MRD ATTENDANCE FORM

TITLE/SUBJECT: Start Up Polar Vortex 2019 Start Start Up

DATE: 2-17-19 **TO:** 2-17-19
TIME: 6:00 A **TO:** 6:00 P

SESSION NUMBER:

COMPLEX/AREA/DEPT:

2-17-19
Polar Vortex
Days

- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☐ Other _____
- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

	Employee ID	PRINTED NAME	SIGNATURE
1	310210	Jeff Wolfe	
2	818219	W Peck	
3	377995	Amander Styes	
4	075879	David Francis	
5	981130	Justin Tasker	
6	820230	ADRIAN DARZU	
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Completed forms must be promptly delivered to the Training Center.

Pre-Bump / Calibration

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
35	2-17-19	0800	LEL 49 % O_2 PASS % VOC 99.2 ppm ___ ppm H_2S 7 ppm CO 48 ppm	WP	
AR 25	2-17-19	8:26 AM	LEL Failed % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm	JDW	Failed LEL Tagout
AR 38	2/17/19	8:29	LEL 52 % O_2 PASS % VOC 100 ppm ___ ppm H_2S 11 ppm CO 50 ppm	JDW	
AR 24	2/17/19	8:30	LEL 49 % O_2 PASS % VOC 100 ppm ___ ppm H_2S 10 ppm CO 49 ppm	JDW	
AR 22	2/17/19	11:31	LEL ___ % O_2 PASS % VOC ___ ppm ___ ppm H_2S 11 ppm SO_2 PASS 48 ppm	JDW Fail	Does not Transmit
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm		

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Pre-Bump / Calibration

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MR 125	2-17-19	0615	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 61	2-17-19	0615	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm NH3 PASS ppm	JW	
MR 124	2-17-19	0645	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 126	2-17-19	0700	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 121	2-17-19	0700	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm NH3 PASS ppm	JW	
AR 2	2-17-19	0745	LEL FAILED % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm	WP	LEL FAILED
11	2-17	0750	LEL 46 % O_2 PASSED % VOC 94 ppm ____ ppm H_2S 9 ppm SO2 4.3 ppm	WP	

Pre-Bump / Calibration

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: 0_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % 0_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

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Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
9 AR	2/17/19	5:45	LEL 47 % 0_2 Pass % VOC 101 ppm CO 50 ppm H_2S 10 ppm ___ ___ ppm	JPW	
37 AR	2-17-19	0605	LEL 50 % 0_2 PASS % VOC 103 ppm CO 44 ppm H_2S 9 ppm ___ ___ ppm	WP	
21 AR	2-17-19	0625	LEL 50 % 0_2 Pass % VOC 97.2 ppm CO 50 ppm H_2S 10 ppm SO2 5 ppm	WP	
20 AR	2-17-19	0630	LEL 58 % 0_2 PASS % VOC 114 ppm ___ ___ ppm H_2S 10 ppm SO2 4.4 ppm	WP	
36 UR	2-17-19	0600	LEL ___ % 0_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	
22 UR	2-17-19	0600	LEL ___ % 0_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	
23 UR	2-17-19	0600	LEL ___ % 0_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	

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Post-Bump

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: 0_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % 0_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MULTI RAE 124	2/17/19	4:40	LEL Pass % 0_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm SO2 Pass ppm	D.F	PASS
AR 24	2/17/19	4:45	LEL 47 % 0_2 2.8 % VOC 114 ppm ___ ppm H_2S 11 ppm CO 50 13 ppm	D.F	PASS
UR 22	2/17	4:53	LEL ___ % 0_2 Pass % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm	A.M.S.	Pass
AR 21	2-17	0512	LEL 44 % 0_2 PASS % VOC 108 ppm ___ ppm H_2S 9 ppm SO2 4.8 ppm	WP	PASS
MR 61	2-17	0515	LEL ___ % 0_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm NH3 ___ ppm	WP	PASS
UR 36	2/17	5:30 PM	LEL ___ % 0_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm Brac Pass ppm	JW	Pass
AR 20	2/17/19	5:31 P	LEL 50 % 0_2 20.4 % VOC 100 ppm ___ ppm H_2S 10 ppm SO2 5.4 ppm	JW	PASS

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Pest-Bump

INSTRUMENT CALIBRATION CHECK

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LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MR 120	2/11/11	5:52	LEL Pass % O_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm SO_2 Pass ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		

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MR # 61
AR # 21

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
Flare Blind Swing	W Peek	2-17-19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Melvin & Deacon	1430	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Downing & Electric	1445	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Schaefer & Liebold	1500	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Hart & Frazier	1515	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Leonard & Bassett	1530	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Annabelle & Leroy	1545	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Visger & Fisher Fwy Dr	1600	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Corbin & Fort St	1615	Ø	Ø	Ø	Ø	O_2 - 20.4	NDS	WP
	Downing & Fisher Fwy Dr	1630	Ø	Ø	Ø	Ø	O_2 - 20.3	NDS	WP
	Miami & Edsel	1645	Ø	Ø	Ø	Ø	O_2 - 20.4	NDS	WP

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MR # 61
AR # 21

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
FLARE Blind Swing	W Peck J Tinsley	2-17-19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Beatrice & Miami	1030	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Omaha & Deacon	1045	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Patricia & Leonard	1100	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Pleasant & Patricia	1115	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Bassett & Schaefer	1130	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Liebold & Toronto	1145	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Pleasant & Fort	1200	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Liddesdale & Visger	1330	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Beechwood & Hall	1345	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Morrow & Palmerston	1400	Ø	Ø	Ø	Ø	O_2 20.6	NDS	WP
	Frazier & Melon	1415	Ø	Ø	Ø	Ø	O_2 20.6	NDS	WP

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ADRIAN D

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	ORMOND and Heidt	8:25	1.4		2	0	$O_2=0$ $SO_2=0$	AREARAE #20
	—— " ——	8:25	10		0	0	$O_2=0$ $SO_2=0$	Multi RAE #124
	AMT ROOM	8:50	0		0	0	$O_2=0$ $SO_2=0$	Area Rae #20
	—— " ——	"	0		0	0	$O_2=0$ $SO_2=0$	Multi rae # 124
	ORMOND and RIVERSIDE	9:00	0		0	0	$O_2=0$ $SO_2=0$	AREA RAE #20
	—— " ——	9:00	0		0	0	—— " ——	MULTI RAE #124
	PLEASANT and LIDDESDALE	9:40	0		0	0	—— " ——	AREA RAE #20
	—— " ——	"	0		0	0	—— " ——	Multi RAE #124
	VALLEN PPE store	10:50	0		0	0	—— " ——	Area Rae #20
	—— " ——	10:50	0		0	0	—— " ——	Multi Rae 124
	Shaffer and Oak Wood	11:20	0		0	0	—— " ——	Area Rae #20
	HESS and Shaeffer	12:50	0		0	0	—— " ——	Area Rae #20
	—— " ——	12:50	0		0	0		Multi Rae #126
	~~Rose and Dix~~	~~2:00~~	~~0~~		~~0~~	~~0~~		
	Shaffer and Oak wood	1:30	0		0	0		Area Rae #20
	~~Multi~~ —— " ——	1:30	0		0	0	—— " ——	Multi Rae # 26
	Rose and Dix	2:00	0		0	0	—— " ——	Area Rae # 20
	VALLEN PPE store	2:50	0		0	0	—— " ——	Area Rae # 20
	—— " ——	2:50	0		0	0	—— " ——	Multi Rae # 125

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ADRIAN D

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Shaeffer and Oakwood	3:25	0		0	0	O_2 = 20.9 SO_2 = 0	Area Rae #20
	— " —	3:25	0		0	0	— " —	— " —
	VALLEN PPE Store	4:25	0		0	0	— " —	Area Rae #20
	— " —	"	"		"	"	— " —	Multi Rae #125
	Shaeffer and Oakwood	4:55	"		"	"	— " —	Area Rae #20
	— " —	"	"		"	"	— " —	Multirae #125

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Styes Francis

AMT FIELD DATA FORM

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Monitoring Results							
	Wabash / Rialto	10:31	0		0	0	SO2 - 0 O2 - 20.9	NDO
	Rialto curve	10:35	0		0	0	SO2 - 0 O2 - 20.9	NDO
	Rialto / Outer	10:37	0		0	0	S 0 O2 20.9	NDO
	Outer Pr WHSE	10:42	0		0	0	S 0 | O2 20.9	NDO
	Palmer / Grace	10:47	0		0	0	S 0 | O2 20.9	NDO
	S. Wabash / Corbin	10:49	0		0	0	S 0 | O2 20.9	NDO
	Grace / Dix	10:52	0		0	0	S 0 | O2 20.9	NDO
	Ford ~~tow~~ Center	10:56	0		0	0	S 0 | O2 20.9	NDO
	Palmer / N. Wabash	11:31	0		0	0	S 0 | O2 20.9	NDO
	Rialto / Outer	11:37	0		0	0	S 0 | O2 20.9	NDO
	Porter / Rec	11:40	0		0	0	S 0 | O2 20.9	NDO
	Emogene / Dix	11:43	0		0	0	S 0 | O2 20.9	NDO
	Corbin / Dix	11:47	0		0	0	S 0 | O2 20.9	NDO
	Rialto / Corbin	11:49	0		0	0	S 0 | O2 20.9	NDO
	Roger / BSt	11:53	0		0	0	S 0 | O2 20.9	NDO
	Liquor Store ~~BSt~~ Outer	11:56	0		0	0	S 0 | O2 20.9	NDO
	Charter / Frank	11:57	0		0	0	S 0 | O2 20.9	NDO
	Charter / Porter	12:00	0		0	0	S 0 | O2 20.9	NDO

