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	4/14/06	0905	—	P-0591	Primary	4/11/06	~~48.9~~ 0.0	23.9	35.0	36.0	
AM-1-TSP		0915	—	000423	Primary		~~46.7~~ 0.0	23.9	45.0	46.5	
AM-2-PM10		0925	—	P-0592	Primary		~~416.4~~ 0.0	23.9	35.0	36.0	
AM-2-TSP		0920	—	000424	Primary		~~464.3~~ 0.0	23.9	43.5	45.0	
AM-3-PM10		0935	—	P-0593	Primary		~~393.6~~ 0.0	23.9	33.5	34.5	
AM-3-TSP		0940	—	000425	Primary		~~465.6~~ 0.0	23.9	43.0	45.5	
AM-4-PM10		0955	—	P-0594	Primary		~~419.4~~ 0.0	23.9	44.5	45.5	
AM-4-TSP		1000	—	000426	Primary		~~466.4~~ 0.0	23.9	45.0	46.5	
AM-5-PM10		1020	—	P-0595	Primary		~~399.3~~ 0.0	23.9	37.0	37.5	
AM-5-TSP		1015	—	000427	Primary		~~471.2~~ 0.0	23.9	44.5	46.5	
AM-6-PM10		1030	—	P-0596	Primary		~~420.2~~ 0.0	23.9	35.0	36.5	
AM-6-TSP		1035	—	000428	Primary		~~468.2~~ 0.0	23.9	43.0	45.0	
Field Quality Control Samples											
AM-1-PM10-DUP		0910	—	P-0597	Duplicate		~~370.7~~ 0.0	23.9	35.0	36.5	
AM-4-TSP		1005	—	000429	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 # ~~73~~ 74

x Marie Sherman — *Brown and Caldwell* — 4/18/06

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):	861.10	millibars	646.0	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	47.77	°F	281.9	°K	**Event #**	74
					Date	4/11/06

	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	35.50	4/5/06	23.919	-4.5827	1.17	1,681
AM-2-PM10	23.9	35.50	4/5/06	18.804	1.1630	1.19	1,700
AM-3-PM10	23.9	34.00	4/5/06	8.5429	13.583	1.04	1,490
AM-4-PM10	23.9	34.50	4/5/06	15.100	6.2948	1.09	1,567
AM-5-PM10	23.9	37.25	4/6/06	19.444	1.3503	1.20	1,715
AM-6-PM10	23.9	35.75	4/6/06	12.361	9.2195	1.16	1,670
AM-1-PM10-DUP	23.9	36.00	4/5/06	20.533	-0.0404	1.16	1,664

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	23.9	46.50	4/5/06	30.015	1.5861	1.416	2,030
AM-2-TSP	23.9	44.25	4/5/06	31.400	0.6095	1.316	1,888
AM-3-TSP	23.9	44.25	4/5/06	30.279	0.8601	1.357	1,946
AM-4-TSP	23.9	46.50	4/5/06	30.015	2.5197	1.385	1,986
AM-5-TSP	23.9	45.50	4/5/06	30.061	3.5113	1.318	1,890
AM-6-TSP	23.9	44.00	4/5/06	34.130	-1.9548	1.279	1,835

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	4/20/06	9:10	—	P-0598	Primary	4/17/06	23.9	47.9	34.5 (ms)	35.5	
AM-1-TSP		9:20		000430	Primary		23.9	47.9	—	—	no dixon Chart
AM-2-PM10		9:30		P-0599	Primary		23.9	47.9	34.5 (ms)	35.5 (ms)	
AM-2-TSP		9:35		000431	Primary		23.9	47.9	44.5	45.5	
AM-3-PM10		9:45		P-0560 (ms)	Primary		23.9	47.9	33.5	35.0	
AM-3-TSP		9:50		000432	Primary		23.9	47.9	43.5	45.5	
AM-4-PM10		10:05		P-0561 (ms)	Primary		23.9	47.9	34.0	35.0	
AM-4-TSP		10:10		000433	Primary		23.9	47.9	48.5	49.5	
AM-5-PM10		10:25		P-0562 (ms)	Primary		23.9	47.9	36.5	37.5 (ms)	
AM-5-TSP		10:30		000434	Primary		23.9	47.9	43.5	45.5	
AM-6-PM10		10:40		P-0563 (ms)	Primary		23.9	47.9	36.0	37.0	
AM-6-TSP		10:45		000435	Primary		23.9	47.9	45.0	46.5	
Field Quality Control Samples											
AM-1-PM10-DUP		9:15		P-0564 (ms)	Duplicate		23.9	47.9	—	—	no dixon Chart
AM- —	—	—	—	—	Trip Blank		N/A	N/A	N/A	N/A	
AM- 5.PM.10	↓	10:35	↓	P-0565	Field Blank	↓	N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

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

Event # 75

X Maria Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

4/25/06 — **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):	869.08	millibars	652.0	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	38.21	°F	276.6	°K	**Event #**	75
					Date	4/17/06

	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	35.50	4/5/06	23.919	-4.5827	1.16	1,668
AM-2-PM10	24.0	35.00	4/5/06	18.804	1.1630	1.15	1,657
AM-3-PM10	24.0	34.25	4/5/06	8.5429	13.583	1.02	1,471
AM-4-PM10	24.0	34.50	4/5/06	15.100	6.2948	1.07	1,543
AM-5-PM10	24.0	36.75	4/6/06	19.444	1.3503	1.16	1,673
AM-6-PM10	24.0	36.50	4/6/06	12.361	9.2195	1.18	1,695
AM-1-PM10-DUP	24.0	0.00	4/5/06	20.533	-0.0404	0.00	

