Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	10/5/06	9:50	0.39	P-0769	Primary	10/3/06	0.0	24.0	23.0	24.0	reset machines
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		10:10	0.28	P-0770	Primary	10/3/06	0.0	24.0	30.0	31.0	reset Machines
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		10:30	0.23	P-0771	Primary	10/3/06	0.0	24.0	25.5	28.5	reset machines
AM-6-TSP		10:35	0.34	000544	Primary	10/3/06	0.0	24.0	31.5	32.5	reset machines
Field Quality Control Samples											
AM-1-PM10-DUP		9:55	0.38	P-0772	Duplicate	10/3/06	0.0	24.0	30.5	31.5	reset Machine
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): Calm

Event # 103

x Maine Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

10/5/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	865.38	millibars	649.2	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	60.02	°F	288.7	°K	**Event #**	103
					Date	10/3/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	23.50	9/20/06	19.634	-5.2414	1.07	1,534
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.50	9/20/06	17.078	0.4911	1.16	1,674
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	27.00	9/20/06	18.804	-2.4944	1.09	1,570
AM-1-PM10-DUP	24.0	31.00	9/20/06	17.086	1.2712	1.14	1,635

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.16	1,673

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	10/11/06	10:55	0.22	P-0773	Primary	10/8/06	24.0	47.9	23.0	24.5	reset Machines on 10/5/06
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		11:10	0.27	P-0774	Primary		24.0	47.9	30.5	31.5	reset Machines on 10/5
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
* AM-6-PM10		11:35	0.17	P-0775	Primary		24.0	47.9			reset machines on 10/5
AM-6-TSP		11:40	0.33	000575	Primary		24.0	47.9	31.5	32.5	reset machines on 10/5
Field Quality Control Samples											
AM-1-PM10-DUP		11:00	0.32	P-0776	Duplicate		24.0	47.9	30.5	31.5	reset machines on 10/5
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM- 1-PM-0		11:05	0.22	P-0777	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions * Dixon Chart erratic

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): _____

Event # 104

X Marie Sherman — *Brown and Caldwell* — 10/11/06

Field Technician Signature — **Company** — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.

Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.

Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	871.81	millibars	654.1	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	50.52	°F	283.4	°K	**Event #**	104
					Date	10/8/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	23.9	23.75	9/20/06	19.634	-5.2414	1.06	1,525
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	23.9	31.00	9/20/06	17.078	0.4911	1.17	1,672
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	23.9	36	9/20/06	18.804	-2.4944	1.39	1,991
AM-1-PM10-DUP	23.9	31.00	9/20/06	17.086	1.2712	1.12	1,606

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	23.9	32.00	9/20/06	20.441	6.3040	1.18	1,693

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	10/18/06	11:05	0.26	P-0778	Primary	10/14/06	47.9	71.9	23.5	24.0	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	10/18/06	11:30	0.18	P-0779	Primary		47.9	71.9	30.5	31.5	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	10/18/06	11:55	0.19	P-0780	Primary		47.9	71.9	25.5	30.0	19:84 on 10/18;
AM-6-TSP	10/18/06	12:00	0.38	001546	Primary		47.9	71.9	31.5	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP	10/18/06	11:10	0.26	P-0781	Duplicate		47.9	71.9	30.5	31.5	
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☐ Clear ☐ Rainy ☐ Hazy ☒ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): Breezy N/East

Event # 105

X [signature]
Field Technician Signature

Brown and Caldwell
Company

10-18-06
Date

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	861.40	millibars	646.3	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	56.68	°F	286.9	°K	**Event #**	105
					Date	10/14/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	23.75	9/20/06	19.634	-5.2414	1.07	1,545
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.18	1,700
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	27.75	9/20/06	18.804	-2.4944	1.12	1,607
AM-1-PM10-DUP	24.0	31.00	9/20/06	17.086	1.2712	1.13	1,634

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.16	1,675

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	10/24/06	11:55	0.29	P-0782	Primary	10/20/06	71.9	95.9	23.5	24.5	Cleaned Shim plates
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	10/24/06	12:10	0.27	P-0783	Primary	10/20/06	71.9	95.9	30.5	31.5	Cleaned Shim plates
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	10/24/06	12:30	0.29	P-0784	Primary	10/20/06	71.9	95.9	26.5	27.5	Cleaned Shim plates
AM-6-TSP	10/24/06	12:35	0.35	200547	Primary	10/20/06	71.9	95.9	31.5	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP	10/24/06	12:00	0.28	P-0785	Duplicate	10/20/06	71.9	95.9	30.5	31.5	Cleaned Shim plates
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☒ Other (explain): Calm

