1	U
Xylenes(total)	ug/L	2.7		9.3		10		1	U
PNAs (EPA 8310)									
Acenaphthene	ug/L	3	J	5	J	7		5	U
Acenaphthylene	ug/L	2	U	3		4.3		2	U
Anthracene	ug/L	0.06	J	0.1	J	0.1	J	0.2	U
Benzo(a)anthracene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(a)pyrene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(b)fluoranthene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(g,h,i)perylene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Chrysene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Dibenz(a,h)anthracene	ug/L	0.5	U	0.5	U	0.5	U	0.5	U
Fluoranthene	ug/L	0.2	J	0.09	J	0.1	J	0.2	U
Fluorene	ug/L	1	U	0.2	J	0.3	J	1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.2	U	0.2	U	0.2	U	0.2	U
Naphthalene	ug/L	5	U	10		11		5	U
Phenanthrene	ug/L	0.2	J	0.7	J	0.9	J	1	U
Pyrene	ug/L	1.4		0.2	U	0.2	U	0.2	U
BaP equivalency	ug/L	0.38	U	0.38	U	0.38	U	-	U
Methane (RSK 175)									
Methane	ug/L	9200		1900		1600		Not Analyzed	
General Chemistry									
Alkallinity	mg/L	3280		643		621		Not Analyzed	
Sulfide	mg/L	3.2		0.2	U	0.2	U		
Nitrate	mg/L	2	U	0.25		0.33			
Sulfate	mg/L	340		16		17			

APPENDIX E
CORE LOGS AND BORING LOGS

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-01**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.2 ft. | Total Hole Depth: 20.0 ft. | North: 474523.4 ft. | East: 1484105.4 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand, fine; medium dense - dense; dry-moist; dark grayish brown (10YR 4/2).
2		181-478 100%				Yellowish brown (10YR 5/6), trace of shells
4						
6		181-479 95%				trace wood
8					SC SM	Silty Clayey Sands; fine; wet; soft; loose; dark grayish brown (10YR 4/2)
10		100%			SP	Poorly Graded Sand; fine; moist; wet; loose; medium dense; dark grayish brown (10YR 4/2), trace shells
12						
14		100%				
16						
18		60%			CH	Clay; soft; moist; very dark gray (2.5Y N3/0), some organics, odor
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-02**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.1 ft. | Total Hole Depth: 20.0 ft. | North: 474289.7 ft. | East: 1484943.7 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; loose; medium dense; moist; light brownish gray (2.5Y 6/2)
2		181-480 80%				
4						
6		181-481 60%				
8						
10		90%				
12						
13.5					CH	Clay; soft; moist; dark gray (2.5Y N4/0)
14		100%			SP	Poorly Graded Sand; fine; moist to wet; loose; brown (10YR 4/3)
16						Gray (2.5YR N5/0)
18		100%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-03**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.9 ft. | Total Hole Depth: 20.0 ft. | North: 474173.2 ft. | East: 1484216.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
		181-482 80%			SP SM	Poorly Graded Sand to Silty Sand; fine; medium dense; moist; brown (10YR 5/3)
2						
4					OL	Silty Clay; hard; black (10YR 2/1)
		181-483 100%			SP	Poorly Graded Sand; fine; loose; medium dense; moist; brown (10YR 4/3)
6						
8						
10		100%				
12						
14		100%				
16						
18		100%			OH	Silty Clay; firm-hard; moist; very dark brown (10YR 2/2) marsh crust, organic debris, odor
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-04**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 6.2 ft. | Total Hole Depth: 24.0 ft. | North: 473636.3 ft. | East: 1483455.4 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/6/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Clay; firm; moist; dark grayish brown (2.5YR 4/2)
2		181-707 70%			CL	
4						
6		181-708 70%				Some organic debris
8						Poorly Graded Sand; fine; loose; moist-wet; dark gray (2.5YR N4/0)
10		70%			SP	
12						
14		10%				Silty Clay; soft; moist; dark gray (2.5YR N4/0)
16					CL	
18		60%				Silty Clay; soft; moist; olive gray (5Y 4/2); organic debris, odor
20					OL	
22		30%				dark gray (2.5YR N4/0)
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-05**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.3 ft. | Total Hole Depth: 20.0 ft. | North: 473557 ft. | East: 1484356.9 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
		181-484 80%			SM	Poorly Graded Silty Sand; fine; firm; dry-moist; dark brown (7.5YR 3/2)
2						
4						
6		181-485 60%			SP	Poorly Graded Sand; fine; medium dense; moist; brown (10YR 5/3)
8						Gray (10YR 5/1)
10		100%				
12						
14						
16						
18						
20					CL	Clay; moist; soft; very dark gray (10YR 3/1)
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-06**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 10.3 ft. | Total Hole Depth: 20.0 ft. | North: 473277.9 ft. | East: 1484950.1 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		181-486 70%			SP	Poorly Graded Sand; fine; loose; dry-moist; light brownish gray (10YR 6/2)
4						
6		181-487 100%			CL	Clay; soft; moist; very dark gray (2.5Y N3/0)
8					SC	Clayey Sand; fine; loose; moist; brown (7.5YR 5/4)
10		90%			SP	Poorly Graded Sand; fine; medium dense; moist; dark gray (2.5YR N4/0)
12						
14		100%				
16						odor; dark sediment; black
18		100%			OH	Clay; firm; moist; very dark gray (7.5YR N3/0); organic debris, odor
20						
22						
24						

APPENDIX E – CH-07 BORING LOG AND WELL CONSTRUCTION DIAGRAM

FINAL OPERABLE UNIT 5 REMEDIAL INVESTIGATION REPORT

THE ABOVE IDENTIFIED BORING LOG IS NOT AVAILABLE.

EXTENSIVE RESEARCH WAS PERFORMED BY NAVFAC SOUTHWEST TO LOCATE THIS BORING LOG. THIS PAGE HAS BEEN INSERTED AS A PLACEHOLDER AND WILL BE REPLACED SHOULD THE MISSING ITEM BE LOCATED.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-08**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 11.4 ft. | Total Hole Depth: 24.0 ft. | North: 472843.5 ft. | East: 1484308.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/6/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		178-0018 100%			GM	Well Graded Silty Sandy Gravel; fine sand to fine gravel; loose; medium dense; dry-moist; very dark grayish brown (10YR 3/2) (crushed rock)
4						trace clay
6		178-0019 100%			ML	Silty Clay; firm; moist; wetter; softer with depth
8						Clay content increases with depth
10		60%			CL	Clay; wet; soft; lenses of sandy clay
12						
14		60%				
16					SP	Poorly Graded Sand; fine; wet; loose; dark gray (2.5Y N4/1)
18		10%				
20					OL	Silty Clay; moist; soft; dark grayish brown (10YR 4/2); organic debris
22		30%				
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-09**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 11.8 ft. | Total Hole Depth: 20.0 ft. | North: 472834.1 ft. | East: 1485337.7 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; medium dense - dense; dry; brown (7.5YR 4/4)
2		181-704 80%			SP	Poorly Graded Sand; fine; loose; dry-moist; light brownish gray (10YR 6/2); trace crushed rock
4						
6		181-705 60%				
8						
					CL	Silty Clay; soft; moist; gray (7.5YR N5/0)
10		100%			CH	Clay; soft; moist; dark gray (7.5YR N4/0)
12					SP	Poorly Graded Sand; fine; loose; moist; yellowish brown (10YR 5/4)
					CH	Clay; soft; moist; gray (2.5Y N5/0)
14		60%			SP	Poorly Graded Sand; fine; loose; moist; gray (10YR 5/1)
16					SC	Clayey Sand; soft; moist; gray (10YR 5/1)
18		80%			SP	Poorly Graded Sand; fine; moist; grayish brown (10YR 5/2)
20					OH	Clay; soft; moist; dark gray (10YR 4/1); organic debris
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-10**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.5 ft. | Total Hole Depth: 20.0 ft. | North: 473898.3 ft. | East: 1483949.2 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
		181-702 90%			SC	Clayey Sand; fine grained; moist; loose; grayish brown (10YR 5/2)
2						
4					CH	Clay; moist; firm; very dark gray (2.5 YR N3/0)
		181-703 80%				
6						
8					SP	Poorly Graded Sand; fine; moist; firm; very dark gray (2.5YR N3/0)
10		60%				
12						grades to dark gray (5Y 4/1)
14		60%				
16						
18		50%			CH	Clay; soft; moist; very dark gray (2.5Y N3/0)
					CL	Silty Clay; firm; moist; very dark grayish brown 2.5Y 3/2); trace organics; slight odor
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-11**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.0 ft. | Total Hole Depth: 20.0 ft. | North: 474294 ft. | East: 1483896.5 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		100%			CL	Silty Clay; moist; firm; very dark gray (10YR 3/1)
4					SP	Poorly Graded Sand; fine; dry-moist; loose; brown (10YR 5/3)
6		100%			CH	Clay; moist; firm; very dark gray (2.5Y N/3)
8					SP	Poorly Graded Sand; fine; dry-moist; firm; dark yellow brown (10YR 4/6) to grayish brown (10YR 5/2); trace shells
10		100%				
12					CH	Clay; moist; firm; very dark gray (2.5Y N3/0)
14		100%			SP	Poorly graded Sand; fine; medium dense - dense; moist-wet; dark gray (5YR4/1)
16					CL	Silty Clay; firm; moist; dark gray (5YR 4/1)
18		50%			CH	Clay; soft-firm; moist; very dark gray (2.5YR N3/0)
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-12**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 7.3 ft. | Total Hole Depth: 20.0 ft. | North: 473583.5 ft. | East: 1483866.6 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		60%			CL	Clayey Silt; firm; moist; dark brown (10YR3/3); some concrete and crushed rock
4						
6		90%			OL	Clay; firm; moist; dark gray (2.5YR N4/0); some organic debris
8					SP	Poorly Graded Sand; fine; medium dense-dense; moist-wet; gray (2.5Y N5/0)
10		100%				
12						
14		100%				trace shells
16						
18		100%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-13**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 7.7 ft. | Total Hole Depth: 20.0 ft. | North: 473753.4 ft. | East: 1484112.5 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		90%			ML	Clayey Silt; firm; moist; dark grayish brown (2.5Y 4/2); trace crushed rock
4						
6		90%			SP	Poorly Graded Sand; fine; medium dense; moist; dark grayish brown (2.5Y 4/2)
8						
10		50%				
12						Poorly Graded Sand; fine; medium dense; moist; dark grayish brown (2.5Y 4/2)
14		50%				
16						
18		60%			CL	Silty Clay - Clay; soft; moist; very dark gray (2.5Y N3/0)
20						Silty Clay; firm; moist; very dark grayish brown (2.5Y 3/2)
22						
24						

Boring Log and Well Construction Diagram

IT CORPORATION
A Member of The IT Group

Soil Boring **CH-14**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.2 ft. | Total Hole Depth: 20.0 ft. | North: 473778.8 ft. | East: 1484460.1 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
2		80%			SM	Silty Sand-Sand; fine; dry-moist; medium dense-dense; dark grayish brown (10YR 4/2)
4						
6		80%			CL	Clay; moist; firm
8					SP	Poorly Graded Sand; fine grained; moist; loose; medium dense; dark gray (7.2YR N4/0) grades to gray (10YR 5/1)
10		100%				
12					SC SP	Clayey Sand grading to fine Sand; loose; moist-wet; gray (10YR 5/1)
14		100%				
16						
18		80%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-15**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.2 ft. | Total Hole Depth: 20.0 ft. | North: 473794.3 ft. | East: 1484785.1 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		100%			SM	Silty Sand; very fine; dry; dense; brown (10YR 5/3)
					CL	Clay; firm; moist; very dark gray (10YR3/1)
4					SP	Poorly Graded Sand; fine; loose; dark gray (5Y 4/1) grading to Clay; soft; dark gray (5Y 4/1)
6		100%			CL	Silty Clay-Clay; loose; moist; very dark gray (7.5YR N3/0)
8					SP	Poorly Graded Sand; fine; soft-firm; moist-wet; dark gray (5Y 4/1)
10		100%				
12						Poorly Graded Sand; fine; soft-firm; moist-wet; dark gray (5Y 4/1)
14		80%				
16						
18		80%				
					CL	Clay; firm; moist; very dark gray (7.5YR N3/0)
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-16**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.1 ft. | Total Hole Depth: 20.0 ft. | North: 474001.8 ft. | East: 1484803 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		90%			SM	Sitly Sand; very fine-coarse; dry-moist; loose-dense; brown (7.5YR 5/2)
4					SP	Poorly Graded Sand; fine; moist; loose; light brownish gray (10YR 6/2)
6		30%				
8					CL	Silty Clay; soft; moist; very dark gray (2.5Y N3/0)
10		80%				
12					SP	Poorly Graded Sand; fine; loose; moist to wet; grayish brown (10YR 5/2)
14		60%				
16						
18						
20					CL	Silty Clay; soft-firm; moist; brown (7.5YR 4/2); organic debris, marsh crust
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-17**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.7 ft. | Total Hole Depth: 20.0 ft. | North: 473547.7 ft. | East: 1484832.6 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
2		80%			SM	Silty Sand-Sand; fine; firm; dry-moist; brown (10YR 4/3)
4						
6		100%			SM SC	Silty to Clayey Sand; fine; firm; wet-moist; dark gray (2.5Y N4/0)
8					SP	Poorly Graded Sand; fine; medium dense; moist; gray (7.5YR N5/0)
10		100%				
12						Poorly Graded Sand; fine; medium dense; moist-wet; gray (7.5YR N5/0)
14		100%				
16						
18		100%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-18**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.6 ft. | Total Hole Depth: 20.0 ft. | North: 473378.6 ft. | East: 1484700.1 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; medium; moist; dark yellowish brown (10YR 3/4)
2		80%				grades to dark grayish brown (10YR 4/2)
4						
					CL	Sandy Clay-Clay; moist; firm; (7.5YR N4/0)
6		90%			SP	Poorly Graded Sand; fine; moist; yellowish brown (10YR 5/4)
8					SM	Silty Sand; fine; moist; firm; yellowish brown (10YR 5/4) to dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; firm; yellowish brown (10YR 5/4)
10		100%				
12						Poorly Graded Sand; fine; moist; gray (10YR 5/1)
14		90%				
16						Poorly Graded Sand; fine; moist-wet; yellowish brown (10YR 5/4); 3-in clay layer at 16 ft.
18		100%				
					CH	Clay; moist; firm; dark gray (7.5YR N4/0); trace organic debris
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-19**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.6 ft. | Total Hole Depth: 20.0 ft. | North: 473930 ft. | East: 1485590.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0					SM	Silty Sand; fine; dense; dry-moist; yellowish brown (10YR 5/4); trace crushed rock
2		80%			SP SM	Poorly Graded Sand - Silty Sand; fine; dense; dry-moist; gray (10YR 5/1)
4						
6		100%				
8					CH	Clay; soft-firm; moist
10		100%				
12					SC	Clayey Sand; fine; very soft; wet; very dark gray (2.5YR N3/0)
14		100%				
16					SP SC	Poorly Graded fine Sand, grading to Clayey Sand with depth; medium dense-dense; moist; dark gray (2.5YR N4/0)
18		100%				
20					SP	Poorly Graded Sand; fine; moist; medium dense; dark gray (2.5YR N4/0)
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-20**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.9 ft. | Total Hole Depth: 24.0 ft. | North: 473311 ft. | East: 1485526.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0					SW	Well Graded Sand; fine-coarse; medium dense; dry; light gray (10YR 6/1)
2		100%				
4						Well Graded Sand; loose; moist; brown (10YR 4/3)
6		100%			CH	Clay; soft; moist-wet; gray (7.5YR N5/0)
8					SP SC	Poorly Graded Sand; fine; loose; moist; gray (7.5YR N5/1)
10		0%				
12						
14		0%				
16						
18		80%				Grading to Clayey Sand
20					SC	Clayey Sand
22		100%			SP	Poorly Graded Sand; fine; loose; wet; gray (7.5YR N5/0)
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-21**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 10.2 ft. | Total Hole Depth: 20.0 ft. | North: 473131.2 ft. | East: 1485254.2 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		100%			SM	Silty Sand - Sand; fine; dry-moist; loose; medium dense; dark gray (5YR 4/1)
4						
6		50%				
8						
10		100%			CL	Silty Clay; very soft; gray (7.5YR N5/0)
12					SP	Poorly Graded Sand; fine; moist; loose; gray (10YR 5/1)
14		100%			CL	Silty Clay; very soft; wet; gray (7.5YR N5/0)
16					SC	Clayey Sand; fine; very soft; wet; dark gray (5Y 4/1)
18		100%				
20					SP	Poorly Graded Sand; fine; moist; loose - medium dense; gray (7.5YR N5/0)
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-22**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 13.0 ft. | Total Hole Depth: 20.0 ft. | North: 473109.7 ft. | East: 1484855 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/4/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		60%			GM	Sand Gravel; crushed rock; fine-medium grain sand; dry-moist; very dense; pale brown (10YR 6/3)
4					CH	Silty Clay; dry-moist; firm-hard
6		50%			SP	Poorly Graded Sand; fine with some medium grain; dry-moist; dense-very dense; pale brown (10YR 6/3)
8						
					CH	Clay; moist; soft-firm; gray (2.5Y N5/0)
10		100%			SP	Poorly Graded Sand; fine; moist; gray (2.5Y N5/0)
					CH	Clay; moist; soft-firm; gray (2.5Y N5/0)
12					OL	Silty Clay with Organics; wet, very soft; gray (7.5YR N5/0)
14		80%			SP	Poorly Graded Sand; fine; wet; medium dense; gray (7.5YR N5/0)
16						
					OL	Silty Clay with Organics; wet; very soft; gray (7.5YR N5/0)
18		100%			SP	Poorly Graded Sand; fine; wet; medium dense; gray (7.5YR N5/0)
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-23**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 12.5 ft. | Total Hole Depth: 20.0 ft. | North: 472879.5 ft. | East: 1484934.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0					GM	Silty Sand with Crush Rock; fine-coarse; medium dense; dry; pale brown (10YR 6/3)
2		60%			SM	Silty Sand; fine-coarse grained; dry; medium dense; pale brown (10YR 6/3)
4						
6						
					CH	Clay; hard; dry-moist
8					SM	Silty Sand; fine-coarse; medium dense; dry; pale brown (10YR 6/3)
10		60%			CL	Silty Clay; soft; moist; brown (7.5YR 4/2)
12					ML	Clayey Silt; soft; moist; brown (7.5YR 4/2)
14		70%				
16						
18						
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-24**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 12.9 ft. | Total Hole Depth: 24.0 ft. | North: 472532 ft. | East: 1485153 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/6/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0					SM	Silty Sand; fine-coarse sand; dry-moist; medium dense; reddish yellow (7.5YR 6/8)
2		60%				
					SP	Poorly Graded Sand; fine; loose; moist; light brownish gray (2.5Y 6/2)
4						
					CL	Clay; soft-firm; moist
6		90%			SP	Poorly Graded Sand; fine; loose; moist; light brownish gray (2.5Y 6/2)
8						
10		100%				
12						Poory Graded Sand; fine; loose; moist; light brownish gray (2.5Y 6/2)
14		100%				Grading to gray sand (2.5Y N5/0)
16						
18		100%			CL	Silty Clay; soft; gray (2.5Y N5/0)
20					OL	organic rich clay; dark brown (7.5Y 4/2)
					CL	Silty Clay; soft; moist; dark brown (7.5Y 4/2)
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-25**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 9.9 ft. | Total Hole Depth: 20.0 ft. | North: 473107.3 ft. | East: 1483923.5 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		50%			SC	Clayey Sand; fine; moist-wet; soft; reddish brown (5YR 5/3)
4					SM	Silty Sand; fine-medium; trace crushed rock; loose; fine-medium; very pale brown (10YR 7/4)
6		50%				
8					CL	Silty Clay; soft; moist; gray (2.5YR N5/0)
10		60%				
12						
14		60%				
16					SP	Poorly Graded Sand; fine; very wet; loose; dark gray (2.5Y N4/0)
18		0%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-26**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 11.5 ft. | Total Hole Depth: 20.0 ft. | North: 472236.7 ft. | East: 1485169.5 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Probe 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Steve Truman | Log By: Mark Zellman | Date: 6/5/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
2		50%			SM	Silty Sand; fine-coarse; dense; dry; yellowish brown (10YR 5/4)
4						Clay; soft; moist; dark gray (2.5Y N4/0); some thin fine grained sand lenses
6		40%				
8					CH	
10		0%				
12						
14		0%				
16					CL	Silty Clay; very soft; wet; dark gray (2.5Y N4/0)
18		100%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-27**

