Table F3-7
Point Hydraulic Conductivities by Model Layer
Casmalia Resources Superfund Site
Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 1 - UNCONFINED UPPER HSU WELLS SCREENED HIGHER THAN TEN FEET ABOVE HSU CONTACT											
B3B	503475	1236759	345	321	329	1,2,3,4*	6.00E-04				6.00E-04
C2M	504170	1235422	435	390	391	1,2,3	5.60E-03				5.60E-03
CB-4-1	506669	1236236	629	624	607	1			1.10E-03		1.10E-03
CB-5I-1	506022	1235297	530	524	514	1			1.50E-01		1.50E-01
CB-6I-1	506063	1235307	533	523	519	1,2			3.40E-01		3.40E-01
D1M	506013	1234767	468	434	431	1,2	2.80E-03				2.80E-03
RP-10A	505925	1234304	418	408	391	1	1.24E+00	2.82E+00			2.03E+00
RP-11A	505470	1234397	407	397	391	1,2	1.33E+00	3.67E+00			2.50E+00
RP-12A	505099	1234608	404	394	382	1	1.92E+00	2.51E+00			2.22E+00
RP-28B	505027	1234749	397	387	380	1,2	2.06E+00	9.30E+00		1.75E+00	4.37E+00
TP-4	506248	1237685	507	497	495	1,2,3	7.34E+00	2.51E+01			1.62E+01
TP-6	504258	1238254	*NA*	*NA*	*NA*	*1,2,3*	*3.95E+00*	*5.30E+00*			*4.63E+00*
TP-12	506098	1238095	501	491	485	1,2	1.44E+00	2.65E+00			2.05E+00
TP-13	504633	1238637	447	437	434	1,2	3.95E-01	4.50E-01			4.23E-01
MEAN VALUE FOR LAYER 1:											**2.50E+00**
MEDIAN VALUE FOR LAYER 1:											**1.23E+00**

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Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 2 - UPPER HSU WELLS SCREENED BETWEEN 5 AND 10 FEET ABOVE HSU CONTACT											
B3B	503475	1236759	345	321	329	1,2,3,4*	6.00E-04				6.00E-04
C2M	504170	1235422	435	390	391	1,2,3	5.60E-03				5.60E-03
CB-6I-1	506063	1235307	533	523	519	1,2			3.40E-01		3.40E-01
D1M	506013	1234767	468	434	431	1,2	2.80E-03				2.80E-03
RP-6B	503395	1236822	362	352	352	2,3	3.10E+00				3.10E+00
RP-9B	506276	1234441	443	433	432	2,3	1.69E+00	2.76E+00			2.23E+00
RP-11A	505470	1234397	407	397	391	1,2	1.33E+00	3.67E+00			2.50E+00
RP-28B	505027	1234749	397	387	380	1,2	2.06E+00	9.30E+00		1.75E+00	4.37E+00
TP-1	504948	1234857	396	386	389	2,3	2.00E-01	9.00E-02			1.45E-01
TP-3	504203	1236582	403	393	391	2,3	2.23E+00				2.23E+00
TP-4	506248	1237685	507	497	495	1,2,3	7.34E+00	2.51E+01			1.62E+01
TP-5	504144	1237438	366	356	356	2,3	2.10E-02	5.90E-02			4.00E-02
TP-6	504258	1238254	*NA*	*NA*	*NA*	*1,2,3*	*3.95E+00*	*5.30E+00*			*4.63E+00*
TP-8	505259	1235629	468	458	459	2,3	7.30E+00	2.45E+01			1.59E+01
TP-12	506098	1238095	501	491	485	1,2	1.44E+00	2.65E+00			2.05E+00
TP-13	504633	1238637	447	437	434	1,2	3.95E-01	4.50E-01			4.23E-01
TP-15	506054	1236333	551	541	541	2,3	2.37E+00	1.92E+00			2.15E+00
WB-6	506708	1235233	535	524	524	2,3	2.80E-01				2.80E-01
MEAN VALUE FOR LAYER 2:											**3.14E+00**
MEDIAN VALUE FOR LAYER 2:											**2.10E+00**

