Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/4/08

Well ID: B/W-15
Static Water Level: 28.07

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 35'						640		0.18		7.97		-169.1		4.07			
1044	START PUMP / ADJUST FLOW																
1050	0	500	0	14.39	—	1304	—	6.27	—	6.50	—	190.1	—	0.65	<10 NTU	28.13	-.08'
1055	5			14.33	.4 ✓	1306	.2 ✓	6.06	3.4 ✓	6.44	Δ.06✓	191.9	.9 ✓				
1100	10		5.0	14.38	.4 ✓	1305	.2 ✓	5.98	1.3 ✓	6.46	Δ.02✓	190.6	.7 ✓	2.80	<10	28.15	-.08'
1105	15			14.37	.1 ✓	1305	0 ✓	5.92	1.0 ✓	6.49	Δ.03✓	189.7	.5 ✓				
1110	20		10.0	14.31	.4 ✓	1305	0 ✓	5.90	.3 ✓	6.48	Δ.01✓	189.9	.1 ✓	2.43	<10	28.23	-.16'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 11:10

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
		Duplicate	
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:
Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

20 PSI	17/13	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: B/W-1D1
Static Water Level: 31.13

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 138'						958		0.37		7.31		98.6		1.31			
0931	PUMP ON / ADJUST FLOW																
0935	0	500	0	15.36	—	931	—	1.58	—	7.15	—	100.2	—	4.10	<10 NTU	31.18	-.05'
0940	5			15.29	.5 ✓	861	7.8	0.69		7.01	Δ .14	116.8	15.3				
0945	10		5.0	15.31	.1 ✓	855	.7 ✓	0.58	Δ .1 ✓	7.05	Δ .04 ✓	119.2	2.0 ✓	6.55	<10	31.18	-.05'
0950	15			15.13	1.1 ✓	855	0 ✓	0.60	Δ .01 ✓	7.07	Δ .02 ✓	120.8	1.3 ✓				
0955	20		10.0	15.17	.3 ✓	859	.5 ✓	0.59	Δ .01 ✓	7.12	Δ .05 ✓	120.2	.5 ✓	5.95	<10	31.27	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 0955

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:			
	Duplicate		
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

70 PSI	13/17	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: B/W-1D2
Static Water Level: 36.17'

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 155'/intake 225'						252		0.83		7.93		64.5		0.18			
1225	PUMP ON / ADJUST FLOW																
1230	0	500	0	14.81	—	291	—	1.20	—	7.36	—	180.5	—	10.62	—	36.54	
1235	5			14.75	.4 ✓	310	6.3 ✓	0.93	Δ.27	7.45	Δ.09 ✓	182.9	1.3 ✓	10.06	5.4 ✓		
1240	10		5.0	14.73	.1 ✓	310	0 ✓	0.84	Δ.09 ✓	7.48	Δ.03 ✓	181.5	.7 ✓	9.55	5.2 ✓	36.41	
1245	15			14.89	1.0 ✓	309	.3 ✓	0.83	Δ.01 ✓	7.48	Δ0 ✓	181.5	0 ✓	2.17	<10 NTU		
1250	20		10.0	14.79		310		0.83	0 ✓	7.54		178.8		1.40	<10 NTU	36.52	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 12:50

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID: B/W-1D2-FD

✓	Duplicate	
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

PSI 85	12/18	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: ~~11/10/08~~ 11/13/08

Well ID: B/W-1D3
Static Water Level: ~~32.77~~ 31.18

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 331'						404		3.20		7.72		55.3		0.17			
0926	START PUMP + ADJUST FLOW																
0935	Ø	430	Ø	14.85	—	422	—	3.38	—	7.32	—	87.2	—	4.51	—	31.63	0.45
0940	5	430		14.92		418	<1 ✓	3.11		7.52	Δ.2	91.5		3.99	<10NTU ✓	31.60	0.42
0945	10	430	4.3	14.95	<1 ✓	416	<1 ✓	3.02	Δ.09 ✓	7.41	Δ.11	95.5	Δ4 ✓	2.01	<10 ✓		
0950	15	430		14.98	<1 ✓	415	<1 ✓	2.96	Δ.06 ✓	7.27	Δ.14	97.2	Δ1.7 ✓	1.43	<10 ✓	31.43	0.25
0955	20	430	8.6	14.93	<1 ✓	415	<1 ✓	2.87	Δ.09 ✓	7.17	Δ.1 ✓	99.1	Δ1.9 ✓	0.55			
1000	25	430		14.94		415		2.88		7.07	Δ.1 ✓	101.7					
1005	30	430	12.9	15.02		416		2.84		7.02	Δ.05 ✓	103.4		1.05			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/13/08 10:05

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	180 psi	20/40
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump: DC gasoline ~~nitrogen~~ CO_2 gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: _____

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/12/08

Well ID: B/W-2I
Static Water Level: 26.74

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 82'						263		0.58		8.13		89.7		0.94			
1113	START Pump + ADJUST FLOW																
1120	Ø	500	Ø	14.69	—	240	—	1.07	—	7.32	—	148.3	—	0.92	—	21.25	0.51
1125	5	400	2.5	14.75	<1 ✓	237	<1 ✓	0.88	Ø	7.31	Δ.01 ✓	148.0		1.46		21.16	0.42
1130	10	400	~~5.0~~	14.79	<1 ✓	238	<1 ✓	0.88	Ø ✓	7.41	Δ.1 ✓	141.7	7 ✓	2.10		21.13	0.39
1135	15	300		14.86	<1 ✓	239	<1 ✓	0.85	Δ.03 ✓	7.44	Δ.03 ✓	137.9	4 ✓	4.27		21.15	0.41
1140	20	300	~~10.0~~	14.99		240		0.84	Δ.01 ✓	7.47		135.7	2 ✓	7.54		21.05	0.31
1145	25	300		15.01		240		0.81		7.48		133.7		7.40		21.05	
1150	30	300		15.21		239		0.80		7.49		132.0		9.83			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/12/08 11:50

Sampler: P Bassett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

45psi	17/13	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Too much drawdown at 500 ml/min, backed it off to 400 ml/min then 300 ml/min. Water became more cloudy with pumping

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-12-08

Well ID: B/W-2D
Static Water Level: 24.71

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						268		0.31		7.98		-42.10		0.26			
1235	0	500	0	14.52		273		0.90		6.42		151.9					
1240	5	500	2.5	14.46	<1	263	3	0.52	Δ0.38	6.36	0.06	158.9	5	2.12	<10 NTU	24.71	0
1245	10	500	5	14.38	<1 ✓	256	3 ✓	0.42	Δ0.10	6.44	0.08 ✓	158.2	<1 ✓				
1250	15	500	7.5	14.37	<1	257	<1	0.33	Δ0.09 ✓	6.54	0.10	150.4	5	0.46		24.71	0
1255	20	500	10	14.38		257		0.28	Δ0.05	6.79	0.25	138.1					
1300	25	500	12.5	14.36		257		0.28		6.84	0.05	133.1		0.24		24.71	0
1305	30	500	15	14.39		257		0.29		6.92	0.08	124.1					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-12-08 1305

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID:

	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N (NA)

Bladder pump:	DC	(gasoline) nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: B|W-3S
Static Water Level: 26.42

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1867		0.20		7.49		91.20		14.31			
0855	0	500	0	14.77		1843		0.89		7.41		284.7		5.02		26.69	0.27
0900	5	500	2.5	14.90	<1	1846	<1	0.55	Δ0.34	7.41	0	279.0	2				
0905	10	500	5	14.90	0 ✓	1846	0 ✓	0.45	Δ0.10	7.40	0.01 ✓	274.6	2 ✓	9.30		26.68	
0910	15	500	7.5	14.89	<1 ✓	1845	<1 ✓	0.36	Δ0.09 ✓	7.40	0	270.7	1				
0915	20	500	10	14.84		1846		0.32	Δ0.04 ✓	7.40		266.8		3.77		26.69	Δ.27
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 0915

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID:				
	Duplicate	X		
	MS/MSD			
	Level IV			
	Field Blank			
	EQ Rinsate Blank			

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: B/W-3I
Static Water Level: 27.24

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						290		0.15		8.31		-7.90		7.31			
1000	0	500	0	14.85		306		0.74		8.22		200.5		2.80	< 10 NTU	27.55	0.31
1005	5	500	2.5	14.83	<1	302	1	0.40	Δ0.34	8.22	0	197.9	1				
1010	10	500	5	14.84	<1	300	<1	0.30	Δ0.10	8.21	0.01	195.4	1	3.71		27.51	0.27
1015	15	500	7.5	14.83	<1	300	0	0.26	Δ0.04	8.20	0.01	187.6	4				
1020	20	500	10	14.83		299		0.24	Δ0.02	8.19		180.0		2.42		27.51	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-10-08 1020

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ YR

QC Sample ID:

	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: BW-3D
Static Water Level: 29.61

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						224		0.22		8.27		2.70		0.31			
1100	0	500	0	15.32		218		1.53		6.90		106.0		0.31	<10NTU	29.68	0.07
1105	5	500	2.5	15.14	1	218	0	0.58	Δ0.95	7.39	0.49	104.3	2				
1110	10	500	5	15.12	<1	218	0	0.32	Δ0.26	7.54	0.15	94.0	10	0.27		29.69	0.08
1115	15	500	7.5	15.09	<1	218	0	0.29	Δ0.03	7.69	0.15	86.5	8				
1120	20	500	10	15.11		218		0.28	Δ0.01	7.71	0.02	83.0		0.19		29.69	
1125	25	500	12.5	15.11		218		0.30	Δ0.02	7.79	0.08	79.9					
1130	30	500	15	15.11		218		0.31		7.83	0.04	77.3		0.62		29.69	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1130

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID:			
	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: B/W-4S
Static Water Level: 62.46

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1851		3.85		7.24		91.80		0.45			
1425	0	500	0	15.88		1992		3.07		7.04		143.3		1.29	<10 NTU	62.47	0.01
1430	5	500	2.5	15.81	<1	2011	<1	1.57		6.98	0.06	146.2	2				
1435	10	500	5	15.79	<1 ✓	2015	<1 ✓	1.47	Δ 0.10	7.01	0.03	143.8	2 ✓	6.13		62.47	
1440	15	500	7.5	15.78	<1	2024	<1	1.52	Δ0.05 ✓	7.03	0.02 ✓	142.8	<1				
1445	20	500	10	15.79		2034		1.62	Δ0.10	7.04		142.4		2.34		62.47	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1445

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID:		
		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated	Non-Dedicated	
X		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Pump deconned before use: Y N NA

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: BW-4I
Static Water Level: 62.19

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1676		0.25		7.25		107.00		0.25			
1225	0	500	0	15.85		1698		0.80		7.17		134.8		4.72	<10 NTU	62.28	0.09
1230	5	500	2.5	15.86	<1	1671	2	0.36	Δ0.44	7.19	0.02	137.2	2				
1235	10	500	5	15.81	<1 ✓	1655	<1 ✓	0.28	Δ0.08	7.20	0.01 ✓	138.3	<1 ✓	2.10		62.29	0.16
1240	15	500	7.5	15.83	<1	1638	1	0.25	Δ0.03 ✓	7.22	0.02	137.2	<1				
1245	20	500	10	15.79		1625		0.24	Δ0.01	7.21		138.8		1.04		62.29	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1245

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated	Non-Dedicated	Pump deconned before use: Y N NA
X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: B/W-4D
Static Water Level: 61.87

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						858		0.13		7.81		33.90		0.14			
1325	0	450	0	16.06		842		0.91		7.36		104.80		0.26	<10 NTU	61.92	0.05
1330	5	450	2.25	16.08	<1	828	2	0.36	Δ0.55	7.47	Δ0.11	103.9	<1				
1335	10	450	4.50	16.05	<1 ✓	826	<1 ✓	0.28	Δ0.08	7.55	Δ0.08	102.2	2 ✓	0.22		61.92	
1340	15	450	6.75	15.97	<1	826	0	0.21	Δ0.07 ✓	7.56	0.01 ✓	104.5	2				
1345	20	450	8	15.95		825		0.20	Δ0.01	7.57	0.01	104.7		0.16		61.92	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1345

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity	500 ml	N	NONE
		Sulfate, Nitrate/Nitrite			
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:				
		Duplicate	X	
		MS/MSD		
		Level IV		
		Field Blank		
		EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: B/W-58R
Static Water Level: 32.72