Project	Alameda CTO 31	Owner	U.S. Navy				
Location	Alameda Point			Proj. No.	819814		
Surface Elev.	12.3 ft.	Total Hole Depth	20.0 ft.	North	472492.7 ft.	East	1484568.6 ft.
Top of Casing	NA	Water Level Initial	NA	Static	NA	Diameter	2 in.
Screen: Dia	NA	Length	NA	Type/Size	NA		
Casing: Dia	NA	Length	NA	Type	NA		
Fill Material	Bentonite/cement grout			Rig/Core	Power Probe 9600		
Drill Co.	Kehoe Drilling	Method	DPT Rig				
Driller	Steve Truman	Log By	Mark Zellman	Date	6/5/01	Permit #	NA
Checked By	Dale Landon	License No.					

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
2		0%			GM	Silty-Sandy-Gravel (crushed rock); dry; loose; light brown (7.5YR 6/4) - yellowish brown (10YR 5/6)
4						
					CH	Clay; soft-firm; moist; dark gray (7.5YR N4/0)
6		70%			SM	Silty Sand; fine-coarse; dry; loose-dense; brown (7.5YR 5/2)
8						
10					CL	Silty Clay; soft; moist; dark gray (7.5YR N4/0)
12						
14		50%				
16						
18		50%			OL	Silty Clay with organic debris; soft-firm; moist; brown (7.5YR 4/2); marsh crust
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-28**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *10.2 ft.* Total Hole Depth *20.0 ft.* North *472527.1 ft.* East *1483680.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Push 9600*

Drill Co. *Kehoe Drilling* Method *DPT Rig*

Driller *Steve Truman* Log By *Mark Zellman* Date *6/5/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
2		60%			GM	Well Sorted Very Silty Sand with Gravel; fine-coarse; loose-medium dense; dry-moist; olive gray (5Y 5/2); with crushed shells
4					CH	Clay; soft-firm; moist; dark gray (2.5Y N4/0)
6		60%				
8						
10		60%				
12						
14		60%				Trace amounts of organic debris
16						
18		60%				
20						
22						
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-29**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 8.2 ft. | Total Hole Depth: 24.0 ft. | North: 473430 ft. | East: 1483411.3 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Tyler Deeds | Log By: Mark Zellman | Date: 6/6/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		80%			CL	Silty Clay with Gravel; soft-firm; moist; strong brown (7.5YR 4/6)
4						Silty Clay; firm; moist
6		20%			CH	Clay; soft; moist; dark gray (5Y 4/1)
8						
10						
12						
14		100%			SP	Poorly Graded Sand; fine; wet; loose; dark gray (2.5Y N4/0)
16					CL	Very Silty Clay; moist; soft; dark gray (2.5Y N4/0)
18		10%				
20					SP	Poorly Graded Sand; fine; wet; loose; dark gray (2.5Y N4/0)
22		30%				
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **CH-30**

Project: Alameda CTO 31 | Owner: U.S. Navy
Location: Alameda Point | Proj. No.: 819814
Surface Elev.: 10.5 ft. | Total Hole Depth: 24.0 ft. | North: 473063.2 ft. | East: 1484296.1 ft.
Top of Casing: NA | Water Level Initial: NA | Static: NA | Diameter: 2 in.
Screen: Dia: NA | Length: NA | Type/Size: NA
Casing: Dia: NA | Length: NA | Type: NA
Fill Material: Bentonite/cement grout | Rig/Core: Power Push 9600
Drill Co.: Kehoe Drilling | Method: DPT Rig
Driller: Tyler Deeds | Log By: Mark Zellman | Date: 6/6/01 | Permit #: NA
Checked By: Dale Landon | License No.:

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		70%			GM	Silty Sandy Gravel (crushed rock); fine-medium coarse; loose-medium dense; moist; strong brown (7.5YR 5/8)
4					CL	Silty Clay; soft-firm; moist; strong brown (7.5YR 5/8)
6		100%				
8						Silty Clay; soft; moist; gray (7.5YR N5/0)
10		100%				
12					SP	Poorly Graded Sand; fine; moist-wet; loose; gray (7.5YR N5/0)
14		100%				
16						
18		100%				
20						
22		60%				
24						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-001**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.2 ft.* Total Hole Depth *8.0 ft.* North *473635.3 ft.* East *1483455.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Clay; moist; fat; dark grayish brown (10YR 4/2); roots
2		100%			CH	
4						Trace 1/4" gravel
6		100%			CL	Clay; moist to saturated; plastic; dark gray (2.5Y 4/0)
					SP	Poorly Graded Sand; fine; saturated; dark gray (2.5Y 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-002**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.5 ft.* Total Hole Depth *4.0 ft.* North *473684.3 ft.* East *1483543 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SW	Well Graded Gravelly Sand; fine to coarse; mostly fine, silt 5-10%; gravel 5-10%; clay 0-5%; dry to slightly moist; dark gray (10YR 4/1)
2		75%				
					CL	Silty Clay; plastic; slightly moist; silt 10-15%; sand 0-5%; dark gray (10YR 4/1)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-003**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.4 ft.* Total Hole Depth *4.0 ft.* North *473692.4 ft.* East *1483523.5 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; well graded; silt 5-10%; gravel 0-5%; clay 0-5%; slightly moist; dark gray (10YR 4/1)
2		100%				
					CL	Silty Clay; slightly plastic, slightly moist; dark gray (10YR 4/1)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-004**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.4 ft.* Total Hole Depth *8.0 ft.* North *473695.1 ft.* East *1483524.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand, fine sand, root matter, wet, clay 5-10%; dark gray (10YR 4/1)
2		100%				
4					CL	Silty Clay, trace gravel, root matter, slightly plastic, silt 10-15%; gravel 0-5%
6		100%				Same as above, less compact; grades to wet plastic less compact clay; very dark gray (2.5YR 3/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-005**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.4 ft.* Total Hole Depth *4.0 ft.* North *473696.2 ft.* East *1483526.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; wet; very dark grayish brown (10YR 3/2)
2		100%				Same as above
					CL	Silty Clay; non-plastic; slightly moist; silt 10-15%; very dark grayish brown (10YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-006**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.6 ft.* Total Hole Depth *4.0 ft.* North *473785.5 ft.* East *1483535.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to medium; mostly medium; silt 5-10%; gravel 5-10%; dry to slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					CL	Silty Clay; slightly plastic; dry to slightly moist; silt 10-15%; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-007**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.2 ft.* Total Hole Depth *4.0 ft.* North *473591.7 ft.* East *1483564.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					GM	Silty Gravel; up to 1/2" subangular-subround; silts 5-10%; sand 0-5%; dry; dark grayish brown (10YR 4/2)
2		100%				
					CL	Silty Clay with trace gravel; silt 10-15%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-008**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.0 ft.* Total Hole Depth *4.0 ft.* North *473573.3 ft.* East *1483666.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Clayey Silt; clay 0-5%; non-plastic; moist; dark grayish brown (10YR 4/2)
2		100%				
					CL	Silty Clay; silt 10-15%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-009**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.2 ft.* Total Hole Depth *4.0 ft.* North *473591.6 ft.* East *1483683.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		100%			GM	Silty Sandy Gravel, up to 1/2"; silt 20-25%; fine sand 10-15%; dry; dark grayish brown (10YR 4/2)
4					CL	Clay; moist; plastic; dark gray (5YR 4/1)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-010**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.4 ft.* Total Hole Depth *4.0 ft.* North *473635.6 ft.* East *1483657.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top soil grades to Sandy Gravel with clay to sandy clay
2		50%			GM	
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-011**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.7 ft.* Total Hole Depth *8.0 ft.* North *473840.4 ft.* East *1483582 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 10-15%; gravel 0-5%; slightly moist; loose; very dark grayish brown (10YR 3/2)
2		100%				
					CL	Clay; plastic; trace fine sand 0-5%; trace silt 0-5%; moist; very dark grayish brown (10YR 3/2)
4						
6		100%				
						Same as above; very dark brown (10YR 2/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-012**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.1 ft.* Total Hole Depth *4.0 ft.* North *473929.3 ft.* East *1483627.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Sandy Clay; fine sand 20-25%; plastic; wet; trace gravel lense; very dark grayish brown (10YR 3/2)
2		75%			CL	Clay; plastic; trace fine sand 0-5%; trace silt 0-5%; moist; very dark grayish brown (10YR 3/2)
						Same as above
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-013**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.0 ft.* Total Hole Depth *4.0 ft.* North *473912.3 ft.* East *1483677.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/22/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand; fine sand; clay 15-20%; moist to wet; very dark grayish brown (10YR 3/2)
2		75%				
					CL	Silty Clay; silt 10-15%; plastic; moist; dark brown (10YR 4/3)
4						Grades to Clay; silt 0-5%; plastic
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-014**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.1 ft.* Total Hole Depth *8.0 ft.* North *473968 ft.* East *1483671.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Gravelly Clay; gravel 5-10%; fine sand 0-5%
2		100%				
						Clay; trace fine sand 0-5%; trace silt 0-5%; plastic; moist; very dark grayish brown (10YR 3/2)
4					SP	Poorly Graded Sand; fine; wet; very dark grayish brown (10YR 3/2)
					CL	Clay; plastic; saturated; very dark grayish brown (10YR 3/2)
6		100%				
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-015**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.6 ft.* Total Hole Depth *8.0 ft.* North *473672.9 ft.* East *1483794.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Sandy Clay; fine sand 20-25%; plastic; moist; very dark grayish brown (10YR 3/2)
2		100%				
						Clay; trace fine sand 0-5%; trace silt 5-10%; plastic; moist; dark grayish brown (10YR 3/2)
4					CL	
6		100%				Same as above grades to moist; dark gray (7.5YR 4/0)
					SP	Poorly Graded Sand; fine; silt 0-5%; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-016**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.5 ft.* Total Hole Depth *4.0 ft.* North *473677.5 ft.* East *1483794.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand; Fine Sand; clay 10-15%; gravel 0-5%; silt 5-10%; compact; dark brown (10YR 4/3)
2		100%				
					CL	Clay; fine sand 0-5%; plastic; moist; compact; dark brown (10YR 4/3)
					SP	Poorly Graded Sand; fine; moist; dark brown (10YR 4/3)
					CL	Clay; plastic; moist; dark brown (10YR 4/3)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-017**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.3 ft.* Total Hole Depth *8.0 ft.* North *473750.5 ft.* East *1483700.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Gravel; silt 10-15%; fine sand 5-10%; compact; dry; dark grayish brown (10YR 4/2)
2		75%			GM	
4						Clay; plastic; moist; dark grayish brown (10YR 4/2)
6		100%			CL	Grades to dark gray (7.5YR 4/0)
						Clay; plastic; wet; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-018**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.5 ft.* Total Hole Depth *4.0 ft.* North *473767.2 ft.* East *1483755.9 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 5-10%; fine sand 0-5%; compact; dry; dark grayish brown (10YR 4/2)
2		100%				
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-019**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *4.0 ft.* North *473778.7 ft.* East *1483795.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 10-15%; fine sand 10-15%; clay 0-5%; dry; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; wet; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-020**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.7 ft.* Total Hole Depth *4.0 ft.* North *473574 ft.* East *1483810.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Clayey Silt; compact; non-plastic; clay 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					CL	Clay; trace fine sand 0-5%; trace silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-021**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.3 ft.* Total Hole Depth *8.0 ft.* North *473585.9 ft.* East *1483818.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt with Clay; gravel 5-10%; clay 0-5%; compact; moist; dark grayish brown (10YR 4/2)
2		100%			GM	Silty Gravel; silt 20-25%; Subangular-Subrounded; slightly moist; dark grayish brown (10YR 4/2)
4					CL	Clay; silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
6		100%				Grades to wet-saturated; very dark gray (7.5YR 3/0)
					SP	Poorly Graded Sand; fine; black (7.5YR 2/0); saturated with TPH odor
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-022**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.3 ft.* Total Hole Depth *4.0 ft.* North *473585 ft.* East *1483865.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silt; clay 5-10%; gravel 10-15%; non-plastic; slightly moist; dark grayish brown (10YR 4/2)
2		95%			ML	Grades to 0% gravel and 10-15% clay
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-023**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.7 ft.* Total Hole Depth *4.0 ft.* North *473670.4 ft.* East *1483878.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly, Sandy, Clayey, Silt; sand 5-10%; gravel 5-10%; clay 5-10%; non-plastic; slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded fine sand lense; moist; dark grayish brown (10YR 4/2)
					CL	Clay; silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-024**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.7 ft.* Total Hole Depth *4.0 ft.* North *473697.3 ft.* East *1483881.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly, Sandy, Clayey, Silt; sand 5-10%; gravel 5-10%; clay 5-10%; non-plastic; slightly moist; dark grayish brown (10YR 4/2)
2		95%				
					CL	Clay; silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-025**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.9 ft.* Total Hole Depth *4.0 ft.* North *473700.1 ft.* East *1483863.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Silt; sand 5-10%; gravel 0-5%; clay 5-10%; non-plastic; loose; moist
2		95%				
					CL	Silty Clay; silt 10-15%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-026**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.7 ft.* Total Hole Depth *4.0 ft.* North *473559.2 ft.* East *1483923.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Clayey silt; fine sand 5-10%; clay 10-15%; non-plastic; slightly moist; dark grayish brown (10YR 4/2)
2		80%			ML	
					CL ML	Increased clay content 25-30%
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-027**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.3 ft.* Total Hole Depth *8.0 ft.* North *473716.1 ft.* East *1483902.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; dry; dark grayish brown (10YR 4/2)
2		80%				
					CL	Clay; plastic; moist; very dark grayish brown (10YR 3/2)
4					SP	Poorly Graded Sand; fine; wet to saturated; dark grayish brown (10YR 4/2)
6		55%				Grades to dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-028**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.9 ft.* Total Hole Depth *4.0 ft.* North *473737.9 ft.* East *1483864.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		90%				
					ML	Clayey Silt; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-028 (Redrill)**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *NA* Total Hole Depth *4.0 ft.* North _____ East _____
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/5/01* Permit # *NA*
Checked By *Dale Landon* License No. _____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine sand; silt 20-25%; trace gravel; dry; dark grayish brown (10YR 4/2)
						Same as above, no gravel
2		100%				
						cobble; rounded
					CL	Silty Clay; compact; dry; dark grayish brown (10YR 4/2)
						Sandy Clay; fine sand 10-15%; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-029**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.7 ft.* Total Hole Depth *4.0 ft.* North *473807.7 ft.* East *1483845.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Clayey Silty Sand; fine; clay 10-15%; silt 5-15%; gravel 0-5%
2		100%				same as above; gravel 5-10%
					CL	Silty Clay; silt 10-15%; fine sand 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
4					SP	Sand; fine; poorly graded; moist; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-030**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.1 ft.* Total Hole Depth *4.0 ft.* North *473803.7 ft.* East *1483855 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Gravelly Clay; gravel 20-25%; sand 5-10%; silt 5-10%; moist; very dark grayish brown (10YR 3/2)
2		85%			CL	
						Silty Clay; silt 10-15%; plastic; moist; very dark grayish brown (10YR 3/2)
4					SP	Poorly Graded Fine Sand; moist; very dark grayish brown (10YR 3/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-031**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *4.0 ft.* North *473862.9 ft.* East *1483813.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand; fine to coarse; clay 5-10%; compact; moist; dark grayish brown (10YR 4/2)
2		50%				Less Clay 0-5%, compact
					CL	Silty Clay; silt 10-15%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-032**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *473963.5 ft.* East *1483779.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/23/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; sand 5-10%; trace gravel 0-5%; loose; dry; very dark grayish brown (10YR 3/2)
2		75%			SM	Sandy Silt; fine; silt 15-20%; dry; very dark grayish brown (10YR 3/2)
4					ML	Silt; compact; slightly moist; brown (7.5YR 4/2)
					SM	Sandy Silt; dark gray (7.5YR 4/0)
6		100%			SP	Poorly Graded Sand; fine; silt 0-5%; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-033**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *4.0 ft.* North *474024 ft.* East *1483846.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; clay 5-10%; moist; dark grayish brown (10YR 4/2)
2		70%				
					CL	Silty Clay; silt 10-15%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-034**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *8.0 ft.* North *474008.6 ft.* East *1483874.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Clayey Silt, clay 15-20%; fine sand 5-10%; non-plastic; moist; dark grayish brown (10YR 4/2)
2		100%				
					SC	Clayey fine sand; clay 5-10%
					CL	Clay; silt 5-10%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6		100%				Grades to dark gray (7.5YR 4/0)
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-035**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.1 ft.* Total Hole Depth *8.0 ft.* North *474198.4 ft.* East *1483840.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Clay; silt 5-10%; plastic; moist; dark grayish brown (10YR 4/2)
2		100%				
4						
6		100%			SM	Silty Sand; fine; silt 5-10%; wet; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-036**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.0 ft.* Total Hole Depth *8.0 ft.* North *474202.3 ft.* East *1483863.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Silty Sandy Clay; silt 5-10%; fine sand 5-10%; non-plastic; slightly moist; very dark grayish brown (10YR 3/2)
2		100%				
4						
					SP	Poorly Graded Sand; fine; wet to saturated; dark grayish brown (10YR 4/2)
6		100%				2" plastic clay lenses
						same as above, saturated
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-037**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *474187.9 ft.* East *1483793.6 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; moist; very dark grayish brown (10YR 3/2)
2		100%				
					CL	Silty Clay; silt 10-15%; plastic; moist; very dark grayish brown (10YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-038**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *474229.8 ft.* East *1483826.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Silty Sandy Clay; silt 20-25%; fine sand 5-10%; compact; slightly moist to moist; non-plastic; dark grayish brown (10YR 4/2)
2		100%				
						Same as above
4					SP	Poorly Graded Sand; fine; dry; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-039**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *10.0 ft.* Total Hole Depth *4.0 ft.* North *474318 ft.* East *1483964 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Silty Clay; silt 10-15%; dense; non-plastic; slightly moist; dark grayish brown (10YR 4/2)
2		80%				
					SM	Silty Sand; fine; silt 5-10%; slightly moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-040**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *474180.1 ft.* East *1483928.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; very dark grayish brown (10YR 3/2)
2		75%				
						Grades to grayish brown (10YR 4/2)
4						
					CL	Clay; trace silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
6		80%			SP	Poorly Graded Sand; fine; silt 0-5%; wet to saturated; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-041**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *474127.1 ft.* East *1484008.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; moist; very dark grayish brown (10YR 3/2)
2		100%				
4					CL	Clay; silt 0-5%; plastic; moist
6		100%				
					SP	Silty Sand; fine; silt 5-10%; saturated; dark brown (7.5YR 3/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-042**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.4 ft.* Total Hole Depth *4.0 ft.* North *474107 ft.* East *1484005.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					GM	Sandy Gravel; sand fine to coarse 10-15%; silt 5-10%; moist; dark grayish brown (10YR 4/2)
2		80%				
					CL	Clay; silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
					SP	Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-043**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.7 ft.* Total Hole Depth *4.0 ft.* North *474315.9 ft.* East *1484088.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 20-25%; slightly moist; very dark grayish brown (10YR 3/2)
2		85%			SP	Poorly Graded Sand; fine; loose; slightly moist; dark grayish brown (10YR 4/2)
					ML	Silt; loose; dry; white (10YR 8/1)
					SP	Poorly Graded Sand; fine; dry; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-044**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *8.0 ft.* North *474226.7 ft.* East *1484165.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; gravel 5-10%; dry; very dark grayish brown (10YR 3/2)
2		95%				
					SP	Poorly Graded Sand; fine
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						Poorly Graded Sand; fine; wet; dark grayish brown (10YR 4/2)
6		100%			SP	TPH stained soil with odor
						Same as above; saturated
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-045**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *474118.5 ft.* East *1484068.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		50%			SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; gravel 5-10%; dry to slightly moist; very dark grayish brown (10YR 3/2)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		80%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2) Black stained soil
8					SP	Poorly Graded Sand; fine; saturated; dark grayish brown (10YR 4/2)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-046**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.5 ft.* Total Hole Depth *4.0 ft.* North *473997 ft.* East *1484115.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; gravel 5-10%; dry; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Silty Clay; silt 20-25%; wet; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-047**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.4 ft.* Total Hole Depth *4.0 ft.* North *473958.6 ft.* East *1484094 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; silt 0-5%; clay 0-5%; moist; dark grayish brown (10YR 4/2)
2		70%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-048**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *473921.9 ft.* East *1484083 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 15-20%; gravel 5-10%; moist; very dark grayish brown (10YR 3/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; moist; plastic; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-049**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *8.0 ft.* North *473945.7 ft.* East *1484010.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 10-15%; gravel 0-5%; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					SC	Clayey Sand; fine; clay 20-25%; wet; dark gray (7.5YR 4/0)
4					SM	Silty Sand; fine to coarse; mostly fine silt 5-10%; gravel 0-5%; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		60%			CL	Clay; plastic; moist; dark gray(7.5YR 3/2)
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-050**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.8 ft.* Total Hole Depth *4.0 ft.* North *473861.4 ft.* East *1484049.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 15-20%; gravel 0-5%; slightly moist; very dark grayish brown (10YR 3/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; plastic; moist; dark grayish brown (10YR 4/2) Grades to clay, silt 0-5%; plastic
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-051**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *473805.1 ft.* East *1484032.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; dry to slightly moist; very dark grayish brown (10YR 3/2)
2		100%				
					ML	Sandy Silt; fine sand 25-30%; moist; loose; very dark grayish brown (10YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-052**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.1 ft.* Total Hole Depth *4.0 ft.* North *473794.2 ft.* East *1484013.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML SM	Sandy Silt-Silty Sand (50%/50%); fine sand; moist; loose to compact; very dark grayish brown (10YR 3/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; trace clay in lenses 0-5%; very dark grayish brown (10YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-053**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *8.0 ft.* North *473859.5 ft.* East *1483936.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; clay 0-5%; gravel 5-10%; moist; dark grayish brown (10YR 4/2)
2		75%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
					GP	Gravel Lense (fill); sand; fine; moist; dark grayish brown (10YR 4/2)
4					SC	Clayey Sand; fine; clay 10-15%; wet to saturated; dark grayish brown (10YR 4/2)
6		100%			CL	Clay; plastic; wet to saturated; dark gray (10YR 4/0)
					SP	Poorly Graded Sand; fine; wet to saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-054**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.8 ft.* Total Hole Depth *4.0 ft.* North *473795.1 ft.* East *1483983.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; silt 5-10%; moist; very dark grayish brown (10YR 3/2)
2						
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-055**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.6 ft.* Total Hole Depth *8.0 ft.* North *473693.8 ft.* East *1484010.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 15-20%; fine sand 5-10%; dry; dark grayish brown (10YR 4/2)
2		100%				Silt; compact; dry; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 20-25%; wet; very dark gray (7.5YR 3/0)
4					SP	Poorly Graded Sand; fine; moist; dark yellowish brown (10YR 4/6)
6		100%				Grades to dark gray (7.5YR 4/0)
8						Saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-056**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.5 ft.* Total Hole Depth *4.0 ft.* North *473699 ft.* East *1484012 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Gravelly Silt; gravel 10-15%; compact; dry; dark grayish brown (10YR 4/2)
2		100%			ML	
						Silt; moist compact; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-057**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *4.0 ft.* North *473819 ft.* East *1484093.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 20-25%; loose; dry; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; wet; very dark gray (7.5YR 3/0)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-058**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.8 ft.* Total Hole Depth *4.0 ft.* North *473836.8 ft.* East *1484127.9 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 15-20%; slightly moist; very dark grayish brown (10YR 3/2)
2		95%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 20-25%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-059**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473865.2 ft.* East *1484120.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2		80%				
					SM	Silty Sand; silt 15-20%; fine; dry to slightly moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 20-25%; dry; non-plastic
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-060**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.2 ft.* Total Hole Depth *8.0 ft.* North *473633.2 ft.* East *1484022.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 15-20%; loose; slightly moist; very dark grayish brown (10YR 3/2)
2		100%				
					CL	Clay; silt 0-5%; plastic; moist; dark grayish brown (10YR 4/2)
4						
					SP	Poorly Graded Sand; fine; moist to wet; very dark gray (7.5YR 3/0)
6		90%				
						Grades to dark grayish brown (10YR 4/2); shell fragments
8					CL	Sandy Clay; plastic; very dark gray (7.5YR 3/0)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-061**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.9 ft.* Total Hole Depth *4.0 ft.* North *473582 ft.* East *1484022.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 10-15%; loose; slightly moist; very dark grayish brown (10YR 3/2)
2		95%				
					CL	Silty Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-062**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.2 ft.* Total Hole Depth *4.0 ft.* North *473572.9 ft.* East *1484116.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					GM	Silty Gravel; silt 20-25%; loose; dry; dark yellowish brown (10YR 4/6)
2		100%				
					CL	Clay; plastic; moist; very dark gray (10YR 3/1)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-063**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.8 ft.* Total Hole Depth *4.0 ft.* North *473625.5 ft.* East *1484162.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Silt; gravel 5-10%; compact; slightly moist; very dark grayish brown (10YR 3/2)
2		100%				Silt; compact; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