Table F3-7
Point Hydraulic Conductivities by Model Layer
Casmalia Resources Superfund Site
Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 3 - UPPER HSU WELLS SCREENED BETWEEN 0 AND 5 FEET ABOVE HSU CONTACT											
A2M	504115	1239242	406	400	401	3	5.60E-02				5.60E-02
B3B	503475	1236759	345	321	329	1,2,3,4*	6.00E-04				6.00E-04
C2M	504170	1235422	435	390	391	1,2,3	5.60E-03				5.60E-03
RP-3B	505986	1236665	537	527	530	3	7.62E-01			1.80E-01	4.71E-01
RP-5B	503918	1236766	387	377	384	3	1.35E-01			1.50E-02	7.50E-02
RP-6B	503395	1236822	362	352	352	2,3	3.10E+00				3.10E+00
RP-9B	506085	1238089	443	433	432	2,3	1.69E+00	2.76E+00			2.23E+00
RP-14B	506162	1235324	531	521	525	3				1.67E+01	1.67E+01
TP-1	504948	1234857	396	386	389	2,3	2.00E-01	9.00E-02			1.45E-01
TP-15	506054	1236333	551	541	541	2,3	2.37E+00	1.92E+00			2.15E+00
TP-3	504203	1236582	403	393	391	2,3	2.23E+00				2.23E+00
TP-4	506248	1237685	507	497	495	1,2,3	7.34E+00	2.51E+01			1.62E+01
TP-5	504144	1237438	366	356	356	2,3	2.10E-02	5.90E-02			4.00E-02
TP-6	504278	1238226	*NA*	*NA*	*NA*	1,2,3	*3.95E+00*	*5.30E+00*			*4.63E+00*
TP-8	505259	1235629	468	458	459	2,3	7.30E+00	2.45E+01			1.59E+01
WB-6	506708	1235233	535	524	524	2,3	2.80E-01				2.80E-01
WP-8S	506256	1237892	498	488	492	3				3.10E+00	3.10E+00
MEAN VALUE FOR LAYER 3:											**3.96E+00**
MEDIAN VALUE FOR LAYER 3:											**2.15E+00**

Table F3-7
Point Hydraulic Conductivities by Model Layer
Casmalia Resources Superfund Site
Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 4 - LOWER HSU WELLS BETWEEN 0 AND 25 FEET BELOW HSU CONTACT											
A2B	504420	1238808	416	396	419	4	1.70E-02				1.70E-02
B3B	503475	1236759	345	321	329	1,2,3,4*	6.00E-04				6.00E-04
C2B	504196	1235405	366	356	379	4	8.50E-02				8.50E-02
CB-4-2	506669	1236236	597	590	607	4			5.60E-04		5.60E-04
CB-5I-2	506022	1235297	514	504	514	4			2.70E-03		2.70E-03
CB-5I-3	506022	1235297	497	485	514	4			1.50E-02		1.50E-02
CB-6I-2	506063	1235307	519	514	519	4			3.10E-02		3.10E-02
CB-6I-3	506063	1235307	498	489	519	4,5			4.50E-01		4.50E-01
CB-7I-1	504390	1238791	519	511	519	4			6.00E-04		6.00E-04
CB-8I-1	504367	1238797	402	392	422	4,5			9.00E-04		9.00E-04
CpH	504766	1234722	326	316	335	4	3.00E-04				3.00E-04
RP-26C	505347	1238216	491	481	506	4	1.35E+00	9.30E-01			1.14E+00
RP-27C	505219	1238574	504	494	523	4,5	5.00E-02	1.10E-01			8.00E-02
SB-10	502446	1237755	404	393	406	4	5.80E-06				5.80E-06
MEAN VALUE FOR LAYER 4:											**1.30E-01**
MEDIAN VALUE FOR LAYER 4:											**8.85E-03**

Table F3-7
Point Hydraulic Conductivities by Model Layer
Casmalia Resources Superfund Site
Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 5 - LOWER HSU WELLS BETWEEN 25 AND 75 FEET BELOW HSU CONTACT											
CB-4-3	506669	1236236	577	570	607	5			2.50E-05		2.50E-05
CB-4-5	506669	1236236	557	542	607	5			7.10E-01		7.10E-01
CB-5I-4	506022	1235297	466	456	514	5			1.30E-02		1.30E-02
CB-5I-5	506022	1235297	446	436	514	5			1.40E-03		1.40E-03
CB-6I-3	506063	1235307	498	489	519	4,5			4.50E-01		4.50E-01
CB-6I-4	506063	1235307	467	458	519	5			1.70E-01		1.70E-01
CB-6I-5	506063	1235307	451	441	519	5,6			1.64E-01		1.64E-01
CB-6I-6	506063	1235307	451	441	519	5,6			9.92E-02		9.92E-02
CB-7I-2	504390	1238791	401	394	424	5			2.80E-02		2.80E-02
CB-7I-4	504390	1238791	374	365	424	5			7.34E-05		7.34E-05
CB-8I-1	504367	1238797	402	392	422	4,5			9.00E-04		9.00E-04
CB-8I-2	504367	1238797	384	372	422	5			2.00E-03		2.00E-03
CB-8I-3	504367	1238797	372	362	422	5			9.60E-06		9.60E-06
D1B	506089	1234741	401	377	432	5	4.00E-03				4.00E-03
RP-3C	505994	1236584	514	504	541	5	7.00E-04	5.00E-03			2.85E-03
RP-7C	503547	1237188	378	368	419	5	3.10E-01	2.20E-01			2.65E-01
RP-27C	505219	1238574	504	494	523	4,5	5.00E-02	1.10E-01			8.00E-02
MEAN VALUE FOR LAYER 5:											**1.17E-01**
MEDIAN VALUE FOR LAYER 5:											**1.30E-02**

