

Description Baseline ground water quality samples obtained from Irigaray Mine Unit 1 ore body wells  
Formation(s) Upper Irigaray Sandstone  
Reference(s) 2, 5  
Notes

Analyte Units Lab Method		Ca mg/L	Mg mg/L	Na mg/L	K mg/L	CO3 mg/L	HCO3 mg/L	SO4 mg/L	Cl mg/L	NH4 mg/L	NO2 mg/L	NO3 mg/L	NO2+NO 3 mg/L
Well Name	Sample Date												
AP-3	1976	7.3	0.8	128	2.4	2.2	73.6	200	12.3	<0.2	0.02	0.4	
AP-3	1976	7.3	0.8	127	2.1	1.2	79.2	195	12.3	<0.2	<0.02	0.35	
AP-3	1976	7.3	0.8	125	2.1	4.2	71.7	193	13	<0.2	0.02	0.53	
AP-3	1976	9.6	0.8	134	2.5	16.1	98.3	185	8.9	0.1	0.25	0.3	
AP-4	1976	9.1	0.9	128	1.9	3.6	77.4	206	12.3	<0.2	<0.02	0.44	
AP-4	1976	9.4	0.9	125	2.5	1.3	84.2	201	12	<0.2	<0.02	0.58	
AP-4	1976	9.4	1	128	1.9	3.9	82.2	202	11.8	<0.2	<0.02	0.66	
AP-4	1976	14.1	1.2	145	2.4	12.4	118	210		0.2	<0.02	0.65	
AP-5	1976	2.3	<0.1	125	3.6	8.4	44.8	195	12.8	<0.2	<0.02	0.4	
AP-5	1976	1.6	<0.1	127	5.3	21	14.2	225	12.8	<0.2	<0.02	0.35	
AP-5	1976	1.8	<0.1	128	4.9	19.5	20.8	228	13	<0.2	<0.02	0.31	
AP-5	1976	5.4	0.26	130	3.6	28.5	75.9	180	9.2	0.15	<0.02	0.2	
AP-10	1976	7.5	1	121	1.9	1.5	79.1	188	13.3	<0.2	0.24	0.35	
AP-10	1976	6.8	0.9	127	1.7	0.8	84.1	189	13.5	<0.2	<0.02	0.44	
AP-10	1976	6.7	0.9	125	1.7	1.9	78.9	195	13.8	<0.2	<0.02	0.44	
AP-10	1976	8.8	1.19	131	2.3	12.4	102.1	180	9.4	<0.1	<0.02	0.27	
T-26	08/08/1979	12.3	1.3	159	2.1	10.3	86.4	273	9	<0.5			<1
T-26	08/15/1979	12.9	1.24	166	1.7	8.9	89.6	291	9.9	<0.5			<1
T-26	08/22/1979	12.3	1.17	162	1.7	6	95.2	281	9.5	<0.5			<1
T-32	08/08/1979	8	1.08	126	1.5	10.6	89.3	192	9.9	<0.5			<1
T-32	08/15/1979	6.8	0.9	130	1.2	12	85.4	195	10.1	<0.5			<1
T-32	08/22/1979	6.4	0.84	126	1.2	6.3	96.1	192	9.7	<0.5			<1
T-33	08/01/1979	10.3	0.99	140	1.5	6.6	98.8	231	10.5	<0.5			<1
T-33	08/09/1979	11.3	1.21	141	1.9	8	97.7	236	10.3	<0.5			<1
T-33	08/16/1979	9.6	1.02	143	1.3	9.6	92.7	231	10.2	<0.5			<1

