Sheet No.: AA-3

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 01 Page No: 5

☒ Check box if GPS information has been recorded previously

Station ID: A-1 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00005**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes No	Yes No
Pump ID Number	24976	11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07		
Start Time (hh:mm)	10:32		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 10:04 Flow 1.98	Check1 Time Flow	Check1 Time Flow
	Check2 09:30 2.0	Check2	Check2
	Check3 0920 2.0	Check3	Check3
	Check4 0946 2.0	Check4	Check4
Stop Date (mm/dd/yy)	10/07/07		
Stop Time (hh:mm)	1030		
Stop Counter	7193		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	overcast wet ground. Patchy fog 10/04/07		
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 11

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 23

☑ Check box if GPS information has been recorded previously

Station ID: A- 1 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00017**	**P1-00028**	
Sample Height (ft)	6	~~N/A~~ 0	
Location Description		SFB 11/19/07	
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes (No) SFB 11/19/07	Yes No
Pump ID Number	24976		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/07/07	10/11/07	
Start Time (hh:mm)	10:30	1045	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0937 Flow 2.0	Check1 Time Flow	Check1 Time Flow
	Check2 0938 2.0	Check2	Check2
	Check3 0900 2.0	Check3	Check3
	Check4 1042 2.0	Check4	Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	0927		
Stop Counter	713.6		
Pump fault? (circle)	TW ~~Yes~~ (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: ~~SA~~ SFB	QC by:

Sheet No.: AA- 19

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 41

☑ Check box if GPS information has been recorded previously

Station ID: A- 1 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00243**	**P1-00262**	
Sample Height (ft)	6	~~N/A~~ 0	
Location Description		SFB 10/20/07	
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No	Yes No	Yes No
Pump ID Number	24976 SFB 11/19/07	SFB 11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07	10/10/07	
Start Time (hh:mm)	0928	0810	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0738 Flow 2.0 Check2 0757 2.0 Check3 0808 2.0 Check4 0809 1.98	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0822		
Stop Counter	7133		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-27

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 57 ☑ Check box if GPS information has been recorded previously

Station ID: A-1 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00277**	**P1-00030**	
Sample Height (ft)	6	~~N/A~~ 0	
Location Description		SFB 11/19/07	
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	(Yes) No 11/19/07 SFB 11/19/07	Yes No
Pump ID Number	24976		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07	10/19/07	
Start Time (hh:mm)	0825	0802	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0758 Flow 2.0	Check1 Time Flow	Check1 Time Flow
	Check2 0757 2.0	Check2	Check2
	Check3 0753 2.0	Check3	Check3
	Check4 0746 2.0	Check4	Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0814		
Stop Counter	7189		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments			
Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-4

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 01 Page No: 6

☒ Check box if GPS information has been recorded previously

Station ID: A-2 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: TW SA

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00006**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	Yes No	Yes No
Pump ID Number	24709 SFB 11/19/07		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07		
Start Time (hh:mm)	11:00		
Start Counter	~~7192~~ 0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 1019 Flow 1.98 Check2 0945 2.0 Check3 0935 2.0 Check4 0958 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/07/07		
Stop Time (hh:mm)	1055		
Stop Counter	7192		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	overcast wet ground		

Entered By (Provide initials): MKP/SA **Validated By (Provide initials):** SDA/TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-12

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 24

☑ Check box if GPS information has been recorded previously

Station ID: A-2 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA, TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00018**	**P1-00019**	**P1-00026**
Sample Height (ft)	6	6	~~NA~~ 0
Location Description			SFD 11/19/07
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) (FD)-(field dup) SFB 11/19/07 For FD, Parent ID: P1-00018	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes (No) SFB 11/19/07	(Yes) SFB No 11/19/07
Pump ID Number	24709	24996	
Flow Meter ID Number	Rm02	Rm02	
Start Date (mm/dd/yy)	10/07/07	10/07/07	~~10/8/07~~ 10/09/07
Start Time (hh:mm)	1057	1059	~~0855~~ 0955 TW
Start Counter	0	0	
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0852 Flow 2.0 Check2 0955 2.0 Check3 0917 2.0 Check4 1055 2.0	Check1 Time 0852 Flow 1.98 Check2 0955 2.0 Check3 0917 2.0 Check4 1055 2.0	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07	10/12/07	
Stop Time (hh:mm)	0948	0951	
Stop Counter	7126	7130	
Pump fault? (circle)	Yes (No)	Yes (No)	Yes No
Stop Flow (L/min)	2.0	2.0	
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-20

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 41 ☑ Check box if GPS information has been recorded previously

Station ID: A-2 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: TW SA

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00244**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes No	Yes No
Pump ID Number	24709	4/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07		
Start Time (hh:mm)	0948		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0745 Flow 2.0 Check2 0803 2.0 Check3 0818 2.0 Check4 0816 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0830		
Stop Counter	7134		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 28

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 58 ☑ Check box if GPS information has been recorded previously

Station ID: A- 2 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00278**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	Yes No	Yes No
Pump ID Number	24709 SFB 11/19/07		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07		
Start Time (hh:mm)	0841		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0806 Flow 1.97 Check2 0809 2.0 Check3 0801 2.0 Check4 0753 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0828		
Stop Counter	7186		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.03		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-8

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 01 Page No: 10 + 27

☒ Check box if GPS information has been recorded previously

Station ID: A-3 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: TW / SA

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00010**	**P1-00012**	
Sample Height (ft)	6	0 SFB 11/19/07	
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	(Yes) No	Yes No
Pump ID Number	24710 SFB 11/19/07	SFB 11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07	10/04/07	
Start Time (hh:mm)	12:42	10:47	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 12:15 Flow 1.97 Check2 10:44 2.0 Check3 1040 2.0 Check4 1041 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/07/07	10/7/07	
Stop Time (hh:mm)	1220	SFB 11/19/07	
Stop Counter	5618		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	overcast wet ground Breezy		
Entered By (Provide initials): MRP / SA		**Validated By (Provide initials):** SDA / TW	

For Data Entry Completion (Provide Initials)	Completed by:	QC by:

Sheet No.: AA-16

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 26

☑ Check box if GPS information has been recorded previously

Station ID: A-3 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00024**	**P1-00027**	
Sample Height (ft)	6	~~NA~~ 0	
Location Description		SFB 11/19/07	
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB-(field blank)) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	(Yes) SFB 11/19/07 No	Yes No
Pump ID Number	24710		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/07/07	10/10/07	
Start Time (hh:mm)	TW ~~1220~~ 1223	10:37	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0932 Flow 2.0 Check2 1039 2.0 Check3 1034 2.0 Check4 1147 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	1115		
Stop Counter	7131		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): TW		**Validated By (Provide initials):** SA	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-04

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 44

☑ Check box if GPS information has been recorded previously

Station ID: A- 3 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00250**	**P1-00261**	
Sample Height (ft)	6	~~N/A~~ 0	
Location Description		SFB 10/20/07	
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB-(field blank)) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	(Yes) SFB No	Yes No
Pump ID Number	24710 11/19/07	11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07	10/14/07	
Start Time (hh:mm)	1115	0830	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0808 Flow 2.0 Check2 0828 (A) 1.98 Check3 0850 2.0 Check4 0842 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0950		
Stop Counter	7114		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 32

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 60

☑ Check box if GPS information has been recorded previously

Station ID: A- 3 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00284**	**P1-00029**	
Sample Height (ft)	6	N/A 0	
Location Description		SFB 11/19/07	
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	(Yes) SFB 11/19/07 No	Yes No
Pump ID Number	24710		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07	10/18/07	
Start Time (hh:mm)	0951	0836	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0834 Flow 2.0	Check1 Time Flow	Check1 Time Flow
	Check2 0843 2.0	Check2	Check2
	Check3 0834 2.0	Check3	Check3
	Check4 0820 2.0	Check4	Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0918		
Stop Counter	7167		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by:	QC by: SFB

Sheet No.: AA-5

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL01 Page No: 7

☒ Check box if GPS information has been recorded previously

Station ID: A-4 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: MRP SFB 11/19/07

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00007**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No SFB 11/19/07	Yes No	Yes No
Pump ID Number	~~24711~~ 26046		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07		
Start Time (hh:mm)	11:28		
Start Counter	0		
Daily Flow Check: 10/03 Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 10:34 Flow 0.0 Check2 ~~13:54~~ ~~2.0~~ MRP Check3 2 10:01 1.97 Check4 3 0952 2.0 4 1009 1.99	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/7/07		
Stop Time (hh:mm)	1122		
Stop Counter	5605		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	overcast Ground wet. Pump failed new pump on 10/03/07		

Entered By (Provide initials): MRP **Validated By (Provide initials):** SDA

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-13

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

☑ Check box if GPS information has been recorded previously

Field Logbook No: FL02 Page No: 25

Station ID: A-4 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	P1-00020	P1-00021	
Sample Height (ft)	6	0 ~~B~~ TW ~~AA~~	
Location Description		SFB 11/19/07	
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes (No) SFB 11/19/07	Yes No
Pump ID Number	20046		
Flow Meter ID Number	12M02		
Start Date (mm/dd/yy)	10/07/07	10/07/07	
Start Time (hh:mm)	1124	1130	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0907 Flow 1.98 Check2 1011 2.0 Check3 0936 2.0 Check4 1107 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	1017		
Stop Counter	7131		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635		FIELD BLANK (FB)	
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-21

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 42

☑ Check box if GPS information has been recorded previously

Station ID: A-4 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: TW SA

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00245**	**P1-00246**	
Sample Height (ft)	6	6	
Location Description			
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) (FD-(field dup)) SFB 11/9/07 For FD, Parent ID: P1-00245	FS-(field sample) ~~(FB-(field blank))~~ FD-(field dup) For FD, Parent ID: TW
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/9/07	~~Yes~~ TW (No)	Yes No
Pump ID Number	26046	24996	
Flow Meter ID Number	RM02	(TW) ~~24996~~ RM02	
Start Date (mm/dd/yy)	10/12/07	10/12/07	TW
Start Time (hh:mm)	1020	1013	~~0902~~
Start Counter	0	0	
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0752 Flow 2.0 Check2 0811 2.0 Check3 0826 1.82 Check4 0823 2.02	Check1 Time 0752 Flow 1.98 Check2 0811 2.0 Check3 0826 2.0 Check4 0823 2.0	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07	10/17/07	
Stop Time (hh:mm)	0855	0901	
Stop Counter	7112	7127	
Pump fault? (circle)	Yes (No)	Yes (No)	Yes No
Stop Flow (L/min)	1.95	2.0	
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: JFB	QC by:

Sheet No.: AA-29

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 58

☑ Check box if GPS information has been recorded previously

Station ID: A- 4 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SATW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00279**	**P1-00280**	
Sample Height (ft)	6	8 SFB	
Location Description		11/19/07	
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes (No) SFB	Yes No
Pump ID Number	26046/24636 11/19/07	11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07	10/17/07	
Start Time (hh:mm)	0857	0902	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0814 Flow 1.91 Check2 0817 1.9 Check3 0809 1.97 Check4 0800 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0839		
Stop Counter	4335		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	There was continually adjustment being made we replaced Pump with	S/n 24636 on 10/19/07	

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-6

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL01 Page No: 8 ☒ Check box if GPS information has been recorded previously

Station ID: A-5 Station Comments: Dirt road approx. 30 ft. from site

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: MRP/SA SFB 11/19/07

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00008**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No	Yes No	Yes No
Pump ID Number	24748 SFB 11/19/07		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07		
Start Time (hh:mm)	11:57		
Start Counter	0 1100 SFB 11/19/07		
Daily Flow Check: 10/03 10/03 Record time (hh:mm) and flow rate (L/min) in fields provided TW	Check1 ~~11:05~~ 0.0; ~~Check2~~ ~~11:07~~ ~~2.0~~; Check2 10:17 2.0; Check3 1005 2.0; Check4 1018 1.99	Check1 Time Flow; Check2; Check3; Check4	Check1 Time Flow; Check2; Check3; Check4
Stop Date (mm/dd/yy)	10/07/07		
Stop Time (hh:mm)	11 44		
Stop Counter	5891		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635	overcast wet ground. Breezy S. Haul road ~30ft from site		
Entered By (Provide initials): MRP/SA		**Validated By (Provide initials):** SDA/TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-14

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 25

☑ Check box if GPS information has been recorded previously

Station ID: A-5 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00022**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	Yes No	Yes No
Pump ID Number	24748 SFB 11/19/07		
Flow Meter ID Number	2m02		
Start Date (mm/dd/yy)	10/07/07		
Start Time (hh:mm)	1145		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0916 Flow 2.0 Check2 1018 2.0 Check3 0948 2.0 Check4 1115 1.98	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	1032		
Stop Counter	7126		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-22

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 43

☑ Check box if GPS information has been recorded previously

Station ID: A-5 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____m Y coord (Northing): _____m

Elevation Coordinate System: WGS84, meters Elevation: _____m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00247**	**P1-00248**	
Sample Height (ft)	6	0	
Location Description			
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB-(field blank)) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes (No) SFB	Yes No
Pump ID Number	247448 11/19/07	11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07	10/12/07	
Start Time (hh:mm)	1033	1034	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0758 Flow 2.0 Check2 0817 2.0 Check3 0838 2.0 Check4 0831 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0921		
Stop Counter	7128		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-30

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 59

☑ Check box if GPS information has been recorded previously

Station ID: A-5 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00281**	**P1-00282**	**P1-00415**
Sample Height (ft)	6	6	~~N/A~~ 0
Location Description		11/19/07	SFB
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) (FD)-(field dup) SFB For FD, Parent ID: P1-00281	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes (No) SFB	(Yes) No
Pump ID Number	24748 11/19/07	24996 11/19/07	
Flow Meter ID Number	RM02	RM02	
Start Date (mm/dd/yy)	10/17/07	10/17/07	10/21/07
Start Time (hh:mm)	0924	0927	0808
Start Counter	0	0	
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0821 Flow 2.0	Check1 Time 0821 Flow 2.0	Check1 Time Flow
	Check2 0830 2.0	Check2 0830 2.0	Check2
	Check3 0816 2.0	Check3 0816 1.98	Check3
	Check4 0806 2.0	Check4 0806 2.0	Check4
Stop Date (mm/dd/yy)	10/22/07	10/22/07	
Stop Time (hh:mm)	0852	0854	
Stop Counter	7167	5790	
Pump fault? (circle)	Yes (No)	Yes (No)	Yes No
Stop Flow (L/min)	2.0	2.0	
Field Comments Cassette Lot Number: 14635		Pump was left in adjust mode for 1 day resulting in low counter	
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-7

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 01 Page No: 9 and 17 and 34 ☒ Check box if GPS information has been recorded previously

Station ID: A- 6 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: MRP SFB 11/19/07

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00009**	**P1-00011**	**P1-00013**
Sample Height (ft)	6	0- SFB 11/19/07	0- SFB 11/19/07
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No	Yes SFB No	Yes No
Pump ID Number	24757 SFB 11/19/07	11/19/07	SFB 11/19/07
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/02/07	10/03/07	10/05/07
Start Time (hh:mm)	12:21	11:39	10:24
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 11:40 Flow 2.0 Check2 10:30 2.0 Check3 1018 2.0 Check4 1030 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/07/07	10/7/07	10/7/07
Stop Time (hh:mm)	1205	SFB 11/19/07	SFB 11/19/07
Stop Counter	7182		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments	Overcast / Breezy wet ground	Partly cloudy wet ground	
Cassette Lot Number: 14635			

Entered By (Provide initials): MRP **Validated By (Provide initials):** SDA

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 15

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 26

☑ Check box if GPS information has been recorded previously

Station ID: A- 6 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00023**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes No	Yes No
Pump ID Number	24757		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/07/07		
Start Time (hh:mm)	1206		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0924 Flow 1.98 Check2 1033 2.0 Check3 1011 2.0 Check4 1124 1.98	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	1047		
Stop Counter	7115		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): TW		**Validated By (Provide initials):** SA	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-23

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 02 Page No: 43

☑ Check box if GPS information has been recorded previously

Station ID: A-60 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00249**	**P1-00260**	
Sample Height (ft)	6	0	
Location Description			
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB-(field blank)) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes (No) SFB 11/19/07	Yes No
Pump ID Number	24757		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07	10/13/07	
Start Time (hh:mm)	1048	0805	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0804 Flow 2.0 Check2 0823 2.0 Check3 0844 2.0 Check4 0836 2.0	Check1 Time ~~8:05~~ Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0938		
Stop Counter	7130		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-31

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 60

☑ Check box if GPS information has been recorded previously

Station ID: A-6 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00283**	**P1-00264**	
Sample Height (ft)	6	~~N/A~~ 0 SFB 11/19/07	
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No SFB 11/19/07	Yes No SFB 11/19/07	Yes No
Pump ID Number	24757		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07	10/20/07	
Start Time (hh:mm)	0940	0826	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0828 Flow 2.0 Check2 0837 2.0 Check3 0824 2.0 Check4 0814 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0907		
Stop Counter	7166		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.03		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-1

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL01 Page No: 3

☒ Check box if GPS information has been recorded previously

Station ID: A- 7 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: MRP, SA, TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	P1-00001	P1-00002	P1-00014
Sample Height (ft)	6	6	N/A 0 SFB 11/19/07
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) (FD)-(field dup) SFB 11/19/07 For FD, Parent ID: P1-00001	FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	Yes (No) SFB 11/19/07	Yes (No) by SFB 11/19/07
Pump ID Number	24687	24996	
Flow Meter ID Number	RM02	RM02	
Start Date (mm/dd/yy)	10/02/07	10/02/07	10/6/07
Start Time (hh:mm)	09:22	09:25	08:41
Start Counter	0	0	
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 08:57 Flow 2.0 Check2 08:54 2.0 Check3 0846 2.0 Check4 0835 2.0	Check1 Time 0905 Flow 1.97 Check2 0857 2.0 Check3 0846 2.0 Check4 0835 2.0	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/07/07	10/07/07	
Stop Time (hh:mm)	0923	0925	
Stop Counter	7199	7197	
Pump fault? (circle)	Yes (No)	Yes (No)	Yes No
Stop Flow (L/min)	2.0	2.0	
Field Comments Cassette Lot Number: 14635	overcast light rain wet ground Patchy Fog	overcast light rain wet ground Patchy Fog	Field blank

Entered By (Provide initials): MRP/SA **Validated By (Provide initials):** SDA/TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 9

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL 02 Page No: 22

☑ Check box if GPS information has been recorded previously

Station ID: A- 7 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00015**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	Yes No	Yes No
Pump ID Number	24687 SFB 11/19/07		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/07/07		
Start Time (hh:mm)	09:41		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0758 Flow 2.0 Check2 0828 1.98 Check3 0827 1.98 Check4 0933 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	0847		
Stop Counter			
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 17

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 40

☑ Check box if GPS information has been recorded previously

Station ID: A- 7 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	P1-00241	P1-00263	
Sample Height (ft)	6	0 SFB 11/19/07	
Location Description			
Field QC Type (circle)	(FS-(field sample)) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) (FB-(field blank)) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB 11/19/07	(Yes) SFB 11/19/07 No	Yes No
Pump ID Number	24687		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07	10/16/07	
Start Time (hh:mm)	0843	0753	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0723 Flow 2.0 Check2 0742 2.0 Check3 0747 2.0 Check4 0750 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0751		
Stop Counter	7141		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA- 25

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 56

☑ Check box if GPS information has been recorded previously

Station ID: A- 7 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00275**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No) SFB	Yes No	Yes No
Pump ID Number	24687	11/19/07	
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07		
Start Time (hh:mm)	0754		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0743 Flow 2.0 Check2 0739 2.0 Check3 0735 2.0 Check4 0729 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0739		
Stop Counter	7184		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-2

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL01 Page No: 4

☒ Check box if GPS information has been recorded previously

Station ID: A- 8 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID (place pre-printed label in field provided)	P1-00003			P1-00004					
Sample Height (ft)	6			~~N/A~~ 0 SFB 10/11/07					
Location Description									
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:			FS-(field sample) (FB)-(field blank) FD-(field dup) For FD, Parent ID:			FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:		
Matrix Type	Outdoor			Outdoor			Outdoor		
Flow Meter Type	Rotameter			Rotameter			Rotameter		
Archive blank (circle)	Yes (No) SFB 11/19/07			Yes (No) SFB 11/19/07			Yes No		
Pump ID Number	24994/24711								
Flow Meter ID Number	RM02								
Start Date (mm/dd/yy)	10/02/07			10/02/07					
Start Time (hh:mm)	10:00			10:00					
Start Counter	0								
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1	Time 09:25	Flow 1.96	Check1	Time	Flow	Check1	Time	Flow
	Check2	09:12	2.0	Check2			Check2		
	Check3	0901	2.0	Check3			Check3		
	Check4	0855	0.0	Check4			Check4		
Stop Date (mm/dd/yy)	10/07/07			~~10~~ 10/7/07 SFB 11/19/07					
Stop Time (hh:mm)	1000								
Stop Counter	1475								
Pump fault? (circle)	(Yes) No			Yes No			Yes No		
Stop Flow (L/min)	1.97								
Field Comments	overcast wet ground Fog on 10/04/07			Field Blank					
Cassette Lot Number: 14635									
Entered By (Provide initials): MRP/SA				**Validated By (Provide initials):** SDA / TW					

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-10

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 23 ☐ Check box if GPS information has been recorded previously

Station ID: A- 8 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00016**	**P1-00025**	
Sample Height (ft)	6	N/A 0	
Location Description		SFB 11/19/07	
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor 11/19/07	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No SFB	Yes SFB No 11/19/07	Yes No
Pump ID Number	24711/24994		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/07/07	10/8/07	
Start Time (hh:mm)	1005	0810	
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0810 Flow 0	Check1 Time Flow	Check1 Time Flow
	Check2 0840 0	Check2	Check2
	Check3 0839 1.97	Check3	Check3
	Check4 0945 0	Check4	Check4
Stop Date (mm/dd/yy)	10/12/07		
Stop Time (hh:mm)	0905		
Stop Counter	2762		
Pump fault? (circle)	Yes ~~No~~ TW	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-18

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 40

☑ Check box if GPS information has been recorded previously

Station ID: A-8 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00242**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes No SFB 11/19/07	Yes No	Yes No
Pump ID Number	24994		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/12/07		
Start Time (hh:mm)	0900		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0728 Flow 2.0 Check2 0748 2.0 Check3 0752 2.0 Check4 0759 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/17/07		
Stop Time (hh:mm)	0805		
Stop Counter	7141		
Pump fault? (circle)	Yes No	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			
Entered By (Provide initials): SA		**Validated By (Provide initials):** TW	

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

Sheet No.: AA-26

LIBBY OU3 PHASE 1 FIELD SAMPLE DATA SHEET (FSDS) rev0
STATIONARY AMBIENT AIR MONITOR

Field Logbook No: FL02 Page No: 57 ☑ Check box if GPS information has been recorded previously

Station ID: A- 8 Station Comments:

GPS Coordinate System: UTM Zone 11 North, WGS84 datum, meters

X coord (Easting): _____ m Y coord (Northing): _____ m

Elevation Coordinate System: WGS84, meters Elevation: _____ m

Sampling Team: MWH Sampler Initials: SA TW

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID (place pre-printed label in field provided)	**P1-00276**		
Sample Height (ft)	6		
Location Description			
Field QC Type (circle)	(FS)-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:	FS-(field sample) FB-(field blank) FD-(field dup) For FD, Parent ID:
Matrix Type	Outdoor	Outdoor	Outdoor
Flow Meter Type	Rotameter	Rotameter	Rotameter
Archive blank (circle)	Yes (No)	Yes No	Yes No
Pump ID Number	24994 SFB 11/18/07		
Flow Meter ID Number	RM02		
Start Date (mm/dd/yy)	10/17/07		
Start Time (hh:mm)	0806		
Start Counter	0		
Daily Flow Check: Record time (hh:mm) and flow rate (L/min) in fields provided	Check1 Time 0749 Flow 2.0 Check2 0746 2.0 Check3 0747 2.0 Check4 0734 2.0	Check1 Time Flow Check2 Check3 Check4	Check1 Time Flow Check2 Check3 Check4
Stop Date (mm/dd/yy)	10/22/07		
Stop Time (hh:mm)	0757		
Stop Counter	7189		
Pump fault? (circle)	Yes (No)	Yes No	Yes No
Stop Flow (L/min)	2.0		
Field Comments Cassette Lot Number: 14635			

Entered By (Provide initials): SA **Validated By (Provide initials):** TW

For Data Entry Completion (Provide Initials)	Completed by: SFB	QC by:

FL01

Mike Peterson
Meteorological Solutions INC.
2257 so 1100 E SLC, Utah 84106
office cell
(801) 474-3826 (801) 450-8706

Libby OU-3

Libby ~~03-5~~ mp 043-3

site A7

10/1/07 Tyler and Conner (CDM)

1310 Mike, Scott and Tyler (MSI)

Installed Sampler 3

and duplicate Sampler

light rain

Also installed post with

tubing and no filter till

tomorrow.