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:			Pump @ 45'			647		6.35		8.21		130.3		1.30			
1137			Pump	ON +	ADJUST	FLOW											
1145	0	400	0	15.45	—	639	—	6.49	—	8.15	—	167.2	—	6.40	<10 NTU	32.74	-0.02'
1150	5			15.41	.3 ✓	635	.6 ✓	6.36	2.0 ✓	8.04	Δ.11	172.3	3.0 ✓	5.34	<10		
1155	10		4.0	15.39	.1 ✓	633	.3 ✓	6.23	2.0 ✓	8.02	Δ.02 ✓	171.5	.5 ✓	1.87	<10	32.77	-.05'
1200	15			15.39	0 ✓	628	.8 ✓	6.33	1.6 ✓	8.04	Δ.02 ✓	170.9	.3 ✓				
1205	20	↓	8.0	15.32		627		6.22		8.04		169.8		1.75	<10	32.73	-.01'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 12:05

Sampler: P Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID:			
		Duplicate	
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:
Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

25 PSI	16/14	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: B/W-5IR
Static Water Level: 32.82

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 91'						846		6.29		8.06		131.1		4.95			
0948		Pump ON - ADJUST FLOW															
0955	0	500	0	15.34	—	837	—	5.55	—	7.99	—	80.7	—	2.20	<10 NTU	33.05	-.23'
1000	5			15.44	.6 ✓	838	.1 ✓	5.72	3.0 ✓	8.03	Δ.04 ✓	94.9	16.1				
1005	10		5.0	15.33	.7 ✓	835	.3 ✓	5.74	.3 ✓	8.01	Δ.02 ✓	106.2	11.2	2.40	<10 NTU	32.89	-.07'
1010	15			15.33	0 ✓	833	.2 ✓	5.78	.7 ✓	7.99	Δ.02 ✓	112.2	5.4 ✓				
1015	20		10.0	15.38	.2 ✓	832	.1 ✓	5.74	.7 ✓	7.99	Δ0 ✓	116.2	3.5 ✓				
1020	25		12.5	15.40	.1 ✓	832	0 ✓	5.76	.3 ✓	8.01	Δ.02 ✓	119.8	3.0 ✓	2.23	<10 NTU	33.03	-.21'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 10:20

Sampler: P Barnett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID: B/W-5IR-FD

X	Duplicate	
	~~MS/MSD~~	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

50 PSI	16/14	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: B/W-5DR
Static Water Level: 53.19

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:				Sample 1251		1018		6.85		7.52		126.1		2.47			
0823		Pump ON + ADJUST FLOW															
0835	0	500	0	15.21	—	998	—	6.22	—	7.79	—	126.1	—	11.66		33.27	
0840	5			15.37	1.0 ✓	990	.8 ✓	6.39	2.7 ✓	7.85	Δ.06 ✓	131.7	4.3 ✓	7.08	<10 NTU		
0845	10		5.0	15.43	.4 ✓	1001	1.1 ✓	6.40	.2 ✓	7.82	Δ.03 ✓	136.7	3.7 ✓	5.16	<10 NTU	33.25	
0850	15			15.46	.2 ✓	1010	.9 ✓	6.41	.2 ✓	7.80	Δ.02 ✓	139.9	2.3 ✓				
0855	20	↓	10.0	15.45	.1 ✓	1013	.3 ✓	6.44	.5 ✓	7.81	Δ.01 ✓	142.2	1.6 ✓	5.04	<10	33.30	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 08:55

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity	500 ml	N	NONE
		Sulfate, Nitrate/Nitrite			
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

75 PSI	15/15	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: BW-6S
Static Water Level: 106.34

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						761		7.52		8.06		744.6		1.39			
1425	0	500	0	16.47		757		6.94		8.02		264.6		1.82	<10 NTU	106.34	
1430	5	500	2.5	16.58	<1	749	1	6.54	6	8.12	0.10	251.4	5				
1435	10	500	5	16.57	<1 ✓	750	<1 ✓	6.70	2 ✓	8.10	0.02	244.7	3 ✓	1.50		106.34	
1440	15	500	7.5	16.60	<1 ✓	752	<1 ✓	6.77	1 ✓	8.10	0 ✓	238.8	2 ✓				
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 1440

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N (NA)

Bladder pump:	DC	(gasoline) nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: B/W-6I
Static Water Level: 105.43

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						6216		6.16		7.99		67.70		0.19			
1535	0	500	0	16.59		622		7.56		7.97		203.8				105.43	
1540	5	500	2.5	16.75	<1	620	<1	6.75	11	8.15	Δ0.18	196.7	4	0.38	~~0.38~~		
1545	10	500	5	16.69	<1 ✓	619	<1 ✓	6.51	4	8.08	0.07	195.8	<1 ✓			105.43	
1550	15	500	7.5	16.74	<1 ✓	619	0 ✓	6.54	<1 ✓	8.08	0 ✓	195.1	<1 ✓	0.24			
1555	20	500	10	16.74		619		6.50	<1	8.11	0.03 ✓	194.2	•			105.43	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/4/08 1555

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID:

	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N (N/A)

Bladder pump: DC (gasoline) nitrogen gas	
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: BW-9I
Static Water Level: 154.25

pump @ 184' bgs

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						642		5.82		7.62		196.60		0.92			
0935	0	400	0	16.87		648		6.60		6.78		160.0		1.30	<10 NTU	154.50	0.25
0940	5	400	2	17.07	1	642	<1	6.28	5	7.55	0.77	140.7	13				
0945	10	400	4	17.11	<1 ✓	641	<1 ✓	6.31	<1 ✓	7.69	0.14	138.9	1	0.49		154.48	0.23
0950	15	400	6	17.08	<1	641	0	6.19	2	7.79	0.10	138.2	<1 ✓				
0955	20	400	8	17.13		642		6.17		7.83	0.04 ✓	138.9	<1	0.36		154.48	
1000	25	400	10	17.17		642		6.33		7.84	0.01	139.1					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1000

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
		Duplicate	X
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:	Dedicated	Non-Dedicated
Bladder pump: DC gasoline nitrogen gas	X	
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Pump deconned before use: Y N NA

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/5/08

Well ID: B/W-8S
Static Water Level: 147.75

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 157				1207		4.97		7.75		293.7		165?			
1459	START PUMP + ADJUST FLOW																
1505	0	500	0	17.27	—	1144	—	6.31	—	7.56	—	171.4	—	17.43	—	147.93	-.18'
1510	5			17.31	<1 ✓	1125	1.6 ✓	5.23	19	7.33	Δ.23	181.5	5.7 ✓	19.40			
1515	10		5.0	17.30	<1 ✓	1123	<1 ✓	4.98	4.9 ✓	7.39	Δ.06✓	179.9	<1 ✓	11.29		147.88	-.13'
1520	15			17.28	<1 ✓	1122	<1 ✓	5.03	1.0 ✓	7.43	Δ.04✓	177.7	<1 ✓	7.36	<10NTU		
1525	20		10.0	17.21	<1 ✓	1124	<1 ✓	5.01	<1 ✓	7.47	Δ.04✓	175.8	<1 ✓	5.83	<10	147.78	-.03'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/5/08 15:25

Sampler: Penny Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	80 PSI	11/19
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump: DC / gasoline / nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: Penny Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/5/08

Well ID: B/W-8I
Static Water Level: 147.38

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 191'						1179		5.06		7.72		219.6		0.60			
1332	START PUMP + ADJUST FLOW																
1340	Ø	300	Ø	17.79	—	1100	—	5.27	—	6.77	—	204.7	—	0.94	<10 NTU	147.38	Ø
1345	5			17.78	<1 ✓	1106	<1 ✓	4.89	7.5 ✓	7.11	Δ.34	204.5	<1 ✓	1.93	<10		
1350	10		3.0	17.66	<1 ✓	1111	<1 ✓	4.70	3.9 ✓	7.39	Δ.28	200.6	1.9 ✓	3.83	<10	147.38	Ø
1355	15			17.38	1.6 ✓	1110	<1 ✓	4.59	2.3 ✓	7.38	Δ.01 ✓	202.3	<1 ✓	4.29	<10		
1400	20		6.0	17.35	<1 ✓	1105	<1 ✓	4.61	<1 ✓	7.38	ΔØ ✓	202.7	<1 ✓	1.96	<10		
1405	25		7.5	17.44	<1 ✓	1103	<1 ✓	4.53	<1 ✓	7.41	Δ.03 ✓	200.4	<1 ✓	1.60	<10	147.38	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/5/08 14:05

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate		
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

100 PSI	20/40	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/11/08

Well ID: B/W-9S
Static Water Level: not measured before started pumping

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 32'				1961		5.41		7.35		66.7		1.47			
1257	START PUMP + ADJUST FLOW															18.50	
1305	Ø	500	Ø	14.19	—	2232	—	5.50	—	7.16	—	142.4	—	2.30	—	18.49	
1310	5			14.17	<1 ✓	2237	<1 ✓	5.47	1 ✓	7.18	Δ .02 ✓	143.1	✓	2.31	<10 NTU		
1315	10		5.0	14.18	<1 ✓	2240	<1 ✓	5.43	<1 ✓	7.18	Δ Ø ✓	144.5	✓	0.79		18.58	
1320	15			14.20	✓	2238	✓	5.38	✓	7.19	✓	145.5	✓	0.86			
1325	20		10.0	14.18		2240		5.40		7.19		146.7		0.59			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/11/08 13:25

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

15psi	15/15	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

%RPD = 200 X (Read 1 - Read 2) / (Read 1 + Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/11/08

Well ID: B/W-9I
Static Water Level: 20.14

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 83'						596		0.20		7.83		69.1		2.55			
1143	START PUMP + ADJUST FLOW																
1150	Ø	500	Ø	13.82	—	561	—	1.27	—	7.57	—	100.1	—	9.31	—	20.29	-.15'
1155	5			13.81	<1 ✓	561	<1 ✓	0.94		7.61	Δ.04 ✓	106.0	6 ✓	6.69			
1200	10		5.0	13.93	<1 ✓	561	<1 ✓	0.84	Δ.1 ✓	7.60	Δ.01 ✓	109.1	4 ✓	7.79		20.24	-.1'
1205	15			13.86	<1 ✓	562	<1 ✓	0.74	Δ.1 ✓	7.64	Δ.04 ✓	110.1	<1 ✓	6.05			
1210	20		10.0	13.85		562		0.67	Δ.07 ✓	7.62		1125	2 ✓	5.11			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/11/08 12:10

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/11/08

Well ID: B/W -9D
Static Water Level: 26.94

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:			Pump @ 155			228		0.31		7.91		30.0		0.82			
0951	START PUMP + ADJUST FLOW																
0955	Ø	480	Ø	13.47	—	218	—	2.75	—	7.54	—	109.9	—	1.04	—	27.00	-.06'
1000	5			13.75		214	<1 ✓	1.21		7.86		107.5	<10 ✓	1.06	<10 NTU		
1005	10		4.8	13.81	<1 ✓	214	<1 ✓	0.95		7.85	Δ.01 ✓	111.9	<10 ✓	0.43	<10	26.98	-.04'
1010	15			13.86	<1 ✓	214	<1 ✓	0.83	Δ.12	7.82	Δ.03 ✓	114.8	<10 ✓	0.19	<10		
1015	20		9.6	13.86	<1 ✓	214		0.73	Δ.1 ✓	7.83	Δ.01 ✓	115.3		0.03			
1020	25			13.93		214		0.72	Δ.01 ✓	7.83		116.4		0.03		27.17	0.23
1025	30		13.4	13.94		214		0.68	Δ.04 ✓	7.84		117.4		0.02			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/11/08 11:25

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID: B/W-9D-FD

	Duplicate		
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/10/08

Well ID: B/W-105
Static Water Level: 28.44

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 39'				360		4.03		7.19		272.1		2.06			
1229	START + ADJUST FLOW																
1235	Ø	500	Ø	14.49	—	373	—	4.78	—	6.90	—	184.4	—	1.49	—	28.44	Ø
1240	5			14.44	<1 ✓	372	<1 ✓	4.59	4	6.83	Δ.07✓	182.9	<1	1.95	<10NTU		
1245	10		5.0	14.48	<1 ✓	372	<1 ✓	4.50	2 ✓	6.85	Δ.02✓	180.1	2 ✓	3.09	<10	28.54	
1250	15			14.55	<1 ✓	372	<1 ✓	4.41	2	6.87	Δ.02✓	179.2	<1	3.09			
1255	20		10.0	14.56		372		4.35		6.89		177.1		2.33			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/10/08 12:55