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	24.0	0.00	4/5/06	30.015	1.5861	-0.053	
AM-2-TSP	24.0	44.75	4/5/06	31.400	0.6095	1.351	1,945
AM-3-TSP	24.0	45.00	4/5/06	30.279	0.8601	1.400	2,017
AM-4-TSP	24.0	48.75	4/5/06	30.015	2.5197	1.478	2,128
AM-5-TSP	24.0	44.50	4/5/06	30.061	3.5113	1.306	1,881
AM-6-TSP	24.0	46.00	4/5/06	34.130	-1.9548	1.353	1,948

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	4/26/06	9:20	—	P-0606	Primary	4/23/06	47.9	71.9	35.5	35.5	Cleaned Shim plate
AM-1-TSP		9:30	—	000436	Primary		47.9	71.9	46.5	47.5	
AM-2-PM10		9:45	—	P-0607	Primary		47.9	71.9	35.0	35.5	Cleaned Shim Plate
AM-2-TSP		9:50	—	000437	Primary		47.9	71.9	43.5	44.5	
AM-3-PM10		10:00	—	P-0608	Primary		47.9	71.9	33.5	34.5	Cleaned Shim plate
AM-3-TSP		10:05	—	000438	Primary		47.9	71.9	43.0	45.0	
AM-4-PM10		10:15	—	P-0609	Primary		47.9	71.9	33.5	34.5	Cleaned Shim plate
AM-4-TSP		10:20	—	000439	Primary		47.9	71.9	48.5	49.5	
AM-5-PM10		10:35	—	P-0610	Primary		47.9	71.9	37.0	38.0	Cleaned Shim plate
AM-5-TSP		10:40	—	000440	Primary		47.9	71.9	45.0	46.5	
AM-6-PM10		10:50	—	P-0611	Primary		47.9	71.9	35.5	36.5	Cleaned Shim plate
AM-6-TSP		10:55	—	000441	Primary		47.9	71.9	44.5	45.5	
Field Quality Control Samples											
AM-1-PM10-DUP		9:25	—	P-0612	Duplicate		47.9	71.9	35.5	36.5	Cleaned Shim plate
AM- 3-TSP		10:10	—	000442	Trip Blank		N/A	N/A	N/A	N/A	
AM- 1-PM-10		9:35	—	P-0613	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☒ Windy Breezy - NW

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

Event # 76

x Marine Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

5/1/06 — **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):	863.88	millibars	648.1	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	46.84	°F	281.4	°K	**Event #**	76
					Date	4/23/06

	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	35.50	4/5/06	23.919	-4.5827	1.17	1,684
AM-2-PM10	24.0	35.50	4/5/06	18.804	1.1630	1.18	1,702
AM-3-PM10	24.0	34.00	4/5/06	8.5429	13.583	1.03	1,487
AM-4-PM10	24.0	34.25	4/5/06	15.100	6.2948	1.08	1,552
AM-5-PM10	24.0	37.50	4/6/06	19.444	1.3503	1.20	1,730
AM-6-PM10	24.0	36.00	4/6/06	12.361	9.2195	1.17	1,689
AM-1-PM10-DUP	24.0	36.00	4/5/06	20.533	-0.0404	1.16	1,666

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	24.0	47.00	4/5/06	30.015	1.5861	1.435	2,067
AM-2-TSP	24.0	44.00	4/5/06	31.400	0.6095	1.312	1,890
AM-3-TSP	24.0	44.00	4/5/06	30.279	0.8601	1.353	1,948
AM-4-TSP	24.0	48.25	4/5/06	30.015	2.5197	1.444	2,079
AM-5-TSP	24.0	45.75	4/5/06	30.061	3.5113	1.329	1,914
AM-6-TSP	24.0	45.00	4/5/06	34.130	-1.9548	1.310	1,887

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	5/4/06	12:00		P-0614	Primary	7/29/06	71.9	95.9	34.0	35.5	
AM-1-TSP		12:10		00443	Primary		71.9	95.9	44.5	46.5	
AM-2-PM10		12:20		P-0615	Primary		71.9	95.9	34.5	35.5	
AM-2-TSP		12:15		00444	Primary		71.9	95.9	43.0	44.0	
AM-3-PM10		11:05		P-0616	Primary		71.9	95.9	33.5	34.5	
AM-3-TSP		11:10		00445	Primary		71.9	95.9	39.5	43.5	
AM-4-PM10		11:20		P-0617	Primary		71.9	95.9	33.5	34.5	
AM-4-TSP		11:25		00446	Primary		71.9	95.9	47.5	48.5	
AM-5-PM10		10:35		P-0618	Primary		71.9	95.9	36.5	37.5	
AM-5-TSP		10:30		00447	Primary		71.9	95.9	45.5	46.5	Bird nest inside top of u
AM-6-PM10		10:45		P-0619	Primary		71.9	95.9	35.0	36.5	
AM-6-TSP		10:50		00448	Primary		71.9	95.9	43.5	45.5	
Field Quality Control Samples											
AM-1-PM10-DUP		12:05		P-0620	Duplicate		71.9	95.9	35.0	36.5	
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM- 4-TSP		11:30		00449	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☐ Clear ☐ Rainy ☐ Hazy ☒ Windy NW direction