**Description** Baseline ground  
**Formation(s)** Upper Irigaray Se  
**Reference(s)** 2, 5  
**Notes**

Well Name	Analyte Units Lab Method	F mg/L	SiO2 mg/L	Alk as CaCO3 mg/L	pH std	TDS mg/L	EC umho/cm	Al mg/L	Ag mg/L	As mg/L	B mg/L	Ba mg/L	Cd mg/L	Cr mg/L
Well Name	Sample Date													
AP-3	1976	0.28	3.9	92	8.7	380	605			<0.01	0.225	0.016	<0.002	<0.002
AP-3	1976	0.28	3.8	98	8.4	358	615			0.012	0.1	0.016	<0.002	<0.002
AP-3	1976	0.28	3.75	92	9	372	620			0.012	0.095	0.011	<0.002	<0.002
AP-3	1976	0.68	3.8	93.6	8.5	394	610			0.022	0.06	<0.01	<0.002	<0.002
AP-4	1976	0.31	4.3	98	8.9	386	630			0.082	0.109	<0.01	<0.002	<0.002
AP-4	1976	0.33	4.2	102	8.4	389	535			0.095	0.077	0.015	<0.002	0.002
AP-4	1976	0.33	4.6	102	8.9	388	618			0.094	0.117	0.02	<0.002	0.002
AP-4	1976	0.35	4.4	106.8	9	438	670			0.105	0.08	0.022	<0.002	<0.002
AP-5	1976	0.28	3.2	84	9.5	350	600			<0.01	0.113	<0.01	<0.002	<0.002
AP-5	1976	0.3	3.85	92	10.4	338	638			<0.01	0.118	0.043	<0.002	<0.002
AP-5	1976	0.28	4	94	10.2	308	625			<0.01	0.11	0.036	<0.002	<0.002
AP-5	1976	0.25	3.4	85.4	9.7	364	610			<0.005	0.06	0.022	<0.002	<0.002
AP-10	1976	0.28	3.45	90	8.5	368	595			<0.01	0.134	0.023	<0.002	<0.002
AP-10	1976	0.28	3.75	96	8.2	410	580			<0.01	0.125	0.015	<0.002	<0.002
AP-10	1976	0.33	3.65	96	8.6	358	580			<0.01	0.099	0.015	<0.002	<0.002
AP-10	1976	0.28	3.3	93.6	9.1	390	600			0.009	0.04	0.022	<0.002	<0.002
T-26	08/08/1979	0.2	7.5	88	8.8	531.8	804			<0.002				
T-26	08/15/1979	0.2	6.8	88.2	8.7	536.4	846			<0.002				
T-26	08/22/1979	0.2	7.1	88	8.7	560	827			<0.002				
T-32	08/08/1979	0.2	7	90.8	8.8	406.8	625			0.003				
T-32	08/15/1979	0.2	7.1	90	8.8	392	646			0.002				
T-32	08/22/1979	0.2	7	89.3	8.8	432.8	638			0.002				
T-33	08/01/1979	0.2	7	92	8.8	437.3	724			0.005				
T-33	08/09/1979	0.2	7	93.5	8.8	473.6	721			0.002				
T-33	08/16/1979	0.3	7	92	8.9	432.8	684			0.002				