Styes
Francis

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Council / Wall	12:13	0		0	0	S 0 O_2 20.9	NDO
	Roger / Morris	12:05	0		0	0	S 0 O_2 20.9	NDO
	Dix / Morris	12:05	0		0	0	S 0 O_2 20.9	NDO
	Outer Drive WHSE	12:13	0		0	0	S 0 O_2 20.9	NDO
	Meginnity / Emily	12:16	0		0	0	S 0 O_2 20.9	NDO
	Dix / Margaret	12:19	0		0	0	S 0 O_2 20.9	NDO
	Claranne / Rose	12:23	0		0	0	S 0 O_2 20.9	NDO
	Leo / Flora	12:25	0		0	0	S 0 O_2 20.9	NDO
	Flora / Oakwood	12:27	0		0	0	S 0 O_2 20.9	NDO
	Leo / Claranne	1:37	0		0	0	S 0 O_2 21.4	NDO
	Grace / Palmer	1:42	0		0	0	S 0 O_2 21.4	NDO
	Allen / Reo	1:46	0		0	0	S 0 O_2 21.4	NDO
	Wall / Montie	1:51	0		0	0	S 0 O_2 21.4	NDO
	University / Porter	1:55	0		0	0	S 0 O_2 21.4	NDO
	Blanche / Palmer	2:01	0		0	0	S 0 O_2 21.4	NDO
	Allen / Coleman	2:09	0		0	0	S 0 O_2 21.4	NDO
	Oakwood / Ryth	2:11	0		0	0	S 0 O_2 21.4	NDO
	Greenfield / Allen	2:15	0		0	0	S 0 O_2 21.4	NDO

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Styes
Francis

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Dearborn / Fort	3:34	0		0	0	S 0 O_2 21.4	NDO
	Kaupp / Homestead	3:40	0		0	0	S 0 O_2 21.4	NDO
	Dora / Rose	3:45	0		0	0	S 0 O_2 21.4	NDO
	Dix / Bloomfield	3:48	0		0	0	S 0 O_2 21.4	NDO
	Cicotte / Porter	3:55	0		0	0	S 0 O_2 21.4	NDO
	Arlington / Porter	3:57	0		0	0	S 0 O_2 21.4	NDO
	Porter / Southfield	3:58	0		0	0	S 0 O_2 21.4	NDO
	Hanford / Frank	4:02	0		0	0	S 0 O_2 21.4	NDO
	College / Wall	4:08	0		0	0	S 0 O_2 21.4	NDO
	College / Lawrence	4:10	0		0	0	S 0 O_2 21.4	NDO
	Morris / Roger	4:12	0		0	0	S 0 O_2 21.4	NDO
	Palmer / Norman	4:17	0		0	0	S 0 O_2 21.4	NDO
	Wall / Oakwood	4:22	0		0	0	S 0 O_2 21.4	NDO

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MRD ATTENDANCE FORM

TITLE/SUBJECT: ~~Start Up~~ Polar Vortex 2019 Event Startup

DATE: 2-17-19 **TO:** 2-17-19
TIME: 6:00 A **TO:** 6:00 P

SESSION NUMBER:

COMPLEX/AREA/DEPT:

2-17-19
Polar Vortex
Days

- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☐ Other _____
- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

TSC ONLY
AREA CODE
COURSE CODE

ops hours JDL

	Employee ID	PRINTED NAME	SIGNATURE
1	310210	Jeff Wolfe	
2	818219	W Peck	
3	377995	Amander Styes	
4	075879	David Francis	
5	981130	Justin Tasler	
6	820230	ADRIAN DARZV	
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7-1 JDL

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ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

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AR 38	2/17/19	8:29	LEL 52 % O_2 PASS % VOC 100 ppm ___ ___ppm H_2S 11 ppm CO 50 ppm	JDL	
AR 24	2/17/19	8:30	LEL 49 % O_2 PASS % VOC 100 ppm ___ ___ppm H_2S 10 ppm CO 49 ppm	JDL	
AR 22	2/17/19	11:31	LEL ___ % O_2 PASS % VOC ___ ppm ___ ___ppm H_2S 11 ppm SO_2 PASS 48 ppm	JDL Fail	Does not Transmit
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm ___ ___ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm ___ ___ppm		

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Pre-Bump / Calibration

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Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MR 125	2-17-19	0615	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 61	2-17-19	0615	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm NH3 PASS ppm	JW	
MR 124	2-17-19	0645	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 126	2-17-19	0700	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm SO2 PASS ppm	JW	
MR 121	2-17-19	0700	LEL ____ % O_2 ____ % VOC ____ ppm CO PASS ppm H_2S ____ ppm NH3 PASS ppm	JW	
AR 2	2-17-19	0745	LEL FAILED % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm	WP	LEL FAILED
11	2-17	0750	LEL 46 % O_2 PASSED % VOC 94 ppm ____ ppm H_2S 9 ppm SO2 4.3 ppm	WP	

Pre-Bump / Calibration

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
9 AR	2/17/19	5:45	LEL 47 % O_2 Pass % VOC 101 ppm CO 50 ppm H_2S 10 ppm ___ ___ ppm	JPW	
37 AR	2-17-19	0605	LEL 50 % O_2 PASS % VOC 105 ppm CO 44 ppm H_2S 9 ppm ___ ___ ppm	WP	
21 AR	2-17-19	0625	LEL 50 % O_2 Pass % VOC 97.2 ppm CO 50 ppm H_2S 10 ppm SO2 5 ppm	WP	
20 AR	2-17-19	0630	LEL 58 % O_2 PASS % VOC 114 ppm ___ ___ ppm H_2S 10 ppm SO2 4.4 ppm	WP	
36 UR	2-17-19	0600	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	
22 UR	2-17-19	0600	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	
23 UR	2-17-19	0600	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm B 5 ppm	WP	

Post-Bump

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MULTI RAE 124	2/17/19	4:40	LEL Pass % O_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm SO2 Pass ppm	D.F	PASS
AR 24	2/17/19	4:45	LEL 47 % O_2 2.8 % VOC 114 ppm ___ ppm H_2S 11 ppm CO 50 ~~13~~ ppm	D.F	PASS
UR 22	2/17	4:53	LEL ___ % O_2 Pass % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm	A.M.S.	Pass
AR 21	2-17	0512	LEL 44 % O_2 PASS % VOC 108 ppm ___ ppm H_2S 9 ppm SO2 4.8 ppm	WP	PASS
MR 61	2-17	0515	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm NH3 ___ ppm	WP	PASS
UR 36	2/17	5:30 PM	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm Brice Pass ppm	JRW	Pass
AR 20	2/17/19	5:31 P	LEL 58 % O_2 20.4 % VOC 100 ppm ___ ppm H_2S 10 ppm SO2 5.4 ppm	JRW	PASS

Post-Bump

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
MR 120	2/11/11	5:52	LEL Pass % O_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm SO_2 Pass ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		

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MR # 61
AR # 21

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
Flare Bind Swing	W Peek	2-17-19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Melvin & Deacon	1430	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Downing & Electric	1445	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Schaefer & Liebold	1500	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Hart & Frazier	1515	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Leonard & Bassett	1530	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Annabelle & Leroy	1545	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Visger & Fisher Fwy Dr	1600	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Corbin & Fort St	1615	Ø	Ø	Ø	Ø	O_2 - 20.4	NDS	WP
	Downing & Fisher Fwy Dr	1630	Ø	Ø	Ø	Ø	O_2 - 20.3	NDS	WP
	Miami & Edsel	1645	Ø	Ø	Ø	Ø	O_2 - 20.4	NDS	WP

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MR # 61
AR # 21

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
FLARE Blind Swing	W Peck J Tinsley	2-17-19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Beatrice & Miami	1030	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Omaha & Deacon	1045	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Patricia & Leonard	1100	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Pleasant & Patricia	1115	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Bassett & Schaefer	1130	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Liebold & Toronto	1145	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Pleasant & Fort	1200	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Liddesdale & Visger	1330	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Beechwood & Hall	1345	Ø	Ø	Ø	Ø	O_2 - 20.7	NDS	WP
	Morrow & Palmerston	1400	Ø	Ø	Ø	Ø	O_2 20.6	NDS	WP
	Frazier & Melon	1415	Ø	Ø	Ø	Ø	O_2 20.6	NDS	WP

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ADRIAN D

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	ORMOND and Heidt	8:25	1.4		2	0	$O_2=0$ $SO_2=0$	AREA RAE #20
	— " —	8:25	10		0	0	$O_2=0$ $SO_2=0$	Multi RAE #124
	AMT ROOM	8:50	0		0	0	$O_2=0$ $SO_2=0$	Area Rae #20
	— " —	"	0		0	0	$O_2=0$ $SO_2=0$	Multi rae #124
	ORMOND and RIVERSIDE	9:00	0		0	0	$O_2=0$ $SO_2=0$	AREA RAE #20
	— " —	9:00	0		0	0	— " —	MULTI RAE #124
	PLEASANT and LIDDESDALE	9:40	0		0	0	— " —	AREA RAE #20
	— " —	"	0		0	0	— " —	Multi RAE #124
	VALLEN PPE store	10:50	0		0	0	— " —	Area Rae #20
	— " —	10:50	0		0	0	— " —	Multi Rae 124
	Shaffer and Oak Wood	11:20	0		0	0	— " —	Area Rae #20
	HESS and Shaeffer	12:50	0		0	0	— " —	Area Rae #20
	— " —	12:50	0		0	0		Multi Rae #126
	~~Rose and Dix~~	2:00	0		0	0		
	Shaffer and Oak Wood	1:30	0		0	0		Area Rae #20
	~~Multi~~ — " —	1:30	0		0	0	— " —	Multi Rae #26
	Rose and Dix	2:00	0		0	0	— " —	Area Rae #20
	VALLEN PPE store	2:50	0		0	0	— " —	Area Rae #20
	— " —	2:50	0		0	0	— " —	Multi Rae #125

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ADRIAN D

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Shaeffer and Oakwood	3:25	0		0	0	O_2 = 20.9 SO_2 = 0	Area Rae #20
	— " —	3:25	0		0	0	— " —	— " —
	VALLEN PPE Store	4:25	0		0	0	— " —	Area Rae #20
	— " —	— " —	— " —		— " —	— " —	— " —	Multirae #125
	Shaeffer and Oakwood	4:55	— " —		— " —	— " —	— " —	Area Rae #20
	— " —	— " —	— " —		— " —	— " —	— " —	Multirae #125

