Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W - 15
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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
		NO SAMPLE COLLECTED — WELL IS DRY															
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time:

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			**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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: _____

QAQC Review: _____

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W-1D1
Static Water Level: 60.76

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1219			START PUMP + ADJUST FLOW														
1225	0	500	0	16.37	—	945	—	1.25	—	7.20	—	106.0	—	5.62	<10NTU	60.80	.04'
1230	5	↓	2.5	16.12	1.5 ✓	955	1.1 ✓	0.33		7.32	Δ.12	103.0	2.9 ✓				
1235	10		5	16.10	.1 ✓	956	.1 ✓	0.32	Δ.01 ✓	7.31	Δ.01 ✓	101.6	1.4 ✓	3.71	<10 NTU		
1240	15	↓	7.5	16.06	.2 ✓	958	.2 ✓	0.35	Δ.03 ✓	7.31	Δ 0 ✓	100.0	1.6 ✓			60.85	
1245	20		10	16.13	.4 ✓	958	0 ✓	0.37	Δ.02 ✓	7.31	Δ 0 ✓	98.6	2.9 ✓	1.31	<10NTU		
			2Q2008 PARAM			830		0.89		7.30		135.6		1.88			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID:

Sample Date and Time: 9/11/08 12:45

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
90	Pressure (PSI)	
10	Refill Time	
20	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W-1D2
Static Water Level: 107.89

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
11:03		START	PUMP + ADJUST FLOW														
11:10	0	500	0	16.02	—	238	—	3.12	—	6.96	—	82.2	—	0.73	<10NTU		
11:15	5		2.5	15.91	.7 ✓	253	6.1	0.94		7.87		67.8	9.2			107.92	.03'
11:20	10		5	15.86	.3 ✓	254	.4 ✓	0.82	Δ.08 ✓	7.96	Δ.9 ✓	66.3	2.2 ✓	0.45			
11:25	15		7.5	15.83	.2 ✓	253	.4 ✓	0.83	Δ.01 ✓	7.94	Δ.02 ✓	65.3	1.5 ✓				
11:30	20		10	15.91	.5 ✓	252	.4 ✓	0.83	Δ0 ✓	7.93	Δ.01 ✓	64.5	1.2 ✓	0.18			
		2Q2008 PARAMETERS				268		0.78		7.69		132.1		0.21			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/11/08 11:30

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
1	Cycles per Minute	
125	Pressure (PSI)	
25	Refill Time	
35	Discharge time	

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

3 Consecutive stable readings before sampling

Comments: Tag top of pump at 152.7 bmp

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W-1D3
Static Water Level: 114.96

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0910		START	Pump + ADJUST FLOW														
0925	0	160	0	17.08	—	302	—	3.52	—	6.65	—	59.7	—	0.31	<10 NTU	115.10	.14'
0930	5	260		16.43	3.9	303	.3 ✓	3.73	5.8 ✓	6.48	Δ.17	64.4	Δ4.7 ✓				
0935	10	↓	2.6	16.15	1.7 ✓	305	.6 ✓	3.50	6.4 ✓	6.64	Δ.16	64.3	Δ.1 ✓	0.42	<10NTU		
0940	15			16.17	.1 ✓	305	0 ✓	3.04	14.1	7.33	Δ.69	58.4	Δ5.9 ✓				
0945	20		5.2	16.21	.2 ✓	342	11.4	2.93	3.7 ✓	7.75	Δ.42	57.5	Δ.9 ✓	0.15	<10 NTU		
0950	25			16.22	.1 ✓	358	4.6	2.94	.3 ✓	7.78	Δ.03 ✓	58.4	Δ.9 ✓				
0955	30		7.8	16.62	2.4 ✓	386	7.5	2.82	4.2 ✓	7.76	Δ.02 ✓	59.2	Δ.8 ✓	0.37	<10NTU	115.13	.17'
1000	35			17.44	4.8 ✓	392	1.5 ✓	2.63	6.9 ✓	7.75	Δ.01 ✓	58.5	Δ.7 ✓				
1005	40		10.4	Change gas cylinder													
1010	45			16.41		404		3.20		7.72		55.3		0.17			
		7 PROBE PARAMETERS				335		2.85		7.61		167.0		0.09			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/11/08 11:10

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
1	Cycles per Minute	
250 (max)	Pressure (PSI)	
20	Refill Time	
40	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-11-08

Well ID: B|W-2I
Static Water Level: 21.95

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2Q2008		Parameters				264		0.76		7.96		222.10		3.12			
1140	0	500	0	15.08		257		4.23		8.10		127.1		[illegible]			
1145	5	500	2.5	14.64	3	257	0	0.83		8.13	Δ0.03	122.2	Δ4.9	0.73	<10 NTU	22.16	
1150	10	500	5	14.64	0 ✓	261	2 ✓	0.67	Δ0.16	8.14	Δ0.01 ✓	112.3	Δ9.9 ✓				
1155	15	500	7.5	14.55	<1	262	<1 ✓	0.60	Δ0.07	8.14	0 ✓	103.1	Δ9.2				
1200	20	500	10	14.51		263		0.58		8.13		89.7		0.94		22.21	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B|W-2I **Sample Date and Time:** 9-11-08 1200 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: PBarrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-11-08

Well ID: B/W-2D
Static Water Level: 35.88

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2Q08 Parameters						252		0.51		7.82		105.90		0.10			
1250	0	500	0	15.06		265		0.46		7.93		51.4					
1255	5	500	2.5	15.01	<1	269	<1	0.37	Δ0.09	7.94	0.01	33.4	Δ18	0.33	<10 NTU		
1300	10	500	5	15.04	<1	268	0	0.31	0.06	7.96	0.02	16.6	Δ17			35.88	
1305	15	500	12.5	15.01	<1	269	<1	0.31	0	7.98	0.02	-4.9	Δ22	0.26			
1310	20	500	15	15.01	0	269	0	0.31	0	7.99	0.01	-25.3	Δ20			35.88	
1315	25	500	17.5	15.02	<1	269	<1	0.31	0	7.99	0	-36.1	Δ11				
1320	30	500	20	15.04		268		0.30		7.98		-40.3	Δ4.2	0.26		35.88	
1325	35	500	22.5	15.02		268		0.31		7.98		-42.1	Δ2.2				
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B/W-2D, ~~B/W-2D FB~~ **Sample Date and Time:** 9-11-08 1325 **Sampler:** MMP

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
40	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: Penny Barrett

QAQC Review: PBarrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B/W-35
Static Water Level: 25.80

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008	parameters					1932		0.81		7.43		115.4		4.05			
1155	0	500	0	17.23		1882		4.81		7.52		138.6					
1200	5	500	2.5	15.66	10	1859	1	0.45		7.48	0.04	125.6	10				
1205	10	500	5	15.80	<1	1871	<1 ✓	0.35	20.10	7.49	0.01 ✓	113.4	10 ✓	14.67		26.05	
1210	15	500	7.5	15.66	<1	1873	<1 ✓	0.26	0.09 ✓	7.49	0	101.6	10 ✓	14.79	<1		
1215	20	500	10	15.62		1867		0.20	0.06 ✓	7.49	0	91.2		14.31	<1		
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-35 **Sample Date and Time:** 9-9-08 1215 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
~~20~~ 25	Pressure (PSI)	
17	Refill Time	
13	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B|W-3I
Static Water Level: 26.92

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						255		0.32		7.95		67.70		2.51			
1405	0	500	0	15.89		294		0.26		8.29		1.2		5.50			
1410	5	500	2.5	15.78	<1	294	0	0.16	Δ0.10	8.33	0.04	-3.4	Δ4.6			27.10	0.18
1415	10	500	5	15.80	<1	291	1	0.15	Δ0.01	8.33	0	-5.9	Δ2.5	7.37			
1420	15	500	7.5	15.72		290		0.15		8.31		-7.9					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B|W-3I
Sample Date and Time: 9-9-08 1420
Sampler: YMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
45	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B/W-3D
Static Water Level: 34.16

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 parameters						190		0.29		7.57		53.50		0.07			
1310	0	500	0	15.93		235		0.47		8.24		19.2		0.91			
1315	5	500	2.5	15.88	<1	226	4	0.26	Δ0.21	8.21	0.03	-0.1					
1320	10	500	5	15.80	<1 ✓	226	0	0.23	Δ0.03	8.23	0.02 ✓	3.6	Δ3.7	0.52		34.20	0.04
1325	15	500	7.5	15.96	1 ✓	225	<1	0.23	0	8.23	0 ✓	2.6	Δ1.0				
1330	20	500	10	15.88		224		0.22		8.22		2.7		0.31		34.20	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-3D
Sample Date and Time: 9-9-08 1330
Sampler: TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
85	Pressure (PSI)	
8	Refill Time	
22	Discharge time	

Comments: (*) a little degassing in flow through cell

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

(*) ΔpH from last Qtr > 0.5, air bubbles in sample discharge

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B/W-4S
Static Water Level: 63.77

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008	parameters					1947		1.65		6.71		230.4		0.65			
1025	0	500	0	16.60		1837		4.62		7.28		85.6					
1030	05	500	2.5	16.44	<1	1843	<1	4.07	12	7.27	0.01	86.7	1	0.83	<10	65.8	0.03
1035	10	500	5	16.47	<1 ✓	1844	<1 ✓	3.89	5	7.27	0 ✓	87.3	<1 ✓				
1040	15	500	7.5	16.37	<1	1848	<1	3.90	<1	7.25	0.02 ✓	90.1	3 ✓	0.45		63.8	
1045	20	500		16.41		1851		3.85		7.24		91.8					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-4S; B/W-4S-FD
Sample Date and Time: 9-9-08 1045
Sampler: TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
55	Pressure (PSI)	
17	Refill Time	
13	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

(*) ΔpH >0.5 from last Qtr

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B|W-4I
Static Water Level: 63.92

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 parameters						1572				7.24		136.30		0.36			
0825	0	500	0	16.54		1606		2.85		7.35		=24.3					
0830	5	500	2.5	16.29	2	1731	7	0.31		7.19	0.16	85.9					
0835	10	500	5	16.34	<1 ✓	1713	1	0.25	Δ0.06	7.20	0.01	96.8	Δ10.9				
0840	15	500	7.5	16.36	<1	1691	1 ✓	0.22	Δ0.03 ✓	7.20	0 ✓	102.9	Δ 6.1	0.42	<10	63.99	
0845	20	500	10	16.42	<1	1684	<1 ✓	0.24	Δ0.02 ✓	7.23	0.03 ✓	104.9	Δ 2				
0850	25	500		16.55		1676		0.25		7.25		107.0		0.25			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B|W-4I
Sample Date and Time: 9-9-08 0850
Sampler: TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-9-08

Well ID: B/W-4D
Static Water Level: 64.12 (measurement not at MP)

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 parameters						788		0.33		7.76		134.20		0.11			
0920	0	500	0	17.72		866		5.40		7.42		-47.1					
0925	5	500	2.5	16.54	7	858	<1	0.43		7.75	0.30	4.8		0.45	<10	64.18	0.06
0930	10	500	5	16.51	<1	861	<1 ✓	0.23	Δ0.20	7.81	0.06	18.3	Δ13.5				
0935	15	500	7.5	16.49	<1 ✓	860	<1 ✓	0.18	Δ0.05	7.81	0 ✓	27.8	Δ9.5	0.10			
0940	20	500	10	16.53	<1 ✓	860	0	0.14	Δ0.04 ✓	7.81	0	31.5	Δ3.7 ✓			64.19	0.07
0945				16.50		858		0.13	Δ0.01 ✓	7.81	0	33.9		0.14			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-4D
Sample Date and Time: 9-9-08 0945
Sampler: TWL

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
120	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

Comments: Collected ^{11}B tracer sample at location

3 Consecutive stable readings before sampling

Field Review: PBarrett

QAQC Review: PBarrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-55R
Static Water Level: 32.22

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1214		START	PUMP +	ADJUST	FLOW												
1220	0	460		16.75	—	653	—	6.51	—	8.24	—	132.4	—	1.15	<10 NTU	32.23	.01'
1225	5		4.6	16.86	.7 ✓	652	.2 ✓	6.48	.5 ✓	8.22	Δ.02 ✓	132.2	.2 ✓				
1230	10			16.90	.2 ✓	650	.3 ✓	6.24	3.8 ✓	8.20	Δ.02 ✓	131.6	.5 ✓	1.31	<10	32.41	
1235	15		9.2	16.61	1.7 ✓	649	.2 ✓	6.38	2.0 ✓	8.20	0 ✓	130.9	.5 ✓				
1240	20	↓		16.78	1.0 ✓	647	.3 ✓	6.35	.5 ✓	8.21	Δ.01 ✓	130.3	.5 ✓	1.30	<10		
		2Q2008 PARAMETERS				575		5.85		8.29		127.2		3.17			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/10/08 12:40