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

20 psi	21/9	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/10/08

Well ID: B/W-10D
Static Water Level: 28.54

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		pump @ 110'				416		0.40		7.93		195.1		1.04			
1339	START + ADJUST FLOW																
1345	Ø	500	Ø	15.22	—	346	—	2.17	—	7.63	—	182.4	—	5.21	—	28.54	Ø
1350	5			15.03		335		1.24		7.30		194.4		5.03			
1355	10		5.0	14.99	<1 ✓	333	<1 ✓	1.04		7.34	Δ.04 ✓	188.4	Δ6 ✓	11.09		28.55	
1400	15			14.92	<1 ✓	333	<1 ✓	0.98	Δ.06 ✓	7.36	Δ.02 ✓	185.6	Δ28 ✓	12.85			
1405	20		10.0	14.92	0 ✓	334	<1 ✓	0.93	Δ.05 ✓	7.38	Δ.02 ✓	184.0	Δ1.6 ✓	11.60		28.57	
1410	25	↓		14.92	✓	333	✓	0.89	Δ.04 ✓	7.38	✓	183.3		9.98			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/10/08 14:10

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		~~Duplicate~~
		~~MS/MSD~~
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

60 psi	8/22	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/2/08

Well ID: B/W-11S
Static Water Level: 43.44

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:			52.4' depth of pump			5133		0.59		3.91		266.5		49.84			
1235		START	PUMP + ADJUST FLOW														
1240	0	400	0	15.61	—	5059	—	3.50	—	3.40	—	383.3	—	76.33	—	43.55	
1245	5			15.59	.13 ✓	5053	.02 ✓	1.66	71.3 %	3.58	Δ.02 ✓	338.4	%2.4	45.43	%50		
1250	10		4.0	15.54	.32 ✓	5055	.06 ✓	1.37	19.1 %	3.61	Δ.03 ✓	326.3	%3.6 ✓	40.42	%11.6	43.53	
1255	15			15.53	.26 ✓	5054	.02 ✓	1.30	Δ.07 ✓	3.62	Δ.01 ✓	324.9	%.4 ✓	32.01	%23		
1300	20		8.0	15.56	.13 ✓	5056	.04 ✓	1.37	Δ.07 ✓	3.65	Δ.03 ✓	323.4	.46 ✓	27.03	%16		
1308	28			15.55	.06 ✓	5062	.06 ✓	1.42	Δ.05 ✓	3.67	Δ.02 ✓	319.6	1.1 ✓	37.94	%33		
1315	35		12.0	15.50		5081		1.49		3.70		315.0		40.98	8		
1320	40			15.54		5107		1.58		3.72		312.5		31.53	25		
1325	45		16.0	15.55		5125		1.64		3.73		309.4		28.04	13		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/2/08 1325

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

X		Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: stabilization not reached for turbidity

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/2/08

Well ID: B/W-11D
Static Water Level: 43.27

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC (**)		DO (*)		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 180' bgs				8052		0.57		6.05		31.0		5.88			
1540		Pump ON + ADJUST FLOW															
1555	Ø	300	Ø	15.54	—	7725	—	1.82	—	6.05	—	27.7	—	1.24	<10 NTU	43.45	-.18'
1600	5	↓		15.52	0.5 ✓	8082	4.5	1.97	Δ.15	6.03	Δ.02 ✓	4.5	Δ23				
1605	10		3.0	15.48	0.3 ✓	8202	1.5 ✓	2.24	Δ.27	6.02	Δ.01 ✓	-12.2	Δ16	1.07	<10 NTU	43.32	-.05'
1610	15			15.42	.4 ✓	8355	1.8 ✓	2.42	Δ.18	6.02	Δ Ø ✓	-23.6	Δ11				
1615	20		6.0	15.37	.3 ✓	8371	.2 ✓	2.58	Δ.16	6.01	Δ.01 ✓	-34.5	Δ10.9 ✓				
1620	25			15.29	.5 ✓	8366	.05 ✓	2.74	Δ.14	5.99	Δ.02 ✓	-39.9	Δ5.4 ✓	0.60	<10 NTU		
1625	30	↓	9.0	15.23		8350		2.84	Δ.10 ✓	5.99	Δ Ø	-48.2	Δ1.7 ✓			43.40	-.13'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/2/08 16:25

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate	
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

90 PSI	8/22	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Bubbles are created as water enters sample discharge tube (above cap) but not evident in 1/4" poly discharge line (below cap). it appears they are degassing bubbles as water enters larger tube
(*) A lot of bubbles in flowcell, DO may not be accurate

Field Review:

QAQC Review: T Richards

(**) SC readings bouncing alot thru refill/discharge cycle

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

P Barrett

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/2/08

Well ID: B/W-11B
Static Water Level: 42.58

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 70' bgs						1022		0.32		7.00		-144.2		2.89			
1417		START PUMP + ADJUST FLOW															
1420	0	100	0	15.63	—	930	—	5.45	—	6.79	—	-25.0	—	5.02	—	46.09	-3.51'
1425	5			15.49	.9 ✓	891	4.3	1.98		6.94	Δ.15	-110.5				46.90	-4.32'
1430	10		1.0	15.56	.5 ✓	895	.4 ✓	1.33	Δ.65	6.95	Δ.01 ✓	-139.2	Δ28.7	4.60	<10NTU	47.98	-5.40'
1435	15			15.62	.4 ✓	903	.9 ✓	1.08	Δ.25	6.97	Δ.02 ✓	-144.1	Δ4.9 ✓	3.04	<10NTU	49.10	-6.52'
1440	20		2.0	15.59	.2 ✓	910	.8 ✓	1.02	Δ.06 ✓	6.97	Δ0 ✓	-140.1	Δ4.0 ✓			49.70	-7.12'
1445	25			15.56	.2 ✓	914	.4 ✓	0.97	Δ.05 ✓	6.97	Δ0 ✓	-139.8	Δ.03 ✓			50.63	
1450	30		3.0	15.54	.1 ✓	916	.2 ✓	0.96	Δ.01 ✓	6.97	Δ0 ✓	-139.0	Δ.08 ✓	3.27	<10NTU	51.33	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/2/08 14:50

Sampler: P Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information: Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

35psi	22/8	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

%RPD = 200 X $\frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/6/08

Well ID: BIW-13S
Static Water Level: 133.32

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1405	–	500	–	17.54		874		7.12		6.91		253.7		7.17	<10 ✓	133.32	
1410	5	500	2.5	17.24	1.72 ✓	853	2.43 ✓	6.48	9.41 ✓	7.50	0.59	258.0	1.65 ✓	3.34	<10 ✓		
1415	10	500	5.00	17.30	<1 ✓	843	1.17 ✓	6.32	2.5 ✓	7.58	0.08 ✓	256.0	– ✓	2.19	<10 ✓	133.33	0.01
1420	15	500	7.5	17.21	<1 ✓	841	0.23 ✓	6.30	0.32 ✓	7.60	0.02 ✓	256.9	0.42 ✓	1.47	<10 ✓	–	
1425	20	500	10	17.22	<1 ✓	841	– ✓	6.27	0.47 ✓	7.63	0.03 ✓	255.8	1.21 ✓	1.77	<10	133.33	0.01
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-6-08 1425

Sampler: Roxanne Barrin

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated (circled) Non-Dedicated — Pump deconned before use: Y N NA (circled)

			Bladder pump: DC gasoline (circled) nitrogen gas
			Geosquirt
			Production Pump
			Redi-Flo
			Other:

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: B/W-14S
Static Water Level: 16.33

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						553		0.14		7.36		-8.30		0.14			
1210	0	500	0	14.20		559		1.16		7.05		28.4					
1215	5	500	2.5	14.20	0	560	<1	0.83	Δ0.33	7.05	0	28.6	Δ0.02	0.12	<10NTU	16.35	0.02
1220	10	500	5	14.18	<1 ✓	561	<1 ✓	0.47	Δ0.36	7.12	0.07 ✓	22.6	Δ 6 ✓				
1225	15	500	7.5	14.18	0	560	4	0.38	Δ0.09	7.18	0.06	17.0	Δ5.6	0.07		16.35	
1230	20	500	10	14.21		560		0.30	Δ0.08	7.21		13.0					
1235	25	500	12.5	14.28		560		0.25	Δ0.05 ✓	7.24		10.2		0.06		16.35	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 1235

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TR

QC Sample ID: B/W-14S

		Duplicate
	X	MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated	Non-Dedicated	
X		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Pump deconned before use: Y N NA

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: BIW-155
Static Water Level: 12.56

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						501		0.17		7.22		111.46		0.21			
1010	0	500	0	13.55		441		0.80		7.02		30.9		1.24	<10NTU	12.56	
1015	5	500	2.5	13.58	<1	437	<1	0.43	Δ0.37	7.14	0.12	33.3	Δ2.4				
1020	10	500	5	13.57	<1 ✓	437	0 ✓	0.35	Δ0.08	7.18	0.04	36.6	Δ3.3 ✓	0.64		12.56	
1025	15	500	7.5	13.54	<1	437	0	0.27	Δ0.07 ✓	7.21	0.03 ✓	39.5	Δ3.1				
1030	20	500	10	13.51		437		0.24	Δ0.03	7.21	0	40.3		0.38		12.57	0.01
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 1030

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:				
		Duplicate	X	
		MS/MSD		
		Level IV		
		Field Blank		
		EQ Rinsate Blank		

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: B/W-16S
Static Water Level: 193.33

pump @ 207.5

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						6669		6.29		7.78		187.40		1.80			
1100	0	500	0	17.49		6666		6.66		7.01		214.0		2.51	< 10 NTU	193.33	
1105	5	500	2.5	17.49	0	6664	<1	6.68	<1	7.97	0.96	186.1	14				
1110	10	500	5	17.49	0	6665	<1	6.61	1	7.99	0.02	182.6	2	1.94			
1115	15	500	7.5	17.50	<1	6665	0	6.83	3	7.99	0	180.6	1				
1120	20	500	10	17.50		6666		6.76		8.01	0.02	178.5	1	0.93			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-11-08 11:20

Sampler: TMK

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:				
		Duplicate	X	
		MS/MSD		
		Level IV		
		Field Blank		
		EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC	gasoline	nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-6-05

Well ID: B/W-18S
Static Water Level: 23.91

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
0845	—	500	—	14.16		3825		0.25	Δ 0.08	7.49		232.6		71.74		24.01	0.10
0850	5	500	2.5	14.19	<1	3838	<1	0.24	Δ 0.01	7.51	Δ 0.02	240.6	3.35	50.16	35.48		
0855	10	500	5	14.22	<1	3827	<1	0.32	Δ 0.08	7.48	Δ 0.03	245.5	2.01	27.60	58.02	24.14	0.23
0900	15	500	7.5	14.29	<1	3822	<1	0.23	Δ 0.09	7.54	Δ 0.06	246.0	0.20	17.67	43.87	—	
0905	20	500	10	14.26	<1	3768	1.42	0.24	Δ 0.01	7.52	0.02	244.8	0.48	16.15	8.99	24.17	0.26
0910	25	500	12.5	14.31	<1	3745	0.61	0.24	—	7.47	0.05	243.3	0.61	12.92	22.22	—	
0915	30	500	15	14.34	<1	3739	0.16	0.27	Δ 0.03	7.53	0.06	242.5	0.32	13.29	2.82	24.11	0.20
0920	35	500	17.5	14.31	<1	3737	0.05	0.28	Δ 0.01	7.45	0.08	241.2	0.53	12.17	8.79	—	
0925	40	500	20	14.34	<1	3734	0.08	0.30	Δ 0.02	7.49	0.04	239.7	0.62	12.07	0.65	24.11	0.20
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-6-05 0925

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate		
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

Bladder pump: DC gasoline (circled) nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-6-08