Styes Francis

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Wabash / Rialto	10:31	0		0	0	SO2 - 0 O2 - 20.9	NDO
	Rialto curve	10:35	0		0	0	SO2 - 0 O2 - 20.9	NDO
	Rialto / Outer	10:37	0		0	0	S 0 O2 20.9	NDO
	Outer Pr WHSE	10:42	0		0	0	S 0 O2 20.9	NDO
	Palmer / Grace	10:47	0		0	0	S 0 O2 20.9	NDO
	S. Wabash / Corbin	10:49	0		0	0	S 0 O2 20.9	NDO
	Grace / Dix	10:52	0		0	0	S 0 O2 20.9	NDO
	Ford ~~tom~~ Center	10:56	0		0	0	S 0 O2 20.9	NDO
	Palmer / N. Wabash	11:31	0		0	0	S 0 O2 20.9	NDO
	Rialto / Outer	11:37	0		0	0	S 0 O2 20.9	NDO
	Porter / Rec	11:40	0		0	0	S 0 O2 20.9	NDO
	Emogene / Dix	11:43	0		0	0	S 0 O2 20.9	NDO
	Corbin / Dix	11:47	0		0	0	S 0 O2 20.9	NDO
	Rialto / Corbin	11:49	0		0	0	S 0 O2 20.9	NDO
	Roger / BSt	11:53	0		0	0	S 0 O2 20.9	NDO
	Liquor Store ~~BSt~~ Outer	11:56	0		0	0	S 0 O2 20.9	NDO
	Charter / Frank	11:57	0		0	0	S 0 O2 20.9	NDO
	Charter / Porter	12:00	0		0	0	S 0 O2 20.9	NDO

Styes
Francis

AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)		Observations/Comments
	Carroll / Wall	12:13	0		0	0	S 0	O_2 20.9	NDO
	Roger / Morris	12:05	0		0	0	S 0	O_2 20.9	NDO
	Dix / Morris	12:05	0		0	0	S 0	O_2 20.9	NDO
	Outer Drive W/HSE	12:13	0		0	0	S 0	O_2 20.9	NDO
	Meginnity / Emily	12:16	0		0	0	S 0	O_2 20.9	NDO
	Dix / Margaret	12:19	0		0	0	S 0	O_2 20.9	NDO
	Claranne / Rose	12:23	0		0	0	S 0	O_2 20.9	NDO
	Leo / Flora	12:25	0		0	0	S 0	O_2 20.9	NDO
	Flora / Oakwood	12:27	0		0	0	S 0	O_2 20.9	NDO
	Leo / Claranne	1:37	0		0	0	S 0	O_2 21.4	NDO
	Grace / Palmer	1:42	0		0	0	S 0	O_2 21.4	NDO
	Allen / Reo	1:46	0		0	0	S 0	O_2 21.4	NDO
	Wall / Montie	1:51	0		0	0	S 0	O_2 21.4	NDO
	University / Porter	1:55	0		0	0	S 0	O_2 21.4	NDO
	Blanche / Palmer	2:01	0		0	0	S 0	O_2 21.4	NDO
	Allen / Coleman	2:09	0		0	0	S 0	O_2 21.4	NDO
	Oakwood / Ruth	2:11	0		0	0	S 0	O_2 21.4	NDO
	Greenfield / Allen	2:15	0		0	0	S 0	O_2 21.4	NDO

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Styes
Francis

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Dearborn / Fort	3:34	0		0	0	S 0 O_2 21.4	NDO
	Kaupp / Homestead	3:40	0		0	0	S 0 O_2 21.4	NDO
	Dora / Rose	3:45	0		0	0	S 0 O_2 21.4	NDO
	Dix / Bloomfield	3:48	0		0	0	S 0 O_2 21.4	NDO
	Cicotte / Porter	3:55	0		0	0	S 0 O_2 21.4	NDO
	Arlington / Porter	3:57	0		0	0	S 0 O_2 21.4	NDO
	Porter / Southfield	3:58	0		0	0	S 0 O_2 21.4	NDO
	Hanford / Frank	4:02	0		0	0	S 0 O_2 21.4	NDO
	College / Wall	4:08	0		0	0	S 0 O_2 21.4	NDO
	College / Lawrence	4:10	0		0	0	S 0 O_2 21.4	NDO
	Morris / Roger	4:12	0		0	0	S 0 O_2 21.4	NDO
	Palmer / Norman	4:17	0		0	0	S 0 O_2 21.4	NDO
	Wall / Oakwood	4:22	0		0	0	S 0 O_2 21.4	NDO

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MRD ATTENDANCE FORM

TITLE/SUBJECT: Air Monitoring Team Emergency Response

DATE: 2/17 **TO:** Nights
TIME: 1800 **TO:** 06.00

SESSION NUMBER:

COMPLEX/AREA/DEPT: Coker Flare Startup

02/17/2019
Polar Vortex
AMT Nights

- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☑ Emergency Coker Flare Startup
- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

	Employee ID	PRINTED NAME	SIGNATURE
1	779763	John Taggart	
2	269004	PAT RICHARDSON	
3	881517	Grace Poling	
4	880450	KELLEY JAMES	
5	999275	Daron O'Connor	
6	796377	Alum Brown	
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Completed forms must be promptly delivered to the Training Center.

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Pre-Bump / Calibration 2/17/19 Nights

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 24	2/17/19	1840	LEL 48 % O_2 0.1 % VOC 106 ppm CO 45 ppm H_2S 9 ppm ___ ___ ppm	JET	
AR 21	2/17/19		LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		
MR PRO 59	2/17/19	1842	LEL PASS % O_2 PASS % VOC PASS ppm NH_3 PASS ppm H_2S PASS ppm ___ ___ ppm	JET	
UR 3000 23	2/17/19	1842	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm Benzene PASS ppm	JET	
AR 20	2/17/19	1845	LEL 52 % O_2 0.0 % VOC 95.7 ppm SO_2 5.2 ppm H_2S 10 ppm ___ ___ ppm	JET	
AR 25	2/17/19	1900	LEL 44 % O_2 0.0 % VOC 97.5 ppm CO 51 ppm H_2S 10 ppm ___ ___ ppm	JET	Took Several Calibrations
AR 2	2/17/19	1913	LEL 48 % O_2 0.0 % VOC 101 ppm SO_2 4.8 ppm H_2S 10 ppm ___ ___ ppm	JET	

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Pre-Bump / Calibration 2/17/19 Nights

INSTRUMENT CALIBRATION CHECK

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LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 38	2/17/19	1947	LEL 47 % O_2 0.0 % VOC 102 ppm CO 51 ppm H_2S 11 ppm ___ ___ ppm	JET	
MR Pro 126	2/17/19	2242	LEL PASS % O_2 PASS % VOC PASS ppm SO_2 PASS ppm H_2S PASS ppm ___ ___ ppm	Ray Richardson	
AR Plus Unit 2	2/17/19	1253	LEL PASS % O_2 PASS % VOC PASS ppm CO PASS ppm H_2S PASS ppm SO_2 PASS ppm	JET	O_2 Sensor Drift
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		

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Post Bump 2/17/19 Nights

INSTRUMENT CALIBRATION CHECK

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LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 8	2/17/19	2329	LEL 49 % O_2 0.0% VOC 102 ppm CO 47 ppm H_2S 9 ppm ___ ppm	JET	Post Bump data at Solaroc #38 Downloaded datalogger
~~AP~~AR 35	2/18/19	0419	LEL 48 % O_2 0.0 % VOC 119 ppm ~~H2S~~ CO 40 ppm H_2S 9 ppm ___ ppm	JET	Post Bump Downloaded Datalogger
AR 37	2/18/19	0448	LEL 53 % O_2 0.0% VOC 121 ppm CO 35 ppm H_2S 9 ppm ___ ppm	JET	Post Bump Calibrated CO + VOC No data in datalogger
MRPro 126	2/18/19	0448	LEL PASS % O_2 PASS % VOC PASS ppm SO_2 PASS ppm H_2S PASS ppm ___ ppm	JET	
MR3000 282	2/18/19	0546	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm Benzene PASS ppm	JET	
AR 24	2-18-19	0600	LEL 49 % O_2 0.0 % VOC 120 ppm ___ ppm H_2S 8 ppm CO 34 ppm	AO	Post Bump CO-Low Calibrated/ Calibrated VOC
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm		

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2-17/2-18-19

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
unit 24	Victoria + Marshall	2040	0	0	0	0	OXY- 20.3	NO ODORS
	"	2100	0	0	0	0	OXY- 20.5	"
	Fort St. + Gleason	2105	0	0	0	0	OXY - 20.8	NO ODORS
	"	2120	0	0	0	0	OXY - 20.9	"
	Fort + Downing	2125	0	0	0	0	OXY- 20.6	NO ODORS
	"	2140	0	0	0	0	OXY -20.5	"
	Fort + Schafer	2145	0.1	0	0	0	OXY- 20.4	NO ODORS
	"	2200	0	0	0	0	OXY- 20.6	Normal Refinery smell
	Fort + Schafer	2315	0	0	0	0	OXY- 20.5	
	"	2340	0	0	0	0	OXY- 20.8	"
	Fort + Counsel	0050	0	0	0	0	OXY -20.5	NO ODOR
	"	0120	0	0	0	0	OXY- 20.7	"
	Fort + Visger	0130	0	0	0	0	OXY- 20.7	NO ODOR
		0155	0	0	0	0	OXY- 20.8	"
	Fort + Outer Dr	0240	0	0	0	0	OXY - 20.6	NO ODOR
	"	0255	0	0	0	0	OXY - 20.8	
	FORT + 75 EXIT RAMP	0520	0	0	0	0	OXY - 20.5	NO ODOR
	"	0535	0	0	0	0	OXY- 20.6	"

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unit #2 deployed @ 0310 (CX-3)
unit #38 deployed @ 0320 (CX-5)

2-18-19

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
unit 24	FORT ST. + Visger	0540	0	0	0	0	OXY - 20.8	NO ODOR
--	FORT + Visger	0555	0	0	0	0	OXY - 20.7	NO ODOR