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

Event # 77

x Marino Sherman

Field Technician Signature

Brown and Caldwell

Company

5/5/06

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):	868.54	millibars	651.6	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	63.48	°F	290.6	°K	**Event #**	77
					Date	4/29/06

	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	34.75	4/5/06	23.919	-4.5827	1.16	1,673
AM-2-PM10	24.0	35.00	4/5/06	18.804	1.1630	1.18	1,701
AM-3-PM10	24.0	34.00	4/5/06	8.5429	13.583	1.07	1,538
AM-4-PM10	24.0	34.50	4/5/06	15.100	6.2948	1.11	1,597
AM-5-PM10	24.0	37.00	4/6/06	19.444	1.3503	1.20	1,730
AM-6-PM10	24.0	35.50	4/6/06	12.361	9.2195	1.17	1,688
AM-1-PM10-DUP	24.0	35.75	4/5/06	20.533	-0.0404	1.16	1,677

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	24.0	45.75	4/5/06	30.015	1.5861	1.376	1,982
AM-2-TSP	24.0	43.25	4/5/06	31.400	0.6095	1.272	1,832
AM-3-TSP	24.0	41.75	4/5/06	30.279	0.8601	1.264	1,821
AM-4-TSP	24.0	48.00	4/5/06	30.015	2.5197	1.415	2,038
AM-5-TSP	24.0	46.00	4/5/06	30.061	3.5113	1.318	1,898
AM-6-TSP	24.0	44.25	4/5/06	34.130	-1.9548	1.273	1,833

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	5/10/06	10:10	—	P-0621	Primary	5/5/06	95.9	119.9	34.5	36.0	
AM-1-TSP		10:20		000450	Primary		95.9	119.9	45.0	47.5	
AM-2-PM10		10:30		P-0622	Primary		95.9	119.9	35.0	36.5	
AM-2-TSP		10:35		000451	Primary		95.9	119.9	43.5	44.5	
AM-3-PM10		10:45		P-0623	Primary		95.9	119.9	33.5	34.5	
AM-3-TSP		10:50		000452	Primary		95.9	119.9	41.5	45.0	
AM-4-PM10		11:20		P-0624	Primary		95.9	119.9	33.5	34.5	
AM-4-TSP		11:25		000453	Primary		95.9	119.9	48.0	49.0	
AM-5-PM10		12:00		P-0625	Primary		95.9	119.9	36.5	38.0	
AM-5-TSP		12:05		000454	Primary		95.9	119.5	45.5	46.5	
AM-6-PM10		12:15		P-0626	Primary		95.9	119.5	35.5	36.5	
AM-6-TSP		12:20		000455	Primary		95.9	119.5	45.5	48.0	
Field Quality Control Samples											
AM-1-PM10-DUP		10:15		P-0627	Duplicate		95.9	119.9	35.5	36.5	
AM-6-TSP		12:25		000456	Trip Blank		N/A	N/A	N/A	N/A	
AM-5-TSP		12:10		000457	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

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

Event # 78

X Marco Sherman — *Brown and Caldwell* — 5/11/06

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):	866.83	millibars	650.3	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	56.40	°F	286.7	°K	**Event #**	78
					Date	5/5/06

	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	35.00	4/5/06	23.919	-4.5827	1.16	1,675
AM-2-PM10	24.0	35.75	4/5/06	18.804	1.1630	1.20	1,729
AM-3-PM10	24.0	34.00	4/5/06	8.5429	13.583	1.05	1,516
AM-4-PM10	24.0	34.50	4/5/06	15.100	6.2948	1.10	1,584
AM-5-PM10	24.0	37.25	4/6/06	19.444	1.3503	1.20	1,732
AM-6-PM10	24.0	36.25	4/6/06	12.361	9.2195	1.20	1,730
AM-1-PM10-DUP	24.0	36.25	4/5/06	20.533	-0.0404	1.17	1,691

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	24.0	46.50	4/5/06	30.015	1.5861	1.408	2,028
AM-2-TSP	24.0	44.00	4/5/06	31.400	0.6095	1.302	1,875
AM-3-TSP	24.0	43.25	4/5/06	30.279	0.8601	1.319	1,899
AM-4-TSP	24.0	48.25	4/5/06	30.015	2.5197	1.432	2,062
AM-5-TSP	24.0	46.00	4/5/06	30.061	3.5113	1.326	1,910
AM-6-TSP	24.0	46.75	4/5/06	34.130	-1.9548	1.349	1,943

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	5/15/06	10:10	—	P-0630	Primary	5/11/06	119.9	143.9	32.0	35.5	Changed Chart recorder pens
AM-1-TSP		10:15		000458	Primary			143.9	45.5	47.5	
AM-2-PM10		10:30		P-0631	Primary			143.9	34.5	35.5	
AM-2-TSP		10:35		000459	Primary			143.9	43.5	45.0	
AM-3-PM10		10:50		P-0632	Primary			143.9	45.0	46.5	
AM-3-TSP		10:55		000460	Primary			143.9	38.5	44.0	
AM-4-PM10		11:05		P-0633	Primary			143.9	45.5	47.5	
AM-4-TSP		11:10		000461	Primary			143.9	47.0	48.5	
AM-5-PM10		11:20		P-0634	Primary			143.9	36.5	37.5	
AM-5-TSP		11:25		000462	Primary			143.9	45.5	46.5	
AM-6-PM10		11:30		P-0635	Primary			143.9	34.5	35.5	
AM-6-TSP		11:35		000463	Primary			143.9	44.5	48.0	
Field Quality Control Samples											
AM-1-PM10-DUP		10:20		P-0636	Duplicate			143.9	35.5	36.5	
AM-2 TSP		10:40		000464	Trip Blank		N/A	N/A	N/A	N/A	
AM-3 TSP		11:00		000465	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