Boring Log and Well Construction Diagram

IT CORPORATION
A Member of The IT Group

Soil Boring **OU5-064**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.6 ft.* Total Hole Depth *8.0 ft.* North *473548.7 ft.* East *1484174.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/25/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 15-20%; slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 10-15%; plastic; dry; dark grayish brown (10YR 4/2)
4						Poorly Graded Sand; fine; wet to saturated; very dark gray (7.5YR 3/0)
6		100%			SP	
8						Same as above
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-065**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.2 ft.* Total Hole Depth *4.0 ft.* North *473638.3 ft.* East *1484201 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 5-10%; fine sands 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-066**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *473657.1 ft.* East *1484182.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; slightly moist
2		100%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-067**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *473722.9 ft.* East *1484164 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2		90%				
					CL	Clay; plastic; moist; dark gray (7.5YR 4/0)
4					SP	Poorly Graded Sand; fine; dark gray (7.5YR 4/0)
					CL	Clay; plastic; saturated to wet; dark gray (7.5YR 4/0)
6		75%				
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-068**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *473640.4 ft.* East *1484250.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand; fine; clay 10-15%; silt 0-5%; slightly moist to moist; very dark grayish brown (10YR 3/2)
2		80%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					ML	Silt; loose; slightly moist; dark grayish brown (10YR 4/2)
					CL	Clay; silt 5-10%; plastic; slightly moist to dry; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-069**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473608.3 ft.* East *1484334.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; slightly moist; dark grayish brown (10YR 4/2)
2		90%				
					CL	Silty Clay; silt 10-15%; plastic; slightly moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-070**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *473558.9 ft.* East *1484357.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Sandy Clay; fine sand 10-15%; silt 5-10%; moist; very dark grayish brown (10YR 3/2)
2		100%			GM	Sandy Clayey Gravel; sand fine to coarse 15-20%; silt 5-10%; clay 10-15%; slightly moist; dark grayish brown (10YR 4/2) (fill material)
4					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-071**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *4.0 ft.* North *473553.9 ft.* East *1484396.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 15-20%; fine sand 10-15%; dry to slightly moist; dark grayish brown (10YR 4/2) (fill material)
2		90%				
					CL	Silty Clay; silt 10-15%; plastic; slightly moist; dark brown (7.5YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-072**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *473568.2 ft.* East *1484379.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 10-15%; sand 15-20%; fine to coarse; slightly moist; very dark grayish brown (10YR 3/2)
2		90%				
					CL	Clay; plastic; moist; dark brown (7.5YR 3/2) mixed with dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-073**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *473645.4 ft.* East *1484361.5 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 5-10%; sand; fine to coarse 20-25%; dry; dark grayish brown (10YR 4/2)
2		95%				
4						Same as above
					CL	Clay; plastic; wet; dark gray (7.5YR 4/0)
6		100%				
					SP	Poorly Graded Sand; fine; saturated; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-074**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *473537.5 ft.* East *1484457.4 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Sandy Silt; gravel 5-10%; fine to coarse sand 20-25%; dry; very dark grayish brown (10YR 3/2)
2		95%				
					CL	Clay; plastic; moist; very dark grayish brown (10YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-075**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *473538.5 ft.* East *1484499.8 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Gravelly Clay; gravel 5-10%; silt 0-5%; moist; non-plastic; very dark grayish brown (10YR 3/2)
						Clay; plastic; slightly moist; very dark grayish brown (10YR 3/2)
2		95%			CL	Silty Sandy Clay; silt 10-15%; very fine sand 10-15%; dry to slightly moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-076**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473588.1 ft.* East *1484590.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Silty Clay; silt 10-15%; gravel 0-5%; sand 0-5%; dry; compact; very dark grayish brown (10YR 3/2)
					SP	Poorly Graded Sand; fine; dry; dark brown (10YR 4/3)
2		95%				Silty Clay; non-plastic; dry; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark brown (7.5YR 3/2)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-077**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *8.0 ft.* North *473727.8 ft.* East *1484431.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Silty Sandy Clay; silt 10-15%; sand 5-10%; moist; very dark grayish brown (10YR 3/2)
2		75%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		75%				Black Silt (ash)
						Same as above
						Grades to dark brown (7.5YR 3/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-078**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *473738.9 ft.* East *1484455.5 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; dry; dark grayish brown (10YR 4/2)
2		95%			SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
						Same as above
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-079**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *473754.6 ft.* East *1484519.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; moist; very dark grayish brown (10YR 3/2)
2		85%			SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 15-20%; plastic; slightly moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-080**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *473754.9 ft.* East *1484544.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Clayey Sand; fine; silt 15-20%; clay 10-15%; moist; very dark grayish brown (10YR 3/2)
2		85%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-081**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.2 ft.* Total Hole Depth *8.0 ft.* North *473714.3 ft.* East *1484663.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; moist; very dark grayish brown (10YR 3/2)
2		95%			ML	Clayey Silt; clay 5-10%; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Clay; plastic; moist; dark gray (7.5YR 3/2)
6		75%			SP	Poorly Graded Sand; fine; wet; dark grayish brown (10YR 4/2)
8						Grades to dark gray (7.5YR 3/2) saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-082**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.1 ft.* Total Hole Depth *4.0 ft.* North *473807.9 ft.* East *1484723.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2		90%				
					CL	Silty Clay; plastic; moist; dark brown (7.5YR 3/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark brown (7.5YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-083**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *473758.3 ft.* East *1484617.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2		80%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-084**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *4.0 ft.* North *473803.5 ft.* East *1484521.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; clay 5-10%; slightly moist; very dark grayish brown (10YR 3/2)
2		90%			SP	Poorly Graded Sand; fine
					CL	Silty Clay; non-plastic; moist; dark grayish brown (10YR 4/2)
4						Clay; plastic; moist; dark brown (7.5YR 3/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-085**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.7 ft.* Total Hole Depth *4.0 ft.* North *473821.3 ft.* East *1484512.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 5-10%; gravel 0-5%; moist; very dark grayish brown (10YR 3/2)
2		80%				
					SP	Poorly Graded Sand; fine; wet; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-086**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *4.0 ft.* North *473778.8 ft.* East *1484459.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 5-10%; slighlty moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; moist; dark grayish brown (10YR 4/2)
					ML	Clayey Silt; moist; clay 5-10%; dark brown (7.5YR 3/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-087**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.9 ft.* Total Hole Depth *8.0 ft.* North *473840.5 ft.* East *1484394.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		90%			SM	Silty Sand; fine; silt 20-25%; clay 10-15%; gravel 0-5%; slightly moist; very dark grayish brown (10YR 3/2)
					ML	Silt with clay 5-10%; moist; dark grayish brown (10YR 4/2)
4						Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		100%			SP	
8						Same as above, saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-088**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473777.9 ft.* East *1484296.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/24/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 5-10%; moist; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					ML	Sandy Silt; very fine sand 15-20%; moist clay 5-10%; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-089**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *8.0 ft.* North *473877.8 ft.* East *1484238.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; moist; dark grayish brown (10YR 4/2)
2		85%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						Clay; same as above
6		80%			SP	Poorly Graded Sand; fine; wet to saturated; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-090**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *473878.4 ft.* East *1484223.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/29/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; clay 5-10%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SM	
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-091**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *6.9 ft.* Total Hole Depth *4.0 ft.* North *473951.7 ft.* East *1484248.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Sandy Silt; fine sand 10-15%; loose; dry to slightly moist; dark grayish brown (10YR 4/2)
2		100%			ML	
						Same as above
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-092**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *6.3 ft.* Total Hole Depth *4.0 ft.* North *473965.9 ft.* East *1484208.9 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; dry; very dark grayish brown (10YR 3/2)
					ML	Silt; compact; dry; dark grayish brown (10YR 4/2)
2		100%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-093**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.1 ft.* Total Hole Depth *8.0 ft.* North *473950.8 ft.* East *1484139.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 10-15%; dry; dark grayish brown (10YR 4/2)
2		100%				
						Same as above; Silt 5-10%
4					SM	
6		100%				Same as above; small clay (plastic) zone 2"
8						Same as above; saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-094**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.8 ft.* Total Hole Depth *4.0 ft.* North *474099.3 ft.* East *1484282.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2					GM	Silty Gravel; silt 5-10%; loose; slightly moist; dark brown (10YR 4/3)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 15-20%; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-095**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *10.1 ft.* Total Hole Depth *8.0 ft.* North *474218.2 ft.* East *1484289.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 15-20%; loose; moist; very dark grayish brown (10YR 3/2)
2		90%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
					SM	Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
6		95%			CL	Clay; wet to saturated; plastic; dark brown (7.5YR 3/2); TPH odor with black staining
					SP	Poorly Graded Sand; fine; saturated; dark brown (7.5YR 3/2); upper foot TPH odor with black staining
8						
10						

Boring Log and Well Construction Diagram

IT CORPORATION
A Member of The IT Group

Soil Boring **OU5-096**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *474267.1 ft.* East *1484177 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; silt 20-25%; clay 5-10%; gravel 0-5%; moist; very dark grayish brown (10YR 3/2)
2		100%				Gravel increases to 10-15%
4					GC	Clayey Silty Gravel; clay 10-15%; silt 10-15%; loose
					SM	Silty Sand; fine; silt 10-15%; clay 5-10%; dark grayish brown (10YR 4/2)
6		100%			SP	Poorly Graded Sand; fine; dark brown (7.5YR 3/2)
						Same as above; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-097**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.0 ft.* Total Hole Depth *4.0 ft.* North *474308.5 ft.* East *1484304.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; clay 5-10%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
2		70%			SM	
						Same as above; slightly moist
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-098**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *8.0 ft.* North *474304.8 ft.* East *1484391.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 0-5%; clay 5-10%; moist; very dark grayish brown (10YR 3/2)
2		75%				
						Silty Sand; fine; silt 10-15%; gravel 5-10%; slightly moist; grayish brown (10YR 5/2)
4					SP	Poorly Graded Sand; very fine; silt 0-5%; moist; dark grayish brown (10YR 4/2)
6		90%			CL	Clay; wet; plastic; dark brown (7.5YR 3/2)
8						Same as above; black; strong TPH odor
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-099**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *474285.5 ft.* East *1484458.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 10-15%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
2		100%			SM	
						Same as above (silt 5-10%)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-100**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.5 ft.* Total Hole Depth *8.0 ft.* North *474217.5 ft.* East *1484569.6 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine sand; silt 15-20%; clay 5-10%; moist; very dark grayish brown (10YR 3/2)
2		75%			SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
4						
						Same as above
6		100%				
						Same as above; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-101**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *474173.6 ft.* East *1484399.7 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 0-5%; moist; very dark grayish brown (10YR 3/2)
2		85%				
					GM	Silty Gravel; silt 10-15%; clay 5-10%; moist; dark yellowish brown (10YR 4/5)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-102**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.7 ft.* Total Hole Depth *4.0 ft.* North *474159.1 ft.* East *1484539.6 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; clay 5-10%; gravel 0-5%; moist; very dark grayish brown (10YR 3/2)
2		100%			SM	
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-103**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *4.0 ft.* North *474157 ft.* East *1484562.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; dry; dark grayish brown (10YR 4/2)
					SM	Silty Sand; fine; silt 15-20%; moist
2		75%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-104**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *474218.1 ft.* East *1484617 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		90%				
						Same as above
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-105**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *474219.8 ft.* East *1484624.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		75%			SP	
4						Same as above
						Clay; wet; plastic; dark brown (7.5YR 4/2)
6		100%			CL	
						Strong TPH odor (black)
					SP	Poorly Graded Sand; fine; saturated; dark brown (7.5YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-106**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.0 ft.* Total Hole Depth *4.0 ft.* North *474208.8 ft.* East *1484634.7 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SP	Same as above; moist
						Same as above
4						
6						
8						
10						

