

Project: FPUA Deep Injection Well (IW-1) at the 25th Street Reverse Osmosis Facility
 Well: IW-1

Drill Stem Water Quality Data
 (Collected during Closed Circulation)

Date	Time (hours)	Depth (ft bpl)	Conductivity (umhos/cm)	Chloride (mg/L)	Sample Volume (mL)	Multiplier	No. of Digits	New Sample Volume (mL)	New No. of Digits	Multiplier	Re-titrated Chloride (mg/L)	Estimated Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	pH (S.U.)	Remarks	Sampled By
04/02/2002	1410	560	1,206	22	2.0	25.0	1				0	35	601	28.8	9.2		YBI/CH2M
04/02/2002	1156	590	1,240	24	2.0	25.0	1				0	38	616	27.9	9.0		YBI/CH2M
04/02/2002	1505	620	1,163	20	2.0	25.0	1				0	32	675	22.4	7.6		YBI/CH2M
04/02/2002	1550	650	1,185	32	2.0	25.0	1				0	51	589	25.1	7.5		YBI/CH2M
04/02/2002	1630	680	1,161	220	2.0	25.0	9				0	352	571	22.3	7.5		YBI/CH2M
04/02/2002	1705	710	1,180	190	2.0	25.0	8	20	21	5	105	304	578	22.0	7.6		YBI/CH2M
04/02/2002	1745	740	1,181	220	2.0	25.0	9				0	352	597	22.3	7.5		YBI/CH2M
04/02/2002	1805	770	1,198	180	2.0	25.0	7				0	288	585	21.9	7.4		YBI/CH2M
04/02/2002	1830	800	1,208	180	2.0	25.0	7				0	288	590	22.0	7.6		YBI/CH2M
04/02/2002	2320	830	1,187	200	2.0	25.0	8				0	320	580	22.0	7.7		YBI/CH2M
04/03/2002	0200	860	1,194	210	2.0	25.0	8				0	336	586	22.2	7.6		YBI/CH2M
04/03/2002	0405	890	1,206	180	2.0	25.0	7				0	288	591	22.1	7.5		YBI/CH2M
04/03/2002	0535	920	1,228	230	2.0	25.0	9				0	368	603	22.2	7.4		YBI/CH2M
04/03/2002	0945	950	1,273	240	2.0	25.0	10				0	384	622	22.2	7.5		YBI/CH2M
04/03/2002	1150	980	1,397	270	2.0	25.0	11				0	432	684	22.1	7.5		YBI/CH2M
04/03/2002	1430	1010	1,537	277	2.0	25.0	11				0	443	752	22.1	7.5		YBI/CH2M
04/03/2002	1630	1040	1,576	297	2.0	25.0	12				0	475	773	22.2	7.4		YBI/CH2M
04/03/2002	1800	1070	1,574	279	2.0	25.0	11				0	446	771	21.6	7.5		YBI/CH2M
04/03/2002	2115	1100	1,371	251	2.0	25.0	10				0	402	672	21.8	7.5		YBI/CH2M
04/04/2002	0015	1130	1,216	198	2.0	25.0	8				0	317	595	21.6	7.5		YBI/CH2M
04/04/2002	0430	1160	1,116	174	2.0	25.0	7				0	278	547	23.6	7.6		YBI/CH2M
04/04/2002	0825	1190	1,107	176	2.0	25.0	7				0	282	542	23.7	7.5		YBI/CH2M
04/04/2002	1010	1220	1,077	175	2.0	25.0	7				0	280	528	24.5	7.6		YBI/CH2M
04/04/2002	1130	1250	1,070	166	2.0	25.0	7				0	266	523	26.0	7.4		YBI/CH2M
04/04/2002	1220	1280	1,030	164	2.0	25.0	7				0	262	505	25.8	7.4		YBI/CH2M
04/04/2002	1300	1310	1,092	174	2.0	25.0	7				0	278	534	26.5	7.5		YBI/CH2M
04/04/2002	1400	1340	1,130	184	2.0	25.0	7				0	294	554	26.0	7.5		YBI/CH2M
04/04/2002	1500	1380	1,130	179	2.0	25.0	7				0	286	554	22.8	7.5		YBI/CH2M
04/04/2002	1700	1410	1,237	211	2.0	25.0	8				0	338	607	22.6	7.5		YBI/CH2M
04/04/2002	1825	1440	1,234	202	2.0	25.0	8				0	323	605	23.0	7.4		YBI/CH2M
04/04/2002	2025	1470	1,358	243	2.0	25.0	10				0	389	665	22.3	7.4		YBI/CH2M
04/04/2002	2220	1500	1,558	287	2.0	25.0	11	20	61	5	305	459	764	22.2	7.4		YBI/CH2M
04/05/2002	0045	1530	1,816	367	2.0	25.0	15				0	587	890	22.1	7.4		YBI/CH2M
04/05/2002	0315	1560	1,856	296	2.0	25.0	12				0	474	908	24.7	7.4		YBI/CH2M
04/05/2002	0510	1590	1,956	424	2.0	25.0	17				0	678	955	23.7	7.4		YBI/CH2M
04/05/2002	0720	1620	2,130	426	2.0	25.0	17				0	682	1,030	24.5	7.5		YBI/CH2M
04/05/2002	0810	1650	1,996	384	2.0	25.0	15				0	614	978	24.6	7.5		YBI/CH2M
04/05/2002	1020	1680	2,160	430	2.0	25.0	17				0	688	1,050	26.0	7.5		YBI/CH2M
04/05/2002	1050	1710	2,200	422	2.0	25.0	17				0	675	1,070	26.5	7.5		YBI/CH2M
04/05/2002	1150	1740	2,060	404	2.0	25.0	16				0	646	965	25.9	7.5		YBI/CH2M
04/05/2002	1220	1770	2,100	388	2.0	25.0	16				0	621	1,020	25.8	7.5		YBI/CH2M
04/05/2002	1400	1800	2,110	404	2.0	25.0	16				0	646	1,030	25.0	7.4		YBI/CH2M
04/05/2002	1440	1830	2,130	440	2.0	25.0	18	20	82	5	410	704	1,040	24.9	7.5		YBI/CH2M
04/05/2002	2250	1850	2,650	522	2.0	25.0	21				0	835	1,290	26.2	7.4		YBI/CH2M
04/05/2002	2340	1880	2,130	434	2.0	25.0	17	20	77	5	385	694	1,030	25.0	7.5		YBI/CH2M