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

Event # 79

X [signature] *Brown and Caldwell* 5/17/06

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):	867.23	millibars	650.6	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	65.90	°F	292.0	°K	**Event #**	79
					Date	5/11/06

	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	34.75	4/5/06	23.919	-4.5827	1.16	1,677
AM-2-PM10	24.0	35.25	4/5/06	18.804	1.1630	1.19	1,719
AM-3-PM10	24.0	45.75	4/5/06	8.5429	13.583	2.00	2,876
AM-4-PM10	24.0	46.75	4/5/06	15.100	6.2948	1.66	2,386
AM-5-PM10	24.0	37.00	4/6/06	19.444	1.3503	1.21	1,736
AM-6-PM10	24.0	35.00	4/6/06	12.361	9.2195	1.15	1,657
AM-1-PM10-DUP	24.0	36.00	4/5/06	20.533	-0.0404	1.18	1,694

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	24.0	47.00	4/5/06	30.015	1.5861	1.411	2,032
AM-2-TSP	24.0	44.25	4/5/06	31.400	0.6095	1.298	1,869
AM-3-TSP	24.0	41.50	4/5/06	30.279	0.8601	1.253	1,804
AM-4-TSP	24.0	47.75	4/5/06	30.015	2.5197	1.403	2,020
AM-5-TSP	24.0	46.00	4/5/06	30.061	3.5113	1.314	1,892
AM-6-TSP	24.0	46.00	4/5/06	34.130	-1.9548	1.317	1,897

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	5/22/06	10:00		P-0637	Primary	5/17/06	143.9	167.9	33.5	35.0	
AM-1-TSP		10:10		000466	Primary			167.9	45.5	47.5	
AM-2-PM10		10:25		P-0638	Primary			167.9	34.5	35.5	
AM-2-TSP		10:30		000467	Primary			167.9	43.0	44.0	
AM-3-PM10		10:40		P-0639	Primary			167.9	45.5	46.5	
AM-3-TSP		10:45		000468	Primary			167.9	40.5	44.5	
* AM-4-PM10		11:00		P-0640	Primary			177.6	46.0	47.5	Machine running 10 hrs over
AM-4-TSP		11:10		000469	Primary			167.9	47.0	48.5	
AM-5-PM10		11:20		P-0641	Primary			167.9	36.0	37.0	
AM-5-TSP		11:25		000470	Primary			167.9	45.5	46.0	
AM-6-PM10		11:30		P-0642	Primary			167.9	34.0	35.0	
AM-6-TSP		11:35		000471	Primary			167.9	43.5	46.5	
Field Quality Control Samples											
AM-1-PM10-DUP		10:05		P-0643	Duplicate			167.9	35.5	36.5	
AM-					Trip Blank		N/A	N/A	N/A	N/A	
AM- 1-TSP		10:15		000472	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☐ Clear ☐ Rainy ☒ Hazy ☒ Windy

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

Event # 80

X Mario Sherman

Field Technician Signature

Brown and Caldwell

Company

5/25/06

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):	869.55	millibars	652.4	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	71.26	°F	295.0	°K	**Event #**	80
					Date	5/17/06

	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	34.25	4/5/06	23.919	-4.5827	1.15	1,662
AM-2-PM10	24.0	35.00	4/5/06	18.804	1.1630	1.19	1,713
AM-3-PM10	24.0	46.00	4/5/06	8.5429	13.583	2.03	2,924
AM-4-PM10	33.7	46.75	4/5/06	15.100	6.2948	1.66	
AM-5-PM10	24.0	36.50	4/6/06	19.444	1.3503	1.19	1,718
AM-6-PM10	24.0	34.75	4/6/06	12.361	9.2195	1.14	1,648
AM-1-PM10-DUP	24.0	36.00	4/5/06	20.533	-0.0404	1.18	1,700

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	24.0	47.00	4/5/06	30.015	1.5861	1.405	2,024
AM-2-TSP	24.0	43.50	4/5/06	31.400	0.6095	1.271	1,830
AM-3-TSP	24.0	42.25	4/5/06	30.279	0.8601	1.271	1,830
AM-4-TSP	24.0	47.75	4/5/06	30.015	2.5197	1.398	2,012
AM-5-TSP	24.0	45.75	4/5/06	30.061	3.5113	1.300	1,873
AM-6-TSP	24.0	45.25	4/5/06	34.130	-1.9548	1.292	1,860