10/1/07 site A8

1330 Installed

10/1/07

1356 site A1 installed

10/1/07

1412 Installed site A2

10/1/07

1453 Installed A5

Still overcast with light rain

10/1/07

1506 Installed site A6

10/1/07

1526 Installed site A3

10/1/07

1553 Installed A4 last site

start sampling tomorrow [signature]

Libby 043-3

site A-7

10/2/07

0900

mike, Scott and Tyler (MSI)

on site to start sampling pumps

and filters for 1st sampling

event. Duplicate sampler will

be here for 1st event.

Jeff with Chapman construction

is escorting us. Weather is

overcast with light rain, ground

is wet.

Box H07 pump S/N 24687

Battery #13 voltage was 12.63 volts.

Box H09 pump S/N 24996

Battery #15 voltage was 12.62 volts

Box H07 Filter ID P1-00001

Started at 09:22 MDT

Box H09 Duplicate Filter ID P1-00002

Started at 09:25 MDT

Both samplers verified at 2 1pm.

0932 leaving site [signature]

P1-00001 X **P1-00002**

no further entries.

Libby OU-3

10/02/07 Site A-8
0945
Mike, Scott and tyler (MSI)
on site to install sampling pump
and filter for 1st run day
Box H08 Pump S/N 24994
Battery #14 voltage at 12.7 Volts
Box H08 Filter ID P1-00003
Started at 10:00 MDT Flow set to 2 lpm
Field blank taken at this site
at 10:00 MDT Filter ID P1-00004
weather is still overcast with
light rain on and off, low
clouds (Patchy fog) wet ground.
leaving site at 10:05 MDT

No further entries.

P1-00003

P1-00004

Libby OU-3

Site A-1

10/02/07
1024
Mike, Scott, and Tyler (MSI)
on site to install sampling pump
and filter for 1st run event.
Box H01 Pump S/N 24976
Battery #8 voltage was 12.6 volts
Box H01 Filter ID # P1-00005
Started at 10:32 MDT
Flow set at 2.0 lpm.
1038 leaving site

no further entries.

P1-00005

Libby OU-3
Site A-2

10/02/07
1053
Mike, Scott, and Tyler on site to install sample pump and filter for 1st run event.
Box # H02 pump S/N 24709
Battery # 11 Voltage at 12.58 volts
Box # H02 Filter ID P1-00006
Started at 11:00 MDT Flow set at 2.0 lpm.
Weather still overcast not raining but ground is very wet.
1105 leaving site

no further entries

P1-00006

Libby OU-3
Site A-4

10/02/07
11:19
Mike, Scott, and Tyler (MSI) on site to install sample pump and filter for 1st run event.
Box # H04 pump S/N 24711
Battery # 9 Voltage at 12.54 volts
Box # H04 filter ID P1-00007
Started at 11:28 MDT
Flow set at 2.0 lpm
Still overcast with light rain and wet ground.
11:32 leaving site

no further entries

P1-00007

Libby OU-3
Site A-5

10/02/07
1148
Mike, Scott, and Tyler on site to install sample pump and filter for 1st run event.
Box # H05 pump S/N 24748
Battery # 10 voltage at 12.65 volts
Box # H05 filter ID P1-00008
Started at 11:57 MDT
This is the site closest to the (active Today) Haul Road.
Haul Road is wet and muddy today, about 25-35 feet from road.
Sample Flow set at 2.0 lpm.
Still overcast and breezy here.
no rain.
1202 leaving site
Mike

no further entries

P1-00008

Libby OU-3
Site A-6

10/02/07
1212
Mike, Scott, and Tyler on site to install sample pump and filter for 1st run event.
Box # H06 pump S/N 24757
Battery # 7 voltage at 12.65 volts
Box # H06 filter ID P1-00009
Started at 12:21 MDT.
Flow set at 2.0 lpm.
weather still overcast and breezy now. Not raining now but the ground is still very wet.
12:25 leaving site
Mike

No further entries.

P1-00009

Libby OU-3
Site A-3

10/02/07
12:34
Mike, Scott, and Tyler (MSI) on site to install sample pump and filter for first run event.
Box# H03 pump S/N 24710
Battery # 12 voltage at 12.7 volts
Box # H03 Filter ID P1-00010
Started at 12:42 MDT
Flow set at 2.0 lpm.
weather still overcast, no rain and wet ground. Sun breaking through occasionaly.
12:46 leaving site.
Mark R

no further entries.

P1-00010

Libby OU-3
Site A-7

10/03/07
0856
Mike, Scott, and Tyler on site for daily flow checks
Box H07 pump S/N 24687
flow was at 2.0 lpm
Battery #15 voltage at 12.51 volts
Battery #13 voltage at 12.51 volts
Box H09 pump S/N 24996
was at 1.97 lpm we reset this back to 2.0 lpm.
weather is light rain and overcast.
Box H07 Filter ID P1-00001
Box H09 Filter ID P1-00002
0915
Depart site Mark R

No further entries

Libby OU-3
Site A-8

10/03/07
0922
Mike, Scott, Tyler on site for daily flow checks.
Box H08 Pump S/N 24994 flow was at 1.96 reset back to 2.0 lpm
Battery #14 was at 12.58 volts
Box H08 Filter ID P1-00003
weather is still overcast with light rain.
0934
leaving site

No further entries

Libby OU-3
Site A-1

10/03/07
0959
Mike, Scott, tyler on site for daily flow check.
Box H01 pump S/N 24976
flow at 1.98 reset to 2.0 lpm
Battery #8 voltage at 12.47
weather is still light rain wet ground. Filter ID P1-00005
1008
leaving site

No further entries

Libby OU-3
site A-2

10/03/07
1015
Mike, Scot, tyler (MSI) on site for daily flow check.
Box #02 pump S/N 24709
flow was at 1.98 set to 2.0 lpm
Battery #11 voltage at 12.45 volts
Filter ID P1-00006
more rain moderate showers.
1023
leaving site

no further entries

Libby OU-3
site A-4

10/03/07
1034
Mike, Scott, and Tyler (MSI) on site for daily flow check.
Box #04 pump S/N 24711
Flow was at 0.0 pump failed
Battery #9 voltage at 12.5 volts
will have to replace with spare pump. Filter ID P1-00007
1045 left site will finish daily flow checks at remaining sites then bring spare pump back later.
1045
left site

no further entries

Libby OU-3
Site A-5

10/03/07
1059
Mike, Scott, and Tyler on site for daily flow check.
Pump was not running.
only ran for 93 min
Battery # 10 voltage at 12.62 volts
Pump S/N 24748
Restarted at 1107
Filter ID P1-00008
Flow check at 2.0 lpm
Weather is overcast and cool.
rain stopped for now.
1110
leaving site

Libby OU-3
Site A-6

10/03/07
1134
Mike, Scott, and Tyler on site for daily flow check.
Box H06 Pump S/N 24757
Flow was at 2.0 lpm
Battery #7 voltage at 12.52 volts
Filter ID P1-00009
Weather has changed to scattered clouds with sun
Ground is still wet.
Field Blank taken at this site today at 11:39
Filter ID P1-00011
1145
leaving site

P1-00011

Libby OU-3
Site A-3

10/03/07
1212
Mike, Scott, and Tyler (MSI)
on site for daily flow check
Battery #12 Voltage at 12.58 volts
Box #03 pump S/N 24710
Flow was at 1.97 reset to 2.0 lpm
Filter ID P1-00010
weather is still scattered
clouds with sun not raining
wet ground.
1221
leaving site
Mark Ro

no further entries

Libby OU-3
Site A-4

10/03/07
1347
Mike, and Scott back on
site to install spare pump
S/N 26046
Started back up at 13:54
Flow set at 2.0 lpm
Filter ID P1-00007
Battery #9 voltage at 12.48 volts
weather is now sunny with some
clouds.
1357
leaving site
Mark Ro

no further entries

Libby OU-3
site A-7

10/04/07
0854
Mike Scott Tyler (MSI)
Conner (CDM) Jeff (Chapman)
On site for daily flow checks.
Box H07 Pump S/N 24687
filter ID P1-00001
flow was at 1.9 on RM02
which = 2.0 lpm
Battery #13 at 12.47 volts
Box H09 Pump S/N 24996
filter ID P1-00002
flow was at 1.9 on RM02
which = 2.0 lpm.
Battery was at 12.47 volts
weather is overcast not
raining, wet ground.
0903 left site

no further entries

Libby OU3
site A-8

10/04/07
0912
Mike, Scott, Tyler (MSI)
Conner (CDM) Jeff (Chapman)
On site for daily flow checks
Box H08 Pump S/N 24994
filter ID P1-00003
flow was at 1.9 on RM02
which = 2.0 lpm
Battery 14 was at 12.54 volts
weather is Fog no rain
but ground is wet.
0916
left site

no further entries

Libby OU-3
Site A-1

10/04/07
0930
Mike, Scott, Tyler (MSI)
Conner (CDM) Jeff (Chapman)
on site for daily flow checks.
Box H01 Pump S/N 24976
filter ID P1-00005
flow was at 1.9 on RM02
which = 2.0 lpm
Battery #8 was at 12.43 volts
weather patchy fog not raining
wet ground.
0935
left site
Mel Re

no further entries

Libby OU-3
Site A-2

10/04/07
0945
Mike, Scott, Tyler (MSI)
Conner (CDM) Jeff (Chapman)
on site for daily flow checks
Box H02 Pump S/N 24709
filter ID P1-00006
flow was at 1.9 on RM02
which = 2.0 lpm
Battery #11 was at 12.42 volts
weather is foggy not raining wet
ground.
0950 left site
Mel Re

no further entries

Libby OU-3
site A-4

10/04/07
1001
Mike, Scott, Tyler (MSI)
Conner (COM) Jeff (Chapman)
Box H04 pump S/N 26046
filter ID P1-00007
flow was at 1.87 on RM02
which = 1.97
flow was reset back to 1.9
on RM02 which = 2.0 lpm
Battery #9 voltage was 12.38 volts
weather is overcast not raining
wet ground.
1010
left site Mark Re

no further entries

Libby OU-3
site A-5

10/04/07
10:17
Mike, Scott, Tyler (MSI)
Conner (COM) Jeff (Chapman)
on site for daily flow checks
Box H05 pump S/N 24748
filter ID P1-00008 flow was
at 1.9 on RM02 which = 2.0
lpm.
Battery #10 voltage at 12.51 volts
weather partly fog. not raining
wet ground.
1022 left site
Mark Re

Libby 04-3
site A-6

10/04/07
1030
Mike, Scott, Tyler (MSI)
Conner (CDM)
On site for daily flow checks
Box 1406 Pump S/n 24757
filter ID P1-00009
flow at 1.9 on RM02 which
= 2.0 lpm
Battery #7 voltage at 12.48 volts
weather Patchy fog broken clouds
not raining wet ground.
Ice on top of sampling box.
1037 left site
MARK

no further entries

Libby 04-3
site A-3

10/04/07
1044
Mike, Scott, Tyler (MSE)
Conner (CDM)
On site for daily flow checks
Box 1403 Pump S/n 24710
filter ID P1-00010 flow was
at 1.9 on RM02 which = 2.0 lpm
Battery #12 voltage at 12.54 volts
Field blank taken at this site
today at 10:47 filter ID - P1-00012
Box 1403 Pump S/n
was left in adjust mode from
yesterday. Put back in regular screen.
1057 left site
MARK

No further entries

P1-00012

Libby 04-3
site A-7

10/05/07
0846
Mike, scott, and Tyler (MSI)
Jeff (chapman)
On site for daily flow checks
Battery #13 was 12.45 volts
Box H07 Pump s/n 24687
filter ID P1-00001
flow was at 1.9 on RM02
which = 2.0 lpm
Battery #15 was at 12.44 volts
Box H09 Pump s/n 24996
filter ID P1-00002 flow
was at 1.9 on RM02 which
= 2.0 lpm.
weather is rainy and overcast.
very wet ground.
0853 leaving site.

Libby 04-3
site A-8

10/05/07
0901
Mike, scott, Tyler (MSI)
Jeff (chapman)
on site for daily flow checks.
Battery #14 at 12.51 volts
Box H08 Pump s/n 24994
filter ID P1-00003
flow was at 1.9 on RM02
which = 2.0 lpm
weather is overcast with rain
snow mixed.
0906
left site

Libby Ou-3
site A-1

10/05/07
0920
Mike, Scott, Tyler (MSI)
Jeff (chapman)
on site for daily flow checks
Battery # 8 was at 12.40 volts
Box H01 Pump S/N 24976
filter ID P1-00005 flow
was 1.9 on RMO2 which =
2.0 lpm
weather is snowing!
sticking to ground.
0925
left site

Libby Ou-3
site A-2

10/05/07
0935
Mike, Scott, Tyler (MSI)
Jeff (chapman)
on site for daily flow check
Battery #11 was at 12.39 volts
filter ID P1-00006 flow was
at 1.9 on RMO2 which = 2.0 lpm
Box H02 Pump S/N 24709
weather snowing sticking on ground.
0940 left site

Libby OU-5

Site A-4

10/05/07

0952

Mike, Scott, Tyler (MSI)

Jeff (Chapman)

On site for daily flow checks.

Battery # 9 at 12.55 volts

Box H04 Pump S/N 24711

filter ID P1-

flow at 1.9 on RM02

which = 2.0 lpm

Weather is snowing

sticking to ground

0957

left site

Mike R

Libby OU5

Site A-5

10/05/07

1005

Mike, Scott, Tyler (MSI)

Jeff (Chapman)

on site for daily flow check.

Battery #10 voltage at 12.48 volts

Box H05 Pump S/N 24748

filter ID P1-00008

flow at 1.9 on RM02 which

= 2.0 lpm.

Weather snowing up to 1/4 inch

on ground.

1010

left site.

Mike R

Libby 04-3
site A-6

10/05/07
1018
Mike, Scott, Tyler (MSI)
Jeff (Chapman)
on site for daily flow
check.
Battery #7 voltage at 12.45 volts
Box H06 Pump s/n 24757
filter ID P1-00009
flow was at 1.9 on Rmor
which = 2.0 lpm.
field blank at this site
today at 1024
filter ID - P1-00013
weather is snowing over
3 inches on Sampler Box!
1029 left site

P1-00013

FL 02

SCOTT ADAMSON
METEOROLOGICAL SOLUTIONS INC.
2257 S. 1100 E.
SALT LAKE CITY UT 84106
(801) 474-3826

Libby OU-3

Libby OU-3

10/1/07
1320 Site A7

Took Box 1 and 9
For Installation.

1340 Site A8

Box 8 installed on site

1400 Site A1
Box 7 installed on site

1414 Site A2
Box 2 installed on site

1456 Site A5
Box 5 installed on site

1510 Site A6
Box 6 installed on site

1529 Site A3
Box 3 installed on site

Libby OU-3

10/1/07
1556 Site A4
Box 4 installed on site

10/2/07
0910 site A7

Installed Pole extentions to get sampling to 6 feet. Box #~~7~~ 1 changed to #~~1~~ 7
Installed Pumps Box 9 s/n 24996
Box 1 s/n 24687
Volt meter check done on Batteries
#7 - 12.63V
#9 - 12.62V
Wx Conditions Overcast light fog
Calm filter ID #7 P1-00001
#9 P1-00002

#7 Start time 0922
RM 02 verified 1.9 L/min reading.
Counter 0 verified 2L/min flow
online

#9 Start time 0925
RM02 verified 1.9 L/m reading
Counter 0 verified 2.0L/min flow
online left site 0934

10/2/07 Libby OU-3
Site arrival 0950 A-8
Wx conditions: overcast, patchy fog
wet ground
Installed Pole extention for 6 foot
sampling height. Installed Pump/Filter
Box 8 serial number 24994
Battery Volt check 12.70 Volts
Rotameter RM02 reading 1.9 L/min
Pump time 1000 verified 2.0 L/min
Counter 0
filter ID P1-00003
field Blank P1-00004
Online 1003 left site

Site Arrival 1025 A-1
Wx conditions: overcast
wet ground
Installed Pole extention for 6 foot
Sampling site.
Box 1 serial number 24936
Battery Volt check 12.60 Volts
Rotameter RM02 reading 1.9 L/min
Pump time 1032 verified 2.0 L/min
Counter 0 adjusted up 50 ml/min
filter ID P1-00005
online

10/2/07 Libby OU-3
Site arrival 1055
Wx conditions overcast
wet ground
Installed Pole extention for 6 foot sampling
height. Installed pump/filter
Box H02 serial number 24709
Battery Volt check 12.58 Volts
Rotameter RM02 1.9 L/min verified 2.0 L/min
Pump time 1100 adjusted Pump
Counter 0 +50 ml
filter ID P1-00006
online 1106 left site

Site arrival 1120
Wx conditions overcast
wet ground
Installed Pole extentions for 6 foot sampling
height. Installed Pump/filter
Pump serial number 24711
Battery Volt Check 12.54 Volts
Rotameter RM02 1.9 L/min 2.0 L/min verified
Pump Time 1124 adjustment +40 mL/min
Counter 0
filter ID P1-00007
Online left site 1130

10/2/07 Libby OU-3
Site arrival 1150 site A-5
Wx Conditions: Overcast windy
wet ground
Installed Pole extention for
6 foot Sampling
Pump Serial number 24748
Battery check 12.65 Volts

Pump Time 1157
Rotometer RMO2 1.9 L/min verified 2.0 L/m
Counter 0 adjusted +30 ml/min
filter ID PI-00008
1201 online
30 ft. from Haul road

Site arrival 1215 A-6
Wx Conditions: over-cast south Breeze
wet ground
Installed Pole extension for 6
foot sampling Installed Pump/filter
Box H06 serial number 24757
Battery voltage 12.65
Pump time 1221 Rotometer RMO2
Counter 0 ~~ad~~ 1.9 L/min verified 2.0 L/min
filter ID PI-00009 adjustment +40 ml/min
left site online 1225

10/2/07 Libby OU-3
Site arrival 1233 Site A-3
Wx Conditions: Overcast Breezy
wet ground
Installed Pole extension for
6 foot sampling Installed Pump/filter
Box H03 serial number 24710
Battery check 12.70 Volts
Pump Time 1242 RMO2 1.9 L/min
Rotometer RMO2 verified 2.0 L/min
Counter 0 adjusted +90 ml/min
Filter ID PI-00010

no further entry 10/2/07

10/3/07 Libby OU-3
0900 Site A-7
Box H07 PI-00001
Battery 12.51 Volts
RM02 Flow reading 1.9 L/min
verifies 2.0 L/min
~~Cartridge~~ Cartridge had water on outside
Box H07 PI-00002
Battery 12.51 Volts
flow reading 1.87 L/min
verifies 1.97 L/min
reset + 30 ml/min to 2.0 L/min
Wx conditions: overcast with
drizzle and patchy fog
wet ground left site 0915

0920 Site A-8
Box H08 PI-00003
Battery 12.58 Volts
RM02 flow reading 1.86 L/min
verifies to 1.97 L/min
reset + 30 ml/min to 2.0 L/min
Wx Conditions: Broken clouds
patchy fog drizzle and ground
is wet
left site 0935

10/3/07 Libby OU-3
1002 Site A-1
Box H01 PI-00005
Battery: 12.47 Volts
RM02 Flow reading 1.88 L/min
verifies 1.98 L/min
Bumped up + 20 ml/min
Wx Conditions: overcast light rain
wet ground
left site 1007

1018 Site A-2
Box H02 PI-00006
Battery: 12.45 Volts
RM02 flow reading 1.88 L/min
verifies 1.98 L/min
adjusted + 20 ml/min
Wx Conditions: overcast
light fog rain
left site 1035