ft-bpl: feet below pad level
 umhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 C: Celsius
 S.U.: standard units
 TOC: Top of Casing

Drill Stem Water Quality Data
(Collected during Closed Circulation)

Date	Time (hours)	Depth (ft bpl)	Conductivity (umhos/cm)	Chloride (mg/L)	Sample Volume (mL)	Multiplier	No. of Digits	New Sample Volume (mL)	New No. of Digits	Multiplier	Re-titrated Chloride (mg/L)	Estimated Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	pH (S.U.)	Remarks	Sampled By
05/01/2002	N/A	1900	4,100	815	2.0	25.0	33	20	70	5	350	1,304	2,002	27.4	11.5		YBI/CH2M
05/01/2002	N/A	1930	3,807	710	2.0	25.0	28				0	1,136	1,900	27.5	11.5		YBI/CH2M
05/01/2002	N/A	1960	4,160	810	2.0	25.0	32	20	81	5	405	1,296	2,030	27.3	11.5		YBI/CH2M
05/01/2002	2007	1990	4,040	830	2.0	25.0	33				0	1,328	1,980	27.5	11.5		YBI/CH2M
05/02/2002	0010	2020	4,130	810	2.0	25.0	32				0	1,296	2,010	27.3	11.5		YBI/CH2M
05/02/2002	0415	2050	4,180	810	2.0	25.0	32				0	1,296	2,050	27.6	11.5		YBI/CH2M
05/02/2002	0725	2080	4,950	980	2.0	25.0	39				0	1,568	2,430	27.4	11.7		YBI/CH2M
05/02/2002	0930	2110	4,680	920	2.0	25.0	37				0	1,472	2,290	27.3	11.6		YBI/CH2M
05/02/2002	1145	2140	5,440	1,065	2.0	25.0	43				0	1,704	2,660	24.5	11.8		YBI/CH2M
05/02/2002	1500	2170	5,210	1,020	2.0	25.0	41	5	33	20	660	1,632	2,540	24.4	11.7		YBI/CH2M
05/03/2002	2205	2200	5,530	1,085	2.0	25.0	43	5	34	20	680	1,736	2,710	11.9	12.1		YBI/CH2M
05/05/2002	0305	2230	9,170	1,795	2.0	25.0	72				0	2,872	4,470	11.2	10.7		YBI/CH2M
05/05/2002	0510	2260	8,140	1,595	2.0	25	64	50	1,150	2	2,300	2,552	3,970	11.4	10.9		YBI/CH2M
05/06/2002	2000	2290	17,360	3,410	2.0	25	136	5	297	20	5,940	5,456	8,670	12.5	9.1		YBI/CH2M
05/06/2002	2140	2306	16,720	3,275	2.0	25	131	5	318	20	6,360	5,240	8,190	13.8	9.3		YBI/CH2M
											0					Sample not collected	
05/09/2002	1245	2380	42,200	8,275	2.0	25	331				0	13,240	20,600	19.9	8.2		YBI/CH2M
05/10/2002	1230	2420	39,200	7,685	2.0	25	307				0	12,296	19,000	15.5	8.2		YBI/CH2M
05/10/2002	1500	2450	34,900	6,845	2.0	25	274	5	560	20	11,200	10,952	17,100	16.0	8.2		YBI/CH2M
05/10/2002	1600	2480	37,700	7,390	2.0	25	296				0	11,824	18,400	17.5	8.2		YBI/CH2M