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02/18/19 05:00

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB32126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181270	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
COKER FLARE STARTUP	KELLEY JAMES + RAY RICHARDSON	02/18/19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes (Multigas/LEL) Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
126-A	PLEASANT + PATRICIA	05:11	0	N/A	0	0	CO: 0 ppm SO2: 0 ppm	O2: 20.9%	KJJ
126-B	LIEBOLD + LEONARD	05:12	0	N/A	0	0	" "	"	KJJ
126-C	LIEBOLD + GILROY	05:13	0	N/A	0	0	" "	"	KJJ
126-D	ANNABELLE + GILROY	05:14	0	N/A	0	0	" "	"	KJJ
126-E	ANNABELLE + SCHAEFER	05:16	0	N/A	0	0	" "	"	KJJ
126-F	BEATRICE + MELVIN	05:17	0	N/A	0	0	" "	"	KJJ
126-G	DEACON + MIAMI	05:18	0	N/A	0	0	" "	"	KJJ
126-H	DOWNING + ETHEL	05:19	0	N/A	0	0	" "	"	KJJ
126-I	BASSETT + OMAHA	05:20	0	N/A	0	0	" "	"	KJJ
126-J	FRANCIS + BASSETT	05:22	0	N/A	0	0	" "	"	KJJ
126-K	DEACON + FRANCIS	05:23	0	N/A	0	0	" "	"	KJJ

02/18/19 VV5808 START: 05:08 ANNABELLE + SCHAEFER

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AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	
126-L	VISGER+DEACON	05:23	0	N/A	0	0	CO:0ppm SO2:0ppm	O2:20.9%	KJJ
126-M	BEATRICE+OMAHA	05:24	0	N/A	0	0	" "	"	KJJ
126-N	DOWNING+BEATRICE	05:25	0	N/A	0	0	" "	"	KJJ
126-O	ANNADELLE+MIAMI	05:26	0	N/A	0	0	" "	"	KJJ
126-P	MIAMI+ELECTRIC	05:27	0	N/A	0	0	" "	"	KJJ
126-Q	ELECTRIC+SCHAEFER	05:28	0	N/A	0	0	" "	"	KJJ

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02/18/19 04:00

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB32126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181127 01	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
COKER FLARE RELIGHT	KELLEY JAMES + RAY RICHARDSON	02/18/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)		Observations/Comments	Sampler's Initials
126-A	ANNABELLE + SCHAEFER	03:53	0	N/A	0	0	CO: 0 ppm	SO_2: 0 ppm	O_2: 20.9 %	KJJ
126-B	ANNABELLE + MIAMI	03:54	0	N/A	0	0	"	"	"	KJJ
126-C	ANNABELLE + DOWNING	03:55	0	N/A	0	0	"	"	"	KJJ
126-D	ANNABELLE + OMAHA	03:56	0	N/A	0	0	"	"	"	KJJ
126-E	ANNABELLE + VISGER	03:57	0	N/A	0	0	"	"	"	KJJ
126-F	VISGER + BASSETT	03:58	0	N/A	0	0	"	"	"	KJJ
126-G	VISGER + 19TH	03:59	0	N/A	0	0	"	"	"	KJJ
126-H	FRANCIS + 19TH	04:00	0	N/A	0	0	"	"	"	KJJ
126-I	19TH +	04:02	0	N/A	0	0	"	"	"	KJJ
126-J	19TH + OUTER	04:03	0	N/A	0	0	"	"	"	KJJ
126-K	OUTER + 75S	04:08	0	N/A	0	0	"	"	"	KJJ

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AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	
126-L	VALLEN	04:13	0	N/A	0	0	CO:0ppm SO_2:0ppm	O_2:20.9%	KSJ

02/18/19 02:00

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6208	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB32126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181127011	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
COKER FLARE RELIGHT	KELLEY JAMES + RAY RICHARDSON	02/18/19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)		Observations/Comments	Sampler's Initials
126-A	FORT+DOWNING	02:30	0	N/A	0	0	CO:0ppm	SO_2:0ppm	O_2:20.9%	KJJ
126-B	DOWNING+FISHER	02:31	0	N/A	0	0	"	"	"	KJJ
126-C	FISHER+OMAHA	02:32	0	N/A	0	0	"	"	"	KJJ
126-D	VISGER+FISHER	02:33	0	N/A	0	0	"	"	"	KJJ
126-E	DARTMOUTH+FRANCIS	02:34	0	N/A	0	0	"	"	"	KJJ
126-F	DARTMOUTH+GLEASON	02:35	0	N/A	0	0	"	"	"	KJJ
126-G	DARTMOUTH+OUTER DR	02:36	0	N/A	0	0	"	"	"	KJJ
126-H	FORT+OUTER DR.	02:37	0	N/A	0	0	"	"	"	KJJ
126-I	OUTER+ELECTRIC	02:38	0	N/A	0	0	"	"	"	KJJ
126-J	ELECTRIC+LEBLANC	02:39	0	N/A	0	0	"	"	"	KJJ
126-K	ELECTRIC+GLEASON	02:40	0	N/A	0	0	"	"	"	KJJ

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AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	
126-L	ELECTRIC+FRANCIS	02:41	0	N/A	0	0	CO:0ppm SO_2:0ppm	O_2:20.9%	KJJ
126-M	ELECTRIC+VISGER	02:42	0	N/A	0	0	" "	"	KJJ
126-N	ANABELLE+VISGER	02:42	0	N/A	0	0	" "	"	KJJ
126-O	ANABELLE+FRANCIS	02:43	0	N/A	0	0	" "	"	KJJ
126-P	ANNABELLE+GLEASON	02:44	0	N/A	0	0	" "	"	KJJ
126-Q	ANNABELLE+PETERS	02:45	0	N/A	0	0	" "	"	KJJ
126-R	ANNABELLE+SALLIOTTE	02:45	0	N/A	0	0	" "	"	KJJ
126-S	ANNABELLE+OUTER	02:46	0	N/A	0	0	" "	"	KJJ

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02/18/19 00:00

UNIT #2

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB32126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181127 01	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
COKER FLARE RELIGHT	KELLEY JAMES + RAY RICHARDSON	02/18/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
126-A	WARING + PETERS	00:43	0	N/A	0	0	CO: 0ppm SO2: 0ppm	O2: 20.9%	KJJ
126-B	GLEASON + GREYFRIARS	00:44	0	N/A	0	0	" "	"	KJJ
126-C	GLEASON + DARTMOUTH	00:45	0	N/A	0	0	" "	"	KJJ
126-D	DARTMOUTH + FRANCIS	00:45	0	N/A	0	0	" "	"	KJJ
126-E	DARTMOUTH + VISGER	00:46	0	N/A	0	0	" "	"	KJJ
126-F	FISHER + OMAHA	00:47	0	N/A	0	0	" "	"	KJJ
126-G	FISHER + DOWNING	00:48	0	N/A	0	0	" "	"	KJJ
126-H	FORT + DOWNING	00:49	0	N/A	0	0	" "	"	KJJ
126-I	FORT + OUTER	00:52	0	N/A	0	0	" "	"	KJJ
126-J	FORT + ELECTRIC	00:53	0	N/A	0	0	" "	"	KJJ
126-K	ELECTRIC + LE BLANC	00:54	0	N/A	0	0	" "	"	KJJ

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AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	
126-A	ELECTRIC + GLEASON	00:55	0	N/A	0	0	CO: 0ppm, SO_2: 0ppm	O_2: 20.9%	KJJ
126-B	ELECTR + FRANCIS	00:56	0	N/A	0	0	" "	"	KJJ
126-C	FRANCIS + ANNABELLE	00:57	0	N/A	0	0	" "	"	KJJ
126-D	ANNABELL + GLEASON	00:58	0	N/A	0	0	" "	"	KJJ
126-E	PETERS + ANNABELLE	00:59	0	N/A	0	0	" "	"	KJJ
126-F	ANNABELLE + SALLIOTE	00:59	0	N/A	0	0	" "	"	KJJ
126-G	ANNABELLE + OUTER	01:00	0	N/A	0	0	" "	"	KJJ

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02/17/19 21:30

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MLB32126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181127 01	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
COKER FLAR RELIG4T	KELLEY JAMES + RAY RICHARDSON	02/17/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes (Multigas/LEL) Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
126-A	TORONTO + DCS	21:55	0.01	N/A	0	0	CO: 0 ppm SO2: 0 ppm	O2: 20.9%	KJJ
126-B	TORONTO + LPG LOADING	21:57	0.02	N/A	0	0	" "	"	KJJ
126-C	SULFUR RD + TANK 64	21:59	0.02	N/A	0	0	" "	"	KJJ
126-D	SULFUR + N. HAMPTON	22:00	0.02	N/A	0	0	" "	"	KJJ
126-E	PREFLASH + N. HAMPTON	22:01	0.02	N/A	0	0	" "	"	KJJ
126-F	WARING + N. HAMPTON	22:02	0.02	N/A	0	0	" "	"	KJJ
126-G	SULFUR + COMPLEX 2 RD.	22:05	0.01	N/A	0	0	" "	"	KJJ
126-H	SULFUR + MAINTENANCE	22:06	0.01	N/A	0	0	" "	"	KJJ
126-I	7B WAREHOUSE	22:07	0.03	N/A	0	0	" "	"	KJJ
126-J	TORONTO + DCS	22:52	0	N/A	0	0	" "	"	KJJ
126-K	TORONTO + LPG RAILWAY	22:54	0	N/A	0	0	" "	"	KJJ

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AMT FIELD DATA FORM

Monitoring Results									
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	
126-L	LPG RAILWAY + TK59	22:55	0	N/A	0	0	CO: 0ppm SO2: 0ppm	O2: 20.9%	KJJ
126-M	TORONTO + LPG RAILWAY	22:57	0	N/A	0	0	" "	"	KJJ
126-N	LPG RAILWAY + MAINTENANCE	22:59	0	N/A	0	0	" "	" Small Naphtha odor	KJJ
126-O	7B WAREHOUSE	22:59	0	N/A	0	0	" "	" Small NAPHTHA ODOR	KJJ
126-P	FORT + SCHAEFER	23:02	0	N/A	0	0	" "	" No odor	KJJ
126-Q	SCHAEFER + LPG RAILWAY	23:03	0	N/A	0	0	" "	" "	KJJ
126-R	MIAMI + FORT	23:08	0	N/A	0	0	" "	" Small Naphtha odor	KJJ
126-S	ELECTRIC + MIAMI	23:09	0	N/A	0	0	" "	" No odor	KJJ
126-T	SCHAEFER + ELECTRIC	23:10	0	N/A	0	0	" "	" "	KJJ