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	5/24/06	0730	—	P-0644	Primary	5/23/06	167.9	191.9	33.5	35.5	
AM-1-TSP		0740		000473	Primary		167.9	191.9	~~46.5~~	48.0	46.5
AM-2-PM10		0800		P-0645	Primary		167.9	191.9	34.5	35.5	
AM-2-TSP		0810		000474	Primary		167.9	191.9	43.5	45.0	
AM-3-PM10		0830		P-0646	Primary		167.9	191.9	45.5	46.5	
AM-3-TSP		0840		000475	Primary		167.9	167.9	—	—	Malfunction
AM-4-PM10		0900		P-0647	Primary		177.6	201.6	46.5	47.5	
AM-4-TSP		0910		000476	Primary		167.9	167.9	—	—	Malfunction
AM-5-PM10		1020		P-0648	Primary		167.9	191.9	37.0	38.0	
AM-5-TSP		1030		000477	Primary		167.9	191.9	46.5	47.0	
AM-6-PM10		1110		P-0649	Primary		167.9	191.9	35.0	37.0	
AM-6-TSP		1120		000478	Primary		167.9	191.9	43.0	45.5	
Field Quality Control Samples											
AM-1-PM10-DUP		0735		P-0650	Duplicate		167.9	191.9	35.0	36.0	
AM- 2-PM-10		0815		P-0652	Trip Blank		N/A	N/A	N/A	N/A	
AM- 4-TSP		0915		000479	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

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

Event # 81

X Gary J Brenning — **Field Technician Signature**

Brown and Caldwell — **Company**

5/24/06 — **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):	869.06	millibars	652.0	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	58.36	°F	287.8	°K	**Event #**	81
					Date	5/23/06

	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	34.50	4/5/06	23.919	-4.5827	1.15	1,656
AM-2-PM10	24.0	35.00	4/5/06	18.804	1.1630	1.17	1,692
AM-3-PM10	24.0	46.00	4/5/06	8.5429	13.583	1.99	2,862
AM-4-PM10	24.0	47.00	4/5/06	15.100	6.2948	1.65	2,378
AM-5-PM10	24.0	37.50	4/6/06	19.444	1.3503	1.21	1,745
AM-6-PM10	24.0	36.00	4/6/06	12.361	9.2195	1.19	1,712
AM-1-PM10-DUP	24.0	35.50	4/5/06	20.533	-0.0404	1.15	1,657

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	24.0	47.25	4/5/06	30.015	1.5861	1.431	2,060
AM-2-TSP	24.0	44.00	4/5/06	31.400	0.6095	1.301	1,874
AM-3-TSP	0.0	0.00	4/5/06	30.279	0.8601	-0.028	0
AM-4-TSP	0.0	0.00	4/5/06	30.015	2.5197	-0.084	0
AM-5-TSP	24.0	46.75	4/5/06	30.061	3.5113	1.349	1,943
AM-6-TSP	24.0	45.00	4/5/06	34.130	-1.9548	1.300	1,872

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	5/31/06	10:30		P-0653	Primary	5/29/06	191.9	215.9	34.0	35.5	Cleaned Shim plates
AM-1-TSP		10:40		000480	Primary		191.9	215.9	45.0	47.5	
AM-2-PM10		11:00		P-0654	Primary		191.9	215.9	34.5	35.5	Cleaned Shim plates
AM-2-TSP		11:05		000481	Primary		191.9	215.9	43.5	45.0	
AM-3-PM10		11:20		P-0655	Primary		191.9	215.9	46.5	47.0	Cleaned Shim plates
AM-3-TSP		11:25		000482	Primary		167.9	191.9	41.5	45.0	
AM-4-PM10		11:45		P-0656	Primary		201.6	225.6	46.5	47.5	Cleaned Shim plates
AM-4-TSP		11:50		000483	Primary		167.9	191.9	48.0	49.0	
AM-5-PM10		12:10		P-0657	Primary		191.9	215.9	36.0	38.5	Cleaned Shim plates
AM-5-TSP		12:15		000484	Primary		191.9	215.9	47.0	47.5	
AM-6-PM10		12:20		P-0658	Primary		191.9	215.9	35.0	37.0	Cleaned Shim plates
AM-6-TSP		12:25		000485	Primary		191.9	215.9	44.0	46.5	
Field Quality Control Samples											
AM-1-PM10-DUP		10:30		P-0659	Duplicate		191.9	215.9	35.0	36.5	Cleaned Shim plates
AM-2-TSP		11:10		000486	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 # 82

x Maure Sherman — **Field Technician Signature**

Brown and Caldwell — **Company**

6/1/06 — **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):	869.58	millibars	652.4	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	54.92	°F	285.9	°K	**Event #**	82
					Date	5/29/06

	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	34.75	4/5/06	23.919	-4.5827	1.15	1,661
AM-2-PM10	24.0	35.00	4/5/06	18.804	1.1630	1.17	1,685
AM-3-PM10	24.0	46.75	4/5/06	8.5429	13.583	2.03	2,927
AM-4-PM10	24.0	47.00	4/5/06	15.100	6.2948	1.64	2,367
AM-5-PM10	24.0	37.25	4/6/06	19.444	1.3503	1.20	1,726
AM-6-PM10	24.0	36.00	4/6/06	12.361	9.2195	1.18	1,702
AM-1-PM10-DUP	24.0	35.75	4/5/06	20.533	-0.0404	1.15	1,663

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	24.0	46.25	4/5/06	30.015	1.5861	1.405	2,023
AM-2-TSP	24.0	44.25	4/5/06	31.400	0.6095	1.314	1,892
AM-3-TSP	24.0	43.25	4/5/06	30.279	0.8601	1.323	1,905
AM-4-TSP	24.0	48.50	4/5/06	30.015	2.5197	1.445	2,080
AM-5-TSP	24.0	47.25	4/5/06	30.061	3.5113	1.370	1,973
AM-6-TSP	24.0	45.25	4/5/06	34.130	-1.9548	1.311	1,888