05/11/2002	1355	2510	60,400	11,850	2.0	25	474				0	18,960	29,400	17.2	8.1		YBI/CH2M
05/11/2002	1545	2540	33,500	6,465	2.0	25	259				0	10,344	16,400	16.2	8.3		YBI/CH2M
05/11/2002	1735	2570	40,900	8,015	2.0	25	321				0	12,824	20,100	17.0	8.2		YBI/CH2M
05/12/2002	1155	2600	39,000	7,645	2.0	25	306	5	547	20	10,940	12,232	19,000	25.4	8.3		YBI/CH2M
05/12/2002	1350	2630	30,300	5,945	2.0	25	238	5	477	20	9,540	9,512	14,700	25.8	8.3		YBI/CH2M
05/13/2002	1125	2660	35,500	6,960	2.0	25	278	5	603	20	12,060	11,136	17,400	24.8	7.7		YBI/CH2M
05/15/2002	2005	2690	33,400	6,545	2.0	25	262	5	618	20	12,360	13,090	16,400	22.8	6.5		YBI/CH2M
05/16/2002	0230	2720	50,500	9,545	2.0	25	382	5	1,030	20	20,600	19,090	24,700	22.8	6.9		YBI/CH2M
05/16/2002	0745	2750	53,000	10,375	2.0	25	415	5	1,035	20	20,700	20,750	25,900	22.8	7.4		YBI/CH2M
05/17/2002	2350	2780	52,700	10,120	2.0	25	405				0	20,240	25,900	22.8	7.5		YBI/CH2M
05/18/2002	0745	2810	54,300	10,265	2.0	25	411				0	20,530	26,600	22.9	7.5		YBI/CH2M
05/18/2002	1030	2840	53,800	10,545	2.0	25	422				0	21,090	26,300	22.9	7.6		YBI/CH2M
05/19/2002	0220	2870	54,100	10,600	2.0	25	424				0	21,200	26,600	22.8	7.5		YBI/CH2M
05/19/2002	2330	2900	54,100	10,525	2.0	25	421	5	1,065	20	21,300	21,050	26,500	22.8	7.6		YBI/CH2M
05/20/2002	0635	2930	54,300	10,250	2.0	25	410				0	20,500	26,500	22.9	7.5		YBI/CH2M
05/20/2002	1500	2960	54,600	10,700	2.0	25	428				0	21,400	26,700	22.9	7.5		YBI/CH2M
05/21/2002	0745	2990	54,600	10,650	2.0	25	426				0	21,300	26,700	23.0	7.6		YBI/CH2M
05/22/2002	0030	3020	55,200	10,820	2.0	25	433	5	1,025	20	20,500	21,640	27,000	23.3	7.7		YBI/CH2M
05/23/2002	0300	3050	54,900	10,760	2.0	25	430				0	21,520	26,900	23.5	7.6		YBI/CH2M
05/23/2002	1920	3080	55,000	10,725	2.0	25	429				0	21,450	26,900	23.5	7.6		YBI/CH2M
05/24/2002	0600	3110	54,900	10,760	2.0	25	430				0	21,520	26,700	22.9	7.6		YBI/CH2M
05/25/2002	0500	3140	52,800	9,375	2.0	25	375				0	18,750	26,100	28.2	6.8		YBI/CH2M
05/25/2002	1815	3170	54,400	9,625	2.0	25	385	5	1,170	20	23,400	19,250	26,700	27.6	7.2		YBI/CH2M
05/26/2002	0925	3200	54,900	10,125	2.0	25	405				0	20,250	26,900	27.8	7.4		YBI/CH2M