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2/17/19 20:00

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 126	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB 3Z 126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 20181270	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
POLAR VORTEX POST FLARE BLIND REMOVE	KELLEY JAMES + RAY RICHARDSON	~~02/19~~ 02/17/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
126-A	OAKWOOD + FLORA	20:20	0	NA	0	0	CO: 0 ppm SO2: 0 ppm	O2: 20.9%	KJJ
126-B	FLORA + LEO	20:21	0	N/A	0	0	" "	"	KJJ
126-C	LEO + FRANCIS	20:22	0	N/A	0	0	" "	"	KJJ
126-D	FLORA + ROSE	20:23	0	N/A	0	0	" "	"	KJJ
126-E	CLARANN + ROSE	20:24	0	N/A	0	0	" "	"	KJJ
126-F									

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2/17/19 18:00

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL R6	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: PGM 6248	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: MCB32 126PB	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 02/04/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: 2018/1270	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
POLAR VORTEX POST FLAREBLIND REMOVED	RAY RICHARDSON / KELLEY JAMES	2/17/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)		Observations/Comments	Sampler's Initials
126-A	EMOGENE + DIX	18:46	0	N/A	0	0	CO 0 ppm	SO2 0.0 ppm	O2: 20.9%	KJJ
126-B	EMOGENE + MEGINNITY	18:47	0	N/A	0	0	"	"	"	KJJ
126-C	MEGINNITY + GRACE	18:48	0	N/A	0	0	"	"	"	KJJ
126-D	GRACE + DIX	18:49	0	N/A	0	0	"	"	"	KJJ
126-E	NORMAN + DIX	18:50	0	N/A	0	0	"	"	"	KJJ
126-F	NORMAN + MEGINNITY	18:51	0	N/A	0	0	"	"	"	KJJ
126-G	BLOOMFIELD + MEGINNITY	18:52	0	N/A	0	0	"	"	"	KJJ
126-H	~~MEGINNITY~~ RIALTO + BLOOMFIELD	18:54	0	N/A	0	0	"	"	"	KJJ
126-I	RIALTO + DOWNING	18:54	0	N/A	0	0	"	"	"	KJJ
126-J	DOWNING + MEGINNITY	18:56	0	N/A	0	0	"	"	"	KJJ
126-K	DOWNING + WABASH	18:57	0	N/A	0	0	"	"	"	KJJ
126-L	FISHER + WABASH	18:58	0	N/A	0	0	"	"	"	KJJ
126-M	WABASH + MIAMI	18:59	0	N/A	0	0	"	"	"	KJJ
126-N	WABASH + RIALTO	19:00	0	N/A	0	0	"	"	"	KJJ
126-O	RIALTO + MIAMI	19:01	0	N/A	0	0	"	"	"	KJJ
126-P	RIALTO + FISHER	19:02	0	N/A	0	0	"	"	"	KJJ
126-Q	WABASH + DIX	19:03	0	N/A	0	0	"	"	"	KJJ

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MRD ATTENDANCE FORM

TITLE/SUBJECT: Air Monitoring Team Emergency Response

DATE: 2/18/19 **TO:** 2/18/19
TIME: 6A **TO:** 6P

SESSION NUMBER:

COMPLEX/AREA/DEPT: Coker Flare Startup Days

2-18-19
Polar Vortex
AMT Days

- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☑ Emergency
- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

	Employee ID	PRINTED NAME	SIGNATURE
1	818219	W Peek	W Peek (OPS hours)
2	95130	Justin Tinsley	Justin Tinsley
3	316 210	Josh Wade	[illegible]
4	762185	Doug Peek	[illegible]
5	820230	ADRIAN DARZU	Adrian Darzu (7-7
6	075879	DAVID Francis	[illegible]
7	833200	Joe Reidy	Joe Reidy
8			
9			
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11			
12			
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Completed forms must be promptly delivered to the Training Center.

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Pre-Bump/Calibration 2/18/19 Days

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR Plus 6	2/18/19	0511	LEL PASS% O_2 PASS % VOC PASS ppm CO PASS ppm H_2S PASS ppm NH_3 PASS ppm	JET	
AR 25	2/18/19	0518	LEL 57 % O_2 0.0 % VOC 94.3 ppm ~~H_2S~~ ppm H_2S 9 ppm CO 42 ppm	JET	
AR 42	2/18/19	0523	LEL 49 % O_2 0.0 % VOC 101 ppm NH_3 35 ppm H_2S 10 ppm ppm	JET	"L" was not showing up in display redownloaded automatic datalogging
MR Pro 124	2/18/19	0523	LEL PASS % O_2 PASS % VOC PASS ppm SO_2 PASS ppm H_2S PASS ppm CO PASS ppm	JET	
MR Pro 61	2/18/19	0527	LEL PASS % O_2 PASS % VOC PASS ppm NH_3 PASS ppm H_2S PASS ppm CO PASS ppm	JET	
AR 24	2/19/19	6:00	LEL 49 % O_2 PASS % VOC 100 ppm ppm H_2S 10 ppm CO 51 ppm	JPW	
ART 6	2/19/19	6:17	LEL Pass % O_2 Pass % VOC Pass ppm NH_3 Pass ppm H_2S Pass ppm CO Pass ppm	JPW	

Pre-Bump / Calibration

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR2	2/18/19	7:18	LEL 49 % O_2 PASS % VOC 962 ppm ___ ___ppm H_2S 10 ppm ~~[illegible]~~ 55 ppm	JDW	
UR22	2/18/19	7:20	LEL ___% O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm Benzene Pass ppm	JDW	
UR23	2/18/19	7:22	LEL ___% O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm Benzene Pass ppm	JDW	
UR36	2/18/19	7:24	LEL ___% O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm Benzene Pass ppm	JDW	
MR121	2/18/19	1:03 pm	LEL PASS % O_2 PASS % VOC PASS ppm CO PASS ppm H_2S PASS ppm NH_3 PASS ppm	JDW	
AR 124	2/18	448	LEL ___% O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm ___ ___ppm	DF	Pass
AR 126	2/18	4:58	LEL ___% O_2 ___ % VOC ___ ppm ___ ___ppm H_2S ___ ppm ___ ___ppm	D.F.	Pass

Transfered data to Pre Bump / Cal Night 2-18 Sheet

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2-18-19 Monday Team Dave Francis/ Joe Reidy

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other Area Rae	Detector Tubes
Serial No.	Serial No. # 36	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #126	Serial No: #37	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time: 2-18-19 AM	Pre-Cal. Date/Time: 2-18-19 AM	Pre-Cal. Date/Time: 2-18-19 AM	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2-18-19 5pm	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX6 Flare Start-Up	Joe Reidy/Dave Francis	2-18-19 Monday

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	O_2	CO	Other (List)	SO_2	Observations/Comments	Sampler's Initials
Toronto	N ~~Hampton~~ Toronto Gate	810 am	0	—	0	0	20.9	0		0	Sunny Light Wind # Unit 26	JR/DF
	Annabelle & Schaefer	825	0	—	0	0	20.9	0		0	NDO / No Detectable Odor	"
	Visger & Bassett	832	0	—	0	0	20.9	0		0	NDO	"
	Visger & 8th	844	0	—	0	0	20.9	0		0	NDO	"
	10249 W Jefferson River R	856	0	—	0	0	20.9	0		0	NDO	"
	Brennan & W Jefferson Detroit	858	0	—	0	0	20.9	0		0	NDO	"
	Industrial & Marion RR	902	0	—	0	0	20.9	0		0	Asphalt Smell from local tanks	"
	Industrial & Belanger R Rouge	910	0	—	0	0	20.9	0		0	NDO	"
	Industrial & Great Lakes RR	912	0	—	0	0	20.9	0		0	NDO	"
	Genessee & Great Lakes RR	914	0	—	0	0	20.9	0		0	NDO	"
	Beatrice & Schaefer Detroit	924	0	—	0	0	20.9	0		0	NDO	"

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2-18-19 Monday DF/JR

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #126	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2-18-19 AM	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2-18-19 5PM	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX6 Flare Start up	JR/DF Joe Ready/Dave Francis	2-18-19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
River Rouge	Pleasant & Jefferson	10:30	0	—	0	0	O2 20.9 CO 0 SO2 0	NDO	D.F
	Henry & Burke	10:35	0	—	0	0	20.9 0 0	NDO	D.F
	Genessee & Maple	10:40	0	—	0	0	20.9 0 0	NDO	D.F
	Genessee & Great lakes	10:42	0	—	0	0	20.9 0 0	NDO	D.F
	Jefferson & Elm	10:45	0	—	0	0	20.9 0 0	NDO	D.F
	Jefferson & Victoria	10:50	0	—	0	0	20.9 0 0	NDO	D.F
	Charles & Pleasant	10:55	0	—	0	0	20.9 0 0	NDO	D.F
	Pleasant & Burke	11:16	0	—	0	0	20.9 0 0	NDO	DF/JR
	Pleasant & Richter	11:18	0	—	0	0	20.9 0 0	NDO	"
	Batavia & Byron	11:21	0	—	0	0	20.9 0 0	NDO	"
	Genesse & Oak	11:23	0	—	0	0	20.9 0 0	NDO	"

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Francis / Reidy

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #126	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2-18-19 AM	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2-18-19 PM	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX 6 Flare Start up	Joe Reidy / Dave Francis	2-18-19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	O_2 CO SO_2 Other (List)	Observations/Comments	Sampler's Initials
River Rouge	Pine + Burke	11:25	0	–	0	0	20.9 0 0	NDO No Detectable Odor	JR/JF
Detroit	Visger + High	12:45	0	–	0	0	20.9 0 0	NDO	JR/DF
R Rouge	Visger + W Jefferson	12:46	0	–	0	0	20.9 0 0	NDO	"
Ecorse	Glenwood + W Jefferson	12:54	0	–	0	0	20.9 0 0	NDO	"
R Rouge	Alexander + Orchard	12:55	0	–	0	0	20.9 0 0	NDO	"
R Rouge	Great Lakes + Ironton	12:58	0	–	0	0	20.9 0 0	NDO	"
R Rouge	Richter + Maple	1:03	0	–	0	0	20.9 0 0	NDO	"
R Rouge	Elm + Jefferson	1:06	0	–	0	0	20.9 0 0	NDO	"
RR	Anchor + Brownlee	1:11	0	–	0	0	20.9 0 0	NDO	"
RR	Marion + W Jefferson	1:13	0	–	0	0	20.9 0 0	NDO	"
RR	James + Division	1:15	0	–	0	0	20.9 0 0	NDO	"