Sampler: PBassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

None	~~Duplicate~~
	~~MS/MSD~~
	Level IV
	Field Blank
	EQ Rinsate Blank

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
35	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: PBassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-5I R
Static Water Level: 32.44

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1056		PUMP ON + ADJUST															
1104	0	500	0	16.87	—	846	—	6.58	—	8.05	—	130.8	—	2.48	<10 NTU	32.51	
1109	5	|	2.5	16.85	.1 ✓	846	0 ✓	6.43	2.3 ✓	8.03	Δ .02 ✓	132.0	.9 ✓				
1114	10	|	5	16.87	.1 ✓	848	.2 ✓	6.43	0 ✓	8.05	Δ .02 ✓	131.5	.4 ✓			~~32~~	
1119	15	|	7.5	16.89	.1 ✓	847	.1 ✓	6.36	1.1 ✓	8.05	Δ 0 ✓	131.4	.1 ✓	2.29	<10	32.47	
1124	20	↓	10	16.95	.4 ✓	846	.1 ✓	6.29	1.1 ✓	8.06	Δ .01 ✓	131.1	.2 ✓	4.95	<10		
		2Q2008 PARAMETERS				873		4.50		7.99		114.6		0.89			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: | **Sample Date and Time:** 9/10/08 11:24 | **Sampler:** P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp (circled) Comp Gas
2	Cycles per Minute
60	Pressure (PSI)
13	Refill Time
17	Discharge time

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-5DR
Static Water Level: 33.77

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0954		PUMP ON / ADJUST FLOW															
1000	0	500	0	16.43	—	969	—	6.50	—	7.86	—	106.5	—	2.94	<10 NTU	33.90	0.13'
1005	5		2.5	16.40	.18 ✓	979	1.0 ✓	6.52	.3 ✓	7.82	Δ.04 ✓	117.2	9.6 ✓				
1010	10		5	16.49	.55 ✓	1001	2.2 ✓	6.85	4.9 ✓	7.81	Δ.01 ✓	121.6	3.7 ✓	0.66	<10	33.99	0.22'
1015	15		7.5	16.48	.1 ✓	1011	1.0 ✓	6.83	.3 ✓	7.82	Δ.01 ✓	124.3	2.2 ✓				
1020	20	↓	10	16.52	.2 ✓	1018	.7 ✓	6.85	.3 ✓	7.82	Δ 0 ✓	126.1	1.4 ✓	2.47	<10		
		2Q2008 PARAMETERS				1047		5.21		7.93		84.50		1.25			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID:

Sample Date and Time: 9/10/08 1020

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	~~Gasoline Comp~~	Comp Gas
2	Cycles per Minute	
110	Pressure (PSI)	
11	Refill Time	
19	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B/W-6S
Static Water Level: 106.03

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						786		5.95		8.04		102.3		1.16			
1520	0	500	0	17.48		767		7.85		8.15		55.6		2.38	< 10		
1525	5	500	2.5	17.43	<1	766	<1	7.55	4	8.15	0	66.0	Δ10.4			106.18	0.15
1530	10	500	5	17.48	<1	767	<1	7.56	<1	8.09	0.06	70.5	Δ4.5	1.39			
1535	15	500	7.5	17.59		767		7.52		8.06		74.4					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B/W-6S
Sample Date and Time: 9-8-08 1535
Sampler: TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
90	Pressure (PSI)	
18	Refill Time	
12	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B/W-6I
Static Water Level: 105.26

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
~~1350~~	2208	parameters				636		5.82		8.01		125		0.13			
1350	0	500	0	18.06		6416		6.83		7.09		2.4					
1355	5	500	2.5	17.85	1	6226	3	6.25	9	7.87	0.78	14.4	Δ12	0.30	< 10		
1400	10	500	5	17.69	<1 ✓	626	0 ✓	5.98	4 ✓	7.94	0.07	36.6	Δ22.2			105.30	0.04
1405	15	500	7.5	17.66	<1 ✓	6226	0 ✓	6.13	2 ✓	8.04	0.10 ✓	48.8	Δ12.2	0.30			
1410	20	500	10	17.63	<1	627	<1	6.10	<1	7.98	0.06 ✓	56.9	Δ8.1			105.31	0.05
1415	25	500	12.5	17.58		626		6.15		7.98		62.5	Δ5.6 ✓	0.19			
1420	30	500	15	17.55		626		6.16		7.99		67.7	Δ5.2 ✓				
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-6I
B/W-6I-FD

Sample Date and Time: 9-8-08 1420

Sampler: TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	~~Gasoline Comp~~	Comp Gas
2	Cycles per Minute	
120	Pressure (PSI)	
9	Refill Time	
21	Discharge time	

Comments: collecting "B sample for tracer sampling event at this location

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

3 Consecutive stable readings before sampling

Field Review: Penny Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/16/08

Well ID: B/W-7I
Static Water Level: 153.91

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0825		400	START	Pump	+ AD	JUST	FLOW										
0830	0	400	0	17.69	—	785	—	5.04	—	5.84	—	207.6	—	1.09	<10 NTU	154.15	.24'
0835	5	↓	2	17.74	.3 ✓	662	17	6.07		6.93		199.2	4.1 ✓				
0840	10	↓	4	17.76	.1 ✓	645	2.6 ✓	6.08	Δ.01 ✓	7.53	Δ.4	193.8	2.7 ✓	1.16	<10	154.10	.19'
0845	15	↓	6	17.81	.3 ✓	641	.6 ✓	6.01	Δ.07 ✓	7.60	Δ.07 ✓	194.2	.2 ✓				
0850	20	↓	8	17.83	.1 ✓	642	.1 ✓	6.04	Δ.03 ✓	7.63	Δ.03 ✓	195.2	.5 ✓			154.15	.24'
0855	25		10	17.87		642		5.82		7.62		196.6		0.92	<10		
		2Q2008 PARAMETERS				671		7.06		7.55		120.6		0.36			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/16/08 08:55

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
150	Pressure (PSI)	
10	Refill Time	
20	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/14/08

Well ID: B/W-85
Static Water Level: 148.92

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1204	—	START	PUMP	ADJUST FLOW													
1210	0	350	0	19.30	—	1211	—	4.65	—	7.73	—	299.7	—	36.48		148.96	
1215	5			18.87	2.2 ✓	1209	.2 ✓	4.25	8.9 ✓	7.74	Δ.01 ✓	301.1	.5 ✓	28.14			
1220	10		3.5	18.94	.4 ✓	1205	.3 ✓	4.63	8.5 ✓	7.73	Δ.01 ✓	300.6	.2 ✓	77.86	w/o filter	148.95	
1225	15			19.30	1.2 ✓	1205	0 ✓			7.74	Δ.01 ✓	298.8	.6 ✓				
1230	20		7.0	19.40	.5 ✓	1207	.1 ✓	5.27	12.9	7.74	Δ0 ✓	296.6	.7 ✓	43.45	with filt.		
1235	25			19.27	✓	1206	✓	5.25	.4 ✓	7.74	✓	295.3	✓				
1240	30		10.5	19.34	✓	1207	✓	4.97	5.4 ✓	7.75	✓	293.7	✓	165.8	unfiltered		
		2Q2008 PARAMETERS				1240		3.55		7.84		181.6		5.0			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/14/08 1240

Sampler: PBassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
1	Cycles per Minute	
max ~90	Pressure (PSI)	
34	Refill Time	
26	Discharge time	

Comments: - Water became more cloudy after 10 minutes, put 10um filter on at 1225

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

3 Consecutive stable readings before sampling

Field Review: PBassett

QAQC Review: PBassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/14/08

Well ID: B/W-8I
Static Water Level: 148.50

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1330		START	PUMP +	ADJUST	FLOW												
1340	0	200	0	20.43	—	1176	—	6.17	—	7.01	—	228.2	—	8.27	<10NTU	148.52	.02'
1345	5			20.04	1.9 ✓	1175	.1 ✓	5.12		7.47		226.1	.9 ✓				
1350	10		2.0	20.16	.6 ✓	1177	.2 ✓	5.21	Δ.21	7.66		233.9	3.4 ✓	2.41	<10NTU		
1355	15			20.09	.3 ✓	1179	.2 ✓	5.18	Δ.03 ✓	7.71	Δ.05 ✓	222.1	5.1 ✓				
1400	20		4.0	20.04	.2 ✓	1178	.1 ✓	5.02	Δ.16 ✓	7.72	Δ.01 ✓	220.9	.5 ✓			148.51	.01'
1405	25			19.83	1.1 ✓	1179	.1 ✓	5.06	Δ.04 ✓	7.72	Δ0 ✓	219.6	.6 ✓	0.60	<10NTU		
		2Q2008 PARAMETERS				1218		5.03		7.65		183.3		.61			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: | **Sample Date and Time:** 9/14/08 14:05 | **Sampler:** PBassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
1	Cycles per Minute	
max ~90	Pressure (PSI)	
20	Refill Time	
40	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: PBassett

QAQC Review: PBassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/W-95
Static Water Level: 16.95

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
13:35		START	PUMP +	ADJUST	FLOW												
1340	0	446	0	15.75	—	1945	—	5.70	—	7.33	—	49.1	—	3.80	<10 NTU	16.87	
1345	5	440		15.35	2.6 ✓	1965	0.5 ✓	5.58	2.1 ✓	7.33	Δ 0 ✓	56.5	14.0				
1350	10	400	4.4	15.57	1.4 ✓	1962	0.4 ✓	5.47	2.0 ✓	7.34	Δ 0.1 ✓	60.7	7.1 ✓	0.83	<10 ✓	16.82	
1355	15	↓		15.56	0.1 ✓	1963	0.1 ✓	5.44	0.6 ✓	7.34	Δ 0 ✓	63.5	4.5 ✓				
1400	20	↓	8.4	15.59	0.2 ✓	1961	0.1 ✓	5.41	0.6 ✓	7.35	Δ .1 ✓	66.7	4.9 ✓	1.47	<10 ✓	17.03	
		2Q2008 PARAMETERS				2095		5.87		7.30		243.0		1.02			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/9/08 14:00

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
35	Pressure (PSI)	
22	Refill Time	
8	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/W-9I
Static Water Level: 19.88

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1610		START	PUMP +	ADJUST	FLOW												
1615	0	480	0	15.16	—	597	—	0.58	—	7.76	—	83.5	—	3.84	<10 NTU	20.15	0.27
1620	5	480		15.40	1.6 ✓	596	0.16 ✓	0.27	Δ .31	7.81	Δ .05 ✓	77.8	7.1 ✓				
1625	10	|	4.8	15.20	1.3 ✓	596	0 ✓	0.22	Δ .05 ✓	7.81	Δ 0 ✓	74.0	5.0 ✓	6.01	<10 NTU	20.08	
1630	15	|		15.06	0.9 ✓	596	0 ✓	0.21	Δ .01 ✓	7.82	Δ .01 ✓	71.7	3.1 ✓				
1635	20	↓	9.6	15.01	0.3 ✓	596	0 ✓	0.20	Δ .01 ✓	7.83	Δ .01 ✓	69.1	3.6 ✓	2.55	<10 NTU		
		2Q2008 PARAMETERS				589		0.17		7.87		147.4		1.52			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: | **Sample Date and Time:** 9/9/08 1635 | **Sampler:** P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
65	Pressure (PSI)	
14	Refill Time	
16	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/W-9D
Static Water Level: 38.39

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1451		START	Pump +	ADJUST	FLOW												
1500	-0	320	0	17.05	—	242	—	1.93	—	7.42	—	32.6	—	5.94	<10NTU	38.52	
1505	5	320		16.24	4.8	232	4.2	1.13	52	7.63	Δ.21	36.5	11.3				
1510	10	320	3.2	16.29	0.3 ✓	229	1.3 ✓	0.46	Δ.67	7.87	Δ.24	32.6	11.3	0.82	<10NTU	38.63	
1515	15	320		16.28	0.1 ✓	227	0.9 ✓	0.32	Δ.14 ✓	7.91	Δ.04 ✓	31.3	4.1 ✓				
1520	20	320	6.4	16.13	0.9 ✓	228	0.1 ✓	0.31	Δ.01 ✓	7.92	Δ.01 ✓	30.2	3.5 ✓			38.43	
1525	25	320		16.11	0.1 ✓	228	0 ✓	0.31	Δ0 ✓	7.91	Δ.01 ✓	30.0	0.6 ✓	0.82	<10NTU		
		2Q2008 PARAMETERS				239		.23		7.84		121.4		1.04			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

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

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	~~Gasoline Comp~~	Comp Gas
2	Cycles per Minute	
150	Pressure (PSI)	
5	Refill Time	
25	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-15-08