IT_COMMERCIAL Rev: 2/23/00 ALAMEDA_CTO31.GPJ IT_CORP.GDT 11/14/02

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-107**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *474146.1 ft.* East *1484593.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; clay 0-5%; slightly moist; very dark grayish brown (10YR 3/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-108**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.1 ft.* Total Hole Depth *8.0 ft.* North *474052.8 ft.* East *1484631.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2		90%				
						Same as above, moist
					CL	Silty Clay; silt 15-20%; plastic; moist; dark brown (7.5YR 4/2)
4						
						Same as above, wet
6		75%				
						Strong TPH odor
					SP	Poorly Graded Sand; fine; saturated; dark brown (7.5YR 3/2)
8					CL	Clay; compact; hard; slightly moist; dark brown (7.5YR 4/2)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-109**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.7 ft.* Total Hole Depth *4.0 ft.* North *474118.2 ft.* East *1484549.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; slightly moist; very dark grayish brown (10YR 3/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-110**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.7 ft.* Total Hole Depth *4.0 ft.* North *474045.3 ft.* East *1484585 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; gravel 0-5%; dry; very dark grayish brown (10YR 3/2)
2		80%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-111**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.3 ft.* Total Hole Depth *8.0 ft.* North *473993.9 ft.* East *1484498 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/30/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; clay 0-5%; moist; very dark grayish brown (10YR 3/2)
2		95%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
						Same as above; grades to dark brown (7.5YR 4/2)
6		60%			CL	Clay; plastic; compact; hard; moist; dark brown (7.5YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-112**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *4.0 ft.* North *474072.2 ft.* East *1484457.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; clay 0-5%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-113**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.0 ft.* Total Hole Depth *8.0 ft.* North *474029.2 ft.* East *1484315.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 0-5%; gravel
2		70%			SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
4						
6		80%			CL	Clay; wet to saturated; plastic; loose; dark gray (7.5YR 4/0) Black staining with strong TPH odor
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0) Black staining with strong TPH odor
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-114**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.5 ft.* Total Hole Depth *4.0 ft.* North *474032.8 ft.* East *1484389.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; clay 5-10%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SM	Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
4					CL	Gravelly Clay; gravel 10-15%; sand 5-10%; moist; dark yellowish brown (10YR 4/5)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-115**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *474021.9 ft.* East *1484421 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Gravelly Silt; gravel 20-25%; loose; dry; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-116**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *9.6 ft.* Total Hole Depth *4.0 ft.* North *473985.4 ft.* East *1484430.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Gravelly Clay; gravel 15-20%; moist; dark grayish brown (10YR 4/2)
2		90%			SM	Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
					CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-117**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *8.0 ft.* North *473969.2 ft.* East *1484335 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; coal like material; dry; no odor; dark grayish brown (10YR 4/2)
					CL	Silty Clay; loose; dry; dark grayish brown (10YR 4/2)
						Clay; plastic; moist; hard; compact; dark grayish brown (10YR 4/2)
4					SP	Poorly Graded Sand; fine; moist
6		90%				Black staining with hydrocarbon odor
8						Same as above, saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-118**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473907.6 ft.* East *1484393 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Sandy Clay; fine sand 5-10%; plastic; moist; very dark grayish brown (10YR 3/2)
2		75%			SM	Silty Sand; very fine; silt 10-15%; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 10-15%; plastic; moist
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-119**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.9 ft.* Total Hole Depth *8.0 ft.* North *473873.5 ft.* East *1484416.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; moist; very dark grayish brown (10YR 3/2)
2		60%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
						Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
						Some coarse sand
6		50%				
						Poorly Graded Fine Sand
8						Same as above; dark gray (7.5YR 4/0)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-120**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.3 ft.* Total Hole Depth *4.0 ft.* North *473927 ft.* East *1484470.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 0-5%; moist; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-121**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *473887 ft.* East *1484556.5 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 10-15%; gravel 5-10%; dry; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		75%				
					GC	Clayey Gravel; clay 10-15%; sand 5-10%; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-122**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *4.0 ft.* North *473980.9 ft.* East *1484677.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; very dark grayish brown (10YR 3/2)
					GW	Sandy Gravel; sand 20-25%; fine to coarse; loose; slightly moist; dark yellowish brown (10YR 4/5)
2		80%			SP	Poorly Graded Sand; fine; with 1" clay zones; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-123**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *473988.1 ft.* East *1484684.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 5-10%; moist; dark grayish brown (10YR 4/2)
2		95%			SP	Sand; fine; trace silt 0-5%
4					SC	Same as above; clay 5-10%
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-124**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.7 ft.* Total Hole Depth *4.0 ft.* North *473998.2 ft.* East *1484691 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SW	Gravelly Sand; fine to coarse; gravel 5-10%; dry; dark yellowish brown (10YR 4/5)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		50%				
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-125**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *8.0 ft.* North *473993.5 ft.* East *1484660.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; clay 0-5%; moist; very dark grayish brown (10YR 3/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		50%				
4						Same as above; saturated
6		100%			CL	Clay; saturated; plastic; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-126**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.9 ft.* Total Hole Depth *4.0 ft.* North *474006 ft.* East *1484642.5 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; moist; dark grayish brown (10YR 4/2)
					SW	Gravelly Sand; fine to coarse; gravel 5-10%; dry; dark yellowish brown (10YR 4/5)
2		70%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-127**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.8 ft.* Total Hole Depth *4.0 ft.* North *474141.6 ft.* East *1484803.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; dry; dark grayish brown (10YR 4/2)
2		85%			SP	Same as above; moist
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-128**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *474165.7 ft.* East *1484789.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Clay; plastic; moist; very dark grayish brown (10YR 3/2)
					SP	Poorly Graded Sand; fine; moist
2		100%				
4						Same as above
6		100%				Same as above; saturated; dark brown (7.5YR 3/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-129**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.2 ft.* Total Hole Depth *4.0 ft.* North *474288.9 ft.* East *1484943 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SW	Gravelly Sand; fine to coarse sand; gravel 20-25%; silt 5-10%; moist; dark yellowish brown (10YR 4/5)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-130**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *8.0 ft.* North *474114.7 ft.* East *1484875.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Clayey Silt; sand 30-35%; clay 10-15%; moist; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6		100%				Same as above; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-131**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *474288.7 ft.* East *1485122.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) *Geologic Descriptions are Based on the USCS.*
0						Top Soil
						Gravelly Silty Sand; fine to coarse; gravel 15-20%; silt 10-15%; slightly moist; dark yellowish brown (10YR 4/5)
2		50%			SM	
						Silty Sand; fine; silt 15-20%; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-132**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.0 ft.* Total Hole Depth *8.0 ft.* North *474231.8 ft.* East *1485119.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Gravelly Clay; gravel 20-25%; moist; very dark grayish brown (10YR 3/2); grades to dark yellowish brown (10YR 4/5)
2		60%				
						Clay; plastic; moist; dark gray (7.5YR 4/0)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		100%				
8						Same as above; saturated
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-133**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.2 ft.* Total Hole Depth *4.0 ft.* North *474212.9 ft.* East *1485064 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *5/31/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SC	Clayey Sand; fine; clay 20-25%; moist; dark grayish brown (10YR 4/2)
2		100%			CL	Sandy Clay; plastic; moist; fine sand 15-20%; dark gray (7.5YR 4/0)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-134**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *4.0 ft.* North *474131.8 ft.* East *1484978.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					ML	Sandy Silt; fine sand 10-15%; dry; dark grayish brown (10YR 4/2)
2					CL	Gravelly Clay; dry; gravel 15-20%; dark yellowish brown (10YR 4/5)
						Clay; plastic; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-135**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.2 ft.* Total Hole Depth *8.0 ft.* North *474155.3 ft.* East *1485045.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/01* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; dark grayish brown (10YR 4/2)
2		75%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					SM	Silty Sand; fine; silt 15-20%; gravel 5-10%; dark grayish brown (10YR 4/2)
						Silty Sand; fine; moist; dark grayish brown (10YR 4/2) with dark gray (7.5YR 4/0); striations
6		100%				
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-136**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *8.0 ft.* North *474006.2 ft.* East *1485050.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Gravelly Silty Sand; fine; gravel 15-20%; silt 10-15%; dry; dark yellowish brown (10YR 4/5)
2		100%				
					CL	Silty Clay; silt 15-20%; moist; plastic; dark gray (7.5YR 4/0)
4					SC	Sand; fine; clay 10-15%; moist; dark gray (7.5YR 4/0)
						Same as above; dark grayish brown (10YR 4/2)
6		100%				
						Same as above; saturated
					GC	Clayey Sandy Gravel; clay 15-20%; sand 10-15%; saturated
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-137**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.9 ft.* Total Hole Depth *4.0 ft.* North *474050.6 ft.* East *1484822.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Clayey Sand; fine; clay 15-20%; moist; dark grayish brown (10YR 4/2)
2		70%			SC	
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-138**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *474001.8 ft.* East *1484803.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; moist; very dark grayish brown (10YR 3/2)
2		80%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
6		60%				
8						Same as above; saturated; dark gray (7.5YR 4/0)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-139**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *4.0 ft.* North *473934.8 ft.* East *1484856.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-140**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.5 ft.* Total Hole Depth *8.0 ft.* North *473912.7 ft.* East *1484898.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 15-20%; plastic; moist; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Saturated
6		100%				Same as above; dark gray (7.5YR 4/0)
					SC	Clayey Sand ; fine; clay 20-25%; wet; dark gray (7.5YR 4/0)
						Same as above; fine sand
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-141**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *8.0 ft.* Total Hole Depth *8.0 ft.* North *473795.2 ft.* East *1484784.6 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/01* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 30-35%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
2		100%				
					CL	Silty Clay; silt 15-20%; plastic; moist; dark grayish brown (10YR 4/2)
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		100%			CL	Silty Clay; saturated; plastic; loose; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-142**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *7.8 ft.* Total Hole Depth *4.0 ft.* North *473890.1 ft.* East *1484989.9 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 25-30%; gravel 5-10%; dry; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; dry; dark yellowish brown (10YR 4/5)
					CL	Clay; plastic; compacts; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-143**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.0 ft.* Total Hole Depth *4.0 ft.* North *473893 ft.* East *1485046.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; gravel 5-10%; dry; dark grayish brown (10YR 4/2)
2		100%			SC	Clayey Sand; fine; clay 25-30%; compact; moist; dark gray (7.5YR 4/0)
4						Same as above; clay 15-20%
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-144**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.9 ft.* Total Hole Depth *8.0 ft.* North *473855.7 ft.* East *1485027.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; gravel 0-5%; moist; dark grayish brown (10YR 4/2)
2		100%				
						Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
4					SM	
6		100%				Grades to dark gray (7.5YR 4/0); saturated
8						Same as above
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-145**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.1 ft.* Total Hole Depth *4.0 ft.* North *473712.1 ft.* East *1485087.8 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					GP	Sandy Gravel; sand; fine; dry; dark grayish brown (10YR 4/2)
2		95%				
					SM	Silty Sand; fine; silt 15-20%; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-146**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.8 ft.* Total Hole Depth *4.0 ft.* North *473626.1 ft.* East *1485103.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine sand; silt 25-30%; gravel 5-10%
2		100%				
					CL	Sandy Clay; fine sand 10-15%; moist
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-147**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.4 ft.* Total Hole Depth *8.0 ft.* North *473657.1 ft.* East *1485072.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Clayey Sand; fine to coarse; mostly fine; silt 15-20%; clay 10-15%; gravel 0-5%; moist
2		100%				
					SM	
4						Silty Sand; fine; silt 15-20%; moist; dark grayish brown (10YR 4/2)
						Silty Clayey Sand; fine; silt 10-15%; clay 10-15%; moist; dark grayish brown (10YR 4/2)
6		100%				
					SP	Poorly Graded Sand; fine; saturated; dark brown (7.5YR 3/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-148**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.3 ft.* Total Hole Depth *8.0 ft.* North *473705.4 ft.* East *1485015.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					CL	Sandy Clay; fine sand 20-25%; plastic; moist; dark grayish brown (10YR 4/2)
2		100%				
						Grades to fine sand 5-10%
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					SC	Clayey Sand; fine; clay 15-20%; moist
6		100%				
					CL	Clay; loose; saturated; plastic; dark brown (7.5YR 3/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-149**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *4.0 ft.* North *473736.9 ft.* East *1484954.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine to coarse; silt 5-10%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
						Silty Sand; fine; silt 20-25%; clay 5-10%; dark grayish brown (10YR 4/2)
2		90%			SM	
						Poorly Graded Sand; fine; moist
					SP	
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-150**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.5 ft.* Total Hole Depth *8.0 ft.* North *473733.8 ft.* East *1484954 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 20-25%; clay 5-10%; slightly moist; dark grayish brown (10YR 4/2)
2		95%			SM	
						Silty Sand; fine; silt 10-15%; clay 5-10%; moist
4						Poorly Graded Sand; fine; silt 0-5%; dark brown (7.5YR 4/2)
6		55%			SP	
8						Same as above
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-151**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *7.5 ft.* Total Hole Depth *8.0 ft.* North *473600.8 ft.* East *1484740.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; silt 0-5%; moist; dark grayish brown (10YR 4/2)
2		100%				
					CL	Clay; plastic; moist; compact; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6		100%				Same as above; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-152**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.4 ft.* Total Hole Depth *4.0 ft.* North *473566.4 ft.* East *1484796.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine silt 10-20%; clay 0-5%; gravel 0-5%; slightly moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Clay; moist; plastic; dark gray (7.5YR 4/0)
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-153**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.7 ft.* Total Hole Depth *4.0 ft.* North *473546.9 ft.* East *1484832.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; dry; dark grayish brown (10YR 4/2)
2		100%			SP	Same as above; slightly moist
4						Same as above; moist
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-154**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.5 ft.* Total Hole Depth *8.0 ft.* North *473525.1 ft.* East *1484931.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 5-10%; gravel 0-5%; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						Same as above
					SC	Clayey Sand; fine; clay 15-20%; silt 5-10%; dark gray (7.5YR 4/0)
6		100%			SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-155**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *10.1 ft.* Total Hole Depth *8.0 ft.* North *473588 ft.* East *1485102.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
2		95%			SM	Silty Sand; fine to coarse; mostly fine; silt 10-15%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
						Clay 5-10%
4					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
6		100%				
					SC	Clayey Sand; fine; clay 10-15%; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-156**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *10.0 ft.* Total Hole Depth *4.0 ft.* North *473510 ft.* East *1485084.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 15-20%; dry; dark grayish brown (10YR 4/2)
2		100%			SM	Same as above
						Silty Sand; very fine; silt 5-10%; dry; dark grayish brown (10YR 4/2)
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-157**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.8 ft.* Total Hole Depth *4.0 ft.* North *473437.8 ft.* East *1485029.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Silty Sand; fine; silt 5-10%; moist; dark grayish brown (10YR 4/2)
2		90%			SM	
4						Same as above
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-158**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.7 ft.* Total Hole Depth *8.0 ft.* North *473387.3 ft.* East *1484973.9 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/1/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		90%				
4						Same as above
					CL	Silty Clay; silt 5-10%; wet to saturated; plastic; loose; dark gray (7.5YR 4/0)
6		100%				
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5 YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-159**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *4.0 ft.* North *473385.1 ft.* East *1484699.6 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; gravel 5-10%; dry; dark grayish brown (10YR 4/2)
2		100%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
					CL	Silty Clay; silt 15-20%; moist; compact
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-160**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *8.6 ft.* Total Hole Depth *8.0 ft.* North *473379.1 ft.* East *1484700.1 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine to coarse; mostly fine; silt 15-20%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
2		100%			CL	Clay; plastic; moist; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Silty Clay; silt 10-15%; plastic; loose; wet; dark gray (7.5YR 4/0)
6		100%			SP	Poorly Graded Sand; fine; wet to saturated; dark grayish brown (10YR 4/2)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-161**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *4.0 ft.* North *473338.1 ft.* East *1484837.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; gravel 0-5%; dry; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
2		90%				
					CL	Clay; plastic; moist; dark gray (7.5YR 4/0)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-162**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.7 ft.* Total Hole Depth *8.0 ft.* North *473386.4 ft.* East *1484887.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						
						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; dark grayish brown (10YR 4/2)
					SP	Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2						
4					CL	Silty Clay; silt 15-20%; wet; plastic; loose; dark gray (7.5YR 4/0)
6					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-163**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *10.2 ft.* Total Hole Depth *8.0 ft.* North *473278.7 ft.* East *1484949.2 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; dark grayish brown (10YR 4/2)
2					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Silty Clay; silt 15-20%; wet to saturated; loose; plastic; dark gray (7.5YR 4/0)
6						
8					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-164**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *11.4 ft.* Total Hole Depth *4.0 ft.* North *473255.7 ft.* East *1485082.2 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4						
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-165**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.8 ft.* Total Hole Depth *4.0 ft.* North *473197.9 ft.* East *1484986.4 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
						Poorly Graded Sand; fine; slightly moist; dark grayish brown (10YR 4/2)
2		100%			SP	
4						Same as above; moist
6						
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-166**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.3 ft.* Total Hole Depth *8.0 ft.* North *473195.4 ft.* East *1485056.3 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; silt 20-25%; moist; fine; very dark grayish brown (10YR 3/2)
2		75%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Silty Clay; moist; plastic; dark grayish brown (10YR 4/2)
						Same as above
6		100%			SP	Poorly Graded Sand; fine; saturated; dark grayish brown (10YR 4/2)
						Same as above; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-167**

Project *Alameda CTO 31* Owner *U.S. Navy*
Location *Alameda Point* Proj. No. *819814*
Surface Elev. *9.6 ft.* Total Hole Depth *8.0 ft.* North *473246.5 ft.* East *1484810.5 ft.*
Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*
Screen: Dia *NA* Length *NA* Type/Size *NA*
Casing: Dia *NA* Length *NA* Type *NA*
Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*
Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*
Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*
Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 20-25%; dry; dark grayish brown (10YR 4/2)
2		90%			SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
4					CL	Clay; silt 10-15%; plastic; wet; dark gray (7.5YR 4/0)
6		100%				
					SP	Poorly Graded Sand; fine; saturated; dark gray (7.5YR 4/0)
8						
10						

IT CORPORATION
A Member of The IT Group

Boring Log and Well Construction Diagram

Soil Boring **OU5-168**

Project *Alameda CTO 31* Owner *U.S. Navy*

Location *Alameda Point* Proj. No. *819814*

Surface Elev. *10.3 ft.* Total Hole Depth *4.0 ft.* North *473202.3 ft.* East *1484751.1 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Bentonite/cement grout* Rig/Core *Power Probe 9600*

Drill Co. *Kehoe Testing and Engineering* Method *Direct Push*

Driller *Tyler Deeds* Log By *Dave Poley* Date *6/4/02* Permit # *NA*

Checked By *Dale Landon* License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Top Soil
					SM	Silty Sand; fine; silt 15-20%; gravel 0-5%; moist; dark grayish brown (10YR 4/2)
2		100%				
					SP	Poorly Graded Sand; fine; moist; dark grayish brown (10YR 4/2)
						Same as above; grades to dark gray (7.5YR 4/0)
4						
6						
8						
10						

APPENDIX F
FIELD FORMS

APPENDIX F – FIELD FORMS IS CONTAINED IN ELECTRONIC FORMAT

TO VIEW THE DATA, CONTACT:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

APPENDIX G
LABORATORY VALIDATION FORMS

APPENDIX G – LABORATORY VALIDATION FORMS IS CONTAINED IN ELECTRONIC FORMAT

TO VIEW THE DATA, CONTACT:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

Appendix G is attached on the combined CD found in Appendix F.