Event # 106

x Marie Sherrno
Field Technician Signature

Brown and Caldwell
Company

10/24/06
Date

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units	
Average Daily Pressure (Pavg):	869.84	millibars	652.6	mm Hg	
Avg. Daily Temperature (Tavg):	52.27	°F	284.4	°K	

Sample	
Event #	106
Date	10/20/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.00	9/20/06	19.634	-5.2414	1.07	1,546
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.17	1,684
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	36	9/20/06	18.804	-2.4944	1.40	2,011
AM-1-PM10-DUP	24.0	31.00	9/20/06	17.086	1.2712	1.12	1,618

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.18	1,694

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	10/30/06	11:05	0.20	P-0786	Primary	10/26/06	95.9	119.9	23.5	24.5	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	10/30/06	11:10 AM	0.35	P-0787	Primary		95.9	119.9	30.5	31.5	
AM-3-TSP		11:25			Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	10/30/06	11:40	0.25	P-0788	Primary		95.9	119.9	28.5	32.5	
AM-6-TSP	10/30/06	11:45	0.32	00550	Primary		95.9	119.9	30.5	31.5	
Field Quality Control Samples											
AM-1-PM10-DUP	10/30/06	11:10	0.32	P-0789	Duplicate		95.9	119.9	30.5	31.5	
AM- ~~6 PM10~~	~~10/30/06~~				Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☒ Other (explain): Breezy - NE Direction MS ~~Calm~~

Event # 107

X Marma Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

10/30/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units	
Average Daily Pressure (Pavg):	879.59	millibars	659.9	mm Hg	
Avg. Daily Temperature (Tavg):	38.55	°F	276.8	°K	

Sample	
Event #	107
Date	10/26/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.00	9/20/06	19.634	-5.2414	1.06	1,524
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.15	1,651
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	42	9/20/06	18.804	-2.4944	1.58	2,280
AM-1-PM10-DUP	24.0	31.00	9/20/06	17.086	1.2712	1.10	1,585

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	31.00	9/20/06	20.441	6.3040	1.16	1,667

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	11/6/06	10:35	0.24	P-0790	Primary	11/1/06	119.9	143.9	23.5	24.5	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	11/6/06	10:55	0.27	P-0791	Primary	11/1/06	119.9	143.9	30.5	31.5	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	11/6/06	11:25	0.29	P-0792	Primary	11/1/06	119.9	143.9	—	—	dixon chart erratic
AM-6-TSP	11/6/06	11:30	0.25	~~P-0795~~ P-0795	Primary	11/1/06	119.9	143.9	31.5	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP	11/6/06	10:40	0.24	P-0793	Duplicate	11/1/06	119.9	143.9	30.5	31.0	
AM-6-PM10	11/6/06	11:35	0.29	P-0794	Trip Blank	11/1/06	N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): _____

Event # 108

X Maria Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

11/6/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.

Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.

Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	870.31	millibars	652.9	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	38.83	°F	276.9	°K	**Event #**	108
					Date	11/1/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.00	9/20/06	19.634	-5.2414	1.06	1,531
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.15	1,661
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	0.00	9/20/06	18.804	-2.4944		
AM-1-PM10-DUP	24.0	30.75	9/20/06	17.086	1.2712	1.10	1,581

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.20	1,723

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	11/8/06	1:15	0.28	P-0796	Primary	11/7/06	143.9	167.9	23.0	23.5	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		1:30	0.28	P-0797	Primary	11/7/06	143.9	167.9	30.5	31.5	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		11:25	0.38	P-0798	Primary	11/7/06	143.9	167.9	—	—	dixon Chart erratic
AM-6-TSP		11:30	0.35	P-0799	Primary	11/7/06	143.9	167.9	31.5	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP					Duplicate						
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☐ Clear ☐ Rainy ☐ Hazy ☒ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): NW

Event # 109

X Marc Thomas
Field Technician Signature

Brown and Caldwell
Company

11/8/06
Date

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units	
Average Daily Pressure (Pavg):	870.67	millibars	653.2	mm Hg	
Avg. Daily Temperature (Tavg):	55.31	°F	286.1	°K	

Sample	
Event #	109
Date	11/7/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	23.50	9/20/06	19.634	-5.2414	1.06	1,525
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.75	9/20/06	17.078	0.4911	1.16	1,675
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	0.00	9/20/06	18.804	-2.4944		
AM-1-PM10-DUP	0.0	0.00	9/20/06	17.086	1.2712		