Well ID: B/W-15D1
Static Water Level: 25.02

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1124	–	500	–	14.96		777		3.10		7.26		111.0		10.71		25.02	
1134	5	500	2.5	14.87	<1 ✓	706	9.57	0.32	162.57	8.03	0.77	112.3	1.16 ✓	17.24	46.56	25.03	0.01
1139	10	500	5	15.20	2.19	711	0.70 ✓	0.31	Δ 0.01 ✓	8.42	0.39	103.6	8.05 ✓	10.83	46.67	–	
1144	15	500	7.5	15.21	<1 ✓	714	0.42 ✓	0.29	Δ 0.02 ✓	8.23	0.19	106.1	2.36 ✓	6.91	44.19	25.05	0.03
1149	20	500	10	15.23	<1 ✓	720	0.83 ✓	0.29	– ✓	8.25	0.02 ✓	105.6	0.47 ✓	6.31	9.07 ✓	–	
1154	25	500	12.5	15.27	<1 ✓	721	0.13 ✓	0.31	Δ 0.02 ✓	8.28	0.03 ✓	105.1	0.47 ✓	4.06	43.39	25.12	0.10
1159	30	500	15	15.33	<1 ✓	720	0.13 ✓	0.32	Δ 0.01 ✓	8.19	0.09	106.4	1.22 ✓	2.66	41.66	–	
1204	35	500	17.5	15.36	<1 ✓	718	0.27 ✓	0.36	Δ 0.04 ✓	8.24	0.05	104.7	1.61 ✓	2.76	3.69 ✓	25.03	0.01
1209	40	500	20	15.39	<1 ✓	717	0.13 ✓	0.37	Δ 0.01 ✓	8.25	0.01 ✓	103.8	0.86 ✓	2.73	1.09 ✓	–	
1219	45	500	22.5	15.43	<1 ✓	717	– ✓	0.39	Δ 0.02 ✓	8.20	0.05 ✓	104.2	5.23 ✓	3.0	9.4 ✓	25.05	0.03
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-6-08 1219

Sampler: Royanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	✓	Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information: (Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

Bladder pump: DC (gasoline) nitrogen gas		
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-6-08

Well ID: BMW-18-D2
Static Water Level: 25.38

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1007	–	500	–	14.71		573		2.74		7.31		76.8		8009		25.38	–
1012	5	500	2.5	14.70	<1 ✓	459	22.09	0.43	0.43	7.87	0.56	88.2	13.81	15.80	134.09	25.88	0.50
1017	10	500	5.0	14.77	<1 ✓	445	3.09	0.31	0.12	8.15	0.27	91.1	3.23 ✓	14.52	8.44 ✓	–	
1022	15	500	7.5	14.82	<1 ✓	440	1.12 ✓	0.26	0.05 ✓	8.26	0.09	79.4	13.72	25.17	53.66	25.53	0.14
1027	20	500	10.0	14.91	<1 ✓	454	3.54	0.26	0.00 ✓	8.46	0.20	81.0	1.99 ✓	50.54	67.01	–	2
1032	25	500	12.5	14.91	– ✓	461	1.53 ✓	0.25	Δ0.01 ✓	8.41	0.05 ✓	86.8	6.91 ✓	57.00	0.90 ✓	25.60	0.22
1037	30	500	15.0	14.98	– ✓	463	0.43 ✓	0.27	Δ0.02	8.44	0.03 ✓	86.7	0.11 ✓	53.36	4.52 ✓	–	
1042	35	500	17.5	14.98	– ✓	466	0.65 ✓	0.28	Δ0.01 ✓	8.44	– ✓	87.0	0.34 ✓	54.50	1.19 ✓	25.83	0.45
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-6-08 1042

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:
Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump:	DC / gasoline / nitrogen gas
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/5/08

Well ID: B/W-19S
Static Water Level: 101.99

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 107'						1195		8.60		7.73		102.9		8.19			
1136	START PUMP + ADJUST																
1140	0	~~500~~ 460	0	16.82	—	1071	—	7.15	—	7.66	—	182.2	—	7.21	—	101.99	0
1145	5			16.78	<1 ✓	1064	<1 ✓	7.01	1.9 ✓	7.42	Δ.24	186.7	2.4 ✓	5.75	<10 NTU		
1150	10		4.6	16.86	<1 ✓	1068	<1 ✓	7.00	<1 ✓	7.44	Δ.02 ✓	184.2	1.3 ✓	5.93	<10	102.01	
1155	15			16.93	<1 ✓	1069	<1 ✓	6.84	2.3 ✓	7.47	Δ.03 ✓	182.1	1.1 ✓	4.12	<10		
1200	20		9.2	16.91	<1 ✓	1071	<1 ✓	6.89	<1 ✓	7.49	Δ.02 ✓	180.8	.7 ✓	3.19	<10	102.11	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/5/08 12:00

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	~~Duplicate~~	55PSI 14/16
	~~MS/MSD~~	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas		
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/5/08

Well ID: B/W-19I
Static Water Level: 101.97

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 153				1014		7.29		7.83		100.6		0.48			
1019	PUMP ON + ADJUST FLOW																
1025	0	500	0	16.72	—	957	—	6.65	—	7.56	—	141.1	—	3.95	—	101.98	
1030	5			16.78	<1 ✓	962	<1 ✓	6.71	<1 ✓	7.55	Δ.01 ✓	145.0	2.7 ✓				
1035	10		5.0	16.75	<1 ✓	964	<1 ✓	6.75	<1 ✓	7.57	Δ.02 ✓	144.3	.5 ✓	2.77	<10 NTU	102.15	
1040	15			16.78	<1 ✓	967	<1 ✓	6.78	<1 ✓	7.61	Δ.04 ✓	143.6	.5 ✓				
1045	20		10.0	16.82	<1 ✓	968	<1 ✓	6.74	<1 ✓	7.61	Δ 0 ✓	143.9	<1 ✓	2.77	<10 NTU	101.99	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/5/08

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated Pump deconned before use: Y N (NA)

		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/5/08

Well ID: B/W-19D
Static Water Level: 101.68

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 128'						1031		5.34		7.53		52.6		1.33			
0850	START PUMP + ADJUST FLOW																
0855	0	500	0	16.75	—	836	—	3.95	—	7.70	—	104.6	—	2.09	<10 NTU	101.68	
0900	5			16.75	<1 ✓	960	13	4.58	14	7.90	Δ.02 ✓	109.2	4 ✓				
0905	10		5.0	16.80	<1 ✓	960	<1 ✓	4.56	<1 ✓	7.88	Δ.02 ✓	115.1	5.2 ✓	0.78	<10	101.68	
0910	15			16.81	<1 ✓	961	<1 ✓	4.52	<1 ✓	7.92	Δ.04 ✓	117.5	2.0 ✓				
0915	20		10.0	16.76	<1 ✓	959	<1 ✓	4.48	<1 ✓	7.90	Δ.02 ✓	120.7	2.6 ✓	0.60	<10	101.68	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/5/08 0915

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
	Duplicate		
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

70PSI	14/16	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: BMW-205
Static Water Level: 37.00

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1310	-	500	—	14.49		391		4.67		7.60		88.1		9.38	<10 ✓	37.00	
1315	5	500	2.5	14.39	<1 ✓	389	2.63 ✓	1.21	<117.68	7.64	0.06 ✓	88.6	Δ0.50 ✓	1.70	<10 ✓		
1320	10	500	5.0	14.44	<1 ✓	387	0.51 ✓	1.01	20.20	7.64	— ✓	88.9	Δ0.34 ✓	2.02	<10 ✓	37.20	0.20
1325	15	500	7.5	14.44	— ✓	388	0.25 ✓	0.80	Δ0.21 ✓	7.64	— ✓	88.5	Δ0.40	—			
1330	20	500	10.0	14.45	<1 ✓	388	— ✓	0.68	Δ0.12 ✓	7.67	0.03 ✓	88.4	Δ0.10	4.04	✓	37.20	0.20
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1330

Sampler: Roxanne Barnes

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N (NA)

		Bladder pump: (DC) gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other: 40 PSI

Comments: full stabilization was not reached for D.O.

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/9/08

Well ID: B/W-21S
Static Water Level: 56.44

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump@ 77'				475		2.34		7.10		12.7		1.00			
1459	START PUMP + ADJUST FLOW																
1505	Ø	500	Ø	14.28	—	505	—	3.12	—	7.02	—	138.5	—	0.32	—	56.45	-.01'
1510	5			14.29	<1 ✓	504	<1 ✓	2.63	Δ.49	7.00	Δ.02 ✓	137.6	<1 ✓	0.15	<10 NTU		
1515	10		5.0	14.25	<1 ✓	504	<1 ✓	2.49	5.4 ✓	6.97	Δ.03 ✓	139.6	1.4 ✓	0.09	<10	56.45	-.01'
1520	15			14.29	<1 ✓	504	<1 ✓	2.41	3.2 ✓	6.96	Δ.01 ✓	140.9	.9 ✓				
1525	20	↓	10.0	14.29	<1 ✓	503	<1 ✓	2.32	3.8 ✓	6.96	Δ0 ✓	141.6	.5 ✓	0.01	<10	56.46	-.02'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/9/08 15:25

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

40 psi	15/15	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: BW-225
Static Water Level: 157.73

pump depth 190.3

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1781		4.45		7.30		290.40		1.52			
0820	0	500	0	16.67		1709		5.41		7.05		145.20		19.94		157.82	0.09
0825	5	500	2.5	16.76	<1	1704	<1	5.41	0	7.39	Δ0.34	139.4	4	9.67	<10 NTU		
0830	10	500	5	16.78	<1 ✓	1706	<1 ✓	5.38	<1 ✓	7.39	0	143.3	3 ✓	6.37		157.78	0.05
0835	15	500	7.5	16.77	<1	1710	<1	5.36	<1	7.38	0.01 ✓	146.0	2				
0840	20	500	10	16.75		1711		5.32		7.38	0 ✓	148.0		3.37		157.78	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 0840

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated	Non-Dedicated	Pump deconned before use: Y N NA
X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/12/08

Well ID: B/W-23B
Static Water Level: Not measured

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:			Pump @ 311			714		1.81		6.32		27.0		0.62			
1355	START PUMP + ADJUST																
1405	Ø	400	Ø	16.89	—	662	—	1.41	—	5.52	—	152.2	—	3.35	—	228.93	
1410	5	400		17.13		678		1.03		5.58		97.7				228.95	
1415	10	400	4.0	17.12	<1 ✓	682		0.95		5.64		94.6	Δ3 ✓	2.33	<10 NTU	228.93	
1420	15	400		17.14	<1 ✓	678		0.98		5.70		93.7	Δ1 ✓				
1425	20	400	8.0	17.10	<1 ✓	674	<1 ✓	1.21		5.75	Δ.05 ✓	93.3	Δ.4 ✓	1.78	<10	228.95	
1430	25	400		17.11		673	<1 ✓	1.38		5.80	Δ.05 ✓	91.1	Δ2 ✓				
1435	30	400	12.0	17.09		676	<1 ✓	1.62		5.87	Δ.07 ✓	86.2		0.66	<10	228.95	
1440	35	400		17.09		680		1.70	Δ.08 ✓	5.88		84.1					
1445	40	400	16.0	17.10		683		1.79	Δ.09 ✓	5.93		80.9		0.94	<10		
1450	45	400	18.0	17.11		684		1.91	~~Δ1.8~~ Δ0.12	5.93		79.4					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/12/08 14:50

Sampler: P Barnett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

150 psi	4/2/18	Bladder pump: DC gasoline ~~nitrogen~~ gas CO_2
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: did not reach full stabelization for D.O.