Well ID: B/W-10S
Static Water Level: 28.26

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2608	Parameters					306		3.80		7.05		144.80		4.21			
~~1030~~																	
~~1035~~	0	500	0	14.65		3160		4.25		7.21		293.6					
1035	5	500	2.5	14.67	<1	3160	0	4.08	4	7.21	0	286.1	3	4.84	<10 NTU		
1040	10	500	5	14.60	<1	3160	0	3.96	3	7.18	0.03	279.3	2			24.24	0.02
1045	15	500	7.5	14.60		3160		4.03		7.19		272.1		2.06			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-10S **Sample Date and Time:** 9-15-08 1045 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-15-08

Well ID: B/W-10D
Static Water Level: 33.0

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2068	Parameter					314		0.36		7.88		215.3		2.13			
1115	0	500	0	15.44		415		0.66		7.91		224.1		1.82	<10 NTU		
1120	5	500	2.5	15.35	<1	415	0	0.56	≤0.10	7.91	0	216.0	4			33.25	0.25
1125	10	500	5	15.39	<1	416	<1	0.46	≤0.10	7.93	0.02	204.6	5	1.04			
1130	15	500	7.5	15.39		416		0.40		7.93		195.1					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-10D **Sample Date and Time:** 9-15-08 1130 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/W-11S
Static Water Level: 44.0

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0828		START PUMP + ADJUST FLOW															
0837	0	460	0	16.23	—	5015	—	1.74	—	3.78	—	291.9	—	318.8	Unfiltered		
0842	5	500	2.5	16.24	0.06 ✓	5049	0.7 ✓	1.19	Δ.55 ✓	3.81	Δ0.03 ✓	284.5	2.6 ✓			44.28	0.28 ft
0847	10		5	16.10	0.9 ✓	5090	0.8 ✓	0.70	Δ.49	3.86	Δ0.05 ✓	274.7	3.5 ✓	7.7	filtered		
0852	15		7.5	16.22	0.7 ✓	5107	0.3 ✓	0.66	Δ.04 ✓	3.88	Δ0.02 ✓	271.0	1.4 ✓			44.37	0.37 ft
0857	20		10	16.37	0.9 ✓	5127	0.4 ✓	0.61	Δ.05 ✓	3.90	Δ.02 ✓	267.9	1.2 ✓				
0902	25	↓	12.5	16.58	1.3 ✓	5133	0.1 ✓	0.59	Δ.02 ✓	3.91	Δ.01 ✓	266.5	0.5 ✓	49.84	unfilt	44.25	0.25
		2Q2008 PARAMETERS				5293		.24		4.03		251.0		2.22			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/9/08 09:02

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID: #

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

Bladder Pump Information:

DC Comp	(Gasoline Comp) Comp Gas
2	Cycles per Minute
25	Pressure (PSI)
13	Refill Time
17	Discharge time

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

Comments: Water is cloudy w/ red flakes, put 10um filter on discharge before YSI

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/MW-11D
Static Water Level: 48.45

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0935		START	Pump +	ADJUST													
0950	0	300	0	18.21	—	7796	—	0.64	—	6.09	—	25.2		21.61		48.67	
0955	5	↓		16.93	7.2 ✓	7622	2.3 ✓	0.54	Δ .10 ✓	6.06	Δ .03 ✓	29.4					
1000	10	↓	3.0	16.99	0.4 ✓	7696	1.0 ✓	0.55	Δ .01 ✓	6.05	Δ .01 ✓	30.1		8.76			
1005	15	240		17.09	0.6 ✓	7895	2.5 ✓	0.55	Δ 0 ✓	6.05	Δ 0 ✓	30.0					
1010	20	↓	5.4	17.17		8052		0.57		6.05		31.0		5.88		48.48	
		2Q2008 PARAMETERS				8387		0.42		6.09		-5.3		0.79			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/9/08 10:10

Sampler: PBassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
150	Pressure (PSI)	
5	Refill Time	
2.5	Discharge time	

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

3 Consecutive stable readings before sampling

Comments: (*) NOTE: Alot of air bubbles in discharge probably indicates bad bladder or leaking connection. Could only get 300 ml/min flow. Collected sample any way. Field measurements may be affected
SC reading jumping around
Collected "B tracer sample 250 ml unpreser, filt

Field Review: PBassett

QAQC Review: PBassett 9/22/08 (*)

- Not enough Pressure to field filter Samples w/0.45um filter. Collected samples unfilt & unpres in field & then filtered w/peristaltic in field office.

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/9/08

Well ID: B/W - 11B
Static Water Level: 46.61

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1115		START	PUMP +	ADJUST	FLOW												
1122	0	440	0	16.89	—	846	—	1.05	—	6.89	—	-190.4	—	4.89	<10 NTU	51.2	Δ 4.59
1127	5			16.88	0.1 ✓	1012	17.9	0.47		6.97	Δ .12	-157.4	19.0	4.66	<10 ✓	56.69	Δ 10.08
1132	10	↓	4.4	17.08	1.2 ✓	1020	0.8 ✓	0.38	Δ.89 ✓	6.98	Δ.01 ✓	-145.2	8.1 ✓			58.09	Δ 11.48
1137	15	280		17.37	1.7 ✓	1021	0.1 ✓	0.35	Δ.03 ✓	6.99	Δ.01 ✓	-143.9	0.9 ✓			60.47	Δ 13.86
1142	20	↓	7.2	17.56		1021		0.32		7.00		-144.2		2.89	<10	62.06	Δ 15.40
														~~2.89~~	~~<10~~ ✓ PB		
		2Q2008 PARAMETERS				1374		0.33		6.89		-93.9		0.30			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/9/08 1142

Sampler: P Barrett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
50	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

3 Consecutive stable readings before sampling

Comments: Get a lot of drawdown because bedrock well recharges very slowly, pumping rate significantly decreased as WL gets close to pump elevation

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

⊗ Excessive drawdown during purge

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-10-08

Well ID: B/W-13S
Static Water Level: 134.05

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2608	Parameters					775		6.51		7.39		232.1		0.21			
1310	0	400	0	17.85		809		6.17		6.72		83.2					
1315	5	400	2	17.70	<1	819	1	5.68	8	7.50	0.78	63.2	Δ20	0.38	<10 NTU	134.05	0
1320	10	400	4	17.60	<1 ✓	820	<1 ✓	5.55	2 ✓	7.59	0.09	66.8	Δ3.6				
1325	15	400	6	17.55	<1 ✓	821	<1 ✓	5.52	<1 ✓	7.54	0.05	71.0	Δ4.2	0.27		134.05	
1330	20	400	8	17.55		822		5.52		7.49		75.8					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B/W-13S
Sample Date and Time: 9-10-08 1330
Sampler: TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
80	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barnett

QAQC Review: P Barnett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-10-08

Well ID: B/W-4S
Static Water Level: 18.43

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2608	Para	meters				476		0.16		9.27		9.70		0.00			
1450	0	500	0	14.95		554		1.00		7.40		71.6		0.40	< 10 NTU		
1455	5	500	2.5	14.63	2	551	<1	0.38	Δ0.62	7.41	0.01	38.0	61			18.52	0.09
1500	10	500	5	14.53	<1 ✓	553	<1 ✓	0.29	Δ0.09	7.41	0 ✓	ORP called back, missed reading					
1505	15	500	~~10~~ 7.5	14.56	<1 ✓	553	0	0.19	Δ0.10 ✓	7.41	0 ✓	4.8					
1510	20	500	10	14.65	<1	552	<1	0.15	Δ0.04 ✓	7.39	0.02	-2.5	Δ7.3	0.20		18.49	0.06
1515	25	500	12.5	14.59	<1	552	0	0.15	0	7.35	0.04	-6.0	Δ3.5				
1520	30	500	15	14.56		553		0.14		7.36		-8.3		0.14		18.49	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-4S **Sample Date and Time:** 9-10-08 1520 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
35	Pressure (PSI)	
4	Refill Time	
16	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-10-08

Well ID: B/W-15S
Static Water Level: 14.00

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						334		0.15		7.26		56.50		~~0.15~~	0.24		
1620	0	500	0	14.51		524		1.00		7.55		106.5					
1625	5	500	2.5	13.95	4	506	3	0.59	Δ0.41	7.31	Δ0.24	116.3	Δ9.8	0.20	< 10 NTU	14.02	0.02
1630	10	500	5	13.84	<1	503	<1 ✓	0.33	Δ0.26	7.27	0.04	114.5	Δ1.8 ✓				
1635	15	500	7.5	13.83	<1 ✓	502	<1 ✓	0.23	Δ0.10	7.25	0.02 ✓	112.8	Δ1.7 ✓	0.19		14.02	
1640	20	500	10	13.82	<1 ✓	502	0	0.18	Δ0.05	7.24	0.01 ✓	111.6					
1645	25	500	12.5	13.74		501		0.17		7.22		111.4		0.21		14.02	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-15S **Sample Date and Time:** 9-10-08 1645 **Sampler:** TWK

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
30	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/16/08

Well ID: B/W-16S
Static Water Level: 192.90

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0942		START	PUMP + ADJUST FLOW														
0950	0	500	0	18.65	—	669	—	6.09	—	7.06	—	187.7	—	4.00	<10NTU	193.05	.15
0955	5		2.5	18.48	.9 ✓	664	.8 ✓	6.28	Δ.19	7.87	Δ.81	183.4	2.3 ✓				
1000	10		5	18.45	.2 ✓	665	.2 ✓	6.25	Δ.03 ✓	7.86	Δ.01 ✓	184.8	.8 ✓	3.33	<10NTU	192.91	.01
1005	15		7.5	18.45	0 ✓	666	.2 ✓	6.23	Δ.02 ✓	7.83	Δ.03 ✓	185.9	.6 ✓				
1010	20		10	18.55		666	0 ✓	6.29		7.78		187.4		1.80	<10		
		2Q 2008 PARAMETERS				685		6.07		7.59		89.6		3.26			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/16/08 10:10

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
180	Pressure (PSI)	
20	Refill Time	
10	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-14-08

Well ID: B|W-18S
Static Water Level: 24.02

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2Q08 Parameters						3981		0.36		7.55		97.70		9.64			
1435	0	500	0	14.82		3967		0.33		7.69		55.5		5.50	<10 NTU		
1440	5	500	2.5	14.82	0	3961	<1	0.25	0.08	7.67	0.02	39.4	Δ16			24.11	0.09
1445	10	500	5	14.79	<1	3964	<1 ✓	0.25	0 ✓	7.67	0 ✓	9.6	Δ30				
1450	15	500	7.5	14.85	<1	3958	<1 ✓	0.25	0	7.65	0.02 ✓	-18.5	Δ28	6.13			
1455	20	500	10	14.84	<1	3970	<1	0.26	0.01	7.66	0.01	-44.2	Δ25			24.01	
1500	25	500	12.5	Scorpion invaded site									Δ7				
1505	30	500	15	14.80		3965		0.24		7.65		-57.5	Δ7	4.21		24.05	
1510	35	500	17.5	14.91		3970		0.25		7.64		-61.5					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B|W-18S **Sample Date and Time:** 9-14-08 1510 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/14/08

Well ID: BW-18D1
Static Water Level: 30.20

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						607		0.07		7.90		260.9		2.65			
1150	0	500	0	15.28		731		0.81		7.19		328.0					
1155	5	500	2.5	15.20	<1	731	0	0.33	Δ0.48	8.02	0.83	298.1	10	2.04	<10 NTU	30.28	0.08
1200	10	500	5	15.25	<1 ✓	731	0 ✓	0.23	Δ0.10	8.12	0.10	283.5	5 ✓				
1205	15	500	7.5	15.22	<1 ✓	731	0 ✓	0.22	Δ0.01	8.15	0.03	273.4	4 ✓	2.05		30.29	
1210	20	500	10	15.24		732		0.20		8.16		266.0					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: BW-18D1 **Sample Date and Time:** 9/14/08 1210 **Sampler:** JMP

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-14-08

Well ID: B/W-18D2
Static Water Level: 30.50

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2Q08	Parameters					439		0.08		8.31		-51.0		34.52			
1250	0	500	0	15.37		476		0.46		8.61		226.0					
1255	5	500	2.5	15.44	<1	465	2	0.28	Δ0.18	8.68	0.07	183.8	21	18.84		30.62	0.12
1300	10	500	5	15.36	<1 ✓	459	1 ✓	0.24	Δ0.04	8.67	0.01 ✓	152.0	19	60.12	105		
1305	15	500	7.5	15.36	0	457	<1	0.25	Δ0.01	8.68	0.01	128.7	17	58.87	2	30.64	0.14
1310	20	500	10	15.40	<1	456	<1	0.24	0.01	8.68	0	107.1	18	64.32	9 ✓		
1315	25	500	12.5	15.43	<1	454	<1	0.22	0.02	8.67	0.01	88.5	19	63.36	2 ✓	30.63	
1320	30	500	15	15.39	<1	454	0	0.23	0.01	8.67	0	66.9	28				
1325	35	500	17.5	15.35	<1	454	0	0.24	0.01	8.67	0	46.0	Δ21	62.95		30.63	
1330	40	500	20	15.40	<1	452	<1	0.23	0.01	8.60	0.07	33.0	Δ13				
1335	45	500	22.5	15.40		452		0.23		8.64		8.5	Δ24.5	57.34			
1340	50	500	25	15.51		452		0.24		8.64		-9.8	Δ18.3				
1345	55			15.46		451		0.24		8.63		-27.4				30.63	
1350	60			15.40		451		0.24		8.65		-38.7		62.81			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-18D2 **Sample Date and Time:** 9-14-08 1350 **Sampler:** MWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
90	Pressure (PSI)	
10	Refill Time	
20	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-19S
Static Water Level: 102.15