APPENDIX H
COREHOLE PHOTOGRAPHS

APPENDIX H – COREHOLE PHOTOGRAPHS IS CONTAINED IN ELECTRONIC FORMAT

TO VIEW THE DATA, CONTACT:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

APPENDIX I
SOIL BORING PHOTOGRAPHS

APPENDIX I – SOIL BORING PHOTOGRAPHS IS CONTAINED IN ELECTRONIC FORMAT

TO VIEW THE DATA, CONTACT:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

APPENDIX J
SAMPLE COLLECTION SUMMARY

Table J-1
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-001	181-0048	0 - 0.5	X	X		
	181-0049	0.5 - 2	X		X	
	181-0050	2 - 4	X		X	Matrix Spike/Martix Spike Duplicate (MS/MSI
	181-0051	4 - 8	X		X	
OU5-002	181-0052	0 - 0.5	X			
	181-0053	0.5 - 2	X			
	181-0054	2 - 4	X			
OU5-003	181-0055	0 - 0.5	X			
	181-0056	0.5 - 2	X			
	181-0057	2 - 4	X			
	181-0058	2 - 4	X			Field Duplicate
OU5-004	181-0059	0 - 0.5	X	X		
	181-0060	0.5 - 2	X	X		
	181-0061	2 - 4	X	X		
	181-0062	4 - 8	X	X		
OU5-005	181-0063	0 - 0.5	X			
	181-0064	0.5 - 2	X			
	181-0065	2 - 4	X			MS/MSD also performed on this sample
OU5-006	181-0066	0 - 0.5	X			
	181-0067	0.5 - 2	X			
	181-0068	2 - 4	X			
	181-0069	2 - 4	X			Field Duplicate
OU5-007	181-0119	0 - 0.5	X			
	181-0070	0.5 - 2	X			
	181-0071	2 - 4	X			
OU5-008	181-0072	0 - 0.5	X			
	181-0073	0.5 - 2	X			
	181-0074	2 - 4	X			
OU5-009	181-0075	0 - 0.5	X			
	181-0076	0.5 - 2	X			
	181-0077	2 - 4	X			
	181-0078	2 - 4	X			Field Duplicate
OU5-010	181-0079	0 - 0.5	X			
	181-0080	0.5 - 2	X			
	NS	2 - 4				Not sampled, no recovery
OU5-011	181-0081	0 - 0.5	X	X		
	181-0082	0.5 - 2	X	X		
	181-0083	2 - 4	X	X		
	181-0084	4 - 8	X	X		

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-012	181-0085	0 - 0.5	X			
	181-0086	0.5 - 2	X			
	181-0087	2 - 4	X			
	181-0088	2 - 4	X			Field Duplicate
OU5-013	181-0089	0 - 0.5	X			
	181-0090	0.5 - 2	X			
	181-0091	2 - 4	X			
OU5-014	181-0092	0 - 0.5	X	X		
	181-0093	0.5 - 2	X		X	
	181-0094	2 - 4	X		X	
	181-0095	4 - 8	X		X	
OU5-015	181-0100	0 - 0.5	X	X		
	181-0101	0.5 - 2	X	X		
	181-0102	2 - 4	X	X		MS/MSD
	181-0103	4 - 8	X	X		
	181-0104	4 - 8	X	X		Field Duplicate (PAH & Metals)
OU5-016	181-0105	0 - 0.5	X			
	181-0106	0.5 - 2	X			
	181-0107	2 - 4	X			
OU5-017	181-0108	0 - 0.5	X	X		
	181-0109	0.5 - 2	X		X	
	181-0110	2 - 4	X		X	
	181-0111	4 - 8	X		X	
OU5-018	181-0112	0 - 0.5	X			
	181-0113	0.5 - 2	X			
	181-0114	2 - 4	X			
	181-0115	2 - 4	X			Field Duplicate
OU5-019	181-0116	0 - 0.5	X			
	181-0117	0.5 - 2	X			
	181-0118	2 - 4	X			
OU5-020	181-0120	0 - 0.5	X			
	181-0121	0.5 - 2	X			
	181-0122	2 - 4	X			MS/MSD

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-021	181-0123	0 - 0.5	X	X		
	181-0124	0.5 - 2	X	X		
	181-0125	2 - 4	X	X		
	181-0126	4 - 8	X	X		
	181-0127	4 - 8	X	X		Field Duplicate (PAH & Metals)
OU5-022	181-0128	0 - 0.5	X			
	181-0129	0.5 - 2	X			
	181-0130	2 - 4	X			
OU5-023	181-0131	0 - 0.5	X			
	181-0132	0.5 - 2	X			
	181-0133	2 - 4	X			
OU5-024	181-0134	0 - 0.5	X			
	181-0135	0.5 - 2	X			
	181-0136	2 - 4	X			
	181-0137	2 - 4	X			Field Duplicate
OU5-025	181-0138	0 - 0.5	X			
	181-0139	0.5 - 2	X			
	181-0140	2 - 4	X			MS/MSD
OU5-026	181-0141	0 - 0.5	X			
	181-0142	0.5 - 2	X			
	181-0143	2 - 4	X			
OU5-027	181-0144	0 - 0.5	X	X		
	181-0145	0.5 - 2	X		X	
	181-0146	2 - 4	X		X	
	181-0147	4 - 8	X		X	
	181-0148	4 - 8	X			Field Duplicate (PAH Only)
OU5-028	181-0149	0 - 0.5	X			Site was redrilled, there are two sets of data
	181-0150	0.5 - 2	X			Site was redrilled, there are two sets of data
	181-0151	2 - 4	X			Site was redrilled, there are two sets of data
OU5-029	181-0152	0 - 0.5	X			
	181-0153	0.5 - 2	X			
	181-0154	2 - 4	X			
OU5-030	181-0155	0 - 0.5	X			
	181-0156	0.5 - 2	X			
	181-0157	0.5 - 2	X			Field Duplicate
	181-0158	2 - 4	X			MS/MSD
OU5-031	181-0159	0 - 0.5	X			
	181-0160	0.5 - 2	X			
	NS	2 - 4				Not sampled, no recovery

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-032	181-0096	0 - 0.5	X	X		
	181-0097	0.5 - 2	X	X		
	181-0098	2 - 4	X	X		
	181-0099	4 - 8	X	X		
OU5-033	181-0161	0 - 0.5	X			
	181-0162	0.5 - 2	X			
	181-0163	0.5 - 2	X			Field Duplicate
	181-0164	2 - 4	X			
OU5-034	181-0165	0 - 0.5	X	X		
	181-0166	0.5 - 2	X		X	
	181-0167	2 - 4	X		X	
	181-0168	4 - 8	X		X	
OU5-035	181-0169	0 - 0.5	X	X		
	181-0170	0.5 - 2	X		X	
	181-0171	2 - 4	X		X	
	181-0172	4 - 8	X		X	MS/MSD
OU5-036	181-0173	0 - 0.5	X	X		
	181-0174	0.5 - 2	X		X	
	181-0175	2 - 4	X		X	
	181-0176	4 - 8	X		X	
	181-0177	4 - 8	X			Field Duplicate (PAH Only)
OU5-037	181-0178	0 - 0.5	X			
	181-0179	0.5 - 2	X			
	181-0180	2 - 4	X			
OU5-038	181-0181	0 - 0.5	X			
	181-0182	0.5 - 2	X			
	181-0183	2 - 4	X			
OU5-039	181-0184	0 - 0.5	X			
	181-0185	0.5 - 2	X			
	181-0186	2 - 4	X			
	181-0187	2 - 4	X			Field Duplicate
OU5-040	181-0188	0 - 0.5	X	X		
	181-0189	0.5 - 2	X		X	Metals sample was archived in error
	181-0190	2 - 4	X		X	Metals sample was archived in error
	181-0191	4 - 8	X	X		MS/MSD
OU5-041	181-0192	0 - 0.5	X	X		
	181-0193	0.5 - 2	X		X	
	181-0194	2 - 4	X		X	
	181-0195	4 - 8	X		X	

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-042	181-0196	0 - 0.5	X			
	181-0197	0.5 - 2	X			
	181-0198	2 - 4	X			
	181-0199	2 - 4	X			Field Duplicate
OU5-043	181-0200	0 - 0.5	X			
	181-0201	0.5 - 2	X			
	181-0202	2 - 4	X			
OU5-044	181-0203	0 - 0.5	X	X		
	181-0204	0.5 - 2	X	X		
	181-0205	2 - 4	X	X		
	181-0206	4 - 8	X	X		
OU5-045	181-0207	0 - 0.5	X	X		
	181-0208	0.5 - 2	X		X	
	181-0209	2 - 4	X		X	
	181-0210	2 - 4	X			Field Duplicate (PAH Only)
	181-0211	4 - 8	X		X	MS/MSD
OU5-046	181-0212	0 - 0.5	X			
	181-0213	0.5 - 2	X			
	181-0214	2 - 4	X			
OU5-047	181-0215	0 - 0.5	X			
	181-0216	0.5 - 2	X			
	181-0217	2 - 4	X			
OU5-048	181-0218	0 - 0.5	X			
	181-0219	0.5 - 2	X			
	181-0220	2 - 4	X			
	181-0221	2 - 4	X			Field Duplicate
OU5-049	181-0222	0 - 0.5	X	X		
	181-0223	0.5 - 2	X	X		
	181-0224	2 - 4	X	X		
	181-0225	4 - 8	X	X		
OU5-050	181-0226	0 - 0.5	X			
	181-0227	0.5 - 2	X			
	181-0228	2 - 4	X			MS/MSD
OU5-051	181-0233	0 - 0.5	X			
	181-0234	0.5 - 2	X			
	181-0235	2 - 4	X			
	181-0236	2 - 4	X			Field Duplicate
OU5-052	181-0237	0 - 0.5	X			
	181-0238	0.5 - 2	X			
	181-0239	2 - 4	X			

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-053	181-0229	0 - 0.5	X	X		
	181-0230	0.5 - 2			X	Sample for PAH was incorrectly archived
	181-0231	2 - 4			X	Sample for PAH was incorrectly archived
	181-0232	4 - 8			X	Sample for PAH was incorrectly archived
OU5-054	181-0240	0 - 0.5	X			
	181-0241	0.5 - 2	X			
	181-0242	2 - 4	X			
	181-0243	2 - 4	X			Field Duplicate
OU5-055	181-0244	0 - 0.5	X	X		
	181-0245	0.5 - 2	X	X		
	181-0246	2 - 4	X	X		
	181-0247	4 - 8	X	X		MS/MSD
OU5-056	181-0248	0 - 0.5	X			
	181-0249	0.5 - 2	X			
	181-0250	2 - 4	X			
OU5-057	181-0251	0 - 0.5	X			
	181-0252	0.5 - 2	X			
	181-0253	0.5 - 2	X			Field Duplicate
	181-0254	2 - 4	X			
OU5-058	181-0255	0 - 0.5	X			
	181-0256	0.5 - 2	X			
	181-0257	2 - 4	X			
OU5-059	181-0258	0 - 0.5	X			
	181-0259	0.5 - 2	X			
	181-0260	2 - 4	X			
OU5-060	181-0261	0 - 0.5	X	X		
	181-0262	0.5 - 2	X		X	
	181-0263	2 - 4	X		X	
	181-0264	2 - 4	X			Field Duplicate (PAH Only)
	181-0265	4 - 8	X		X	MS/MSD
OU5-061	181-0266	0 - 0.5	X			
	181-0267	0.5 - 2	X			
	181-0268	2 - 4	X			
OU5-062	181-0269	0 - 0.5	X			
	181-0270	0.5 - 2	X			
	181-0271	2 - 4	X			
OU5-063	181-0272	0 - 0.5	X			
	181-0273	0.5 - 2	X			
	181-0274	2 - 4	X			
	181-0275	2 - 4				Field Duplicate - Sample was lost

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-064	181-0276	0 - 0.5	X	X		
	181-0277	0.5 - 2	X	X		
	181-0278	2 - 4	X	X		
	181-0279	4 - 8	X	X		
OU5-065	181-0280	0 - 0.5	X			
	181-0281	0.5 - 2	X			
	181-0282	2 - 4	X			MS/MSD
OU5-066	181-0283	0 - 0.5	X			
	181-0284	0.5 - 2	X			
	181-0285	0.5 - 2	X			Field Duplicate
	181-0286	2 - 4	X			
OU5-067	181-0287	0 - 0.5	X	X		
	181-0288	0.5 - 2	X	X		
	181-0289	2 - 4	X	X		
	181-0290	4 - 8	X	X		
OU5-068	181-0291	0 - 0.5	X			
	181-0292	0.5 - 2	X			
	181-0293	2 - 4	X			
OU5-069	181-0294	0 - 0.5	X			
	181-0295	0.5 - 2	X			
	181-0296	2 - 4	X			
	181-0297	2 - 4	X			Field Duplicate
OU5-070	181-0298	0 - 0.5	X			
	181-0299	0.5 - 2	X			
	181-0300	2 - 4	X			MS/MSD
OU5-071	181-0301	0 - 0.5	X			
	181-0302	0.5 - 2	X			
	181-0303	2 - 4	X			
OU5-072	181-0304	0 - 0.5	X			
	181-0305	0.5 - 2	X			
	181-0306	2 - 4	X			
	181-0307	2 - 4	X			Field Duplicate
OU5-073	181-0308	0 - 0.5	X	X		
	181-0309	0.5 - 2	X	X		
	181-0310	2 - 4	X	X		
	181-0311	4 - 8	X	X		
OU5-074	181-0312	0 - 0.5	X			
	181-0313	0.5 - 2	X			
	181-0314	2 - 4	X			

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-078	181-0326	0 - 0.5	X			
	181-0327	0.5 - 2	X			
	181-0328	0.5 - 2	X			Field Duplicate
	181-0329	2 - 4	X			
OU5-079	181-0330	0 - 0.5	X			
	181-0331	0.5 - 2	X			
	181-0332	2 - 4	X			
OU5-080	181-0333	0 - 0.5	X			
	181-0334	0.5 - 2	X			
	181-0335	2 - 4	X			MS/MSD
OU5-081	181-0336	0 - 0.5	X	X		
	181-0337	0.5 - 2	X	X		
	181-0338	2 - 4	X	X		
	181-0339	4 - 8	X	X		
	181-0340	4 - 8	X	X		Field Duplicate (PAH & Metals)
OU5-082	181-0341	0 - 0.5	X			
	181-0342	0.5 - 2	X			
	181-0343	2 - 4	X			
OU5-083	181-0344	0 - 0.5	X			
	181-0345	0.5 - 2	X			
	181-0346	2 - 4	X			
OU5-075	181-0315	0 - 0.5	X			
	181-0316	0.5 - 2	X			MS/MSD
	181-0317	2 - 4	X			
	181-0318	2 - 4	X			Field Duplicate
OU5-076	181-0319	0 - 0.5	X			
	181-0320	0.5 - 2	X			
	181-0321	2 - 4	X			
OU5-077	181-0322	0 - 0.5	X	X		
	181-0323	0.5 - 2	X		X	Metals sample was sent as archive in error
	181-0324	2 - 4	X		X	Metals sample was sent as archive in error
	181-0325	4 - 8	X		X	Metals sample was sent as archive in error
OU5-084	181-0347	0 - 0.5	X			
	181-0348	0.5 - 2	X			
	181-0349	0.5 - 2	X			Field Duplicate
	181-0350	2 - 4	X			
OU5-085	181-0351	0 - 0.5	X			
	181-0352	0.5 - 2	X			
	181-0353	2 - 4	X			MS/MSD

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-086	181-0354	0 - 0.5	X			
	181-0355	0.5 - 2	X			
	181-0356	2 - 4	X			
OU5-087	181-0357	0 - 0.5	X	X		
	181-0358	0.5 - 2	X			No Archive Collected
	181-0359	2 - 4	X			No Archive Collected
	181-0360	4 - 8	X			No Archive Collected
	181-0361	4 - 8	X			Field Duplicate (PAH Only)
OU5-088	181-0362	0 - 0.5	X			
	181-0363	0.5 - 2	X			
	181-0364	2 - 4	X			
OU5-089	181-0365	0 - 0.5	X	X		
	181-0366	0.5 - 2	X	X		
	181-0367	2 - 4	X	X		
	181-0368	4 - 8	X	X		
OU5-090	181-0369	0 - 0.5	X			
	181-0370	0.5 - 2	X			MS/MSD
	181-0371	2 - 4	X			
	181-0372	2 - 4	X			Field Duplicate
OU5-091	181-0373	0 - 0.5	X			
	181-0374	0.5 - 2	X			
	181-0375	2 - 4	X			
OU5-092	181-0376	0 - 0.5	X			
	181-0377	0.5 - 2	X			
	181-0378	2 - 4	X			
OU5-093	181-0379	0 - 0.5	X	X		
	181-0380	0.5 - 2	X	X		
	181-0381	2 - 4	X	X		
	181-0382	4 - 8	X	X		
OU5-094	181-0383	0 - 0.5	X			
	181-0384	0.5 - 2	X			
	181-0385	2 - 4	X			
OU5-095	181-0386	0 - 0.5	X	X		
	181-0387	0.5 - 2	X	X		
	181-0390	0.5 - 2	X			Field Duplicate, metals was not requested or
	181-0388	2 - 4	X	X		
	181-0389	4 - 8	X	X		MS/MSD