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/6/08

Well ID: B/W-25S
Static Water Level: 20.43

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 41'						1404		0.70		7.42		129.5		0.76			
1028	START PUMP + ADJUST FLOW																
1035	0	500	0	14.86	—	1797	—	1.27	—	7.01	—	66.8	—	3.65	<10NTU	20.47	-.04'
1040	5			14.70	1.1 ✓	1799	<1 ✓	0.97	Δ.2	6.93	Δ.08 ✓	69.8	Δ3 ✓	3.40			
1045	10		5.0	14.71	<1 ✓	1798	<1 ✓	0.88	Δ.09 ✓	7.00	Δ.07 ✓	69.8	Δ0 ✓	2.36		20.44	-.01'
1050	15			14.75	<1 ✓	1800	<1 ✓	0.79	Δ.09 ✓	7.03	Δ.03 ✓	68.7	Δ1.1 ✓				
1055	20		10.0	14.91		1798		0.76	Δ0.03	7.11		69.2		1.33			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/6/08 10:55

Sampler: P Bassett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

20851	19/11	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/6/08

Well ID: B/W-25I
Static Water Level: 24.31

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 115'						1140		0.38		7.41		145.1		1.09			
1203	START PUMP + ADJUST FLOW																
1210	0	500	0	15.14	—	1136	—	1.07	—	6.91	—	130.1	—	1.32	<10NTU	24.33	-0.02'
1215	5			15.22	<1 ✓	1133	<1 ✓	0.81		6.90	Δ.01 ✓	129.8	.2 ✓				
1220	10		5.0	15.18	<1 ✓	1132	<1 ✓	0.73	Δ.08 ✓	6.96	Δ.06 ✓	125.9	3 ✓	0.23	<10 NTU	24.34	-.03'
1225	15			15.16	<1 ✓	1130	<1 ✓	0.66	Δ.07 ✓	7.02	Δ.06 ✓	122.2	3 ✓				
1230	20		10.0	15.17	<1 ✓	1131	<1 ✓	0.63	Δ.03 ✓	7.04	Δ.02 ✓	121.2	.8 ✓	0.39	<10NTU	24.39	-.08'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/6/08 12:30

Sampler: P Bassett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
X	Duplicate	60PSI	16/14
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

Bladder pump: DC gasoline (circled) nitrogen gas	
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/6/08

Well ID: B/W-25D
Static Water Level: 29.45

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 152'				232		0.18		8.16		45.2		0.70			
0850	START PUMP + ADJUST FLOW																
0855	0	500	0	14.30	—	283	—	2.17	—	7.79	—	-155.7	—	10.26	—	30.61	-1.16'
0900	5	300		14.32	<1 ✓	257	9	0.78		7.82	Δ.03 ✓	-120.3	25	18.10	55	30.28	-.83'
0905	10		3.0	14.30	<1 ✓	258	<1 ✓	0.63	Δ.15	7.84	Δ.02 ✓	-101.1	17	13.67	27	30.28	-.83'
0910	15			14.33	<1 ✓	257	<1 ✓	0.59	Δ.04 ✓	7.83	Δ.01 ✓	-97.0	4.1 ✓	10.51	26	30.16	-.71'
0915	20		6.0	14.37	<1 ✓	255	<1 ✓	0.54	Δ.05 ✓	7.82	Δ.01 ✓	-81.7	17	8.30	23	30.24	-.79'
0920	25			14.37	<1 ✓	253	<1 ✓	0.54	Δ0 ✓	7.85	Δ.03 ✓	-67.5	19	8.59	3.4 ✓		
0925	30		9.0	14.32	✓	252	✓	0.49	Δ.05 ✓	7.86	✓	-56.1	18	6.43	<10 NTU	30.07	
0930	35			14.37	✓	250		0.50		7.88		-49.0	Δ7.1 ✓	7.32	<10		
0935	40		12.0	14.47		248		0.53		7.91		-45.3	Δ3.7 ✓	7.21	<10		
0940	45			14.46		247		0.54		7.91		-41.9	Δ3.4 ✓	7.34		30.10	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/6/08 0940

Sampler: P Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:			
		Duplicate	
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:
Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

~~75 PSI~~	~~12/18~~	Bladder pump: DC gasoline (circled) nitrogen gas
75 PSI	13/17	Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Reduced pumping rate to minimize drawdown
Replaced bladder in pump several weeks ago because of air bubbles in discharge last event
ORP flagged on calibration form

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/11/08

Well ID: B/W-27S
Static Water Level: 22.95

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 32'						334		5.61		6.76		111.6		4.61			
0804	START PUMP + ADJUST FLOW																
0810	Ø	500	Ø	13.00	—	359	—	5.38	—	6.56	—	124.4	—	3.00	—	22.95	Ø
0815	5			13.05	<1 ✓	353	<1 ✓	5.28	2	6.49	Δ.07 ✓	132.6		7.77	<10 NTU		
0820	10		5.0	13.03	<1 ✓	353	<1 ✓	5.22	1 ✓	6.51	Δ.02 ✓	137.3	Δ4.7 ✓	3.10	<10	22.95	Ø
0825	15			13.02	<1 ✓	353	<1 ✓	5.24	<1	6.53	Δ0.02 ✓	140.1	Δ2.8 ✓	3.25	<10		
0830	20	✓	10.0	13.03		353		5.23		6.53		142.4	Δ2.3 ✓	1.91			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/11/08 08:30

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

20psi	18/12	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/12/08

Well ID: B/W-27D
Static Water Level: 32.23 @ 09:25

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 105'						545		6.10		7.61		69.2		2.17			
0935	START PUMP + ADJUST FLOW																
0945	0	500	Ø	13.32	—	545	—	1.12	—	6.92	—	68.3	—	3.08	—	32.25	
0950	5			13.39	<1 ✓	543	<1 ✓	0.94	Δ.18	7.04	Δ.12	76.0	2 ✓	2.32	<10 NTU		
0955	10		5.0	13.41	<1 ✓	540	<1 ✓	0.89	Δ.05 ✓	7.06	Δ.02 ✓	80.3	1 ✓	1.54	<10	32.30	0.07
1000	15			13.47	<1 ✓	530	2 ✓	0.83	Δ.06 ✓	7.04	Δ.02 ✓	85.9	1.2 ✓	1.39	<10		
1005	20		10.0	13.50		523	2.5 ✓	0.83	0 ✓	7.07	Δ.03 ✓	87.8		1.53			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/12/08 10:05

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

55psi	18/12	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Pulled pump, replaced bladder + reinstalled in well right before purging + sampling. Working well, no air bubbles in discharge

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: B/W-28S
Static Water Level: 53.81

pump @ 58' bgs

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1333		6.12		7.38		127.60		1.86			
1215	0	400	0	15.89		1320		5.05		7.21		286.6		3.14	<10 NTU	53.89	0.08
1220	5	400	2	15.89	0	1322	<1	4.65	8	7.15	0.06	284.4	<1			53.84	0.03
1225	10	400	4	15.94	<1	1318	<1	4.62	<1	7.24	0.09	272.8	4	1.17		53.84	
1230	15	400	6	15.92	<1	1318	0	4.59	<1	7.26	0.02	271.2	<1				
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1230

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TMR

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated	Non-Dedicated	Pump deconned before use: Y N NA
X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: B/W-28I
Static Water Level: 54.17

pump @ 108.1

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1043		0.50		7.33		226.80		0.57			
1410	0	500	0	16.06		1042		1.75		7.34		-48.2		11.07		54.20	0.03
1415	5	500	2.5	16.00	<1	1040	<1	0.44	Δ1.31	7.27	0.07	-14.0	110	3.52	<10 NTU		
1420	10	500	5	15.99	<1 ✓	1043	<1 ✓	0.34	Δ0.10	7.30	0.03 ✓	-3.1	Δ10.9				
1425	15	500	7.5	15.97	<1	1055	1	0.30	Δ0.04 ✓	7.32	0.02	3.5	Δ6.6	1.19		54.19	0.02
1430	20	500	10	15.97		1060		0.27	Δ0.03	7.34		7.5	Δ4 ✓				
1435	25	500	12.5	15.99		1069		0.28		7.31		11.1	Δ3.6	0.84		54.19	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-11-08 1435

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated	Non-Dedicated	
X		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Pump deconned before use: Y N NA

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: B/W-28D
Static Water Level: 53.03

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						644		0.22		7.87		158.9		1.84			
1315	0	500	0	16.08		648		1.54		7.56		-54.8		14.25		53.12	0.09
1320	5	500	2.5	16.12	<1	655	1	0.36	Δ1.18	7.72	0.16	-5.1	166	2.58	<10 NTU		
1325	10	500	5	16.13	<1	657	<1	0.26	Δ0.10	7.77	0.05	10.2	600	~~10.4~~		53.28	0.25 ~~0.25~~
1330	15	500	7.5	16.11	<1	658	<1	0.20	Δ0.06	7.78	0.01	19.5	Δ9.3	1.02			
1335	20	500	10	16.13		657		0.16	Δ0.04	7.79	0.01	25.9	Δ6.4			53.26	0.23
1340	25	500	12.5	16.10		658		0.16	0	7.83		30.6	Δ4.7	0.86			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1340

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~ TMR

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Pump deconned before use: Y N NA

Dedicated	Non-Dedicated	
X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: water was very turbid during initial purge ~500-1000 NTU visually

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/2/08

Well ID: B/W-29S
Static Water Level: 80.20

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: 3Q08						3479		0.24		4.32		210.5		6.30			
1530	0	500	0 ~~14.27~~	14.27		3966		1.00		4.11		286		~~44.64~~		80.22	0.02
1535	5	500	2.5	14.28	<1	3966	0	0.54	0.46	4.18	0.07	263.5	9	29.26	41		
1540	10	500	5	14.26	<1 ✓	3965	<1 ✓	0.45	0.09 ✓	4.22	0.04 ✓	251.1	5 ✓	21.95	32	80.22	
1545	15	500	7.5	14.25	<1	3965	0	0.40	0.05	4.25	0.03	245.0		14.54	44		
1550	20	500	10	14.31		3963		0.37		4.25		240.2		11.66	15	80.22	
1555	25	500	12.5	14.33		3963		0.36		4.27		236.4		9.50	<10		
1600	30	500	15	14.28		3962		0.35		4.27		234.3		7.70			
1605	35	500	~~17.5~~ 17.5	14.22		3965		0.32		4.27		232.2		4.77		80.22	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/2/08 1605

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	~~H2SO4~~

QC Sample ID: B/W-29S-FD

		Duplicate	X	
		MS/MSD		
		Level IV		
		Field Blank		
		EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling
23 519
15 73
12 514
8 5

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-9-08

Well ID: BLW-29I
Static Water Level: 81.35

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						4247		0.25		6.46		8.80		2.36			
1255	0	500	0	13.99		4840		1.19		6.29		-9.0		88.41			
1300	5	500	2.5	13.96	<1	4551	6	0.52	Δ0.67	6.37	0.08	16.6	674	37.33	94	81.52	
1305	10	500	5	13.91	<1 ✓	4425	3	0.38	Δ0.14	6.42	0.05 ✓	24.9	Δ8.3	22.26	51		
1310	15	500	7.5	13.93	<1	4365	1 ✓	0.34	Δ0.04	6.44	0.02	30.0	Δ5.1 ✓	13.96	46	81.53	
1315	20	500	10	13.92		4321	1	0.31	Δ0.03 ✓	6.47		32.9	Δ2.9	11.76	17		
1320	25	500	12.5	13.92		4287	<1	0.30	Δ0.01	6.49		34.5		8.18	<10 NTU	81.53	0.18
1325	30	500	15	13.92		4261		0.25		6.50		35.7		6.75			
1330	35	500	17.5	13.90		4240		0.25		6.51		36.6		4.69			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-9-08 1330

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated: X | Non-Dedicated: | Pump deconned before use: Y N NA

Bladder pump: DC (gasoline) nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments: sulfer smell during initial purge

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/9/08

Well ID: DW-29D1
Static Water Level: 85.50

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						2526		0.22		7.36		57.10		0.25			
1130	0	500	0	13.99		2468		1.19		7.11		200.0		9.26	<10 NTU	85.76	0.26
1135	5	500	2.5	14.01	<1	2500	1	0.46	Δ0.73	7.09	0.02	208.0	4				
1140	10	500	5	13.98	<1 ✓	2506	<1 ✓	0.32	Δ0.14	7.15	0.06 ✓	205.8	1 ✓	31.36		85.77	
1145	15	500	7.5	14.01	<1	2508	<1	0.26	Δ0.06	7.19	0.04	203.4	1	25.89	19		
1150	20	500	10	14.00		2508		0.21	Δ0.05 ✓	7.21		201.4		17.54	38		
1155	25	500	12.5	14.00		2508		0.20	Δ0.01	7.23		199.6		17.78	1	85.77	
1200	30	500	15	14.01		2509		0.19		7.23		197.9		12.00	38		
1205	35	500	17.5	13.98		2509		0.18		7.25		196.4		6.72	<10	85.77	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-9-08 1205

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	500 ml	Y	~~H2SO4~~ TR

QC Sample ID:

		Duplicate	X
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/2/08

Well ID: BIW-29D3
Static Water Level: 84.74

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						1871		0.23		7.66		-14.50		0.57			
1255	0	300	0	14.90		1773		2.52		7.63		60.2		6.80	<10	84.78	0.04
1300	5	200	1.5	14.91	<1	1747		1.30		7.84	0.21	-55.9					
1305	10	200	2.5	14.94	<1	1782		0.72	0.28	7.64	0.20	-58.9	Δ 3.0	2.37		84.76	
1310	15	200	3.5	14.95	<1	1822		0.50	0.22	7.56	0.08	-45.7	0.13				
1315	20	200	4.5	14.83		1840		0.40	0.10	7.35	0.21	-13.0	Δ 32	1.76		84.76	
1320	25	200	5.5	14.84		1849		0.39	0.01	7.31	0.04	14.5	Δ 27.5				
1325	30	200	6.5	14.89		1865		0.35	0.04	7.39	0.08	44.4	Δ 30.1	1.04		84.76	
1330	35	200	7.5	14.97		1869		0.33	0.02	7.52	0.13	52.8	Δ 8.2				
1335	40	200	8.5	14.90		1869		0.33		7.49	0.03	65.0	Δ 12.2	0.88		84.76	
1340	45	200	9.5	14.84		1869		0.32		7.50	0.01	73.1	Δ 7.9				
1345	50	200	10.5	14.72		1869		0.35		7.51	0.01	78.2	Δ 5.1	0.47		84.76	
1350	55	200	11.5	14.66		1869		0.33		7.50		79.3					
Criteria	60 max	100-500 ml/min		±3%		± 3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		±10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/2/08 1350

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity	500 ml	N	NONE
		Sulfate, Nitrate/Nitrite			
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	~~H2SO4~~

QC Sample ID: BIW-29D3-FD

	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas		
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments: windy sampling conditions; cylinder is bad on control box causing lower flow rate

104.6 13.2

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-5-08

Well ID: D4BC-15
Static Water Level: 16.85

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1440		500	–	15.11		1129		4.80		7.44		133.6		1.94			
1445	5	500	2.5	15.06	<1	1128	<1	4.12	15.24	7.27	0.17	132.7	<1	0.69	<10	16.95	0.10
1450	10	500	5	15.13	<1	1128	–	3.98	2.45	7.19	0.08	133.6	<1	1.04	<10	–	
1455	15	500	7.5	15.05	<1	1128	–	4.05	-1.74	7.27	0.08	129.9	2.96	0.51	<10	16.98	0.13
1500	20	500	10	15.04	<1	1128	–	3.99	1.49	7.29	0.01	128.3	-1.08	0.51	<10		
1505	25	500	12.5	15.01	<1	1131	<1	3.96	0.75	7.29	–	122.7	<1	1.87	<10	17.03	0.18
1510	30	500	15	15.00	<1	1132	<1	3.95	0.25	7.26	0.03	128.0	<1				
1515	35	500	17.5	15.00	–	1133	<1	3.96	0.25	7.26	–	128.1	<1				
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-5-08 1515

Sampler: Roxanne Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump:	DC gasoline nitrogen gas
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-3-08

Well ID: D5AC-1S
Static Water Level: 27.22

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1331	0	300	0	15.59		14608		1.53		6.49		53.9		7.70		28.20	1.09
1336	5	300	1.5	15.25	<1	14401	-2.77	1.28	0.23	6.57	-0.08	60.1	-10.87	3.52	74.5	~~28.02~~	
1341	10	300	3	15.09	1.05	14467	<1	0.96	0.32	6.45	0.12	66.5	-10.11	1.18	99.57	28.02	0.78
1346	15	300	4.5	15.00	<1	14357	<1	0.85	0.11	6.52	0.07	70.0	Δ<10.	3.00	-87.08	28.02	0.78
1351	20	300	6	14.93	<1	14286	<1	0.80	0.05	6.52	—	72.7	Δ<10.	3.23	-7.38	—	
1356	25	300	7.5	14.87	<1	14218	<1	0.76	0.04	6.50	0.02	75.4	Δ<10	2.99	7.71	28.02	0.78
~~1401~~	~~30~~	~~300~~	~~9~~														
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-3-08 1356

Sampler: Rayanne Barrin

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated — Non-Dedicated — Pump deconned before use: Y N (NA)

Bladder pump: (DC) gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-12-08

Well ID: MW-2002-IS
Static Water Level: 17.87

pump @ 26'

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						3016		0.24		7.24		24.10		0.21			
1110	0	500	0	14.75		3051		2.00		6.82		199.7		2.57	<10 NTU	17.89	0.02
1115	5	500	2.5	14.63	<1	3079	<1	0.50	Δ1.50	6.54	0.28	202.9	2				
1120	10	500	5	14.53	<1	3085	<1	0.40	Δ0.10	6.63	0.09	189.6	7	0.29		18.02	0.15
1125	15	500	7.5	14.49	<1	3088	<1	0.31	Δ0.09	6.69	0.06	180.0	5				
1130	20	500		14.50		3087		0.22	Δ0.09	6.76	0.07	169.9		0.25		18.03	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-12-08 1130

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X	
X	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/9/08

Well ID: MW-2002-2S
Static Water Level: 48.64

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:		Pump @ 55'				718		5.67		8.09		281.0		2.20			
1329		START PUMP + ADJUST FLOW															
1335	Ø	500	Ø	15.61	—	690	—	7.88	—	8.11	—	112.2	—	4.03	—	48.82	-.18'
1340	5			15.62	<1 ✓	693	<1 ✓	7.20	9.0 ✓	8.11	ΔØ ✓	113.6	1.2 ✓	2.25	<10 NTU		
1345	10		5.0	15.60	<1 ✓	694	<1 ✓	7.07	1.8 ✓	8.09	Δ.02 ✓	115.9	2.0 ✓	0.77	<10 NTU	48.98	-.34'
1350	15			15.69	<1 ✓	695	<1 ✓	7.05	<1 ✓	8.09	Ø ✓	116.7	<1 ✓				
1355	20	↓	10.0	15.67		695		6.98		8.09		118.1		0.36		48.93	0.29
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/9/08 1355

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		~~Duplicate~~
		~~MS/MSD~~
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

30 psi	13/17	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

%RPD = 200 X (Read 1 - Read 2) / (Read 1 + Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 2008 4Q Groundwater
Date: 11/9/08

Well ID: MW-2002-2I
Static Water Level: 49.72

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 135'						489		0.59		8.24		76.3		21.59			
1129	START PUMP + ADJUST FLOW																
1135	Ø	500	Ø	15.67	—	484	—	1.60	—	7.99	—	414.1	—	38.50	—	49.92	-0.2'
1140	5			15.65	<1 ✓	482	<1 ✓	1.10	Δ.5	7.97	Δ.02 ✓	20.2		42.84	10.6 %	~~42.84~~	
1145	10		5.0	15.72	<1 ✓	482	Ø ✓	Ø.01	Δ.09 ✓	7.97	ΔØ ✓	37.5	Δ17.	40.95	4.5 %	49.88	-.11'
1150	15			15.69	<1 ✓	480	<1 ✓	1.04	Δ.03 ✓	7.98	Δ.01 ✓	43.5	Δ6 ✓	36.79	"		
1155	20		10.0	15.65	<1 ✓	480	Ø ✓	1.14	Δ.1 ✓	7.98	Ø ✓	47.7	Δ4.2 ✓	36.93	<1	49.79	-.07'
1200	25			15.64	<1	480	Ø	1.23	Δ.09 ✓	7.99	Δ.01 ✓	50.2	Δ2.5 ✓				
1205	30		15.0	15.62		479		1.27		7.98		50.6		30.44	19	49.86	.14
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/9/08 12:05

Sampler: P Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID: MW-2002-2I-FD

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

75 psi	14/16	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Water in flow cell is pretty cloudy, did not use prefilter
stabelization not reached for turbidity

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: MW-2S
Static Water Level: 61.02

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						5960		0.22		4.05		206.6		9.95			
~~0815~~	0	500	0	17.91		6171		0.90		4.10		195.8		7.03	<10 NTU	61.08	0.06
0820	5	500	2.5	17.78	1	6164	1	0.45	0.45Δ	4.12	0.02	193.9	Δ1.9				
0825	10	500	5	17.97	1 ✓	6164	0 ✓	0.36	0.09Δ	4.12	0 ✓	192.3	Δ1.6 ✓	2.81		61.08	
0830	15	500	7.5	18.00	<1 ✓	6162	<1 ✓	0.31	0.05Δ ✓	4.12	0 ✓	190.5	Δ2.3				
0835	20	500	10	17.91		6161		0.31	0	4.12		190.1		1.94		61.08	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 0835

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information: Dedicated	Non-Dedicated	Pump deconned before use: Y N NA
X		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: lots of orange precipitate discharged during initial purge

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: MW-45
Static Water Level: 83.91

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:			Pump @ 97'			1766		4.45		7.32		205.2		0.24			
1342			START PUMP + ADJUST FLOW														
1350	0	500	0	16.26	—	1755	—	3.31	—	7.29	—	195.9	—	2.18	<10 NTU	84.06	-.15'
1355	5			16.21	.3 ✓	1749	.3 ✓	3.17	18.3	7.20	Δ.09 ✓	203.0	3.5 ✓				
1400	10		5.0	16.20	.1 ✓	1748	.1 ✓	3.19	.6 ✓	7.21	Δ.01 ✓	204.5	.7 ✓	0.50	<10	83.98	-.07'
1405	15			16.26	.4 ✓	1746	.1 ✓	3.10	2.8 ✓	7.21	Δ0 ✓	204.9	.2 ✓				
1410	20		10.0	16.16	.6 ✓	1746	0 ✓	3.03	2.2 ✓	7.21	Δ0 ✓	205.8	.4 ✓	.03	<10	84.05	-.14'
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 14:10

Sampler: P Bassett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate			
	MS/MSD			
	Level IV			
	Field Blank			
	EQ Rinsate Blank			

Pump Information: (Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

50 PSI	13/17	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-9-06

Well ID: MW-55
Static Water Level: 49.61

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1520	-	480	-	14.22		15380		1.65		3.77		223.2		2.91		49.61	-
1525	5	480	2.4	14.57	2.0✓	15477	0.62✓	0.61	Δ1.04	3.85	0.08✓	215.1	3.69✓	0.20	<10✓		
1530	10	480	4.8	14.84	<1✓	15487	0.06✓	0.51	Δ0.10✓	3.85	—✓	213.0	0.95✓	0.04	<10✓	49.65	0.05
1535	15	480	9.6	14.92	<1✓	15489	0.01✓	0.50	Δ0.01	3.86	0.01✓	212.0	0.47✓	0.04	<10✓	49.69	0.09
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-9-06 1535

Sampler: Royanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information: 35 PSI

Dedicated / Non-Dedicated

Pump deconned before use: Y N (NA)

Bladder pump: (DC) gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments: SC readings may be off, 15,000 µS/cm standard solution was not read during calibration. Stabilization was not fully reached for D.O.