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.17	1,689

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	11/4/06	11:25	0.28	P-0800	Primary	11/13/06	167.9	191.9	23.5	24.0	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	11/4/06	11:45	0.30	P-0801	Primary	11/13/06	167.9	191.9	30.5	31.5	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	11/4/06	12:05	0.30	P-0802	Primary	11/13/06	~~167.9~~ 191.9	216.9	28.5	51.0	replaced motor + rebalanced
AM-6-TSP	11/4/06	12:10	0.22	00576	Primary	11/13/06	167.9	191.9	30.0	31.0	
Field Quality Control Samples											
AM-1-PM10-DUP	—	—	—	—	Duplicate	—	—	—	—	—	
AM-					Trip Blank	—	N/A	N/A	N/A	N/A	
AM- 3-PM10	11/4/06	11:50	0.33	P-0803	Field Blank	—	N/A	N/A	N/A	N/A	

Ambient Conditions

- ☐ Clear
- ☒ Cloudy
- ☐ Rainy
- ☐ Snowy
- ☐ Hazy
- ☐ Foggy
- ☐ Windy
- ☐ Other (explain): _____

Event # 110

X Marine Sherman
Field Technician Signature

Brown and Caldwell
Company

11/4/06
Date

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	863.63	millibars	647.9	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	52.29	°F	284.4	°K	**Event #**	110
					Date	11/13/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	23.75	9/20/06	19.634	-5.2414	1.07	1,538
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.17	1,690
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	36.67	11/10/06	16.218	0.5485	1.46	2,108
AM-1-PM10-DUP	0.0	0.00	9/20/06	17.086	1.2712		

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.50	9/20/06	20.441	6.3040	1.19	1,720

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	11/21/06	11:30	0.25	P-0804	Primary	11/9/06	191.9	215.9	23.5	24.0	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		11:50	0.32	P-0805	Primary		191.9	215.9	30.5	31.5	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		12:05	0.24	P-0806	Primary		0.0	23.9	28.5	30.0	* Changed out mass Flow Control
AM-6-TSP		12:10	0.38	000578	Primary		191.9	215.9	31.5	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP		11:35	0.21	P-0807	Duplicate		143.9	167.9	31.5	32.0	
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

□ Clear □ Rainy □ Hazy ☒ Windy

□ Cloudy □ Snowy □ Foggy □ Other (explain): Very windy - NW 60-70 mph day of sampling

* recalibrated also on 11/15/06

Event # 111

x Marie Sherman

Field Technician Signature

Brown and Caldwell

Company

11/21/06

Date

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.

Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.

Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	872.55	millibars	654.6	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	43.75	°F	279.7	°K	**Event #**	111
					Date	11/19/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	23.75	9/20/06	19.634	-5.2414	1.06	1,523
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	31.00	9/20/06	17.078	0.4911	1.16	1,667
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	23.9	29.50	11/15/06	19.634	-2.8720	1.13	1,618
AM-1-PM10-DUP	24.0	31.75	9/20/06	17.086	1.2712	1.14	1,642

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.00	9/20/06	20.441	6.3040	1.19	1,716

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
					Primary Samples						
AM-1-PM10	11/28/06	~~11:40~~ 12:20	~~0.21~~ 0.19	P-0809	Primary	11/25/06	215.9	239.9	24.0	25.0	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		12:05	0.34	P-0810	Primary		215.9	239.9			Fixed Chart blank for 5 hrs
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		11:40	0.21	P-0811	Primary		23.9	47.9	29.5	30.5	
AM-6-TSP		11:45	0.19	00579	Primary		215.9	239.9	32.5	33.5	
					Field Quality Control Samples						
AM-1-PM10-DUP					Duplicate		~~Not~~				
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

- ☐ Clear
- ☒ Cloudy
- ☐ Rainy
- ☐ Snowy
- ☐ Hazy
- ☐ Foggy
- ☐ Windy
- ☐ Other (explain): Slight Wind Flurries, Partly Cloudy

Event # 112

X Maria Hernandez — **Field Technician Signature**

Brown and Caldwell — **Company**

11/28/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	865.01	millibars	649.0	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	32.70	°F	273.5	°K	**Event #**	112
					Date	11/25/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.50	9/20/06	19.634	-5.2414	1.08	1,551
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	32.50	9/20/06	17.078	0.4911	1.21	1,738
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	30.00	11/15/06	19.634	-2.8720	1.14	1,639
AM-1-PM10-DUP	0.0	0.00	9/20/06	17.086	1.2712		