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	6/7/06	9:55	0.21	P-0660	Primary	6/4/06	215.9	239.9	34.0	35.5	
AM-1-TSP		10:00	0.26	000487	Primary		215.9	239.9	43.5	45.5	
AM-2-PM10		10:20	0.24	P-0661	Primary		215.9	239.9	35.0	36.0	
AM-2-TSP		10:25	0.30	000488	Primary		215.9	239.9	43.0	44.0	
AM-3-PM10		10:30	0.25	P-0662	Primary		215.9	239.9	45.0	46.5	
AM-3-TSP		10:35	0.24	000489	Primary		191.9	215.9	37.5	42.5	
AM-4-PM10		10:45	0.36	P-0663	Primary		225.6	249.4	46.5	47.5	
AM-4-TSP		10:50	0.24	000490	Primary		191.9	215.9	47.0	48.5	
AM-5-PM10		11:05	0.25	P-0664	Primary		215.9	239.9	36.0	37.5	
AM-5-TSP		11:00	0.30	000491	Primary		215.9	239.9	45.5	46.5	
AM-6-PM10		11:10	0.25	P-0665	Primary		215.9	239.9	34.5	35.5	
AM-6-TSP		11:20	0.28	000492	Primary		215.9	239.9	41.5	45.0	
Field Quality Control Samples											
AM-1-PM10-DUP		10:05	0.23	P-0666	Duplicate		215.9	239.9	35.5	36.5	
AM- 1-TSP		10:10	0.24	000493	Trip Blank		N/A	N/A	N/A	N/A	
AM- 6-PM10		11:15	0.23	P-0667	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

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

Event # 83

X Marc Kerrigan — **Field Technician Signature**

Brown and Caldwell — **Company**

6/8/06 — **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):	866.05	millibars	649.8	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	72.65	°F	295.7	°K	**Event #**	83
					Date	6/4/06

	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	34.75	4/5/06	23.919	-4.5827	1.17	1,687
AM-2-PM10	24.0	35.50	4/5/06	18.804	1.1630	1.21	1,745
AM-3-PM10	24.0	45.75	4/5/06	8.5429	13.583	2.02	2,913
AM-4-PM10	24.3	47.00	4/5/06	15.100	6.2948	1.68	2,454
AM-5-PM10	24.0	36.75	4/6/06	19.444	1.3503	1.21	1,736
AM-6-PM10	24.0	35.00	4/6/06	12.361	9.2195	1.16	1,677
AM-1-PM10-DUP	24.0	36.00	4/5/06	20.533	-0.0404	1.18	1,706

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	24.0	44.50	4/5/06	30.015	1.5861	1.323	1,905
AM-2-TSP	24.0	43.50	4/5/06	31.400	0.6095	1.266	1,824
AM-3-TSP	24.0	40.00	4/5/06	30.279	0.8601	1.198	1,725
AM-4-TSP	24.0	47.75	4/5/06	30.015	2.5197	1.393	2,005
AM-5-TSP	24.0	46.00	4/5/06	30.061	3.5113	1.303	1,877
AM-6-TSP	24.0	43.25	4/5/06	34.130	-1.9548	1.233	1,776

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	New Motors Installed 6/12/06
Primary Samples											
AM-1-PM10	6/12/06	2:25	0.38	P-0668	Primary	6/10/06	239.9	263.9	34.5	35.5	SN:1013B
AM-1-TSP		2:30	0.49	000494	Primary		239.9	263.9	44.0	47.5	SN:1033A
AM-2-PM10		3:45	0.32	P-0669	Primary		239.9	263.9	35.0	36.0	SN:1016B
AM-2-TSP		3:50	0.49	000495	Primary		239.9	263.9	43.5	45.5	SN:1034A
AM-3-PM10		4:45	0.27	P-0670	Primary		239.9	263.9	45.5	46.5	SN:1018B
AM-3-TSP		4:50	0.28	000496	Primary		215.9	239.9	39.5	44.0	SN:1014A
AM-4-PM10		5:50	0.27	P-0671	Primary		249.9	273.9	46.5	47.5	SN:1012B
AM-4-TSP		5:55	0.38	000497	Primary		215.9	239.9	47.0	48.5	SN:1015A
AM-5-PM10		6:35	0.41	P-0672	Primary		239.9	263.9	36.5	38.0	SN:1019B
AM-5-TSP		6:40	0.36	000498	Primary		239.9	263.9	45.0	46.5	SN:1017A
AM-6-PM10		7:10	0.27	P-0673	Primary		239.9	263.9	34.5	36.5	SN:1020B
AM-6-TSP		7:15	0.37	000499	Primary		239.9	263.9	42.0	45.5	SN:1021A
Field Quality Control Samples											
AM-1-PM10-DUP		2:35	0.34	P-0674	Duplicate		239.9	263.9	34.5	36.5	SN:1022B
AM-5 TSP	✓	6:45	0.33	000500	Trip Blank	✓	N/A	N/A	N/A	N/A	
AM-2 TSP		2:45	0.24	000501	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

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

Event # 84

X _____ *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):	862.19	millibars	646.9	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	66.98	°F	292.6	°K	**Event #**	84
					Date	6/10/06