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FPUA RO WTP IW-1 Drill-Stem Water Quality

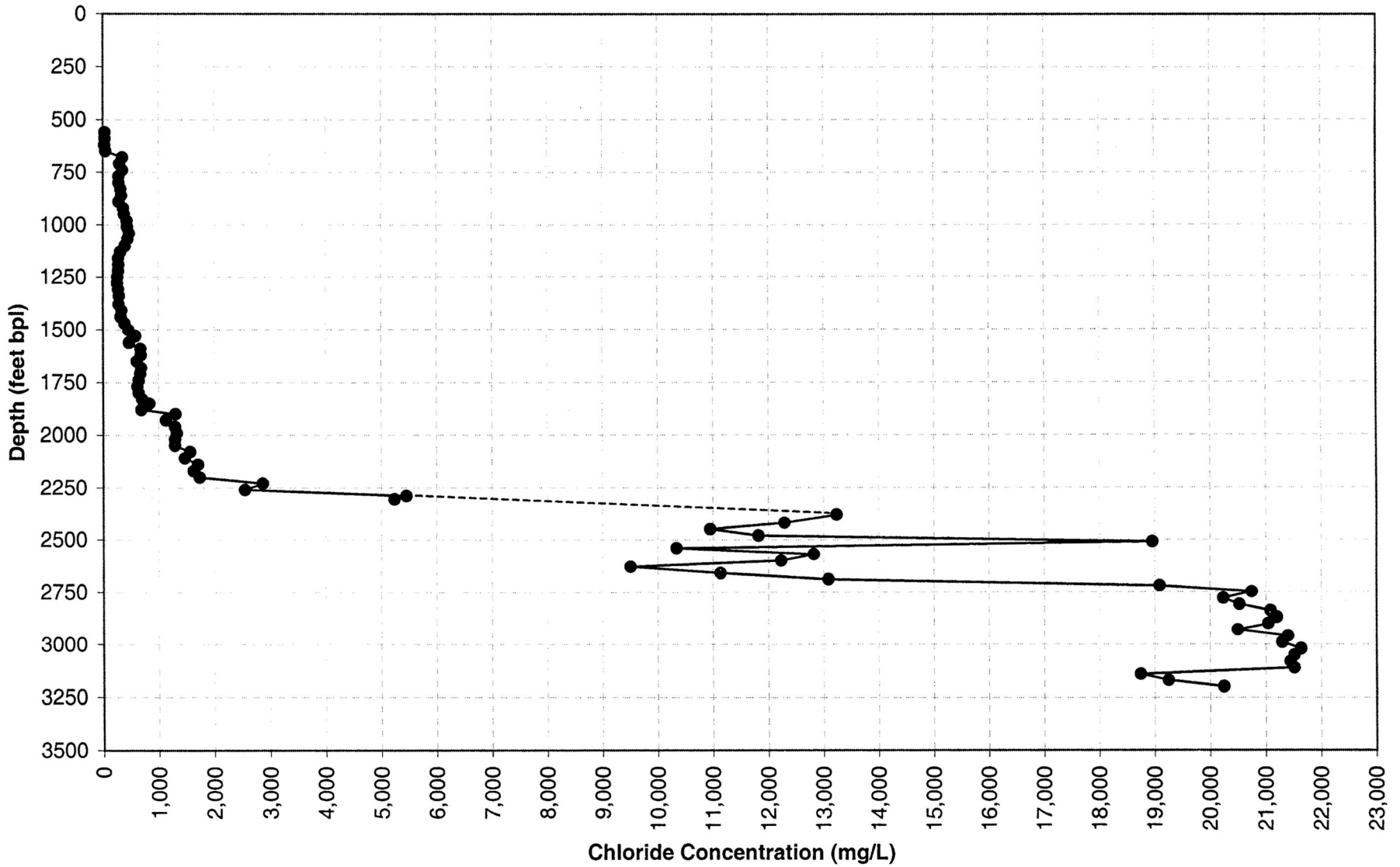


Exhibit 4-3

FPUA RO WTP