**Description** Baseline ground  
**Formation(s)** Upper Irigaray Se  
**Reference(s)** 2, 5  
**Notes**

	Analyte Units Lab Method	Cu mg/L	Fe mg/L	Hg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	Pb mg/L	Se mg/L	V mg/L	Zn mg/L	U mg/L	U308 mg/L	Ra-226 pCi/L
Well Name	Sample Date													
AP-3	1976	<0.005	0.036	<0.0002	<0.025	<0.02	<0.2	0.002	0.022	<0.05	<0.02	3.35		43
AP-3	1976	0.005	0.436	<0.0002	<0.025	<0.02	<0.2	0.008	0.024	<0.05	<0.02	3.4		51
AP-3	1976	<0.005	0.518	<0.0002	<0.025	<0.02	<0.2	0.008	0.02	<0.05	<0.02	3.46		59
AP-3	1976	<0.005	0.2	<0.0002	<0.025	<0.02	<0.2	0.005	0.174	0.08	0.017	5.17		76
AP-4	1976	<0.005	0.04	<0.0002	<0.025	<0.02	<0.2	<0.002	0.266	0.21	<0.02	9.73		77
AP-4	1976	0.009	0.206	<0.0002	<0.025	<0.02	<0.2	0.002	0.416	0.29	<0.02	11.89		125
AP-4	1976	0.012	0.559	<0.0002	<0.025	<0.02	<0.2	<0.002	0.283	0.31	<0.02	14.05		165
AP-4	1976	<0.005	0.019	<0.0002	<0.025	0.03	<0.2	<0.002	2	0.55	<0.009	18.6		210
AP-5	1976	<0.005	0.071	<0.0002	<0.025	<0.02	<0.2	<0.002	0.057	0.12	<0.02	0.56		22
AP-5	1976	<0.005	0.21	<0.0002	<0.025	<0.02	<0.2	<0.002	0.043	0.1	<0.02	0.32		22
AP-5	1976	0.009	0.314	<0.0002	<0.025	<0.02	<0.2	<0.002	0.035	0.09	<0.02	0.33		22
AP-5	1976	<0.005	0.115	<0.0002	<0.025	<0.02	<0.2	<0.002	0.218	0.09	<0.009	0.33		28
AP-10	1976	<0.005	2	<0.0002	<0.025	<0.02	<0.2	<0.002	0.022	<0.05	<0.02	0.83		35
AP-10	1976	<0.005	0.651	<0.0002	<0.025	<0.02	<0.2	0.008	<0.01	<0.05	<0.02	1.38		26
AP-10	1976	0.005	0.332	<0.0002	<0.025	<0.02	<0.2	<0.002	0.011	<0.05	<0.02	0.93		17
AP-10	1976	<0.005	1.2	<0.0002	0.038	<0.02	<0.2	0.002	0.066	0.07	0.009	1.51		34
T-26	08/08/1979		<0.02						<0.002				<0	0
T-26	08/15/1979		<0.02						<0.002				<0.01	0
T-26	08/22/1979		<0.02						<0.002				<0.01	0
T-32	08/08/1979		0.05						<0.002				0.04	3
T-32	08/15/1979		<0.02						<0.002				0.04	2
T-32	08/22/1979		<0.02						<0.002				0.01	2
T-33	08/01/1979		0.04						<0.002				0.06	2
T-33	08/09/1979		0.02						<0.002				0.02	2
T-33	08/16/1979		<0.02						<0.002				0.01	1

**Description** Baseline ground  
**Formation(s)** Upper Irigaray Sa  
**Reference(s)** 2, 5  
**Notes**

Well Name	Sample Date	Analyte/ Units Lab Method	Alpha		Beta		Th-230		Notes
			pCi/L	+/-	pCi/L	+/-	pCi/L	+/-	
AP-3	1976	7							
AP-3	1976	7							
AP-3	1976	8							
AP-3	1976	8							
AP-4	1976	8							
AP-4	1976	15							
AP-4	1976	20							
AP-4	1976	20							
AP-5	1976	5							
AP-5	1976	5							
AP-5	1976	5							
AP-5	1976	5							
AP-10	1976	3							
AP-10	1976	2							
AP-10	1976	2							
AP-10	1976	8							
T-26	08/08/1979	0.1	2	6	22	68	0	1.6	
T-26	08/15/1979	0.1	3	6	0	66	0	1.6	
T-26	08/22/1979	0.1	5	7	0	66	0.9	1.8	
T-32	08/08/1979	0.4	47	13	0	67	1.1	2.6	
T-32	08/15/1979	0.3	48	13	0	66	0	1.8	
T-32	08/22/1979	0.3	25	9	0	66	0	1.9	
T-33	08/01/1979	0.3	51	13	0	67	0	2	
T-33	08/09/1979	0.3	31	11	0	66	1.1	2.6	
T-33	08/16/1979	0.2	18	9	0	67	1.5	2.7	