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1633		~~350~~	START	PUMP	+ ADJUST	FLOW											
1644	0	350	0	18.18	—	1194	—	8.31	—	7.73	—	98.8	—	2.10	<10 NTU	102.18	.03'
1649	5			18.08	.6 ✓	1199	.4 ✓	8.56	2.9 ✓	7.74	Δ.01 ✓	99.9	1.1 ✓				
1654	10		3.5	17.93	.8 ✓	1195	.4 ✓	8.73	1.9 ✓	7.74	Δ0 ✓	100.8	.9 ✓	9.52			
1659	15			18.02	.5 ✓	1194	.1 ✓	8.60	1.5 ✓	7.74	Δ0 ✓	101.3	.5 ✓			102.21	
1704	20		7.0	18.00		1195		8.60		7.73		102.9		8.19			
		2Q2008 PARAMETERS				1169		7.17		7.79		158.3		6.09			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/10/08 17:04

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	~~Gasoline Comp~~	Comp Gas
1	Cycles per Minute	
100	Pressure (PSI)	
37	Refill Time	
23	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-19I
Static Water Level: 102.54

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1455		START	PUMP +	ADJUST	FLOW												
1505	0	500	0	18.94	—	1021	—	6.91	—	7.69	—	89.0	—	1.99	<10 NTU	102.51	
1510	5			19.45	2.7 ✓	1017	.4 ✓	7.64	10.0 ✓	7.81	Δ.12	93.3	4.7 ✓				
1515	10		5	19.02	2.2 ✓	1012	.5 ✓	7.98	4.4 ✓	7.85	Δ.04 ✓	95.6	2.4 ✓	2.98	<10 NTU	102.54	0'
1520	15			18.85	.9 ✓	1013	.1 ✓	7.71	3.4 ✓	7.82	Δ.03 ✓	99.1	3.6 ✓				
1525	20		10	19.02	.9 ✓	1014	.1 ✓	7.29	5.6 ✓	7.83	Δ.01 ✓	100.6	1.5 ✓	0.48			
		2Q 2008 PARAMETERS				1048		6.40		7.96		84.0		0.32			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/10/08 15:25

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID: B/W-19I-FD

	15:45	Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
150 (max)	Pressure (PSI)	
7	Refill Time	
23	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/10/08

Well ID: B/W-19D
Static Water Level: 103.59

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1333																	
1340	0	440	0	18.30	—	1024	—	3.63	—	7.51	—	-79.7	—	2.36	<10 NTU	103.59	0
1345	5	300		18.67	2.0 ✓	1045	2.0 ✓	5.36	38 ✗	7.84		-4.6					
1350	10	300	3.0	18.50	.9 ✓	1045	0 ✓	5.51	2.8 ✓	7.87	Δ.03 ✓	14.3		2.78	<10 NTU	103.59	0
1355	15	300		18.36	.8 ✓	1042	.3 ✓	5.34	3.1 ✓	7.87	Δ0 ✓	31.3	Δ17				
1400	20	300	6.6	18.45	.5 ✓	1038	.4 ✓	5.44	1.9 ✓	7.88	Δ.01 ✓	41.6	Δ10.3 ✓	1.32	<10 NTU		
1405	25	300		18.42	.2 ✓	1034	.4 ✓	5.37	1.9 ✓	7.88	Δ0 ✓	47.7	Δ6.1 ✓				
1410	30	300	9.0	18.52	.5 ✓	1031	.3 ✓	5.34	.6 ✓	7.88	Δ0 ✓	52.6	Δ4.9 ✓	1.33	<10NTU		
		2Q 2008 PARAMETERS				1034		3.44		7.90		118.2		0.22			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/10/08 14:10

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	~~Gasoline Comp~~	Comp Gas
2	Cycles per Minute	
150 (max)	Pressure (PSI)	
12	Refill Time	
18	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: 3Q 2008
Date: 9/16/08

Well ID: B/W-20S
Static Water Level: 39.54

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
8 14		400		15.63		457		8.24		7.64		245.9		13.51			
0819	5		2.0	15.21	2.72	418	8.91	3.64	80.97	6.84	0.75	284.1	-16.18	14.89	-9.71	39.65	-0.11
0824	10		4.0	15.16	<1	407	2.66	3.09	16.88	6.92	0.08	281.4	<1	7.13	<10		
0829	15		6.0	15.13	<1	406	<1	3.01	2.62	6.97	0.05	279	<1	4.43	<10	39.69	-0.15
0834	20		8.0	15.11	<1	405	<1	2.99	<1	6.98	0.01	278.0	<1	4.55	<10	39.67	
~~0839~~	~~25~~																
		2Q2008 PARAMETERS				311		0.20		7.82		-118.1		0.04			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-20S
Sample Date and Time: 9/16/08 0834
Sampler: Royanne Barrini

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp / Gasoline Comp / Comp Gas	
	Cycles per Minute
	Pressure (PSI)
	Refill Time
	Discharge time

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

(*) Δ pH > 0.5 from last Qtr

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: B/W-21S
Static Water Level: 66.77

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1548		START PUMP + ADJUST															
1553	0	520	0	16.08	—	478	—	3.39	—	7.18	—	0.7	—	1.05	<10 NTU	66.82	0.05ft
1558	5	↑		15.70	2.4 ✓	474	0.8 ✓	2.40		7.13	Δ0.05 ✓	4.8	Δ4.1 ✓	0.94	<10 ✓		
1603	10		5.2	15.61	0.6 ✓	474	0 ✓	2.34	2.5 ✓	7.11	Δ0.02 ✓	8.6	Δ3.8 ✓				
1608	15			15.65	0.3 ✓	474	0 ✓	2.33	0.4 ✓	7.11	Δ0 ✓	10.2	Δ1.6 ✓	1.00	<10 ✓	66.80	0.03ft
1613	20	↓	10.4	15.57	0.5 ✓	475	0.2 ✓	2.34	0.4 ✓	7.10	Δ0.1 ✓	12.7	Δ2.5 ✓				
		2Q2008 PARAMETERS				445		2.03		7.06		16.20		.07			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/8/08 1613

Sampler: P Bassett

Analysis Requested: NDEP Profile 2

		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

QC Sample ID: B/W-21S-FD 16:30

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
60	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-10-08

Well ID: B/W-22S
Static Water Level: 157.12

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						1734		5.00		7.33		142.9		1.51			
0945	0	500	0	17.47		1744		4.86		7.35		290.9		2.72	< 10 NTU		
0950	5	500	2.5	17.48	<1	1768	1	4.88	<1	7.34	0.01	293.3	<1			157.20	0.08
0955	10	500	5	17.52	<1	1775	<1	4.59	6	7.34	0	289.8	1	1.52			
1000	15	500	7.5	17.53		1781		4.45		7.30		290.4					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B/W-22S **Sample Date and Time:** 9-10-08 1000 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas (circled)
2	Cycles per Minute	
95	Pressure (PSI)	
16	Refill Time	
14	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-10-08

Well ID: B/W-23B
Static Water Level: 228.71

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						6060		3.05		7.60		22.40		0.51			
1105	0	500	0	19.23		713		4.86		6.76		257.4		2.98	< 10 NTU		
1110	5	500	2.5	17.88	7	699	2	1.86	80	5.99	0.77	126.0	69			228.96	0.25
1115	10	500	5	18.02	<1	703	<1 ✓	0.94	65	5.92	0.07	108.4	15	1.29			
1120	15	500	7.5	18.05	<1 ✓	707	<1 ✓	0.56	Δ0.38	5.91	0.01 ✓	103.5	5			228.99	0.28
1125	20	500	10	18.10	<1 ✓	711	<1	0.46	Δ0.10	5.95	0.04	91.2	13	0.99			
1130	25	500	12.5	18.04	<1	711	0	0.51	Δ0.05	6.01	0.06	81.1	Δ10			228.99	0.28
1135	30	500	15	18.08	<1	712	<1	0.74	Δ0.23	6.10	0.09	66.7	Δ14	0.50			
1140	35	500	17.5	18.09	<1	710	<1	0.99	Δ0.25	6.17	0.07	54.2	Δ12.5			229	0.29
1145	40	500	20	17.92	<1	710	0	1.20	Δ0.21	6.21	0.04	46.0	Δ8.2	0.48			
1150	45	500	22.5	17.72		712		1.41	Δ0.21	6.26	0.05	36.2	Δ9.8 ✓			228.99	
1155	50	~~500~~ 500	25	17.77		712		1.55	Δ0.14	6.29	0.02	32.5	Δ3.7				
1200				17.96		715		1.66		6.29		29.0		0.62			
1205	60			17.93		714		1.81		6.32		27.0					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-23B
Sample Date and Time: 9-10-08 1205
Sampler: YMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	(Comp Gas)
2	Cycles per Minute	
180	Pressure (PSI)	
16	Refill Time	
14	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: Penny Bassett

QAQC Review: P Bassett 9/22/08

(*) Δ pH >0.5 from last qtr

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: B/W-25S
Static Water Level: 20.38

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0950		START	PUMPING + ADJUST			FLOW											
0955		500	0	14.96	—	1407	—	0.90	—	7.42	—	135.6	—	0.59	<10 NTU ✓	20.40	0.02 ▲ ✓
1000		480		14.86	0.7 ✓	1404	0.2 ✓	0.80	0.1 ▲ ✓	7.41	0.01 ▲ ✓	135.1	0.4 ✓				
1005		480	4.8	14.87	0.1 ✓	1405	0.1 ✓	0.73	0.07 ▲ ✓	7.44	0.03 ▲ ✓	132.4	2.0 ✓	0.49	<10 NTU ✓		
1010		480		14.93	0.4 ✓	1406	0.1 ✓	0.70	0.03 ▲ ✓	7.46	0.02 ▲ ✓	130.1	1.7 ✓				
1015		480	9.6	14.95		1404		0.70		7.42		129.5		0.76	<10 ✓	20.43	0.05 ▲ ✓
		2Q2008 PARAMETERS				1278		0.74		7.30		224.4		1.61			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/8/08 0915

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
40	Pressure (PSI)	
21	Refill Time	
9	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: B/W-25 I
Static Water Level: 30.69

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0830		Start	pumping	+ adjust flow													
0834	~~5000~~	500	0	15.07	—	1140	—	0.64	—	7.46	—	149.5	—	2.21	<10 MV ✓	30.69	0 Δ ✓
0839	5		2.5	14.91	1.06 ✓	1139	0.08 ✓	0.42	0.22 Δ	7.63	0.17 Δ	140.8	6.0 ✓	1.42	<10 ✓		
0844	10		5	14.99	0.5 ✓	1139	0 ✓	0.38	0.04 Δ ✓	7.37	0.26 Δ	147.3	4.5 ✓			30.70	0.01 Δ ✓
0849	15		7.5	15.00	0.1 ✓	1140	0.1 ✓	0.38	0 Δ ✓	7.38	0.01 Δ ✓	146.7	0.4 ✓	1.42	<10 ✓		
0854	20		10	15.03	0.2 ✓	1139	0.1 ✓	0.38	0 Δ ✓	7.39	0.01 Δ ✓	146.1	0.4 ✓				
0900	25	↓	12.5	15.09	0.4 ✓	1140	0.1 ✓	0.38	0 Δ ✓	7.41	0.02 Δ ✓	145.1	0.7 ✓	1.09	<10 ✓		
		2Q2008 PARAMETERS				1003		0.26		7.42		229.2		0.28			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/8/08 09:00

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

	None	Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Bladder Pump Information:

DC Comp	(Gasoline Comp) Comp Gas
2	Cycles per Minute
90	Pressure (PSI)
16	Refill Time
14	Discharge time

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: B/W-25D
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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
		NOT SAMPLED – PROBLEM W/ SAMPLE DISCHARGE LINE															
						AIRBUBBLES IN DISCHARGE, NO SAMPLE COMING											
						TO SURFACE											
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time:

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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: _____

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W-27S
Static Water Level: 23.32