1040 Site A-4
Box H04 PI-00007
~~P~~ Pump was not on and would not
stay on after restarting
Wx Conditions Broken light Drizzle
wet ground left site 1045

10/3/07 Libby OU-3
1100 Site A-5
ran 94 min PI-00008
After connecting computer
History indicated Low Battery
and went into sleep mode
Restarted Pump
Wx conditions: Broken clouds
Slight Breeze

1136 Site A-6
Box H06 PI-00009
Battery: 12.52 Volts
RMO2 1.9 L/min reading
Verifies to 2.0 L/min
Wx Conditions: Scattered cover
moist ground
field Blank
PI-00011 Done
1213 Site A-3
Box H03 PI-00010
Battery 12.58 Volts
RMO2 1.87 L/min reading
Verifies to 1.97 L/min
adjusted +30 mL/min
Wx condition: Broken cover Breezy
left site 1220

10/3/07 Libby OU-3
Site A-4 1350
Replaced pump with
Serial # 260446
adjusted + 20 mL/min
for 1.94 L/min RMO2 reading
verified to 2.0 L/min
kept filter # PI-00007
Battery: ~~12.45~~ 12.48 volts
Wx Conditions: Scattered clouds
Slight breeze
Pump Time started 1354

1330 Drove by A-5 and listened
for Pump running
10/3/07
~~10-2-07~~

10/4/07 Libby OU-3
0859 Site ~~A~~ A-7
Battery 13 12.47 Volts
Box H07 PI-00001
Rm02 1.94/min reading
verifies to 2.0 L/min flow
Box H09 PI-00002
Battery 15 12.47 Volts
Rm02 1.94/min reading
verifies to 2.0 L/min flow
flow check done
0902 left site

Wx Conditions:
Over cast wet ground
0911 Site A-8
Box H08 PI-00003
Battery 12.54 Volts # 14
Rm02 1.9 L/min reading
Verifies 2.0 L/min flow
Wx Conditions: fog moist ground
filter PI-00002
left site 0913
10/4/07

10/4/07 Libby OU-3
A-1 arrival 0932
Box H01 PI-00005
Battery 12.43 Volts # 8
Rm02 1.94/min reading
Verifies to 2.0 L/min flow
Wx conditions: Overcast, light fog
moist ground filter PI-00005
left site 0936

0949 Site A-2 Box H02
Battery 12.42 Volts # 11
Rm02 1.9 L/min reading
verifies to 2.0 L/min flow
filter PI-00006
Wx conditions: Overcast fog
moist ground
left site 0949

1001 Site A-4 Box H04
Battery 12.35 Volts # 9
Rm02 1.97 L/min reading
verifies to 1.97 L/min
filter PI-00004 adjusted +30 ml/min
Wx Conditions: Broken cover
moist ground left site 1011

10/4/07 Libby OU-3
1018 Site A5
Box H05
Battery 12.51 Volts # 10
RM02 1.9 L/min reading
Verifies to 2.0 L/min flow
Filter PI-00008
Wx Conditions: Broken cover Patchy fog
moist ground
left site 1022

1033 Site A6
Box H06
Battery 12.48 Volts # 7
RM02 1.9 L/min reading
verifies to 2.0 L/min flow
filter PI-00009
Wx Conditions: Broken cover
Patchy fog moist ground
left site 1136
1044 Site A3 Box H03 Range adjust made
Battery 12.54 Volts # 12 upon arrival
RM02 1.9 L/min reading
Verifies to 2.0 L/min
filter PI-00010 field blank PI-00012
Wx Conditions: Broken cover
moist ground left site

10/5/07 Libby OU-3
848 Site A-7 Box H07 H07
Battery 12.45 Volts #13
RM02 1.9 L/min reading
verifies to 2.0 L/min
Filter PI-00011
RM02 1.9 L/min reading
Battery 12.44 Volts # 15
verifies to 2.0 L/min
Wx conditions: Patchy fog
overcast rain moist ground

904 Site A-8 Box H08 PI-00003
Battery 12.51 Volts #14
RM02 1.9 L/min reading
verifies to 2.0 L/min
Wx conditions: Overcast
Patchy fog rain/snow mix
920 Site A-1 Box H01 PI-00005
Battery 12.40 Volts # 8
RM02 1.9 L/min reading
Verifies 2.0 L/min flow
Wx Conditions overcast
Snow

10/5/07 Libby OW3
9 35 Site #2
Box H02 PI-00006
Battery 12.39 Volts #11
Rmo2 1.9 L/min
Verifies 2.0 L/min
Wx conditions Over cast
Snow
954 Site A-4 Box H03
Battery 12.35 Volts #9
Rmo2 1.9 L/min reading
Verifies to 2.0 L/min
Wx conditions Snow over cast
filter PI-00007
1007 A5 Box H05 PI-00008
Battery 12.48 Volts #10
Rmo2 1.9 L/min reading
Verifies to 2.0 L/min
Wx conditions overcast
Snow
avg 4" accumulation
10/05/07

10/5/07 Libby OW
920 Site 6 Box H06
filter PI-00009
Battery 12.45 Volts #2
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
Wx conditions Snow
overcast 3" accumulation

Field Blank PI-00013
1010 Site A-3 PI-00010
12.52 Volts #12
Rmo2 1.9 L/min reading
Verifies to 2.0 L/min
Wx cond Snow 2" accumulation
10/5/07

10/6/07 Libby OU-3
0835 Site A7
Box H07
Battery 12.41 Volts #13
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00001
Battery 12.40 Volts # 15
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00002
Wx conditions: Light fog overcast
moist ground
field blank P1-00014
841 at site A7

855 Site A8
Box H08 P1-00003
Battery 12.58 Volts #14
Pump was not running upon
arrival. We downloaded the
the Pump History for 24994
24994_A8_P1-00003_100307.hst
Tried fixing Power connection after
Low battery → sleep mode indicated
on history. The pump continued

10/6/07 Libby OU-3
to turn itself off. We tried a new
power source connector wire but
that failed. We replaced the
pump with S/n 24711
restarted Pump at 09.24
pump adjusted +40 ml/min

09:46 Site A-1
Box H01
Battery 12.37 Volts #8
Rmo2 1.9 L/min reading verifies
2.0 L/min flow
filter P1-00005
Wx Conditions: overcast
patchy fog moist ground

0958 Site A-2
Box H02
Battery 12.35 Volts # 11
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
Wx conditions: fog overcast filter P1-00006
moist ground
10/6/07

10/6/07 Libby OU-3
1009 Site A-4
Box H04
Battery 12.32 Volts #9
Rmoz 1.89 L/min
verifies to 1.99 L/min
adjusted +10 ml/min
filter P1-00007
Wx conditions: overcast
moist ground

1018 Site A-5
Box H05
Battery 12.45 Volts # 10
Rmoz 1.89 L/min reading
verifies 1.99 L/min flow
Filter P1-00008
adjusted +10 ml/min
Wx Conditions: Thick fog overcast
no snow on ground but
the ground is wet

10/6/07 Libby OU-3
1030 A-6
Box H06
Battery 12.42 Volts # 7
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00009
Wx Conditions: overcast
Patches of snow on ground
wet ground exposed

1041 Site A-3 Box H03
Battery 12.48 Volts # 12
Rmoz 1.9 L/min reading
verifies to 2.0 L/min flow
filter P1-00010
Wx Conditions: overcast
patches of snow on wet ground

10/6/07

10/7/07 Libby OU-3
0922 Site A-7
Box H07
Battery 12.38 Volts #13
RM02 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00001
Wx conditions: overcast, calm
Box H09 Duplicate
Battery 12.37 Volts # 15
RM02 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00002
Wx conditions: overcast, calm
Stop counter: Box H07: 7199 min
Box H09: 7197 min
Stop 0923 for H07
Stop 0925
Box H07 new filter
Pump S/n 24 687
Started Sampling at 09:41
adjusted -20 ml/min to get 2.0 L/min

P1-00015

10/7/07 Libby OU-3
0956 Site A8
Box H08
Battery 12.47 Volts #14
RM02 1.97 L/min reading
verifies 1.97 L/min flow
filter P1-00003 Stop time 1000
Wx conditions: overcast calm
Stop counter: 1475
Box H08 new filter
~~new filter~~ Pump S/n 24711
Started sampling 1005
adjusted +80 ml/min to 2.0 L/min

P1-00016

1023 Site A-1 Box H01
Battery 12.34 Volts #8
RM02 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00005 Stop time
Wx conditions: Overcast
Stop counter 7193 Stop time 1030
Box H01 new filter
Pump S/n 24976
Start time 1030
adjusted +70 ml/min to 2.0 L/min

P1-00017

10/7/07 Libby OU-3
Site A2 0952
Battery 12.32 Volts #11
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00006 stop time 1055
Wx conditions: overcast calm
Stop counter 7192
Box H02 New filter
Pump S/n 24709
Start time 1057
adjusted +70 ml/min for 2.0 ml/min flow

P1-00018

A-2 Replicate Box H09
Battery 12.37 Volts # 15
Pump S/n 24996
new filter
start time 1059
flow adjusted +30 ml/min to 2.0 L/min flow
10/7/07

P1-00019

10/7/07 Libby OU-3
Site A-4 1115
Battery 12.29 Volts # 9
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00007
Wx conditions: overcast, calm
field Blank P1-00021
Stop counter 5605 stop time 1122
Box H04 new filter
Start time 1124
adjusted +70 ml/min for 2.0 L/min flow

P1-00020

P1-00021

field Blank
1130
Pump S/n 26046

1139 Site A-5
Battery 12.42 Volts #
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00008 Pump S/n 24248
Wx conditions overcast, calm
Stop counter 5891 stop time 1144
Box H05 New filter
Start time 1145
adjusted +40 ml/min for 2.0 L/min flow

P1-00022

10/07/07 Libby OV-3
1200 Site A6 Box H06
Battery 12.39 Volts # 7
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00009 Pump S/n 24757
Wx conditions: overcast calm
drizzle
Stop counter 7182 stop time 1205
Box H06 new filter
Start time 1206
adjusted +40 ml/min

P1-00023

1217 Site A-3 Box H03
Battery 12.45 Volts # 12
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00010 Pump S/n 24710
Wx conditions: overcast, calm
Stop counter 5614 stop time 1220
Box H03 new filter
start time 1223
adjusted +120 ml/min for 2.0 L/min flow
10/07/07

P1-00024

10/08/07 Libby OV-3
758 Site A-7 Box H07
Battery 12.35 # 13
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00015
Wx conditions: overcast, calm
patchy fog

810 Site A-8 Box H08
Pump was not running
upon arrival we downloaded
history 24711_A8_P1-00016_100807
Pump had Low Batt. warning
Battery at 12.55 volts # 14
readjusted flow to +40 ml/min
where it was preset at -70 ml/min
which is of concern due to page 23
we set it to +80 ml/min ~~yes~~ on 10/07/07
837 Site A-1 Box H01
Battery 12.31 Volts # 8
RMO2 1.9 L/min reading
verifies to 2.0 L/min flow
filter P1-00017
Wx conditions overcast calm
moist ground

FL03

Name TYLER WARD
METEOROLOGICAL SOLUTIONS INC
Address 22575 1100E
SLC, UTAH 84106
Phone (801) 474-3826

Project LIBBY OU-3

LIBBY OU-3

10.02.07 9:30 AM A-7

- OVERCAST, LOW CLOUDS NO WIND
- DUPLICATE H09 SET
- H07 - P1.00001
- H09 - P1.00002

10:AM A-8

- SUN EMERGING
- H08 - P1-00003
- BLANK - P1-00004

10:40A A-1

- H01 - P1.00005

TW - ~~H02 - P1 - 00006~~ ~~A-2~~

11:00 A A-2

- H02 - P1 - 00006

11:30A A-4

- H04 - P1 - 00007
- VERY SLIGHT BREEZE

12:00 AM A-5

- H05 - P1 - 00008
- STRONGER BREEZE
- THIS SIGHT IS THE CLOSEST TO HAUL ROAD (~30ft)

12:30P A-6

- H06 - P1 - 00009
- BREEZE, GUSTY

- H03 - P1 - 00010 A-3
- BREEZE

10/6/07 Libby OU-3
835 Site A-7
Box H07
Battery 12.41 Volts #13
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00001
Battery 12.40 Volts #15
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00002
Wx Conditions: Light fog overcast
moist ground

P1-00014

field blank
08:41 at site A-7

855 Site A-8
Box H08
Battery 12.58 Volts #14
Pump was off upon arrival and
we downloaded history fixed power
connection and restarted at ~~9:09~~ 0958 pump time
filter # P1-00003
Wx conditions: overcast fog
moist ground

10/6/07 Libby OU-3
New Pump installed 2411 and started
09:24 Pump adjusted +40ml/min

0946 Site A-1
Box H01
Battery 12.37 Volts #8
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00005
Wx conditions: overcast
patchy fog moist ground

0958 Site A-2
Box H02
Battery 12.35 Volts #11
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
Wx conditions: fog overcast
moist ground

10/06/07 Libby OU-3
1009 Site A-4
Box H04
Battery 12.32 Volts #9
Rmo2 1.89 L/min
verifies to 1.99 L/min
adjusted + 10 ml/min
filter P1-00007
Wx Conditions overcast
moist ground

1018 Site A5
Box H05
Battery 12.45 Volts # 10
~~1.94~~ Rmo2 1.89 L/min reading
verifies 1.99 L/min
filter P1-00008
adjusted + 10 ml/min
Wx conditions Thick fog overcast
no snow ~~and~~ on ground but moist

10/6/07

10/6/07 Libby OU-3
1030 A-6
Box H06
Battery 12.42 Volts #7
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00009
Wx conditions: overcast
Patches of snow on ground
wet ground exposed

1041 Site A-3

Battery 12.48 Volts #12
Rmo2 1.9 L/min reading
verifies to 2.0 L/min flow
filter P1-00010

Wx Conditions: overcast
Patches of snow on wet ground

10/07/07 Libby OU-3
1200 Site A6 Box H06
Battery 12.39 Volts # 7
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00009 Pump S/n 24757
Wx conditions: overcast calm
drizzle
Stop counter 7182 stop time 1205
Box H06 new filter
Start time 1206
adjusted +40 ml/min

P1-00023

1217 Site A-3 Box H03
Battery 12.45 Volts # 12
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00010 Pump S/n 24710
Wx conditions: overcast, calm
Stop counter 5614 stop time 1220
Box H03 new filter
Start time 1223
adjusted +120 ml/min for 2.0 L/min flow
10/07/07

P1-00024

10/08/07 Libby OU-3
758 Site A-7 Box H07
Battery 12.35 # 13
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00015
Wx conditions: overcast, calm
patchy fog

P1-00025

810 Site A-8 Box H08 field blank
Pump was not running P1-00025
upon arrival we downloaded
history 24711_A8_P1-00016_100807
Pump had Low Batt. warning
Battery at 12.55 volts # 14
readjusted flow to +40 ml/min
where it was preset at -70 ml/min
which is of concern due to page 23
we set it to +80 ml/min ~~yes~~ on 10/07/07
837 Site A-1 Box H01
Battery 12.31 Volts # 8
Rmoz 1.9 L/min reading
verifies to 2.0 L/min flow
filter P1-00017
Wx conditions overcast calm
moist ground

10/08/07 Libby OV-3
852 Site A-2
Box H02
Battery 12.29 Volts # 11
~~92~~ Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00018
Battery 12.34 Volts # 15
Rmoz 1.88 L/min reading
verifies 1.98 L/min flow
adjusted +20 ml/min
filter PI-00019
Wx conditions overcast calm
moist ground

907 Site A-4 Box H04
Battery 12.26 # 9
Rmoz 1.88 L/min reading
verifies 1.98 L/min flow
adjusted flow +20 ml/min
filter PI-00020
Wx conditions: overcast drizzle
moist ground

10/8/07 Libby OV-3
916 Site A-5 Box H05
Battery 12.40 #10
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00022
Wx conditions: light rain
Overcast moist ground

924 Site A6 Box H06
Battery 12.37 Volts # 7
Rmoz 1.88 L/min reading
verifies 1.98 L/min flow
adjusted +20 ml/min to +60 ml/min
filter PI-00023
Wx conditions overcast
light rain moist ground

932 Site A-3 Box H03
Battery 12.43 Volts # 12
Rmoz 1.9 L/min reading
verifies 2.0 L/min ~~reading~~ flow
filter PI-00024
Wx conditions: Rain ~~over~~ S-F
Broken cover moist ground

1004 A8 drive by to verify Pump was running

10/09/07 Libby OU-3
Site A-7 0828 Box H07
Battery 12.43 Volts # 13
Rmo2 1.88 L/min reading
verifies 1.98 L/min flow
filter P1-00015
Wx conditions: overcast, calm

Site A-8 840
Arrived at site and pump
was not running
we down loaded the history
24711_P1-00016_A8_100807
we replaced the Pump
with 24996 we have decided
to rewire and replace the battery
we will return later
Site A-1 938 Box H01
Battery 12.28 Volts # 8
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00017
Wx conditions: Overcast calm
wet ground

10/9/07 Libby OU-3
955 Site A-2 Box H02
Battery 12.26 Volts # 11
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00018
Box H09 field blank
Battery 12.31 Volts # 15
Rmo2 1.9 L/min readin
verifies 2.0 L/min flow
filter P1-00019
Wx Conditions: fog overcast
Calm moist wind
1011 Site A-4 Box H04
Battery 12.23 Volts # 9
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00020
Wx conditions Broken cover Calm
moist ground

P1-00026

10/7/07 SA
~~10/8/07~~ Libby ou 3
1018 Site A-5
Battery 12.27 Volts #10
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-000 22
Spider in cartridge stuck
stick in to remove it only sidewall
Wx conditions: patchy fog
Broken cover calm winds
moist ground
stick was in ≈ 1/4 inch only
touched sidewall
1033 Site A6
Battery 12.33 Volts #7
Rmo2 1.9 L/min reading
verifies 2.0 L/m flow
Wx conditions Patchy fog
Broken cover Calm winds
1039 Site A-3 Box H03
Battery 12.39 Volts #12
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
Wx Conditions: Broken cover
Calm moist ground

10/9/07 SA
~~10/8/07~~ Libby ou 3
245 Site A-8 Box H08
Battery 12.47 Volts #14
flow 1.87 L/min reading
verifies to 1.93 L/min flow
replacing Battery and wire
to pump to help reduce
faulting occurance again

~~Pup~~ SA Pump ID B 24711
Battery #5 12.81 Volts
reset to 2.0 L/min

10/10/07
827 Site A-7 Box H07
Battery 12.29 Volts #13
Rmo2 1.88 reading
Verifies 1.98 L/min flow
Wx Conditions: Dense fog calm
moist ground
filter PI-00015

10/10/07 Libby OU-3
839 Site A-8
Box H03 Battery 12.63 Volts # 5
RMO2 1.87 L/min reading
Verifies 1.97 L/min flow
adjusted + 30 ml/min
filter PI-00016
Wx conditions: Dense fog calm
moist ground

900 Site A-1 Box H08
Battery 12.25 Volts # 8
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00017
Wx conditions: fog Broken cover calm
moist ground

917 Site A-2 Box H02
Battery 12.23 Volts # 11
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00018
Box H01 Battery 12.28 Volts # 15
RMO2 1.9 L/min reading
verifies 2.0 L/min flow

10/10/07 Libby OU3
filter PI-00019
Wx conditions: Patches of Dense fog
calm overcast moist ground

934 Site A-4 Box H04
Battery 12.20 Volts #
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00020
Wx conditions: overcast Dense fog calm
moist ground

948 Site A-5 Box H05
Battery 12.34 Volts # 10
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter PI-00022
Wx Conditions: Patchy fog, Broken
cover, calm, moist ground

1011 Site A-6 Box H06 filter PI-00023
Battery 12.[illegible] Volts # 7
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
Wx Conditions: Broken cover, calm, moist ground

10/10/07 Libby ou3
~~5~~ 1034 Site A3 Box H03
Battery 12.36 Volts # 12
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00024
Wx conditions: Broken cover,
calm moist ground
field blank
10:37

P1-00027

10/11/07
9:33 Site A-7 Box H07
Battery 12.76 Volts #13
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00015
Wx conditions: Broken cover
Calm
945
~~1045~~ SA Site A-8 Box H06
Battery 12.66 Volts # 5
Pump was not running
upon arrival. again, there was
a Low Battery warning

10/11/07 Libby ou3
and we have replaced the
battery eliminator with a
new one sent from manufacturer
Pump had faulted at 1128 am
10/10/07 as found in
history 24711_A8_P1-00016_101107

1042 Site A-1 Box H01
Battery 12.22 Volts #8
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00017
Wx conditions: Scattered cover
Slight South breeze
field blank
1045

P1-00028

1055 Site A-2
Box H07 Battery 12.20 Volts #11
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00018
Box H01 Battery 12.25 Volts #13
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00019

10/11/07 Libby OW3
Site A-2 Wx Conditions:
Scattered Clouds Calm

1107 Site A-4
Box H04
Battery 12.17 Volts # 9
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00020
Wx conditions Scattered cover
Calm

1115 Site A-5 Box H05
Battery 12.31 Volts # 10
Rmo2 1.88 L/min reading
verifies 1.98 L/min flow
adjusted +20 ml/min
filter P1-00022
Wx conditions: Scattered cover
Southerly wind

10/11/07 Libby OW3
1124 Site A-6 Box H06
Battery 12.77 Volts # 7
Rmo2 1.88 L/min reading
verifies 1.98 L/min flow
filter P1-00023 adjusted +20 ml/min
Wx conditions: Scattered cover
Southerly winds

1147 Site A3 Box H03
Battery 12.33 Volts # 12
~~Rm~~ Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00024
Wx conditions Scattered clouds
Calm

10/12/07 Libby ou3
843 Site A-7 Box H07
Battery 12.22 Volts # 13
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00015 ended 847
new filter end counter 5799
Start time 849
Start counter 0
wx conditions overcast, calm

P1-00241

900 Site A-8 Box H08
Battery 12.53 Volts # 5
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00016 ended 904
Start time 905 end counter 2762
new filter
start counter 0
wx conditions. overcast, calm
10/12/07

P1-00242

10/12/07 Libby ou3
922 Site A-1 Box H01
arrival at site cartridge
was not fastened to post
and label was chewed.
there was slobber from
what we believe is an Elk
Battery 12.18 Volts #8
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
~~en~~ filter P1-00017 ending counter
7136 end time ~~8~~ 927
Start time 928
new filter
Start counter 0
Wx conditions: overcast, calm