	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	35.00	4/5/06	23.919	-4.5827	1.18	1,693
AM-2-PM10	24.0	35.50	4/5/06	18.804	1.1630	1.21	1,739
AM-3-PM10	24.0	46.00	4/5/06	8.5429	13.583	2.03	2,925
AM-4-PM10	24.0	47.00	4/5/06	15.100	6.2948	1.68	2,414
AM-5-PM10	24.0	37.25	4/6/06	19.444	1.3503	1.22	1,755
AM-6-PM10	24.0	35.50	4/6/06	12.361	9.2195	1.19	1,707
AM-1-PM10-DUP	24.0	35.50	4/5/06	20.533	-0.0404	1.16	1,677

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	24.0	45.75	4/5/06	30.015	1.5861	1.366	1,968
AM-2-TSP	24.0	44.50	4/5/06	31.400	0.6095	1.300	1,872
AM-3-TSP	24.0	41.75	4/5/06	30.279	0.8601	1.255	1,808
AM-4-TSP	24.0	47.75	4/5/06	30.015	2.5197	1.397	2,012
AM-5-TSP	24.0	46.00	4/5/06	30.061	3.5113	1.308	1,883
AM-6-TSP	24.0	43.75	4/5/06	34.130	-1.9548	1.251	1,801

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	6/20/06	10:05	0.35	P-0675	Primary	6/16/06	0.0	23.9	33.0	34.5	New bushes
AM-1-TSP		10:15	0.33	000502	Primary		0.0	23.9	36.0	42.5	"
AM-2-PM10		10:20	0.35	P-0676	Primary		0.0	23.9	34.5	35.0	"
AM-2-TSP		10:25	0.27	000503	Primary		0.0	23.9	43.5	45.5	New motor (1034C)
AM-3-PM10		10:35	0.31	P-0677	Primary		0.0	23.9	46.5	47.5	New bushes
AM-3-TSP		10:40	0.37	000504	Primary		0.0	23.9	40.0	44.0	"
AM-4-PM10		10:55	0.24	P-0678	Primary		0.0	23.9	43.5	44.5	"
AM-4-TSP		11:00	0.32	000505	Primary		0.0	23.9	47.5	49.5	"
AM-5-PM10		11:10	0.29	P-0679	Primary		0.0	23.9	36.0	37.5	"
AM-5-TSP		11:15	0.29	000506	Primary		0.0	23.9	43.0	46.5	"
AM-6-PM10		11:25	0.30	P-0680	Primary		0.0	23.9	33.5	35.5	"
AM-6-TSP		11:30	0.25	000507	Primary		0.0	23.9	42.5	45.5	"
Field Quality Control Samples											
AM-1-PM10-DUP		10:10	0.32	P-0681	Duplicate		0.0	23.9	35.5	36.5	"
AM-5-PM-10		11:35	0.35	P-0682	Trip Blank		N/A	N/A	N/A	N/A	
AM-5-TSP		11:20	0.33	000508	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☑ Clear ☐ Rainy ☐ Hazy ☑ Windy

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

Event # 85

Bistell 6/13 – 6/14/06

x Marie Sheppard — *Brown and Caldwell* — 6/22/06

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):	870.10	millibars	652.8	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	68.33	°F	293.3	°K	**Event #**	85
					Date	6/16/06

	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	33.75	6/13/06	23.891	-5.3532	1.17	1,679
AM-2-PM10	23.9	34.75	6/13/06	16.247	5.0264	1.12	1,612
AM-3-PM10	23.9	47.00	6/13/06	21.590	-1.1087	1.51	2,166
AM-4-PM10	23.9	44.00	6/13/06	20.783	-0.6244	1.45	2,078
AM-5-PM10	23.9	36.75	6/14/06	22.210	-2.3987	1.22	1,745
AM-6-PM10	23.9	34.50	6/13/06	20.417	-0.6314	1.16	1,669
AM-1-PM10-DUP	23.9	36.00	6/13/06	19.662	0.7891	1.19	1,702

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	23.9	39.25	6/13/06	31.400	-1.7311	1.223	1,753
AM-2-TSP	23.9	45.00	6/14/06	32.744	-0.1325	1.288	1,847
AM-3-TSP	23.9	42.00	6/13/06	28.988	5.0301	1.180	1,692
AM-4-TSP	23.9	48.75	6/13/06	36.859	-4.1022	1.347	1,931
AM-5-TSP	23.9	44.75	6/14/06	34.038	-1.6675	1.277	1,831
AM-6-TSP	23.9	44.00	6/13/06	29.969	2.3577	1.293	1,854

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	6/27/06	10:35	0.29	P-0683	Primary	6/22/06	23.9	47.9	33.0	34.5	
AM-1-TSP		10:40	0.26	000509	Primary				41.5	43.5	
AM-2-PM10		10:50	0.36	P-0684	Primary				34.5	35.5	
AM-2-TSP		10:55	0.25	000510	Primary				43.5	44.5	
AM-3-PM10		11:10	0.28	P-0685	Primary				45.5	48.0	
AM-3-TSP		11:15	0.23	000511	Primary				37.5	43.5	
AM-4-PM10		11:30	0.32	P-0686	Primary				43.5	44.5	
AM-4-TSP		11:35	0.36	000512	Primary				46.5	49.5	
AM-5-PM10		11:55	0.24	P-0687	Primary				35.5	37.5	
AM-5-TSP		12:00	0.28	000513	Primary				39.9	47.0	
AM-6-PM10		12:05	0.21	P-0688	Primary				33.0	35.0	
AM-6-TSP		12:10	0.30	000514	Primary				42.0	44.5	
Field Quality Control Samples											
AM-1-PM10-DUP		10:45	0.36	P-0689	Duplicate				35.5	36.5	
AM-2 PM-10		11:00	0.41	P-0690	Trip Blank		N/A	N/A	N/A	N/A	
AM-4 TSP		11:40	0.35	000515	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