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1344																	
1350	0	500	0	13.31	—	335	—	5.83	—	6.78	—	114.3	—	1.82	<10 NTU	23.33	.01'
1355	5		2.5	13.26	.4 ✓	335	0 ✓	5.73	1.7 ✓	6.77	Δ.01 ✓	112.1	1.9 ✓	27.21			
1400	10		5	13.19	.5 ✓	334	.1 ✓	5.66	1.2 ✓	6.76	Δ.01 ✓	111.6	.4 ✓	14.75			
1405	15		7.5	13.14	.4 ✓	334	.1 ✓	5.64	.35 ✓	6.77	Δ.01 ✓	111.6	0 ✓	7.40	<10NTU	23.33	.01'
1410	20		10	13.19		334		5.61		6.76		111.6		4.61	<10NTU		
		2Q2008 PARAMETERS				362		6.22		6.75		64.0		5.51			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/11/08 14:10

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
40	Pressure (PSI)	
21	Refill Time	
9	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/11/08

Well ID: B/W-27D
Static Water Level: 66.05

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1442		PUMP ON + ADJUST FLOW														~~66.2~~	
1450	0	500	0	15.45	—	547	—	5.09	—	7.64	—	-19.5	—	0.99	<10 NTU	66.2	
1455	5		2.5	15.03	2.7 ✓	544	.5 ✓	6.30	21.2	7.62	Δ.02 ✓	21.6	—			~~66.09~~	
1500	10		5	14.87	1.1 ✓	545	.2 ✓	7.89	22.4	7.63	Δ.01 ✓	44.5	69.2	6.09	<10	66.09	
1505	15		7.5	15.10	1.5 ✓	544	.2 ✓	7.06	11.1	7.62	Δ.01 ✓	57.1	24.8				
1510	20		10	14.99	.7 ✓	545	.2 ✓	7.03	.4 ✓	7.61	Δ.01 ✓	60.9	Δ3.8 ✓	1.18	<10		
1515	25		12.5	15.00	.1 ✓	545	0 ✓	6.78	3.6 ✓	7.61	Δ 0 ✓	67.4	Δ6.5 ✓				
1520	30		15	15.04	.1 ✓	545	0 ✓	6.80		7.61	Δ 0 ✓	69.2	Δ1.8 ✓	2.17	<10		
		ZQ 2008 PARAMETERS				516		0.38		7.54		15.6		0.12			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/11/08 15:20

Sampler: P Bassett

Analysis Requested: NDEP Profile 2		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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
60	Pressure (PSI)	
10	Refill Time	
20	Discharge time	

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

3 Consecutive stable readings before sampling

Comments: (*) Some air bubbles in discharge line, could be loose connection on air line inside well. DO is pretty unstable, probably not accurate.
Top of pump @ 102' bmp

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

(*) Air bubbles in discharge

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/15/08

Well ID: B/W-28S
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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
		NOT SAMPLED — WELL DRY															
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: | **Sample Date and Time:** | **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments: _____

3 Consecutive stable readings before sampling

Field Review: _____ QAQC Review: _____

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-15-08

Well ID: B|W-28I
Static Water Level: 55.75

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						906		0.30		7.30		196.70		1.37			
0755	0	500	0	16.12		1053		0.72		7.34		219.8					
0800	5	500	2.5	16.13	<1	1038	1	0.57	Δ0.15	7.33	0.01	221.2	<1	2.18	<10 NTU		
0805	10	500	5	16.13	0	1043	<1 ✓	0.55	Δ0.02	7.34	0.01 ✓	223.9	1 ✓			55.80	0.05
0810	15	500	7.5	16.13	0	1044	<1 ✓	0.52	Δ0.03	7.34	0 ✓	225.9	<1 ✓	0.57			
0815	20	500	10	16.13		1043		0.50		7.33		226.8					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B|W-28I **Sample Date and Time:** 9-15-08 0815 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
60	Pressure (PSI)	
12	Refill Time	
18	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-15-08

Well ID: B/W-28D
Static Water Level: 56.56

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008	Parameters					558		0.24		7.91		47.90		3.32			
0855	0	500	0	16.43		630		1.00		7.86		138.9					
0900	5	500	2.5	16.39	<1	641	2	0.37		7.86	0	150.1	8	4.45	<10 NTU	56.78	0.22
0905	10	500	5	16.39	0 ✓	642	<1 ✓	0.28	0.09	7.84	0.02 ✓	156.2	4 ✓				
0910	15	500	7.5	16.40	<1 ✓	644	<1 ✓	0.23	0.05 ✓	7.86	0.02 ✓	158.9	2 ✓	1.84		56.75	
0915	20	500	10	16.47		644		0.22	0.01 ✓	7.87		158.9					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-28D; B/W-28D-FD
Sample Date and Time: 9-15-08 0915
Sampler: TWR

Analysis Requested: NDEP Profile 2		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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B|W-29S
Static Water Level: 80.28

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
~~1407~~	2Q08 Parameters					4059		0.37		4.26		236.7		13.74			
1140	0	500	0	15.42		3940		4.01		4.30		229.0		17.25			
1145	5	500	2.5	14.95	3	3890	1	0.58		4.34	0.04	216.1	6	14.14		80.52	
1150	10	500	5	14.85	<1 ✓	3874	<1 ✓	0.33	Δ0.25	4.34	0 ✓	211.5	2 ✓	8.02	< 10		
1155	15	500	7.5	14.82	<1 ✓	3872	<1 ✓	0.27	Δ0.06	4.33	0.01 ✓	210.3	<1 ✓				
1200	20	500	10	14.74		3874		0.25	Δ0.02 ✓	4.32		210.5		6.80		80.32	
1205	25	500	12.5	14.75		3879		0.24	Δ0.01 ✓	4.32		210.5					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B|W-29S
Sample Date and Time: 9-8-08
Sampler: TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
80	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B/W-29I
Static Water Level: 83.83

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
~~1045~~	2008	parameters				43603		0.24		6.45		104.60		14.15			
1045	0	500	0	14.56		4701		0.76		6.33		19.1		4.02			
1050	5	500	2.5	14.52	<1	4511	4	0.45	Δ0.31	6.37	0.04	14.0	Δ5.0		~~3.75~~	83.75	
1055	10	500	5	14.51	<1 ✓	4382	3	0.32	Δ0.13	6.41	0.04 ✓	10.8	Δ3.2 ✓	2.36			
1100	15	500	7.5	14.54	<1	4300	2 ✓	0.28	Δ0.04	6.43	0.02	9.3	Δ1.5				
1105	20	500	10	14.52	<1	4247	1 ✓	0.25	Δ0.03	6.46		8.8					
1110	25																
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: B/W-29I **Sample Date and Time:** 9-8-08 1110 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
90	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barnett

QAQC Review: P Barnett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B/W-29D1
Static Water Level: 100.17

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
~~0925~~	2008	parameters				~~1946~~	2560	0.24		7.21		73.90		1.32			
0925	0	500	0	15.84		2550		4.92		7.40		65.1					
0930	5	500	2.5	14.85	6	2501	2	0.89		7.35	0.05	64.6	<1	0.63	<10		
0935	10	500	5	14.85	0	2512	<1 ✓	0.39	Δ0.50	7.35	0 ✓	61.4	5 ✓			100.45	0.28
0940	15	500	7.5	14.86	<1	2524	<1 ✓	0.30	Δ0.09	7.36	0.01 ✓	59.2	4 ✓	0.28			
0945	20	500	10	14.81		2526		0.25	Δ0.05 ✓	7.36	0	57.8				100.44	0.27
0950	25	500	12.5	14.84		2526		0.22	Δ0.03 ✓	7.36		57.1		0.25			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-29D1 **Sample Date and Time:** 9-8-08 0950 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
2	Cycles per Minute	
110	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-8-08

Well ID: B/W-29D3
Static Water Level: could not measure

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 parameters						1916		~~1.10~~	0.18	7.77		4.10		0.46			
0810	0	500	0	15.12		1834		6.05		8.06		135.1					
0815	5	500	2.5	14.90	1	1750	5	3.36		8.35	0.29	-148.0		2.78	< 10		
0820	10	500	5	15.09	1 ✓	1828	4	1.42		7.79	0.56	-117.4	23				
0825	15	500	7.5	15.13	<1 ✓	1860	2	0.60		7.67	0.12	-79.0	38	1.35			
0830	20	500	10	15.16	<1	1866	<1 ✓	0.37	Δ0.23	7.666	0.01	-50.9	43				
0835	25	500	12.5	15.23	<1	1871	<1	0.32	Δ0.05	7.666	0 ✓	-35.6	35	3.38			
0840	30	500	15	15.18	<1	1871	0	0.26	Δ0.06 ✓	7.66	0 ✓	-25.8	Δ9.2				
0845	35	500	17.5	15.18	0	1872	<1	0.24	Δ0.02	7.65	0.01	-20.0	Δ5.8 ✓				
0850	40	500		15.16		1871		0.23		7.666		-14.5	Δ5.5	0.57			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: B/W-29D3 **Sample Date and Time:** 9-8-08 0850 **Sampler:** TWP

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
160	Pressure (PSI)	
10	Refill Time	
20	Discharge time	

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

3 Consecutive stable readings before sampling

Comments: (*) no SWL available. The water level meter (300') will not fit past tubing junction at 108'. Bubbles were present in discharge tube throughout purge & sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

(*) Air bubbles in sample discharge

Groundwater Sampling Log - Low Flow Method

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

Event: 3Q 2008 Groundwater
Date: 9/14/08

Well ID: D4BC-1S
Static Water Level: 15.93

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1105	—	500	—	15.57		1322		6.48		6.68		-1.4		17.96			
1120	5		2.5	14.97	3.92	1185	10.9	5.03	46.62	6.55	0.13	15.6	-239.4	1.87	<10	16.05	-0.12
1125	10		5	14.99	<1	1183	<1	3.77	6.66	6.71	0.15	31.2	-66.7	0.91	<10	16.00	+.05
1130	15		7.5	14.98	<1	1182	<1	3.64	3.57	6.76	0.07	41.1	-27.8	1.56	<10	15.99	0.01
1135	20		10	14.92	<1	1182	—	3.58	<10	6.52	0.04	46.9	-13.8				
1140	25		12.5	14.95	<1	1183	<1	3.48	<10	6.88	0.06	51.4	-9.1	1.02	<10	16.01	
		2Q2008 PARAMETERS				1345		6.24		7.33		95.2		0.08			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: D4BC-1S
Sample Date and Time: 9/14/08 1140
Sampler: Roxanne Barringer

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: 3Q2008
Date: 9/11/08

Well ID: D5AC-15
Static Water Level: 22.10

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
915	—	300	~~4.38~~	16.38		14100		2.35		6.56		191.7		0.95	<10		
920	5		1.5	16.06	1.97	14252	-1.07	1.34	54.74	6.49	0.07	209.4	-8.83	1.88	<10		
925	10		3	16.11	<1	14226	<1	1.10	19.67	6.51	0.02	205.3	1.92	1.85	<10		
930	15		4.5	16.25	21	14075	1.06	1.00	9.52	6.52	0.01	203.9	<1	1.88	<10		
935	20		6	16.27	<1	13963	<1	0.92	8.33	6.48	0.04	206.6	-1.31	1.85	<10		
940	25		7.5	16.33	<1	13933	<1	0.89	40.03	6.46	—	203.5	1.51	1.88	—		
945	30	↓	9	16.49		13871		0.88	40.01	6.55		205.3	<1	1.88	—		
		2Q2008 PARAMETERS				13,969		1.27		6.53		139.7		1.10			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: D5AC-15 **Sample Date and Time:** 9/11/08 0945 **Sampler:** Roxanne Barringer

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/8/08
Samplers: Royanne Barringer
Start Time 1410
Sample Time

Well Information

	new	old
Well ID:	MW-15	

Casing Diameter:		in	* multiplier
Total Depth			ftbtoc
Screen Interval			ftbgs
Approx depth to water			ftbtoc
Depth of Pump			ftbtoc
Sample Pump Type			
Approx. purge volume			gal
Purge Water Containment			

Measured Information

Depth to Water ftbtoc
Pump Used
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump ftbtoc
Pump Settings

Note: unable to sample PVC discharge broken inside casing

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
		N/A							
		No Sample collected well discharge line is broken							
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
MW-15	9/8/08	1410	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

NA

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

P Barringer

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-7-08

Well ID: MW-02S
Static Water Level: 61.19

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1355	0	500	0	19.15		6042		1.00		3.97		232.4					
1400	5	500	2.5	19.04	<1	5974	1	0.35		4.02	0.05	215.5	6	9.21	<10	61.30	
1405	10	500	5	18.97	<1	5964	<1	0.27	Δ0.08	4.05	0.03	210.9	2				
1410	15	500	7.5	18.90		5960		0.22		4.05		206.6		3.95		61.33	
		2Q2008 PARAMETERS				6228		0.32		4.61		223.0		0.6			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: MW-2S **Sample Date and Time:** 9-7-08 1410 **Sampler:** TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
70	Pressure (PSI)	
18	Refill Time	
12	Discharge time	

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

Comments: (*) lots of orange precipitate being pumped out in initial purge. At sample time there was still precipitate - a 10 µm filter was used for the 'unfiltered' samples