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Francis / Reidy

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #126	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/18/19 5p	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX6 Flare Startup	Joe Reidy / Dave Francis	2-18-19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List) O_2 CO SO_2	Observations/Comments	Sampler's Initials
River Rouge	Eaton + Palmerston	245	0	—	0	0	20.9 0 0	No Odor Detected	JR/DF
RR	Henry + W Jefferson	2:52	0	—	0	0	20.9 0 0	NDO (No Detectable odor)	"
RR	Richter + Henry	2:56	0	—	0	0	20.9 0 0	NDO	"
RR	Maple + Richter	2:58	0	—	0	0	20.9 0 0	NDO	"
RR	Alexander + Abbot	301	0	—	0	0	20.9 0 0	NDO	"
RR	Alexander + Orchard	303	0	—	0	0	20.9 0 0	NDO	"
RR (Ecorse)	High + Ruth	306	0	—	0	0	20.9 0 0	NDO	"
RR (Ecorse)	SBM Drive + Bell	308	0	—	0	0	20.9 0 0	NDO	"
RR	Schaefer + W Jefferson	312	0	—	0	0	20.9 0 0	NDO	"
RR	Frazier + Schaefer	314	0	—	0	0	20.9 0 0	NDO	"

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Francis / Reidy

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #124	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/18/19 5:40p	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX6 Flare Startup	Joe Reidy / Dave Francis	2-18-19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List) O_2 CO SO_2	Observations/Comments	Sampler's Initials
CPX1	Tractor Fort	408	0	—	0	0	21.5 0 0		JR/DF
	Melvindale Office	422	0	—	0	0	21.5 0 0		"
	Fort + Schaefer	430	0	—	0	0	21.4 0 0		"
	Stockert Schaefer	434	0	—	0	0	21.4 0 0		"

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: AREA RAE	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 25	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: MULT.	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	D. PEK / A. DARZU	2/18/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	W. OUTER DR. + ELECTRIC	0845	0		0	0	CO=0 O2=20.9		D.P/A.D
	"	0900	0		0	0	CO=0 O2=20.9		"
	JEFFERSON + NIEMAN	0912	0		0	0	CO=0 O2=20.9		"
	"	0924	0		0	0	CO=0 O2=20.9		"
	SCHAEFER + BEATRICE	0933	0		2	0	CO=0 O2=20.9		"
	"	0942	0		2	0	CO=0 O2=20.6	ZEROED A.R.	"
	OUTER DR. W. HOUSE	1026	0		0	0	CO=0 O2=20.9		"
	"	1042	0		0	0	CO=0 O2=20.9		"
	SCHAEFER + OAKWOOD	1058	0		0	0	CO=0 O2=20.9		"
	"	1114	0		0	0	CO=0 O2=21.1		"
	SCHAEFER + ETHEL	1248	0		0	0	CO=0 O2=20.9		"

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AMT FIELD DATA FORM 2/18/19 A.R. 25

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	SCHAEFER + FRAZIER	1322	0		0	0	CO=0 O2=21.2	
	"	1336	0		0	0	CO=0 O2=21.2	
	ORMOND + HEIDT	1410	0		0	0	CO=0 O2=21.2	
	"	1422	0		0	0	CO=0 O2=21.2	
	KEMENY REC CTR	1522	0		0	0	CO=0 O2=21.4	
	"	1541	0		0	0	CO=0 O2=21.4	
	SCHAEFER + FRAZIER	1549	0		0	0	CO=0 O2=21.2	
	"	1605	0		0	0	CO=0 O2=21.2	
	HALTINER + CORA	1618	0		0	0	CO=0 O2=21.1	
	"	1633	0		0	0	CO=0 O2=21.1	
	OUTER DR W. HOUSE	1652	0		0	0	CO=0 O2=20.9	
	"	1715	0		0	0	CO=0 O2=20.9	
	SCHAEFER + OAKWOOD	1735	0		0	0	CO=0 O2=20.9	

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D. PIEK / A. DARZU

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: MULTI RAE	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #124	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/12/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot: MULT.	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	D. PEK / A. DARZU	2/12/19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	W. OUTER DR + ELECTRIC	0845	0		0	0	CO=0 SO2=0 O2=21.2		D.P/A.D
	"	0900	0		0	0	CO=0 SO2=0 O2=21.2		"
	JEFFERSON + NIEMAN	0912	0		0	0	CO=0 SO2=0 O2=20.9		"
	"	0924	0		0	0	CO=0 SO2=0 O2=20.9		"
	SCHAEFER + BEATRICE	0933	0		0	0	CO=0 SO2=0 O2=20.9		"
	"	0942	0		0	0	CO=0 SO2=0 O2=20.9		"
	OUTER DR. W, HOUSE	1026	0		0	0	CO=0 SO2=0 O2=21.2		"
	"	1042	0		0	0	CO=0 SO2=0 O2=21.3		"
	SCHAEFER + OAKWOOD	1058	0		0	0	CO=0 SO2=0 O2=21.2		"
	"	1114	0		0	0	CO=0 SO2=0 O2=21.2		"

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: MULTI-RAE	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 121	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	D. PEK / A. DARZU	2/18/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	SCHAEFER + FRAZIER	1322	0		0	0	CO=0 NH3=0 O2=20.9		D.P/A.D.
	"	1336	0		0	0	CO=0 NH3=0 O2=20.9		"
	ORMOND + HEIDT	1410	0		0	0	CO=0 NH3=0 O2=20.9		"
	"	1423	0		0	0	CO=0 NH3=0 O2=20.9		"
	KEMENY REC CTR.	1522	0		0	0	CO=0 NH3=0 O2=20.9		"
	"	1541	0		0	0	CO=0 NH3=0 O2=20.9		"
	SCHAEFER + FRAZIER	1549	0		0	0	CO=0 NH3=0 O2=20.9		"
	"	1605	0		0	0	CO=0 NH3=0 O2=20.9		"
	HALTINER + CORA	1618	0		0	0	CO=0 NH3=0 O2=21.4		"
	"	1633	0		0	0	CO=0 NH3=0 O2=21.4		"
								DEAD BATT.	

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AR#42

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
Coker Flare Start up	W Peek J Tinsley	2-18-19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Miami & Beatrice	0800	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Frazier & Morrow	0815	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Omaha & Deacon	0830	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Electric & Visger	0845	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Beatrice & Gilroy	0900	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Toronto & Lickbold	0915	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Deacon & Leonard	0930	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Leonard & Annabelle	0945	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Patricia & Leonard	1000	Ø	Ø	Ø	Ø	O_2 - 20.5	NDS	WP
	Pleasant & Patricia	1015	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Fisher W & Downing	~~1230~~ 1245	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	JT

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AR #47

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Fort 5 & Conway	1300	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Greyfriars & Visger	1320	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Superior & Milton	1340	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Annabelle & Schafer	1500	Ø	Ø	Ø	Ø	O_2 - 20.8	JT / NOS
	Deacon & Schafer	1520	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Hart & Frazer	1540	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Bromley & Campbell	1600	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Beechley & Copeland	1618	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS
	Melvin & ethel	1634	Ø	Ø	Ø	Ø	O_2 - 20.9	JT / NOS

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MRD ATTENDANCE FORM

TITLE/SUBJECT: Air Monitoring Team Emergency Response

DATE: 2-18-14 **TO:** 2-18-14
TIME: 6 PM **TO:** 6 AM

SESSION NUMBER:

COMPLEX/AREA/DEPT: Coker Flare Start up

2-18-14
Polar Vortex
AMT Nights

- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☑ Emergency

John Taggart

- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

	Employee ID	PRINTED NAME	SIGNATURE
1	269004	Ray Richardson	
2	856300	Tara Chippewa	
3	799763	John Taggart	
4	861517	Grace Poling	
5	96377	Alvin Brown	
6	999275	Aaron O'Connor	
7			
8			
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Completed forms must be promptly delivered to the Training Center.

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Pre-Bump/Calibration Night 2-18 cat

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
UR 22	2/18/19	6:09 PM	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S 10 ppm Bump Pass ppm	SDW	
AR 42	2/18/19	6:13	LEL 47 % O_2 Pass % VOC 63 ppm ___ ppm H_2S 10 ppm NH3 5 ppm	JPW	
AR24	2/18/19	730 pm	LEL 50 % O_2 20.6 % VOC 0.8 ppm CO 44 ppm H_2S 9 ppm ___ ppm	RR	
AR20	2/18/19	730 pm	LEL 50 % O_2 0 % VOC 105 ppm SO2 5.9 ppm H_2S 10 ppm ___ ppm	RR	
AR 38	2/18/19	7:50 P.M	LEL 48 % O_2 0 % VOC 120 ppm ___ ppm H_2S 10 ppm CO 47 ppm	A.O	
AR 21	2/18/19	2007	LEL 45 % O_2 0.0 % VOC 97.4 ppm SO2 5.0 ppm H_2S 9 ppm ___ ppm	JET	
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm ___ ppm		

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Pre-Bump / Calibration Night 2·18

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 35	2/18	5:06	LEL 45 % O_2 .3 % VOC 81 ppm CO 13 ppm H_2S 6 ppm ___ ppm	DF	PASS
AR 124	2/18	4:48	LEL PASS % O_2 PASS % VOC PASS ppm CO PASS ppm H_2S PASS ppm SO2 ___ ppm	DF	Pass
AR 126	2/18	4:58	LEL PASS % O_2 PASS % VOC Pass ppm CO PASS ppm H_2S Pass ppm SO2 PASS ppm	D.F	Pass
U.R 36	2/18	5:11	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm Base Pass ppm	D.F	Pass
UR 23	2/18	1731	LEL ___ % O_2 ___ % VOC ___ ppm ___ ppm H_2S ___ ppm Base pass ppm	Justin T	Pass
MR Col	2/18	1731	LEL pass % O_2 ___ % VOC pass ppm NH3 pass ppm H_2S pass ppm CO pass ppm	Justin T	PASS
MR 121	2/18/19	6:08 P	LEL Pass % O_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm SO2 Pass ppm	JDW	Pass

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Post-Bump 2/19/19 Nights

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 37	2/19/19	0428	LEL 51 % O_2 ____ % VOC ____ ppm CO 40 ppm H_2S 8 ppm ____ ppm	TC	Pump wont stay running Tagged out
MR 124	2/19/19	0519	LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm	TC	Bump Test Passed
AR 42	2-19	0605	LEL 48 % O_2 0 % VOC 110 ppm ____ ppm H_2S 10 ppm ____ ppm	AO	
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		