□ Clear □ Rainy ☒ Hazy □ Windy

□ Cloudy □ Snowy □ Foggy □ Other (explain): Fire Smoke

Event # 86

x Marc Thomas — *Brown and Caldwell* — 6/27/06

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):	871.41	millibars	653.8	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	74.44	°F	296.7	°K	**Event #**	86
					Date	6/22/06

	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	33.75	6/13/06	23.891	-5.3532	1.18	1,693
AM-2-PM10	24.0	35.00	6/13/06	16.247	5.0264	1.14	1,644
AM-3-PM10	24.0	47.50	6/13/06	21.590	-1.1087	1.53	2,208
AM-4-PM10	24.0	44.00	6/13/06	20.783	-0.6244	1.46	2,097
AM-5-PM10	24.0	37.00	6/14/06	22.210	-2.3987	1.23	1,772
AM-6-PM10	24.0	34.00	6/13/06	20.417	-0.6314	1.15	1,660
AM-1-PM10-DUP	24.0	36.00	6/13/06	19.662	0.7891	1.19	1,718

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	24.0	42.50	6/13/06	31.400	-1.7311	1.313	1,891
AM-2-TSP	24.0	44.00	6/14/06	32.744	-0.1325	1.253	1,804
AM-3-TSP	24.0	40.50	6/13/06	28.988	5.0301	1.125	1,620
AM-4-TSP	24.0	48.25	6/13/06	36.859	-4.1022	1.328	1,912
AM-5-TSP	24.0	43.47	6/14/06	34.038	-1.6675	1.236	1,780
AM-6-TSP	24.0	44.00	6/13/06	29.969	2.3577	1.286	1,852

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	7/3/06	9:30	0.28	P-0691	Primary	6/28/06	47.9	71.9	33.0	35.0	
AM-1-TSP		9:40	0.25	000516	Primary			71.9	41.5	43.5	
AM-2-PM10		9:50	0.22	P-0692	Primary			71.9	35.0	35.5	
AM-2-TSP		9:55	0.24	000517	Primary			71.9	43.5	44.5	
AM-3-PM10		10:10	0.24	P-0693	Primary			71.9	45.5	47.5	
AM-3-TSP		10:15	0.25	000518	Primary			71.9	38.5	42.5	
AM-4-PM10		10:30	0.32	P-0694	Primary			71.9	43.0	44.5	
AM-4-TSP		10:35	0.19	000519	Primary			71.9	46.5	49.0	
AM-5-PM10		10:45	0.33	P-0695	Primary			71.9	36.0	37.5	
AM-5-TSP		10:50	0.19	000520	Primary			71.9	43.0	46.0	
AM-6-PM10		11:00	0.32	P-0696	Primary			71.9	33.5	35.0	
AM-6-TSP		11:05	0.33	000521	Primary			71.9	42.0	44.5	
Field Quality Control Samples											
AM-1-PM10-DUP		9:35	0.25	P-0697	Duplicate			71.9	33.5	34.5	
AM-2TSP		10:00	0.36	000522	Trip Blank		N/A	N/A	N/A	N/A	
AM-1TSP		9:45	0.33	000523	Field Blank		N/A	N/A	N/A	N/A	

Ambient Conditions

☒ Clear ☐ Rainy ☐ Hazy ☐ Windy

☐ Cloudy ☐ Snowy ☐ Foggy ☐ Other (explain): Windy during Sample run

Event # 87

X [signature] *Brown and Caldwell* 7/5/06

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):	871.41	millibars	653.8	mm Hg	**Sample**	
Avg. Daily Temperature (Tavg):	74.44	°F	296.7	°K	**Event #**	87
					Date	1/0/00

	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	-47.9	0.00	6/13/06	23.891	-5.3532	0.22	-644
AM-2-PM10	-47.9	0.00	6/13/06	16.247	5.0264	-0.31	889
AM-3-PM10	-47.9	0.00	6/13/06	21.590	-1.1087	0.05	-148
AM-4-PM10	-47.9	0.00	6/13/06	20.783	-0.6244	0.03	-86
AM-5-PM10	-47.9	0.00	6/14/06	22.210	-2.3987	0.11	-310
AM-6-PM10	-47.9	0.00	6/13/06	20.417	-0.6314	0.03	-89
AM-1-PM10-DUP	-47.9	0.00	6/13/06	19.662	0.7891	-0.04	115

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	-47.9	0.00	6/13/06	31.400	-1.7311	0.055	-158
AM-2-TSP	-47.9	0.00	6/14/06	32.744	-0.1325	0.004	-12
AM-3-TSP	-47.9	0.00	6/13/06	28.988	5.0301	-0.174	499
AM-4-TSP	-47.9	0.00	6/13/06	36.859	-4.1022	0.111	-320
AM-5-TSP	-47.9	0.00	6/14/06	34.038	-1.6675	0.049	-141
AM-6-TSP	-47.9	0.00	6/13/06	29.969	2.3577	-0.079	226

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