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Point Hydraulic Conductivities by Model Layer
Casmalia Resources Superfund Site
Casmalia, CA

Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 6 - LOWER HSU WELLS BETWEEN 75 AND 150 FEET BELOW HSU CONTACT											
A1-B	507635	1236522	634	610	752	6	7.00E-04				7.00E-04
CB-4-7	506669	1236236	474	464	607	6			3.40E-04		3.40E-04
CB-5I-6	506022	1235297	424	406	514	6			3.95E-01		3.95E-01
CB-6I-5	506063	1235307	451	441	519	5,6			1.64E-01		1.64E-01
CB-6I-6	506063	1235307	451	441	519	5,6			9.92E-02		9.92E-02
CB-7I-5	504390	1238791	349	338	424	6			1.36E-04		1.36E-04
CB-7I-6	504390	1238791	321	311	424	6			8.79E-03		8.79E-03
CB-7I-7	504390	1238791	294	284	424	6			3.95E-05		3.95E-05
CB-8I-5	504367	1238797	337	324	422	6			8.00E-03		8.00E-03
CB-8I-6	504367	1238797	304	293	422	6			1.10E-07		1.10E-07
CB-8I-7	504367	1238797	282	272	422	6			4.82E-08		4.82E-08
RP-3D	506160	1235340	445	435	536	6				5.95E-01	5.95E-01
RP-14D	506160	1235340	384	374	527	6	5.10E-02	3.40E-02		4.23E-01	1.69E-01
RP-18D	504667	1235226	286	276	376	6		3.40E-02	1.84E-02		2.62E-02
RP-24D	504375	1238799	314	304	424	6				8.75E-06	8.75E-06
RP-3D	505989	1236624	460	450	537	6	6.50E-01	1.77E+00		5.90E-01	1.00E+00
RP-4D	504652	1236616	323	313	415	6	5.25E-02	2.00E-02			3.63E-02
RP-5D	503877	1236774	292	282	383	6	2.35E-01	1.63E-01			1.99E-01
MEAN VALUE FOR LAYER 6:											**1.50E-01**
MEDIAN VALUE FOR LAYER 6:											**1.75E-02**

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Well/ Piezometer/Boring	Northing	Easting	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	Upper/ Lower HSU Contact Elevation (ft msl)	Model Layers*	Horizontal Hydraulic Conductivity (feet per day)				
Test Type#							Slug-H	Slug-C	Packer	Pump	Mean Value
LAYER 7 - LOWER HSU WELLS BETWEEN 150 AND 300 FEET BELOW HSU CONTACT											
CB-7I-8	504390	1238791	258	247	424	7			9.92E-06		9.92E-06
CB-8I-8	504367	1238797	255	245	422	7			4.00E-03		4.00E-03
MEAN VALUE FOR LAYER 7:											**2.00E-03**
MEDIAN VALUE FOR LAYER 7:											**NA**

Notes:
Point hydraulic conductivities used as guide and input to initial MODFLOW simulations; final model conductivities will be based on calibration results.
- Hydraulic test types include slug tests analyzed using Hvorslev (Slug-H), Cooper or Karasaki (Slug-C/K) methods,
packer tests (Packer), or constant head or rate pumping tests (Pump).
* - Wells completed with saturated screens crossing model layers assigned as follows;
For Layers 1-3; well screens extending more than 50% (2.5 feet) into layer assigned to layer.
For Layers 3 and 4; well screens extending less than 5 feet into Layer 4 assigned to Layer 3 only.
For Layers 3 and 4; well screens extending 5 or more feet into Layer 4 assigned to both model layers.
For Layers 4-7; well screens extending more than 5 feet into Layer assigned to both model layers.
3,4* - Well screened across Upper and Lower HSU contact.
NA - Data not available.
Clay barriers in Layers 1-3 simulated using MODFLOW HFB Package.