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2-18-19 / 2-19-19

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
42	Sanders + Dumfries	2010	0.0	0.0	0.0	0.0	OXY - 20.8	NO ODOR	AO/AB
	Greyfriers + Sanders	2050	0.0	0.0	0.0	0.0	OXY - 20.9	NO ODOR	AO/AB
	"	2120	0	0	0	0	OXY - 20.8	NO ODOR	AO/AB
	Mellon + Oakwood	2135	0	0	0	0	OXY - 20.6	NO ODOR	AO/AB
	"	2215	0	0	0	0	OXY - 20.9	NO ODOR	AO/AB
	Firehouse #2	2345	0.0	0.0	0.0	0.0	OXY - 20.8	NO ODOR	AO/AB
	"	0100	0.0	0.0	0	0	OXY - 20.9	NO ODOR	AO/AB
	Mellon + Schaefer	0120	0	0	0	0	OXY - 20.6	NO ODOR	AO/AB
	"	0200	0	0	0	0	OXY - 20.7	NO ODOR	AO/AB
	Contractor Village	0245	0	0	0	0	OXY - 20.8	NO ODOR	AO/AB
	"	0325	0	0	0	0	OXY - 20.8	NO ODOR	AO/AB

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2-19-19

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
4Z	OAKWOOD Heights	0330	0345	0	0	0	OXY - 20.8	NO ODOR	AO/AB
	Dumfries	0410	0430	0	0	0	OXY - 20.9	NO ODOR	AO/AB
	SANDERS + Greyfriers	0430							

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 124	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: Multirae Pro	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 447969139	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0506pm	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0520Am	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	Tara Chippewa / Ray Richardson	2/19/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
1-2	Oakwood & Fordson	0310	0	—	0	0	O_2 20.9	No smell	TC/RR
1-2	Fordson & Ormond	0311	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Fordson & Powell	0312	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Ormond & Colonial	0315	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Ormond & Luther	0316	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Ormond & Heidt	0316	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Heidt & Riverside	0317	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Heidt & Powell	0317	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Heidt & Denmark	0317	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Denmark & Luther	0318	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Powell & Colonial	0319	0	—	0	0	O_2 20.9	No Smell	TC/RR

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AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
1-2	Fort & Oakwood	0319	0	—	0	0	O_2 20.9	No Smell
1-2	Fort & Dearborn	0320	0	—	0	0	O_2 20.9	No Smell
1-2	Fort & Powell	0322	0	—	0	0	O_2 20.9	No Smell
1-2	Powell & Bayside	0322	0	—	0	0	O_2 20.9	No Smell
1-2	Fort & Dumfries	0323	0	—	0	0	O_2 20.9	No Smell
1-2	Gale & Dumfries	0323	0	—	0	0	O_2 20.9	No Smell
1-2	Dumfries & Greenfriars	0325	0	—	0	0	O_2 20.9	No Smell

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 124	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: MultiRaePro	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 44796939	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0506pm	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0520AM	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	Tara Chippewa/Ray Richardson	2/19/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
1-2	NAB Parking lot	0135	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Oakwood & Fordson	0137	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Fordson & Ormond	0138	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Fordson & Powell	0139	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Fordson & Dix	0140	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Dix & Mellon	0141	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	Contractor village	0142	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	910 Dix	0142	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	FEB2	0143	0	0	–	0	O_2 20.9	No smell	TC/RR
1-2	13921 Mellon	0145	0	0	–	0	O_2 20.9	No smell	TC/RR

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 124	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: MultiRae Pro	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 44796939	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0506pm	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0520am	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	Tara Chippewa / Ray Richardson	2/19/19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
1-2	Vallen	0003	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	13921 Mellon	0005	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Oakwood & Fordson	0006	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Mellon & Ormond	0007	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Powell & Fordson	0008	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Dix & Fordson	0009	0	—	0	0	O_2 20.9	No Smell	TC/RR

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 124	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: Multirae Pro	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 447960939	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0540pm	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0520am	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	Tara Chippewa/ Ray Richardson	2/18/19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
1-2	Pleasant & Patricia	0804	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Patricia & Leonard	0805	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Patricia & Gilroy	0806	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liebold & Gilroy	0806	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liebold & Toronto	0807	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Toronto & Liddesdale	0807	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liddesdale & Gilroy	0808	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liddesdale & Leonard	0809	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liddesdale & Pleasant	0809	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Pleasant & Beatrice	0810	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Beatrice & Leonard	0810	0	—	0	0	O_2 20.9	No Smell	TC/RR

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AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
1-2	Beatrice & Gilroy	0811	0	—	0	0	O_2 20.9	No Smell
1-2	Beatrice & Toronto	0812	0	—	0	0	O_2 20.9	No Smell
1-2	Toronto & Annabelle	0812	0	—	0	0	O_2 20.9	No Smell
1-2	Annabelle & Gilroy	0813	0	—	0	0	O_2 20.9	No Smell
1-2	Annabelle & Leonard	0813	0	—	0	0	O_2 20.9	No Smell
1-2	Decon & Leonard	0814	0	—	0	0	O_2 20.9	No Smell
1-2	Decon & Gilroy	0815	0	—	0	0	O_2 20.9	No Smell
1-2	Decon & Shaefer	0815	0	—	0	0	O_2 20.9	No Smell
1-2	Ethel & Shaefer	0816	0	—	0	0	O_2 20.9	No Smell
1-2	Ethel & Leonard	0817	0	—	0	0	O_2 20.9	No Smell
1-2	Ethel & Pleasant	0817	0	—	0	0	O_2 20.9	No Smell
1-2	Pleasant & Basset	0818	0	—	0	0	O_2 20.9	No Smell
1-2	Basset & Leonard	0818	0	—	0	0	O_2 20.9	No Smell
1-2	Basset & Shaefer	0819	0	—	0	0	O_2 20.9	No Smell

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL 124	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: multirae PRO	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: 44796939	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0506pm	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0520 am	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	Tara Chippewa / Ray Richardson	2/18/19 Nights

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other: multirae 124

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
1-2	Patricia & Pleasant	0657	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Ethel & Pleasant	0659	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Leonard & Ethel	0659	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Shaefer & Ethel	0700	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Annabelle & Shaefer	0701	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Toronto & Annabelle	0702	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Leonard & Annabelle	0703	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Liebold & Leonard	0704	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Leonard & Patricia	0705	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Patricia & Gilroy	0705	0	—	0	0	O_2 20.9	No Smell	TC/RR
1-2	Gilroy & Liebold	0706	0	—	0	0	O_2 20.9	No Smell	TC/RR

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AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
1-2	Liddesdale & Gilroy	0706	0	—	0	0	O_2 20.9	No Smell
1-2	Beatrice & Gilroy	0707	0	—	0	0	O_2 20.9	No Smell
1-2	Beatrice & Leonard	0708	0	—	0	0	O_2 20.9	No Smell
1-2	Leonard & Decon	0708	0	—	0	0	O_2 20.9	No Smell
1-2	Basset & Leonard	0709	0	—	0	0	O_2 20.9	No Smell
1-2	Shaefer & Basset	0710	0	—	0	0	O_2 20.9	No Smell
1-2	Beatrice & Shaefer	0711	0	—	0	0	O_2 20.9	No Smell
1-2	Beatrice & Toronto	0711	0	—	0	0	O_2 20.9	No Smell

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: 1241	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/18 0506 PM	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2/19 0530 AM	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
Vortex	Grace + Ray	2/18/19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	PM Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Oakwood + Schafer	9 27	0	N/A	0	0	CO:0 SO2:0 O2:	20.9 No Smell	GP
	Flora + Led	9 29	0	N/A	0	0	"	"	GP
	Flora + Rose	9 30	0	N/A	0	0	"	"	GP
	Rose + Clarann	9 31	0	N/A	0	0	"	"	GP
	Rose + Eddon	9:32	0	N/A	0	0	"	"	GP
	Rose + Palmer	9:32	0	N/A	0	0	"	"	GP
	Palmer + Wabash	9:34	0	N/A	0	0	"	"	GP
	Corbin + Dix	9:36	0	N/A	0	0	"	"	GP
	Corbin + ~~Margaret~~	9:37	0	N/A	0	0	"	"	GP
	Palmer + Margaret	9:38	0	N/A	0	0	"	"	GP
	Palmer + David	9:39	0	N/A	0	0	"	"	GP

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AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time PM	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
	Palmer + Grace	9:40	0	N/A	0	0	CO:0 SO_2:0 O_2:20.9	No Smell
	Palmer + Blanch	9:40	0	N/A	0	0	"	"
	Palmer + Outer	9:41	0	N/A	0	0	"	"
	Emogene + Dix	9:44	0	N/A	0	0	"	"
	Megenty + Grace	9:45	0	N/A	0	0	"	"

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Multigas - Multirae Pro 124
SN 44796939
PreCal - 2/18/19 0504pm Post Cal - 2/19 0520AM

TaraChippewa / Ray Richardson 2/19/19

AMT FIELD DATA FORM

Monitoring Results								
Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments
1-2	NAB Parking Lot	0454	0	-	0	0	O_2 20.9	No Smell
1-2	Fordson & Oakwood	0455	0	-	0	0	O_2 20.9	No Smell
1-2	Fordson & Ormond	0456	0	-	0	0	O_2 20.9	No Smell
1-2	Fordson & Powell	0457	0	-	0	0	O_2 20.9	No Smell
1-2	Fordson & Dix	0458	0	-	0	0	O_2 20.9	No Smell
1-2	Dix & Ormond	0458	0	-	0	0	O_2 20.9	No Smell
1-2	Dix & Oakwood	0459	0	-	0	0	O_2 20.9	No Smell
1-2	13921 Mellon	0500	0	-	0	0	O_2 20.9	No Smell
1-2	Shaefer & Mellon	0501	0	-	0	0	O_2 20.9	No Smell
1-2	Shaefer & Oakwood	0502	0	-	0	0	O_2 20.9	No Smell
1-2	Dix & Oakwood	0503	0	-	0	0	O_2 20.9	No Smell
1-2	Contractor village gate	0504	0	-	0	0	O_2 20.9	No Smell
1-2	910 Dix	0505	0	-	0	0	O_2 20.9	No Smell
1-2	FEB2	0506	0	-	0	0	O_2 20.9	No Smell
1-2	Mellon & Oakwood	0509	0	-	0	0	O_2 20.9	No Smell

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MRD ATTENDANCE FORM

TITLE/SUBJECT: Air Monitoring Team Emergency Response

DATE: 2-19-19 **TO:** 2-19-19
TIME: 6AM **TO:** 6PM

SESSION NUMBER:

COMPLEX/AREA/DEPT: Coker Flare Startup

TYPE:
- ☐ Training & Development Topic
- ☐ What If
- ☐ Sequential
- ☑ Emergency
- ☐ General Safety Topic
- ☐ General Environmental Topic
- ☐ General Energy Topic

INSTRUCTOR NAME:
INSTRUCTOR SIGNATURE:

	Employee ID	PRINTED NAME	SIGNATURE
1	818219	W Peck	W Peck
2	951130	J Tinsley	[illegible]
3	075879	David Francis	[illegible]
4	820230	ADRIAN DARZU	[illegible]
5	833200	Joe Reidy	Joe Reidy
6	782185	DOUG PEK	D Pek
7	310210	J Wade	[illegible]
8			
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Completed forms must be <u>promptly</u> delivered to the Training Center.