P1-00243

940 Site A2 Box H02
Battery 12.15 Volts # 11
Rmo2 1.9 L/min reading
filter P1-00018 verifies 2.0 L/min flow
end time 946 end counter 7126
new filter
Start time 948
Start counter 0
Wx conditions overcast, calm

P1-00244

10/12/07 Libby OU3
Box H09
Battery 12.20 Volts
Rmo2 1.9 L/min reading
verifies 2.0L/min flow
filter P1-00019
End time 951 end flow 7130
~~Start time~~ ~~Start counter 0~~
~~new filter P1-00~~ SA
new site at A-4

1005 Site A-4 Box H04
Battery 12.12 Volts # 9
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00020
end time 1017 end counter 7131
Start time 1020 Start counter 0
new filter **P1-00245**

Box H09 Duplicate
New filter P1 **P1-00246**
~~ACO~~ Start time 1013
Start counter 0
Wx Conditions: over cast, calm

10/12/07 Libby OU3
1028 Site A-5
Battery 12.26 Volts #10
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00022
end time 1032 end counter 7128
Start time 1033 **P1-00247**
New filter
Start Counter 0
field Blank **P1-00248**
1034

1044 Site A-6
Battery 12.22 Volts #7
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
P1-00023
Stop time 1047 Stop counter 7115
Start time 1048 Start counter 0
New filter **P1-00249**

Wx conditions overcast, calm
10/12/07

10/12/07 Libby OU's
Site A3 Box H00
Battery 12.28 Volts #
Rmo2 1.9 L/min reading
Verifies 2.04mm flow
filter P1-00024
end time 1115 end Counter 7131
Start time 1115
Start Counter 0
New filter

P1-00250

Wx conditions: Broken Calm
10/12/07

10/16/07 Libby OU3
6836 A-6
Battery 12.10 Volts #7
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00249
Wx cond Broken clouds calm

0842 A-3
Battery 12.15 Volts #12
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00250
Wx cond. Broken clouds calm

10/17/07 745 A7
Battery 12.04 Volts #13
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00241 stop time ~~715~~ 751
stop counter 7141
Battery change to #1 12.82 Volts
Start time: 0754 start counter: 0
filter P1-00275
Wx cond. Patchy fog calm

P1-00275

10/17/07 Libby OU3
802 Site A-8
Battery 12.37 Volts #5
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00242
end time 805 end counter 7141
Start time 806 start counter 0
filter **P1-00276**

Wx cond Broken cloud calm

818 Site A-1
Battery 11.99 ~~12.37~~ (SA) Volts #8
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00243
end time 822 end counter 7133
Start time 825 start counter 0
filter **P1-00277**

Battery # 3 12.85 Volts

10/17/07 Libby ou3
834 Site A-2
Battery 11.97 Volts # 11
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
end time 830 end counter 7134
Start time 841 Start counter 0
filter

P1-00278

Battery # 16 12.65 Volts
wx cond Broken calm
849 Site A-4 Box H04
Battery 11.53 Volts # 9
Rmo2 1.85 L/min reading
verifies 1.95 L/min flow
filter P1-00245
end time 855 end counter 7112
Start time 857 start counter 0
filter

P1-00279

Battery # 4 12.84 Volts
Box H09
Battery 12.02 Volts #
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00246 end time 901
end counter 7127

10/17/07 Libby ou3
Site A-4 wx cond Broken cover
calm

P1-00280

field Blank
902 ~~SA 10/17/07~~

replaced Box H09 Battery
6 12.59 Volts

915 site A-5 Box H05
Battery 12.09 Volts # 10
Rmo2 1.9 L/min reading
verifies 2.0 L/min flow
filter P1-00247
end time 921 end counter 7128
Start time 924 start counter 0
filter

P1-00281

Box H09
Start time 927 start counter 0
filter

P1-00282

Wx cond Broken calm
Box H05 Battery

10/17/07 Libby ons
935 A-6 Box 406
Battery 12.05 Volts # 7
Rmo2 1.8 L/min reading
Verifies 2.0 L/min flow
filter P1-00249
end time 938 end counter 7130
Start time 940 Start counter 0
filter

P1-00283

Battery replaced # 14 12.87 Volts
Wx Cond Broken Calm Drizzle

946 Site A-3
Battery 12.10 Volts # 12
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
end time 950 end counter 7114
Start time 951 Start counter
filter

P1-00284

10/17/07

10/18/07 Libby ons
Battery 12.58 Volts #1
0743 Site A-7
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00275
Wx Cond. Overcast calm

0744 site A-8
Battery 12.32 Volts #5
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00276
Wx cond. Overcast calm
patchy snow on ground

0758 Site A-1
Battery 12.57 Volts #3
Rmo2 1.9 L/min reading
Verifies 2.0 L/min flow
filter P1-00277
Wx cond. Over cast calm
1/4 inch of snow on ground

10/18/07 Libby OU3

806 Site A-2

Battery 12.53 Volts # 16

Rmoz 1.87 L/min reading

Verifies 1.97 L/min flow

P1-00278 adjusted +30 ml/min

Wx cond. overcast calm

patches of snow on ground

814 Site A-4

Battery 12.62 Volts # 4

Rmoz 1.81 L/min reading

verifies 1.91 L/min flow

filter P1-00279 adjusted +90 ml/min

Wx cond. overcast calm

Patches of snow

821 Site A-5

Box H05

Battery 12.52 Volts #2

Rmoz 1.9 L/min reading

verifies 2.0 L/min flow

filter P1-00281

10/18/07 Libby OU3

Box H09

Battery 12.48 Volts #6

Rmoz 1.9 L/min reading

verifies 2.0 L/min flow

P1-00282 Pump was in

Adjust mode Counter still at 0

Wx cond. overcast calm

1/4" of snow

828 Site A-6

Battery 12.67 Volts # 111

Rmoz 1.9 L/min reading

verifies 2.0 L/min flow

P1-00283

Wx cond. overcast calm

1/4 inch of snow covering ground

834 Site A-3

Battery 12.05 Volts # 12

Rmoz 1.9 L/min reading

verifies 2.0 L/min flow

P1-00284

field blank

P1-00029

Wx cond overcast calm patchy snow

10/19/07 Libby OU3
737 Site A-7
Battery 12.53 Volts #1
Rmo2 1.9 L/min reading
Veritcs 2.0 L/min flow
P1-00275
Wx cond. overcast, fog, calm
rain

746 Site A-8
Battery 12.29 Volts #5
Rmo2 1.9 L/min reading
veritcs 2.0 L/min flow
P1-00276
Wx cond over-cast, calm, rain

757 A-1
Battery 12.53 Volts # 3
Rmo2 L/min reading
Veritcs L/min flow
P1-00277 Teeth marks in
cartridge possibly from Elk.
Wx Cond. overcast calm rain
Field Team
0759

P1-00030

10/19/07 Libby OU3
809 Site A-2
Battery 12.51 Volts #6
Rmo2 1.9 L/min reading
veritcs 2.0 L/min flow
P1-00278
Wx cond. overcast, calm, rain

817 Site A-4
Battery 12.53 Volts #4
R mo2 1.80 L/min reading
Veritcs 1.90 L/min flow
~~to~~ P1-00279
Due to continuing adjustment
replaced pump S/N 24636
Wx cond. Overcast, rain, calm
10/19/07

10/19/07 Libby 043
830 Site A-5 Box H05
Battery 12.49 Volts #2
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00281
Box H09
Battery 12.46 Volts #6
RMO2 1.9 L/min reading
Verifies 2.2 L/min flow
PI-00282
Wx Cond Overcast calm rain

837 Site A-6
Battery 12.61 Volts #14
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00283
Wx Cond Over cast, calm, rain

843 Site A-3
Battery 12.02 Volts #12
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00284
Wx Cond Overcast calm rain

10/20/07 Libby 043
735 Site A-7
Battery 12.50 Volts #1
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00275
Wx cond Scattered clouds, calm

747 Site A-8
Battery 12.26 Volts #5
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00276
Wx Cond scattered clouds, calm

753 Site A-1
Battery 12.50 Volts #3
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00277
Wx Cond Broken clouds, calm

10/20/07 Libby on 3

801 Site A-2
Battery 12.47 Volts # 12
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
P1-00278
Wx cond Broken clouds, calm

809 Site A-4
Battery 12.45 Volts # 4
Rmoz 1.87 L/min reading
verifies 1.97 L/min flow
P1-00279 adjusted + 30 ml/min
Wx cond Broken clouds, calm

816 Site A-5 Box H05
Battery 12.45 Volts # 2
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
P1-00281

Box H09
Battery 12.43 Volts # 6
Rmoz 1.88 SA L/min reading
verifies 1.98 SA L/min flow
P1-00282 adjusted +20 ml/min
Wx cond. Broken clouds, calm

10/20/07 Libby on 3

824 Site A-6
Battery 12.55 Volts # 14
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
P1-00283
Wx cond Broken cover, calm
frost was on the cartridge
and snow covers the ground
field blank

P1-00264

834 Site A-3
Battery 12.48 Volts # 13
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
P1-00284
Wx cond. Broken clouds, calm

10/21/07
729 Site A-7
Battery 12.46 Volts #1
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
P1-00275
Wx cond Overcast calm

10/21/07 Libby OU3
734 Site A-8
Battery 12.26 Volts #5
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00276
Wx cond Dense fog, calm

746 Site A-1
Battery 12.48 Volts #3
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00277
Wx cond Over cast calm

753 Site A-2
Battery 12.43 Volts # 16
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00278
Wx cond overcast calm, patchy fog
10/21/07

10/21/07 Libby OU3
800 Site A-11
Battery 12.34 Volts #4
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00279
Wx cond. Dense fog

806 Site A-~~15~~ (SA) Box H06
Battery 12.41 Volts #2
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00281
Box H06
Battery 12.38 Volts # 6
Rmoz 1.9 L/min reading
Verifies 2.0 L/min flow
P1-00282
Field blank
808
10/21/07

P1-00415

10/21/07 Libby OU3
814 Site A-6
Battery 12.48 Volts #14
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
Pl-00183
Wx cond scattered clouds, calm
Ice/frost everywhere

820 Site A-3
Battery 11.94 Volts #12
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
Pl-00281
Wx cond Scattered clouds, calm

10/22/07
733 Site A-7
Battery 12.44 Volts #1
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
Pl-00275
end time 739 end counter 7184
Wx Cond overcast, calm, light rain

10/22/07 Libby OU3
751 Site A-8
Battery 12.19 Volts ~~#~~ 5
Rmoz 1.9 L/min reading
verifies 2.0 L/min flow
Pl-00276
end time 757 end counter 7189
Wx cond overcast, calm

811 Site A.1
Battery 12.14 Volts ~~#~~ 3
Rmoz 1.9 L/min flow
Verifies L/min reading
Pl-00277
end time 814 end counter 7189
Wx cond. Overcast, calm
823 Site A-2
Battery 12.40 Volts # 10
Rmoz 1.93 L/min ~~flo~~ reading
verifies 2.03 L/min flow
end time 828 end counter 7196
Wx Cond overcast, calm
10/22/07

10/22/07 Libby on 3
836 Site A-4
Battery 12.36 Volts #4
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
PI-00279
end time ~~en~~ 839 end counter 4333
Wx cond. overcast, calm
848 Site A-5
Box H05
Battery 12.35 Volts #2
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00281 end time 852 end counter 7167
Box H0~~4~~ (SA) 9
Battery 12.36 Volts #6
RMO2 1.9 L/min reading
verifies 2.0 L/min flow
PI-00282
end time ~~857~~ (SA) 852 end counter ~~7167~~ (SA) 5790
Wx cond overcast calm
10/22/07

10/22/07 Libby on 3
901 Site A 6
Battery 12.45 Volts #14
RMO2 1.93 L/min reading
Verifies 2.03 L/min flow
PI-00283
end time 907 end counter 7166
Wx cond. overcast, calm

915 Site A 3
Battery 11.91 Volts #12
RMO2 1.9 L/min reading
Verifies 2.0 L/min flow
PI-00284
end time 918 end counter 7167
Wx cond Overcast, calm
10/22/07

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10.01.07
Rotometer ID: RM02
Actual Temp (°F): 20.7

Calibration By: SA + TW
Primary Standard ID: 111363
Actual Pressure (in. Hg): 27.70

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.1	2.220
2.	2.0	2.113
3.	1.9	1.993
4.	1.8	1.881
5.	1.7	1.782
6.	1.6	1.643
7.	1.5	1.557
8.	1.4	1.495
9.	1.3	1.359
10.	1.2	1.195

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10.01.07
Rotometer ID: RM01
Actual Temp (°F): 21.3

Calibration By: SA TW
Primary Standard ID:
Actual Pressure (in. Hg): 27.70

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.1	2.262
2.	2.0	2.165
3.	1.9	2.055
4.	1.8	1.938
5.	1.7	1.862
6.	1.6	1.716
7.	1.5	1.634
8.	1.4	1.498
9.	1.3	1.397
10.	1.2	1.263

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10.01.07
Rotometer ID: RM03
Actual Temp (°F): 20.8

Calibration By: TW SA
Primary Standard ID: 111363
Actual Pressure (in. Hg): 27.70

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.1	2.280
2.	2.0	2.170
3.	1.9	2.066
4.	1.8	1.967
5.	1.7	1.812
6.	1.6	1.670
7.	1.5	1.569
8.	1.4	1.515
9.	1.3	1.398
10.	1.2	1.298

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10/03/07
Rotometer ID: RM02
Actual Temp (°F): 71.5

Calibration By: MRP + SA
Primary Standard ID: 111363
Actual Pressure (in. Hg): 27.70

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.05	2.174
2.	2.00	2.126
3.	1.95	2.083
4.	1.90	2.027
5.	1.85	1.984
6.	1.80	1.935
7.	1.75	1.899
8.	1.70	1.839
9.	1.65	1.789
10.	1.60	1.714

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/02/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.
Overcast, & areas of patchy fog, Southerly winds late morning to early afternoon drizzle

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
None						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
None						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
None						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/03/07 **From:** _____

Weather Conditions: Describe the general weather conditions for the date of this memo.

morning overcast, patchy fog and rain.
~~after~~ wp late morning scattered clouds with slight breeze

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
none						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
A-4 P1-00007	Pump	failure		replaced	with spare pump	
A-5 P1-00008	Pump	failure		restarted	pump and verified	
				Pump still running after		
				2 1/2 hrs.		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
none						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/4/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

Early morning overcast and fog (moist ground)
late morning Broken cloud cover and Patchy fog

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
none						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
none						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
none						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10.05.07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST, RAIN TURNING TO SNOW
WET GROUND. HIGHER ELEVATION SITES
2-3 INCHES OF SNOW

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
~~SNOW ON GROUND TW~~						
A3-P1-00010		SNOW		ON	GROUND	AND
A5-P1-00008		ON			FILTER	
A6-P1-00009		GROUND				

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10.06.07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.
MORNING - OVERCAST WITH AREAS OF PATCHY FOG

MIDMORNING - STARTING TO CLEAR, MOSTLY CLOUDY PATCHY FOG

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
A-8 P1-00003	PUMP	FAILURE		REPLACED WITH SPARE		
				PUMP (29711)		VERIFIED
				PUMP STILL		RUNNING
				AFTER 1.5 HOURS.		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/07/07 **From:**_____

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST, CALM WINDS
MID MORNING LIGHT DRIZZLE

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AMBIENT AIR
CALIBRATION CHECK SCHEDULE

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Week No: 1 **Dates:** 10/02/07 - 10/07/07

	A-1		A-2		A-3		A-4	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/02/07	10:30	1032	1100	11:00	13:00	12:42	1130	11:28
10/03/07	10:32	10:04	11:00	10:19	12:42	12:15	1128	13:54
10/04/07	10:04	9:30	10:19	9:45	12:15	10:44	1354	10:01
10/05/07	0930	0920	0945	0935	1044	~~0935~~ 2100	1001	0952
10/06/07	0920	0946	0935	0958	1040	1041	0952	1009
10/07/07	1032	1030	1100	1055	1242	1220	1128	1124

DUPLICATE INCLUDED

	A-5		A-6		A-7		A-8	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/02/07	12:00	11:57	12:30	12:21	0800	09:22	10:00	10:00
10/03/07	11:57	11:05	12:21	11:40	0922	08:56	1000	09:25
10/04/07	11:05	10:17	11:40	10:30	8:56	8:54	9:25	9:12
10/05/07	1017	1005	1030	1018	8:45	846	0912	0901
10/06/07	1005	1018	1018	1030	0846	0835	0901	0855
10/07/07	1157	1144	1221	1205	922	0922	1000	1000

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24687
Date Printed: Monday, Oct 8, 2007 10:52 AM
Min Temp 60.0F
Max Temp 60.0F
TWA Temp 60.0F
No Flow Correction

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 9:06 AM			0:03
Hold		Tue Oct 2 2007 9:06 AM			4:57
Sleep		Tue Oct 2 2007 9:11 AM			11:04
Hold		Tue Oct 2 2007 9:22 AM			0:20
Flow	2000	Tue Oct 2 2007 9:22 AM	14398	14398	4d 23:59:05
Reset		Sun Oct 7 2007 9:22 AM			0:01
Flow	2000	Sun Oct 7 2007 9:22 AM	1.333	14399	0:40
Hold		Sun Oct 7 2007 9:22 AM			6:59

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24996
Date Printed: Monday, Oct 8, 2007 11:19 AM
Min Temp 52.1F
Max Temp 77.5F
TWA Temp 59.3F
Flow Correction Approximately +30 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 9:10 AM			0:03
Hold		Tue Oct 2 2007 9:10 AM			4:57
Sleep		Tue Oct 2 2007 9:15 AM			9:04
Hold		Tue Oct 2 2007 9:24 AM			0:15
Flow	2000	Tue Oct 2 2007 9:25 AM	2839	2839	23:39:26
Hold		Wed Oct 3 2007 9:04 AM			0:01
Flow	2000	Wed Oct 3 2007 9:04 AM	0.066	2839	0:02
Flow Adjust		Wed Oct 3 2007 9:04 AM			2:33
Flow	2000	Wed Oct 3 2007 9:07 AM	11556	14395	4d 0:17:56
Fault (Run)		Sun Oct 7 2007 9:25 AM			0:01
Hold		Sun Oct 7 2007 9:25 AM			4:59
Sleep		Sun Oct 7 2007 9:30 AM			1:21
Hold		Sun Oct 7 2007 9:31 AM			1:11

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24994
Date Printed: Monday, Oct 8, 2007 11:05 AM
Min Temp 49.6F
Max Temp 80.2F
TWA Temp 58.5F
Flow Correction Approximately +40 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 9:49 AM			0:02
Hold		Tue Oct 2 2007 9:49 AM			6:16
Sleep		Tue Oct 2 2007 9:55 AM			4:20
Hold		Tue Oct 2 2007 10:00 AM			0:03
User Setup		Tue Oct 2 2007 10:00 AM			0:09
Hold		Tue Oct 2 2007 10:00 AM			0:24
Flow	2000	Tue Oct 2 2007 10:00 AM	2816	2816	23:27:47
Hold		Wed Oct 3 2007 9:28 AM			0:01
Flow	2000	Wed Oct 3 2007 9:28 AM	0.069	2816	0:02
Flow Adjust		Wed Oct 3 2007 9:28 AM			3:14
Flow	2000	Wed Oct 3 2007 9:31 AM	6042	8858	2d 2:21:09
Low Bat		Fri Oct 5 2007 11:53 AM			0:09
Sleep		Fri Oct 5 2007 11:53 AM			21:10:33
Hold		Sat Oct 6 2007 9:03 AM			1:32

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24711
Date Printed: Monday, Oct 8, 2007 11:04 AM
Min Temp 9.8C
Max Temp 22.1C
TWA Temp 13.9C
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Sat Oct 6 2007 9:23 AM			0:02
Hold		Sat Oct 6 2007 9:23 AM			0:02
Flow	2000	Sat Oct 6 2007 9:23 AM	6.333	6.333	3:10
Flow Adjust		Sat Oct 6 2007 9:27 AM			0:37
Flow	2000	Sat Oct 6 2007 9:27 AM	2942	2948	1d 0:31:03
Hold		Sun Oct 7 2007 9:58 AM			0:01
Flow	2000	Sun Oct 7 2007 9:58 AM	0.233	2949	0:07
Flow Adjust		Sun Oct 7 2007 9:58 AM			1:02
Flow	2000	Sun Oct 7 2007 9:59 AM	1.567	2950	0:47
Hold		Sun Oct 7 2007 10:00 AM			3:13

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24976
Date Printed: Monday, Oct 8, 2007 11:06 AM
Min Temp 12.2C
Max Temp 33.5C
TWA Temp 16.9C
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
---	-----	-----	------	------	--------
Reset		Tue Oct 2 2007 10:27 AM			0:02
Hold		Tue Oct 2 2007 10:27 AM			4:36
Flow	2000	Tue Oct 2 2007 10:32 AM	6.368	6.368	3:11
Hold		Tue Oct 2 2007 10:35 AM			0:03
Flow	2000	Tue Oct 2 2007 10:35 AM	0.098	6.466	0:03
Flow Adjust		Tue Oct 2 2007 10:35 AM			1:17
Flow	2000	Tue Oct 2 2007 10:37 AM	2812	2818	23:26:00
Flow Adjust		Wed Oct 3 2007 10:03 AM			1:19
Flow	2000	Wed Oct 3 2007 10:04 AM	11567	14385	4d 0:23:28