IW-1 Pilot Hole Chloride Data

FPUA RO WTP IW-1 Drill-Stem Water Quality

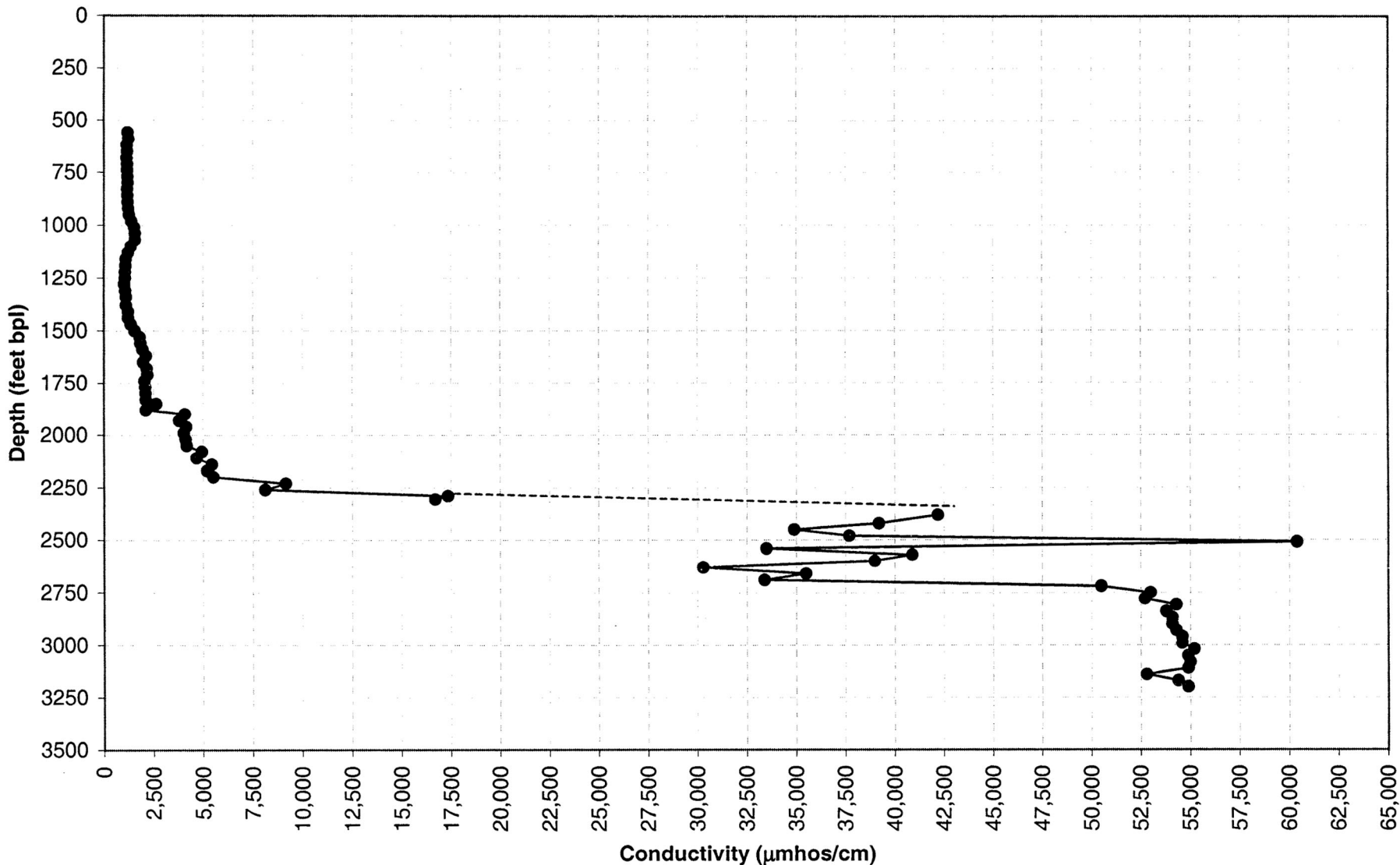


Exhibit 4-2

FPUA RO WTP

IW-1 Pilot Hole Conductivity Data