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Pre-Bump / Calibration Days 2/19/19

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR8	2/19/19	0507	LEL 50 % O_2 0 % VOC 106 ppm CO 48 ppm H_2S 9 ppm ___ ___ ppm	Bump Test Passed GP	
AR22	2/19/19	0518	LEL 50 % O_2 0 % VOC 111 ppm SO2 5 ppm H_2S 10 ppm ___ ___ ppm	Bump Test Passed GP	
AR11	2/19/19	0530	LEL 55 % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S 10 ppm ___ ___ ppm	Failed GP Drifting	
MR61	2/19/19	400	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm	Passed	
MR124	2/19/19	420	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm	Passed	
UR 25	2/19/19	420	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm	Passed	
UR22	2/19/19	530	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm	Passed	

MR 121 2/19/19 530 Passed

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Pre Bump/Calibration Days 2/19/19

INSTRUMENT CALIBRATION CHECK

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LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 24	2/19/19	0433	LEL 44 % 0.1 O_2 [illegible] % VOC 100 ppm CO 43 ppm H_2S 9 ppm ___ ___ ppm	Bump Test Passed TC	VOC Cal
AR 20	2/19/19	0433	LEL 44 % 0.0 O_2 [illegible] % VOC 88 ppm SO2 44 ppm H_2S 11 ppm ___ ___ ppm	Bump Test Passed TC	
AR 35	2/19/19	0440	LEL 44 % O_2 0 % VOC 102 ppm CO 45 ppm H_2S 10 ppm ___ ___ ppm	Bump Test Passed GP	
AR 25	2/19/19	0453	LEL 49 % O_2 0.0 % VOC 96.8 ppm CO 50 ppm H_2S 10 ppm ___ ___ ppm	Bump Test Passed GP	
AR 2	2/19/19	0459	LEL 49 % O_2 0.1 % VOC 96.4 ppm SO2 5.3 ppm H_2S 10 ppm ___ ___ ppm	Bump Test Passed GP	
AR 21	2/19/19	0507	LEL 45 % O_2 0 % VOC 95.6 ppm SO2 5.2 ppm H_2S 9 ppm ___ ___ ppm	Bump Test Passed GP	
AR 7	2/19/19	0507	LEL 48 % O_2 0 % VOC 95.4 ppm ___ ___ ppm H_2S 10 ppm ___ ___ ppm	Bump Test Passed GP	

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Pre Bump / Cal Days 2-19-19

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
UR 36	2/19/18	6:48	LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm Bump Pass ppm	JPL	
MR 126	2/19/18	6:50	LEL Pass % O_2 Pass % VOC Pass ppm CO Pass ppm H_2S Pass ppm Gas Pass ppm	JPL	
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		
			LEL ____ % O_2 ____ % VOC ____ ppm ____ ppm H_2S ____ ppm ____ ppm		

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Post Bump Day 2-19-19

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
AR 20	2-19	1100	LEL 41 % O_2 PASS % VOC 104 ppm ___ ___ ppm H_2S 10 ppm SO2 5ppm	WP	PASS
M.R. 124	2/19	11:05	LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm	D.F	Pass
A.R 35	2/19	1110	LEL ✓ % O_2 ✓ % VOC ✓ ppm CO ✓ ppm H_2S ✓ ppm ___ ___ ppm	D.P	PASS
AR 38	2-19	1115	LEL 48 % O_2 PASS % VOC 99.5 ppm CO 46 ppm H_2S 9 ppm ___ ppm	WP	Calibrated for VOC High PASS
MR121	2/19/18	11:15	LEL Pass % O_2 Pass % VOC Pass ppm ___ ___ ppm H_2S PASS ppm NH3 Pass ppm	DW	Pass
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		
			LEL ___ % O_2 ___ % VOC ___ ppm ___ ___ ppm H_2S ___ ppm ___ ___ ppm		

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Post Bump Day 2-19-19

INSTRUMENT CALIBRATION CHECK

Calibration Results must be in the following range: O_2: 16 % to 19 % MultiRae and AreaRae Plus

LEL: 40 % to 60 % O_2: < .5 % (Area Rae) (99.99% Nitrogen VOC 80 ppm to 120 ppm

H_2S: 10ppm 8 ppm to 12 Other: CO 40 ppm to 60 ppm

ppm Other: SO2 4 ppm to 6 Other: NH3 40 ppm to 60 ppm

If instruments cannot be calibrated to the above manufacturer's listed ranges, the instrument must be taken out of service and repaired.

Instrument ID	Date	Time	Calibration Results	Calibrated by:	Comments
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm ____ ____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm ____ ____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm ____ ____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm _____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm ____ ____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S _____ ppm ____ ____ppm		
			LEL _____% O_2 _____ % VOC _____ ppm ____ ____ppm H_2S_____ ppm ____ ____ppm		

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: MULT-RAE PRO	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: #121	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/19/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	D. PEK / A. DARZU	2/19/19

Monitoring For:	Equipment Used (Circle Appropriate):			
	UltraRAE	Detector Tubes	Multigas/LEL	Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	W. JEFFERSON + ANCHOR	0813	0		0	0	CO=0 NH3=0 O2=20.9		D.P / A.D
	PLEASANT + DWIGHT	0835	0		0	0	CO=0 NH3=0 O2=20.9		"
	"	0849	0		0	0	CO=0 NH3=0 O2=20.9		"
	ORMOND + HEIDT	0946	0		0	0	CO=0 NH3=0 O2=20.9		"
	LIDDESDALE + PLEASANT	1000	0		0	0	CO=0 NH3=0 O2=20.9		"
	DEACON + PLEASANT	1018	0		0	0	CO=0 NH3=0 O2=20.9		"
	"	1039	0		0	0	CO=0 NH3=0 O2=20.9		"

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model: AREA RAE	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: # 35	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2/19/19	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
	D. PEK / A. DARZU	2/19/19

Monitoring For:	Equipment Used (Circle Appropriate):
	UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	W. JEFFERSON + ANCHOR	0813	0		0	0	CO=0 O2=21.4		D.P / A.D.
	PLEASANT + DWIGHT	0835	0		0	0	CO=0 O2=21.5		"
	"	0849	0		0	0	CO=0 O2=21.6		"
	ORMOND + HEIDT	0946	0		0	0	CO=0 O2=21.3		"
	LIDDESDALE + PLEASANT	1000	0		0	0	CO=0 O2=21.3		"
	DEACON + PLEASANT	1019	0		0	0	CO=0 O2=21.2		"
	"	1037	0		0	0	CO=0 O2=21.2		"

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AR#20

AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	Mfg/Model:	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No:	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time:	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
Coker Flare Start UP	W Peek J Tinsley	2-19-19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	Other (List)	Observations/Comments	Sampler's Initials
	Omaha & Annebelle	0750	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Morrow & Campbell	0810	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Ethel & Melvin	0830	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Bassett & Pleasant	0845	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Leonard & Beatrice	0900	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Outer Drive & 75	0925	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Annabelle & Gleason	0955	Ø	Ø	Ø	Ø	O_2 - 20.6	NDS	WP
	Francis & Ethel	1010	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP
	Schroeder & Annabelle	1030	Ø	Ø	Ø	Ø	O_2 - 20.9	NDS	WP

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AMT FIELD DATA FORM

UltraRAE (VOC)	UltraRAE (Benzene)	Multigas/LEL	Other	Detector Tubes
Serial No.	Serial No.	~~Mfg/Model:~~ MultiRae	Mfg/Model:	Mfg:
Pre-Cal. Date/Time:	Pre-Cal. Date/Time:	Serial No: Unit 124	Serial No:	Tube Type:
Post-Cal. Date/ Time:	Post-Cal. Date/Time:	Pre-Cal. Date/Time: 2-19-19 AM	Pre-Cal. Date/Time:	Tube Range:
Calibration Gas Lot:	Calibration Gas Lot:	Post-Cal. Date/Time: 2-19-19 10:58	Post-Cal. Date/Time:	
	RAE-SEP Tube Batch#	Calibration Gas Lot:	Calibration Gas Lot:	

Incident Name:	Sampler Name:	Date:
CPX6 Flare	JeReidy/Dave Francis	2-19-19

Monitoring For:

Equipment Used (Circle Appropriate): UltraRAE Detector Tubes Multigas/LEL Other:

Monitoring Results

Location ID	Location Description/GPS Coordinates	Time	VOC (ppm)	Benzene (ppm)	LEL (%)	H_2S (ppm)	O_2 CO SO_2 Other (List)	Observations/Comments	Sampler's Initials
Detroit	Agnes + 10th	10:40	0	—	0	0	20.9 0 0	~~JR~~ NDO	JR/DF
Detroit	Saliotte + 14th	10:41	0	—	0	0	20.9 0 0	NDO No Detectable Odor	JR/DF
Detroit	Deacon + Peters	10:45	0	—	0	0	20.9 0 0	NDO	"
Detroit	Fort + Visger	10:48	0	—	0	0	20.9 0 0	NDO	"

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