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24709
Date Printed: Monday, Oct 8, 2007 10:56 AM
Min Temp 51.6F
Max Temp 77.0F
TWA Temp 58.4F
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:56 AM			0:02
Hold		Tue Oct 2 2007 10:56 AM			4:07
Flow	2000	Tue Oct 2 2007 11:00 AM	7.468	7.468	3:44
Hold		Tue Oct 2 2007 11:03 AM			0:05
Flow	2000	Tue Oct 2 2007 11:04 AM	0.066	7.534	0:02
Flow Adjust		Tue Oct 2 2007 11:04 AM			0:18
Flow	2000	Tue Oct 2 2007 11:04 AM	0.268	7.802	0:08
Hold		Tue Oct 2 2007 11:04 AM			0:03
User Setup		Tue Oct 2 2007 11:04 AM			0:09
Hold		Tue Oct 2 2007 11:04 AM			0:02
Flow	2000	Tue Oct 2 2007 11:04 AM	0.567	8.369	0:17
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.202	8.571	0:06
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.066	8.637	0:02
Flow Adjust		Tue Oct 2 2007 11:05 AM			0:34
Flow	2000	Tue Oct 2 2007 11:05 AM	2792	2800	23:15:49
Hold		Wed Oct 3 2007 10:21 AM			0:03
Flow	2000	Wed Oct 3 2007 10:21 AM	0.101	2800	0:03
Flow Adjust		Wed Oct 3 2007 10:21 AM			0:28
Flow	2000	Wed Oct 3 2007 10:22 AM	11584	14385	4d 0:32:11

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24711
Date Printed: Monday, Oct 8, 2007 10:59 AM
Min Temp 17.8C
Max Temp 26.8C
TWA Temp 25.4C
Flow Correction Approximately -70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 3 2007 3:59 PM			0:01
Flow	2000	Wed Oct 3 2007 3:59 PM	0.265	0.265	0:08
Hold		Wed Oct 3 2007 3:59 PM			4:59
Sleep		Wed Oct 3 2007 4:04 PM			4:36
Hold		Wed Oct 3 2007 4:08 PM			0:19
Flow	2000	Wed Oct 3 2007 4:09 PM	2.134	2.399	1:04
Hold		Wed Oct 3 2007 4:10 PM			0:02
Flow	2000	Wed Oct 3 2007 4:10 PM	0.035	2.434	0:01
Flow Adjust		Wed Oct 3 2007 4:10 PM			0:20
Flow	2000	Wed Oct 3 2007 4:10 PM	3.666	6.100	1:50
Hold		Wed Oct 3 2007 4:12 PM			0:01
Flow	2000	Wed Oct 3 2007 4:12 PM	0.032	6.132	0:01
Flow Adjust		Wed Oct 3 2007 4:12 PM			39:52
Low Bat		Wed Oct 3 2007 4:52 PM			0:09
Sleep		Wed Oct 3 2007 4:52 PM			0:57
Hold		Wed Oct 3 2007 4:53 PM			2:36

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 26046
Date Printed: Monday, Oct 8, 2007 11:01 AM
Min Temp 55.0F
Max Temp 87.6F
TWA Temp 61.4F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 3 2007 1:52 PM			0:03
Hold		Wed Oct 3 2007 1:52 PM			1:47
Flow	2000	Wed Oct 3 2007 1:54 PM	1.800	1.800	0:54
Hold		Wed Oct 3 2007 1:55 PM			0:01
Flow	2000	Wed Oct 3 2007 1:55 PM	0.066	1.866	0:02
Flow Adjust		Wed Oct 3 2007 1:55 PM			2:18
Flow	2000	Wed Oct 3 2007 1:57 PM	2419	2421	20:09:30
Hold		Thu Oct 4 2007 10:07 AM			0:01
Flow	2000	Thu Oct 4 2007 10:07 AM	0.069	2421	0:02
Flow Adjust		Thu Oct 4 2007 10:07 AM			0:44
Flow	2000	Thu Oct 4 2007 10:07 AM	5767	8188	2d 0:03:34
Hold		Sat Oct 6 2007 10:11 AM			0:01
Flow	2000	Sat Oct 6 2007 10:11 AM	0.066	8188	0:02
Flow Adjust		Sat Oct 6 2007 10:11 AM			0:52
Flow	2000	Sat Oct 6 2007 10:12 AM	3022	11210	1d 1:10:46

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24748
Date Printed: Monday, Oct 8, 2007 11:10 AM
Min Temp 67.5F
Max Temp 72.0F
TWA Temp 70.0F
Flow Correction Approximately +30 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 11:51 AM			0:03
Hold		Tue Oct 2 2007 11:51 AM			4:57
Sleep		Tue Oct 2 2007 11:56 AM			0:15
Hold		Tue Oct 2 2007 11:57 AM			0:12
Flow	2000	Tue Oct 2 2007 11:57 AM	2.532	2.532	1:16
Hold		Tue Oct 2 2007 11:58 AM			0:01
Flow	2000	Tue Oct 2 2007 11:58 AM	0.032	2.564	0:01
Flow Adjust		Tue Oct 2 2007 11:58 AM			1:10
Flow	2000	Tue Oct 2 2007 11:59 AM	185.7	188.2	1:32:50
Low Bat		Tue Oct 2 2007 1:32 PM			0:10
Sleep		Tue Oct 2 2007 1:32 PM			21:27:45
Hold		Wed Oct 3 2007 11:00 AM			4:30

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24757
Date Printed: Monday, Oct 8, 2007 11:16 AM
Min Temp 49.8F
Max Temp 83.6F
TWA Temp 57.4F
Flow Correction Approximately +40 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:17 PM			0:02
Hold		Tue Oct 2 2007 12:17 PM			3:52
Flow	2000	Tue Oct 2 2007 12:21 PM	3.266	3.266	1:38
Hold		Tue Oct 2 2007 12:22 PM			0:04
Flow	2000	Tue Oct 2 2007 12:22 PM	0.202	3.468	0:06
Hold		Tue Oct 2 2007 12:22 PM			0:03
Flow	2000	Tue Oct 2 2007 12:22 PM	0.233	3.701	0:07
Hold		Tue Oct 2 2007 12:23 PM			0:01
Flow	2000	Tue Oct 2 2007 12:23 PM	0.066	3.767	0:02
Flow Adjust		Tue Oct 2 2007 12:23 PM			0:49
Flow	2000	Tue Oct 2 2007 12:23 PM	14361	14365	4d 23:40:42

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24710
Date Printed: Monday, Oct 8, 2007 10:57 AM
Min Temp 51.0F
Max Temp 75.7F
TWA Temp 57.9F
Flow Correction Approximately +120 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:38 PM			0:03
Hold		Tue Oct 2 2007 12:38 PM			4:36
Flow	2000	Tue Oct 2 2007 12:42 PM	7.701	7.701	3:51
Flow Adjust		Tue Oct 2 2007 12:46 PM			0:24
Flow	2000	Tue Oct 2 2007 12:47 PM	2818	2826	23:29:11
Hold		Wed Oct 3 2007 12:16 PM			0:01
Flow	2000	Wed Oct 3 2007 12:16 PM	0.066	2826	0:02
Flow Adjust		Wed Oct 3 2007 12:16 PM			22:32:54
Flow	2000	Thu Oct 4 2007 10:49 AM	8828	11654	3d 1:33:47
Hold		Sun Oct 7 2007 12:22 PM			0:46

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Sheet No.: F1-000001

Task Order: _____
Calibration Date: 10/07/07
Rotometer ID: RM02
Actual Temp (°F): _____

Calibration By: TW SA
Primary Standard ID: 111363
Actual Pressure (in. Hg): _____

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.05	2.164
2.	2.00	2.125
3.	1.95	2.075
4.	1.90	2.015
5.	1.85	1.967
6.	1.80	1.910
7.	1.75	1.867
8.	1.70	1.838
9.	1.65	1.778
10.	1.60	1.705

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/08/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST W/ PERIODS OF LIGHT RAIN
MOIST GROUND

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
A-8 PI-00016	LOW BAT WARNING			RESTART PUMP		
	PUMP FAILURE					

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

2

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/09/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

- MORNING - OVERCAST PATCHY FOG
MID MORNING - PARTLY CLOUDY CALM WINDS

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
A-8 PI-00016	LOW	BAT	FAULT	- REPLACE	PUMP	
				- FIX	PUMP	AND
				REPLACE	BAT	
				AND	WIRE	
				- REPLACE	PUMP	

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						
- SOP SAYS TO TERMINATE SAMPLING AFTER						
TWO FAULTS. WE WERE TOLD NOT TO DO						
THIS.						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/10/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

Early morning: Dense fog and overcast with calm winds changing over to Patchy fog and Broken Cloud cover
All sites had moist ground

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
None						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
None						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
None						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/11/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.
Scattered cloud cover with late morning wind out of the South

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
None						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
A-8 Pump Battery Low failure	Low Battery Sleep mode		Warning engaged	replaced Battery eliminator of pump with new one sent in from Manufacturer		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
None						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/12/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST AND CALM

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity	Estimated Proximity to Sample Location
~~NONE~~ TW		
A-1 - P1-00017	CARTRIDGE TAG AND TAPE WAS PARTIALLY REMOVED SALIVA ON CARTRIDGE	SAMPLE CARTRIDGE

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue	Description of Actions Taken to Rectify Issues
NONE		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation	List Mod Form Number Completed
NONE		

LIBBY OU3 AMBIENT AIR
CALIBRATION CHECK SCHEDULE

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Week No: 2 Dates: 10/07/07 – 10/12/07

DUPLICATE HERE

	A-1		A-2		A-3		A-4	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/07/07		1030		1057		1220		1124
10/08/07		0827		0852		0932		0907
10/09/07		0938		0955		1039		1011
10/10/07		0900		0917		1034		0936
10/11/07		1042		1055		1147		1107
10/12/07		0927		0948		1115		1017

	A-5		A-6		A-7		A-8	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/07/07		1145		1206		0941		1005
10/08/07		0916		0924		0758		0810
10/09/07		1018		1033		0828		0840
10/10/07		0948		1011		0827		0839
10/11/07		1115		1124		0933		0945
10/12/07		1032		1047		0847		0905

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24687
Date Printed: Friday, Oct 12, 2007 1:06 PM
Min Temp 58.7F
Max Temp 95.1F
TWA Temp 68.9F
Flow Correction Approximately +20 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Sun Oct 7 2007 9:39 AM			0:02
Hold		Sun Oct 7 2007 9:39 AM			2:12
Flow	2000	Sun Oct 7 2007 9:41 AM	0.867	0.867	0:26
Flow Adjust		Sun Oct 7 2007 9:41 AM			0:29
Flow	2000	Sun Oct 7 2007 9:42 AM	5615	5615	1d 22:47:18
Flow Adjust		Tue Oct 9 2007 8:29 AM			1:19
Flow	2000	Tue Oct 9 2007 8:30 AM	2874	8490	23:57:08
Hold		Wed Oct 10 2007 8:28 AM			0:01
Flow	2000	Wed Oct 10 2007 8:28 AM	0.066	8490	0:02
Flow Adjust		Wed Oct 10 2007 8:28 AM			0:24
Flow	2000	Wed Oct 10 2007 8:28 AM	5798	14288	2d 0:18:54

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24711
Date Printed: Friday, Oct 12, 2007 1:09 PM
Min Temp 17.8C
Max Temp 26.8C
TWA Temp 25.4C
Flow Correction Approximately -70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Sat Oct 6 2007 9:23 AM			0:02
Hold		Sat Oct 6 2007 9:23 AM			0:02
Flow	2000	Sat Oct 6 2007 9:23 AM	6.333	6.333	3:10
Flow Adjust		Sat Oct 6 2007 9:27 AM			0:37
Flow	2000	Sat Oct 6 2007 9:27 AM	2942	2948	1d 0:31:03
Hold		Sun Oct 7 2007 9:58 AM			0:01
Flow	2000	Sun Oct 7 2007 9:58 AM	0.233	2949	0:07
Flow Adjust		Sun Oct 7 2007 9:58 AM			1:02
Flow	2000	Sun Oct 7 2007 9:59 AM	1.567	2950	0:47
Hold		Sun Oct 7 2007 10:00 AM			4:30
Flow	2000	Sun Oct 7 2007 10:05 AM	0.968	2951	0:29
Flow Adjust		Sun Oct 7 2007 10:05 AM			1:09
Flow	2000	Sun Oct 7 2007 10:06 AM	125.5	3077	1:02:44
Low Bat		Sun Oct 7 2007 11:09 AM			0:09
Sleep		Sun Oct 7 2007 11:09 AM			21:02:15
Hold		Mon Oct 8 2007 8:11 AM			3:56
Flow	2000	Mon Oct 8 2007 8:15 AM	2.468	3079	1:14
Hold		Mon Oct 8 2007 8:17 AM			0:01
Flow	2000	Mon Oct 8 2007 8:17 AM	0.035	3079	0:01
Flow Adjust		Mon Oct 8 2007 8:17 AM			1:13
Flow	2000	Mon Oct 8 2007 8:18 AM	724.1	3803	6:02:02
Low Bat		Mon Oct 8 2007 2:20 PM			0:09
Sleep		Mon Oct 8 2007 2:20 PM			18:24:39
Hold		Tue Oct 9 2007 8:45 AM			2:12

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24711
Date Printed: Friday, Oct 12, 2007 1:10 PM
Min Temp 17.8C
Max Temp 26.8C
TWA Temp 25.4C
Flow Correction Approximately -70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 9 2007 2:56 PM			0:02
Hold		Tue Oct 9 2007 2:56 PM			0:54
Flow	2000	Tue Oct 9 2007 2:57 PM	0.366	0.366	0:11
Reset		Tue Oct 9 2007 2:57 PM			0:01
Flow	2000	Tue Oct 9 2007 2:57 PM	0.567	0.933	0:17
Reset		Tue Oct 9 2007 2:58 PM			
Flow	2000	Tue Oct 9 2007 2:58 PM	0.066	0.999	0:02
Reset		Tue Oct 9 2007 2:58 PM			0:22
Hold		Tue Oct 9 2007 2:58 PM			0:23
Flow	2000	Tue Oct 9 2007 2:59 PM	2126	2127	17:42:46
Flow Adjust		Wed Oct 10 2007 8:41 AM			0:19
Flow	2000	Wed Oct 10 2007 8:42 AM	313.8	2440	2:36:53
Low Bat		Wed Oct 10 2007 11:18 AM			0:09
Sleep		Wed Oct 10 2007 11:19 AM			22:28:13
Hold		Thu Oct 11 2007 9:47 AM			1:44

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24994
Date Printed: Friday, Oct 12, 2007 1:07 PM
Min Temp 47.6F
Max Temp 88.0F
TWA Temp 68.1F
Flow Correction Approximately +50 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 9 2007 9:20 AM			0:01
Flow	2000	Tue Oct 9 2007 9:20 AM	1.299	1.299	0:39
Hold		Tue Oct 9 2007 9:21 AM			0:01
Flow	2000	Tue Oct 9 2007 9:21 AM	651.6	652.9	5:25:49

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24994
Date Printed: Friday, Oct 12, 2007 1:11 PM
Min Temp 52.2F
Max Temp 88.0F
TWA Temp 64.1F
Flow Correction Approximately +50 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Thu Oct 11 2007 10:01 AM			0:04
Reset		Thu Oct 11 2007 10:01 AM			0:02
Hold		Thu Oct 11 2007 10:01 AM			0:08
Flow	2000	Thu Oct 11 2007 10:01 AM	0.101	0.101	0:03
Hold		Thu Oct 11 2007 10:01 AM			0:18
Flow	2000	Thu Oct 11 2007 10:01 AM	1.699	1.800	0:51
Reset		Thu Oct 11 2007 10:02 AM			0:01
Flow	2000	Thu Oct 11 2007 10:02 AM	8.767	10.57	4:23
Reset		Thu Oct 11 2007 10:06 AM			0:01
Flow	2000	Thu Oct 11 2007 10:06 AM	1.866	12.43	0:56
Hold		Thu Oct 11 2007 10:07 AM			0:08
Flow	2000	Thu Oct 11 2007 10:07 AM	16.90	29.33	8:27
Hold		Thu Oct 11 2007 10:16 AM			1:27
Reset		Thu Oct 11 2007 10:17 AM			0:03
Hold		Thu Oct 11 2007 10:17 AM			0:14
Flow	2000	Thu Oct 11 2007 10:18 AM	2732	2762	22:46:13

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24976
Date Printed: Friday, Oct 12, 2007 1:12 PM
Min Temp 12.9C
Max Temp 37.5C
TWA Temp 19.3C
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:27 AM			0:02
Hold		Tue Oct 2 2007 10:27 AM			4:36
Flow	2000	Tue Oct 2 2007 10:32 AM	6.368	6.368	3:11
Hold		Tue Oct 2 2007 10:35 AM			0:03
Flow	2000	Tue Oct 2 2007 10:35 AM	0.098	6.466	0:03
Flow Adjust		Tue Oct 2 2007 10:35 AM			1:17
Flow	2000	Tue Oct 2 2007 10:37 AM	2812	2818	23:26:00
Flow Adjust		Wed Oct 3 2007 10:03 AM			1:19
Flow	2000	Wed Oct 3 2007 10:04 AM	11569	14387	4d 0:24:29
Hold		Sun Oct 7 2007 10:28 AM			1:21
Flow	2000	Sun Oct 7 2007 10:30 AM	1.333	14389	0:40
Hold		Sun Oct 7 2007 10:30 AM			0:01
Flow	2000	Sun Oct 7 2007 10:30 AM	0.066	14389	0:02
User Setup		Sun Oct 7 2007 10:30 AM			0:05
Flow	2000	Sun Oct 7 2007 10:31 AM	14271	28659	4d 22:55:17

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24709
Date Printed: Friday, Oct 12, 2007 1:14 PM
Min Temp 55.5F
Max Temp 90.0F
TWA Temp 64.5F
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:56 AM			0:02
Hold		Tue Oct 2 2007 10:56 AM			4:07
Flow	2000	Tue Oct 2 2007 11:00 AM	7.468	7.468	3:44
Hold		Tue Oct 2 2007 11:03 AM			0:05
Flow	2000	Tue Oct 2 2007 11:04 AM	0.066	7.534	0:02
Flow Adjust		Tue Oct 2 2007 11:04 AM			0:18
Flow	2000	Tue Oct 2 2007 11:04 AM	0.268	7.802	0:08
Hold		Tue Oct 2 2007 11:04 AM			0:03
User Setup		Tue Oct 2 2007 11:04 AM			0:09
Hold		Tue Oct 2 2007 11:04 AM			0:02
Flow	2000	Tue Oct 2 2007 11:04 AM	0.567	8.369	0:17
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.202	8.571	0:06
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.066	8.637	0:02
Flow Adjust		Tue Oct 2 2007 11:05 AM			0:34
Flow	2000	Tue Oct 2 2007 11:05 AM	2792	2800	23:15:49
Hold		Wed Oct 3 2007 10:21 AM			0:03
Flow	2000	Wed Oct 3 2007 10:21 AM	0.101	2800	0:03
Flow Adjust		Wed Oct 3 2007 10:21 AM			0:28
Flow	2000	Wed Oct 3 2007 10:22 AM	11585	14385	4d 0:32:25
Hold		Sun Oct 7 2007 10:54 AM			2:33
Flow	2000	Sun Oct 7 2007 10:57 AM	14261	28647	4d 22:50:43

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24996
Date Printed: Friday, Oct 12, 2007 1:16 PM
Min Temp 48.2F
Max Temp 87.9F
TWA Temp 62.1F
Flow Correction Approximately +50 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 9:10 AM			0:03
Hold		Tue Oct 2 2007 9:10 AM			4:57
Sleep		Tue Oct 2 2007 9:15 AM			9:04
Hold		Tue Oct 2 2007 9:24 AM			0:15
Flow	2000	Tue Oct 2 2007 9:25 AM	2839	2839	23:39:26
Hold		Wed Oct 3 2007 9:04 AM			0:01
Flow	2000	Wed Oct 3 2007 9:04 AM	0.066	2839	0:02
Flow Adjust		Wed Oct 3 2007 9:04 AM			2:33
Flow	2000	Wed Oct 3 2007 9:07 AM	11556	14395	4d 0:17:56
Fault (Run)		Sun Oct 7 2007 9:25 AM			0:01
Hold		Sun Oct 7 2007 9:25 AM			4:59
Sleep		Sun Oct 7 2007 9:30 AM			1:21
Hold		Sun Oct 7 2007 9:31 AM			6:18
Sleep		Sun Oct 7 2007 9:37 AM			1:20:46
Hold		Sun Oct 7 2007 10:58 AM			1:14
Flow	2000	Sun Oct 7 2007 10:59 AM	2629	17024	21:54:33
Hold		Mon Oct 8 2007 8:54 AM			0:01
Flow	2000	Mon Oct 8 2007 8:54 AM	0.066	17024	0:02
Flow Adjust		Mon Oct 8 2007 8:54 AM			0:23
Flow	2000	Mon Oct 8 2007 8:54 AM	11632	28656	4d 0:56:03

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 26046
Date Printed: Friday, Oct 12, 2007 1:17 PM
Min Temp 57.6F
Max Temp 92.8F
TWA Temp 66.3F
Flow Correction Approximately +90 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 3 2007 1:52 PM			0:03
Hold		Wed Oct 3 2007 1:52 PM			1:47
Flow	2000	Wed Oct 3 2007 1:54 PM	1.800	1.800	0:54
Hold		Wed Oct 3 2007 1:55 PM			0:01
Flow	2000	Wed Oct 3 2007 1:55 PM	0.066	1.866	0:02
Flow Adjust		Wed Oct 3 2007 1:55 PM			2:18
Flow	2000	Wed Oct 3 2007 1:57 PM	2419	2421	20:09:30
Hold		Thu Oct 4 2007 10:07 AM			0:01
Flow	2000	Thu Oct 4 2007 10:07 AM	0.069	2421	0:02
Flow Adjust		Thu Oct 4 2007 10:07 AM			0:44
Flow	2000	Thu Oct 4 2007 10:07 AM	5767	8188	2d 0:03:34
Hold		Sat Oct 6 2007 10:11 AM			0:01
Flow	2000	Sat Oct 6 2007 10:11 AM	0.066	8188	0:02
Flow Adjust		Sat Oct 6 2007 10:11 AM			0:52
Flow	2000	Sat Oct 6 2007 10:12 AM	3024	11212	1d 1:11:52
Hold		Sun Oct 7 2007 11:24 AM			0:44
Flow	2000	Sun Oct 7 2007 11:24 AM	2609	13821	21:44:23
Hold		Mon Oct 8 2007 9:09 AM			0:01
Flow	2000	Mon Oct 8 2007 9:09 AM	0.066	13821	0:02
Flow Adjust		Mon Oct 8 2007 9:09 AM			0:51
Flow	2000	Mon Oct 8 2007 9:10 AM	11654	25475	4d 1:06:57