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-096	181-0391	0 - 0.5	X	X		
	181-0392	0.5 - 2	X		X	
	181-0393	2 - 4	X		X	
	181-0400	2 - 4	X			Field Duplicate (PAH Only)
	181-0394	4 - 8	X		X	
OU5-097	181-0395	0 - 0.5	X			
	181-0396	0.5 - 2	X			
	181-0397	2 - 4	X			
OU5-098	181-0398	0 - 0.5	X			Metals not analyzed, not requested on COC
	181-0399	0.5 - 2	X		X	
	181-0401	2 - 4	X		X	
	181-0402	4 - 8	X		X	
OU5-099	181-0403	0 - 0.5	X			
	181-0404	0.5 - 2	X			
	181-0405	0.5 - 2	X			Field Duplicate
	181-0406	2 - 4	X			
OU5-100	181-0407	0 - 0.5	X	X		
	181-0408	0.5 - 2	X	X		
	181-0409	2 - 4	X	X		
	181-0410	4 - 8	X	X		MS/MSD
OU5-101	181-0411	0 - 0.5	X			
	181-0412	0.5 - 2	X			
	181-0413	2 - 4	X			
OU5-102	181-0414	0 - 0.5	X			
	181-0415	0.5 - 2	X			
	181-0423	0.5 - 2	X			Field Duplicate
	181-0416	2 - 4	X			
OU5-103	181-0417	0 - 0.5	X			
	181-0418	0.5 - 2	X			
	181-0419	2 - 4	X			
OU5-104	181-0420	0 - 0.5	X			
	181-0421	0.5 - 2	X			
	181-0422	2 - 4	X			
OU5-105	181-0451	0 - 0.5	X	X		
	181-0452	0.5 - 2	X	X		
	181-0453	2 - 4	X	X		
	181-0454	4 - 8	X	X		MS/MSD
OU5-106	181-0455	0 - 0.5	X			
	181-0456	0.5 - 2	X			
	181-0457	0.5 - 2	X			Field Duplicate
	181-0458	2 - 4	X			

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-107	181-0459	0 - 0.5	X			
	181-0460	0.5 - 2	X			
	181-0461	2 - 4	X			
OU5-108	181-0462	0 - 0.5	X	X		
	181-0463	0.5 - 2	X		X	
	181-0464	2 - 4	X		X	
	181-0466	2 - 4	X			Field Duplicate (PAH Only)
	181-0465	4 - 8	X		X	
OU5-109	181-0467	0 - 0.5	X			
	181-0468	0.5 - 2	X			
	181-0469	2 - 4	X			
OU5-110	181-0470	0 - 0.5	X			
	181-0471	0.5 - 2	X			
	181-0472	2 - 4	X			MS/MSD
OU5-111	181-0473	0 - 0.5	X	X		
	181-0474	0.5 - 2	X		X	
	181-0477	0.5 - 2	X			Field Duplicate (PAH Only)
	181-0475	2 - 4	X		X	
	181-0476	4 - 8	X		X	
OU5-112	181-0488	0 - 0.5	X			
	181-0489	0.5 - 2	X			
	181-0490	2 - 4	X			
OU5-113	181-0491	0 - 0.5	X	X		
	181-0492	0.5 - 2	X	X		
	181-0493	2 - 4	X	X		
	181-0494	4 - 8	X	X		
OU5-114	181-0495	0 - 0.5	X			
	181-0496	0.5 - 2	X			
	181-0497	2 - 4	X			
	181-0498	2 - 4	X			Field Duplicate
OU5-115	181-0499	0 - 0.5	X			
	181-0500	0.5 - 2	X			
	181-0501	2 - 4	X			MS/MSD
OU5-116	181-0502	0 - 0.5	X			
	181-0503	0.5 - 2	X			
	181-0504	2 - 4	X			
OU5-117	181-0505	0 - 0.5	X	X		
	181-0506	0.5 - 2	X		X	
	181-0507	2 - 4	X		X	
	181-0508	2 - 4	X			Field Duplicate (PAH Only)
	181-0509	4 - 8	X		X	

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-118	181-0510	0 - 0.5	X			
	181-0511	0.5 - 2	X			
	181-0512	2 - 4	X			
OU5-119	181-0513	0 - 0.5	X	X		
	181-0514	0.5 - 2	X	X		
	181-0515	2 - 4	X	X		
	181-0516	4 - 8	X	X		
OU5-120	181-0517	0 - 0.5	X			
	181-0518	0.5 - 2	X			
	181-0519	0.5 - 2	X			Field Duplicate
	181-0520	2 - 4	X			MS/MSD
OU5-121	181-0521	0 - 0.5	X			
	181-0522	0.5 - 2	X			
	181-0523	2 - 4	X			
OU5-122	181-0524	0 - 0.5	X			
	181-0525	0.5 - 2	X			
	181-0526	2 - 4	X			
OU5-123	181-0527	0 - 0.5	X			
	181-0528	0.5 - 2	X			
	181-0529	0.5 - 2	X			Field Duplicate
	181-0530	2 - 4	X			
OU5-124	181-0531	0 - 0.5	X			
	181-0532	0.5 - 2	X			
	181-0533	2 - 4	X			
OU5-125	181-0534	0 - 0.5	X	X		
	181-0535	0.5 - 2	X	X		
	181-0536	2 - 4	X	X		
	181-0537	4 - 8	X	X		MS/MSD
OU5-126	181-0538	0 - 0.5	X			
	181-0539	0.5 - 2	X			
	181-0540	2 - 4	X			
	181-0541	2 - 4	X			Field Duplicate
OU5-127	181-0542	0 - 0.5	X			
	181-0543	0.5 - 2	X			
	181-0544	2 - 4	X			
OU5-128	181-0545	0 - 0.5	X	X		
	181-0546	0.5 - 2	X	X		
	181-0547	2 - 4	X	X		
	181-0548	4 - 8	X	X		

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-129	181-0549	0 - 0.5	X			
	181-0550	0.5 - 2	X			
	181-0551	2 - 4	X			
	181-0552	2 - 4	X			Field Duplicate
OU5-130	181-0553	0 - 0.5	X	X		
	181-0554	0.5 - 2	X	X		
	181-0555	2 - 4	X	X		
	181-0556	4 - 8	X	X		MS/MSD
OU5-131	181-0557	0 - 0.5	X			
	181-0558	0.5 - 2	X			
	181-0559	2 - 4	X			
OU5-132	181-0560	0 - 0.5	X	X		
	181-0561	0.5 - 2	X	X		
	181-0562	2 - 4	X	X		
	181-0563	4 - 8	X	X		
OU5-133	181-0564	0 - 0.5	X			
	181-0565	0.5 - 2	X			
	181-0566	2 - 4	X			
	181-0567	2 - 4	X			Field Duplicate
OU5-134	181-0568	0 - 0.5	X			
	181-0569	0.5 - 2	X			
	181-0570	2 - 4	X			
OU5-135	181-0571	0 - 0.5	X	X		
	181-0572	0.5 - 2	X		X	
	181-0573	2 - 4	X		X	
	181-0574	2 - 4	X			Field Duplicate (PAH Only)
	181-0575	4 - 8	X		X	MS/MSD
OU5-136	181-0576	0 - 0.5	X	X		
	181-0577	0.5 - 2	X		X	
	181-0578	2 - 4	X		X	
	181-0579	4 - 8	X		X	
OU5-137	181-0580	0 - 0.5	X			
	181-0581	0.5 - 2	X			
	181-0582	2 - 4	X			
OU5-138	181-0583	0 - 0.5	X	X		
	181-0584	0.5 - 2	X		X	
	181-0585	2 - 4	X		X	
	181-0586	4 - 8	X		X	
	181-0587	4 - 8	X			Field Duplicate (PAH Only)

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-139	181-0588	0 - 0.5	X			
	181-0589	0.5 - 2	X			
	181-0590	2 - 4	X			
OU5-140	181-0591	0 - 0.5	X	X		
	181-0592	0.5 - 2	X	X		
	181-0593	2 - 4	X	X		
	181-0594	4 - 8	X	X		
OU5-141	181-0595	0 - 0.5	X	X		
	181-0596	0.5 - 2	X		X	
	181-0597	2 - 4	X		X	
	181-0598	2 - 4	X			Field Duplicate (PAH Only)
	181-0599	4 - 8	X		X	
OU5-142	181-0600	0 - 0.5	X			
	181-0601	0.5 - 2	X			
	181-0602	2 - 4	X			
OU5-143	181-0603	0 - 0.5	X			
	181-0604	0.5 - 2	X			
	181-0605	2 - 4	X			
OU5-144	181-0606	0 - 0.5	X	X		
	181-0607	0.5 - 2	X		X	
	181-0608	0.5 - 2	X			Field Duplicate (PAH Only)
	181-0609	2 - 4	X		X	
	181-0610	4 - 8	X		X	
OU5-145	181-0611	0 - 0.5	X			
	181-0612	0.5 - 2	X			
	181-0613	2 - 4	X			
OU5-146	181-0614	0 - 0.5	X			
	181-0615	0.5 - 2	X			
	181-0616	2 - 4	X			
OU5-147	181-0617	0 - 0.5	X	X		
	181-0618	0.5 - 2	X		X	
	181-0619	2 - 4	X		X	
	181-0633	2 - 4	X			Field Duplicate (PAH Only)
	181-0620	4 - 8	X		X	
OU5-148	181-0621	0 - 0.5	X	X		
	181-0622	0.5 - 2	X	X		
	181-0623	2 - 4	X	X		
	181-0624	4 - 8	X	X		
OU5-149	181-0625	0 - 0.5	X			
	181-0626	0.5 - 2	X			
	181-0627	2 - 4	X			

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-150	181-0628	0 - 0.5	X	X		
	181-0629	0.5 - 2	X		X	
	181-0630	2 - 4	X		X	
	181-0631	4 - 8	X		X	
	181-0632	4 - 8	X			Field Duplicate (PAH Only)
OU5-151	181-0633	0 - 0.5	X	X		
	181-0634	0.5 - 2	X		X	
	181-0635	2 - 4	X		X	
	181-0636	4 - 8	X		X	
OU5-152	181-0637	0 - 0.5	X			
	181-0638	0.5 - 2	X			
	181-0639	2 - 4	X			
OU5-153	181-0640	0 - 0.5	X			
	181-0641	0.5 - 2	X			
	181-0643	0.5 - 2	X			Field Duplicate
	181-0642	2 - 4	X			
OU5-154	181-0644	0 - 0.5	X	X		
	181-0645	0.5 - 2	X	X		
	181-0646	2 - 4	X	X		
	181-0647	4 - 8	X	X		
OU5-155	181-0648	0 - 0.5	X	X		
	181-0649	0.5 - 2	X		X	
	181-0650	2 - 4	X		X	
	181-0651	4 - 8	X		X	
OU5-156	181-0652	0 - 0.5	X			
	181-0653	0.5 - 2	X			
	181-0654	2 - 4	X			
	181-0655	2 - 4	X			Field Duplicate
OU5-157	181-0656	0 - 0.5	X			
	181-0657	0.5 - 2	X			
	181-0658	2 - 4	X			
OU5-158	181-0659	0 - 0.5	X	X		
	181-0660	0.5 - 2	X		X	
	181-0661	2 - 4	X		X	
	181-0662	4 - 8	X		X	
OU5-159	181-0663	0 - 0.5	X			
	181-0664	0.5 - 2	X			
	181-0665	2 - 4	X			
	181-0666	2 - 4	X			Field Duplicate

Table J-1 (continued)
Operable Unit 5 Soil Boring Sampling Locations, Intervals, and Analyses Per

Boring Number	Sample Number	Sample Depth (feet bgs)	Analyses			Comments
			PAH	Metals	Archive	
OU5-160	181-0667	0 - 0.5	X			Metals not analyzed, not requested on COC
	181-0668	0.5 - 2	X	X		
	181-0669	2 - 4	X	X		
	181-0670	4 - 8	X	X		
OU5-161	181-0671	0 - 0.5	X			
	181-0672	0.5 - 2	X			
	181-0673	2 - 4	X			
OU5-162	181-0674	0 - 0.5	X	X		
	181-0675	0.5 - 2	X	X		
	181-0676	2 - 4	X	X		
	181-0677	4 - 8	X	X		
OU5-163	181-0678	0 - 0.5	X	X		
	181-0679	0.5 - 2	X		X	
	181-0680	2 - 4	X		X	
	181-0682	2 - 4	X			Field Duplicate (PAH Only)
	181-0681	4 - 8	X		X	
OU5-164	181-0683	0 - 0.5	X			
	181-0684	0.5 - 2	X			
	181-0685	2 - 4	X			
OU5-165	181-0686	0 - 0.5	X			
	181-0687	0.5 - 2	X			
	181-0688	0.5 - 2	X			Field Duplicate
	181-0689	2 - 4	X			
OU5-166	181-0690	0 - 0.5	X	X		
	181-0691	0.5 - 2	X	X		
	181-0692	2 - 4	X	X		
	181-0693	4 - 8	X	X		
OU5-167	181-0694	0 - 0.5	X	X		
	181-0695	0.5 - 2	X		X	
	181-0696	2 - 4	X		X	
	181-0697	4 - 8	X		X	
OU5-168	181-0698	0 - 0.5	X			
	181-0699	0.5 - 2	X			
	181-0700	2 - 4	X			
	181-0701	2 - 4	X			Field Duplicate
Equipment Rinse Samples	181-0702-R	NA	X	X		
	181-0706-R	NA	X	X		

PAH denotes polyaromatic hydrocarbon
COC denotes chemical of concern
NA denotes not applicable

Table J-2
Geotechnical Soil Sampling Locations, Intervals, and Analyses

Boring Location	Parcel	Sample Number	Sample Depth	Analyses: Permeability (ASTM D5084)	Moisture Content (ASTM D2216)	Density (ASTM D1557)	Grain Size (ASTM D2487)	TOC (EPA 9060)	Comments
CH-01	182	181- 0795	2	X	X	X	X		
		181- 0796	7	X	X	X	X		
		181- 0478	2					X	
		181- 0479	7					X	
CH-02	181	181- 0797	2	X	X	X	X		
		181- 0798	7	X	X	X	X		
		181- 0480	2					X	
		181- 0481	7	X	X	X	X	X	
CH-03	181	181- 0799	2	X	X	X	X		
		181- 0800	7	X	X	X	X		
		181- 0482	2					X	
		181- 0483	7					X	
CH-04	181	181- 0805	2	X	X	X	X		
		181- 0806	7	X	X	X	X		
		181- 0707	2					X	
		181- 0708	7					X	
CH-05	181	181- 0801	2	X	X	X	X		
		181- 0802	7	X	X	X	X		
		181- 0485	2					X	
		181- 0485	7					X	
CH-06	181	181- 0803	2	X	X	X	X		
		181- 0804	7	X	X	X	X		
		181- 0486	2					X	
		181- 0487	7					X	
CH-08	178	178- 0035	2	X	X	X	X		
		178- 0036	7	X	X	X	X		
		178- 0018	2					X	
		178- 0019	7					X	
CH-09	176	176- 0031	2	X	X	X	X		
		176- 0032	7	X	X	X	X		
		181- 0704	2					X	
		181- 0705	7					X	
CH-10	181	181- 0807	2	X	X	X	X		
		181- 0808	7	X	X	X	X		
		181- 0702	2					X	
		181- 0703	7					X	

ASTM denotes American Society for Testing and Materials
EPA denotes U.S. Environmental Protection Agency
TOC denotes total organic compound