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

(*) Unfilt sample for lab analysis was filtered w/ 10 µm filter

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/7/08

Well ID: MW-45
Static Water Level: 84.41

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1637		start pumping + adjust flow															
1640		440	0	20.02	—	1801	—	7.23	—	7.02	—	191.6	—	4.30	—	84.55	0.14
1645		500	2.5	18.05	10.3	1764	2.1 ✓	4.73	41	7.29	0.27 ✓	202.1	5.3 ✓	1.29	<10 ✓		
1650		500	5	17.46	3.3 ✓	1763	0.1 ✓	4.69	0.84 ✓	7.31	0.02 ✓	203.9	0.9 ✓			84.52	0.11
1655		500	7.5	17.36	0.6 ✓	1764	0.1 ✓	4.61	1.72 ✓	7.31	0 ✓	204.7	0.4 ✓	1.93	<10 ✓		
1700		500	10	17.26		1762		4.54		7.31	0	205.5				84.60	
1705		500	12.5	17.35		1766		4.45		7.32		205.2		0.24	<10 ✓		
		2Q2008 PARAMETERS				1854		3.26		7.34		220.7		0.05			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: MW-4 **Sample Date and Time:** 9/7/08 17:05 **Sampler:** P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID: MW-4-FD

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

Bladder Pump Information:

DC Comp (Gasoline Comp) Comp Gas	
2	Cycles per Minute
110	Pressure (PSI)
16	Refill Time
14	Discharge time

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: 3Q
Date: 9/11/08

Well ID: MW-55
Static Water Level: 52.1

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1350	-	400	-	17.29		15622		3.42		3.64		297.9		1.80	<10		
1355	5		2	16.96	2.51	15460	1.04	2.13	46.48	3.77	0.13	224.6	28.06	0.60	<10		
1400	10		4			Compressor overheated, Paused + let cool											
1415	15		6	17.48	-3.56	15483	<1	2.19	-2.77	3.36	0.11	214.7	4.50	0.68	<10		
1420	20		8	17.31	<1	15481	<1	2.13	2.77	3.56	-	212.5	1.02	0.54	<10		
1425	25		10	17.21	<1	15533	<1	2.08	2.37	3.55	0.01	211.8	<1	0.50	<10		
1430	30	↓		17.26	<1	15546		2.05		3.56	0.01	211.6	<1	0.50			
		2Q2008 PARAMETERS				15,674		0.81		3.84		231.2		.04			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: MW-55 **Sample Date and Time:** 9/11/08 1430 **Sampler:** Roxanne Barrimer

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp (Gasoline Comp, Comp Gas)	
	Cycles per Minute
	Pressure (PSI)
	Refill Time
	Discharge time

Comments: Compressor overheated @ 1400, let sit 15 min then restarted + let parameters stabalize again

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-11-08

Well ID: MW-2002-IS
Static Water Level: 17.70

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2Q08	Parameters					3089		0.73		7.04		132.40		0.32			
1420	0	500	0	14.55		2972		0.52		7.26		50.5					
1425	5	500	2.5	14.37	1	2996	<1	0.44	<0.08	7.25	0.01	39.1	<11	0.28		17.92	0.22
1430	10	500	5	14.33	<1 ✓	3008	<1 ✓	0.34	<0.10 ✓	7.26	0.01 ✓	30.9	<8 ✓				
1435	15	500	7.5	14.32	<1 ✓	3016	<1 ✓	0.24	<0.10 ✓	7.28	0.02 ✓	24.1	<7 ✓	0.21		17.90	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/11/08 14:35

Sampler: ~~TRM~~ TMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: Penny Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/7/08

Well ID: MW2002-25
Static Water Level: 49.47

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1355		START	PUMPING	Adjust flow													
1400		480															
1402	0	480	0	18.10	—	736	—	6.62		7.75	~~0.13~~	284.4		5.72		49.77	
1407	5	440		17.68	2.3 ✓	725	1.5 ✓	5.61	16.5	8.06	0.31	288.0	1.2 ✓	8.92	<10 ✓		
1412	10	440	4.4	17.38	1.7 ✓	721	0.5 ✓	5.76	2.6 ✓	8.07	0.01 ✓	286.7	0.5 ✓			49.72	<0.3 ✓
1417	15	440		17.47	0.5 ✓	719	0.3 ✓	5.59	2.9 ✓	8.08	0.01 ✓	284.0	0.9 ✓	7.47	<10 ✓		
1422	20	440	8.8	17.74		718		5.67		8.09	0.01 ✓	281.0		2.20	<10 ✓	49.72	<0.3 ✓
		2Q2008 PARAMETERS				738		5.27		8.25		130.4		0.97			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: MW2002-25 **Sample Date and Time:** 9/7/08 14:22 **Sampler:** P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
45	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/7/08

Well ID: MW2002-2I
Static Water Level: 49.96

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1505	start pumping + adjust flow																
1508	0	500	0	18.05	—	496	—	0.85	—	8.00	—	31.6	—	38.72	—		
1513	5	500		17.26	4.5	491	1.0 ✓	0.31	1.0 %	8.21	0.21	104.9	107	37.83	2.3	50.22	
1518	10	480	5	17.15	0.6 ✓	491	0 ✓	0.27	<0.1 Δ	8.22	0.01 ✓	106.5	1.5	28.67	27.5		
1523	15	480		17.06	0.5 ✓	491	0 ✓	0.35	<0.1 Δ	8.23	0.01 ✓	93.9	12.5	24.46	15.8	50.10	
1528	20	480	10	16.98	0.5 ✓	490	0.2 ✓	0.41	<0.1 Δ	8.23	0 ✓	89.4	4.9 ✓				
1533	25	480		17.06	0.5 ✓	490	0 ✓	0.50	<0.1 Δ	8.23	0 ✓	85.7	4.2 ✓	22.66	7.6 ✓	50.09	
1538	30	480	15	17.38	1.8 ✓	489	0.2 ✓	0.59	<0.1 Δ	8.24	0.01 ✓	76.3	11.6	21.59	4.8 ✓		
		2Q2008 PARAMETERS				522		0.76		8.19		48.7		55.14			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: MW2002-2I
Sample Date and Time: 9/7/08 15:38
Sampler: PBassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
140	Pressure (PSI)	
11	Refill Time	
19	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: PBassett

QAQC Review: PBassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/15/08

Well ID: PA-MW-S
Static Water Level: 97.11

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
0756		Pump ON + ADJUST FLOW															
0758	0	500	0	17.09	—	1893	—	1.28	—	7.38	—	168.8	—	6.79	<10 NTU	97.14	.03'
0803	5		2.5	17.11	.1 ✓	1889	.2 ✓	0.78		7.36	Δ.02 ✓	166.9	1.1 ✓				
0808	10		5	17.13	.1 ✓	1889	0 ✓	0.64	Δ.14 ✓	7.35	Δ.01 ✓	165.6	.8 ✓	4.81	<10 NTU		
0813	15		7.5	17.15	.1 ✓	1886	.2 ✓	0.68	Δ.04 ✓	7.35	Δ0 ✓	164.7	.5 ✓			97.19	.08'
0820	20		10	17.27		1887		0.69		7.35		164.0		1.68	<10 NTU		
		2Q2008 PARAMETERS				1955		0.89		7.44		130.8		0.47			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: | **Sample Date and Time:** 9/15/08 08:30 | **Sampler:** P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

		Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/15/08

Well ID: PA-MW-2S
Static Water Level: 143.12

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1022		START	PUMP +	ADJUST	FLOW												
1030	0	400	0	18.52	—	1998	—	4.05	—	6.75	—	169.6	—	0.42	40NTU	143.22	0.1'
1035	5		2	18.43	.5 ✓	1988	.5 ✓	4.15	Δ.1 ✓	6.78	Δ.03 ✓	170.3	.4 ✓				
1040	10		4	18.30	.7 ✓	1987	.1 ✓	4.32	Δ.17	6.78	Δ0 ✓	170.3	0 ✓	0.71	<10		
1045	15		6	18.24	.3 ✓	1973	.7 ✓	4.44	Δ.12	6.80	Δ.02 ✓	170.3	0 ✓				
1050	20	↓	8	18.34	✓	1953	1.0 ✓	4.67	Δ.23	6.82	Δ.02 ✓	170.7	.2 ✓	2.66		143.25	Δ.13'
1055	25		10	18.33	✓	1938	.8 ✓	4.87	Δ.20	6.85	Δ.03 ✓	170.7	0 ✓				
1100	30	↓	12	18.22		1931		4.93	Δ.06	6.86		171.2		0.32			
		2Q 2008 PARAMETERS				2154		3.98		6.80		157.8		.05			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/15/08 11:00

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	(Gasoline Comp)	Comp Gas
1	Cycles per Minute	
max	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/15/08

Well ID: PA-MW-3S
Static Water Level: 117.23

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
~~0902~~																	
~~0910~~	~~0~~	400	~~0~~	17.83	—	1745	—	2.03	—	7.09	—	162.1	—	0.41	<10NTU	117.38	.15'
0915	5		2	17.74	.5 ✓	1773	1.6 ✓	0.52		7.04	Δ.05 ✓	164.4	1.4 ✓				
0920	10		4	17.78	.2 ✓	1777	.2 ✓	0.48	Δ.04 ✓	7.04	Δ0 ✓	163.7	.4 ✓	1.27	<10		
0925	15		6	17.79	.1 ✓	1775	.1 ✓	0.44	Δ.04 ✓	7.04	Δ0 ✓	163.2	.3 ✓			117.27	.04'
0930	20	↓	8	17.77		1768		0.44		7.06		162.8		0.33	<10		
		2Q2008 PARAMETERS				1744		0.69		7.12		140.2		0.22			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/15/08 0930

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/10/08
Samplers: Roxanne Barcweer
Start Time 1325
Sample Time 1330

Well Information

	new	old
Well ID:	PW-1S	

Casing Diameter:		in	* multiplier
Total Depth			ftbtoc
Screen Interval			ftbgs
Approx depth to water			ftbtoc
Depth of Pump			ftbtoc
Sample Pump Type			
Approx. purge volume			gal
Purge Water Containment			

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1330			3.84		3800		18.7		1.89
2Q2008 PARAM			4.00		4136				0.81
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-1S	9/10/08	1330	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: J Barrett

QC Review: PBarrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/10/08
Samplers: Royann C. Bowling
Start Time 1050
Sample Time 1100

Well Information

	new	old
Well ID:	PW-2S	

Casing Diameter:		in	* multiplier
Total Depth			ftbtoc
Screen Interval			ftbgs
Approx depth to water			ftbtoc
Depth of Pump			ftbtoc
Sample Pump Type			
Approx. purge volume			gal
Purge Water Containment			

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1100			3.95		6310		17.5		0-90
2Q2008 PARAMETERS			4.00		6816				0.12
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-2S	9/10/08	1100	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Bassett

QC Review: PBassett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/10/08
Samplers: Royanne Barringer
Start Time 1545
Sample Time 1550

Well Information

	new	old		
Well ID:	PW-	35		
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1550			3.85		7050		16.1		2.67
2Q2008 PARAM:			3.97		8268				0.16
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-35	9/10/08	1550	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID PW-35-FD
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name:
Project Number:
Date: 9/10/08
Samplers: Royanne Barringer
Start Time 1500
Sample Time 1505

Well Information

	new	old		
Well ID:	PW-45			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water ftbtoc
Pump Used
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump ftbtoc
Pump Settings

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH S.U.	PH Delta	Conductivity uS/cm	Conductivity %RPD **	Temperature °C	Temperature %RPD **	Turbidity
1505			5.34		5590		16.0		5.40
2020 08 PARAM:			5.57		5948				8.06
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container Qty	Size	Type	Field Prep Filter	Preserv.	Analysis	Lab
PW-45	9/10/08	1505	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: PBarrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/10/08
Samplers: Roxanne Barringer
Start Time 1420
Sample Time 1425

Well Information

	new	old		
Well ID:	PW-5S			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1425			6.19		3200		16.0		8.10
2Q2008 PARAM:			5.84		4610				1.01
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-5S	9/10/08	1425	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/10/08
Samplers: Royanne Barringer
Start Time 1350
Sample Time 1400

Well Information

	new	old		
Well ID:	PW-6S			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1400			6.51		3580		19.3		2.93
2Q2008 PARAM			6.79		3730				2.20
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-6S	9/10/08	1400	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/9/08
Samplers: Royanne Barringer
Start Time 1455
Sample Time 1510

Well Information

Well ID:	new	old
	PW-75	

Casing Diameter:		in	* multiplier
Total Depth			ftbtoc
Screen Interval			ftbgs
Approx depth to water			ftbtoc
Depth of Pump			ftbtoc
Sample Pump Type			
Approx. purge volume			gal
Purge Water Containment			

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1510			6.66		7770		17.8		25.92
2Q2008 PARAM:			5.60		7780				16.80
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-75	9/9/08	1510	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: JBarrett