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.75	9/20/06	20.441	6.3040	1.24	1,781

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

entered by BJ 12/20/06

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	12/5/06	12:25	0.27	P-0812	Primary	12/1/06	239.9	263.9	24.0	24.0	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		12:10	0.33	P-0813	Primary		239.9	263.9	30.0	31.0	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		12:45	0.27	P-0814	Primary		47.9	71.9	29.5	30.0	
AM-6-TSP		12:50	0.22	C00580	Primary		239.9	263.9	32.0	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP		12:30	0.27	P-0815	Duplicate		167.9	191.9	33.0	34.0	
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☐ Clear ☐ Rainy ☐ Hazy ☐ Windy

☒ Cloudy ☑ Snowy ☐ Foggy ☐ Other (explain): Snow / Calm

Event # 113

X Marne Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

12/5/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.

Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.

Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	876.54	millibars	657.6	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	29.63	°F	271.8	°K	**Event #**	113
					Date	12/1/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.00	9/20/06	19.634	-5.2414	1.05	1,516
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.50	9/20/06	17.078	0.4911	1.12	1,612
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	29.75	11/15/06	19.634	-2.8720	1.12	1,613
AM-1-PM10-DUP	24.0	33.50	9/20/06	17.086	1.2712	1.19	1,708

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.25	9/20/06	20.441	6.3040	1.23	1,769

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

— entered by BJZ 12/20/06

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	12/11/06	11:40	0.31	P-0816	Primary	12/7/06	263.9	287.9	24.0	24.5	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10		12:00	0.31	P-0817	Primary		263.9	287.9	30.0	31.0	
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10		12:15	0.31	P-0818	Primary		71.9	95.9	29.5	30.5	
AM-6-TSP		12:20	0.25	00581	Primary		263.9	287.9	32.0	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP	—	—	—	—	Duplicate		—	—	—	—	
AM- 1 PM-10	↓	11:45	0.28	P-0819	Trip Blank	↓	N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

- ☐ Clear
- ☒ Cloudy
- ☐ Rainy
- ☐ Snowy
- ☐ Hazy
- ☐ Foggy
- ☒ Windy
- ☐ Other (explain): Breezy - N W

Event # 114

x Guy J Dunning for Marne Sherman — Brown and Caldwell

Field Technician Signature — **Company** — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	876.38	millibars	657.5	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	28.37	°F	271.1	°K	**Event #**	114
					Date	12/7/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.25	9/20/06	19.634	-5.2414	1.06	1,527
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.50	9/20/06	17.078	0.4911	1.12	1,610
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	30.00	11/15/06	19.634	-2.8720	1.13	1,624
AM-1-PM10-DUP	0.0	0.00	9/20/06	17.086	1.2712		

24.0	*Target*	1.13	1,630
23.0 - 25.0	*Allowable Variance*	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.25	9/20/06	20.441	6.3040	1.23	1,771

24.0	*Target*	1.67	2,400
23.0 - 25.0	*Allowable Variance*	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

entered by PJB 12/20/06

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	12/18/06	12:10	0.31	P-0820	Primary	12/13/06	287.9	311.9	24.0	24.5	
AM-1-TSP					Primary						
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	12/18/06	12:43	.24	P-0821	Primary		287.9	311.9	30.5	31.0	1°
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	12/18/06	13:15	.20	P-0822	Primary		95.9	119.9	29.5	30.0	
AM-6-TSP		13:21	.22	000582	Primary		287.9	311.9	32.0	32.5	
Field Quality Control Samples											
AM-1-PM10-DUP	12/18/06		0.27	P-0823	Duplicate		191.9		Sample not Submitted		Malfunction during sample collection!
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM- 6-PM-10	12/18/06		0.20	P-0824	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy
☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): fresh snow on ground

Event # 115

X Penny Barrett — **Field Technician Signature**

Brown and Caldwell — **Company**

12/18/06 — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.
Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.
Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	874.82	millibars	656.3	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	43.30	°F	279.4	°K	**Event #**	115
					Date	12/13/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.25	9/20/06	19.634	-5.2414	1.07	1,545
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.75	9/20/06	17.078	0.4911	1.15	1,650
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	29.75	11/15/06	19.634	-2.8720	1.13	1,634
AM-1-PM10-DUP	-191.9	0.00	9/20/06	17.086	1.2712		