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24748
Date Printed: Friday, Oct 12, 2007 1:19 PM
Min Temp 60.3F
Max Temp 95.4F
TWA Temp 69.9F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 11:51 AM			0:03
Hold		Tue Oct 2 2007 11:51 AM			4:57
Sleep		Tue Oct 2 2007 11:56 AM			0:15
Hold		Tue Oct 2 2007 11:57 AM			0:12
Flow	2000	Tue Oct 2 2007 11:57 AM	2.532	2.532	1:16
Hold		Tue Oct 2 2007 11:58 AM			0:01
Flow	2000	Tue Oct 2 2007 11:58 AM	0.032	2.564	0:01
Flow Adjust		Tue Oct 2 2007 11:58 AM			1:10
Flow	2000	Tue Oct 2 2007 11:59 AM	185.7	188.2	1:32:50
Low Bat		Tue Oct 2 2007 1:32 PM			0:10
Sleep		Tue Oct 2 2007 1:32 PM			21:27:45
Hold		Wed Oct 3 2007 11:00 AM			5:35
Flow	2000	Wed Oct 3 2007 11:06 AM	8549	8737	2d 23:14:21
Hold		Sat Oct 6 2007 10:20 AM			0:01
Flow	2000	Sat Oct 6 2007 10:20 AM	0.101	8737	0:03
Flow Adjust		Sat Oct 6 2007 10:20 AM			0:34
Flow	2000	Sat Oct 6 2007 10:20 AM	3046	11783	1d 1:23:12
Hold		Sun Oct 7 2007 11:44 AM			1:29
Flow	2000	Sun Oct 7 2007 11:45 AM	11461	23245	3d 23:30:33
Hold		Thu Oct 11 2007 11:16 AM			0:01
Flow	2000	Thu Oct 11 2007 11:16 AM	0.035	23245	0:01
Flow Adjust		Thu Oct 11 2007 11:16 AM			0:20
Flow	2000	Thu Oct 11 2007 11:16 AM	2791	26035	23:15:24

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24757
Date Printed: Friday, Oct 12, 2007 1:20 PM
Min Temp 53.7F
Max Temp 94.0F
TWA Temp 63.6F
Flow Correction Approximately +80 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:17 PM			0:02
Hold		Tue Oct 2 2007 12:17 PM			3:52
Flow	2000	Tue Oct 2 2007 12:21 PM	3.266	3.266	1:38
Hold		Tue Oct 2 2007 12:22 PM			0:04
Flow	2000	Tue Oct 2 2007 12:22 PM	0.202	3.468	0:06
Hold		Tue Oct 2 2007 12:22 PM			0:03
Flow	2000	Tue Oct 2 2007 12:22 PM	0.233	3.701	0:07
Hold		Tue Oct 2 2007 12:23 PM			0:01
Flow	2000	Tue Oct 2 2007 12:23 PM	0.066	3.767	0:02
Flow Adjust		Tue Oct 2 2007 12:23 PM			0:49
Flow	2000	Tue Oct 2 2007 12:23 PM	14363	14366	4d 23:41:19
Hold		Sun Oct 7 2007 12:05 PM			1:10
Flow	2000	Sun Oct 7 2007 12:06 PM	2559	16925	21:19:19
Hold		Mon Oct 8 2007 9:25 AM			0:01
Flow	2000	Mon Oct 8 2007 9:25 AM	0.035	16925	0:01
Flow Adjust		Mon Oct 8 2007 9:25 AM			0:31
Flow	2000	Mon Oct 8 2007 9:26 AM	8879	25804	3d 1:59:38
Hold		Thu Oct 11 2007 11:25 AM			0:01
Flow	2000	Thu Oct 11 2007 11:25 AM	0.199	25805	0:06
Flow Adjust		Thu Oct 11 2007 11:26 AM			0:39
Flow	2000	Thu Oct 11 2007 11:26 AM	2800	28605	23:20:10

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Moni
SN 24710
Date Printed: Friday, Oct 12, 2007 1:23 PM
Min Temp 53.6F
Max Temp 91.3F
TWA Temp 63.6F
Flow Correction Approximately +120 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:38 PM			0:03
Hold		Tue Oct 2 2007 12:38 PM			4:36
Flow	2000	Tue Oct 2 2007 12:42 PM	7.701	7.701	3:51
Flow Adjust		Tue Oct 2 2007 12:46 PM			0:24
Flow	2000	Tue Oct 2 2007 12:47 PM	2818	2826	23:29:11
Hold		Wed Oct 3 2007 12:16 PM			0:01
Flow	2000	Wed Oct 3 2007 12:16 PM	0.066	2826	0:02
Flow Adjust		Wed Oct 3 2007 12:16 PM			22:32:54
Flow	2000	Thu Oct 4 2007 10:49 AM	8828	11654	3d 1:33:47
Hold		Sun Oct 7 2007 12:22 PM			1:03
Flow	2000	Sun Oct 7 2007 12:24 PM	14262	25915	4d 22:50:52

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10/15/07
Rotometer ID: RM02
Actual Temp (°F): _____

Calibration By: SA TW
Primary Standard ID: 111363
Actual Pressure (in. Hg): _____

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.05	2.182
2.	2.00	2.136
3.	1.95	2.092
4.	1.90	2.025
5.	1.85	1.974
6.	1.80	1.927
7.	1.75	1.878
8.	1.70	1.846
9.	1.65	1.796
10.	1.60	1.719

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 AMBIENT AIR
CALIBRATION CHECK SCHEDULE

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P. 801.474.3826 F: 801.474.0766

Week No: 3 Dates: 10/12/07 -

DUPLICATE HERE

	A-1		A-2		A-3		A-4	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/12/07		0928		0948		1115		1020
10/13/07		0738		0745		0808		0752
10/14/07		0757		0803		0828		0811
10/15/07		0808		0818		0850		0826
10/16/07		0809		0816		0842		0823
10/17/07		0822		0830		0950		0855

	A-5		A-6		A-7		A-8	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
0/12/07		1033		1048		0843		0900
0/13/07		0758		0804		0723		0728
0/14/07		0817		0823		0742		0748
0/15/07		0848		0844		0747		0752
0/16/07		0831		0836		0750		0759
0/17/07		0921		0938		0751		0805

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/13/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

SCATTERED CLOUDS, CALM

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/14/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.
Lower elevation fog Scattered cloud cover, calm winds
frosty ground on higher elevations

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
None						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
None						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
None						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/15/07 **From:**_____

Weather Conditions: Describe the general weather conditions for the date of this memo.

CLEAR AND CALM

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/16/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

BROKEN CLOUDS AND CALM

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/17/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

BROKEN CLOUDS, CALM, LATE MORNING DRIZZLE

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity	Estimated Proximity to Sample Location
NONE		

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue	Description of Actions Taken to Rectify Issues
NONE		

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation	List Mod Form Number Completed
NONE		

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24687
Date Printed: Wednesday, Oct 17, 2007 10:57 AM
Min Temp 55.4F
Max Temp 95.8F
TWA Temp 69.5F
Flow Correction Approximately +10 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Sun Oct 7 2007 9:39 AM			0:02
Hold		Sun Oct 7 2007 9:39 AM			2:12
Flow	2000	Sun Oct 7 2007 9:41 AM	0.867	0.867	0:26
Flow Adjust		Sun Oct 7 2007 9:41 AM			0:29
Flow	2000	Sun Oct 7 2007 9:42 AM	5615	5615	1d 22:47:18
Flow Adjust		Tue Oct 9 2007 8:29 AM			1:19
Flow	2000	Tue Oct 9 2007 8:30 AM	2874	8490	23:57:08
Hold		Wed Oct 10 2007 8:28 AM			0:01
Flow	2000	Wed Oct 10 2007 8:28 AM	0.066	8490	0:02
Flow Adjust		Wed Oct 10 2007 8:28 AM			0:24
Flow	2000	Wed Oct 10 2007 8:28 AM	5798	14288	2d 0:19:13
Hold		Fri Oct 12 2007 8:47 AM			1:45
Flow	2000	Fri Oct 12 2007 8:49 AM	14283	28572	4d 23:01:40

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24994
Date Printed: Wednesday, Oct 17, 2007 10:58 AM
Min Temp 48.3F
Max Temp 93.8F
TWA Temp 63.2F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Thu Oct 11 2007 10:01 AM			0:04
Reset		Thu Oct 11 2007 10:01 AM			0:02
Hold		Thu Oct 11 2007 10:01 AM			0:08
Flow	2000	Thu Oct 11 2007 10:01 AM	0.101	0.101	0:03
Hold		Thu Oct 11 2007 10:01 AM			0:18
Flow	2000	Thu Oct 11 2007 10:01 AM	1.699	1.800	0:51
Reset		Thu Oct 11 2007 10:02 AM			0:01
Flow	2000	Thu Oct 11 2007 10:02 AM	8.767	10.57	4:23
Reset		Thu Oct 11 2007 10:06 AM			0:01
Flow	2000	Thu Oct 11 2007 10:06 AM	1.866	12.43	0:56
Hold		Thu Oct 11 2007 10:07 AM			0:08
Flow	2000	Thu Oct 11 2007 10:07 AM	16.90	29.33	8:27
Hold		Thu Oct 11 2007 10:16 AM			1:27
Reset		Thu Oct 11 2007 10:17 AM			0:03
Hold		Thu Oct 11 2007 10:17 AM			0:14
Flow	2000	Thu Oct 11 2007 10:18 AM	2733	2762	22:46:25
Hold		Fri Oct 12 2007 9:04 AM			1:16
Flow	2000	Fri Oct 12 2007 9:05 AM	14282	17044	4d 23:00:59

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24976
Date Printed: Wednesday, Oct 17, 2007 10:58 AM
Min Temp 10.7C
Max Temp 38.5C
TWA Temp 19.2C
Flow Correction Approximately +90 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:27 AM			0:02
Hold		Tue Oct 2 2007 10:27 AM			4:36
Flow	2000	Tue Oct 2 2007 10:32 AM	6.368	6.368	3:11
Hold		Tue Oct 2 2007 10:35 AM			0:03
Flow	2000	Tue Oct 2 2007 10:35 AM	0.098	6.466	0:03
Flow Adjust		Tue Oct 2 2007 10:35 AM			1:17
Flow	2000	Tue Oct 2 2007 10:37 AM	2812	2818	23:26:00
Flow Adjust		Wed Oct 3 2007 10:03 AM			1:19
Flow	2000	Wed Oct 3 2007 10:04 AM	11569	14387	4d 0:24:29
Hold		Sun Oct 7 2007 10:28 AM			1:21
Flow	2000	Sun Oct 7 2007 10:30 AM	1.333	14389	0:40
Hold		Sun Oct 7 2007 10:30 AM			0:01
Flow	2000	Sun Oct 7 2007 10:30 AM	0.066	14389	0:02
User Setup		Sun Oct 7 2007 10:30 AM			0:05
Flow	2000	Sun Oct 7 2007 10:31 AM	14273	28662	4d 22:56:24
Hold		Fri Oct 12 2007 9:27 AM			0:55
Flow	2000	Fri Oct 12 2007 9:28 AM	11363	40025	3d 22:41:32
Flow Adjust		Tue Oct 16 2007 8:09 AM			0:27
Flow	2000	Tue Oct 16 2007 8:10 AM	2904	42928	1d 0:11:45

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24709
Date Printed: Wednesday, Oct 17, 2007 10:59 AM
Min Temp 51.0F
Max Temp 90.0F
TWA Temp 64.4F
Flow Correction Approximately +90 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:56 AM			0:02
Hold		Tue Oct 2 2007 10:56 AM			4:07
Flow	2000	Tue Oct 2 2007 11:00 AM	7.468	7.468	3:44
Hold		Tue Oct 2 2007 11:03 AM			0:05
Flow	2000	Tue Oct 2 2007 11:04 AM	0.066	7.534	0:02
Flow Adjust		Tue Oct 2 2007 11:04 AM			0:18
Flow	2000	Tue Oct 2 2007 11:04 AM	0.268	7.802	0:08
Hold		Tue Oct 2 2007 11:04 AM			0:03
User Setup		Tue Oct 2 2007 11:04 AM			0:09
Hold		Tue Oct 2 2007 11:04 AM			0:02
Flow	2000	Tue Oct 2 2007 11:04 AM	0.567	8.369	0:17
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.202	8.571	0:06
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.066	8.637	0:02
Flow Adjust		Tue Oct 2 2007 11:05 AM			0:34
Flow	2000	Tue Oct 2 2007 11:05 AM	2792	2800	23:15:49
Hold		Wed Oct 3 2007 10:21 AM			0:03
Flow	2000	Wed Oct 3 2007 10:21 AM	0.101	2800	0:03
Flow Adjust		Wed Oct 3 2007 10:21 AM			0:28
Flow	2000	Wed Oct 3 2007 10:22 AM	11585	14385	4d 0:32:25
Hold		Sun Oct 7 2007 10:54 AM			2:33
Flow	2000	Sun Oct 7 2007 10:57 AM	14262	28647	4d 22:50:58
Hold		Fri Oct 12 2007 9:48 AM			0:40
Flow	2000	Fri Oct 12 2007 9:48 AM	8073	36720	2d 19:16:34
Fault (Run)		Mon Oct 15 2007 5:05 AM			0:01
Flow	2000	Mon Oct 15 2007 5:05 AM	6186	42906	2d 3:33:04

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 26046
Date Printed: Wednesday, Oct 17, 2007 11:01 AM
Min Temp 53.1F
Max Temp 95.4F
TWA Temp 64.6F
Flow Correction Approximately +300 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 3 2007 1:52 PM			0:03
Hold		Wed Oct 3 2007 1:52 PM			1:47
Flow	2000	Wed Oct 3 2007 1:54 PM	1.800	1.800	0:54
Hold		Wed Oct 3 2007 1:55 PM			0:01
Flow	2000	Wed Oct 3 2007 1:55 PM	0.066	1.866	0:02
Flow Adjust		Wed Oct 3 2007 1:55 PM			2:18
Flow	2000	Wed Oct 3 2007 1:57 PM	2419	2421	20:09:30
Hold		Thu Oct 4 2007 10:07 AM			0:01
Flow	2000	Thu Oct 4 2007 10:07 AM	0.069	2421	0:02
Flow Adjust		Thu Oct 4 2007 10:07 AM			0:44
Flow	2000	Thu Oct 4 2007 10:07 AM	5767	8188	2d 0:03:34
Hold		Sat Oct 6 2007 10:11 AM			0:01
Flow	2000	Sat Oct 6 2007 10:11 AM	0.066	8188	0:02
Flow Adjust		Sat Oct 6 2007 10:11 AM			0:52
Flow	2000	Sat Oct 6 2007 10:12 AM	3024	11212	1d 1:11:52
Hold		Sun Oct 7 2007 11:24 AM			0:44
Flow	2000	Sun Oct 7 2007 11:24 AM	2609	13821	21:44:23
Hold		Mon Oct 8 2007 9:09 AM			0:01
Flow	2000	Mon Oct 8 2007 9:09 AM	0.066	13821	0:02
Flow Adjust		Mon Oct 8 2007 9:09 AM			0:51
Flow	2000	Mon Oct 8 2007 9:10 AM	11654	25475	4d 1:07:03
Hold		Fri Oct 12 2007 10:17 AM			3:03
Flow	2000	Fri Oct 12 2007 10:20 AM	8418	33893	2d 22:09:13
Hold		Mon Oct 15 2007 8:29 AM			0:01
Flow	2000	Mon Oct 15 2007 8:29 AM	0.233	33893	0:07
Flow Adjust		Mon Oct 15 2007 8:29 AM			2:51
Flow	2000	Mon Oct 15 2007 8:32 AM	2869	36762	23:54:27
Flow Adjust		Tue Oct 16 2007 8:26 AM			0:43
Flow	2000	Tue Oct 16 2007 8:27 AM	2936	39698	1d 0:28:00

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24996
Date Printed: Wednesday, Oct 17, 2007 10:59 AM
Min Temp 46.2F
Max Temp 86.6F
TWA Temp 57.4F
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 9:10 AM			0:03
Hold		Tue Oct 2 2007 9:10 AM			4:57
Sleep		Tue Oct 2 2007 9:15 AM			9:04
Hold		Tue Oct 2 2007 9:24 AM			0:15
Flow	2000	Tue Oct 2 2007 9:25 AM	2839	2839	23:39:26
Hold		Wed Oct 3 2007 9:04 AM			0:01
Flow	2000	Wed Oct 3 2007 9:04 AM	0.066	2839	0:02
Flow Adjust		Wed Oct 3 2007 9:04 AM			2:33
Flow	2000	Wed Oct 3 2007 9:07 AM	11556	14395	4d 0:17:56
Fault (Run)		Sun Oct 7 2007 9:25 AM			0:01
Hold		Sun Oct 7 2007 9:25 AM			4:59
Sleep		Sun Oct 7 2007 9:30 AM			1:21
Hold		Sun Oct 7 2007 9:31 AM			6:18
Sleep		Sun Oct 7 2007 9:37 AM			1:20:46
Hold		Sun Oct 7 2007 10:58 AM			1:14
Flow	2000	Sun Oct 7 2007 10:59 AM	2629	17024	21:54:33
Hold		Mon Oct 8 2007 8:54 AM			0:01
Flow	2000	Mon Oct 8 2007 8:54 AM	0.066	17024	0:02
Flow Adjust		Mon Oct 8 2007 8:54 AM			0:23
Flow	2000	Mon Oct 8 2007 8:54 AM	11632	28656	4d 0:56:15
Hold		Fri Oct 12 2007 9:51 AM			5:46
Sleep		Fri Oct 12 2007 9:56 AM			16:43
Hold		Fri Oct 12 2007 10:13 AM			0:26
Flow	2000	Fri Oct 12 2007 10:13 AM	2600	31257	21:40:07
Hold		Sat Oct 13 2007 7:54 AM			0:01
Flow	2000	Sat Oct 13 2007 7:54 AM	0.101	31257	0:03
Flow Adjust		Sat Oct 13 2007 7:54 AM			0:20
Flow	2000	Sat Oct 13 2007 7:54 AM	11654	42911	4d 1:06:58

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24748
Date Printed: Wednesday, Oct 17, 2007 10:59 AM
Min Temp 56.4F
Max Temp 99.3F
TWA Temp 70.6F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 11:51 AM			0:03
Hold		Tue Oct 2 2007 11:51 AM			4:57
Sleep		Tue Oct 2 2007 11:56 AM			0:15
Hold		Tue Oct 2 2007 11:57 AM			0:12
Flow	2000	Tue Oct 2 2007 11:57 AM	2.532	2.532	1:16
Hold		Tue Oct 2 2007 11:58 AM			0:01
Flow	2000	Tue Oct 2 2007 11:58 AM	0.032	2.564	0:01
Flow Adjust		Tue Oct 2 2007 11:58 AM			1:10
Flow	2000	Tue Oct 2 2007 11:59 AM	185.7	188.2	1:32:50
Low Bat		Tue Oct 2 2007 1:32 PM			0:10
Sleep		Tue Oct 2 2007 1:32 PM			21:27:45
Hold		Wed Oct 3 2007 11:00 AM			5:35
Flow	2000	Wed Oct 3 2007 11:06 AM	8549	8737	2d 23:14:21
Hold		Sat Oct 6 2007 10:20 AM			0:01
Flow	2000	Sat Oct 6 2007 10:20 AM	0.101	8737	0:03
Flow Adjust		Sat Oct 6 2007 10:20 AM			0:34
Flow	2000	Sat Oct 6 2007 10:20 AM	3046	11783	1d 1:23:12
Hold		Sun Oct 7 2007 11:44 AM			1:29
Flow	2000	Sun Oct 7 2007 11:45 AM	11461	23245	3d 23:30:33
Hold		Thu Oct 11 2007 11:16 AM			0:01
Flow	2000	Thu Oct 11 2007 11:16 AM	0.035	23245	0:01
Flow Adjust		Thu Oct 11 2007 11:16 AM			0:20
Flow	2000	Thu Oct 11 2007 11:16 AM	2792	26037	23:15:59
Hold		Fri Oct 12 2007 10:32 AM			0:39
Flow	2000	Fri Oct 12 2007 10:33 AM	14254	40290	4d 22:46:58

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Monit
SN 24757
Date Printed: Wednesday, Oct 17, 2007 11:00 AM
Min Temp 49.8F
Max Temp 94.0F
TWA Temp 63.7F
Flow Correction Approximately +80 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:17 PM			0:02
Hold		Tue Oct 2 2007 12:17 PM			3:52
Flow	2000	Tue Oct 2 2007 12:21 PM	3.266	3.266	1:38
Hold		Tue Oct 2 2007 12:22 PM			0:04
Flow	2000	Tue Oct 2 2007 12:22 PM	0.202	3.468	0:06
Hold		Tue Oct 2 2007 12:22 PM			0:03
Flow	2000	Tue Oct 2 2007 12:22 PM	0.233	3.701	0:07
Hold		Tue Oct 2 2007 12:23 PM			0:01
Flow	2000	Tue Oct 2 2007 12:23 PM	0.066	3.767	0:02
Flow Adjust		Tue Oct 2 2007 12:23 PM			0:49
Flow	2000	Tue Oct 2 2007 12:23 PM	14363	14366	4d 23:41:19
Hold		Sun Oct 7 2007 12:05 PM			1:10
Flow	2000	Sun Oct 7 2007 12:06 PM	2559	16925	21:19:19
Hold		Mon Oct 8 2007 9:25 AM			0:01
Flow	2000	Mon Oct 8 2007 9:25 AM	0.035	16925	0:01
Flow Adjust		Mon Oct 8 2007 9:25 AM			0:31
Flow	2000	Mon Oct 8 2007 9:26 AM	8879	25804	3d 1:59:38
Hold		Thu Oct 11 2007 11:25 AM			0:01
Flow	2000	Thu Oct 11 2007 11:25 AM	0.199	25805	0:06
Flow Adjust		Thu Oct 11 2007 11:26 AM			0:39
Flow	2000	Thu Oct 11 2007 11:26 AM	2801	28606	23:20:33
Hold		Fri Oct 12 2007 10:47 AM			1:01
Flow	2000	Fri Oct 12 2007 10:48 AM	14261	42867	4d 22:50:26

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Moni
SN 24710
Date Printed: Wednesday, Oct 17, 2007 11:00 AM
Min Temp 51.0F
Max Temp 93.9F
TWA Temp 64.2F
Flow Correction Approximately +140 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:38 PM			0:03
Hold		Tue Oct 2 2007 12:38 PM			4:36
Flow	2000	Tue Oct 2 2007 12:42 PM	7.701	7.701	3:51
Flow Adjust		Tue Oct 2 2007 12:46 PM			0:24
Flow	2000	Tue Oct 2 2007 12:47 PM	2818	2826	23:29:11
Hold		Wed Oct 3 2007 12:16 PM			0:01
Flow	2000	Wed Oct 3 2007 12:16 PM	0.066	2826	0:02
Flow Adjust		Wed Oct 3 2007 12:16 PM			22:32:54
Flow	2000	Thu Oct 4 2007 10:49 AM	8828	11654	3d 1:33:47
Hold		Sun Oct 7 2007 12:22 PM			1:03
Flow	2000	Sun Oct 7 2007 12:24 PM	14263	25916	4d 22:51:17
Hold		Fri Oct 12 2007 11:15 AM			0:25
Flow	2000	Fri Oct 12 2007 11:15 AM	5431	31347	1d 21:15:29
Hold		Sun Oct 14 2007 8:31 AM			0:01
Flow	2000	Sun Oct 14 2007 8:31 AM	0.032	31347	0:01
Flow Adjust		Sun Oct 14 2007 8:31 AM			0:30
Flow	2000	Sun Oct 14 2007 8:31 AM	8797	40145	3d 1:18:41

LIBBY OU3 PHASE 1
PRECISION ROTOMETER CALIBRATION
DATA SHEET

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Calibration Date: 10/20/07
Rotometer ID: RM02
Actual Temp (°F): _____

Calibration By: SA TW
Primary Standard ID: 111363
Actual Pressure (in. Hg): _____

	Ball Reading = Y (mid-ball)	Flow Rate = X_1 (L_1/min)
1.	2.05	2.158
2.	2.00	2.118
3.	1.95	2.066
4.	1.90	2.017
5.	1.85	1.968
6.	1.80	1.925
7.	1.75	1.878
8.	1.70	1.830
9.	1.65	1.784
10.	1.60	1.691

Rotometer Calibration Procedure:

1. Obtain the actual temperature and actual pressure in Libby, MT from the MET Station. Record the actual temperature and actual pressure in the fields provided above.
2. Calibrated rotometer to desired ball reading with a sampling pump and cassette in-line. Cassette must be the same type and from the same lot of cassettes that will be used for sampling. Record value in Ball Reading colum.
3. Check adjusted flowrate of sample pump to the Dry Cal flow calibrator primary flow standard. 10 repetitive flow measurement will be averaged and that result recorded in the Flow Rate column for the selected interval.
4. Repeat this process at 10 intervals over the range of the precision rotometer.
5. Input data into rotometer calculation sheet to generate the corrected flow Rate.