%RPD = 200 X (Read 1 - Read 2) / (Read 1 + Read 2)

3 consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: PA-MW-15
Static Water Level: not measured before pumping started

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 108'						1887		0.69		7.35		164.0		1.68			
1514	Pump ON + ADJUST FLOW																
1520	Ø	500	Ø	16.76	—	1874	—	2.08	—	7.31	—	179.7	—	3.53	<10 NTU	97.29	
1525	5			16.66	.6 ✓	1871	.16 ✓	1.24	50	7.25	Δ.06 ✓	180.6	.5 ✓			97.37	
1530	10		5.0	16.68	.1 ✓	1869	.1 ✓	1.11	11	7.26	Δ.01 ✓	179.4	.6 ✓	2.52	<10		
1535	15			16.68	Ø ✓	1869	Ø ✓	1.07	3.6 ✓	7.26	ΔØ ✓	178.3	.6 ✓				
1540	20		10.0	16.62		1868		1.03	Δ0.04 ✓	7.25		177.3		2.77	<10	97.27	
1545	25		12.5	16.61		1868		1.02	Δ0.01	7.26		177.1					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/3/08 15:45

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:		
		Duplicate
	2x Vol	MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

55 PSI	14/16	Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/10/08

Well ID: PA-MW-2S
Static Water Level: 143.43

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: Pump @ 153'						1931		4.93		6.86		171.2		0.32			
1038	START PUMP + ADJUST																
1045	Ø	500	Ø	17.34	—	1740	—	7.99	—	7.28	—	142.5	—	0.39	—	143.60	-0.17'
1050	5		2.5	17.31	<1 ✓	1749	<1 ✓	7.97	Δ.02	7.27	Δ.01 ✓	145.3	2	0.42			
1055	10		5.0	17.32	<1 ✓	1749	<1 ✓	7.90	Δ.07	7.25	Δ.02 ✓	148.2	2 ✓	0.24		143.54	-0.11'
1100	15		7.5	17.33	<1 ✓	1753	<1 ✓	7.77	2% ✓	7.23		150.9	2 ✓	0.13			
~~1105~~	~~20~~		~~10.0~~														
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/10/08 11:00

Sampler: P Barrett

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

(Dedicated) Non-Dedicated — Pump deconned before use: Y N (NA)

75psi	15/15	Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/6/08

Well ID: PA-MW-3S
Static Water Level: 117.47

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters: pump @ 127'						1768		0.44		7.06		162.8		0.33			
14/10	START PUMP + ADJUST FLOW																
1415	0	500	0	17.38	—	1794	—	2.20	—	6.80	—	185.2	—	0.70	< 10 NTU	117.70	-.43'
1420	5			17.28	<1 ✓	1812	1.0 ✓	0.84		6.67	Δ.13	179.4	3.1 ✓	0.48	<10		
1425	10		5.0	17.24	<1 ✓	1807	<1 ✓	0.71	Δ.13	6.75	Δ.02 ✓	173.1	3.5 ✓	0.17	<10	117.57	-.10'
1430	15			17.22	<1 ✓	1783	1.3 ✓	0.69	Δ.02 ✓	6.82	Δ.07 ✓	165.9	4.2 ✓				
1435	20		10.0	17.18	<1 ✓	1772	<1 ✓	0.68	Δ.01 ✓	6.87	Δ.05 ✓	162.3	2.2 ✓	0.41		117.57	-.10'
1440	25			17.12	<1 ✓	1766	<1 ✓	0.68	Δ0 ✓	6.91	Δ.04 ✓	159.0	2.0 ✓	1.10			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11/6/08 14:40

Sampler: P Barrett

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated (circled) Non-Dedicated Pump deconned before use: Y N NA (circled)

70 PSI	13/17	Bladder pump: DC gasoline (circled) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: ORP flagged on calibration form

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-9-08

Well ID: PW-15
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1210				12.80		3715		2.64		4.23		9		10.15			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-9-08 1210

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
	Duplicate		
	MS/MSD		
	Level IV	X	
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump:	DC gasoline nitrogen gas
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: PW-25
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1008				13.25		6509				4.11				2.65			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1008

Sampler: Royanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:		
		Duplicate
		MS/MSD
	X	Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
	X	Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: PW-35
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1035				12.64		7639				3.85				4.15			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 1035

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	
	MS/MSD	
	Level IV	X
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: PW-45
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1436				14.96		5130				5.23				55.08			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1436

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	
	MS/MSD	
	Level IV	X
	Field Blank	
	EQ Rinsate Blank	

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: PW-55
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1455				1438		3366				6.21				4.04			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-11-08 1455

Sampler: Royanne Barring

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:				
		Duplicate		
		MS/MSD		
		Level IV	X	
		Field Blank		
		EQ Rinsate Blank		

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump:	DC	gasoline	nitrogen gas
Geosquirt			
Production Pump			
Redi-Flo			
Other:			

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-11-08

Well ID: PW-65
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1516				14.89		3671				6.56				3.84			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-11-08 1516

Sampler:

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	
	MS/MSD	
	Level IV	X
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas		
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-4-08

Well ID: PW-75
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1345				12.18		7784				5.42				44.57			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-4-08 1345

Sampler: Roxanne Banning

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

✓	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other:

Comments: no purge required

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/3/08

Well ID: ~~PW-8~~ PW-8S
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
PW-8S	16:00			12.54		6277		2.52		6.53		140.0		2.93			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-3-08 1600

Sampler: Roxanne Barrington

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate		
	MS/MSD		
	Level IV	X	
	Field Blank		
	EQ Rinsate Blank		

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump:	DC gasoline nitrogen gas
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments: Filtered Samples in lab using ~~geosquirt~~ peristaltic PB

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-3-08

Well ID: PW-9S
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1535				15.54		12360		3.09		6.33		70.9		4.70			
												70.9 PB					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-3-08 1535

Sampler: Royanne Bonnington

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
X		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-3-08

Well ID: PW-105
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1025				13.94		16532		2.18		6.41		75.0		42.41			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 1025 11-03-08

Sampler: Roxanne Bowanji

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
	✓	MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
	X	Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-3

Well ID: PW-11S
Static Water Level: NA

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
0955				14.53		11684		2.58		6.32		199.8		5.38			
														5.38	PB		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-03-08 0955

Sampler: Ryanne Barrini

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
X		Production Pump
		Redi-Flo
		Other:

Comments:

%RPD = 200 X $\frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$

3 consecutive stable readings before sampling

Field Review:

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-12-08

Well ID: USGS-135 top of pump @ 16.83
Static Water Level: 15.42

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
0855	0	200	0	14.78		2505		1.56		6.96		184.1		0.63			16.48
0858	well	quit producing,		letting recharge													
				14.91		2515		1.75		7.01		186.3					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-12-08 0915

Sampler: YWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
~~X~~	~~Radionuclides~~	~~7L~~	~~Y~~	~~HNO3~~
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X	
	MS/MSD		
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: Well not producing enough water to adequately purge + stabalize parameters. Collected w/out full purge, did not collect radionuclide sample (7L)

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 12-2-08

Well ID: USGS-2135
Static Water Level: 17.58

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1245			~~15.5~~	15.55		4343		3.61		3.97		221.9		26.05			
1325				14.68	5.76	4245	2.28	2.55	34.41	3.96	0.01	259.3 ~~74.72~~	-15.54	74.72 ~~110.54~~	110.54		
1350				14.21	3.25	4144	2.40	2.70	-5.71	3.92	0.04	281.5	-8.21	59.69	22.31		
1435				14.51	-2.09	4138	0.14	3.57	-26.08	3.87	0.05	291.6	-3.52	61.18	-2.47		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-2-08 1435

Sampler: Royanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:
Dedicated / Non-Dedicated (Non-Dedicated circled)
Pump deconned before use: Y (circled) N NA

Bladder pump:	DC	gasoline / nitrogen gas
Geosquirt	✓	
Production Pump		
Redi-Flo		
Other:		

Comments: Purged dry 3x ~45 min recharge

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-12-08

Well ID: UW-1s
Static Water Level: 107.3

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:										5.38							
1305	–	500	–	15.90		3609		2.03	Δ2.76	5.88		116.60		40.33		107.30	–
1313	5		2.5	15.61	1.84	3761	4.12	1.75	Δ2.76	5.79	0.41	52.30	76.13	5.36	<10 ✓	–	
1318	10		5.0	15.45	1.03	3768	0.18 ✓	1.70	Δ0.05 ✓	5.84	0.05 ✓	33.50	43.82	4.02	<10 ✓	107.51	0.21
1323	15		7.5	15.40	<1 ✓	3774	0.15 ✓	1.82	Δ0.12 ✓	5.71	0.11 ✓	24.30	Δ9.20	4.02	– ✓	107.48	0.18
1328	20		10.0	15.50	<1 ✓	3775	– ✓	1.94	Δ0.12 ✓	5.86	0.15 ✓	15.4	Δ8.90	0.41	<10 ✓	–	
1333	25		12.5	15.46	<1 ✓	3763	0.13 ✓	1.97	Δ0.03	5.85	0.01 ✓	08.7	Δ6.70	2.09	<10 ✓	107.36	0.06
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-12-08 1333

Sampler: Royanne Barrington

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information: 65 psI

Dedicated Non-Dedicated Pump deconned before use: Y N (NA)

		Bladder pump: (DC) gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments: full stabilization was not reached for D.O nor pH

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: PBarr

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-12-08

Well ID: W32DC-D
Static Water Level: 22.54

pump depth ~110' bgs

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						249		0.23		8.29		20.80		0.35			
0950	0	500	0	14.28		249		1.00		7.53		8.9		0.80	<10 NTU	22.68	0.18
0955	5	500	2.5	14.26	<1	246	1	0.38	Δ0.62	6.93	0.60	92.6	165				
1000	10	500	5	14.26	0 ✓	246	0 ✓	0.28	Δ0.10	7.03	0.10	97.9	6	1.44		22.78	0.28
1005	15	500	7.5	14.27	<1 ✓	246	0	0.24	Δ0.04 ✓	7.21	0.18	96.0	2 ✓				
1010	20	500	10	14.31		246		0.20	Δ0.04	7.31	0.10	91.9	4	0.84		22.76	0.26
1015	25	500	12.5	14.32		246		0.19		7.41	0.10 ✓	89.9					
1020	30	500	15	14.32		246		0.18		7.51	0.10	88.0		0.79		22.76	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-12-08 1020

Sampler: TWR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Pump deconned before use: Y N NA

Dedicated	Non-Dedicated	
X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-9-08

Well ID: W4CB 2I ~~D4CB 2I~~
Static Water Level: 23.42

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1038	—	500	—	13.71		4392		3.44	<10	6.05		6.3		9.35	<10	23.42	
1043	5	500	2.5	13.63	<1	5341	19.5	1.66	~~69.80~~	5.71	0.24	25.4	85.06	7.09	<10		
1048	10	500	5.00	13.61	<1	5563	4.07	1.30	Δ 0.36	5.56	0.15	19.3	27.29	4.25	<10	23.62	0.20
1053	15	500	7.5	13.59	<1	5628	1.16	1.05	Δ 0.25	5.55	0.01	10.2	61.69	4.27	<10		
1058	20	500	10	13.60	<1	5622	0.10	1.00	Δ 0.05	5.84	0.01	7.0	<10%	3.53	<10	~~23.28~~ 23.60	0.02
1103	25	500	12.5	13.60	—	5708	1.48	1.07	Δ 0.07	5.82	0.02	2.4	<10	2.01	<10	23.58	0.02
1108	30	500	15	13.60	—	5728	0.38	1.26	Δ 0.19	5.80	0.02	0.9	<10%	1.35	<10		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-9-08 1108

Sampler: Royanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

X		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:
		35 psi

Comments: Stabelization was not fully reached for D.O.

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T. Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-5-05

Well ID: W5AA+1 I
Static Water Level: 18.98

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1255		500	—	14.47		831		1.09		7.98		97.1		2.50		19.02	~~19~~ 0.04
1300		500	2.5	14.30	1.18	726	13.48	0.35	Δ 0.74	7.95	0.03	97.0	Δ <10	2.36	12.05	19.05	0.07
1305		500	5.00	14.35	<1	702	3.36	0.26	Δ 0.09	7.94	0.01	97.1	Δ <10	1.35	<10	—	0.07
1310		500	7.5	14.33	<1	694	1.14	0.25	Δ 0.01	7.91	0.03	97.4	Δ <10	1.15	<10	19.10	0.12
1315		500	10	14.34	<1	690	<1	0.23	Δ 0.02	7.99	0.08	98.8	Δ <10	0.96	<10	—	
1320		500	12.5	14.28	<	687	<1	0.23	—	8.01	0.02	88.9	Δ <10	0.96	—	19.10	0.12
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-5-05 ~~1315~~ 1320

Sampler: Rayann Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:		
	✓	Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: (DC)	gasoline	nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: D Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-02-08

Well ID: W5AA-35
Static Water Level: 21.62

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1530				14.19		3881		6.99		6.47		87.2		66.41			
1555				13.81	2.71	5589	-36.07	7.70	-9.67	7.18	-0.71	67.5	25.46	97.17	-37.60		
1620				14.22	2.36	5659	-1.24	7.68	0.26	7.31	-0.13	78.1	-14.56	119.6	-20.69		
1640				14.06		5731		7.70		6.98		96.2		66.73			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-2-08 1640

Sampler: Rayanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

	Duplicate		
	MS/MSD		X
	Level IV		
	Field Blank		
	EQ Rinsate Blank		

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: (Y) N NA

Bladder pump:	DC gasoline nitrogen gas
Geosquirt	✓
Production Pump	
Redi-Flo	
Other:	

Comments: Pump dry 3x
Not much water

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: WSAB-2S
Static Water Level: 17.24