Table J-3
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OS-HP-01	178	Not sampled	8-12					Silt/clay zone no sample collected
		No recovery	12-15					Insufficent water to sample
		No recovery	18-22					Insufficent water to sample
		Not sampled	>22					Silt/clay zone no sample collected
OS-HP-02	180	180- 0001	8-12	X	X	X		
		180- 0002	12-16	X	X	X		
		No recovery	16-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-03	178	No recovery	8-12					Insufficent water to sample
		178- 0033	12-16	X	X	X		
		178- 0034	16-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-04	176	Not sampled	8-12					Silt/clay zone no sample collected
		176- 0026	12-16	X	X	X	X	
		176- 0027	16-20	X	X	X	X	
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-05	178	Not sampled	8-12					Silt/clay zone no sample collected
		178- 0031	12-16	X	X	X		
		Not sampled	16-20					Silt/clay zone no sample collected
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-06	179	179- 0001	6-10	X	X	X	X	
		179- 0003	10-14	X	X	X	X	
		No recovery	14-18					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-07	179	No recovery	6-10					Insufficent water to sample
		179- 0005	10-14	X	X	X		
		179- 0006	14-18	X	X	X		
		No recovery	20-24					Insufficent water to sample
OS-HP-08	179	179- 0008	6-10	X	X	X		
		179- 0009	11-15	X	X	X		
		179- 0010	15-19	X	X	X		
		No recovery	19-23					Insufficent water to sample
OS-HP-09	179	179- 0011	8-12	X	X	X		
		179- 0013	12-16	X	X	X		
		179- 0014	16-20	X	X			Insufficent water to collect PAH sam
		Not sampled	>20					Silt/clay zone no sample collected

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OS-HP-10	181	181- 0735	6-10	X	X	X		
		181- 0736	9-13	X	X	X		
		181- 0737	14-18	X	X	X		
		No recovery	19-23					Insufficent water to sample
OS-HP-11	Annex	031W- 0144	8-12	X	X	X		
		031W- 0145	12-16	X	X	X		
		031W- 0146	16-20	X	X	X		
		031W- 0147	20-24	X	X	X		
OS-HP-12	176	176- 0011	5.5-9.5	X	X	X		
		176- 0013	10-14	X	X	X		
		176- 0015	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample
OS-HP-13	176	No recovery	6-9					Insufficent water to sample
		No recovery	12-14.5					Insufficent water to sample
		176- 0008	16-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-14	176	No recovery	8-12					Insufficent water to sample
		176- 0024	12-16	X	X	X	X	
		176- 0025	16-19	X	X			NA
		Not sampled	>19					Silt/clay zone no sample collected
OS-HP-15	175	Not sampled	8-12					Silt/clay zone no sample collected
		No recovery	12-15					Insufficent water to sample
		No recovery	17.5-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-16	172	Not sampled	8-12					Silt/clay zone no sample collected
		Not sampled	12-16					Silt/clay zone no sample collected
		No recovery	16-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-17	176	176- 0019	8-12	X	X			Insufficent water to sample PAH
		176- 0020	12-16	X	X			Insufficent water to sample PAH
		176- 0021	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample
OS-HP-18	174	Not sampled	8-12					Silt/clay zone no sample collected
		No recovery	12-14.5					Insufficent water to sample
		174- 0001	17.5-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OS-HP-19	174	No recovery	8-12					Insufficent water to sample
		No recovery	12-16					Insufficent water to sample
		No recovery	16-20					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample
OS-HP-20	178	Not sampled	8-12					Insufficent water to sample
		Not sampled	12-16					Insufficent water to sample
		178- 0029	16-20	X	X	X	X	
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-21	178	No recovery	8-12					Insufficent water to sample
		178- 0032	12-16	X	X	X		
		No recovery	16-20					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample
OS-HP-22	178	No recovery	8-12					Insufficent water to sample
		Not sampled	12-16					Silt/clay zone no sample collected
		178- 0030	16-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-23	174	No recovery	8-12					Insufficent water to sample
		No recovery	12-16					Insufficent water to sample
		No recovery	16-20					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample
OS-HP-24	174	Not sampled	8-12					Silt/clay zone no sample collected
		No recovery	12-16					Insufficent water to sample
		Not sampled	16-20					Clay
		No recovery	20-24					Insufficent water to sample
OS-HP-25	176	No recovery	6-10					Insufficent water to sample
		176- 0016	12-16	X	X	X	X	
		176- 0017	16-20	X	X	X	X	
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-26	Annex	No recovery	8-12					Insufficent water to sample
		031W- 0140	12-16	X	X	X		
		031W- 0142	16-20	X	X	X		
		031W- 0143	20-24	X	X	X		
OS-HP-27	Annex	No recovery	8-12					Insufficent water to sample
		031W- 0135	12-16	X	X	X		
		031W- 0137	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OS-HP-28	Annex	031W- 0136	8-12	X	X	X	X	
		031W- 0138	12-16	X	X	X	X	
		031W- 0139	16-20	X	X	X	X	
		031W- 0141	20-24	X	X	X	X	
OS-HP-29	176	No recovery	8-11					Insufficent water to sample
		176- 0009	12-16	X	X	X		
		176- 0010	17-21	X	X	X		
		Not sampled	>21					Silt/clay zone no sample collected
OS-HP-30	176	No recovery	8-12					Insufficent water to sample
		176- 0012	12-16	X	X	X		
		176- 0014	17-21	X	X	X		
		Not sampled	>21					Silt/clay zone no sample collected
OS-HP-31	176	Not sampled	8-12					Silt/clay zone no sample collected
		176- 0022	12-16	X	X	X		
		176- 0023	16-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-32	172	Not sampled	8-12					Silt/clay zone no sample collected
		No recovery	12-16					Insufficent water to sample
		No recovery	16-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-33	176	No recovery	6-9					Insufficent water to sample
		No recovery	12-14.5					Insufficent water to sample
		No recovery	17.5-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-34	176	No recovery	8-12					Insufficent water to sample
		No recovery	12-16					Insufficent water to sample
		No recovery	16-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-35	176	Not sampled	8-12					water
		No recovery	12-16					Insufficent water to sample
		176- 0018	16-20	X	X	X		
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-36	175	175- 0001	8-12	X	X	X		
		175- 0002	12-16	X	X	X		
		175- 0003	16-19	X	X			Insufficent water to sample to PAH
		No recovery	20-24					Insufficent water to sample

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OS-HP-37	181	181- 0741	6-10	X	X	X	X	
		181- 0743	10-14	X	X	X	X	
		181- 0745	14-18	X	X	X	X	
		Not sampled	>20					water
OS-HP-38	172	No recovery	6-10					Insufficent water to sample
		No recovery	11.5-14					Insufficent water to sample
		No recovery	17.5-20					Insufficent water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OS-HP-39	174	No recovery	8-12					Insufficent water to sample
		174- 0002	12-16	X	X			Insufficent water to sample to PAH
		No recovery	16-19					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample
OU5-HP-01	181	181- 0762	6-10	X	X	X	X	
		181- 0764	10-14	X	X	X	X	
		181- 0765	14-18	X	X	X	X	
		Not sampled	>20					Silt/clay zone no sample collected
OU5-HP-02	181	181- 0778	8-12	X	X	X		
		181- 0781	12-16	X	X	X		
		No recovery	16-20					Insufficient water to sample
		No recovery	20-24					Insufficient water to sample
OU5-HP-03	181	181- 0775	8-12	X	X	X		
		181- 0776	12-16	X	X	X		
		No recovery	16-20					Insufficient water to sample
		No recovery	20-24					Insufficient water to sample
OU5-HP-04	181	181- 0771	8-12	X	X	X		
		181- 0773	12-16	X	X	X		
		No recovery	16-20					Insufficient water to sample
		No recovery	20-24					Insufficient water to sample
OU5-HP-05	181	No recovery	8-12					Insufficient water to sample
		181- 0768	12-16	X	X	X		
		181- 0770	16-20	X	X	X		
		No recovery	20-24					Insufficient water to sample
OU5-HP-06	181	181- 0782	6-10	X	X	X	X	
		181- 0784	10-14	X	X	X	X	
		181- 0785	14-18	X	X	X	X	
		No recovery	20-24					Insufficient water to sample

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OU5-HP-07	181	181- 0793	6-10	X	X	X		
		181- 0794	10-14	X	X	X		
		No recovery	14-18					Insufficient water to sample
		Not sampled	>20					Silt/clay zone no sample collected
OU5-HP-08	181	181- 0763	8-12	X	X	X		
		181- 0766	12-16	X	X	X		
		181- 0767	16-20	X	X	X		
		No recovery	20-24					Insufficient water to sample
OU5-HP-09	181	181- 0783	8-12	X	X	X		
		181- 0786	12-16	X	X	X		
		181- 0787	16-20	X	X	X		
		No recovery	20-24					Insufficient water to sample
OU5-HP-10	181	181- 0769	8-10	X	X	X	X	
		181- 0772	10-14	X	X	X	X	
		181- 0774	14-18	X	X	X	X	
		No recovery	20-24					Insufficient water to sample
OU5-HP-11	181	181- 0738	8-12	X	X	X		
		181- 0739	12-16	X	X	X		
		181- 0740	16-20	X	X	X		
		No recovery	20-24					Insufficient water to sample
OU5-HP-12	181	181- 0742	8-12	X	X	X		
		181- 0744	12-16	X	X	X		
		181- 0746	16-20	X	X	X		
		No recovery	20-24					Insufficient water to sample
OU5-HP-13	181	181- 0729	8-12	X	X	X	X	
		181- 0730	12-15	X	X	X	X	
		181- 0731	15-17.5	X	X	X	X	
		No recovery	19-23					Insufficient water to sample
OU5-HP-14	181	181- 0777	6-10	X	X	X	X	
		181- 0779	10-14	X	X	X	X	
		181- 0780	14-18	X	X			PAH and NA
		Not sampled	>20					Silt/clay zone no sample collected
OU5-HP-15	181	181- 0760	7-11	X	X	X		
		181- 0761	12-16	X	X	X		
		No recovery	16-20					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample

Table J-3 (continued)
Direct Push (Hydropunch) Groundwater Sampling Locations, Intervals, an

Boring Location	Parcel	Sample Number	Sample Depth (ft bgs)	VOC	MTBE	PAH	NA	Comments
OU5-HP-16	181	181- 0790	8-12	X	X	X		
		181- 0791	12-16	X	X	X		
		181- 0792	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample
OU5-HP-17	181	181- 0754	6-10	X	X	X	X	
		181- 0757	10-14	X	X	X	X	
		181- 0759	14-18	X	X	X	X	
		Not sampled	>20					Silt/clay zone no sample collected
OU5-HP-18	181	181- 0753	8-12	X	X	X		
		181- 0755	12-16	X	X	X		
		181- 0756	16-20	X	X	X		
		181- 0758	20-24	X	X	X		
OU5-HP-19	181	181- 0732	8-12	X	X	X		
		181- 0733	12-16	X	X	X		
		181- 0734	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample
OU5-HP-20	181	181- 0748	6-10	X	X	X	X	
		181- 0751	10-14	X	X	X	X	
		181- 0752	15-19	X	X	X	X	
		No recovery	20-24					Insufficent water to sample
OU5-HP-21	181	181- 0747	8-12	X	X	X		
		181- 0749	12-16	X	X	X		
		181- 0750	16-20	X	X	X		
		No recovery	20-24					Insufficent water to sample
OU5-HP-22	181	181- 0788	8-12	X	X	X		
		181- 0789	12-16	X	X	X		
		No recovery	16-20					Insufficent water to sample
		No recovery	20-24					Insufficent water to sample

ft bgs denotes feet below ground surface
VOC denotes Volatile organic compounds
MTBE denotes Methyl tertiary butyl ether
PAH denotes polyaromatic hydrocarbons
NA denotes Natural attenuation parameters

Table J-4
Groundwater Monitoring Well Sampling Locations and Analyses

Monitoring Well	Parcel	Sample Number	VOC	MTBE	PAH	Natural Attenuation Parameters	Comments
181-MW45	181	181- 0430	X	X	X		
		181- 0431	X	X	X		Field Duplicate
		181- 0440				X	
181-MW46	181	181- 0429	X	X	X		
		181- 0441				X	
181-MW47	181	181- 0428	X	X	X		
		181- 0442				X	
S-02	176						Not Sampled, well is deep compl
S-12	176	181- 0436	X	X	X	X	Matrix Spike/Matrix Spike Duplicate also performed on this sample
S-13	176	181- 0433	X	X	X		
		181- 0443				X	
S-16	172	181- 0435	X	X	X	X	
S-35	Alameda Annex	181- 0437	X	X	X	X	
		181- 0438	X	X	X	X	Field Duplicate
EW-2	176	181- 0434	X	X	X		
		181- 0444				X	
PW-10A	181						Not Sampled, well has obstructio
PW-12	181	181- 0432	X	X	X		
		181- 0445				X	
Equipment Rinse Sample	Not Applicable	181- 0439-R	X	X	X	X	

VOC denotes volatile organic compound
MTBE denotes methyl tertiary butyl ether
PAH denotes polyaromatic hydrocarbon

Table J-5
Soil Gas Sampling Locations, Intervals, and Analyses

Boring Number	Parcel	Sample Number	Sample Depth (ft bgs)	EPA Method TO15 (VOCs and Naphthalene)
OS-SG-01	180	180-003	2	X
		NR	5	
OS-SG-02	178	178-021	2	X
		NR	5	
OS-SG-03	178	178-027	2	X
		178-028	5	X
OS-SG-04	179	179-002	2	X
		NR	5	
OS-SG-05	179	179-004	2	X
		NR	5	
OS-SG-06	179	179-007	2	X
		NR	5	
OS-SG-07	179	179-012	2	X
		NR	5	
OS-SG-08	178	178-026	2	X
		NR	5	
OS-SG-09	178	178-024	2	X
		178-025	5.5	X
OS-SG-10	181	181-717	2	X
		NR	5	
OS-SG-11	176	176-003	2	X
		176-004	6	X
OS-SG-12	176	176-001	2	X
		176-002	5	X
OS-SG-13	172	172-001	2	X
		NR	7	
OS-SG-14	176	176-005	2	X
		176-006	7	X
OS-SG-15	176	176-007	2	X
		NR	7	
OS-SG-16	178	178-022	2	X
		178-023	5.5	X
OU5-SG-17	181	181-718	2	X
		NR	5	
OU5-SG-01	181	181-728	2	X
		NR	5	
OU5-SG-02	181	NR	2	
		181-723	7	X
OU5-SG-03	181	181-714	2	X
		NR	5	
OU5-SG-04	181	181-720	2	X
		181-721	5.5	X

Table J-5 (continued)
Soil Gas Sampling Locations, Intervals, and Analyses

Boring Number	Parcel	Sample Number	Sample Depth (ft bgs)	EPA Method TO15 (VOCs and Naphthalene)
OU5-SG-05	181	181-719	2	X
		NR	5	
OU5-SG-06	181	181-715	2	X
		NR	5	
OU5-SG-07	181	181-716	2	X
		NR	5	
OU5-SG-08	181	181-722	2	X
		NR	5	
OU5-SG-09	181	181-725	2	X
		NR	5	
OU5-SG-10	181	181-726	2	*
		181-727	5.5	X
OU5-SG-11	181	181-711	2	X
		181-712	5	X
OU5-SG-12	181	181-709	2	X
		181-710	5	X
OU5-SG-13	181	181-713	2	X
		NR	5	
OU5-SG-14	182	182-028	2	X
		NR	5.5	
OU5-SG-15	181	181-724	2	X
		NR	5	

** Not analyzed because there was an obstruction in the valve.*
ft bgs denotes feet below ground surface
EPA denotes U.S. Environmental Protection Agency
VOC denotes volatile organic compound
NR denotes no recovery from interval

APPENDIX K
HISTORIC IR SITE 25 ANALYTICAL DATA

APPENDIX K – HISTORIC IR SITE 25 ANALYTICAL DATA IS CONTAINED IN ELECTRONIC FORMAT

TO VIEW THE DATA, CONTACT:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

Appendix K is attached on the combined CD found in Appendix F.