QC Review: PBarrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/9/08
Samplers: Roxanne Barringer
Start Time
Sample Time 1430

Well Information

	new	old		
Well ID:	PW-8S			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water ftbtoc
Pump Used
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump ftbtoc
Pump Settings

Note: filtered in Lab w/ peristaltic pump

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1430			6.48		6360		28.6		1.45
					6360 RB				
2Q2008 PARAM			6.37		6226				3.12
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-8S	9/9/08	14:30	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/9/08
Samplers: Roxanne Barringer

Start Time 930
Sample Time 940

Well Information

	new	old		
Well ID:	PW-	95		
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
~~9:38~~			~~6.47~~		12060		16.8		7.76
09:40 RB			6.47						
2Q2008 PARAM			6.48		12,140				2.20
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-95	9/9/08	940	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Bassett

QC Review: P Bassett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/9/08
Samplers: Royanne Barenger
Start Time 8:48
Sample Time 0907

Well Information

	new	old		
Well ID:	PW-105			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
~~903~~			6.42		13110		20.5		15.45
0907 RB									
2Q2008 PARAM:			6.39		17,146				22.80
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-105	9/9/08	0907	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/9/08
Samplers: Royanne Barrineau
Start Time: 810
Sample Time:

Well Information

	new	old		
Well ID:	PW-11S			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water _____ ftbtoc
Pump Used _____
Pump Deconned Before Use ____yes ____ no
Actual Depth of Pump _____ ftbtoc
Pump Settings _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
825			6.50		11790		17.3		67.80
2Q2008 PARAM:			6.46		11,220				4.50
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
PW-11S	9/9/08	825	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/7/08

Well ID: US EPA 2S
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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
		NOT SAMPLED — WELL DRY															
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time:

Sampler: R Baringer

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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: _____

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/7/08
Samplers: Royanne Barringer
Start Time
Sample Time: 1730

Well Information

	new	old		
Well ID:	USGS-	2B5		
Casing Diameter:			in	* multiplier
Total Depth	~ 29'			ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump	~~28.6~~	28.6		ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water: 15.02 ftbtoc
Pump Used: Geosquirt
Pump Deconned Before Use: ✓ yes ___ no
Actual Depth of Pump: 28.6 ftbtoc
Pump Settings

Note: Purge dry 3x and let recharge
1st purge 16:05 - 16:12
2nd purge 16:26 - 16:31
3rd purge 1644 - 1651

Well Purging Record

Time	Purge Flowrate	Total Gals	PH S.U.	PH Delta	Conductivity uS/cm	Conductivity %RPD **	Temperature °C	Temperature %RPD **	Turbidity
1610			3.81		5020		18.2		44.36
1630			4.19		4750		18.0		26.40
1646			4.20		4720		17.4		26.48
2Q2008 PARAM:			3.98		5621				1.20
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container Qty	Size	Type	Field Prep Filter	Preserv.	Analysis	Lab
USGS-2B5	9/7/08	1730	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-11-08

Well ID: USGS-13S
Static Water Level: 15.10

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2220	0	PARAMETERS				2414		1.23		7.10		117.1		0.61			
0938																	
~~0940~~	0	200	1	16.47		2487		6.26		7.25		268.9		2.84		16.08	
0943	5	200	2	15.71		2471		3.07		7.14		276.8				16.91	
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: USGS-13S **Sample Date and Time:** 9-11-08 0943 **Sampler:** YMR

Analysis Requested: NDEP Profile 2		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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

Comments: also sampled for ~~234U~~ ~~238U~~ 11B + 36Cl for tracer sampling
(*) sampled before stabalization per Penny's recommendation
Well started pumping air @ 1020, not enough volume in well to fill 7L bottles for radiochem

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

3 Consecutive stable readings before sampling

Field Review: Penny Bassett

QAQC Review: P Bassett 9/22/08

(*) No parameter stabalization prior to sampling; not enough water to collect complete sample (no Rad). We knew this would occur based on previous sampling attempt.

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/14/08

Well ID: UW-1S
Static Water Level: 107.75

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1536		START	Pump +	ADJUST FLOW													
1545	0	500	0	17.64	—	3757	—	1.34	—	5.72	—	29.8	—	1.25	filtered	107.89	.14'
1550	5		2.5	17.25	2.2 ✓	3772	.4 ✓	0.73		5.74	Δ.02 ✓	20.6					
1555	10		5	17.29	.2 ✓	3775	.1 ✓	0.66	Δ.07 ✓	5.74	Δ0 ✓	16.8	Δ3.8 ✓	.44	filt'd	107.92	
1600	15		7.5	17.07	1.3 ✓	3784	.2 ✓	0.58	Δ.08 ✓	5.74	Δ0 ✓	10.9	Δ5.9 ✓				
1605	20	↓	10	17.13	.4 ✓	3785	.1 ✓	0.54	Δ.04 ✓	5.73	Δ.01 ✓	4.9	Δ6.0 ✓	1.79	unfilt'd		
		2Q2008 PARAMETERS				3798		0.47		5.94		14.4		0.22			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/14/08 16:05

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

	16:15	Duplicate
		MS/MSD
		Level IV
		Field Blank
		EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
1	Cycles per Minute	
max ~90	Pressure (PSI)	
31	Refill Time	
29	Discharge time	

Comments: Fine red particles in discharge, put 10um filter on pre-YSI
Otherwise water is pretty clear

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

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-11-08

Well ID: W32DC-D
Static Water Level: 32.69

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008	Pump	meters				251		0.63		8.22		58.40		0.42			
1035	0	500	0	14.69		270		1.00		8.51		30.9					
1040	5	500	2.5	14.63	<1	252	7	0.43	Δ0.57	8.43	0.08	31.0	Δ0.01	0.37			
1045	10	500	5	14.70	<1	250	<1	0.33	Δ0.10	8.37	0.06	28.1	Δ2.9			32.77	
1050	15	500	7.5	14.66	<1	249	<1	0.25	Δ0.08	8.32	0.05	25.2	Δ2.9	0.35			
1055	20	500	10	14.72		249		0.23		8.29		20.8					
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: W32DC-D **Sample Date and Time:** 9-11-08 1055 **Sampler:** TWR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments:

3 Consecutive stable readings before sampling

Field Review: Penny Barnett

QAQC Review: P Barnett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: 3Q 2008 Groundwater
Date: 9/14/08

Well ID: W4CB-2I
Static Water Level: 24.83

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1422		300		16.34		4212	-25.19	3.42		6.07		-35.6		77.26		24.95	
1427	5		2.5	14.37	12.52	5726	30.58	1.38	85.47	5.56		17.1	569.72	8.41	<10	24.95	0.12
1432	10		5	14.21	<1	5451	<1	1.29	6.74	5.62	0.06	3.1	138.61	5.22	<10	24.95	—
1437	15		2.5	14.23	<1	5512	-1.11	1.21	6.40	5.56	-0.24	-16.9	-285.5				
1442	20		10	14.21	<1	5582	-1.26	1.19	1.66	5.92	0.06	-24.3	-35.92	4.53	<10	24.95	—
1447	25		12.5	14.25	<1	5602	<1	1.15	3.41	5.81	0.11	-25.6	-5.21	—		—	
1452	30		15	14.26	<1	5633	<1	1.12	2.64	6.00	0.19	-27.2	-6.06	4.25	<10	24.98	—
1457	35		17.5	14.24	<1	5640	<1	1.10	<1	5.93	0.07	-22.4	<1	—		—	
1502	40	↓		14.27	<1	5635	<1	1.10	<1	6.02	0.09	-27.3	<1	3.45	<10	25.50	0.05
1507	45	↓		14.26	<1	6684	<1	1.09		5.99		-27.6		3.30	<10	25.00	0.05
		2Q2008 PARAMETERS				6617		1.50		5.85		-40.1		8.66			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: W4CB-2I
Sample Date and Time: 9/14/08 1507
Sampler: Roxanne Barrenja

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp / Gasoline Comp / Comp Gas	
	Cycles per Minute
	Pressure (PSI)
	Refill Time
	Discharge time

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: 3 Q Groundwater
Date: 9/14/08

Well ID: W5AA-1I
Static Water Level: 20.79

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1239	—	500	—	15.62		742		2.83		7.22		277.4		4.16	<10	~~20.83~~	
1244	5	500	2.5	14.95	4.38	701	4.83	1.20	80.99	6.44	0.78	307.5	10.29	1.24	<10	20.83	- 0.03
1249	10		5	14.96	<1	697	1.42	0.99	19.17	6.94	0.50	290.4	5.71	1.76	<10	20.80	0.03
1254	15		7.5	14.98	<1	689	1.15	0.94	Δ 0.05	7.07	0.13	279.9	4.04	—		—	—
1259	20		10	14.89	<1	680	1.31	0.86	Δ 0.08	7.24	0.13	265.8	4.08	1.25	<10	20.82	0.03
1304	25		12.5	14.88	<1	678	<1	0.89	Δ 0.01	7.29	0.05	260.9	1.86	1.03	<10	20.80	
		2Q2008 PARAMETERS				925		0.53		7.89		96.4		0.29			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifer	

Sample ID: W5AA-1I **Sample Date and Time:** 9/14/08 1304 **Sampler:** Royanne Barringer

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

Comments: Discharge tubing and discharge had large particles & Bugs initially

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

(*) ΔpH >0.5 from previous Qtr

(X)

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name:	Quarter 3 2008
Project Number:	134557
Date:	9/2/08
Samplers:	Roxanne
	13:30
Start Time	18.37
Sample Time	14:45

Well Information

	new	old		
Well ID:	W5AA-35			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water		21.48		ftbtoc
Depth of Pump		~~26.6~~ ~~26.5~~ 22.6		ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water	21.48 ftbtoc
Pump Used	Geosquirt
Pump Deconned Before Use	✓ yes ___ no
Actual Depth of Pump	ftbtoc
Pump Settings	pump @ 22.6'

Note: pumped dry 3x + allow to recharge

Well Purging Record

Time	Purge Flowrate	Total Gals	PH (X) S.U.	PH Delta	Conductivity uS/cm	Conductivity %RPD **	Temperature °C	Temperature %RPD **	Turbidity
~~18:37~~									
13:37			6.87		5970		24.3		5.55
14:01			6.93		5740		25.1		30.0
14:22			6.96		5880				34.95
14:44			7.35		5730		29.5		15.02
2Q2008 PARAMETERS			6.83		5778				1.23
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container Qty	Size	Type	Field Prep Filter	Preserv.	Analysis	Lab
W5AA-35	9/7/08	14:45	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID ___
Field Blank Sample ID ___
Equip. Blank Sample ID ___
Other QC: MS/MSD ___
Level IV ___

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Bassett

QC Review: P Bassett 9/22/08

(X) ΔpH >0.5 from previous Qtr

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/14/08

Well ID: W5AB-2S
Static Water Level: 17.07

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1600		500		17.78		7242		5.77		6.09		70.3		31.55		17.22	
1605	5		2.5	16.09	9.97	7095	2.11	1.85	102.88	5.79	0.30	129.9	-59.54	28.37	10.61	10	
1610	10		5	15.80	1.81	7116	<1	1.35	31.25	5.80	0.01	148.5	-13.36	24.87	13.14	17.30	
1615	15		7.5	15.84	0.04	7121	<1	1.30	A 0.05	5.80	-	154.6	-4.02	19.87	22.35	17.30	
1620	20		10	15.79	<1	7142	<1	1.16	11.38	5.84	0.04	157.5	-1.8	17.11	14.92	17.31	
1625	25		12.5	15.83	<1	7163	<1	1.11	A 0.05	5.88	0.04	158.8	<1	14.58	15.96	-	
1630	30		15	15.85	<1	7173	<1	1.11	-	5.88	-	158.5	-	12.38	16.32	17.33	
1635	35		17.5	15.83	<1	7180	<1	1.11	-	5.90	0.02	158.1	<1	11.98	3.2	17.33	
		2Q2008 PARAMETERS				7361		2.15		6.01		182.2		5.83			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: WS AB-2S
Sample Date and Time: 9/14/08 1635
Sampler: Roxanne Bannister

Analysis Requested: NDEP Profile 2

		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

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp / Comp Gas
	Cycles per Minute
	Pressure (PSI)
	Refill Time
	Discharge time

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

Comments:

3 Consecutive stable readings before sampling

Field Review: Penney Bennett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-14-08