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						7180		1.11		5.90		158.10		11.98			
1025	0	500	0	15.16		7038		0.92		5.83		287.6		1.19	<10NTU	17.51	0.27
1030	5	500	2.5	15.06	<1	7047	<1	0.70	Δ0.22	5.87	0.04	270.0	7				
1035	10	500	5	15.06	0	7077	<1	0.60	Δ0.10	5.86	0.01	231.4	15	0.98		17.48	0.24
1040	15	500	7.5	15.06	0	7105	<1	0.56	Δ0.04	5.90	0.04	205.6	12				
1045	20	500	10	15.05		7134		0.51	0.05	5.88	0.02	190.3	8	0.88		17.49	
1050	25	500	12.5	15.05		7155		0.48	0.03	5.90		177.6	7				
1055	30	500	15	15.07		7189		0.50		5.95		169.5	6	0.79		17.56	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 1055

Sampler: TMR

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:			
		Duplicate	X
		MS/MSD	
		Level IV	
		Field Blank	
		EQ Rinsate Blank	

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: (DC)	gasoline	nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/4/08

Well ID: W5AB-3I
Static Water Level: 20.23

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						3354		0.21		6.69		106.40		9.94			
1205	0	500	0	14.46		2939		0.76		6.73		111.8		11.60		20.41	
1210	5	500	2.5	14.39	<1	3108	9	0.39	Δ0.37	6.73	0	111.5	<1	8.84	<10 NTU		
1215	10	500	5	14.40	<1 ✓	3179	2	0.30	Δ0.09	6.70	0.03 ✓	112.8	1 ✓			20.41	
1220	15	500	7.5	14.36	<1	3216	1 ✓	0.25	Δ0.05 ✓	6.73	0.03	111.7	<1	6.17		20.41	
1225	20	500	10	14.32		3236	<1	0.22	Δ0.03	6.72		111.7					
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11/4/08 1225

Sampler: TWR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated / Non-Dedicated — Pump deconned before use: Y N NA

Bladder pump:	BC	gasoline / nitrogen gas
Geosquirt		
Production Pump		
Redi-Flo		
Other:		

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11/9/08

Well ID: W5BB-S
Static Water Level: ~~25~~ 25.95

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1337	—	500	—	15.54		3372		3.46	4.6 ✓	7.08		119.6	Δ4.6	34.16		25.95	
1342	5	500	2.5	15.59	0.32 ✓	3378	0.17 ✓	3.07	11.94 ✓	7.18	0.10 ✓	124.2	Δ[illegible]	1.54	<10 ✓	—	
1347	10	500	5	15.57	— ✓	3394	0.47 ✓	2.94	<10 ✓	7.18	— ✓	126.1	Δ1.90 ✓	0.32	<10 ✓	29.50	0.02
1352	15	500	7.5	15.61	<1 ✓	3396	0.05	3.01	2 <10 ✓	7.21	0.03 ✓	126.5	Δ0.40	0.05	<10 ✓	29.65	0.02
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-9-08 1352

Sampler: Rayanne Barrie

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity	500 ml	N	NONE
		Sulfate, Nitrate/Nitrite			
	X	TOC	250 ml	N	HCl
	~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas
Geosquirt
Production Pump
Redi-Flo
Other: 3 5 P S 1

Comments: stabelization not fully reached for DO

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-9-08

Well ID: W5DB-D
Static Water Level: 37.35

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						745		1.95		7.73		-40.3		0.22			
1450	0	500	0	14.23		810		1.42		7.57		66.9		0.77	<10NTU	37.59	
1455	5	500	2.5	14.24	<1	804	<1	1.37	Δ0.05	7.68	Δ0.11	67.4	<1				
1500	10	500	5	14.23	<1 ✓	796	1 ✓	1.45	Δ0.08 ✓	7.71	Δ0.03	68.6	2 ✓	0.45		37.59	0.24
1505	15	500	7.5	14.26	<1	789	<1	1.53	Δ0.08	7.71	0 ✓	69.9	2				
1510	20	500	10	14.25		784		1.61		7.72	0.01	70.7		0.31			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-9-08 1510

Sampler: TMR

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
~~X~~	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:		
	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information:

Dedicated	Non-Dedicated	
X		Bladder pump: DC (gasoline) nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Pump deconned before use: Y N NA

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: WW-15
Static Water Level: 44.64

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1418	-	500	-	15.71		616		1.21		7.16		79.1		15.05		44.64	-
1423	5	500	2.5	15.70	<1 ✓	606	1.63 ✓	0.52	Δ0.69	7.66	0.50	21.2	115.45	10.70	33.78		
1428	10	500	5.0	15.70	- ✓	604	0.33 ✓	0.42	Δ0.10 ✓	7.70	0.04 ✓	-32.9	924.7	6.58	<10 ✓	44.69	0.05
1433	15	500	7.5	15.68	<1 ✓	603	0.16 ✓	0.43	Δ0.01 ✓	7.82	0.12 ✓	-82.4	85.86	5.71	<10 ✓	—	
1438	20	500	10.0	15.70	<1 ✓	601	0.32 ✓	0.38	Δ0.05 ✓	7.86	0.04 ✓	-165.8	24.86	5.27	<10 ✓	44.71	0.07
1443	25	500	12.5	15.69	<1 ✓	599	0.33 ✓	0.35	Δ0.03 ✓	7.89	0.03 ✓	-128.6	19.45	5.29	<10 ✓	—	
1448	30	500	15.0	15.68	<1 ✓	597	0.33 ✓	0.29	Δ0.06 ✓	7.92	0.03 ✓	-146.5	13.01	6.15	<10 ✓	44.69	0.05
1453	35	500	17.5	15.68	- ✓	596	0.16 ✓	0.29	- ✓	7.92	- ✓	-161.5	-9.74 ✓	4.38	<10 ✓	—	
1458	40	500	20.0	15.63	<1 ✓	595	0.16 ✓	0.23	Δ0.06 ✓	7.88	0.04 ✓	-170	-5.48 ✓	4.68	<10 ✓	-	
1503	45	500	22.5	15.66		594		0.24		7.96	0.04	180.2	5	4.98	<10 ✓	44.73	0.09
~~1508~~																	
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-10-08 ~~1508~~ 1503

Sampler: Royanne Barringer

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	~~Orthophosphate~~	500 ml	Y	H2SO4

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information: 36 psi

Dedicated / Non-Dedicated — Pump deconned before use: Y N (NA)

X		Bladder pump: (DC) gasoline nitrogen gas
		Geosquirt
		Production Pump
		Redi-Flo
		Other:

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barnett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-10-08

Well ID: NW-25
Static Water Level: 46.40

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
1234	–	400	–	15.97		719		1.54		6.45		45.3		24.05		46.40	–
1247	5	400	2.0	15.97	– ✓	563	24.33	0.94	48.38	7.05	Δ0.60	8.5	136.8	15.09	45.78	–	
1249	10	400	4.0	15.91	<1 ✓	538	4.54	0.66	Δ 0.28	7.28	Δ0.23	-27.8	376.16	14.50	3.98 ✓	46.54	0.14
1254	15	400	6.0	15.95	<1 ✓	530	1.49 ✓	0.50	Δ 0.16	7.40	Δ0.12	-53.6	63.39	14.45	0.34 ✓	–	
1259	20	400	8.0	16.02	<1 ✓	537	1.31 ✓	0.39	Δ 0.11 ✓	7.46	0.06 ✓	-74.7	32.89	15.07	4.20 ✓	46.52	0.12
1304	25	400	10	16.04	<1 ✓	543	1.11 ✓	0.32	Δ 0.07 ✓	7.50	0.04 ✓	-88.7	17.13	15.61	3.52 ✓	–	
1309	30	400	12	16.11	<1 ✓	549	1.09 ✓	0.29	Δ 0.03 ✓	7.52	0.02 ✓	-96.9	8.83 ✓	15.09	3.35	46.55	0.15
1314	35	400	14	16.22	<1 ✓	561	2.16 ✓	0.26	Δ 0.03	7.55	0.03 ✓	-103.3	6.39 ✓	15.94	5.47 ✓	–	
1319	40	400	16	16.19	<1 ✓	565	0.71 ✓	0.25	Δ 0.01 ✓	7.50	0.05 ✓	-106.3	2.86 ✓	15.23	4.55 ✓	46.59	0.19
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifer	

Sample Date and Time: 11-10-08 1319

Sampler: Royanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
X	~~Orthophosphate~~	~~500 ml~~	~~Y~~	~~H2SO4~~

QC Sample ID:

	Duplicate	X
	MS/MSD	
	Level IV	
	Field Blank	
	EQ Rinsate Blank	

Pump Information: 42 PSI

Dedicated | Non-Dedicated | Pump deconned before use: Y N NA

Bladder pump: (DC) gasoline nitrogen gas	
Geosquirt	
Production Pump	
Redi-Flo	
Other:	

Comments:

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-4-08

Well ID: WW-36B
Static Water Level: X/N

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:						486											
1315				13.12		~~458~~				7.22				1.78			
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-4-08 1315

Sampler: Roxanne Barringer

Analysis Requested:		Volume:	Filtered	Preservative:
X	Dissolved Metals	500 ml	Y	HNO3
X	Radionuclides	7L	Y	HNO3
X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
X	TOC	250 ml	N	HCl
X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:		
	Duplicate	
	MS/MSD	
	Level IV	X
	Field Blank	
	EQ Rinsate Blank	

Pump Information:
Dedicated Non-Dedicated Pump deconned before use: Y N NA

Bladder pump: DC gasoline nitrogen gas		
Geosquirt		
Production Pump	X	
Redi-Flo		
Other:		

Comments: Purged 5 min — Need H/S water supply well, runs frequently, not able to do large vol. purge

$$\%RPD = 200 \times \frac{\text{Read 1 - Read 2}}{\text{Read 1+ Read 2}}$$

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-

Well ID: WW-40B
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
0804				13.42		579				7.31				8.39			
0956				14.80	-9.7	535	7.89			7.47	0.16			3.55	81.07		
1130				14.74	<1	535	—			7.29	0.18			6.11	-53.0		
1305				14.14	4.15	568	-5.89			7.17	0.15			2.71	-184.7		
1430				13.14	7.33	543	4.5			6.76	0.41			6.08	-76.67		
1620				10.80	19.5	535	1.48			7.28				5.70	6.45		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-4-08 1620

Sampler: Royanne Barre

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:

✓	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
X		Production Pump
		Redi-Flo
		Other:

Comments: Started purging — large volume purge, not based on parameter stabalization

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: T Richards

Groundwater Sampling Log

Project: Yerington Mine site, NV
Client: Atlantic Richfield
Project #: 134557

Event: 4Q Groundwater
Date: 11-5-08

Well ID: MW-59B
Static Water Level:

BROWN AND CALDWELL

Time		Pump Rate	Vol removed	Temperature		SC		DO		PH		ORP		Turbidity		Depth to Water	
	min	ml/min	Liters	Deg C	%RPD	uS/cm	%RPD	mg/L	%RPD or Δ	SU	Δ	mV	%RPD or Δ	NTU	%RPD	Ft	Drawdown
Previous event field parameters:																	
0730				15.58		1165				8.21				6.92			
0845				16.72	-7.05	869	29.10			7.55	0.36			3.26	71.90		
1030				17.55	-4.84	912	-4.82	~~[illegible]~~		7.64	0.21			1.59	68.86		
1130				17.24	-1.07	934	-2.38			7.53	0.21			8.51	-56.43		
Criteria	60 max	100-500 ml/min		3%		3%		10% or Δ0.1 mg/L if <2.0		Δ 0.1 pH		10% or Δ10mV		< 10 NTU or 10%		<0.3 ft or 2% of aquifier	

Sample Date and Time: 11-5-08 1130

Sampler: Raymond Barron

Analysis Requested:			Volume:	Filtered	Preservative:
	X	Dissolved Metals	500 ml	Y	HNO3
	X	Radionuclides	7L	Y	HNO3
	X	TDS, ph, Alkalinity / Sulfate, Nitrate/Nitrite	500 ml	N	NONE
	X	TOC	250 ml	N	HCl
	X	Orthophosphate	500 ml	Y	H2SO4

QC Sample ID:		
		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Pump Information:

Dedicated Non-Dedicated Pump deconned before use: Y N NA

		Bladder pump: DC gasoline nitrogen gas
		Geosquirt
		Production Pump 30 gal per min.
		Redi-Flo
		Other:

Comments:

%RPD = 200 X (Read 1 - Read 2) / (Read 1+ Read 2)

3 consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: T Richards