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	32.25	9/20/06	20.441	6.3040	1.21	1,736

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60

Field Data Sheet

Air Quality Monitoring Program, Yerington Mine, Yerington Nevada

entered by [illegible] 12/22/06

Location	Filter Removal			Sample			Elapsed Time		Chart Response		Comment
	Date	Time (24 hr)	Activity (µSv/hr)	Filter Serial #	Type	Date	Start	End	Min	Max	
Primary Samples											
AM-1-PM10	12/21/06	09:42	0.25	000825	Primary	12/19/06	311.9	335.9	24.5	25.0	
AM-1-TSP					Primary	12/19/06					
AM-2-PM10					Primary						
AM-2-TSP					Primary						
AM-3-PM10	12/21/06	10:03	0.31	000583	Primary	12/19/06	311.9	335.9	30.0	31.0	used TSP filter
AM-3-TSP					Primary						
AM-4-PM10					Primary						
AM-4-TSP					Primary						
AM-5-PM10					Primary						
AM-5-TSP					Primary						
AM-6-PM10	12/21/06	10:23	0.24	000584	Primary	12/19/06	119.9	143.9	30.0	31.0	used TSP filter
AM-6-TSP	12/21/06	10:29	0.40	000585	Primary	12/19/06	311.9	335.9	30.0	32.0	
Field Quality Control Samples											
AM-1-PM10-DUP					Duplicate						
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM-					Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

□ Clear □ Rainy □ Hazy □ Windy

☒ Cloudy □ Snowy □ Foggy □ Other (explain): _____

Event # 116

X Roxanne Barringer — Brown and Caldwell — 12/21/06

Field Technician Signature — **Company** — **Date**

Notes:

Elapsed time refers to readings on the TE-300-312 Elapsed Time Indicator.

Indicate any filter damage or mishandling under filter condition.

Chart response refers to readings on the TE-5009 Continuous Flow/Pressure Recorder.

Activity refers to a combined alpha, beta, and gamma reading on a Geiger counter.

WARNING: Do not approach filter if activity readings are above 2 uSv/hr (0.2 mRem).

Total Volume Calculations

Air Quality Monitoring Program, Yerington Mine, Yerington, Nevada

Ambient Conditions		Field Equipment Units		Calculation Required Units		
Average Daily Pressure (Pavg):	874.86	millibars	656.4	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	14.03	°F	263.2	°K	**Event #**	116
					Date	12/19/06

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-PM10	24.0	24.75	9/20/06	19.634	-5.2414	1.07	1,534
AM-2-PM10	0.0	0.00	6/13/06	16.247	5.0264		
AM-3-PM10	24.0	30.50	9/20/06	17.078	0.4911	1.10	1,587
AM-4-PM10	0.0	0.00	6/13/06	20.783	-0.6244		
AM-5-PM10	0.0	0.00	6/14/06	22.210	-2.3987		
AM-6-PM10	24.0	30.50	11/15/06	19.634	-2.8720	1.13	1,627
AM-1-PM10-DUP	0.0	0.00	9/20/06	17.086	1.2712		

24.0	***Target***	1.13	1,630
23.0 - 25.0	***Allowable Variance***	1.02 - 1.24	

Equations

Qa = 1/ms*(I*Sqrt(Tavg/Pavg)-bs)

V = Qa*t*60

Pressuremm Hg = Pressuremillibars*760/1013

Temperaturedegrees K = 5/9*(TemperaturedegreesF-32)+273.15

	t Sample Duration (hrs)	I Avg Chart Response	Sampler Calibration (date)	ms Sampler Slope	bs Sampler Intercept	Qa Actual Flow Rate (m3/min)	V Total Volume (m3)
AM-1-TSP	0.0	0.00	6/13/06	31.400	-1.7311		
AM-2-TSP	0.0	0.00	6/14/06	32.744	-0.1325		
AM-3-TSP	0.0	0.00	6/13/06	28.988	5.0301		
AM-4-TSP	0.0	0.00	6/13/06	36.859	-4.1022		
AM-5-TSP	0.0	0.00	6/14/06	34.038	-1.6675		
AM-6-TSP	24.0	31.00	9/20/06	20.441	6.3040	1.19	1,716

24.0	***Target***	1.67	2,400
23.0 - 25.0	***Allowable Variance***	1.10 - 1.70	

Equations

Qstd = 1/ms*(I*Sqrt(298/Tavg*Pavg/760)-bs)

V = Qstd*t*60