Well ID: ~~WSAB-3I TP~~ WSAB-3I
Static Water Level: 22.33

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
2008 Parameters						3029		0.36		6.77		81.50		11.15			
1610	0	500	0	15.12		2976		0.46		6.77		121.90		13.44			
1615	5	500	2.5	14.97	<1	3223	8	0.29	≤0.18	6.73	0.04	114.50	16	14.38	7		
1620	10	500	5	14.92	<1 ✓	3300	2	0.26	≤0.02	6.71	0.02 ✓	110.2	4 ✓	15.89	10	22.54	0.21
1625	15	500	7.5	14.96	<1 ✓	3341	1 ✓	0.22	≤0.04 ✓	6.70	0.01	107.2	3 ✓	16.32	3 ✓		
1630	20	500	10	14.90	<1	3354	<1 ✓	0.21	≤0.01 ✓	6.69		106.4		9.94	<10 NTU		
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: WSAB-3I
Sample Date and Time: 9-14-08 1630
Sampler: MMR

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp (Gasoline Comp) Comp Gas	
2	Cycles per Minute
30	Pressure (PSI)
15	Refill Time
15	Discharge time

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

Comments:

3 Consecutive stable readings before sampling

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/15/08

Well ID: W5BB-S
Static Water Level: 29.51

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1320		PUMP ON + ADJUST FLOW															
1325	0	500	0	17.48	—	2987	—	4.62	—	7.11	—	152.5	—	0.49	<10NTU	29.58	.07'
1330	5		2.5	16.75	4.2	3018	1.0 ✓	4.13	Δ.49	7.13	Δ.02 ✓	156.1	2.3 ✓				
1335	10		5	16.78	.2 ✓	3072	1.8 ✓	4.08	Δ.05 ✓	7.12	Δ.01 ✓	154.3	1.2 ✓	0.38			
1340	15		7.5	16.81	.2 ✓	3110	1.2 ✓	4.10	Δ.02 ✓	7.11	Δ.01 ✓	153.1	.8 ✓			29.63	-12'
1345	20		10	16.77		3146		4.10		7.10		152.7		0.71		29.57	
~~1350~~	~~25~~		~~12.5~~														
		2Q2008 PARAMETERS				3425		6.04		7.21		128.5		0.21			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/15/08 13:45

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

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

Bladder Pump Information:

DC Comp / Gasoline Comp / Comp Gas	
	Cycles per Minute
	Pressure (PSI)
	Refill Time
	Discharge time

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9-7-08

Well ID: W5DB-D
Static Water Level: 45.41

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1500	0	500	0	15.40		765		1.60		7.79		-180.0		0.54	< 10		
1505	5	500	2.5	15.23	1	766	< 1	1.32	19	7.84	0.05	-132.7	30			45.58	0.17
1510	10	500	5	15.07	1 ✓	765	< 1 ✓	1.34	2	7.83	0.01 ✓	-109.6	19	0.40			
1515	15	500	7.5	15.20	< 1	757	1	1.51	12	7.80	0.03	-89.0	21				
1520	20	500	10	15.01	1	756	< 1	1.50	< 1	7.80	0	-78.4	13	0.31			
1525	25	500	12.5	14.95	< 1	753	< 1	1.65	10	7.78	0.02	-65.5	18			45.62	0.21
1530	30	500	15	14.97	< 1	748	< 1	1.80	9 ✓	7.76	0.02	-56.0	Δ 9.5				
1535	35	500	17.5	14.90	< 1	746	< 1	1.84	2 ✓	7.75	0.01	-47.5	Δ 8.5				
1540	40	500	20	14.93		745		1.95		7.73		-40.3		0.22			
		2Q2008 PARAMETERS				795		1.63		7.71		8.90		.48			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID: WSDB-D, WSDB-D-FD **Sample Date and Time:** 9-7-08 1540 **Sampler:** TMR

Analysis Requested: NDEP Profile 2		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

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

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
80	Pressure (PSI)	
15	Refill Time	
15	Discharge time	

Comments:

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

3 Consecutive stable readings before sampling

Field Review: P Barrett

QAQC Review: P Barrett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: MW-15
Static Water Level: 44.31

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1408		START	+ ADJUST														
1415	0	460	0	17.75	—	623	—	2.15	—	7.68	—	-121.0	—	4.77	<10 NTU	44.24	0.07 ft
1420	5	460		17.23	3.0 ✓	648	3.9	0.29		7.87	Δ0.19	-110.5	9.1 ✓	4.05	<10 ✓		
1425	10	460	4.6	17.18	0.3 ✓	647	0.2 ✓	0.20	Δ0.09 ✓	7.92	Δ0.05 ✓	-127.2	14.0			44.30	0.01 ft
1430	15	460		17.13	0.3 ✓	644	0.5 ✓	0.18	Δ0.02 ✓	7.96	Δ0.04 ✓	-145.4	13.4	4.48	<10 ✓		
1435	20	460	9.2	17.09	0.2 ✓	643	0.2 ✓	0.18	Δ0 ✓	7.96	Δ0 ✓	-156.0	7.0 ✓				
1440	25	460		17.13	0.2 ✓	642	0.2 ✓	0.18	Δ0 ✓	7.97	Δ0.01 ✓	-163.7	4.8 ✓	4.07	<10 ✓		
1445	30	460	13.8	17.06	0.4 ✓	640	0.3 ✓	0.18	Δ0 ✓	7.97	Δ0 ✓	-169.1	3.2 ✓				
		2Q2008 PARAMETERS				516		0.21		7.94		+106.5		5.15			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/8/08 14:45

Sampler: P Bassett

Analysis Requested: NDEP Profile 2			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

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
	Pressure (PSI)	
	Refill Time	
	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

Groundwater Sampling Log - Low Flow Method

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

Event: Quarter 3 2008
Date: 9/8/08

Well ID: WW-2
Static Water Level: 45.83

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	SU	Delta	mV	%RPD	NTU	%RPD	Ft	Drawdown
1210		START	PUMPING	+ ADJ	UST	FLOW											
1217	0	480	0	17.28	—	511	—	0.31	—	7.86	—	-108.3	—	9.89	—	45.99	0.16 ✓
1222	5			17.13	0.9 ✓	500	2.1 ✓	0.15	Δ0.16 ✓	8.07	Δ0.21	-156.1	36.2	10.55	6.5 ✓		
1227	10		4.8	17.07	0.4 ✓	513	2.6 ✓	0.15	Δ0 ✓	7.99	Δ0.08 ✓	-136.2	13.6			45.98	Δ0.15 ✓
1232	15			17.05	0.1 ✓	518	1.0 ✓	0.15	Δ0 ✓	8.01	Δ0.02 ✓	-130.6	4.2 ✓	11.27	6.6 ✓		
1237	20		9.6	17.07	0.1 ✓	534	3.0 ✓	0.18	Δ0.03 ✓	7.93	Δ0.08 ✓	-116.2	11.6			45.99	0.16 ✓
1242	25			17.09	0.1 ✓	549	2.8 ✓	0.25	Δ0.07 ✓	7.87	Δ0.06 ✓	-108.1	7.2 ✓	10.53	6.8 ✓		
1247	30		14.4	17.08	0.1 ✓	552	0.5 ✓	0.26	Δ0.01 ✓	7.87	0 ✓	-102.6	5.2 ✓				
1252	35	↓		17.08	0 ✓	569	3.0 ✓	0.31	Δ0.05 ✓	7.81	Δ0.06 ✓	-94.9	7.8 ✓	10.25	2.7 ✓		
		2Q2008 PARAMETERS				535		0.29		7.77		-125.4		9.26			
Criteria	60 max	100-500 ml/min		+/- 3%		+/- 3%		+/- 10%		+/- 0.1		+/-10mV 0r 10%		< 10 NTU or +/- 10%		<0.3 ft or 2% of aquifier	

Sample ID:

Sample Date and Time: 9/8/08 1252

Sampler: P Bassett

Analysis Requested: NDEP Profile 2		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

QC Sample ID:

	Duplicate
	MS/MSD
	Level IV
	Field Blank
	EQ Rinsate Blank

Bladder Pump Information:

DC Comp	Gasoline Comp	Comp Gas
2	Cycles per Minute	
75	Pressure (PSI)	
13	Refill Time	
17	Discharge time	

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

3 Consecutive stable readings before sampling

Comments:

Field Review: P Bassett

QAQC Review: P Bassett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name: Quarter 3 2008
Project Number: 134557
Date: 9/8/08
Samplers: Royanne Barringer
Start Time 0855
Sample Time 0905

Well Information

	new	old
Well ID:	MW36	B

Casing Diameter:		in	* multiplier
Total Depth			ftbtoc
Screen Interval			ftbgs
Approx depth to water			ftbtoc
Depth of Pump			ftbtoc
Sample Pump Type			
Approx. purge volume			gal
Purge Water Containment			

Measured Information

Depth to Water Not measured ftbtoc
Pump Used Dedicated production pump
Pump Deconned Before Use ___yes ___no
Actual Depth of Pump ___ftbtoc
Pump Settings

Note:
Let purge 5 min
Well is in constant use as water supply well for Need Heights. No Purge required.

Well Purging Record

Time	Purge Flowrate	Total Gals	PH S.U.	PH Delta	Conductivity uS/cm	Conductivity %RPD **	Temperature °C	Temperature %RPD **	Turbidity
900			6.90		522		N/A		1.53
2Q2008 PARAM:			7.39		509				1.27
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container Qty	Size	Type	Field Prep Filter	Preserv.	Analysis	Lab
9/8 MW-36 B	9/8/08	0905	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD (MS/MSD)
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: PBarrett QC Review: PBarrett 9/22/08

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name:	Quarter 3 2008
Project Number:	134557
Date:	9/9/08
Samplers:	Royanne Barringer
Start Time	647
Sample Time	

Well Information

	new	old		
Well ID:		MW-40B		
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water: Not measured ftbtoc
Pump Used: Dedicated production pump
Pump Deconned Before Use: ____yes ____no
Actual Depth of Pump: _____ ftbtoc
Pump Settings: _____

Note:

Well Purging Record

Time	Purge Flowrate	Total Gals	PH		Conductivity		Temperature		Turbidity
			S.U.	Delta	uS/cm	%RPD **	°C	%RPD **	
1042			6.97	—	556	—	14.2	—	3.26
754			6.18	Δ.79	560	.7	14.2	0	3.45
1441			7.36	Δ1.18	~~562~~ 582	3.8	15.5	8.7	2.21
1246			7.35	Δ.01 ✓	548	6.0	17.3	10.9	3.20
1535			7.32	Δ.02 ✓	574	20.6	16.9	2.3 ✓	~~1.05~~ 1.05
2Q2008 PARAM:			7.30		552				1.70
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container			Field Prep		Analysis	Lab
			Qty	Size	Type	Filter	Preserv.		
MW-40B	9/9/08	1535	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID _____
Field Blank Sample ID _____
Equip. Blank Sample ID _____
Other QC: MS/MSD _____
Level IV _____

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: P Barrett

QC Review: P Barrett 9/22/08

E1505
001KF-0159

BROWN AND CALDWELL

GROUNDWATER SAMPLING LOG
Purge Method

Project Information

Project Name:	Quarter 3 2008
Project Number:	134557
Date:	9/8/08
Samplers:	Royanne Barringer
Start Time	0700
Sample Time	1100

Well Information

	new	old		
Well ID:	WW-59B			
Casing Diameter:			in	* multiplier
Total Depth				ftbtoc
Screen Interval				ftbgs
Approx depth to water				ftbtoc
Depth of Pump				ftbtoc
Sample Pump Type				
Approx. purge volume				gal
Purge Water Containment				

Measured Information

Depth to Water: not measured ftbtoc
Pump Used: Dedicated production pump
Pump Deconned Before Use: ___yes ___no
Actual Depth of Pump: ftbtoc
Pump Settings:

Note: purge for 4 hours

Well Purging Record

Time	Purge Flowrate	Total Gals	PH S.U.	PH Delta	Conductivity uS/cm	Conductivity %RPD **	Temperature °C	Temperature %RPD **	Turbidity
0845			7.30		928				3.75
0945			7.30		927				1.41
1050			7.31		950		19.9		3.05
2Q2008 PARAMETER			7.56		961				2.19
Minimum criteria		3x Casing	+/- 0.1		+/- 3%		+/- 3%		

Sample Collection Record

Sample ID	Date	Time	Sample Container Qty	Size	Type	Field Prep Filter	Preserv.	Analysis	Lab
WW-59B	9/8/08	1100	1	500 ml	P	N	None	Alk	TA-IRV
			1	250 ml	G	N	HCl	TOC	TA-IRV
			1	500 ml	P	Y	HNO_3	Metals	TA-IRV
			7	1000 ml	P	Y	HNO_3	Radiochem	TA-R

Duplicate Sample ID
Field Blank Sample ID
Equip. Blank Sample ID
Other QC: MS/MSD
Level IV

((TD-DW) * Multiplier) *3 = Total Purge Volume
* 8" Steel = 2.658 gal/ft
* 6" S80 PVC = 1.35 gal/ft
* 4" S40 PVC = 0.65 gal/ft
* 2" S40 PVC = 0.16 gal/ft

**RPD % = $200 * \frac{X_1 - X_2}{X_1 + X_2}$

Field Review: PBarrett

QC Review: PBarrett 9/22/08