LIBBY OU3 AMBIENT AIR
CALIBRATION CHECK SCHEDULE

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

Week No: 4 Dates: 10/17/07 – 10/22/07

	A-1		A-2		A-3		A-4	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/17/07		0825		0841		~~0724~~ 0951		0857
10/18/07		0758		0806		0834		0814
10/19/07		0757		0809		0843		0817
10/20/07		0753		0801		0834		0809
10/21/07		0746		0753		0820		0800
10/22/07								

Duplicate

	A-5		A-6		A-7		A-8	
	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed	Time Scheduled	Time Completed
10/17/07		0924		0940		0754		~~0757~~ 0805
10/18/07		0821		~~0828~~		0743		0749
10/19/07		0830		0837		0739		0746
10/20/07		0816		0824		0735		0747
10/21/07		0806		0814		0729		0734
10/22/07								

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSi
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/18/07 **From:**_____

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST, CALM, HIGHER ELEVATION
SNOW ON GROUND

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/19/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

OVERCAST, CALM, RAIN

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity	Estimated Proximity to Sample Location
A-1 P1-00277	RIPPED TAPE, TEETH MARK ON CARTRIDGE	ON CARTRIDGE

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue	Description of Actions Taken to Rectify Issues
~~NONE~~		
A-4 P1-00279	PUMP CONTINUED TO PULL AIR INADEQUETLY	CHANGED PUMP TO S/N 24636

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation	List Mod Form Number Completed
NONE		

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/20/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

BROKEN CLOUDS, CALM, SNOW @ A-6

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/21/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.

Overcast and calm with areas of dense fog

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

LIBBY OU3 AIR SAMPLING PROGRAM
DAILY IMPACT/OBSERVATION MEMORANDUM

2257 S 1100 E
Suite 203
SLC, UT 84106
MSI
Meteorological Solutions Inc.
P: 801.474.3826 F: 801.474.0766

This report represents a summary of observations made during the day that could potententially impact the results of samples collected as part of the ambient air sampling program as described in AMB-LIBBY-OU3: Collection of Outdoor Ambient Air Samples.

Date: 10/22/07 **From:**

Weather Conditions: Describe the general weather conditions for the date of this memo.
early morning rain, overcast and calm winds

OBSERVED ACTIVITIES: Described observed activities that could effect sample results (wildfires, street sweeping, city maintenance, etc.).

Potentially Impacted Sample Locations	Description of Activity			Estimated Proximity to Sample Location		
NONE						

EQUIPMENT ISSUES: Describe all equipment issues that could effect sample viability .

Potentially Impacted Sample Locations	Issue			Description of Actions Taken to Rectify Issues		
NONE						

DEVIATIONS FROM GUIDANCE DOCUMENT: Describe previously undocumented deviations related to the ambient air program.

Potentially Impacted Sample Locations	Describe Deviation			List Mod Form Number Completed		
NONE						

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24687
Date Printed: Tuesday, Oct 23, 2007 9:17 AM
Min Temp 53.5F
Max Temp 80.8F
TWA Temp 62.7F
Flow Correction Approximately +10 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Low Bat		Sun Jan 19 2048 3:14 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			
0		Tue Jan 1 1980 12:00 AM			10156d 7:38:58

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24994
Date Printed: Tuesday, Oct 23, 2007 9:17 AM
Min Temp 45.7F
Max Temp 72.4F
TWA Temp 55.1F
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
---	---	---	---	---	---
Reset		Thu Oct 11 2007 10:01 AM			0:04
Reset		Thu Oct 11 2007 10:01 AM			0:02
Hold		Thu Oct 11 2007 10:01 AM			0:08
Flow	2000	Thu Oct 11 2007 10:01 AM	0.101	0.101	0:03
Hold		Thu Oct 11 2007 10:01 AM			0:18
Flow	2000	Thu Oct 11 2007 10:01 AM	1.699	1.800	0:51
Reset		Thu Oct 11 2007 10:02 AM			0:01
Flow	2000	Thu Oct 11 2007 10:02 AM	8.767	10.57	4:23
Reset		Thu Oct 11 2007 10:06 AM			0:01
Flow	2000	Thu Oct 11 2007 10:06 AM	1.866	12.43	0:56
Hold		Thu Oct 11 2007 10:07 AM			0:08
Flow	2000	Thu Oct 11 2007 10:07 AM	16.90	29.33	8:27
Hold		Thu Oct 11 2007 10:16 AM			1:27
Reset		Thu Oct 11 2007 10:17 AM			0:03
Hold		Thu Oct 11 2007 10:17 AM			0:14
Flow	2000	Thu Oct 11 2007 10:18 AM	2733	2762	22:46:25
Hold		Fri Oct 12 2007 9:04 AM			1:16
Flow	2000	Fri Oct 12 2007 9:05 AM	14282	17045	4d 23:01:12
Hold		Wed Oct 17 2007 8:06 AM			1:11
Flow	2000	Wed Oct 17 2007 8:08 AM	14378	31422	4d 23:48:49

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24976
Date Printed: Tuesday, Oct 23, 2007 9:14 AM
Min Temp 9.3C
Max Temp 26.3C
TWA Temp 14.6C
Flow Correction Approximately +80 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 17 2007 8:24 AM			0:03
Hold		Wed Oct 17 2007 8:24 AM			0:44
Flow	2000	Wed Oct 17 2007 8:25 AM	14378	14378	4d 23:48:51

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24709
Date Printed: Tuesday, Oct 23, 2007 9:14 AM
Min Temp 47.7F
Max Temp 71.8F
TWA Temp 56.0F
Flow Correction Approximately +130 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 10:56 AM			0:02
Hold		Tue Oct 2 2007 10:56 AM			4:07
Flow	2000	Tue Oct 2 2007 11:00 AM	7.468	7.468	3:44
Hold		Tue Oct 2 2007 11:03 AM			0:05
Flow	2000	Tue Oct 2 2007 11:04 AM	0.066	7.534	0:02
Flow Adjust		Tue Oct 2 2007 11:04 AM			0:18
Flow	2000	Tue Oct 2 2007 11:04 AM	0.268	7.802	0:08
Hold		Tue Oct 2 2007 11:04 AM			0:03
User Setup		Tue Oct 2 2007 11:04 AM			0:09
Hold		Tue Oct 2 2007 11:04 AM			0:02
Flow	2000	Tue Oct 2 2007 11:04 AM	0.567	8.369	0:17
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.202	8.571	0:06
Hold		Tue Oct 2 2007 11:05 AM			0:01
Flow	2000	Tue Oct 2 2007 11:05 AM	0.066	8.637	0:02
Flow Adjust		Tue Oct 2 2007 11:05 AM			0:34
Flow	2000	Tue Oct 2 2007 11:05 AM	2792	2800	23:15:49
Hold		Wed Oct 3 2007 10:21 AM			0:03
Flow	2000	Wed Oct 3 2007 10:21 AM	0.101	2800	0:03
Flow Adjust		Wed Oct 3 2007 10:21 AM			0:28
Flow	2000	Wed Oct 3 2007 10:22 AM	11585	14385	4d 0:32:25
Hold		Sun Oct 7 2007 10:54 AM			2:33
Flow	2000	Sun Oct 7 2007 10:57 AM	14262	28647	4d 22:50:58
Hold		Fri Oct 12 2007 9:48 AM			0:40
Flow	2000	Fri Oct 12 2007 9:48 AM	8073	36720	2d 19:16:34
Fault (Run)		Mon Oct 15 2007 5:05 AM			0:01
Flow	2000	Mon Oct 15 2007 5:05 AM	6186	42906	2d 3:33:04
Hold		Wed Oct 17 2007 8:38 AM			2:22
Reset		Wed Oct 17 2007 8:40 AM			0:02
Hold		Wed Oct 17 2007 8:40 AM			0:01
Reset		Wed Oct 17 2007 8:40 AM			0:03
Hold		Wed Oct 17 2007 8:40 AM			0:13
Flow	2000	Wed Oct 17 2007 8:41 AM	2814	45720	23:26:51
Hold		Thu Oct 18 2007 8:07 AM			0:01
Flow	2000	Thu Oct 18 2007 8:07 AM	0.066	45720	0:02
Flow Adjust		Thu Oct 18 2007 8:07 AM			0:17
Flow	2000	Thu Oct 18 2007 8:08 AM	11560	57280	4d 0:19:55

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 26046
Date Printed: Tuesday, Oct 23, 2007 9:16 AM
Min Temp 52.4F
Max Temp 80.4F
TWA Temp 62.3F
Flow Correction Approximately +560 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 3 2007 1:52 PM			0:03
Hold		Wed Oct 3 2007 1:52 PM			1:47
Flow	2000	Wed Oct 3 2007 1:54 PM	1.800	1.800	0:54
Hold		Wed Oct 3 2007 1:55 PM			0:01
Flow	2000	Wed Oct 3 2007 1:55 PM	0.066	1.866	0:02
Flow Adjust		Wed Oct 3 2007 1:55 PM			2:18
Flow	2000	Wed Oct 3 2007 1:57 PM	2419	2421	20:09:30
Hold		Thu Oct 4 2007 10:07 AM			0:01
Flow	2000	Thu Oct 4 2007 10:07 AM	0.069	2421	0:02
Flow Adjust		Thu Oct 4 2007 10:07 AM			0:44
Flow	2000	Thu Oct 4 2007 10:07 AM	5767	8188	2d 0:03:34
Hold		Sat Oct 6 2007 10:11 AM			0:01
Flow	2000	Sat Oct 6 2007 10:11 AM	0.066	8188	0:02
Flow Adjust		Sat Oct 6 2007 10:11 AM			0:52
Flow	2000	Sat Oct 6 2007 10:12 AM	3024	11212	1d 1:11:52
Hold		Sun Oct 7 2007 11:24 AM			0:44
Flow	2000	Sun Oct 7 2007 11:24 AM	2609	13821	21:44:23
Hold		Mon Oct 8 2007 9:09 AM			0:01
Flow	2000	Mon Oct 8 2007 9:09 AM	0.066	13821	0:02
Flow Adjust		Mon Oct 8 2007 9:09 AM			0:51
Flow	2000	Mon Oct 8 2007 9:10 AM	11654	25475	4d 1:07:03
Hold		Fri Oct 12 2007 10:17 AM			3:03
Flow	2000	Fri Oct 12 2007 10:20 AM	8418	33893	2d 22:09:13
Hold		Mon Oct 15 2007 8:29 AM			0:01
Flow	2000	Mon Oct 15 2007 8:29 AM	0.233	33893	0:07
Flow Adjust		Mon Oct 15 2007 8:29 AM			2:51
Flow	2000	Mon Oct 15 2007 8:32 AM	2869	36762	23:54:27
Flow Adjust		Tue Oct 16 2007 8:26 AM			0:43
Flow	2000	Tue Oct 16 2007 8:27 AM	2936	39699	1d 0:28:13
Hold		Wed Oct 17 2007 8:55 AM			2:38
Reset		Wed Oct 17 2007 8:58 AM			0:03
Hold		Wed Oct 17 2007 8:58 AM			0:05
Reset		Wed Oct 17 2007 8:58 AM			0:03
Hold		Wed Oct 17 2007 8:58 AM			0:16
Flow	2000	Wed Oct 17 2007 8:58 AM	2797	42495	23:18:17
Flow Adjust		Thu Oct 18 2007 8:17 AM			1d 0:06:46

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24636
Date Printed: Tuesday, Oct 23, 2007 9:15 AM
Min Temp 49.2F
Max Temp 65.5F
TWA Temp 56.8F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
---	---	---	---	---	---
Reset		Fri Oct 19 2007 8:23 AM			0:02
Hold		Fri Oct 19 2007 8:23 AM			1:15
Flow	2000	Fri Oct 19 2007 8:24 AM	0.700	0.700	0:21
Hold		Fri Oct 19 2007 8:24 AM			0:01
Flow	2000	Fri Oct 19 2007 8:25 AM	0.035	0.735	0:01
Flow Adjust		Fri Oct 19 2007 8:25 AM			0:12
Flow	2000	Fri Oct 19 2007 8:25 AM	2852	2853	23:46:06
Flow Adjust		Sat Oct 20 2007 8:11 AM			0:30
Flow	2000	Sat Oct 20 2007 8:11 AM	5814	8667	2d 0:26:53

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24748
Date Printed: Tuesday, Oct 23, 2007 9:16 AM
Min Temp 51.8F
Max Temp 79.8F
TWA Temp 61.3F
Flow Correction Approximately +60 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 11:51 AM			0:03
Hold		Tue Oct 2 2007 11:51 AM			4:57
Sleep		Tue Oct 2 2007 11:56 AM			0:15
Hold		Tue Oct 2 2007 11:57 AM			0:12
Flow	2000	Tue Oct 2 2007 11:57 AM	2.532	2.532	1:16
Hold		Tue Oct 2 2007 11:58 AM			0:01
Flow	2000	Tue Oct 2 2007 11:58 AM	0.032	2.564	0:01
Flow Adjust		Tue Oct 2 2007 11:58 AM			1:10
Flow	2000	Tue Oct 2 2007 11:59 AM	185.7	188.2	1:32:50
Low Bat		Tue Oct 2 2007 1:32 PM			0:10
Sleep		Tue Oct 2 2007 1:32 PM			21:27:45
Hold		Wed Oct 3 2007 11:00 AM			5:35
Flow	2000	Wed Oct 3 2007 11:06 AM	8549	8737	2d 23:14:21
Hold		Sat Oct 6 2007 10:20 AM			0:01
Flow	2000	Sat Oct 6 2007 10:20 AM	0.101	8737	0:03
Flow Adjust		Sat Oct 6 2007 10:20 AM			0:34
Flow	2000	Sat Oct 6 2007 10:20 AM	3046	11783	1d 1:23:12
Hold		Sun Oct 7 2007 11:44 AM			1:29
Flow	2000	Sun Oct 7 2007 11:45 AM	11461	23245	3d 23:30:33
Hold		Thu Oct 11 2007 11:16 AM			0:01
Flow	2000	Thu Oct 11 2007 11:16 AM	0.035	23245	0:01
Flow Adjust		Thu Oct 11 2007 11:16 AM			0:20
Flow	2000	Thu Oct 11 2007 11:16 AM	2792	26037	23:15:59
Hold		Fri Oct 12 2007 10:32 AM			0:39
Flow	2000	Fri Oct 12 2007 10:33 AM	14257	40294	4d 22:48:40
Hold		Wed Oct 17 2007 9:21 AM			1:25
Reset		Wed Oct 17 2007 9:23 AM			0:03
Hold		Wed Oct 17 2007 9:23 AM			0:54
Reset		Wed Oct 17 2007 9:24 AM			0:09
Hold		Wed Oct 17 2007 9:24 AM			0:02
Reset		Wed Oct 17 2007 9:24 AM			0:09
Hold		Wed Oct 17 2007 9:24 AM			0:13
Flow	2000	Wed Oct 17 2007 9:24 AM	0.835	40295	0:25
Hold		Wed Oct 17 2007 9:25 AM			0:04
Flow	2000	Wed Oct 17 2007 9:25 AM	0.101	40295	0:03
Flow Adjust		Wed Oct 17 2007 9:25 AM			0:31
Flow	2000	Wed Oct 17 2007 9:25 AM	14334	54629	4d 23:26:51

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24996
Date Printed: Tuesday, Oct 23, 2007 9:16 AM
Min Temp 43.6F
Max Temp 62.5F
TWA Temp 52.7F
Flow Correction Approximately +80 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Wed Oct 17 2007 9:05 AM			0:05
Reset		Wed Oct 17 2007 9:05 AM			0:03
Hold		Wed Oct 17 2007 9:05 AM			4:57
Sleep		Wed Oct 17 2007 9:10 AM			15:41
Hold		Wed Oct 17 2007 9:25 AM			0:04
Flow	2000	Wed Oct 17 2007 9:25 AM	0.233	0.233	0:07
Hold		Wed Oct 17 2007 9:26 AM			1:08
Flow	2000	Wed Oct 17 2007 9:27 AM	0.801	1.034	0:24
Flow Adjust		Wed Oct 17 2007 9:27 AM			22:56:01
Flow	2000	Thu Oct 18 2007 8:23 AM	5750	5751	1d 23:55:03
Hold		Sat Oct 20 2007 8:18 AM			0:01
Flow	2000	Sat Oct 20 2007 8:18 AM	0.066	5751	0:02
Flow Adjust		Sat Oct 20 2007 8:18 AM			0:37
Flow	2000	Sat Oct 20 2007 8:19 AM	5830	11581	2d 0:35:05

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24757
Date Printed: Tuesday, Oct 23, 2007 9:17 AM
Min Temp 44.6F
Max Temp 73.2F
TWA Temp 53.4F
Flow Correction Approximately +70 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:17 PM			0:02
Hold		Tue Oct 2 2007 12:17 PM			3:52
Flow	2000	Tue Oct 2 2007 12:21 PM	3.266	3.266	1:38
Hold		Tue Oct 2 2007 12:22 PM			0:04
Flow	2000	Tue Oct 2 2007 12:22 PM	0.202	3.468	0:06
Hold		Tue Oct 2 2007 12:22 PM			0:03
Flow	2000	Tue Oct 2 2007 12:22 PM	0.233	3.701	0:07
Hold		Tue Oct 2 2007 12:23 PM			0:01
Flow	2000	Tue Oct 2 2007 12:23 PM	0.066	3.767	0:02
Flow Adjust		Tue Oct 2 2007 12:23 PM			0:49
Flow	2000	Tue Oct 2 2007 12:23 PM	14363	14366	4d 23:41:19
Hold		Sun Oct 7 2007 12:05 PM			1:10
Flow	2000	Sun Oct 7 2007 12:06 PM	2559	16925	21:19:19
Hold		Mon Oct 8 2007 9:25 AM			0:01
Flow	2000	Mon Oct 8 2007 9:25 AM	0.035	16925	0:01
Flow Adjust		Mon Oct 8 2007 9:25 AM			0:31
Flow	2000	Mon Oct 8 2007 9:26 AM	8879	25804	3d 1:59:38
Hold		Thu Oct 11 2007 11:25 AM			0:01
Flow	2000	Thu Oct 11 2007 11:25 AM	0.199	25805	0:06
Flow Adjust		Thu Oct 11 2007 11:26 AM			0:39
Flow	2000	Thu Oct 11 2007 11:26 AM	2801	28606	23:20:33
Hold		Fri Oct 12 2007 10:47 AM			1:01
Flow	2000	Fri Oct 12 2007 10:48 AM	14261	42867	4d 22:50:27
Hold		Wed Oct 17 2007 9:38 AM			0:43
Flow	2000	Wed Oct 17 2007 9:39 AM	0.101	42867	0:03
Hold		Wed Oct 17 2007 9:39 AM			0:10
Reset		Wed Oct 17 2007 9:39 AM			0:31
Hold		Wed Oct 17 2007 9:40 AM			0:25
Reset		Wed Oct 17 2007 9:40 AM			0:02
Hold		Wed Oct 17 2007 9:40 AM			0:11
Flow	2000	Wed Oct 17 2007 9:40 AM	14334	57200	4d 23:26:45

SKC Pump Archive History
Filename: SKC Pump Archive History C:\Documents and Settings\Scott\Desktop\Libby Forms\Libby Asbestos Mc
SN 24710
Date Printed: Tuesday, Oct 23, 2007 9:15 AM
Min Temp 45.8F
Max Temp 79.6F
TWA Temp 54.9F
Flow Correction Approximately +140 ml/min

Mode	Value	Start	Volume Liters	Accum Volume	Duration
Reset		Tue Oct 2 2007 12:38 PM			0:03
Hold		Tue Oct 2 2007 12:38 PM			4:36
Flow	2000	Tue Oct 2 2007 12:42 PM	7.701	7.701	3:51
Flow Adjust		Tue Oct 2 2007 12:46 PM			0:24
Flow	2000	Tue Oct 2 2007 12:47 PM	2818	2826	23:29:11
Hold		Wed Oct 3 2007 12:16 PM			0:01
Flow	2000	Wed Oct 3 2007 12:16 PM	0.066	2826	0:02
Flow Adjust		Wed Oct 3 2007 12:16 PM			22:32:54
Flow	2000	Thu Oct 4 2007 10:49 AM	8828	11654	3d 1:33:47
Hold		Sun Oct 7 2007 12:22 PM			1:03
Flow	2000	Sun Oct 7 2007 12:24 PM	14263	25916	4d 22:51:17
Hold		Fri Oct 12 2007 11:15 AM			0:25
Flow	2000	Fri Oct 12 2007 11:15 AM	5431	31347	1d 21:15:29
Hold		Sun Oct 14 2007 8:31 AM			0:01
Flow	2000	Sun Oct 14 2007 8:31 AM	0.032	31347	0:01
Flow Adjust		Sun Oct 14 2007 8:31 AM			0:30
Flow	2000	Sun Oct 14 2007 8:31 AM	8798	40145	3d 1:18:52
Hold		Wed Oct 17 2007 9:50 AM			0:33
Flow	2000	Wed Oct 17 2007 9:51 AM	1.166	40146	0:35
Hold		Wed Oct 17 2007 9:51 AM			0:06
Flow	2000	Wed Oct 17 2007 9:51 AM	14334	54480	4d 23:27:07

LIBBY OU3, PHASE I SAMPLING: AIR MONITOR VOLUME CALCULATOR SPREADSHEET (rev2)

Index ID	Pump ID	Flow Meter	Pump Fault? (Yes/No)	Pump Comments	Start Information			Day 1 Check		Day 2 Check		Day 3 Check		Day 4 Check		Stop Information				Data Entry Checked by	Total Sample Volume (L)
					Date (mm/dd/yy)	Time (hh:mm)	Counter	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Date (mm/dd/yy)	Time (hh:mm)	Counter	Flow (L/min)		
Example P1-00001	G-04897	677YHG	No	No issues encountered	08/01/07	8:00	1256.7	9:02	2.2	8:54	1.9	9:16	2.0	13:02	2.3	08/06/07	14:15	1456.8	1.8	CLW	15,327
P1-00001	24687	RM02	No	None	10/02/07	9:22	0	8:57	2.0	8:54	2.0	8:46	2.0	8:35	2.0	10/07/07	9:23	7199	2.0		14,402
P1-00002	24996	RM02	No	None	10/02/07	9:25	0	9:05	2.0	8:57	2.0	9:01	2.0	8:35	2.0	10/07/07	9:25	7197	2.0		14,379
P1-00003	24994	RM02	Yes	100607_pump ID- 24994 showed low battery fault and was replaced with	10/02/07	10:00	0	9:25	2.0	9:12	2.0	9:20	2.0	8:55	0.0	10/07/07	10:00	1475	2.0		12,934
P1-00005	24976	RM02	No	None	10/02/07	10:32	0	10:04	2.0	9:30	2.0	9:35	2.0	9:46	2.0	10/07/07	10:30	7193	2.0		14,382
P1-00006	24709	RM02	No	None	10/02/07	11:00	0	10:19	2.0	9:45	2.0	9:52	2.0	9:58	2.0	10/07/07	10:55	7192	2.0		14,376
P1-00007	24711/ 26046	RM02	Yes	100307_Pump ID- 24711 showed low battery fault and was	10/02/07	11:28	0	10:34	0.0	10:01	2.0	10:05	2.0	10:09	2.0	10/07/07	11:22	5605	2.0		12,974
P1-00008	24748	RM02	Yes	100307_Pump ID- 24748 showed low battery fault and was	10/02/07	11:57	0	11:00	0.0	10:17	2.0	10:18	2.0	10:18	2.0	10/07/07	11:44	5891	2.0		12,984
P1-00009	24757	RM02	No	None	10/02/07	12:21	0	11:40	2.0	10:30	2.0	10:18	2.0	10:30	2.0	10/07/07	12:05	7182	2.0		14,368
P1-00010	24710	RM02	No	None	10/02/07	12:42	0	12:15	2.0	10:44	2.0	10:40	2.0	10:41	2.0	10/07/07	12:20	5618	2.0		14,335
P1-00015	24687	RM02			10/07/07	9:41	0														#VALUE!
P1-00016	24711	RM02			10/07/07	10:05	0														#VALUE!
P1-00017	24976	RM02			10/07/07	10:30	0														#VALUE!
P1-00018	24709	RM02			10/07/07	10:57	0														#VALUE!
P1-00019	24996	RM02			10/07/07	10:59	0														#VALUE!
P1-00020	26046	RM02			10/07/07	11:24	0														#VALUE!
P1-00022	24748	RM02			10/07/07	11:45	0														#VALUE!
P1-00023	24757	RM02			10/07/07	12:06	0														#VALUE!
P1-00024	24710	RM02			10/07/07	12:23	0														#VALUE!

LIBBY OU3, PHASE I SAMPLING: AIR MONITOR VOLUME CALCULATOR SPREADSHEET (rev2)

Index ID	Pump ID	Flow Meter	Pump Fault? (Yes/No)	Pump Comments	Start Information			Day 1 Check		Day 2 Check		Day 3 Check		Day 4 Check		Stop Information				Data Entry Checked by	Total Sample Volume (L)
					Date (mm/dd/yy)	Time (hh:mm)	Counter	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Date (mm/dd/yy)	Time (hh:mm)	Counter	Flow (L/min)		
Example P1-00001	G-04897	677YHG	No	No issues encountered	08/01/07	8:00	1256.7	9:02	2.2	8:54	1.9	9:16	2.0	13:02	2.3	08/06/07	14:15	1456.8	1.8	CLW	15,327
P1-00001	24687	RM02	No	None	10/02/07	9:22	0	8:57	2.0	8:54	2.0	8:46	2.0	8:35	2.0	10/07/07	9:23	7199	2.0		14,402
P1-00002	24996	RM02	No	None	10/02/07	9:25	0	9:05	2.0	8:57	2.0	9:01	2.0	8:35	2.0	10/07/07	9:25	7197	2.0		14,379
P1-00003	24994	RM02	Yes	100607_pump ID- 24994 showed low battery fault and was replaced with	10/02/07	10:00	0	9:25	2.0	9:12	2.0	9:20	2.0	8:55	0.0	10/07/07	10:00	1475	2.0		12,934
P1-00005	24976	RM02	No	None	10/02/07	10:32	0	10:04	2.0	9:30	2.0	9:35	2.0	9:46	2.0	10/07/07	10:30	7193	2.0		14,382
P1-00006	24709	RM02	No	None	10/02/07	11:00	0	10:19	2.0	9:45	2.0	9:52	2.0	9:58	2.0	10/07/07	10:55	7192	2.0		14,376
P1-00007	24711/ 26046	RM02	Yes	100307_Pump ID- 24711 showed low battery fault and was	10/02/07	11:28	0	10:34	0.0	10:01	2.0	10:05	2.0	10:09	2.0	10/07/07	11:22	5605	2.0		12,974
P1-00008	24748	RM02	Yes	100307_Pump ID- 24748 showed low battery fault and was	10/02/07	11:57	0	11:00	0.0	10:17	2.0	10:18	2.0	10:18	2.0	10/07/07	11:44	5891	2.0		12,984
P1-00009	24757	RM02	No	None	10/02/07	12:21	0	11:40	2.0	10:30	2.0	10:18	2.0	10:30	2.0	10/07/07	12:05	7182	2.0		14,368
P1-00010	24710	RM02	No	None	10/02/07	12:42	0	12:15	2.0	10:44	2.0	10:40	2.0	10:41	2.0	10/07/07	12:20	5618	2.0		14,335
P1-00015	24687	RM02	No	None	10/07/07	9:41	0	7:58	2.0	8:28	2.0	8:27	2.0	9:33	2.0	10/12/07	8:47		2.0		14,263
P1-00016	24711	RM02	Yes	100807,100907,101107 low battery faults	10/07/07	10:05	0	8:10	0.0	8:10	0.0	8:39	2.0	9:45	0.0	10/12/07	9:05	2762	2.0		9,987
P1-00017	24976	RM02	No	None	10/07/07	10:30	0	8:37	2.0	9:30	2.0	9:00	2.0	10:42	2.0	10/12/07	9:27	7136	2.0		14,274
P1-00018	24709	RM02	No	None	10/07/07	10:57	0	8:52	2.0	9:55	2.0	9:17	2.0	10:55	2.0	10/12/07	9:48	7126	2.0		14,262
P1-00019	24996	RM02	No	None	10/07/07	10:59	0	8:52	2.0	9:55	2.0	9:17	2.0	10:55	2.0	10/12/07	9:51	7130	2.0		14,264
P1-00020	26046	RM02	No	None	10/07/07	11:24	0	9:07	2.0	10:11	2.0	9:36	2.0	11:07	2.0	10/12/07	10:17	7131	2.0		14,253
P1-00022	24748	RM02	No	None	10/07/07	11:45	0	9:16	2.0	10:18	2.0	9:48	2.0	11:15	2.0	10/12/07	10:32	7126	2.0		14,239
P1-00023	24757	RM02	No	None	10/07/07	12:06	0	9:24	2.0	10:33	2.0	10:11	2.0	11:24	2.0	10/12/07	10:47	7115	2.0		14,214
P1-00024	24710	RM02	No	None	10/07/07	12:23	0	9:32	2.0	10:39	2.0	10:34	2.0	11:47	2.0	10/12/07	11:15	7131	2.0		14,264

Corrections
SFB 11/21/07

LIBBY OU3, PHASE I SAMPLING: AIR MONITOR VOLUME CALCULATOR SPREADSHEET (rev2)

Index ID	Pump ID	Flow Meter	Pump Fault? (Yes/No)	Pump Comments	Start Information			Day 1 Check		Day 2 Check		Day 3 Check		Day 4 Check		Stop Information				Data Entry Checked by	Total Sample Volume (L)
					Date (mm/dd/yy)	Time (hh:mm)	Counter	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Date (mm/dd/yy)	Time (hh:mm)	Counter	Flow (L/min)		
Example P1-00001	G-04897	677YHG	No	No issues encountered	08/01/07	8:00	1256.7	9:02	2.2	8:54	1.9	9:16	2.0	13:02	2.3	08/06/07	14:15	1456.8	1.8	CLW	15,327
P1-00001	24687	RM02	No	None	10/02/07	9:22	0	8:57	2.0	8:54	2.0	8:46	2.0	8:35	2.0	10/07/07	9:23	7199	2.0		14,402
P1-00002	24996	RM02	No	None	10/02/07	9:25	0	9:05	2.0	8:57	2.0	(3) ~~9:01~~	2.0	8:35	2.0	10/07/07	9:25	7197	2.0		14,379
P1-00003	24994	RM02	Yes	100607_pump ID- 24994 showed low battery fault and was replaced with	10/02/07	10:00	0	9:25	2.0	9:12	2.0	(4) ~~9:20~~	2.0	8:55	0.0	10/07/07	10:00	1475	2.0		12,934
P1-00005	24976	RM02	No	None	10/02/07	10:32	0	10:04	2.0	9:30	2.0	(5) ~~9:35~~	2.0	9:46	2.0	10/07/07	10:30	7193	2.0		14,382
P1-00006	24709	RM02	No	None	10/02/07	11:00	0	10:19	2.0	9:45	2.0	(6) ~~9:52~~	2.0	9:58	2.0	10/07/07	10:55	7192	2.0		14,376
P1-00007	24711/ 26046	RM02	Yes	100307_Pump ID- 24711 showed low battery fault and was	10/02/07	11:28	0	10:34	0.0	10:01	2.0	(7) ~~10:05~~	2.0	10:09	2.0	10/07/07	11:22	5605	2.0		12,974
P1-00008	24748	RM02	Yes	100307_Pump ID- 24748 showed low battery fault and was	10/02/07	11:57	0	11:00	0.0	10:17	2.0	(8) ~~10:18~~	2.0	10:18	2.0	10/07/07	11:44	5891	2.0		12,984
P1-00009	24757	RM02	No	None	10/02/07	12:21	0	11:40	2.0	10:30	2.0	10:18	2.0	10:30	2.0	10/07/07	12:05	7182	2.0		14,368
P1-00010	24710	RM02	No	None	10/02/07	12:42	0	12:15	2.0	10:44	2.0	10:40	2.0	10:41	2.0	10/07/07	12:20	5618	2.0		14,335
P1-00015	24687	RM02	No	None	10/07/07	9:41	0	7:58	2.0	8:28	2.0	8:27	2.0	9:33	2.0	10/12/07	8:47		2.0		14,263
P1-00016	24711	RM02	Yes	100807,100907,101107 low battery faults	10/07/07	10:05	0	8:10	0.0	(1) ~~8:10~~	0.0	8:39	2.0	9:45	0.0	10/12/07	9:05	2762	2.0		9,987
P1-00017	24976	RM02	No	None	10/07/07	10:30	0	8:37	2.0	(2) ~~9:30~~	2.0	9:00	2.0	10:42	2.0	10/12/07	9:27	7136	2.0		14,274
P1-00018	24709	RM02	No	None	10/07/07	10:57	0	8:52	2.0	9:55	2.0	9:17	2.0	10:55	2.0	10/12/07	9:48	7126	2.0		14,262
P1-00019	24996	RM02	No	None	10/07/07	10:59	0	8:52	(9) ~~2.0~~	9:55	2.0	9:17	2.0	10:55	2.0	10/12/07	9:51	7130	2.0		14,264
P1-00020	26046	RM02	No	None	10/07/07	11:24	0	9:07	2.0	10:11	2.0	9:36	2.0	11:07	2.0	10/12/07	10:17	7131	2.0		14,253
P1-00022	24748	RM02	No	None	10/07/07	11:45	0	9:16	2.0	10:18	2.0	9:48	2.0	11:15	2.0	10/12/07	10:32	7126	2.0		14,239
P1-00023	24757	RM02	No	None	10/07/07	12:06	0	9:24	2.0	10:33	2.0	10:11	2.0	11:24	2.0	10/12/07	10:47	7115	2.0		14,214
P1-00024	24710	RM02	No	None	10/07/07	12:23	0	9:32	2.0	10:39	2.0	10:34	2.0	11:47	2.0	10/12/07	11:15	7131	2.0		14,264

(1) 0840
(2) 0938
(3) 0846
(4) 0901
(5) 0920
(6) 0935
(7) 0952
(8) 1005
(9) 1.98 L/min

FSDS sheets are correct
SFB 11/16/07

LIBBY OU3, PHASE I SAMPLING: AIR MONITOR VOLUME CALCULATOR SPREADSHEET (rev2)

Index ID	Pump ID	Flow Meter	Pump Fault? (Yes/No)	Pump Comments	Start Information			Day 1 Check		Day 2 Check		Day 3 Check		Day 4 Check		Stop Information				Data Entry Checked by	Total Sample Volume (L)
					Date (mm/dd/yy)	Time (hh:mm)	Counter	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Date (mm/dd/yy)	Time (hh:mm)	Counter	Flow (L/min)		
Example P1-00001	G-04897	677YHG	No	No issues encountered	08/01/07	8:00	1256.7	9:02	2.2	8:54	1.9	9:16	2.0	13:02	2.3	08/06/07	14:15	1456.8	1.8	CLW	**15,327**
P1-00241	24687	RM02	No	No issues encountered	10/12/07	8:43	0	7:23	2.0	7:42	2.0	7:47	2.0	7:50	2.0	10/17/07	7:51	7141	2.0		**14,296**
P1-00242	24994	RMO2	No	No issues encountered	10/12/07	9:00	0	7:28	2.0	7:48	2.0	7:52	2.0	7:59	2.0	10/17/07	8:05	7141	2.0		**14,290**
P1-00243	24976	RM02	No	No issues encountered	10/12/07	9:28	0	7:38	2.0	7:57	2.0	8:08	2.0	8:09	2.0	10/17/07	8:22	7133	2.0		**14,254**
P1-00244	24709	RM02	No	No issues encountered	10/12/07	9:48	0	7:45	2.0	8:03	2.0	8:18	2.0	8:16	2.0	10/17/07	8:30	7134	2.0		**14,244**
P1-00245	26046	RM02	No	No issues encountered	10/12/07	10:20	0	7:52	2.0	8:11	2.0	8:26	1.8	8:23	2.0	10/17/07	8:55	7112	2.0		**14,077**
P1-00246	24996	RM02	No	No issues encountered	10/12/07	10:13	0	7:52	2.0	8:11	2.0	8:26	2.0	8:23	2.0	10/17/07	9:01	7127	2.0		**14,228**
P1-00247	24748	RM02	No	No issues encountered	10/12/07	10:33	0	7:58	2.0	8:17	2.0	8:38	2.0	8:31	2.0	10/17/07	9:21	7128	2.0		**14,256**
P1-00249	24757	RM02	No	No issues encountered	10/12/07	10:48	0	8:04	2.0	8:23	2.0	8:44	2.0	8:36	2.0	10/17/07	9:38	7130	2.0		**14,260**
P1-00250	24710	RM02	No	No issues encountered	10/12/07	11:15	0	8:08	2.0	8:28	2.0	8:50	2.0	8:42	2.0	10/17/07	9:50	7114	2.0		**14,215**
P1-00275	24687	RM02	No	No issues encountered	10/17/07	7:54	0	7:43	2.0	7:39	2.0	7:35	2.0	7:29	2.0	10/22/07	7:39	7184	2.0		**14,370**
P1-00276	24994	RMO2	No	No issues encountered	10/17/07	8:06	0	7:49	2.0	7:46	2.0	7:47	2.0	7:34	2.0	10/22/07	7:57	7189	2.0		**14,382**
P1-00277	24976	RM02	No	No issues encountered	10/17/07	8:25	0	7:58	2.0	7:57	2.0	7:53	2.0	7:46	2.0	10/22/07	8:14	7189	2.0		**14,378**
P1-00278	24709	RM02	No	No issues encountered	10/17/07	8:41	0	8:06	2.0	8:09	2.0	8:01	2.0	7:53	2.0	10/22/07	8:28	7186	2.0		**14,375**
P1-00279	26046	RM02	No	Low flow, replaced with pump s/n 24636	10/17/07	8:57	0	8:14	1.9	8:17	1.9	8:09	2.0	8:00	2.0	10/22/07	8:39	4333	2.0		**14,208**
P1-00281	24748	RM02	No	Pump was left in adjust mode for 1 day resulitng in low counter	10/17/07	9:24	0	8:21	2.0	8:30	2.0	8:16	2.0	8:06	2.0	10/22/07	8:52	7167	2.0		**14,336**
P1-00282	24996	RM02	No	No issues encountered	10/17/07	9:27	0	8:21	2.0	8:30	2.0	8:16	2.0	8:06	2.0	10/22/07	8:54	5790	2.0		**14,320**
P1-00283	24757	RM02	No	No issues encountered	10/17/07	9:40	0	8:28	2.0	8:37	2.0	8:24	2.0	8:14	2.0	10/22/07	9:07	7166	2.0		**14,356**
P1-00284	24710	RM02	No	No issues encountered	10/17/07	9:51	0	8:34	2.0	8:43	2.0	8:34	2.0	8:20	2.0	10/22/07	9:18	7167	2.0		**14,334**

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LIBBY OU3, PHASE I SAMPLING: AIR MONITOR VOLUME CALCULATOR SPREADSHEET (rev2)

Index ID	Pump ID	Flow Meter	Pump Fault? (Yes/No)	Pump Comments	Start Information			Day 1 Check		Day 2 Check		Day 3 Check		Day 4 Check		Stop Information				Data Entry Checked by	Total Sample Volume (L)
					Date (mm/dd/yy)	Time (hh:mm)	Counter	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Time (hh:mm)	Flow (L/min)	Date (mm/dd/yy)	Time (hh:mm)	Counter	Flow (L/min)		
Example P1-00001	G-04897	677YHG	No	No issues encountered	08/01/07	8:00	1256.7	9:02	2.2	8:54	1.9	9:16	2.0	13:02	2.3	08/06/07	14:15	1456.8	1.8	CLW	15,327
P1-00241	24687	RM02	No	No issues encountered	10/12/07	8:43	0	7:23	2.0	7:42	2.0	7:47	2.0	7:50	2.0	10/17/07	7:51	7141	2.0		14,296
P1-00242	24994	RMO2	No	No issues encountered	10/12/07	9:00	0	7:28	2.0	7:48	2.0	7:52	2.0	7:59	2.0	10/17/07	8:05	7141	2.0		14,290
P1-00243	24976	RM02	No	No issues encountered	10/12/07	9:28	0	7:38	2.0	7:57	2.0	8:08	2.0	8:09	2.0	10/17/07	8:22	7133	2.0		14,254
P1-00244	24709	RM02	No	No issues encountered	10/12/07	9:48	0	7:45	2.0	8:03	2.0	8:18	2.0	8:16	2.0	10/17/07	8:30	7134	2.0		14,244
P1-00245	26046	RM02	No	No issues encountered	10/12/07	10:20	0	7:52	2.0	8:11	2.0	8:26	1.8	8:23	2.0	10/17/07	8:55	7112	2.0		14,077
P1-00246	24996	RM02	No	No issues encountered	10/12/07	10:13	0	7:52	2.0	8:11	2.0	8:26	2.0	8:23	2.0	10/17/07	9:01	7127	2.0		14,228
P1-00247	24748	RM02	No	No issues encountered	10/12/07	10:33	0	7:58	2.0	8:17	2.0	8:38	2.0	8:31	2.0	10/17/07	9:21	7128	2.0		14,256
P1-00249	24757	RM02	No	No issues encountered	10/12/07	10:48	0	8:04	2.0	8:23	2.0	8:44	2.0	8:36	2.0	10/17/07	9:38	7130	2.0		14,260
P1-00250	24710	RM02	No	No issues encountered	10/12/07	11:15	0	8:08	2.0	8:28	2.0	8:50	2.0	8:42	2.0	10/17/07	9:50	7114	2.0		14,215